CACHE MOSQUITO ABATEMENT

210 W. 3700 N.
HYDE PARK, UT 84318

DESIGN TEAM

OWNER

CACHE COUNTY MOSQUITO ABATMENT DISTRICT
210 W 3700 N
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FORSGREN ASSOCIATES
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CRAIG L. RASMUSSEN

BID ALTERNATE #1

PERIMETER FENCING AND AUTOMATIC GATE SYSTME. SEE CIVIL FOR MORE INFORMATION

PERMIT SET / BID SET

design west | architects
255 SOUTH 300 WEST LOGAN UT 84321
795 NORTH 400 WEST SALT LAKE CITY UT 84103

CACHE MOSQUITO ABATEMENT
DISTRICT HEADQUARTERS
210 W. 3700 N.
HYDE PARK, UT 84318

MARK:	DATE:	DESCRIPTION:

PROJECT #: 819159
DRAWN BY: ALARCON
CHECKED BY: LEMON
ISSUED: 07.09.2020

STATE OF UTAH
JUNE 09, 2020
RYAN WAYNE LEMON
8668330-0301
LICENCED ARCHITECT

COVER SHEET
G-001

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COMCHECK

COMcheck Software Version 4.1.3.0

Envelope Compliance Certificate

Project Information

Energy Code:	90.1 (2016) Standard
Project Title:	Mosquito Abatment District
Location:	Hyde Park, Utah
Climate Zone:	5b
Project Type:	New Construction
Vertical Glazing / Wall Area:	4%
Performance Sim. Specs:	EnergyPlus 8.1.0.009 (EPW: USA_UT_Salt.Lake.City.Intl.AP.725720_TMY3.epw)

Construction Site:
210 w. 3700 n.
Hyde Park, UT 84318

Owner/Agent:
Richard Rigby
Cache County Mosquito Abatment District
210 w 3700 n
Hyde Park, UT 84318
435.890.9545
cmd84318@cachemosquito.com

Designer/Contractor:
Ryan Lemon
Design West Architects
255 s 300 w
Logan,, UT 84321
435.752.7031
ryan@designwestarchitects.com

Building Area	Floor Area
1-Automotive Facility : Nonresidential	7908

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor(a)
MEMBRANE ROOF: Insulation Entirely Above Deck, [Bldg. Use 1 - Automotive Facility]	1844	---	30.0	0.032	0.032
FRONT STANDING METAL SEAM: Other Metal Building Roof, [Bldg. Use 1 - Automotive Facility] (b)	555	---	---	0.031	0.037
GARAGE STANDING METAL SEAM: Other Metal Building Roof, [Bldg. Use 1 - Automotive Facility] (b)	5498	---	---	0.031	0.037
Floor 1: Slab-On-Grade:Unheated, Vertical 2 ft., [Bldg. Use 1 - Automotive Facility] (d)	396	---	10.0	0.540	0.520
NORTH					
NORTH CMU WALL 1: Concrete Block:8", Partially Grouted, Cells Empty, Normal Density, Furring: Metal, [Bldg. Use 1 - Automotive Facility]	167	13.0	7.5	0.067	0.090
NORHT STUD WALL 2: Steel-Framed, 16" o.c., [Bldg. Use 1 - Automotive Facility]	177	19.2	7.5	0.060	0.055
Window 3: Vinyl/Fiberglass Frame:Fixed, Perf. Specs.: Product ID Pella, SHGC 0.30, VT 0.43, [Bldg. Use 1 - Automotive Facility] (c)	24	---	---	0.200	0.310
NORTH STUD WALL 3: Steel-Framed, 16" o.c., [Bldg. Use 1 - Automotive Facility]	212	19.2	7.5	0.060	0.055
Front Entry Storefront: Metal Frame with Thermal Break:Fixed, Perf. Specs.: Product ID Kawneer, SHGC 0.20, VT 0.43, [Bldg. Use 1 - Automotive Facility] (c)	29	---	---	0.380	0.380
Front Door Glass (> 50% glazing):Metal Frame, Entrance Door, Perf. Specs.: Product ID Kawneer, SHGC 0.20, VT 0.43, [Bldg. Use 1 - Automotive Facility] (c)	42	---	---	0.380	0.680

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor(a)
NORTH CMU WALL 4: Concrete Block:8", Partially Grouted, Cells Empty, Normal Density, Furring: Metal, [Bldg. Use 1 - Automotive Facility]	243	13.0	7.5	0.067	0.090
Window 5: Vinyl/Fiberglass Frame:Fixed, Perf. Specs.: Product ID Pella, SHGC 0.30, VT 0.43, [Bldg. Use 1 - Automotive Facility] (c)	64	---	---	0.200	0.310
NORTH METAL WALL 5: Other Metal Building Wall, [Bldg. Use 1 - Automotive Facility] (b)	248	---	---	0.052	0.050
NORTH CONCRETE STEM WALL: Solid Concrete:8" Thickness, Normal Density, Furring: None, [Bldg. Use 1 - Automotive Facility]	18	---	1.1	0.345	0.090
EAST					
EAST CMU WALL 2: Concrete Block:8", Partially Grouted, Cells Empty, Normal Density, Furring: Metal, [Bldg. Use 1 - Automotive Facility]	350	13.0	7.5	0.067	0.090
Door 111B: Insulated Metal, Swinging, [Bldg. Use 1 - Automotive Facility]	24	---	---	0.300	0.370
EAST STUD WALL 3: Steel-Framed, 16" o.c., [Bldg. Use 1 - Automotive Facility]	312	19.2	7.5	0.060	0.055
Window 1: Vinyl/Fiberglass Frame:Fixed, Perf. Specs.: Product ID Pella, SHGC 0.30, VT 0.43, [Bldg. Use 1 - Automotive Facility] (c)	24	---	---	0.200	0.310
Window 2: Vinyl/Fiberglass Frame:Fixed, Perf. Specs.: Product ID Pella, SHGC 0.30, VT 0.43, [Bldg. Use 1 - Automotive Facility] (c)	24	---	---	0.200	0.310
EAST METAL WALL 1: Other Metal Building Wall, [Bldg. Use 1 - Automotive Facility] (b)	1314	---	---	0.052	0.050
GARAGE DOOR 120B: Insulated Metal, Garage door 14% glazing, [Bldg. Use 1 - Automotive Facility]	120	---	---	0.100	0.370
GARAGE DOOR 120D: Insulated Metal, Garage door 14% glazing, [Bldg. Use 1 - Automotive Facility]	120	---	---	0.100	0.370
GARAGE DOOR 120 F: Insulated Metal, Garage door 14% glazing, [Bldg. Use 1 - Automotive Facility]	120	---	---	0.100	0.370
GARAGE DOOR 120H: Insulated Metal, Garage door 14% glazing, [Bldg. Use 1 - Automotive Facility]	120	---	---	0.100	0.370
GARAGE DOOR 120K: Insulated Metal, Garage door 14% glazing, [Bldg. Use 1 - Automotive Facility]	120	---	---	0.100	0.370
EAST CONCRETE STEM WALL: Solid Concrete:8" Thickness, Normal Density, Furring: None, [Bldg. Use 1 - Automotive Facility]	334	---	1.1	0.345	0.090
SOUTH					
SOUTH METAL WALL 1: Other Metal Building Wall, [Bldg. Use 1 - Automotive Facility] (b)	818	---	---	0.052	0.050
Door 124: Insulated Metal, Swinging, [Bldg. Use 1 - Automotive Facility]	24	---	---	0.300	0.370
Door 120M: Insulated Metal, Swinging, [Bldg. Use 1 - Automotive Facility]	24	---	---	0.300	0.370
SOUTH CONCRETE STEM WALL: Solid Concrete:8" Thickness, Normal Density, Furring: None, [Bldg. Use 1 - Automotive Facility]	258	---	1.1	0.345	0.090
WEST					
WEST STUD WALL 1: Steel-Framed, 16" o.c., [Bldg. Use 1 - Automotive Facility]	70	19.2	7.5	0.060	0.055
WEST STUD WALL 2: Steel-Framed, 16" o.c., [Bldg. Use 1 - Automotive Facility]	67	19.2	7.5	0.060	0.055
WEST CMU WALL 3 ABOVE: Concrete Block:8", Partially Grouted, Cells Empty, Normal Density, Furring: Metal, [Bldg. Use 1 - Automotive Facility]	50	13.0	7.5	0.067	0.090
WEST CMU WALL 3 BELOW: Concrete Block:8", Partially Grouted, Cells Empty, Normal Density, Furring: Metal, [Bldg. Use 1 - Automotive Facility]	504	13.0	7.5	0.067	0.090
Window 6: Vinyl/Fiberglass Frame:Fixed, Perf. Specs.: Product ID Pella, SHGC 0.30, VT 0.43, [Bldg. Use 1 - Automotive Facility] (c)	16	---	---	0.200	0.310
Window 7: Vinyl/Fiberglass Frame:Fixed, Perf. Specs.: Product ID Pella, SHGC 0.30, VT 0.43, [Bldg. Use 1 - Automotive Facility] (c)	16	---	---	0.200	0.310

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor(a)
WEST METAL WALL 4: Other Metal Building Wall, [Bldg. Use 1 - Automotive Facility] (b)	838	---	---	0.052	0.050
GARAGE DOOR 120C: Insulated Metal, Garage door 14% glazing, [Bldg. Use 1 - Automotive Facility]	120	---	---	0.100	0.370
GARAGE DOOR 120E: Insulated Metal, Garage door 14% glazing, [Bldg. Use 1 - Automotive Facility]	120	---	---	0.100	0.370
GARAGE DOOR 120G: Insulated Metal, Garage door 14% glazing, [Bldg. Use 1 - Automotive Facility]	120	---	---	0.100	0.370
GARAGE DOOR 120J: Insulated Metal, Garage door 14% glazing, [Bldg. Use 1 - Automotive Facility]	120	---	---	0.100	0.370
GARAGE DOOR 120L: Insulated Metal, Garage door 14% glazing, [Bldg. Use 1 - Automotive Facility]	120	---	---	0.100	0.370
WEST CONCRETE STEM WALL: Solid Concrete:8" Thickness, Normal Density, Furring: None, [Bldg. Use 1 - Automotive Facility]	341	---	1.1	0.345	0.090

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.
(b) 'Other' components require supporting documentation for proposed U-factors.
(c) Fenestration product performance must be certified in accordance with NFRC and requires supporting documentation.
(d) Slab-On-Grade proposed and budget U-factors shown in table are F-factors.

Envelope PASSES: Design 3% better than code

Envelope Compliance Statement

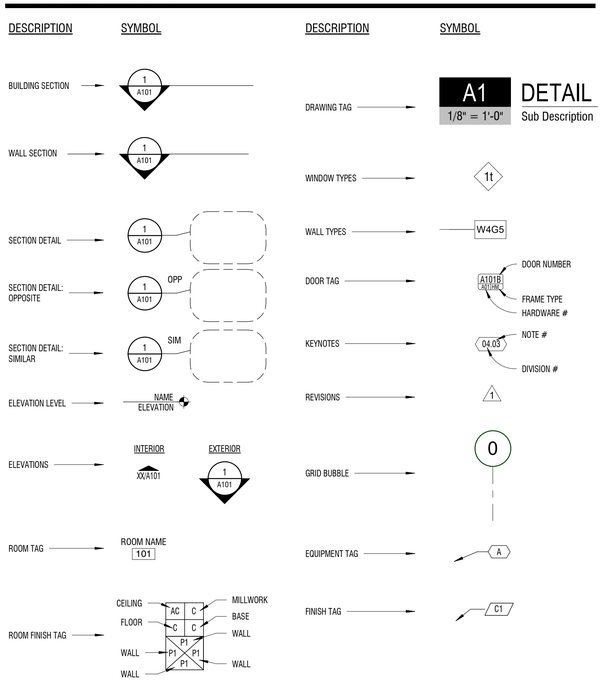
Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 90.1 (2016) Standard requirements in COMcheck Version 4.1.3.0 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Ryan W. Lemon, Project Architect — Signature — June 30, 2020
Name - Title — Date

ABBREVIATIONS

ABR.	DESCRIPTION	ABR.	DESCRIPTION	ABR.	DESCRIPTION
ACC STA	ACCESSIBLE STATION	EIFS	EXTERIOR INSULATION FINISH SYSTEM	P-LAM	PLASTIC LAMINATE PLATE
AC	ACOUSTIC, ACOUSTICAL			PLYWD	PLYWOOD
ABS	ACRYLONITRILE-BUTADIENE -STYRENE	FIN	FINISH	PVC	POLYVINYL CHLORIDE
		FEC	FIRE EXTINGUISHER CABINET	PREFAB	PREFABRICATED
AD	ADDENDUM	FLR	FLOOR	PT	PRESERVATIVE TREATED
ADJ	ADJUSTABLE	FD	FLOOR DRAIN	PROJ	PROJECTION
AFF	ABOVE FINISH FLOOR	FTG	FOOTING	QT	QUARRY TILE
ALT	ALTERNATE	FDN	FOUNDATION	RAD	RADIUS
ALUM	ALUMINUM	GALV	GALVANIZED	REF	REFRIGERATOR
AB	ANCHOR BOLT	GI	GALVANIZED IRON	REINF	REINFORCE
L	ANGLE	GA	GAUGE	REV	REVISION
ASI	ARCHITECT SUPPLEMENTAL INSTRUCTION	GYP BD	GYPSUM BOARD	RFI	REQUEST FOR INFORMATION
		HDWD	HARDWOOD	RD	ROOF DRAIN
ASPH	ASPHALT	HT	HEIGHT	RO	ROUGH OPENING
BSMT	BASMENT	HM	HOLLOW METAL	R/	ROUND
BB	BASKETBALL	HORIZ	HORIZONTAL	SCHED	SCHEDULE
BRG	BEARING	ID	INSIDE DIAMETER	SIM	SIMILAR
BM	BENCH MARK	INSUL	INSULATION	SHT	SHEET
BLKG	BLOCKING	INT	INTERIOR	SPEC	SPECIFICATION
BD	BOARD	JT	JOINT	SQ	SQUARE
B.O.	BOTTOM OF	KD	KNOCK DOWN	SS	STAINLESS STEEL
BLDG	BUILDING	KO	KNOCK OUT	STD	STANDARD
B.U.R.	BUILT UP ROOF	LLV	LONG LEG VERTICAL	STL	STEEL
CLG	CEILING	MH	MANHOLE	STOR	STORAGE
℄	CENTER LINE	MFR	MANUFACTURER	STRUCT	STRUCTURAL
CT	CERAMIC TILE	MB	MARKER BOARD	SUSP	SUSPENDED, SUSPENSION
CB	CHALKBOARD	MO	MASONRY OPENING	SYS	SYSTEM
C	CHANNEL	MAX	MAXIMUM	TB	TACKBOARD
CO	CLEAN OUT	MECH	MECHANICAL	TEL	TELEPHONE
COL	COLUMN	MT	MOUNT	TV	TELEVISION
CONC	CONCRETE	MTL	METAL	TEMP	TEMPORARY
CMU	CONCRETE MASONRY UNIT	MIN	MINIMUM	TS	TUBE STEEL
CONN	CONNECTION	MISC	MISCELLANEOUS	THRES	THRESHOLD
CONT	CONTINUOUS	(N)	NEW	TOIL	TOILET
CONTR	CONTRACTOR	NIC	NOT IN CONTRACT	T.O.	TOP OF
DIM	DIMENSION	NTS	NOT TO SCALE	T & B	TOP AND BOTTOM
DS	DOWNSPOUT	O.C.	ON CENTER	TYP	TYPICAL
DWG	DRAWING	OPNG	OPENING	VERT	VERTICAL
EA	EACH	OPP	OPPOSITE	U.N.O.	UNLESS NOTED OTHERWISE
ELECT	ELECTRICAL	OD	OUTSIDE DIAMETER	WC	WATER CLOSET
EWC	ELECTRIC WATER COOLER	OH	OVERHEAD	WM	WATER METER
ELEV	ELEVATION	OF/CI	OWNER FURNISHED / CONTRACTOR INSTALLED	WWF	WELDED WIRE FABRIC
EQ	EQUAL			W	WIDE FLANGE
EQUIP	EQUIPMENT	OF/OI	OWNER FURNISHED / OWNER INSTALLED	WDO	WIDE FLANGE
EXIST	EXISTING			W/	WITH
(E)	EXISTING	PART BD	PARTICLE BOARD	W/O	WITHOUT
EXP	EXPANSION	PART'N	PARTITION	WD	WOOD
EXT	EXTERIOR	d	PENNY		

SYMBOLS LEGEND



MATERIALS LEGEND

MATERIAL	SYMBOL
EARTH	
ASPHALT PAVING	
COMPACTED GRANULAR FILL	
CONCRETE	
CONCRETE MASONRY UNITS	
BRICK	
STEEL	
CONTINUOUS WOOD	
WOOD BLOCKING	
PLYWOOD / OSB	
PARTICLE BOARD	
INSULATION	
RIGID INSULATION	
GYPSUM BOARD	
ACOUSTIC TILE	
GLU-LAMINATE BEAM	
PLASTER & METAL LATH	
GLASS	
TILE	
FINISH WOOD	
ALUMINUM	
STEEL GIRT WALL	

VICINITY MAP

NORTH

PERMIT SET / BID SET

design west | architects
LOGAN UT 84321
SALT LAKE CITY UT 84103
255 SOUTH 300 WEST
795 NORTH 400 WEST

CACHE MOSQUITO ABATEMENT
DISTRICT HEADQUARTERS
210 W. 3700 N.
HYDE PARK, UT 84318

DESCRIPTION:
DATE:
MARK:

PROJECT #: 819159
DRAWN BY: ALARCON
CHECKED BY: LEMON
ISSUED: 07.09.2020

STATE OF UTAH
JUNE 09, 2020
RYAN WAYNE LEMON
8668330-0301
LICENSED ARCHITECT

PROJECT INFORMATION

G-002

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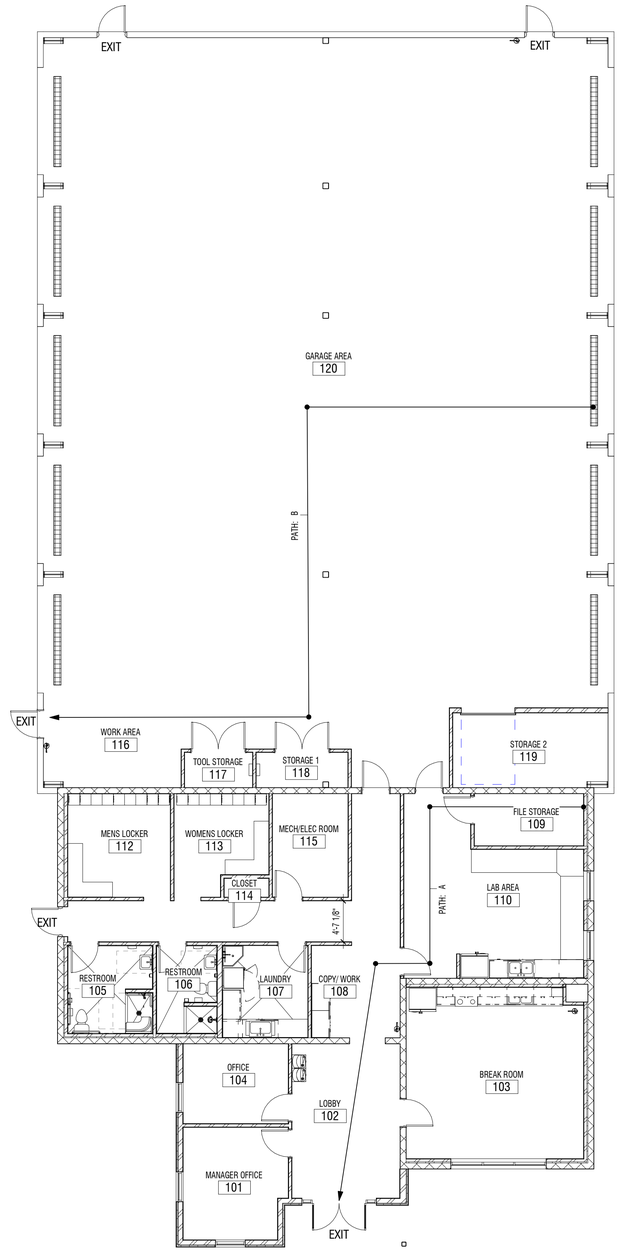

A1
1/8" = 1'-0"

CODE PLAN

NORTH

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OCCUPANCY LOADS

NUMBER	NAME	AREA
MAIN BUILDING		
101	MANAGER OFFICE	144 SF
102	LOBBY	210 SF
103	BREAK ROOM	376 SF
104	OFFICE	106 SF
105	RESTROOM	91 SF
106	RESTROOM	64 SF
107	LAUNDRY	99 SF
108	COPY/ WORK	105 SF
109	FILE STORAGE	71 SF
110	LAB AREA	336 SF
111	HALLWAY	236 SF
112	MENS LOCKER	133 SF
113	WOMENS LOCKER	109 SF
114	CLOSET	11 SF
115	MECH/ELEC ROOM	98 SF
116	WORK AREA	126 SF
117	TOOL STORAGE	30 SF
118	STORAGE 1	40 SF
119	STORAGE 2	145 SF
120	GARAGE AREA	4934 SF
SUBTOTAL		7464 SF

NUMBER	NAME	AREA
STORAGE BUILDING		
201	STORAGE ROOM	153 SF
202	STORAGE ROOM	144 SF
203	STORAGE ROOM	144 SF
SUBTOTAL		442 SF
GRAND TOTAL		7906 SF

EGRESS PATHS

PATH	LENGTH	STARTING ROOM
FINISH FLOOR		
A	68'	FILE STORAGE 109
B	96'	GARAGE AREA 120

CODE REVIEW

APPLICABLE CODES

2015 International Building Code (IBC)
2015 International Mechanical Code (IMC)
2015 International Plumbing Code (IPC)
2015 International Fuel Gas Code (IFGC)
2015 International Energy Conservation Code (IECC)
2014 National Electrical Code (NEC)
ICC/ANSI A117.1-2009
STATE OF UTAH ADOPTED AMENDMENTS TO THE IBC

MIXED OCCUPANCIES - SEPARATED USES (SECTION 508 & TABLE 508.4)	REQUIRED SEPARATION
OCCUPANCY TYPE(S)	B, S1

INCIDENTAL USE AREA(S) (SECTION 509 & TABLE 509)	REQUIRED SEPARATION
INCIDENTAL USE AREA (NONE)	N / A

ALLOWABLE HEIGHT (SECTION 504)	HEIGHT / STORIES
BASE ALLOWABLE HEIGHT (ABOVE GRADE PLANE) (TABLE 504.3 & 504.4)	40'-0" / 1
HEIGHT INCREASE FOR SPRINKLERS (TABLE 504.3)	NO
ACTUAL HEIGHT	20'-1" / 1

ALLOWABLE AREA	
BASE ALLOWABLE AREA (PER FLOOR) (TABLE 506.2)	9,000 SF
INCREASED ALLOWABLE AREA PER FLOOR (EQUATION 5-1)	N/A
MAXIMUM AREA [ALLOWABLE AREA OF 1ST FLOOR x STORIES PER SECTION 506.4 - 1, 2, 3] W = (L1 x W1 + ...)F F = 195 P = 390 W = (130 x 30 + 35 x 30)/390 = 13 If = [(P - 0.25) W/30 Aa = At + (NS x If) If = [(195/390 - 0.25) 13/30 = 0.11 9,500 + (8,500 x 0.11) =10,575 (SECTION 506.2.1)	N/A
UNLIMITED BUILDING AREA? (SECTION 507)	NO
SPECIAL PROVISIONS? (SECTION 508)	NO
ACTUAL AREA	7,908 S.F.

CONSTRUCTION CLASSIFICATION	TYPE
(SECTION 602 & TABLE 601)	VB

FIRE-RESISTANCE RATING - BUILDING ELEMENTS (TABLE 601)	REQUIRED RATING UL LISTING
STRUCTURAL FRAME, INCLUDING COLUMNS, GIRDERS & TRUSSES	0 HOUR
	N / A
BEARING WALLS, EXTERIOR	0 HOUR
	N / A
BEARING WALLS, INTERIOR	0 HOUR
	N / A
NONBEARING WALLS, EXTERIOR	PER FIRE RESISTANCE RATING - FIRE SEPARATION DISTANCE BELOW
NONBEARING WALLS, INTERIOR	
FLOOR CONSTRUCTION INCLUDING SUPPORT BEAMS AND JOISTS	0 HOUR
	N / A
ROOF CONSTRUCTION INCLUDING SUPPORT BEAMS AND JOISTS	0 HOUR
	N / A

FIRE-RESISTANCE RATING - FIRE SEPARATION DIST (TABLE 602)	REQUIRED RATING
< 5'	1 HOUR
>= 5' AND < 10'	1 HOUR
>= 10' AND < 30'	0 HOUR
<= 30'	0 HOUR

FIRE AREA - MAX (SECTION 903.2)	N / A
	M < 9,000 S.F.
AUTOMATIC SPRINKLER SYSTEMS (TABLE 903.2.1.3)	NO
FIRE ALARM SYSTEM (SECTION 907)	NO

MEANS OF EGRESS	
FLOOR AREA IN SQUARE FEET PER OCCUPANT (TABLE 1004.5)	150 GROSS BUSINESS / 200 GROSS STORAGE AREA
OCCUPANT LOAD (SECTION 1004.1)	17+27=44
EXITS REQUIRED (SECTION 1006.3.2)	2

EGRESS WIDTH	
STAIRWAY WIDTH PER OCCUPANT (SECTION 1005.3.1)	N/A
STAIRWAY WIDTH REQUIRED	N/A
STAIRWAY WIDTH PROVIDED	N/A
OTHER EGRESS COMPONENT WIDTH PER OCCUPANT (SECTION 1005.3.2)	0.2"
OTHER EGRESS COMPONENT WIDTH REQUIRED	8-3/4"
OTHER EGRESS COMPONENT WIDTH PROVIDED	36 MIN"

EGRESS PATH		
MAX ALLOWED	ALLOWED	PROVIDED
B	75'	68'
S1	100'	96'

CORRIDORS	
REQUIRED FIRE-RESISTANCE RATING (SECTION 1020 & TABLE 1020.1)	N/A (EXCEPTION 4)
MINIMUM WIDTH REQUIRED (SECTION 1020.2)	44"
MINIMUM WIDTH PROVIDED	55"

PLUMBING		
MINIMUM PLUMBING FACILITIES (SECTION 2902 & TABLE 2902.1)	NO. REQUIRED	NO. PROVIDED
	1 PER 25 FOR THE FIRST 50 AND 1 PER 50 FOR THE REMAINDER EXCEEDING 50	
WATER CLOSETS (SEE IPC SECTION 419.2 FOR URINALS)	2	2
	1 PER 40	
LAVATORIES	2	2
	1 PER 100	
DRINKING FOUNTAINS (SEE IPC SECTION 410.1)	1	1
SERVICE SINKS (TABLE 2902.1)	1	1

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CACHE MOSQUITO ABATEMENT
DISTRICT HEADQUARTERS

210 W. 3700 N.
HYDE PARK, UT 84318

DESCRIPTION:
DATE:
MARK:

PERMIT SET / BID SET

PROJECT #: 819159
DRAWN BY: ALARCON
CHECKED BY: LEMON
ISSUED: 07.09.2020

STATE OF UTAH
JUNE 09, 2020
RYAN WAYNE LEMON
8668330-0301
LICENSED ARCHITECT

CODE REVIEW

G-003

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GENERAL NOTES

1. ALL IMPROVEMENTS MUST COMPLY WITH HYDE PARK CITY STANDARDS.

2. UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE ONLY. CONTRACTOR SHALL FIELD VERIFY ALL UTILITY LOCATIONS BY CONTACTING BLUE STAKES AT 1-800-662-4111 OR 811 AND OTHER APPLICABLE UTILITIES PRIOR TO EXCAVATION. CONTRACTOR SHALL POT-HOLE AND LOCATE UTILITIES AT THE CONTRACTOR'S EXPENSE WHEN REQUIRED AND SHALL BE SOLELY RESPONSIBLE FOR COSTS AND REPAIRS DUE TO DAMAGE OF EXISTING UTILITIES. ALL UTILITIES MAY NOT BE SHOWN ON PLANS.

3. CONTRACTOR SHALL POTHOLE (WHERE APPLICABLE) ALL GAS SERVICES, COMMUNICATIONS LINES, SEWER LINES, AND WATER LINES IN ORDER TO VERIFY ADEQUATE CLEARANCE TO THE NEW CONSTRUCTION. THIS SHALL BE DONE AT THE BEGINNING OF THE PROJECT IN ORDER TO PROVIDE ADEQUATE TIME TO RESOLVE CONFLICTS.

4. CONTRACTOR SHALL REPAIR DISTURBED SURFACES TO EXISTING CONDITIONS, INCLUDING, BUT NOT LIMITED TO UTILITY LINES AND SERVICES, ASPHALT REPAIR, CURB AND GUTTER, SIDEWALK, PLANTER STRIPS, SPRINKLER AND IRRIGATION SYSTEMS AND GENERAL CLEANUP EXCEPT WHERE INSTRUCTED IN WRITING OTHERWISE.

5. ALL UTILITIES AND BUILDING ACCESSES SHALL BE KEPT IN WORKING ORDER EXCEPT FOR THE MINIMUM TIME NEEDED FOR EXCAVATION, TRENCHING, CONNECTIONS, ETC.

6. APPROVAL FROM HYDE PARK CITY IS REQUIRED PRIOR TO WATER SHUT-DOWNS IF REQUIRED TO COMPLETE THE WORK. ALL AFFECTED ENTITIES AND PROPERTY OWNERS SHALL BE NOTIFIED 24 HOURS PRIOR TO APPROVED SHUTDOWNS.

7. ALL BIODEGRADABLE DEBRIS RESULTING FROM WORK ON THE PROJECT SHALL BE DISPOSED OF BY THE CONTRACTOR TO AN APPROPRIATE DISPOSAL LOCATION. ALL NON-BIODEGRADABLE DEBRIS RESULTING FROM WORK ON THE PROJECT SHALL BE DISPOSED OF PROPERLY BY THE CONTRACTOR.

8. FIELD VERIFY ELEVATIONS OF EXISTING UTILITIES TO BE CROSSED OR CONNECTED INTO WITH NEW CONSTRUCTION TO CONFIRM GRADES ALLOW NEW CONSTRUCTION AS PROPOSED. NOTIFY ENGINEER OF POTENTIAL CONFLICT PRIOR TO INSTALLING NEW UTILITY SYSTEMS.

9. PREPARE SUBGRADE IN ACCORDANCE WITH RECOMMENDATIONS OF GEOTECHNICAL REPORT PREPARED BY CMT DATED _____.

SURVEY AND CONSTRUCTION

1. CONTRACTOR SHALL PROVIDE CONSTRUCTION STAKING FOR THE PROJECT.

2. CONTRACTOR SHALL FIELD-VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION.

3. CONTRACTOR SHALL REMOVE EXISTING ASPHALT/HARD SURFACES AND RECONSTRUCT SURFACE IMPROVEMENTS TO THE LINES AND GRADES SHOWN HEREIN.

PERMITS

1. IT SHALL BE UNLAWFUL TO DO ANY CONSTRUCTION, EXCAVATION WORK ON ANY STREET, CURB, GUTTER, SIDEWALK, SEWER LINE, WATER LINE, PRESSURE IRRIGATION LINE, STORM DRAIN OR OTHER INFRASTRUCTURE ADDITION OR IMPROVEMENT IN HYDE PARK CITY WITHOUT AN ENCROACHMENT PERMIT FROM THE CITY TO DO SO. HYDE PARK CITY AND ALL UTILITY COMPANIES ARE BOUND BY HYDE PARK CITY STANDARD SPECIFICATIONS. NO WORK SHALL BE STARTED UNTIL A PERMIT IS SECURED.

2. CONTRACTOR SHALL COMPLY WITH THE TERMS OF ALL PERMITS REQUIRED FOR THIS PROJECT.

3. CONTRACTOR SHALL OBTAIN AND KEEP COPIES OF ALL PERMITS ON SITE.

4. NO ROAD SHALL BE CLOSED BY THE CONTRACTOR TO THE PUBLIC WITHOUT PRIOR COORDINATION WITH HYDE PARK CITY. THE CONTRACTOR SHALL, AT ALL TIMES, CONDUCT ITS WORK SO AS TO INSURE THE LEAST POSSIBLE OBSTRUCTION TO TRAFFIC AND NORMAL COMMERCIAL PURSUITS.

ACCESS AND IRRIGATION IMPACTS

1. DAMAGE TO EXISTING IRRIGATION DITCHES, ROADWAY SWALES, PIPING OR CONDUITS, OR OTHER CONVEYANCE SYSTEMS (INCLUDING CONTROL VALVES) SHALL BE REPAIRED BY CONTRACTOR AT NO COST TO THE OWNER, CITY, OR THE UTILITY OWNER.

RESTORATION AND SURFACE IMPROVEMENTS

1. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND THE RESTORATION OR REPLACEMENT OF ANY IMPROVEMENTS EXISTING ON PUBLIC OR PRIVATE PROPERTY AT THE START OF WORK OR PLACED THERE DURING THE PROGRESS OF THE WORK.

2. EXISTING IMPROVEMENTS SHALL INCLUDE BUT NOT TO BE LIMITED TO PERMANENT SURFACING, SIDEWALKS, PLANTED AREAS, DITCHES, DRIVEWAYS, WALLS, AND FENCES. ALL IMPROVEMENTS SHALL BE RECONSTRUCTED TO EQUAL OR BETTER, IN ALL RESPECTS, THAN THE EXISTING IMPROVEMENTS REMOVED.

3. UNLESS OTHERWISE DIRECTED, ALL STREET SURFACING, CURBS, GUTTERS, SIDEWALKS, DRIVEWAYS, OR OTHER HARD SURFACE THAT MUST BE REMOVED IN THE PERFORMANCE OF THE WORK SHALL BE RESTORED IN KIND BY THE CONTRACTOR IN ACCORDANCE WITH THE SPECIFICATIONS CONTAINED HEREIN. DEVIATION OF MORE THAN ONE-FOURTH INCH (1/4") BETWEEN OLD AND NEW WORK OR WITHIN NEW CONSTRUCTION SHALL BE CORRECTED. SUCH MEASUREMENT SHALL BE MADE FROM A TEN-FOOT (10') MINIMUM LENGTH STRAIGHT EDGE. ADJOINING SURFACES BETWEEN OLD AND NEW MUST BE FLUSH

ENVIRONMENTAL SAFETY

1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBSERVE ALL BEST PRACTICES RELATIVE TO ENSURING A POSITIVE AND NON-HAZARDOUS ENVIRONMENTAL CLIMATE DURING ALL PHASES OF CONSTRUCTION. THE STORM WATER POLLUTION PREVENTION PLAN SHALL BE FOLLOWED DURING CONSTRUCTION IN COORDINATION WITH THE MS4.

2. CONCRETE WASHOUT WATER SHALL BE DISPOSED OF USING A DESIGNATED CONCRETE WASHOUT AREA TO PREVENT WASHOUT WATER INFILTRATION ON-SITE. UNAUTHORIZED CONCRETE WASHOUTS WILL BE PROSECUTED AS A CLASS B MISDEMEANOR DUE TO POSSIBLE CONTAMINATION OF THE AQUIFER. THIS SHALL APPLY TO BOTH THE OPERATOR AND THE RESPECTIVE COMPANY.

