

# PROJECT TEAM

**OWNER**

SUMMIT POWDER MOUNTAIN  
ATTN: JEFF WEBBELOW  
3623 N. WOLF CREEK DR.  
EDEN, UT 84310

**ARCHITECT**

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**GENERAL CONTRACTOR**

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DESIGN SUPERVISOR  
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**MECHANICAL AND PLUMBING**

CCI MECHANICAL, INC.  
ENGINEERING, CONSTRUCTION & SERVICE  
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MOBILE: (801) 419-6031

**ELECTRICAL**

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ERIC FOGG - ENGINEER HYPERLINK  
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OFFICE 801-975-8844  
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**STRUCTURAL ENGINEER**

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**WET & DRY HVAC SYSTEM**

CCI MECHANICAL, INC.  
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84119  
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**KITCHEN DESIGN**

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PHONE: 801-292-1611  
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# SPM - PARCEL 4 BLDG

8569 EAST SPRING PARK  
EDEN, UT 84310

ISSUED FOR FOUNDATION PERMIT- JUNE 27, 2017

REVIEW FOR REFERENCE TO FOUNDATION PERMIT ONLY



4200 Sepulveda Boulevard, Suite 100  
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NOT FOR CONSTRUCTION UNTIL  
SIGNED BY THE ARCHITECT

**POWDER MOUNTAIN - PARCEL 4**  
8569 East Spring Park  
Eden, UT 84310

SHEET TITLE  
COVER SHEET

No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/6/27

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236

DATE 06/20/2017

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**GENERAL NOTES**

- 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.
- 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.
- TRAFFIC CONTROL, STRIPING & SIGNAGE TO CONFORM TO CURRENT UDOT TRANSPORTATION ENGINEER'S MANUAL AND MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- ANY AREA OUTSIDE THE LIMIT OF WORK THAT IS DISTURBED SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT NO COST TO OWNER.
- CONSULT ALL OF THE DRAWINGS AND SPECIFICATIONS FOR COORDINATION REQUIREMENTS BEFORE COMMENCING CONSTRUCTION.
- AT ALL LOCATIONS WHERE EXISTING PAVEMENT ABUTS NEW CONSTRUCTION, THE EDGE OF THE EXISTING PAVEMENT SHALL BE SAWCUT TO A CLEAN, SMOOTH EDGE.
- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE MOST RECENT, ADOPTED EDITION OF ADA ACCESSIBILITY GUIDELINES.
- 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.
- CONTRACTOR IS RESPONSIBLE FOR SCHEDULING AND NOTIFYING ENGINEER OR INSPECTING AUTHORITY 48 HOURS IN ADVANCE OF COVERING UP ANY PHASE OF CONSTRUCTION REQUIRING OBSERVATION.
- 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.
- 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.
- CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS BEFORE BIDDING AND BRING UP ANY QUESTIONS BEFOREHAND.
- SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH BY THE GEOTECHNICAL ENGINEER.
- CATCH SLOPES SHALL BE GRADED AS SPECIFIED ON GRADING PLANS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FLAGGING, CAUTION SIGNS, LIGHTS, BARRICADES, FLAGMEN, AND ALL OTHER DEVICES NECESSARY FOR PUBLIC SAFETY.
- 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.
- 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 UTILITIES 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.
- CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL WATER, POWER, SANITARY FACILITIES AND TELEPHONE SERVICES AS REQUIRED FOR THE CONTRACTOR'S USE DURING CONSTRUCTION.
- CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE OWNER, ENGINEER, AND/OR GOVERNING AGENCIES.
- 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.
- 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, EXCEPT FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
- 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.
- 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.
- 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.
- 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, ACCOMMODATIONS, 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.
- 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.**

- 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.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL STRIPING AND/OR PAVEMENT MARKINGS NECESSARY TO THE EXISTING STRIPINGS INTO FUTURE STRIPING. METHOD OF REMOVAL SHALL BE BY GRINDING OR SANDBLASTING.
- 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 69 - EXCAVATIONS, AND SECTION 69 - TRENCHES, ALONG WITH ANY LOCAL CODES OR ORDINANCES.
- ALL EXISTING GATES AND FENCES TO REMAIN UNLESS OTHERWISE NOTED ON PLANS. PROTECT ALL GATES AND FENCES FROM DAMAGE.

**UTILITY NOTES**

- 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.
- 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. CONTRACTOR SHALL BE REQUIRED TO COOPERATE WITH OTHER CONTRACTORS AND UTILITY COMPANIES INSTALLING NEW STRUCTURES, UTILITIES AND SERVICE TO THE PROJECT.
- CONTRACTOR SHALL POT HOLE ALL UTILITIES TO DETERMINE IF CONFLICTS EXIST PRIOR TO BEGINNING ANY EXCAVATION. NOTIFY MEMBERS OF BLUE STAKES. 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.
- 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.
- ALL VALVES AND MANHOLE COVERS SHALL BE RAISED OR LOWERED TO MEET FINISHED GRADE.
- CONTRACTOR SHALL CUT PIPES OFF FLUSH WITH THE INSIDE WALL OF THE BOX OR MANHOLE.
- CONTRACTOR SHALL GROUT AT CONNECTION OF PIPE TO BOX WITH NON-SHRINKING GROUT, INCLUDING PIPE VOIDS LEFT BY CUTTING PROCESS, TO A SMOOTH FINISH.
- CONTRACTOR SHALL GROUT WITH NON-SHRINK GROUT BETWEEN GRADE RINGS AND BETWEEN BOTTOM OF INLET LID FRAME AND TOP OF CONCRETE BOX.
- 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.
- CONTRACTOR SHALL CLEAN ASPHALT, TAR OR OTHER ADHESIVES OFF OF ALL MANHOLE LIDS AND INLET GRATES TO ALLOW ACCESS.
- 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.
- 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.
- MAINTAIN A MINIMUM 18" VERTICAL SEPARATION DISTANCE BETWEEN ALL UTILITY CROSSINGS.
- CONTRACTOR SHALL START INSTALLATION AT LOW POINT OF ALL NEW GRAVITY UTILITY LINES.
- ALL BOLTED FITTINGS MUST BE GREASED AND WRAPPED.
- UNLESS SPECIFICALLY NOTED OTHERWISE, MAINTAIN AT LEAST 2 FEET OF COVER OVER ALL STORM DRAIN LINES AT ALL TIMES (INCLUDING DURING CONSTRUCTION).
- ALL WATER LINES SHALL BE INSTALLED A MINIMUM OF 60" OF COVER TO TOP OF PIPE BELOW FINISHED GRADE.
- ALL SEWER LINES AND SEWER SERVICES SHALL HAVE A MINIMUM SEPARATION OF 10 FEET, PIPE EDGE TO PIPE EDGE, FROM THE WATER LINES. WATER AND SEWER LINES SHALL NOT BE IN THE SAME TRENCH. IN CROSSING LOCATIONS WATER LINES SHALL BE A MINIMUM OF 18" ABOVE SEWER LINES.
- CONTRACTOR SHALL INSTALL THRUST BLOCKING AT ALL WATERLINE ANGLE POINTS AND TEES.
- ALL UNDERGROUND UTILITIES SHALL BE IN PLACE PRIOR TO INSTALLATION OF CURB, GUTTER, SIDEWALK AND STREET PAVING.
- CONTRACTOR SHALL INSTALL MAGNETIC LOCATING TAPE CONTINUOUSLY OVER ALL NONMETALLIC PIPE.
- THE CONTRACTOR SHALL NOTIFY NOLTE ASSOCIATES, INC. 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.
- UNDER NO CIRCUMSTANCE SHALL THE PIPE OR ACCESSORIES BE DROPPED INTO THE TRENCH.
- WATER AND SEWER UTILITIES TO BE INSTALLED PER POWDER MOUNTAIN WATER & SEWER DISTRICT REQUIREMENTS.

**LEGEND:**

SYMBOL / LINETYPE	DESCRIPTION	DETAIL
	GRADING CATCH LINE	APWA PLAN NO. 541
	2 1/2" WATER LATERAL	APWA PLAN NO. 381, 382
	6" C900 PVC WATER PIPE	
	2" WATER METER	APWA PLAN NO. 522
	WATER VALVE	SEE VALVE CALLOUT
	FIRE DEPARTMENT CONNECTION	N/A
	4" SDR-35 PVC SEWER PIPE	APWA PLAN NO. 381, 382
	4" SANITARY SEWER MANHOLE	APWA PLAN NO. 411
	4" SANITARY SEWER CLEANOUT	N/A
	HYDROMECHANICAL GREASE INTERCEPTOR	SEE MECHANICAL PLANS
	6" HDPE STORM DRAIN PIPE	APWA PLAN NO. 381, 382
	4" PERFORATED HDPE PIPE	SEE PIPE CALLOUT
	GAS LINE	N/A
	ELECTRICAL CONDUIT	APWA PLAN NO. 315
	ELECTRICAL PULL BOX	
	EXISTING 8" WATER PIPE	
	EXISTING WATER LATERAL	
	EXISTING WATER VALVE	
	EXISTING WATER LATERAL	
	EXISTING WATER LATERAL	
	EXISTING 4" SANITARY SEWER MANHOLE	
	EXISTING 15" STORM DRAIN PIPE	
	EXISTING 4" STORM DRAIN MANHOLE	
	EXISTING STORM DRAIN CATCH BASIN	
	EXISTING ELECTRICAL CONDUIT	
	EXISTING ELECTRICAL PULL BOX	
	EXISTING ELECTRICAL TRANSFORMER	
	EXISTING COMMUNICATIONS CONDUIT	
	EXISTING COMMUNICATIONS PULL BOX	

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

**ABBREVIATION:**

APWA	AMERICAN PUBLIC WORKS ASSOCIATION	MA	MATCH
AC	ASPHALTIC CONCRETE	MAX	MAXIMUM
4	AND	MH	MANHOLE
APPR.	APPROXIMATELY	MIN	MINIMUM
ARV	AIR RELEASE VALVE	MSE	MECHANICALLY STABILIZED EARTH
AT	AT	N	NORTH
BDRY	BOUNDARY	NIC	NOT IN CONTRACT
BG	BUILDING	NTS	NOT TO SCALE
BRG	BEARING	OC	ON CENTER
BS	BOTTOM OF STAIR/STEP	OH	OVERHEAD
BVC	BEGIN VERTICAL CURVE	PC	POINT OF CURVATURE
BW	BOTTOM OF WALL	PI	POINT OF INTERSECTION
CB	CATCH BASIN	PL	PROPERTY LINE
CL OR C	CENTERLINE	POC	POINT ON CURVE
CMP	CORRUGATED METAL PIPE	PP	POWER POLE
COB	CLEANOUT BOX	PRC	POINT OF REVERSE CURVE
CONC	CONCRETE	PRV	PRESSURE REDUCING VALVE
DET	DETAIL	PSJ	POUNDS PER SQUARE INCH
DIA	DIAMETER	PT	POINT OF TANGENT
DIP	DUCTILE IRON PIPE	PVC	POLYVINYL CHLORIDE
DIST	DISTRICT	PU&DE	PUBLIC UTILITY & DRAINAGE EASEMENT
DWG	DRAWING	PUE	PUBLIC UTILITY EASEMENT
E	ENTRY	PVI	POINT OF VERTICAL INTERSECTION
EA	EACH	PVT	POINT OF VERTICAL TANGENT
EG	EDGE OF CONCRETE	R	RADIUS
EC	EXISTING GRADE	RCR	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	REF	REFERENCE
ER	EDGE OF ROAD	ROW	RIGHT-OF-WAY
EVC	END OF VERTICAL CURVE	SS	SANITARY SEWER
ELEV	ELEVATION	SD	STORM DRAIN
ESMT	EASEMENT	SW	SIDEWALK
EX	EXISTING	SCH	SCHEDULE
FF	FINISH FLOOR	SEC.	SECTION
FG	FINISH GRADE	SF	SQUARE FEET
FH	FIRE HYDRANT	STA	STATION
FL	FLOWLINE	STD	STANDARD
FT	FEET	TBC	TOP BACK OF CURB
GAR	GARAGE	TC	TOP OF CONCRETE
GB	GRADE BREAK	TEMP	TEMPORARY
HP	HIGH POINT	TG	TOP OF GRATE
HORIZ	HORIZONTAL	TS	TOP OF STAIR/STEP
ID	INSIDE DIAMETER	TW	TOP OF WALL
IE	INVERT ELEVATION	TYP	TYPICAL
INV	INVERT	VAR	VARIES
IRR	IRRIGATION	VERT	VERTICAL
L	LENGTH	W/	WITH
LF	LINEAR FEET		
LP	LOW POINT		

**WEBER COUNTY**

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

**ROCKY MOUNTAIN POWER**

KARL SEWELL  
 1438 WEST 2550 SOUTH  
 OGDEN, UT 84401  
 (801) 629-4310

**POWDER MOUNTAIN WATER & SEWER DISTRICT**

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 (801) 745-0912

**CIVIL SHEET INDEX:**

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C401	EROSION CONTROL PLAN
C402	EROSION CONTROL DETAILS
C501	DETAILS
C502	DETAILS
C503	DETAILS
C504	DETAILS



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STAMP



NOT FOR CONSTRUCTION UNTIL  
 SIGNED BY THE ENGINEER

**POWDER MOUNTAIN**  
**8569 EAST SPRING PARK**  
**EDEN, UT 84310**

SHEET TITLE

**GENERAL NOTES**

No	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/6/27

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JOB NO.

236

DATE

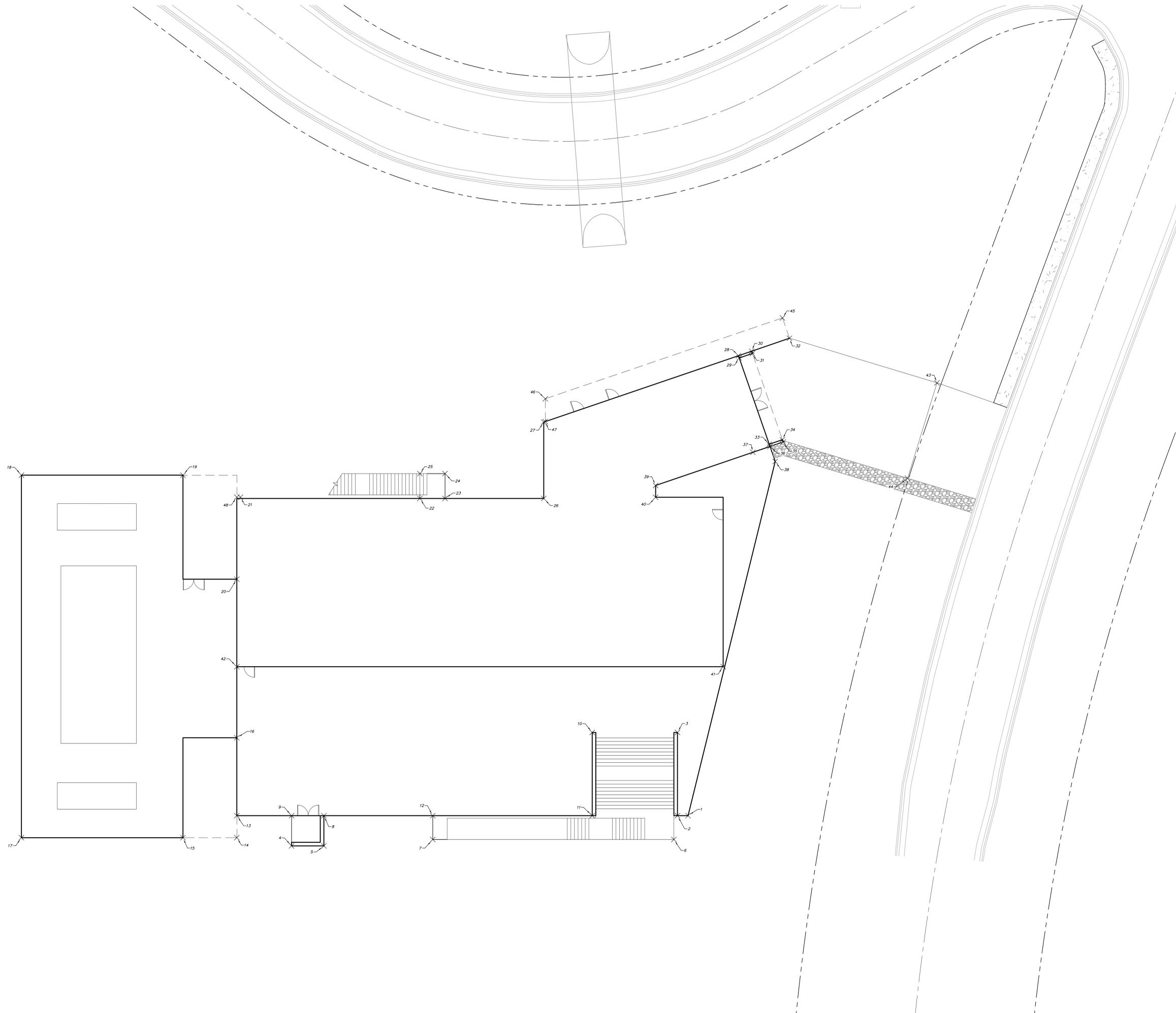
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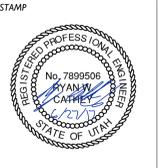
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SHEET NO.

**C001**



Point #	Northing	Easting
1	3655660.41	1573269.19
2	3655660.41	1573266.24
3	3655683.83	1573266.24
4	3655651.91	1573167.74
5	3655651.91	1573167.74
6	3655653.72	1573265.24
7	3655653.72	1573198.07
8	3655660.41	1573167.74
9	3655660.41	1573167.74
10	3655683.83	1573242.49
11	3655660.41	1573242.49
12	3655660.41	1573198.07
13	3655660.41	1573143.49
14	3655654.22	1573143.49
15	3655654.22	1573128.49
16	3655682.33	1573143.49
17	3655654.22	1573083.49
18	3655756.22	1573083.49
19	3655756.22	1573128.49
20	3655726.95	1573143.49
21	3655750.03	1573144.49
22	3655749.66	1573194.49
23	3655749.66	1573201.49
24	3655756.65	1573201.49
25	3655756.66	1573194.49
26	3655749.66	1573228.99
27	3655771.14	1573228.99
28	3655789.82	1573283.22
29	3655789.19	1573283.44
30	3655791.09	1573286.90
31	3655790.44	1573287.11
32	3655794.74	1573297.44
33	3655764.90	1573291.78
34	3655766.17	1573295.46
35	3655765.54	1573295.68
36	3655764.27	1573292.00
37	3655762.64	1573287.26
38	3655760.08	1573293.46
39	3655753.31	1573260.14
40	3655749.98	1573260.14
41	3655702.32	1573278.97
42	3655702.31	1573143.48
43	3655782.17	1573338.53
44	3655755.34	1573330.32
45	3655800.44	1573295.48
46	3655777.69	1573229.41
47	3655771.28	1573229.41
48	3655750.03	1573143.49



NOT FOR CONSTRUCTION UNTIL  
SIGNED BY THE ENGINEER

**POWDER MOUNTAIN**  
8569 EAST SPRING PARK  
EDEN, UT 84310

SHEET TITLE  
**HORIZONTAL CONTROL**

No	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/6/27

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JOB NO. **236**  
DATE **06/28/2017**  
SCALE **1" = 10'**

SHEET NO. **C101**



6/27/2017 4:56 PM

**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.

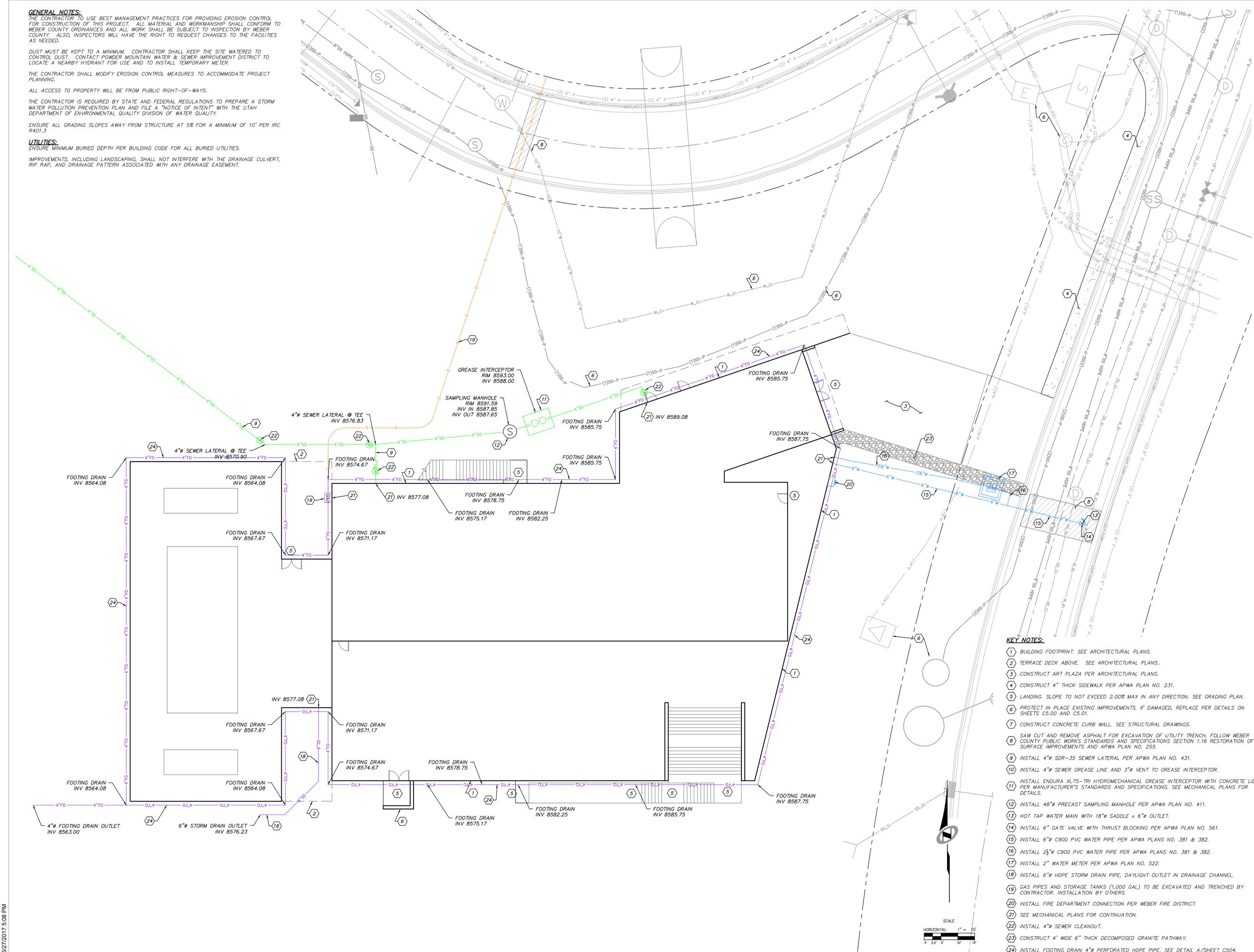
THE CONTRACTOR IS REQUIRED BY STATE AND FEDERAL REGULATIONS TO PREPARE A STORM WATER POLLUTION PREVENTION PLAN AND FILE A "NOTICE OF INTENT" WITH THE UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WATER QUALITY.

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 THE DRAINAGE CULVERT, RIP RAP, AND DRAINAGE PATTERN ASSOCIATED WITH ANY DRAINAGE EASEMENT.

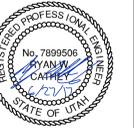


**KEY NOTES:**

- 1 BUILDING FOOTPRINT. SEE ARCHITECTURAL PLANS.
- 2 TERRACE DECK ABOVE. SEE ARCHITECTURAL PLANS.
- 3 CONSTRUCT ART PLAZA PER ARCHITECTURAL PLANS.
- 4 CONSTRUCT 4" THICK SIDEWALK PER APWA PLAN NO. 231.
- 5 LANDING. SLOPE TO NOT EXCEED 2.00% MAX IN ANY DIRECTION. SEE GRADING PLAN.
- 6 PROTECT IN PLACE EXISTING IMPROVEMENTS. IF DAMAGED, REPLACE PER DETAILS ON SHEETS C5.00 AND C5.01.
- 7 CONSTRUCT CONCRETE CURB WALL. SEE STRUCTURAL DRAWINGS.
- 8 SAW CUT AND REMOVE ASPHALT FOR EXCAVATION OF UTILITY TRENCH. FOLLOW WEBER COUNTY PUBLIC WORKS STANDARDS AND SPECIFICATIONS SECTION 1-16 RESTORATION OF SURFACE IMPROVEMENTS AND APWA PLAN NO. 255.
- 9 INSTALL 4" SDR-35 SEWER LATERAL PER APWA PLAN NO. 431.
- 10 INSTALL 4" SEWER GREASE LINE AND 3" VENT TO GREASE INTERCEPTOR.
- 11 INSTALL ENDURA XL75-TRI HYDROMECHANICAL GREASE INTERCEPTOR WITH CONCRETE LID PER MANUFACTURER'S STANDARDS AND SPECIFICATIONS. SEE MECHANICAL PLANS FOR DETAILS.
- 12 INSTALL 48" PRECAST SAMPLING MANHOLE PER APWA PLAN NO. 411.
- 13 HOT TAP WATER MAIN WITH 18" SADDLE x 6" OUTLET.
- 14 INSTALL 6" GATE VALVE WITH THRUST BLOCKING PER APWA PLAN NO. 561.
- 15 INSTALL 6" C900 PVC WATER PIPE PER APWA PLANS NO. 381 & 382.
- 16 INSTALL 2 1/2" C900 PVC WATER PIPE PER APWA PLANS NO. 381 & 382.
- 17 INSTALL 2" WATER METER PER APWA PLAN NO. 522.
- 18 INSTALL 6" HDPE STORM DRAIN PIPE, DAYLIGHT OUTLET IN DRAINAGE CHANNEL.
- 19 GAS PIPES AND STORAGE TANKS (1,000 GAL) TO BE EXCAVATED AND TRENCHED BY CONTRACTOR. INSTALLATION BY OTHERS.
- 20 INSTALL FIRE DEPARTMENT CONNECTION PER WEBER FIRE DISTRICT.
- 21 SEE MECHANICAL PLANS FOR CONTINUATION.
- 22 INSTALL 4" SEWER CLEANOUT.
- 23 CONSTRUCT 4' WIDE 6" THICK DECOMPOSED GRANITE PATHWAY.
- 24 INSTALL FOOTING DRAIN 4" PERFORATED HDPE PIPE. SEE DETAIL A/SHEET C504.



STAMP



NOT FOR CONSTRUCTION UNTIL  
 SIGNED BY THE ENGINEER

**POWDER MOUNTAIN**  
 8569 EAST SPRING PARK  
 EDEN, UT 84310

SHEET TITLE  
**SITE & UTILITY  
 PLAN**

No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/06/27

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JOB NO. **236**

DATE **06/28/2017**

SCALE **1" = 10'**

SHEET NO.

**C201**

**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.

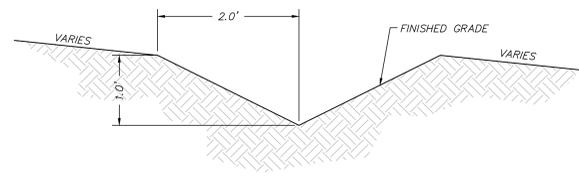
THE CONTRACTOR IS REQUIRED BY STATE AND FEDERAL REGULATIONS TO PREPARE A STORM WATER POLLUTION PREVENTION PLAN AND FILE A "NOTICE OF INTENT" WITH THE UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WATER QUALITY.

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

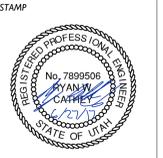
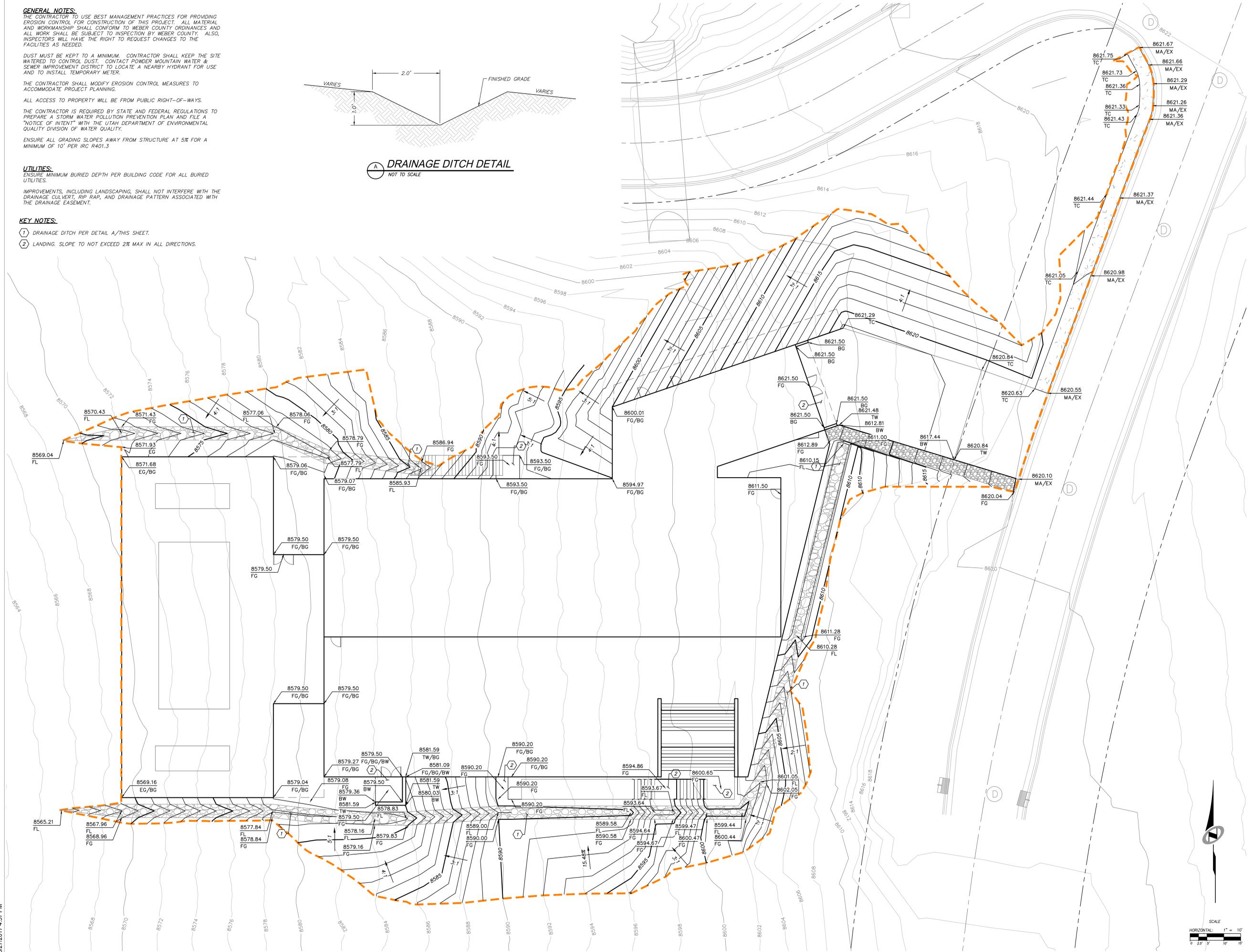
**UTILITIES:**  
 ENSURE MINIMUM BURIED DEPTH PER BUILDING CODE FOR ALL BURIED UTILITIES.

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

- KEY NOTES:**
- 1 DRAINAGE DITCH PER DETAIL A/THIS SHEET.
  - 2 LANDING SLOPE TO NOT EXCEED 2% MAX IN ALL DIRECTIONS.



**A DRAINAGE DITCH DETAIL**  
 NOT TO SCALE



NOT FOR CONSTRUCTION UNTIL SIGNED BY THE ENGINEER

**POWDER MOUNTAIN**  
**8569 EAST SPRING PARK**  
**EDEN, UT 84310**

SHEET TITLE  
**GRADING PLAN**

No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/6/27

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JOB NO. **236**  
 DATE **06/28/2017**  
 SCALE **1"=10'**

SHEET NO. **C301**



6/27/2017 4:57 PM

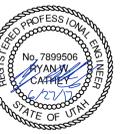






TALISMAN  
CIVIL CONSULTANTS

STAMP



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SIGNED BY THE ENGINEER

**POWDER MOUNTAIN**  
8569 EAST SPRING PARK  
EDEN, UT 84310

SHEET TITLE  
**DETAILS**

No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/6/27

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JOB NO.  
236

DATE  
06/28/2017

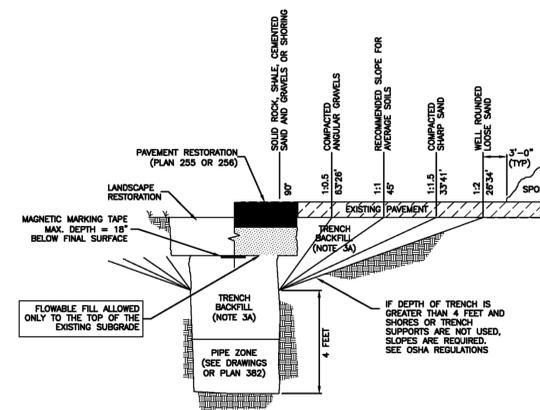
SCALE  
N/A

SHEET NO.  
C501

**Trench backfill**

- GENERAL**
  - The drawing applies to backfilling the trench above the pipe zone.
- PRODUCTS**
  - Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 3-inches.
  - Flowable Fill: Target is 60 psi in 28 days with 90 psi maximum in 28 days, APWA Section 31 05 15. It must flow easily requiring no vibration for consolidation.
- EXECUTION**
  - Trench Backfill:
    - DO NOT USE sewer rock, pea gravel, or recycled RAP aggregate as trench backfill.
    - Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a standard proctor density, APWA Section 31 23 26.
    - Water jetting is NOT allowed.
    - Submission of quality control compaction test result data developed for haunching areas may be requested by ENGINEER at any time. Provide results of tests immediately upon request.
  - Flowable Fill: When required, place controlled low strength material in the trench, APWA Section 31 05 15. Cure the fill before placing surface restorations.
  - Surface Restoration:
    - Landscaped Surface: Rake to match existing grade. Replace vegetation to match pre-construction conditions. Follow APWA Section 32 92 00 (turf or grass) or APWA Section 32 93 13 (ground cover) requirements.
    - Paved Surface: Do not install asphalt or concrete surfacing until trench compaction is acceptable to ENGINEER. Follow APWA Section 33 05 25 (asphalt surfacing), or APWA Section 33 05 25 (concrete surfacing).

202



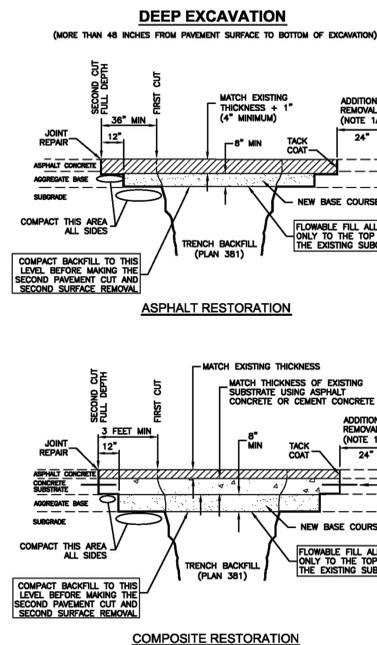
**Trench backfill**

Plan  
381

**Asphalt concrete T-patch**

- GENERAL**
  - If a saw cut in the direction of vehicular travel is within a wheel path, ENGINEER may order additional pavement removal so saw cut falls outside of a wheel path.
- PRODUCTS**
  - Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
  - Flowable Fill: Target is 60 psi in 28-days and 90 psi maximum in 28 days, APWA Section 31 05 15. It must flow easily requiring no vibration for consolidation.
  - Reinforcement: Galvanized or epoxy coated, deformed, 60 ksi yield grade steel, ASTM A 615.
  - Concrete: Class 4000, APWA Section 03 30 04.
  - Tack Coat: APWA Section 32 12 13.13.
  - Asphalt Concrete: APWA Section 32 12 05.
    - Warm weather patch – AC-20-DM-1/2 unless indicated otherwise.
    - Cold weather patch – modified MC-250-FM-1, APWA Section 33 05 25.
- EXECUTION**
  - Base Course Placement: APWA Section 32 05 10. Maximum lift thickness before compaction is 8-inches when using riding equipment or 6-inches when using hand held equipment. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.
  - Tack Coat: Clean all horizontal and vertical surfaces. Apply full coverage.
  - Asphalt Pavement: Match existing thickness plus 1 inch but not more than 6-inches in residential thoroughfares or 8-inches non residential thoroughfares. Install in lifts no greater than 3-inches after compaction. Compact to 94 percent of ASTM D 2041 (Rice density) plus or minus 2 percent. If asphalt pavement is substituted for concrete substrate, omit rebar and provide 1.25 inches of pavement for each 1 inch of concrete substrate substituted.
  - Reinforcement: Required if thickness of existing Portland-cement concrete substrate is 6-inches or greater. Not required if (1) less than 6-inches thick, (2) if existing concrete is deteriorating, (3) if excavation is less than 3 feet square, or (4) if asphalt pavement is substituted for Portland-cement concrete substrate.
  - Concrete Substrate: Cure to initial set before placing new asphalt concrete patch.
  - Joint Repair: If a crack occurs at a connection to an existing pavement or at any street fixture, flush seal the crack per Plan 265.
  - Patch Repair: Repair patch if any of the following conditions within the patch occur:
    - Pavement surface distortion exceeds 1/4-inch deviation in 10 feet. Repair option: Plane off surface distortions. Coat planed surfaces with a cationic or anionic emulsion that complies with APWA Section 32 12 03.
    - Cracks at least 1-foot long and 1/4-inch wide occur more often than 1 in 10 square feet. Repair option: Crack seal, APWA Section 32 01 17.
    - Asphalt raveling is greater than 1 square foot per 100 square feet. Repair option: Mill and inlay.

98



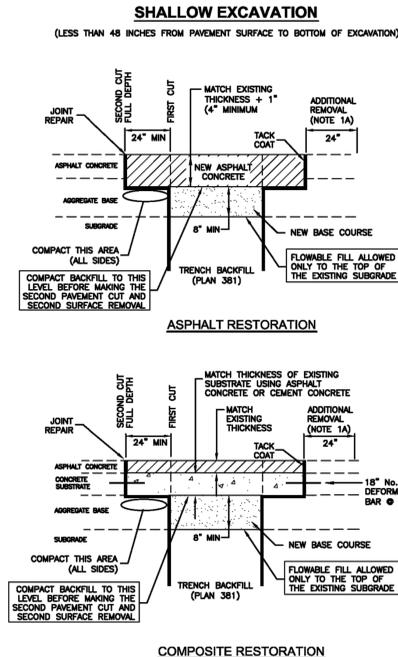
**Asphalt concrete T-patch**

Plan  
255

**Asphalt concrete T-patch**

- GENERAL**
  - If a saw cut in the direction of vehicular travel is in a wheel path, consult ENGINEER for directions on removing additional pavement other than the amount shown on the drawing.
- PRODUCTS**
  - Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
  - Flowable Fill: Target is 60 psi in 28 days with 90 psi maximum in 28 days, APWA Section 31 05 15. It must flow easily requiring no vibration for consolidation.
  - Reinforcement: No. 5, Galvanized or epoxy coated, deformed, 60 ksi yield grade steel, ASTM A 615.
  - Concrete: Class 4000, APWA Section 03 30 04.
  - Tack Coat: APWA Section 32 12 13.13.
  - Asphalt Concrete: APWA Section 32 12 05.
    - Warm Weather Patch: AC-20-DM-1/2, unless indicated otherwise.
    - Cold Weather Patch: Modified MC-250-FM-1 as indicated in APWA Section 33 05 25.
- EXECUTION**
  - Base Course Placement: APWA Section 32 05 10. Maximum lift thickness before compaction is 8-inches when using riding equipment or 6-inches when using hand held equipment. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.
  - Flowable Fill: Cure to initial set before placing aggregate base or asphalt pavement. Use in excavations that are too narrow to receive compaction equipment.
  - Tack Coat: Clean all horizontal and vertical surfaces. Apply full coverage.
  - Asphalt Pavement: Match existing thickness plus 1 inch but not more than 6-inches in residential thoroughfares or 8-inches non residential thoroughfares. Install in lifts no greater than 3-inches after compaction. Compact to 94 percent of ASTM D 2041 (Rice density) plus or minus 2 percent. If asphalt pavement is substituted for concrete substrate, omit rebar and provide 1.25 inches of pavement for each 1 inch of concrete substrate substituted.
  - Reinforcement: Required if thickness of existing Portland-cement concrete substrate is 6-inches or greater. Not required if (1) less than 6-inches thick, (2) if existing concrete is deteriorating, (3) if excavation is less than 3 feet square, or (4) if asphalt pavement is substituted for Portland-cement concrete substrate.
  - Concrete Substrate: Cure to initial set before placing new asphalt concrete patch.
  - Joint Repair: If a crack occurs at a connection to an existing pavement or at any street fixture, flush seal the crack per Plan 265.
  - Patch Repair: Repair patch if any of the following conditions within the patch occur:
    - Pavement surface distortion exceeds 1/4-inch deviation in 10 feet. Repair option: Plane off surface distortions. Coat planed surfaces with a cationic or anionic emulsion that complies with APWA Section 32 12 03.
    - Cracks at least 1-foot long and 1/4-inch wide occur more often than 1 in 10 square feet. Repair option: Crack seal.
    - Asphalt raveling is greater than 1 square foot per 100 square feet. Repair option: Mill and inlay.

96



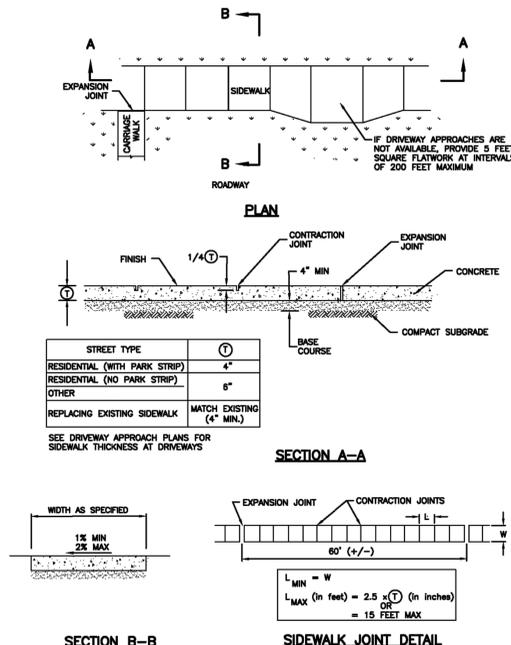
**Asphalt concrete T-patch**

Plan  
255

**Sidewalk**

- GENERAL**
  - Variance from specified dimensions and slopes must be acceptable to the ENGINEER. System configuration may be changed at ENGINEER's discretion.
  - Additional requirements are specified in APWA Section 32 16 13.
- PRODUCTS**
  - Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
  - Expansion Joint Filler: 1/2-inch thick type F1 full depth, APWA Section 32 13 73.
  - Concrete: Class 4000, APWA Section 03 30 04. If necessary, provide concrete that achieves design strength in less than 7 days. Use caution; however, as concrete crazing (spider cracks) may develop if air temperature exceeds 90 degrees F.
  - Concrete Curing Agent: Clear membrane forming compound with fugitive dye (Type ID Class A), APWA Section 03 39 00.
- EXECUTION**
  - Base Course Placement: APWA Section 32 05 10. Maximum lift thickness before compaction is 8-inches when using riding equipment or 6-inches when using hand held equipment. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.
  - Concrete Placement: APWA Section 03 30 10.
    - Install expansion joints vertical, full depth, with top of filler set flush with concrete surface.
    - Install contraction joints vertical, 1/8-inch wide or 1/4 slab thickness if the slab is greater than 8-inches thick. Maximum length to width ratio for non-square panels is 1.5 to 1. Maximum panel length (in feet) is 1.5 times the slab thickness (in inches).
    - Provide 1/2-inch radius edges. Apply a broom finish. Apply a curing agent.

56



**Sidewalk**

Plan  
231

March 2009

57



NOT FOR CONSTRUCTION UNTIL  
SIGNED BY THE ENGINEER

**POWDER MOUNTAIN**  
8569 EAST SPRING PARK  
EDEN, UT 84310

SHEET TITLE  
**DETAILS**

No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/06/27

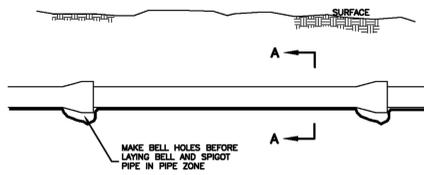
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JOB NO.  
**236**  
DATE  
**06/28/2017**  
SCALE  
**N/A**  
SHEET NO.

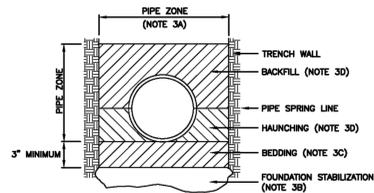
**C502**

- Pipe zone backfill**
- GENERAL**
    - Install the pipe in the center of the trench or no closer than 6-inches from the wall of the pipe to the wall of the trench.
  - PRODUCTS**
    - Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER'S permission.
    - Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.
    - Concrete: APWA Section 03 30 04.
    - Flowable Fill: Target is 60 psi in 28 days with 90 psi maximum in 28 days, APWA Section 31 05 15. It must flow easily requiring no vibration for consolidation.
    - Stabilization-Separation Geotextile: Moderate or high at CONTRACTOR'S choice, APWA Section 31 05 19.
  - EXECUTION**
    - Excavate the Pipe Zone: Width is measured at the pipe spring line and includes any necessary sheathing. Provide width recommended by pipe manufacturer. Follow manufacturer's recommendations when using trench boxes.
    - Foundation Stabilization: Get ENGINEER'S permission before installing common fill. Vibrate to stabilize. Installation of stabilization-separation geotextile will be required to separate backfill material and native subgrade materials if common fill cannot provide a working surface or prevent soils migration.
    - Base Course:
      - Furnish untreated base course material unless specified otherwise by pipe manufacturer.
      - 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.
      - When using concrete, provide at least Class 2,000 per APWA Section 03 30 04.
    - Pipe Zone: DO NOT USE sewer rock, pea gravel, or recycled RAP aggregate in the pipe zone. Water jetting is NOT allowed.
      - 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 unless pipe manufacturer requires more stringent installation.
      - Submission of quality control compaction test result data developed for the haunch zone may be requested by ENGINEER at any time. CONTRACTOR is to provide results of tests immediately upon request.
    - Flowable Fill (when required and if allowed by pipe manufacturer):
      - Place the controlled low strength material, APWA Section 31 05 15.
      - Prevent pipe flotation by installing in lifts and providing pipe restraints as required by pipe manufacturer.
      - Reset pipe to line and grade if pipe "floats" out of position.

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**ELEVATION VIEW**



**SECTION A-A**

**INSTALLATION**

**CONCRETE PIPE:** FOLLOW ASTM C 1479  
\*RECOMMENDED PRACTICE FOR INSTALLATION OF PRECAST CONCRETE SEWER, STORM DRAIN, AND CULVERT PIPE USING STRONG INSTALLATION.

**PVC AND HDPE PIPE:** FOLLOW ASTM D 2321  
\*RECOMMENDED PRACTICE FOR UNDERGROUND INSTALLATION OF HIGH-DENSITY POLYETHYLENE PIPE FOR SEWERS AND OTHER GRAVITY-FLOW APPLICATIONS.

**CORRUGATED METAL PIPE:** FOLLOW ASTM A 798  
\*RECOMMENDED PRACTICE FOR INSTALLING HEAVY-WALL CORRUGATED METAL PIPE FOR SEWERS AND OTHER APPLICATIONS.

**VITRIFIED CLAY PIPE:** FOLLOW ASTM C 12.  
\*RECOMMENDED PRACTICE FOR INSTALLING VITRIFIED CLAY PIPE LINES.

**Pipe zone backfill**

205

January 2011

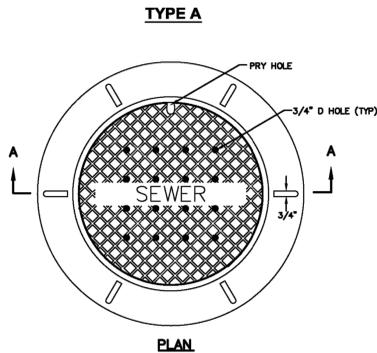
Plan  
**382**

April 1997

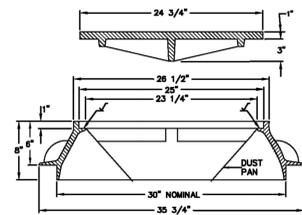
**30" Frame and cover**

- GENERAL**
  - The frame and cover fits the manhole in Plan 411.
- PRODUCTS**
  - Castings: Grey iron class 35 minimum, ASTM A 48, coated with asphalt based paint or better (except on machined surfaces).
    - Cast the heat number on the frame and cover.
    - Give the frame and cover a machine finish so the cover will not rock.
    - ✓ designates machined surface.
    - Cast the words "SEWER" on the cover in upper case flush with the surface finish.
- EXECUTION**
  - Except in paved streets, provide locking manhole covers in easements, alleys, parking lots, and all other places. Drill and tap two holes to a depth of 1-inch at 90 degrees to pry hole and install 3/4 x 3/4-inch allen socket set screws.

210



**PLAN**



**SECTION A-A**

**30" Frame and cover**

211

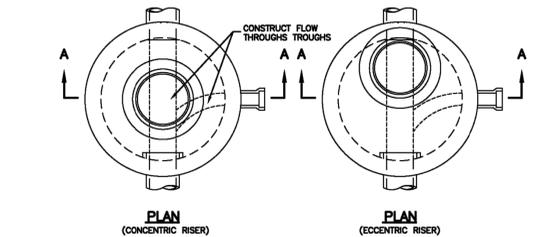
Plan  
**402**

April 2011

**Sanitary sewer manhole**

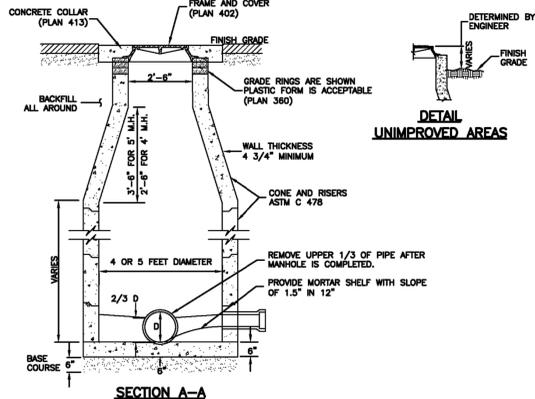
- GENERAL**
  - The drawing shows typical pipe connections. Refer to construction drawings for connection locations or refer to field location of existing piping when engineering pipe connection to the manhole.
  - Manhole size.
    - Diameter is 4 feet: For sewers under 12" diameter.
    - Diameter is 5 feet: For sewers 12" and larger, or when 3 or more pipes intersect the manhole.
- PRODUCTS**
  - Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER'S permission.
  - Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.
  - Concrete: Class 4000, APWA Section 03 30 04.
  - Riser and Reducing Riser: ASTM C 478.
  - Reinforcement: Deformed, 60 ksi yield grade steel, ASTM A 615.
  - Grout: 2 parts sand to 1 part cement mortar, ASTM C 1329.
  - Stabilization-Separation Geotextile: Moderate or high at CONTRACTOR'S choice, APWA Section 31 05 19.
- EXECUTION**
  - Foundation Stabilization: Get ENGINEER'S permission to use a sewer rock or a granular backfill borrow in a geotextile wrap to stabilize an unstable foundation.
  - Base Course Placement: APWA Section 32 11 23. 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.
  - Invert Cover: During construction, place invert covers over the top of pipe in manholes that currently convey sewerage. See Plan 412.
  - Pipe Connections: Grout around all pipe openings.
  - Pipe Seal: Install rubber-based pipe seals on all plastic pipes when connecting plastic pipes to manholes. Hold water-stop in place with stainless steel bands.
  - Joints: Place flexible gasket-type sealant in all riser joints. Finish with grout.
  - Adjustment: If the required manhole adjustment is more than 1'-0", remove the cone and grade rings and adjust the manhole elevation with the appropriate manhole section, the cone section, and the grade rings or plastic form to make frame and lid match finish grade.
  - Finish: Provide smooth and neat finishes on interior of cones, shafts, and rings. Imperfect moldings or honeycombs will not be accepted.
  - Backfill: Provide backfill against the manhole shaft. Pea gravel and recycled RAP aggregate is NOT ALLOWED. Water jetting is NOT allowed. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a standard proctor density, APWA Section 31 23 26.

212



**PLAN (CONCENTRIC RISER)**

**PLAN (ECCENTRIC RISER)**



**SECTION A-A**

**Sanitary sewer manhole**

213

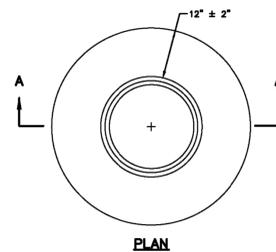
Plan  
**411**

April 2011

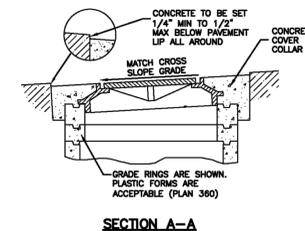
**Cover collar for sanitary sewer manhole**

- GENERAL**
  - In a pavement surface, the concrete will support the frame under traffic loadings.
- PRODUCTS**
  - Concrete: Class 4000, APWA Section 03 30 04.
  - Concrete Curing Agent: Type ID Class A (clear with fugitive dye), membrane forming compound, APWA Section 03 39 00.
- EXECUTION**
  - Pavement Preparation: Provide a neat vertical and concentric joint between concrete and existing asphalt concrete surfaces. Clean edges of all dirt, oil, and loose debris.
  - Concrete Placement: Fill the annular space around the frame and cover casting with concrete. Apply a broom finish. Apply a curing agent.

216



**PLAN**



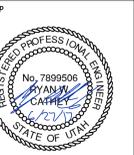
**SECTION A-A**

**Cover collar for sanitary sewer manhole**

217

Plan  
**413**

September 2001



NOT FOR CONSTRUCTION UNTIL SIGNED BY THE ENGINEER

**POWDER MOUNTAIN**  
8569 EAST SPRING PARK  
EDEN, UT 84310

SHEET TITLE  
**DETAILS**

No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/6/27

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JOB NO.  
236

DATE  
06/28/2017

SCALE  
N/A

SHEET NO.

**C503**

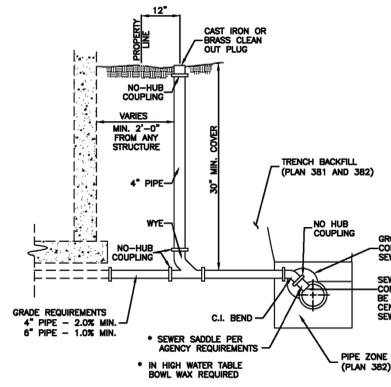
- Sewer lateral connection**
- GENERAL**
    - Before installation, secure acceptance by ENGINEER for all pipe, fittings, and couplings to be used.
    - Before backfilling, secure inspection of installation by ENGINEER. Give at least 24 hours notice.
    - Verify if CONTRACTOR or agency is to install the wye.
  - PRODUCTS**
    - Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
    - Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.
    - Provide agency approved wye or tee with appropriate donut.
    - Stainless steel straps required.
  - EXECUTION**
    - Tape wrap pipe as required by soil conditions.
    - Remove core plug from sewer main. Do not break into sewer main to make connection.
    - Base Course and Backfill Placement: Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a standard proctor density, APWA Section 31 23 26.

- 27" Frame and cover**
- GENERAL**
    - This frame and cover fits manholes in Plan 505.
  - PRODUCTS**
    - Castings: Grey iron class 35 minimum, ASTM A 48, coated with asphalt based paint or better (except on machined surfaces).
      - Cast the heat number on the frame and cover.
      - Give the frame and cover a machine finish so the cover will not rock.
      - √ designates machined surface.
      - Cast the name of the agency or its acronym as the first line. Cast the word "WATERWORKS" as the second line. Cast the word "Valve" (or applicable word) as the third line. Cast all letters on the cover in upper case flush with the surface finish.
  - EXECUTION** (Not used)

- Concrete meter boxes**
- GENERAL**
    - Before backfilling secure inspection of installation by ENGINEER.
  - PRODUCTS**
    - Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
    - Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.
    - Concrete: Class 4000, APWA Section 03 30 04. Use type II cement (low alkali).
    - Reinforcement: Deformed, 60 ksi yield grade steel, ASTM A 615.
  - EXECUTION**
    - Base Course Placement: APWA Section 32 11 23. 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.
    - Concrete Placement: APWA Section 03 30 10. Provide 1/2-inch radius edges. Apply a broom finish. Apply a curing agent.
    - Fill annular space around pipe wall penetrations with waterproof sealer.
    - Place frame and cover directly over valve or meter location.
    - Backfill: Provide backfill against the manhole shaft. Pea gravel and recycled RAP aggregate is NOT ALLOWED. Water jetting is NOT allowed. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a standard proctor density, APWA Section 31 23 26.

- 1 1/2" and 2" meter**
- GENERAL**
    - Turbine meters are required on all systems used exclusively for irrigation or fire protection.
    - Where domestic use is applicable, use a standard meter.
    - Before backfilling, secure inspection of installation by ENGINEER.
  - PRODUCTS**
    - Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
    - Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.
    - Castings: Grey iron class 35 minimum per ASTM A 48, coated with asphalt based paint or better.
  - EXECUTION**
    - Meter Placement:
      - All meters are to be installed in the park strip or within 7 feet of the property line (street side).
      - Do not install meters under driveway approaches, sidewalks, or curb and gutter.
      - In new construction, install meter at center of lot or per agency requirements.
    - Meter Box: Set box so grade of the frame and cover matches the grade of the surrounding surface.
    - Bypass Valve: Lock in off position.
    - Blocking: Use clay brick or concrete block.
      - Center frame and cover over water meter.
      - Allow 1-inch clearance around waterline where water line passes through concrete box wall. Seal opening with compressible seal.
    - 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.
    - Base Course and Backfill Placement: Maximum lift thickness before compaction is 8-inches. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.

218



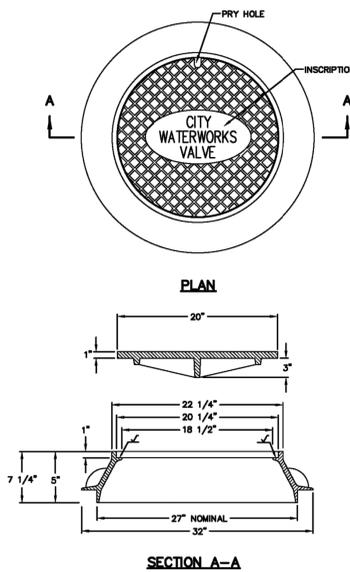
**Sewer lateral connection**

Plan  
**431**

January 2011

219

230



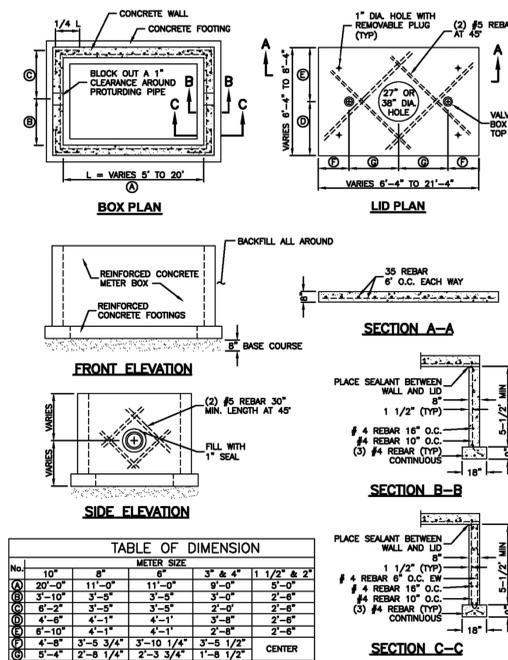
**27" Frame and cover**

Plan  
**502**

April 1997

231

234



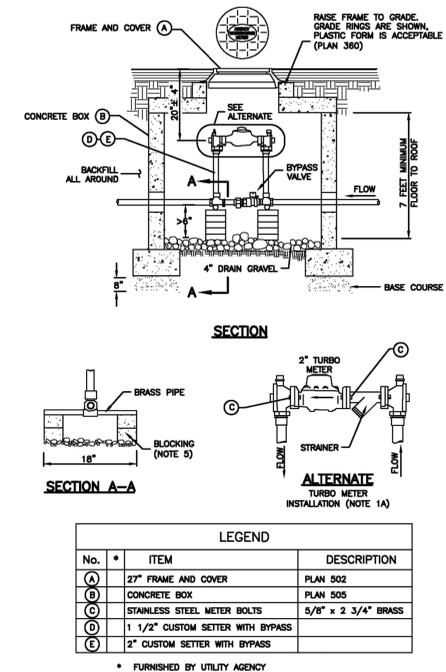
**Concrete meter boxes**

Plan  
**505**

August 2001

235

240



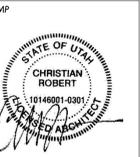
**1 1/2" and 2" meter**

Plan  
**522**

August 2001

241





NOT FOR CONSTRUCTION UNTIL  
SIGNED BY THE ARCHITECT

**POWDER MOUNTAIN - PARCEL 4**  
8569 East Spring Park  
Eden, UT 84310

GRAPHIC  
SYMBOLS AND  
ABBREVIATIONS

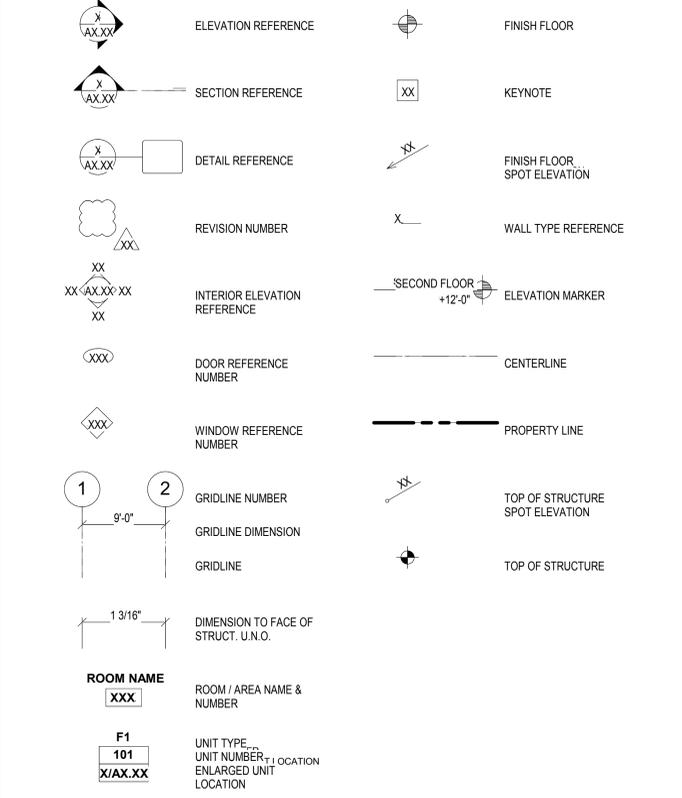
No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/6/27

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SHEET NO. **236**  
DATE **06/20/2017**  
SCALE **1/8" = 1'-0"**

**A00.02**

AB	ANCHOR BOLT	HB	HOSE BIB	SL	SLOPE
AC	ASPHALTIC CONCRETE	HC	HANDICAP or HOLLOW CORE	SLD	SEE LANDSCAPE DRAWINGS
ACT	ACOUSTICAL CEILING TILES	HCT	HOLLOW CLAY TILE	SMF	SEE LIGHTING CONSULTANT'S DRAWINGS
AD	AREA DRAIN	HD	HEAD	SMD	SPECIAL MOMENT FRAME
ADJ	ADJACENT	HDF	HIGH DENSITY FIBERBOARD	SDG	SEE MECHANICAL DRAWINGS
AGGR	AGGREGATE	HDS	HOT DIPPED GALVANIZED	SOG	SLAB ON GRADE
ALT	ALTERNATE	HDR	HEADER	S&P	SHIELD AND POLE
ALUM	ALUMINUM	HDWD	HARDWOOD	SP	STANDARD or STAINED
ANNUNC	ANNUNCIATOR	HW	HARDWARE	SFD	SEE PLUMBING DRAWINGS
ANOD	ANODIZED	HT	HEIGHT	SPEC	SPECIFICATIONS
AP	ACCESS PANEL	HM	HOLLOW METAL	SQ	SQUARE
APPL	APPLIANCE	HR	HORIZONTAL	SSD	SEE STRUCTURAL DRAWINGS
APPROX	APPROXIMATELY	HP	HIGH POINT	SS	SELECT STRUCTURAL or STAINLESS STEEL
ARCH	ARCHITECTURE	HRZ	HAND RAIL	STD	STANDARD or STAINED
ARCHT	ARCHITECT	HSS	HOLLOW STEEL SECTION	STL	STEEL
ATB	ALIGN TO BELOW	HTNG	HEATING	STR	STORAGE
AUTO	AUTOMATIC	HTSFM	HIGH TENS SELF ADHERED SHEET MEMBRANE	STRFRONT	STOREFRONT
AVG	AVERAGE	HW	HOT WATER	STRUCT	STRUCTURAL
BD	BOARD	HVAC	HEATING/VENTILATION & AIR CONDITIONING	SUSP	SUSPENDED
BET/BTW	BETWEEN	HVY	HEAVY	SYMM	SYMMETRICAL
BL	BUILDING LINE	ID	INSIDE DIAMETER	T&D	TO BE DETERMINED
BLDG	BUILDING	IN	INCH	TEL	TELEPHONE
BLK	BLOCK	INCL	INCLUDED(ING)	TEMP	TEMPERED or TEMPORARY
BLKG	BLOCKING	E	INVERT ELEVATION	T&B	TOP AND BOTTOM
BLKT	BLANKET	IF	INSIDE FACE	T&G	TONGUE AND GROOVE
BLW	BELOW	INFILTR	INFILTRATION	THK	THICKNESS
BM	BEAM	INFO	INFORMATION	THRU	THROUGH
BN	BOUNDARY NAIL	INSTAL	INSTALLATION	TO	TOP OF
BO	BOTTOM OF	INSTRUC	INSTRUCTION	TOC	TOP OF CONCRETE
BOS	BOTTOM OF STRUCTURE	INSUL	INSULATION	TOP OF DECK	
BRDG	BRIDGING	INT	INTERIOR	TOJ	TOP OF JOIST
BRK/ET	BRICK/ET	INTERMED	INTERMEDIATE	TOP	TOP OF PARAPET
BS	BOTH SIDES	INVERT	INVERT	TOS	TOP OF STRUCTURE
BTM	BOTTOM	JAN	JANITOR	TOSL	TOP OF SLAB
BTU	BRITISH THERMAL UNIT	JST	JOIST	TOST	TOP OF WALL
BUR	BUILT UP ROOFING	JT	JOINT	TR	TREAD
BYND	BEYOND	K	KEE	TRTD	TREATED
CAB	CABINET	KEE	KEystone ETHYLENE ESTER	TS	TUBULAR STEEL
CB	CATCH BASIN	KIT	KITCHEN	TV	TELEVISION
CBC	CALIFORNIA BUILDING CODE	KP	KICK PLATE	UBC	UNIFORM BUILDING CODE or APPLICABLE LOCAL BLDG CODE
CC	CENTER TO CENTER	L	LENGTH	UL	UNDERWRITERS LABORATORY
CEM	CEMENT	LAV	LAVATORY	ULDRAY	UNDERLAYMENT
CG	CORNER GUARD	LBS or #	POUNDS	UNO	UNLESS NOTED OTHERWISE
CHBC	CALIFORNIA HISTORIC BUILDING CODE	LF	LINEAL FEET	UNO	UNO
CHP	CAST PLACE	LH	LEFT HAND	US	UTILITY
CJ	CONSTRUCTION JOINT	LN	LINE	UV	ULTRAVIOLET
CL	CENTER LINE	LL	LINE LOAD	V	VOID
CLG	CEILING	LO	LINE OF	VP	VAPOR BARRIER
CLG	CAULKING	LOB	LINE OF BUILDING ABOVE	VCT	VINYL COMPOSITE TILE
CLD	CLOSE	LP	LOW POINT	VG	VERTICAL GRAIN
CLR	CLEAR OUT	LT	LIGHT	VGDF	VERTICAL GRAIN DOUGLAS FIR
CMU	CONCRETE MASONRY UNIT	LTWT	LIGHT WEIGHT	VENT	VENTILATION
CO	COLUMN	LVR	LOUVER	VERT	VERTICAL
COL	COLUMN	MACH	MACHINE	VF	VERIFY IN FIELD
COMP	COMPOSITION	MAN	MANUAL	VOL	VOLUME
CONC	CONCRETE	MATL	MATERIAL	VTR	VENT THROUGH ROOF
CONNL	CONNECTION	MAX	MAXIMUM	W	WEST or WIDE FLANGE or WASHER
CONST	CONSTRUCTION	MB	MACHINE BOLT	WI	WITH
CONT	CONTINUOUS	MC	MEDICINE CABINET	WC	WATER CLOSET
COORD	COORDINATE	MDF	MEDIUM DENSITY FIBERBOARD	WD	WOOD
CORR	CORRIDOR	MDO	MEDIUM DENSITY OVERLAY	WD	WASHER AND DRYER
CORRG	CORRUGATED	MECH	MECHANICAL	WF	WALL FURNACE
CPT	CAP	MEMB	MEMBRANE	WGL	WIRE GLASS
CS	COUNTER SINK	MEZZ	MEZZANINE	WH	WATER HEATER or WEEP HOLE
CT	CERAMIC TILE	MF	MOMENT FRAME	WN	WINDOW
CTR	CENTER	MFR	MANUFACTURER	WO	WITHOUT
CW	COLD WATER	MH	MANHOLE	WP	WATERPROOF(ING)
D	DRYER	MIN	MINIMUM	WPM	WATERPROOF MEMBRANE
DBL	DOUBLE	MIR	MIRROR	WSB	WEATHER RESISTIVE BARRIER
DEG	DEGREES	MISC	MISCELLANEOUS	WT	WEIGHT
DEPT	DEPARTMENT	MLWK	MILLWORK	WWF	WELDED WIRE FABRIC
DET, DTL	DETAIL	MOIST	MOISTURE	WKPT	WORK POINT
DF	DRINKING FOUNTAIN or DOUGLAS FIR	MOT	MOTORIZED		
DIA	DIAMETER	MTD	MOUNTED		
DIAG	DIAGONAL	MTL	METAL		
DIFF	DIFFUSER	MIX	MIXTURE		
DIM	DIMENSION	MULL	MULLION		
		(N)	NEW		
		N	NORTH		
		NAT	NATURAL		
		NIC	NOT IN CONTRACT		
		NO or #	NUMBER		
		NTS	NOT TO SCALE		
		OBS	OBSOLETE		
		OC	ON CENTER		
		OD	OUTSIDE DIAMETER or OVERFLOW DRAIN		
		OFF	OFFICE		
		OH	OPPOSITE HAND		
		OPNG	OPENING		
		OPP	OPPOSITE		
		ORIG	ORIGINAL		
		OS	OVERFLOW SCUPPER		
		OT	OUTLET		
		OSA	OUTSIDE AIR		
		OI	OVER		
		OVFL	OVERFLOW		
		OVHD	OVERHEAD		
		PA	PLANTING AREA		
		PB	PLANTER BOX		
		PBD	PARTICLE BOARD		
		PED	PEDESTRIAN		
		PERF	PERFORATED		
		PJ	POUR JOINT		
		PL	PROPERTY LINE or PLATE		
		PLAS	PLASTER		
		PLAM	PLASTIC LAMINATE		
		PLBNG	PLUMBING		
		PLYWD	PLYWOOD		
		PNL	PANEL		
		PP	POWER POLE		
		PAR	PAIR		
		PRF	PREFABRICATED		
		PREFIN	PREFINISHED		
		PROV	PROVIDED		
		PROJ	PROJECT		
		PSF	POUNDS PER SQ FT		
		PT	POINT		
		PTD	PAINTED		
		PTN	PARTITION		
		PVC	POLYVINYL CHLORIDE		
		QT	QUARRY TILE		
		QTY	QUANTITY		
		R	RISER		
		RA	RETURN AIR		
		RAD	RADIUS		
		RAH	ROOF ACCESS HATCH		
		RCP	REFLECTED CEILING PLAN		
		RD	ROOF DRAIN		
		REC	RECESSED		
		RECIRC	RECIRCULATING		
		RECEP	RECEPTACLE		
		RECS	RECOMMENDATIONS		
		REF	REFERENCE or REFRIGERATOR		
		REG	REGISTER or REGULATION or REGULAR		
		RENF	REINFORCEMENT		
		REMOV	REMOVE		
		RESID	RESIDENTIAL		
		RESIL	RESILIENT		
		REQD	REQUIRED		
		REV	REVISED or REVISION		
		RF	ROOF		
		RFNG	ROOFING		
		RH	RIGHT HAND		
		RJ	ROOF JOIST		
		RND	ROUND		
		RM	ROOM		
		RO	ROUGH OPENING		
		ROD	ROOF OVERFLOW DRAIN		
		ROW	RIGHT OF WAY		
		RP	ROOF PLAN		
		RR	ROOF RAFTERS		
		RWD	REDWOOD		
		S	SOUTH		
		SA	SUPPLY AIR		
		SAM	SELF ADHERED MEMBRANE		
		SAF	SELF ADHERED FLASHING		
		SASM	SELF ADHERED SHEET MEMBRANE		
		SC	SOLID CORE		
		SCHED	SCHEDULE		
		SCUP	SCUPPER		
		SECT	SECTION		
		SEP	SEPARATE, SEPARATION		
		SFL	SUB FLOOR		
		SG	SINGLE		
		SHT	SHEET		
		SHRNG	SHRIMP		
		SN	SIMILAR (NOT IDENTICAL)		
		SCD	SEE CIVIL DRAWINGS		
		SDNG	SEEDING		
		SED	SEE ELECTRICAL DRAWINGS		
		SEW	SEWER		
		SHWR	SHOWER		



ABBREVIATIONS AND GRAPHIC SYMBOLS 1/8" = 1'-0" 1

GROSS BUILDING AREAS SCHEDULE	
LEVEL	AREA
1-LOWER BASEMENT	3,414 SF
2-UPPER BASEMENT	14,255 SF
3-GROUND LEVEL	7,819 SF
4-UPPER GROUND LEVEL	1,497 SF
TOTAL GROSS AREA	26,985 SF

## APPLICABLE CODES

AS PER UTAH OFFICIAL, SUBJECT TO THE OTHER PROVISIONS OF THIS PART, THE FOLLOWING CONSTRUCTION CODES ARE INCORPORATED BY REFERENCE, AND TOGETHER WITH THE AMENDMENTS SPECIFIED IN CHAPTER 3, PART 3, STATEWIDE AMENDMENTS TO INTERNATIONAL PLUMBING CODE, AND CHAPTER 4, LOCAL AMENDMENTS INCORPORATED AS PART OF STATE CONSTRUCTION CODE, ARE THE CONSTRUCTION STANDARDS TO BE APPLIED TO BUILDING CONSTRUCTION, ALTERATION, REMODELING, AND REPAIR, AND IN THE REGULATION OF BUILDING CONSTRUCTION, ALTERATION, REMODELING, AND REPAIR IN THE STATE:

- (A) 2015 INTERNATIONAL BUILDING CODE, INCLUDING APPENDIX J
- (B) 2015 INTERNATIONAL RESIDENTIAL CODE
- (C) 2015 INTERNATIONAL PLUMBING CODE
- (D) 2015 INTERNATIONAL MECHANICAL CODE
- (E) 2015 INTERNATIONAL FUEL GAS CODE
- (F) 2014 NATIONAL ELECTRICAL CODE ISSUED BY THE NATIONAL FIRE PROTECTION ASSOCIATION
- (G) 2015 INTERNATIONAL ENERGY CONSERVATION CODE
- (H) 2015 INTERNATIONAL EXISTING BUILDING CODE
- (I) SUBJECT TO SUBSECTION 15A-2-104(2) HUD CODE
- (J) SUBJECT TO SUBSECTION 15A-2-104(1), APPENDIX E OF 2015 INTERNATIONAL RESIDENTIAL CODE
- (K) 2009 ICC/ANSI A117.1 STANDARD FOR ACCESSIBILITY

## PLUMBING FIXTURES CALCS

UPPER BASEMENT		
TOTAL OCCUPANT	300	
	MEN	WOMEN
	150	150
	REQ.D	PROV.D
WATER CLOSET	2	4
URINALS	1	
LAVATORIES	1	1
DRINKING FOUNTAINS		2

GROUND LEVEL		
TOTAL OCCUPANT	300	
	MEN	WOMEN
	150	150
	REQ.D	PROV.D
WATER CLOSET	2	4
URINALS	1	
LAVATORIES	1	1
DRINKING FOUNTAINS		2

## PROJECT SUMMARY

### PROJECT SUMMARY

5 STORY ABOVE GRADE MULTI-HOUSING, RETAIL AND RESTAURANT PROJECT.

ADDRESS: 8569 EAST SPRING PARK, EDEN, UTAH 84310

### LAND USE ZONING:

## DEFERRED SUBMITTALS

THE FOLLOWING ITEMS ARE DESIGN-BUILD AND ARE NOT A PART OF THIS PERMIT. THEY WILL BE SUBMITTED FOR PLAN CHECK AS REQUIRED DURING CONSTRUCTION BY THE CONTRACTOR. THESE DOCUMENTS SHALL BE SUBMITTED TO THE ARCHITECT OR ENGINEER OF RECORD, WHO SHALL REVIEW THEM AND FORWARD THEM TO THE BUILDING OFFICIAL WITH A NOTATION INDICATING THAT THE DOCUMENTS HAVE BEEN REVIEWED AND THAT THEY HAVE BEEN FOUND TO BE IN GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING. THESE SEPARATE ITEMS SHALL NOT BE INSTALLED UNTIL THEIR DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE DEPARTMENT OF BUILDING AND SAFETY.