3. THE CONTRACTOR MUST DISPOSE OF THE RESIDUE CONCRETE AND/OR CONCRETE BY-PRODUCTS UPON COMPLETION OF THE PROJECT.

4. ANY EXCESSIVE PETROLEUM-BASED SPILL SHOULD BE REPORTED TO THE PROPER AUTHORITY.

5. PROTECT STORMWATER INLETS FROM SEDIMENT INFLOW DURING CONSTRUCTION BY USE OF STORMWATER CONTROL BMP'S.

6. CONTRACTOR IS REQUIRED TO PROVIDE PORT-A-JOHN FACILITIES DURING CONSTRUCTION.

7. CONTRACTOR TO PROVIDE SOLID WASTE CONTAINERS FOR CONSTRUCTION DEBRIS THROUGHOUT THE PROJECT.

IMPROVEMENTS

1. CONCRETE SHALL BE TYPE 1 AND SHALL MEET THE MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4000 PSI. UNDER NO CONDITION SHALL THE WATER CEMENT RATIO EXCEED 0.45. FOLLOW ACI STANDARDS FOR PLACEMENT AND CURING.

2. PROVIDE COMPACTED SUBGRADE WITH MINIMUM 4" THICK $\frac{3}{4}$" DRAIN ROCK OR CHIPS BELOW SITE CONCRETE.

3. CONCRETE PAVEMENT/SIDEWALKS SHALL HAVE CONTRACTION JOINTS AS SPECIFIED ON THE PLAN OR AT 5' ON CENTER MAX. FOR SIDEWALK AND AT BUILDING PERIMETER. THE JOINTS SHALL BE APPROXIMATELY 3/16 INCH WIDE AND APPROXIMATELY ONE-QUARTER OF THE TOTAL SLAB THICKNESS IN DEPTH. EXPANSION JOINTS SHALL BE 1/2-INCH THICK AND SHALL BE PLACED EVERY 50 FEET, MAX SPACING.

4. MATERIAL FOR 1/2-INCH EXPANSION JOINTS SHALL BE AS SPECIFIED IN AASHTO M-153 AND AASHTO M-213, AND SHALL BE INSTALLED WITH ITS TOP APPROXIMATELY 1/4-INCH BELOW THE CONCRETE SURFACE.

5. AFTER THE CONCRETE IS PLACED AT THE ESTABLISHED GRADE AND SCREEDED, IT SHALL BE FLOAT FINISHED, EDGED AND THEN GIVEN A LIGHT BROOM FINISH. IN NO CASE SHALL DRY CEMENT OR A MIXTURE OF DRY CEMENT AND SAND BE SPRINKLED ON THE SURFACE TO ABSORB MOISTURE OR HASTEN HARDENING. SURFACE EDGES OF ALL SLABS SHALL BE ROUNDED TO A RADIUS OF 1/2 INCH.

6. CLEAR, GRUB, REMOVE AND DISPOSE OF ALL VEGETATION AND DEBRIS WITHIN THE LIMITS OF THE PROJECT. GRUB AREAS TO A DEPTH OF 8 INCHES OR GREATER BELOW NATURAL GROUND TO REMOVE ALL ROOTS AND OTHER BURIED DEBRIS; THIS SHALL INCLUDE REMOVAL OF THE ORGANIC LADEN TOPSOIL AND STOCKPILING IT FOR LATER DISTRIBUTION.

7. ALL HOLES, CUTS, DEPRESSIONS AND OTHER VOIDS RESULTING FROM CLEARING AND GRUBBING OR OTHER OPERATIONS WITHIN AREAS DESIGNATED TO RECEIVE IMPROVEMENTS SHALL BE BACKFILLED WITH STRUCTURAL FILL AND COMPACTED TO 96% ASTM D-1557.

8. CONTRACTOR IS RESPONSIBLE FOR BARRIERS, FENCING, AND/OR SIGNAGE TO PREVENT ACCESS UNTIL CONCRETE IS SUFFICIENTLY CURED.

9. ASPHALT SURFACING SHALL CONSIST OF COMMERCIAL GRADE BINDER WITH $\frac{3}{4}$" MAXIMUM AGGREGATE IN COMPLIANCE WITH APWA SPECIFICATIONS FOR HOT MIX ASPHALT WITH MINIMUM PROPERTIES OF PG58-28 MIX DESIGN.

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DISTRICT HEADQUARTERS
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HYDE PARK, UT 84318

MARK:	DATE:	DESCRIPTION:

PROJECT #: 819159
DRAWN BY: JMM
CHECKED BY: CLR
ISSUED: 07.08.2020

PROFESSIONAL STRUCTURAL ENGINEER
7/8/20
No. 296553
CRAIG L. RASMUSSEN
STATE OF UTAH

CIVIL NOTES

C-000

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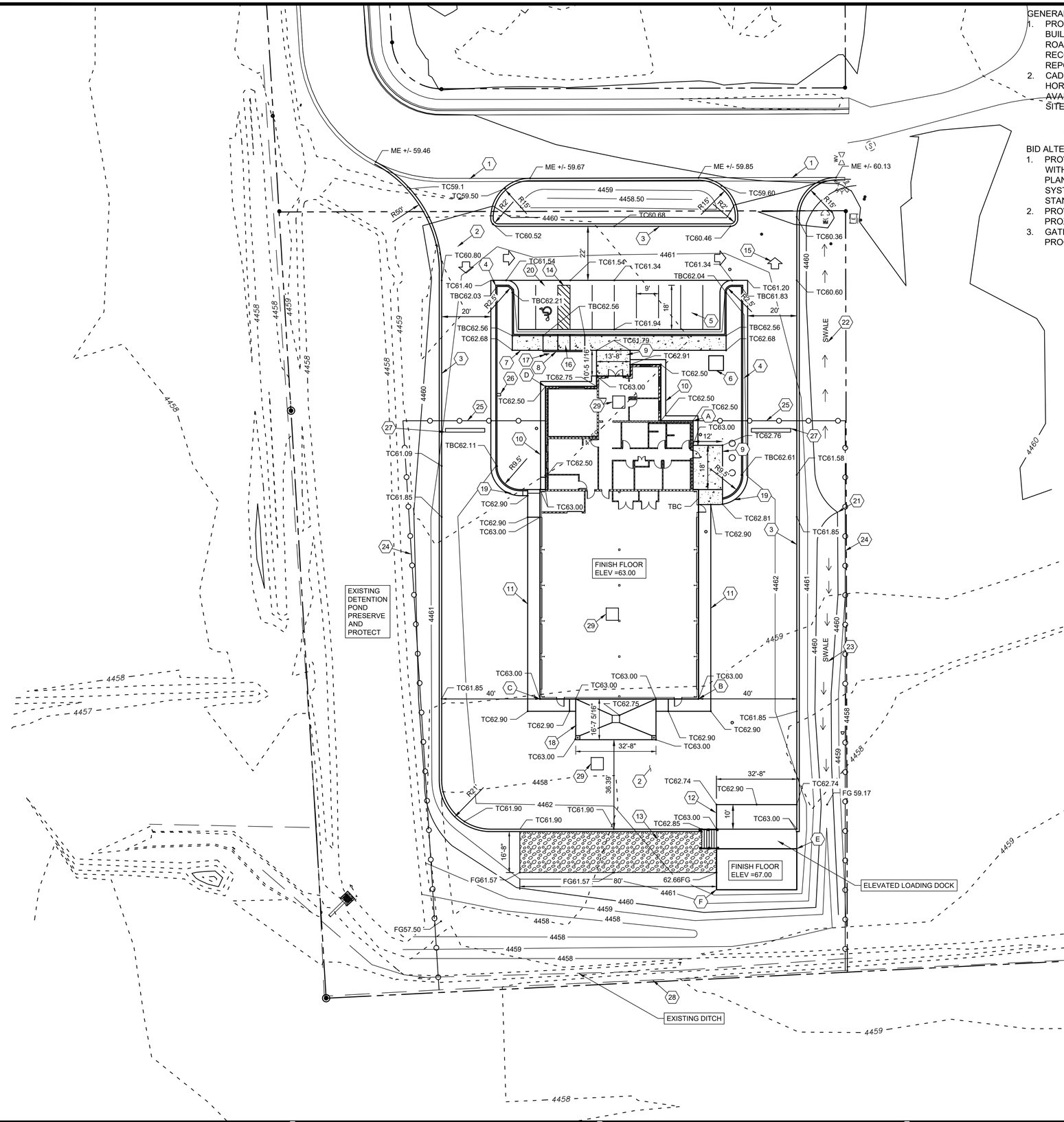

GENERAL NOTES:

1. PROVIDE STRUCTURAL FILL BELOW BUILDINGS, AND PAVED SURFACES AND ROAD BASE PARKING AREAS PER RECOMMENDATION IN THE GEOTECHNICAL REPORT.
2. CAD FILE OF EXISTING SITE AND HORIZONTAL LAYOUT CAN BE MADE AVAILABLE FOR CONSTRUCTION STAKING. SITE GRADING IS NOT IN 3-DIM FORMAT.

BID ALTERNATE #1:

1. PROVIDE 6' CHAIN LINK FENCE PER PLAN WITH GATES AND CONTROL SYSTEM AS PER PLAN. GATE OPERATION AND CONTROL SYSTEM TO BE COMPLIANT WITH UL 325 STANDARDS.
2. PROVIDE (10) PUSH BUTTON KEYCHAIN TYPE PROXIMITY REMOTE CONTROLS.
3. GATE CONTROLS SHALL BE EQUIPPED WITH PROGRAMMABLE TIMER SYSTEM.

KEY NOTES:

1. SAWCUT AND REMOVE EXISTING 18" WIDE FLUSH CURB
2. INSTALL NEW ASPHALT SURFACE PER DETAIL 6 SHEET C-5OO
3. CONSTRUCT 12" WIDE x 8" THICK FLUSH CURB AT 2% AWAY FROM ASPHALT PROVIDE CONTROL JOINT AT 10' SPACING
4. CONSTRUCT SPILL CURB AND GUTTER PER DETAIL 4 SHEET C-500
5. CONSTRUCT 6" THICK CONCRETE PARKING AREA PER DETAIL 7 SHEET C-500
6. CONSTRUCT CONCRETE PAD FOR TRANSFORMER COORDINATE WITH ELECTRIC PLAN
7. CONSTRUCT 6'x4" THICK CONCRETE SIDEWALK
8. CONSTRUCT 6"x12" DEEP CURB WALL
9. CONSTRUCT 4" THICK FLAT WORK
10. CONSTRUCT 2'x4" THICK CONCRETE FLATWORK AT 2% SLOPE AWAY FROM BUILDING PROVIDE CONTROL JOINT AT 10' SPACING
11. CONSTRUCT 5'x6" THICK CONCRETE FLATWORK PROVIDE CONTROL JOINTS PER GENERAL NOTES
12. CONSTRUCT 8" THICK CONCRETE APRON WITH #4 REBAR AT 12" O.C. E.W. PER DETAIL 7 SHEET C-500
13. INSTALL COMPACTED ROAD BASE PARKING LOT W/ 4" ROAD BASE OVER MIN. 18" COMPACTED PIT RUN
14. PAINT 4" WHITE STRIPS AND PARKING LINES AND BLUE ADA SYMBOL
15. PAINT WHITE DIRECTIONAL ARROWS
16. CONSTRUCT ADA RAMP
17. INSTALL VAN ACCESSIBLE ADA PARKING SIGN
18. INSTALL 6" THICK CONCRETE SLAB WITH #4 REBAR AT O.C. E.W.
19. TRANSITION FROM CONCRETE SLAB TO SPILL CURB AND GUTTER
20. CONTRACTOR TO ENSURE ADA PARKING SPACE DOES NOT EXCEED 2% SLOPE IN ANY DIRECTION
21. DRAINAGE SWELL GRADE BREAK
22. SHALLOW DRAIN SWELL SLOPE DIRECTION PER PLAN
23. DRAINAGE SWELL PER PLAN
24. BID ALTERNATE #1 6' CHAINLINK FENCE
25. BID ALTERNATE #1 (2) 13' MOTORIZED BIPARTING SLIDING CHAINLINK GATES WITH PHOTO EYE SENSOR. SYSTEM.
26. BID ALTERNATE #1 KEYPAD ENTRY SYSTEM. COORDINATE LOCATION PER MANUFACTURER GUIDELINES.
27. BID ALTERNATE #1 IN-GROUND EXIT SENSOR LOOP - AUTOMATIC OPENER - CONTINUOUS WIRES INSTALLED IN CONDUIT. LOCATION TO BE COORDINATED WITH MANUFACTURER GUIDELINES.
28. EXISTING BARBWIRE FENCE
29. GEOTECHNICAL TEST PIT APPROX LOCATION, EXCAVATE AND BACKFILL WITH COMPACTED PIT RUN.

BUILDING CORNER LOCATIONS		
CORNER	NORTHERN	EASTING
A	3814422.05	1548033.88
B	3814308.80	1548036.12
C	3814308.80	1547971.63
D	3814436.05	1547973.88
E	3814247.80	1548076.11
F	3814231.13	1548043.44

VERIFY DIMENSIONS WITH ARCHITECTURAL PLAN.

LEGEND

- EXISTING SEWER MANHOLE
- EXISTING WATER VALVE
- EXISTING WATER METER
- EXISTING FIRE HYDRANT
- EXISTING ELECTRICAL BOX

811 Know what's below. Call before you dig.

N

GRAPHIC SCALE

0' 10' 20' 40' 60'

Scale: 1"=20'

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210 W. 3700 N.
HYDE PARK, UT 84318

MARK:	DATE:	DESCRIPTION:

PROJECT #:	819159
DRAWN BY:	JMM
CHECKED BY:	CLR
ISSUED:	07.08.2020

PROFESSIONAL STRUCTURAL ENGINEER
7/8/20
No. 295553
CRAIG L. RASMUSSEN
STATE OF UTAH
Craig L. Rasmussen

SITE LAYOUT AND GRADING PLAN

C-100

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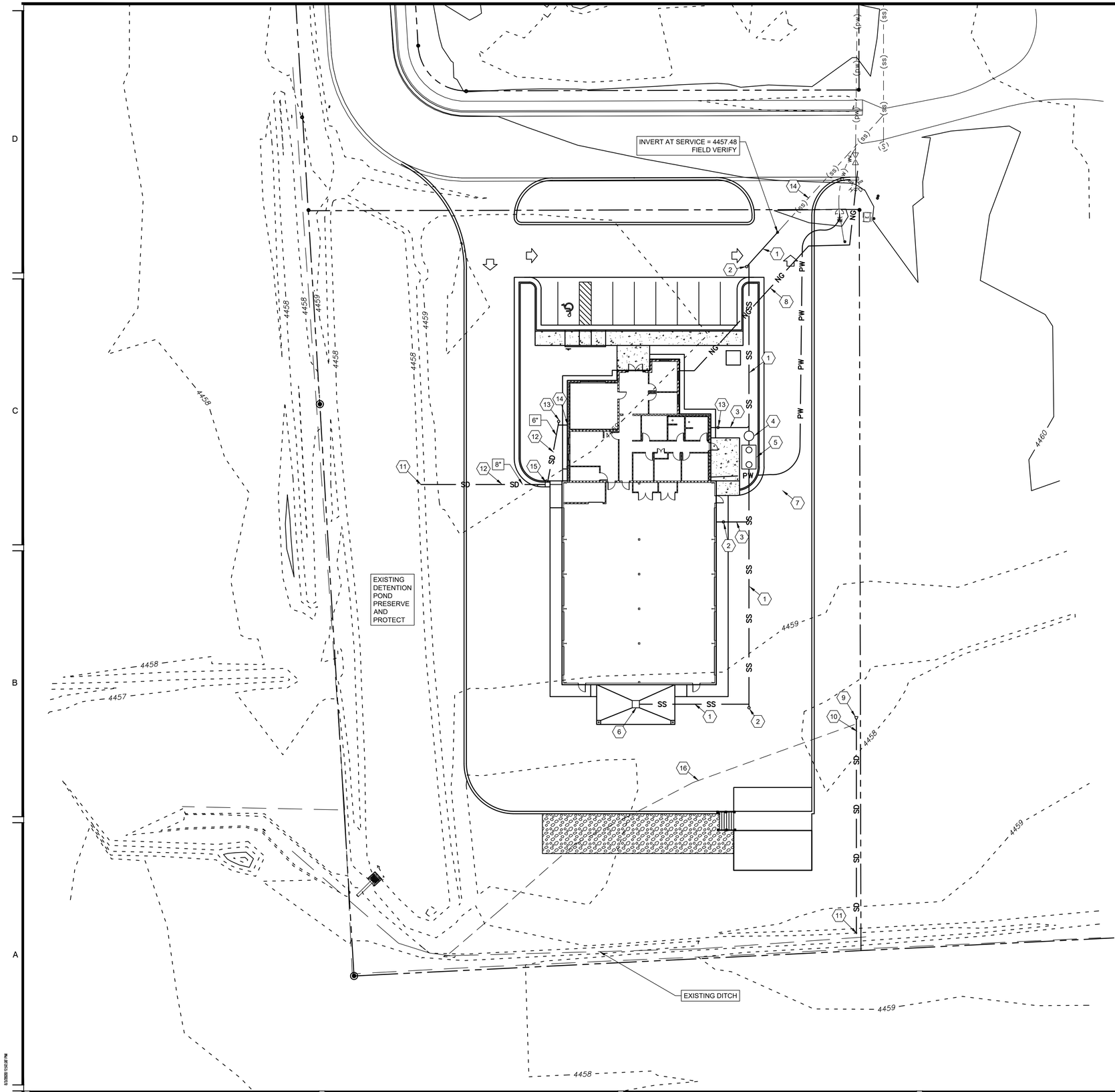

KEY NOTES:

1. INSTALL 6" PVC SDR-35 SEWER PIPE at 1% SLOPE, TRENCH PER DETAIL 2 SHEET C-500
2. INSTALL SEWER CLEANOUT TO GRADE W/ BRASS CAP AND TRAFFIC RATED SLEEVE AND COVER, "SEWER" IN COVER
3. INSTALL 4" PVC SDR-35 SEWER LATERAL 2% MIN. SLOP, COORDINATE BUILDING CONNECTION WITH PLUMBING PLAN PER DETAIL 1 SHEET C-500
4. INSTALL 4' DIA. SAMPLING CONCRETE MANHOLE WITH 6" SAMPLE DROP INV. IN = 4458.56 INV. OUT = 4458.36
5. INSTALL 1500 GAL. OIL/GREASE SEPARATOR PER DETAIL 5 SHEET C-500 INV. IN = 4459.23 INV. OUT = 4458.88
6. INSTALL 3'X3' CONCRETE BOX WITH TRAFFIC RATED GRATE MIN. 2' SUMP BELOW PIPE INVERT PER DETAIL 8 SHEET C-500 INV. OUT = 4460.67
7. INSTALL 1-1/2" POLY WATER SERVICE WITH 4' MINIMUM COVER, CONNECT TO EXISTING SERVICE LINE, COORDINATE BUILDING CONNECTION WITH PLUMPING PLAN
8. COORDINATE INSTALLATION OF GAS SERVICE WITH DOMINION ENERGY, COORDINATE BUILDING CONNECTION WITH PLUMBING PLAN
9. INSTALL FLARED INLET
10. INSTALL 6" FLEXIBLE PIPE AT 1% INV. OUT = 4458.72 INV. IN = 4459.62
11. INSTALL GRATED CAP AT END OF PIPE
12. INSTALL PVC SDR-35 DRAIN PIPE, TRENCH PER DETAIL 2 SHEET C-500
13. INSTALL CLEANOUT TO GRADE WITH BRASS CAP AND IRR BOX COVER IN TURF
14. EXISTING 6" SEWER SERVICE STUB
15. INSTALL 2'x2'x3' DEEP CATCH BASIN IN GUTTER. EXTEND DOWNSPOUT UNDER GRADE AND INTO SIDE OF CATCH BASIN PER DETAIL 8 SHEET C-500
16. REMOVE AND DISPOSE OF EXISTING FLEXIBLE PIPE

LEGEND

(S)	EXISTING SEWER MANHOLE
WV	EXISTING WATER VALVE
WM	EXISTING WATER METER
	EXISTING FIRE HYDRANT
E	EXISTING ELECTRICAL BOX
–(pw)–	EXISTING WATER LINE
–(ss)–	EXISTING SEWER LINE
PW	NEW WATER LINE/SERVICE
SS	NEW SEWER LINE/LATERAL
NG	NEW GAS SERVICE
SD	NEW STORM DRAIN LINE

Know what's below. Call before you dig.

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GRAPHIC SCALE
0' 10' 20' 40' 60'
Scale: 1"=20'

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CACHE MOSQUITO ABATEMENT DISTRICT HEADQUARTERS

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LICENSED PROFESSIONAL STRUCTURAL ENGINEER
7/8/20
No. 295553
CRAIG L. RASMUSSEN
STATE OF UTAH

Craig L. Rasmussen

SITE UTILITY PLAN

C-101

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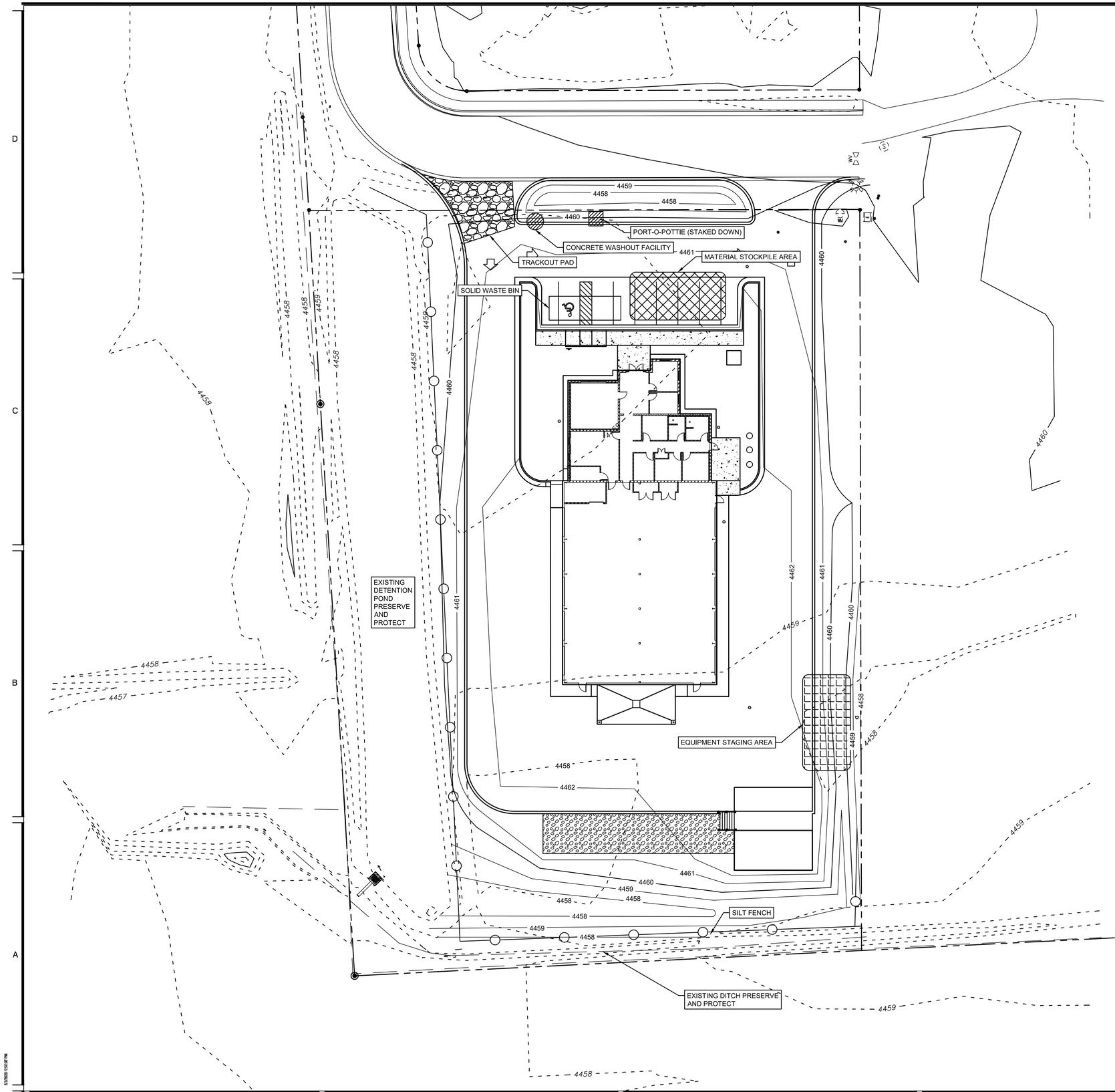

GENERAL NOTES:

1. EROSION CONTROL PLAN TO BE UPDATED BY RESPONSIBLE PARTY TO REFLECT CHANGING PHASES OF CONSTRUCTION.

Know what's **below.** **Call** before you dig.

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GRAPHIC SCALE

0' 10' 20' 40' 60'

Scale: 1"=20'

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LICENSED PROFESSIONAL STRUCTURAL ENGINEER
7/8/20
No. 295553
CRAIG L. RASMUSSEN
STATE OF UTAH

Craig L. Rasmussen

EROSION CONTROL PLAN

C-102

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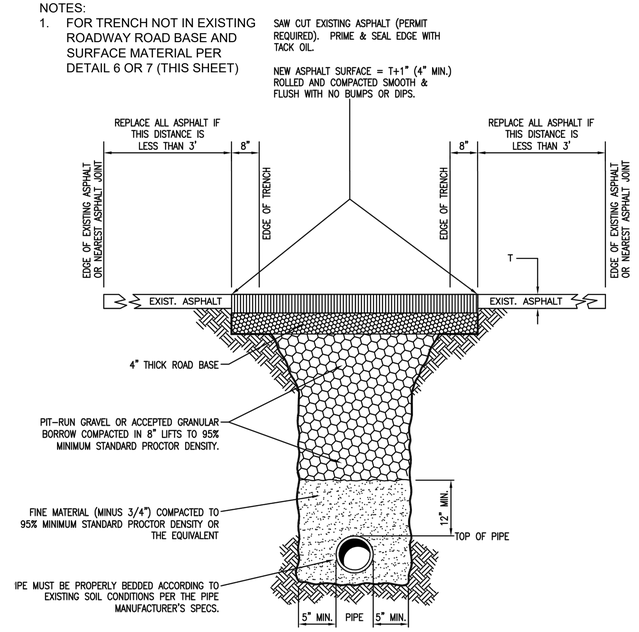
NOTES:
1. FOR TRENCH NOT IN EXISTING ROADWAY ROAD BASE AND SURFACE MATERIAL PER DETAIL 6 OR 7 (THIS SHEET)



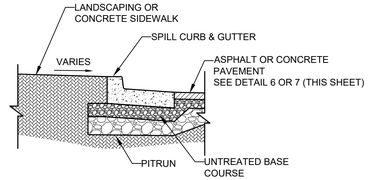
NOTES

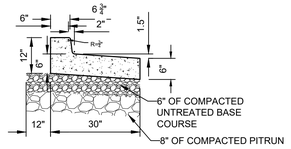
1. ALL NEW ASPHALT SHALL BE INSTALLED FLUSH WITH THE EXISTING ASPHALT SURFACE WITH NO MORE THAN 1/2" VARIANCE FROM A STRAIGHT EDGE LAID ACROSS THE TRENCH CUT. IF THE NEW ASPHALT BULGES OR SETTLES MORE THAN THIS TOLERANCE ONE YEAR AFTER INSTALLATION, THE DEVELOPER WILL REMOVE THE ASPHALT AND RE-PAVE THE CUT AREA TO THE ABOVE TOLERANCE. IF THE ASPHALT PLANTS ARE CLOSED FOR THE SEASON, USE "COLD MIX" ASPHALT OR FLOWABLE FILL, AND REPLACE IT WITH "HOT MIX" WITHIN 30 DAYS AFTER THE PLANTS REOPEN.
2. TYPE "T-A" TRENCHES REQUIRE COMPACTION TESTS APPROVED BY THE CITY ENGINEER. THIS APPROVAL DOES NOT RELIEVE THE CONTRACTOR FROM THE REQUIREMENTS IN NOTE 1. CONTRACTOR WILL GIVE THE CITY ENGINEER WRITTEN CERTIFICATION OF PROPER COMPACTION FROM A LICENSED SOILS TESTING ENGINEER.
3. ALL SPOIL MATERIAL EXCAVATED FROM TRENCHES SHOULD BE EXPORTED FROM CITY PROPERTY. ALL TRENCHING MUST COMPLY WITH FEDERAL OSHA REQUIREMENTS.

TRENCH DETAIL 2
SCALE: NTS

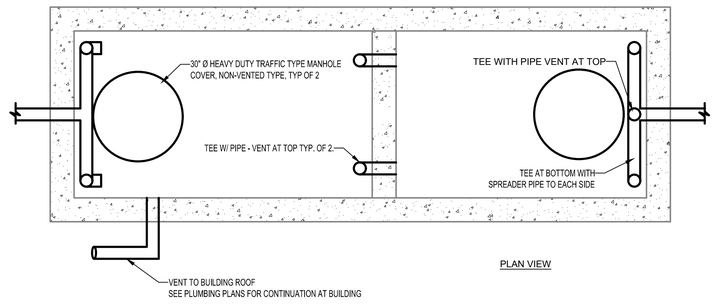
NOT USED 1
SCALE: NTS

NOT USED 3
SCALE: NTS

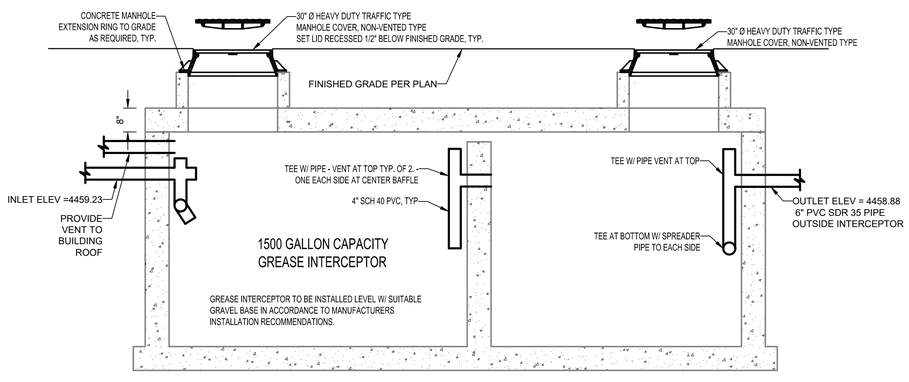




SPILL CURB AND GUTTER 4
SCALE: NTS

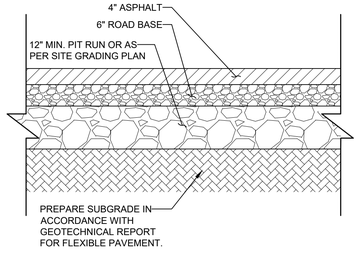


PLAN VIEW

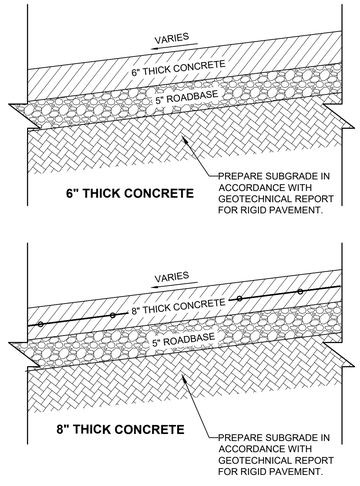


PROFILE VIEW

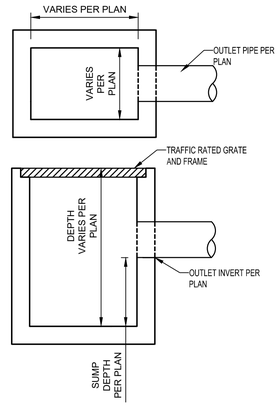
GREASE/WATER SEPERATOR 5
SCALE: NTS



ASPHALT PAVEMENT 6
SCALE: NTS



CONCRETE PAVEMENT 7
SCALE: NTS



CATCH BASIN 8
SCALE: NTS

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SALT LAKE CITY UT 84103
795 NORTH 400 WEST

CACHE MOSQUITO ABATEMENT DISTRICT HEADQUARTERS

210 W. 3700 N.
HYDE PARK, UT 84318

MARK:	DESCRIPTION:	DATE:

PROJECT #: 819159
DRAWN BY: JMM
CHECKED BY: CLR
ISSUED: 07.08.2020

LICENSED PROFESSIONAL STRUCTURAL ENGINEER
7/8/20
No. 299553
CRAIG L. RASMUSSEN
STATE OF UTAH
Craig Rasmussen

SITE DETAILS

C-500

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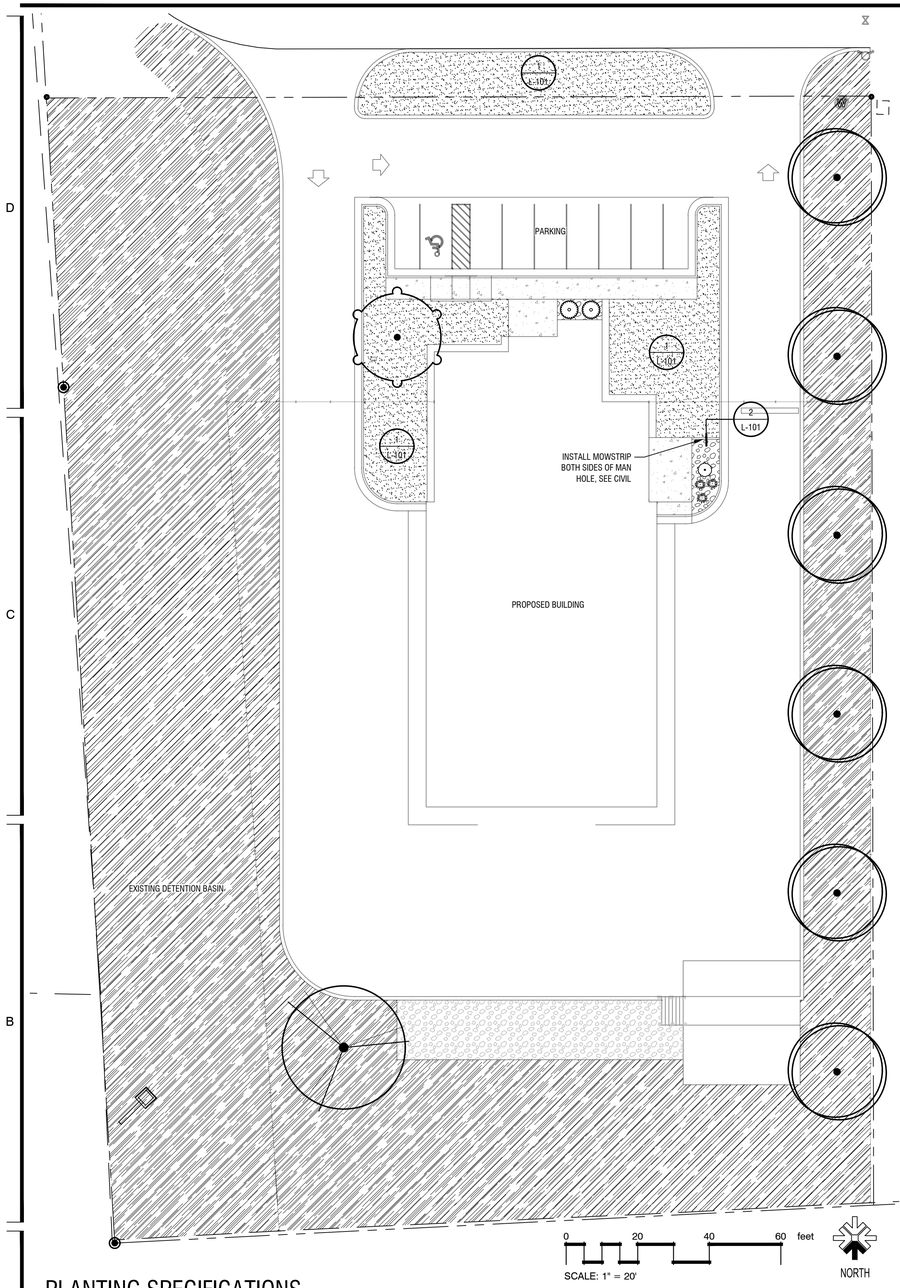
12/2020 8:20:58 PM



PLANTING SCHEDULE

TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL
	CBF	6	Carpinus betulus `Fastigiata` / European Hornbean	B & B	2"
	TTS	1	Tilia tomentosa `Sterling` / Sterling Silver Linden	B & B	2"
	ZSV	1	Zelkova serrata `Village Green` / Village Green Zelkova	B & B	2"
SHRUBS	**CODE**	**QTY**	**BOTANICAL / COMMON NAME**	**CONT**	
	CA	2	Cornus alba `Bailhalo` TM / Ivory Halo Dogwood	5 gal	
	PO	1	Physocarpus opulifolius `Little Devil` TM / Dwarf Ninebark	5 gal	
ANNUALS/PERENNIALS	**CODE**	**QTY**	**BOTANICAL / COMMON NAME**	**CONT**	
	HEM HAP	3	Hemerocallis x `Happy Returns` / Happy Returns Daylily	1 gal	
GROUND COVERS	**CODE**	**QTY**	**BOTANICAL / COMMON NAME**	**CONT**	
	FLG CHP	143 sf	Flagstone Chips / Flagstone Chips	N/A	
	NAT G14	30,974 sf	Native Grass / Grass Native	Seed	
	POA PRA	4,253 sf	Poa pratensis / Kentucky Bluegrass	sod	

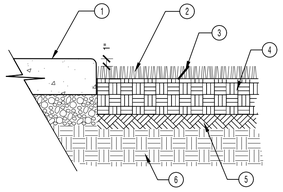
NATIVE GRASS MIX

Native Grass / Grass Native — Seed
Fresh, clean, dry, new seed, mixed species as follows:

1. Granite Seed & Erosion Control Native Cabin Blend base indicated with * in table below with custom additions.

Species	PLS/acre
Mountain brome (Bromus marginatus)*	6.0
Slender wheatgrass (Elymus trachycaulus ssp. trachycaulus)*	5.0
Sandberg bluegrass (Poa secunda ssp. sandbergii)*	1.0
Big bluegrass (Poa secunda ssp. ampla)*	1.0
Rocky Mountain fescue (festuca saximontana)*	1.0
Western wheatgrass (Pascopyrum smithii)*	4.0
Bluebunch wheatgrass _Pseudoroegneria spicata ssp. spicata)*	2.0
Western yarrow (Achillea millefolium var. occidentalis)	0.10
Rocky Mountain penstemon (Penstemon strictus)	0.50
Prairie coneflower (Ratibida columnifera)	0.40
Colorado blue columbine (Aquilegia coerulea)	1.0
Arrowleaf balsamroot (Balsamorhiza sagittata)	2.0
Rocky Mountain beeplant (Cleome serrulata)	2.0
Blue flax (Linum perenne)	1.0
Utah serviceberry (Amelanchier utahensis)	1.0
Basin big sagebrush (Artemisia tridentata ssp.tridentata)	0.50
Rubber rabbitbrush (Ericameria nauseosa)	0.25
Anterlope bitterbrush (Purshia tridentata)	3.0
Quick Guard Steril Tritlcale	10.0
Total	41.75

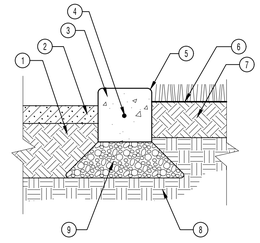
2. Supplier: Granite Seed & Erosion COntrol, 1697 West 2100 North, Lehi, UT 84043: Office 801.768.4422
3. PROVIDE ROUTINE MAINTENANCE FOR A MINIMUN OF 60 DAYS AFTER SUBSTANTIAL COMPLETION AND ENSUF MINIMUM GERMINATION COVERAGE OF 90% OF AREA.



1. ADJACENT HARDSCAPE, SEE PLAN FOR MATERIAL
2. SOD
3. TIGHT BEVELED JOINTS
4. TOP SOIL (4" MINIMUM)
5. TRANSITION LAYER TOPSOIL AND NATIVE SOIL MIX
6. UNISTURBED OR COMPACTED SUBGRADE

NOTES:
1. ENSURE SMOOTH TRANSITION WHEN PATCHING OR TYING INTO EXISTING LAWNS.
2. MATCH SPECIES OF ADJACENT TURF.

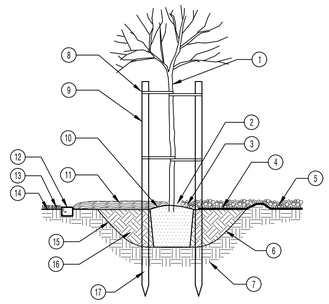
1 SOD PLANTING
1 1/2" = 1'-0"
P-CA3-02



1. SPECIFIED TOPSOIL MIX
2. PLANTER BED, SEE PLANS FOR MATERIAL
3. 6" SQUARE CONCRETE MOWSTRIP
4. 3" REINFORCED BAR CONT. (OVERLAP 12" AT SPLICES)
5. 1/2" RADIUS TROWELED EDGE
6. FINISH GRADE 1" BELOW FOR SOD, 1/1-2" FOR SEED
7. TOP SOIL
8. UNDISTURBED OR COMPACTED SUBGRADE
9. 6" COMPACTED AGGREGATE BASE

NOTE: PROVIDE CONSTRUCTION OR CONTROL JOINTS AT 5' O.C. MAX.

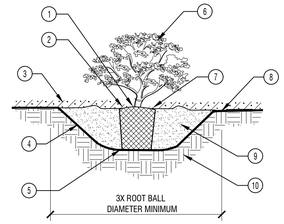
2 CONCRETE MOWSTRIP - 6"
1 1/2" = 1'-0"
P-CA3-03



1. TREE (SEE PLANT SCHEDULE)
2. KEEP MULCH 3" AWAY FROM TREE TRUNK
3. PLACE 1-2" DEPTH OF MULCH OVER ROOT BALL
4. PLACE LANDSCAPE FABRIC UNDER MULCH WITH 12" CLEAR CIRCLE AROUND TREE TRUNK
5. ROCK OR SHREDDED BACK MULCH, SEE PLANS
6. EXCAVATE PLANTING PIT SO THAT THE ROOT FLARE SHALL BE 1-2" ABOVE FINAL GRADE OR 10% OF ROOT BALL
7. UNDISTURBED SUBGRADE
8. "CHAINLOCK" OR EQUAL TREE TIE MATERIAL (1" WIDTH). NAIL OR STAPLE TREE TIE MATERIAL TO STAKE TO HOLD VERTICALLY. LOOSELY LOOP EACH TIE AROUND HALF OF TREE TO PROVIDE 1" SLACK FOR TRUNK GROWTH
9. SUPPORT TREE WITH (2) 2" DIA. TREATED LODGEPOLE PINE DOWELED TREE STAKES (8'-0" LENGTH)
10. AFTER PLACING TREE IN HOLE, REMOVE WIRE AND BURLAP FROM THE UPPER HALF OF THE ROOT BALL (MORE IF THE ROOT BALL IS STABLE)
11. 3" DEEP SOIL PEP IN 3' DIA. TREE RING. SEE PLANS FOR TYPE OF EDGING
12. CONCRETE OR TRENCH EDGING, SEE PLANS
13. GRASS
14. FINISH GRADE
15. PLANT PIT SHALL BE THREE TIMES LARGER THAN ROOTBALL. SLOPE EDGES AT 45° AND SCARIFY SIDE BEFORE PLANTING
16. BACKFILL PLANTING PIT WITH WITH NATIVE SOIL OR 1/2 NATIVE SOIL AND 1/2 SPECIFIED BACKFILL MIX
17. DRIVE STAKES 6" TO 1'-0" INTO UNDISTURBED SOIL BEFORE BACKFILLING

NOTES:
1. TREES ARE PLACED IN EITHER GRASS AREA OR PLANTERS. SEE PLANS FOR LOCATION.
2. TREES STAKING SHALL BE DONE AT THE DISCRETION OF THE CONTRACTOR.
3. INSTALLATION INCLUDES STAKE REMOVAL ONE YEAR AFTER INSTALLATION.

3 TREE PLANTING
3/8" = 1'-0"
P-CA3-09



1. KEEP MULCH 3" AWAY FROM TRUNK
2. NO MORE THAN 1" OF MULCH ON TOP OF ROOT BALL
3. 3" DEEP MULCH
4. SLOPE SIDES AND LOOSEN SOIL
5. ROOT BALL TO REST ON EXISTING OR RE-COMPACTED SOIL
6. SHRUB - SEE PLANTING PLAN
7. SOIL BACKFILL SHALL NOT BE ABOVE ROOT COLLAR
8. FINISH GRADE
9. BACKFILL MIXTURE
10. EXISTING SOIL

NOTES:
1. RETAIN NATURAL SHAPE OF SHRUB.
2. DO NOT PRUNE PRIOR TO INSTALLATION.

4 SHRUB PLANTING
3/8" = 1'-0"
P-CA3-29

PLANTING SPECIFICATIONS

1. CONTRACTOR SHALL VERIFY PLANT QUANTITIES AND LANDSCAPE AREAS AND NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES.
2. LOCATE UTILITIES, CABLES, CONDUITS, PIPING, AND OTHER OBSTACLES PRIOR TO BEGINNING EXCAVATION. REMOVE ROCKS AND OTHER SIMILAR UNDERGROUND OBSTRUCTIONS TO DEPTHS NECESSARY TO PERMIT PROPER INSTALLATION OF TOPSOIL AND LANDSCAPE MATERIALS.
3. GRADING WORK SHALL BE DONE IN A MANNER WHICH DOES NOT CAUSE EXCESSIVE COMPACTION OR CLODS, WHICH WILL NOT BREAK EASILY. SUB-GRADE MATERIAL SHALL BE ROUGH GRADED SO THAT A FINAL GRADE CAN BE ACHIEVED WITH PLACEMENT OF TOPSOIL. COMPACT AREAS UNDER PAVEMENT AND STRUCTURES TO NINETY-FIVE (95) PERCENT. IN PLANTING AREAS COMPACT TO BETWEEN EIGHTY-FIVE (85) AND NINETY (90) PERCENT.
4. ALL PLANTING AREAS SHALL HAVE A TOPSOIL DEPTH OF 4" IN LAWN AREAS AND 12" IN SHRUB BEDS. TOPSOIL SHALL BE FERTILE FRIABLE, NATURAL LOAM, AND SHALL BE CAPABLE OF SUSTAINING VIGOROUS PLANT GROWTH. IT SHALL BE FREE OF STONES, LUMPS, CLODS OF HARD EARTH, PLANTS OR OTHER ROOTS, STICKS, AND OTHER EXTRANEOUS MATTER. THE SOIL SHALL CONTAIN NEITHER NOXIOUS WEEDS NOR THEIR SEEDS. IT SHALL NOT BE USED FOR PLANTING OPERATIONS WHILE IN A FROZEN OR MUDDY CONDITION. CONDUCT A TOPSOIL ANALYSIS TO VERIFY THAT THE TOPSOIL WILL MEET THE FOLLOWING CRITERIA:
   A. CHEMICAL CHARACTERISTICS:
      1) ACIDITY / ALKALINITY RANGE: PH 5.5 TO 8.0.
      2) SOLUBLE SALTS: LESS THAN 3.0 MMHOS/CM.
      3) SODIUM ABSORPTION RATIO (SAR): LESS THAN 6.0.
      4) ORGANIC MATTER: GREATER THAN ONE PERCENT.
   B. PHYSICAL CHARACTERISTICS:
      1) GRADATION AS DEFINED BY USDA TRIANGLE OF PHYSICAL CHARACTERISTICS AS MEASURED BY HYDROMETER.
         a) SAND: 15 TO 60 PERCENT.
         b) SILT: 10 TO 60 PERCENT.
         c) CLAY: 5 TO 30 PERCENT.
      2) CLEAN AND FREE FROM TOXIC MINERALS AND CHEMICALS, NOXIOUS WEEDS, ROCKS LARGER THAN 1-1/2 INCH IN ANY DIMENSION, AND OTHER OBJECTIONABLE MATERIALS.
      3) SOIL SHALL NOT CONTAIN MORE THAN 2 PERCENT BY VOLUME OF ROCKS MEASURING OVER 3/32 INCH IN LARGEST SIZE.
5. WHEN PLACING TOPSOIL SCARIFY THE SURFACE OF THE SUB-GRADE TO A TWO INCH (2") DEPTH TO PROVIDE A TRANSITION ZONE BETWEEN SUB-GRADE AND TOPSOIL. PLACE TOPSOIL ON SUB-GRADE, AND FINE GRADE TO MEET FINAL FINISH GRADE AND TOP SOIL DEPTHS AS INDICATED ON PLANS AND IN THESE NOTES.
6. FINISHED GRADES SHALL BE SMOOTH AND UNIFORM WITH GRADUAL TRANSITIONS BETWEEN PLANES. LANDSCAPE CONTRACTOR SHALL MAINTAIN A MINIMUM OF 2% DRAINAGE AWAY FROM ALL BUILDINGS, STRUCTURES AND WALLS. FINAL GRADE SHALL BE SET AND ADJUSTED TO ELIMINATE PUDDLING OR STANDING WATER.
7. LANDSCAPE CONTRACTOR SHALL INSTALL A SIX (6) INCH BY SIX (6) INCH CONCRETE MOWSTRIP BETWEEN TURF AND PLANTER BEDS AND A TWELVE (24) INCH BY SIX (6) INCH CONCRETE MOWSTRIP AGAINST BUILDING MADE UP OF THE FOLLOWING MATERIALS:
   A. WASHED MORTAR SAND FREE OF ORGANIC MATERIAL
   B. PORTLAND CEMENT 3000 PSI
   C. POTABLE WATER
8. PROVIDE LOCALIZED LOW SPOTS IN MOWSTRIP TO FACILITATE POSITIVE DRAINAGE.
9. LANDSCAPE CONTRACTOR SHALL APPLY A CONTACT HERBICIDE TO ALL PLANTING AREAS WHERE WEEDS OR UNDESIRABLE VEGETATION OCCURS ACCORDING TO MANUFACTURER'S SPECIFICATIONS. WEEDS SHALL BE ALLOWED TO COMPLETELY DIE BACK, INCLUDING THE ROOTS, BEFORE PROCEEDING WITH WORK. DEAD WEEDS SHALL BE REMOVED FROM THE SITE.
10. PRIOR TO PLANTING, THE IRRIGATION SYSTEM SHALL BE FULLY OPERATIONAL, AND ALL PLANTING AREAS SHALL BE THOROUGHLY MOISTENED.
11. PLANT MATERIAL SHALL BE INSPECTED PRIOR TO INSTALLATION BY OWNER'S REPRESENTATIVE. PLANT MATERIALS SHALL BE HEALTHY AND OF GOOD FORM. ANY DAMAGED, MALFORMED, DISEASED, OR ROOT BOUND PLANTS SHALL BE REJECTED AND REPLACED BY THE CONTRACTOR AT HIS EXPENSE.
12. NO PLANT SHALL BE PLACED WITHIN 12 INCHES (12") OF SPRINKLER HEADS.
13. FOR PLANTING INFORMATION SEE PLANTING DETAILS, THIS SHEET. DO NOT USE ANY PLANTING STOCK IF THE ROOT BALL IS CRACKED OR BROKEN BEFORE OR DURING PLANTING. BACK FILL PLANTING HOLES WITH 1 PART NATIVE AND 1-PART TOPSOIL. FILL THE HOLE TO TWO THIRDS (2/3) CAPACITY THEN THOROUGHLY WATER THE PLANT. COMPLETE BACKFILLING THE HOLE. FORM A WATERING BASIN AROUND THE PLANT AND THOROUGHLY WATER AGAIN. APPLY VITAMIN B-1 ROOT STIMULATOR TO THE TREE AND SHRUB PLANTING. MONITOR ALL PLANTS TO ENSURE THAT NO SETTLING OCCURS.
14. SOD SHALL BE FIRST GRADE, PEST AND WEED FREE, ONE AND ONE QUARTER (1-1/4") INCHES THICK SUPPLIED IN ROLLS OR SHEETS OF INDUSTRY STANDARD SIZE. SOD AREAS SHALL HAVE FERTILIZER 16,16,16 AT ONE POUND OF NITROGEN PER THOUSAND (1000) SQUARE FEET INCORPORATED INTO THE UPPER 4" OF TOP SOIL. ADJUST FERTILIZATION MIXTURE, APPLICATION RATE, AND ADD ANY RECOMMENDED SOIL AMENDMENTS TO MEET RECOMMENDATION GIVEN BY TOPSOIL ANALYSIS. THE GRADE OF SOD SHALL BE ONE HALF (1/2) INCH BELOW PAVED ADJACENT SURFACES OR TO MEET EXISTING LAWN. LAY SOD TO FORM A SOLID MASS WITH TIGHTLY FITTED JOINTS. STAGGER STRIPS TO OFFSET JOINTS. TOP DRESS BY WORKING SIFTED SOIL INTO MINOR CRACKS BETWEEN PIECES OF SOD; REMOVING EXCESS TO PREVENT SMOTHERING ADJACENT GRASS. TAMP OR ROLL LIGHTLY TO ENSURE GOOD CONTACT IS MADE BETWEEN EDGES AND THE GROUND. SOD LAID ON ANY SLOPED AREAS SHALL BE ANCHORED WITH WOODEN DOWELS OR OTHER MATERIALS WHICH ARE ACCEPTED BY THE SODDING INDUSTRY.
15. PROTECT LANDSCAPING FROM DAMAGE DUE TO LANDSCAPED OPERATION, OPERATION BY OTHER CONTRACTORS AND TRADES, AND TRESPASSERS. TREAT, REPAIR, OR REPLACE DAMAGED LANDSCAPE WORK AS DIRECTED BY OWNER'S REPRESENTATIVE AT CONTRACTOR'S EXPENSE. REMOVE RUBBISH, TRASH, AND DEBRIS RESULTING FROM OPERATION AT THE END OF EACH WORK DAY AND LEGALLY DISPOSE OF IT OFF THE OWNER'S PROPERTY. WASH PAVED SURFACES CLEAN.
16. AT COMPLETION OF ALL WORK OUTLINED IN THESE PLANS, THE LANDSCAPE CONTRACTOR SHALL CONTACT OWNER AND ARRANGE FOR A WALK THROUGH TO VERIFY THAT ALL ASPECTS OF WORK HAVE BEEN PROPERLY INSTALLED. A MAINTENANCE PERIOD WILL BEGIN ON THE DATE OF WRITTEN ACCEPTANCE OF INSTALLATION BY THE OWNER.
17. MAINTENANCE PERIOD SHALL BE IN EFFECT UNTIL THE OWNER'S REPRESENTATIVE ACCEPTS THE PLANTS WHICH WILL BE A MINIMUM OF 60 DAYS FOR TREES, SHRUBS, AND SOD. THE LANDSCAPE CONTRACTOR SHALL MAINTAIN ALL PLANTS UNTIL TURF IS FULLY ESTABLISHED. IN SODDED LAWNS, SPOTS SIX (6) INCHES OR LARGER OR ANY AREAS FOUND NOT ACCEPTABLE SHALL BE RE-SODDED. MAINTENANCE SHALL INCLUDE BUT NOT BE LIMITED TO: WATERING FOR PLANT GROWTH, FERTILIZATION, REPLACING DEAD AND DAMAGE PLANTS, MAINTENANCE ON IRRIGATION SYSTEM, MOWING, WEEDING, WEEKLY CLEARING OF TRASH, AND FILLING, RE-COMPACTING, AND REPLANTING ERODED OR LOW AREAS AS NECESSARY.
18. A FINAL INSPECTION OF THE PLANTING AND LANDSCAPE IMPROVEMENTS WILL BE MADE AT THE END OF MAINTENANCE PERIOD. THE OWNER'S REPRESENTATIVE SHALL ISSUE A LETTER OF ACCEPTANCE TO THE CONTRACTOR UPON RECTIFYING IDENTIFIED DEFICIENT ITEMS. A GUARANTEE PERIOD SHALL BEGIN UPON RECEIPT OF THE LETTER OF ACCEPTANCE.
19. A ONE (1) YEAR GUARANTEE PERIOD SHALL BEGIN FROM END OF MAINTENANCE PERIOD AND FINAL ACCEPTANCE FOR TREES, SHRUBS, AND GROUND COVERS. ALL PLANTS SHALL GROW AND BE HEALTHY FOR THE GUARANTEE PERIOD AND TREES SHALL LIVE AND GROW IN ACCEPTABLE UPRIGHT POSITION. ANY OUTSIDE FACTORS, SUCH AS VANDALISM OR LACK OF MAINTENANCE ON THE PART OF THE OWNER, SHALL NOT BE CONSIDERED IN THE GUARANTEE.
20. IN ALL PLANTER BEDS PROVIDE MINIMUM OF 3 INCH COVERAGE OF FLAGSTONE CHIPS OVER MIRIFI LANDSCAPE FABRIC. HAND TAMP CHIPS TO PROVIDE COMPACTION. CUT FABRIC 6 INCHES AWAY FROM SHRUBS.

IRRIGATION PERFORMANCE SPECIFICATIONS

1. **PROVIDE AUTOMATIC IRRIGATION SYSTEM DESIGN AND INSTALLATION** FOR ALL LANDSCAPED AREAS PROVIDING ADEQUATE WATERING TO ALL TREES, SHRUBS, PERENNIALS, GROUNDCOVERS AND TURF.
2. SUBMIT DESIGN TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION
3. The irrigation system shall provide the manufacture's recommended minimum operation pressure to every head. The pipe system shall have sufficient pressure to overcome the losses due to friction in piping, fittings, and all other equipment. Water speed in the pipes shall not exceed 5 feet per second in the irrigation mainline and lateral piping.
4. Shop Drawing: Complete irrigation design. Show irrigation piping, including plan layout and locations, types, sizes, capacities, and flow characteristics of piping and pipe components, valves, sprinklers, rotors and drip systems, lighting protection, accessories such as air relief valves, drains etc. and irrigation controller(s) and control wiring Show areas of sprinkler spray and overspray. Indicate interface and spatial relationship between piping, system components, adjacent utilities, and proximate structures.

PERMIT SET / BID SET

design west | architects
LOGAN UT 84321
255 SOUTH 300 WEST
SALT LAKE CITY UT 84103
795 NORTH 400 WEST

CACHE MOSQUITO ABATEMENT
DISTRICT HEADQUARTERS

210 W. 3700 N.
HYDE PARK, UT 84318

DESCRIPTION:
DATE:
MARK:

PROJECT #: 819159
DRAWN BY: HISLOP
CHECKED BY: WRIGHT
ISSUED: 07.08.2020

STATE OF UTAH — 105101–5301 — LICENSED LANDSCAPE ARCHITECT

PLANTING PLAN

L-101

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GENERAL STRUCTURAL NOTES

A. BASIS OF DESIGN

GOVERNING BUILDING CODE:	IBC 2018
OCCUPANCY CATEGORY	II
FLOOR LIVE LOAD	50 PSF
ROOF LIVE LOAD	20 PSF
ROOF SNOW LOAD	30 PSF
WIND DESIGN DATA	
BASIC WIND SPEED (3S GUST)	105 MPH
WIND EXPOSURE	C
INTERNAL PRESSURE COEFFICIENT	Per ASCE 7-16
COMPONENTS AND CLADDING	Per ASCE 7-16
EARTHQUAKE DESIGN DATA	
SEISMIC IMPORTANCE FACTOR, I_e	1
MAPPED SPECTRAL RESPONSE PARAMETERS	
S_S	1.05
S_1	0.35
DESIGN SPECTRAL RESPONSE PARAMETERS	
S_{DS}	0.84
S_{D1}	-
SEISMIC DESIGN CATEGORY	D
BASIC SEISMIC-FORCE-RESISTING SYSTEMS	SPECIAL REINFORCED MASONRY SHEARWALLS
DESIGN BASE SHEAR	0.17 X W
SEISMIC RESPONSE COEFFICIENT, C_s	0.17
RESPONSE MODIFICATION FACTOR, R	5
ANALYSIS PROCEDURE USED	EQUIVALENT LATERAL FORCE PROCEDURE

B. GENERAL - DRAWINGS

1. THE STRUCTURAL NOTES ARE INTENDED TO COMPLIMENT THE PROJECT SPECIFICATIONS. SPECIFIC NOTES AND DETAILS IN THE DRAWINGS SHALL GOVERN THE STRUCTURAL NOTES AND TYPICAL DETAILS.
2. TYPICAL DETAILS AND SECTIONS SHALL APPLY WHERE SPECIFIC DETAILS ARE NOT SHOWN. TYPICAL OR SIMILAR DETAILS REFER TO THE CONDITION ADDRESSED AND ARE NOT NECESSARILY DETAILS LABELED "TYPICAL" OR "SIMILAR" IN THE PLANS AND DOCUMENTS.
3. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND OTHER PROJECT DRAWINGS BY OTHER DISCIPLINES. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE GOVERNING CODES LISTED IN THESE DRAWINGS.
4. THE GENERAL CONTRACTOR SHALL COMPARE AND COORDINATE THE DRAWINGS OF ALL DISCIPLINES AND REPORT ANY DISCREPANCIES BETWEEN THE DRAWINGS. THE GENERAL CONTRACTOR SHALL COORDINATE ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR ANCHORED, EMBEDDED OR SUPPORTED ITEMS. NOTIFY THE ARCHITECT / ENGINEER OF ANY DISCREPANCIES.
5. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS DIMENSIONS AND ELEVATIONS. IF ACTUAL CONDITIONS DIFFER FROM THOSE SHOWN IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE PURCHASING, FABRICATION OR CONSTRUCTION OF ANY AFFECTED ELEMENTS.
6. OMISSIONS OR CONFLICTS BETWEEN THE CONTRACT DRAWINGS AND/OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH ANY WORK INVOLVED. IN CASE OF CONFLICT, FOLLOW THE MOST STRINGENT REQUIREMENT AS DIRECTED BY THE ARCHITECT/ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND CONSTRUCTION SITE SAFETY IN ORDER TO COMPLY WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL PROVIDE ADEQUATE SHORING, BRACING AND SAFETY SYSTEMS AS REQUIRED FOR THE CHOSEN METHOD OF ERECTION AND FOR THE SAFETY OF LIFE AND PROPERTY. SHORING AND BRACING SHALL REMAIN IN PLACE UNTIL THE ENTIRE STRUCTURAL SYSTEM HAS BEEN COMPLETED. DESIGN OF ALL SHORING AND BRACING IS BY OTHERS AT NO ADDITIONAL COST TO THE OWNER.
8. THE CONTRACTOR SHALL ENSURE THAT CONSTRUCTION MATERIALS OR EQUIPMENT PLACED ON THE STRUCTURE IN QUANTITIES OR MASSES DO NOT EXCEED THE DESIGN LOADS STATED HEREIN OR THE DESIGN LOAD BEARING CAPACITY OF SHORING PROVIDED BY THE CONTRACTOR.
9. THE GENERAL CONTRACTOR IS ADVISED TO CONSIDER PERFORMING PHOTOGRAPHIC SURVEYS AND OTHER DOCUMENTATION OF THE CONDITION OF ADJACENT AND EXISTING BUILDINGS AND OTHER STRUCTURES BEFORE THE START OF CONSTRUCTION.
10. SEE SPECIFICATIONS FOR REQUIRED SUBMITTALS. SUBMITTALS SHALL BE MADE IN A TIMELY MANNER AS INDICATED IN SPECIFICATIONS. REVIEW OF SUBMITTALS BY APEX DESIGN GROUP IS FOR GENERAL COMPLIANCE ONLY AND IS NOT INTENDED AS APPROVAL. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL SIZES, DIMENSIONS, AND ELEVATIONS ON SUBMITTALS AS RELATED TO DESIGN DOCUMENTS. PREPARATION OF SHOP DRAWINGS FOR STRUCTURAL ELEMENTS WILL REQUIRE INFORMATION (I.E. DIMENSIONS, ETC.) FOUND IN THE FIELD AND IN THE ARCHITECTURAL, STRUCTURAL, AND OTHER CONSULTANTS DRAWINGS. THESE DOCUMENTS SHALL NOT BE REPRODUCED OR COPIED, IN PART OR WHOLE BY ANY PARTY FOR USE IN PREPARATION OF SHOP DRAWINGS OR OTHER SUBMITTALS.
11. THE GENERAL CONTRACTOR SHALL OBTAIN COPIES OF THE LATEST CONTRACT DOCUMENTS, INCLUDING ALL ADDENDA, AND PROVIDE THE RELEVANT PORTIONS TO ALL SUB-CONTRACTORS AND SUPPLIERS PRIOR TO SUBMITTAL OF SHOP DRAWINGS AND FABRICATION AND ERECTION OF STRUCTURAL MEMBERS.
12. THE CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST TO THE ARCHITECT/ENGINEER FOR ARCHITECT AND/OR ENGINEER APPROVAL BEFORE PROCEEDING WITH ANY CHANGES, MODIFICATIONS, OR SUBSTITUTIONS.
13. DRAWINGS AND DETAILS HAVE BEEN PREPARED WITH THE INTENT TO VISUALLY REPRESENT INFORMATION PROVIDED IN SCALED FORM; HOWEVER CONTRACTOR/SUPPLIERS SHOULD NOT SCALE PLANS OR DETAILS FOR DIMENSIONAL INFORMATION.
14. OBSERVATION VISITS TO THE SITE BY APEX DESIGN GROUP FIELD REPRESENTATIVES SHALL NEITHER BE CONSTRUED AS INSPECTION NOR APPROVAL OF CONSTRUCTION.
15. NO STRUCTURAL MEMBER SHALL BE CUT OR NOTCHED OR OTHERWISE REDUCED IN STRENGTH UNLESS APPROVED BY THE STRUCTURAL ENGINEER.

C. STRUCTURAL STEEL

1. STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST EDITION OF THE FOLLOWING:
   a. AISC 360-10 "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS", WITH "COMMENTARY" AND "SUPPLEMENTS" AS REQUIRED BY BUILDING CODE.
   b. AISC 303-10 "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES"
   c. AISI "SPECIFICATIONS FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS".
   d. AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS".
   e. AWS D1.1 AND 1.3, "STRUCTURAL WELDING CODE" (EXCEPT SPECIFIC ITEMS DO NOT APPLY IF THEY CONFLICT WITH AISC).
   f. AISC 341-10 "SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS".
2. STRUCTURAL STEEL SHALL COMPLY WITH THE FOLLOWING:

WIDE FLANGE SHAPES	ASTM A992, FY = 50 KSI
HOLLOW STRUCTURAL SECTIONS (HSS) – RECTANGULAR AND SQUARE	ASTM A500, GRADE B, FY = 46 KSI
OTHER SHAPES AND PLATES	ASTM A36 (UNO)
THREADED ROD	ASTM A307, GRADE A
HEADED STUD ANCHORS (HAS)	ASTM A108
ANCHOR BOLTS	ASTM F1554, GRADE 36, WITH ASTM A563 HEAVY HEX NUTS AND HARDENED GRADE A WASHERS
BOLTED CONNECTIONS	ASTM A325 WITH ASTM A563 NUTS AND ASTM F436 WASHERS

3. CONNECTIONS SHALL COMPLY WITH THE STRUCTURAL DRAWINGS UNLESS WRITTEN APPROVAL TO CHANGE IS GIVEN BY THE STRUCTURAL ENGINEER.
4. ALL SHOP FABRICATIONS SHALL BE PERFORMED BY AN APPROVED FABRICATOR IN ACCORDANCE WITH SECTIONS 1702 AND 1704 OF THE IBC OR WITH SHOP INSPECTION BY AN INDEPENDENT AGENCY IN ACCORDANCE WITH SECTION 1704.2 OF THE IBC.
5. WELDING
   a. ALL WELDING AND CUTTING SHALL BE PERFORMED BY AWS CERTIFIED WELDERS IN ACCORDANCE WITH ANSI/AWS D1.1 (LATEST EDITION).
   b. USE E-70XX ELECTRODES UNLESS NOTED OTHERWISE. E-60XX MAY BE USED FOR WELDING STEEL DECKS.
   c. ALL INTERSECTING STEEL SHAPES WHICH ARE NOT CONNECTED WITH BOLTS SHALL BE WELDED TOGETHER WITH A FILLET WELD ALL AROUND UNLESS NOTED OTHERWISE. WHERE WELD SIZES ARE NOT SHOWN USE THE FOLLOWING:
      c.i. WHERE ALL CONNECTED PARTS ARE THICKER THAN 1/4", WELD IS 1/16" LESS THAN THE THICKNESS OF THE THINNEST PART.
      c.ii. WHERE ANY OF THE CONNECTED PARTS IS LESS THAN 1/4" THICK, WELD IS SAME AS THICKNESS OF THE THINNEST PART.
   d. WELDING OF HSA'S AND DBA'S SHALL CONFORM TO THE MANUFACTURER'S SPECIFICATIONS.
   e. WHEREVER POSSIBLE, WELDS SHALL BE SHOP WELDS. SPECIAL CONSIDERATIONS, SUCH AS ITEMS WHICH MAY NEED ADJUSTMENT AT THE SITE, REQUIRE THAT SOME WELDS BE FIELD WELDS. WHERE QUESTIONS OR DISCREPANCIES OCCUR THE CONTRACTOR SHALL COORDINATE THE WORK BETWEEN THE SHOP FABRICATOR AND THE STEEL ERECTOR.
6. BOLTING
   a. UNLESS NOTED OTHERWISE, ALL STRUCTURAL STEEL TO STEEL CONNECTIONS SHALL USE HIGH STRENGTH BOLTS CONFORMING TO ASTM A-325.
   b. UNLESS NOTED OTHERWISE, ALL BOLTING IS CLASSIFIED AS NON-SLIP CRITICAL BEARING TYPE CONNECTIONS WITH THREADS INCLUDED IN SHEAR PLANE. TIGHTEN BOLTS TO A SNUG TIGHT CONDITION, WITH ALL PLIES OF THE JOINT IN FIRM CONTACT.
   c. AT OVERSIZED AND SLOTTED HOLES, WASHERS SHALL CONFORM TO ASTM F-436 AND COMPLETELY COVER THE HOLE.
   d. WHERE A STEEL BEAM TO BEAM CONNECTION IS NOT SHOWN, PROVIDE AN AISC STANDARD FRAMED CONNECTION SIZED FOR 1/2 OF THE TOTAL LOAD CAPACITY OF THE BEAM FOR THE SPAN AND STEEL SPECIFIED.
7. METAL DECKING
   a. METAL ROOF DECK SHALL BE 20 GAUGE TYPE B GALVANIZED/PAINTED (SEE ARCH.) STEEL DECK. UNLESS NOTED OTHERWISE.
   b. ATTACH DECKING TO SUPPORTING STRUCTURE WITH 3/4" DIAMETER WELDS AT 12" MAXIMUM SPACING. ATTACH SIDE SEAMS WITH TOP SEAM WELDS AT 24" MAXIMUM SPACING OR #10 SCREWS AT 8" O.C.
   c. ALL DECK SHALL BE CONTINUOUS OVER 3-SPANS. WHERE NOT POSSIBLE, THE DECK SUPPLIER/CONTRACTOR SHALL PROVIDE HEAVIER GAUGE DECK AS NEEDED TO PROVIDE THE EQUIVALENT PERFORMANCE OF THE SPECIFIED DECK WITH 3-SPAN CONTINUITY.
   d. SEE TYPICAL DETAILS FOR SUPPORT OF DECK AT OPENINGS.
   e. PROVIDE 12"X2"X3/16" FOR DECK SUPPORT AT LOCATIONS WHERE COLUMNS EXTEND THROUGH DECK.
   f. PAINTED STEEL DECK SHALL CONFORM TO ASTM A1008 AND GALVANIZED STEEL DECK SHALL CONFORM TO A653 GRADE G60.
8. PROVIDE FULL DEPTH WEB STIFFENER PLATES AT EACH SIDE OF STEEL BEAMS AT ALL BEARING (EXCEPT SECONDARY FRAMING) POINTS. STIFFENER PLATES SHALL BE THICKNESS SHOWN UNLESS NOTED OTHERWISE AND SHALL BE WELDED BOTH SIDES WITH FILLET WELDS ALL AROUND.