1. WET STANDPIPE
2. FIRE SPRINKLERS
3. FIRE ALARM AND LIFE SAFETY
4. ELEVATORS
5. PRE-FABRICATED STAIRS WHERE OCCUR
6. GLAZING AND SKYLIGHTS
7. SHORING
8. WINDOW CLEANING SYSTEMS AND TIE BACKS
9. COMPACTION GROUTING

## BUILDING CODE INFORMATION

### OCCUPANCIES:

MIXED USE:

EVENT SPACE, ACTIVITY AREAS GROUP A-2

GYM, BASKETBALL, BOWLING GROUP A-3

SWIMMING POOL

MEP GROUP S-1

STORAGE GROUP S-2

TOTAL GROSS BUILDING AREA 26,620 SF

TYPE V-B

### TABLE 503 - ALLOWABLE BUILDING HEIGHT AND AREAS:

OCCUPANCY A-2 STORY TYPE V-B ON TOP OF TWO STORY TYPE 1-A

### HEIGHT:

HEIGHT ABOVE BUILDING GRADE PLANS = 60' FOR V-B  
ALLOWABLE NO. OF STORIES ABOVE GRADE PLANE = 2 STORIES

PROPOSED HEIGHT = 51'  
PROPOSED NO. OF STORIES = 2 STORIES TOTAL ABOVE GRADE PLANE PLUS MEZZANINE (REFERED TO AS UPPER GROUND LEVEL IN THE DOCUMENTATION)

### MAX ALLOWABLE AREA:

Aa = [18,000 + (6,000 x 0)] x 2 = 36,000 SF

PROPOSED MAX. AREA PER FLOOR = 14,185 SF

### TABLE 601

FIRE RESISTANCE RATING REUQUIREMENTS PER TYPE

	TYPE 1-A	TYPE V-B
STRUCTURE:	3HR	0
BEARING WALLS :	2HR	0
NON BEARING WALLS		
AND PARTITION INTERIOR:	SEE TABLE 602	0
FLOOR CONSTRUCTION		
AND SECONDARY MEMBERS:	2 HR	0
ROOF CONSTRUCTION		
AND SECONDARY MEMBERS:	1 HR	0

BUILDING FULLY SPRINKLERED, AUTOMATIC SYSTEM THROUGHOUT PER 903.1.1

PROVIDE FIRE ALARM SYSTEM PER SECTION 907.

PROVIDE APPROVED CLASS 1 STANDPIPE SYSTEM AS SET FORTH IN BUILDING CODE AND FIRE CODE 905.

### SHAFT RATINGS:

PER 713.4, 1-HR FIRE RESISTANCE RATING WHERE CONNECTING LEES THAN FOUR STORIES

ENCLOSED ELEVATOR LOBBIES NOT REQUIRED PER EXCEPTION 713.14.1, CONNECTING LESS THAN 2 STORIES

### GRADE PLANE CALCULATION:

$8,569' + 8,572' + 8,610' + 8,607' = 34,358' / 4 = 8,589.5' ASL$



4200 Sepulveda Boulevard, Suite 100  
Culver City, CA 90230  
tel: 310.730.6698  
www.r-a-d.com

STAMP



NOT FOR CONSTRUCTION UNTIL  
SIGNED BY THE ARCHITECT

**POWDER MOUNTAIN - PARCEL 4**  
 8569 East Spring Park  
 Eden, UT 84310

SHEET TITLE

**AREAS CALCS &  
CODE ANALYSIS**

No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/07/27

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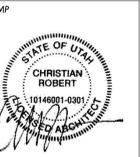
236

DATE 06/20/2017

SCALE

SHEET NO.

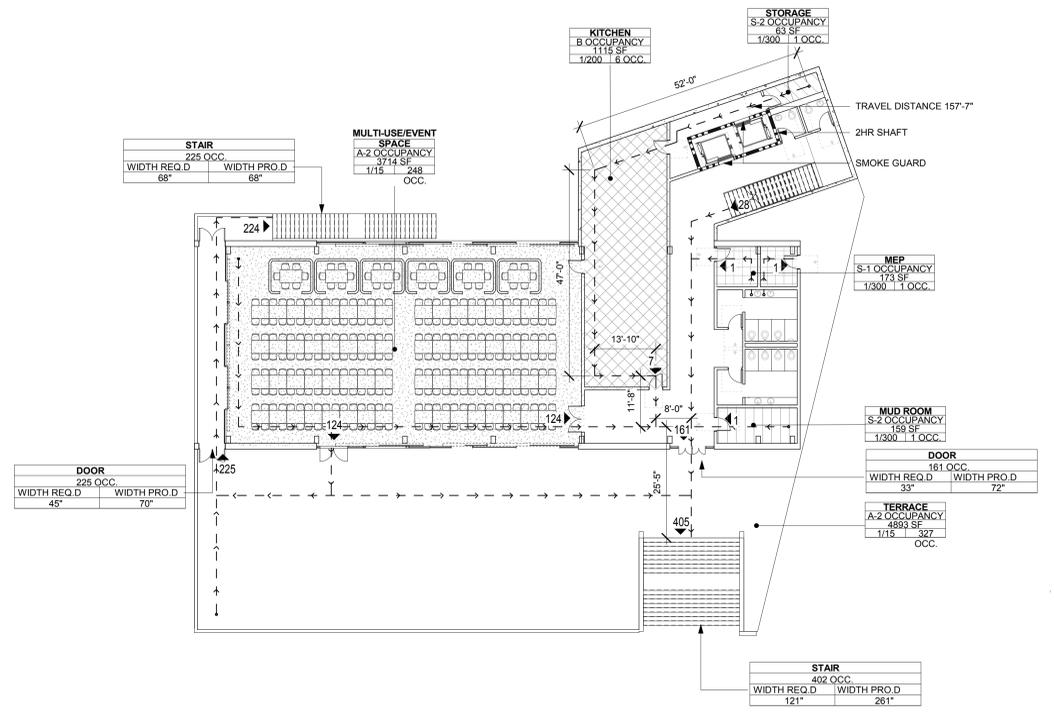
**A01.01**



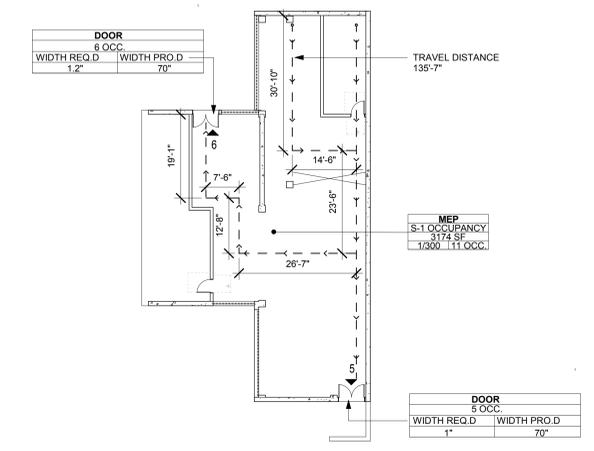
NOT FOR CONSTRUCTION UNTIL  
SIGNED BY THE ARCHITECT

**POWDER MOUNTAIN - PARCEL 4**  
8569 East Spring Park  
Eden, UT 84310

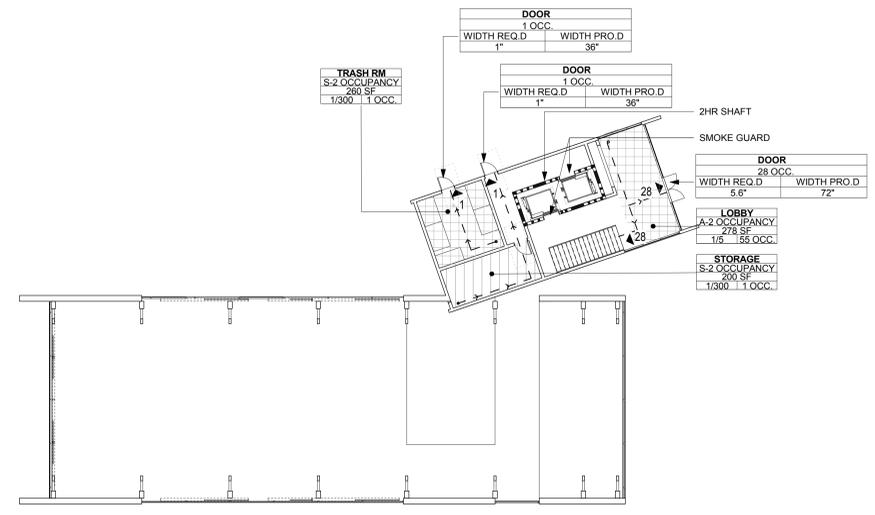
**NOTE:**  
EVERY ROOM OR SPACE THAT IS AN ASSEMBLY OCCUPANCY SHALL HAVE THE OCCUPANT LOAD OF THE ROOM OR SPACE POSTED IN A CONSPICUOUS PLACE, NEAR THE MAIN EXIT OR EXIT ACCESS DOORWAY FROM THE ROOM OR SPACE. POSTED SIGNS SHALL BE OF AN APPROVED LEGIBLE, PERMANENT DESIGN AND SHALL BE MAINTAINED BY THE OWNER OR AUTHORIZED AGENT (BUILDING CODE 1004.3, FIRE CODE 1004.3)



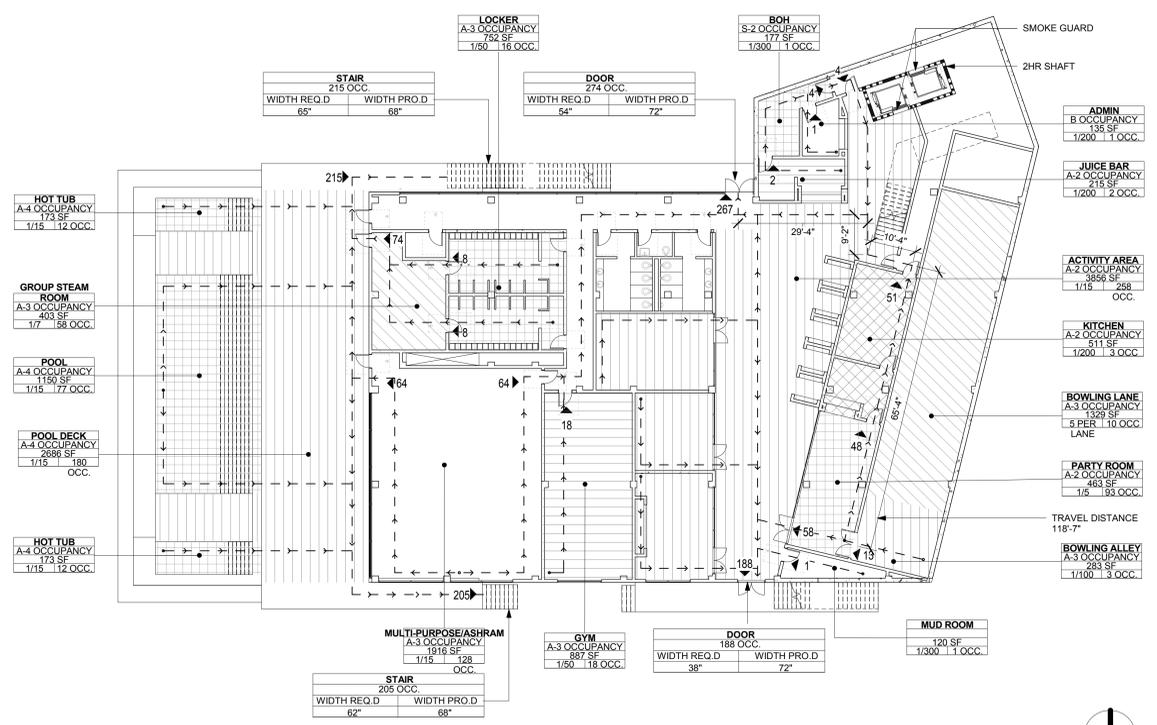
3-GROUND LEVEL (OCC) 1/16" = 1'-0" 3



1-LOWER BASEMENT (OCC) 1/16" = 1'-0" 1



4-UPPER GROUND LEVEL (OCC) 1/16" = 1'-0" 4



2-UPPER BASEMENT (OCC) 1/16" = 1'-0" 2

**CODE ANALYSIS PLANS**

No	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/6/27

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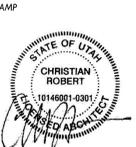
**236**  
DATE: 06/20/2017  
SCALE: 1/16" = 1'-0"  
SHEET NO.

**A01.02**









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SIGNED BY THE ARCHITECT

**POWDER MOUNTAIN - PARCEL 4**  
8569 East Spring Park  
Eden, UT 84310

SHEET TITLE

**ACCESSIBILITY  
NOTES (PUBLIC)**

No	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2/17/2017
2	236	06/20/2017
3	DATE	
4	SCALE	
5	SHEET NO.	

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**A04.05**

PASSENGER LOADING ZONES, DROP-OFF ZONES, AND BUS STOPS CONTD

29. PASSENGER DROP-OFF AND LOADING ZONES SHALL PROVIDE ACCESS ASIES COMPLYING WITH THE FOLLOWING ADJACENT AND PARALLEL TO THE VEHICLE PULLUP SPACE. ACCESS ASILES SHALL ACCORDING ACCESSIBLE ROUTE AND SHALL NOT OVERLAP THE VEHICULAR WAY. §11B-503.3
- A ACCESS ASILES SERVING VEHICLE PULL-UP SPACES SHALL BE 60 INCHES WIDE MINIMUM. §11B-503.1
- B ACCESS ASILES SHALL EXTEND THE FULL LENGTH OF THE VEHICLE PULL-UP SPACES THEY SERVE. §11B-503.2
- C ACCESS ASILES SHALL BE MARKED WITH A PAINTED BORDERLINE AROUND THEIR PERIMETER. THE AREA WITHIN THE BORDERLINES SHALL BE MARKED WITH HATCHED LINES A MAXIMUM OF 36 INCHES ON CENTER IN A COLOR CONTRASTING WITH THAT OF THE ASILE SURFACE. §11B-503.3.3
30. VEHICLE PULL-UP SPACES AND ACCESS ASILES SERVING THEM SHALL COMPLY WITH SECTION 11B-503.2. ACCESSIBLE ROUTES TO ACCESSIBLE SPACES SHALL BE AT THE SAME LEVEL AS THE VEHICLE PULL-UP SPACE THEY SERVE. CHANGES IN LEVEL ARE NOT PERMITTED. §11B-503.4
31. VEHICLE PULL-UP SPACES, ACCESS ASILES SERVING THEM, AND A VEHICULAR ROUTE FROM AN ENTRANCE TO THE PASSENGER LOADING ZONE AND FROM THE PASSENGER LOADING ZONE TO A VEHICLE STOP SHALL PROVIDE A VERTICAL CLEARANCE OF 14 INCHES MINIMUM. §11B503.5

E. PLUMBING FIXTURES AND FACILITIES DRINKING FOUNTAINS

1. NO FEWER THAN TWO DRINKING FOUNTAINS SHALL BE PROVIDED. ONE DRINKING FOUNTAIN SHALL COMPLY WITH 11B-602.1 THROUGH 11B-602.4 AND ONE DRINKING FOUNTAIN SHALL COMPLY WITH 11B-602.7 DRINKING FOUNTAINS FOR STANDING PERSONS. §11B-211.2 (SEE EXCEPTION)
2. WHERE MORE THAN THE MINIMUM NUMBER OF DRINKING FOUNTAINS SPECIFIED IN 11B-211.2 ARE PROVIDED, 50 PERCENT OF THE TOTAL NUMBER OF DRINKING FOUNTAINS PROVIDED SHALL COMPLY WITH 11B-602.1 THROUGH 11B-602.4 AND 50 PERCENT OF THE TOTAL NUMBER OF DRINKING FOUNTAINS PROVIDED SHALL COMPLY WITH 11B-602.7 DRINKING FOUNTAINS FOR STANDING PERSONS. §11B-211.3 SEE EXCEPTION
3. DRINKING FOUNTAINS SHALL COMPLY WITH SECTIONS 11B-307 PROTRUDING OBJECTS AND 11B-602 GENERAL REQUIREMENTS. §11B-602.1
4. UNITS SHALL HAVE A CLEAR FLOOR OR GROUND SPACE COMPLYING WITH SECTION 11B-305 CLEAR FLOOR OR GROUND SPACE POSITIONED FOR A FORWARD APPROACH AND CENTERED ON THE UNIT. KNEE AND TOE CLEARANCE COMPLYING WITH SECTION 11B-306 KNEE AND TOE CLEARANCE SHALL BE PROVIDED. §11B-602.2
5. WHERE DRINKING FOUNTAINS ARE USED BY CHILDREN, A PARALLEL APPROACH COMPLYING WITH SECTION 11B-305 CLEAR FLOOR OR GROUND SURFACES SHALL BE PERMITTED AT UNITS WHERE THE SPOUT IS 30 INCHES MAXIMUM ABOVE THE FINISH FLOOR OR GROUND AND 33 INCHES MAXIMUM FROM THE FRONT EDGE OF THE UNIT, INCLUDING BUMPERS. §11B-602.2 EXCEPTION
6. SPOUT OUTLETS SHALL BE 36 INCHES MAXIMUM ABOVE THE FINISH FLOOR OR GROUND. §11B-602.4
7. THE SPOUT SHALL BE LOCATED 15 INCHES MINIMUM FROM THE VERTICAL SUPPORT AND 5 INCHES MAXIMUM FROM THE FRONT EDGE OF THE UNIT, INCLUDING BUMPERS. §11B602.5
8. THE SPOUT SHALL PROVIDE A FLOW OF WATER 4 INCHES HIGH MINIMUM AND SHALL BE LOCATED 5 INCHES MAXIMUM FROM THE FRONT OF THE UNIT. THE ANGLE OF THE WATER STREAM SHALL BE 30 DEGREES RELATIVE TO THE FRONT FACE OF THE UNIT. WHERE SPOUTS ARE LOCATED LESS THAN 3 INCHES FROM THE FRONT OF THE UNIT, THE ANGLE OF THE WATER STREAM SHALL BE 30 DEGREES MAXIMUM. WHERE SPOUTS ARE LOCATED BETWEEN 3 INCHES AND 5 INCHES MAXIMUM FROM THE FRONT OF THE UNIT, THE ANGLE OF THE WATER STREAM SHALL BE 15 DEGREES MAXIMUM. §11B-602.6
9. SPOUT OUTLETS OF DRINKING FOUNTAINS FOR STANDING PERSONS SHALL BE 36 INCHES MINIMUM AND 40 INCHES MAXIMUM ABOVE THE FINISH FLOOR OR GROUND. §11B602.7
10. WALL- AND POST-MOUNTED CANTILEVERED DRINKING FOUNTAINS SHALL BE 18 INCHES MINIMUM AND 19 INCHES MAXIMUM ABOVE THE FINISH FLOOR. §11B-602.8
11. ALL DRINKING FOUNTAINS SHALL EITHER BE LOCATED COMPLETELY WITHIN ALLOWED PARKING SPACES OR COMPLETELY OUTSIDE OF PARKING SPACES. WHEN POSITIONED SO AS NOT TO ENCROACH INTO PEDESTRIAN WAYS, THE PROTECTED AREA WITHIN SUCH A DRINKING FOUNTAIN IS LOCATED SHALL BE 30 INCHES WIDE MINIMUM AND 18 INCHES HIGH MINIMUM AND SHALL COMPLY WITH SECTION 11B-307 MANEUVERING CLEARANCE. WHEN USED, WING WALLS OR BARRIERS SHALL PROTECT HORIZONTAL AT LEAST AS FAR AS THE DRINKING FOUNTAIN AND TO WITH 6 INCHES VERTICALLY FROM THE FLOOR OR GROUND SURFACE. §11B-602.9

12. WHERE TOILET FACILITIES AND BATHING FACILITIES ARE PROVIDED, THEY SHALL COMPLY WITH 11B-211 TOILET FACILITIES AND BATHING FACILITIES. WHERE TOILET FACILITIES AND BATHING FACILITIES ARE PROVIDED IN FACILITIES PERMITTED BY 11B-206.2 MULTI-STORY BUILDINGS AND FACILITIES EXCEPTIONS 1 AND 2 NOT TO COMPLY WITH 11B-211 TOILET FACILITIES AND BATHING FACILITIES, 11B-211.1 FACILITIES SHALL BE PROVIDED ON A STORY CONNECTED BY AN ACCESSIBLE ROUTE TO AN ACCESSIBLE ENTRANCE. §11B-211.1
13. WHERE SEPARATE TOILET FACILITIES ARE PROVIDED FOR THE EXCLUSIVE USE OF SEPARATE USER GROUPS, THE TOILET FACILITIES SERVING EACH USER GROUP SHALL COMPLY WITH 11B-211 TOILET FACILITIES AND BATHING FACILITIES. §11B-211.1
14. WHERE TOILET ROOMS ARE PROVIDED, EACH TOILET ROOM SHALL COMPLY WITH 11B-603 TOILET AND BATHING ROOMS, WHERE BATHING ROOMS ARE PROVIDED, EACH BATHING ROOM SHALL COMPLY WITH 11B-603 TOILET AND BATHING ROOMS. §11B-212.2 SEE EXCEPTIONS
15. UNSEX TOILET ROOMS SHALL CONTAIN NOT MORE THAN ONE LAVATORY, ONE WASH BASIN, ONE WATER CLOSET, AND ONE URINAL. UNSEX BATHING ROOMS SHALL CONTAIN ONE SHOWER OR ONE SHOWER AND ONE BATHUB, ONE LAVATORY, AND ONE WATER CLOSET. DOORS TO UNSEX TOILET ROOMS AND UNSEX BATHING ROOMS SHALL HAVE PRIVACY LATCHES. §11B-212.1
16. DOOR SHALL NOT SWING INTO THE CLEAR FLOOR SPACE OR CLEARANCE REQUIRED FOR ANY FIXTURE OTHER THAN THE DOOR TO THE ACCESSIBLE WATER CLOSET COMPARTMENT. A DOOR IN ANY POSITION, MAY ENCROACH INTO THE TURNING SPACE BY 12 INCHES MAXIMUM. §11B-603.2.3
17. AT SINGLE USER TOILET OR BATHING ROOMS, DOORS SHALL BE PERMITTED TO SWING INTO THE CLEAR FLOOR SPACE OR CLEARANCE REQUIRED FOR ANY FIXTURE ONLY IF A 30 INCH BY 48 INCH MINIMUM CLEAR FLOOR SPACE IS PROVIDED WITHIN THE ROOM BEYOND THE ARC OF THE DOOR SWING. §11B-603.2.3 EXCEPTION
18. MIRRORS LOCATED ABOVE THE LAVATOIRES OR COUNTERTOPS SHALL BE INSTALLED TO SWING INTO THE CLEAR FLOOR SPACE OR CLEARANCE REQUIRED FOR ANY FIXTURE ONLY IF A 30 INCH BY 48 INCH MINIMUM CLEAR FLOOR SPACE IS PROVIDED WITHIN THE ROOM BEYOND THE ARC OF THE DOOR SWING. §11B-603.2.3 EXCEPTION
19. COAT HOOKS SHALL BE LOCATED WITHIN ONE OF THE REACH RANGES SPECIFIED IN SECTION 11B-308. SHELVES SHALL BE LOCATED 40 INCHES MINIMUM AND 48 INCHES MAXIMUM ABOVE THE FINISH FLOOR. MEDICINE CABINETS SHALL BE LOCATED WITH A USABLE SHELF NO HIGHER THAN 44 INCHES MAXIMUM ABOVE THE FINISH FLOOR. §11B-603.4

20. WHERE TOWEL OR SANITARY NAPKIN DISPENSERS, WASTE RECEPTACLES OR OTHER ACCESSORIES ARE PROVIDED IN TOILET FACILITIES, AT LEAST ONE OF EACH TYPE SHALL BE LOCATED ON AN ACCESSIBLE ROUTE. ALL OPERABLE PARTS, INCLUDING COIN SLOTS, SHALL BE 40 INCHES MAXIMUM ABOVE THE FINISH FLOOR. §11B-603.5
21. CLEARANCE AROUND A WATER CLOSET SHALL BE 60 INCHES MINIMUM MEASURED PERPENDICULAR FROM THE SIDE WALL AND 58 INCHES MINIMUM MEASURED PERPENDICULAR FROM THE REAR WALL. A MINIMUM 60 INCHES WIDE AND 48 INCHES DEEP CLEARANCE SHALL BE PROVIDED IN FRONT OF THE WATER CLOSET. §11B-604.3.1
22. THE SEAT HEIGHT OF A WATER CLOSET ABOVE THE FINISH FLOOR SHALL BE 17 INCHES MINIMUM TO 18 INCHES MAXIMUM FROM THE SIDE WALL OR PARTITION, EXCEPT THAT THE WATER CLOSET SHALL BE 17 INCHES MINIMUM AND 19 INCHES MAXIMUM FROM THE SIDE WALL OR PARTITION IN THE AMBULATORY ACCESSIBLE TOILET COMPARTMENT SPECIFIED IN SECTION 11B-604.2.2. AMBULATORY ACCESSIBLE TOILET COMPARTMENTS SHALL BE ARRANGED FOR A LEFT-HAND OR RIGHT-HAND APPROACH. §11B-604.2
23. CLEARANCE AROUND A WATER CLOSET SHALL BE 60 INCHES MINIMUM MEASURED PERPENDICULAR FROM THE SIDE WALL AND 58 INCHES MINIMUM MEASURED PERPENDICULAR FROM THE REAR WALL. A MINIMUM 60 INCHES WIDE AND 48 INCHES DEEP CLEARANCE SHALL BE PROVIDED IN FRONT OF THE WATER CLOSET. §11B-604.3.1
24. THE SEAT HEIGHT OF A WATER CLOSET ABOVE THE FINISH FLOOR SHALL BE 17 INCHES MINIMUM TO 18 INCHES MAXIMUM MEASURED TO THE TOP OF THE SEAT. SEATS SHALL NOT BE SPRUNG THE RETURN TO A LIFTED POSITION. SEATS SHALL BE 2 INCHES HIGH MAXIMUM. SEATS SHALL BE PERMITTED ONLY IN ALTERATIONS WHERE THE EXISTING FIXTURE IS LESS THAN 15 INCHES HIGH. §11B-604.4 (SEE EXCEPTION FOR RESIDENTIAL UNITS)
25. THE SEAT HANG BAR BARS SHALL BE 42 INCHES LONG MINIMUM, LOCATED 12 INCHES MAXIMUM FROM THE REAR WALL AND EXTENDING 34 INCHES MINIMUM FROM THE REAR WALL WITH THE FRONT END POSITIONED 24 INCHES MINIMUM IN FRONT OF THE WATER CLOSET. §11B-604.5.1
26. THE REAR GRAB BAR SHALL BE 36 INCHES LONG MINIMUM AND EXTEND FROM THE CENTERLINE OF THE WATER CLOSET 12 INCHES MINIMUM ON ONE SIDE AND 24 INCHES MINIMUM ON THE OTHER SIDE. §11B-604.5.2 (SEE EXCEPTIONS)

D. GENERAL SITE AND BUILDING ELEMENTS

- PARKING SPACES
1. WHERE PARKING SPACES ARE PROVIDED, ACCESSIBLE PARKING SPACES SHALL BE PROVIDED IN NUMBER AND KIND REQUIRED PER SECTION 11B-208 PARKING SPACES. §11B-208.1
  2. PROVIDE (1) ACCESSIBLE PARKING SPACES AS REQUIRED BY TABLE 11B-208.2 §11B-208.2 (SEE EXCEPTIONS)
  3. PROVIDE ACCESSIBLE SPACES FOR EACH PARKING FACILITY (PARKING LOTS AND PARKING STRUCTURES). THE NUMBER OF PARKING SPACES REQUIRED TO BE ACCESSIBLE SHALL BE CALCULATED SEPARATELY FOR EACH PARKING FACILITY. THE REQUIRED NUMBER IS NOT BASED ON THE TOTAL NUMBER OF PARKING SPACES PROVIDED IN ALL OF THE PARKING FACILITIES PROVIDED ON SITE. §11B-208
  4. TEN PERCENT OF PATIENT AND VISITOR PARKING SPACES PROVIDED TO SERVE HOSPITAL OUTPATIENT BUILDINGS OR FACILITIES SHALL BE LOCATED ON PROVIDING OUTPATIENT CLINICAL SERVICES OF A HOSPITAL, SHALL COMPLY WITH SECTION 11B-502 PARKING SPACES. §11B-208.2.1
  5. TWENTY PERCENT OF PATIENT AND VISITOR PARKING SPACES PROVIDED TO SERVE REHABILITATION FACILITIES SPECIALIZING IN TREATING CONDITIONS THAT AFFECT MOBILITY AND OUTPATIENT PHYSICAL THERAPY FACILITIES SHALL COMPLY WITH SECTION 11B-502 PARKING SPACES. §11B-208.2.2
  6. ONE IN EVERY SIX OR FRACTION OF SIX PARKING SPACES REQUIRED BY SECTION 11B-208.2 MINIMUM NUMBER, BUT NOT LESS THAN ONE, SHALL BE SERVED BY AN ACCESS ASILE 36 INCHES WIDE MINIMUM PLACED ON THE SIDE OPPOSITE THE DRIVER'S SIDE WHEN THE VEHICLE IS GOING FORWARD INTO THE PARKING SPACE AND SHALL BE DESIGNATED "AN ACCESSIBLE." ALL SUCH SPACES MAY BE GROUPED ON ONE LEVEL OF A PARKING STRUCTURE. §11B-208.2.4, 11B-502, FIG. 11B-502.3, 11B-502.3.1 & 11B-502.3.3
  7. ACCESSIBLE PARKING SPACES COMPLYING WITH SECTION 11B-502 PARKING SPACES SERVING A PARTICULAR BUILDING OR FACILITY SHALL BE LOCATED ON THE SHORTEST ACCESSIBLE ROUTE OF TRAVEL FROM ADJACENT PARKING TO AN ACCESSIBLE ENTRANCE (AS NEAR AS PRACTICAL, TO AN ACCESSIBLE ENTRANCE). §11B-208.3.1
  8. IN BUILDINGS WITH MULTIPLE ACCESSIBLE ENTRANCES WITH ADJACENT PARKING, ACCESSIBLE PARKING SPACES COMPLYING WITH SECTION 11B-502 PARKING SPACES SHALL BE DISPERSED AND LOCATED CLOSEST TO THE ACCESSIBLE ENTRANCES. §11B-208.3.1
  9. IN PARKING FACILITIES THAT DO NOT SERVE A PARTICULAR BUILDING OR FACILITY, ACCESSIBLE PARKING SPACES COMPLYING WITH SECTION 11B-502 PARKING SPACES SHALL BE LOCATED BETWEEN 3 INCHES AND 5 INCHES OF TRAVEL TO AN ACCESSIBLE PEDESTRIAN ENTRANCE OF THE PARKING FACILITY. §11B-208.3.1
  10. DIMENSION MINIMUM 18 FOOT LONG CAR AND VAN ACCESSIBLE PARKING SPACES) AND ACCESSIBLE ASILES. §11B-502.2, FIGURES 11B-502.2 AND 11B-502.3
  11. DIMENSION MINIMUM 9 FOOT WIDTH AT ACCESSIBLE CAR PARKING SPACE. §11B-502.2, FIG. 11B-502.2 & FIG. 11B-502.3
  12. DIMENSION MINIMUM 12 FOOT WIDE ACCESSIBLE VAN PARKING SPACE WITH MINIMUM 5 FOOT WIDE ACCESS ASILE. VAN PARKING SPACES SHALL BE PERMITTED TO BE MINIMUM 12 FEET WIDE WITH A MINIMUM OF 5.8 FOOT WIDE MINIMUM. §11B-502.2, FIGURES 11B-502.2 AND 11B-502.3
  13. CAR AND VAN STALL ACCESS ASILE SHALL BE 5 FOOT WIDE MINIMUM AND SHALL ADJOIN AN ACCESSIBLE ROUTE. TWO PARKING SPACES SHALL BE PERMITTED TO SHARE A COMMON ACCESS ASILE. §11B-502.3, FIGURES 11B-502.2 AND 11B-502.3
  14. ACCESS ASILES SHALL BE MARKED WITH A BLUE PAINTED BORDERLINE ABOVE THEIR PERIMETER. THE AREA WITHIN THE BLUE PAINTED BORDERLINE SHALL BE MARKED WITH HATCHED LINES A MAXIMUM OF 36 INCHES ON CENTER IN A COLOR CONTRASTING WITH THAT OF THE ASILE SURFACE, PREFERABLY BLUE OR WHITE. THE WORDS "NO PARKING" SHALL BE LOCATED ON THE SURFACE WITHIN EACH ACCESS ASILE IN WHITE LETTERS A MINIMUM OF 12 INCHES IN HEIGHT AND LOCATED TO BE VISIBLE FROM THE ADJACENT VEHICULAR WAY. ACCESS ASILE MARKINGS SHALL BE LOCATED BEYOND THE MINIMUM REQUIRED LENGTH. §11B-502.3.3, FIGURE 11B-502.3.3
  15. ACCESS ASILES SHALL NOT OVERLAP THE VEHICULAR WAY. ACCESS ASILES SHALL BE PERMITTED TO BE PLACED ON EITHER SIDE OF THE PARKING SPACE EXCEPT FOR VAN PARKING SPACES WHICH SHALL HAVE ACCESS ASILES LOCATED ON THE PASSENGER SIDE OF THE PARKING SPACE. §11B-502.3.4
  16. CLEARLY SHOW MINIMUM VERTICAL CLEARANCE OF 8 FEET 2 INCHES AT ACCESSIBLE PARKING SPACES AND ALONG ALL ACCESSIBLE VEHICLE ACCESS ROUTE TO SUCH SPACES FROM SITE ENTRANCES AND EXITS. §11B-502.5
  17. PARKING SPACE IDENTIFICATION SIGNS SHALL INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY COMPLYING WITH SECTION 11B-703.2.1. INTERNATIONAL SYMBOL OF ACCESSIBILITY §11B-502.6, FIGURE 11B-703.2.1
  18. SIGNS IDENTIFYING VAN PARKING SPACES SHALL CONTAIN ADDITIONAL LANGUAGE OR AN ADDITIONAL SIGN WITH THE DESIGNATION "VAN ACCESSIBLE." SIGNS SHALL BE 60 INCHES MINIMUM ABOVE THE FINISH FLOOR OR GROUND SURFACE MEASURED TO THE BOTTOM OF THE SIGN. §11B-502.6
  19. PARKING IDENTIFICATION SIGNS SHALL BE REINFORCED WITH A MINIMUM AREA OF 70 SQUARE INCHES. §11B502.6.1
  20. ADDITIONAL LANGUAGE OR AN ADDITIONAL SIGN BELOW THE INTERNATIONAL SYMBOL OF ACCESSIBILITY SHALL STATE "MINIMUM FINE \$250" §11B-502.6
  21. A PARKING SPACE IDENTIFICATION SIGN SHALL BE PROVIDED FROM EACH PARKING SPACE. SIGNS SHALL BE PERMANENTLY POSTED EITHER IMMEDIATELY ADJACENT TO THE PARKING SPACE OR WITH THE PROTECTED PARKING SPACE WIDTH AT THE HEAD END OF THE PARKING SPACE. SIGNS MAY ALSO BE PERMANENTLY POSTED ON A WALL AT THE INTERIOR END OF THE PARKING SPACE. §11B-502.6.3
  22. EACH ACCESSIBLE CAR AND VAN SPACE SHALL HAVE SURFACE IDENTIFICATION COMPLYING WITH EITHER OF THE FOLLOWING SCHEMES. §11B-502.6.4
  - A. THE PARKING SPACE SHALL BE MARKED WITH AN INTERNATIONAL SYMBOL OF ACCESSIBILITY COLOR. THE REFLECTING SURFACE SHALL BE MARKED WITH THE INTERNATIONAL SYMBOL OF ACCESSIBILITY IN WHITE OR A BLUE BACKGROUND A MINIMUM 36 INCHES WIDE BY 36 INCHES HIGH. THE CENTERLINE OF THE INTERNATIONAL SYMBOL OF ACCESSIBILITY SHALL BE 6 INCHES FROM THE CENTERLINE OF THE PARKING SPACE, ITS SIDES PARALLEL TO THE LENGTH OF THE PARKING SPACE AND ITS LOWER CORNER AT, OR LOWER SIDE ALIGNED WITH, THE END OF THE PARKING SPACE LENGTH. §11B-502.6.4.1
  - B. THE PARKING SPACE SHALL BE OUTLINED OR PAINTED BLUE AND SHALL BE MARKED WITH AN INTERNATIONAL SYMBOL OF ACCESSIBILITY WITH SECTION 11B-703.2.1 INTERNATIONAL SYMBOL OF ACCESSIBILITY A MINIMUM 36 INCHES WIDE BY 36 INCHES HIGH IN WHITE OR A SUITABLE CONTRASTING COLOR. THE REFLECTING SURFACE SHALL BE MARKED WITH THE INTERNATIONAL SYMBOL OF ACCESSIBILITY IN WHITE OR A BLUE BACKGROUND A MINIMUM 36 INCHES WIDE BY 36 INCHES HIGH. THE CENTERLINE OF THE PARKING SPACE AND ITS LOWER CORNER AT, OR LOWER SIDE ALIGNED WITH, THE END OF THE PARKING SPACE LENGTH. §11B-502.6.4.2
  23. AN ADDITIONAL SIGN SHALL BE POSTED EITHER: 1) IN A CONSPICUOUS PLACE AT EACH ENTRANCE TO AN OFF-STREET PARKING FACILITY OR 2) IMMEDIATELY ADJACENT TO THE SITE ACCESSIBLE PARKING AND VISIBLE FROM EACH PARKING SPACE. §11B-502.8
- PARKING SPACES CONTD
3. THE ADDITIONAL SIGN SHALL NOT BE LESS THAN 17 INCHES WIDE BY 2 INCHES HIGH. §11B628.1
  4. THE ADDITIONAL SIGN SHALL CLEARLY STATE IN LETTERS WITH A MINIMUM HEIGHT OF 1 INCH THE FOLLOWING INFORMATION: 1) THE NUMBER OF ACCESSIBLE DESIGNATED ACCESSIBLE SPACES NOT DISPLAYING DISTINGUISHING PLACARDS OR SPECIAL LICENSE PLATES ISSUED FOR PERSONS WITH DISABILITIES WILL BE TOWED AWAY AT THE OWNERS EXPENSE. 2) THE TOWING VEHICLE SHALL BE RECLAIMED AT, OR BY TELEPHONING, BLANK SPACES SHALL BE FILLED IN WITH APPROPRIATE INFORMATION AS A PERMANENT PART OF THE SIGN. (TOWING COMPANY'S NAME AND TELEPHONE NUMBER SHALL BE PROVIDED ON SIGN)
- RELATIONSHIP TO ACCESSIBLE ROUTES
24. PARKING SPACES AND ACCESS ASILES SHALL BE DESIGNED SO THAT PERSONS USING THEM ARE NOT REQUIRED TO TRAVEL BEHIND PARKING SPACES OTHER THAN TO PASS BEHIND THE PARKING SPACE IN WHICH THEY PARKED. §11B-502.7.1
  25. A CURB OR WHEEL STOP SHALL BE PROVIDED IF REQUIRED TO PREVENT ENCROACHMENT OF VEHICLES OVER THE REQUIRED CLEAR WIDTH OF ADJACENT ACCESSIBLE ROUTES. §11B502.7.2
- PASSENGER LOADING ZONES, DROP-OFF ZONES, AND BUS STOPS
26. PARKING FACILITIES THAT PROVIDE VALET PARKING SERVICES SHALL PROVIDE AT LEAST ONE PASSENGER LOADING ZONE COMPLYING WITH SECTION 11B-503 PASSENGER DROP-OFF AND LOADING ZONES. THE PARKING REVERSE 8 OF SECTION 11B-208 - PARKING SPACES GENERAL APPLY TO FACILITIES WITH VALET PARKING. §11B-208.4
  27. MECHANICAL ACCESS PARKING GARAGES SHALL PROVIDE AT LEAST ONE PASSENGER LOADING ZONE COMPLYING WITH SECTION 11B-503 PASSENGER DROP-OFF AND LOADING ZONES AT VEHICLE DROP-OFF AND VEHICLE PICK-UP AREAS. §11B-209.5
  28. PASSENGER DROP-OFF AND LOADING ZONES SHALL PROVIDE A VEHICULAR PULL-UP SPACE 36 INCHES WIDE MINIMUM AND 20 FEET LONG MINIMUM. §11B-503.2

HANDRAILS

60. HANDRAILS SHALL BE PROVIDED ON BOTH SIDES OF STAIRS AND RAMPS. §11B-506.2
61. HANDRAILS SHALL BE CONTINUOUS WITH THE FULL LENGTH OF EACH STAIR FLIGHT OR RAMP RUN. INSIDE HANDRAILS ON SWITCHBACK OR DOGLEG STAIRS AND RAMPS SHALL BE CONTINUOUS BETWEEN FLIGHTS OR RUNS. §11B-506.3
62. TOP OF GRIPPING SURFACES OF HANDRAILS SHALL BE 34 INCHES MINIMUM AND 38 INCHES MAXIMUM VERTICALS. STAIR NOSINGS, AND RAMP SURFACES HANDRAILS SHALL BE AT A CONSISTENT HEIGHT ABOVE WALKING SURFACES, STAIR NOSINGS, AND RAMPS SURFACES. §11B-406.4
63. CLEARANCE BETWEEN HANDRAIL GRIPPING SURFACES AND ADJACENT SURFACES SHALL BE 1 1/2 INCHES MINIMUM. HANDRAILS MAY BE LOCATED IN A RECESS IF THE RECESS IS 3 INCHES MAXIMUM DEEP AND 18 INCHES MINIMUM CLEAR ABOVE THE TOP OF THE HANDRAIL. §11B-406.5
64. HANDRAIL GRIPPING SURFACES SHALL BE CONTINUOUS ALONG THEIR LENGTH AND SHALL NOT BE OBSTRUCTED ALONG THEIR LENGTH. THE BOTTOMS OF HANDRAIL GRIPPING SURFACES SHALL NOT BE OBSTRUCTED FOR MORE THAN 20 PERCENT OF THEIR LENGTH. WHERE PROVIDED, HORIZONTAL PROJECTIONS SHALL OCCUR 1 1/2 INCHES MINIMUM FROM THE HANDRAIL GRIPPING SURFACE. §11B-505.665. HANDRAIL GRIPPING SURFACES WITH A CIRCULAR CROSS SECTION SHALL HAVE AN OUTSIDE DIAMETER OF 1 1/2 INCHES MINIMUM AND 2 INCHES MAXIMUM. §11B-506.7.1
66. HANDRAIL GRIPPING SURFACES WITH A NON-CIRCULAR CROSS SECTION SHALL HAVE A PERIMETER DIMENSION OF 4 INCHES MINIMUM AND 6 INCHES MAXIMUM, AND A CROSS-SECTION DIMENSION OF 2 1/2 INCHES MAXIMUM. §11B-506.7.2
67. HANDRAIL GRIPPING SURFACES SHALL EXTEND BEYOND AND IN THE SAME DIRECTION OF STAIR FLIGHTS AND RAMP RUNS IN

ENTRANCES

19. ENTRANCES SHALL BE PROVIDED IN ACCORDANCE WITH 11B-206.4 ENTRANCES, ENTRANCE DOORS, DOORWAYS, AND GATES SHALL COMPLY WITH 11B-404 DOORS, DOORWAYS, AND GATES AND SHALL BE ON AN ACCESSIBLE ROUTE COMPLYING WITH 11B-402 ACCESSIBLE ROUTES. (SEE EXCEPTIONS). §11B-206.4
20. ALL ENTRANCES AND EXTERIOR GROUND-FLOOR EXITS TO BUILDINGS AND FACILITIES SHALL COMPLY WITH 11B-404 DOORS, DOORWAYS, AND GATES. §11B-206.4.1
21. WHERE DIRECT ACCESS IS PROVIDED FOR PEDESTRIANS FROM A PARKING STRUCTURE TO A BUILDING OR FACILITY ENTRANCE, EACH DIRECT ACCESS TO THE BUILDING OR FACILITY ENTRANCE SHALL COMPLY WITH 11B-404 DOORS, DOORWAYS, AND GATES. §11B-206.4.2
22. DIRECT CONNECTIONS TO OTHER FACILITIES SHALL PROVIDE AN ACCESSIBLE ROUTE COMPLYING WITH 11B-404 DOORS, DOORWAYS, AND GATES FROM THE POINT OF CONNECTION TO BOARDING PLATFORMS AND ALL TRANSPORTATION COMPONENTS WALKING SURFACES WITH A RUNNING SLOPE NOT STEEPER THAN 1:20 (5%). DOORWAYS, RAMPS, CURB RAMPS EXCLUDING THE FLARED SIDES, ELEVATORS, AND PLATFORM FLATS. §11B-402.2
23. THE RUNNING SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:20 (5%). THE CROSS SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:48 (2.083%). §11B-403.3
24. ACCESSIBLE ROUTES SHALL CONSIST OF ONE OR MORE OF THE FOLLOWING COMPONENTS: WALKING SURFACES WITH A RUNNING SLOPE NOT STEEPER THAN 1:20 (5%), DOORWAYS, RAMPS, CURB RAMPS EXCLUDING THE FLARED SIDES, ELEVATORS, AND PLATFORM FLATS. §11B-402.2
25. THE CLEAR WIDTH FOR WALKING SURFACES IN CORRIDORS SERVING AN OCCUPANT LOAD OF 10 OR MORE SHALL BE 44 INCHES MINIMUM. §11B-403.5.1 EXCEPTION 2
27. THE CLEAR WIDTH FOR SIDEWALKS AND WALKS SHALL BE 48 INCHES MINIMUM. §11B-403.5.1 EXCEPTION 3
28. THE CLEAR WIDTH FOR AISLES SHALL BE 36 INCHES MINIMUM IF SERVING ELEMENTS ON ONLY ONE SIDE, AND 44 INCHES MINIMUM IF SERVING ELEMENTS ON BOTH SIDES. §11B-403.5.1 EXCEPTION 4
29. CURB RAMPS SHALL HAVE DETECTABLE WARNINGS THAT EXTEND 36 INCHES IN THE DIRECTION OF TRAVEL FOR THE FULL WIDTH OF THE RAMP RUN EXCLUDING ANY FLARED SIDES. §11B-247.1.2.2, §11B-705.1.2.2
30. ON PERPENDICULAR CURB RAMPS, DETECTABLE WARNINGS SHALL BE LOCATED SO THE EDGE NEAREST THE CURB IS 8 TO 8 INCHES FROM THE LINE AT THE FACE OF THE CURB MARKING THE TRANSITION BETWEEN THE CURBS AND THE GUTTER, STREET OR HIGHWAY. §11B-247.1.2.2, §11B-705.1.2.2
31. REVOLVING DOORS, REVOLVING GATES, AND TURNSTILES SHALL NOT BE PART OF AN ACCESSIBLE ROUTE. §11B-404.1
32. AT LEAST ONE OF THE ACTIVE LEAVES OF DOORWAYS WITH TWO LEAVES SHALL COMPLY WITH 11B-404.2. CLEAR WIDTH SHALL BE 11B-404.2. MANEUVERING CLEARANCES. §11B-404.2.2
33. DOOR OPENINGS SHALL PROVIDE A CLEAR WIDTH OF 32 INCHES MINIMUM. CLEAR OPENINGS OF DOORWAYS WITH SWINGING DOORS SHALL BE MEASURED BETWEEN THE FACE OF THE DOOR AND THE STOP. WITH THE DOOR OPEN 90 DEGREES. OPENINGS MORE THAN 24 INCHES DEEP SHALL PROVIDE A CLEAR OPENING OF 36 INCHES MINIMUM. THERE SHALL BE NO PROJECTIONS INTO THE REQUIRED CLEAR OPENING WIDTH. LOWER THAN 34 INCHES ABOVE THE FINISH FLOOR OR GROUND. PROJECTIONS INTO THE CLEAR OPENING WITH BETWEEN 34 INCHES AND 80 INCHES ABOVE THE FINISH FLOOR OR GROUND SHALL NOT EXCEED 4 INCHES. §11B-404.2.3
34. MINIMUM MANEUVERING CLEARANCES AT DOORS AND GATES SHALL COMPLY WITH 11B-404.2.4 MANEUVERING CLEARANCES. MANEUVERING CLEARANCES SHALL EXTEND THE FULL WIDTH OF THE DOORWAY AND THE REQUIRED LATCH SIDE OR HINGE SIDE CLEARANCE. §11B-404.2.4
35. SWINGING DOORS AND GATES SHALL HAVE MANEUVERING CLEARANCES COMPLYING WITH TABLE 11B-404.2.4.2. §11B-404.2.4.2
36. DOORWAYS LESS THAN 36 INCHES WIDE WITHOUT DOORS OR GATES, SLIDING DOORS, OR FOLDING DOORS SHALL HAVE MANEUVERING CLEARANCES COMPLYING WITH TABLE 11B-404.2.4.2. §11B-404.2.4.2
37. MANEUVERING CLEARANCES FOR FORWARD APPROACH SHALL BE PROVIDED WHEN ANY OBSTRUCTION WITHIN 18 INCHES OF THE LATCH SIDE AN INTERIOR DOORWAY, OR WITHIN 24 INCHES OF THE LATCH SIDE OF AN EXTERIOR DOORWAY, IS MORE THAN 8 INCHES HIGH. §11B-247.1.2.4, §11B-705.1.2.4
38. THRESHOLDS, IF PROVIDED AT DOORWAYS, SHALL BE 1/2 INCH HIGH MAXIMUM. RAISED THRESHOLDS AND CHANGES IN LEVEL AT DOORWAYS SHALL COMPLY WITH 11B-302 FLOOR OR GROUND SURFACES AND 11B-303 CHANGES IN LEVEL. §11B-302.2
39. HANDLES, PULLS, LATCHES, LOCKS, AND OTHER OPERABLE PARTS ON DOORS AND GATES SHALL COMPLY WITH 11B-309 OPERATION OF OPERABLE PARTS OF SUCH HARDWARE SHALL BE 34 INCHES MINIMUM AND 44 INCHES MAXIMUM ABOVE THE FINISH FLOOR OR GROUND, WHERE SLIDING DOORS ARE IN THE FULLY OPEN POSITION, OPERATING HARDWARE SHALL BE EXPOSED AND USABLE FROM BOTH SIDES. §11B-404.2.7
40. THE FORCE FOR PUSHING OR PULLING OPEN A DOOR OR GATE OTHER THAN FIRE DOORS SHALL BE AS FOLLOWS. §11B-404.2.8
- A. INTERIOR HINGED DOORS AND GATES: 5 POUNDS MAXIMUM.
- B. SLIDING OR FOLDING DOORS: 5 POUNDS MAXIMUM.
- C. REQUIRED FIRE DOORS: THE MINIMUM OPENING FORCE ALLOWABLE BY THE APPROPRIATE ADMINISTRATIVE AUTHORITY, NOT TO EXCEED 15 POUNDS.
- D. EXTERIOR HINGED DOORS: 5 POUNDS MAXIMUM.

41. SWINGING DOOR AND GATE SURFACES WITHIN 10 INCHES OF THE FINISH FLOOR OR GROUND MEASURED VERTICALLY SHALL HAVE A SMOOTH SURFACE ON THE INSIDE SIDE EXTENDING THE FULL WIDTH OF THE GATE. PARTS OF THE HORIZONTAL OR VERTICAL JOINTS IN ADJACENT SURFACES SHALL BE WITHIN 1/16 INCH OF THE SAME PLANE AS THE OTHER AND BE FREE OF SHARP OR ABRASIVE EDGES. CAVITIES CREATED BY ADDED KICK PLATES SHALL BE CARPED. §11B-404.2.10
42. PROVIDE RAMP DETAILS, INCLUDING SLOPE, LANDINGS, AND HANDRAILS.
43. RAMP RUNS SHALL HAVE A RUNNING SLOPE NOT STEEPER THAN 1:12 (8.33%). §11B-406.2.1
44. CROSS SLOPE OF RAMP RUNS SHALL NOT BE STEEPER THAN 1:48 (2.083%). §11B-406.3
45. FLOOR OR GROUND SURFACES OF RAMP RUNS SHALL COMPLY WITH 11B-302 FLOOR OR GROUND SURFACES, CHANGES IN LEVEL OTHER THAN THE RUNNING SLOPE AND CROSS SLOPE ARE NOT PERMITTED ON RAMP RUNS. §11B-405.4
46. THE CLEAR WIDTH OF A RAMP RUN SHALL BE 48 INCHES MINIMUM. §11B-405.5
47. THE RISE FOR ANY RAMP RUN SHALL BE 30 INCHES MAXIMUM. §11B-405.6
48. RAMP RUNS SHALL HAVE LANDINGS AT THE TOP AND THE BOTTOM OF EACH RAMP RUN. §11B-405.7
49. LANDINGS SHALL COMPLY WITH 11B-302 FLOOR OR GROUND SURFACES. CHANGES IN LEVEL ARE NOT PERMITTED. §11B-405.7.1
50. THE LANDING CLEAR WIDTH SHALL BE AT LEAST AS WIDE AS THE WIDEST RAMP RUN LEADING TO THE LANDING. §11B-405.7.2
51. TOP LANDINGS SHALL BE 60 INCHES WIDE MINIMUM. §11B-405.7.2.1
52. BOTTOM LANDINGS SHALL EXTEND 24 INCHES MINIMUM IN THE DIRECTION OF TRAVEL. §11B-405.7.3.1
53. RAMP RAMP DETAILS, INCLUDING SLOPE, LANDINGS, AND HANDRAILS.
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56. A CURB 2 INCHES HIGH MINIMUM OR BARRIER SHALL BE PROVIDED THAT PREVENTS THE PASSAGE OF A 4 INCH DIAMETER SPHERE, WHERE ANY PORTION OF THE SPHERE IS WITHIN 4 INCHES OF THE FINISH FLOOR OR GROUND SURFACE, TO PREVENT WHEEL ENTRAPMENT. THE CURB OR BARRIER SHALL PROVIDE A CONTINUOUS AND UNINTERRUPTED BARRIER ALONG THE LENGTH OF THE RAMP. §11B-405.8.2
59. LANDINGS SUBJECT TO WET CONDITIONS SHALL BE DESIGNED TO PREVENT THE ACCUMULATION OF WATER. §11B-405.10

DOORS, DOORWAYS AND GATES

29. CURB RAMPS SHALL HAVE DETECTABLE WARNINGS THAT EXTEND 36 INCHES IN THE DIRECTION OF TRAVEL FOR THE FULL WIDTH OF THE RAMP RUN EXCLUDING ANY FLARED SIDES. §11B-247.1.2.2, §11B-705.1.2.2
30. ON PERPENDICULAR CURB RAMPS, DETECTABLE WARNINGS SHALL BE LOCATED SO THE EDGE NEAREST THE CURB IS 8 TO 8 INCHES FROM THE LINE AT THE FACE OF THE CURB MARKING THE TRANSITION BETWEEN THE CURBS AND THE GUTTER, STREET OR HIGHWAY. §11B-247.1.2.2, §11B-705.1.2.2
31. REVOLVING DOORS, REVOLVING GATES, AND TURNSTILES SHALL NOT BE PART OF AN ACCESSIBLE ROUTE. §11B-404.1
32. AT LEAST ONE OF THE ACTIVE LEAVES OF DOORWAYS WITH TWO LEAVES SHALL COMPLY WITH 11B-404.2. CLEAR WIDTH SHALL BE 11B-404.2. MANEUVERING CLEARANCES. §11B-404.2.2
33. DOOR OPENINGS SHALL PROVIDE A CLEAR WIDTH OF 32 INCHES MINIMUM. CLEAR OPENINGS OF DOORWAYS WITH SWINGING DOORS SHALL BE MEASURED BETWEEN THE FACE OF THE DOOR AND THE STOP. WITH THE DOOR OPEN 90 DEGREES. OPENINGS MORE THAN 24 INCHES DEEP SHALL PROVIDE A CLEAR OPENING OF 36 INCHES MINIMUM. THERE SHALL BE NO PROJECTIONS INTO THE REQUIRED CLEAR OPENING WIDTH. LOWER THAN 34 INCHES ABOVE THE FINISH FLOOR OR GROUND. PROJECTIONS INTO THE CLEAR OPENING WITH BETWEEN 34 INCHES AND 80 INCHES ABOVE THE FINISH FLOOR OR GROUND SHALL NOT EXCEED 4 INCHES. §11B-404.2.3
34. MINIMUM MANEUVERING CLEARANCES AT DOORS AND GATES SHALL COMPLY WITH 11B-404.2.4 MANEUVERING CLEARANCES. MANEUVERING CLEARANCES SHALL EXTEND THE FULL WIDTH OF THE DOORWAY AND THE REQUIRED LATCH SIDE OR HINGE SIDE CLEARANCE. §11B-404.2.4
35. SWINGING DOORS AND GATES SHALL HAVE MANEUVERING CLEARANCES COMPLYING WITH TABLE 11B-404.2.4.2. §11B-404.2.4.2
36. DOORWAYS LESS THAN 36 INCHES WIDE WITHOUT DOORS OR GATES, SLIDING DOORS, OR FOLDING DOORS SHALL HAVE MANEUVERING CLEARANCES COMPLYING WITH TABLE 11B-404.2.4.2. §11B-404.2.4.2
37. MANEUVERING CLEARANCES FOR FORWARD APPROACH SHALL BE PROVIDED WHEN ANY OBSTRUCTION WITHIN 18 INCHES OF THE LATCH SIDE AN INTERIOR DOORWAY, OR WITHIN 24 INCHES OF THE LATCH SIDE OF AN EXTERIOR DOORWAY, IS MORE THAN 8 INCHES HIGH. §11B-247.1.2.4, §11B-705.1.2.4
38. THRESHOLDS, IF PROVIDED AT DOORWAYS, SHALL BE 1/2 INCH HIGH MAXIMUM. RAISED THRESHOLDS AND CHANGES IN LEVEL AT DOORWAYS SHALL COMPLY WITH 11B-302 FLOOR OR GROUND SURFACES AND 11B-303 CHANGES IN LEVEL. §11B-302.2
39. HANDLES, PULLS, LATCHES, LOCKS, AND OTHER OPERABLE PARTS ON DOORS AND GATES SHALL COMPLY WITH 11B-309 OPERATION OF OPERABLE PARTS OF SUCH HARDWARE SHALL BE 34 INCHES MINIMUM AND 44 INCHES MAXIMUM ABOVE THE FINISH FLOOR OR GROUND, WHERE SLIDING DOORS ARE IN THE FULLY OPEN POSITION, OPERATING HARDWARE SHALL BE EXPOSED AND USABLE FROM BOTH SIDES. §11B-404.2.7
40. THE FORCE FOR PUSHING OR PULLING OPEN A DOOR OR GATE OTHER THAN FIRE DOORS SHALL BE AS FOLLOWS. §11B-404.2.8
- A. INTERIOR HINGED DOORS AND GATES: 5 POUNDS MAXIMUM.
- B. SLIDING OR FOLDING DOORS: 5 POUNDS MAXIMUM.
- C. REQUIRED FIRE DOORS: THE MINIMUM OPENING FORCE ALLOWABLE BY THE APPROPRIATE ADMINISTRATIVE AUTHORITY, NOT TO EXCEED 15 POUNDS.
- D. EXTERIOR HINGED DOORS: 5 POUNDS MAXIMUM.

41. SWINGING DOOR AND GATE SURFACES WITHIN 10 INCHES OF THE FINISH FLOOR OR GROUND MEASURED VERTICALLY SHALL HAVE A SMOOTH SURFACE ON THE INSIDE SIDE EXTENDING THE FULL WIDTH OF THE GATE. PARTS OF THE HORIZONTAL OR VERTICAL JOINTS IN ADJACENT SURFACES SHALL BE WITHIN 1/16 INCH OF THE



DIVISION I – APPLICATION

APPLICATION

1. HOUSING ACCESSIBILITY SHALL APPLY TO THE FOLLOWING (1101A.1):

A. ALL NEWLY CONSTRUCTED COVERED MULTIFAMILY DWELLINGS, SEE ALL COVERED UNITS UNDER SECTION 1102A.1.

B. NEW COMMON USE SPACES SERVING EXISTING COVERED MULTIFAMILY DWELLINGS.

C. ADDITIONS TO EXISTING BUILDINGS, WHERE THE ADDITION ALONE MEETS THE DEFINITION OF A COVERED MULTIFAMILY DWELLING.

D. COMMON-USE AREAS SERVING COVERED MULTIFAMILY DWELLINGS.

E. WHERE ANY PORTION OF A BUILDING'S EXTERIOR IS PRESERVED, BUT THE INTERIOR OF THE BUILDING IS REMOVED, INCLUDING ALL STRUCTURAL PORTIONS OF FLOORS AND CEILING, THE BUILDING IS CONSIDERED A NEW BUILDING FOR DETERMINING THE APPLICATION OF THIS CHAPTER.

2. COVERED MULTIFAMILY DWELLINGS SHALL BE MAINTAINED IN COMPLIANCE WITH THE ACCESSIBILITY STANDARDS IN EFFECT AT THE TIME OF CONSTRUCTION.

3. APARTMENTS CONSTRUCTED PRIOR TO MARCH 13, 1991 SHALL BE MAINTAINED IN COMPLIANCE WITH THE ACCESSIBILITY STANDARDS IN EFFECT AT THE TIME OF CONSTRUCTION (1102A.2).

4. NEW PUBLICLY FUNDED MULTIFAMILY DWELLINGS ARE SUBJECT TO THE PROVISIONS OF CHAPTER 11A.

5. PUBLIC HOUSING AS DEFINED IN CHAPTER 2 OF THIS CODE IS SUBJECT TO PROVISIONS OF THE DIVISION OF THE STATE ARCHITECT (DOSA-UC), SEE CHAPTER 11B.

6. EXISTING PUBLICLY FUNDED MULTIFAMILY DWELLINGS ARE SUBJECT TO PROVISIONS OF SECTION 11B-202.4.

MULTISTORY DWELLINGS WITH ONE OR MORE ELEVATORS

9. FOR MULTISTORY DWELLING UNITS IN BUILDINGS WITH ELEVATORS, THE STORY OF THE UNIT THAT SERVED BY THE ELEVATOR IS CONSIDERED A GROUND FLOOR AND THE PRIMARY ENTRY FLOOR TO THE UNIT AND SHALL COMPLY WITH THE FOLLOWING (1102A.3):

A. AT LEAST ONE POWDER ROOM OR BATHROOM SHALL BE LOCATED ON THE PRIMARY ENTRY LEVEL.

B. ALL ROOMS OR SPACES LOCATED ON THE PRIMARY ENTRY LEVEL SHALL BE SERVED BY AN ACCESSIBLE ROUTE AND SHALL COMPLY WITH DIVISION IV.

DIVISION II – EXTERIOR FACILITIES

SITE DEVELOPMENT AND ROUTE OF TRAVEL

NOTE: ACCESSIBLE ROUTE OF TRAVEL IS DEFINED AS A CONTINUOUS AND UNOBSTRUCTED PATH CONNECTING ALL ACCESSIBLE ELEMENTS AND SPACES IN AN ACCESSIBLE BUILDING OR FACILITY THAT CAN BE NEGOTIATED BY A PERSON WITH A SEVERE PHYSICAL DISABILITY AND THAT IS ALSO SAFE FOR AND USABLE BY PERSONS WITH OTHER DISABILITIES" (107A.1.4)

NOTE: EXCEPT WHEN INDIVIDUAL DWELLING UNITS, AN ACCESSIBLE ROUTE OF TRAVEL SHALL NOT PASS THROUGH KITCHENS, STORAGE ROOMS, RESTROOMS, CLOSETS OR OTHER SPACES USED FOR SIMILAR SPACES. (1109A.1)

1. SITE DEVELOPMENT AND GRADING SHALL BE DESIGNED TO PROVIDE ACCESS TO ALL ENTRANCES AND EXTERIOR GROUND FLOOR EXITS AND ACCESS TO NORMAL PATHS OF TRAVEL, AND WHERE NECESSARY TO PROVIDE ACCESS, SHALL INCORPORATE PEDESTRIAN RAMPS, CURB RAMPS, ETC. (1101A.1)

2. WHEN A BUILDING OR PORTION OF A BUILDING IS REQUIRED TO BE ACCESSIBLE OR ADAPTABLE, AN ACCESSIBLE ROUTE OF TRAVEL SHALL BE PROVIDED TO ALL PORTIONS OF THE BUILDING, TO ACCESSIBLE BUILDING ENTRANCES, AND BETWEEN THE BUILDING AND THE PUBLIC WALKWAY. (1101A.1)

3. THE ACCESSIBLE ROUTE OF TRAVEL SHALL BE THE MOST PRACTICAL DIRECT ROUTE BETWEEN ACCESSIBLE BUILDING ENTRANCES, ACCESSIBLE SITE FACILITIES, AND THE ACCESSIBLE ENTRANCE TO THE SITE. (1101A.1)

4. WHERE MORE THAN ONE ROUTE OF TRAVEL IS PROVIDED, ALL ROUTES SHALL BE ACCESSIBLE (1101A.1.1)

5. AT LEAST ONE ACCESSIBLE ROUTE WITHIN THE BOUNDARY OF THE SITE SHALL BE PROVIDED FROM PUBLIC TRANSPORTATION STOPS, ACCESSIBLE PARKING AND ACCESSIBLE PASSENGER LOADING ZONES, AND PUBLIC STREETS OR SIDEWALKS TO ACCESSIBLE BUILDING ENTRANCES AND FACILITIES. ACCESSIBLE ROUTES SHALL BE TO THE MAXIMUM EXTENT FEASIBLE, COINCIDE WITH THE ROUTE FOR THE GENERAL PUBLIC. (1101A.1.2)

6. WHEN MORE THAN ONE BUILDING OR FACILITY IS LOCATED ON A SITE, ACCESSIBLE ROUTES OF TRAVEL SHALL BE PROVIDED BETWEEN BUILDINGS AND ACCESSIBLE SITE FACILITIES. (1101A.1.3)

7. AT LEAST ONE ACCESSIBLE ROUTE SHALL CONNECT TO THE FOLLOWING: (1101A.1.3 & 1101A.4)

A. ACCESSIBLE BUILDINGS, FACILITIES, ELEMENTS AND SPACES THAT ARE ON THE SAME SITE.

B. ACCESSIBLE BUILDING OR FACILITY ENTRANCES WITH ALL ACCESSIBLE SPACES AND ELEMENTS AND WITH ALL ACCESSIBLE DWELLING UNITS WITHIN THE BUILDING OR FACILITY.

8. AN ACCESSIBLE ROUTE SHALL CONNECT AT LEAST ONE ACCESSIBLE ENTRANCE OF EACH ACCESSIBLE DWELLING UNIT TO THOSE EXTERIOR AND INTERIOR SPACES AND FACILITIES THAT SERVE THE ACCESSIBLE DWELLING UNIT. (1101A.1.5)

9. AT EVERY PRIMARY PUBLIC ENTRANCE AND AT EVERY MAJOR JUNCTION ALONG OR LEADING TO AN ACCESSIBLE ROUTE OF TRAVEL, THERE SHALL BE A SIGN DISPLAYING THE INTERNATIONAL SYMBOL OF ACCESSIBILITY. SIGNS SHALL INDICATE THE DIRECTION TO ACCESSIBLE BUILDING ENTRANCES AND FACILITIES. (110A.2)

10. ALL COVERED GROUND FLOOR UNITS IN NON-ELEVATOR BUILDINGS MUST BE ADAPTABLE AND ON AN ACCESSIBLE ROUTE. (1104A.1)

11. GARAGES, CARPORTS AND OTHER PARKING FACILITIES, WHICH ARE ACCESSORY TO COVERED MULTIFAMILY DWELLING UNITS, SHALL BE ACCESSIBLE AS REQUIRED BY 109A. (109A.1)

ACCESSIBLE PARKING

13. EACH PARKING FACILITY PROVIDED FOR COVERED MULTIFAMILY DWELLINGS AND FACILITIES (E.G., SWIMMING POOLS, CLUB HOUSES, RECREATION AREAS AND LAUNDRY ROOMS) THAT SERVE COVERED MULTIFAMILY DWELLINGS SHALL PROVIDE ACCESSIBLE PARKING. (1100A.1)

14. PARKING FACILITIES SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING (109A.2):

A. GARAGES

B. PRIVATE GARAGES (SEE SECTION 1105A FOR THE APPLICATION OF BUILDING STANDARDS FOR ACCESSIBILITY)

C. CARPORTS

D. OFF-STREET PARKING (PARKING LOTS/SPACES)

15. PRIVATE GARAGES ACCESSORY TO COVERED MULTIFAMILY DWELLING UNITS SHALL BE ACCESSIBLE. PRIVATE GARAGES INCLUDE INDIVIDUAL GARAGES AND MULTIPLE INDIVIDUAL GARAGES GROUPED TOGETHER. (109A.2.1)

16. EXCEPTION: AN ATTACHED PRIVATE GARAGE DIRECTLY SERVING A SINGLE COVERED MULTIFAMILY DWELLING UNIT PROVIDING AT LEAST ONE OF THE FOLLOWING OPTIONS:

A. A DOOR LEADING DIRECTLY FROM THE COVERED DWELLING UNIT WHICH IMMEDIATELY ENTERS THE GARAGE. THE DOOR SHALL COMPLY ON BOTH SIDES WITH SECTIONS 1132A.3 THROUGH 1132A.9.

B. AN ACCESSIBLE ROUTE OF TRAVEL FROM THE COVERED DWELLING UNIT TO AN EXTERIOR DOOR ENTERING THE GARAGE. SEE SECTION 1132A.1 FOR REQUIREMENTS AT BOTH EXIT DOORS.

C. AN ACCESSIBLE ROUTE OF TRAVEL FROM THE DWELLING UNITS PRIMARY ENTRY DOOR TO THE VEHICULAR ENTRANCE AT THE GARAGE. SEE SECTION 1132A.1 FOR REQUIREMENTS AT THE PRIMARY ENTRY DOOR.

17. ACCESSIBLE PARKING SPACES SHALL BE PROVIDED AT A MINIMUM RATE OF 2 PERCENT, BUT NOT LESS THAN ONE, PER ACCESSIBLE UNIT OR SPACE. THE MINIMUM SIZE OF EACH TYPE OF PARKING FACILITY SHALL BE MADE ACCESSIBLE EVEN IF THE TOTAL NUMBER EXCEEDS 2 PERCENT. WHEN ASSIGNED PARKING IS PROVIDED, SIGNAGE AS REQUIRED BY SECTION 1109A.8 SHALL NOT BE REQUIRED. (109A.4)

18. WHEN ASSIGNED PARKING SPACES ARE PROVIDED FOR A RESIDENT OR A GROUP OF RESIDENTS, AT LEAST 2 PERCENT OF THE ASSIGNED PARKING SPACES SERVING COVERED MULTIFAMILY DWELLING UNITS SHALL BE ACCESSIBLE IN EACH TYPE OF PARKING FACILITY. AT LEAST ONE SPACE OF EACH TYPE OF PARKING FACILITY SHALL BE MADE ACCESSIBLE EVEN IF THE TOTAL NUMBER EXCEEDS 2 PERCENT. WHEN ASSIGNED PARKING IS PROVIDED, SIGNAGE AS REQUIRED BY SECTION 1109A.8 SHALL NOT BE REQUIRED. (109A.4)

19. WHEN PARKING IS PROVIDED FOR COVERED MULTIFAMILY DWELLINGS AND IS NOT ASSIGNED TO A RESIDENT OR A GROUP OF RESIDENTS, AT LEAST 5 PERCENT OF THE PARKING SPACES SHALL BE ACCESSIBLE AND PROVIDED ACCESS TO GRADE LEVEL ENTRANCES TO CURB RAMPS, SIDEWALKS AND FACILITIES (E.G., SWIMMING POOLS, CLUB HOUSES, RECREATION AREAS AND LAUNDRY ROOMS) THAT SERVE COVERED MULTIFAMILY DWELLINGS. ACCESSIBLE PARKING SPACES SHALL BE PROVIDED WITH SIGNAGE AS REQUIRED BY SECTION 109A.8. SUCH SIGNAGE SHALL NOT BE BLOCKED FROM VIEW BY A VEHICLE PARKED IN THE SPACE. (109A.5)

20. WHEN ASSIGNED PARKING IS PROVIDED, DESIGNATED ACCESSIBLE PARKING FOR THE DWELLING UNIT SHALL BE PROVIDED ON REQUEST OF RESIDENTS WITH DISABILITIES ON THE SAME TERMS AND WITH THE FULL RANGE OF CHOICES (E.G., OFF-STREET PARKING, CARPORT OR GARAGE) THAT ARE AVAILABLE FOR OTHER RESIDENTS. (109A.6)

21. THE LOCATION OF ACCESSIBLE PARKING SPACES SHALL COMPLY WITH THE FOLLOWING:

BA. IF THIS SHEET IS NOT 30° x 42", IT IS A REDUCED RAMP

ACCESSIBLE PARKING CONTD

A. ACCESSIBLE PARKING SPACES SHALL BE LOCATED ON THE SHORTEST ACCESSIBLE ROUTE TO AN ACCESSIBLE BUILDING, OR COVERED MULTIFAMILY DWELLING UNIT ENTRANCE. ALL VAN ACCESSIBLE SPACES MAY BE GROUPED ON ONE LEVEL, OF A MULTILEVEL PARKING FACILITY.

B. WHEN PARKING FACILITIES ARE LOCATED ADJACENT TO A BUILDING WITH MULTIPLE ACCESSIBLE ENTRANCES, ACCESSIBLE PARKING SPACES SHALL BE DISPersed AND LOCATED NEAR THE ACCESSIBLE BUILDING ENTRANCES.

C. WHEN PRACTICAL, THE ACCESSIBLE ROUTE SHALL NOT CROSS LANES FOR VEHICULAR TRAFFIC. WHEN CROSSING VEHICLE TRAFFIC LANES IS NECESSARY, THE ACCESSIBLE ROUTE SHALL BE DESIGNATED AND MARKED AS A CROSSWALK.

D. PARKING FACILITIES THAT DO NOT SERVE A PARTICULAR BUILDING SHALL HAVE ACCESSIBLE PARKING SPACES LOCATED ON THE SHORTEST ACCESSIBLE ROUTE TO AN ACCESSIBLE PEDESTRIAN ENTRANCE OF THE PARKING FACILITY.

E. ACCESSIBLE PARKING SPACES SHALL BE LOCATED SO THAT PERSONS WITH PHYSICAL DISABILITIES ARE NOT COMPELLED TO WHEEL OR WALK BEHIND PARKED CARS OTHER THAN THEIR OWN. (109A.7)

22. ALL ENTRANCES, EXITS AND VEHICULAR PASSAGeways TO AND FROM REQUIRED ACCESSIBLE PARKING SPACES WITHIN PARKING FACILITIES, SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 8 FEET 2 INCHES FROM THE FLOOR TO THE LOWEST PROJECTION OF THE CEILING. REFLECTIVE WARNING SIGNS COMPLYING WITH CHAPTER 11B FOR CHARACTER HEIGHT SHALL BE INSTALLED AT TRANSITIONS FROM THE 8 FEET 2 INCH CEILING TO LOWER CEILING HEIGHTS IN VEHICULAR PASSAGeways IN THE SAME PARKING LEVEL.

23. PARKING SPACES SHALL BE ARRANGED TO COMPLY WITH THE FOLLOWING (1109A.2):

A. IN EACH PARKING AREA, A BUMPER OR CURB SHALL BE PROVIDED AND LOCATED TO PREVENT ENCRoACHMENT OF CARS OVER THE REQUIRED WIDTH OF WALKWAYS.

B. RAMPS, INCLUDING CURB RAMPS, SHALL NOT ENCRoACH INTO ANY ACCESSIBLE PARKING SPACE OR THE ADJACENT LOADING AND UNLOADING ACCESS AISLE.

24. SURFACE SLOPES OF ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL BE THE MINIMUM POSSIBLE AND SHALL NOT EXCEED ¼ INCH PER FOOT (2.08% GRADIENT) IN ANY DIRECTION. (1109A.3)

25. WHERE ACCESSIBLE SINGLE SPACES ARE PROVIDED, THEY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING (109A.5):

A. SINGLE SPACES SHALL BE 14 FEET WIDE AND LINED TO PROVIDE A 9-FOOT WIDE PARKING AREA AND A 5-FOOT WIDE LOADING AND UNLOADING ACCESS AISLE ON THE PASSENGER SIDE OF THE VEHICLE (SEE FIGURE 11A-20) WITH THE VEHICLE PARKED IN THE FORWARD POSITION.