FLANGE WIDTH	STIFFENER THICKNESS	WELD THICKNESS
< 8 1/4"	1/4"	3/16"
8 1/4" < BF < 12 1/2"	3/8"	1/4"
12 1/2" < BF < 16 1/2"	1/2"	5/16"
16 1/2" < BF < 20 3/4"	5/8"	3/8"

9. FABRICATORS AND SUPPLIERS SHALL COORDINATE PAINT/FINISHES WITH REQUIREMENTS FOR DIRECT APPLIED INSULATION, FIREPROOFING, ETC. AS NOTED IN THE PROJECT SPECIFICATIONS.
10. WHEN DETERMINING THE FIRE RESISTANCE OF ASSEMBLIES, USE THE FOLLOWING: STEEL ROOF MEMBERS ARE CONSIDERED UN-RESTRAINED AND STEEL FLOOR FRAMING MEMBERS ARE CONSIDERED RESTRAINED.
11. UNLESS NOTED OTHERWISE, ALL HORIZONTAL FRAMING MEMBERS SHALL BE ERECTED WITH THE NATURAL CROWN UP.

D. FOUNDATION

1. DESIGN SOIL PRESSURE: 1200 PSF ASSUMED
2. SOILS REPORT BY:
3. SOIL PREPARATION UNDER FOOTINGS AND SLABS-ON-GRADE SHALL BE IN ACCORDANCE WITH THE SOILS REPORT. ALL FOOTINGS AND SLABS-ON-GRADE SHALL BEAR ON STRUCTURAL FILL EXTENDING TO SUITABLE NATURAL SOILS AS DESCRIBED IN THE SOILS REPORT.
4. TOP OF FOOTING ELEVATIONS SHOWN ON THE FOOTING AND FOUNDATION PLAN ARE BASED ON PRELIMINARY GRADING INFORMATION AND MUST BE VERIFIED PRIOR TO CONSTRUCTION. STEPS WHERE SHOWN ARE AT APPROXIMATE LOCATIONS. ALL EXTERIOR FOOTINGS MUST BEAR A MINIMUM OF 30 INCHES BELOW LOWEST ADJACENT FINAL GRADE.
5. ALL WALLS (EXCEPT CANTILEVERED RETAINING WALLS) SHALL BE ADEQUATELY BRACED AGAINST LATERAL MOVEMENT PRIOR TO BACKFILLING. DESIGN AND ERECTION OF BRACING/SHORING IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. BRACING SHALL REMAIN IN PLACE UNTIL SUPPORTING STRUCTURAL ELEMENTS ARE IN PLACE AND HAVE ATTAINED FULL STRENGTH.
6. UNLESS NOTED OTHERWISE, ALL FOOTINGS AT COLUMNS TO BE CENTERED BELOW COLUMNS.
7. UNLESS NOTED OTHERWISE, ALL FOOTINGS SHALL HAVE VERTICAL FACES FORMED WITH STANDARD FORMING MATERIALS (WOOD, METAL, ETC.). WITH PRIOR APPROVAL OF ARCHITECT AND ENGINEER, CONCRETE FOR FOOTINGS CAN BE PLACED IN EXCAVATED "SOIL" FORMS PROVIDED THAT THE DIMENSIONS ARE INCREASED 3" ON EACH SIDE.

E. CONCRETE

1. ALL CONCRETE MIX DESIGNS SHALL COMPLY WITH THE PROJECT SPECIFICATIONS AND THE REQUIREMENTS LISTED BELOW:

LOCATION	EXPOSURE CLASS	AGGREGATE SIZE (MAX)	WATER TO CEMENT RATIO (MAX)	AIR CONTENT	COMPRESSIVE STRENGTH (28 DAY)
FOOTINGS	F1, S0, W0, C0	1"	0.55	4.50%	3500
CONCRETE WALLS	F2, S0, W0, C0	1"	0.45	6.00%	4500
INTERIOR SLAB	F0, S0, W0, C0	3/4"	-	1.50%	3000
EXTERIOR SLAB ON GRADE	F3, S0, W0, C0	3/4"	0.45	6.00%	4500

2. WATER USED IN MIXING CONCRETE SHALL CONFORM TO ASTM C1602.
3. NO PIPES, DUCTS, SLEEVES, ETC. SHALL BE PLACED IN STRUCTURAL CONCRETE UNLESS SPECIFICALLY DETAILED OR APPROVED BY THE STRUCTURAL ENGINEER. NO ALUMINUM PRODUCTS SHALL BE EMBEDDED IN CONCRETE. PENETRATIONS THRU STRUCTURAL CONCRETE ELEMENTS MUST BE APPROVED BY THE ENGINEER AND SHALL BE BUILT INTO THE ELEMENT PRIOR TO CONCRETE PLACEMENT.
4. REFER TO ARCHITECTURAL DRAWINGS FOR MOLDS, GROOVES, ORNAMENTS, ETC. TO BE CAST IN TO CONCRETE, AND FOR EXTENT AND LOCATION OF DEPRESSIONS, CURBS, RAMPS, ETC.
5. UNLESS NOTED OTHERWISE, MINIMUM REINFORCING IN ALL CONCRETE FOUNDATION WALLS SHALL BE AS FOLLOWS:

THICKNESS	TOP & BOTTOM BARS	VERTICAL	HORIZONTAL
8	(2) #5	#4 AT 18"O.C.	#4 AT 12"O.C.
10	(2) #5	#4 AT 12"O.C.	#5 AT 12"O.C.
12	(2) #5	#4 AT 18"O.C. EA. FACE	#4 AT 16"O.C. EA. FACE

6. UNLESS NOTED OTHERWISE, FOR OPENINGS LARGER THAN 12" IN ANY DIRECTION IN CONCRETE WALLS ADD (2) #5 BARS ALL SIDES IN ADDITION TO REGULAR WALL REINFORCING AND EXTEND 24" EACH WAY BEYOND OPENING. WHERE 24" IS NOT AVAILABLE, EXTEND BARS AS FAR AS POSSIBLE AND TERMINATE WITH A STANDARD HOOK.
7. CONSTRUCTION JOINTS NOT SHOWN ON THE PLANS SHALL BE MADE AND LOCATED SO AS TO NOT IMPAIR THE STRENGTH OF THE STRUCTURE AND AS APPROVED BY THE STRUCTURAL ENGINEER. PROVIDE 2 X 4 (SHAPED) KEYWAY IN ALL VERTICAL AND HORIZONTAL JOINTS UNLESS NOTED OR DETAILED OTHERWISE. ALL STEEL REINFORCING SHALL BE CONTINUOUS THROUGH COLD JOINTS UNLESS NOTED OTHERWISE. SEE TYPICAL DETAILS FOR COLD/CONSTRUCTION JOINTS FOR SLABS ON GRADE.

F. MASONRY

1. ALL HOLLOW MASONRY UNITS SHALL CONFORM TO ASTM C-90.
2. F'm (MINIMUM) = 1500 PSI
3. ALL GROUT (SITE MIXED OR PRE-MIXED) SHALL CONFORM TO ASTM C-476 OR SECTION 2.2A OF TMS 602-08/ACI 530.1-08/ASCE 6-08. GROUT SHALL BE PLACED WITH SUFFICIENT WATER FOR POURING WITHOUT SEGREGATION. DO NOT USE MORTAR FOR GROUT. MECHANICALLY VIBRATE ALL GROUT.
4. GROUT STOPS SHALL BE AN APPROVED PRODUCT DESIGNED AND MANUFACTURED FOR USE AS A GROUT STOP. GROUT STOP SUBMITTALS SHALL BE SUBMITTED TO THE ARCHITECT / ENGINEER FOR REVIEW. OTHER GROUT STOP MATERIALS SUCH AS ASPHALT IMPREGNATED MATERIALS ARE NOT PERMITTED.
5. MORTAR SHALL BE TYPE S AND SHALL CONFORM TO ASTM C 270.
6. ALL MASONRY WORK SHALL CONFORM TO CHAPTER 21 OF THE IBC.
7. ALL MASONRY BLOCK CELLS IN WALLS TO BE GROUTED SOLID.
8. UNLESS NOTED OTHERWISE, MINIMUM REINFORCING IN ALL 8" MASONRY WALLS SHALL BE AS FOLLOWS:
   a. VERTICAL: # 5 BARS IN CELLS ADJACENT TO ALL OPENINGS, AT CORNERS AND AT A MAXIMUM SPACING OF 32" THROUGHOUT THE WALL. ALL VERTICAL REINFORCEMENT INCLUDING, BUT NOT LIMITED TO JAMBS, COLUMNS, AND WALL REINFORCING SHALL BE DOWELED INTO AND THROUGH THE FOUNDATION WALL AND INTO THE FOOTING BELOW UNLESS SPECIFICALLY DETAILED OTHERWISE.
   b. HORIZONTAL: #5 BARS IN 8" DEEP "H" BLOCK BOND BEAM UNITS AT 48"O.C. AND AT ROOFS AND TOP OF WALL. BOND BEAMS AT ROOF WILL SLOPE TO MATCH SLOPING ROOF.
9. PROVIDE (1) #5 (MINIMUM), IN GROUTED SPACE, ON ALL SIDES AND ADJACENT TO EVERY OPENING WHICH EXCEEDS 24" IN EITHER DIRECTION. HORIZONTAL BARS SHALL EXTEND 24" BEYOND THE CORNERS OF THE OPENING AND VERTICAL BARS SHALL EXTEND TO TOP OF WALL. VERTICAL REINFORCING SHALL BE PROVIDED AT ENDS, CORNERS AND EACH SIDE OF CONTROL JOINTS. SEE TYPICAL DETAILS FOR OPENINGS WHICH EXCEED 32" IN EITHER DIRECTION.
10. EACH GROUT POUR SHALL TERMINATE 1-1/2" BELOW TOP OF UNIT.
11. GROUT POURS SHALL NOT EXCEED 5'-0" UNLESS HIGH LIFT GROUTING PROCEDURES ARE FOLLOWED.
12. THE USE OF HIGH LIFT GROUTING PROCEDURES REQUIRE THE APPROVAL OF THE ARCHITECT AND ENGINEER AND SHALL NOT EXCEED THE MAXIMUM HEIGHTS GIVEN TMS 402-13/ACI 530-13/ASCE 5-13. GROUT DEMONSTRATION PANELS, AS PRESCRIBED BY THE ARCHITECT AND ENGINEER, SHALL BE REQUIRED WHERE REQUESTED GROUTING PROCEDURES DO NOT MEET THE LIMITS OF TMS 402-13. ADDITIONALLY, ALL HIGH LIFT GROUTING SHALL INCLUDE INSPECTION PROCEDURES NEEDED TO VERIFY GROUT PLACEMENT DURING CONSTRUCTION.
13. ALL MASONRY BEAMS SHALL BE BUILT INTEGRAL WITH SUPPORT. NO TOOTHING OR DOWELING PERMITTED. UNITS WITH ONE END OPEN SHALL BE USED FOR ALL MASONRY BEAMS.
14. PROVIDE VERTICAL CONTROL JOINTS AT MAXIMUM SPACINGS NOTED BELOW UNLESS NOTED OTHERWISE IN THE SPECIFICATIONS AND/OR ON ARCHITECTURAL ELEVATIONS AND AT ALL CHANGES IN WALL ELEVATION AND MASONRY THICKNESS. CONTROL JOINTS SHALL NOT BE LOCATED DIRECTLY OVER OR CLOSER THAN 24" TO WALL OPENINGS (DOORS, WINDOWS, MECHANICAL OPENINGS, ETC.), OR WITHIN MASONRY JAMBS.

REINFORCED MASONRY	40 FT
VENEER	30 FT AND AT INTERFACE OF VENEER SUPPORTED BY SUSPENDED STRUCTURAL ELEMENTS

15. HORIZONTAL REINFORCEMENT SHALL TERMINATE AT EACH SIDE OF CONTROL JOINTS EXCEPT AT FLOOR AND ROOF LEVEL BOND BEAMS AND AT TOP OF PARAPET.
16. CONTROL JOINTS SHALL BE PROVIDED AT THE MASONRY SIDE OF EMBEDDED STEEL COLUMNS TO CONTROL CRACKING OF FACE SHELLS.
17. EMBED CHANNELS AND PLATES TO BE PLACED SO AS TO CREATE FLUSH SURFACE WITH FACE OF MASONRY. FLANGES ON CHANNEL EMBEDS SHALL BE HORIZONTAL.
18. ALL VERTICAL REINFORCING SHALL BE SECURED IN PLACE PRIOR TO GROUTING USING WIRE POSITIONERS OR OTHER ACCEPTABLE DEVICES. REINFORCING SHALL BE SECURED AT BAR-SPLICE LOCATIONS AND AT A SPACING NOT MORE THAN 120 BAR DIAMETERS.
19. UNLESS NOTED OTHERWISE, MASONRY WALLS SHALL BE CONSTRUCTED UTILIZING COMMON RUNNING-BOND WITH FULLY MORTARED BED JOINTS AROUND GROUTED CELLS.
20. MASONRY VENEER SHALL BE ANCHORED AS FOLLOWS: MASONRY VENEER SHALL BE ANCHORED USING THE DUR-O-WAL VENEER ANCHOR ASSEMBLY SYSTEM, OR AN APPROVED EQUAL. REGARDLESS OF BACK-UP SYSTEM, PROVIDE A CONTINUOUS HORIZONTAL 9 GAUGE WIRE AT 16"O.C. IN VENEER MORTAR JOINTS FOR ANCHOR ATTACHMENT. POSITIVE ANCHORAGE TO THE WIRE SHALL BE PROVIDED TO SUPPORT NOT MORE THAN 2 SQUARE FEET OF WALL, WITH A HORIZONTAL SPACING NOT EXCEEDING 16".
   a. WOOD AND METAL STUDS; USE HOHMANN AND BARNARD HB-200/DA 213-S HEAVY DUTY ANCHORS OR AN APPROVED EQUAL. THE DUR-O-WAL ASSEMBLY SHALL BE ATTACHED TO WOOD STUDS USING A # 12 X 2" WOOD SCREWS OR TO METAL STUDS USING #10 SCREWS.
   b. BRICK AND BLOCK WALLS; USE HOHMANN AND BARNARD MIGHTY-LOK SEISMIC ANCHORS OR AN APPROVED EQUAL, AT SPACINGS NOTED ABOVE. INSTALL A 2 WIRE 9 GAUGE LADUR TYPE JOINT REINFORCEMENT AT 16"O.C. IN THE BACK-UP WALL FOR ANCHORAGE ATTACHMENT.
   c. CONCRETE WALLS; USE HOHMANN AND BARNARD HB 303SV SEISMIC NOTCH DOVE TAIL ANCHOR SYSTEM OR AN APPROVED EQUAL AT SPACINGS NOTED ABOVE.
21. ELECTRICAL CONDUIT SHALL NOT BE PLACED IN CELLS THAT CONTAIN REBAR. CONDUIT IS ALLOWED TO PASS THROUGH REINFORCED CELLS WHEN IT OCCURS PERPENDICULAR TO THE REBAR. CONDUIT SHALL NOT CONTACT REBAR AS IT PASSES. THERE SHALL BE 1" CLEAR BETWEEN CONDUIT AND REBAR.
22. PROVIDE 180 DEGREE STANDARD HOOK IN HORIZONTAL REINFORCING AT WALL ENDS.

G. DEFERRED SUBMITTALS

1. DEFERRED SUBMITTALS ARE COMPLETE PACKAGES TO BE SUBMITTED FOR REVIEW THAT INCLUDE DRAWINGS AND CALCULATIONS FOR ALL ELEMENTS AND CONNECTIONS OF ITEMS LISTED BELOW. DEFERRED SUBMITTALS SHALL BEAR THE STAMP AND SIGNATURE OF THE DESIGN PROFESSIONAL RESPONSIBLE FOR THE DESIGN.
2. DEFERRED SUBMITTAL COMPONENTS SHALL NOT BE INSTALLED UNTIL APPROVED BY THE BUILDING OFFICIAL.
3. DEFERRED SUBMITTALS SHALL INCLUDE, BUT ARE NOT LIMITED TO:
   a. OPEN WEB JOISTS & GIRDERS.
   b. PRE-ENGINEERED METAL BUILDING
   c. SEISMIC BRACING OF ALL ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL ITEMS WHERE REQUIRED BY ASCE 7-16 OR THE PROJECT CONTRACT DOCUMENTS.

H. REINFORCING STEEL

1. REINFORCING BAR STRENGTH REQUIREMENTS:
   a. ALL REINFORCING BARS, SHALL CONFORM TO ASTM STANDARD A-615 GRADE 60 AND ALL WELDED WIRE FABRIC SHALL CONFORM TO ASTM STANDARD A-185 AND SHALL BE SUPPLIED IN FLAT SHEETS. ADEQUATELY TIE AND SUPPORT ALL REINFORCING STEEL AS SPECIFIED BY ACI 117, TO MAINTAIN EXACT REQUIRED POSITION.
2. ALL FIELD BENT DOWELS SHALL BE GRADE 40 WITH SPACING INDICATED REDUCED BY 1/3.
3. UNLESS NOTED OTHERWISE, REINFORCEMENT SHALL HAVE THE FOLLOWING CONCRETE COVERAGE:
   a. CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH .. 3"
   b. EXPOSED TO EARTH OR WEATHER:
      b.i. #6 & LARGER .. 2"
      b.ii. #5 & SMALLER ..1-1/2"
   c. NOT EXPOSED TO WEATHER OR EARTH:
      c.i. SLABS, WALLS, JOISTS, #11 & SMALLER .. 3/4"
      c.ii. BEAMS, COLUMNS: MAIN REINFORCING OR TIES .. 1-1/2"
   d. SLAB ON GRADE:
      d.i. PLACE REINFORCING AT CENTER OF SLAB UNLESS INDICATED OTHERWISE.
4. EXCEPT WHERE NOTED ON PLANS OR DETAILS CONTINUOUS REINFORCEMENT SHALL BE SPLICED AT POINTS OF MINIMUM STRESS BY LAPPING PER THE REBAR LAP SCHEDULE.
5. REINFORCING STEEL MAY BE SPLICED WITH MECHANICAL COUPLERS THAT HAVE A TENSION CAPACITY OF AT LEAST 125% OF THE STRENGTH OF THE BAR. MECHANICAL COUPLERS SHALL BE A POSITIVE CONNECTING TYPE COUPLER, AND SHALL BE INSTALLED IN ACCORDANCE WITH AN APPROVED ICC RESEARCH REPORT. WHERE THESE ARE USED, SPLICES ON ADJACENT BARS SHALL BE STAGGERED AT LEAST 24 INCHES ALONG THE LENGTH OF THE BARS.
6. ALL VERTICAL REINFORCING IN STRUCTURAL ELEMENTS ABOVE SHALL BE SPLICED WITH MATCHING DOWELS EMBEDDED WITHIN THE FOOTINGS OR STRUCTURE BELOW. SPLICE LENGTHS SHALL COMPLY WITH REBAR LAP SCHEDULE. DOWELS INTO FOOTINGS SHALL TERMINATE WITH A STANDARD HOOK, AND SHALL EXTEND TO WITHIN 4" OF THE BOTTOM OF THE FOOTING, BUT NEED NOT EXTEND MORE THAN 20" INTO FOOTING.
7. DO NOT WELD REINFORCING EXCEPT AS NOTED ON PLANS, WHERE REINFORCING IS WELDED, USE ASTM A-706 REINFORCING.

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DESCRIPTION:
DATE:
MARK:

PROJECT #: 200001
DRAWN BY: BFL
CHECKED BY: RC
ISSUED: 7/10/2020

LICENSED PROFESSIONAL ENGINEER
No. 353531
RON M. CHRISTENSEN
7/9/2020
STATE OF UTAH

GENERAL STRUCTURAL NOTES

S001

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8. REINFORCING BARS, TIES, AND TENDONS SHALL BE SUPPORTED BY NYLON CONES, PLASTIC-COATED TIE-WIRES, OR PLASTIC-COATED CHAIRS. REINFORCING IN FOOTINGS IS PERMITTED TO BE SUPPORTED ON CONCRETE DOBIES.
9. UNLESS NOTED OTHERWISE, HOOKS, STIRRUPS, TIES, AND OTHER BENDS IN REINFORCING STEEL SHALL MEET THE STANDARDS SET FORTH IN ACI 318/318R. UNLESS OTHERWISE PERMITTED BY THE ENGINEER, ALL REINFORCEMENT SHALL BE BENT COLD. REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE SHALL NOT BE FIELD BENT, EXCEPT AS SHOWN ON THESE DRAWINGS OR OTHERWISE PERMITTED BY THE ENGINEER.
10. UNLESS SPECIFICALLY NOTED AND/OR DETAILED IN THE STRUCTURAL DRAWINGS CONDUIT SHALL NOT BE IN CONTACT WITH REINFORCING STEEL.

I. OPEN WEB JOISTS AND GIRDERS

1. ALL OPEN WEB STEEL JOISTS AND GIRDERS SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST EDITION OF "STANDARD SPECIFICATIONS AND CODE OF STANDARD PRACTICE" OF THE STEEL JOIST INSTITUTE.
2. SEE FRAMING PLAN FOR ADDITIONAL SNOW DRIFT LOAD, SCREEN WALLS LOAD AND MECHANICAL UNIT LOAD.
3. ANY BRACING REQUIRED FOR MISCELLANEOUS ITEMS (I.E. DUCTWORK, PIPING, ETC.) MUST CONNECT TO THE TOP CHORD OF THE JOIST OR GIRDER. BRACING TO THE BOTTOM CHORD IS NOT ALLOWED UNLESS SPECIFICALLY DETAILED THAT WAY ON THE PLANS.
4. PROVIDE SPECIAL BEARING ENDS AS REQUIRED AT SLOPED BEARING CONDITIONS. CONTRACTOR SHALL COORDINATE WITH OTHER STRUCTURAL ELEMENTS.
5. ALL JOISTS SHALL BE CAMBERED PER SJI SPECIFICATIONS, UNLESS NOTED OTHERWISE.
6. FIELD MODIFICATIONS (INCLUDING HOLES IN THE CHORD OR WEB MEMBERS) SHALL NOT BE MADE TO ANY JOIST OR GIRDER WITHOUT PRIOR APPROVAL BY THE MANUFACTURER.
7. FABRICATORS AND SUPPLIERS SHALL COORDINATE PAINT/FINISHES WITH REQUIREMENTS FOR DIRECT APPLIED INSULATION, FIREPROOFING, ETC. AS NOTED IN THE PROJECT SPECIFICATIONS.
8. JOIST BRIDGING SHALL BE PROVIDED AS REQUIRED BY THE JOIST MANUFACTURER AND SJI STANDARDS. BRIDGING WHERE SHOWN ON THE STRUCTURAL DRAWINGS IS A SCHEMATIC REPRESENTATION ONLY. SEE JOIST MANUFACTURER FOR BRIDGING SIZE, CONNECTIONS, TYPE AND QUANTITY.
9. WHERE ADDED LOADS ARE SHOWN ON THE JOISTS BUT NOT SPECIFICALLY DIMENSIONED, THE JOIST DESIGNER SHALL PLACE THOSE LOADS ON THE JOIST AT A LOCATION THAT RESULTS IN THE HIGHEST STRESS IN THE MEMBERS. THE DESIGNER MAY ASSUME THAT THE LOAD OCCURS WITHIN 10 FEET OF A SCALED DIMENSION.
10. FABRICATOR MUST SUBMIT A CERTIFICATE OF COMPLIANCE TO THE BUILDING OFFICIAL PER IBC 2206.5 STATING THAT WORK WAS PERFORMED IN ACCORDANCE WITH APPROVED CONSTRUCTION DOCUMENTS AND WITH SJI SPECIFICATIONS.
11. UNLESS NOTED OTHERWISE, ROOF JOISTS AND GIRDERS SHALL BE DESIGNED FOR A NET WIND UPLIFT OF 12PSF.
12. ALL ROOF JOISTS BEARING ON EXTERIOR WALLS SHALL BE DESIGNED TO TRANSFER 4 KIPS (ASD) TOP CHORD AXIAL FORCE THROUGH THE BEARING SHOE.

J. WOOD

1. MATERIALS:
   - a. FASTENERS
     - a.i. NAILS SHALL MEET THE FOLLOWING REQUIREMENTS:

NAIL SIZE	SHANK DIAMETER	MIN. PENETRATION INTO SUPPORT MEMBER
8D	0.131"	1.50"
10D	0.148"	1.63"
16D	0.162"	1.75"

     - a.ii. FASTENER SIZES OTHER THAN THOSE LISTED ABOVE ARE NOT PERMITTED WITHOUT PRIOR WRITTEN APPROVAL FROM THE ENGINEER.
     - a.iii. ALL NAILS NOTED ON THE DRAWINGS SHALL BE AS SHOWN ABOVE, (UNO).
     - a.iv. NAILS FOR THIRD PARTY HARDWARE SHALL BE AS REQUIRED BY MANUFACTURER OF HARDWARE.
     - a.v. BOLTS SHALL BE ASTM A36 OR EQUAL WITH ASTM A563 HEAVY HEX NUTS AND ASTM F436 HARDENED WASHERS, GRADE A UNO.
   - b. FRAMING LUMBER
     - b.i. ALL FRAMING LUMBER SHALL BE #2 DOUGLAS FIR-LARCH OR BETTER UNLESS NOTED OTHERWISE.
   - c. SHEATHING
     - c.i. WOOD SHEATHING SHALL MEET THE MINIMUM PERFORMANCE CRITERIA GIVEN IN APA PRP-108, PERFORMANCE STANDARDS AND POLICIES FOR STRUCTURAL-USE PANELS, FORM E445, VOLUNTARY PRODUCT STANDARD PS1 &PS 2 AND PERFORMANCE STANDARD FOR WOOD-BASED STRUCTURAL-USE PANELS, FORM S350 AND STRUCTURAL PLYWOOD, FORM H860. PANELS SHALL HAVE A MINIMUM FOLLOWING THICKNESS AND SPAN RATING, UNO:

THICKNESS (IN)	SPAN RATING
7/16	24/16
15/32	32/16
1/2	32/16
19/32	40/20
5/8	40/20
23/32	48/24

       - c.i.1. FLOOR SHEATHING: 23/32" THICK WITH #10 NAILS AT 6" O.C. AT PANEL EDGES AND BOUNDARIES; AT 12" O.C. IN THE PANEL FIELD.
       - c.i.2. WALL SHEATHING: 7/16" THICK WITH #8 SCREWS AT 6" O.C. AT PANEL EDGES; 12" O.C. IN THE PANEL FIELD.
2. ALL FRAMING HARDWARE, STRAPS, ANCHORS, POST CAPS, HOLD DOWNS, COLUMN BASES, ETC. SHALL BE PROVIDED BY SIMPSON STRONG-TIE OR APPROVED EQUAL.

K. COLD-FORMED STEEL

1. ALL COLD-FORMED STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCEWITH MFR'S RECOMMENDATIONS AND IN ACCORDANCE WITH THE LATEST EDITIONOF "NORTH AMERICAN SPECIFICATIONS FOR THE DESIGN OF COLD-FORMED STEELSTRUCTURAL MEMBERS" BY AISI.1
2. STRUCTURAL DRAWINGS TYPICALLY SHOW ONLY THE PRIMARY STRUCTURALFRAMING ELEMENTS OF THE SYSTEM. CONTRACTOR SHALL PROVIDE ALLACCESSORIES INCLUDING TRACKS, WEB STIFFENERS, BLOCKING, LINTELS, CLIPANGLES, REINFORCEMENTS, FASTENING DEVICES, BRACING, AND OTHERACCESSORIES AS RECOMMENDED BY THE MFR. TO PROVIDE A COMPLETEFRAMING SYSTEM.
3. STEEL FOR 33, 43, 54, 68 AND 97 MILS THICK (20, 18, 16, 14 AND 12 GAGE) STUDS AND JOISTS SHALL HAVE A MIN. YIELD STRENGTH OF 50 KSI. STEEL FOR ALL THINNER STUDS AND JOISTS, ALL THICKNESSES OF TRACK, ALL DIAGONAL TENSION STRAPS ANDBRACES, AND BRIDGING SHALL HAVE A MIN. YIELD STRENGTH OF 33 KSI. STEEL SHALL BE GALVANIZED OR THOROUGHLY COATED WITH RUST INHIBITIVE PAINT ATALL LOCATIONS.
4. FASTENING OF COMPONENTS SHALL BE WITH SELF-TAPPING SCREWS OR WELDS.ALL WELDS OF GALVANIZED STEEL SHALL BE TOUCHED UP WITH ZINC-RICH PAINT.ALL WELDS OF CARBON SHEET STEEL SHALL BE TOUCHED UP WITH RUST INHIBITIVE PAINT.
5. SCREWS SHALL BE SELF-TAPPING PAN HEAD, HEX HEAD, OR WAFER HEAD SHEETMETAL SCREWS. SCREWS WHICH ARE REMOVED SHALL BE REPLACED BY ASCREW OF A LARGER DIA. WHERE THE REPLACEMENT IS MADE INTO AN EXISTING HOLE. REPLACE ALL SCREWS WHICH STRIP OUT MATERIAL. SCREWS SHALL BE SPACED NO CLOSER THAN 5/8" o.c. AND WITH A MIN. FREE EDGE DISTANCE OF 1/2".CLIP ANGLES OR FLAT CLIPS USED FOR ATTACHMENTS SHALL BE 20 GAGE MIN.,U.N.O. SIZE CLIP ANGLES AND FLAT CLIPS TO MAINTAIN MIN. SCREW SPACING AND EDGE DISTANCES NOTED ABOVE. ALL SCREWS #8 AND LARGER SHALL HAVE A MIN.HEAD SIZE OF 5/16".
6. ALL WELDING SHALL BE PERFORMED BY WELDERS EXPERIENCED IN COLD-FORMEDSTEEL FRAMING WORK. ALL WELDING SHALL USE E60 SERIES ELECTRODES (MIN.ROD DIA. = 1/8") AND SHALL CONFORM WITH THE LATEST AMERICAN WELDINGSOCIETY STANDARDS.
7. ALL STUDS SHALL BE SECURELY SEATED FOR FULL END BEARING ON TOP AND BOTTOM TRACK. U.N.O., PROVIDE DOUBLE STUDS AT ALL JAMBS, CORNERS, INTERSECTIONS, AND BEAM BEARING.
8. WALL STUD BRIDGING AS RECOMMENDED BY THE STUD MFR. SHALL BE INSTALLED TO PREVENT BOTH WEAK AXIS BENDING AND STUD ROTATION AT 4'-0" MAX. INTERVALS. WALLS 8'-0" AND SHORTER SHALL HAVE A SINGLE ROW OF BRIDGING AT MID-HEIGHT. ADDITIONALLY, BRIDGING SHALL BE PROVIDED AT ROOF LINES AND WHERE NOTED ON THE DRAWINGS. SOLID BLOCKING SHALL BE INSTALLED IN LIEU OF BRIDGING WHERE NOTED ON THE DRAWINGS.
9. STUDS, JAMBS AND TRIMMERS SIZES WHERE NOT SPECIFICALLY NOTED ON DRAWINGS SHALL BE 600S162-43 MIN. TRACK SIZE WHERE NOT SPECIFICALLYNOTED SHALL BE 600T125-43 MIN.
10. JOISTS, STUDS, TRACK, ETC. SHALL HAVE STEEL THICKNESS AND EFFECTIVE SECTION PROPERTIES AS LISTED IN THE STEEL STUD MFR.'S ASSOCIATION PRODUCT TECHNICAL GUIDE, ICC ESR-3064P, OR EQUIVALENT.

STRUCTURAL OBSERVATIONS

1. STRUCTURAL OBSERVATIONS ARE NOT REQUIREED TO MEET THE REQUIREMENTS OF IBC 1704.6, UNLESS REQUIRED BY THE BUILDING OFFICIAL.
2. WHEN THEY ARE REQUIRED, THE FOLLOWING APPLY:
   - a. PRIOR TO COMMENCEMENT OF OBSERVATIONS THE STRUCTURAL OBSERVER SHALL SUBMIT TO THE BUILDING OFFICIAL A WRITTEN STATEMENT IDENTIFYING FREQUENCY AND EXTENT OF STRUCTURAL OBSERVATIONS.
   - b. STRUCTURAL OBSERVATION REPORTS FOR EACH VISIT SHALL BE SENT DIRECTLY TO THE ARCHITECT / ENGINEER FOR DISTRIBUTION TO THE CONTRACTOR AND – WHERE REQUIRED BY THE JURISDICTION – TO THE BUILDING OFFICIAL.
   - c. AT THE CONCLUSION OF THE WORK THE STRUCTURAL OBSERVER SHALL SUBMIT TO THE BUILDING OFFICIAL A WRITTEN STATEMENT THAT THE SITE VISITS HAVE BEEN MADE AND IDENTIFY ANY REPORTED DEFICIENCIES THAT HAVE NOT BEEN RESOLVED.
3. STRUCTURAL OBSERVATION VISITS SHALL NEITHER BE CONSTRUED AS SPECIAL INSPECTION NOR APPROVAL OF COMPLETED CONSTRUCTION.

STATEMENT OF SPECIAL INSPECTIONS

1. THE DESIGNATED SEISMIC/WIND SYSTEMS AND SEISMIC/WIND-FORCE-RESISTING SYSTEMS THAT ARE SUBJECT TO SPECIAL INSPECTIONS IN ACCORDANCE WITH IBC/CBC SECTION 1705.1 ARE IDENTIFIED ON THESE DOCUMENTS WITH A DIAMOND "L". ALL OTHER ITEMS REQUIRING SPECIAL INSPECTION ARE IDENTIFIED IN THE SPECIAL INSPECTION SCHEDULE ON SHEET S002.
2. SPECIAL INSPECTIONS AND TESTING ARE TO BE PROVIDED AS REQUIRED BY IBC/CBC SECTIONS 1704 THROUGH 1708 AND OTHER APPLICABLE SECTIONS OF THE IBC/CBC. THE TYPE AND FREQUENCY OF TESTING AND SPECIAL INSPECTIONS SHALL BE AS NOTED IN THE SPECIAL INSPECTION SCHEDULE, JOB SPECIFICATIONS, AND ACCORDANCE WITH IBC/CBC SECTION 110 AND CHAPTER 17. THE CONTRACTOR SHALL COORDINATE AND COOPERATE WITH REQUIRED INSPECTIONS.
3. ALL TESTING AND SPECIAL INSPECTION SHALL BE PROVIDED BY A QUALIFIED INDEPENDENT SPECIAL INSPECTION AGENCY IN ACCORDANCE WITH IBC/CBC 1704 AND AS OUTLINED IN THE JOB SPECIFICATIONS. REPORTS OF FINDINGS OR DISCREPANCIES SHALL BE NOTED AND FORWARDED TO THE CONTRACTOR, ARCHITECT, ENGINEER, AND BUILDING OFFICIAL IN A TIMELY MANNER.
4. IN ACCORDANCE WITH IBC/CBC 1704.4, THE CONTRACTOR SHALL SUBMIT A WRITTEN CONTRACTOR'S STATEMENT OF RESPONSIBILITY TO THE BUILDING OFFICIAL AND OWNER. THE STATEMENT SHALL BE SUBMITTED PRIOR TO THE CONSTRUCTION OF ANY SEISMIC/WIND-FORCE-RESISTING SYSTEM, DESIGNATED SEISMIC/WIND SYSTEM, OR COMPONENT IDENTIFIED IN THESE DOCUMENTS WITH A DIAMOND "L".

NOTES:
1. THE ITEMS MARKED WITH A "X" IN THE SPECIAL INSPECTION SCHEDULE SHALL BE INSPECTED IN ACCORDANCE WITH IBC CHAPTER 17 BY A CERTIFIED SPECIAL INSPECTOR FROM AN ESTABLISHED TESTING AGENCY. FOR MATERIAL SAMPLING AND TESTING REQUIREMENTS, REFER TO THE MATERIAL SAMPLING AND TESTING SECTION, THE PROJECT SPECIFICATIONS, AND THE SPECIFIC GENERAL NOTES SECTIONS. THE TESTING AGENCY SHALL SEND COPIES OF ALL STRUCTURAL TESTING AND INSPECTION REPORTS DIRECTLY TO THE ARCHITECT, ENGINEER, CONTRACTOR, AND BUILDING OFFICIAL. ANY ITEMS WHICH FAIL TO COMPLY WITH THE APPROVED CONSTRUCTION DOCUMENTS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF DISCREPANCIES ARE NOT CORRECTED, THEY SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL, ARCHITECT, AND ENGINEER PRIOR TO COMPLETION OF THAT PHASE OF WORK. SPECIAL INSPECTION TESTING REQUIREMENTS APPLY EQUALLY TO ALL BIDDER DESIGNED COMPONENTS.
2. CONTINUOUS SPECIAL INSPECTION MEANS THE FULL-TIME OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK IS BEING PERFORMED. PERIODIC SPECIAL INSPECTION MEANS THE PARTTIME OR INTERMITTENT OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK HAS BEEN OR IS BEING PERFORMED AND AT THE COMPLETION OF THE WORK. (IBC SECTION 1702)
3. ANY CONSTRUCTION OR MATERIAL THAT HAS FAILED INSPECTION SHALL BE SUBJECT TO REMOVAL AND REPLACEMENT.

SPECIAL INSPECTION SCHEDULE[1,3]

PER IBC SECTION 110 AND CHAPTER 17

PRE-FAB CONSTRUCTION (SECTION 1704.2.5)			A. INSPECTION FOR PREFABRICATED CONSTRUCTION SHALL BE THE SAME AS IF THE MATERIAL USED IN THE CONSTRUCTION TOOK PLACE ON SITE. SPECIAL INSPECTION IS REQUIRED EXCEPT AS NOTED IN THE IBC WHERE THE FABRICATOR COMPLIES WITH QUALITY CONTROL REQUIREMENTS AND SUBMITS TO PERIODIC INSPECTION/REVIEW OF FABRICATION PRACTICES BY AN INDEPENDENT REVIEW AGENCY AND IS APPROVED BY THE LOCAL AREA HAVING JURISDICTION. FABRICATOR MAY BE REQUIRED TO FURNISH EVIDENCE OF COMPLIANCE - THAT THE APPROVED AGENCY CERTIFIES THE CONSTRUCTION PRACTICES OF THE FABRICATOR.

STRUCTURAL STEEL (IBC 1705.2.1, 1705.11.1 & 1705.12.2)

PRIOR TO WELDING (TABLE N5.4-1, AISC 360-10):

ITEM	CONTINUOUS[2]	PERIODIC[2]	NOTES
VERIFY WELDING PROCEDURES (WPS) AND CONSUMABLE CERTIFICATES	X		
MATERIAL IDENTIFICATION		X	VERIFY TYPE AND GRADE OF MATERIAL.
WELDER IDENTIFICATION		X	A SYSTEM SHALL BE MAINTAINED BY WHICH A WELDER WHO HAS WELDED A JOINT OR MEMBER CAN BE IDENTIFIED.
FIT-UP GROOVE WELDS		X	VERIFY JOINT PREPARATION, DIMENSIONS, CLEANLINESS, TACKING, AND BACKING.
ACCESS HOLES		X	VERIFY CONFIGURATION AND FINISH.
FIT-UP OF FILLET WELDS		X	VERIFY ALIGNMENT, GAPS AT ROOT, CLEANLINESS OF STEEL SURFACES, AND TACK WELD QUALITY AND LOCATION.

DURING WELDING (TABLE N5.4-2, AISC 360-10):

ITEM	CONTINUOUS[2]	PERIODIC[2]	NOTES
USE OF QUALIFIED WELDERS		X	VERIFY THAT WELDERS ARE APPROPRIATELY QUALIFIED.
CONTROL AND HANDLING OF WELDING CONSUMABLES		X	VERIFY PACKAGING AND EXPOSURE CONTROL.
CRACKED TACK WELDS		X	VERIFY THAT WELDING DOES NOT OCCUR OVER CRACKED TACK WELDS.
ENVIRONMENTAL CONDITIONS		X	VERIFY WIN SPEED IS WITHIN LIMITS AS WELL AS PRECIPITATION AND TEMPERATURE.
WPS FOLLOWED		X	VERIFY ITEMS SUCH AS SETTINGS ON WELDING EQUIPMENT, TRAVEL SPEED, WELDING MATERIALS, SHIELDING GAS TYPE/FLOW RATE, PREHEAT APPLIED, INTERPASS TEMPERATURE MAINTAINED, AND PROPER POSITION.
WELDING TECHNIQUES		X	VERIFY INTERPASS AND FINAL CLEANING, EACH PASS IS WITHIN PROFILE LIMITATIONS, AND QUALITY OF EACH PASS.

AFTER WELDING (TABLE N5.4-3, AISC 360-10):

ITEM	CONTINUOUS[2]	PERIODIC[2]	NOTES
WELDS CLEANED		X	VERIFY THAT WELDS HAVE BEEN PROPERLY CLEANED.
SIZE, LENGTH, AND LOCATION OF WELDS	X		
WELDS MEET VISUAL ACCEPTANCE CRITERIA	X		
ARC STRIKES	X		
K-AREA	X		
BACKING & WELD TABS REMOVED	X		
BACKING & WELD TABS REMOVED	X		
DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT/MEMBER	X		

NONDESTRUCTIVE TESTING (SECTION N5.5, AISC 360-10):

ITEM	CONTINUOUS[2]	PERIODIC[2]	NOTES
CJP WELDS		X	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.

OTHER STEEL INSPECTIONS (SECTION N5.7, AISC 360-10; TABLES J8-1 & J10-1, AISC 341-10):

ITEM	CONTINUOUS[2]	PERIODIC[2]	NOTES
STRUCTURAL STEEL DETAILS		X	ALL FABRICATED STEEL OR STEEL FRAMES SHALL BE INSPECTED TO VERIFY COMPLIANCE WITH THE DETAILS SHOWN IN THE CONSTRUCTION DOCUMENTS, SUCH AS BRACES, STIFFENERS, MEMBER LOCATIONS, AND PROPER APPLICATION OF JOINT DETAILS AT EACH CONNECTION.
ANCHOR RODS AND OTHER EMBEDMENTS SUPPORTING STRUCTURAL STEEL		X	SHALL BE ON THE PREMISES DURING THE PLACEMENT OF ANCHOR RODS AND OTHER EMBEDMENTS SUPPORTING STRUCTURAL STEEL FOR COMPLIANCE WITH CONSTRUCTION DOCUMENTS. VERIFY THE DIAMETER, GRADE, TYPE, AND LENGTH OF THE ANCHOR ROD OR EMBEDDED ITEM, AND THE EXTENT OR DEPTH OF EMBEDMENT PRIOR TO PLACEMENT OF CONCRETE.
BOLTING		X	VERIFY MANUFACTURER'S CERTIFICATIONS FOR BOLTS. VERIFY FASTENER MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS. VERIFY PROPER FASTENERS SELECTED FOR JOINT INCLUDING: GRADE, TYPE AND BOLT LENGTH. VERIFY PROPER BOLTING PROCEDURE FOR JOINT. VERIFY CONNECTING ELEMENTS MEET APPLICABLE REQUIREMENTS. VERIFY PROPER STORAGE OF BOLTS, NUTS, WASHERS AND OTHER FASTENER COMPONENTS.

STEEL CONSTRUCTION OTHER THAN STRUCTURAL STEEL (IBC 1705.2.2)

STEEL ROOF DECKS (IBC TABLE 1705.2.2):

ITEM	CONTINUOUS[2]	PERIODIC[2]	NOTES
MATERIAL VERIFICATION OF COLDFORMED STEEL DECK		X	CONFIRM THAT IDENTIFICATION MARKINGS ARE PROVIDED TO CONFORM TO ASTM STANDARDS SPECIFIED ON CONSTRUCTION DOCUMENTS.

CONCRETE CONSTRUCTION (IBC 1705.3 & 1705.12.1)

NOT REQUIRED BUT RECOMMENDED. AT OWNER OPTION.

CONCRETE CONSTRUCTION (IBC 1705.3 & 1705.12.1)

ITEM	CONTINUOUS[2]	PERIODIC[2]	NOTES
REINFORCING STEEL		X	VERIFY PRIOR TO PLACING CONCRETE THAT REINFORCING IS OF SPECIFIED TYPE, GRADE AND SIZE; THAT IT IS FREE OF OIL, DIRT AND RUST; THAT IT IS LOCATED AND SPACED PROPERLY; THAT HOOKS, BENDS, TIES, STIRRUPS AND SUPPLEMENTAL REINFORCEMENT ARE PLACED CORRECTLY; THAT LAP LENGTHS, STAGGER AND OFFSETS ARE PROVIDED; AND THAT ALL MECHANICAL CONNECTIONS ARE INSTALLED PER THE MANUFACTURER'S INSTRUCTIONS AND/OR EVALUATION REPORT.
CAST-IN BOLTS & EMBEDS		X	VERIFY THE CORRECT PLACEMENT AND CONSTRUCTION OF CAST-IN BOLTS AND EMBEDS.
USE OF REQUIRED MIX DESIGN		X	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.
CONCRETE SAMPLING FOR STRENGTH TESTS, SLUMP, AIR CONTENT, AND TEMPERATURE	X		PROVIDE SAMPLES FOR EVERY 150 CUBIC YARDS OR EACH DAYS CONCRETE PRODUCTION IF THE DAYS PRODUCTION IS LESS THAN 150 CUBIC YARDS.
CURING TEMPERATURE AND TECHNIQUES		X	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). ALL CONCRETE MATERIALS, REINFORCEMENT, FORMS, FILLERS, AND GROUND SHALL BE FREE FROM FROST. IN HOT WEATHER CONDITIONS ENSURE THAT APPROPRIATE MEASURES ARE TAKEN TO AVOID PLASTIC SHRINKAGE CRACKING AND THAT THE SPECIFIED WATER/CEMENT RATIO IS NOT EXCEEDED.
STRENGTH VERIFICATION		X	VERIFY THAT ADEQUATE STRENGTH HAS BEEN ACHIEVED PRIOR TO THE REMOVAL OF SHORES AND FORMS
FORMWORK		X	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.

MASONRY CONSTRUCTION (IBC 1705.4)

PRIOR TO CONSTRUCTION (ARTICLE 1.15, TMS-602/ACI 530.1-11):

ITEM	CONTINUOUS[2]	PERIODIC[2]	NOTES
REVIEW MATERIAL CERTIFICATES, MIX DESIGNS, TEST RESULTS AND CONSTRUCTION PROCEDURES		X	VERIFY THAT MATERIALS CONFORM TO THE REQUIREMENTS OF THE APPROVED CONSTRUCTION DOCUMENTS. MIX DESIGN, TEST RESULTS, MATERIAL CERTIFICATES, AND CONSTRUCTION PROCEDURES SHOULD BE SUBMITTED FOR REVIEW. MORTAR MIX DESIGNS SHALL CONFORM TO ASTM C 270 WHILE GROUT SHALL CONFORM TO ASTM C 476. MATERIAL CERTIFICATES SHALL BE PROVIDED FOR THE FOLLOWING: REINFORCEMENT; ANCHORS, TIES, FASTENERS, AND METAL ACCESSORIES; MASONRY UNITS; MORTAR AND GROUT MATERIALS. CONSTRUCTION PROCEDURES FOR COLD-WEATHER OR HOT-WEATHER CONSTRUCTION SHALL BE REVIEWED.

AS CONSTRUCTION BEGINS (TABLE 1.19.2, TMS-402/ACI 530-11):

ITEM	CONTINUOUS[2]	PERIODIC[2]	NOTES
PROPORTIONS OF SITE-PREPARED MORTAR		X	VERIFY THAT MORTAR IS OF THE TYPE AND COLOR SPECIFIED ON THE CONSTRUCTION DOCUMENTS, THAT IT CONFORMS TO ASTM C 270, AND THAT IT IS MIXED IN ACCORDANCE WITH ARTICLE 2.6 A OF TMS-602/ACI 530.1-11.
CONSTRUCTION OF MORTAR JOINTS		X	VERIFY THAT MORTAR JOINTS COMPLY WITH ARTICLE 3.3 B OF TMS-602/ACI 530.1-11.
LOCATION OF REINFORCEMENT, CONNECTORS, AND ANCHORAGES		X	VERIFY THAT REINFORCEMENT IS PLACED IN ACCORDANCE WITH ARTICLE 3.4 OF TMS-602/ACI 530.1-11.

PRIOR TO GROUTING (TABLE 1.19.2, TMS-402/ACI 530-11):

ITEM	CONTINUOUS[2]	PERIODIC[2]	NOTES
GROUT SPACE		X	VERIFY THAT GROUT SPACE IS FREE OF MORTAR DROPPINGS, DEBRIS, LOOSE AGGREGATE, AND OTHER DELETERIOUS MATERIALS AND THAT CLEANOUTS ARE PROVIDED PER ARTICLE 3.2 D AND 3.2 F OF TMS-602/ACI 530.1-11
GRADE, TYPE, AND SIZE OF REINFORCEMENT AND ANCHOR BOLTS, AND ANCHORAGES		X	VERIFY THAT REINFORCEMENT, JOINT REINFORCEMENT, WALL TIES, ANCHOR BOLTS AND VENEER ANCHORS COMPLY WITH THE APPROVED CONSTRUCTION DOCUMENTS AND SECTION 1.6 OF TMS 402/ACI 530-11.
PLACEMENT OF REINFORCEMENT, CONNECTORS, AND ANCHORAGES		X	VERIFY THAT REINFORCEMENT, JOINT REINFORCEMENT, WALL TIES, ANCHOR BOLTS AND VENEER ANCHORS ARE INSTALLED IN ACCORDANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS AND ARTICLES 3.2 E, 3.4, AND 3.6 A OF TMS 602/ACI 530-11.
PROPORTIONS OF SITE-PREPARED GROUT		X	VERIFY THAT GROUT IS PROPORTIONED PER ASTM C 476 AND HAS A SLUMP BETWEEN 8-11 INCHES. SELF-CONSOLIDATED GROUT SHALL NOT BE PROPORTIONED ONSITE. (SEE ARTICLES 2.6 B AND 2.4 G.1.B OF TMS 602/ACI 530.1-11

DURING MASONRY CONSTRUCTION:

ITEM	CONTINUOUS[2]	PERIODIC[2]	NOTES
SIZE AND LOCATION OF STRUCTURAL ELEMENTS		X	VERIFY THE LOCATIONS OF STRUCTURAL ELEMENTS WITH RESPECT TO THE APPROVED PLANS AND CONFIRM THAT TOLERANCES MEET THE REQUIREMENTS OF ARTICLE 3.3 F OF TMS 602/ACI 530.1-11.
TYPE, SIZE, AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION.		X	VERIFY THAT CORRECT ANCHORAGES AND CONNECTIONS ARE PROVIDED PER THE APPROVED PLANS AND SECTIONS 1.16.4.3 AND 1.17.1 OF TMS 402/ACI 530-11.
PREPARATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD WEATHER (<40°F) OR HOT WEATHER (>90°F).		X	VERIFY THAT COLD-WEATHER CONSTRUCTION IS PERFORMED IN ACCORDANCE WITH ARTICLE 1.8 C OF TMS 602/ACI 530.1-11 AND HOT WEATHER CONSTRUCTION PER ARTICLE 1.8 D OF TMS 602/ACI 530.1-11.
PLACEMENT OF GROUT	X		
OBSERVATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS		X	CONFIRM THAT SPECIMENS/PRISMS ARE PERFORMED AS REQUIRED BY ARTICLE 1.4 OF TMS-602/ACI 530.1-11.

MINIMUM TESTING:

ITEM	CONTINUOUS[2]	PERIODIC[2]	NOTES
VERIFICATION OF SLUMP FLOW AND VISUAL STABILITY INDEX (VSI) FOR SELF-CONSOLIDATING GROUT		X	COMPRESSIVE STRENGTH TESTS SHOULD BE PERFORMED IN ACCORDANCE WITH ASTM C 1019 FOR SLUMP FLOW AND ASTM C 1611 FOR VSI.
VERIFICATION OF F'M		X	DETERMINE THE COMPRESSIVE STRENGTH FOR EACH WYTHE BY THE "UNIT STRENGTH METHOD" OR BY THE "PRISM TEST METHOD" AS SPECIFIED IN ARTICLE 1.4 B OF TMS 602/ACI 530.1-11 PRIOR TO CONSTRUCTION.

SOILS CONSTRUCTION (IBC 1705.6)

SEE ADDITIONAL REQUIREMENTS ON FOUNDATION PLAN, FOUNDATION NOTES

PRIOR TO CONSTRUCTION (ARTICLE 1.15, TMS-602/ACI 530.1-11):

ITEM	CONTINUOUS[2]	PERIODIC[2]	NOTES
VERIFY SUBGRADE IS ADEQUATE TO ACHIEVE DESIGN BEARING CAPACITY		X	PRIOR TO PLACEMENT OF CONCRETE.
VERIFY EXCAVATIONS EXTEND TO PROPER DEPTH AND MATERIAL		X	PRIOR TO PLACEMENT OF COMPACTED FILL OR CONCRETE.
VERIFY THAT SUBGRADE HAS BEEN APPROPRIATELY PREPARED PRIOR TO PLACING COMPACTED FILL		X	PRIOR TO PLACEMENT OF COMPACTED FILL.
PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS		X	ALL MATERIALS SHALL BE CHECKED AT EACH LIFT FOR PROPER CLASSIFICATIONS AND GRADATIONS NOT LESS THAN ONCE FOR EACH 10,000FT² OF SURFACE AREA.
VERIFY PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION.	X		

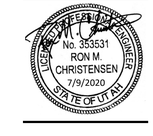
BIDDING & CITY SUBMITTAL

design west | architects
LOGAN UT 84321
SALT LAKE CITY UT 84103
255 SOUTH 300 WEST
795 NORTH 400 WEST

CACHE COUNTY MOSQUITO ABATEMENT
210 W. 3700 N.
HYDE PARK, UT 84318

DESCRIPTION:
DATE:
MARK:

PROJECT #: 200001
DRAWN BY: BFL
CHECKED BY: RC
ISSUED: 7/10/2020



GENERAL STRUCTURAL NOTES

S002

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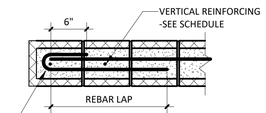
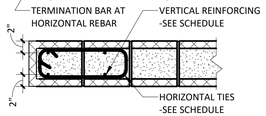
MASONRY JAMB SCHEDULE

MARK	NOMININAL THICKNESS	VERTICAL REINF.	HORIZONTAL TIES	CONFIG.	COMMENTS
MJ-1	8"	(2) #5	TERMINATION BARS	A	

NOTE:
1. ALL VERT. REINFORCING SHALL HAVE MATCHING DOWELS CAST INTO FOUNDATIONS
2. HORIZONTAL REINFORCING NOT SHOWN
3. JAMBS TO BE GROUTED SOLID
4. ALL JAMBS TO BE MJ-1 AT ALL OPENINGS U.N.O.



CONFIGURATION 'A'



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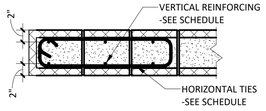
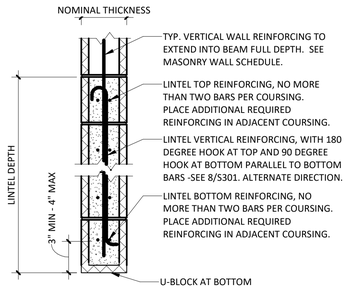


CONFIGURATION 'C'

MASONRY LINTEL SCHEDULE

MARK	NOMINAL THICKNESS	REINFORCING			LINTEL DEPTH	COMMENTS
		TOP REINF	BOTTOM REINF	VERT REINF		
ML-1	8"	-	(2) #4	-	2' - 0"	

1. B.E.= BOTTOM ELEVATION ABOVE FINISH FLOOR, VERIFY BOTTOM ELEVATIONS SHOWN WITH ARCHITECTURAL DRAWINGS.
2. ALL MASONRY LINTELS TO BE ML-1 U.N.O.



NOTE:
EXTEND LINTEL REINFORCING A MIN. OF 24" BEYOND END OF OPENING OR PROVIDE MAX HORIZONTAL LENGTH POSSIBLE WITH STANDARD HOOK. ALL MASONRY UNITS SHALL HAVE ONE OPEN END CELL IN LINTELS. HORIZONTAL WALL REINFORCING NOT SHOWN

REBAR LAP SCHEDULE - FOR MASONRY APPLICATIONS

(1) BAR AT CL. OF WALL (VERT. OR HORIZ.)			BARS AT EACH FACE OF WALL (VERT. OR HORIZ.)		
NO.	DIA.	ALL WALLS	NO.	DIA.	ALL WALLS
2	0.250	12"	2	0.250	12"
3	0.375	15"	3	0.375	16"
4	0.500	20"	4	0.500	29"
5	0.625	25"	5	0.625	45"
6	0.750	43"	6	0.750	54"

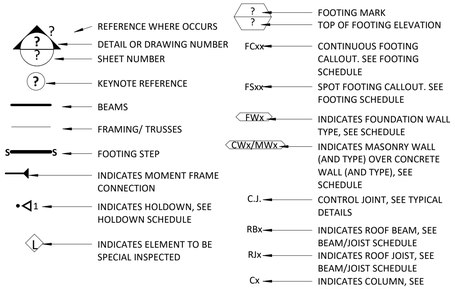
NOTE: WHEN SPLICING BARS OF DIFFERENT SIZES, USE LAP SPLICE LENGTH OF LARGER BARS U.N.O.

MASONRY WALL SCHEDULE

MARK	THICKNESS	MATERIAL	SOLID GROUT	VERTICAL	HORIZONTAL	COMMENTS
M08	8"	CMU	YES	#5 @ 32" o.c.	#5 @ 48" o.c.	(2) #5 @ WALL ENDS

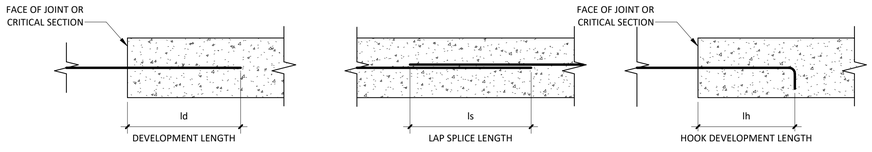
NOTES:
1. PROVIDE BOND BEAMS AT ROOF BOND BEAMS SHALL HAVE (2) #5 BARS. WHERE THE ROOF SLOPES, STEP THE BOND BEAM TO ALIGN WITH THE ROOF SLOPE.
2. VERTICAL REINFORCING TO BE AT CENTERLINE OF WALL.
3. A BOND BEAM SHALL BE LOCATED IN THE FIRST COURSE ABOVE THE FOUNDATION IF VERTICAL DOWELS HAVE BEEN BENT TO ALIGN WITH VERTICAL CMU CELLS.
4. WHERE TWO VERTICAL BARS ARE LOCATED IN THE SAME CELL, THE CENTER OF THE VERTICAL BARS SHALL BE LOCATED 21/2" FROM THE FACE OF MASONRY. HORIZONTAL REINFORCING SHALL BE LOCATED TO THE INSIDE OF THE VERTICAL BARS. WHERE ONE VERTICAL BAR IS LOCATED IN A CELL LOCATE IT IN THE CENTER OF THE WALL U.N.O..
5. PROVIDE TWO VERTICAL BARS (MIN.) AT ALL CORNERS AND ENDS OF WALLS.
6. HORIZONTAL WALL REINFORCING SHALL BE PLACED BETWEEN VERTICAL MASONRY COLUMN REINFORCING BARS.
7. HORIZONTAL WALL REINFORCING SHALL CONTINUE THROUGH MASONRY LINTELS. WHERE BOTH HORIZONTAL REINFORCING AND LINTEL REINFORCING OCCUR IN THE SAME COURSE, USE THE LARGER REINFORCING.
8. PLACE (1) #5 HORIZONTAL BAR AT TOP OF PARAPET WALLS.

ABR.	DESCRIPTION	ABR.	DESCRIPTION	ABR.	DESCRIPTION
ACC STA	ACCESSIBLE STATION	EIFS	EXTERIOR INSULATION FINISH SYSTEM	P-LAM	PLASTIC LAMINATE PLATE
AC	ACOUSTIC, ACOUSTICAL	FIN	FINISH	PLYWD	PLYWOOD
ABS	ACRYLONITRILE-BUTADIENE -STYRENE	FEC	FIRE EXTINGUISHER CABINET	PVC	POLYVINYL CHLORIDE
AD	ADDENDUM	FLR	FLOOR	PREFAB	PREFABRICATED
ADJ	ADJUSTABLE	FD	FLOOR DRAIN	PT	PRESERVATIVE TREATED
AFF	ABOVE FINISH FLOOR	FTG	FOOTING	PROJ	PROJECTION
ALT	ALTERNATE	FDN	FOUNDATION	QT	QUARRY TILE
ALUM	ALUMINUM	GALV	GALVANIZED	RAD	RADIUS
AB	ANCHOR BOLT	GI	GALVANIZED IRON	REF	REFRIGERATOR
L	ANGLE	GA	GAUGE	REINF	REINFORCE
ASI	ARCHITECT SUPPLEMENTAL INSTRUCTION	GYP BD	GYPSUM BOARD	REV	REVISION
ASPH	ASPHALT	HDWD	HARDWOOD	RFI	REQUEST FOR INFORMATION
BSMT	BASMENT	HT	HEIGHT	RD	ROOF DRAIN
BB	BASKETBALL	HM	HOLLOW METAL	RO	ROUGH OPENING
BRG	BEARING	HORIZ	HORIZONTAL	R/	ROUND
BM	BENCH MARK	ID	INSIDE DIAMETER	SCHED	SCHEDULE
BLKG	BLOCKING	INSUL	INSULATION	SIM	SIMILAR
BD	BOARD	INT	INTERIOR	SHT	SHEET
B.O.	BOTTOM OF	JT	JOINT	SPEC	SPECIFICATION
BLDG	BUILDING	KD	KNOCK DOWN	SQ	SQUARE
B.U.R.	BUILT UP ROOF	KO	KNOCK OUT	SS	STAINLESS STEEL
CLG	CEILING	LLV	LONG LEG VERTICAL	STD	STANDARD
C	CENTER LINE	MH	MANHOLE	STL	STEEL
CT	CERAMIC TILE	MFR	MANUFACTURER	STOR	STORAGE
CB	CHALKBOARD	MB	MARKER BOARD	STRUCT	STRUCTURAL
C	CHANNEL	MO	MASONRY OPENING	SUSP	SUSPENDED, SUSPENSION
CO	CLEAN OUT	MAX	MAXIMUM	SYS	SYSTEM
COL	COLUMN	MECH	MECHANICAL	TB	TACKBOARD
CONC	CONCRETE	MT	MOUNT	TEL	TELEPHONE
CMU	CONCRETE MASONRY UNIT	MTL	METAL	TV	TELEVISION
CONN	CONNECTION	MIN	MINIMUM	TEMP	TEMPORARY
CONT	CONTINUOUS	MISC	MISCELLANEOUS	TS	TUBE STEEL
CONTR	CONTRACTOR	(N)	NEW	THRES	THRESHOLD
DIM	DIMENSION	NIC	NOT IN CONTRACT	TOIL	TOILET
DS	DOWNSPOUT	NTS	NOT TO SCALE	T.O.	TOP OF
DWG	DRAWING	O.C.	ON CENTER	T & B	TOP AND BOTTOM
EA	EACH	OPNG	OPENING	TYP	TYPICAL
ELECT	ELECTRICAL	OPP	OPPOSITE	VERT	VERTICAL
EWC	ELECTRIC WATER COOLER	OD	OUTSIDE DIAMETER	U.N.O.	UNLESS NOTED OTHERWISE
ELEV	ELEVATION	OH	OVERHEAD	WC	WATER CLOSET
EQ	EQUAL	OF/CI	OWNER FURNISHED / CONTRACTOR INSTALLED	WM	WATER METER
EQUIP	EQUIPMENT	OF/OI	OWNER FURNISHED / OWNER INSTALLED	WWF	WELDED WIRE FABRIC
EXIST	EXISTING	PART BD	PARTICLE BOARD	W	WIDE FLANGE
(E)	EXISTING	PART'N	PARTITION	WDO	WIDE FLANGE
EXP	EXPANSION	d	PENNY	W/	WITH
EXT	EXTERIOR			W/O	WITHOUT
				WD	WOOD



REBAR LAP SPLICE SCHEDULE - FOR CONCRETE APPLICATIONS

	CONCRETE REINFORCING & SPLICE & DEVELOPMENT LENGTHS (IN)											
	#3			#4			#5			#6		
BAR LOCATION	ld	ls	lh	ld	ls	lh	ld	ls	lh	ld	ls	lh
ALL CONDITIONS	17	22	8	22	29	11	28	36	14	33	43	16



NOTE: WHEN SPLICING BARS OF DIFFERENT SIZES, USE LAP SPLICE LENGTH OF LARGER BARS U.N.O.

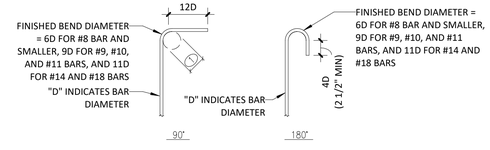
CONCRETE FOUNDATION WALL SCHEDULE

MARK	WIDTH	FDN TYPE	REINFORCEMENT (EA. CURTAIN)				
			VERTICAL		HORIZONTAL		TOP & BOTTOM
			V SIZE	V SPACING	H SIZE	H SPACING	
FW1	0' - 8"	A	#4	16" O.C.	#4	12" O.C.	(1) #4

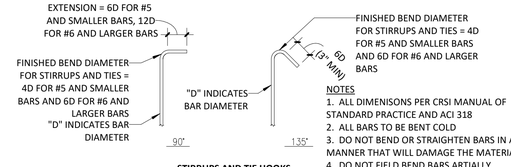
NOTES
1. PLACE VERTICAL DOWELS IN FOUNDATION WALL TO EXTEND INTO AND MATCH ALL MASONRY WALL VERTICAL REINFORCEMENT. MATCH SIZE AND SPACING

FOOTING SCHEDULE

MARK	WIDTH	LENGTH	THICK.	RIENFORCEMENT			
				LENGTHWISE		CROSSWISE	
				QTY./ SPACING	SIZE	QTY./ SPACING	SIZE
FC2.0	2' - 0"	CONT.	12"	(3)	#4	-	-
FS2.0	2' - 0"	2' 0"	12"	(3)	#4	(3)	#4
FS4.0	4' - 0"	4' - 0"	12"	(6)	#4	(6)	#4
FS5.0	5' - 0"	5' 0"	12"	(7)	#4	(7)	#4
FS5.5	6' - 0"	6' 0"	12"	(8)	#4	(8)	#4



STANDARD REINFORCING



STIRRUPS AND TIE HOOKS

NOTES
1. ALL DIMENISONS PER CRSI MANUAL OF STANDARD PRACTICE AND ACI 318
2. ALL BARS TO BE BENT COLD
3. DO NOT BEND OR STRAIGHTEN BARS IN A MANNER THAT WILL DAMAGE THE MATERIAL
4. DO NOT FIELD BEND BARS ARTIALLY EMBEDDED IN CONCRETE OR MASONRY

STANDARD HOOKS AND BENDS FOR REINFORCING

1 S003 **DETAIL** NTS

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255 SOUTH 300 WEST
SALT LAKE CITY UT 84103

CACHE COUNTY MOSQUITO ABATEMENT
210 W. 3700 N.
HYDE PARK, UT 84318

DESCRIPTION:
DATE:
MARK:

PROJECT #: 200001
DRAWN BY: BFL
CHECKED BY: RC
ISSUED: 7/10/2020

STRUCTURAL SCHEDULES

S003

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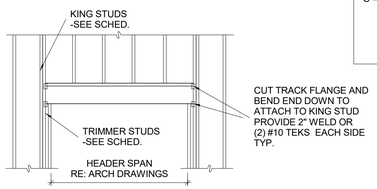
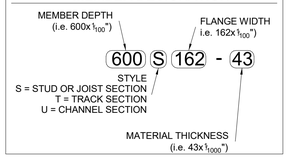
COLD FORM STEEL HEADER SCHEDULE

SPAN	HEADER SIZE	HEADER TRACK SIZE	TRIMMER STUDS	KING STUDS	BRACING REQ'D
UP TO 4'-0"	(2) 600S137-33	(2) 600S125-33	ONE	ONE	NO
4'-0" TO 8'-0"	(2) 600S137-43	(2) 600S125-54	ONE	TWO	NO
8'-0" TO 12'-0"	(2) 800S162-54	(2) 600S125-33	TWO	TWO	YES
12'-0" TO 16'-0"	(2) 1000S250-54	(2) 600S125-33	TWO	THREE	YES
16'-0" TO 20'-0"	(2) 1200S262-54	(2) 600S125-68	THREE	THREE	YES

NOTES:
1. HEADER SIZES ABOVE ARE TO BE USED U.N.O.
2. PROVIDE WEB STIFFENERS @ BEARING LOCATIONS.
3. ALL HEADER SECTIONS ARE TO BE UNPUNCHED.
4. PROVIDE A MIN. 1" BEARING LENGTH FOR WEB CRIPPLING.



MEMBER DESIGNATION



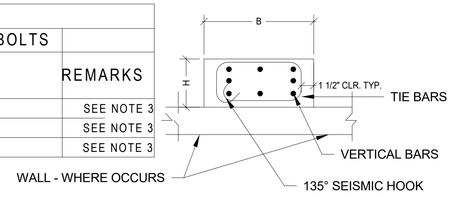
SHEAR WALL SCHEDULE1

MARK	SHTG. THK.	SIDES OF WALL	STUD SPACING	STUDS	STUDS @ ABUTTING SHTG. PNL.	SHEAR WALL END STUDS	STUD BLOCKING	TOP PLATES	BOTTOM PLATE	SHTG. NAILING @ PNL. EDGES	SHEATHING NAILING @ SILL PLATE	SHTG. NAILING @ INTR. STUDS	ANCHOR BOLTS	NOTES
SW1	7/16"	ONE	24"	600S137-54	600S137-54	(2) 600S137-54	600S137-54	600T150-54	600T150-54	#8 SDST @4" O.C.	#8 SDST @4" O.C.	#8 SDST @12" O.C.	1/2" DIA. x 10" 2 32" o.c.	
SW2	7/16"	ONE	24"	800S137-43	800S137-43	(2) 800S137-43	800S137-43	800T150-43	800T150-43	#8 SDST @6" O.C.	#8 SDST @6" O.C.	#8 SDST @12" O.C.	1/2" DIA. x 10" 2 32" o.c.	
SW3	7/16"	ONE	24"	600S137-54	600S137-54	(2) 600S137-54	600S137-54	600T150-54	600T150-54	#8 SDST @6" O.C.	#8 SDST @6" O.C.	#8 SDST @12" O.C.	1/2" DIA. x 10" 2 32" o.c.	