B. WHEN MORE THAN ONE SPACE IS PROVIDED, TWO 9-FOOT WIDE PARKING SPACES MAY BE LINED ON EACH SIDE OF A 5-FOOT WIDE LOADING AND UNLOADING ACCESS AISLE. SEE FIGURES 11A-2A AND 11A-2C.

C. THE MINIMUM LENGTH OF EACH PARKING SPACE SHALL BE 16 FEET.

D. THE LOADING AND UNLOADING ACCESS AISLE SHALL BE MARKED BY A BORDER PAINTED BLUE, WITHIN THE BLUE BORDER, HATCHED LINES A MAXIMUM OF 36 INCHES ON CENTER SHALL BE PAINTED A COLOR CONTRASTING WITH THE PARKING SURFACE. PREFERABLY BLUE OR WHITE. THE WORDS "NO PARKING" SHALL BE PAINTED ON THE GROUND WITHIN EACH 8-FOOT WIDE LOADING AND UNLOADING ACCESS AISLE. THIS NOTICE SHALL BE PAINTED IN WHITE LETTERS NO LESS THAN 12 INCHES HIGH AND LOCATED SO THAT IT IS VISIBLE TO TRAFFIC ENFORCEMENT OFFICIALS. SEE FIGURES 11A-2A, 11A-2B AND 11A-2C.

26. ONE IN EVERY EIGHT ACCESSIBLE SPACES, BUT NOT LESS THAN ONE, SHALL BE VAN ACCESSIBLE AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING (109A.8.6):

A. EACH SPACE SHALL BE SERVED BY A LOADING AND UNLOADING ACCESS AISLE AT LEAST 8 FEET WIDE, PLACED ON THE PASSENGER SIDE WITH THE VEHICLE PARKED IN THE FORWARD POSITION.

B. THE MINIMUM LENGTH OF EACH SPACE SHALL BE 16 FEET.

C. EACH SPACE SHALL BE DESIGNATED "VAN ACCESSIBLE" AS REQUIRED BY 1109A.8.8.

D. ALL VAN ACCESSIBLE SPACES MAY BE GROUPED ON ONE LEVEL OF A MULTILEVEL PARKING FACILITY.

E. THE LOADING AND UNLOADING ACCESS AISLE SHALL BE MARKED BY A BORDER PAINTED BLUE, WITHIN THE BLUE BORDER, HATCHED LINES A MAXIMUM OF 36 INCHES ON CENTER SHALL BE PAINTED A COLOR CONTRASTING WITH THE PARKING SURFACE. PREFERABLY BLUE OR WHITE. THE WORDS "NO PARKING" SHALL BE PAINTED ON THE GROUND WITHIN EACH 8-FOOT WIDE LOADING AND UNLOADING ACCESS AISLE. THIS NOTICE SHALL BE PAINTED IN WHITE LETTERS NO LESS THAN 12 INCHES HIGH AND LOCATED SO THAT IT IS VISIBLE TO TRAFFIC ENFORCEMENT OFFICIALS. NOTE: SEE FIGURES 11A-2A, 11A-2B AND 11A-2C.

27. PARKING SPACES ADJACENT TO ACCESSIBLE PARKING SPACES SHALL NOT BE CONSIDERED AS LOADING AND UNLOADING ACCESSIBLE. (109A.8.7)

28. EACH ACCESSIBLE PARKING SPACE RESERVED FOR PERSONS WITH DISABILITIES SHALL BE IDENTIFIED BY A REFLECTIVE SIGN PERMANENTLY POSTED IMMEDIATELY ADJACENT TO AND VISIBLE FROM EACH STALL OR SPACE, CONSISTING OF THE INTERNATIONAL SYMBOL OF ACCESSIBILITY IN WHITE ON A DARK BLUE BACKGROUND. THE SIGN SHALL NOT BE SMALLER THAN 70 SQUARE INCHES IN AREA AND, WHEN IN A SIGN OF TRAVEL, SHALL NOT BE POSTED AT A MINIMUM HEIGHT OF 60 INCHES FROM THE BOTTOM OF THE SIGN TO THE FINISHED GRADE. SIGNS MAY ALSO BE CENTERED ON THE WALL AT THE INTERIOR END OF THE PARKING SPACE AT A MINIMUM HEIGHT OF 36 INCHES FROM THE PARKING SPACE FINISHED GRADE. GROUND OR SIDEWALK VAN ACCESSIBLE SPACES COMPLYING WITH SECTION 1109A.8.6 AND SHALL HAVE AN ADDITIONAL LANGUAGE STATING "VAN ACCESSIBLE" BELOW THE SYMBOL OF ACCESSIBILITY. (109A.8.8)

NOTE: WHEN ASSIGNED RESIDENT PARKING IS PROVIDED, SIGNAGE IS NOT REQUIRED EXCEPT FOR UNASSIGNED OR VISITOR PARKING SPACES.

29. AN ADDITIONAL SIGN SHALL ALSO BE POSTED IN A CONSPICUOUS PLACE AT EACH ENTRANCE TO OFF-STREET PARKING FACILITIES OR IMMEDIATELY ADJACENT TO AND VISIBLE FROM EACH ACCESSIBLE STALL OR SPACE. THE SIGN SHALL NOT BE LESS THAN 14 INCHES BY 22 INCHES IN SIZE WITH LETTERING NOT LESS THAN 1 INCH IN HEIGHT, AND SHALL CLEARLY AND CONSPICUOUSLY STATE THE FOLLOWING:

UNAUTHORIZED VEHICLES PARKED IN DESIGNATED ACCESSIBLE SPACES NOT DISPLAYING DISTINGUISHING PLACARDS OR SPECIAL LICENSE PLATES ISSUED FOR PERSONS WITH DISABILITIES WILL BE TOWED AWAY AT OWNER'S EXPENSE. TOWED VEHICLES MAY BE REQUIRED TO BE REMOVED BY OR BY TELEPHONING.

30. IN ADDITION TO THE ABOVE REQUIREMENTS, THE SURFACE OF EACH ACCESSIBLE PARKING SPACE SHALL HAVE A SURFACE IDENTIFICATION DUPLICATING EITHER OF THE FOLLOWING SCHEMES (109A.8.9):

A. BY OUTLINING OR PAINTING THE STALL OR SPACE IN BLUE AND OUTLINING ON THE GROUND IN THE STALL OR SPACE IN WHITE OR SUITABLE CONTRASTING COLOR THE "INTERNATIONAL SYMBOL OF ACCESSIBILITY" OR

B. BY OUTLINING THE "INTERNATIONAL SYMBOL OF ACCESSIBILITY" IN WHITE ON BLUE BACKGROUND, THE "INTERNATIONAL SYMBOL OF ACCESSIBILITY" SHALL BE LOCATED SO THAT IT IS VISIBLE TO A TRAFFIC ENFORCEMENT OFFICER WHEN A VEHICLE IS PROPERLY PARKED IN THE SPACE AND SHALL BE 30 INCHES HIGH BY 36 INCHES WIDE. NOTE: SEE FIGURES 11A-2A, 11A-2B, AND 11A-2C.

WALKS AND SIDEWALKS

31. WALKS AND SIDEWALKS SHALL HAVE A CONTINUOUS COMMON SURFACE, NOT INTERRUPTED BY STEPS OR BY ABRUPT CHANGES IN LEVEL EXCEEDING ¼". (1131A.1)

32. SIDEWALKS SERVING INDIVIDUAL DWELLING UNITS IN COVERED MULTIFAMILY BUILDING SHALL BE 36" MINIMUM IN CLEAR WIDTH, ALL OTHER SIDEWALKS SHALL BE 48" MINIMUM IN CLEAR WIDTH (1131A.1.1).

33. WALK AND SIDEWALK SURFACE CROSS SLOPES SHALL NOT EXCEED ¼" PER FOOT (2.08% PERCENT SLOPE), WHERE DUE TO LOCAL CONDITIONS CREATE UNREASONABLE HARDSHIP, THE CROSS SLOPE MAY BE INCREASED TO A MAXIMUM OF ½" PER FOOT (4.2 PERCENT SLOPE) FOR DISTANCES NOT TO EXCEED 20 FEET. (1131A.1.3)

34. WALK AND SIDEWALK SURFACES SHALL BE SLIP-RESISTANT AS FOLLOWS: (1131A.1.2)

A. SURFACES WITH A SLOPE OF LESS THAN 6 PERCENT GRADIENT SHALL BE AT LEAST AS SLIP-RESISTANT AS THAT DESCRIBED AS A MEDIAN SLIGHT FINISH.

B. SURFACES WITH A SLOPE OF 6 PERCENT OR GREATER GRADIENT SHALL BE SLIPRESISTANT.

35. WALKS, SIDEWALKS, AND PEDESTRIAN WAYS SHALL BE FREE OF GRATING UNLESS WHERE NECESSARY FOR GRATINGS LOCATED IN THE SURFACE OF ANY OF THESE AREAS, GRID OPENINGS IN GRATINGS SHALL BE LIMITED TO ¼" IN THE DIRECTION OF TRAFFIC FLOW. (1131A.6)

36. WHEN THE SLOPE OR THE DIRECTION OF TRAVEL OF ANY WALK EXCEEDS 1 UNIT VERTICAL TO 20 UNITS HORIZONTAL (5PERCENTSLOPE), IT SHALL COMPLY WITH THE PROVISIONS OF SECTION 1122A.1 AS A PEDESTRIAN RAMP. (1131A.3)

37. WALKS SHALL BE PROVIDED WITH A LEVEL AREA NOT LESS THAN 80% x 6' AT A DOOR OR GATE THAT SWINGS AWAY FROM THE WALK, AND NOT LESS THAN 48" WIDE BY 4' DEEP AT A DOOR OR GATE THAT SWINGS AWAY FROM THE WALK. SUCH WALKS SHALL EXTEND 24" TO THE SIDE OF THE STRIKE EDGE OF A DOOR OR GATE THAT SWINGS TOWARD THE WALK (1131A.4)

CURB RAMPS

NOTE: CURB RAMP IS DEFINED AS A SLOPING PEDESTRIAN WAY, INTENDED FOR PEDESTRIAN TRAFFIC WHICH PROVIDES ACCESS BETWEEN A WALK OR SIDEWALK AND A SURFACE LOCATED ABOVE OR BELOW AN ADJACENT CURB FACE. (1070A)

NOTE: CURB RAMPS WITHIN THE BOUNDARY OF THE SITE SHALL BE CONSTRUCTED AT EACH CORNER OF STREET INTERSECTIONS AND WHERE A PEDESTRIAN WAY CROSSES A CURB. THE PREFERRED AND RECOMMENDED LOCATION FOR CURB RAMPS IS IN THE CENTER OF THE CROSSWALK OF EACH STREET CORNER, WHERE IT IS NECESSARY TO LOCATE A CURB RAMP IN THE CENTER OF THE CURB RETURN, THE STREET SURFACES SHALL BE MARKED TO IDENTIFY PEDESTRIAN CROSSWALKS, AND THE LOWER END OF THE CURB RAMP SHALL TERMINATE WITHIN SUCH CROSSWALK AREAS. CURB RAMPS DO NOT REQUIRE HANDRAILS. (1131A.1)

NOTE: CURB RAMPS WITHIN THE BOUNDARY OF THE SITE SHALL BE CONSTRUCTED AT EACH CORNER OF STREET INTERSECTIONS AND WHERE A PEDESTRIAN WAY CROSSES A CURB. THE PREFERRED AND RECOMMENDED LOCATION FOR CURB RAMPS IS IN THE CENTER OF THE CROSSWALK OF EACH STREET CORNER, WHERE IT IS NECESSARY TO LOCATE A CURB RAMP IN THE CENTER OF THE CURB RETURN, THE STREET SURFACES SHALL BE MARKED TO IDENTIFY PEDESTRIAN CROSSWALKS, AND THE LOWER END OF THE CURB RAMP SHALL TERMINATE WITHIN SUCH CROSSWALK AREAS. CURB RAMPS DO NOT REQUIRE HANDRAILS. (1131A.1)

CURB RAMPS CONTD

38. CURB RAMPS SHALL BE A MINIMUM OF 48 INCHES IN WIDTH. (1122A.3)

39. THE SLOPE OF CURB RAMPS SHALL NOT EXCEED 1 UNIT VERTICAL TO 12 UNITS HORIZONTAL (8.33-PERCENT SLOPE). (1122A.5)

40. TRANSITIONS FROM RAMPS TO WALKS, GUTTERS, OR STREETS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES. (1122A.5)

41. CURB RAMP LOCATED WHERE THE PEDESTRIANS MUST WALK ACROSS THE RAMP SHALL HAVE FLARED SIDES, THE MAXIMUM SLOPE OF THE FLARE SHALL BE ONE UNIT VERTICAL IN 10 UNITS HORIZONTAL. (10-PERCENT SLOPE). CURB RAMP WITH RETURN CURBS CAN BE USED WHERE PEDESTRIANS WOULD NOT NORMALLY WALK ACROSS THE RAMP. (1122A.5)

42. EXTERIOR STAIRS SERVING BUILDINGS ON A SITE CONTAINING MULTIFAMILY DWELLING UNITS SHALL HAVE A MINIMUM CLEAR ENCRoACH AND ALL TREADS MARKED BY A STRIPE PROVIDING CLEAR VISUAL CONTRAST.

43. EXCEPT WHEN AN INDIVIDUAL DWELLING UNIT, INTERIOR STAIRS SHALL HAVE THE UPPER APPROACH AND LOWER TREAD MARKED BY A STRIPE PROVIDING CLEAR VISUAL CONTRAST.

44. CURB RAMPS SHALL BE LOCATED TO PREVENT THEIR OBSTRUCTION BY PARKED CARS. BUILT-UP CURB RAMPS SHALL BE THAT THEY DO NOT PROJECT INTO VEHICULAR TRAFFIC LANES. (1122A.2)

45. ALL CURB RAMPS SHALL HAVE A GROOVED BORDER 12 INCHES WIDE AT THE LEVEL SURFACE OF THE SIDEWALK ALONG THE TOP AND EACH SIDE APPROXIMATELY ¾ INCH ON CENTER. ALL CURB RAMPS CONSTRUCTED BETWEEN THE FACE OF THE CURB AND THE STREET SHALL HAVE A GROOVED BORDER AT THE LEVEL SURFACE OF THE SIDEWALK. SEE FIGURES 11A-3A THROUGH 11A-3K. (1122A.6)

46. FOR DETECTABLE WARNING REQUIREMENTS, SEE CHAPTER 11B, SECTION 1127B.5, ITEM 7. (1122A.9)

NOTE: ANY PATH OF TRAVEL SHALL BE CONSIDERED A RAMP IF ITS SLOPE IS GREATER THAN 1 UNIT VERTICAL IN 20 UNITS HORIZONTAL (5-PERCENT SLOPE).

47. THE WIDTH OF RAMPS SHALL BE CONSISTENT WITH THE REQUIREMENTS FOR EXITS IN CHAPTER 10 OF THIS CODE, BUT IN NO CASE SHALL THE RAMP WIDTH BE LESS THAN THE FOLLOWING (1114A.1, 1122A.1):

A. RAMPS SERVING ACCESSIBLE ENTRANCES TO COVERED MULTIFAMILY BUILDINGS WHERE THE RAMP IS THE ONLY EXIT DISCHARGE PATH AND SERVES AN OCCUPANT LOAD OF 30 OR MORE SHALL HAVE A MINIMUM CLEAR WIDTH OF 90 INCHES.

B. RAMPS SERVING ACCESSIBLE ENTRANCES OF COVERED MULTIFAMILY DWELLINGS WITH AN OCCUPANT LOAD OF 10 OR LESS MAY BE 36 INCHES IN CLEAR WIDTH.

C. ALL OTHER RAMPS SHALL HAVE A MINIMUM CLEAR WIDTH OF 48 INCHES.

D. HANDRAILS, CURBS, WHEEL GUIDES AND OR APPURTENANCES SHALL NOT PROJECT INTO THE REQUIRED CLEAR WIDTH OF A RAMP.

48. THE MAXIMUM SLOPE OF RAMPS ON AN ACCESSIBLE ROUTE SHALL BE NO GREATER THAN 1 UNIT VERTICAL IN 12 UNITS HORIZONTAL (8.33-PERCENT SLOPE). (1114A.2, 1122A.1)

49. THE CROSS SLOPE OF RAMP SURFACES SHALL NOT EXCEED ¼ INCH PER FOOT (2.08-PERCENT SLOPE). (1114A.2.1, 1122A.1.1)

50. RAMP LANDINGS SHALL BE LEVEL AND COMPLY WITH THE FOLLOWING: (1114A.4, 1122A.1)

A. LANDINGS SHALL BE PROVIDED AT THE TOP AND BOTTOM OF EACH RAMP. INTERMEDIATE LANDINGS SHALL BE PROVIDED AT SPACES NOT EXCEEDING 30 INCHES OF VERTICAL RISE AND AT EACH CHANGE OF DIRECTION. LANDINGS ARE NOT CONSIDERED IN DETERMINING THE MAXIMUM HORIZONTAL DISTANCE OF EACH RAMP. (1114A.4.1, 1122A.1.1)

B. TOP LANDINGS SHALL NOT BE LESS THAN 80 INCHES WIDE. TOP LANDINGS SHALL HAVE A MINIMUM LENGTH OF NOT LESS THAN 60 INCHES IN THE DIRECTION OF THE RAMP RUN. (SEE SECTION 1128A.3 FOR MANEUVERING CLEARANCES AT DOORS. (SEE FIGURE 11A-6C), (1114A.4.2, 1122A.3.2)

C. THE MINIMUM WIDTH OF BOTTOM AND INTERMEDIATE LANDINGS SHALL NOT BE LESS THAN THE WIDTH OF THE RAMP. (1114A.4.3, 1122A.3.3)

D. DOORS IN ANY POSITION SHALL NOT REDUCE THE MINIMUM DIMENSION OF THE LANDING TO LESS THAN 42 INCHES AND SHALL NOT REDUCE THE REQUIRED WIDTH BY MORE THAN 2 INCHES WHEN FULLY OPEN. (SEE FIGURE 11A-6D), (1114A.4.4, 1122A.3.4)

E. THE WIDTH OF THE LANDING SHALL COMPLY WITH SECTION 1120A.3 FOR STRIKE EDGE CLEARANCE AND MANEUVERING SPACE AT DOORS. (1114A.4.5, 1122A.3.5)

F. INTERMEDIATE AND BOTTOM LANDINGS AT A CHANGE OF DIRECTION IN EXCESS OF 90 DEGREES SHALL HAVE A LENGTH IN THE DIRECTION OF RAMP RUN OF NOT LESS THAN 72 INCHES. (SEE FIGURES 11A-6C AND 11A-6D), (1114A.4.6, 1122A.3.6)

G. OTHER INTERMEDIATE LANDINGS SHALL HAVE A DIMENSION IN THE DIRECTION OF RAMP RUN OF NOT LESS THAN 80 INCHES. SEE FIGURE 11A-6C, (1114A.4.7, 1122A.3.7)

51. RAMPS MORE THAN 30 INCHES ABOVE THE ADJACENT FLOOR OR GROUND AND OPEN ON ONE OR BOTH SIDES SHALL BE PROVIDED WITH GUARDRAILS AS REQUIRED BY SECTION 1015. GUARDRAILS SHALL BE CONTINUOUS FROM THE TOP OF THE RAMP TO THE BOTTOM OF THE RAMP. (1114A.4, 1122A.4)

52. RAMP HANDRAILS SHALL COMPLY WITH THE FOLLOWING: (1114A.5, 1122A.5)

F. INTERMEDIATE AND BOTTOM LANDINGS AT A CHANGE OF DIRECTION IN EXCESS OF 90 DEGREES SHALL HAVE A LENGTH IN THE DIRECTION OF RAMP RUN OF NOT LESS THAN 72 INCHES. (SEE FIGURES 11A-6C AND 11A-6D), (1114A.4.6, 1122A.3.6)

G. OTHER INTERMEDIATE LANDINGS SHALL HAVE A DIMENSION IN THE DIRECTION OF RAMP RUN OF NOT LESS THAN 80 INCHES. SEE FIGURE 11A-6C, (1114A.4.7, 1122A.3.7)

51. RAMPS MORE THAN 30 INCHES ABOVE THE ADJACENT FLOOR OR GROUND AND OPEN ON ONE OR BOTH SIDES SHALL BE PROVIDED WITH GUARDRAILS AS REQUIRED BY SECTION 1015. GUARDRAILS SHALL BE CONTINUOUS FROM THE TOP OF THE RAMP TO THE BOTTOM OF THE RAMP. (1114A.4, 1122A.4)

52. RAMP HANDRAILS SHALL COMPLY WITH THE FOLLOWING: (1114A.5, 1122A.5)

AREAS OF REFUGE

SEE SECTION 1007.

STARWAYS

SEE DIVISION II.

ELEVATORS AND PLATFORM (WHEELCHAIR) LIFTS (ALSO SEE PROVISIONS IN SECTION 1024)

ELEVATORS PROVIDED IN COVERED MULTIFAMILY BUILDINGS SHALL BE ACCESSIBLE. ELEVATORS REQUIRED TO BE ACCESSIBLE SHALL COMPLY WITH SECTION 1124A, ASME A17.1, SAFETY CODE FOR ELEVATORS AND ESCALATORS, TITLE 8, OF ANY OTHER CODE OF REGULATIONS, UNDER "ELEVATOR SAFETY ORDERS," AND THE CALIFORNIA APPLICABLE SAFETY REGULATIONS OF OTHER ADMINISTRATIVE AUTHORITIES HAVING JURISDICTION.

EXCEPT: PRIVATE ELEVATORS SERVING ONLY ONE DWELLING UNIT. (1124A.1)

HAZARDS ON ACCESSIBLE ROUTES

SEE DIVISION II.

DOORS

1. EVERY PRIMARY ENTRANCE TO A DWELLING UNIT REQUIRED TO BE ACCESSIBLE SHALL BE PROVIDED WITH A DOOR BELL, Buzzer, CHIME OR EQUIVALENT INSTALLATIONS MOUNTED A MAXIMUM OF 48 INCHES ABOVE THE FLOOR CONNECTED TO PERMANENT WIRING. (1132A.10)

2. RECESSED DOORMATS SHALL BE ADEQUATELY Y ANCHORED TO PREVENT INTERFERENCE WITH WHEELCHAIR TRAFFIC. (1192A.1)

3. DOORWAYS WHICH PROVIDE ACCESS TO COMMON USE AREAS COVERED MULTIFAMILY DWELLINGS SHALL COMPLY WITH THE FOLLOWING: (1128A.1)

A. PERMIT THE INSTALLATION OF A DOOR NOT LESS THAN 36 INCHES IN WIDTH, NOT LESS THAN 80 INCHES IN HEIGHT AND PROVIDE A CLEAR WIDTH OF NOT LESS THAN 32 INCHES, MEASURED WITH THE DOOR POSITIONED AT AN ANGLE OF 90 DEGREES FROM ITS CLOSED POSITION.

B. BE CAPABLE OF OPENING AT LEAST 90 DEGREES.

C. A PAIR OF DOORS, MANUAL OR AUTOMATIC, MUST HAVE AT LEAST ONE LEAF WHICH PROVIDES A CLEAR WIDTH OF NOT LESS THAN 32 INCHES, MEASURED WITH THE DOOR POSITIONED AT AN ANGLE OF 90 DEGREES FROM ITS CLOSED POSITION.

D. THE WIDTH OF ANY COMPONENT IN THE EGRESS SYSTEM SHALL NOT BE LESS THAN THE MINIMUM WIDTH REQUIRED BY SECTION 1005.

5. HANDRAILS MAY BE LOCATED IN A RECESS IF THE RECESS IS A MAXIMUM OF 3 INCHES DEEP AND EXTENDS AT LEAST 18 INCHES ABOVE THE TOP OF THE RAIL, ANY WALL OR OTHER SURFACE ADJACENT TO THE HANDRAIL SHALL BE FREE OF SHARP ABRAISVE ELEMENTS. SEE FIGURE 11A-6, (1114A.6.2.4, 1122A.5.2.5)

VI. THE HANDGRIP PORTION OF HANDRAILS SHALL NOT BE LESS THAN 1 1/2 INCHES NOR MORE THAN 2 INCHES IN CROSS-SECTION. DIMENSION OR THE SHAPE SHALL PROVIDE AN EQUIVALENT GRIPPING SURFACE. THE HANDGRIP PORTION OF HANDRAILS SHALL HAVE A SMOOTH SURFACE WITH NO SHARP CORNERS.

VII. EDGES SHALL HAVE A MINIMUM RADIUS OF 1/8 INCH. HANDRAILS SHALL NOT ROTATE WITH THEIR FITTINGS. SEE FIGURE 11A-6B, (1114A.6.2.5)

8. MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 8 1/2 POUNDS FOR EXTERIOR DOORS AND 5 POUNDS FOR INTERIOR DOORS, SUCH PULL OR PUSH EFFORT BEING APPLIED AT RIGHT ANGLES TO INNGE DOORS AND AT THE CENTER PLANE OF SLIDING OR FOLDING DOORS; COMPENSATING DEVICES OR AUTOMATIC DOOR OPERATORS MAY BE UTILIZED TO MEET THE ABOVE STANDARDS, WHEN FIRE DOORS ARE REQUIRED, THE MAXIMUM EFFORT TO OPERATE THE DOOR MAY BE INCREASED TO THE MINIMUM ALLOWABLE BY THE APPROPRIATE ADMINISTRATIVE AUTHORITY, NOT TO EXCEED 15 POUNDS. (1128A.4)

9. IF THE DOOR HAS A CLOSER, THEN THE SHEEP FORCE OF THE CLOSER SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 70 DEGREES, THE DOOR WILL TAKE AT LEAST 3 SECONDS TO MOVE TO A POINT 3 INCHES FROM THE LATCH, MEASURED TO THE LANDING EDGE OF THE DOOR. (1128A.4.1)

10. THE TYPE OF LATCH AND LOCK REQUIRED FOR ALL DOORS SHALL BE IN ACCORDANCE WITH SECTION 1128A.6 AND CHAPTER 10, SECTION 1008. (1128A.5)

11. HAND-ACTIVATED DOOR LATCHING, LOCKING AND OPENING HARDWARE SHALL BE CENTERED BETWEEN 30 INCHES 44 INCHES ABOVE THE FLOOR, LATCHING AND LOCKING DEVICES THAT ARE HAND-ACTUATED AND ON AN ACCESSIBLE ROUTE SHALL BE OPERABLE WITH A SINGLE FINGER BY LEVER TYPE HARDWARE. POKED BARS, PUSH-PULL ACTUATORS SHALL BE PERMITTED, BUT ARE LIMITED TO LOBBIES, TOILET AND BATHING FACILITIES, LAUNDRY FACILITIES, COMMUNITY ROOMS, CLUB-HOUSES, HEALTH AND FITNESS FACILITIES, GAME ROOMS, AND PORTIONS OF COMMON USE TENANT STORAGE. ALL ENTRANCES, DOORS, FIXTURES AND CONTROLS SHALL BE ON AN ACCESSIBLE ROUTE. (1127A.1)

14. WHEN PROVIDED, COMMON USE AREAS AND FACILITIES IN COVERED MULTIFAMILY HOUSING DEVELOPMENTS SHALL BE ACCESSIBLE TO PERSONS WITH DISABILITIES. COMMON USE FACILITIES INCLUDE, BUT ARE NOT LIMITED TO, LOBBIES, TOILET AND BATHING FACILITIES, LAUNDRY FACILITIES, COMMUNITY ROOMS, CLUB-HOUSES, HEALTH AND FITNESS FACILITIES, GAME ROOMS, AND PORTIONS OF COMMON USE TENANT STORAGE. ALL ENTRANCES, DOORS, FIXTURES AND CONTROLS SHALL BE ON AN ACCESSIBLE ROUTE. (1127A.1)

59. HANDRAILS PROJECTING FROM A WALL SHALL HAVE A SPACE OF 1 1/2" BETWEEN THE WALL AND THE HANDRAIL, HANDRAILS LOCATED IN A RECESS IF THE RECESS IS A MAXIMUM OF 3" DEEP AND EXTENDS AT LEAST 18" ABOVE THE TOP OF THE RAIL. HANDRAILS SHALL NOT ROTATE WITH THEIR FITTING. (1115A.6.2.4, 1123A.6.2.4, 1115A.6.2.5, 1123A.6.2.5, FIG. 11A-6B)

60. ALL TREAD SURFACES SHALL BE SLIP-RESISTANT. TREADS SHALL HAVE SMOOTH, ROUND, OR CHAMFERED EDGES, AND NO ABRUPT EDGES AS THE NOSING (LOWER FRONT EDGE), (1123A.3, 1115A.3)

61. THE NOSING SHALL NOT PROJECT MORE THAN 1/4" PAST THE FACE OF THE RISER BELOW. RISERS SHALL BE SLOPED OR THE UNDERSIDE OF THE NOSING SHALL HAVE AN ANGLE NOT MORE THAN 30 DEGREES FROM THE HORIZONTAL. SEE FIGURE 11A-6, (1115A.4, 1115A.4)

62. EXTERIOR STAIRS SERVING BUILDINGS ON A SITE CONTAINING MULTIFAMILY DWELLING UNITS SHALL HAVE A MINIMUM CLEAR ENCRoACH AND ALL TREADS MARKED BY A STRIPE PROVIDING CLEAR VISUAL CONTRAST.

63. EXCEPT WHEN AN INDIVIDUAL DWELLING UNIT, INTERIOR STAIRS SHALL HAVE THE UPPER APPROACH AND LOWER TREAD MARKED BY A STRIPE PROVIDING CLEAR VISUAL CONTRAST.

64. REQUIRED STAIR FLARES SHALL BE A MINIMUM OF 2 INCHES WIDE TO A MAXIMUM OF 4 INCHES WIDE STRIPES PARALLEL TO, AND NOT MORE THAN 1 INCH FROM, THE NOSE OF THE STEP OR UPPER APPROACH. THE STRIPE SHALL EXTEND THE FULL WIDTH OF THE STEP OR UPPER APPROACH AND SHALL BE OF MATERIAL THAT IS AT LEAST AS SLIP RESISTANT AS THE OTHER TREADS OF THE STAIR. A PAINTED STRIPE SHALL BE ACCEPTABLE. (1123A.5)

65. OPEN RISERS ARE NOT PERMITTED ON EXTERIOR STAIRWAYS. EXCEPTIONS:

A. AN OPENING OF NOT MORE THAN ¾ INCH MAY BE PERMITTED BETWEEN THE BASE OF THE RISER AND THE TREAD.

B. RISERS CONSTRUCTED OF GRATING CONTAINING OPENINGS OF NOT MORE THAN ¾ INCH MAY BE PERMITTED. (1112A.9)

66. EXCEPT WHEN AN INDIVIDUAL DWELLING UNIT, RISERS ARE NOT PERMITTED ON INTERIOR STAIRWAYS. (1123A.5)

HAZARDS ON ACCESSIBLE ROUTES

67. ABRUPT CHANGES IN LEVEL EXCEEDING 4 INCHES IN VERTICAL DIMENSION, SUCH AS CHANGES IN LEVEL AT PLANTERS OR FOUNTAINS LOCATED IN OR ADJACENT TO WALKS, PEDESTRIAN OR OTHER EXTERIOR WAYS, SHALL BE AVOIDED. WHEN SUCH CHANGES ARE APPROVED BARRIERS PROVIDING AT LEAST 6 INCHES IN HEIGHT ABOVE THE WALK OR SIDEWALK SURFACE TO WARN THE BLIND OF A POTENTIAL DROP-OFF. (116A.1.5) SEE EXCEPTIONS.

68. WALKS, PEDESTRIAN WAYS, AND OTHER CIRCULATION SPACES WHICH ARE PART OF THE REQUIRED EGRESS SYSTEM SHALL HAVE A MINIMUM CLEAR HEADROOM AS REQUIRED IN SECTION 1003.2. OTHER WALKS, PEDESTRIAN WAYS, AND CIRCULATION SPACES SHALL HAVE A MINIMUM CLEAR HEADROOM OF 80 INCHES. IF THE VERTICAL CLEARANCE OF AN AREA ADJOINING AN ACCESSIBLE ROUTE IS REQUIRED TO BE LESS THAN 80 INCHES NOMINAL DIMENSION, A GUARDRAIL, OR OTHER BARRIER HAVING ITS LEADING EDGE AT OR BELOW 27 INCHES ABOVE THE FINISHED FLOOR SHALL BE PROVIDED. SEE FIGURE 11A-1B, (1110A.5, 1122A.5)

69. ANY OBSTRUCTION THAT OVERHANGS A PEDESTRIAN WAY SHALL BE A MINIMUM OF 80 INCHES ABOVE THE WALKING SURFACE AS MEASURED FROM THE BOTTOM OF THE OBSTRUCTION, BUT NOT LIMITED TO, SIDEWALKS, A GUY BRACE, SIDEWALK GUY OR SIMILAR DEVICE SHALL BE USED TO PREVENT AN OVERHANGING OBSTRUCTION. (1118A.2 FOR REQUIRED HEADROOM CLEARANCE). (1118A.3)

70. WHEREVER SIGNS MOUNTED ON POSTS OR PLYONS PROTRUDE FROM THE POST OR PLYONS AND THE BOTTOM EDGE OF THE SIGN IS LESS THAN 80 INCHES ABOVE THE FINISHED FLOOR OR GROUND LEVEL, THE EDGES OF SUCH SIGNS SHALL BE ROUNDED OR KEASED AND THE CORNERS SHALL BE ROUNDED TO A MINIMUM RADIUS OF 1/2 INCHES. (SEE SECTION 1118A.2 FOR REQUIRED HEADROOM CLEARANCE). (1118A.4)

A. LANDINGS SHALL BE PROVIDED AT THE TOP AND BOTTOM OF EACH RAMP. INTERMEDIATE LANDINGS SHALL BE PROVIDED AT SPACES NOT EXCEEDING 30 INCHES OF VERTICAL RISE AND AT EACH CHANGE OF DIRECTION. LANDINGS ARE NOT CONSIDERED IN DETERMINING THE MAXIMUM HORIZONTAL DISTANCE OF EACH RAMP. (1114A.4.1, 1122A.1.1)

B. TOP LANDINGS SHALL NOT BE LESS THAN 80 INCHES WIDE. TOP LANDINGS SHALL HAVE A MINIMUM LENGTH OF NOT LESS THAN 60 INCHES IN THE DIRECTION OF THE RAMP RUN. (SEE SECTION 1128A.3 FOR MANEUVERING CLEARANCES AT DOORS. (SEE FIGURE 11A-6C), (1114A.4.2, 1122A.3.2)

C. THE MINIMUM WIDTH OF BOTTOM AND INTERMEDIATE LANDINGS SHALL NOT BE LESS THAN THE WIDTH OF THE RAMP. (1114A.4.3, 1122A.3.3)

D. DOORS IN ANY POSITION SHALL NOT REDUCE THE MINIMUM DIMENSION OF THE LANDING TO LESS THAN 42 INCHES AND SHALL NOT REDUCE THE REQUIRED WIDTH BY MORE THAN 2 INCHES WHEN FULLY OPEN. (SEE FIGURE 11A-6D), (1114A.4.4, 1122A.3.4)

E. THE WIDTH OF THE LANDING SHALL COMPLY WITH SECTION 1120A.3 FOR STRIKE EDGE CLEARANCE AND MANEUVERING SPACE AT DOORS. (1114A.4.5, 1122A.3.5)

F. INTERMEDIATE AND BOTTOM LANDINGS AT A CHANGE OF DIRECTION IN EXCESS OF 90 DEGREES SHALL HAVE A LENGTH IN THE DIRECTION OF RAMP RUN OF NOT LESS THAN 72 INCHES. (SEE FIGURES 11A-6C AND 11A-6D), (1114A.4.6, 1122A.3.6)

G. OTHER INTERMEDIATE LANDINGS SHALL HAVE A DIMENSION IN THE DIRECTION OF RAMP RUN OF NOT LESS THAN 80 INCHES. SEE FIGURE 11A-6C, (1114A.4.7, 1122A.3.7)

51. RAMPS MORE THAN 30 INCHES ABOVE THE ADJACENT FLOOR OR GROUND AND OPEN ON ONE OR BOTH SIDES SHALL BE PROVIDED WITH GUARDRAILS AS REQUIRED BY SECTION 1015. GUARDRAILS SHALL BE CONTINUOUS FROM THE TOP OF THE RAMP TO THE BOTTOM OF THE RAMP. (1114A.4, 1122A.4)

52. RAMP HANDRAILS SHALL COMPLY WITH THE FOLLOWING: (1114A.5, 1122A.5)

COMMON USE FACILITIES CONTD

TOILET FACILITIES:

15. WHEN COMMON USE TOILET FACILITIES ARE PROVIDED FOR RESIDENTS OR GUESTS, AT LEAST ONE PERCENT OF THE TOTAL NUMBER OF FIXTURES BUT NOT LESS THAN ONE OF EACH TYPE SHALL COMPLY WITH THIS SECTION. (1127A.2)

MULTIPLE-ACCOMMODATION TOILET FACILITIES SHALL HAVE THE FOLLOWING: (1127A.2.1, FIGURES 11A-9A AND 11A-9B)

16. TURNING SPACE OF SUFFICIENT SIZE TO INSCRIBE A CIRCLE WITH A DIAMETER NOT LESS THAN 60 INCHES OR A 1/4 SHAPED SPACE SHALL BE PROVIDED WITHIN THE TOILET FACILITY. THE WHEELCHAIR TURNING SPACE SHALL COMPLY WITH SECTION 1132A.1. OTHER THAN THE DOOR TO THE ACCESSIBLE WATER CLOSET COMPARTMENT, A DOOR, IN ANY POSITION, MAY ENCRoACH INTO THIS SPACE BY NOT MORE THAN 12 INCHES.

17. DOORS SHALL NOT SWING INTO THE CLEAR FLOOR SPACE REQUIRED FOR ANY FIXTURE. REQUIRED CLEAR FLOOR SPACE, CLEARANCE AT FIXTURES, AND TURNING SPACE SHALL BE PERMITTED TO OVERLAP.

18. ACCESSIBLE WATER CLOSET COMPARTMENTS SHALL BE 60 INCHES WIDE MINIMUM MEASURED PERPENDICULAR TO THE SIDE WALL AND 36 INCHES DEEP MINIMUM FOR WALL HUNG WATER CLOSETS AND 59 INCHES DEEP MINIMUM FOR FLOOR MOUNTED WATER CLOSETS MEASURED PERPENDICULAR TO THE REAR WALL. (SEE FIGURE 11A-9A(C))

19. WATER CLOSET FIXTURES LOCATED IN ACCESSIBLE WATER CLOSET COMPARTMENTS SHALL BE POSITIONED WITH A WALL OR PARTITION TO THE REAR AND TO ONE SIDE. THE CENTERLINE OF THE WATER CLOSET SHALL BE 17 INCHES MINIMUM TO 18 INCHES MAXIMUM FROM THE SIDE WALL OR PARTITION.

20. IN AMBULATORY ACCESSIBLE TOILET COMPARTMENTS, THE WATER CLOSET SHALL BE 1 INCH MINIMUM AND 1

BATHING FACILITIES COMTD

66. SHOWER COMPARTMENT FLOOR SURFACES SHALL BE STABLE, FIRM AND SLIP RESISTANT. THE MAXIMUM SLOPE OF THE FLOOR SHALL BE 1/4 INCH PER FOOT (2.083 PERCENT SLOPE) IN ANY DIRECTION. WHEN GRABS ARE PROVIDED, GRATE OPENINGS SHALL BE 1/4 INCH MAXIMUM AND LOCATED FLUSH WITH THE FLOOR SURFACE. (1127A.5.3.4)

67. CONTROLS, FAUCETS AND SHOWER SPRAY UNITS IN SHOWER COMPARTMENTS SHALL BE OPERABLE WITH ONE HAND, AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE OPERABLE PARTS SHALL BE 5 POUNDS MAXIMUM. ALL CONTROLS AND FAUCETS SHALL BE OF A SINGLE-LEVER DESIGN. (1127A.5.3.5)

68. IN STANDARD ROLL-IN SHOWER COMPARTMENTS (1127A.5.3.1) A OPERABLE PARTS OF CONTROLS AND FAUCETS SHALL BE INSTALLED ON THE BACK WALL OF THE COMPARTMENT ADJACENT TO THE SEAT WALL. 19 INCHES MINIMUM AND 2 INCHES MAXIMUM FROM THE SEAT WALL.

B. OPERABLE PARTS OF CONTROLS AND FAUCETS SHALL BE LOCATED ABOVE THE GRAB BAR, BUT NO HIGHER THAN 48 INCHES ABOVE THE SHOWER FLOOR. WITH THEIR CENTERLINE AT 39 INCHES MINIMUM AND 41 INCHES MAXIMUM ABOVE THE SHOWER FLOOR.

C. OPERABLE PARTS OF THE SHOWER SPRAY UNIT, INCLUDING THE HANDLE, SHALL BE INSTALLED ON THE BACK WALL ADJACENT TO THE SEAT WALL. 19 INCHES MINIMUM AND 27 INCHES MAXIMUM FROM THE SEAT WALL.

D. OPERABLE PARTS OF THE SHOWER SPRAY UNIT, INCLUDING THE HANDLE, SHALL BE LOCATED ABOVE THE GRAB BAR, BUT NO HIGHER THAN 48 INCHES ABOVE THE SHOWER FLOOR (MEASURED TO THE TOP OF THE MOUNTING BRACKET).

69. IN ALTERNATE ROLL-IN SHOWER COMPARTMENTS (1127A.5.3.6)

A. OPERABLE PARTS OF CONTROLS AND FAUCETS SHALL BE INSTALLED ON THE SIDE WALL OF THE COMPARTMENT ADJACENT TO THE SEAT WALL. 19 INCHES MINIMUM AND 27 INCHES MAXIMUM FROM THE SEAT WALL.

B. OPERABLE PARTS OF CONTROLS AND FAUCETS SHALL BE LOCATED ABOVE THE GRAB BAR, BUT NO HIGHER THAN 48 INCHES ABOVE THE SHOWER FLOOR. WITH THEIR CENTERLINE AT 39 INCHES MINIMUM AND 41 INCHES MAXIMUM ABOVE THE SHOWER FLOOR.

C. OPERABLE PARTS OF THE SHOWER SPRAY UNIT, INCLUDING THE HANDLE, SHALL BE INSTALLED ON THE FOLLOWING LOCATIONS: I. ON THE SIDE WALL OF THE COMPARTMENT ADJACENT TO THE SEAT WALL, 17 INCHES MINIMUM AND 19 INCHES MAXIMUM FROM THE SEAT WALL. II. ON THE BACK WALL OPPOSITE THE SEAT. 15 INCHES MINIMUM, LEFT OR RIGHT, OF THE CENTERLINE OF THE SEAT. OPERABLE PARTS OF THE SHOWER SPRAY UNIT, INCLUDING THE HANDLE, SHALL BE LOCATED ABOVE THE GRAB BAR, BUT NO HIGHER THAN 48 INCHES ABOVE THE SHOWER FLOOR. (1127A.5.3.5.2)

D. A FLEXIBLE HAND-HELD SHOWER SPRAY UNIT WITH A HOSE AT LEAST 99 INCHES LONG THAT CAN BE USED BOTH AS A FIXED SHOWER HEAD AND AS A HAND-HELD SHOWER SHALL BE PROVIDED. THE SHOWER SPRAY UNIT SHALL HAVE AN ON/OFF CONTROL WITH A NON-POSITIVE SHUT-OFF. IF AN ADJUSTABLE-HEIGHT SHOWER HEAD ON A VERTICAL RAIL IS USED, THE BAR SHALL BE INSTALLED SO AS NOT TO OBSTRUCT THE USE OF GRAB BARS.

70. WHEN ACCESSIBLE SHOWER FACILITIES ARE PROVIDED IN AREAS SUBJECT TO EXCESSIVE VANDALISM, IN LIEU OF PROVIDING THE FIXED SHOWER HEADS, TWO WALL-MOUNTED SHOWER HEADS SHALL BE INSTALLED. EACH SHOWER HEAD SHALL BE INSTALLED SO THAT IT CAN BE OPERATED INDEPENDENTLY OF THE OTHER AND SHALL HAVE SWIVEL ANGLE ADJUSTMENTS, BOTH VERTICALLY AND HORIZONTALLY, TO THE POINT OF USE. ONE SHOWER HEAD SHALL BE LOCATED AT A HEIGHT OF 46 INCHES MAXIMUM ABOVE THE FLOOR. (1127A.5.3.6.1)

71. A SEAT IN A STANDARD ROLL-IN SHOWER COMPARTMENT SHALL BE A FOLDING TYPE, INSTALLED ON THE SIDE WALL ADJACENT TO THE CONTROLS. THE SEAT SHALL EXTEND FROM THE BACK WALL TO A POINT WITHIN 3 INCHES OF THE COMPARTMENT ENTRY. A SEAT IN AN ALTERNATE ROLL-IN TYPE SHOWER COMPARTMENT SHALL BE A FOLDING TYPE, INSTALLED ON THE FRONT WALL OPPOSITE THE BACK WALL, AND SHALL EXTEND FROM THE ADJACENT SIDE WALL TO A POINT WITHIN 3 INCHES OF THE COMPARTMENT ENTRY.

72. SHOWER COMPARTMENT SEATS SHALL COMPLY WITH SECTION 1127A.4.4 AND SHALL BE LOCATED WITHIN 12 INCHES OF THE SEAT WALL. THE TOP OF THE SEAT SHALL BE 17 INCHES MINIMUM AND 19 INCHES MAXIMUM ABOVE THE BATHROOM FINISH FLOOR. WHEN FOLDED, THE SEAT SHALL NOT EXTEND MORE THAN 6 INCHES ABOVE THE MOUNTING WALL. (1127A.5.3.7)

73. THE REAR EDGE OF A RECTANGULAR SEAT SHALL BE 25 INCHES MINIMUM FROM THE SEAT WALL. THE FRONT EDGE OF A RECTANGULAR SEAT SHALL BE 15 INCHES MINIMUM AND 16 INCHES MAXIMUM FROM THE SEAT WALL. THE SIDE EDGE OF THE SEAT SHALL BE 19 INCHES MAXIMUM FROM THE ADJACENT WALL. (1127A.5.3.7.1)

74. THE REAR EDGE OF AN L-SHAPED SEAT SHALL BE 21 INCHES MAXIMUM FROM THE SEAT WALL. THE FRONT EDGE OF AN L-SHAPED SEAT SHALL BE 15 INCHES MINIMUM AND 16 INCHES MAXIMUM FROM THE SEAT WALL. THE REAR EDGE OF THE L PORTION OF THE SEAT SHALL BE 15 INCHES MAXIMUM FROM THE WALL. THE FRONT EDGE SHALL BE 14 INCHES MINIMUM AND 15 INCHES MAXIMUM FROM THE WALL. THE END OF THE L SHALL BE 22 INCHES MINIMUM AND 23 INCHES MAXIMUM FROM THE MAIN SEAT WALL. (1127A.5.3.7.2)

75. ACCESSIBLE SHOWER COMPARTMENTS SHALL BE PROVIDED WITH GRAB BARS, INSTALLED IN ACCORDANCE WITH SECTION 1127A.5.3.8.1 OR SECTION 1127A.5.3.8.2. GRAB BARS SHALL ALSO COMPLY WITH SECTION 1127A.5.3.9.

76. WHEN MULTIPLE GRAB BARS ARE USED, REQUIRED HORIZONTAL GRAB BARS SHALL BE INSTALLED AT LEAST 3 INCHES FROM THE FINISH FLOOR. WHEN SEPARATE GRAB BARS ARE REQUIRED ON ADJACENT WALLS AT A COMMON HEIGHT, THE SPACING OF U-SHAPED GRABS MEETING THE DIMENSIONAL REQUIREMENTS OF SECTION 1127A.5.3.8.1 OR SECTION 1127A.5.3.8.2 SHALL BE PERMITTED. SEE FIGURE 11A-9 OR FIGURE 11A-10. (1127A.5.3.8)

77. IN STANDARD ROLL-IN SHOWER COMPARTMENTS, GRAB BARS SHALL BE INSTALLED ON THE BACK WALL AND ON THE SIDE WALL OPPOSITE THE SEAT. GRAB BARS ABOVE THE SEAT ARE NOT PERMITTED. GRAB BARS SHALL BE INSTALLED 6 INCHES MAXIMUM FROM ADJACENT WALLS. (1127A.5.3.9)

78. IN ALTERNATE ROLL-IN SHOWER COMPARTMENTS, GRAB BARS SHALL BE INSTALLED ON THE BACK WALL AND THE SIDE WALL FURTHEST FROM THE COMPARTMENT ENTRY. GRAB BARS ABOVE THE SEAT ARE NOT PERMITTED. GRAB BARS SHALL BE INSTALLED 6 INCHES MAXIMUM FROM ADJACENT WALLS. (1127A.5.3.9.2)

79. WHEN A SOAP DISH IS PROVIDED, IT SHALL BE LOCATED ON THE CONTROL WALL AT A MAXIMUM HEIGHT OF 40 INCHES ABOVE THE SHOWER FLOOR, AND WITHIN THE REACH LIMITS FROM THE SEAT. (1127A.5.3.9)

80. WHEN NO SEPARATE SHOWER COMPARTMENTS ARE PROVIDED, THE SHOWER FOR PERSONS WITH DISABILITIES SHALL BE LOCATED IN A CORNER WITH L-SHAPED GRAB BARS EXTENDING ALONG TWO ADJACENT WALLS WITH A FOLDING SEAT ADJACENT TO THE SHOWER CONTROLS. (SEE FIGURE 11A-4). (1127A.5.3.10)

81. WHEN TWO OR MORE ACCESSIBLE SHOWERS ARE PROVIDED WITHIN THE SAME FUNCTIONAL AREA, THERE SHALL BE AT LEAST ONE SHOWER CONSTRUCTED OPPOSITE HAND FROM THE OTHER OR THE OTHERS (I.E., ONE LEFT-HAND CONTROL VERSUS RIGHT-HAND CONTROLS). (1127A.5.3.11)

LOCKERS: 82. WHEN LOCKERS ARE PROVIDED FOR RESIDENTS OR GUESTS, AT LEAST ONE LOCKER AND NOT LESS THAN 1 PERCENT OF ALL LOCKERS SHALL BE ACCESSIBLE TO PERSONS WITH DISABILITIES. AN ACCESSIBLE ROUTE NOT LESS THAN 30 INCHES IN CLEAR WIDTH SHALL BE PROVIDED TO THESE LOCKERS. SEE SECTION 1133A.1.1.1 FOR DIMENSIONAL REQUIREMENTS OF LOCKERS LEADING FROM THE INTERIOR OF THE DWELLING UNIT TO AN UNFINISHED BASEMENT OR AN ATTACHED GARAGE. (1133A.2)

83. ALL ACCESSIBLE TOILET AND BATHING FACILITIES SHALL BE IDENTIFIED BY THE INTERNATIONAL SYMBOL OF ACCESSIBILITY. SIGNS NEED NOT BE PROVIDED FOR FACILITIES WITHIN A DWELLING UNIT OR GUESTROOM. (1127A.7.1)

84. DOORWAYS LEADING TO SANITARY FACILITIES (TOILET OR BATHING ROOMS) SHALL BE IDENTIFIED BY A GEOMETRIC SYMBOL, IN COMPLIANCE WITH THIS SECTION. GEOMETRIC SYMBOLS SHALL BE CENTERED HORIZONTALLY ON THE DOOR AT A HEIGHT OF 58 INCHES MINIMUM AND 60 INCHES MAXIMUM ABOVE THE FINISH FLOOR MEASURED TO THE CENTER OF THE SYMBOL. WHEN A DOOR IS PROVIDED, THE SYMBOL SHALL BE MOUNTED WITHIN 1 INCH OF THE VERTICAL CENTERLINE OF THE DOOR. DIRECTIONAL SIGNS INDICATING THE LOCATION OF THE NEAREST ACCESSIBLE TOILET OR BATHING ROOMS SHALL BE PROVIDED. SUCH SYMBOLS SHALL COMPLY WITH SECTION 1143.5 AND SHALL INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY. EDGES OF ACCESSIBILITY SIGNAGE SHALL BE ROUND, CHAMFERED OR BEADED. CORNERS SHALL HAVE A MINIMUM RADIUS OF 18 INCH. SEE SECTION 1143A FOR ADDITIONAL SIGNAGE REQUIREMENTS APPLICABLE TO SANITARY FACILITIES. (1127A.7.2)

85. MEN'S SANITARY FACILITIES SHALL BE IDENTIFIED BY AN EQUILATERAL TRIANGLE, 1/4 INCH THICK WITH EDGES 12 INCHES LONG AND A VERTEX POINTING UPWARD. THE TRIANGLE SYMBOL SHALL CONTRAST WITH THE DOOR, EITHER LIGHT ON A DARK BACKGROUND OR DARK ON A LIGHT BACKGROUND. (1127A.7.2.1)

86. WOMEN'S SANITARY FACILITIES SHALL BE IDENTIFIED BY A CIRCLE, 1/4 INCH THICK AND 12 INCHES IN DIAMETER. THE CIRCLE SYMBOL SHALL CONTRAST WITH THE DOOR, EITHER LIGHT ON A DARK BACKGROUND OR DARK ON A LIGHT BACKGROUND. (1127A.7.2.2)

87. UNisex SANITARY FACILITIES SHALL BE IDENTIFIED BY A CIRCLE, 1/4 INCH THICK AND 12 INCHES IN DIAMETER WITH A TRIANGLE INSIDE THE CIRCLE AND WITHIN THE TRIANGLE. THE TRIANGLE SYMBOL SHALL CONTRAST WITH THE CIRCLE SYMBOL, EITHER LIGHT ON A DARK BACKGROUND OR DARK ON A LIGHT BACKGROUND. THE CIRCLE SYMBOL SHALL CONTRAST WITH THE DOOR, EITHER LIGHT ON A DARK BACKGROUND OR DARK ON A LIGHT BACKGROUND. (1127A.7.2.3)

TOILET ROOM FIXTURES AND ACCESSORIES: 88. WHERE TOWEL, SANITARY NAPKINS, WASTE RECEPTACLES, AND OTHER SIMILAR DISPENSING AND DISPOSAL FIXTURES ARE PROVIDED, AT LEAST ONE OF EACH TYPE SHALL HAVE A MINIMUM CHANGE OF 1/4 INCH IN THE HORIZONTAL PLANE FROM THE OUTLET OF THE DISPENSER SHALL BE BELOW THE GRAB BAR, 19 INCHES MINIMUM ABOVE THE FINISH FLOOR. THE OUTLET OF THE DISPENSER SHALL NOT BE LOCATED BELOW GRAB BARS. DISPENSERS SHALL NOT BE OF A TYPE THAT CONTROLS DELIVERY OR THAT DOES NOT ALLOW CONTINUOUS PAPER FLOW. (SEE FIGURE 11A-9B). (1127A.8.2)

89. TOILET TISSUE DISPENSER SHALL BE LOCATED ON THE WALL OR PARTITION CLOSEST TO THE WATER CLOSET. 7 INCHES MINIMUM AND 9 INCHES MAXIMUM IN FRONT OF THE WATER CLOSET AND WITHIN THE CENTERLINE OF THE DISPENSER. THE CENTERLINE OF THE OUTLET OF THE DISPENSER SHALL BE BELOW THE GRAB BAR, 19 INCHES MINIMUM ABOVE THE FINISH FLOOR. THE OUTLET OF THE DISPENSER SHALL NOT BE LOCATED BELOW GRAB BARS. DISPENSERS SHALL NOT BE OF A TYPE THAT CONTROLS DELIVERY OR THAT DOES NOT ALLOW CONTINUOUS PAPER FLOW. (SEE FIGURE 11A-9B). (1127A.8.2)

90. EXTERIOR LANDINGS OF IMPERVIOUS CONSTRUCTION (I.E., CONCRETE, BRICK, FLAGSTONE) SERVING PRIMARY ENTRY DOORS AND REQUIRED EXTERIOR EXIT DOORS ARE LIMITED TO NOT MORE THAN 3/4 INCH OF CHANGE IN HEIGHT BETWEEN FLOOR SURFACES. CHANGES IN LEVEL SHALL COMPLY WITH SECTION 1133A.

B. EXTERIOR LANDINGS OF PERVIOUS CONSTRUCTION (E.G., WOOD DECKING WITH SPACES) SHALL BE THE SAME LEVEL, AS THE INTERIOR LANDING, EXCEPT THAT SECONDARY EXTERIOR LANDINGS SHALL BE 1/4 INCH HIGHER THAN THE INTERIOR LANDING. HEIGHT BETWEEN THE FLOOR SURFACES, CHANGES IN LEVEL, SHALL COMPLY WITH SECTION 1133A.

C. SECONDARY EXTERIOR DOORS ON DECKS, PATIOS, OR BALCONY SURFACES CONSTRUCTED OF IMPERVIOUS MATERIALS (E.G., CONCRETE, BRICK, FLAGSTONE) MAY HAVE A MINIMUM CHANGE IN HEIGHT FROM THE INTERIOR LANDING OF 4 INCHES. CHANGES IN HEIGHT GREATER THAN 1/4 INCH SHALL BE ACCOMPLISHED BY MEANS OF A RAMP COMPLYING WITH SECTION 1141A OR BY MEANS OF A PLATFORM CONSTRUCTED TO THE LEVEL OF THE FLOOR AS ILLUSTRATED IN FIGURE 11A-6.

D. SECONDARY EXTERIOR DOORS ON DECKS, PATIOS, OR BALCONY SURFACES CONSTRUCTED OF IMPERVIOUS MATERIALS (E.G., CONCRETE, BRICK, FLAGSTONE) MAY HAVE A MAXIMUM CHANGE IN HEIGHT FROM THE INTERIOR LANDING OF 1 INCH, PROVIDED A RAMP WITH A MAXIMUM SLOPE OF 1:8 IS PERMANENTLY INSTALLED. (SEE FIGURE 11A-6).

E. IN BUILDINGS CONTAINING COVERED MULTIFAMILY DWELLING UNITS, THE FLOOR OR LANDING IMMEDIATELY OUTSIDE THE ENTRY MAY BE SLOPED UP TO 1 INCH PER FOOT (12 INCHES) IN A DIRECTION AWAY FROM THE PRIMARY ENTRANCE OF THE DWELLING UNIT FOR DRAINAGE.

90. WHERE MIRRORS ARE PROVIDED, AT LEAST ONE SHALL BE ACCESSIBLE. MIRRORS LOCATED ABOVE LAVATOIRES OR COUNTERTOPS SHALL BE INSTALLED WITH THE BOTTOM EDGE OF THE REFLECTING SURFACE 40 INCHES MAXIMUM ABOVE THE FINISH FLOOR. MIRRORS NOT LOCATED ABOVE LAVATOIRES OR COUNTERTOPS SHALL BE INSTALLED WITH THEIR BOTTOM EDGE OF THE REFLECTING SURFACE 36 INCHES MAXIMUM ABOVE THE FINISH FLOOR. (1127A.8.3)

COMMON ACCESSIBLE LAUNDRY ROOMS: 91. WHERE COMMON USE LAUNDRY ROOMS ARE PROVIDED, AT LEAST ONE OF EACH TYPE OF DESIGNATED WAREHOUSE AREA SHALL BE ACCESSIBLE. IT SHALL BE ON AN ACCESSIBLE ROUTE, AND SHALL COMPLY WITH THIS SECTION. SUCH APPLIANCES INCLUDE CLOTHES WASHERS, MACHINES, DRYERS, SOAP DISPENSERS, AND OTHER RELATED FEATURES SUCH AS WASH SINKS, TABLES, AND STORAGE AREAS.

WHERE LAUNDRY ROOMS ARE PROVIDED ON FLOORS OF AN ELEVATOR BUILDING, EACH LAUNDRY ROOM SHALL BE ACCESSIBLE. WHERE THERE IS ONE LAUNDRY ROOM ON A GROUND FLOOR IN EACH BUILDING, EACH LAUNDRY ROOM SHALL BE ACCESSIBLE. WHERE THERE IS A LAUNDRY ROOM ON THE GROUND FLOOR OF A BUILDING AND ANOTHER LOCATED IN THE BASEMENT, IT IS ACCEPTABLE TO HAVE ONLY THE GROUND FLOOR LAUNDRY ROOM ACCESSIBLE. (1127A.10.1)

92. THERE SHALL BE A MINIMUM CLEAR SPACE 30 INCHES PERPENDICULAR BY 48 INCHES PARALLEL IN FRONT OF CLOTHES WASHERS AND DRYERS REQUIRED TO BE ACCESSIBLE. THERE SHALL BE A MINIMUM CLEAR SPACE 30 INCHES BY 48 INCHES PROVIDED FOR AT LEAST ONE OF EACH TYPE OF FIXTURE OR APPLIANCE PROVIDED IN THE LAUNDRY ROOM (E.G., SOAP DISPENSERS, WASH SINKS, TABLES, STORAGE AREAS). (1127A.10.2)

93. CLOTHES WASHERS AND DRYERS INCLUDING STACKED CLOTHES WASHERS AND CLOTHES DRYERS REQUIRED TO BE ACCESSIBLE SHALL HAVE CONTROLS AND OPERATING MECHANISMS INCLUDING DOORS, CONTROL SLITS, LINE SCREENS, DETERGENT AND BLEACH COMPARTMENTS) WITHIN THE REACH RANGE OF A SEATED USER. CONTROLS AND OPERATING MECHANISMS SHALL BE LOCATED NO HIGHER THAN 48 INCHES, AND NO LOWER THAN 15 INCHES, ABOVE THE FINISHED FLOOR MEASURED TO THE CENTER OF THE GRIP. IF THE REACH IS OVER AN OBSTRUCTION FOR EXAMPLE, A WASHING MACHINE OPERATING MECHANISM SHALL BE LOCATED WITHIN THE REACH RANGES SPECIFIED IN SECTION 1136A.3.

CONTROLS AND OPERATING MECHANISMS THAT DO NOT SATISFY THESE SPECIFICATIONS ARE ACCEPTABLE, PROVIDED THAT COMPATIBLE CONTROLS OR OUTLETS THAT PERFORM THE SAME FUNCTIONS ARE PROVIDED WITHIN THE SAME AREA AND ARE ACCESSIBLE.

94. CONTROLS AND OPERATING MECHANISMS SHALL BE OPERABLE WITH ONE HAND AND NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE CONTROLS AND OPERATING MECHANISMS SHALL BE NO GREATER THAN 5 POUNDS. (1127A.10.3)

95. WASHING MACHINES AND CLOTHES DRYERS, WASHING MACHINES AND CLOTHES DRYERS IN ACCESSIBLE COMMON USE LAUNDRY ROOMS SHALL BE FRONT LOADING.

96. THE BOTTOM OF THE OPENING TO THE LAUNDRY COMPARTMENT SHALL BE LOCATED 15 INCHES MINIMUM FROM THE FINISH FLOOR. THE BOTTOM OF THE OPENING SHALL BE 19 INCHES MAXIMUM ABOVE THE FINISH FLOOR. (1127A.10.4)

97. IF FIXED STORAGE FACILITIES SUCH AS CABINETS, SHELVES, CLOSETS OR DRAWERS ARE PROVIDED WHERE ACCESS IS REQUIRED BY SECTIONS 1127.1.2 AND 1102A, AT LEAST ONE OF EACH TYPE OF FACILITY PROVIDED SHALL COMPLY WITH THIS SECTION. ADDITIONAL STORAGE MAY BE PROVIDED OUTSIDE OF THE REACH RANGES SPECIFIED IN SECTION 1136A.3. (1127A.11.1)

98. A CLEAR FLOOR SPACE AT LEAST 30 INCHES BY 48 INCHES COMPLYING WITH SECTION 1136A.1.4 THAT ALLOWS OTHER A PERSON USING A WHEELCHAIR SHALL BE PROVIDED AT ACCESSIBLE STORAGE FACILITIES. (1127A.11.2)

99. ACCESSIBLE STORAGE SPACES AND CLOSETS SHOULD SHALL BE LOCATED AT LEAST ONE OF THE REACH RANGES SPECIFIED IN SECTION 1136A.3. (SEE FIGURE 11A-14 AND FIGURE 11A-11). (1127A.11.3)

100. HARDWARE FOR ACCESSIBLE STORAGE FACILITIES SHALL COMPLY WITH SECTION 1136A.4. TOUCH LATCHES AND U-SHAPED PULLS ARE ACCEPTABLE. (1127A.11.4)

FIXED OR BUILT-IN SEATING, TABLES, AND COUNTERS: 101. WHERE FIXED OR BUILT-IN SEATING, TABLES, OR COUNTERS ARE PROVIDED FOR RESIDENTS OR GUESTS, PRESENT, BUT NOT LESS THAN ONE, SHALL BE ACCESSIBLE AS PROVIDED IN THIS SECTION. (1127A.12.1)

102. WHEN SEATING SPACES FOR PERSONS IN WHEELCHAIRS ARE PROVIDED AT FIXED TABLES OR COUNTERS, CLEAR FLOOR SPACE COMPLYING WITH SECTION 1136A.1.4 POSITIONED FOR A FORWARD APPROACH SHALL BE PROVIDED. SUCH CLEAR FLOOR SPACE SHALL NOT COVER THE REQUIRED KNEE AND TOE SPACE BY MORE THAN 19 INCHES. SEE FIGURE 11A-1K. (1127A.12.2)

103. WHEN SEATING FOR PERSONS IN WHEELCHAIRS IS PROVIDED AT FIXED TABLES OR COUNTERS, KNEE AND TOE SPACE COMPLYING WITH SECTION 1136A.2 SHALL BE PROVIDED. SEE FIGURE 11A-1K. (1127A.12.3)

104. THE TOPS OF TABLES AND COUNTERS SHALL BE 28 INCHES TO 34 INCHES FROM THE FINISH FLOOR. (1127A.12.4)

DIVISION V - DWELLING UNIT FEATURES 1. AN ACCESSIBLE ROUTE SHALL BE PROVIDED THROUGH ALL ROOMS AND SPACES OF THE DWELLING UNIT. THE ACCESSIBLE ROUTE SHALL PASS THROUGH THE PRIMARY ENTRY DOOR AND SHALL CONNECT WITH ALL ADDITIONAL EXTERIOR DOORS, REQUIRED CLEAR FLOOR SPACES AT KITCHEN APPLIANCES, AND BATHROOM FIXTURES. FOR THE PURPOSE OF THIS SECTION, "ACCESSIBLE ROUTES" MAY INCLUDE HALLWAYS, CORRIDORS, AND RAMPS. (1130A.1)

2. THE ACCESSIBLE ROUTE INTO AND THROUGHOUT COVERED MULTIFAMILY DWELLING UNITS SHALL BE AT LEAST 36 INCHES WIDE. (1130A.2)

CHANGES IN LEVEL ON ACCESSIBLE ROUTES 3. ABRUPT CHANGES IN LEVEL ALONG ANY ACCESSIBLE ROUTE SHALL NOT EXCEED 1/4 INCH. WHEN CHANGES IN LEVEL DO OCCUR, THEY SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1 UNIT VERTICAL IN 2 UNITS HORIZONTAL (68% SLOPE). CHANGES IN LEVEL NOT EXCEEDING 1/4 INCH MAY BE VERTICAL. (1130A.3)

4. CHANGES IN LEVEL GREATER THAN 1/4 INCH SHALL BE MADE BY MEANS OF A RAMP ELEVATOR OR PLATFORM (WHEELCHAIR LIFT). SEE SECTION 1127A FOR RAMPS AND SECTION 1124A.11 FOR SPECIAL ACCESS LIFTS. (1131A.2)

DOORS 5. THE WIDTH AND HEIGHT OF PRIMARY ENTRY DOORS AND ALL REQUIRED EXIT DOORS SHALL COMPLY WITH SECTION 1129A.1.1. THE REQUIREMENTS OF SECTIONS 1126A.3 SHALL APPLY TO MANEUVERING CLEARANCES AT THE SIDE OF THE DOOR EXPOSED TO COMMON OR PUBLIC USE SPACES (E.G., ENTRY OR EXIT DOORS WHICH OPEN FROM THE COVERED MULTIFAMILY DWELLING UNIT INTO A COMMON HALLWAY OR LOBBY, OR DIRECTLY TO THE OUTSIDE). (1132A.1)

6. EXCEPT AS ALLOWED BY SECTION 1108A.2, INTERIOR DOORS INTENDED FOR USER PASSAGE AND SECONDARY EXTERIOR DOORS SHALL COMPLY WITH THIS SECTION. THE PROVISIONS OF THIS SECTION SHALL APPLY TO THE DWELLING UNIT SIDE OF DOORS LEADING FROM THE INTERIOR OF THE DWELLING UNIT TO AN UNFINISHED BASEMENT OR AN ATTACHED GARAGE. (1132A.2)

7. DOORS SHALL COMPLY WITH THE FOLLOWING: (1132A.3) A. DOORS SHALL NOT BE LESS THAN 6 FEET 8 INCHES IN HEIGHT.

B. SWINGING DOORS SHALL PROVIDE A NET CLEAR OPENING WIDTH OF NOT LESS THAN 32 INCHES, MEASURED WITH THE DOOR OPENED AT AN ANGLE OF 90 DEGREES FROM THE CLOSED POSITION. A 34-INCH DOOR IS ACCEPTABLE. THE PRIMARY ENTRY DOOR AND ALL REQUIRED EXIT DOORS SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 1129A.1.

C. SWINGING DOORS SHALL BE CAPABLE OF OPENING AT LEAST 90 DEGREES.

D. A NOMINAL 32-INCH CLEAR OPENING PROVIDED BY A STANDARD 6-FOOT WIDE SLIDING PATIO DOOR ASSEMBLY IS ACCEPTABLE.

E. A PAIR OF DOORS, MANUAL OR AUTOMATIC, MUST HAVE AT LEAST ONE LEAF WHICH PROVIDES A CLEAR WIDTH OF NOT LESS THAN 32 INCHES, MEASURED WITH THE DOOR POSITIONED AT AN ANGLE OF 90 DEGREES FROM ITS CLOSED POSITION.

F. THE WIDTH OF ANY COMPONENT IN THE MEANS OF EGRESS SYSTEM SHALL NOT BE LESS THAN THE MINIMUM WIDTH REQUIRED BY SECTION 1005.

G. THE FLOOR OR LANDING ON EACH SIDE OF A DOOR SHALL BE LEVEL. PRIMARY ENTRY DOORS, REQUIRED EXIT DOORS, OR SECONDARY EXTERIOR DOORS WITH CHANGES IN HEIGHT BETWEEN THE INTERIOR SURFACE OR FLOOR LEVEL AND THE EXTERIOR SURFACE OR FLOOR LEVEL SHALL COMPLY WITH THE FOLLOWING: (1132A.4)

A. EXTERIOR LANDINGS OF IMPERVIOUS CONSTRUCTION (I.E., CONCRETE, BRICK, FLAGSTONE) SERVING PRIMARY ENTRY DOORS AND REQUIRED EXTERIOR EXIT DOORS ARE LIMITED TO NOT MORE THAN 3/4 INCH OF CHANGE IN HEIGHT BETWEEN FLOOR SURFACES. CHANGES IN LEVEL SHALL COMPLY WITH SECTION 1133A.

B. EXTERIOR LANDINGS OF PERVIOUS CONSTRUCTION (E.G., WOOD DECKING WITH SPACES) SHALL BE THE SAME LEVEL, AS THE INTERIOR LANDING, EXCEPT THAT SECONDARY EXTERIOR LANDINGS SHALL BE 1/4 INCH HIGHER THAN THE INTERIOR LANDING. HEIGHT BETWEEN THE FLOOR SURFACES, CHANGES IN LEVEL, SHALL COMPLY WITH SECTION 1133A.

C. SECONDARY EXTERIOR DOORS ON DECKS, PATIOS, OR BALCONY SURFACES CONSTRUCTED OF IMPERVIOUS MATERIALS (E.G., CONCRETE, BRICK, FLAGSTONE) MAY HAVE A MINIMUM CHANGE IN HEIGHT FROM THE INTERIOR LANDING OF 4 INCHES. CHANGES IN HEIGHT GREATER THAN 1/4 INCH SHALL BE ACCOMPLISHED BY MEANS OF A RAMP COMPLYING WITH SECTION 1141A OR BY MEANS OF A PLATFORM CONSTRUCTED TO THE LEVEL OF THE FLOOR AS ILLUSTRATED IN FIGURE 11A-6.

D. SECONDARY EXTERIOR DOORS ON DECKS, PATIOS, OR BALCONY SURFACES CONSTRUCTED OF IMPERVIOUS MATERIALS (E.G., CONCRETE, BRICK, FLAGSTONE) MAY HAVE A MAXIMUM CHANGE IN HEIGHT FROM THE INTERIOR LANDING OF 1 INCH, PROVIDED A RAMP WITH A MAXIMUM SLOPE OF 1:8 IS PERMANENTLY INSTALLED. (SEE FIGURE 11A-6).

E. IN BUILDINGS CONTAINING COVERED MULTIFAMILY DWELLING UNITS, THE FLOOR OR LANDING IMMEDIATELY OUTSIDE THE ENTRY MAY BE SLOPED UP TO 1 INCH PER FOOT (12 INCHES) IN A DIRECTION AWAY FROM THE PRIMARY ENTRANCE OF THE DWELLING UNIT FOR DRAINAGE.

DOORS CONT'D 3. THRESHOLDS AT THE PRIMARY ENTRY AND REQUIRED EXIT DOORS SHALL BE NO HIGHER THAN 1/4 INCH. THRESHOLDS AT SECONDARY EXTERIOR DOORS, INCLUDING INSTALLED WITH BEAD OR BRUSH FINISH, SHALL BE NO HIGHER THAN 1/4 INCH. THRESHOLDS AT INTERIOR DOOR THRESHOLDS EIGHT AT INTERIOR DOOR THRESHOLDS (E.G. FLOOR MATERIAL CHANGES AT DOOR THRESHOLDS) SHALL NOT EXCEED 1/4 INCH. THRESHOLDS SHALL COMPLY WITH THE FOLLOWING: (1132A.4.1)

A. THRESHOLDS WITH A CHANGE IN HEIGHT OF NOT MORE THAN 1/4 INCH MAY BE VERTICAL.

B. THRESHOLDS WITH A CHANGE IN HEIGHT BETWEEN 1/4 INCH AND 3/4 INCH SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1 UNIT VERTICAL IN 2 UNITS HORIZONTAL (68-PERCENT SLOPE).

10. MANEUVERING CLEARANCES AT INTERIOR DOORS SHALL PROVIDE A MINIMUM LENGTH ON BOTH SIDES OF THE DOOR AT LEAST 48 INCHES MEASURED AT A RIGHT ANGLE TO THE PLANE OF THE DOOR IN ITS CLOSED POSITION. (1132A.5.1)

A. A 39 INCH LENGTH IS ACCEPTABLE WHEN A MINIMUM CLEAR OPENING WIDTH OF 34 INCHES IS PROVIDED.

B. THE FLOOR OR LANDING ON THE DWELLING UNIT SIDE OF THE PRIMARY ENTRY DOOR AND ANY REQUIRED EXIT DOOR SHALL HAVE A MINIMUM LENGTH OF NOT LESS THAN 44 INCHES. SECTION 1126A.3 SHALL APPLY TO MANEUVERING CLEARANCES AT THE SIDE OF THE DOOR EXPOSED TO COMMON OR PUBLIC USE SPACES.

11. THE WIDTH OF THE LEVEL AREA ON THE SIDE TO WHICH THE DOOR SWINGS SHALL EXTEND 18 INCHES PAST THE STRIKE EDGE FOR ALL DOORS. THE WIDTH OF THE LEVEL AREA AT THE EXTERIOR SIDE OF THE PRIMARY ENTRY DOOR AND ANY REQUIRED EXIT DOORS SHALL COMPLY WITH SECTION 1129A.1.2. (1132A.5.2)

12. MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 8 1/2 POUNDS FOR EXTERIOR DOORS AND 5 POUNDS FOR INTERIOR DOORS. SUCH PULL OR PUSH EFFORT BEING APPLIED AT REACH RANGES. THE MAXIMUM EFFORT TO OPERATE THE DOOR MAY VARY ON SLIDING OR FOLDING DOORS, COMPENSATING DEVICES OR AUTOMATIC DOOR OPENERS MAY BE UTILIZED TO MEET THESE STANDARDS. WHEN FIRE DOORS ARE REQUIRED, THE MAXIMUM EFFORT TO OPERATE THE DOOR MAY BE INCREASED TO THE MINIMUM ALLOWABLE BY THE APPROPRIATE REGULATORY AGENCY, NOT TO EXCEED 15 POUNDS. (1132A.6)

13. THE TYPE OF LATCH AND LOCK REQUIRED FOR ALL DOORS SHALL BE IN ACCORDANCE WITH SECTION 1132A.8 AND CHAPTER 10, SECTION 1008. (1132A.7)

14. HAND-ACTIVATED DOOR LATCHING, LOCKING, AND OPENING HARDWARE SHALL BE CENTERED BETWEEN 30 INCHES AND 44 INCHES ABOVE THE FLOOR. LATCHING AND OTHER FIXTURES THAT ARE HAND-ACTIVATED AND ON AN ACCESSIBLE ROUTE SHALL BE OPERABLE WITH A SINGLE EFFORT BY LEVER-TYPE HARDWARE, PANGIC BARS, PUSH-PULL ACTING BARS, OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT THE NEED FOR TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST. (1132A.8)

15. THE LEVER OR LEVER OF ACTUATED LATCHES OR LOCKS SHALL BE CURVED WITH A RETURN TO WITHIN 3/8 INCH OF THE DOOR TO PREVENT CATCHING ON THE CLOTHING OF PERSONS DURING EGRESS IN GROUP AND OCCUPANCIES WITH AN OCCUPANT LOAD GREATER THAN 1. (1132A.9.1)

16. THE BOTTOM 10 INCHES OF ALL DOORS SHALL HAVE A SMOOTH, UNINTERRUPTED SURFACE TO THE DOOR. THE DOOR SHALL BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION. WHERE NARROW FRAME DOORS ARE USED, A 10 INCH HIGH SMOOTH PANEL SHALL BE INSTALLED ON THE PUSH-SIDE OF THE DOOR WHICH WILL ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION (1132A.9) EXCEPTION: AUTOMATIC AND SLIDING DOORS.