NOTES
1. WALL SHEATHING TO BE APA RATED PANEL 16/32 EXPOSURE 1
2. APPLY WALL SHEATHING TO EXTERIOR FACE OF WALL STUDS. SHEATHING MAY BE REQUIRED TO BE INSTALLED ON BOTH WALL FACES, SEE SCHEDULE.
3. MAINTAIN 3/8" MIN. EDGE DISTANCE FROM EDGE OF SHEATHING PANEL TO CENTER OF FASTENERS.
4. ALL EXTERIOR METAL STUD WALLS ARE TO MEET SW1 REQUIREMENTS U.N.O.
5. WALL SHEATHING MAY BE INSTALLED WITH LONG DIMENSION VERTICAL OR HORIZONTAL. NO SHEATHING PANEL SHALL BE LESS THAN 24" IN ANY DIRECTION
6. BLOCKING REQUIRED BETWEEN STUDS AT ALL SHEATHING PANEL EDGES, SEE SCHEDULE FOR BLOCKING SIZE.
7. ANCHOR BOLTS ARE AS SPECIFIED IN SCHEDULE, SEE PLAN FOR PLATE WASHER AND OTHER REQUIREMENTS. PLATE WASHER TO BE A STANDARD CUT WASHER
8. A MIN. OF (2) FULL HEIGHT STUDS ARE REQUIRED AT ENDS OF SHEARWALLS, U.N.O. ON PLANS, DETAILS, OR HOLDOWN SCHEDULE.
9. MULTIPLE 2x STUDS AT HOLDOWN LOCATIONS ARE TO BE STITCH SCREWED TOGETHER WITH #8 SCREWS @ 8" o.c. STAGGERED.
10. WHERE A WALL INTERSECTS A SHEARWALL, SHEATHING IS TO BE CONTINUOUS THROUGH WALL INTERSECTION WITHOUT INTERUPTION.
11. ANCHOR BOLTS TO HAVE A MIN. EMBEDMENT OF 7".
12. AT ENDS OF SHEAR WALLS PROVIDE PANEL EDGE NAILING ALONG HOLDOWN STUDS FOR FULL-HEIGHT OF THE WALL.

CONCRETE PIER SCHEDULE

Type MARK	SIZE		REINFORCEMENT		ANCHOR BOLTS	
	B (IN)	H (IN)	VERTICAL BARS	TIE BARS	DEPTH	REMARKS
CP1	18"	18"	**(8) #4**	#3 @ 12" O.C.	12"	SEE NOTE 3
CP2	20"	20"	(8) #5	#3 @ 12" O.C.	12"	SEE NOTE 3
CP3	14"	**14"**	**(8) #4**	#3 @ 12" O.C.	8"	SEE NOTE 3

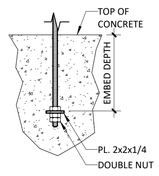


CONCRETE PIER SCHEDULE NOTES:
1. TIE BARS TO MAINTAIN 1-1/2" CLEAR COVER
2. TERMINATE TIE BARS WITH 90 DEGREE HOOK WITH 3-1/2" EXTENSION
3. PLACE (3) #3 OR (2) #4 TIES AT TOP OF ANCHOR BOLTS WITHIN 5" SPACING
4. DEPTH OF ANCHOR BOLTS IN MIN. EMBEDMENT DEPTH INTO CONCRETE
5. SEE BUILDING MANUFACTURER REQUIREMENTS FOR BOLT PROJECTION ABOVE SLAB
6. SEE BUILDING MANUFACTURER REQUIREMENTS FOR ANCHOR BOLT QUANTITY AND DIAMETER
7. VERTICAL BARS ARE TO BE LOCATED WITHIN THE TIE BARS.
8. ANCHOR BOLTS ARE TO BE F1554 GRADE A36 HEX HEAD OR THREADED ROD WITH A 2"X2"X1/4" STEEL PLATE WASHER AT BOTTOM WITH A NUT ON TOP AND DOUBLE NUT ON BOTTOM MAY BE USED, EMBEDMENT DEPTH IS TO BOTTOM OF PLATE WASHER.
9.
*CONTRACTOR TO DETERMINE PIER DEPTH (H) BASED ON LOCATION OF STEEL COLUMN LOCATION IN RELATION TO GRID 2.

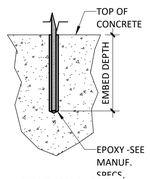
HOLDOWN SCHEDULE

MARK	DESCRIPTION
•◁1	SIMPSON S/DTT2Z W/ 1/2" DIA. ANCHOR W/ 18" EMBEDMENT, ATTACHED TO STUD MEMEBERS W/ (8) #14 SMS.

NOTES:
1. INSTALL ALL HARDWARE AS PER MANUFACTURERS RECOMMENDATIONS.
2. HOLDOWNS AT CORNERS TO BE ATTACHED TO COMMON STUDS TO CORNER WALLS.
3. HOLDOWNS TO BE INSTALLED AT SHEAR WALL ENDS AND AT EDGES OF OPENINGS, I.E. DOORS & WINDOWS TO A MIN. OF 2 FULL HEIGHT STUDS.
4. AT NEW FOUNDATION WALLS USE CAST-IN-PLACE TYPE ANCHORS. SEE SHEET S001 FOR EPOXY TYPE AND SPECIFICATIONS. SEE DETAILS FOR ADDITIONAL ANCHOR INFO.
5. ANCHOR AND ANCHOR REINFORCING REQUIREMENTS ARE FOUND IN THE ANCHORS FOR HOLDOWN SCHEDULE.



CAST-IN-PLACE THREADED ROD ANCHOR DTL.



POST-INSTALLED THREADED ROD ANCHOR DTL.

design west | architects
LOGAN UT 84321
255 SOUTH 300 WEST
SALT LAKE CITY UT 84103
798 NORTH 400 WEST

CACHE COUNTY MOSQUITO ABATEMENT

210 W. 3700 N.
HYDE PARK, UT 84318

DESCRIPTION: | DATE: | MARK:

PROJECT #: 200001
DRAWN BY: BFL
CHECKED BY: RC
ISSUED: 7/10/2020

BIDDING & CITY SUBMITTAL

APEX DESIGN GROUP
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MAIL: 2720 W 7000 S
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STRUCTURAL SCHEDULES

S004

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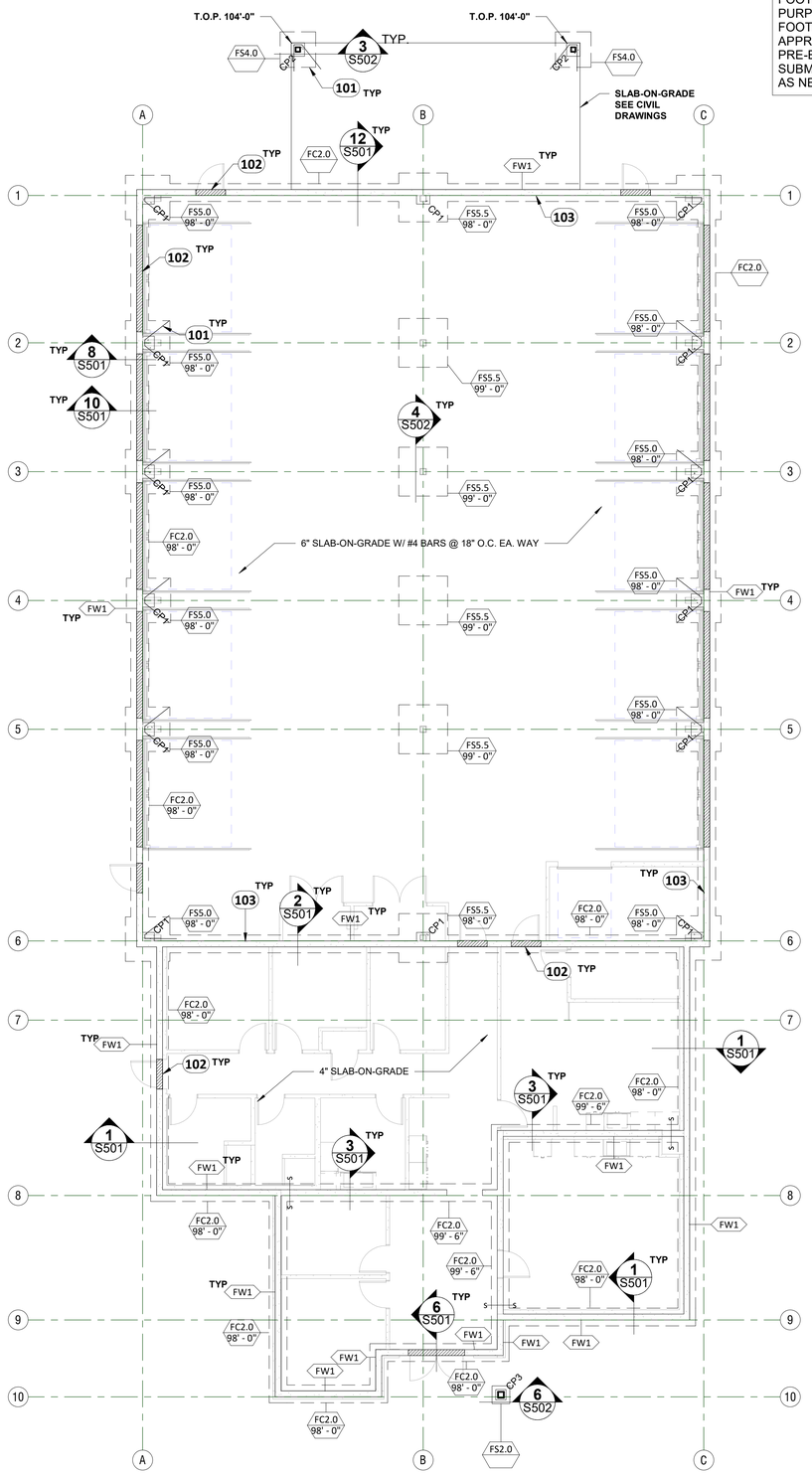
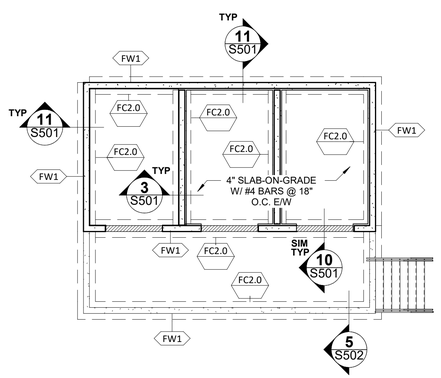


1 **FOUNDATION PLAN**
1/8" = 1'-0"



2 **STORAGE BUILDING FOUNDATION PLAN**
1/8" = 1'-0"

KEYNOTE LEGEND	
#	DESCRIPTION
101	#5 REBAR HAIRPIN CENTERED IN SLAB DEPTH EXTEND 8FT TYP. EA. LEG.
102	DEPRESS TOP OF FOUNDATION WALL 6" MIN AT OPENING
103	DOWEL NEW SLAB REINFORCING INTO NEW FOUNDATION WALL. EMBED REINFORCEMENT 4" USE CHEMICAL ADHESIVE

FOOTING AND FOUNDATION NOTES

1. COORDINATE AND VERIFY THIS DRAWING WITH ALL OTHER DRAWINGS INCLUDING ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS.
2. FOR ALL DIMENSIONS AND ELEVATIONS NOT SHOWN, REFER TO THE ARCHITECTURAL DRAWINGS.
3. UNLESS NOTED OTHERWISE, ALL FOOTINGS ARE CENTERED UNDER WALLS AND COLUMNS/ JAMBS.
4. REFER TO THE GENERAL STRUCTURAL NOTES, FOR OTHER REQUIREMENTS.
5. PLACE ALL FOOTING REINFORCING IN BOTTOM OF FOOTING WITH 3" CLEAR CONCRETE COVER, UNLESS NOTED OTHERWISE. WHERE TOP REINFORCEMENT IS SPECIFIED PLACE 2" BELOW TOP OF CONCRETE.
6. AT CONCRETE FLOOR SLOPES, REFER TO ARCHITECTURAL DRAWINGS FOR FLOOR SLOPES.
7. FOR CONCRETE WALL INTERSECTION SEE DETAIL 7/S501.
8. ANCHOR BOLTS AND HOLDOWNS SHALL BE SECURED IN PLACE PRIOR TO THE PLACEMENT OF CONCRETE, AND SHALL BE INSTALLED PER THE MANUFACTURER SPECIFICATIONS AND THE GENERAL STRUCTURAL NOTES.
9. ALL SITE WALLS, SIDEWALKS OR OTHER ARCHITECTURAL FEATURES SHALL BE BY OTHERS UNLESS SPECIFICALLY ADDRESSED ON THE STRUCTURAL PLANS.
10. MAINTAIN 30" MIN. FROST PROTECTION OF ALL EXTERIOR FOOTINGS, STEP CONTINUOUS FTGS. AS NEEDED. FTG. & FND. STEP LOCATIONS TO BE FIELD DETERMINED BASED ON FINISHED GRADE. MAX. VERT. FTG. STEP = 4'-0", SEE DETAIL 1/S502 FOR FTG. STEP.
11. VERTICAL FOUNDATION REINFORCEMENT TO BE LOCATED IN CENTER OF FOUNDATION WALL U.N.O.
12. PLACE SLAB ON GRADE ON 4" MIN. OF GRANULAR MATERIAL.
13. SEE ARCHITECTURAL DRAWINGS FOR ALL TOP OF FND. WALL ELEVATIONS.
14. FOR CONCRETE SLAB CONTROL AND CONSTRUCTION JOINTS SEE DETAIL 2/S502.
15. FOR REINFORCING BEND REQUIREMENTS SEE DETAIL 1/S003.
16. FOR REINFORCEMENT LAP, SEE SCHEDULES ON S003.
17. PLACE SLAB ON GRADE ON 4" MIN OF GRANULAR MATERIAL. PLACE CONTROL JOINTS IN SLAB @ 15' MAX SPACING EA. WAY. CONTRACTOR TO DETERMINE LOCATION OF CONTROL JOINTS.
18. REFER TO THE METAL BUILDING DRAWINGS FOR ANCHOR BOLT SIZE, QUANTITY, AND LOCATION. SEE CONCRETE PIER BOLTS TO BE SECURED IN PLACE PRIOR TO THE CONCRETE PLACEMENT.
19. CONTRACTOR TO PROVIDE PRE-ENGINEERED METAL BUILDING AS PART OF BID. BUILDING TO BE INCLUDED IN PROJECT. BUILDING AND REACTIONS ARE TO BE SUBMITTED TO ARCHITECT AND ENGINEER OF RECORD (EOR) FOR REVIEW. FINAL DESIGN OF FOUNDATION SYSTEM BY EOR WILL BE BASED ON REACTIONS.

SYMBOLS LEGEND

SEE SCHEDULES ON SHEET S003
SEE SYMBOLS LEGEND ON SHEET S003

S——S STEP, LOCATION WHERE FOOTING ELEVATION CHANGES

CONCRETE FOUNDATION WALL -SEE SCHEDULES

DENOTES RECESS FOUNDATION WALL. HOLD FOUNDATION WALL 6" MIN. BELOW TOP OF SLAB AND PLACE SLAB OVER. SEE ARCH. DRAWINGS FOR LOCATIONS

? FOOTING MARK, SEE SCHEDULES
? TOP OF FOOTING ELEVATION

FWx INDICATES FOUNDATION WALL TYPE, SEE SCHEDULES

? KEYNOTE, SEE KEYNOTE LEGEND

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795 NORTH 400 WEST SALT LAKE CITY UT 84103

CACHE COUNTY MOSQUITO ABATEMENT
210 W. 3700 N.
HYDE PARK, UT 84318

DESCRIPTION:
DATE:
MARK:

PROJECT #: 200001
DRAWN BY: BFL
CHECKED BY: RC
ISSUED: 7/10/2020

LICENSED PROFESSIONAL ENGINEER
No. 353531
RON M. CHRISTENSEN
7/9/2020
STATE OF UTAH

FOOTING AND FOUNDATION PLANS

S101

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KEYNOTE LEGEND	
#	DESCRIPTION
201	2x10 LEDGER, ATTACH TO MASONRY WALL W/ 5/8" DIA.x4" EMBED TITEN SCREWS @ 24" O.C. STAGGERED
202	23/32 T&G OSB FLOOR SHEATHING
203	PLACE ROOF JOISTS/TRACK AGAINST STRUCTURAL WALL. ATTACH TO WALL WITH (2) #10 SDST SCREWS INTO EACH METAL STUD THAT THE JOIST LAPS OR INTO MASONRY WALLS WITH TITEN 1/4"x2-1/2" CONCRETE/MASONRY SCREWS @ 12" O.C. STAGGERED.
204	PLACE ROOF JOIST AT EDGE OF WALL BELOW
205	SEE DETAIL 9/S503 FOR FRAMING BELOW MECHANICAL UNIT
206	ALIGN STEEL JOISTS WITH BEARING WALL STUDS
207	CONTRACTOR TO PROVIDE PRE-ENGINEERED METAL BUILDING AS PART OF BID. BUILDING TO BE INCLUDED IN PROJECT. BUILDING AND REACTIONS ARE TO BE SUBMITTED TO ARCHITECT AND ENGINEER OF RECORD (EOR) FOR REVIEW. FINAL DESIGN OF FOUNDATION SYSTEM BY EOR WILL BE BASED ON REACTIONS.
208	ATTACH METAL STUD TO MASONRY WALL WITHTITEN 1/4"x2-1/2" CONCRETE/MASONRY SCREWS @ 12" O.C. STAGGERED.

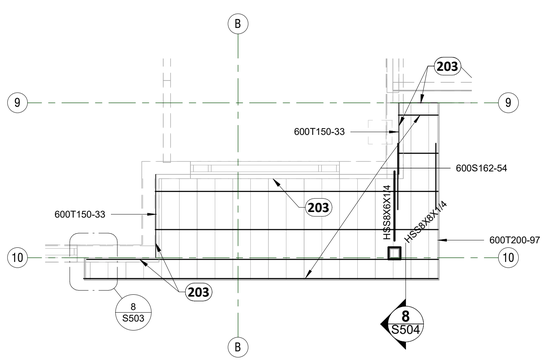
ROOF FRAMING NOTES

1. SEE ARCHITECTURAL DRAWINGS FOR ALL JOIST BEARING ELEVATIONS.
2. VERIFY AND COORDINATE THIS DRAWING WITH ALL OTHER DRAWINGS INCLUDING ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS.
3. FOR ALL DIMENSIONS AND ELEVATIONS NOT SHOWN, REFER TO THE ARCHITECTURAL DRAWINGS.
4. PROVIDE ADEQUATE, TEMPORARY BRACING TO ALL WALLS AND BEAMS UNTIL FLOOR JOISTS/ROOF JOISTS AND FLOOR/ROOF DECKING IS INSTALLED AND COMPLETELY ATTACHED.
5. ALL INTERIOR NON-BEARING WALLS ARE TO BE ARE TO BE HELD SHORT OF THE STRUCTURE ABOVE.
6. LOADS LISTED TO BE PLACED ON STEEL JOISTS ARE ASD.
7. JOIST BRIDGING DESIGN BY JOIST MANUFACTURER. PROVIDE HORIZONTAL BRIDGING WHERE REQUIRED FOR UTILITY AND HVAC ITEMS. SEE DETAIL 3/S502 FOR BRIDGING CONNECTION TO MASONRY WALL.
8. FOR OPENINGS IN ROOF SEE DETAIL 9 / S503
9. STEEL JOIST MANUFACTURER TO DESIGN FOR ADDITIONAL LOADS AS INDICATED ON PLAN
10. FOR MASONRY WALL INTERSECTION SEE DETAIL 5/SS01. FOR MASONRY WALL CORNER SEE DETAIL 4/SS01.

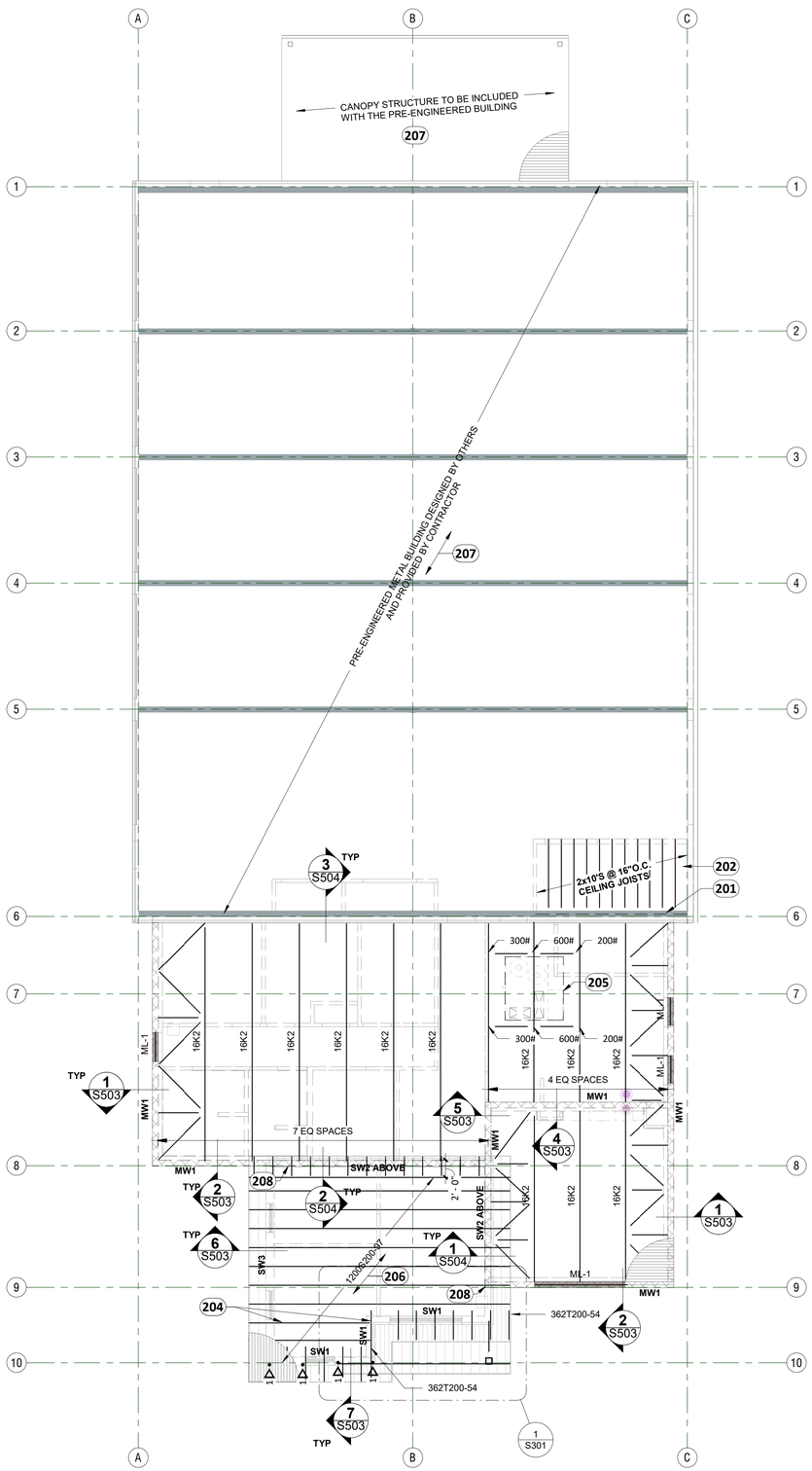
LEGEND

SEE SCHEDULES ON SHEET S003

- XXX# — ADDITIONAL POINT LOADS TO BE INCLUDED IN STEEL JOIST DESIGN (#=LBS)
- STRUCTURAL BEAM, HEADER OR GIRDER
- STRUCTURAL JOIST
- MASONRY
- WINDOW OPENING IN MASONRY WALL
- ? — KEYNOTE, SEE KEYNOTE LEGEND
- MX — MASONRY WALL SYMBOL, SEE SCHEDULES
- STEEL DECK - SEE GENERAL NOTES
- OPENING IN STEEL DECK
- MWX — MASONRY WALL - SEE MASONRY WALL SCHEDULE
- SWX — STEEL STUD WALL - SEE MASONRY WALL SCHEDULE
- •◁1 — HOLDOWN - SEE HOLDOWN SCHEDULE
- STRUCTURAL COLUMN



1 ENLARGED FRONT CANOPY ROOF FRAMING PLAN
1/4" = 1'-0"



2 OFFICE AND GARAGE ROOF FRAMING PLAN
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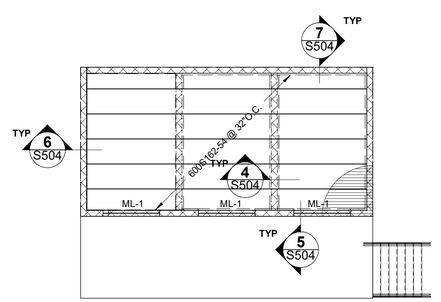

3 STORAGE BUILDING ROOF FRAMING PLAN
1/8" = 1'-0"

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PROJECT #: 200001
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7/9/2020
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ROOF FRAMING PLANS

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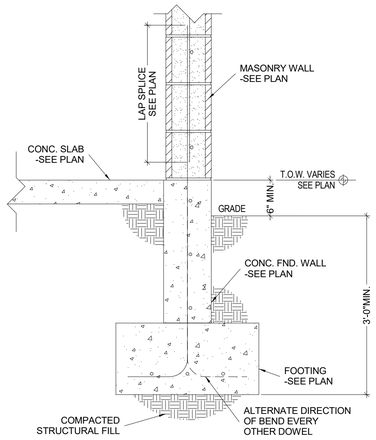

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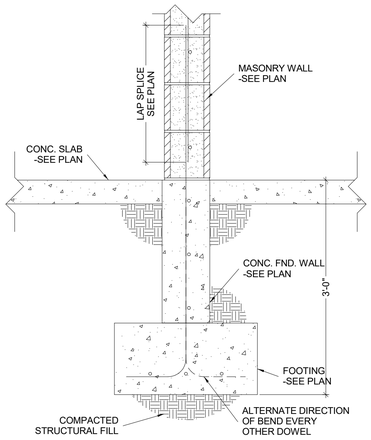

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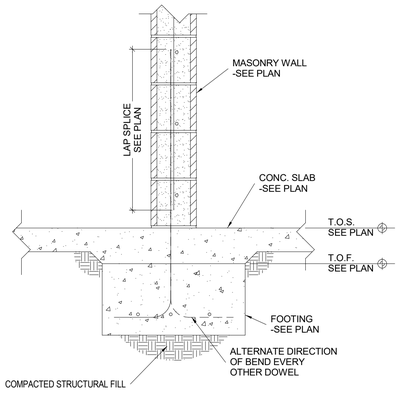

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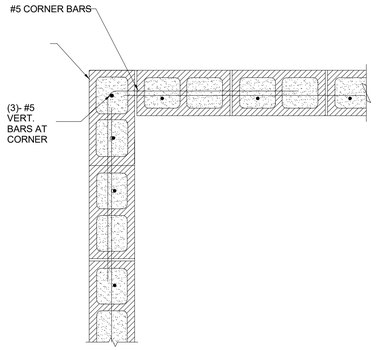

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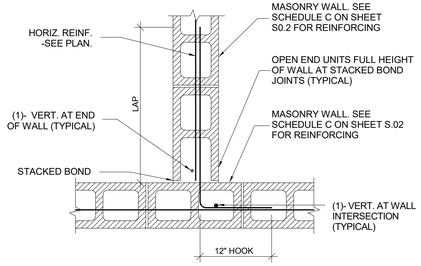

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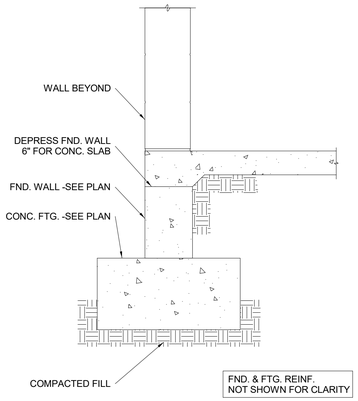

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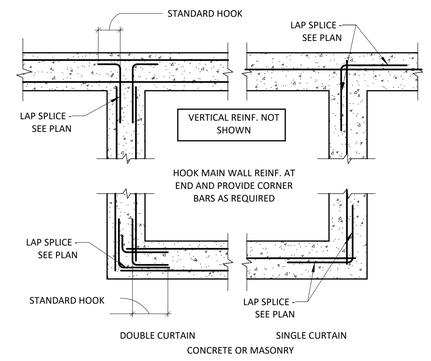

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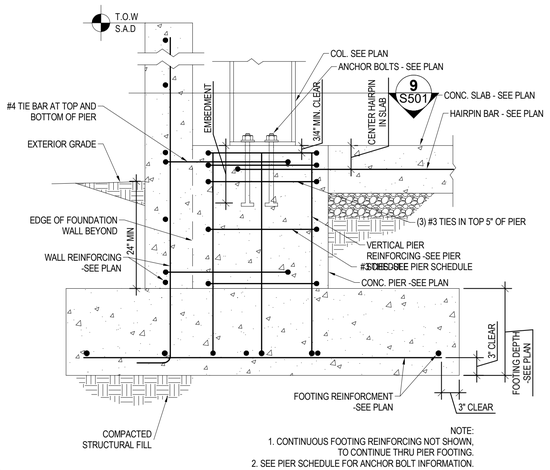

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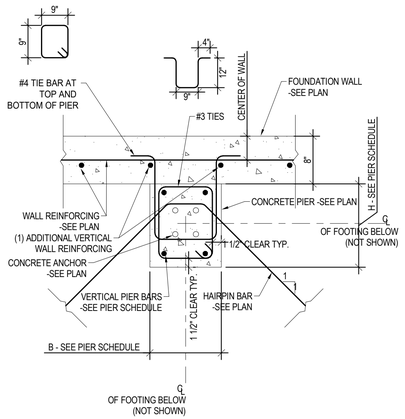

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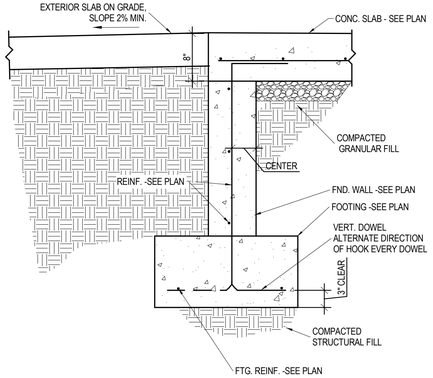

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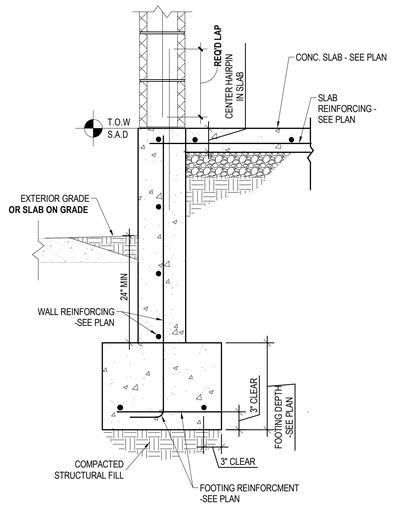

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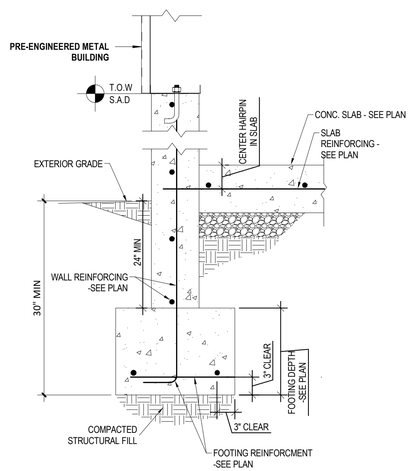

12 S501 **DETAIL** 1" = 1'-0"

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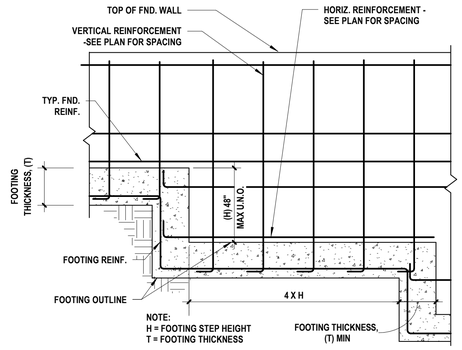

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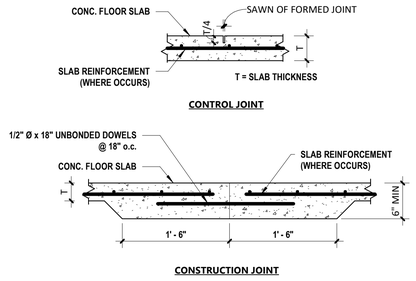

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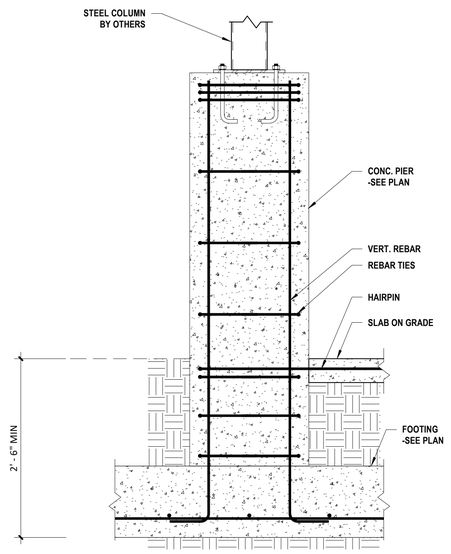

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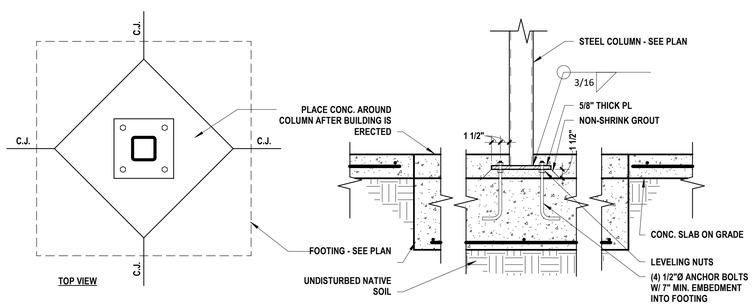

4 S502 **TYPICAL FOOTING DETAIL**
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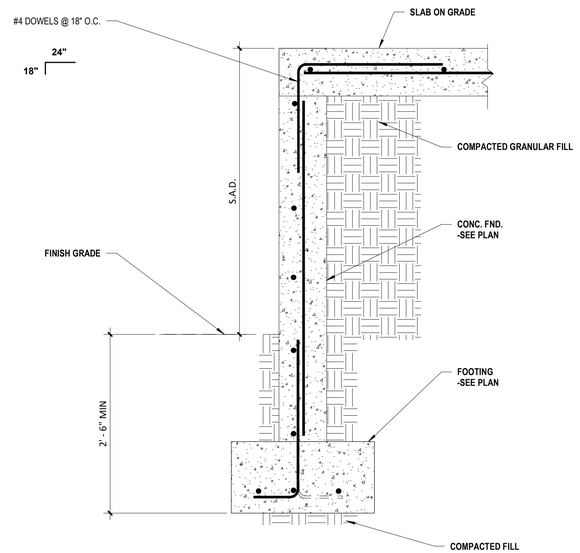

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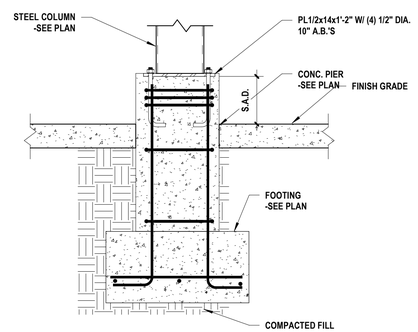