17. EVERY PRIMARY ENTRANCE TO A COVERED MULTIFAMILY DWELLING UNIT SHALL BE PROVIDED WITH A DOOR BUZZER, BELL, CHIME OR EQUIVALENT. THE ACTIVATING MECHANISM OF THE BUZZER, BELL, CHIME OR EQUIVALENT SHALL BE OPERABLE AND CONNECTED TO PERMANENT WIRING. (1132A.10)

18. KITCHENS SHALL BE ON OR AN ACCESSIBLE ROUTE. (1133A.1)

19. CLEAR FLOOR SPACE AT KITCHENS SHALL COMPLY WITH THE FOLLOWING (1133A.2): A. A CLEAR FLOOR SPACE AT LEAST 30 INCHES BY 48 INCHES THAT ALLOWS A PARALLEL APPROACH BY A PERSON IN A WHEELCHAIR SHALL BE PROVIDED AT THE RANGE OR COOK-TOP.

B. A CLEAR FLOOR SPACE AT LEAST 30 INCHES BY 48 INCHES THAT ALLOWS EITHER A PARALLEL OR FORWARD APPROACH SHALL BE PROVIDED AT THE KITCHEN SINK AND ALL OTHER FIXTURES OR APPLIANCES INCLUDING THE RANGE, DISHWASHER, REFRIGERATOR/FREEZER AND TRASH COMPACTOR.

C. THE CENTERLINE OF THE 30 INCH BY 48 INCH CLEAR FLOOR SPACE PROVIDED FOR PARALLEL OR FORWARD APPROACH SHALL BE ALIGNED WITH THE CENTERLINE OF THE APPLIANCE OR FIXTURE. SEE FIGURE 11A-10A.

20. KITCHENS SHALL HAVE A MINIMUM CLEAR WIDTH MEASURED BETWEEN ANY CABINET, COUNTERTOP, OR THE FACE OF ANY APPLIANCE (EXCLUDING HANDLES AND CONTROLS) THAT PROJECTS INTO THE CLEAR FLOOR SPACE. THE MINIMUM CLEAR WIDTH SHALL BE: A. U-SHAPED KITCHENS, DESIGNED WITH PARALLEL APPROACH AT A RANGE OR COOKTOP LOCATED AT THE BASE OF THE U, SHALL HAVE A MINIMUM CLEAR WIDTH OF AT LEAST 60 INCHES. SEE FIGURE 11A-10A.

B. U-SHAPED KITCHENS, DESIGNED WITH A COOKTOP OR SINK LOCATED AT THE BASE OF THE U, WHICH PROVIDES KNEE AND TOE SPACE IN ACCORDANCE WITH SECTION 1136A.1.7 TO ALLOW FOR A FORWARD APPROACH, SHALL HAVE A CLEAR WIDTH OF AT LEAST 48 INCHES. SEE FIGURE 11A-10A.

C. ALL OTHER KITCHEN DESIGNS SHALL PROVIDE A MINIMUM CLEAR WIDTH OF AT LEAST 48 INCHES. SEE FIGURE 11A-10A.

21. THE CENTERLINE OF THE 30 INCH BY 48 INCH CLEAR FLOOR SPACE PROVIDED FOR PARALLEL OR FORWARD APPROACH SHALL BE ALIGNED WITH THE CENTERLINE OF THE APPLIANCE OR FIXTURE. SEE FIGURE 11A-10A.

22. KITCHEN COUNTERTOPS SHALL BE PROVIDED WITH THE FOLLOWING: (1133A.4) A. A MINIMUM LINEAR LENGTH OF 30 INCHES OF COUNTERTOP SHALL BE PROVIDED FOR THE KITCHEN SINK INSTALLATION.

B. A MINIMUM LINEAR LENGTH OF 30 INCHES OF COUNTERTOP SHALL BE PROVIDED FOR A WORK SURFACE.

C. THE SINK AND WORK SURFACE MAY BE A SINGLE INTEGRAL UNIT A MINIMUM OF 60 INCHES IN LENGTH, OR BE SEPARATE COMPONENTS.

D. FINISHED FLOORING SHALL BE EXTENDED TO THE WALL BENEATH THE SINK AND WORK SURFACE. EXCEPTIONS: 1. STONE, CULTURED STONE AND TILED COUNTERTOPS MAY BE USED WITHOUT MEETING THE REPOSITIONING REQUIREMENTS.

2. REPOSITIONABLE COUNTERTOPS SHALL BE PROVIDED A MINIMUM OF FIVE PERCENT OF THE COVERED MULTIFAMILY DWELLING UNITS. REPOSITIONABLE COUNTERTOPS SHALL COMPLY WITH THE FOLLOWING: (1133A.4.1) A. THE KITCHEN SINK AND WORK SURFACE REQUIRED BY 1133A.4 SHALL BE DESIGNED TO ENABLE REPOSITIONING TO A MINIMUM HEIGHT OF 28 INCHES.

B. BASE CABINETS DIRECTLY UNDER THE KITCHEN SINK COUNTER AREA AND WORK SURFACE SHALL BE REMOVABLE AS REQUIRED IN SECTION 1133A.3.

C. THE SIDES OF ADJACENT CABINETS AND THE BACK WALL, WHICH MAY BECOME EXPOSED TO MOISTURE OR FOOD HANDLING WHEN A COUNTERTOP IS LOOPERED, SHALL BE CONSTRUCTED OF DURABLE, NONABSORBENT MATERIALS APPROPRIATE FOR SUCH USES.

D. A CLEAR MANEUVERING SPACE AT LEAST 30 INCHES IN WIDTH BY 48 INCHES IN LENGTH SHALL BE LOCATED OUTSIDE THE SHOWER, FLUSH AND PARALLEL TO THE CONTROL WALL.

E. FINISHED FLOORING SHALL BE EXTENDED TO THE WALL BENEATH THE SINK AND WORK SURFACE. EXCEPTIONS: 1. STONE, CULTURED STONE AND TILED COUNTERTOPS MAY BE USED WITHOUT MEETING THE REPOSITIONING REQUIREMENTS.

2. REPOSITIONABLE COUNTERTOPS SHALL BE PROVIDED A MINIMUM OF FIVE PERCENT OF THE COVERED MULTIFAMILY DWELLING UNITS. REPOSITIONABLE COUNTERTOPS SHALL COMPLY WITH THE FOLLOWING: (1133A.4.1) A

STAMP



NOT FOR CONSTRUCTION UNTIL  
SIGNED BY THE ARCHITECT

**POWDER MOUNTAIN - PARCEL 4**

8569 East Spring Park  
Eden, UT 84310

SHEET TITLE

**ACCESSIBILITY  
NOTES  
(HOUSING 3)**

No.	Description	Date
	ISSUED FOR FOUNDATION PERMIT	2017/6/27

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DATE: **06/20/2017**  
SCALE:

SHEET NO.

**A04.09**

ACCESSIBLE DRINKING FOUNTAINS CONTD

22. DRINKING FOUNTAINS SHALL BE LOCATED COMPLETELY WITHIN ALCOVES, BETWEEN WING WALLS OR OTHERWISE POSITIONED SO AS NOT TO ENCRUCH INTO PEDESTRIAN WAYS. THE ALCOVE OR OTHERWISE PROTECTED AREA IN WHICH THE DRINKING FOUNTAIN IS LOCATED SHALL NOT BE LESS THAN 36 INCHES IN WIDTH AND 18 INCHES IN DEPTH. WHEN THE DEPTH OF THE PROTECTED AREA WHERE THE DRINKING FOUNTAIN IS LOCATED EXCEEDS 24 INCHES, ADDITIONAL MANEUVERING CLEARANCE SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 1138A.1.4.2 AND FIGURE 11A-1H, (1138A-6)

23. WHEN PROVIDED, WING WALLS SHALL PROJECT OUT FROM THE SUPPORTING WALL AT LEAST AS FAR AS THE DRINKING FOUNTAIN TO WITHIN 6 INCHES VERTICALLY FROM THE FINISH FLOOR.

24. PROTRUDING OBJECTS LOCATED IN ALCOVES OR OTHERWISE POSITIONED SO AS TO LIMIT ENCRUCHMENT INTO PEDESTRIAN WAYS ARE PERMITTED TO PROJECT 4 INCHES INTO WALKS, HALLS, CORRIDORS, PASSAGEWAYS OR AISLES. (SEE FIGURE 11A-1A.)

ACCESSIBLE TELEPHONES

IF PUBLIC TELEPHONES ARE PROVIDED, THEY SHALL COMPLY WITH THE SECTION 1140A, ACCESSIBLE TELEPHONES.

ACCESSIBLE SWIMMING POOLS

25. SWIMMING POOLS IN COMMON-USE AREAS SHALL COMPLY WITH THE PROVISIONS OF SECTION 1141A AND CHAPTER 31B, (1141A.1)

26. SWIMMING POOL DECK AREAS MUST BE ACCESSIBLE, AND A MECHANISM TO ASSIST PERSONS WITH DISABILITIES GAIN ENTRY INTO THE POOL AND EXIT FROM THE POOL SHALL BE PROVIDED. SUCH A MECHANISM MAY CONSIST OF A SWIMMING POOL LIFT DEVICE AS LONG AS THE DEVICE MEETS ALL OF THE FOLLOWING CRITERIA: (1141A.2)

A. HAS A SEAT THAT MEETS ALL OF THE FOLLOWING:

I. THE SEAT MUST BE RIGID;  
II. THE SEAT MUST BE NOT LESS THAN 17 INCHES AND NOT MORE THAN 19 INCHES, INCLUSIVE OF ANY CUSHIONED SURFACE THAT MIGHT BE PROVIDED, ABOVE THE POOL DECK;  
III. THE SEAT MUST HAVE TWO ARMRESTS. THE ARMREST ON THE SIDE OF THE SEAT BY WHICH ACCESS IS GAINED SHALL BE EITHER REMOVABLE OR FOLD CLEAR OF THE SEAT;

IV. THE SEAT MUST HAVE A BACK SUPPORT THAT IS AT LEAST 12 INCHES TALL;

V. THE SEAT MUST HAVE AN OCCUPANT RESTRAINT FOR USE BY THE OCCUPANT OF THE SEAT AND THE RESTRAINT MUST MEET THE STANDARDS FOR OPERABLE CONTROLS IN COMPLIANCE WITH SECTION 1138 A.4.4

B. BE CAPABLE OF UNASSISTED OPERATION FROM BOTH THE DECK AND WATER LEVELS.

C. BE STABLE AND NOT PERMIT UNINTENDED MOVEMENT WHEN A PERSON IS GETTING INTO OR OUT OF THE SEAT.

D. BE DESIGNED TO HAVE A LIVE-LOAD CAPACITY OF NOT LESS THAN 300 POUNDS.

E. BE POSITIONED SO THAT, IF THE POOL HAS WATER OF DIFFERENT DEPTHS, IT WILL PLACE THE OPERATOR INTO WATER THAT IS AT LEAST 3 FEET DEEP.

F. BE CAPABLE OF LOWERING THE OPERATOR AT LEAST 18 INCHES BELOW THE SURFACE OF THE WATER.

ELECTRICAL RECEPTACLE, SWITCH AND CONTROL HEIGHTS

SEE DIVISION IV, SECTION 1136A.

SIGNAGE

NOTE: SEE SECTION 1127A.7 FOR ADDITIONAL SIGNAGE REQUIREMENTS APPLICABLE TO SANITARY FACILITIES, AND SECTION 1124A FOR ADDITIONAL SIGNAGE REQUIREMENTS APPLICABLE TO ELEVATORS, (1143A.1)

27. WHEN SIGNS AND/OR IDENTIFICATION DEVICES ARE PROVIDED THEY SHALL COMPLY WITH SECTION 1143A. WHEN BOTH VISUAL AND TACTILE CHARACTERS ARE REQUIRED, EITHER ONE SIGN WITH BOTH VISUAL AND TACTILE CHARACTERS, OR TWO SEPARATE SIGNS - ONE WITH VISUAL, AND ONE WITH TACTILE CHARACTERS, SHALL BE PROVIDED.

28. WHEN SIGNS IDENTIFY PERMANENT ROOMS AND SPACES OF A BUILDING OR SITE, THEY SHALL COMPLY WITH SECTIONS 1143A.1, 1143A.5, 1143A.6 AND 1143A.7.

29. WHEN SIGNS DIRECT TO OR GIVE INFORMATION ABOUT PERMANENT ROOMS AND SPACES OF A BUILDING OR SITE, THEY SHALL COMPLY WITH SECTIONS 1143A.5.

30. WHEN SIGNS IDENTIFY, DIRECT OR GIVE INFORMATION ABOUT ACCESSIBLE ELEMENTS AND FEATURES OF A BUILDING OR SITE, THEY SHALL INCLUDE THE APPROPRIATE SYMBOL OF ACCESSIBILITY AND SHALL COMPLY WITH SECTION 1143A.5.

31. SIGNS WITH VISUAL CHARACTERS SHALL COMPLY WITH THE FOLLOWING:

A. CHARACTERS AND THEIR BACKGROUND SHALL HAVE A NON-GLARE FINISH. CHARACTERS SHALL CONTRAST WITH THEIR BACKGROUND, EITHER LIGHT ON A DARK BACKGROUND OR DARK ON A LIGHT BACKGROUND.

B. CHARACTERS SHALL BE UPPERCASE, LOWERCASE OR A COMBINATION OF BOTH. CHARACTERS SHALL BE CONVENTIONAL IN FORM, AND SHALL NOT BE ITALIC, OBLIQUE, SCRIPT, HIGHLY DECORATIVE, OR OF OTHER UNUSUAL FORMS.

C. CHARACTERS ON SIGNS SHALL BE SELECTED FROM FONTS WHERE THE WIDTH OF THE UPPERCASE LETTER 'O' IS 80 PERCENT MINIMUM AND 110 PERCENT MAXIMUM OF THE HEIGHT OF THE UPPERCASE LETTER 'I'.

D. VISUAL CHARACTERS SHALL BE SIZED IN ACCORDANCE WITH TABLE 1143A.5. VIEWING DISTANCE SHALL BE MEASURED AS THE HORIZONTAL DISTANCE BETWEEN THE CHARACTER AND AN OBSTRUCTION PREVENTING FURTHER APPROACH TOWARDS THE SIGN. CHARACTER HEIGHT SHALL BE BASED ON THE UPPERCASE LETTER 'I'.

E. VISUAL CHARACTERS SHALL BE 40 INCHES MINIMUM ABOVE THE FINISH FLOOR.

F. STROKE THICKNESS OF THE UPPERCASE LETTER 'I' SHALL BE 10 PERCENT MINIMUM AND 20 PERCENT MAXIMUM OF THE HEIGHT OF THE CHARACTER. CHARACTER SPACING SHALL BE MEASURED BETWEEN THE TWO CLOSEST POINTS OF ADJACENT CHARACTERS, EXCLUDING WORD SPACES. SPACING BETWEEN INDIVIDUAL CHARACTERS SHALL BE 10 PERCENT MINIMUM AND 35 PERCENT MAXIMUM OF CHARACTER HEIGHT.

G. SPACING BETWEEN THE BASELINES OF SEPARATE LINES OF CHARACTERS WITHIN A MESSAGE SHALL BE 135 PERCENT MINIMUM AND 170 PERCENT MAXIMUM OF THE CHARACTER HEIGHT.

H. TEXT SHALL BE IN A HORIZONTAL FORMAT.

32. WHEN RAISED CHARACTERS ARE REQUIRED OR WHEN PICTORIAL SYMBOLS (PICTOGRAMS) ARE USED ON SUCH SIGNS, THEY SHALL COMPLY WITH THIS SECTION. RAISED CHARACTERS AND PICTORIAL SYMBOLS SHALL BE DUPLICATED IN BRAILLE COMPLYING WITH SECTION 1143A.7.

A. RAISED CHARACTERS ON SIGNS SHALL BE 1/32 INCH MINIMUM ABOVE THEIR BACKGROUND. CHARACTERS SHALL BE SANS SERIF UPPERCASE, AND SHALL NOT BE ITALIC, OBLIQUE, SCRIPT, HIGHLY DECORATIVE, OR OF OTHER UNUSUAL FORMS.

B. CHARACTERS HEIGHT MEASURED VERTICALLY FROM THE BASELINE OF THE CHARACTER SHALL BE 5/8 INCH MINIMUM AND 2 INCHES MAXIMUM BASED ON THE HEIGHT OF THE UPPERCASE LETTER 'I'.

C. CHARACTERS AND BRAILLE SHALL BE IN A HORIZONTAL FORMAT.

D. RAISED CHARACTERS ON SIGNS SHALL BE SELECTED FROM FONTS WHEN THE WIDTH OF THE UPPERCASE LETTER 'O' IS 80 PERCENT MINIMUM AND 110 PERCENT MAXIMUM OF THE HEIGHT OF THE UPPERCASE LETTER 'I'.

E. STROKE THICKNESS OF THE UPPERCASE LETTER 'I' SHALL BE 15 PERCENT MAXIMUM OF THE HEIGHT OF THE CHARACTER.

F. CHARACTER SPACING SHALL BE MEASURED BETWEEN THE TWO CLOSEST POINTS OF ADJACENT RAISED CHARACTERS WITHIN A MESSAGE, EXCLUDING WORD SPACES. WHEN CHARACTERS HAVE RECTANGULAR CROSS SECTIONS, SPACING BETWEEN INDIVIDUAL RAISED CHARACTERS SHALL BE 1/8 INCH MINIMUM AND 4 TIMES THE RAISED CHARACTER STROKE WIDTH MAXIMUM. WHEN CHARACTERS HAVE OTHER CROSS SECTIONS, SPACING BETWEEN INDIVIDUAL RAISED CHARACTERS SHALL BE 1/16 INCH MINIMUM AND 4 TIMES THE RAISED CHARACTER STROKE WIDTH MAXIMUM AT THE BASE OF THE CROSS SECTIONS, AND 1/8 INCH MINIMUM AND 4 TIMES THE RAISED CHARACTER STROKE WIDTH MAXIMUM AT THE TOP OF THE CROSS SECTIONS. CHARACTERS SHALL BE SEPARATED FROM RAISED BORDERS AND DECORATIVE ELEMENTS 3/8 INCH MINIMUM.

G. SPACING BETWEEN THE BASELINES OF SEPARATE LINES OF RAISED CHARACTERS WITHIN A MESSAGE SHALL BE 135 PERCENT MINIMUM AND 170 PERCENT MAXIMUM OF THE RAISED CHARACTER HEIGHT.

H. WHEN A TACTILE SIGN IS PROVIDED AT A DOOR, THE SIGN SHALL BE LOCATED ALONGSIDE THE DOOR AT THE LATCH SIDE. WHEN A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH ONE ACTIVE LEAF, THE SIGN SHALL BE LOCATED ON THE INACTIVE LEAF. WHEN A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH TWO ACTIVE LEAFS, THE SIGN SHALL BE LOCATED TO THE RIGHT OF THE RIGHT HAND DOOR. WHEN THERE IS NO WALL SPACE AT THE LATCH SIDE OF A SINGLE DOOR OR AT THE RIGHT SIDE OF DOUBLE DOORS, SIGNS SHALL BE LOCATED ON THE NEAREST ADJACENT WALL. SIGNS CONTAINING TACTILE CHARACTERS SHALL BE LOCATED SO THAT A CLEAR FLOOR SPACE OF 18 INCHES MINIMUM BY 18 INCHES MINIMUM, CENTERED ON THE TACTILE CHARACTERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITION AND 45 DEGREE OPEN POSITION. WHEN PERMANENT IDENTIFICATION SIGNAGE IS PROVIDED FOR ROOMS AND SPACES THEY SHALL BE LOCATED ON THE APPROACH SIDE OF THE DOOR AS ONE ENTERS THE ROOM OR SPACE. SIGNS THAT IDENTIFY EXITS SHALL BE LOCATED ON THE APPROACH SIDE OF THE DOOR AS ONE EXITS THE ROOM OR

SIGNAGE CONTD

F. CHARACTER SPACING SHALL BE MEASURED BETWEEN THE TWO CLOSEST POINTS OF ADJACENT RAISED CHARACTERS WITHIN A MESSAGE, EXCLUDING WORD SPACES. WHEN CHARACTERS HAVE RECTANGULAR CROSS SECTIONS, SPACING BETWEEN INDIVIDUAL RAISED CHARACTERS SHALL BE 1/8 INCH MINIMUM AND 4 TIMES THE RAISED CHARACTER STROKE WIDTH MAXIMUM. WHEN CHARACTERS HAVE OTHER CROSS SECTIONS, SPACING BETWEEN INDIVIDUAL RAISED CHARACTERS SHALL BE 1/16 INCH MINIMUM AND 4 TIMES THE RAISED CHARACTER STROKE WIDTH MAXIMUM AT THE BASE OF THE CROSS SECTIONS, AND 1/8 INCH MINIMUM AND 4 TIMES THE RAISED CHARACTER STROKE WIDTH MAXIMUM AT THE TOP OF THE CROSS SECTIONS. CHARACTERS SHALL BE SEPARATED FROM RAISED BORDERS AND DECORATIVE ELEMENTS 3/8 INCH MINIMUM.

G. SPACING BETWEEN THE BASELINES OF SEPARATE LINES OF RAISED CHARACTERS WITHIN A MESSAGE SHALL BE 135 PERCENT MINIMUM AND 170 PERCENT MAXIMUM OF THE RAISED CHARACTER HEIGHT.

H. WHEN A TACTILE SIGN IS PROVIDED AT A DOOR, THE SIGN SHALL BE LOCATED ALONGSIDE THE DOOR AT THE LATCH SIDE. WHEN A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH ONE ACTIVE LEAF, THE SIGN SHALL BE LOCATED ON THE INACTIVE LEAF. WHEN A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH TWO ACTIVE LEAFS, THE SIGN SHALL BE LOCATED TO THE RIGHT OF THE RIGHT HAND DOOR. WHEN THERE IS NO WALL SPACE AT THE LATCH SIDE OF A SINGLE DOOR OR AT THE RIGHT SIDE OF DOUBLE DOORS, SIGNS SHALL BE LOCATED ON THE NEAREST ADJACENT WALL. SIGNS CONTAINING TACTILE CHARACTERS SHALL BE LOCATED SO THAT A CLEAR FLOOR SPACE OF 18 INCHES MINIMUM BY 18 INCHES MINIMUM, CENTERED ON THE TACTILE CHARACTERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITION AND 45 DEGREE OPEN POSITION. WHEN PERMANENT IDENTIFICATION SIGNAGE IS PROVIDED FOR ROOMS AND SPACES THEY SHALL BE LOCATED ON THE APPROACH SIDE OF THE DOOR AS ONE ENTERS THE ROOM OR SPACE. SIGNS THAT IDENTIFY EXITS SHALL BE LOCATED ON THE APPROACH SIDE OF THE DOOR AS ONE EXITS THE ROOM OR SPACE.

I. SIGNS WITH RAISED CHARACTERS SHALL BE LOCATED 48 INCHES MINIMUM ABOVE THE FINISH FLOOR, MEASURED FROM THE BASELINE OF THE BASELINE CELLS AND 60 INCHES MAXIMUM DIRECTLY BELOW THE PICTOGRAM FIELD. THE TEXT DESCRIPTION SHALL COMPLY WITH SECTIONS 1143A.6 AND 1143A.7. THE OUTSIDE DIMENSION OF THE PICTOGRAM FIELD SHALL BE A MINIMUM OF 8 INCHES IN HEIGHT. CHARACTERS AND BRAILLE SHALL NOT BE LOCATED IN THE PICTOGRAM FIELD ABOVE THE FINISH FLOOR, MEASURED FROM THE BASELINE OF THE HIGHEST LINE OF RAISED CHARACTERS.

J. PICTORIAL SYMBOL SIGNS (PICTOGRAMS) SHALL BE ACCOMPANIED BY A TEXT DESCRIPTION LOCATED DIRECTLY BELOW THE PICTOGRAM FIELD. THE TEXT DESCRIPTION SHALL COMPLY WITH SECTIONS 1143A.6 AND 1143A.7. THE OUTSIDE DIMENSION OF THE PICTOGRAM FIELD SHALL BE A MINIMUM OF 8 INCHES IN HEIGHT. CHARACTERS AND BRAILLE SHALL NOT BE LOCATED IN THE PICTOGRAM FIELD.

33. CONTRACTED GRADE 2 BRAILLE SHALL BE USED WHEREVER BRAILLE IS REQUIRED IN OTHER PORTIONS OF THESE STANDARDS.

34. BRAILLE DOTS SHALL HAVE A DOMED OR ROUNDED SHAPE AND SHALL COMPLY WITH TABLE 1143A.7.1. THE INDICATION OF AN UPPERCASE LETTER OR LETTERS SHALL ONLY BE USED BEFORE THE FIRST WORD OF SENTENCES, PROPER NOUNS AND NAMES. INDIVIDUAL LETTERS OF THE ALPHABET, INITIALS, AND ACRONYMS.

35. BRAILLE SHALL BE POSITIONED BELOW THE CORRESPONDING TEXT IN A HORIZONTAL FORMAT, FLUSH LEFT OR CENTERED. IF TEXT IS MULTI-LINED, BRAILLE SHALL BE PLACED BELOW THE ENTIRE TEXT. BRAILLE SHALL BE SEPARATED 3/8 INCH MINIMUM AND 1/2 INCH MAXIMUM FROM ANY OTHER TACTILE CHARACTERS AND 3/8 INCH MINIMUM FROM RAISED BORDERS AND DECORATIVE ELEMENTS.

36. SYMBOLS OF ACCESSIBILITY AND THEIR BACKGROUND SHALL HAVE A NON-GLARE FINISH. SYMBOLS OF ACCESSIBILITY SHALL CONTRAST WITH THEIR BACKGROUND WITH EITHER A LIGHT SYMBOL ON A DARK BACKGROUND OR A DARK SYMBOL ON A LIGHT BACKGROUND. SYMBOLS OF ACCESSIBILITY SHALL COMPLY WITH THE FOLLOWING:

A. THE INTERNATIONAL SYMBOL OF ACCESSIBILITY SHALL CONSIST OF A WHITE FIGURE ON A BLUE BACKGROUND. THE BLUE SHALL BE COLOR NO. 15090 IN FEDERAL STANDARD 598B. (SEE FIGURE 11A-1A)

B. INTERNATIONAL SYMBOL OF TTY. (SEE FIGURE 11A11C)

C. VOLUME CONTROL TELEPHONES. (SEE FIGURE 11A11D)

D. ASSISTIVE LISTENING SYSTEMS. (SEE FIGURE 11A11E)

E. CLEANER AIR SYMBOL. (SEE CHAPTER 11B)

F. TOILET AND BATHING FACILITIES GEOMETRIC SYMBOLS. (SEE SECTION 1127A.7)

DIVISION VI - SITE IMPRACTICALITY TESTS

GENERAL

COVERED MULTIFAMILY DWELLINGS IN BUILDINGS WITHOUT AN ELEVATOR, LOCATED ON SITES WITH DIFFICULT TERRAIN CONDITIONS OR UNUSUAL CHARACTERISTICS, MAY EMPLOY THE SITE IMPRACTICALITY TESTS IN THIS DIVISION FOR DETERMINING THE ACCESSIBILITY AND ADAPTABILITY PROVISIONS REQUIRED BY THIS CHAPTER, EXCEPT AS PROVIDED FOR IN SECTION 1150A.3.1. THE PROVISIONS OF THIS SECTION DO NOT APPLY TO MULTI-STORY DWELLING UNITS IN NON-ELEVATOR BUILDINGS, I.E., TOWNHOUSES. (1150A.1)

STAMP



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SIGNED BY THE ARCHITECT

**POWDER MOUNTAIN - PARCEL 4**  
8569 East Spring Park  
Eden, UT 84310

SHEET TITLE  
**ACCESSIBILITY  
DETAILS**

No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/07/27

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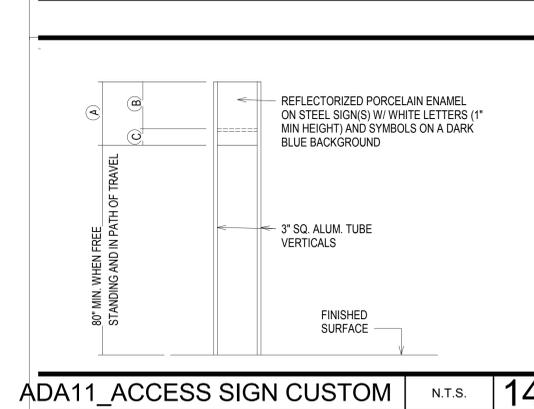
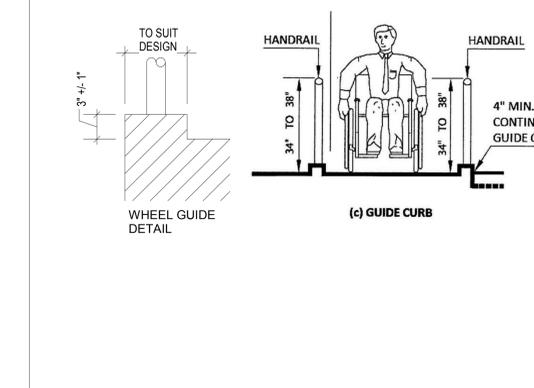
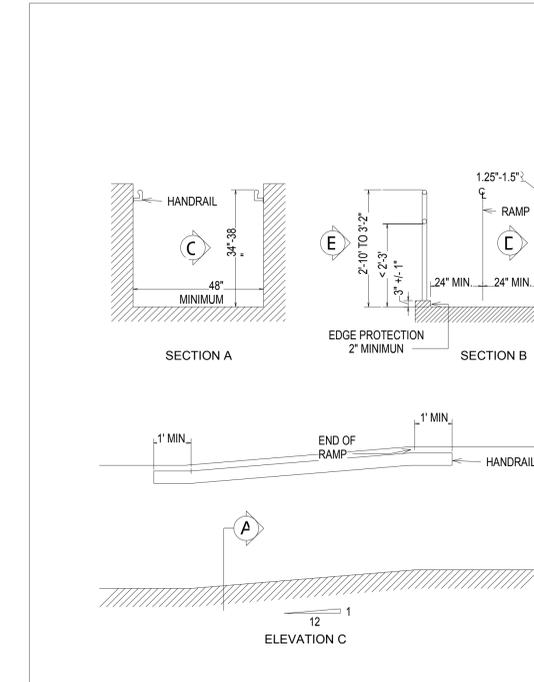
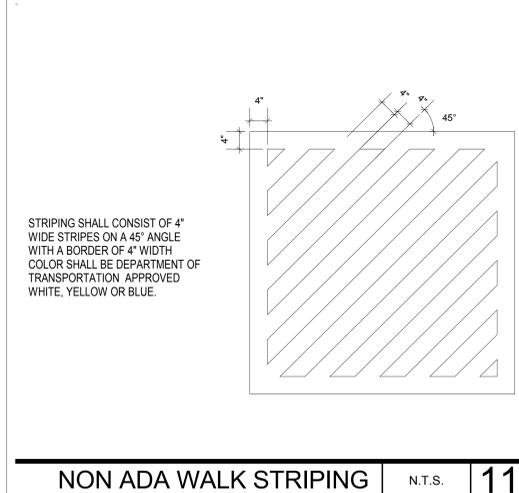
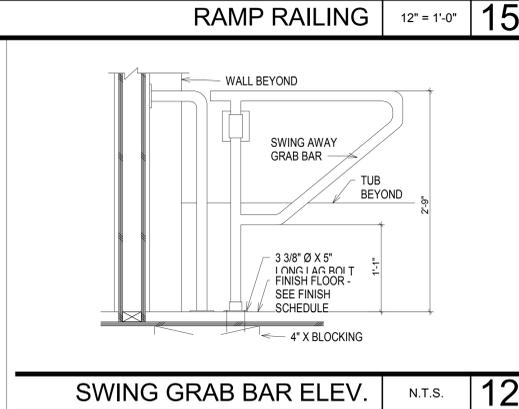
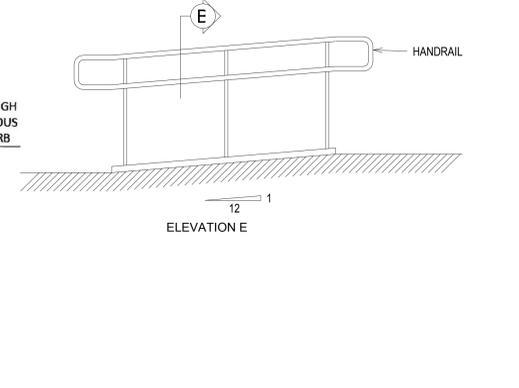
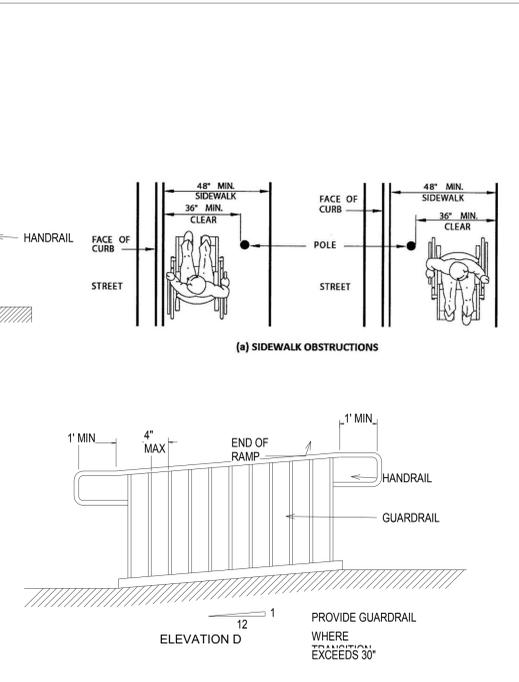
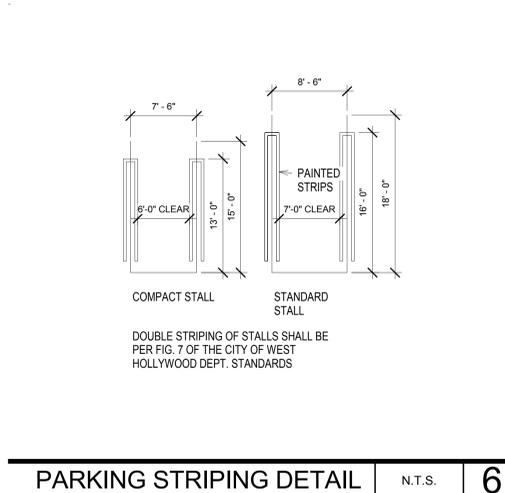
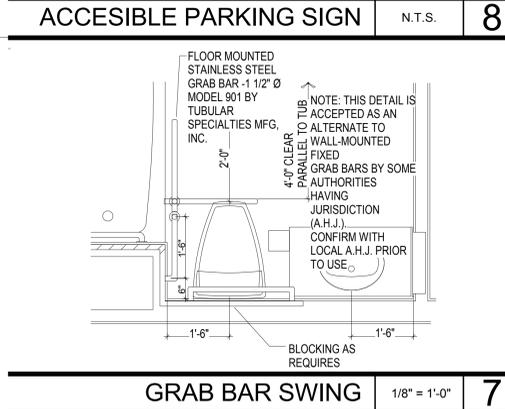
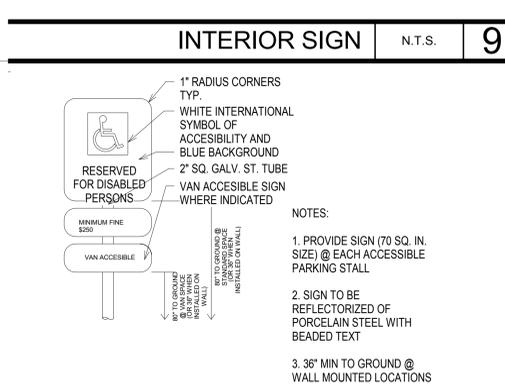
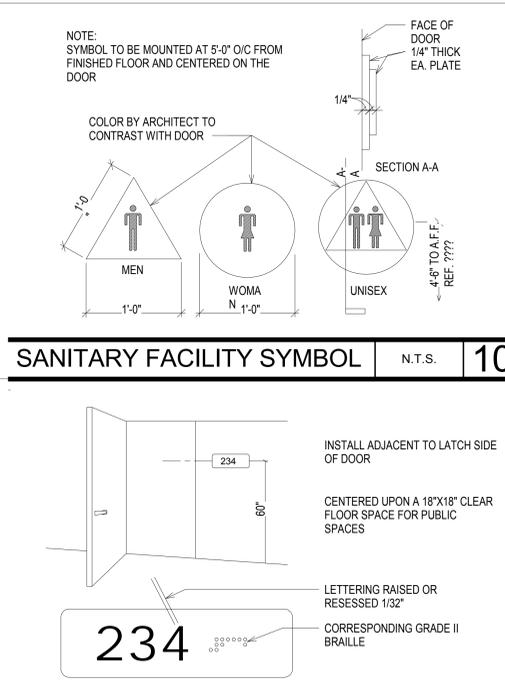
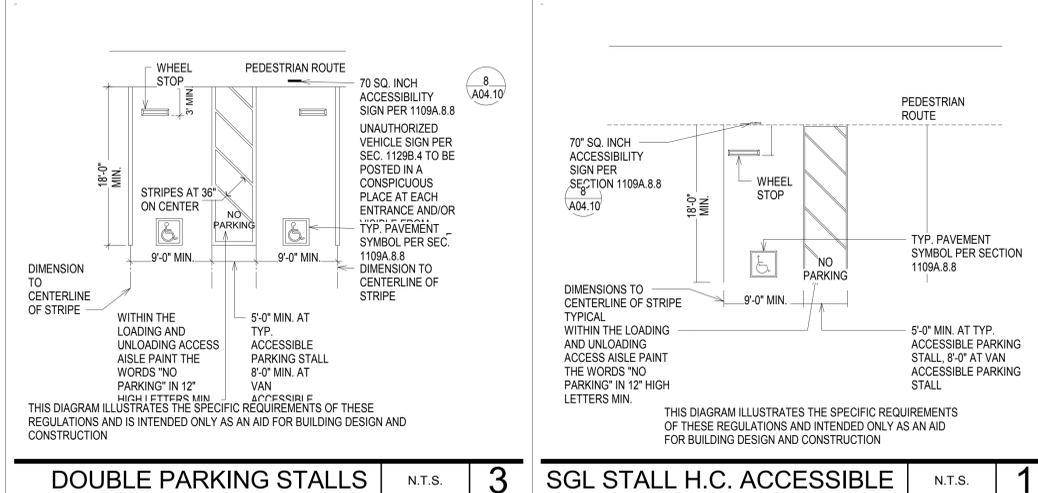
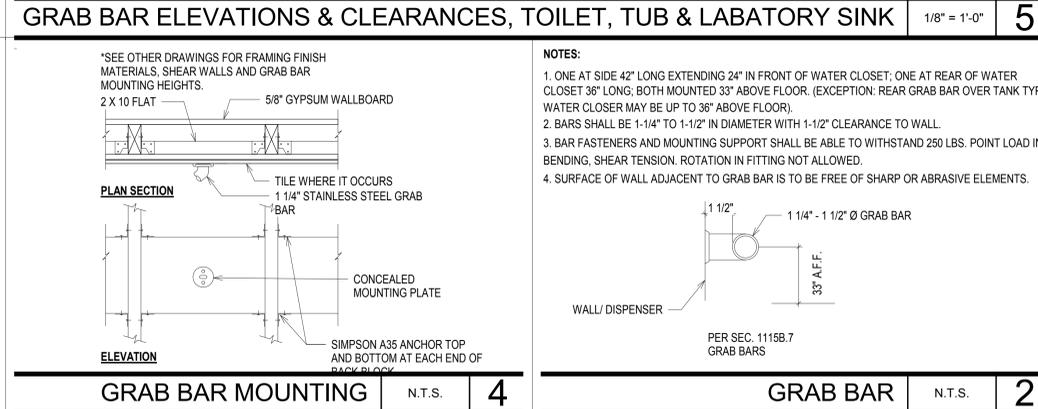
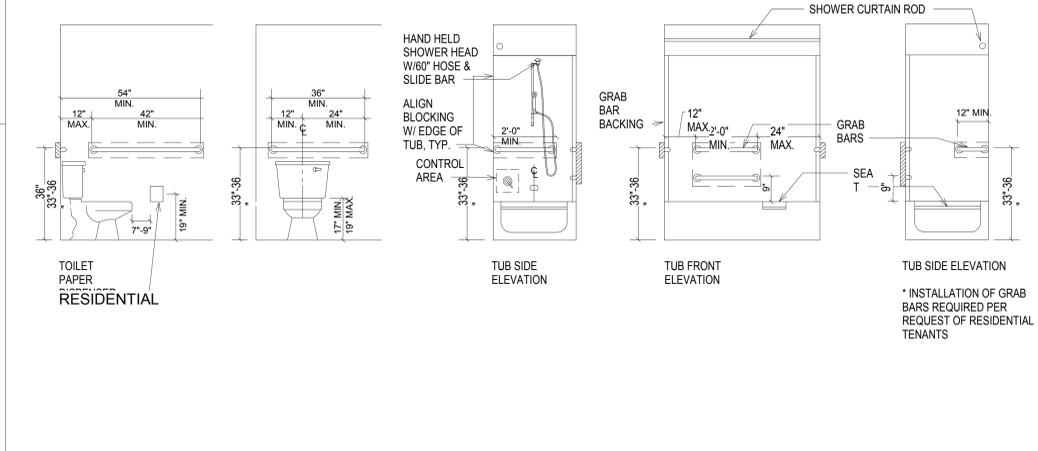
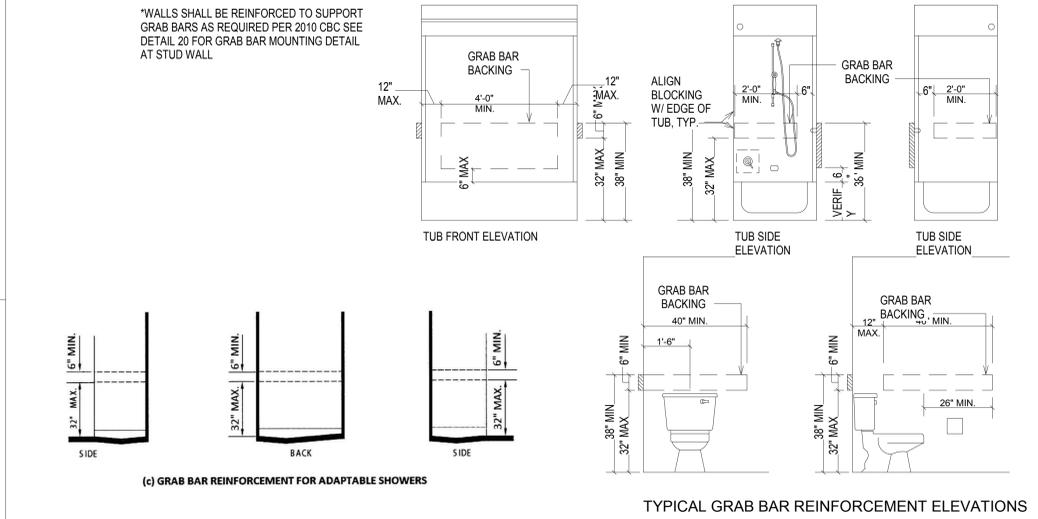
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DATE: **06/20/2017**

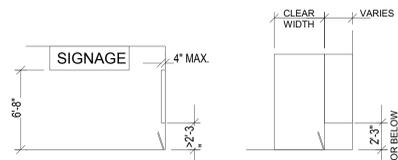
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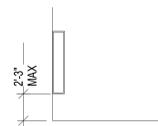
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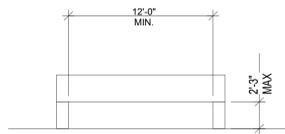




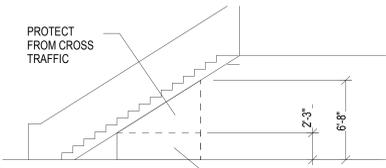
1. WALKING PARALLEL TO A WALL



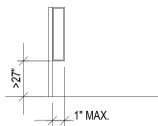
2. WALKING PERPENDICULAR TO A WALL



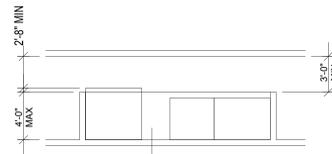
3. FREE-STANDING OVERHANGING OBJECTS



4. OVERHEAD HAZARDS



5. OBJECTS MOUNTED ON POSTS OR PYLONS

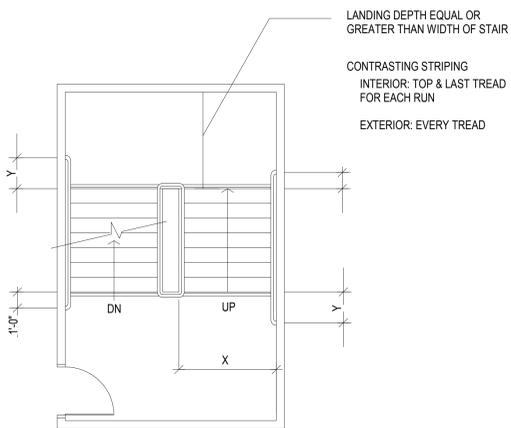


6. PROTECTION AROUND WALL MOUNTED OBJECTS

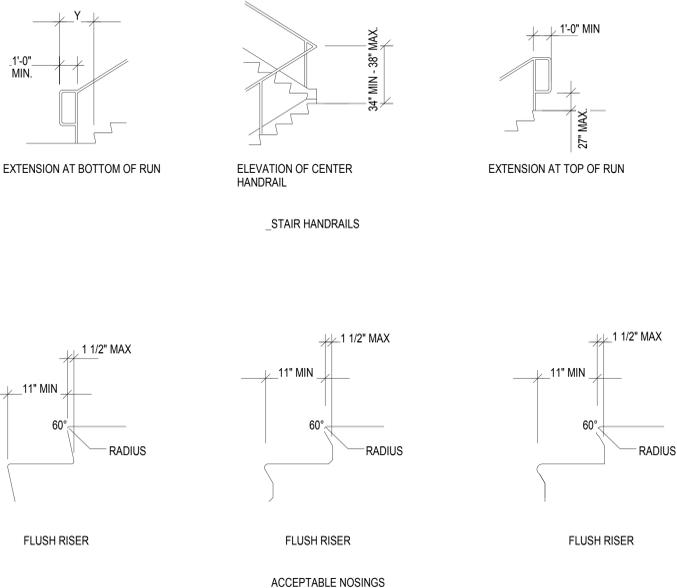
PROTRUDING OBJECTS

1/8" = 1'-0"

4



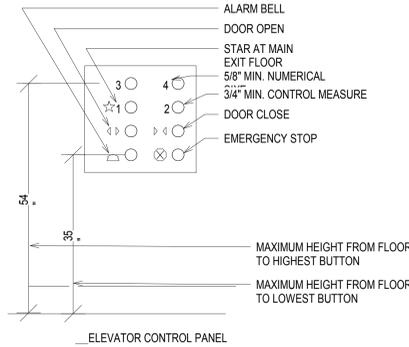
- NOTES:
- X = 44" MIN. WIDTH. SEE PLANS FOR ACTUAL DIMENSIONS
  - Y = WIDTH OF ONE TREAD PLUS 12"



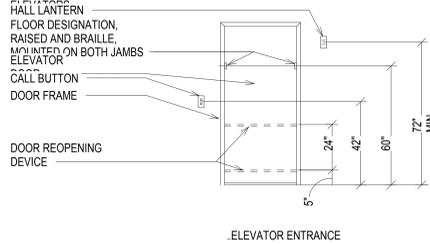
STAIRS

1/8" = 1'-0"

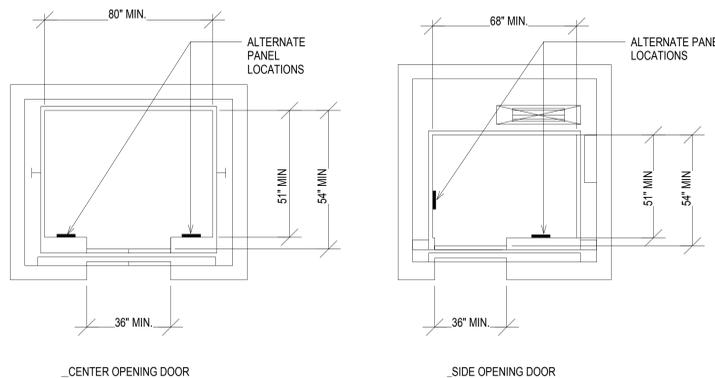
3



NOTE: DIMENSIONS SHOWN DESCRIBE MINIMUM REQUIREMENTS ONLY. REFER TO CONSTRUCTION DOCUMENTS FOR SIZE & LOCATIONS OF SPECIFIC ITEMS.



ELEVATOR ENTRANCE



CENTER OPENING DOOR

SIDE OPENING DOOR

ELEVATORS

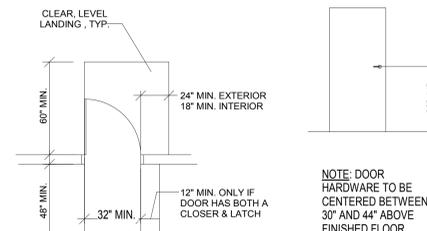
1/8" = 1'-0"

2

NOTE: MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 5 LBS. FOR EXTERIOR DOORS, 5 LBS. FOR INTERIOR DOORS AND 15 LBS. (OR AS ALLOWED BY APPROPRIATE ADMINISTRATIVE AGENCY) FOR FIRE DOORS

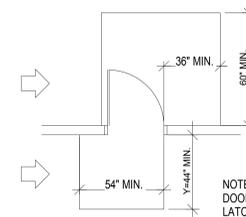


PANIC HARDWARE CLEARANCE

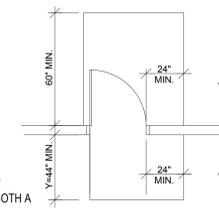


HINGED DOOR REQUIREMENTS

NOTE: DOOR HARDWARE TO BE CENTERED TO BE 30" AND 44" ABOVE FINISHED FLOOR

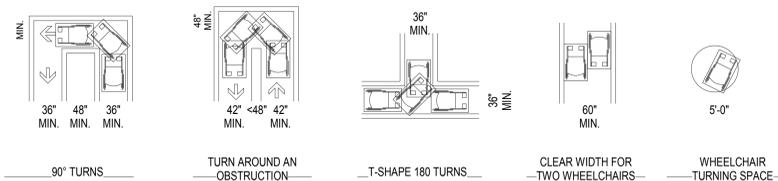


HINGED SIDE APPROACHES

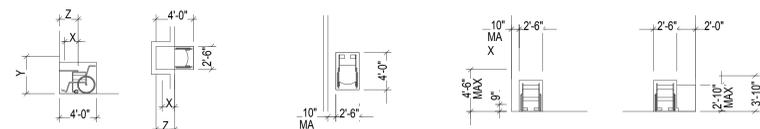


LATCH SIDE APPROACHES

DOORWAY REQUIREMENTS



WHEELCHAIR TURNING REQUIREMENTS IN AN ACCESSIBLE ROUTE



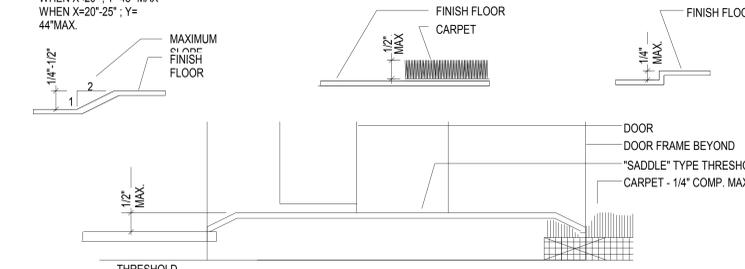
14. MAX. FORWARD REACH OVER AN OBSTRUCTION

NOTE: X <= 25"; Z >= X WHEN X < 20"; Y = 48" MAX WHEN X = 20" - 25"; Y = 44" MAX.

15. CLEAR FLOOR SPACE PARALLEL APPROACH

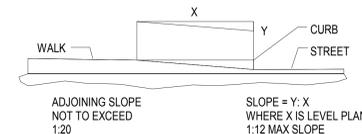
16. HIGH & LOW SIDE REACH

17. SIDE REACH OVER AN OBSTRUCTION

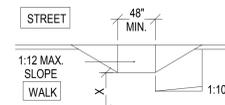


THRESHOLD PARAMETERS

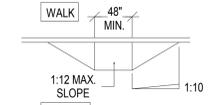
CHANGES OF ELEVATION ALONG ACCESSIBLE ROUTE



CURB RAMP (SECTION)



CURB RAMP WITH FLAIRED SIDES (PLAN)



BUILT-UP CURB RAMP (PLAN)

ACCESSIBLE ROUTE

1/8" = 1'-0"

1



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POWDER MOUNTAIN - PARCEL 4  
8569 East Spring Park  
Eden, UT 84310

ACCESSIBILITY DETAILS

No	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/6/27

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236  
DATE: 06/20/2017  
SCALE: 1/8" = 1'-0"

A04.12



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**POWDER MOUNTAIN - PARCEL 4**  
8569 East Spring Park  
Eden, UT 84310

SHEET TITLE  
**SITE PLAN**

No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/06/27

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236  
DATE: 06/20/2017  
SCALE: 1/16" = 1'-0"  
SHEET NO.

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**POWDER MOUNTAIN - PARCEL 4**

8569 East Spring Park  
Eden, UT 84310

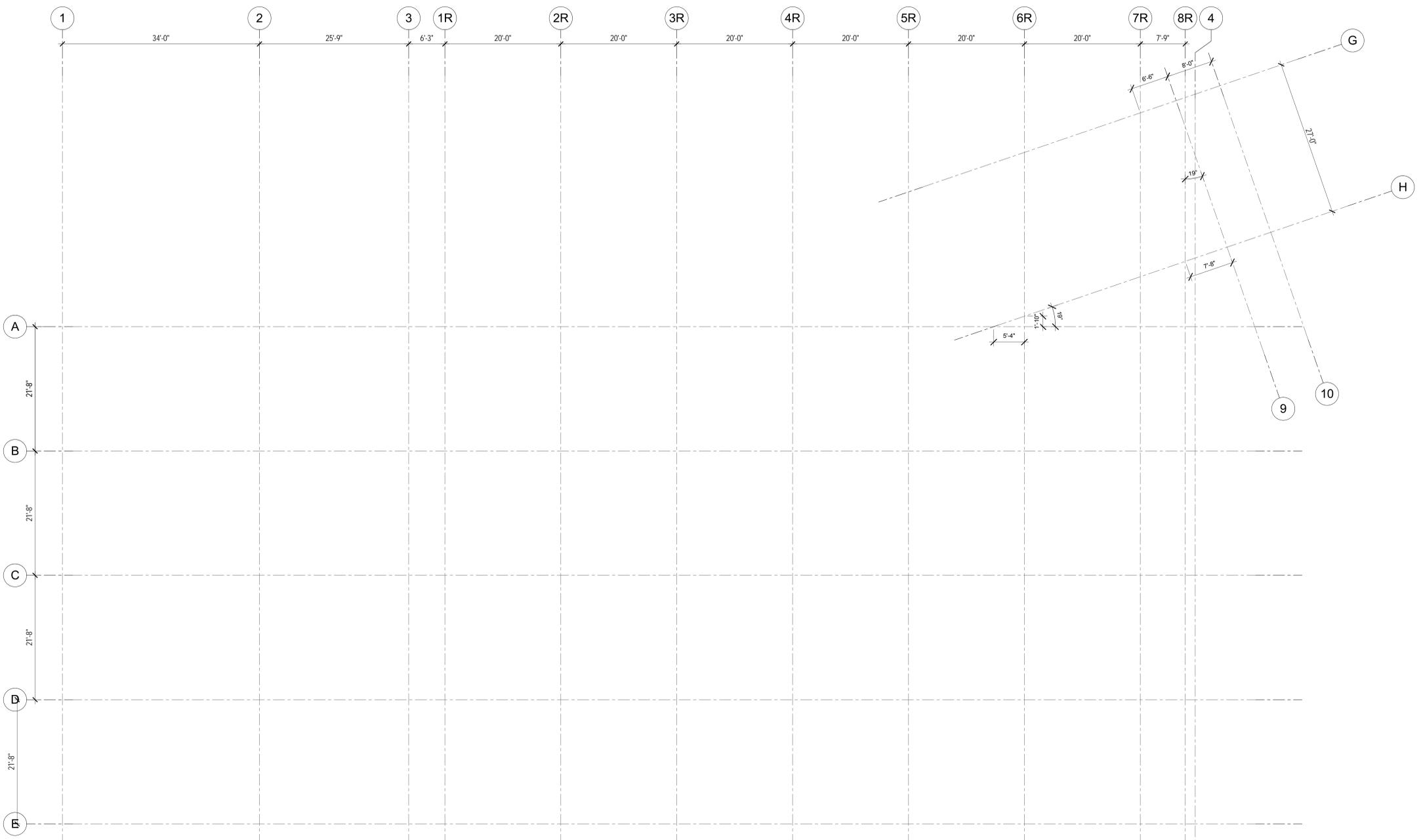
SHEET TITLE

**GRID &  
CONTROL PLAN**

No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/06/27

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236  
DATE 06/20/2017  
SCALE 1/8" = 1'-0"  
SHEET NO.



GROUND LEVEL 1/8" = 1'-0" 1

**A20.00**

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**POWDER MOUNTAIN - PARCEL 4**  
8569 East Spring Park  
Eden, UT 84310

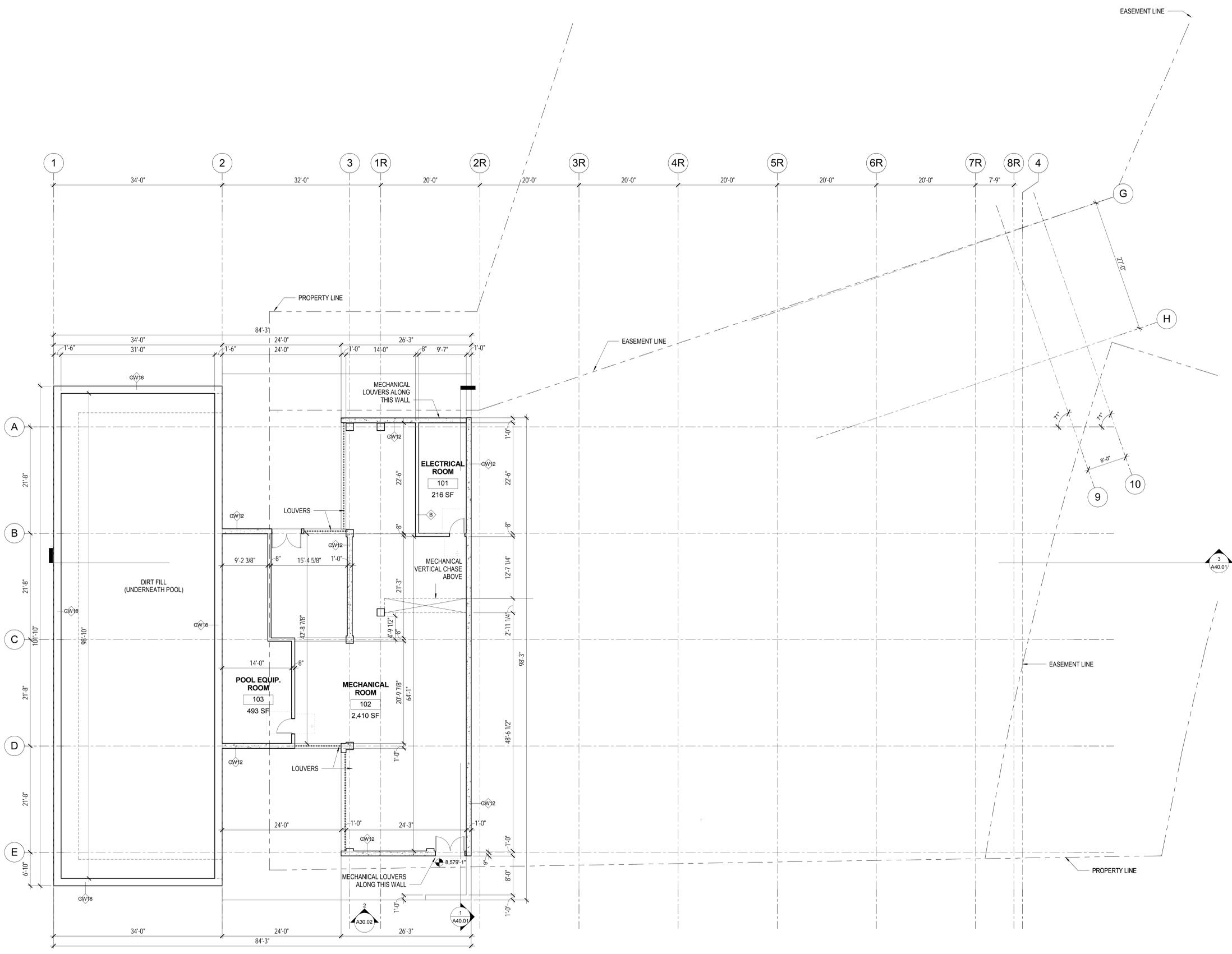
SHEET TITLE  
**LOWER  
BASEMENT LEVEL  
FLOOR PLAN**

No	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/6/27

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236  
DATE: 06/20/2017  
SCALE: 1/8" = 1'-0"  
SHEET NO.

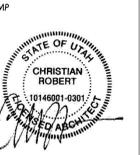
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6/28/2017 11:48:05 AM

R&A: IF THIS SHEET IS NOT 30"x 42", IT IS A REDUCED PRINT

1-LOWER BASEMENT 1/8" = 1'-0" 1



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SIGNED BY THE ARCHITECT

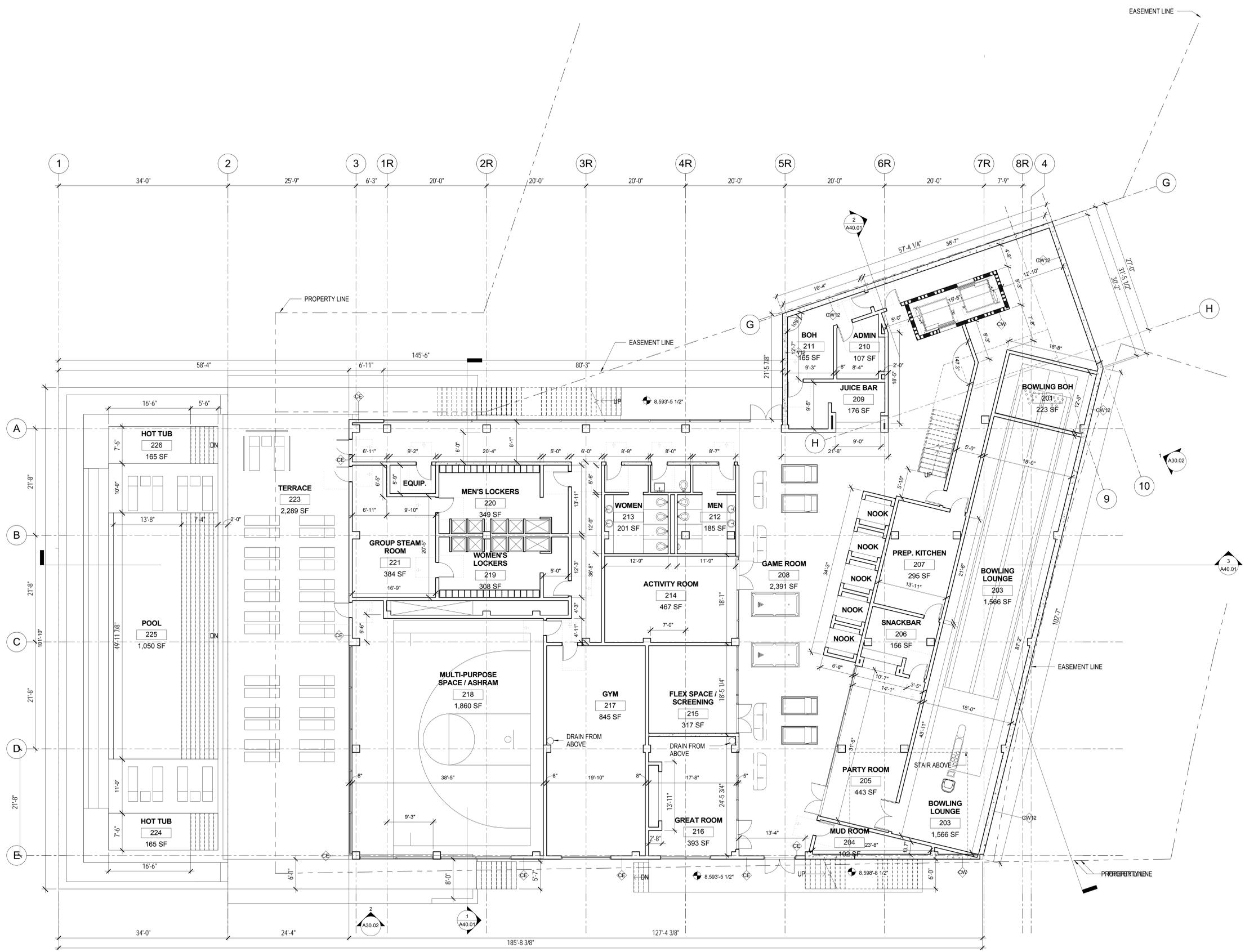
**POWDER MOUNTAIN - PARCEL 4**  
8569 East Spring Park  
Eden, UT 84310

SHEET TITLE  
**UPPER BASEMENT  
LEVEL FLOOR  
PLAN**

No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/06/27

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236  
DATE: 06/20/2017  
SCALE: 1/8" = 1'-0"  
SHEET NO.

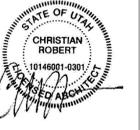


6/28/2017 11:48:08 AM

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**POWDER MOUNTAIN - PARCEL 4**  
8569 East Spring Park  
Eden, UT 84310

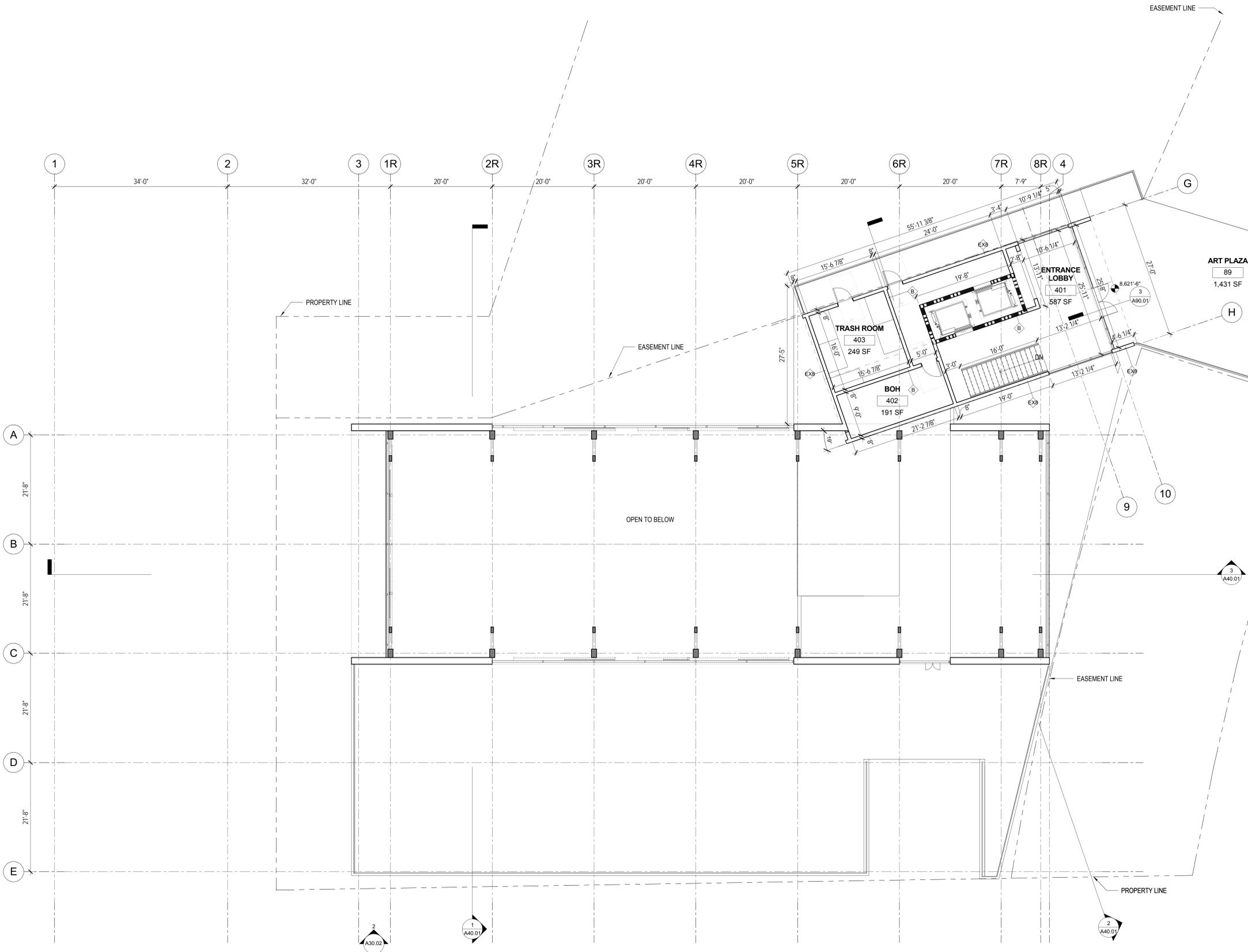
SHEET TITLE  
**UPPER GROUND  
LEVEL FLOOR  
PLAN**

No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/6/27

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236  
DATE 06/20/2017  
SCALE 1/8" = 1'-0"  
SHEET NO.

**A20.04**



GROUND LEVEL 1/8" = 1'-0" 1

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8569 East Spring Park  
Eden, UT 84310

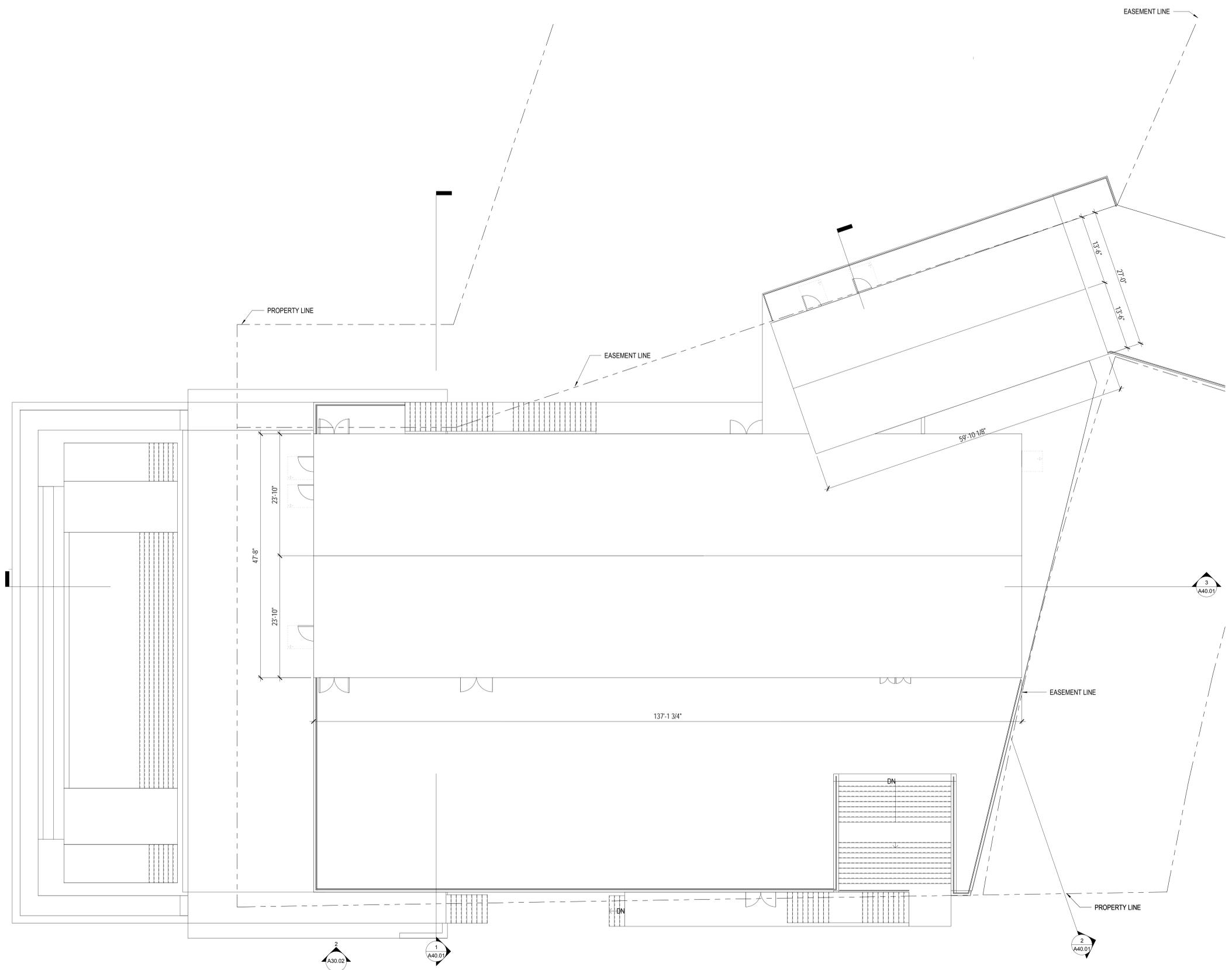
SHEET TITLE  
**ROOFPLAN**

No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/07/27

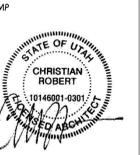
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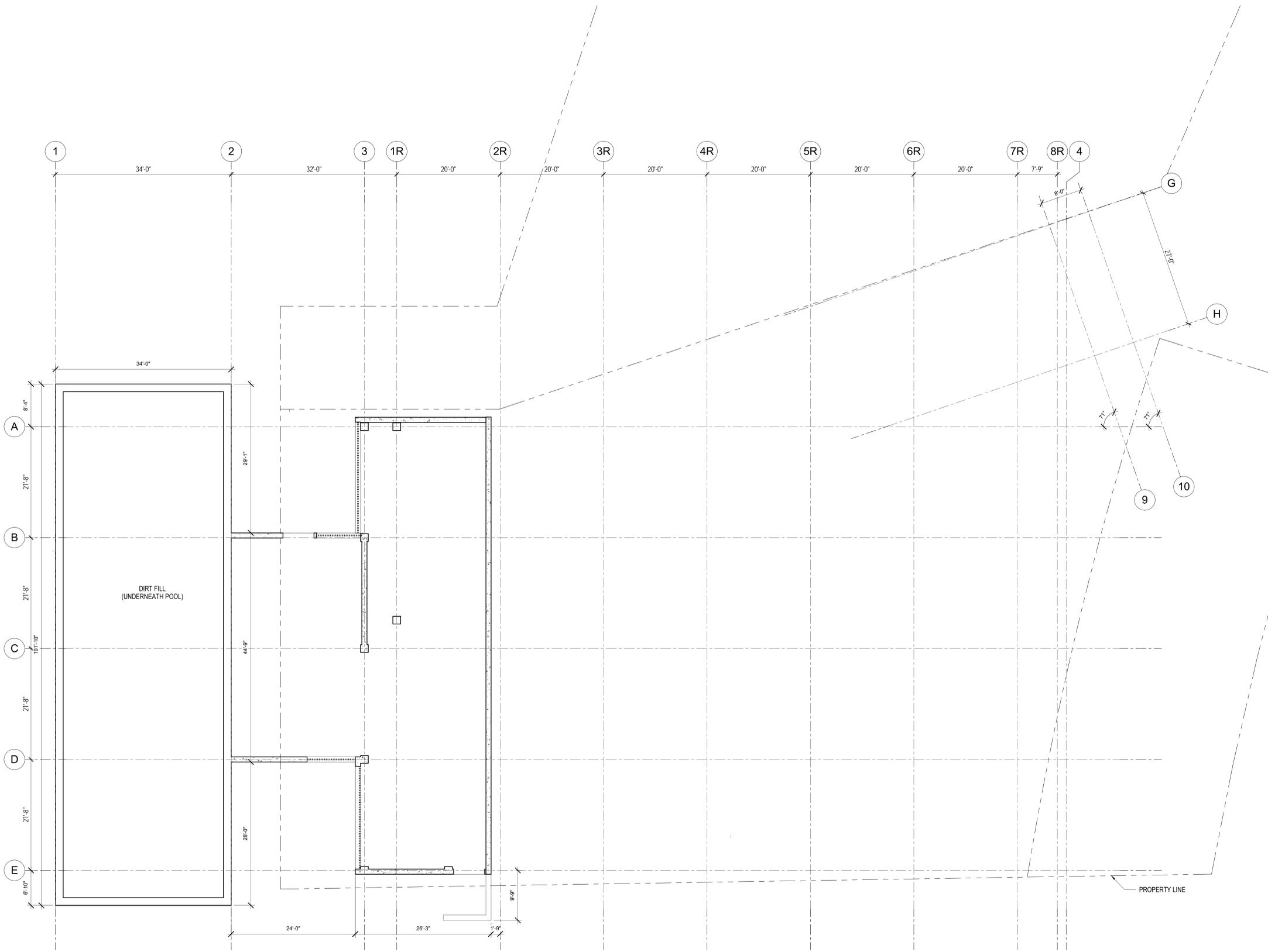
SHEET TITLE  
**LOWER  
 BASEMENT SLAB  
 PLAN**

No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/06/27

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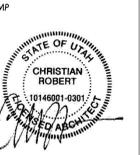
236  
 DATE 06/20/2017  
 SCALE 1/8" = 1'-0"

SHEET NO. **A21.01**



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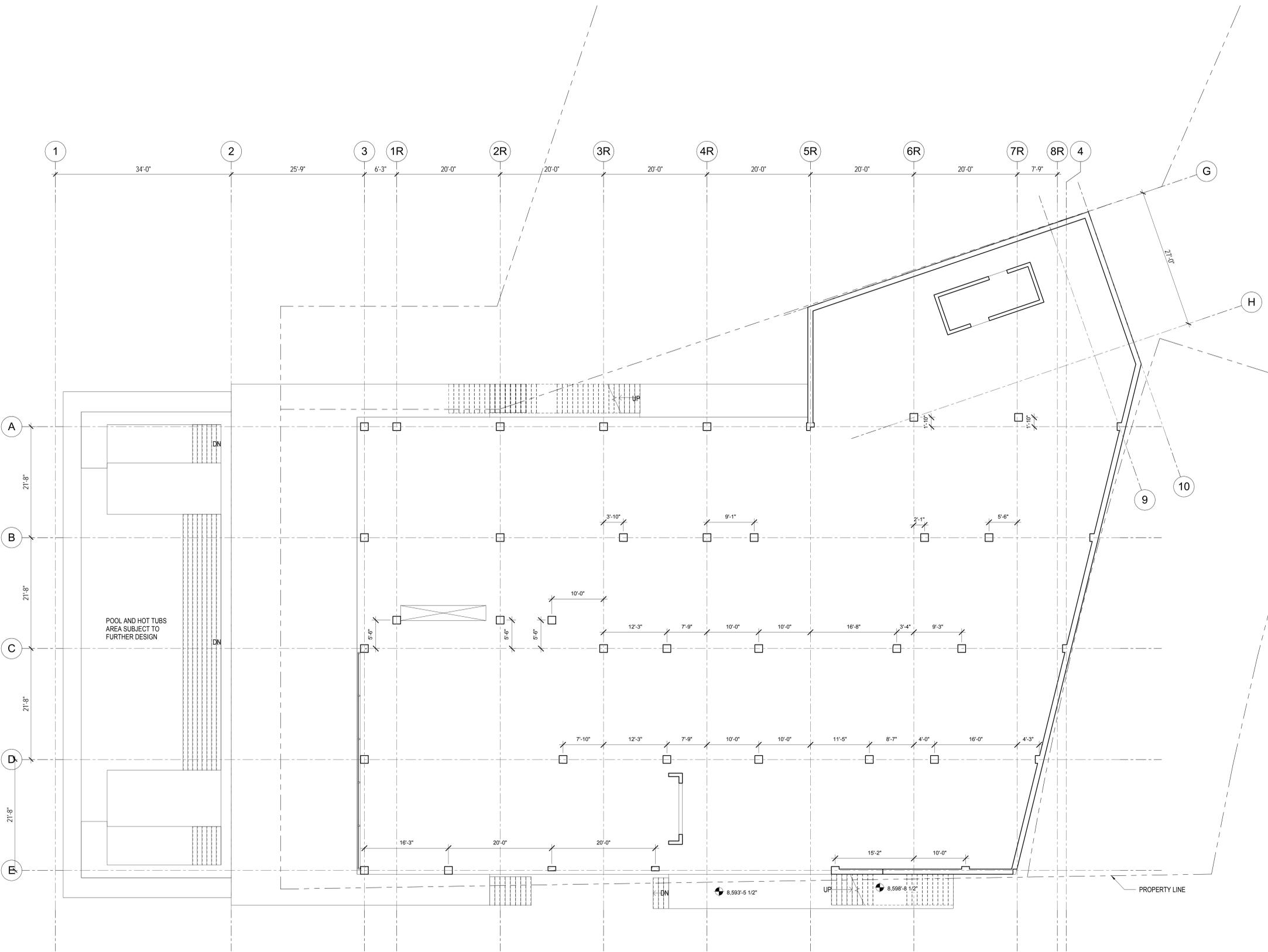
SHEET TITLE  
**UPPER BASEMENT  
 SLAB PLAN**

No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/06/27

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236  
 DATE 06/20/2017  
 SCALE 1/8" = 1'-0"

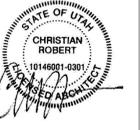
SHEET NO.  
**A21.02**



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 8569 East Spring Park  
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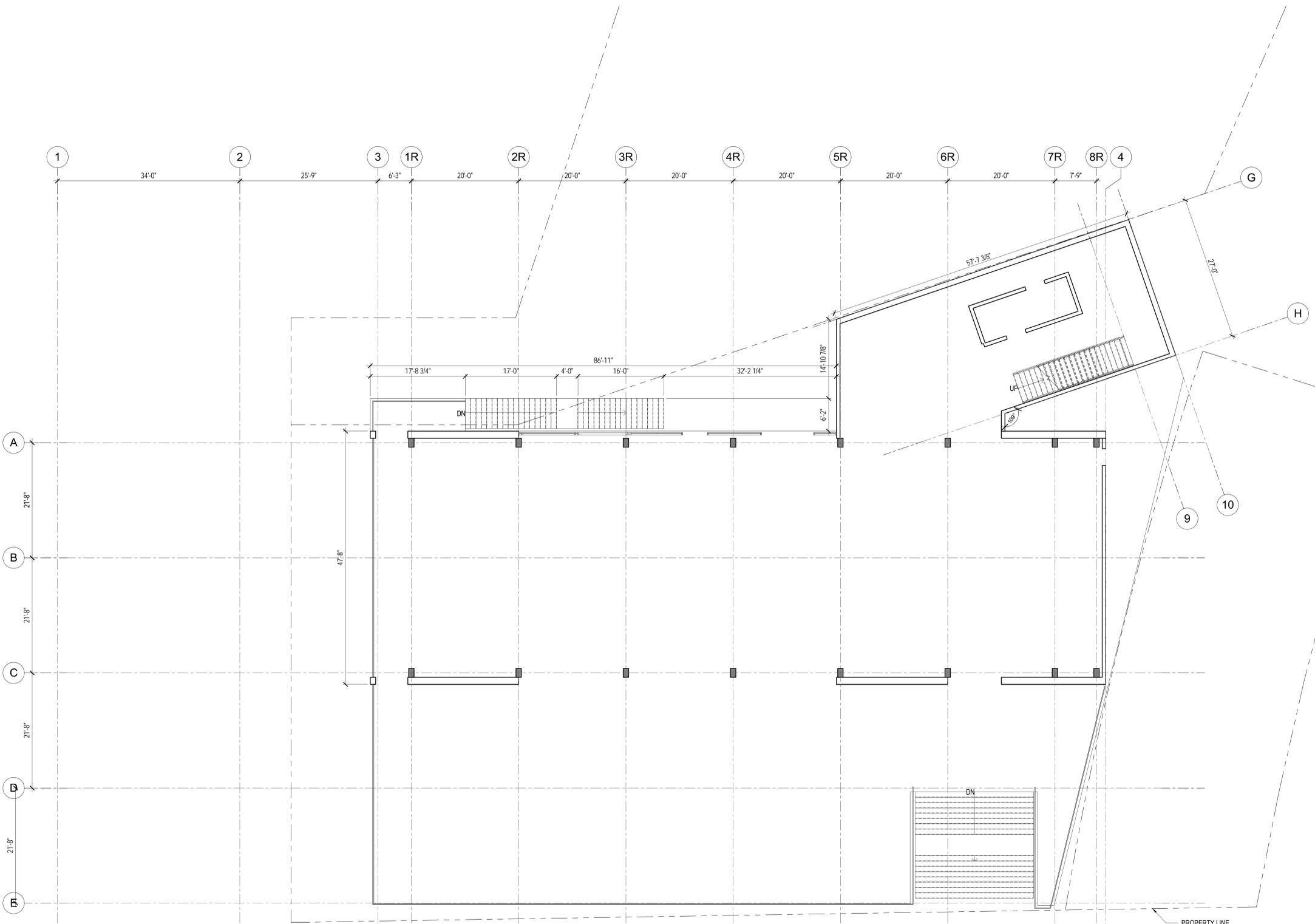
SHEET TITLE  
**GROUND LEVEL  
 SLAB PLAN**

No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/07/27

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236  
 DATE 06/20/2017  
 SCALE 1/8" = 1'-0"

SHEET NO. **A21.03**



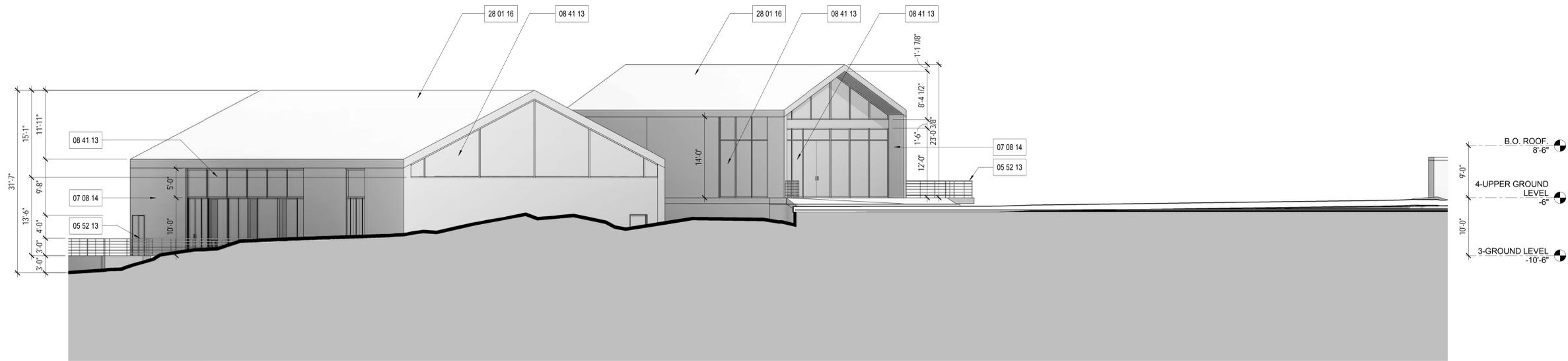
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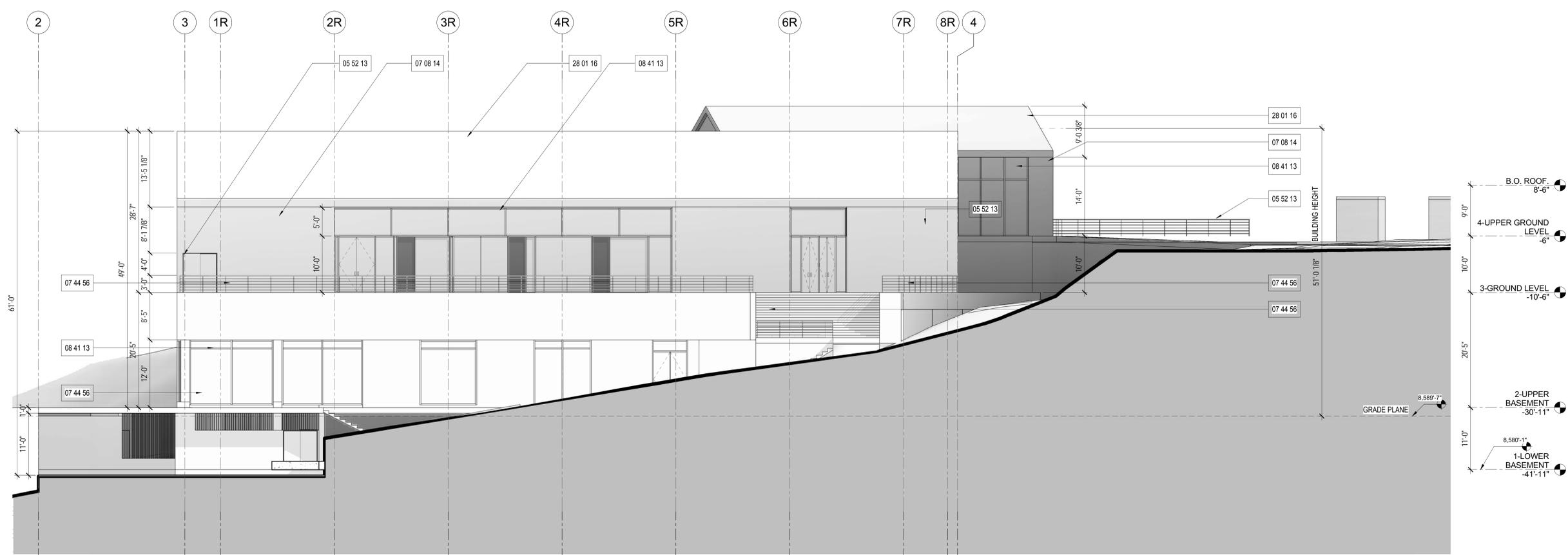


**EXTERIOR FINISHES**

- 03 01 30 CAST-IN-PLACE CONCRETE
- 05 52 13 PIPE AND TUBE RAILINGS
- 06 42 19 PLASTIC LAMINATE-FACED WOOD PANELING
- 07 08 14 STANDING SEAM FAÇADE - SPECIFICATION
- 07 44 56 MINERAL FIBER REINFORCED CEMENTITIOUS PANELS
- 08 32 19 SLIDING ALUMINUM-FRAMED GLASS DOORS
- 08 41 13 ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS
- 28 01 16 STANDING SEAM ROOF - SPECIFICATION



**SOUTH ELEVATION** 1/8" = 1'-0" 1



**WEST ELEVATION** 1/8" = 1'-0" 2



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**POWDER MOUNTAIN - PARCEL 4**  
8569 East Spring Park  
Eden, UT 84310

**EXTERIOR ELEVATIONS - SOUTH & WEST**

No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/06/27

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236  
DATE 06/20/2017  
SCALE 1/8" = 1'-0"

SHEET NO. **A30.02**

6/28/2017 11:48:56 AM

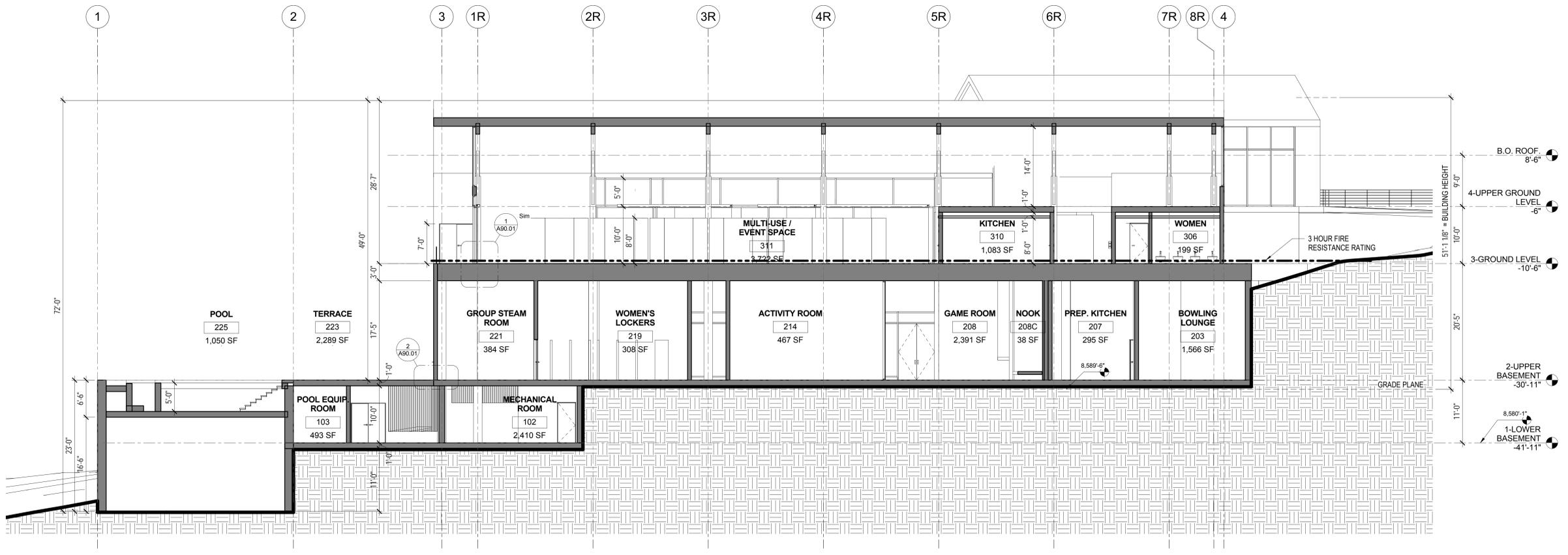
SHEET TITLE  
**BUILDING SECTIONS**

No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/06/27

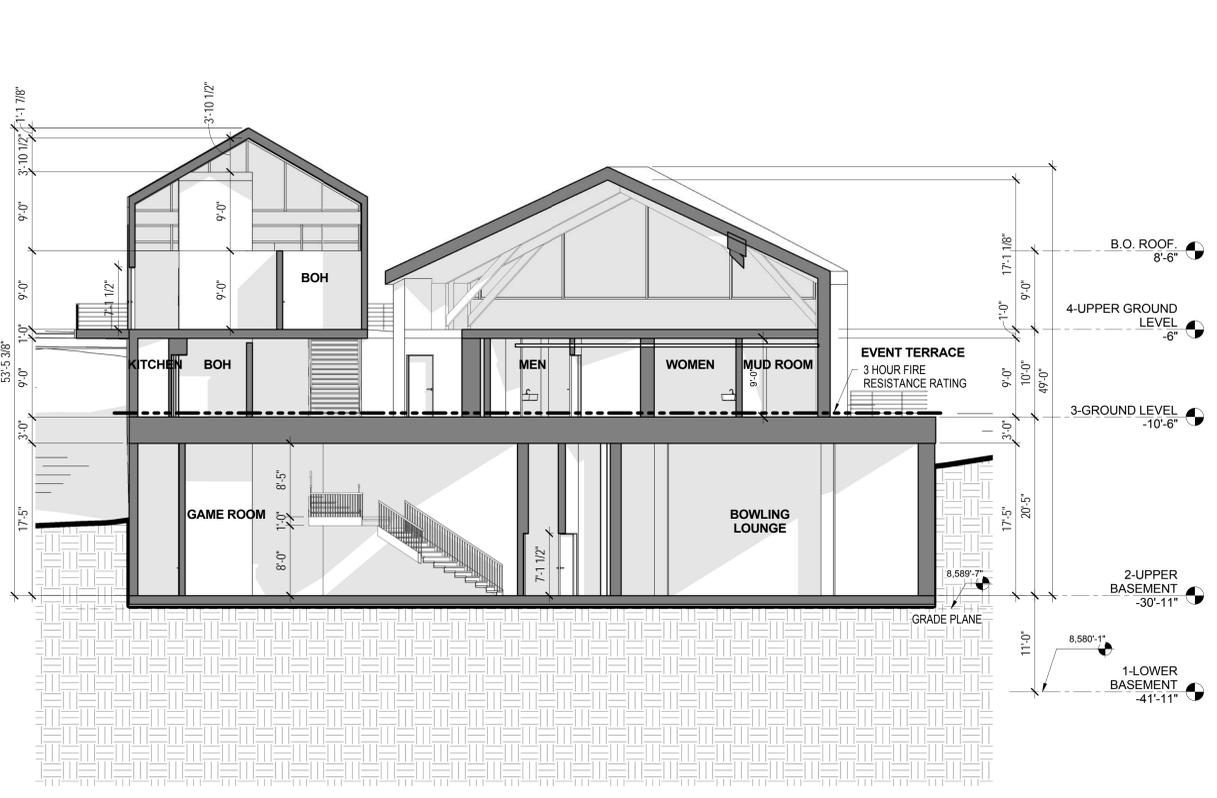
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236  
DATE: 06/20/2017  
SCALE: 1/8" = 1'-0"  
SHEET NO.

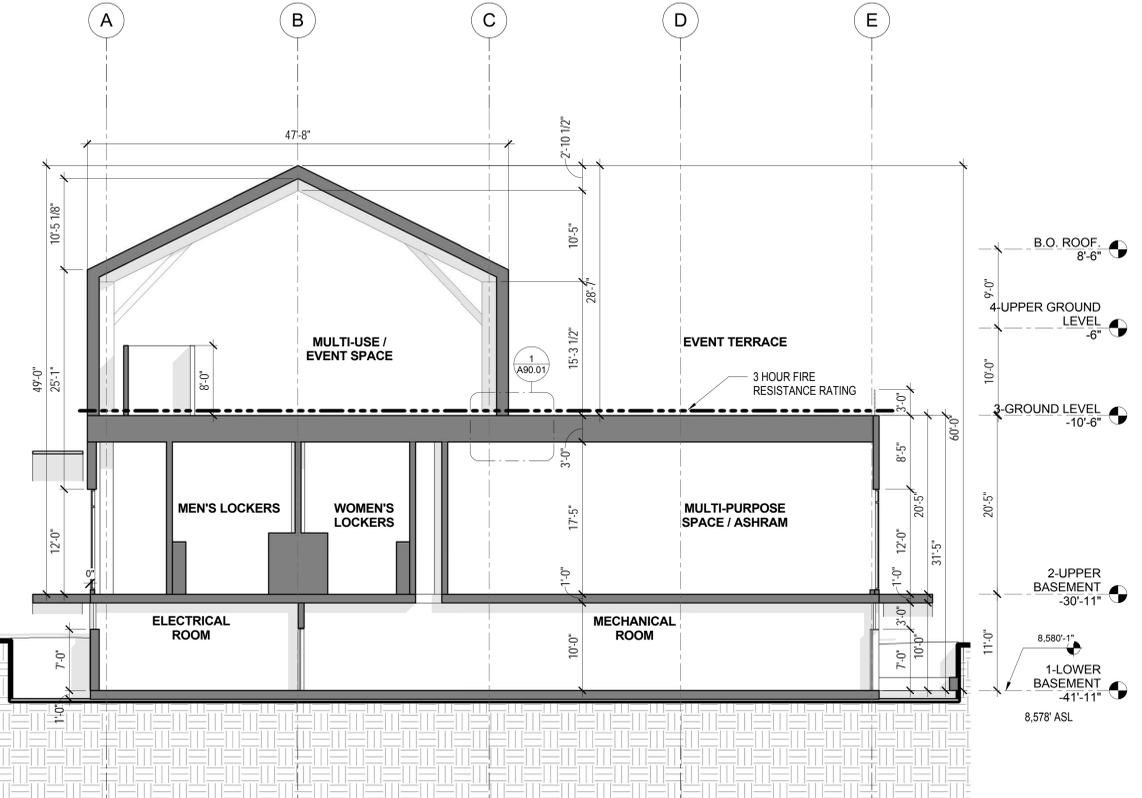
**A40.01**



**BUILDING SECTION 3** 1/8" = 1'-0" **3**



**BUILDING SECTION 2** 1/8" = 1'-0" **2**



**BUILDING SECTION 1** 1/8" = 1'-0" **1**

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 8569 East Spring Park  
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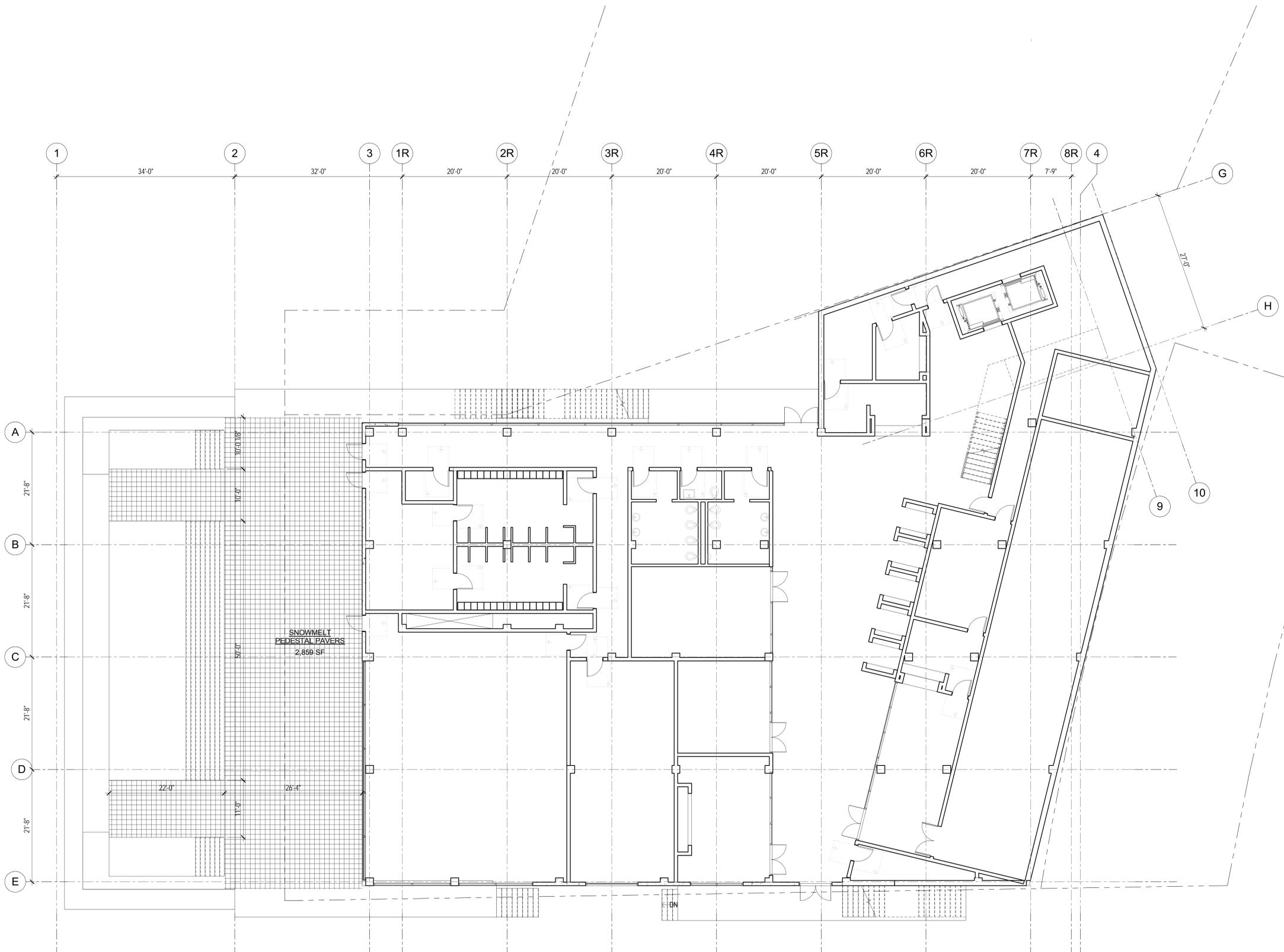
SHEET TITLE  
**UPPER BASEMENT  
 LEVEL PAVING  
 PLAN**

No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/06/27

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236  
 DATE 06/20/2017  
 SCALE 1/8" = 1'-0"

SHEET NO.  
**A51.01**

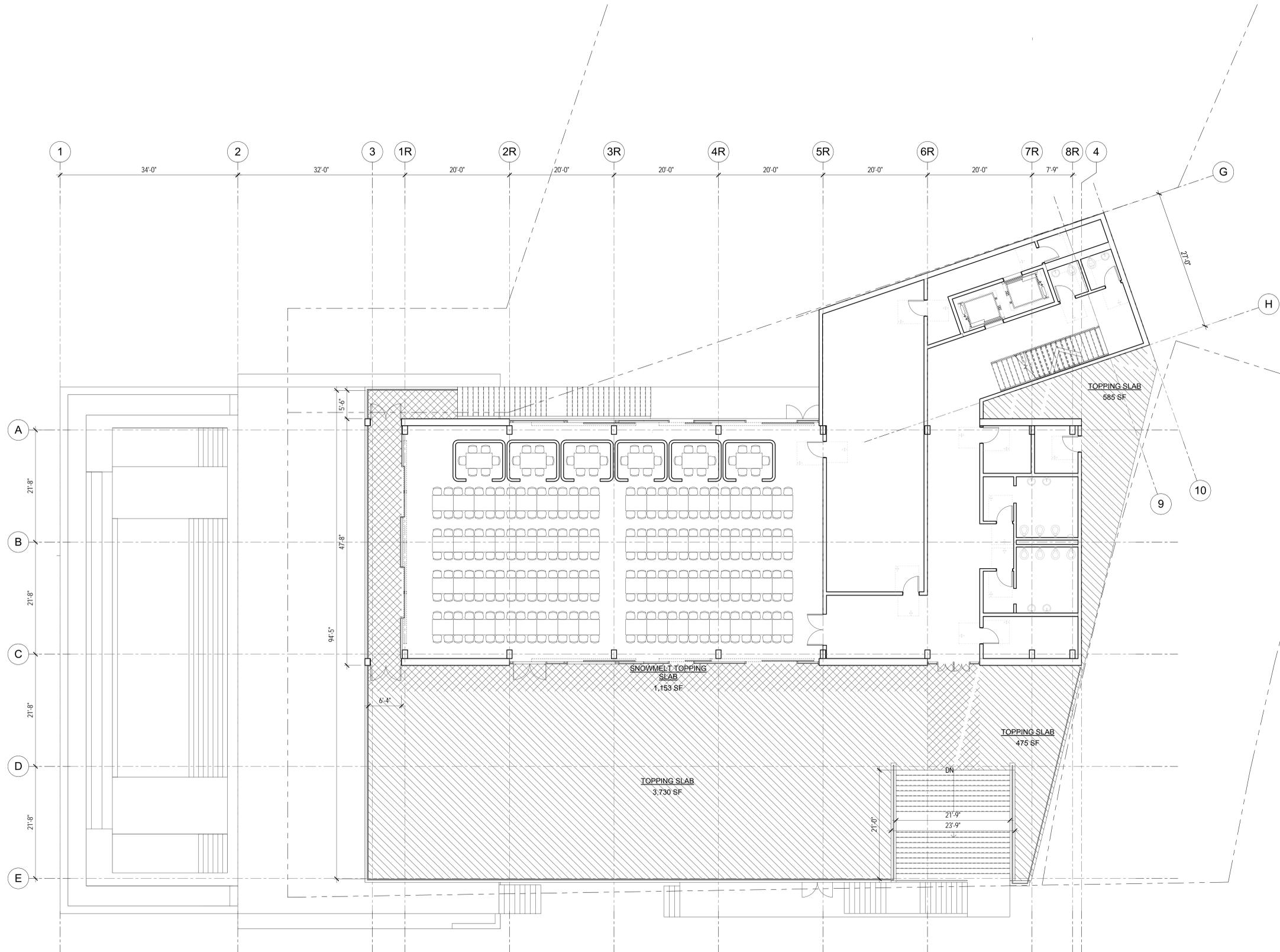


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**SNOWMELT AREA LEGEND**

-  SNOWMELT TOPPING SLAB
-  TOPPING SLAB



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**POWDER MOUNTAIN - PARCEL 4**  
 8569 East Spring Park  
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SHEET TITLE  
**GROUND FLOOR  
 LEVEL PAVING  
 PLAN**

No	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/06/27

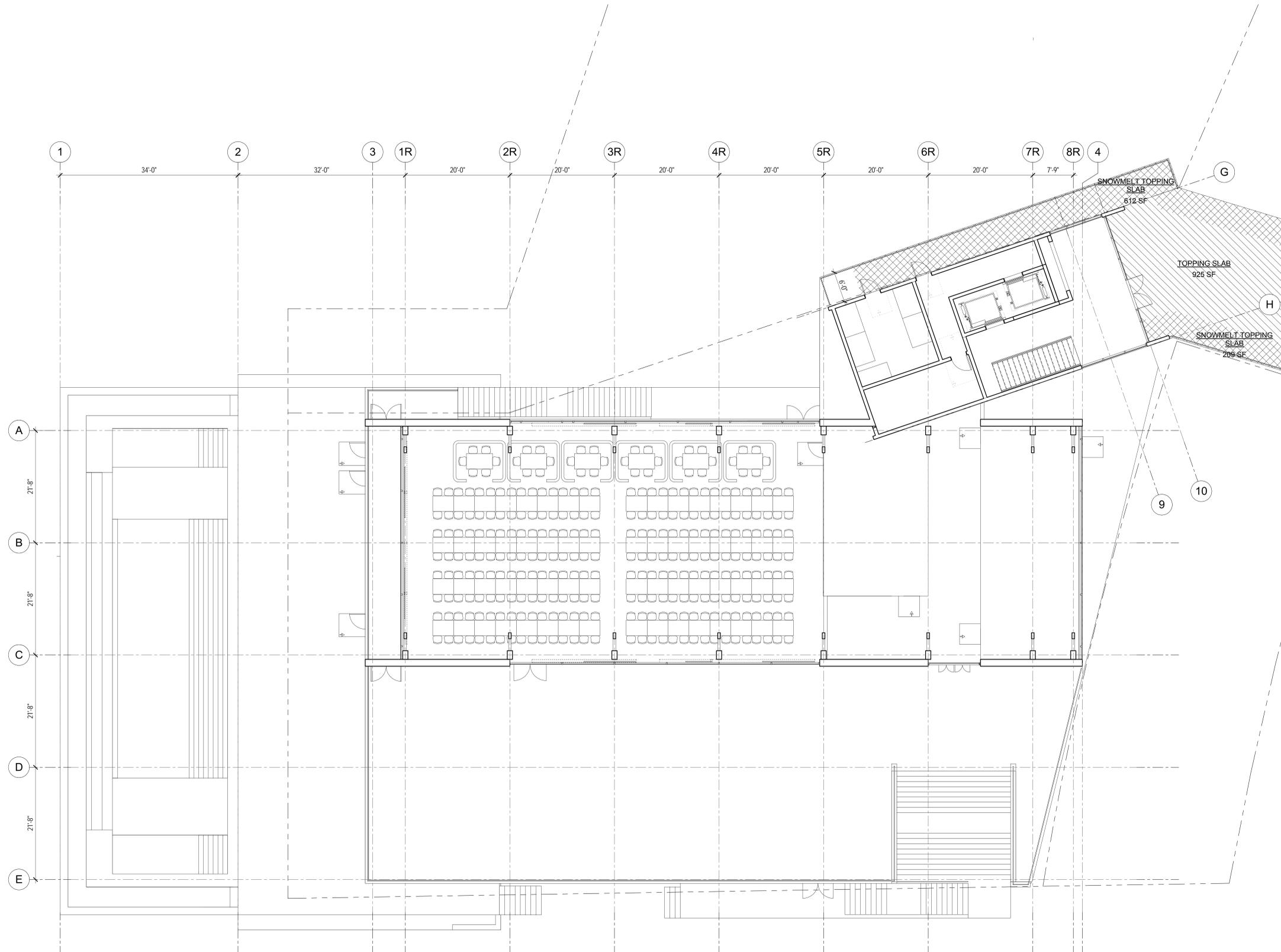
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236  
 DATE 06/20/2017  
 SCALE 1/8" = 1'-0"

SHEET NO. **A51.02**

**SNOWMELT AREA LEGEND**

-  SNOWMELT TOPPING SLAB
-  TOPPING SLAB



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**POWDER MOUNTAIN - PARCEL 4**

8569 East Spring Park  
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SHEET TITLE  
**UPPER GROUND  
FLOOR LEVEL  
PAVING PLAN**

No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/6/27

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236  
DATE 06/20/2017  
SCALE 1/8" = 1'-0"  
SHEET NO.



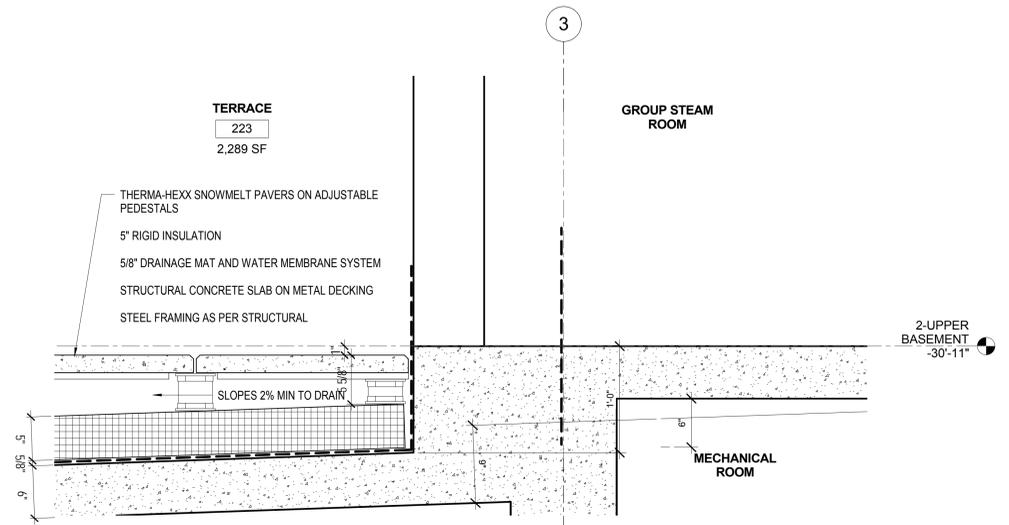
4-UPPER GROUND LEVEL 1/8" = 1'-0" 1

**A51.03**

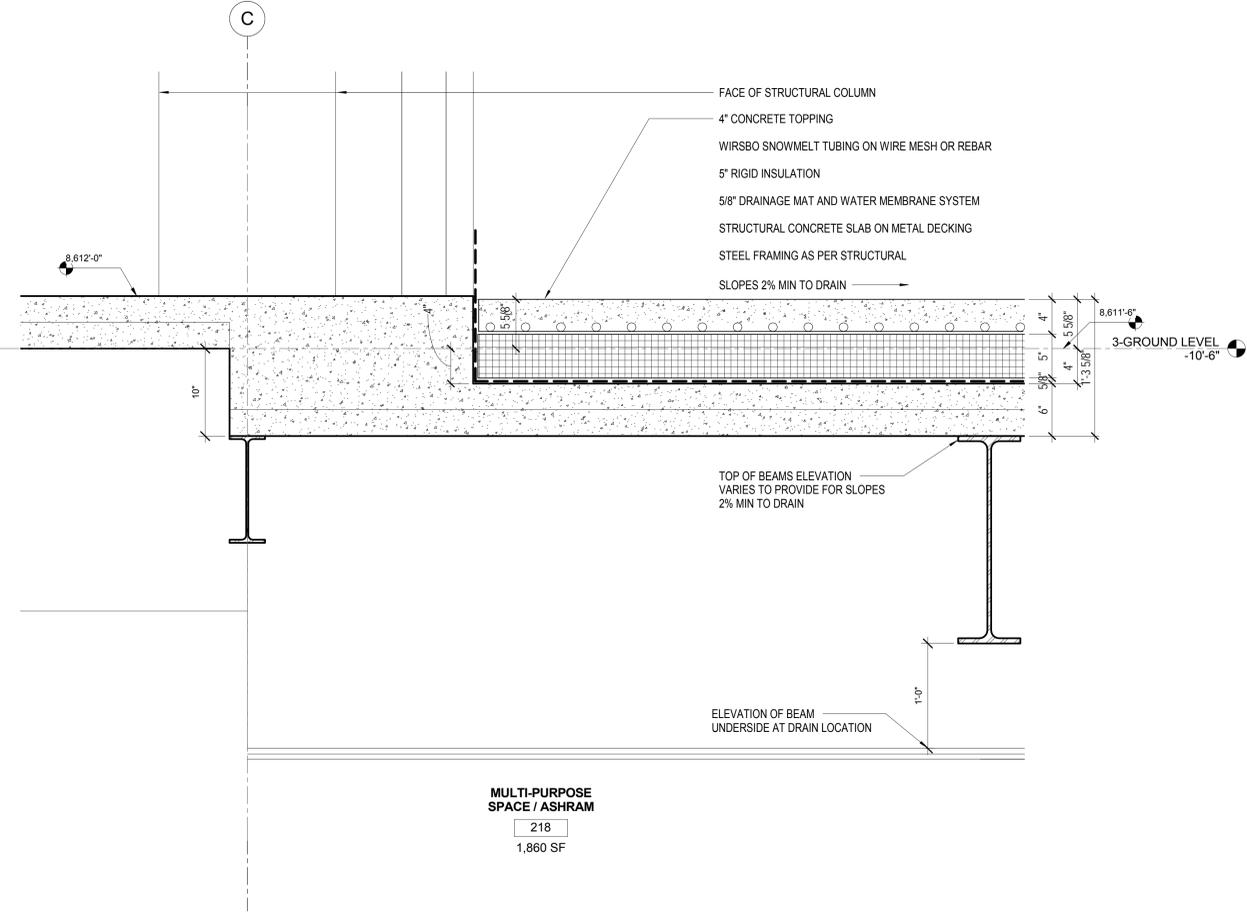
No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/6/27

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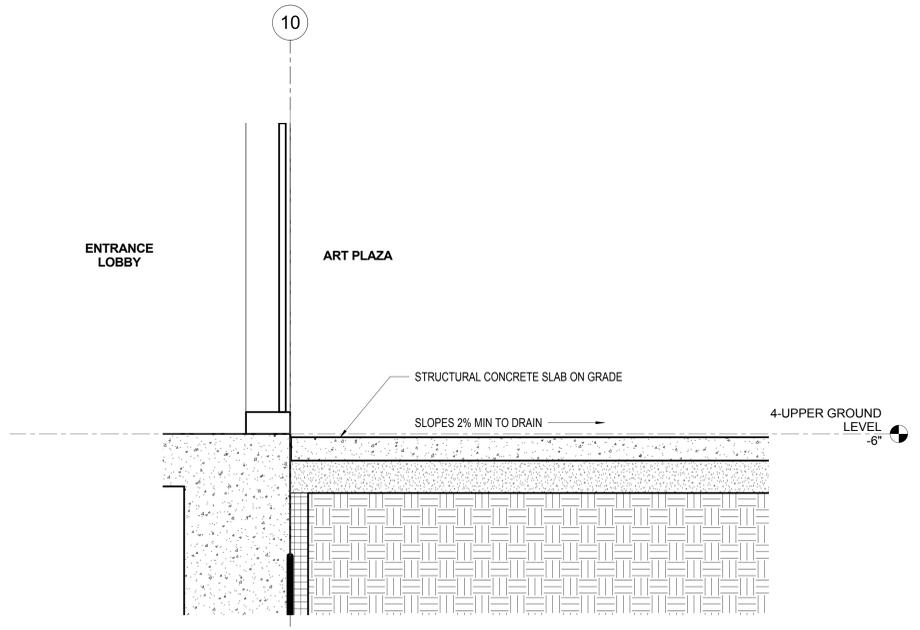
**236**  
 DATE: **06/20/2017**  
 SCALE: **1 1/2" = 1'-0"**  
 SHEET NO.



DETAIL 2 - SLAB BREAK AT POOL DECK @ PAVERS 1 1/2" = 1'-0" 2



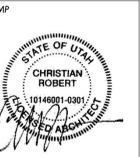
DETAIL 1 - SLAB BREAK AT TERRACE @ CONCRETE TOPPING 1 1/2" = 1'-0" 1



DETAIL 3 - SLAB AT UPPER PLAZA 1 1/2" = 1'-0" 3

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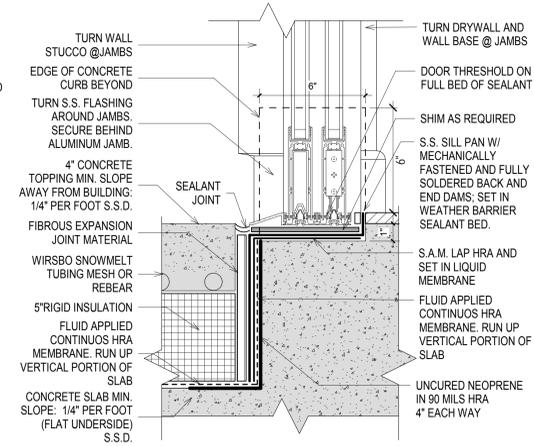
**EXTERIOR  
DETAILS**

No	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/07/27

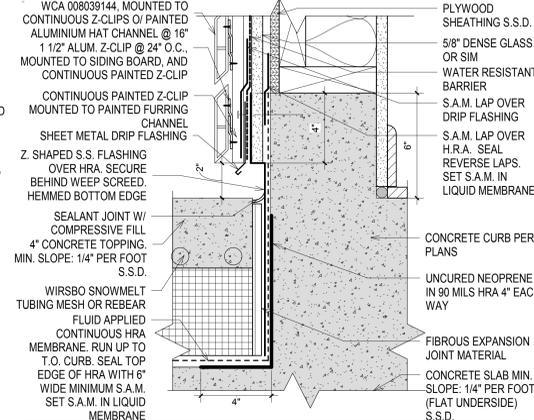
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**236**  
DATE: **06/20/2017**  
SCALE: **As indicated**  
SHEET NO.

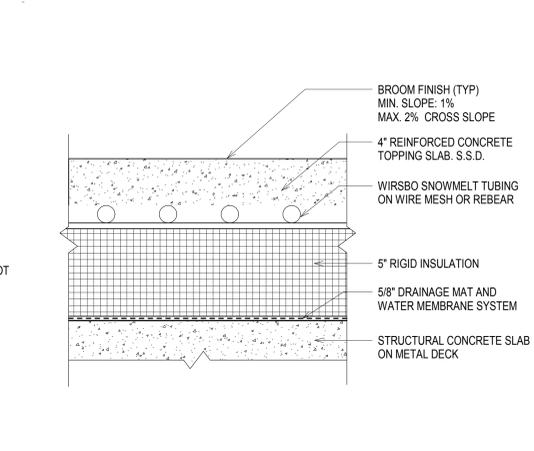
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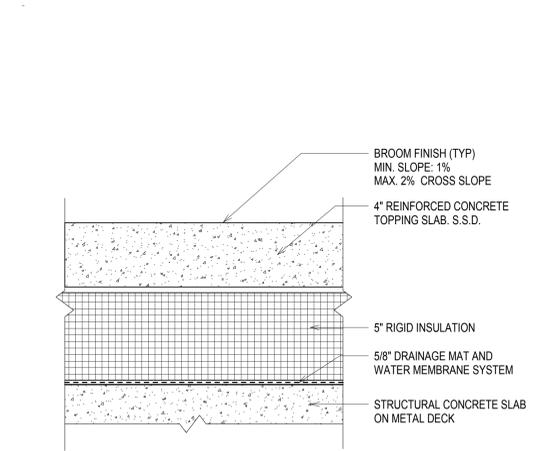
**DECK SLAB TO DOOR** 3" = 1'-0" **1**



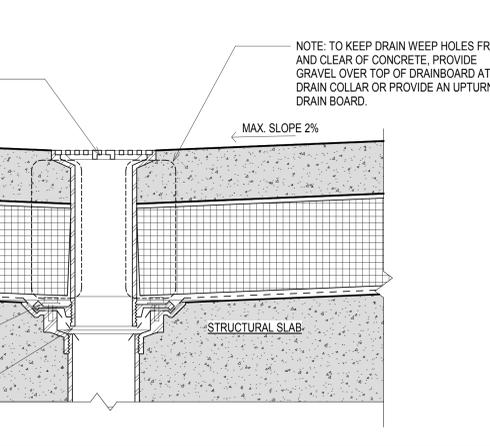
**DECK SLAB TO SCREEN** 3" = 1'-0" **2**



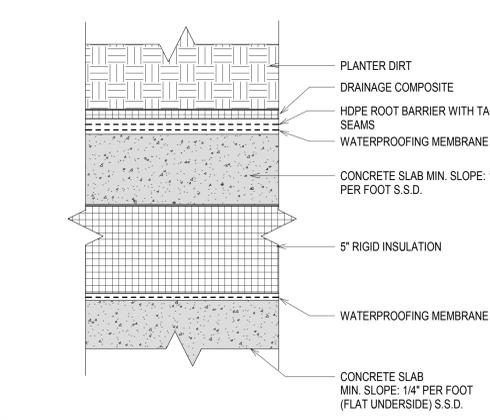
**DECK SLAB W/ SNOWMELT** 3" = 1'-0" **3**



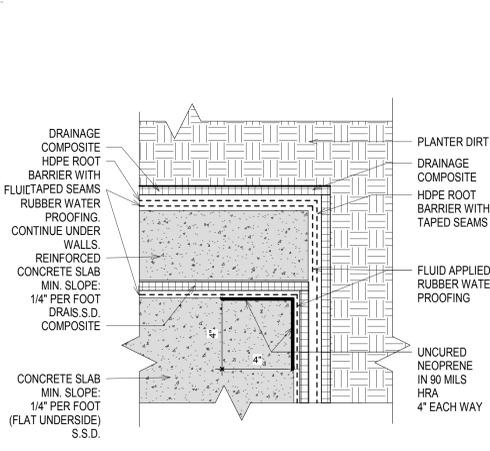
**DECK SLAB W/O SNOWMELT** 3" = 1'-0" **4**



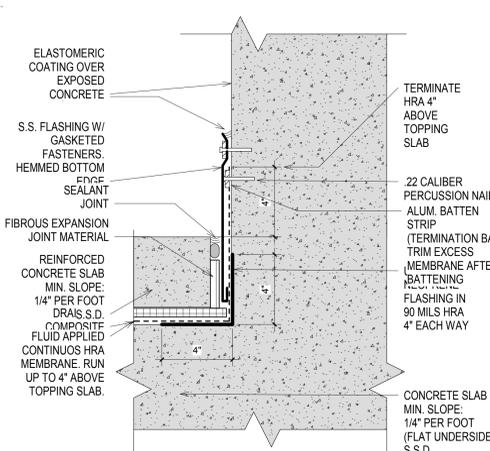
**DECK SLAB @ DRAIN** 3" = 1'-0" **5**



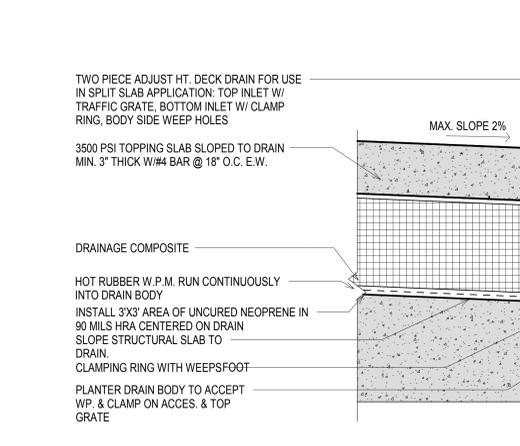
**DECK SLAB @ PLANTER** 3" = 1'-0" **6**



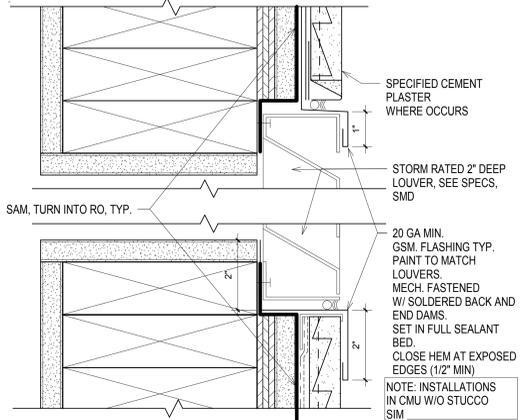
**DECK SLAB @ PLANTER END** 3" = 1'-0" **7**



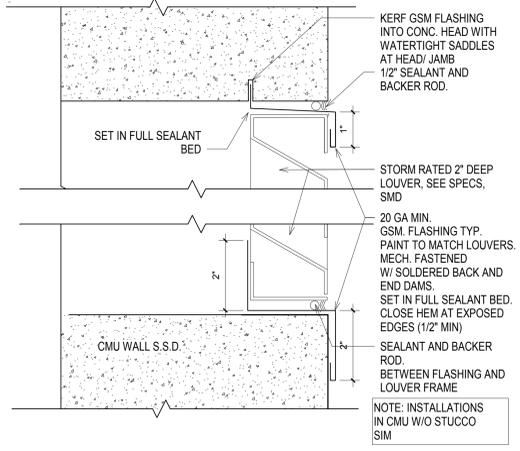
**DECK SLAB TO CONCRETE** 3" = 1'-0" **8**



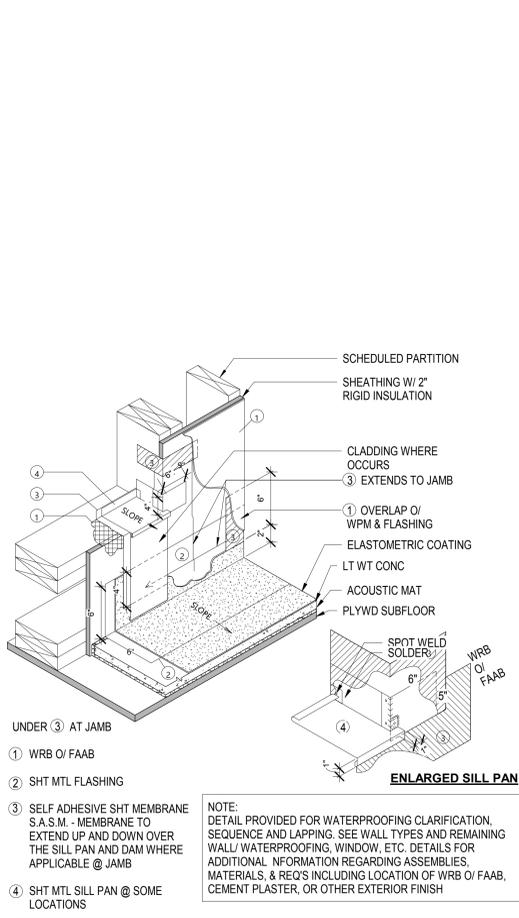
**DECK SLAB @ DRAIN** 3" = 1'-0" **5**



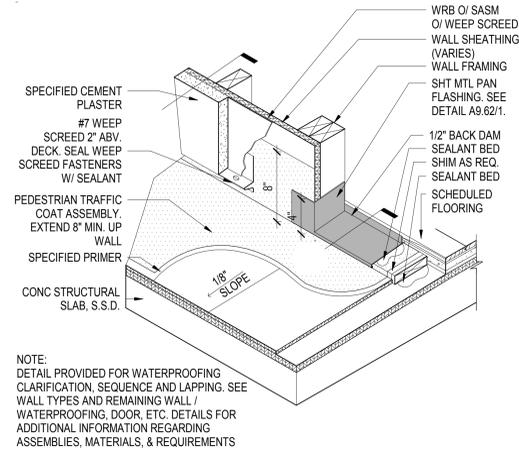
**LOUVER AT FRAMED WALL** 6" = 1'-0" **10**



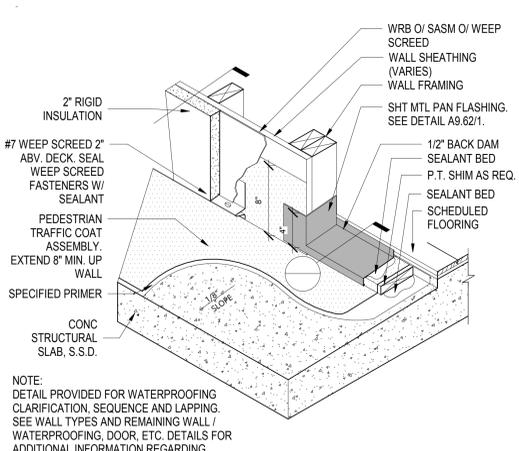
**LOUVER IN CONCRETE WALL** 6" = 1'-0" **11**



**TYP WINDOW SILL FLASHING** 1 1/2" = 1'-0" **14**



**TRSHLD @ CONC BALCONY** 1 1/2" = 1'-0" **15**



**TRSHLD @ CONC BALCONY** 1 1/2" = 1'-0" **16**

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**POWDER MOUNTAIN - PARCEL 4**  
8569 East Spring Park  
Eden, UT 84310

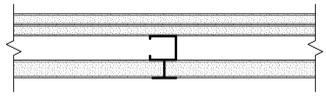
SHEET TITLE  
**WALL TYPES**

No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/6/27

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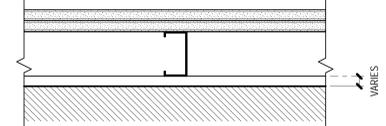
236  
DATE **06/20/2017**  
SCALE **3" = 1'-0"**

SHEET NO.  
**A94.01**



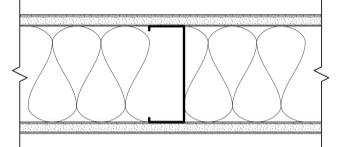
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	THK (IN)	DEPTH	SPACING	TOP	BOT					
EX3										
EX16										

**J TYPE**



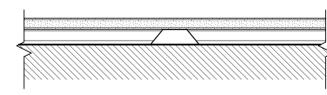
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	THK (IN)	DEPTH	SPACING	TOP	BOT					
EX3										
EX16										

**E TYPE**



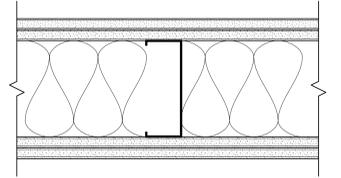
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	THK (IN)	DEPTH	SPACING	TOP	BOT					

**A TYPE**



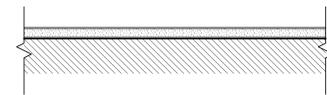
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	THK (IN)	DEPTH	SPACING	TOP	BOT					

**F TYPE**



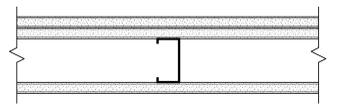
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	THK (IN)	DEPTH	SPACING	TOP	BOT					
B										

**B TYPE**



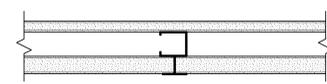
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	THK (IN)	DEPTH	SPACING	TOP	BOT					

**G TYPE**



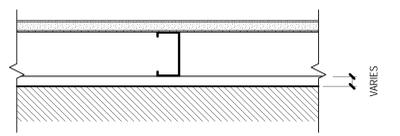
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	THK (IN)	DEPTH	SPACING	TOP	BOT					
C1										
CW										
CW2										
CW12										
CW18										

**C TYPE**



PARTITION TYPE MARK	FRAMING			DETAILS		ATTN THK	FIRE RTG	TESTED ASSEMBLY	STC RTG	SHEET NOTES
	THK (IN)	DEPTH	SPACING	TOP	BOT					

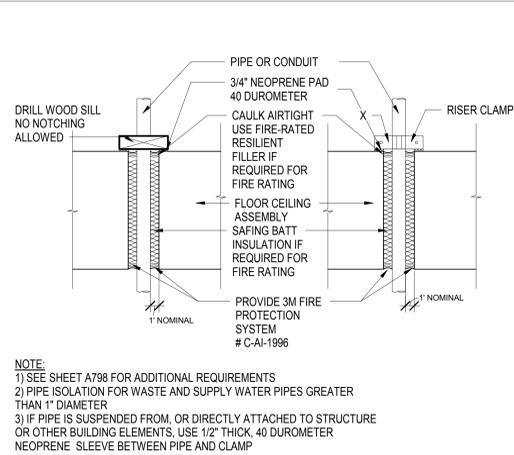
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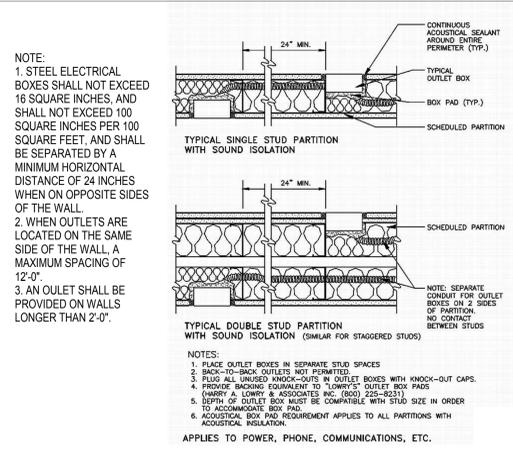
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	THK (IN)	DEPTH	SPACING	TOP	BOT					

**D TYPE**

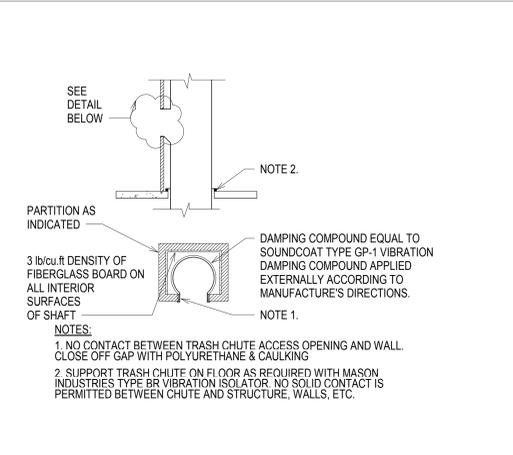




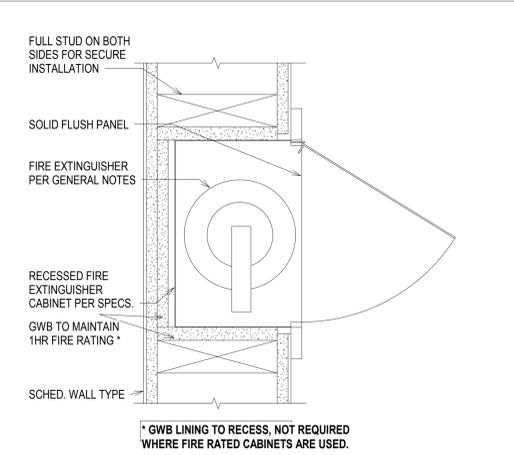
**0-PIPE ISOLATION** 1 1/2" = 1'-0" **17**



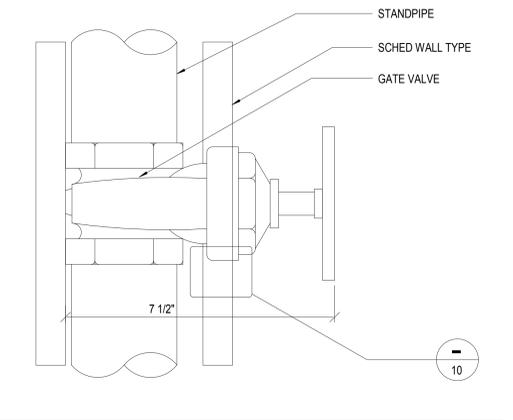
**ACOUSTIC - OUTLET BOXES** 1/8" = 1'-0" **13**



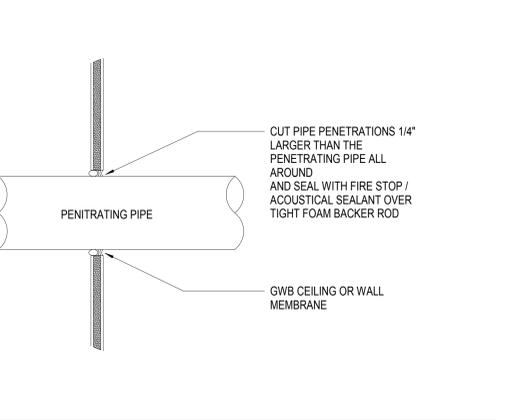
**ACOUSTIC - TRASH CHUTE** 1/8" = 1'-0" **9**



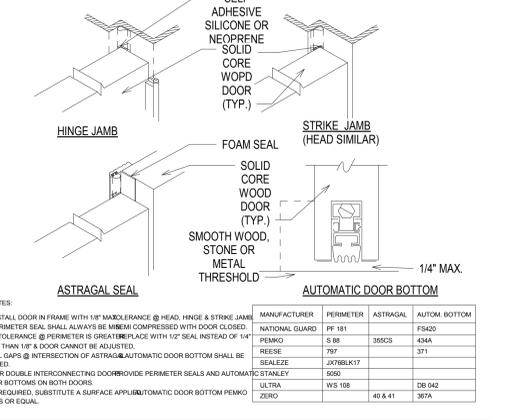
**RECESSED F.E. CABINET** 3/32" = 1'-0" **5**



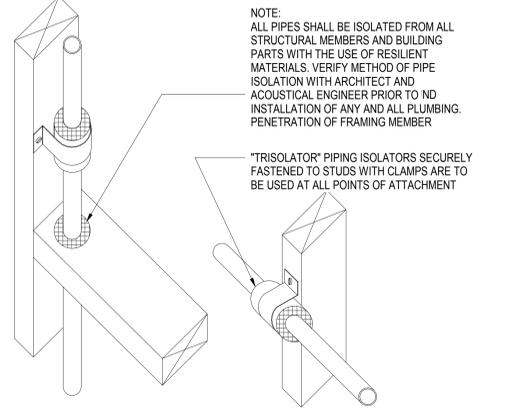
**GATE VALVE FRAMED WALL** 1/8" = 1'-0" **14**



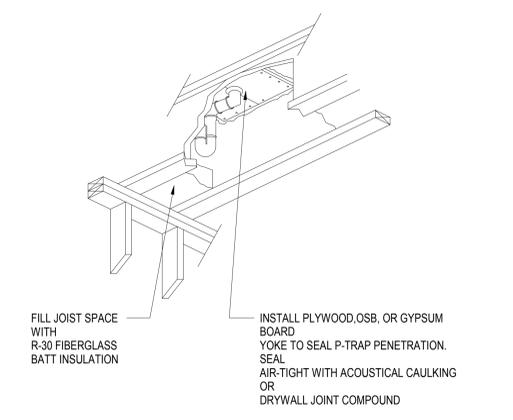
**SEALANT PIPE PENETRATION** 1/8" = 1'-0" **10**



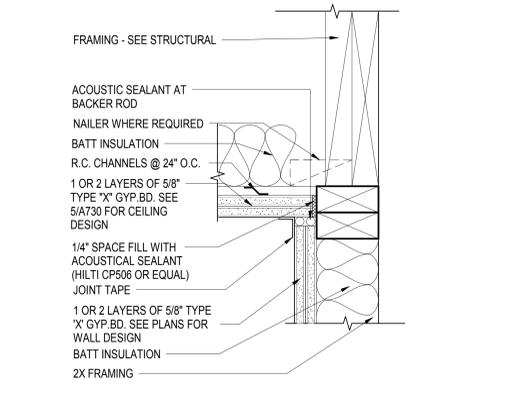
**ACOUSTIC - DOOR SEALS** 1/8" = 1'-0" **6**



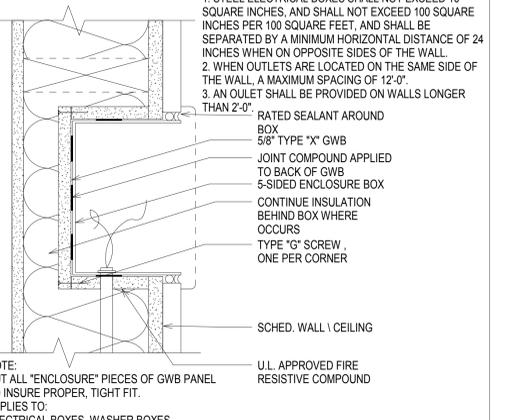
**ACOUSTIC PIPE ISOLATION** 3" = 1'-0" **15**



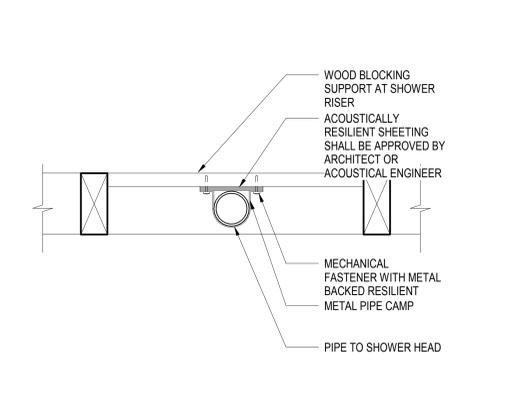
**ISOLATION @ P-TRAPS** 3" = 1'-0" **11**



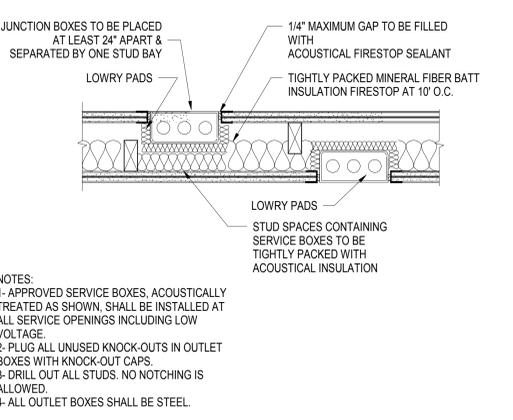
**ACOUSTIC DET. @ CEILING** 3" = 1'-0" **7**



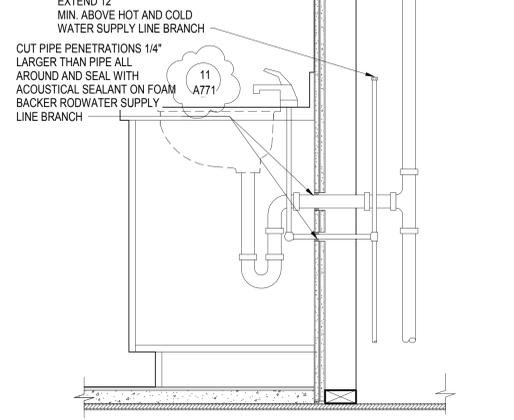
**5-SIDED ENCLOSURE BOX** 1/8" = 1'-0" **3**



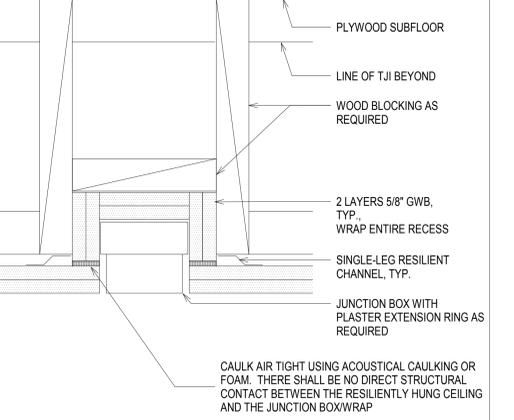
**SHOWER RISER** 3" = 1'-0" **16**



**J-BOX @ DBL. STUD WALL** 1 1/2" = 1'-0" **12**



**VERTICAL PIPE STUB @ SINK** 1 1/2" = 1'-0" **8**



**RECESSED J-BOX CEILING** 3/32" = 1'-0" **4**

No	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/07/27

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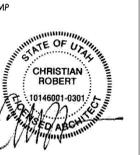
**236**

DATE: **06/20/2017**

SCALE: **As indicated**

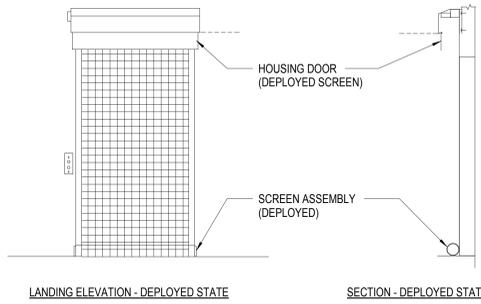
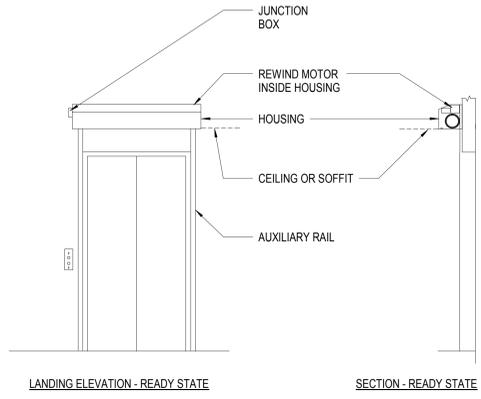
SHEET NO.



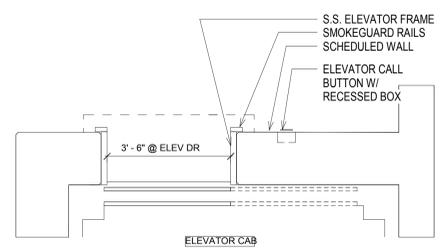


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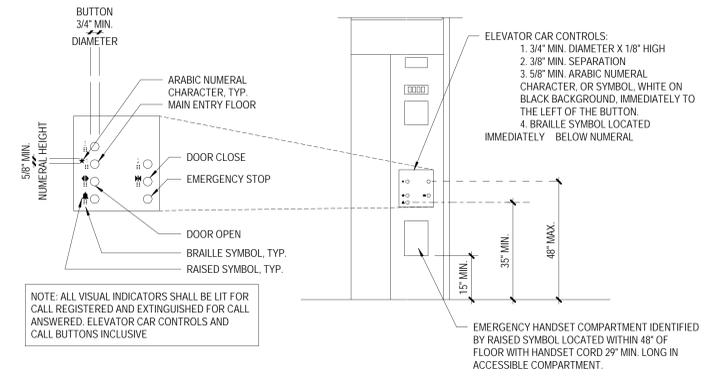
**POWDER MOUNTAIN - PARCEL 4**  
8569 East Spring Park  
Eder, UT 84310



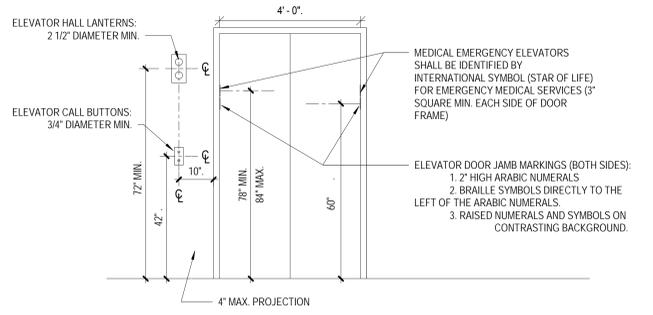
**SMOKEGRD GEN. ELEV. & SECT**      3" = 1'-0"      **5**



**ELEV. JAMB @ PARKING LEVEL**      1/2" = 1'-0"      **4**

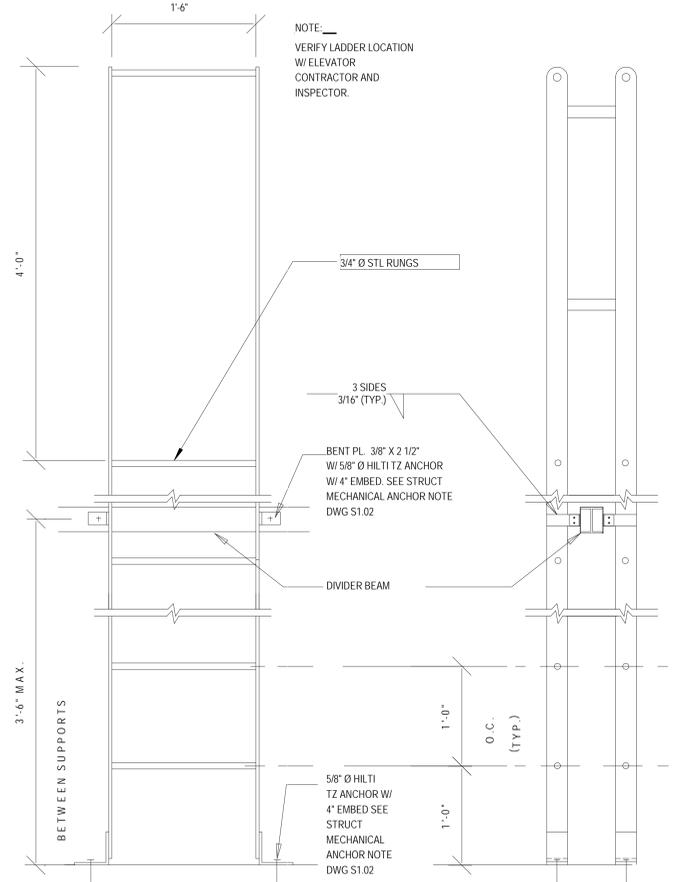


**(A) ENLARGED CONTROL DIAGRAM**      **(B) INTERIOR ELEVATOR CONTROLS**

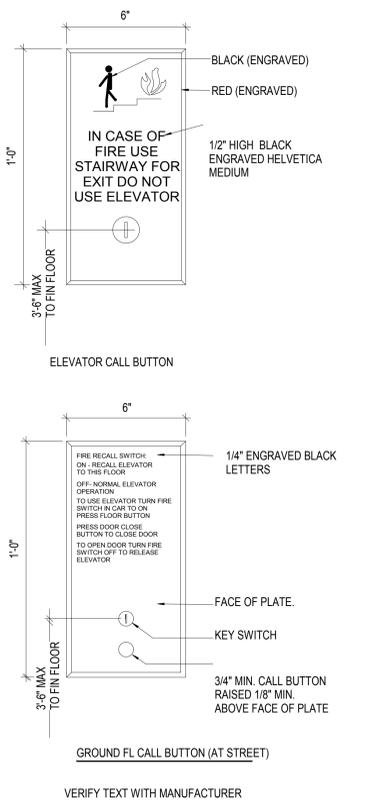


**(C) EXTERIOR ELEVATOR CONTROLS**

**ELEVATOR CONTROLS**      1/4" = 1'-0"      **3**



**PIT LADDER**      1/4" = 1'-0"      **2**



**ELEVATOR CALL BUTTONS**      1/8" = 1'-0"      **1**

SHEET TITLE  
**ELEVATOR  
DETAILS**

No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/6/27

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**236**  
DATE: **06/20/2017**  
SCALE: **As indicated**  
SHEET NO.