6 S502 **DETAIL**
1" = 1'-0"

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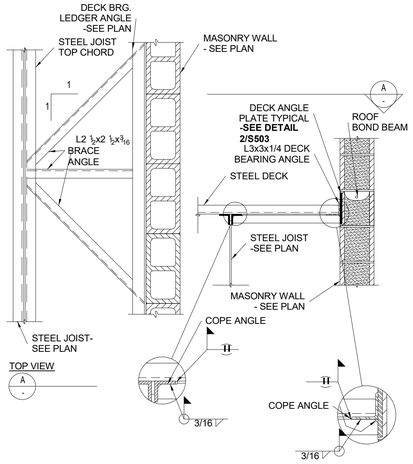

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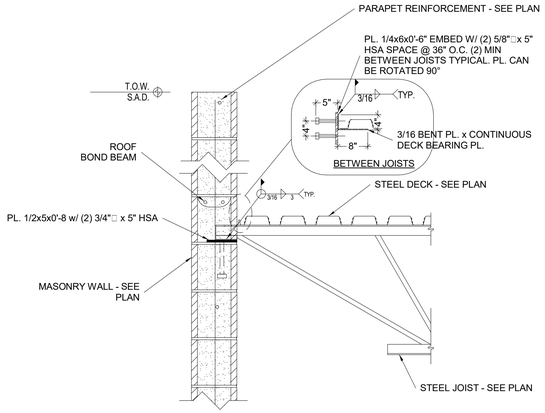

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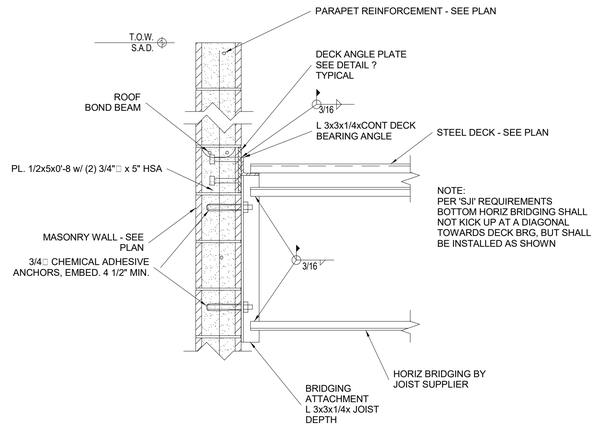

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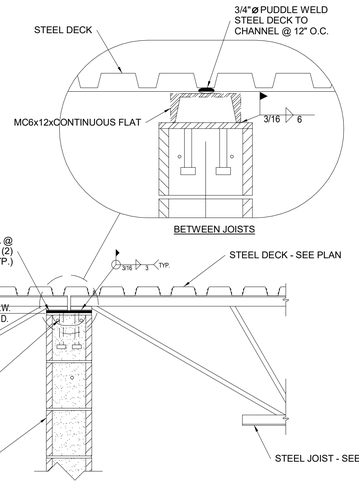

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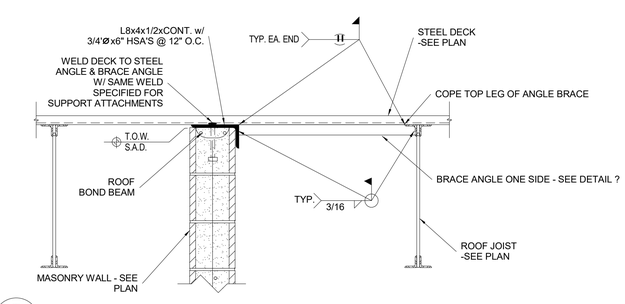

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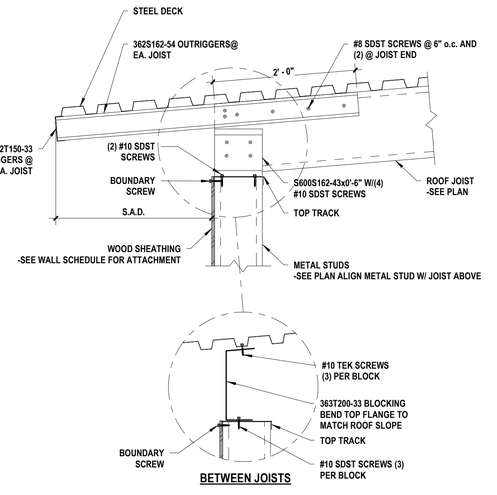

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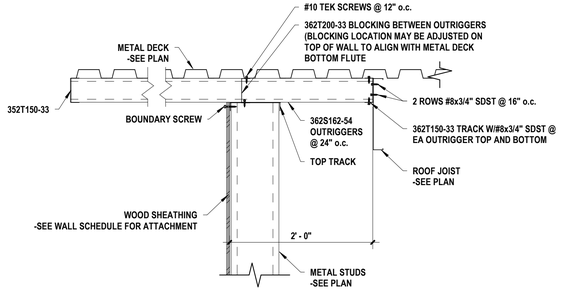

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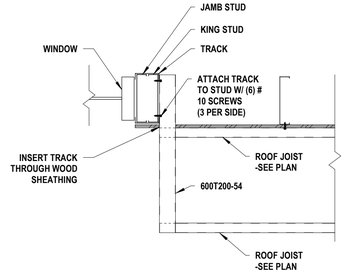

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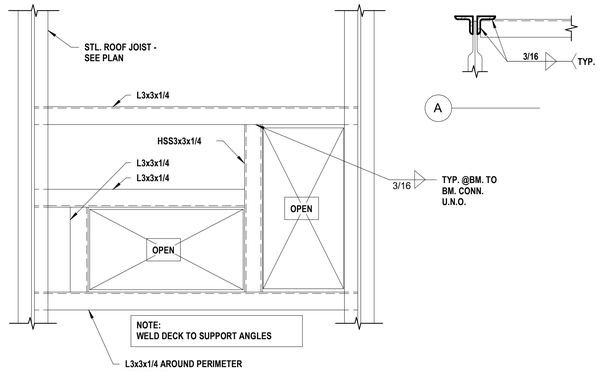

9 DETAIL S503 1" = 1'-0"

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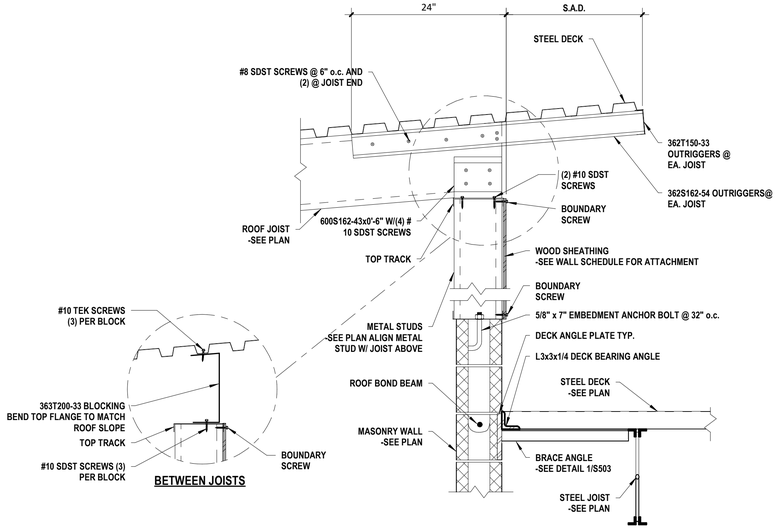

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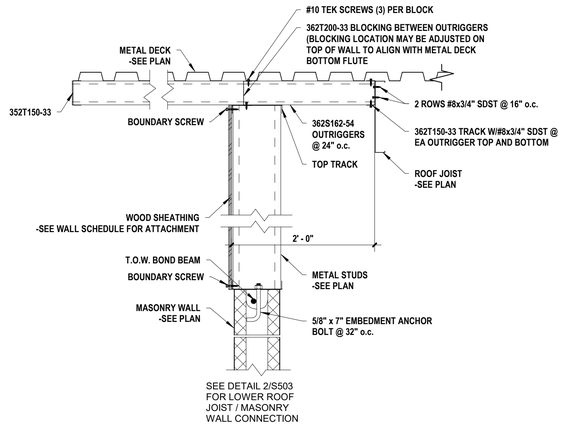

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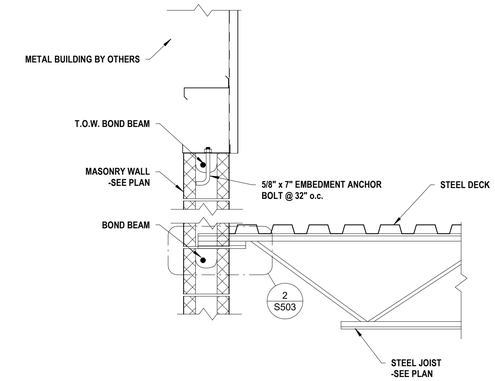

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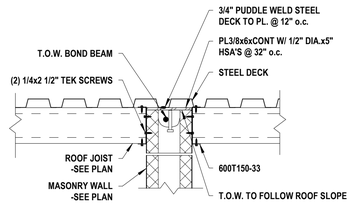

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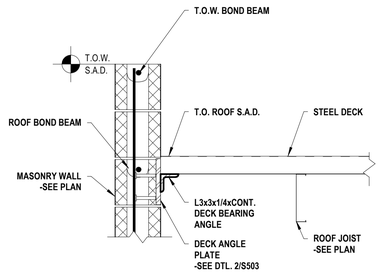

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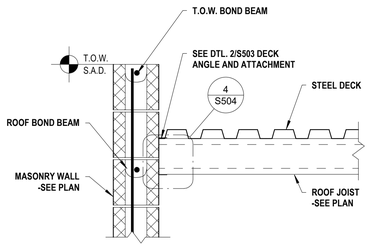

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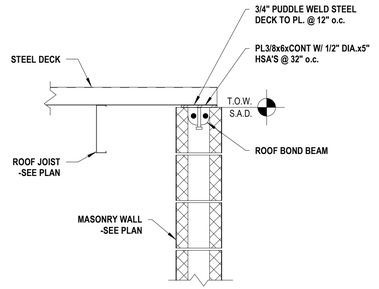

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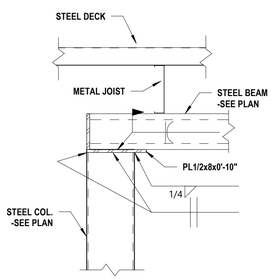

8 S504 **DETAIL** 1" = 1'-0"

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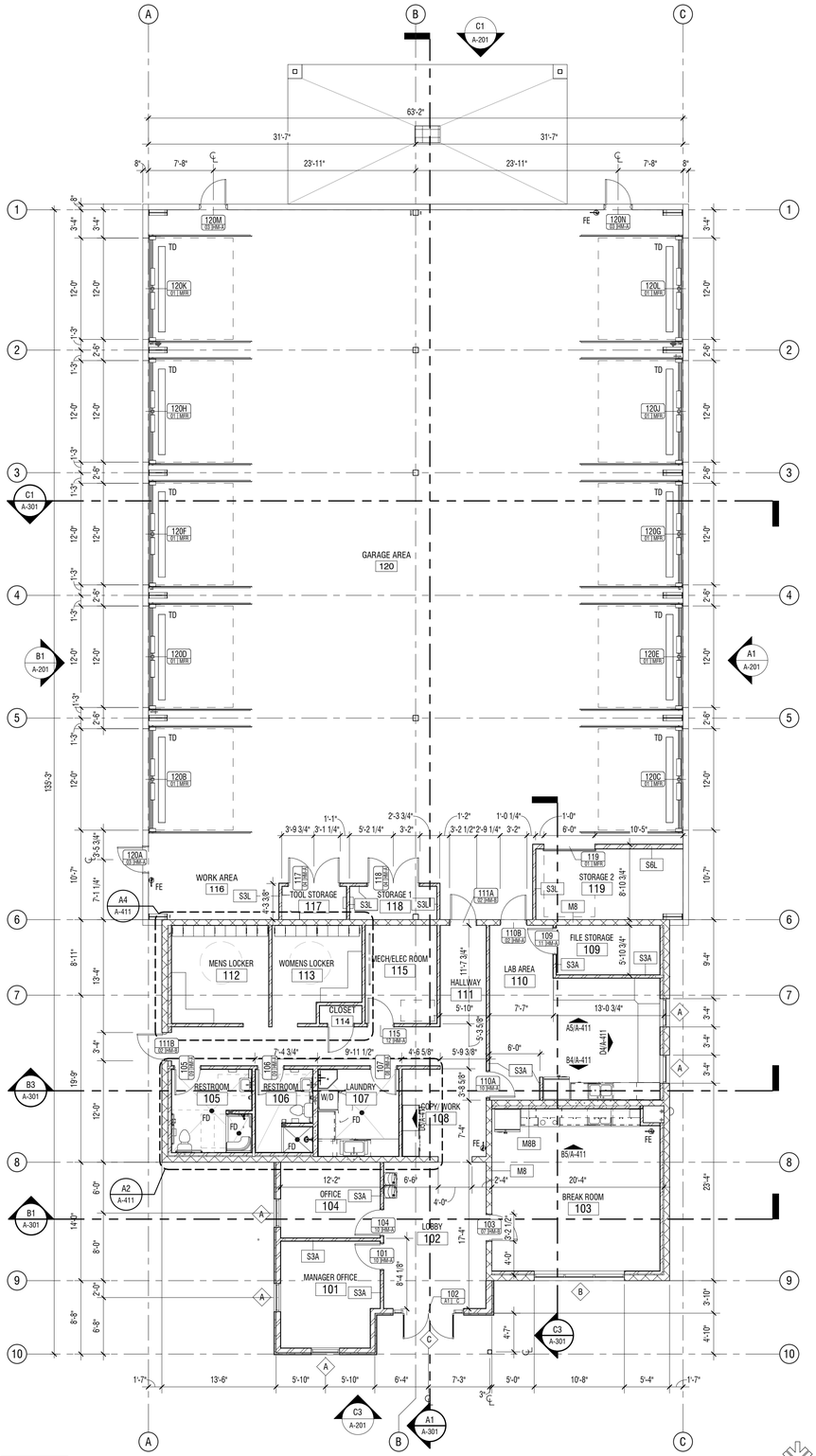
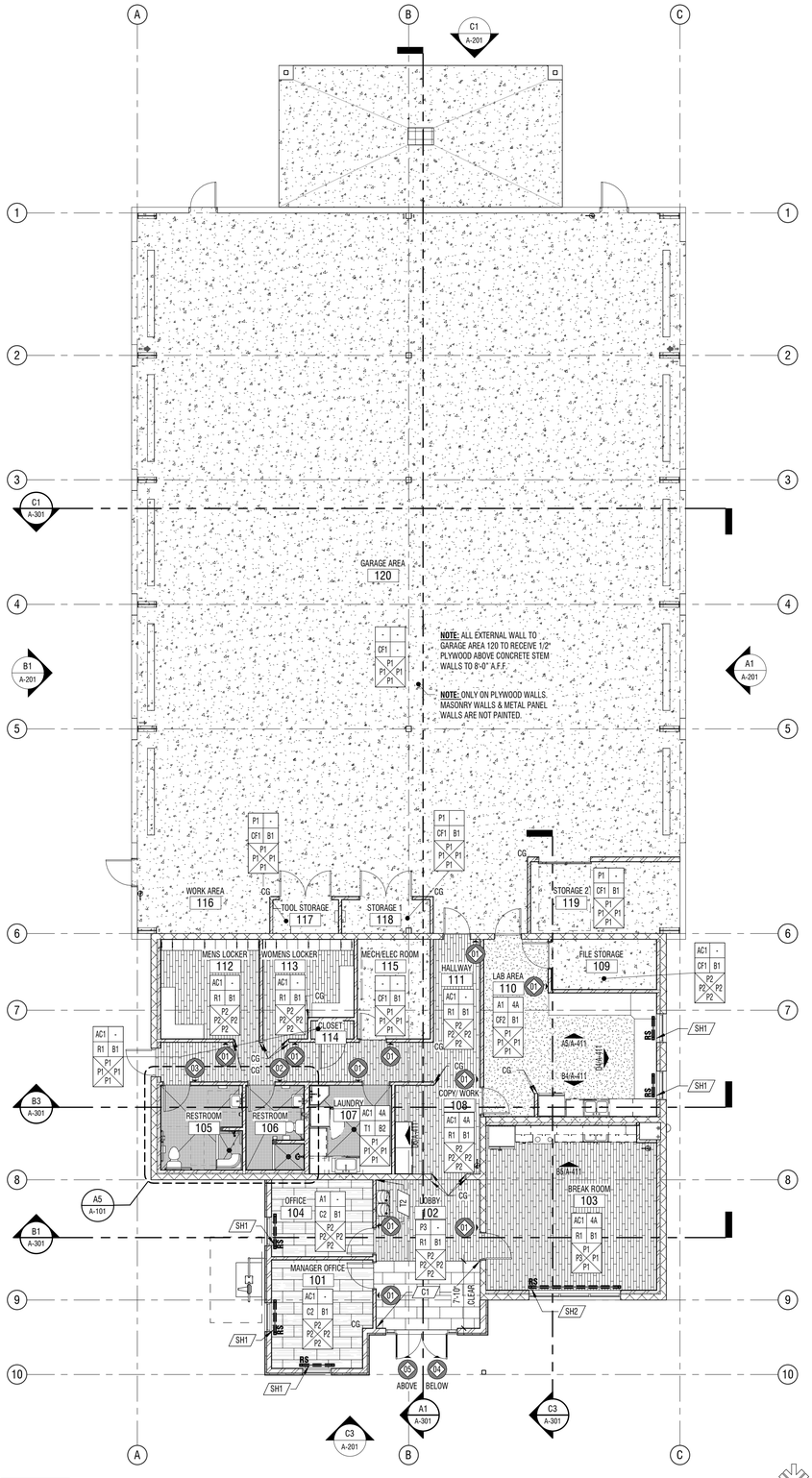


A1 DIMENSION, ANOTATION PLAN

1/8" = 1'-0"

NORTH



A3 FINISH PLAN

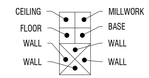
1/8" = 1'-0"

NORTH

GENERAL NOTES

1. GRID LINES ARE TO CENTERLINE OF STUD WALL, FACE OF CONCRETE FOUNDATION TYPICAL, AND FACE OF CMU WALLS TYPICAL U.N.O.
2. DIMENSIONS ARE TO FACE OF STUD WALL, FACE OF MASONRY OR GRID.
3. WALL DOOR JAMBS TO BE LOCATED 3" FROM ADJACENT PERPENDICULAR WALL.
4. SEE SHEET A-511 FOR WALL TYPES.
5. DETAILS WILL BE TO OUTSIDE EDGE OF FRAME. SEE BOTH THE FLOOR PLAN AND EXTERIOR ELEVATIONS FOR ALL WINDOW TYPE REFERENCES.
6. SEAL UTILITY PENETRATIONS IN RATED ASSEMBLIES WITH APPROPRIATE FIRESTOP SYSTEM WHERE OCCURS - INTERIOR.
7. ALL INTERIOR WALLS ARE TO EXTEND TO DECK UNLESS INDICATED OTHERWISE BY NOTE ON SECTION. INSTALL GYP BD 1' 0" ABOVE CEILING HEIGHT @ SUSPENDED CEILINGS.
8. AT RECESSED CABINETS (IE: ELECTRICAL PANELS, FEC, ETC.) IN FIRE RATED WALLS PROVIDE 5 SIDE COVERAGE OF GYP BD IN STUD WALLS TO MAINTAIN INTEGRITY OF FIRE WALL RATING.
9. FE = FIRE EXTINGUISHER
10. TD = TRENCH DRAIN, SEE PLUMBING
11. FD = FLOOR DRAIN, SEE PLUMBING
12. COOKING APPLIANCES RATED FOR DOMESTIC USE ONLY
13. ROOM FINISH TAGS FOR EACH ROOM REPRESENT TYPICAL FINISHES. SPECIFIC WALLS IN SELECTED AREAS MAY HAV MULTIPLE FINISHES WHICH WILL BE INDICATED IN INTERIOR ELEVATIONS.
14. SEE INTERIOR ELEVATIONS FOR ADDITIONAL FINISH INFROMATION
15. SEE REFLECTED CEILING PLANS FOR ADDITIONAL FINISH INFORMATION
16. FOR FINISH LEGEND SEE A-691
17. ROOM FINISH TAG REPRESENTS TYPICAL FINISHES. SPECIFIC WALLS IN SELECTED AREAS WILL HAVE MULTIPLE FINISHES WHICH WILL BE INDICATED BY AN ELEVATION.
18. **CG** (CORNER GUARD) SEE SPECIFICATIONS - COLOR TO BE SELECTED BY ARCHITECT
19. FLOOR MATERIAL TRANSITIONS WILL OCCUR BELOW DOORS. U.N.O.
20. FOR TYPICAL FLOORING TRANSITION DETAILS SEE A-591

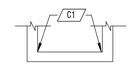
FINISH LEGEND



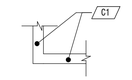
ROOM FINISH TAG

C1

FINISH TAG - INDICATES SPECIFIC APPLIED FINISH



INDICATES FINISH IS APPLIED TO AREA BETWEEN ARROWS



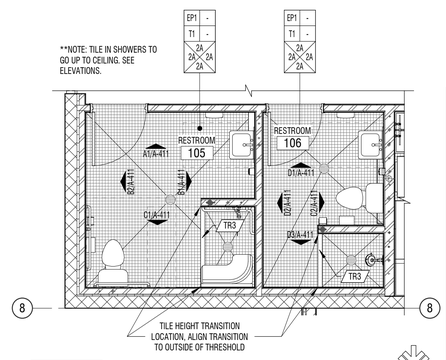
INDICATES FINISH IS APPLIED TO FACE OF SURFACE(S)

RS

INDICATES A MANUAL ROLLER SHADE.

01

INDICATES SIGNAGE LOCATION, SEE SPECIFICATIONS FOR SCHEDULE



A5 ENLARGED FINISH PLAN

RESTROOMS

1/4" = 1'-0"

NORTH

PERMIT SET / BID SET

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LOGAN UT 84321
SALT LAKE CITY UT 84103
255 SOUTH 300 WEST
795 NORTH 400 WEST

CACHE MOSQUITO ABATEMENT
DISTRICT HEADQUARTERS

210 W. 3700 N.
HYDE PARK, UT 84318

MARK:	DATE:	DESCRIPTION:

PROJECT #: 819159
DRAWN BY: ALARCON
CHECKED BY: LEMON
ISSUED: 07.09.2020

STATE OF UTAH
JUNE 09, 2020
RYAN WAYNE LEMON
8668330-0301
LICENCED ARCHITECT

DIMENSION, ANNOTATION, FINISH PLAN

A-101

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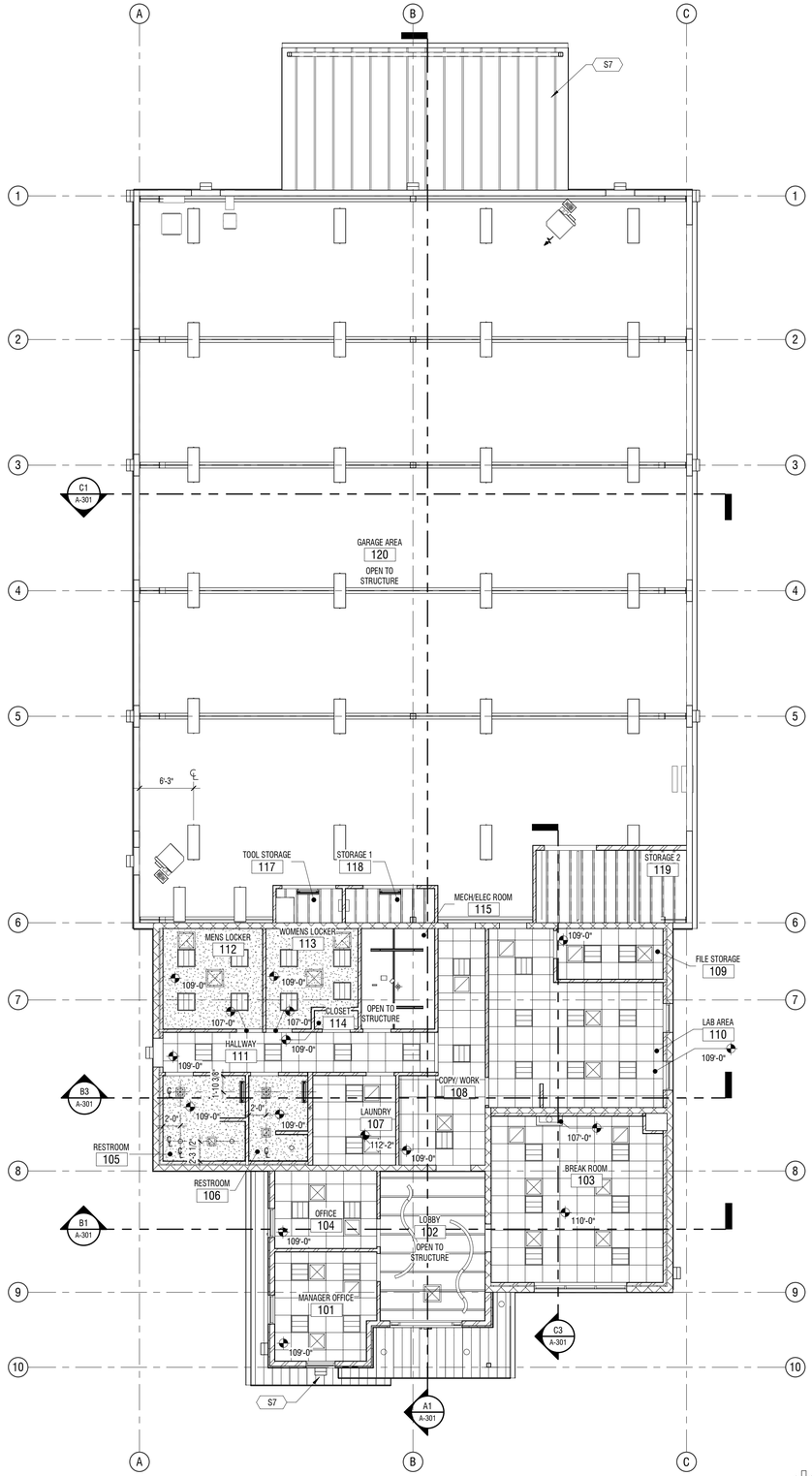
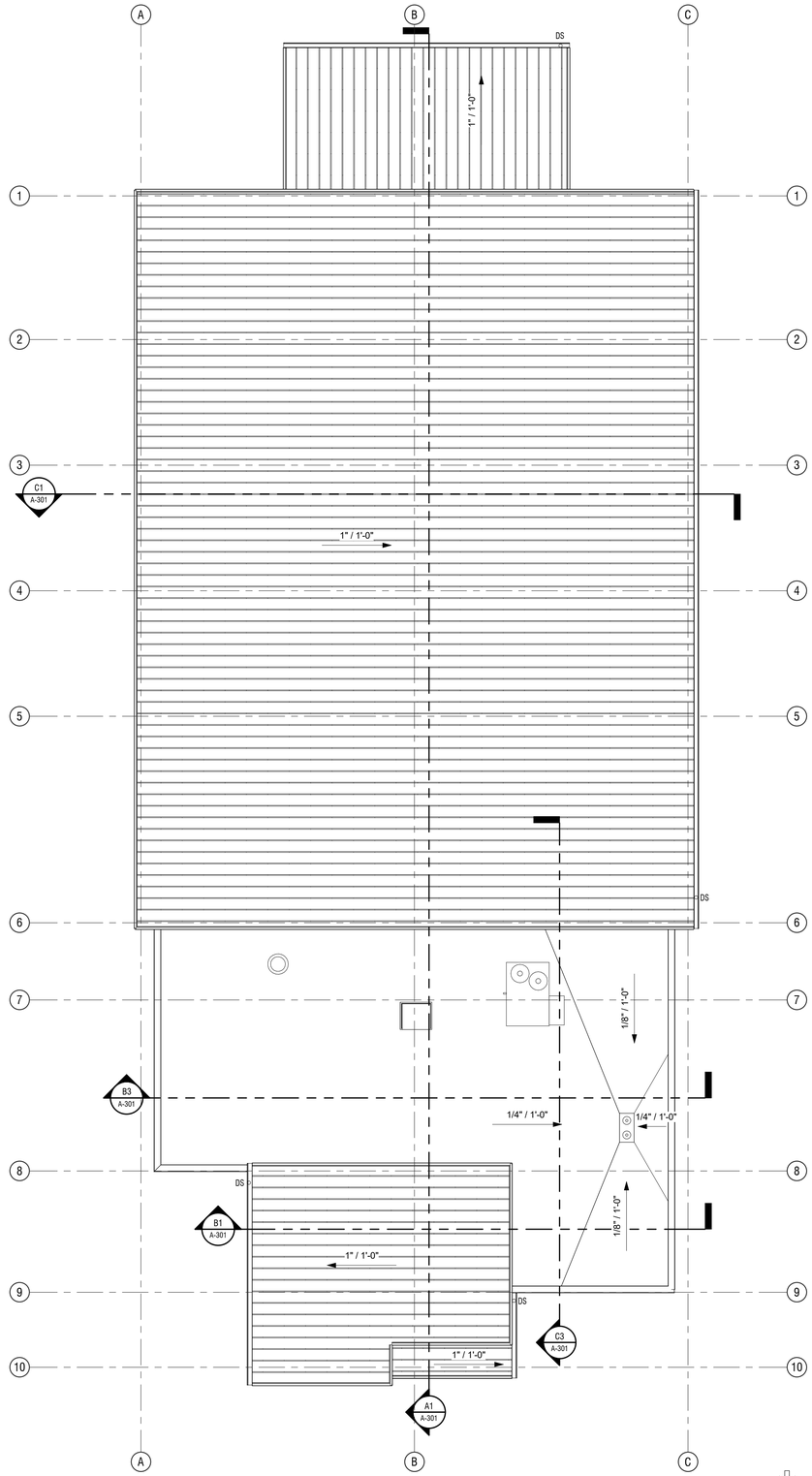


A1 REFLECTIVE CELING PLAN

1/8" = 1'-0"

NORTH



A3 ROOF PLAN

1/8" = 1'-0"

NORTH

GENERAL NOTES

- LEGAL: THE CONSTRUCTION DOCUMENTS FOR THIS PROJECT ARE COMPOSED OF SETS OF DRAWINGS AND SPECIFICATIONS, AND THEREFORE SHALL BE USED AND MAINTAINED IN THEIR ENTIRETY. ANY CONTRACTOR, SUBCONTRACTOR, VENDOR OR PARTY PARTICIPATING IN OR BIDDING ON THIS PROJECT SHALL BE EXPECTED TO PERFORM DUE DILIGENCE TO ENSURE THEIR BID, WORK PERFORMED, AND MATERIALS PROVIDED CONFORMS TO THE INFORMATION PROVIDED WITHIN ANY AND ALL SHEETS OF DRAWINGS AND SPECIFICATIONS, INCLUDING, BUT NOT LIMITED TO, ANY SUBSEQUENT ADDENDA OR CLARIFICATIONS THAT MAY BE ISSUED RELEVANT TO THEIR SCOPE OF WORK. PROJECT SCOPE MAY BE DEFINED WITHIN SPECIFICATIONS AND/OR DRAWINGS.

  ADDITIONALLY, DRAWINGS MAY NOT BE RE-SCALED WHEN PRINTED, WRITTEN DIMENSIONS SHALL HAVE PRECEDENCE, AND LARGER SCALE DRAWINGS SHALL HAVE PRECEDENCE OVER SMALLER SCALE DRAWINGS.

  ANY DEVIATION FROM OR CONFLICT WITHIN THE DRAWINGS AND/OR SPECIFICATIONS, MUST BE SUBMITTED TO AND APPROVED BY THE ARCHITECT BEFORE CONTINUING THAT PORTION OF WORK.
- KEYNOTES: THE FIRST TWO NUMBERS REPRESENT THE RELATED CSI MASTERFORMAT DIVISION. THE SECOND SET OF NUMBERS REPRESENTS AN IDENTIFYING MARK VALUE. NOT ALL VALUES MAY BE USED OR OCCUR IN THE DOCUMENT SET.