**A97.50**

6/28/2017 11:49:55 AM

STAMP



NOT FOR CONSTRUCTION UNTIL  
SIGNED BY THE ARCHITECT

**POWDER MOUNTAIN - PARCEL 4**  
8569 East Spring Park  
Eden, UT 84310

The following items must be performed or provided at no cost to Otis Elevator Company ("Otis") by the Owner or General Contractor or their agents in accordance with governing codes. The price and installation schedule of Otis is based on these job-site conditions existing at the beginning and during the installation of the elevator equipment. Failure to provide the items specified in this list will result in additional work performed by Otis Elevator beyond the scope of our contract causing installation delays. A change order will be submitted by Otis for materials and/or labor expended. All work must be performed per the applicable national and or local codes.

**General Prep/Work**

1. Provide on-site storage area for elevator equipment as follows: dry and enclosed, provides roll-able access to the elevator hoistway at the ground level, located within 100 feet (30480mm) of the hoistway and is larger than 25 x 20 feet (7620mm x 6096mm) per elevator. Any warranties provided by Otis for elevator equipment are null and void if equipment is stored in a manner other than a dry enclosed building structure.
2. Provide sufficient on-site refuse containers for the proper disposal of elevator packaging material. Should sufficient refuse containers not be provided, disposal of packaging material shall become the responsibility of the owner.
3. Provide any cutouts to accommodate elevator equipment (troughing, venting, and hall fixtures), along with the patching/painting of walls, floors, or partitions together with finish painting of entrance doors and frames, if required.

**Hoistway & Pit Prep/Work**

4. Provide and install a steel, I-beam shaped safety beam with a maximum flange width of 8 11/16" (220mm), from side wall to side wall at the top of the hoistway, capable of withstanding a minimum net live load of 7500 lb (3402 kg) per elevator. Reference Otis Layout for location. A 4" minimum clearance is required from top of beam to top of hoistway.

If your jobsite voltage = 600VAC three phase or 240VAC single phase, and your controller is to be located in the hoistway entrance, one of the two option below must be done.

- Option 1: An additional steel I-beam needs to be provided and installed. It is to be located per the Otis layout & sized the same as the safety beam for the purpose of mounting the transformer provide by Otis (See overhead requirements).
- Option 2: No second beam needed. Place a transformer in an electrical room. The transformer must be mounted and wired as per the National Electrical Code (ANSI/NFPA 70). See Otis layout and fact sheets for details.

5. Provide a clear plumb hoistway with variations from the size shown on the Otis layout not to exceed -0/+1" (25mm) and not less than the clear dimensions shown on the Otis layout

6. Provide adequate rail bracket supports, bracket spacing as required by governing code, from pit floor to top of hoistway comply with the rail reaction forces detailed on the Otis Contract Layout. Provide adequate support for the top rail brackets at locations above the top landing as specified on the Otis Layout. Provide separator beams where required. Unless approved by Otis, rail-bracket attachment supports must be exposed and flush with the clear hoistway line. If the floor-to-floor height exceeds the maximum bracket spacing allowed by the elevator code, Otis requires some form of steel support to properly attach our guide rail brackets. The maximum allowed bracket spacing is indicated in the rail force and bracket detail table on the Otis layout. Any rail bracket mounting surfaces that are not in line with the finished hoistway dimension (i.e. the clear hoistway line) may need to be extended to meet the required distance. Otis agrees to provide guidance on this matter at the appropriate time.

If rail bracket embedded plates or inserts are provided by Otis they shall be installed by others in accordance with Otis documentation and instructions.

If vertical tube steel is utilized as rail support on car rail side, opposite cwt., (2) vertical tubes spaced at 20.4" (519mm) on center are required for car rail brackets with "A" dimension >= 5.76" (146mm).

7. Provide adequate support at all fastening points of each entrance. Provide plumb vertical surfaces for entrances and sill supports, one above the other, and square with the hoistway. Finish floor and grout, if required, between entrances and building sill line. For MRL installations, a horizontal support member is to be provided 20" (508mm) above the clear opening at the controller landing to support the entrance and controller components. If any other floor height exceeds 12'-0" (3657mm), a horizontal support member is to be provided 12" (305mm) above the clear opening.

8. Prior to the start of installation, provide a dry, properly framed, enclosed and vented hoistway in accordance with all applicable codes.

- A.) Protection from Falls:  
As required by the Occupational Safety and Health Administration (OSHA) 1926.502 B) (1-3) a freestanding removable barricade at each hoistway opening at each floor. Barricades shall be 42" (1067mm) high, with mid-rail and kick board, and withstand 200 lbs. (90.7kg) of vertical and horizontal pressure.
- B.) Protection from Falling Objects:  
As required by the Occupational Safety and Health Administration (OSHA) 1926.502(j) hoistway protection from falling debris and other trades materials by either:
  - 1.) Full entrance screening/mesh in front of all elevator entrances
  - 2.) Secured/controlled access to all elevator lobbies (lock and key) with posted Notice "only elevator personnel beyond this protection."

Items A.) and B.) can be integrated systems. Hoistway barricades and screening shall be constructed, maintained and removed by others.

10. Provide a pit floor designed to sustain vertical forces (based on safety impact) on car and counterweight rails and impact loads on car and counterweight buffers as shown on the Otis layout. The pit must be dry and clean. The elevator pit must have a floor drain or sump pump to prevent the accumulation of water. Location to be coordinated with Otis to avoid all elevator components and access areas. In areas requiring fire fighters emergency operation (FEO) a sump pump/drain shall be provided that shall have the capacity to remove a minimum of 11.4 m3/h (3,000 gal/h) per elevator (2.2.2.5, ASME A17.1-2007/CSA B44-07). Otis recommends that the owner verify the drain or sump pump system is in compliance with all applicable codes and laws.

11. The front entrance wall at the main landing and top landing, is not to be constructed until after all elevator equipment is installed in the hoistway (the entire front wall - CLEAR HOISTWAY WIDTH - must be open for installation). Remaining front entrance walls are not to be constructed until after door frames and sills are in place. The rough openings, per sizes shown on the Otis layout, are required. Prior to the completion and turnover of the elevator(s), all entrance walls must be installed and rough openings filled in complete to maintain fire rated hoistway requirements.

12. Provide and install a fixed vertical iron ladder in each pit as required by governing code and located per Otis layout or as coordinated with Otis personnel. Ladder width and pit wall pocket requirements are shown in the pit plan view on the Otis layout.

13. Install permanent light fixture in each elevator pit with illumination of not less than 100 lx (10 fc) as measured at the pit floor. The light bulb(s) shall be externally guarded to prevent contact and accidental breakage. The light switch shall be so located as to be accessible from the pit ladder.

14. Glass used in hoistway construction must block 98% or more of incident full-spectrum ultraviolet radiation for the full height of the hoistway.

15. Provide and install guarding of counterweight in a multiple-elevator hoistway as required, when a counterweight is located between elevators, the counterweight runway shall be guarded on the side next to the adjacent elevator. The guarding must meet or exceed the requirements of ASME A17.1-2007, section 2.3.2.3.

If an emergency door in a blind hoistway is required, provide an outward swinging single section type door with door closer and a self closing barrier per ASME A17.1-2007, section 2.11.1.2. Contact your local Otis personnel for a detailed drawing (AAA26900D\_FMI) showing Otis specific requirements.

**MRL Machine Space Prep/Work**

16. Maintain the temperature at the top of the hoistway (machine space) between 32° F (0° C) and 104° F (40° C). This space also includes the car controller which is mounted at the top landing. Relative humidity shall not exceed 95% non-condensing. Provide ventilation to suit Otis heat release amounts as shown in Otis Confirmation of Power Supply form. Local codes may require tighter temperature ranges and higher ventilation levels. Please check with your local code authority for the exact requirements in your area. If your machinery space temperature exceeds this requirement, contact your local Otis sales representative for assistance.
17. Install a permanent light fixture at the top of the hoistway (machine space) of not less than 200-lux (19 fc) as measured at the level of the standing surface on the car when the elevator is at the top landing. Light switch is to be located in the hoistway per the Otis layout.
18. Install a permanent light fixture at the top landing entrance (control space), in the hall, of not less than 200-lux (19 fc) as measured at the floor level. Light switch is to be located close to the elevator entrance.

**Control Room/Space and Machine Space Prep/Work**

19. Provide a suitable control room/space(s) with access and ventilation in accordance with all applicable codes and regulations. The control room/space(s) shall be maintained at a temperature between 32F (0C) and 104F (40C) to be measured 6 feet (1830 mm) above the floor and 1 foot (305 mm) out from the front center of the car controller(s). Relative humidity is not to exceed 95% non-condensing. Provide ventilation to suit Otis heat release amounts as shown on the Otis Confirmation of Power Supply form. Local codes may require tighter temperature ranges and higher ventilation levels, please check with your local code authority for the exact requirements in your area. If your control room/space(s) temperatures exceed these requirements, contact your local Otis sales representative for assistance.

20. Provide illumination of control room/space(s) of not less than 200 LUX (19 FC) as measured at floor level. Light switch is to be located within 18" (157 mm) to the lock-jamb side of the access door to the control room/space(s).

21. Provide control room/space(s) with self-closing and self-locking doors with a group 2 locking device. In addition, ensure that all air gaps around the doors are sealed (i.e. threshold, weather stripping, etc.).

22. Maintain the temperature at the top of the hoistway (machine space) between 32° F (0° C) and 104° F (45° C). Relative humidity shall not to exceed 95% non-condensing. Provide ventilation to suit Otis heat release amounts as shown in Otis Confirmation of Power Supply form. If your machinery space temperature exceeds this requirement, contact your local Otis sales representative for assistance.

23. Install a permanent light fixture at the top of the hoistway (machine space) of not less than 200-lux (19 fc) as measured at the level of the standing surface on the car when the elevator is at the top landing. Light switch is to be located in the hoistway per the Otis layout.

**Fire Prevention Prep/Work**

24. Provide hoistway walls designed and constructed in accordance with the required fire rating (including those places where elevator fixture boxes, rail bracket fastenings, and any other penetration into the hoistway walls).

25. In the United States provide smoke detectors, located as required, with wiring from the sensing devices to the controller(s) designated by Otis.
  - A. For each group of elevators, provide a normally closed contact representing the smoke detector at the designated return landing.
  - B. For each group of elevators, provide a normally closed contact representing all smoke detectors located in lobbies, hoistways, or control rooms/spaces but not the smoke detector at the designated return landing (see above) or the smoke detectors as described below:
    - 1) If a smoke detector is located in the hoistway at or below the lower of the two recall landings, it shall be wired to activate the same normally closed contact as the smoke detector located in the lobby at the lower of the two recall landings.
    - 2) If the control room/space(s) are located at the designated return landing, the smoke detectors located therein shall be wired to activate the same normally closed contact as the smoke detector at the designated landing.
  - C. Requirements for intermittently illuminating the fire hat visual signal in the car operating panel, either 1) or 2) must be selected.
    - 1) For a single unit, or group of elevators having control room/space(s) and one common hoistway, provide one additional normally closed contact representing the control room/space(s) and hoistway smoke detectors.
    - 2) If the group contains more than one hoistway, and hoistway smoke detectors are installed, provide one normally closed contact for each elevator. The contact is to represent the smoke detectors in the control room/space(s) or hoistway containing that particular elevator.

26. In Canada provide smoke detectors, located as required, with wiring from the sensing devices to the controller(s) designated by Otis.
  - A. For each group of elevators, provide a normally closed contact representing the smoke detector at the designated return landing and if provided, from the sensing device in the pit.
  - B. For each group of elevators, provide a normally closed contact representing all smoke detectors located in elevator lobbies, but not the smoke detector at the designated return landing (see above), and if provided, from the sensing device in the top of the hoistway.
  - C. For each group of elevators, provide a normally closed contact representing the smoke detector in the elevator machine space.
  - D. If the control space is located at the designated return landing, the smoke detectors located therein shall be wired to activate the same normally closed contact as the smoke detector at the designated landing. For each group of elevators, provide in addition to the above, a normally closed contact representing the sensing devices in the pit or at the top of the hoistway (For the Fire Hat in the Elevator).

27. In the United States, if sprinklers are installed in the hoistway(s), or machine space(s), a means to automatically disconnect the main line power supply of the affected elevator and any other power supply used to move the elevator upon or prior to the application of water is required (unless prohibited by local code). Smoke detectors shall not be used to activate sprinklers in hoistway(s), or machinery spaces or to disconnect the mainline power supply.

In addition, when the Automatic Recovery Operation (ARO) is specified, the means provided to automatically disconnect power to the elevator shall be equipped with an additional auxiliary contact that is positively opened when power is removed from the elevator system. This automatically controlled mainline disconnect must be provided with all associated wiring and conduit to the controller.

28. Provide an "ABC" fire extinguisher, minimum 10 lbs for machine space, and located convenient to the top landing elevator entrance.

29. Provide control room/space(s) and door to code compliant fire-resistive construction.

**Electrical Requirements**

30. 3 Phase Power MRL - Provide a permanent three (3) phase electrical-feeder system with a separate equipment-grounding conductor terminating in the elevator controller located at the top landing or transformer located at the top of the hoistway. Permanent three (3) phase electrical-feeder to be terminated at the elevator controller or transformer at the start of installation of the top landing elevator entrance and the timing of connection to Otis controller shall be coordinated with the elevator installer.

shall be coordinated with the elevator installer. Feeder conductors and grounding conductor sized according to elevator current characteristics as shown on the Otis Confirmation of Power Supply form. Feeder conductors and grounding conductor must be copper. Provide a fused disconnect switch or circuit breaker capable of being locked in the open position, for each elevator per the National Electrical Code (ANSI/NFPA 70) or Canadian Electrical Code (C22.1) with feeder or branch wiring to elevator controller [NEC 620-51, 620-61(D), and 620-62] or [CEC Rule 38-013 (2) (a)] located at the point of power distribution in the building. The disconnecting means required by the National Electrical Code or Canadian Electrical Code CEC [Rule 38-051] shall be provided with all associated wiring and conduit to the elevator controller. Size of main contacts to suit elevator power characteristics. Fuses, if provided, are to be current limiting class J or equivalent. Circuit breakers, if provided, are to have current limiting characteristics equivalent to class J fuses. Fuses or circuit breakers are to be time delay to cover the full load up accelerating current. Accelerating current typically is the peak as indicated on the Otis Confirmation of Power Supply Form, and lasts for duration not to exceed 7 seconds. Feeder conductors and associated wiring to the controller to be sized to limit wiring voltage drop to 5% maximum when delivering elevator full load up accelerating current. The building power system used to operate the elevator(s) shall be capable of supplying non linear loads and be capable of absorbing the regenerated power listed on the Otis Confirmation of Power Supply form.

Single Phase Power MRL - Provide a permanent single phase electrical-feeder system with a separate equipment-grounding conductor terminating at the transformer located at the top of the hoistway. Permanent single phase electrical-feeder to be terminated at the transformer at the start of installation of the top landing elevator entrance and the timing of connection to Otis controller shall be coordinated with the elevator installer. Feeder conductors and grounding conductor sized according to elevator current characteristics shown on the Otis Confirmation of Power Supply form. Feeder conductors and grounding conductor must be copper. Provide a fused disconnect switch or circuit breaker capable of being locked in the open position, for each elevator per the National Electrical Code (ANSI/NFPA 70) or Canadian Electrical Code (C22.1) with feeder or branch wiring to elevator controller [NEC 620-51, 620-61(D), and 620-62] or [CEC Rule 38-013 (2) (a)] located at the point of power distribution in the building. The disconnecting means required by the National Electrical Code or Canadian Electrical Code CEC [Rule 38-051] shall be provided with all associated wiring and conduit to the elevator controller. Size of main contacts to suit elevator power characteristics. Fuses, if provided, are to be current limiting class J or equivalent. Circuit breakers, if provided, are to have current limiting characteristics equivalent to class J fuses. Fuses or circuit breakers are to be time delay to cover the full load up accelerating current. Accelerating current typically is the peak as indicated on the Otis Confirmation of Power Supply Form, and lasts for duration not to exceed 7 seconds. Feeder conductors and associated wiring to the controller to be sized to limit wiring voltage drop to 5% maximum when delivering elevator full load up accelerating current. The building power system used to operate the elevator(s) shall be capable of supplying non linear loads and be capable of absorbing the regenerated power listed on the Otis Confirmation of Power Supply form.

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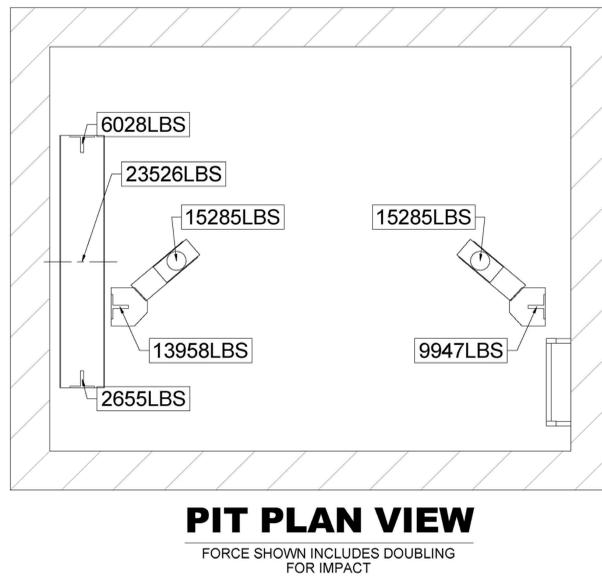
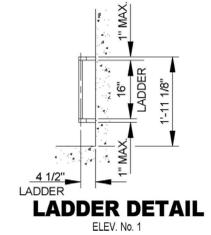
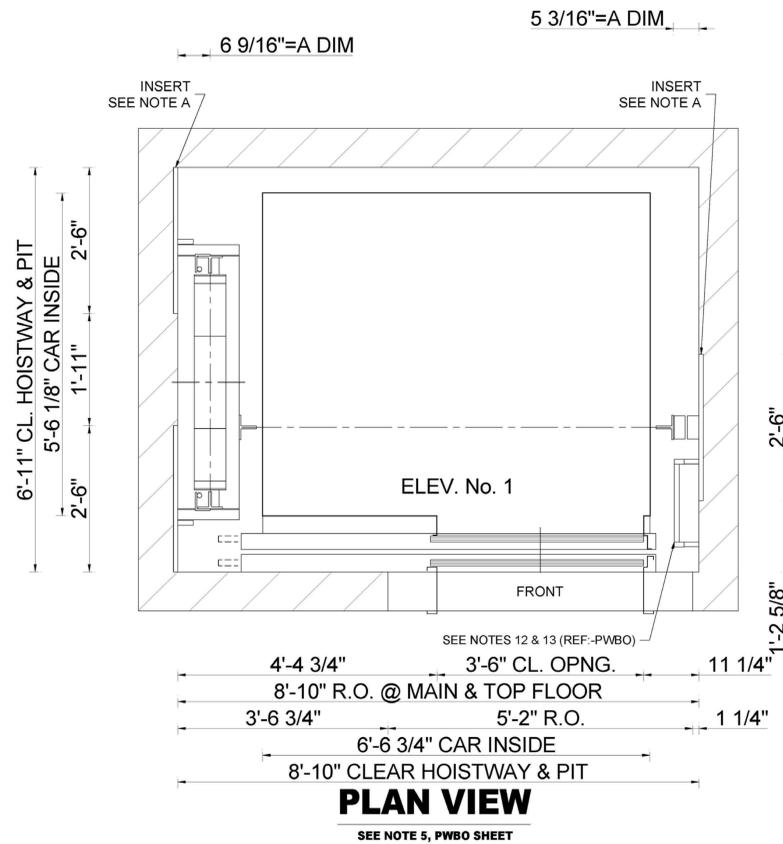
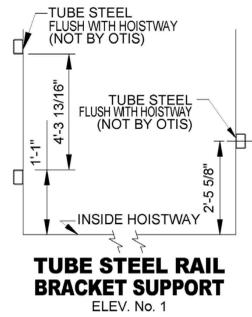
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STAMP



NOT FOR CONSTRUCTION UNTIL  
SIGNED BY THE ARCHITECT

**POWDER MOUNTAIN - PARCEL 4**  
8569 East Spring Park  
Eden, UT 84310



NOTE A  
THESE DIMENSIONS ARE BASED ON HOISTWAY SIZES SHOWN & 30" INSERTS. IF EITHER OF THESE VARY, CONSULT THE SALES REPRESENTATIVE.

APPROVAL  
THIS ARRANGEMENT AND SUPPLEMENTARY NOTES APPROVED  
SIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_

THIS WORK AND THE INFORMATION IT CONTAINS ARE THE PROPERTY OF OTIS ELEVATOR COMPANY ("OTIS"). IT IS DELIVERED TO OTHERS ON THE EXPRESS CONDITION THAT IT WILL BE USED ONLY FOR OR ON BEHALF OF OTIS. THAT NEITHER IT NOR THE INFORMATION IT CONTAINS WILL BE REPRODUCED OR DISCLOSED, IN WHOLE OR IN PART, WITHOUT THE WRITTEN CONSENT OF OTIS, AND THAT ON DEMAND IT AND ANY COPIES WILL BE PROMPTLY RETURNED TO OTIS.

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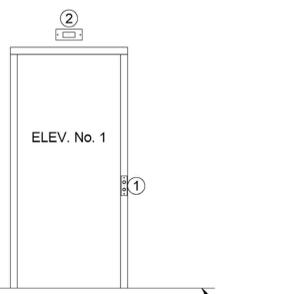
**Gen2<sup>®</sup>**  
**3500# @ 200 F.P.M.**  
**SEISMIC 3+**



DWG. NO.: **G2S 3500-PN**  
BUILDING **POWDER MOUNTAIN NORTH ELEVATOR**  
LOCATION  
CONT. WITH  
OWNER  
ARCHT.  
CONTRACT NO.



**HALL FIXTURE DETAIL**  
① HALL BUTTONS @ ALL FLOORS  
② HALL POSITION INDICATOR @ FLOOR(S) 1



NOTE - DO NOT SCALE THIS DRAWING REFER TO DWG'S. NO. G2S 3500-PWBO, G2S 3500-EL

EXPRESS DRAW: WEB-19

SHEET TITLE  
**ELEVATOR CUTSHEET**

No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/6/27

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DATE: **06/20/2017**  
SCALE

SHEET NO.  
**A97.52**

STAMP



NOT FOR CONSTRUCTION UNTIL  
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**POWDER MOUNTAIN - PARCEL 4**  
8569 East Spring Park  
Eden, UT 84310

SHEET TITLE  
**ELEVATOR  
CUTSHEET**

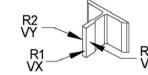
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DATE: **06/20/2017**  
SCALE:  
SHEET NO.

**A97.53**

**RAIL FORCE & BRACKET SPACING DETAIL**



SEE NOTES 6 & 7

Category	Code	Value
CAR	R1	434 lbs
	R2	75 lbs
	VX	1891 lbs
	VY	946 lbs
	MAXIMUM BRACKET SPACING	12' 0"
RAIL SIZE		1-1/2"
CWT	R1	266 lbs
	R2	19 lbs
	VX	1994 lbs
	VY	997 lbs
	MAXIMUM BRACKET SPACING	12' 0"
RAIL SIZE		1-1/2"
DEH (DEAD END HITCH)	R1	660 lbs
	R2	1590 lbs

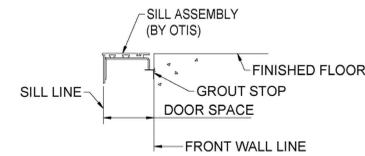
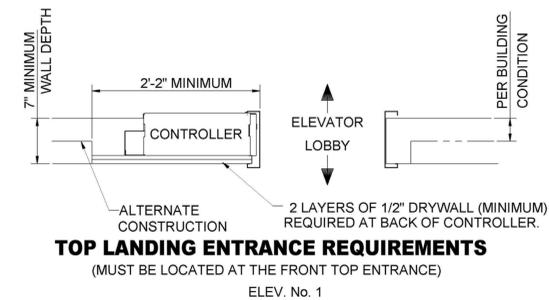
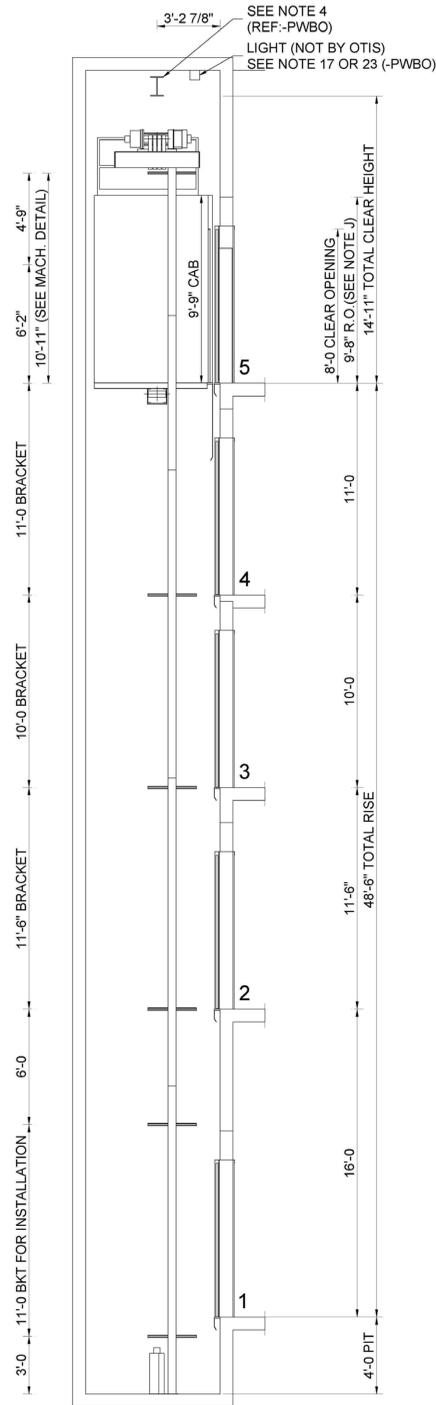
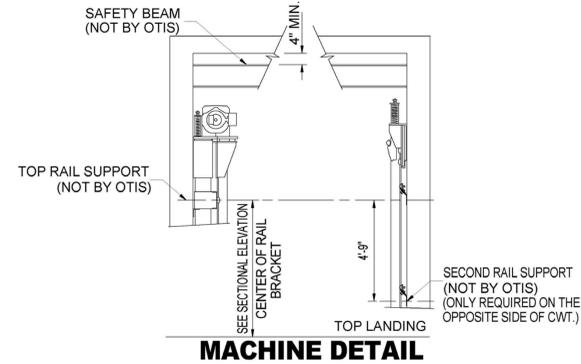
IN MULTICAR GROUPS THE VALUES ABOVE ARE THE LARGEST VALUES FOR THE ENTIRE GROUP

FIRST INTERMEDIATE RAIL SUPPORT LOCATION TO BE LOCATED 14' 0" FROM PIT FLOOR. ALL OTHER INTERMEDIATE SUPPORTS CANNOT EXCEED THE MAXIMUM BRACKET SPACING IN THE RAIL FORCE & BRACKET SPACING DETAIL

CAR R1 = SAFETY APPLICATION  
CWT R1 = LOADING OR RUNNING  
R2 = LOADING OR RUNNING

REQUIREMENTS FOR RAIL BRACKET SUPPORT (NOT BY OTIS):  
DEFLECTION NOT TO EXCEED 1/8"  
BASED ON HORIZONTAL RAIL FORCES.

NOTE J  
ROUGH OPENING AT ALL FLOORS, EXCEPT TOP LANDING, EQUALS 8'-10"  
TOP LANDING EQUALS 9'-8".



ADEQUATE SUPPORT AT ALL FASTENING POINTS OF ENTRANCE ASSEMBLY REQUIRED. MUST WITHSTAND A HORIZONTAL PULL-OUT FORCE OF 140 LBS. @ EA. FASTENING POINT (8 @ EA. ENTRANCE) INCLUDING SUPPORT FOR CENTER SILL SUPPORT BRACKET (NOT BY OTIS).

NOTE - DO NOT SCALE THIS DRAWING

REFER TO DWG'S. NO. G2S 3500-PWBO, G2S 3500-PN

EXPRESS DRAW: WEB:19

STAMP



NOT FOR CONSTRUCTION UNTIL  
SIGNED BY THE ARCHITECT

**POWDER MOUNTAIN - PARCEL 4**  
8569 East Spring Park  
Eden, UT 84310

SHEET TITLE

**ELEVATOR  
OUTSHEET**

No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/6/27

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236

DATE **06/20/2017**

SCALE

SHEET NO.

**A97.54**

The following items must be performed or provided at no cost to Otis Elevator Company ("Otis") by the Owner or General Contractor or their agents in accordance with governing codes. The price and installation schedule of Otis is based on these job-site conditions existing at the beginning and during the installation of the elevator equipment. Failure to provide the items specified in this list will result in additional work performed by Otis Elevator beyond the scope of our contract causing installation delays. A change order will be submitted by Otis for materials and/or labor expended. All work must be performed per the applicable national and or local codes.

**General Prep/Work**

1. Provide on-site storage area for elevator equipment as follows: dry and enclosed, provides roll-able access to the elevator hoistway at the ground level, located within 100 feet (30480mm) of the hoistway and is larger than 25 x 20 feet (7620mm x 6096mm) per elevator. Any warranties provided by Otis for elevator equipment are null and void if equipment is stored in a manner other than a dry enclosed building structure.
2. Provide sufficient on-site refuse containers for the proper disposal of elevator packaging material. Should sufficient refuse containers not be provided, disposal of packaging material shall become the responsibility of the owner.
3. Provide any cutouts to accommodate elevator equipment (troughing, venting, and hall fixtures), along with the patching/painting of walls, floors, or partitions together with finish painting of entrance doors and frames, if required.

**Hoistway & Pit Prep/Work**

4. Provide and install a steel, I-beam shaped safety beam with a maximum flange width of 8 11/16" (220mm), from side wall to side wall at the top of the hoistway, capable of withstanding a minimum net live load of 7500 lb (3402 kg) per elevator. Reference Otis Layout for location. A 4" minimum clearance is required from top of beam to top of hoistway.

If your jobsite voltage = 600VAC three phase or 240VAC single phase, and your controller is to be located in the hoistway entrance, one of the two option below must be done.

Option 1: An additional steel I-beam needs to be provided and installed. It is to be located per the Otis layout & sized the same as the safety beam for the purpose of mounting the transformer provide by Otis (See overhead requirements).

Option 2: No second beam needed. Place a transformer in an electrical room. The transformer must be mounted and wired as per the National Electrical Code (ANSI/NFPA 70). See Otis layout and fact sheets for details.

5. Provide a clear plumb hoistway with variations from the size shown on the Otis layout not to exceed -0"/+1" (25mm) and not less than the clear dimensions shown on the Otis layout.

6. Provide adequate rail bracket supports, bracket spacing as required by governing code, from pit floor to top of hoistway comply with the rail reaction on the Otis Contract Layout. Provide adequate support for the top rail brackets at locations above the top landing as specified on the Otis Layout. Provide separator beams where required. Unless approved by Otis, rail-bracket attachment supports must be exposed and flush with the clear hoistway line. If the floor-to-floor height exceeds the maximum bracket spacing allowed by the elevator code, Otis requires some form of steel support to properly attach our guide rail brackets. The maximum allowed bracket spacing is indicated in the rail force and bracket detail table on the Otis layout. Any rail bracket mounting surfaces that are not in line with the finished hoistway dimension (i.e. the clear hoistway line) may need to be extended to meet the required distance. Otis agrees to provide guidance on this matter at the appropriate time.

If rail bracket embedded plates or inserts are provided by Otis they shall be installed by others in accordance with Otis documentation and instructions.

If vertical tube steel is utilized as rail support on car rail side, opposite cwt., (2) vertical tubes spaced at 20.4" (518mm) on center are required for car rail brackets with "A" dimension >= 5.76" (146mm).

7. Provide adequate support at all fastening points of each entrance. Provide plumb vertical surfaces for entrances and sill supports, one above the other, and square with the hoistway. Finish floor and grout, if required, between entrances and building sill line. For MRL installations, a horizontal support member is to be provided 20" (508mm) above the clear opening at the controller landing to support the entrance and controller components. If any other floor height exceeds 12'-0" (3657mm), a horizontal support member is to be provided 12" (305mm) above the clear opening.

8. Prior to the start of installation, provide a dry, properly framed, enclosed and vented hoistway in accordance with all applicable codes.

**9.A.) Protection from Falls:**

As required by the Occupational Safety and Health Administration (OSHA) 1926.502 B) (1-3) a freestanding removable barricade at each hoistway opening at each floor. Barricades shall be 42" (1067mm) high, with mid-rail and kick board, and withstand 200 lbs. (90.7kg) of vertical and horizontal pressure.

**B.) Protection from Falling Objects:**

As required by the Occupational Safety and Health Administration (OSHA) 1926.502(j) hoistway protection from falling debris and other trades materials by either:

- 1.) Full entrance screening/mesh in front of all elevator entrances
- 2.) Secured/controlled access to all elevator lobbies (lock and key) with posted Notice "only elevator personnel beyond this protection."

**Notes:**

Items A.) and B.) can be integrated systems.

Hoistway barricades and screening shall be constructed, maintained and removed by others.

10. Provide a pit floor designed to sustain vertical forces (based on safety impact) on car and counterweight rails and impact loads on car and counterweight buffers as shown on the Otis layout. The pit must be dry and clean. The elevator pit must have a floor drain or sump pump to prevent the accumulation of water. Location to be coordinated with Otis to avoid all elevator components and access areas. In areas requiring fire fighters emergency operation (FEO) a sump pump/drain shall be provided that shall have the capacity to remove a minimum of 11.4 m3/h (3,000 gal/h) per elevator (2.2.2.5, ASME A17.1-2007/CSA B44-07). Otis recommends that the owner verify the drain or sump pump system is in compliance with all applicable codes and laws.

11. The front entrance wall at the main landing and top landing, is not to be constructed until after all elevator equipment is installed in the hoistway (the entire front wall - CLEAR HOISTWAY WIDTH - must be open for installation). Remaining front entrance walls are not to be constructed until after door frames and sills are in place. The rough openings, per sizes shown on the Otis layout, are required. Prior to the completion and turnover of the elevator(s), all entrance walls must be installed and rough openings filled in complete to maintain fire rated hoistway requirements.

12. Provide and install a fixed vertical iron ladder in each pit as required by governing code and located per Otis layout or as coordinated with Otis personnel. Ladder width and pit wall pocket requirements are shown in the pit plan view on the Otis layout.

13. Install permanent light fixture in each elevator pit with illumination of not less than 100 lx (10 fc) as measured at the pit floor. The light bulb(s) shall be externally guarded to prevent contact and accidental breakage. The light switch shall be so located as to be accessible from the pit ladder.

14. Glass used in hoistway construction must block 98% or more of incident full-spectrum ultraviolet radiation for the full height of the hoistway.

15. Provide and install guarding of counterweight in a multiple-elevator hoistway as required, when a counterweight is located between elevators, the counterweight runway shall be guarded on the side next to the adjacent elevator. The guarding must meet or exceed the requirements of ASME A17.1-2007, section 2.3.2.3.

If an emergency door in a blind hoistway is required, provide an outward swinging single section type door with door closer and a self closing barrier per ASME A17.1-2007, section 2.11.1.2. Contact your local Otis personnel for a detailed drawing (AAA26900D\_FMI) showing Otis specific requirements.

**MRL Machine Space Prep/Work**

16. Maintain the temperature at the top of the hoistway (machine space) between 32° F (0° C) and 104° F (40° C). This space also includes the car controller which is mounted at the top landing. Relative humidity shall not to exceed 95% non-condensing. Provide ventilation to suit Otis heat release amounts as shown in Otis Confirmation of Power Supply form. Local codes may require tighter temperature ranges and higher ventilation levels. Please check with your local code authority for the exact requirements in your area. If your machinery space temperature exceeds this requirement, contact your local Otis sales representative for assistance.

17. Install a permanent light fixture at the top of the hoistway (machine space) of not less than 200-lux (19 fc) as measured at the level of the standing surface on the car when the elevator is at the top landing. Light switch is to be located in the hoistway per the Otis layout.

18. Install a permanent light fixture at the top landing entrance (control space), in the hall, of not less than 200-lux (19 fc) as measured at the floor level. Light switch is to be located close to the elevator entrance.

**Control Room/Space and Machine Space Prep/Work**

19. Provide a suitable control room/space(s) with access and ventilation in accordance with all applicable codes and regulations. The control room/space(s) shall be maintained at a temperature between 32F (0C) and 104F (40C) to be measured 6 feet (1830 mm) above the floor and 1 foot (305 mm) out from the front center of the car controller(s). Relative humidity is not to exceed 95% non-condensing. Provide ventilation to suit Otis heat release amounts as shown on the Otis Confirmation of Power Supply form. Local codes may require tighter temperature ranges and higher ventilation levels, please check with your local code authority for the exact requirements in your area. If your control room/space(s) temperatures exceed these requirements, contact your local Otis sales representative for assistance.

20. Provide illumination of control room/space(s) of not less than 200 LUX (19 FC) as measured at floor level. Light switch is to be located within 18" (157 mm) to the lock-jamb side of the access door to the control room/space(s).

21. Provide control room/space(s) with self-closing and self-locking doors with a group 2 locking device. In addition, ensure that all air gaps around the doors are sealed (i.e. threshold, weather stripping, etc.).

22. Maintain the temperature at the top of the hoistway (machine space) between 32° F (0° C) and 104° F (45° C). Relative humidity shall not to exceed 95% non-condensing. Provide ventilation to suit Otis heat release amounts as shown in Otis Confirmation of Power Supply form. If your machinery space temperature exceeds this requirement, contact your local Otis sales representative for assistance.

23. Install a permanent light fixture at the top of the hoistway (machine space) of not less than 200-lux (19 fc) as measured at the level of the standing surface on the car when the elevator is at the top landing. Light switch is to be located in the hoistway per the Otis layout.

**Fire Prevention Prep/Work**

24. Provide hoistway walls designed and constructed in accordance with the required fire rating (including those places where elevator fixture boxes, rail bracket fastenings, and any other penetration into the hoistway walls).

25. In the United States provide smoke detectors, located as required, with wiring from the sensing devices to the controller(s) designated by Otis.

A. For each group of elevators, provide a normally closed contact representing the smoke detector at the designated return landing.

B. For each group of elevators, provide a normally closed contact representing all smoke detectors located in lobbies, hoistways, or control rooms/spaces but not the smoke detector at the designated return landing (see above) or the smoke detectors as described below:

- 1) If a smoke detector is located in the hoistway at or below the lower of the two recall landings, it shall be wired to activate the same normally closed contact as the smoke detector located in the lobby at the lower of the two recall landings.
- 2) If the control room/space(s) are located at the designated return landing, the smoke detectors located therein shall be wired to activate the same normally closed contact as the smoke detector at the designated landing.

C. Requirements for intermittently illuminating the fire hat visual signal in the car operating panel, either 1) or 2) must be selected.

1) For a single unit, or group of elevators having control room/space(s) and one common hoistway, provide one additional normally closed contact representing the control room/space(s) and hoistway smoke detectors.

2) If the group contains more than one hoistway, and hoistway smoke detectors are installed, provide one normally closed contact for each elevator. The contact is to represent the smoke detectors in the control room/space(s) or hoistway containing that particular elevator.

26. In Canada provide smoke detectors, located as required, with wiring from the sensing devices to the controller(s) designated by Otis.

A. For each group of elevators, provide a normally closed contact representing the smoke detector at the designated return landing and if provided, from the sensing device in the pit.

B. For each group of elevators, provide a normally closed contact representing all smoke detectors located in elevator lobbies, but not the smoke detector at the designated return landing (see above), and if provided, from the sensing device in the top of the hoistway.

C. For each group of elevators, provide a normally closed contact representing the smoke detector in the elevator machine space.

D. If the control space is located at the designated return landing, the smoke detectors located therein shall be wired to activate the same normally closed contact as the smoke detector at the designated landing. For each group of elevators, provide in addition to the above, a normally closed contact representing the sensing devices in the pit or at the top of the hoistway (For the Fire Hat in the Elevator).

27. In the United States, if sprinklers are installed in the hoistway(s), or machine space(s), a means to automatically disconnect the main line power supply of the affected elevator and any other power supply used to move the elevator upon or prior to the application of water is required (unless prohibited by local code). Smoke detectors shall not be used to activate sprinklers in hoistway(s), or machinery spaces or to disconnect the mainline power supply.

In addition, when the Automatic Recovery Operation (ARO) is specified, the means provided to automatically disconnect power to the elevator shall be equipped with an additional auxiliary contact that is positively opened when power is removed from the elevator system. This automatically controlled mainline disconnect must be provided with all associated wiring and conduit to the controller.

28. Provide an "ABC" fire extinguisher, minimum 10 lbs for machine space, and located convenient to the top landing elevator entrance.

29. Provide control room/space(s) and door to code compliant fire-resistive construction.

**Electrical Requirements**

30. 3 Phase Power MRL - Provide a permanent three (3) phase electrical-feeder system with a separate equipment-grounding conductor terminating in the elevator controller located at the top landing or transformer located at the top of the hoistway. Permanent three (3) phase electrical-feeder to be terminated at the elevator controller or transformer at the start of installation of the top landing elevator entrance and the timing of connection to Otis controller shall be coordinated with the elevator installer. Feeder conductors and grounding conductor sized according to elevator current characteristics as shown on the Otis Confirmation of Power Supply form. Feeder conductors and grounding conductor must be copper. Provide a fused disconnect switch or circuit breaker capable of being locked in the open position, for each elevator per the National Electrical Code (ANSI/NFPA 70) or Canadian Electrical Code (C22.1) with feeder or branch wiring to elevator controller [NEC building. The disconnecting means required by the National Electrical Code or Canadian Electrical Code CEC [Rule 620-51, 620-61(D), and 620-62] or [CEC Rule 38-013 (2) (a)] located at the point of power distribution in the 38-051 shall be provided with all associated wiring and conduit to the elevator controller. Size of main contacts to suit elevator power characteristics. Fuses, if provided, are to be current limiting class J or equivalent. Circuit breakers, if provided, are to have current limiting characteristics equivalent to class J fuses. Fuses or circuit breakers are to be time delay to cover the full load up accelerating current. Accelerating current typically is the peak as indicated on the Otis Confirmation of Power Supply Form, and lasts for duration not to exceed 7 seconds. Feeder conductors and associated wiring to the controller to be sized to limit wiring voltage drop to 5% maximum when delivering elevator full load up accelerating current. The building power system used to operate the elevator(s) shall be capable of supplying non linear loads and be capable of absorbing the regenerated power listed on the Otis Confirmation of Power Supply form.

Single Phase Power MRL - Provide a permanent single phase electrical-feeder system with a separate equipment-grounding conductor terminating to the transformer located at the top of the hoistway. Permanent single phase electrical-feeder to be terminated at the transformer at the start of installation of the top landing elevator entrance and the timing of connection to Otis controller shall be coordinated with the elevator installer. Feeder conductors and grounding conductor sized according to elevator current characteristics shown on the Otis Confirmation of Power Supply form. Feeder conductors and grounding conductor must be copper. Provide a fused disconnect switch or circuit breaker capable of being locked in the open position, for each elevator per the National Electrical Code (ANSI/NFPA 70) or Canadian Electrical Code (C22.1) with feeder or branch wiring to elevator controller [NEC building. The disconnecting means required by the National Electrical Code or Canadian Electrical Code CEC [Rule 620-51, 620-61(D), and 620-62] or [CEC Rule 38-013 (2) (a)] located at the point of power distribution in the 38-051 shall be provided with all associated wiring and conduit to the elevator controller. Size of main contacts to suit elevator power characteristics. Fuses, if provided, are to be current limiting class J or equivalent. Circuit breakers, if provided, are to have current limiting characteristics equivalent to class J fuses. Fuses or circuit breakers are to be time delay to cover the full load up accelerating current. Accelerating current typically is the peak as indicated on the Otis Confirmation of Power Supply Form, and lasts for duration not to exceed 7 seconds. Feeder conductors and associated wiring to the controller to be sized to limit wiring voltage drop to 5% maximum when delivering elevator full load up accelerating current. The building power system used to operate the elevator(s) shall be capable of supplying non linear loads and be capable of absorbing the regenerated power listed on the Otis Confirmation of Power Supply form.

31. 3 Phase Power Control Room/Space - Provide a permanent three (3) phase electrical-feeder system with a separate equipment-grounding conductor terminating in the control room/space(s), located per Otis layout. Feeder conductors and grounding conductor sized according to elevator current characteristics as shown on the Otis Confirmation of Power Supply form. Feeder conductors and grounding conductor must be copper. A fused disconnect switch or circuit breaker capable of being locked in the open position, for each elevator per the National Electrical Code (ANSI/NFPA 70) or Canadian Electrical Code (C22.1) with feeder or branch wiring to controller [NEC 620-51, 620-61(D), and 620-62] or [CEC Rule 38-013(2)(a)]. The disconnecting means required by the National Electrical Code or Canadian Electrical Code CEC [Rule 38-051] shall be provided with all associated wiring and conduit to the controller. Size of main contacts to suit elevator power characteristics. Fuses are to be current limiting class RK1 or equivalent. Circuit breakers are to have current limiting characteristics equivalent to class RK1 fuses. Fuses or circuit breakers are to be time delay to cover the full load up accelerating current. Accelerating current typically is the peak as indicated on the Otis Confirmation of Power Supply Form, and lasts for duration not to exceed 7 seconds. Feeder conductors and associated wiring to the controller to be sized to limit wiring voltage drop to 5% maximum when delivering elevator full load up accelerating current. The building power system used to operate the elevator(s) shall be capable of supplying non linear loads and be capable of absorbing the regenerated power listed on the Otis Confirmation of Power Supply form.

Single Phase Power Control Room/Space - Provide a permanent single phase electrical-feeder system with a separate equipment-grounding conductor terminating in the control room/space(s), located per Otis layout. Feeder conductors and grounding conductor sized according to elevator current characteristics as shown on the Otis Confirmation of Power Supply form. Feeder conductors and grounding conductor must be copper. A fused disconnect switch or circuit breaker capable of being locked in the open position, for each elevator per the National Electrical Code (ANSI/NFPA 70) or Canadian Electrical Code (C22.1) with feeder or branch wiring to controller [NEC 620-51, 620-61(D), and 620-62] or [CEC Rule 38-013(2)(a)]. The disconnecting means required by the National Electrical Code or Canadian Electrical Code CEC [Rule 38-051] shall be provided with all associated wiring and conduit to the controller. Size of main contacts to suit elevator power characteristics. Fuses are to be current limiting class RK1 or equivalent. Circuit breakers are to have current limiting characteristics equivalent to class RK1 fuses. Fuses or circuit breakers are to be time delay to cover the full load up accelerating current. Accelerating current typically is the peak as indicated on the Otis Confirmation of Power Supply Form, and lasts for duration not to exceed 7 seconds. Feeder conductors and associated wiring to the controller to be sized to limit wiring voltage drop to 5% maximum when delivering elevator full load up accelerating current. The building power system used to operate the elevator(s) shall be capable of supplying non linear loads and be capable of absorbing the regenerated power listed on the Otis Confirmation of Power Supply form.

32. Provide a dedicated 125 volt, 15 ampere single-phase branch circuit with a fused disconnect switch or circuit breaker located at the point of power distribution in the building. The fused disconnect or circuit breaker shall be capable of being locked in the open position. This branch circuit supplies the car lights, car top receptacle, auxiliary lighting power source and ventilation on each car in compliance with the National Electrical Code [NEC620-53] or Canadian Electrical Code [CEC Rule 38-053]. Termination of this branch circuit shall be in the elevator controller located at the top landing and shall be connected at the same time as the permanent three (3) phase power referenced in the previous paragraph.

33. All 125 volt, 15 or 20 ampere single-phase receptacles installed in pits, machine spaces, control rooms/space(s) shall be of the ground-fault circuit-interrupter type (GFCI). A dedicated single-phase receptacle supplying a permanently installed pit sump pump shall not require GFCI protection.

34. Provide electric power for lights, tools, welding, hoisting, etc. during installation with sufficient power for starting, testing and adjusting the elevator. Provide a 220 volt, 30 ampere single-phase 4 wire electrical supply for platform operation during construction, available at the start of elevator installation.

35. Provide one (1) dedicated outside telephone line, per elevator, and terminated at the controller designated by the Otis construction superintendent. Reference the A17.1 code and the Otis power of confirmation letter for specific requirements.

36. In areas under the jurisdiction of AMSE A17.1-2004/CSA B44 or later where the elevator travel is greater than or equal to 60 feet /18 meters, provide two-way voice communications means that shall enable emergency personnel within the building to establish communications to each car individually without intervention by a person within the car. The communication means shall override communications to the outside of the building and once established shall not be terminated by emergency personnel outside the car. Refer to ASME A17.1-2004 CSA B44 or later, section 2.27.1.1.4 for exact requirements.

37. [Optional] For elevators having an intra building intercom, provide a separate 120 volt, 15 ampere, single phase power supply with fused SPST disconnect switch or circuit breaker, located as required for inter-communicating system power supply. Circuit to be arranged for feeding from the building emergency lighting supply if provided. Conduit and wiring for remotely located inter-communicating stations.

38. [Optional] For installations having emergency (standby) power, provide the standby power unit and means for starting it. The emergency (standby) power unit shall deliver to the elevator via disconnect switches in the building power distribution location or disconnect switches in the control room/space(s), sufficient power to operate one or more elevators at a time at full rated speed, and rated load.

An automatic power transfer switch for each power feeder to monitor both normal and emergency (standby) power conditions and to perform the transfer from one to the other. Switch to have two sets of normally closed dry contacts, one to be open when the switch is in the emergency (standby) power position; the other to open upon initiation of power transfer and to close when transfer is complete. Switch to have an inhibit function which will delay transfer to normal and/or emergency (standby) power by an adjustable period of 0 - 300 seconds. Switch shall have a phase monitor feature, which prohibits the transfer of power between "live" sources unless the sources are in phase with each other. If a shunt trip device is provided, an additional normally closed contact, with all associated wiring and conduit to the controller, is required from the emergency (standby) power source. The emergency (standby) power system provided shall comply with ANSI/NFPA 70 requirements 620.91. The table in section "ELEVATOR REGENERATIVE POWER REQUIREMENTS", on the Otis Confirmation of Power Supply form, contains the elevator system power regenerated under an overhauling load. The information contained in the form is to be used to determine regenerative power absorption capability for the emergency (standby) power distribution system.

Note: The building Emergency (Standby Power) Generator system used to operate the elevator(s) shall be capable of supplying non-linear loads.

You agree to indemnify and save Otis harmless against any and all liability and costs arising out of your failure to carry out any of the foregoing requirements.

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# Gen2<sup>®</sup>

**3500# @ 200 F.P.M.  
SEISMIC 3+**

**Otis**  
A United Technologies Company

DWG. NO.: **G2S 3500R-PWBO**

**BUILDING POWDER MOUNTAIN SOUTH ELEVATOR**

LOCATION

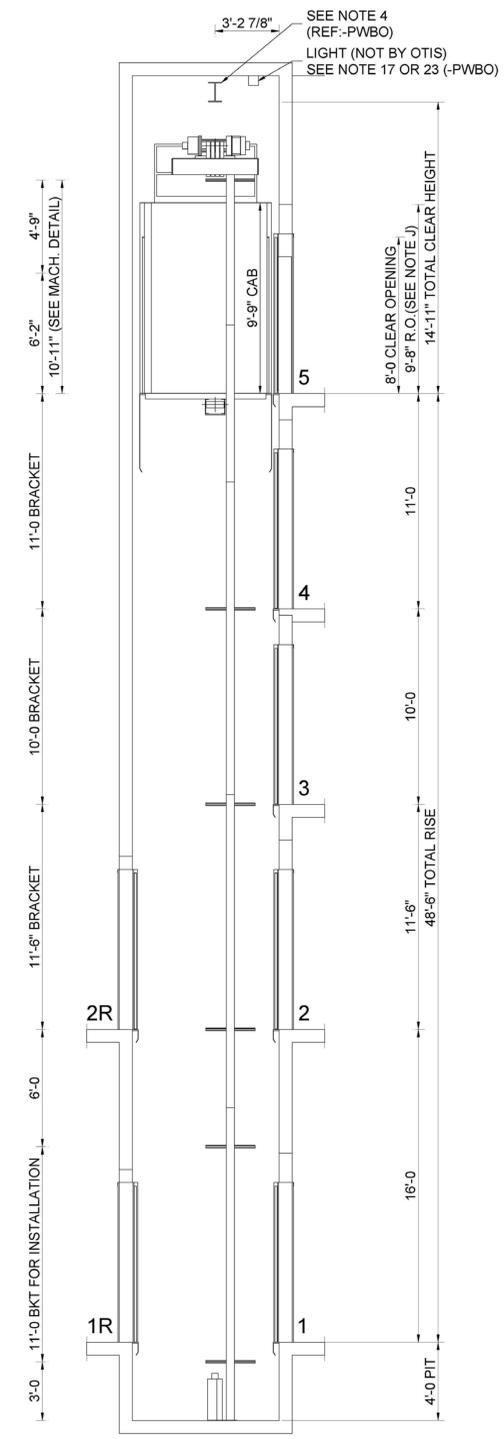
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OWNER

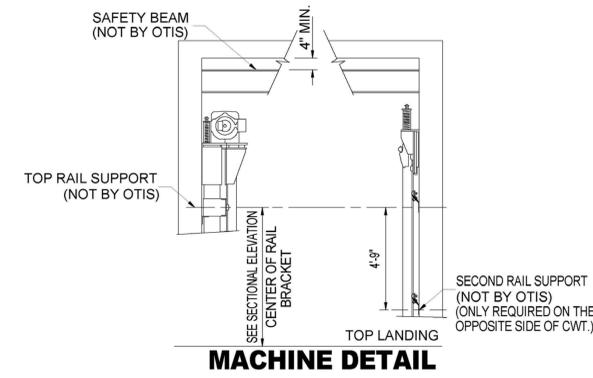
ARCHT.

CONTRACT NO.





**SECTIONAL ELEVATION**  
FOR MAX. SPACING BETWEEN INSERTS SEE RAIL FORCE DETAIL



**MACHINE DETAIL**

**RAIL FORCE & BRACKET SPACING DETAIL**

SEE NOTES 6 & 7

CAR	R1	434 lbs
	R2	75 lbs
	VX	1891 lbs
	VY	946 lbs
	MAXIMUM BRACKET SPACING	12' 0"
RAIL SIZE		1-1/2
CWT	R1	266 lbs
	R2	19 lbs
	VX	1994 lbs
	VY	997 lbs
	MAXIMUM BRACKET SPACING	12' 0"
RAIL SIZE		1-1/2
DEH (DEAD END HITCH)	R1	660 lbs
	R2	1590 lbs

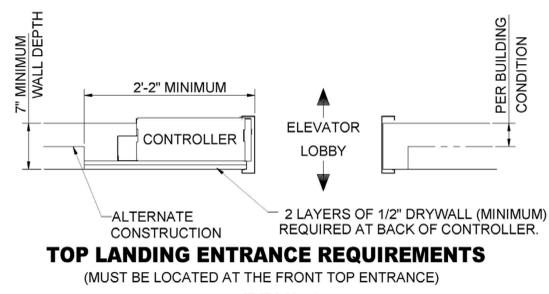
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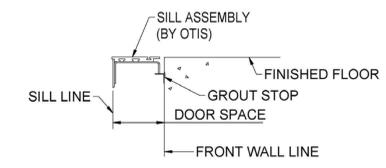
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NOTE J  
ROUGH OPENING AT ALL FLOORS, EXCEPT TOP LANDING, EQUALS 8'-10"  
TOP LANDING EQUALS 9'-8".



**TOP LANDING ENTRANCE REQUIREMENTS**  
(MUST BE LOCATED AT THE FRONT TOP ENTRANCE)  
ELEV. No. 1



**DETAIL "A" SILL SUPPORT**

ADEQUATE SUPPORT AT ALL FASTENING POINTS OF ENTRANCE ASSEMBLY REQUIRED. MUST WITHSTAND A HORIZONTAL PULL-OUT FORCE OF 140 LBS. @ EA. FASTENING POINT (8 @ EA. ENTRANCE) INCLUDING SUPPORT FOR CENTER SILL SUPPORT BRACKET (NOT BY OTIS).

APPROVAL  
THIS ARRANGEMENT AND  
SUPPLEMENTARY NOTES APPROVED

SIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_

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**Gen2<sup>®</sup>**

**3500# @ 200 F.P.M.  
SEISMIC 3+**



DWG. NO.: **G2S 3500R-EL**

BUILDING **POWDER MOUNTAIN SOUTH ELEVATOR**

LOCATION

CONT. WITH

OWNER

ARCHT.

CONTRACT NO.

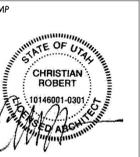
SHEET TITLE  
**ELEVATOR CUTSHEET**

No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/6/27

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DATE **06/20/2017**  
SCALE

SHEET NO.  
**A97.56**



NOT FOR CONSTRUCTION UNTIL  
SIGNED BY THE ARCHITECT

**POWDER MOUNTAIN - PARCEL 4**  
8569 East Spring Park  
Eden, UT 84310

SHEET TITLE

**STAIR,  
GUARDRAIL  
DETAILS**

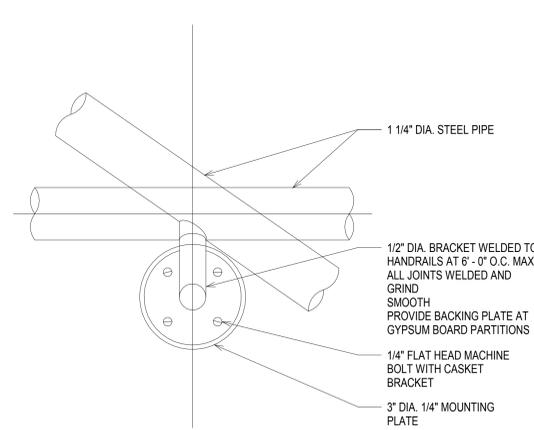
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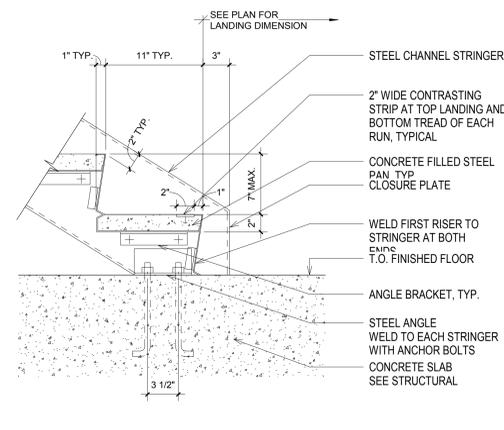
**236**  
DATE: **06/20/2017**  
SCALE: **As indicated**

SHEET NO.

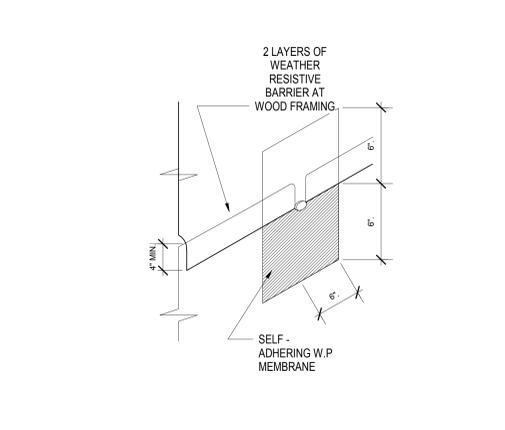
**A97.60**



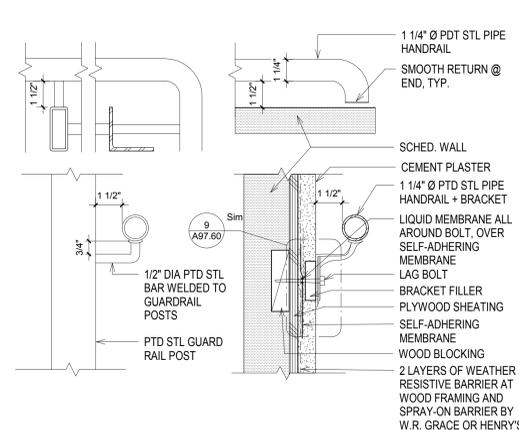
**WALL MTD HANDRAIL ELEV.** 6" = 1'-0" **1**



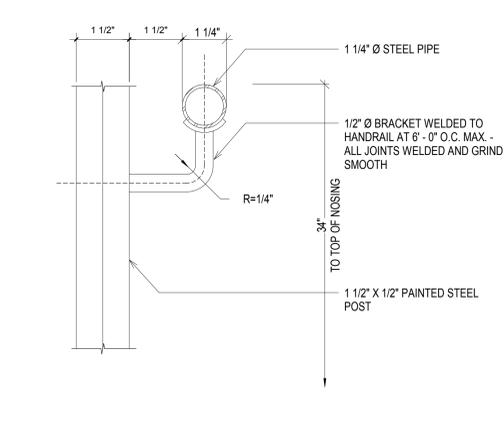
**STRINGER AT SLAB** 1 1/2" = 1'-0" **5**



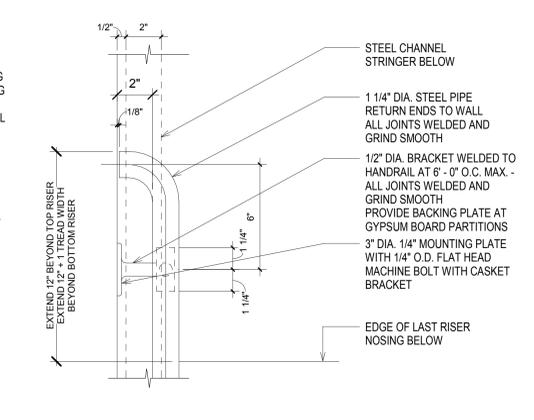
**HANDRAIL WATERPROOFING** 1" = 1'-0" **9**



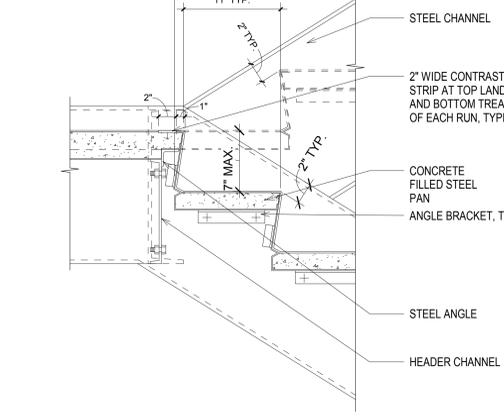
**TYP HANDRAIL AT EXT WALL** 3" = 1'-0" **13**



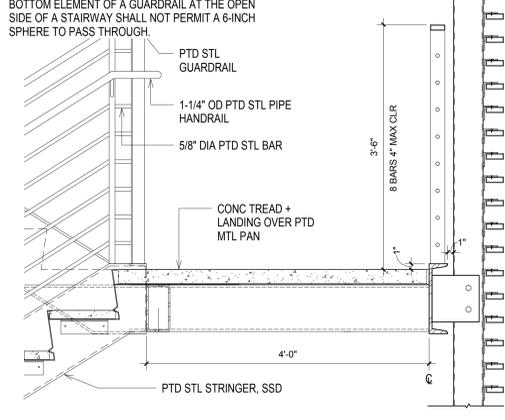
**WALL HANDRAIL BRACKET** 6" = 1'-0" **17**



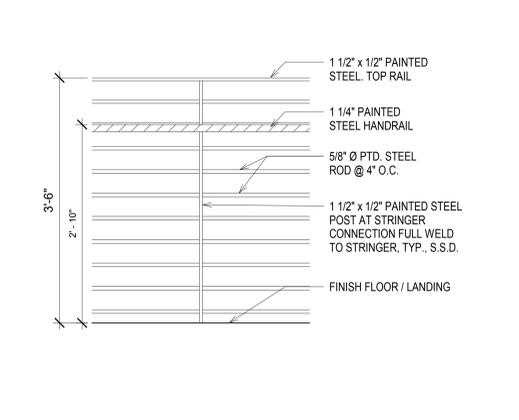
**WALL MTD HANDRAIL PLAN** 6" = 1'-0" **1**



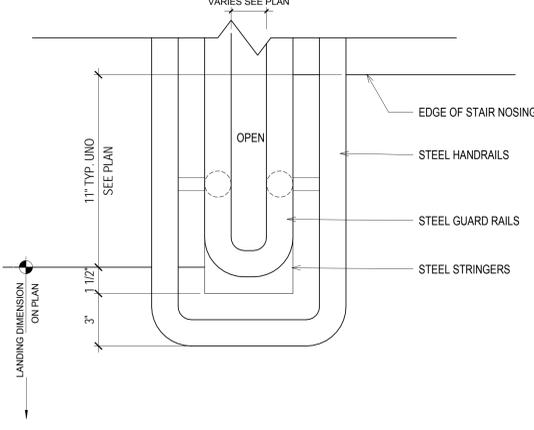
**INTERMEDIATE LANDING** 1 1/2" = 1'-0" **6**



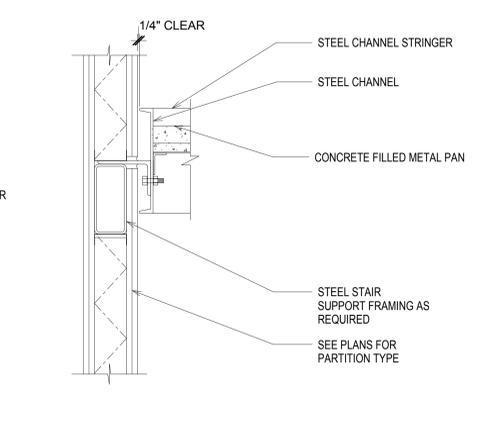
**STAIR - SECT AT INT LANDING** 1" = 1'-0" **10**



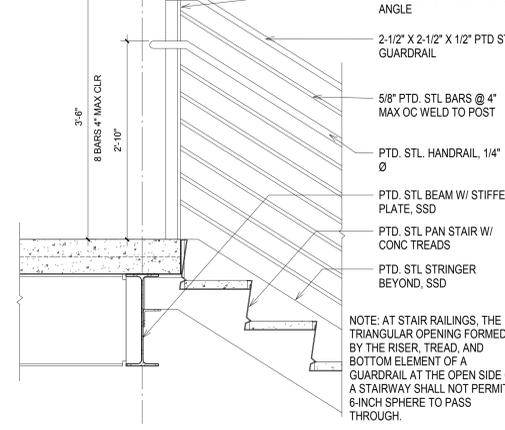
**TYP GUARDRAIL ELEVATION** 1" = 1'-0" **14**



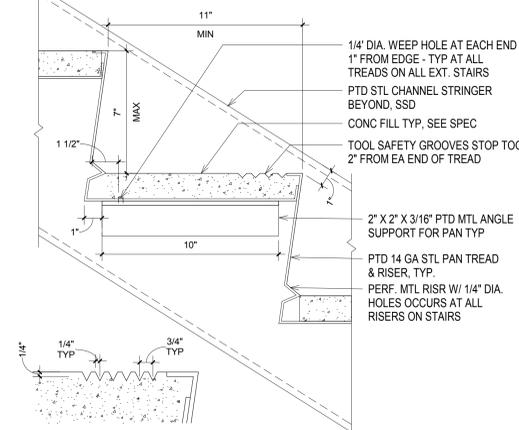
**INSIDE RAILING PLAN VIEW** 3" = 1'-0" **3**



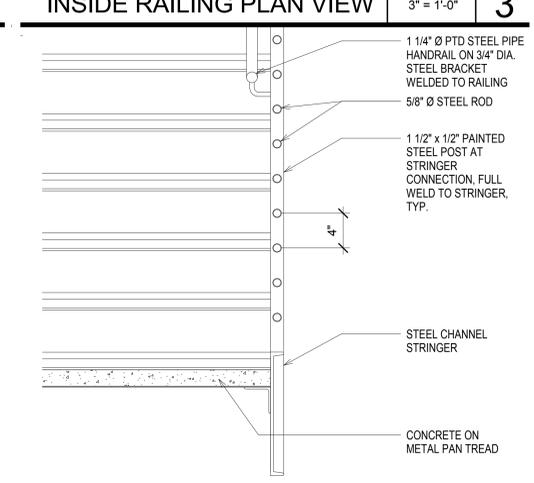
**LANDING CONNECTION** 1 1/2" = 1'-0" **7**



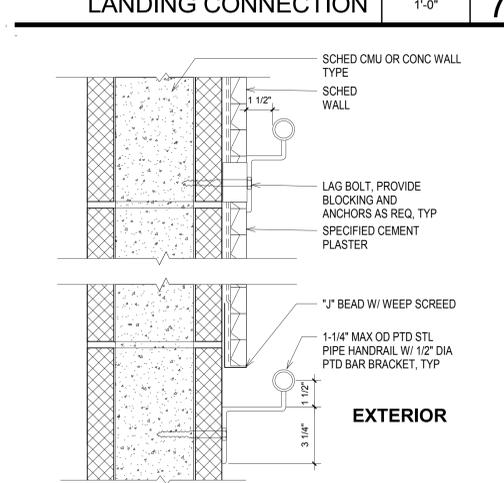
**STR - SECT AT FLOOR LEVEL** 1" = 1'-0" **11**



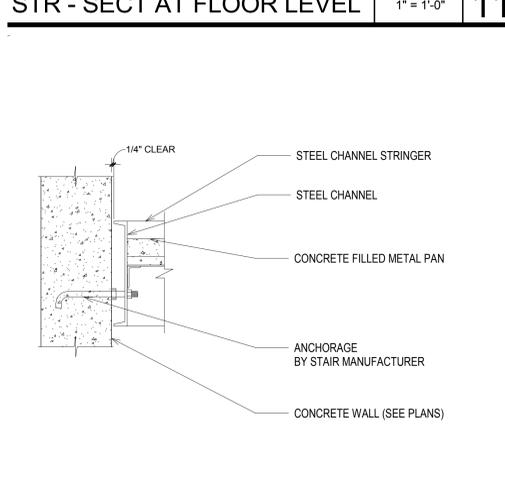
**TYP STAIR TREAD AND RISER** 3" = 1'-0" **15**



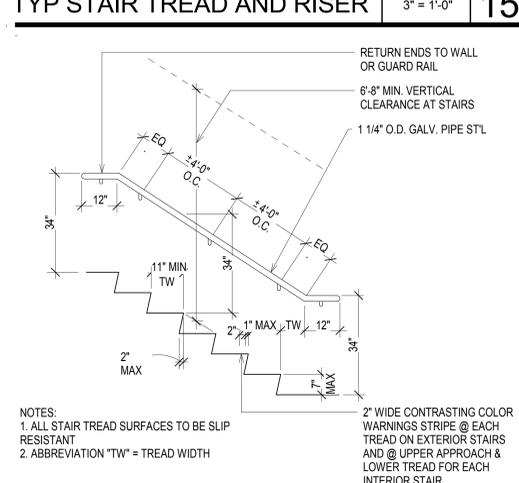
**TYP. RAILING SECTION** 1 1/2" = 1'-0" **4**



**HANDRAIL ATTACHMENT** 3" = 1'-0" **8**



**STRINGER AT CONC. WALL** 1 1/2" = 1'-0" **12**



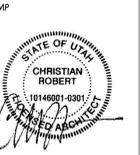
**TYP. HANDRAIL ELEV.** 1 1/2" = 1'-0" **16**



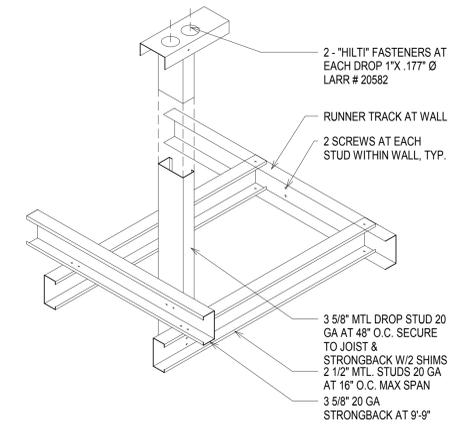
**TYP. HANDRAIL ELEV.** 1 1/2" = 1'-0" **16**

6/28/2017 11:50:13 AM

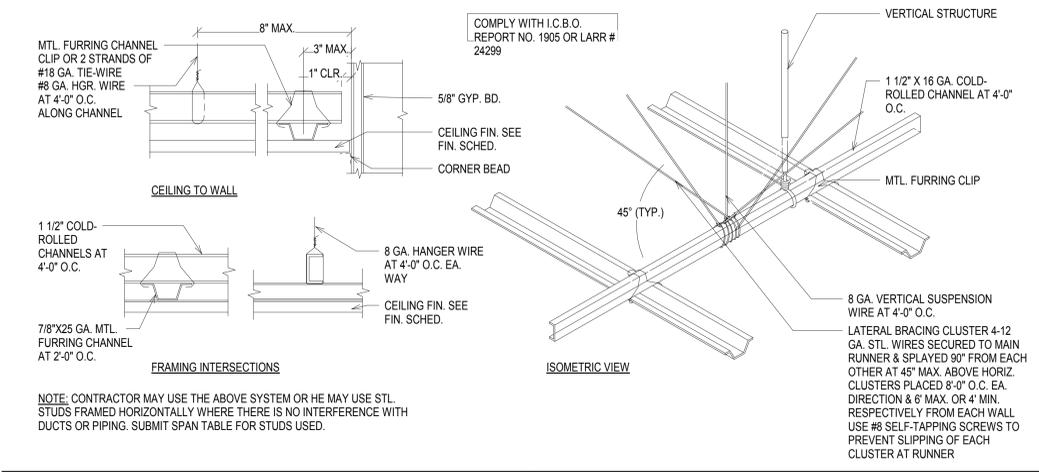
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**TYP MTL STUD CEILING** N.T.S. **1**



**SUSPENDED CEILING** N.T.S. **2**

**POWDER MOUNTAIN - PARCEL 4**  
8569 East Spring Park  
Eden, UT 84310

**CEILING DETAILS**

No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/6/27

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**236**  
DATE **06/20/2017**  
SCALE **1 1/2" = 1'-0"**

SHEET NO. **A98.04**

1. Design Criteria

- 1.1. Governing Building Code: 2015 International Building Code (IBC)
A. Risk Category: II
1.2. Floor Live Loading:
A. Exterior Plazas: 100 psf Live Load
B. Event Space and Lobbies: 100 psf Live Load
C. Exit Facilities & Corridors: 100 psf Live Load
D. Gymnasium: 100 psf Live Load
E. Mechanical Rooms: 125 psf Live Load or actual weights, if larger
1.3. Roof Live Loading:
A. Roof Live Load: 20 psf
B. Roof Snow Load: 184 psf or 202 psf + Drift per IBC
1.4. Earthquake:
A. Seismic Design Category: D
B. Spectral Response Accelerations:
Ss = 0.81 g S1 = 0.58 g
1.5. Wind:
A. Ultimate Design Wind Speed Vd: 115 mph
B. Exposure: C
C. Internal Pressure Coefficient, GCp: 0.18
D. Topographic Factor, Kzt: 1.8
E. Components and Cladding Design Pressure:
Design Wind Pressure (psf)
Location Tributary Area (ft²)
Walls Within 4.8 ft of building corner 86.7 73.2 67.4 53.8
All other areas 70.3 63.5 60.6 53.6
Roof Within 4.8 ft of building edge 103.2 84 75.8 75.8
All other areas 59.3 55.5 53.8 53.8

Table with 2 columns: Location, Tributary Area (ft²). Rows include Walls (Within 4.8 ft of building corner, All other areas) and Roof (Within 4.8 ft of building edge, All other areas).

- 1.6. Foundation:
A. Subsurface Conditions:
Soils report and log of borings has not been obtained by the Owner for this parcel. The design is based upon the geotechnical report for Parcel 2C, just northeast of the site. The Owner has contracted with the Geotechnical Engineer, and fieldwork has been completed for the site.
B. Diagonal members in vertical braced frames shall be considered as secondary members for fire proofing protection
1.7. Classification for Fire Rated Construction:
A. For the purpose of determining fire-resistive assemblies, open-web steel framing members shall be considered unrestrained.
B. Diagonal members in vertical braced frames shall be considered as secondary members for fire proofing protection

- 2. Earthwork
2.1. Clearing: The entire building area shall be scraped to remove all topsoil, vegetation, and debris.
2.2. Profiling:
A. The natural undisturbed soil below slabs on grade shall be proof rolled prior to placing concrete.
B. A minimum of two feet of compacted structural fill over properly prepared native soils, with soft spots removed and replaced with compacted structural fill.
2.3. Footings shall bear on one of the following, but not combined:
A. Properly prepared native soils as described above, with soft spots removed and footing elevations lowered to bear on native soils only.
B. A minimum of two feet of compacted structural fill over properly prepared native soils, with soft spots removed and replaced with compacted structural fill.
2.4. Concrete slabs on grade shall be underlain by at least 4" of either:
A. A well-graded granular base course with no more than 5 percent passing a No. 200 sieve, compacted to 95 percent of the maximum laboratory density as determined by ASTM D1557.
B. A gap-graded free-draining granular material with a maximum size of not more than 3/4 inch and no more than 5 percent passing a No. 200 sieve.

- 3. Concrete
3.1. Materials shall comply with the Standards specified in American Concrete Institute (ACI) 318-14, "Building Code Requirements for Structural Concrete."
A. Concrete mix design requirements shall be as follows:
Location Fc at 28 days W/C Max Aggregate Size Exposure Class
Footings 3000 0.50 - 1" F0 S0 C0
Interior Slabs on Grade 3000 0.45 - 1" F0 S0 C0
Walls and piers 4500 0.45 5 3/4" F1 S0 C1
Joist Beams and Suspended Slabs 5000 0.45 - 3/4" F1 S0 C0
Concrete over Steel Deck 3000 0.45 - 3/4" F0 S0 C0
All other site cast concrete 4500 0.45 4.5 1" F1 S0 C1
\*Exposure Classes are per ACI 318, Section 4.2.1, where F, S and C are exposure categories for freezing and thawing, sulfate, and corrosion protection of reinforcement, respectively.
B. Cementitious Materials:
1. Portland Cement (ASTM C150):
Type I or II for exposure class S0.
2. Fly Ash (ASTM C618, Class C or F): maximum fly ash content as a percentage of total weight of cementitious materials shall be 25 percent.
C. Steel Reinforcement:
1. ASTM A615 Grade 60, fy = 60,000 psi min, unless noted otherwise.
2. Reinforcement at concrete shear walls and all components of walls including coupling beams and wall piers shall comply with ASTM A706, Grade 60. ASTM A615 Grade 60 reinforcement shall be permitted if:
a. The actual yield strength based on mill tests does not exceed 78,000 psi, and
b. The ratio of actual tensile strength to the actual yield strength is not less than 1.25.
c. Mill tests shall be submitted to the Engineer.
D. Wire Reinforcement:
1. Welded wire fabric (WWF): ASTM A1064.
E. Fiber Reinforcement:
1. Synthetic Micro-Fiber: fibrillated polypropylene micro-fibers engineered and designed for use in concrete, complying with ASTM C1116, 1/2 to 1-1/2 inches long. Add to concrete at a dosage rate of 1.5 lb/cu yd where indicated.
2. Macro-synthetic: Fibers: non-alkali, non-fibrillating fibers made of a polypropylene/polyethylene blend. Macro fibers shall comply with ASTM C1116, Type II, and meet the criteria of ASTM D 7508.
Where noted in the Steel Deck Schedule, macro-synthetic fibers shall be added to concrete over steel deck at a dosage rate determined by the fiber manufacturer but not less than 4 lb/cu yd.
b. Do not burn off exposed fibers.
F. Admixtures:
1. Air-entraining admixtures, comply with ASTM C 260 (when used).
a. Tolerance on air content as delivered shall be +/- 1.5%.

- 2. Corrosion Inhibiting Admixture:
a. Corrosion inhibiting additive containing a minimum of 30 percent calcium nitrite dosed at 3 gallons per cubic yard shall be added to all concrete in accordance with the approved class C2.
3. The use of super plasticizers and water reducers is allowed, but not required.
4. Calcium chloride or admixtures containing calcium chloride shall not be added to the concrete at any time.
G. Chloride Ion: Maximum water soluble chloride ion concentrations in hardened concrete at age between 28 and 42 days contributed from the ingredients including water, aggregates, cementitious materials, and admixtures shall not exceed a maximum, by weight of cement, of 1.00% for concrete with exposure class C0, 0.30% for concrete with exposure class C1, 0.15% for concrete with exposure class C2, and 0.06% for all prestressed concrete.
H. Slump Limit: 4 inches, maximum for all concrete prior to the addition of plasticizers and water reducers than 14" shall be of the same size as the thinnest of the concrete used on the structural drawings.
I. Shrinkage Limit: Interior slabs on grade shall have a drying shrinkage limit of 0.040 percent tested in accordance with ASTM C157. Drying shrinkage test results shall be submitted with mix designs.
J. Only one grade or type of concrete shall be poured on the site at any given time.
K. Plastic coated tie wires and chairs shall be used to support reinforcing bars and tie bars in reinforced concrete structures that will be exposed to moisture.
3.2. Formwork shall comply with ACI Standards Publication 347 and the project specifications. The members and connections of most forms, braced frames, and collector elements shall comply with these requirements. Welding methods, procedures and quality control shall comply with AISC 341 Chapter J, AWS D1.1, AWS D1.8 and the following:
1. Demand Critical Welds: The following CJP groove welds are demand critical and shall comply with the special requirements for Demand Critical Welds:
a. Beam flanges to columns, single plate shear connections to columns, and beam webs to columns in moment frames.
b. Column splice welds including column bases in moment frames and braced frames.
c. Link beams to columns in Eccentrically Braced Frame link beams.
d. Web plate to flange plate welds in built-up Eccentrically Braced Frame link beams.
e. Other welds designated as demand critical in the drawings.
2. Welding shall be performed in accordance with AISC 341 Chapter J and a welding procedure specification (WPS) as required in AWS D1.1. WPS variables shall be within the parameters established by the filler metal manufacturer. WPS for demand critical welds shall also comply with AWS D1.8 Section 6.1.
3. Consumables for Welding:
a. Welds used in members and connections of the SFRS shall be made with filler metals meeting the requirements specified in section 6.5 of AWS D1.8.
b. Filler metal properties shall be as follows:
Property 70 ksi Classification 80 ksi Classification
Yield Strength, ksi 58 min 88 min
Tensile Strength, ksi 70 min 80 min
Elongation (%) 22 min 19 min
CVN Toughness, ft-lbf 20 min @ 0 degrees F 20 min @ 2 degrees F
c. Filler metals in Demand Critical Welds shall receive Heat Input Testing that achieves the properties listed above with CVN toughness of 40 ft-lbf min @ 70 degrees F and shall comply with AWS D1.8 Section 6.3.5.1 to 6.3.5.3.
d. Diffusible Hydrogen: Welding electrodes and electrode-flux combinations shall meet the requirements of AWS D1.8 Table 6.3. This manufacturer's Certificate of Conformance shall be considered adequate proof of this requirement.
e. Intermetallic filer metals shall meet the requirements of AWS D1.8 Section 6.3.4.
4. Backer bars shall be removed from the beam bottom flange and columns. The roof of the weld shall be back gouged to sound metal to remove all slag and cracks. Weld the back gouged region and finish welding using a reinforcing fillet weld. Comply with AWS D1.8 sections 6.7 and 6.8. This requirement also applies to all non-fusible backing used at beam to column CJP welds. Comply with AWS D1.8 Section 6.9.
5. Steel backer bars need not be removed from the beam top flange connections to columns or at continuity plate connections to columns provided that the backer bars are welded to the column flange with a continuous 5/16 inch fillet weld on the edge below the CJP groove weld for the entire length of the backer bar.
6. Backing at beam flange to column flange joints shall not be welded to the underside of the beam flange, nor tack welded at this location. If fillet welds or tack welds are placed between the backing and the beam flange in error, they shall be repaired per AWS D1.8 Section 6.9.3.
7. Details and treatment of weld tabs shall be per AWS D1.8 Section 6.11. Use weld tabs as specified in AWS D1.1 Section 5.31 except at the end of CJP welds adjacent to the column web/flange juncture at continuity plates. Remove weld tabs to within 1/8 inch of the base metal surface after welding. Where weld tabs are removed, they shall be replaced with a surface roughness of 500 micro-inches.
8. CJP joints in members with different thickness or widths (such as column splices) shall be transitioned in a manner that the slope in the transition does not exceed 1 in 2:12. The transition shall be accomplished by chamfering the thicker part, tapering the wider part, sloping the weld metal, or by a combination of these.
9. Quality requirements for weld access holes for all demand critical welds shall comply with AWS D1.8 Section 6.10. Weld access hole shape shall be per AWS D1.8 Figure 6.2.
10. Beam bottom flange welding sequence shall comply with AWS D1.8 Section 6.14.
11. Preheat, and interpass temperatures shall comply with AWS D1.1 Section 3.5 and AWS D1.8 Section 6.5.
12. Additional welding provisions applicable to demand critical welds only are as follows:
a. Welding processes shall comply with AWS D1.8 Section 6.2.
b. Filler metal packaging and exposure limitations shall comply with AWS D1.8 Section 6.4.

- 3.5. Detailing: All reinforcing, including welded wire fabric, shall be detailed, bolstered & supported to comply with ACI 315. "Details and Detailing of Concrete Reinforcement" and the Concrete Reinforcing Steel Institute (CRSI) recommendations. Reinforcing bars shall not be welded unless specifically shown on drawings.
A. Lap splice lengths shall be detailed to comply with the CONCRETE REINFORCING BAR DEVELOPMENT AND LAP SPLICING SCHEDULE.
B. All mechanical splices shall have the capacity to develop at least 1.25x of the bar in tension or compression. Type 2 couplers shall have the capacity to develop 1.35x of the bar in tension. Type 1 couplers shall not be used in shear wall joint columns. Mechanical splices shall have a current ICC Evaluator Report, "Lentor" (ER-3967), "Taper-Lock" (ESR-2481) or "SAS Streeter" (ESR-1163) tapered threaded rebar splices, "Bar-Lock" (ESR-2495) bolt coupling sleeves or approved equivalent. Mechanical couplers on adjacent bars shall be staggered a minimum of 24" apart along the longitudinal axis of the reinforcing bars.
C. All embedded elements and dowels shall be securely tied to support or to adjacent reinforcing prior to the placement of concrete.
D. Use chairs or other support devices recommended by CRSI to support and tie reinforcement bars and welded wire fabric prior to placing concrete. Welded wire fabric shall be continuously supported at 36" o.c. maximum.
E. See typical details for reinforcing at wall intersections and ends, reinforcing around wall openings and suspended slab openings, vertical wall dowels, concrete column ties and splices in vertical column reinforcing.
F. See typical details for column cross-ties. The 90-degree hooks of two successive cross-ties engaging the same longitudinal bars shall be alternated end for end.
G. Contractor shall coordinate placement of all openings, curbs, dowels, sleeves, conduits, bolts, inserts and other embedded items prior to concrete placement.
H. Reinforcement shall be bent cold, and shall be bent only once at the same location. All reinforcement shall be shop bent, unless otherwise permitted by the engineer.
3.6. Minimum Reinforcing: Wall reinforcing shall be as follows, unless noted otherwise:
Wall Thickness Horizontal Reinforcing Vertical Reinforcing
6" #4 @ 13" o.c. #4 @ 18" o.c.
8" #5 @ 15" o.c. #4 @ 18" o.c.
12" #5 @ 12" o.c. #4 @ 15" o.c.
Others #4 @ 13" o.c. Each Face #4 @ 15" o.c. Each Face
Spacing shall exceed neither three times the wall thickness nor 18". In addition to the above spacing, 2 - #5 x continuous horizontal bars shall be placed at the bottom of the wall (near the footing) and at each floor level, at the roof level and at the top of wall.
3.7. No aluminum conduit or product containing aluminum or any other material injurious to concrete shall be embedded in concrete.
3.8. Unless otherwise noted, all slabs on grade shall be 4" thick.

- 4. Structural Steel
4.1. Material:
A. W-Shapes: ASTM A992, (Fy = 50 ksi), except as noted otherwise
B. All Other Shapes and Plates: ASTM A36 (Fy = 36 ksi), except as noted otherwise
C. Rectangular and Square Hollow Structural Sections (HSS): ASTM A500, Grade C (Fy = 50 ksi)
D. Steel Deck:
1. Galvanized Steel Sheet: ASTM A653 or A1063, Grade 50 with G60 galvanized coating.
2. Ungalvanized Steel Sheet: ASTM A1009 or A1039, Grade 50
E. Deformed Bar Anchors (DBA): ASTM A496
F. Headed Stud Anchors (HSA): ASTM A108, with dimensions complying with AISC specifications
G. Anchor Rods: ASTM F1554, Grade 36, unless noted otherwise, with ASTM A563 heavy hex nuts and ASTM F436 hardened washers
H. Structural steel that is part of the seismic force resisting system shall be supplied with minimum Charpy V-Notch impact test results of 20 ft-lb. absorbed energy at 70 degrees Fahrenheit, indicated below:
1. Hot rolled shapes with flanges 1.1/2" thick and thicker tested in the alternate core location as described in ASTM A6 Supplementary requirement S30
2. Plates 2" and thicker measured at any location permitted by ASTM A673
3. Test Frequency: Each heat
4.2. Fabrication and construction shall comply with the following Codes and Standards:
A. American Institute of Steel Construction (AISC) 360-10, "Specification for Structural Steel Buildings"
B. AISC 341-10, "Seismic Provisions for Structural Steel Buildings" excluding the following:
C. AISC 303-10, "Code of Standard Practice for Steel Buildings and Bridges" excluding the following: Section 5.3 (last sentence of first paragraph), Section 4.4, Section 4.4.1, Section 4.4.2, Section 4.5, and Section 7.13.3
1. The architectural drawings are the prime contract drawings. Consultants' drawings by other disciplines are supplementary to the architectural drawings. The structural drawings shall be used in conjunction with the architectural drawings. Detailing and shop drawing production for structural elements will require information (including dimensions) contained in architectural, structural, and/or other consultants' drawings. Refer to the Special Instructions section of the general notes, below.
D. AISC/RCSO 2009, "Specification for Structural Joints Using ASTM A325 or A490 Bolts"
E. American Welding Society (AWS) D1.1 2010, "Structural Welding Code - Steel" (specific items do not apply where they conflict with the AISC requirements)
F. American Welding Society (AWS) D1.8 2009, "Structural Welding Code - Seismic Specification" (specific items do not apply when they conflict with the AISC requirements)
G. Unalvanized Steel Sheet: ASTM A1009 or A1039, Grade 50
H. American Iron and Steel Institute (AISI) 2007, "North American Specification for the Design of Cold-Formed Steel Structural Members"
4.3. Structural shapes and plates shall be fabricated from newly rolled (milled) one-piece sections without splices, unless specifically noted otherwise on the structural drawings. Connections for structural steel shall comply with the structural drawings, unless written approval is given by the structural engineer.
4.4. Welding:
A. It is recommended the steel erection contractor and steel fabricator contact the Quality Assurance Agency prior to beginning any welds. A program of joint preparation and welding procedures shall be worked out between the two parties before the welding is started so that correct welds will be made from the beginning.

Table with 4 columns: Location, Fc at 28 days, W/C Ratio, Max Aggregate Size, Exposure Class. Rows include Footings, Interior Slabs on Grade, Walls and piers, Joist Beams and Suspended Slabs, Concrete over Steel Deck, All other site cast concrete.

- 5. Miscellaneous
5.1. Post-Installed Anchors in Concrete and Masonry
A. Anchorage to hardened concrete and grout-filled masonry shall include all mechanical and adhesive anchors and epoxy doweled reinforcing bars of size, quantity, spacing, and embedment as shown on the drawings. Additional anchors shall not be used without approval from the Engineer prior to installation.
B. Special inspection is required during the installation of all post-installed anchors. Refer to applicable code evaluation reports and the Quality Assurance and Statement of Special Inspections sections of the General Structural Notes.
C. Anchorage to Concrete:
1. All post-installed anchors into hardened concrete shall be selected from the following pre-approved products, unless noted otherwise:
Steel Screw Anchor: Hilli KWIK HIT-EZ, ESR-3027
Powers Wedge-Bolt: ESR-2526
Simpson Titan HD: ESR-2713
Steel Expansion/Wedge Anchor: Hilli KWIK Bolt TZ, ESR-1917
ITW Red Head T-Bolt: ESR-2427
Powers Power-Stud SD2: ESR-2502
Simpson Strong-Bolt 2: ESR-3037
Adhesive Anchor System: Hilli HIT-HY 200, ESR-3187
Hill HIT-RE 500-S0, ESR-2322
ITW Red Head Epcon C8+, ESR-2577
ITW Red Head Epcon S7: ESR-2308
Powers AC100+ Gold: ESR-2582
Powers Pure T10: ESR-2528
Simpson SET-XP: ESR-2508
2. Adhesive anchors shall be installed into concrete having a minimum age of 21 days. For installations sooner than 21 days, consult the adhesive manufacturer.
D. Alternate anchors or adhesives are permitted with approval of the engineer. The Contractor shall submit the proposed anchor product data and code evaluation report demonstrating the anchor is approved or exceeds the capacity of the specified anchor.
E. Installation of adhesive anchors horizontally or upwardly inclined to support sustained tension loads shall be performed by personnel certified by an applicable certification program. Certification shall include written and performance tests in accordance with the ACI/CRSI Adhesive Anchor Installer Certification program, or equivalent. Proof of current certification shall be submitted to the engineer for approval prior to commencement of installation.
F. Anchors shall be installed according to the manufacturer's published instructions and applicable code evaluation reports including:
1. Hole diameter, depth, and cleaning procedure
2. Adhesive mixing, preparation, and placement
3. Installation torque
G. Locate all existing reinforcement and embedded items prior to drilling into concrete or masonry elements. Do not damage rebar or embeds while drilling or installing anchors.
H. Grout at defects or abandoned holes with non-shrink grout or an injectable epoxy adhesive matching the surrounding concrete compressive strength. Consult the Architect for additional requirements at architecturally exposed concrete.
I. Drilled anchors are not allowed in post-tensioned concrete without approval of the architect and engineer.
J. Carbon steel anchors are limited to use in dry, interior locations.
6. Special Instructions
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STAMP



NOT FOR CONSTRUCTION UNTIL  
SIGNED BY THE ARCHITECT

**POWDER MOUNTAIN**  
8569 East Spring Park  
Eden, UT 84310

SHEET TITLE

**GENERAL  
STRUCTURAL  
NOTES**

No	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/6/27

THE ABOVE DRAWINGS, SPECIFICATIONS AND DESIGN ARE THE PROPERTY OF R&A. NO PART THEREOF SHALL BE COPIED OR USED WITH ANY OTHER WORK, OTHER THAN THE SPECIFIC PROJECT FOR WHICH THEY HAVE BEEN DEVELOPED WITHOUT THE WRITTEN CONSENT OF R&A. REVELEY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS, SPECIFICATIONS AND DESIGN INTENT IS THE SOLE RESPONSIBILITY OF THE DESIGNER. ANY OTHER PARTY FOLLOWING THE DESIGN PROFESSIONAL'S GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES OR CONFLICTS WHICH ARE ALLEGED

236

DATE 06/27/2017

SCALE

SHEET NO.

**S00.02**

**Concrete Construction per IBC Sections 1705.3 & 1705.12.1**

Item	Frequency	Detailed Instructions
Reinforcing steel	Periodic	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 lap lengths, stagger and offsets are provided; and that all mechanical connections are installed per the manufacturer's instructions and/or evaluation report.
Welding of reinforcing steel	Periodic	Verify weldability of reinforcing steel other than A706. Continuous inspection is required for welding of reinforcing steel used in intermediate or special concrete moment frames, boundary elements of special structural walls or shear reinforcement.
Cast-in bolts & embeds	Continuous	
Post-installed anchors or dowels	Continuous	All post-installed anchors/dowels shall be specially inspected as required by the approved ICC-ES report.
Use of required mix design	Periodic	Verify that all mixes used comply with the approved construction documents; ACI 318: Ch. 4, 5.2-5.4; and IBC 1904.3, 1913.2, 1913.3. Samples for strength tests shall be taken in accordance with ASTM C172, cured per ASTM C31 and tested in accordance with ASTM C39. Acceptance criteria for strength tests shall be per ACI 318 Section 5.6.3.3. For each mix placed, samples shall be taken not less than once a day, nor less than once for each 150 yd <sup>3</sup> of concrete, nor less than once for each 5000 ft <sup>2</sup> of surface area for slabs or walls. At the time fresh concrete is sampled to fabricate specimens for strength tests, perform slump and air content tests and determine the temperature of the concrete.
Concrete sampling for strength tests, slump, air content, and temperature	Continuous	
Concrete & shotcrete placement	Continuous	
Curing temperature and techniques	Periodic	Verify that the ambient temperature for concrete is kept at > 50°F for at least 7 days after placement. High-early-strength concrete shall be kept at > 50°F for at least 3 days. Accelerated curing methods may be used (see ACI 318: 5.11.3). The ambient temperature for shotcrete shall be > 40°F for the same period of time as noted for concrete. Shotcrete shall be kept continuously moist for at least 24 hours after shotcreting. 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.
In-situ strength verification	Periodic	Verify that adequate strength has been achieved prior to the removal of shores and forms or the stressing of post-tensioned tendons.
Formwork	Periodic	Verify that the forms are placed plumb and conform to the shapes, lines, and dimensions of the members as required by the approved construction documents.
Reinforcement in special structural walls and all components of special structural walls including coupling beams and wall piers	Periodic	Verify that ASTM A 615 reinforcing steel used in these areas complies with ACI 318: 21.1.5.2 by means of certified mill test reports. If this reinforcing steel is to be welded chemical tests shall be performed in accordance with ACI 318: 3.5.2.

**Soils per IBC Section 1705.6**

Item	Frequency	Detailed Instructions
Verify subgrade is adequate to achieve design bearing capacity	Periodic	Prior to placement of concrete.
Verify excavations extend to proper depth and material	Periodic	Prior to placement of compacted fill or concrete.
Verify that subgrade has been appropriately prepared prior to placing compacted fill	Periodic	Prior to placement of compacted fill.
Perform classification and testing of compacted fill materials	Periodic	All materials shall be checked at each lift for proper classifications and gradations not less than once for each 10,000ft <sup>2</sup> of surface area.

Item	Frequency	Detailed Instructions
Verify proper materials, densities and lift thicknesses during placement and compaction.	Continuous	

**8. Statement of Special Inspections**

- 8.1. The following materials, systems and components require special inspection or testing per Chapter 17 of the International Building Code (IBC).
- 8.2. For items requiring continuous inspection, a special inspector must be present onsite during the performance of that task. In most cases, periodic inspections/tests shall be performed prior to commencing the task, intermittently during the task, and at the completion of the task.

**Structural Steel per IBC Section 1705.2.1, 1705.11.1 & 1705.12.2**

Item	Frequency	Detailed Instructions
<i>Prior to Welding (Table N5.4-1, AISC 360-10):</i>		
Verify welding procedures (WPS) and consumable certificates	Continuous	
Material identification	Periodic	Verify type and grade of material.
Welder identification	Periodic	A system shall be maintained by which a welder who has welded a joint or member can be identified.
Fit-up groove welds	Periodic	Verify joint preparation, dimensions, cleanliness, lack, and backing.
Access holes	Periodic	Verify configuration and finish.
Fit-up of fillet welds	Periodic	Verify alignment, gaps at root, cleanliness of steel surfaces, and tack weld quality and location.
<i>During Welding (Table N5.4-2, AISC 360-10):</i>		
Use of qualified welders	Periodic	Verify that welders are appropriately qualified.
Control and handling of welding consumables	Periodic	Verify packaging and exposure control.
Cracked tack welds	Periodic	Verify that welding does not occur over cracked tack welds.
Environmental conditions	Periodic	Verify wind speed is within limits as well as precipitation and temperature.
WPS followed	Periodic	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	Periodic	Verify interpass and final cleaning, each pass is within profile limitations, and quality of each pass.
<i>After Welding (Table N5.4-3, AISC 360-10):</i>		
Welds cleaned	Periodic	Verify that welds have been properly cleaned.
Size, length, and location of welds	Continuous	
Welds meet visual acceptance criteria	Continuous	
Arc strikes	Continuous	
k-area	Continuous	
Backing & weld tabs removed	Continuous	
Repair activities	Continuous	
Document acceptance or rejection of welded joint/member	Continuous	
<i>Nondestructive Testing (Section N5.5, AISC 360-10):</i>		
CJP welds (Risk Cat. II)	Periodic	Ultrasonic testing shall be performed on 10% of CJP groove welds in butt, T- and corner joints subject to transversely applied tension loading in materials 5/16-inch thick or greater. Testing rate must be increased if > 5% of welds tested have unacceptable defects.
Access holes (flange > 2')	Continuous	
Welded joints subject to fatigue	Continuous	
<i>After Bolting (Table N5.6-3, AISC 360-10):</i>		
Document acceptance or rejection of bolted connections	Continuous	
<i>Other Steel Inspections (Section N5.7, AISC 360-10; Table J8-1, J10-1, AISC 341-10):</i>		
Structural steel details	Periodic	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.

Item	Frequency	Detailed Instructions
Anchor rods and other embedments supporting structural steel	Periodic	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 embedded item, and the extent or depth of embedment prior to placement of concrete.
Protected zones	Periodic	Verify that no holes or unapproved attachments are made within the protected zone (see Table J8-1 of AISC 341-10).
<i>Steel Elements of Composite Construction (Table N6.1, AISC 360-10; Tables J9-1 thru J9-3, AISC 341-11):</i>		
Placement and installation of steel deck	Continuous	
Placement and installation of steel headed stud anchors	Continuous	
Document acceptance or rejection of steel elements	Continuous	
Reinforcing steel	Periodic	Verify appropriate reinforcement size, spacing, and orientation; that it has not been re-bent in field; that it is correctly tied and supported; and that required steel clearances have been provided.
Composite member size	Periodic	Verify that composite member is the required size.

**Steel Construction Other Than Structural Steel per IBC Section 1705.2.2**

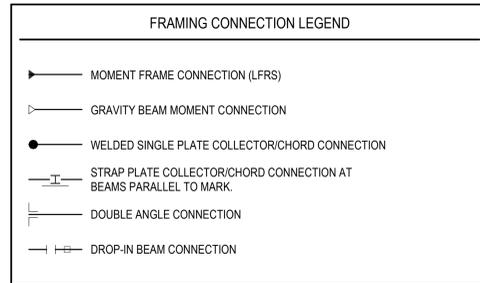
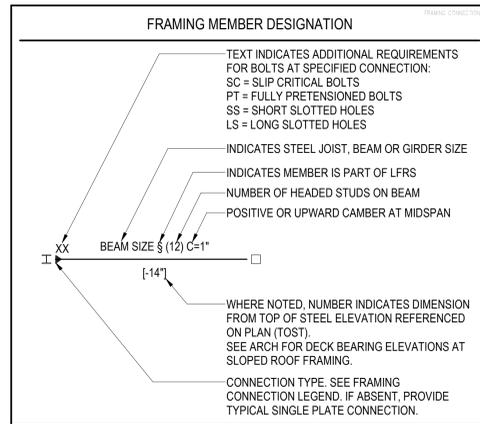
Item	Frequency	Detailed Instructions
<i>Steel Roof and Floor Decks (IBC Table 1705.2.2):</i>		
Material verification of cold-formed steel deck	Periodic	Confirm that identification markings are provided to conform to ASTM standards specified on construction documents.
Floor and roof deck welds	Periodic	Visual inspection is required to confirm that weld meets acceptance criteria of AWS D1.3. Welder qualifications should also be verified.

- 6.4. Shoring and Bracing Requirements:
- A. Floor and Roof Structures -- The General Contractor is responsible for the method and sequence of all structural erection. He shall provide temporary shoring and bracing as his method of erection requires to provide adequate vertical and lateral support. Shoring and bracing shall remain in place as the chosen method requires until all permanent members are in place and all final connections are completed, including all roof and floor attachments. The building shall not be considered stable until all connections are complete.
- B. Foundation walls must be braced until the complete floor or roof systems is completed. Do not backfill until floor or roof systems are in place.
- C. Walls above grade shall be braced until the structural system is complete. Walls shall not be considered to be self-supporting.
- 6.5. All expansion joints (E.J.) shown in the structural drawings shall be considered seismic separation joints, unless noted otherwise.
- 6.6. Submittals: A copy of all shop drawings that have been submitted for review must be kept at the construction site for reference. These drawings must bear the appropriate review stamps. The shop drawing review shall not relieve the contractor of the responsibility of completing the project according to the contract documents. The general contractor shall review and mark all shop drawings prior to submitting them to the Architect for his review. Shop Drawings made from reproductions of (these) contract drawings will be rejected.
- 6.7. Project Coordination: It shall be the responsibility of the general contractor to coordinate with all trades any and all items that are to be integrated into the structural system. Openings or penetrations through, or attachments to the structural system that are not indicated on these drawings shall be the responsibility of the general contractor and shall be coordinated with the Architect/Engineers. The order of construction is the responsibility of the general contractor. It is the contractor's obligation to provide all items necessary for his chosen procedure.
- 6.8. Contractor shall verify all dimensions, and conditions. If the contract drawings do not represent actual conditions, contractor shall notify architect/engineer prior to fabrication or construction within that area.
- 6.9. Notice of Copyright: The structural drawings, plans, schedules, notes and details are hereby copyrighted by Reaveley Engineers and Associates, Inc.. All Rights reserved. Submission or distribution of documents to meet official regulatory requirements or for similar purposes in connection with the project is not to be construed as publication in derogation of Reaveley Engineers and Associates, Inc.'s reserved rights. The documents defining the structure are instruments of service prepared by Reaveley Engineers and Associates, Inc. for one use only. Furthermore, these documents shall not be reproduced, or copied, in whole or in part by the contractor or his subcontractors for preparation of shop drawings or other submittals.

**7. Quality Assurance**

- 7.1. Quality Assurance Agency Requirements:
- A. The Owner shall engage a qualified Quality Assurance Agency (QAA) to provide all special inspection and quality assurance testing for the project. The QAA shall provide all information necessary for the building official to determine that the agency meets the applicable requirements
- The QAA shall be objective, competent and independent from the contractor responsible for the work being inspected. The agency shall also disclose possible conflicts of interest to confirm objectivity.
  - The QAA shall have adequate equipment to perform required tests.
  - The QAA shall employ experienced personnel educated in conducting, supervising and evaluating tests and/or inspections. Experience or training shall be considered relevant when the documented experience or training is related in complexity to the same type of special inspection activities for projects of similar complexity and material qualities.
  - Prior to the start of construction, the QAA shall submit to the building official, the owner, architect and engineer copies of the following:
    - Current calibration records for all equipment to be used for the work being inspected and/or tested.
    - Current certification and training records for each individual performing the inspections and/or testing.
    - Sample inspection and testing reports and the distribution list for the records.
    - Proposed inspection procedures and frequency for each inspection required by the work.
    - Proposed testing methods and frequency of testing required by the work.
  - The QAA shall send copies of all inspection and testing reports to the building official, owner, architect, engineer and contractor. Reports shall indicate that the work inspected was or was not completed in conformance to the approved construction documents. Discrepancies shall be brought to the immediate attention of the contractor for correction. If they are not corrected, the discrepancies shall be brought to the attention of the building official, architect and engineer.
  - The QAA shall submit a final report documenting required special inspections and correction of any discrepancies noted in the inspections. The final report shall be distributed to the building official, owner, architect and engineer in a timely manner prior to the completion of the project.
- 7.2. Contractor Responsibilities:
- A. Each contractor responsible for the construction of a system or component requiring special inspections or testing shall submit a written statement of responsibility to the building official, owner, architect and engineer prior to the commencement of the work. The contractor's statement of responsibility shall contain the following:
- Acknowledgement of awareness of the special requirements defined in the statement of special inspections.
  - Acknowledgement that control will be exercised in order to obtain conformance to the approved construction documents.
  - Contractor's internal quality control procedures, methods and measures to be used in order to obtain conformance to the approved construction documents. Include copies of quality control reports, frequency of reporting and distribution of reports.
  - Identification and qualifications of the person(s) responsible for quality control and their position(s) within the organization.
- B. Notification of Engineer: The contractor shall notify the engineer twenty-four hours prior to the items listed in the Structural Observations by the Engineer of Record section.
- C. Notification of QAA: The contractor shall notify the QAA in a timely manner so that inspection and testing may be performed as outlined in the statement of special inspections.
- 7.3. Structural Observations by the Engineer of Record:
- A. The Engineer of Record will perform structural observations at critical phases of the project as listed below. Observations will be made on a periodic basis throughout the construction of the structural system. During this time frame, site visits will be made approximately every two weeks. Copies of the engineer's report will be distributed to the architect, contractor, owner, and building official.
- Placing concrete in any footing, mat footing, deep foundation, grade beam, or pier
  - Closing any wall forms
  - Placing concrete in any column, beam or suspended slab
  - Grouting any masonry
  - Completing the structural steel framing
  - Completing the welding of major sections of steel decking
  - Completing the nailing of any plywood wall or deck
- B. Observation visits to the site by the Engineer's field representatives shall not be construed as inspection or approval of construction.

PLAN LEGEND					
	FOOTING STEP		CONCRETE WALL		EXISTING FOOTING - CONTINUOUS
	FOOTING - CONTINUOUS		CONCRETE WALL - RECESSED (FDTN CONCRETE LINTEL (FRAMING PLAN)		EXISTING FOOTING - THICKENED SLAB
	FOOTING - THICKENED SLAB		CONCRETE WALL - RECESSED AT DOOR		EXISTING FOOTING - SQUARE, RECTANGULAR, OR MAT
	FOOTING - SQUARE FOOTING - RECTANGULAR FOOTING - MAT FOOTING		CONCRETE PIER IN CONCRETE WALL. TOP OF PIER RECESSED BELOW SLAB.		EXISTING CONCRETE SHEAR WALL, FOUNDATION WALL OR RETAINING WALL
	CHANGE IN ELEVATION		CONCRETE COLUMN		EXISTING OPENING THROUGH CONCRETE WALL
	SLAB BLOCK-OUT AT COLUMN		CONCRETE JAMB COLUMN POURED MONOLITHIC WITH CONCRETE WALL		EXISTING CONCRETE PIER IN CONCRETE WALL. PIER RECESSED BELOW SLAB.
	SLAB CONTROL/CONSTRUCTION JOINT		MASONRY WALL		EXISTING CONCRETE COLUMN
	SPECIAL SLAB OR DECK AREA		MASONRY WALL - RECESSED (FDTN PLAN) MASONRY LINTEL (FRAMING PLAN)		NEW OPENING THROUGH EXISTING CONCRETE WALL
	SPECIAL SLAB OR DECK AREA		MASONRY COLUMN IN MASONRY WALL		EXISTING MASONRY WALL
	SPECIAL SLAB OR DECK AREA		STEEL STUD WALL - STRUCTURAL		EXISTING OPENING THROUGH MASONRY WALL
	RECESSED/DEPRESSED SLAB		STEEL HEADER IN STEEL STUD WALL		NEW OPENING THROUGH EXISTING MASONRY WALL
	OPENING		BRICK WALL		EXISTING MASONRY COLUMN IN MASONRY WALL
	CONCRETE HOUSEKEEPING PAD		BRICK WALL - RECESSED (FDTN PLAN) BRICK LINTEL (FRAMING PLAN)		NEW OPENING THROUGH EXISTING MASONRY WALL
	INDICATES ROOF DAVIT ARM BASE		BRICK COLUMN IN BRICK WALL		EXISTING STEEL COLUMN - TUBE
	INDICATES WINDOW WASHING TIE-BACK		STEEL BRACED FRAME - ABOVE		EXISTING STEEL COLUMN - WIDE FLANGE
	CONCRETE BEAM		STEEL BRACED FRAME		EXISTING STEEL COLUMN - PIPE
	CONCRETE JOIST - ONE WAY PANS		STEEL BEAM OR GIRDER		EXISTING STEEL BRACED FRAME
	CONCRETE JOIST - TWO WAY PANS		STEEL JOIST OR PURLIN		EXISTING SLAB BLOCK-OUT AT COLUMN
	CONCRETE SUSPENDED SLAB		STEEL ANGLE BRACE / KICKER. SEE / FOR SLAB EDGE KICKER. SEE / FOR FRAME BRACE		EXISTING SLAB CONTROL/CONSTRUCTION JOINT
			CROSS BRIDGING		EXISTING STEEL BEAM OR GIRDER
			HORIZONTAL BRIDGING		EXISTING STEEL JOIST OR PURLIN
			STEEL COLUMN - TUBE (HSS)		EXISTING CROSS BRIDGING
			STEEL COLUMN - WIDE FLANGE		EXISTING HORIZONTAL BRIDGING
			STEEL COLUMN - PIPE (HSS)		EXISTING TO BE REMOVED
			CONCRETE ON METAL DECK		EXISTING OPENING
			ROOF DECK		
			STEEL GRATE		



### ABBREVIATIONS

@	AT
AB	ANCHOR BOLT (S)
ABV	ABOVE
ALT	ALTERNATE
APPROX	APPROXIMATE
ARCH	ARCHITECT(URAL)
BLDG	BUILDING
BLW	BELOW
BM	BEAM
BOT	BOTTOM
BRG	BEARING
BTWN	BETWEEN
CJ	CONSTRUCTION JOINT OR CONTROL JOINT
CJP	COMPLETE JOINT PENETRATION
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS
CONTR	CONTRACTOR
CTR	CENTER
D.B.	DECK BEARING
db	DIAMETER OF REINFORCING BAR
DBA	DEFORMED BAR ANCHORS
DBL	DOUBLE
DET	DETAIL
DIA (OR Ø)	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DK	DECK
DN	DOWN
DWG	DRAWING
DWL	DOWEL
E.F.	EACH FACE
E.J.	EXPANSION JOINT (SEISMIC SEPARATION JOINT)
E.W.	EACH WAY
EA	EACH
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATOR
ENG	ENGINEER
EQ	EQUAL
EQUIP	EQUIPMENT
EXIST (E)	EXISTING
EXP	EXPANSION / EXPOSED
EXT	EXTERIOR
F.D.	FLOOR DRAIN
F.F.	FINISH FLOOR
F.V.	FIELD VERIFY
FDTN	FOUNDATION
FIN	FINISH
FL	FLOOR
FT	FOOT
FTG	FOOTING
GA	GAUGE
GALV	GALVANIZED
GLB	GLU-LAMINATED BEAM
GR	GRADE
GSN	GENERAL STRUCTURAL NOTES
HORIZ	HORIZONTAL BRIDGING
HSA	HORIZONTAL
HSS	HEADED STUD ANCHORS
HT	HOLLOW STRUCTURAL STEEL
I.F.	HEIGHT
IBC	INSIDE FACE
ICBO	INTERNATIONAL BUILDING CODE
ICC	INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS
IN	INTERNATIONAL CODE COUNCIL
INSUL	INCH
INT	INSULATION
JST	INTERIOR
JT	JOIST
K	JOINT
K	KIPS - 1,000 POUNDS
KLF	KIPS PER LINEAL FOOT
KSF	KIPS PER SQUARE FOOT
KSI	KIPS PER SQUARE INCH
LBS	POUNDS
Ld, Ll, Lsb, Lsbt, Ldc, Lsc	SEE CONCRETE REINFORCING BAR DEVELOPMENT AND LAP LENGTH SCHEDULE
LFRS	LINEAL FOOT
LFRS	LATERAL FORCE RESISTING SYSTEM (SFRS & WFRS)
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LSH	LONG SIDE HORIZONTAL
LSV	LONG SDIE VERTICAL
MAS	MASONRY
MAX	MAXIMUM
MCJ	MASONRY CONTROL JOINT
MECH	MECHANICAL
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
NIC	NOT IN CONTRACT
NORM	NORMAL
NTS	NOT TO SCALE
O.C.	ON CENTER
O.F.	OUTSIDE FACE
OPNG	OPENING
OPP	OPOSITE
OWSJ	OPEN WEB STEEL JOIST
P.T.	POST-TENSIONED
PCF	POUNDS/CUBIC FOOT
PJP	PARTIAL JOINT PENETRATION
PL	PLATE
PLF	POUNDS/LINEAL FOOT
PNL	PANEL
PSF	POUNDS/SQ FOOT
PSI	POUNDS/SQ INCH

### ABBREVIATIONS

R.D.	ROOF DRAIN
REINF	REINFORCING
REQD	REQUIRED
SFRS	SEISMIC FORCE RESISTING SYSTEM
SHT	SHEET
SI	SPECIAL INSPECTION (SP. INSP.)
SIM	SIMILAR
SOG	SLAB ON GRADE
SO	SQUARE
STAG	STAGGERED
STD	STANDARD
STIFF	STIFFENER
STL	STEEL
STRUCT	STRUCTURAL
T & B	TOP AND BOTTOM
T.O.	TOP OF
TEMP	TEMPERATURE
THDS	THREADS
TOC	TOP OF CONCRETE
TOCP	TOP OF CONCRETE PIER
TOF	TOP OF FOOTING
TOS	TOP OF SLAB
TOST	TOP OF STEEL
TOW	TOP OF WALL
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
W.P.	WORK POINT
W/	WITH
WF	WIDE FLANGE
WFRS	WIND FORCE RESISTING SYSTEM
WT	WEIGHT
WWF	WELDED WIRE FABRIC
YD	YARD

### PLAN MARKS

BF#	BRACED FRAME
CB#	CONCRETE BEAM
CC#	CONCRETE COLUMN
CCSS#	CANTILEVERED CONCRETE SUSPENDED SLAB
CDP#	CONCRETE DRILLED PIER
CFW#	CONCRETE FOUNDATION WALL
CGB#	CONCRETE GRADE BEAM
CJ#	CONCRETE JOIST
CJC#	CONCRETE JAMB COLUMN
CL#	CONCRETE LINTEL
CP#	CONCRETE PIER
CRW#	CONCRETE RETAINING WALL
CSG#	CONCRETE SLAB ON GRADE
CSH#	CONCRETE SHEAR HEAD
CSS#	CONCRETE SUSPENDED SLAB
CSW#	CONCRETE SHEAR WALL
CW#	CONCRETE WALL
FC#	CONTINUOUS FOOTING
FMD#	MAT FOOTING
FR#	RECTANGULAR FOOTING
FS#	SQUARE FOOTING
FTS#	THICKENED SLAB FOOTING
HD#	HOLD DOWN ANCHOR
MC#	MASONRY COLUMN
MF#	MOMENT FRAME
ML#	MASONRY LINTEL
MP#	MASONRY PIER
MW#	MASONRY WALL
PTB#	POST-TENSIONED CONCRETE BEAM
SBP#	STEEL BASE PLATE
SC#	STEEL COLUMN
SCP#	STEEL CAP PLATE
SD#	STEEL DECK
SDA#	STEEL DECK ATTACHMENT
SG#	STEEL GIRDER
SJ#	STEEL JOIST
SND#	SNOW DRIFT
WB#	WOOD BEAM
WBW#	WOOD BEARING WALL
WC#	WOOD COLUMN
WD#	WOOD DIAPHRAGM
WJ#	WOOD JOIST
WSW#	WOOD SHEAR WALL



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**POWDER MOUNTAIN**  
8569 East Spring Park  
Eden, UT 84310

### LEGENDS AND ABBREVIATIONS

No	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/6/27

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DATE: 06/27/2017  
SCALE: 1/8" = 1'-0"

SHEET NO. S00.03

**FOOTING & FOUNDATION PACKAGE NOTES**

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**MECHANICAL ROOM NOTES**

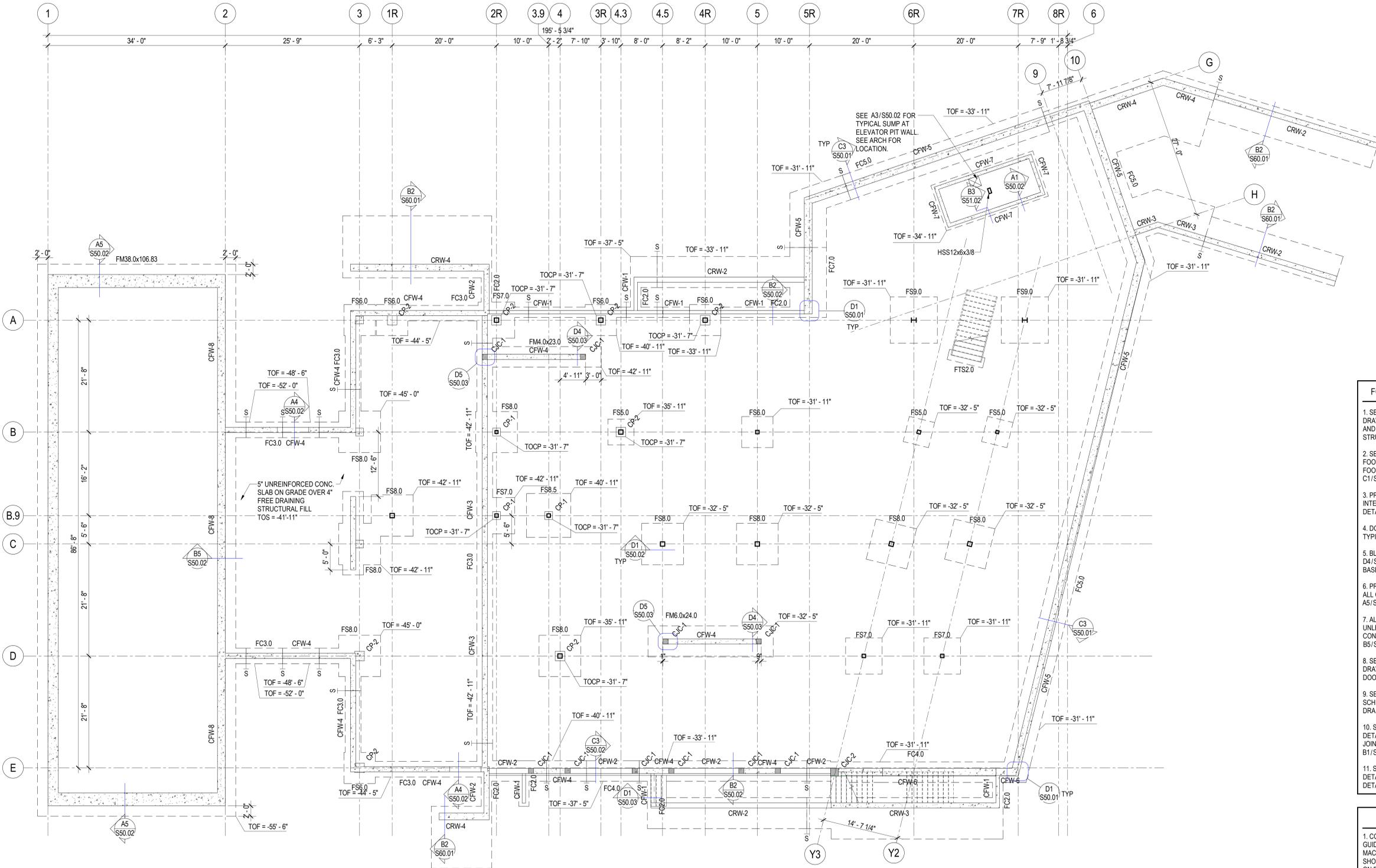
1. VERIFY SIZE AND LOCATION OF ALL HOUSEKEEPING PADS WITH MECHANICAL. SEE TYPICAL DETAILS FOR REINFORCING B3/S50.01  
 2. FRAMING OVER MECHANICAL ROOM HAS BEEN DESIGNED FOR UP TO 25 PSF FOR PIPES AND OTHER HANGING LOTS. IF THIS ALLOWANCE IS EXCEEDED, CONTACT ENGINEER PRIOR TO INSTALLATION.



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- SEE ARCHITECTURAL, CIVIL AND LANDSCAPE DRAWINGS FOR EXTERIOR CONCRETE RETAINING AND / OR SITE WALLS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
- SEE TYPICAL STEP DETAIL AT CONTINUOUS FOOTING AND TYPICAL STEP DETAIL AT MAT FOOTING FOR REINFORCING REQUIREMENTS C1/S50.01, C2/S50.01.
- PROVIDE REINFORCEMENT AT WALL ENDS, INTERSECTIONS AND OPENINGS PER TYPICAL DETAILS D1/S50.01.
- DOWEL ALL CONCRETE WALLS TO FOOTING PER TYPICAL DETAIL C3/S50.01.
- BLOCK-OUT FOUNDATION WALLS PER DETAIL D4/S50.02 WHERE REQUIRED AT STEEL COLUMN BASE PLATE.
- PROVIDE COMPACTED STRUCTURAL FILL UNDER ALL CONCRETE FOOTINGS PER TYPICAL DETAIL A5/S50.01.
- ALL SLABS ON GRADE SHALL BE 4 INCHES THICK UNLESS NOTED OTHERWISE. SEE TYPICAL CONCRETE SLAB ON GRADE PROFILE DETAIL B5/S50.01 FOR SUBGRADE REQUIREMENTS.
- SEE ARCHITECTURAL, CIVIL AND LANDSCAPE DRAWINGS FOR EXTERIOR CONCRETE WORK AT DOORS, SIDEWALKS, ETC.
- SEE ARCHITECTURAL DRAWINGS AND FINISH SCHEDULE FOR SLAB DEPRESSIONS, SLOPES TO DRAINS AND SLAB AREAS TO RECEIVE FLOOR TILE.
- SEE TYPICAL CONCRETE SLAB ON GRADE DETAILS FOR CONSTRUCTION JOINTS, CONTROL JOINTS AND ADDITIONAL SLAB REINFORCING B1/S50.01
- SEE TYPICAL HOUSEKEEPING PAD & CURB DETAILS AT CONCRETE SLAB ON GRADE PER DETAIL B3/S50.01

**ELEVATOR NOTES**

- CONTRACTOR TO COORDINATE LOCATION OF GUIDELINE SUPPORT COLUMNS, SEPARATOR BEAMS, MACHINE BEAMS AND HOIST BEAMS. MEMBERS SHOWN ARE SCHEMATIC AND MAY CHANGE BASED ON ELEVATOR MANUFACTURER REQUIREMENTS.
- CONTRACTOR SHALL VERIFY ELEVATOR PIT DEPTH AND SLUMP REQUIREMENTS PRIOR TO PLACING CONCRETE AT PIT.

**A1 FOOTING & FOUNDATION PLAN**  
 S20.01 SCALE: 1/8" = 1'-0"

**POWDER MOUNTAIN**  
 8569 East Spring Park  
 Eden, UT 84310

SHEET TITLE  
**FOOTING & FOUNDATION PLAN**

No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/06/27

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SHEET NO. **236**  
 DATE **06/27/2017**  
 SCALE **1/8" = 1'-0"**  
 SHEET NO. **S20.01**

06/27/2017 6:02:27 PM

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**ELEVATOR NOTES**

- CONTRACTOR TO COORDINATE LOCATION OF GUIDERAIL, SUPPORT COLUMNS, SEPARATOR BEAMS, MACHINE BEAMS AND HOIST BEAMS. MEMBERS SHOWN ARE SCHEMATIC AND MAY CHANGE BASED ON ELEVATOR MANUFACTURER REQUIREMENTS.
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**FOOTING & FOUNDATION PACKAGE NOTES**

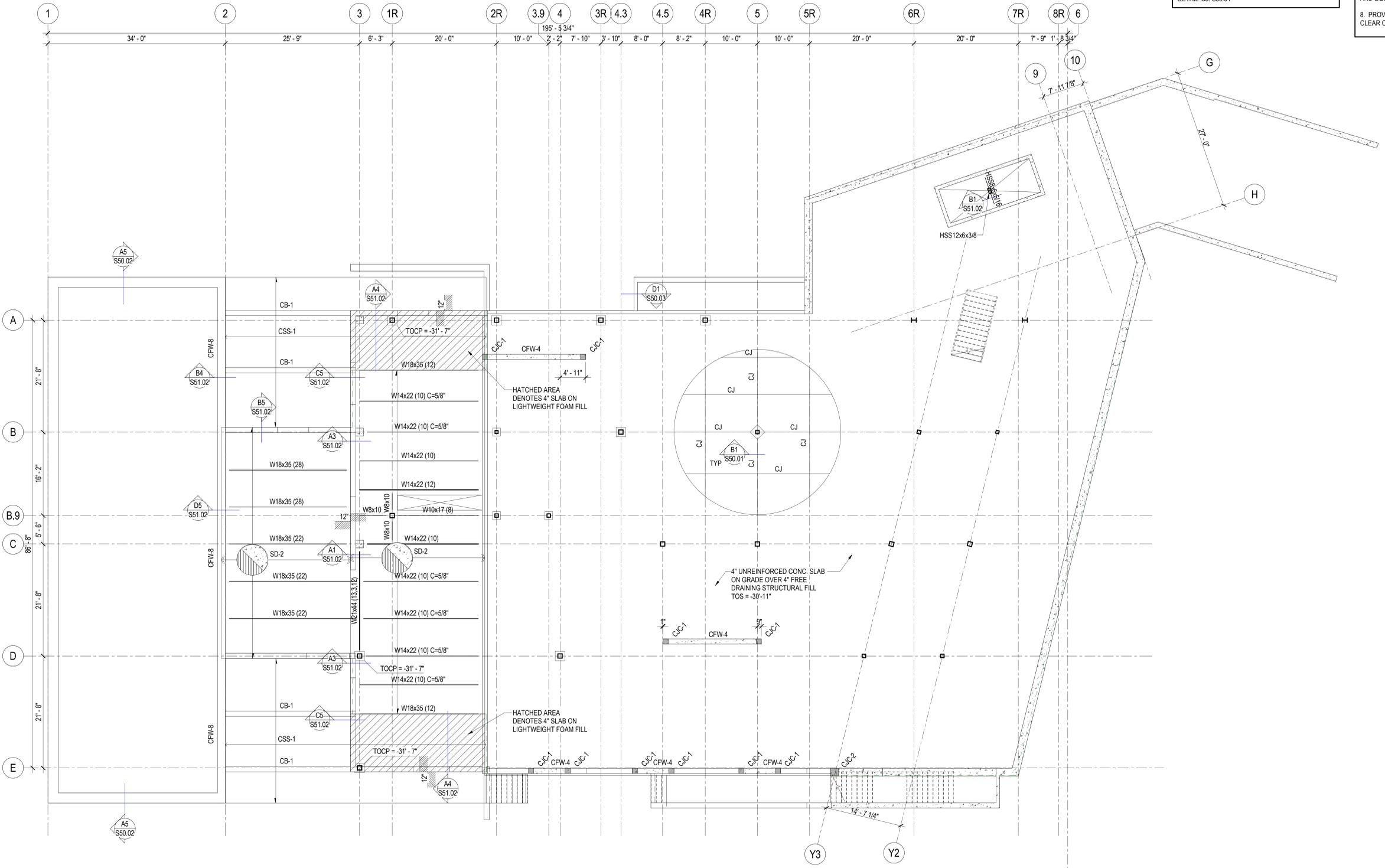
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**SLAB ON GRADE NOTES**

- ALL SLABS ON GRADE SHALL BE 4 INCHES THICK, UNLESS NOTED OTHERWISE. SEE TYPICAL CONCRETE SLAB ON GRADE PROFILE DETAIL B5/S50.01 FOR SUBGRADE REQUIREMENTS.
- SEE ARCHITECTURAL DRAWINGS AND FINISH SCHEDULE FOR SLAB DEPRESSIONS, SLOPES TO DRAINS AND SLAB AREAS TO RECEIVE FLOOR TILE.
- SEE TYPICAL CONCRETE SLAB ON GRADE DETAILS FOR CONSTRUCTION JOINTS, CONTROL JOINTS AND ADDITIONAL SLAB REINFORCING B1/S50.01.
- SEE TYPICAL HOUSEKEEPING PAD & CURB DETAILS AT CONCRETE SLAB ON GRADE PER DETAIL B3/S50.01

**COMPOSITE STEEL FRAMING PLAN NOTES**

- SEE STEEL DECK SCHEDULE ON SHEET S61.03 FOR DECK PROFILE, DECK ATTACHMENT, CONCRETE FILL AND SLAB REINFORCEMENT REQUIREMENTS.
- PROVIDE CONTROL JOINTS IN CONCRETE SLABS OVER STEEL DECK PER DETAIL D4/S51.01 AND GSN SECTION 3.4.H. SUBMIT CONTROL JOINT AND SLAB REINFORCEMENT PLANS FOR REVIEW.
- PROVIDE REINFORCEMENT/FRAMING AT OPENINGS THROUGH STEEL DECK PER TYPICAL OPENING REINFORCING DETAIL D1/S51.01.
- SEE C1/S51.01 FOR TYPICAL STUD PLACEMENT DIAGRAMS FOR HEADED STUD PLACEMENT ON COMPOSITE BEAMS. ADJUST STUD HEIGHT AT SLAB RECESSES PER DETAIL B5/S51.01.
- PROVIDE STEEL DECK FILLER PER DETAIL C2/S51.01 WHERE REQUIRED FOR HEADED STUD PLACEMENT.
- DO NOT PLACE CONDUIT IN CONCRETE OVER STEEL DECK.
- PROVIDE HOUSEKEEPING PADS AND CURBS PER DETAIL C4/S51.01. VERIFY DIMENSIONS AND LOCATIONS OF CURBS AND PADS WITH MECHANICAL AND EQUIPMENT SUPPLIER.
- PROVIDE STAGGERED LAP SPLICES & 2" MIN. CLEAR COVER AT CHORD REINFORCEMENT, TYP.



**A1** UPPER BASEMENT LEVEL FRAMING PLAN  
SCALE: 1/8" = 1'-0"

**POWDER MOUNTAIN**  
8569 East Spring Park  
Eden, UT 84310

SHEET TITLE  
**UPPER BASEMENT  
LEVEL FRAMING  
PLAN**

No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/6/27

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DATE: 06/27/2017  
SCALE: 1/8" = 1'-0"

SHEET NO.  
**S22.01**

06/27/2017 6:02:27 PM

**ELEVATOR NOTES**

- CONTRACTOR TO COORDINATE LOCATION OF GUIDERAIL SUPPORT COLUMNS, SEPARATOR BEAMS, MACHINE BEAMS AND HOIST BEAMS. MEMBERS SHOWN ARE SCHEMATIC AND MAY CHANGE BASED ON ELEVATOR MANUFACTURER REQUIREMENTS.
- CONTRACTOR SHALL VERIFY ELEVATOR PIT DEPTH AND SUMP REQUIREMENTS PRIOR TO PLACING CONCRETE AT PIT.

**FLOOR FRAMING PLAN NOTES**

- SEE ARCHITECTURAL DRAWINGS AND FINISH SCHEDULE FOR SLAB AREAS TO RECEIVE FLOOR TILE.

**SLAB ON GRADE NOTES**

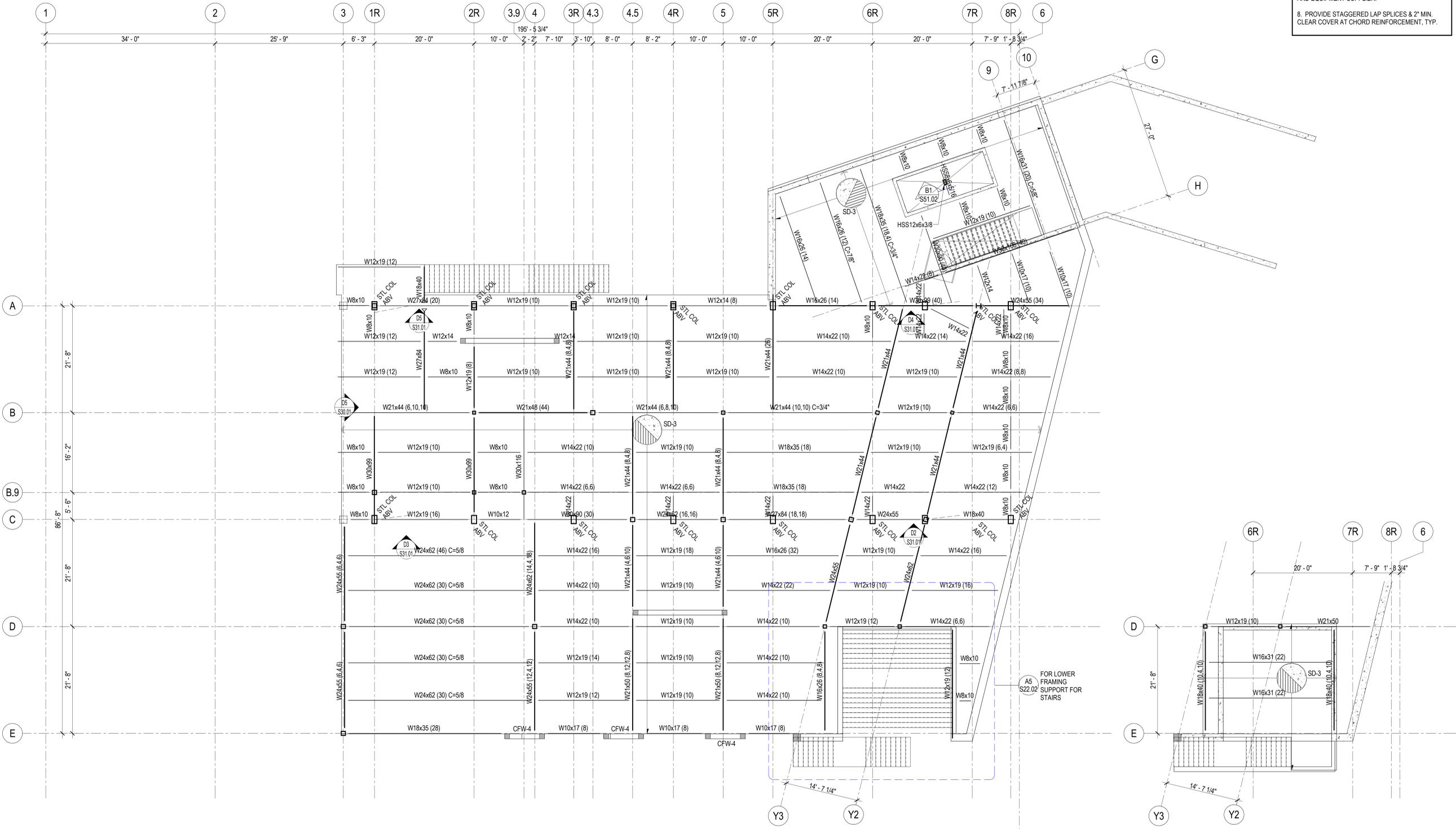
- ALL SLABS ON GRADE SHALL BE 4 INCH THICK, UNLESS NOTED OTHERWISE. SEE TYPICAL CONCRETE SLAB ON GRADE PROFILE DETAIL B5/S50.01 FOR SUBGRADE REQUIREMENTS.
- SEE ARCHITECTURAL DRAWINGS AND FINISH SCHEDULE FOR SLAB DEPRESSIONS, SLOPES TO DRAINS AND SLAB AREAS TO RECEIVE FLOOR TILE.
- SEE TYPICAL CONCRETE SLAB ON GRADE DETAILS FOR CONSTRUCTION JOINTS, CONTROL JOINTS AND ADDITIONAL SLAB REINFORCING B1/S50.01.
- SEE TYPICAL HOUSEKEEPING PAD & CURB DETAILS AT CONCRETE SLAB ON GRADE PER DETAIL B3/S50.01

**COMPOSITE STEEL FRAMING PLAN NOTES**

- SEE STEEL DECK SCHEDULE ON SHEET S61.03 FOR DECK PROFILE, DECK ATTACHMENT, CONCRETE FILL AND SLAB REINFORCEMENT REQUIREMENTS.
- PROVIDE CONTROL JOINTS IN CONCRETE SLABS OVER STEEL DECK PER DETAIL D4/S51.01 AND GSN SECTION 3.4.H. SUBMIT CONTROL JOINT AND SLAB REINFORCEMENT PLANS FOR REVIEW.
- PROVIDE REINFORCEMENT/FRAMING AT OPENINGS THROUGH STEEL DECK PER TYPICAL OPENING REINFORCING DETAIL D1/S51.01.
- SEE C1/S51.01 FOR TYPICAL STUD PLACEMENT DIAGRAMS FOR HEADED STUD ANCHORS ON COMPOSITE BEAMS. ADJUST STUD HEIGHT AT SLAB RECESSES PER DETAIL B5/S51.01.
- PROVIDE STEEL DECK FILLER PER DETAIL C2/S51.01 WHERE REQUIRED FOR HEADED STUD PLACEMENT.
- DO NOT PLACE CONDUIT IN CONCRETE OVER STEEL DECK.
- PROVIDE HOUSEKEEPING PADS AND CURBS PER DETAIL C4/S51.01. VERIFY DIMENSIONS AND LOCATIONS OF CURBS AND PADS WITH MECHANICAL AND EQUIPMENT SUPPLIER.
- PROVIDE STAGGERED LAP SPLICES & 2" MIN. CLEAR COVER AT CHORD REINFORCEMENT, TYP.

**FOOTING & FOUNDATION PACKAGE NOTES**

- THESE DRAWINGS ARE FOR CONSTRUCTION OF FOOTINGS AND FOUNDATIONS ONLY. ADDITIONAL STRUCTURAL ELEMENTS ARE SHOWN FOR REFERENCE ONLY. DO NOT DETAIL, FABRICATE OR CONSTRUCT STRUCTURAL STEEL FROM THESE DOCUMENTS.





**FOOTING & FOUNDATION PACKAGE NOTES**

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STAMP

NOT FOR CONSTRUCTION UNTIL  
SIGNED BY THE ARCHITECT

**POWDER MOUNTAIN**  
8569 East Spring Park  
Eden, UT 84310

SHEET TITLE  
**ROOF FRAMING  
PLAN**

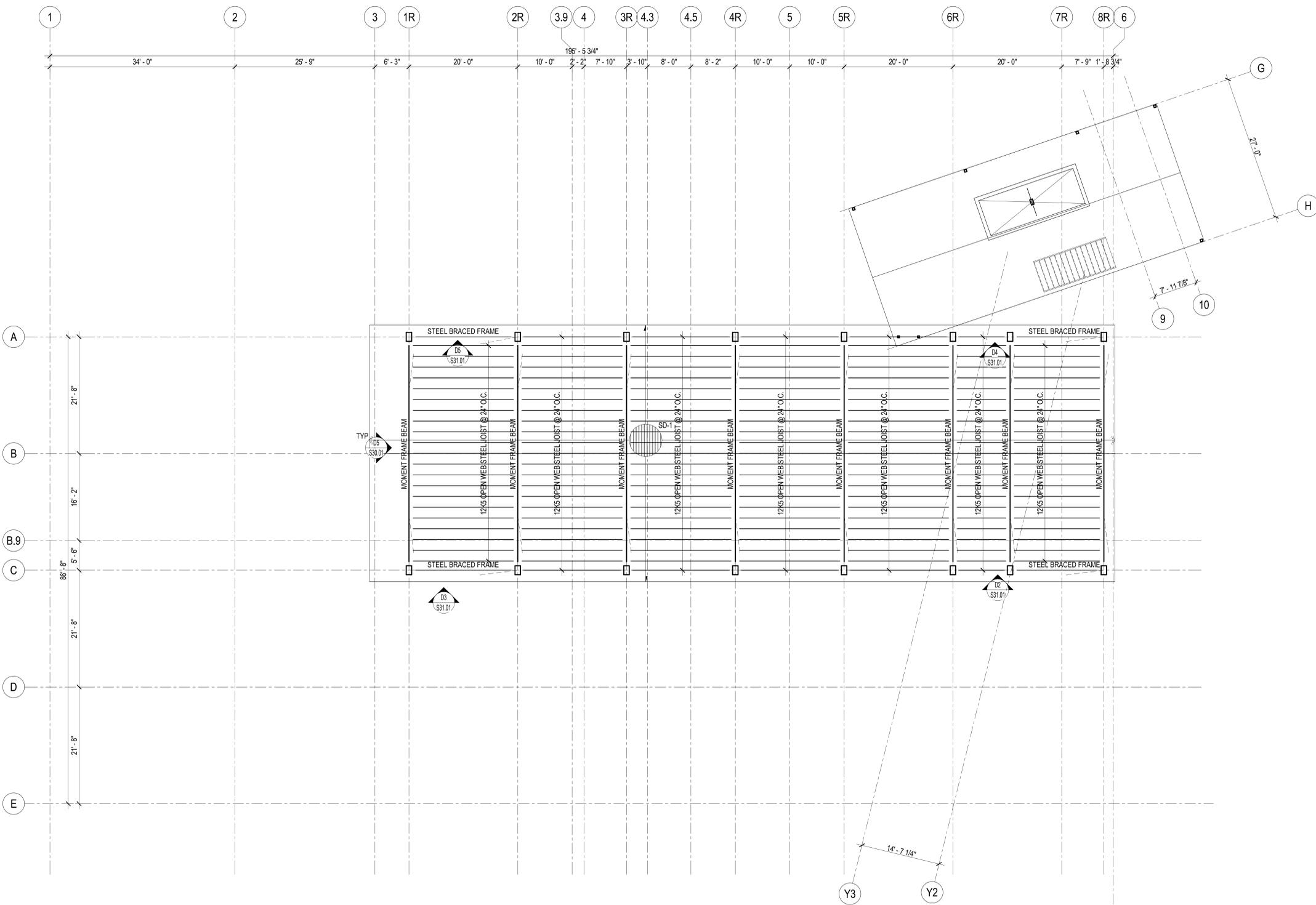
No.	Description	Date
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DATE: **06/27/2017**  
SCALE: **1/8" = 1'-0"**  
SHEET NO.

**S22.04**

FOR REFERENCE ONLY - NOT FOR CONSTRUCTION



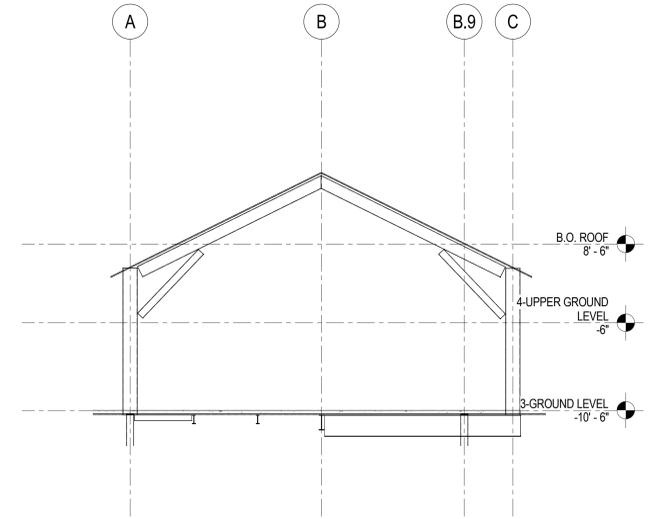
**A1** ROOF FRAMING PLAN  
**S22.04**  
SCALE: 1/8" = 1'-0"

6/27/2017 6:02:28 PM

R&A: IF THIS SHEET IS NOT 30" x 42", IT IS A REDUCED PRINT

STAMP

NOT FOR CONSTRUCTION UNTIL  
SIGNED BY THE ARCHITECT



D5 BARN MF  
S30.01 SCALE: 1/8" = 1'-0"

**POWDER MOUNTAIN**  
8569 East Spring Park  
Eden, UT 84310

SHEET TITLE  
**MOMENT FRAME  
ELEVATIONS**

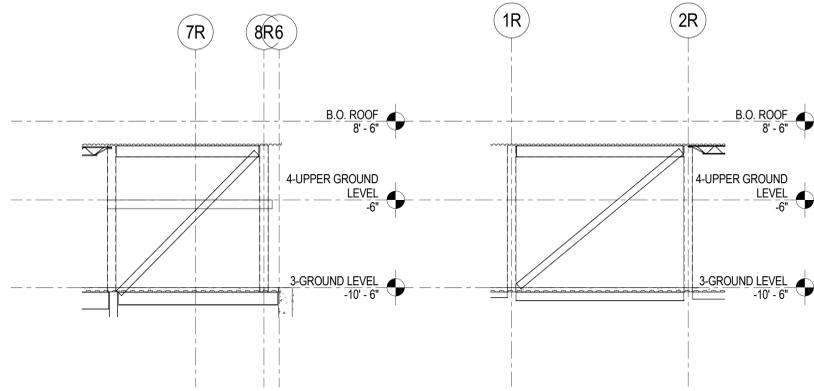
No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/06/27

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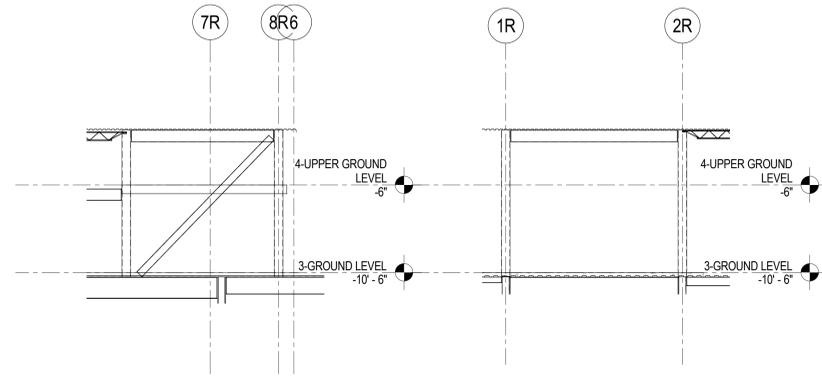
236  
DATE 06/27/2017  
SCALE 1/8" = 1'-0"

SHEET NO.  
**S30.01**



D2 BF ALONG Cb  
S31.01 SCALE: 1/8" = 1'-0"

D3 BF ALONG Ca  
S31.01 SCALE: 1/8" = 1'-0"



D4 BF ALONG Ab  
S31.01 SCALE: 1/8" = 1'-0"

D5 BF ALONG Aa  
S31.01 SCALE: 1/8" = 1'-0"

**POWDER MOUNTAIN**  
8569 East Spring Park  
Eden, UT 84310

SHEET TITLE  
**BRACED FRAME  
ELEVATIONS**

No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/06/27

FOR REFERENCE ONLY - NOT FOR CONSTRUCTION

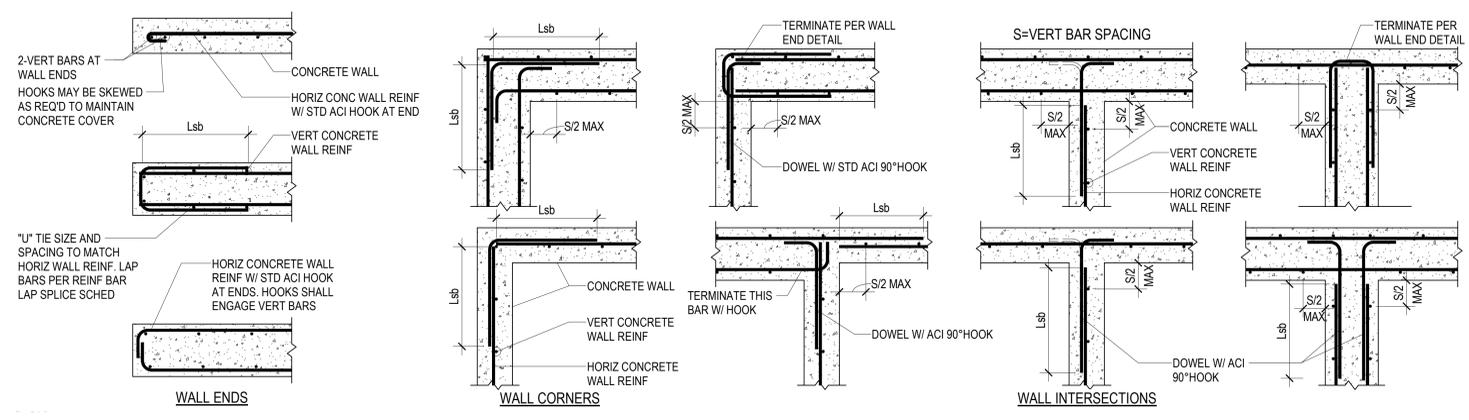
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236

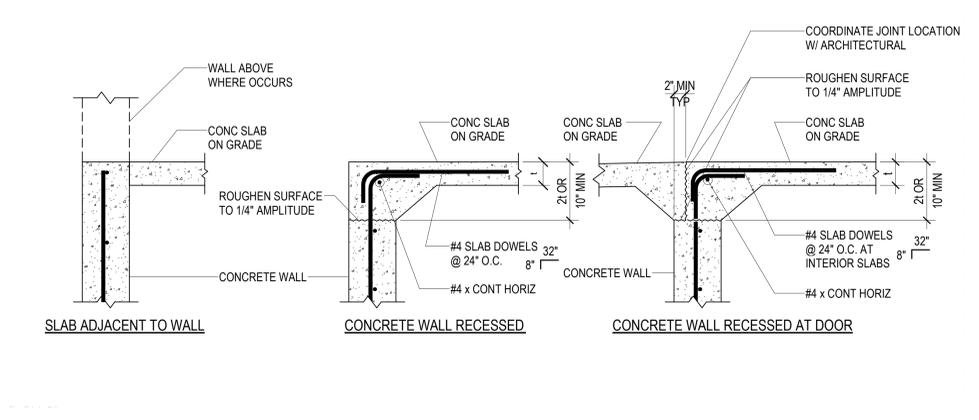
DATE: 06/27/2017

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

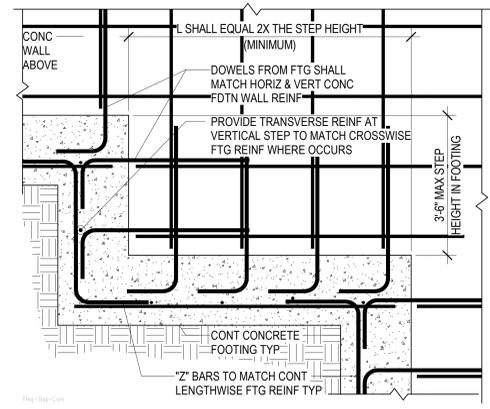
SHEET NO. S31.01



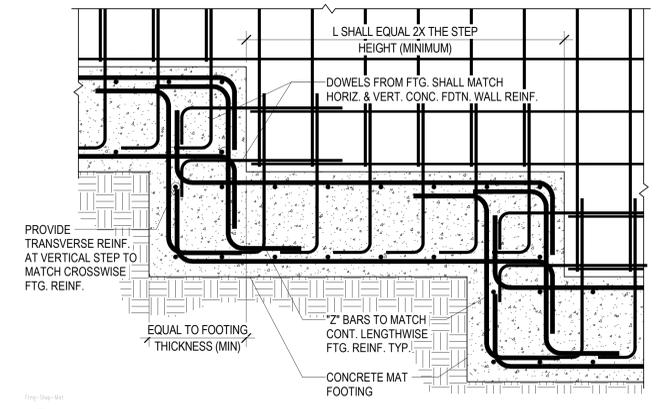
**D1** TYPICAL CONCRETE WALL REINFORCING AT ENDS, CORNERS AND INTERSECTIONS (PLAN VIEWS)  
S50.01 NO SCALE



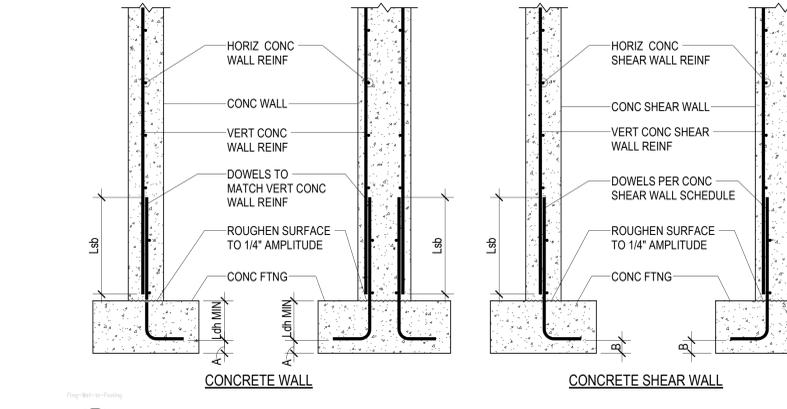
**D4** TYPICAL CONCRETE SLAB ON GRADE TO CONCRETE WALL  
S50.01 NO SCALE



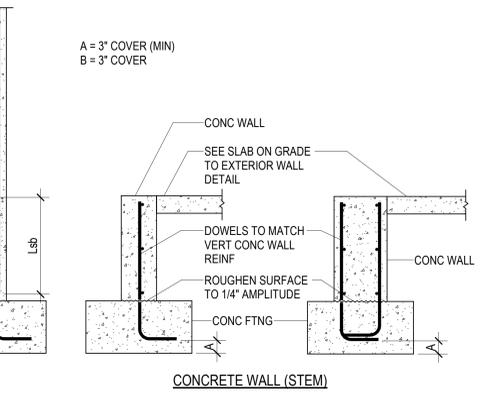
**C1** TYPICAL STEP DETAIL AT CONTINUOUS FOOTING  
S50.01 NO SCALE



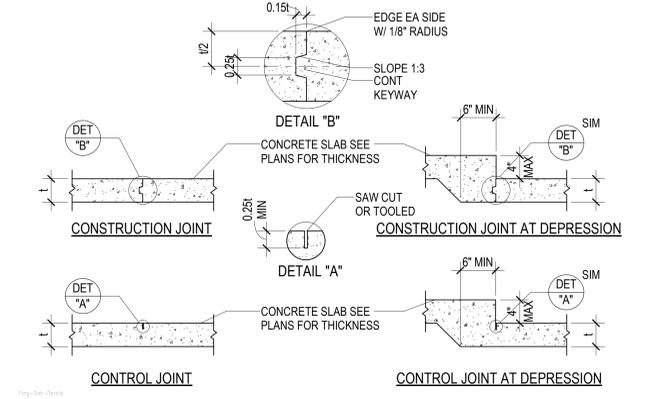
**C2** TYPICAL STEP DETAIL AT MAT FOOTING  
S50.01 NO SCALE



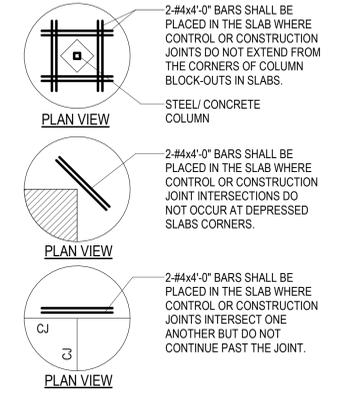
**C3** TYPICAL CONCRETE WALL CONNECTION TO CONCRETE FOOTING  
S50.01 NO SCALE



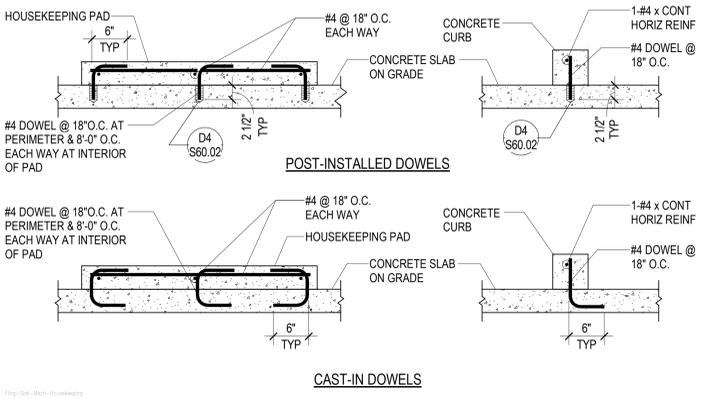
**C4** CONCRETE WALL (STEM)  
S50.01 NO SCALE



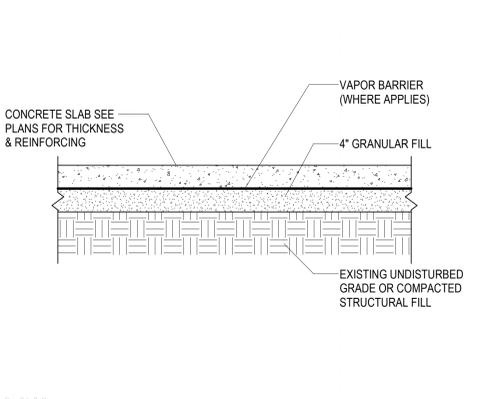
**B1** TYPICAL CONCRETE SLAB ON GRADE DETAILS  
S50.01 NO SCALE



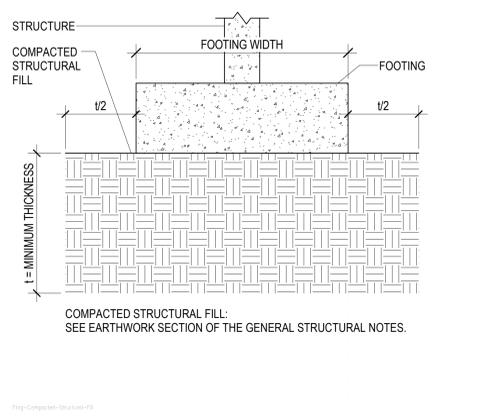
**C5** STEEL CONCRETE COLUMN  
S50.01 NO SCALE



**B3** TYPICAL HOUSEKEEPING PAD & CURB DETAILS AT CONCRETE SLAB ON GRADE  
S50.01 NO SCALE



**B5** TYPICAL CONCRETE SLAB ON GRADE PROFILE  
S50.01 NO SCALE



**A5** TYPICAL COMPACTED STRUCTURAL FILL DETAIL  
S50.01 NO SCALE

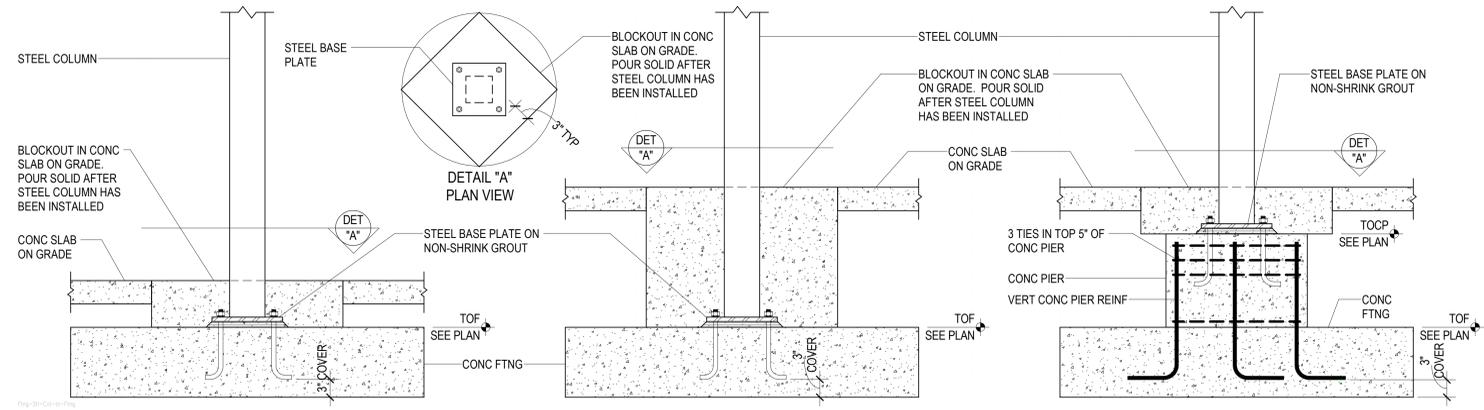
**FOOTING & FOUNDATION DETAILS**

No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/6/27

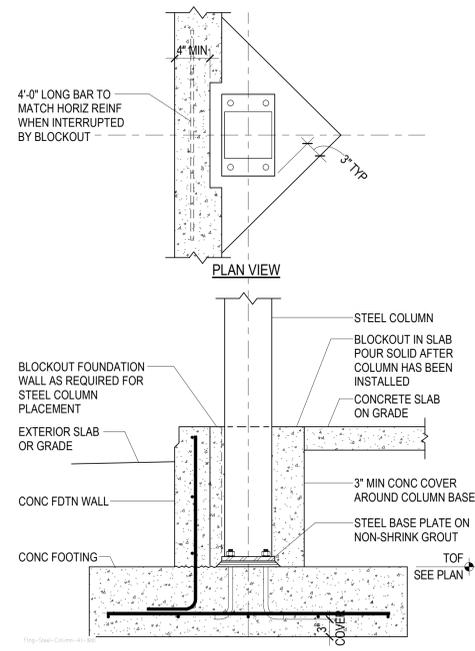
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236  
DATE: 06/27/2017  
SCALE: As indicated  
SHEET NO.

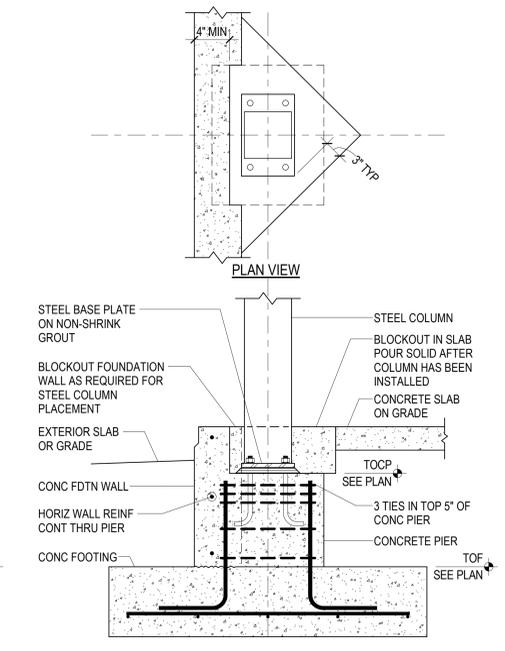
**S50.01**



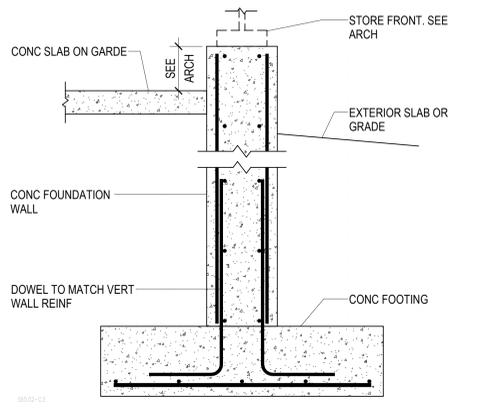
**D1** TYPICAL STEEL COLUMN CONNECTION TO CONCRETE FOOTING/CONCRETE PIER  
NO SCALE



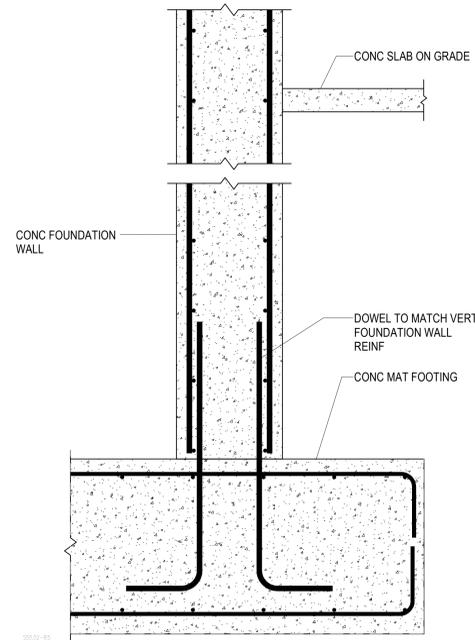
**D4** TYPICAL STEEL COLUMN BASE AGAINST CONCRETE FOUNDATION WALL  
NO SCALE



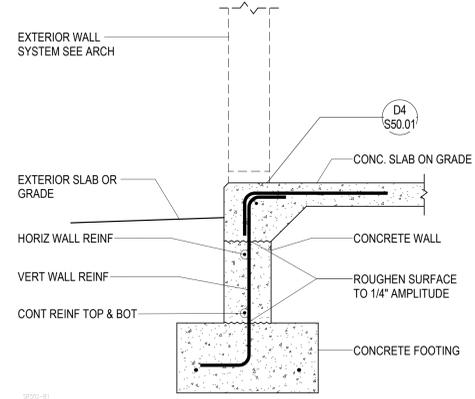
**D4** TYPICAL STEEL COLUMN BASE AGAINST CONCRETE FOUNDATION WALL  
NO SCALE



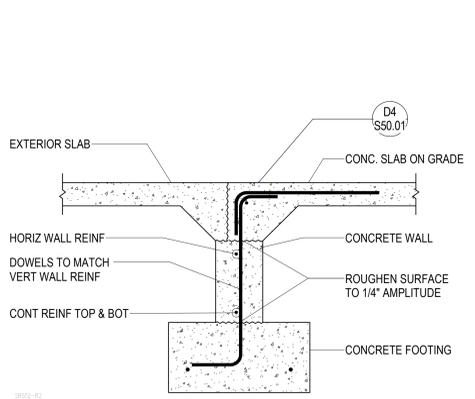
**C3** CONCRETE FOUNDATION WALL TO CONCRETE FOOTING  
NO SCALE



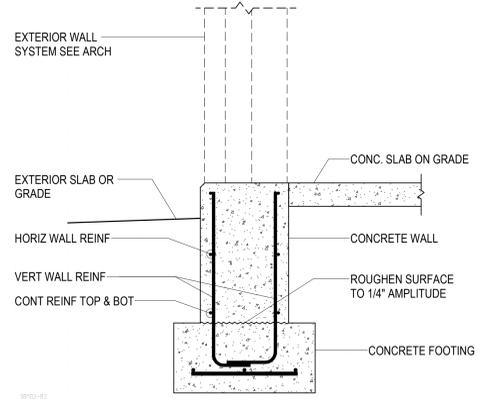
**B5** CONCRETE WALL TO MAT FOOTING  
NO SCALE



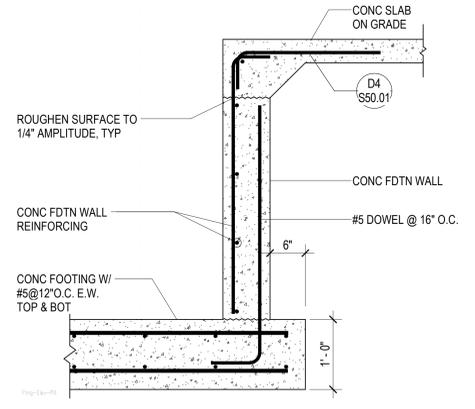
**B1** TYPICAL CONCRETE SLAB TO FOUNDATION WALL AT CURTAIN WALL  
NO SCALE



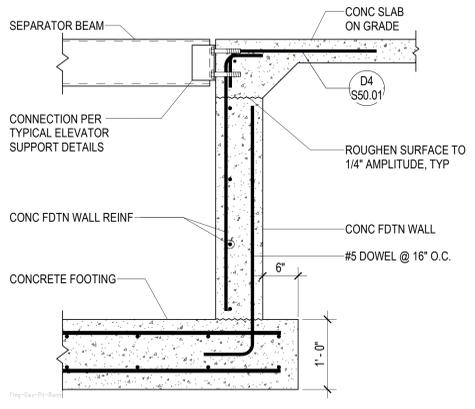
**B2** TYPICAL CONCRETE SLAB TO FOUNDATION WALL AT DOOR OPENING  
NO SCALE



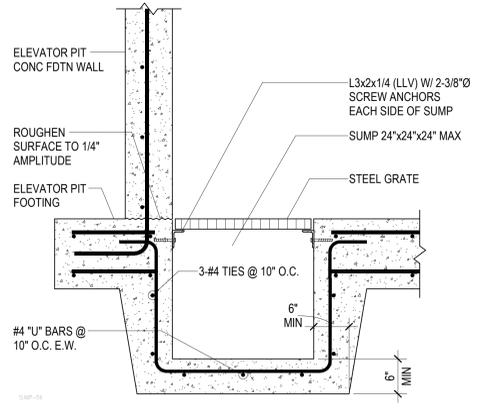
**B3** TYPICAL CONCRETE WALL ON CONCRETE FOOTING  
NO SCALE



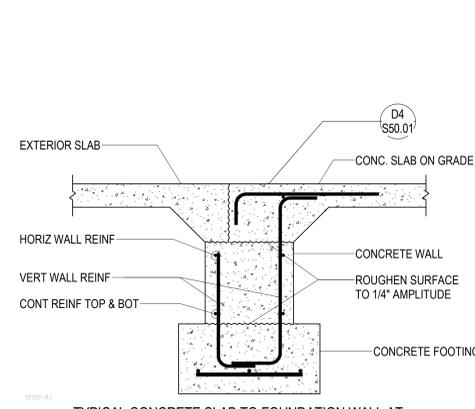
**A1** TYPICAL ELEVATOR PIT DETAIL  
NO SCALE



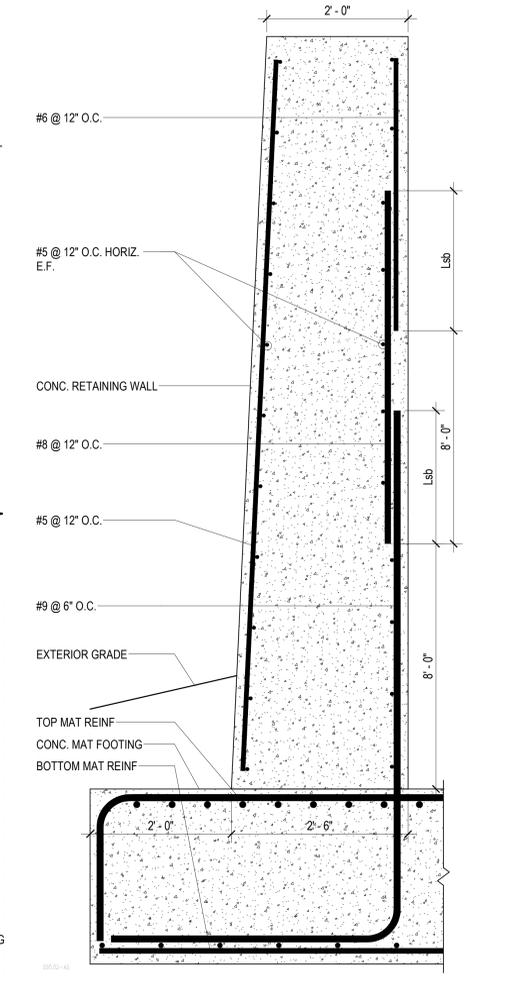
**A2** TYPICAL ELEVATOR PIT DETAIL WITH SEPARATOR BEAM  
NO SCALE



**A3** TYPICAL SUMP AT ELEVATOR PIT WALL  
NO SCALE



**A4** TYPICAL CONCRETE SLAB TO FOUNDATION WALL AT DOOR OPENING  
NO SCALE



**A5** CONCRETE FOUNDATION WALL TO CONCRETE FOOTING  
NO SCALE

**POWDER MOUNTAIN**  
8569 East Spring Park  
Eden, UT 84310

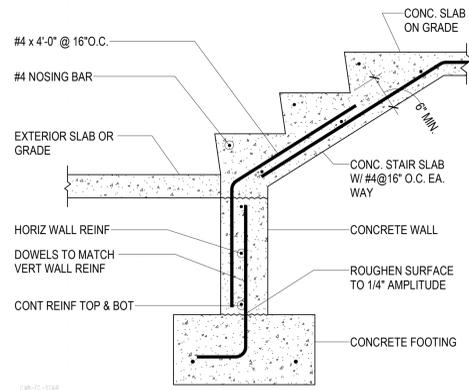
SHEET TITLE  
**FOOTING & FOUNDATION DETAILS**

No	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/6/27

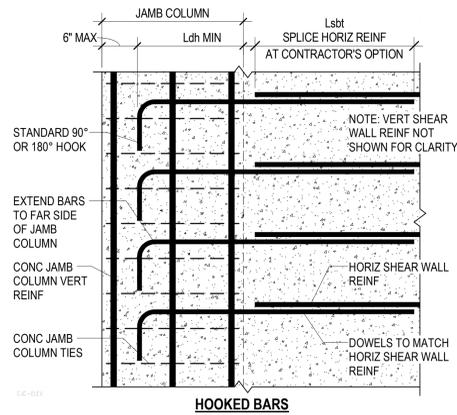
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236  
DATE 06/27/2017  
SCALE 1" = 1'-0"

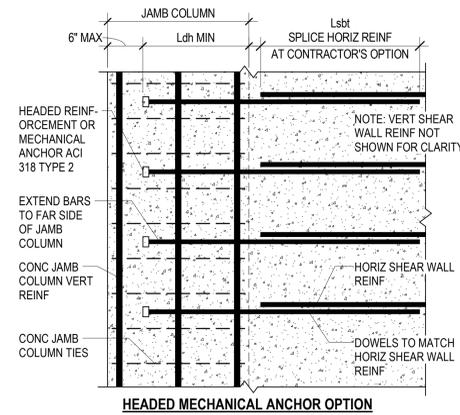
SHEET NO.  
**S50.02**



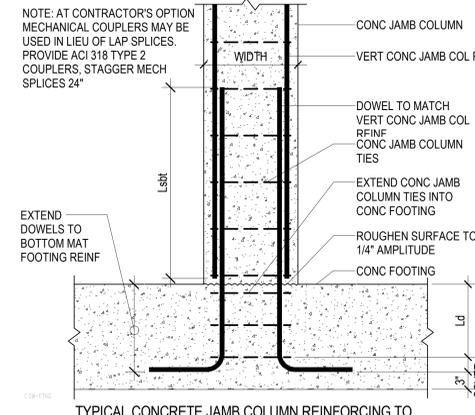
D1 TYPICAL CONCRETE STAIR TO FOUNDATION WALL  
S50.03 / NO SCALE



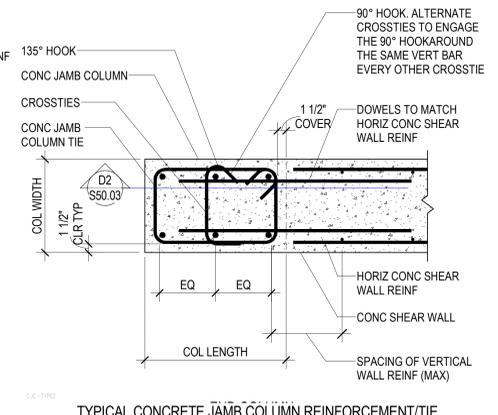
D2 TYPICAL HORIZONTAL SHEAR WALL REINFORCEMENT AT CONCRETE JAMB COLUMN  
S50.03 / NO SCALE



D3 TYPICAL HORIZONTAL SHEAR WALL REINFORCEMENT AT CONCRETE JAMB COLUMN  
S50.03 / NO SCALE



D4 TYPICAL CONCRETE JAMB COLUMN REINFORCING TO CONCRETE FOOTING  
S50.03 / NO SCALE



D5 TYPICAL CONCRETE JAMB COLUMN REINFORCEMENT/TIE DIAGRAM (PLAN VIEW)  
S50.03 / NO SCALE

SHEET TITLE  
**FOOTING & FOUNDATION DETAILS**

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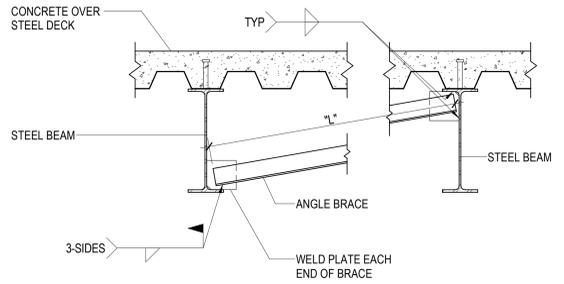
236  
DATE 06/27/2017  
SCALE 1" = 1'-0"

SHEET NO.  
**S50.03**

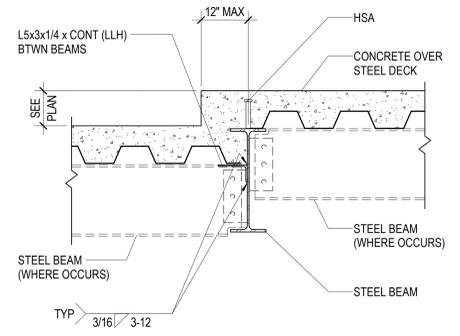


ANGLE BRACE SCHEDULE		
BRACE LENGTH "L"	ANGLE BRACE SIZE	WELD PLATE SIZE
UP TO 4'-0"	L2x2x1/4	4"x1/4"x4"
4'-0" TO 8'-0"	L3x3x1/4	4"x1/4"x4"
8'-0" TO 12'-0"	2-L21/2x21/2x1/4	4"x3/8"x4"
OVER 12'-0"	2-L3x3x1/4	5"x3/8"x5"

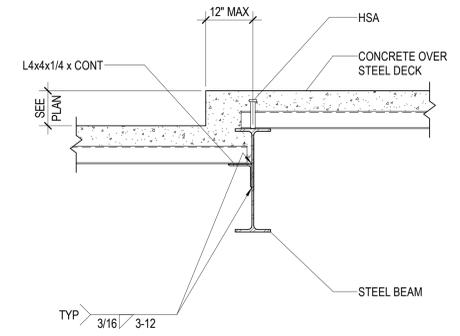
NOTE:  
1. WHERE DOUBLE ANGLES ARE USED PROVIDE 3"x3/8" SPACER PLATES AT THIRD POINTS.



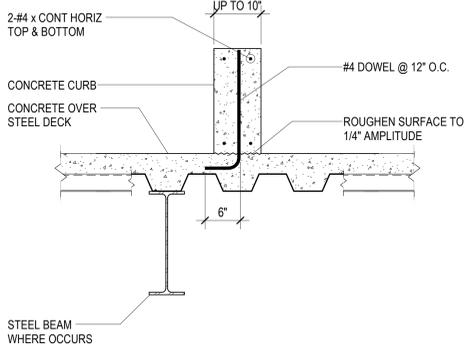
**D1** TYPICAL STEEL BEAM BOTTOM FLANGE BRACE DETAIL  
S51.02 NO SCALE



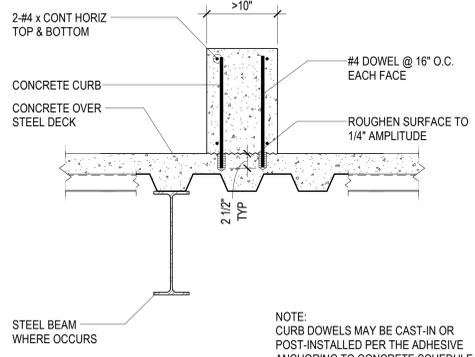
**D3** TYPICAL DETAIL AT STEP IN COMPOSITE FLOOR DECK  
S51.02 NO SCALE



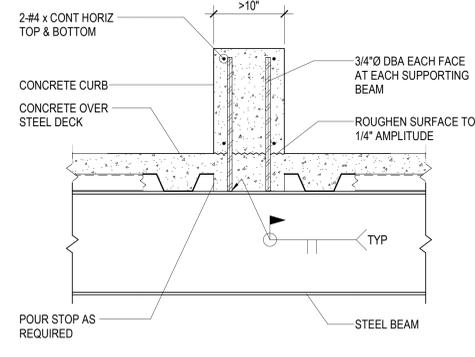
**D5** STEEL BEAM TO CONCRETE WALL  
S51.02 NO SCALE



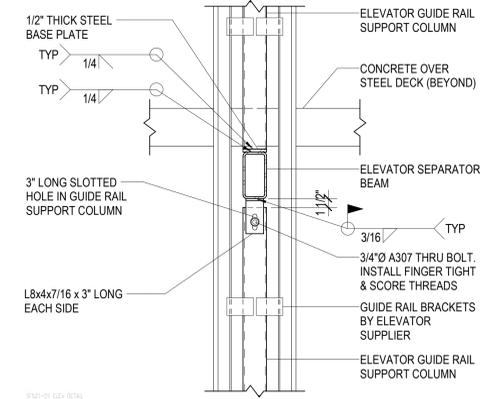
**C1** TYPICAL CONCRETE CURB WALL ON COMPOSITE FRAMING  
S51.02 NO SCALE



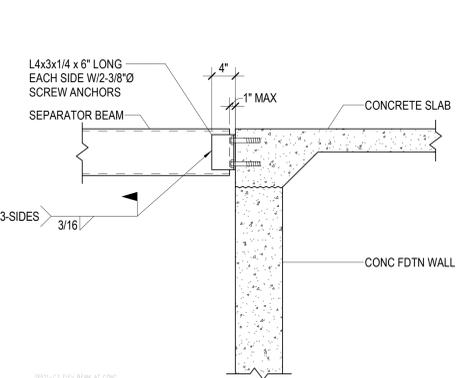
**C3** TYPICAL CONCRETE CURB WALL ON COMPOSITE FRAMING  
S51.02 NO SCALE



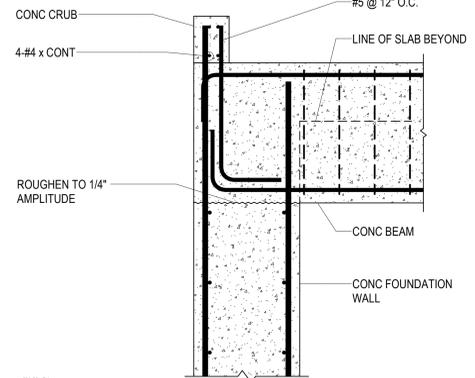
**C5** CONCRETE BEAM AT CONCRETE SUSPENDED SLAB TO CONCRETE WALL WITH STEEL BEAM  
S51.02 NO SCALE



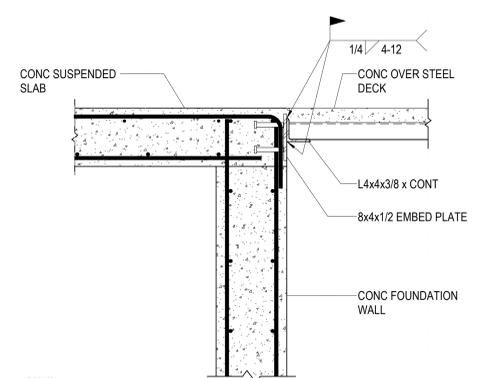
**B1** TYPICAL DETAIL AT ELEVATOR SEPARATOR STEEL BEAM  
S51.02 NO SCALE



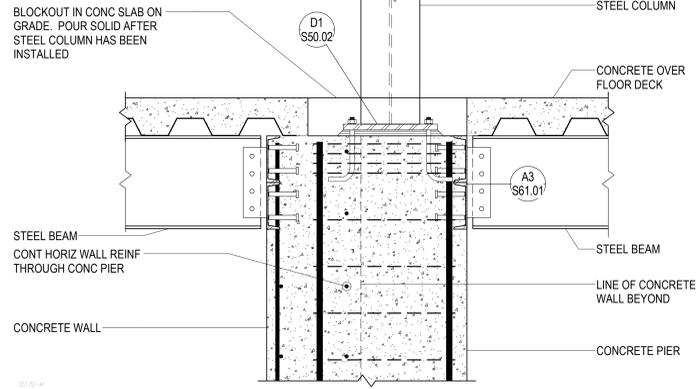
**B3** TYPICAL ELEVATOR SEPARATOR BEAM CONNECTION TO CONCRETE  
S51.02 NO SCALE



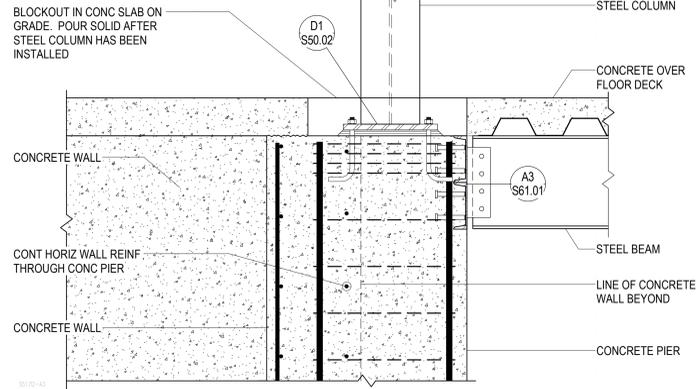
**B4** CONCRETE SUSPENDED SLAB TO CONCRETE WALL  
S51.02 SCALE: 1" = 1'-0"



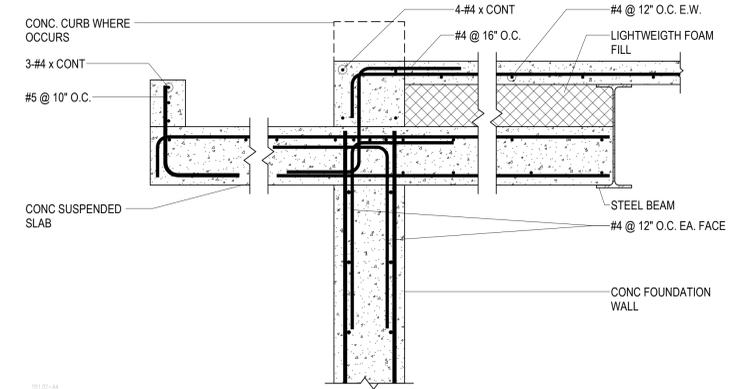
**B5** CONCRETE SUSPENDED SLAB ON CONCRETE WALL WITH CONCRETE OVER STEEL DECK  
S51.02 NO SCALE



**A1** STEEL COLUMN BASE AT CONCRETE PIER WITH STEEL BEAM  
S51.02 NO SCALE



**A3** STEEL COLUMN BASE AT CONCRETE PIER WITH STEEL BEAM  
S51.02 NO SCALE



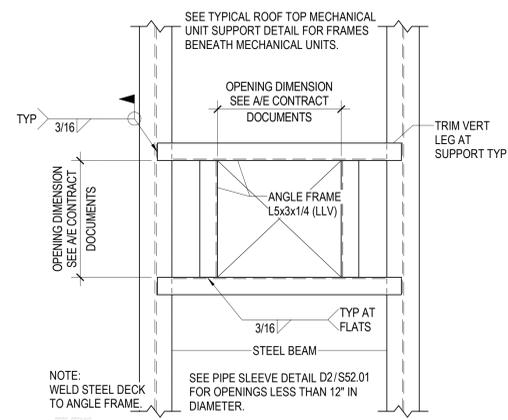
**A4** CONCRETE SUSPENDED SLAB CANTILEVERED AT CONCRETE WALL  
S51.02 NO SCALE

No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/6/27

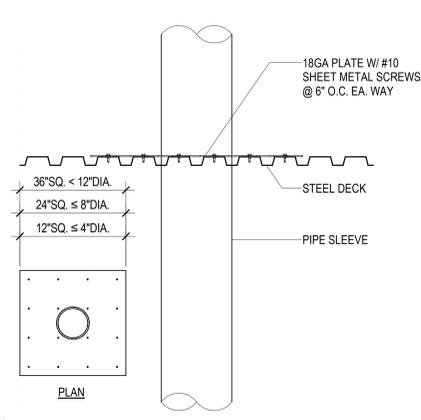
THE ABOVE DRAWINGS, SPECIFICATIONS AND DESIGN ARE THE PROPERTY OF R&A. NO PART THEREOF SHALL BE COPIED OR USED WITH ANY OTHER WORK, OTHER THAN THE SPECIFIC PROJECT FOR WHICH THEY HAVE BEEN DEVELOPED WITHOUT THE WRITTEN CONSENT OF R&A. R&A WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS, SPECIFICATIONS AND DESIGN INTENT. THEY CONVEY, OR FOR PROBLEMS WHICH ARISE FROM OTHERS' FAILURE TO OBTAIN AND/OR FOLLOW THE DESIGN PROFESSIONAL'S GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES OR CONFLICTS WHICH ARE ALLEGED.

DATE: **06/27/2017**  
SCALE: **1" = 1'-0"**  
SHEET NO.

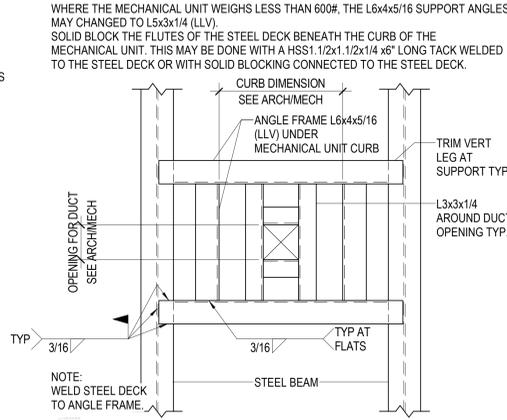
FOR REFERENCE ONLY - NOT FOR CONSTRUCTION



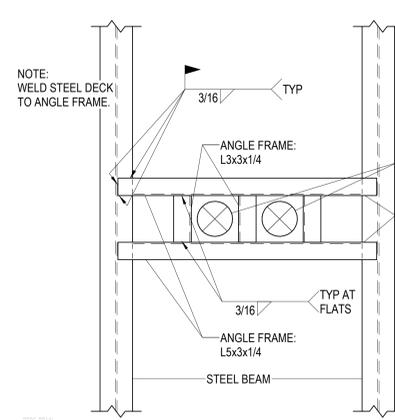
**D1** TYPICAL ROOF OPENING DETAIL (PLAN VIEW)  
S52.01 NO SCALE



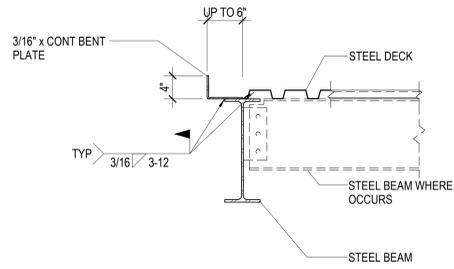
**D2** TYPICAL PIPE SLEEVE HOLE THRU ROOF DECK  
S52.01 NO SCALE



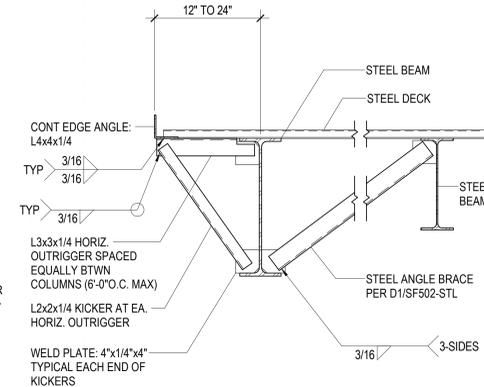
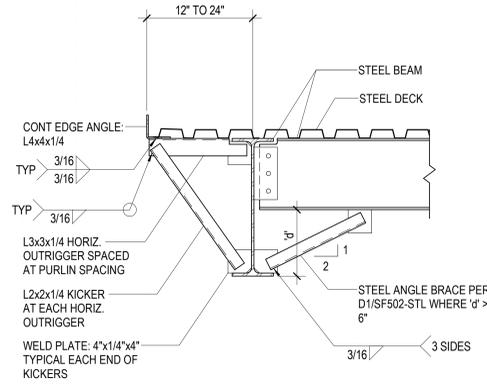
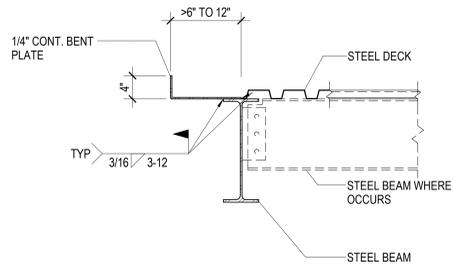
**D3** TYP ROOF TOP MECHANICAL UNIT SUPPORT DETAIL (PLAN VIEW)  
S52.01 NO SCALE



**D4** TYPICAL ROOF DRAIN OPENING (PLAN VIEW)  
S52.01 NO SCALE



**C1** TYPICAL ROOF EDGE DETAILS AT STEEL BEAMS  
S52.01 NO SCALE



STAMP



NOT FOR CONSTRUCTION UNLESS  
SIGNED BY THE ARCHITECT

**POWDER MOUNTAIN**  
8569 East Spring Park  
Eden, UT 84310

SHEET TITLE  
**CONCRETE SCHEDULES**

No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/07/27

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236

DATE 06/27/2017

SCALE 1" = 1'-0"

SHEET NO.

**S60.01**

BAR SIZE	CONCRETE REINFORCING BAR DEVELOPMENT AND LAP SPICE LENGTH SCHEDULE																					
	f <sub>c</sub> = 3000 PSI			f <sub>c</sub> = 4000 PSI			f <sub>c</sub> = 4500 PSI			f <sub>c</sub> = 5000 PSI			f <sub>c</sub> = 6000 PSI			f <sub>c</sub> = ALL						
	Ld	Lt	Lsb	Lsbt	Ld	Lt	Lsb	Lsbt	Ld	Lt	Lsb	Lsbt	Ld	Lt	Lsb	Lsbt	Ldc	Lsc				
#3	17"	22"	22"	28"	15"	19"	19"	25"	14"	18"	18"	23"	13"	17"	17"	22"	12"	16"	16"	20"	8"	12"
#4	22"	29"	29"	38"	19"	25"	25"	33"	18"	24"	24"	31"	17"	23"	23"	29"	16"	21"	21"	27"	10"	15"
#5	28"	36"	36"	47"	24"	31"	31"	41"	23"	30"	30"	38"	22"	28"	28"	36"	20"	26"	26"	33"	12"	19"
#6	33"	43"	43"	56"	29"	37"	37"	49"	27"	35"	35"	46"	26"	34"	34"	44"	24"	31"	31"	40"	15"	23"
#7	48"	63"	63"	81"	42"	54"	54"	71"	40"	51"	51"	67"	38"	49"	49"	63"	34"	45"	45"	58"	17"	27"
#8	55"	72"	72"	93"	48"	62"	62"	81"	45"	59"	59"	76"	43"	56"	56"	72"	39"	51"	51"	66"	19"	30"
#9	62"	81"	81"	105"	54"	70"	70"	91"	51"	66"	66"	86"	48"	63"	63"	81"	44"	57"	57"	74"	22"	34"
#10	70"	91"	91"	118"	61"	79"	79"	102"	57"	74"	74"	96"	54"	71"	71"	92"	50"	64"	64"	84"	24"	39"
#11	78"	101"	101"	131"	67"	87"	87"	114"	64"	82"	82"	107"	60"	78"	78"	102"	55"	71"	71"	93"	27"	43"
#14	93"	121"	NA	NA	81"	105"	NA	NA	76"	99"	NA	NA	72"	94"	NA	NA	66"	86"	NA	NA	33"	NA
#18	124"	161"	NA	NA	108"	140"	NA	NA	101"	132"	NA	NA	96"	125"	NA	NA	88"	114"	NA	NA	43"	NA

NOTES:  
1. DEFINITIONS:  
Ld: TENSION DEVELOPMENT LENGTH FOR REINFORCEMENT SATISFYING THE FOLLOWING CONDITIONS:  
SLABS AND WALLS: CLEAR SPACING > 2db AND CONCRETE CLEAR COVER > db  
BEAMS AND COLUMNS: CLEAR COVER SPACING > db AND CONCRETE CLEAR COVER > db  
Lt: DEVELOPMENT LENGTH FOR TOP BARS IN TENSION  
Lsb: TENSION LAP SPICE LENGTH FOR OTHER THAN TOP BARS (CLASS B)  
Lsbt: TENSION LAP SPICE LENGTH OF TOP BARS  
Ldc: DEVELOPMENT LENGTH FOR BARS IN COMPRESSION  
Lsc: TIED COLUMN LAP SPICE IN COMPRESSION  
db: NOMINAL BAR DIAMETER (INCHES)  
TOP BARS: HORIZONTAL BEAM REINFORCEMENT WITH MORE THAN 12 INCHES OF CONCRETE CAST BELOW

2. MULTIPLY VALUES IN SCHEDULE BY 1.5 IF CLEAR SPACING OR CONCRETE COVER DO NOT MEET REQUIREMENTS FOR Ld IN NOTE 1.

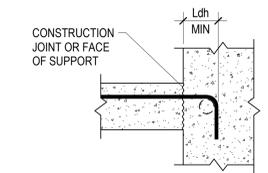
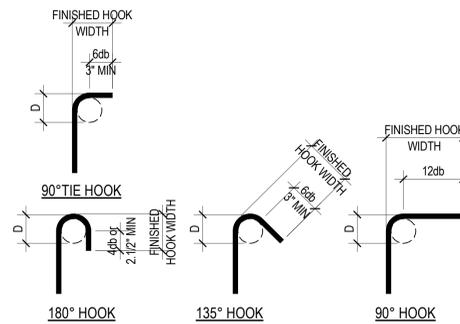
3. MULTIPLY VALUES IN SCHEDULE BY 1.3 FOR USE IN LIGHTWEIGHT AGGREGATE CONCRETE.

4. FOR EPOXY COATED BAR: MULTIPLY VALUES IN SCHEDULE BY 1.5 FOR BARS WITH CLEAR COVER < 3db OR CLEAR SPACING < 6db. OTHERWISE MULTIPLY VALUES BY 1.2.

5. a. FOR BUNDLED BARS OF THREE OR LESS MULTIPLY LENGTHS BY 1.2.  
b. FOR BUNDLED BARS OF FOUR OR MORE MULTIPLY LENGTHS BY 1.33.  
c. INDIVIDUAL BAR SPLICES WITHIN A BUNDLE SHALL NOT OVERLAP. ENTIRE BUNDLES SHALL NOT BE LAP SPLICED.

6. SCHEDULE LENGTHS ARE FOR f<sub>y</sub>=60ksi REINFORCING, MULTIPLY LENGTHS BY 1.25 FOR f<sub>y</sub>=75ksi REINFORCING.

7. LAP SPLICES ARE NOT PERMITTED FOR #14 & #18 BARS. USE BAR COUPLERS PER G.S.N.



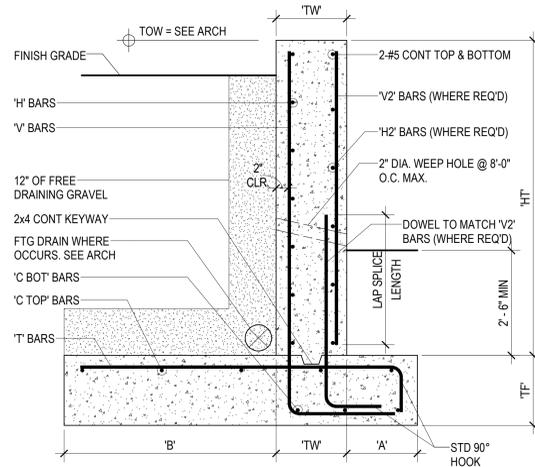
BAR SIZE	D	FINISHED HOOK WIDTH			
		180° HOOK	135° HOOK	90° HOOK	90° TIE HOOK
#3	2.14"	3"	4.14"	6"	4"
#4	3"	4"	4.12"	8"	4.12"
#5	3.14"	5"	5.12"	10"	6"
#6	4.12"	6"	8"	12"	--
#7	5.14"	7"	9"	14"	--
#8	6"	8"	10.12"	16"	--
#9	9.12"	11.34"	--	19"	--
#10	10.3/4"	13.1/4"	--	22"	--
#11	12"	14.3/4"	--	24"	--
#14	18.1/4"	21.3/4"	--	31"	--
#18	24"	28.1/2"	--	41"	--

B4 REINFORCEMENT END HOOK SCHEDULE  
S60.01 NO SCALE

B5 TENSION HOOK DEVELOPMENT SCHEDULE  
S60.01 NO SCALE

MARK	WIDTH	LENGTH	THICK	CROSSWISE REINFORCING				LENGTHWISE REINFORCING				REMARKS
				NO.	SIZE	LENGTH	SPACE	NO.	SIZE	LENGTH	SPACE	
FTS2.0	2'-0"	CONT.	1'-0"	--	NONE	REQ'D	--	3	#4	CONT.	9"	
FC2.0	2'-0"	CONT.	1'-0"	--	NONE	REQ'D	--	3	#4	CONT.	9"	
FC3.0	3'-0"	CONT.	1'-4"	--	#6	2'-6"	8"	4	#5	CONT.	10"	TOP & BOTTOM
FC4.0	4'-0"	CONT.	1'-4"	--	#5	3'-6"	12.4"	5	#5	CONT.	10.3"	
FC5.0	5'-0"	CONT.	2'-0"	--	#5	4'-6"	10"	6	#6	CONT.	10.8"	
FC7.0	7'-0"	CONT.	2'-0"	--	#6	6'-6"	10"	9	#6	CONT.	9.6"	TOP
FSS.0	5'-0"	5'-0"	1'-6"	10	#4	4'-6"	6"	10	#4	4'-6"	6"	BOTTOM
FSS.0	6'-0"	6'-0"	1'-7"	9	#5	5'-6"	8.25"	9	#5	5'-6"	8.25"	
FS7.0	7'-0"	7'-0"	1'-11"	8	#6	6'-6"	11.14"	8	#6	6'-6"	11.14"	
FS8.0	8'-0"	8'-0"	2'-1"	11	#6	7'-6"	9"	11	#6	7'-6"	9"	
FS8.5	8'-6"	8'-6"	2'-3"	12	#6	8'-0"	8.73"	12	#6	8'-0"	8.73"	
FS9.0	9'-0"	9'-0"	2'-5"	13	#6	8'-6"	8.5"	13	#6	8'-6"	8.5"	
FM4.0x23.0	4'-0"	23'-0"	1'-6"	22	#5	5'-6"	13.3"	7	#6	23'-6"	10.8"	TOP
FM4.0x23.0	4'-0"	23'-0"	1'-6"	22	#5	5'-6"	13.3"	7	#6	23'-6"	10.8"	BOTTOM
FM6.0x24.0	6'-0"	24'-0"	1'-6"	21	#5	3'-6"	13.4"	6	#5	22'-6"	8.2"	TOP
FM6.0x24.0	6'-0"	24'-0"	1'-6"	21	#6	3'-6"	13.4"	6	#5	22'-6"	8.2"	BOTTOM
FM38.0x106.83	38'-0"	106'-10"	2'-6"	212	#10	37'-6"	6"	76	#10	106'-4"	6"	TOP
FM38.0x106.83	38'-0"	106'-10"	2'-6"	128	#7	37'-6"	10"	46	#7	106'-4"	10"	BOTTOM

1. PLACE ALL FOOTING REINFORCING IN BOTTOM OF FOOTING WITH 3" CLEAR CONCRETE COVER UNLESS NOTED OTHERWISE.  
2. TOP REINFORCING, WHERE SPECIFIED, SHALL BE PLACED IN THE TOP OF THE FOOTING WITH 2" CLEAR CONCRETE COVER.  
3. SPOT FOOTINGS SHALL BE CENTERED UNDER COLUMNS AND CONTINUOUS FOOTINGS SHALL BE CENTERED UNDER WALLS, UNLESS NOTED OTHERWISE.  
4. ALL FOOTINGS SHALL BE FORMED. FOOTINGS SHALL NOT BE EARTH FORMED OR OVERSIZED WITHOUT WRITTEN PERMISSION FROM THE STRUCTURAL ENGINEER.



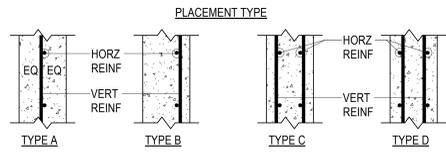
MARK	HT	A	B	TW	TF	V' BARS		H' BARS		V2' BARS		H2' BARS		T' BARS		C TOP BARS		C BOT BARS	
						SIZE	SPACE	SIZE	SPACE	SIZE	SPACE	SIZE	SPACE	SIZE	SPACE	SIZE	SPACE	SIZE	SPACE
CRW-1		10"	2'-6"	8"	1'-0"	#5	12"	#4	12"	--	--	--	--	#5	12"	5-#5	10.5"	3-#5	7"
CRW-2		1'-0"	4'-0"	1'-0"	1'-0"	#6	12"	#4	12"	#4	12"	#4	12"	#5	10"	7-#5	11"	3-#5	10"
CRW-3		1'-0"	6'-0"	1'-0"	1'-4"	#7	8"	#4	12"	#4	12"	#4	12"	#6	8"	10-#6	10"	3-#5	10"
CRW-4		1'-4"	9'-4"	1'-4"	1'-6"	#8	8"	#5	12"	#4	12"	#5	12"	#8	9"	13-#6	11.5"	4-#5	9.3"

1. V' BARS SHALL NOT BE SPLICED BELOW MID-HEIGHT OF WALL.  
2. FOR WALLS WITH HT OF 10'-0" & GREATER. ONE HALF OF THE V' BARS CAN BE DISCONTINUED FROM 8'-0" ABOVE TOP OF FOOTING TO TOP OF WALL.

B2 TYPICAL CONCRETE RETAINING WALL SCHEDULE AND DETAIL  
S60.01 NO SCALE

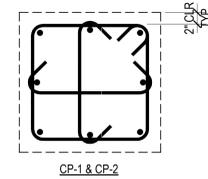
CONCRETE FOUNDATION WALL SCHEDULE						
MARK	THICK	HORIZONTAL REINFORCING	VERTICAL REINFORCING	T & B HORIZ. BARS	PLACEMENT	
CFW-1	8"	#5 @ 12" O.C.	#5 @ 12" O.C.	1-#5	TYPE A	
CFW-2	1'-0"	#4 @ 12" O.C.E.F.	#4 @ 18" O.C.E.F.	2-#4	TYPE C	
CFW-3	1'-0"	#5 @ 12" O.C.E.F.	#6 @ 12" O.C.I.F.	2-#5	TYPE C	
CFW-4	1'-0"	#5 @ 12" O.C.E.F.	#5 @ 12" O.C.E.F.	2-#5	TYPE C	
CFW-5	1'-6"	#5 @ 12" O.C.E.F.	#8 @ 8" O.C.I.F.	2-#5	TYPE C	
CFW-6	1'-6"	#5 @ 12" O.C.E.F.	#7 @ 10" O.C.I.F.	2-#5	TYPE C	
CFW-7	8"	#5 @ 12" O.C.	#5 @ 12" O.C.	1-#5	TYPE A	
CFW-8	1'-6"	#5 @ 12" O.C.E.F.	#7 @ 12" O.C.E.F.	2-#5	TYPE C	

NOTES:  
1. HORIZONTAL WALL REINFORCING SHALL BE CONTINUOUS THRU CONSTRUCTION & CONTROL JOINTS.  
2. SPLICES IN HORIZONTAL WALL REINFORCING SHALL BE TYPE Lsb, STAGGERED SUCH THAT SPLICES DO NOT OVERLAP. SPLICES IN TWO CURTAINS SHALL NOT OCCUR IN THE SAME LOCATION.



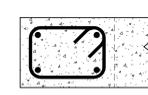
E.F. = EACH FACE  
O.F. = OUTSIDE FACE (AGAINST SOIL)  
I.F. = INSIDE FACE  
3L = THREE LAYERS

CONCRETE PIER SCHEDULE					
MARK	DIMENSIONS		REINFORCING		REMARKS
	DEPTH	WIDTH	VERTICAL	TIES	
CP-1	1'-6"	1'-6"	8-#6	#4 @ 8" O.C.	
CP-2	1'-10"	1'-10"	8-#8	#4 @ 8" O.C.	



C1 TYPICAL CONCRETE PIER REINFORCEMENT/TIE DIAGRAM  
S60.01 NO SCALE

CONCRETE JAMB COLUMN SCHEDULE					
MARK	DIMENSIONS		REINFORCING		REMARKS
	WIDTH	LENGTH	VERTICAL	TIES	
CJC-1	1'-0"	1'-0"	4-#9	#4 @ 8" O.C.	
CJC-2	1'-6"	1'-6"	8-#9	#4 @ 8" O.C.	



CJC-1



CJC-2

A5 TYPICAL CONCRETE JAMB COLUMN REINFORCEMENT/TIE DIAGRAM (PLAN VIEW)  
S60.01 NO SCALE







STEEL DECK SCHEDULE										
MARK	STEEL DECK			CONCRETE FILL			STEEL DECK ATTACHMENT	MIN. ALLOWABLE SHEAR CAPACITY	NOTES	
	PROFILE	MIN I (in <sup>2</sup> /ft)	MIN S (in <sup>2</sup> /ft)	FINISH	THICKNESS (t)	TYPE				REINFORCEMENT
SD-1	TYPE B 1.1/2" DEEP x 20 GA	0.219	0.230	GALVANIZED (G60)	-	-	-	SDA-2	1304 PLF @ 8'-0"	-
SD-2	TYPE W2 2" DEEP x 20 GA	0.422	0.323	PHOSPHATIZED/ PAINTED	5.1/2"	NORMAL WEIGHT	6x6-W2.0xW2.0 WWF OR FIBER	SDA-1	2400 PLF @ 8'-0"	-
SD-3	TYPE W2 2" DEEP x 20 GA	0.422	0.323	PHOSPHATIZED/ PAINTED	6.1/4"	LIGHT WEIGHT	6x6-W2.0xW2.0 WWF OR FIBER	SDA-1	2400 PLF @ 8'-0"	3 HOUR FIRE RATING
<p>NOTES:</p> <ol style="list-style-type: none"> <li>STEEL DECK SHALL COMPLY WITH LATEST REQUIREMENTS OF THE STEEL DECK INSTITUTE (SDI).</li> <li>SUBMIT CURRENT CODE EVALUATION REPORT (ICC OR IAPMO) WITH LOAD AND LATERAL SHEAR CAPACITIES WITH SHOP DRAWINGS.</li> <li>FIBER REINFORCEMENT, WHEN REQUIRED IN SCHEDULE, SHALL BE MACROSYNTHETIC FIBER REINFORCEMENT PER THE CONCRETE MATERIALS SECTION OF THE GENERAL STRUCTURAL NOTES.</li> <li>ALL DECK SHALL BE 3-SPAN CONTINUOUS MINIMUM WHERE POSSIBLE. IN AREAS WHERE 3-SPAN CONDITIONS ARE NOT POSSIBLE THE CONTRACTOR SHALL VERIFY UN-SHORED DECK IS PERMITTED BY THE DECK MANUFACTURER FOR THE SPAN CONDITION, SPAN LENGTH, AND DECK GAUGE. WHERE DECK DOES NOT MEET THE REQUIREMENTS FOR UN-SHORED DECK, THE CONTRACTOR SHALL EITHER PROVIDE HEAVIER GAUGE DECK TO ALLOW FOR UN-SHORED DECK OR PROVIDE SHORING.</li> <li>STEEL DECK WITHOUT CONCRETE FILL SHALL NOT BE USED TO SUPPORT LOADS FROM PLUMBING, HVAC DUCTS, LIGHT FIXTURES, ARCHITECTURAL ELEMENTS OR EQUIPMENT OF ANY KIND, UNLESS SPECIFICALLY NOTED OTHERWISE. LIGHTWEIGHT SUSPENDED ACOUSTICAL CEILINGS WITH A TOTAL WEIGHT PER WIRE NOT EXCEEDING 50# MAY BE HUNG FROM THE STEEL ROOF DECK. THE HANGERS SHOULD BE STAGGERED TO DISTRIBUTE THE LOAD OVER MULTIPLE DECK FLUTES.</li> <li>DECK SHALL HAVE 2" MINIMUM BEARING ON ALL SUPPORTING MEMBERS (MEMBERS PERPENDICULAR TO DECK) UNO. DECKS SHALL HAVE 1.1/2" MINIMUM BEARING AT PARALLEL MEMBERS.</li> <li>DO NOT EMBED CONDUITS OR PIPES IN CONCRETE FILL OVER STEEL DECKS WITHOUT APPROVAL OF STRUCTURAL ENGINEER.</li> <li>SEE TYPICAL DETAILS FOR REINFORCEMENT REQUIRED AT OPENINGS THROUGH STEEL DECK. OPENING REINFORCING SHALL BE INSTALLED PRIOR TO SAW CUTTING OPENINGS.</li> <li>PROVIDE GALVANIZED STEEL DECK ABOVE &amp; BELOW MECHANICAL ROOMS.</li> <li>SEE PLANS AND DETAILS FOR LOCATIONS WHERE ADDITIONAL SLAB REINFORCEMENT IS REQUIRED.</li> </ol>										

STEEL DECK ATTACHMENT SCHEDULE						
MARK	WELDED			MECHANICAL		
	SUPPORTS	PARALLEL	SIDE LAP	SUPPORTS	PARALLEL	SIDE LAP
SDA-1	PW @ 36/4	PW @ 12" O.C.	3/16" BP @ 18" O.C.	-	-	-
SDA-2	PW @ 36/7	PW @ 12" O.C.	1.1/2" TSW @ 18" O.C.	PAF @ 36/7	PAF @ 12" O.C.	PSC @ 12" O.C.
<p>NOTES:</p> <ol style="list-style-type: none"> <li>PW = PUDDLE WELD - 1/2" EFFECTIVE DIAMETER ARC SPOT WELD AT INTERIOR FLUTES, 1" X 3/8" EFFECTIVE ARC SEAM WELD AT SUPPORTS ADJACENT TO SIDELAP.</li> <li>TSW = TOP SEAM WELD - 1.1/2" LONG TOP SEAM WELDS BETWEEN ADJACENT PIECES OF DECKING. CRIMP SIDE SEAMS BEFORE WELDING INTERLOCKING SEAMS.</li> <li>BP = BUTTON PUNCH - 3/16" BUTTON PUNCH BETWEEN ADJACENT PIECES OF DECK. CRIMP SEAMS BEFORE BUTTON PUNCHING INTERLOCKING SEAMS.</li> <li>PAF = POWDER ACTUATED FASTENER -            HILTI X-HSN 24 AT SUPPORTS 3/16" THROUGH 3/8" THICK PNEUTEK SDK61075 AT SUPPORTS 0.113" THROUGH 0.155" THICK            HILTI X-ENP-19 L15 AT SUPPORTS 1/4" THICK AND GREATER PNEUTEK SDK63075 AT SUPPORTS 0.155" THROUGH 0.250" THICK            PNEUTEK K64062 AT SUPPORTS 0.187" THROUGH 0.312" THICK            PNEUTEK K66062 OR K66075 AT SUPPORTS 0.281" THICK AND GREATER</li> <li>SDS = SELF DRILLING SCREW. WHERE SIDELAPS HAVE SCREWED CONNECTION, THE DECK PROVIDED SHALL HAVE A SCREWABLE SIDE SEAM, UNO.</li> <li>PSC = PROPRIETARY SIDELAP CONNECTION - VERCO SIDELAP CONNECTION 2 FOR VERCO PUNCHLOK II SYSTEM, ASC DELTA GRIP FOR ASC DECKS.</li> <li>SPACING AT SUPPORTS IS NOTED AS (DECK PANEL WIDTH)/(ATTACHMENTS PER PANEL). FOR EXAMPLE: PW @ 36/4 INDICATES A 36" WIDE DECK SHEET WITH 4 PUDDLE WELDS AT EACH SUPPORT.</li> <li>HEADED STUD ANCHORS WELDED THROUGH DECK WITH 1" MINIMUM COVER FROM EDGE OF DECK TO STUD CENTERLINE MAY BE SUBSTITUTED ONE FOR ONE FOR PW. ALIGN AND SECURE DECK IN POSITION BEFORE INSTALLING STUDS.</li> <li>SEE PLANS AND SFRS SHEETS FOR ADDITIONAL FASTENERS REQUIRED AT MEMBERS DENOTED AS SFRS. OMIT ATTACHMENTS WHERE DENOTED AS PROTECTED ZONES IN SFRS.</li> <li>ALL WELDED SURFACES SHALL BE DRY BEFORE WELDING DECK OR STUDS TO SUPPORTS.</li> <li>ALIGN AND SECURE DECK IN POSITION BEFORE WELDING OR INSTALLING FASTENERS OR STUDS.</li> <li>ALTERNATE MEANS OF DECK ATTACHMENT ARE PERMITTED WITH APPROVAL OF THE ENGINEER. THE CONTRACTOR SHALL SUBMIT THE PROPOSED ATTACHMENT SYSTEM AND THE CODE EVALUATION REPORT DEMONSTRATING THE SYSTEM HAS THE STRENGTH TO MEET THE SPECIFIED DECK SHEAR. IF THE ALTERNATE METHOD IS APPROVED, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT THE DECK TYPE AND PROFILE IS COMPATIBLE WITH THE FASTENING SYSTEM.</li> </ol>						

STAMP

NOT FOR CONSTRUCTION UNTIL  
SIGNED BY THE ARCHITECT

**POWDER MOUNTAIN**  
8569 East Spring Park  
Eden, UT 84310

SHEET TITLE

**STEEL DECK SCHEDULES**

No	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/07/27

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DATE: 06/27/2017  
SCALE: 1" = 1'-0"  
SHEET NO. S61.03

CONCRETE SUSPENDED SLAB SCHEDULE								
MARK	THICK	PRIMARY REINFORCING			SECONDARY REINFORCING			D BARS
		A BARS	B BARS	C BARS	A BARS	B BARS	C BARS	
CSS-1	10"	#5 @ 10" O.C.	#5 @ 9" O.C.	#5 @ 9" O.C.	#5 @ 12" O.C.	#5 @ 12" O.C.	#5 @ 12" O.C.	#4 @ 16" O.C.
<p>NOTES:</p> <ol style="list-style-type: none"> <li>PRIMARY REINFORCING SHALL RUN PARALLEL TO THE DIRECTION OF THE ARROW ( ) →</li> <li>PRIMARY BOTTOM REINFORCING SHALL BE PLACED BELOW SECONDARY BOTTOM REINFORCING. PRIMARY TOP REINFORCING SHALL BE PLACED ABOVE SECONDARY TOP REINFORCING.</li> </ol>								

A3 CONCRETE SUSPENDED SLAB SCHEDULE  
S61.03 NO SCALE

CANTILEVERED CONCRETE SUSPENDED SLAB SCHEDULE								
MARK	THICK	PRIMARY REINFORCING			SECONDARY REINFORCING			D BARS
		A BARS	B BARS	C BARS	A BARS	B BARS	C BARS	
CSS-1	10"	#5 @ 10" O.C.	#5 @ 9" O.C.	#5 @ 9" O.C.	#5 @ 12" O.C.	#5 @ 12" O.C.	#5 @ 12" O.C.	#4 @ 16" O.C.
<p>NOTES:</p> <ol style="list-style-type: none"> <li>PRIMARY REINFORCING SHALL RUN PARALLEL TO THE DIRECTION OF THE ARROW ( ) →</li> <li>PRIMARY BOTTOM REINFORCING SHALL BE PLACED BELOW SECONDARY BOTTOM REINFORCING. PRIMARY TOP REINFORCING SHALL BE PLACED ABOVE SECONDARY TOP REINFORCING.</li> </ol>								

A4 CANTILEVERED CONCRETE SUSPENDED SLAB SCHEDULE  
S61.03 NO SCALE

6/27/2017 6:02:38 PM

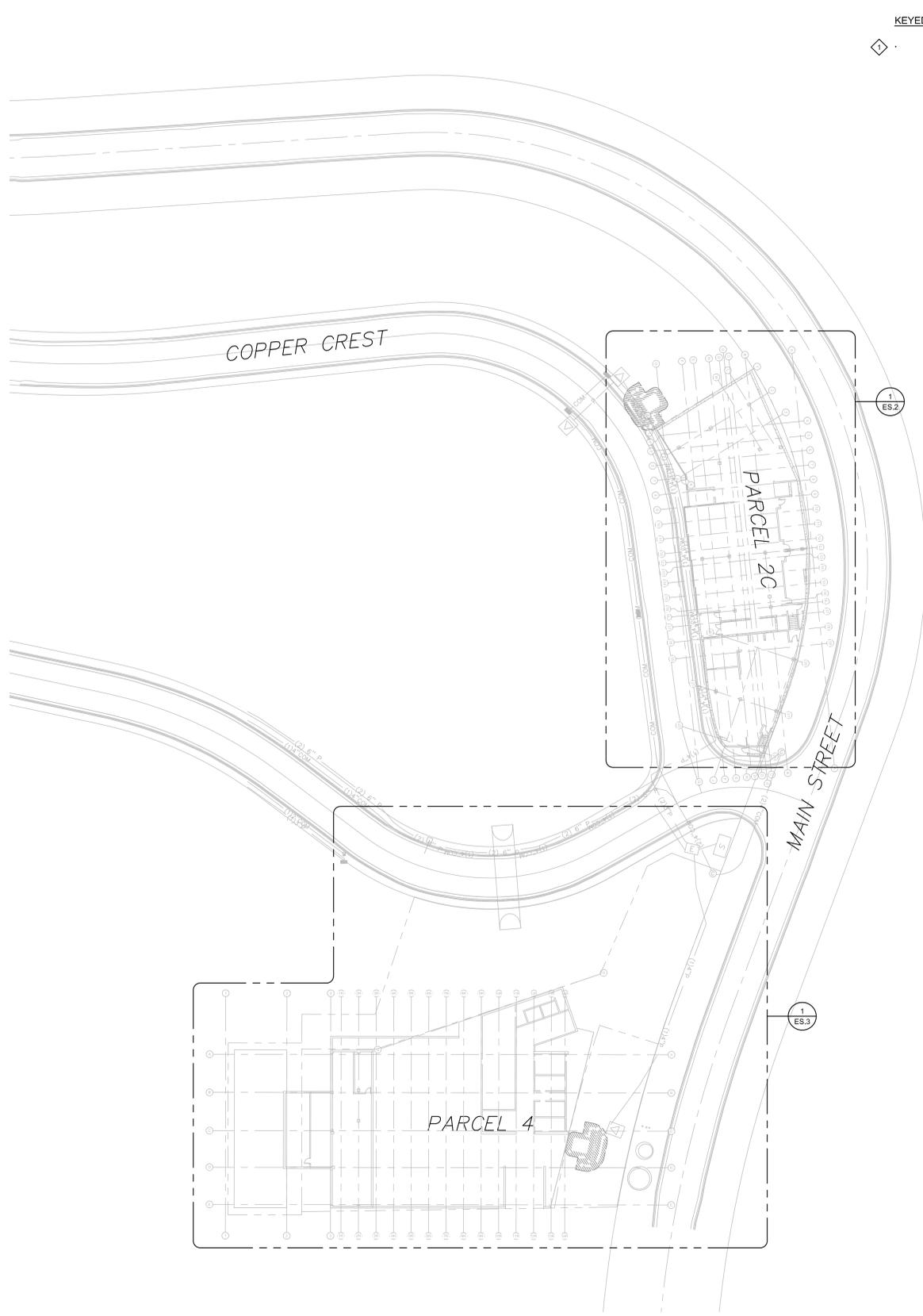
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ABBREVIATIONS	
NOTE: ALL ABBREVIATIONS MAY NOT BE USED.	
ABBREV.	DESCRIPTION
A	AMP OR AMPS
AC	ABOVE COUNTER
ADA	AMERICANS WITH DISABILITIES ACT
AFF	ABOVE FINISHED FLOOR
AHJ	AUTHORITY HAVING JURISDICTION
AIC	AMPERE INTERRUPTING CAPACITY
AL	ALUMINUM
C	CONDUIT
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CU	COPPER
EM	EMERGENCY
EMT	ELECTRIC METALLIC TUBING
ENT	ELECTRIC NONMETALLIC TUBING
EW	ELECTRIC WATER COOLER
E, EX	EXISTING
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FLA	FULL LOAD AMPS
FMC	FLEXIBLE METAL CONDUIT
GFCI	GROUND FAULT INTERRUPTER
GND	GROUND CONDUCTOR
HP	HORSE POWER
IG	ISOLATED GROUND
IMC	INTERMEDIATE METAL CONDUIT
INS	INSULATED
ISO	ISOLATED
KVA	KILO VOLT AMPERES
KW	KILOWATTS

ABBREVIATIONS	
NOTE: ALL ABBREVIATIONS MAY NOT BE USED.	
ABBREV.	DESCRIPTION
LED	LIGHT EMITTING DIODE
LFMC	LIQUID-TIGHT METAL CONDUIT
LFNC	LIQUID-TIGHT NONMETAL CONDUIT
MCA	MINIMUM CIRCUIT AMPS
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MLO	MAIN LUGS ONLY
N.I.C.	NOT IN CONTRACT
NL	NIGHT LIGHT
NEC	NATIONAL ELECTRIC CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
O.C.	ON CENTER(S)
OCP	OVER CURRENT PROTECTION
REQ.	REQUIREMENTS
RMC	RIGID METAL CONDUIT
RMP	ROCKY MOUNTAIN POWER
RNC	RIGID NONMETALLIC CONDUIT
SPD	SURGED PROTECTED DEVICE
SS	SURGE SUPPRESSION
ST	SHUNT TRIP
TR	TAMPER RESISTANT
TYP	TYPICAL
TTB	TELEPHONE TERMINAL BOARD
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	VOLTS
VA	VOLT AMPERE
WP	WEATHERPROOF
XFMR	TRANSFORMER

POWER SYMBOLS LEGEND	
SYMBOL	DESCRIPTION
	SIMPLEX RECEPTACLE
	208/240V OVEN RECEPTACLE
	TWIST-LOCK RECEPTACLE
	DUPLEX RECEPTACLE
	DUPLEX RECEPTACLE - GFCI
	DROP DUPLEX RECEPTACLE - GFCI
	HALF-SWITCHED DUPLEX RECEPTACLE
	FLOOR BOX OUTLET WITH DUPLEX 120V RECEPTACLE
	FLOOR BOX OUTLET WITH 4-PLEX 120V RECEPTACLE AND VOICE/DATA OUTLET
	FOURPLEX RECEPTACLE
	FOURPLEX RECEPTACLE - GFCI
	DROP FOURPLEX RECEPTACLE - GFCI
	SPECIAL PURPOSE RECEPTACLE - THREE PHASE
	SPECIAL PURPOSE RECEPTACLE - SINGLE PHASE
	NON-FUSED DISCONNECT SWITCH
	FUSED DISCONNECT SWITCH
	COMBINATION STARTER/FUSED DISCONNECT
	STARTER
	ELECTRICAL PANEL
	TELEPHONE TERMINAL BOARD
	GROUND BUSS BAR
	THERMAL SWITCH
	ELECTRIC MOTOR
	J-BOX
	METER
	VARIABLE FREQUENCY DRIVE
	TV OUTLET, INCLUDES COAX & PHONE JACKS U.O.N.
	POWER/COMMUNICATIONS POLE FOR WORKSTATION FURNITURE
	VOICE RECEPTACLE
	DATA RECEPTACLE
	COMBINATION VOICE/DATA RECEPTACLE
	SECURITY CAMERA ("TYPE" INDICATES TYPE OF CAMERA)
	CARD READER
	SECURITY SYSTEM KEYPAD
	HOME RUN TO PANELBOARD

CALLOUTS/NOTES LEGEND	
SYMBOL	DESCRIPTION
	MECHANICAL EQUIPMENT CALLOUT
	REVISION CALLOUT
	LIGHT FIXTURE CALLOUT
	OWNER PROVIDED EQUIPMENT CALLOUT
	KEYED NOTE
	WIRE CONDUIT - ALUMINUM
	WIRE CONDUIT - COPPER
	DETAIL CALLOUT
	ELEVATION CALLOUT



KEYED NOTES:

1 ELECTRICAL SITE PLAN  
Scale: 1/32" = 1'-0"



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**POWDER MOUNTAIN**  
8569 EAST SPRING PARK  
EDEN, UT 84310

SHEET TITLE  
**ELECTRICAL SITE PLAN**

No.	Description	Date
1	ISSUED FOR FOUNDATION PERMIT	2017/6/27

JOB NO.  
DATE: 6/28/2017  
SCALE: 1/32" = 1'-0"  
SHEET NO.

**ES.1**

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