  ADDITIONALLY, KEYNOTES RETAIN THEIR ASSIGNED VALUE UNIVERSALLY THROUGHOUT THE SET. THE KEYNOTES LISTED BELOW, REPRESENT THE KEYNOTES FOUND AND UTILIZED ON THIS SHEET AND EACH LIST WILL DIFFER RESPECTIVE TO ITS' SHEET. THEREFORE, BASED ON ACTUAL KEYNOTES UTILIZED ON A GIVEN SHEET OF DRAWINGS, GAPS IN THE SEQUENCING WILL OCCUR.
- CONTRACTOR SHALL VERIFY LAY-OUT OF STRUCTURAL, MECHANICAL, AND ELECTRICAL.
- ALL INTERIOR DIMENSIONS ARE TO/FROM FACE OF STUD / MASONRY. ALL EXTERIOR DIMENSIONS ARE TO/FROM FACE OF GRID/FOUNDATION. DIMENSIONS MARKED 'CLEAR' OR 'CLR' ARE FROM FACE OF FINISH TO FACE OF FINISH AND SHALL BE MAINTAINED AND CANNOT BE FIELD ADJUSTED WITHOUT PRIOR APPROVAL OF THE ARCHITECT.
- MECHANICAL AND ELECTRICAL CONTRACTORS ARE TO COORDINATE WORK W/ SPRINKLER CONTRACTOR PRIOR TO START OF WORK TO AVOID CEILING CONFLICTS.
- CEILING HEIGHT IS B.O. FINISHED CEILING HEIGHT ABOVE FINISHED FLOOR.
- FIXTURES WITHIN A.C.T. TO BE CENTERED IN GRID U.N.O.
- EXTERIOR RATING ON ALL FIXTURES LOCATED OUTSIDE OF BUILDING SHELL.
- MECHANICAL, ELECTRICAL, SPRINKLER AND DRAIN CONTRACTORS TO COORDINATE PRIOR TO CONSTRUCTION TO AVOID CONFLICTS BETWEEN SYSTEMS.
- SEE LIGHTING FIXTURE SPECIFICATIONS FOR MOUNTING HEIGHTS.
- LIGHT FIXTURES MOUNTED BETWEEN OPEN TO STRUCTURE JOISTS ARE TO BE CENTERED BETWEEN JOISTS, UNLESS INDICATED OTHERWISE.
- DS = DOWNSPOUT - COLOR TO MATCH ADJACENT PANEL OR MATERIAL

LEGEND

MATERIALS

- 2'-0" x 4'-0" SUSPENDED ACOUSTICAL LAY-IN CEILING SYSTEM 2X2 SCORED TILES
- PAINTED GYPSUM BOARD CEILINGS TYPICAL, U.N.O.
- 12" ALUMINUM SOFFIT PANELS
- MEMBRANE ROOF

SYMBOLS

- 2x2, 2x4 LAY IN FIXTURE
- LINEAR PENDANT TROFFER FIXTURE
- RECESSED CAN FIXTURE
- LINEAR WALL MOUNTED FIXTURE
- INTERIOR PENDANT CAN FIXTURE
- WALL SCONCE
- HIGH BAY LIGHT FIXTURE
- SUSPENDED LINEAR FIXTURE
- SUPPLY OR FRESH AIR GRILLE
- RETURN OR RELIEF AIR GRILLE
- EXHAUST FAN
- DECORATIVE LIGHTING

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LOGAN UT 84321
255 SOUTH 300 WEST
SALT LAKE CITY UT 84103
795 NORTH 400 WEST

CACHE MOSQUITO ABATEMENT
DISTRICT HEADQUARTERS
210 W. 3700 N.
HYDE PARK, UT 84318

MARK:	DESCRIPTION:	DATE:

PROJECT #:	819159
DRAWN BY:	HARRIS
CHECKED BY:	LEMON
ISSUED:	07.09.2020

STATE OF UTAH
JUNE 09, 2020
RYAN WAYNE LEMON
8668330-0301
LICENSED ARCHITECT

PERMIT SET / BID SET

REFLECTED CEILING, ROOF PLAN

A-102

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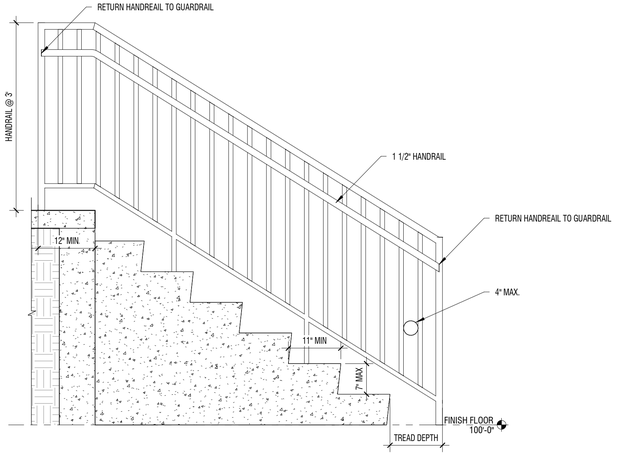
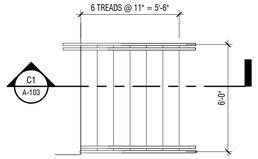
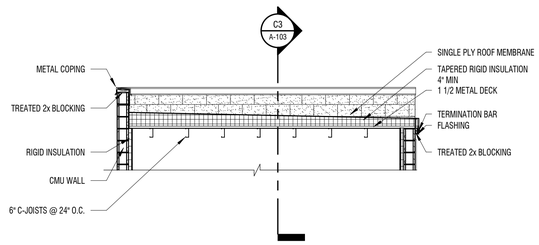


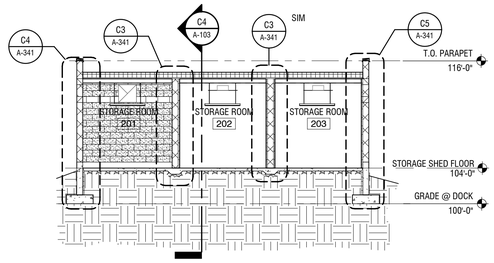
C1 STAIR SECTION
3/4" = 1'-0"



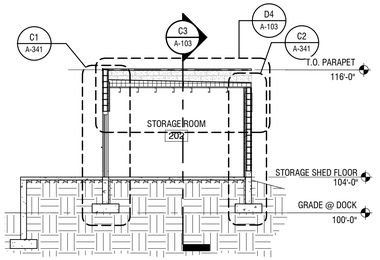
D3 STAIR PLAN
1/4" = 1'-0"



D4 SHED ROOF DETAIL
1/4" = 1'-0"



C3 SHED SECTION
1/8" = 1'-0"



C4 SHED SECTION
1/8" = 1'-0"

GENERAL NOTES

1. GRID LINES ARE TO CENTERLINE OF STUD WALL, FACE OF CONCRETE FOUNDATION TYPICAL, AND FACE OF CMU WALLS TYPICAL U.N.O.
2. DIMENSIONS ARE TO FACE OF STUD WALL, FACE OF MASONRY OR GRID.
3. WALL DOOR JAMBS TO BE LOCATED (X)" FROM ADJACENT PERPENDICULAR WALL.
4. SEE ANNOTATION PLAN SHEET FOR WALL TYPES SHOWN AS OF WALL TYPES.
5. ALUMINUM WINDOW TYPES ARE SHOWN AS
6. DETAILS WILL BE TO OUTSIDE EDGE OF FRAME. SEE BOTH THE FLOOR PLAN AND EXTERIOR ELEVATIONS FOR ALL WINDOW TYPE REFERENCES.
7. SEAL UTILITY PENETRATIONS IN RATED ASSEMBLIES WITH APPROPRIATE FIRESTOP SYSTEM WHERE OCCURS - INTERIOR.
8. ALL INTERIOR WALLS ARE TO EXTEND TO DECK UNLESS INDICATED OTHERWISE BY NOTE ON SECTION.
9. AT RECESSED CABINETS (IE: ELECTRICAL PANELS, FEC AND ETC) IN FIRE RATED WALLS PROVIDE 5 SIDE COVERAGE OF GYP BD IN STUD WALLS TO MAINTAIN INTEGRITY OF FIRE WALL RATING.
10. FE = FIRE EXTINGUISHER
11. FD = FLOOR DRAIN

KEYNOTES

MARK	DESCRIPTION
DIVISION 03: CONCRETE	
C1	CAST-IN-PLACE CONCRETE 48" ABOVE FLOOR LEVEL
C2	CAST-IN-PLACE CONCRETE 4' LOADING DOCK
C3	CAST-IN-PLACE CONCRETE 8" ABOVE FLOOR LEVEL
DIVISION 04: UNIT MASONRY	
M1	SPLIT FACE CMU 8"X8"X16", AMCOR, (COLOR: AMBER GREY)
M2	CONCRETE MASONRY UNITS 8"X8"X16", AMCOR, (COLOR: EBONY)
DIVISION 05: METALS	
S1	METAL SIDING, MBCI, MASTERLINE 16 HORIZONTAL, (COLOR: HARBOR BLUE)
S2	METAL SIDING, MBCI, FW-120, (COLOR: TUNDRA)
S3	METAL SIDING, MBCI, FW-120, (COLOR: HAWAIIAN BLUE)
S4	METAL FASCIA, MBCI (COLOR: CHARCOAL GRAY)
S5	METAL ROOF, MBCI, BATTENLOCK HS (COLOR:CHARCOAL GRAY)
S6	9" TALL ADDRESS LETTERS - APPROVED BY ARCHITECT
S7	METAL SOFFIT, MBCI, FW-120 (COLOR: CHARCOAL GRAY
S8	METAL CAP FLASHING (COLOR: CHARCOAL GRAY)
DIVISION 6: WOOD, PLASTIC, COMPOSITES	
T1	TRANSLUCENT WALL PANELS, MBCI, PBR-HW1490, COLOR: WHITE
T2	CACHE MOSQUITO ABATEMENT DISTRICT SIGN - APPROVED BY ARCHITECT
DIVISION 09: FINISHES	
P3	SEE FINISH SCHEDULE AT A-691

WALL TYPE LEGEND

- 8" CMU CONTRACTOR PROVIDED, CONTRACTOR INSTALLED, SEE ANNOTATION PLAN FOR WALL TYPE LOCATOINS
- BASIC METAL STUD WALLS CONTRACTOR PROVIDED, CONTRACTOR INSTALLED. SEE ANNOTATION PLAN FOR WALL TYPE LOCATIONS

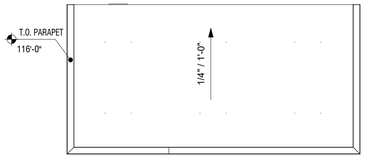
LEGEND

MATERIALS

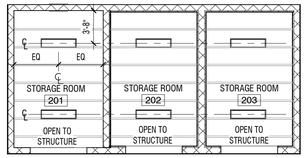
- 2'-0" x 4'-0" SUSPENDED ACOUSTICAL LAY-IN CEILING SYSTEM 2X2 SCORED TILES
- PAINTED GYPSUM BOARD CEILINGS TYPICAL, U.N.O.
- 12" ALUMINUM SOFFIT PANELS
- MEMBRANE ROOF

SYMBOLS

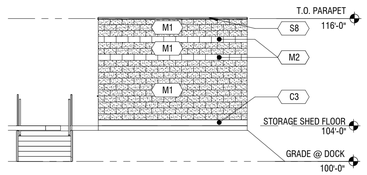
- 2x2, 2x4 LAY IN FIXTURE
- LINEAR PENDANT TROFFER FIXTURE
- RECESSED CAN FIXTURE
- LINEAR WALL MOUNTED FIXTURE
- INTERIOR PENDANT CAN FIXTURE
- WALL SCONCE
- HIGH BAY LIGHT FIXTURE
- SUSPENDED LINEAR FIXTURE
- SUPPLY OR FRESH AIR GRILLE
- RETURN OR RELIEF AIR GRILLE
- EXHAUST FAN
- DECORATIVE LIGHTING



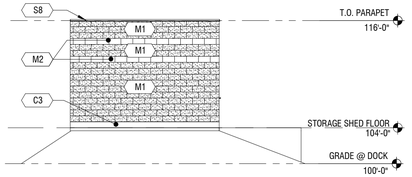
B1 ROOF PLAN
1/8" = 1'-0"



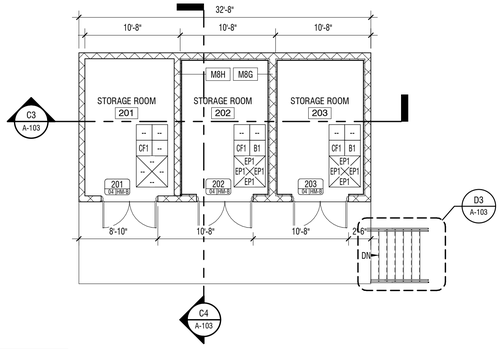
B2 REFLECTIVE CELING PLAN
1/8" = 1'-0"



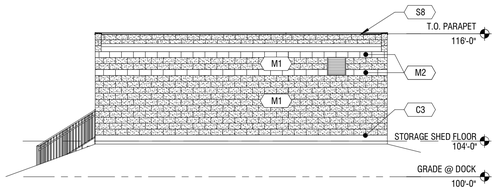
B3 ELEVATION
1/8" = 1'-0"



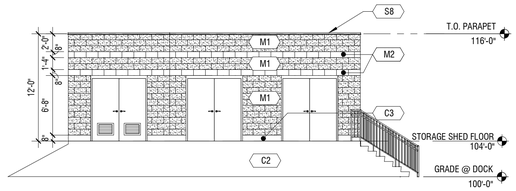
B4 ELEVATION
1/8" = 1'-0"



A1 ANOTATION/ FINISH/ PLAN
1/8" = 1'-0"



A2 ELEVATION
1/8" = 1'-0"



A3 ELEVATION
1/8" = 1'-0"

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LOGAN UT 84321
SALT LAKE CITY UT 84103
255 SOUTH 300 WEST
795 NORTH 400 WEST

CACHE MOSQUITO ABATEMENT
DISTRICT HEADQUARTERS
210 W. 3700 N.
HYDE PARK, UT 84318

DESCRIPTION: | DATE: | MARK:

PROJECT #: 819159
DRAWN BY: HARRIS
CHECKED BY: LEMON
ISSUED: 07.09.2020

STATE OF UTAH
JUNE 09, 2020
RYAN WAYNE LEMON
8668330-0301
LICENSED ARCHITECT

PERMIT SET / BID SET

SHED PLANS
A-103

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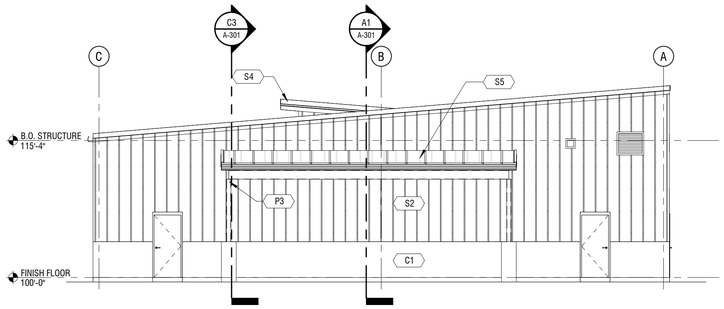
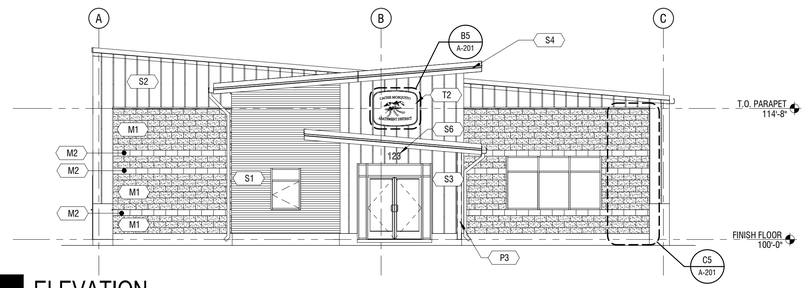
KEYNOTES

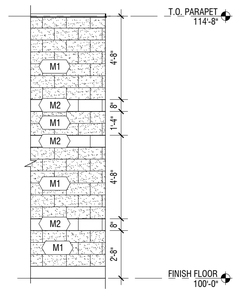
MARK	DESCRIPTION
DIVISION 03: CONCRETE	
C1	CAST-IN-PLACE CONCRETE 48" ABOVE FLOOR LEVEL
C2	CAST-IN-PLACE CONCRETE 4' LOADING DOCK
C3	CAST-IN-PLACE CONCRETE 8" ABOVE FLOOR LEVEL
DIVISION 04: UNIT MASONRY	
M1	SPLIT FACE CMU 8"X8"X16", AMCOR, (COLOR: AMBER GREY)
M2	CONCRETE MASONRY UNITS 8"X8"X16", AMCOR, (COLOR: EBONY)
DIVISION 05: METALS	
S1	METAL SIDING, MBCI, MASTERLINE 16 HORIZONTAL, (COLOR: HARBOR BLUE)
S2	METAL SIDING, MBCI, FW-120, (COLOR: TUNDRA)
S3	METAL SIDING, MBCI, FW-120, (COLOR: HAWAIIAN BLUE)
S4	METAL FASCIA, MBCI (COLOR: CHARCOAL GRAY)
S5	METAL ROOF, MBCI, BATTENLOCK HS (COLOR:CHARCOAL GRAY)
S6	9" TALL ADDRESS LETTERS - APPROVED BY ARCHITECT
S7	METAL SOFFIT, MBCI, FW-120 (COLOR: CHARCOAL GRAY
S8	METAL CAP FLASHING (COLOR: CHARCOAL GRAY)
DIVISION 6: WOOD, PLASTIC, COMPOSITES	
T1	TRANSLUCENT WALL PANELS, MBCI, PBR-HW1490, COLOR: WHITE
T2	CACHE MOSQUITO ABATEMENT DISTRICT SIGN - APPROVED BY ARCHITECT
DIVISION 09: FINISHES	
P3	SEE FINISH SCHEDULE AT A-691



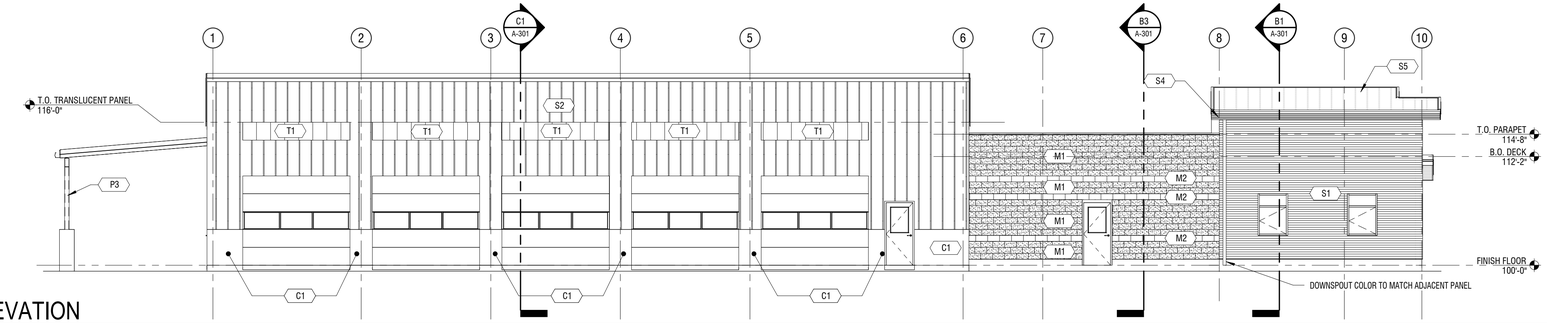
C1 ELEVATION
1/8" = 1'-0"



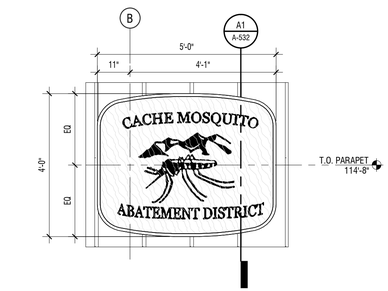
C3 ELEVATION
1/8" = 1'-0"



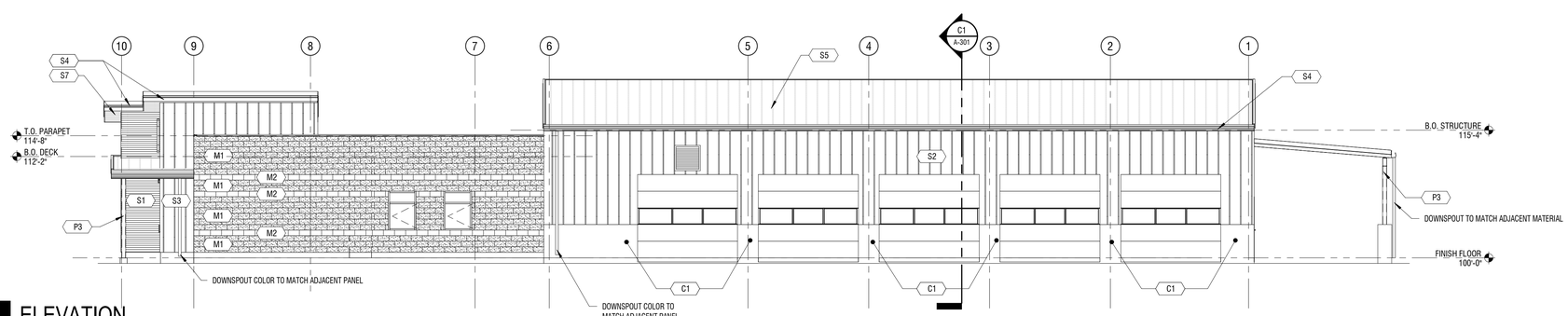
C5 COURSING LAYOUT
1/4" = 1'-0"



B1 ELEVATION
1/8" = 1'-0"



B5 BUILDING SIGN
1/2" = 1'-0"



A1 ELEVATION
1/8" = 1'-0"

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SALT LAKE CITY UT 84103
795 NORTH 400 WEST

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DISTRICT HEADQUARTERS

210 W. 3700 N.
HYDE PARK, UT 84318

MARK:	DATE:	DESCRIPTION:

PROJECT #: 819159
DRAWN BY: HARRIS
CHECKED BY: LEMON
ISSUED: 07.09.2020

STATE OF UTAH
JUNE 09, 2020
RYAN WAYNE
LEMON
8668330-0301
LICENCED ARCHITECT

PERMIT SET / BID SET

EXTERIOR
ELEVATIONS

A-201

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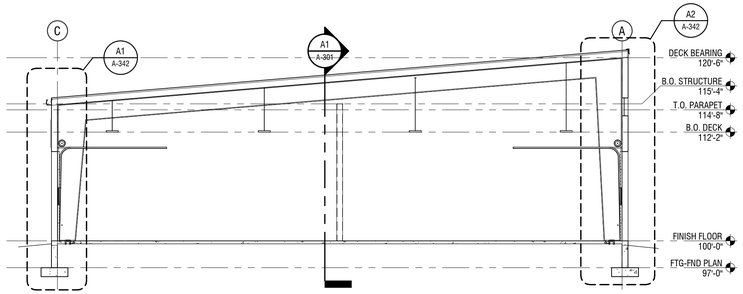
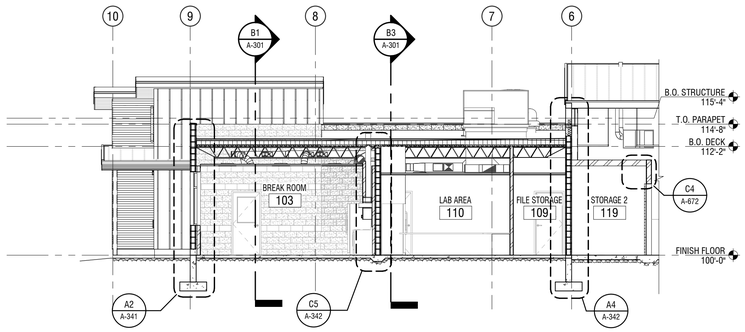


C1 BUILDING SECTION

1/8" = 1'-0"



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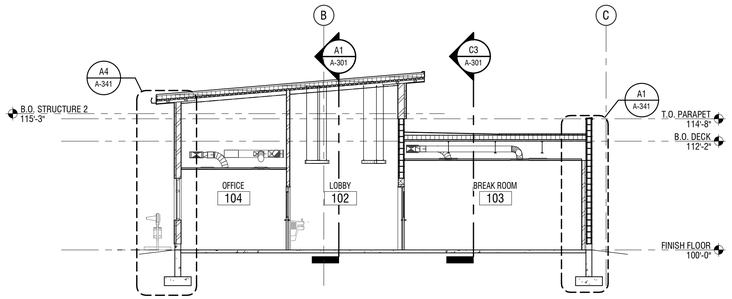
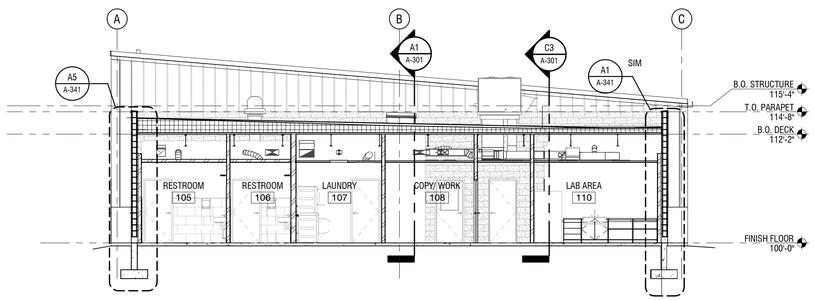
1/8" = 1'-0"



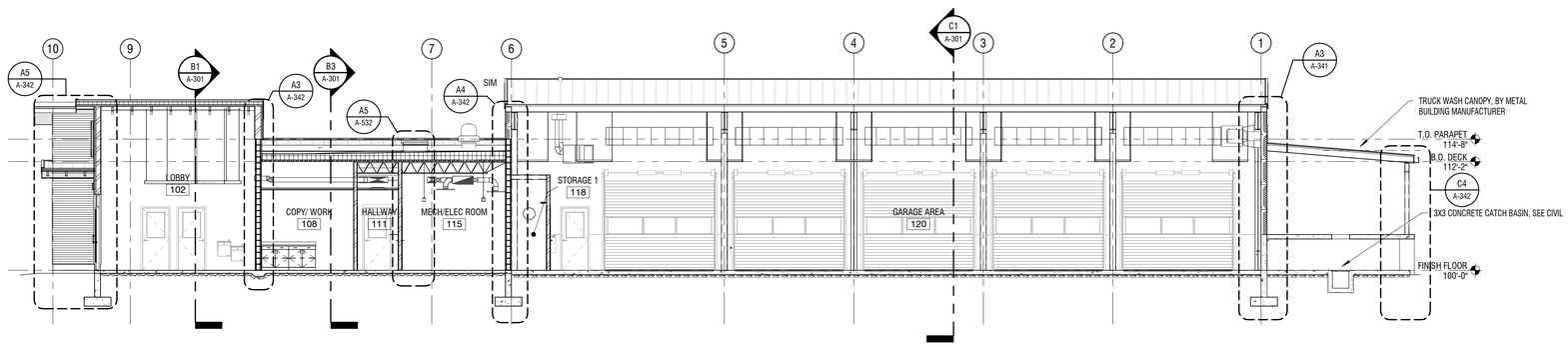
B1 BUILDING SECTION

1/8" = 1'-0"



B3 BUILDING SECTION

1/8" = 1'-0"



A1 BUILDING SECTION

1/8" = 1'-0"

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795 NORTH 400 WEST SALT LAKE CITY UT 84103

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210 W. 3700 N.
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MARK:	DESCRIPTION:	DATE:

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PROJECT #:	819159
DRAWN BY:	ALARCON
CHECKED BY:	LEMON
ISSUED:	07.09.2020

STATE OF UTAH
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RYAN WAYNE LEMON
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BUILDING SECTIONS

A-301

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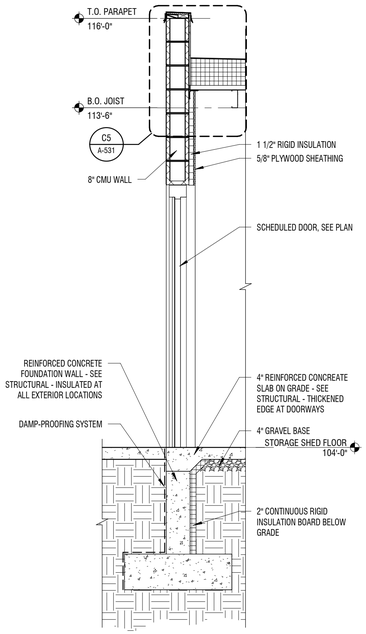
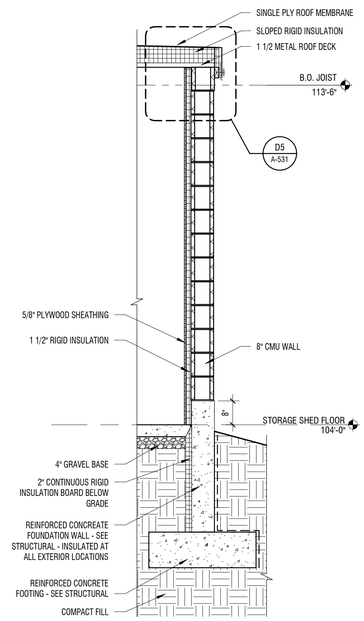


C1 SHED WALL SECTION
1/2" = 1'-0"



C2 SHED WALL SECTION
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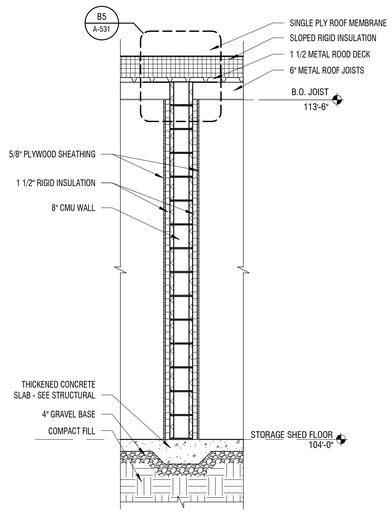
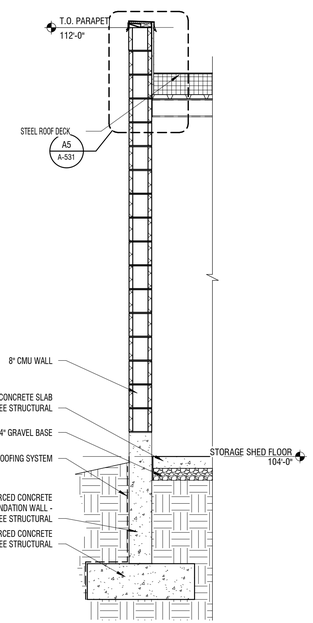
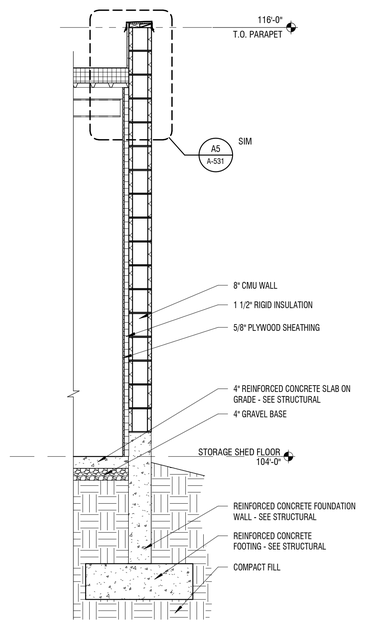


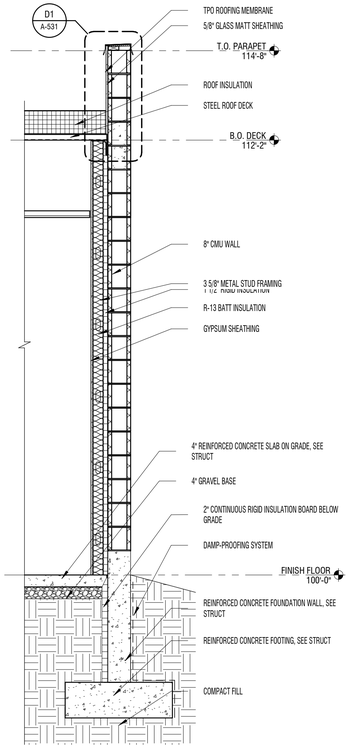
C3 SHED WALL SECTION
1/2" = 1'-0"



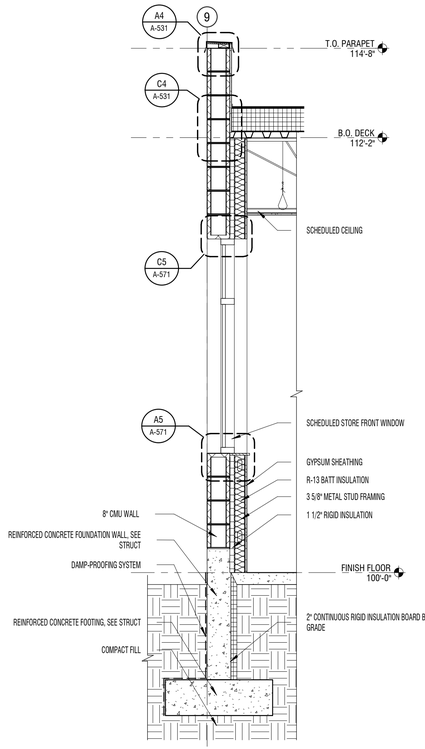
C4 SHED WALL SECTION
1/2" = 1'-0"



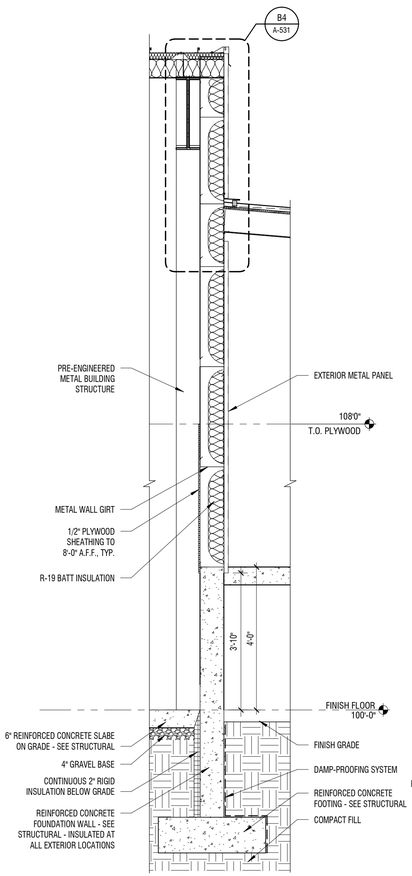
C5 SHED WALL SECTION
1/2" = 1'-0"



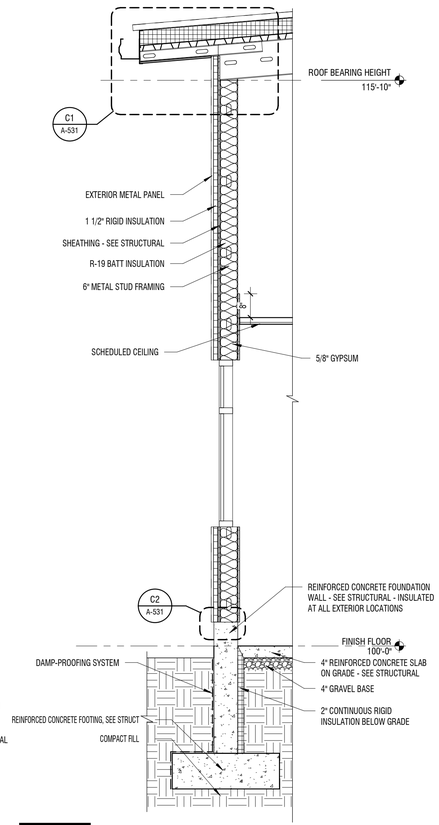
A1 WALL SECTION
1/2" = 1'-0"



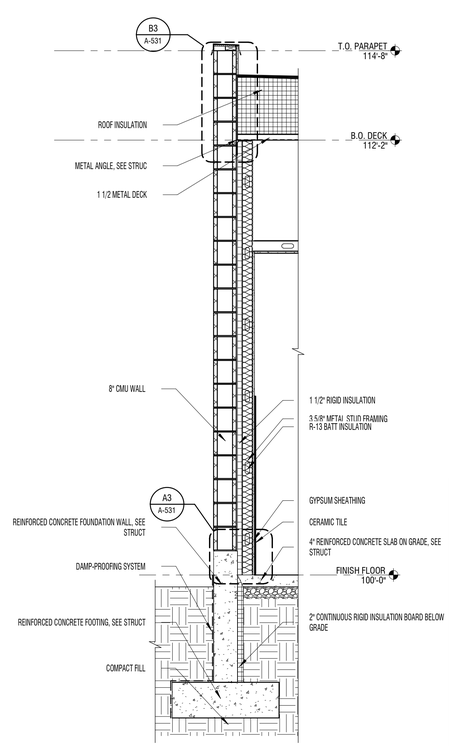
A2 WALL SECTION
1/2" = 1'-0"



A3 WALL SECTION
1/2" = 1'-0"



A4 WALL SECTION
1/2" = 1'-0"



A5 WALL SECTION
1/2" = 1'-0"

PERMIT SET / BID SET

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CACHE MOSQUITO ABATEMENT
DISTRICT HEADQUARTERS
210 W. 3700 N.
HYDE PARK, UT 84318

MARK:	DATE:	DESCRIPTION:

PROJECT #: 819159
DRAWN BY: HARRIS
CHECKED BY: LEMON
ISSUED: 07.09.2020

STATE OF UTAH
JUNE 09, 2020
RYAN WAYNE LEMON
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WALL SECTIONS
A-341

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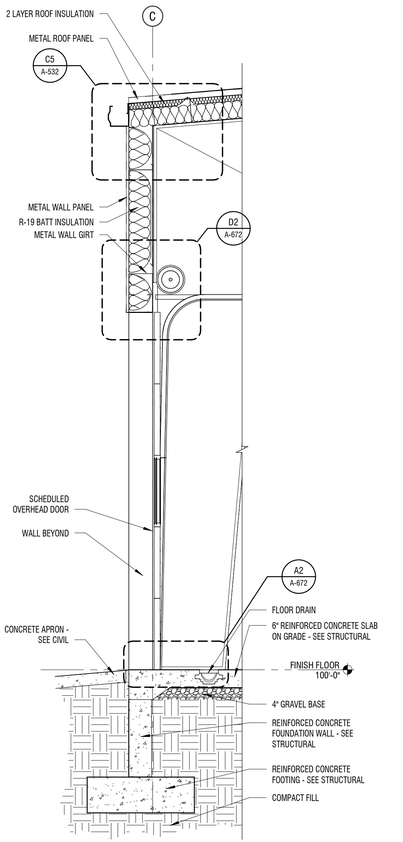
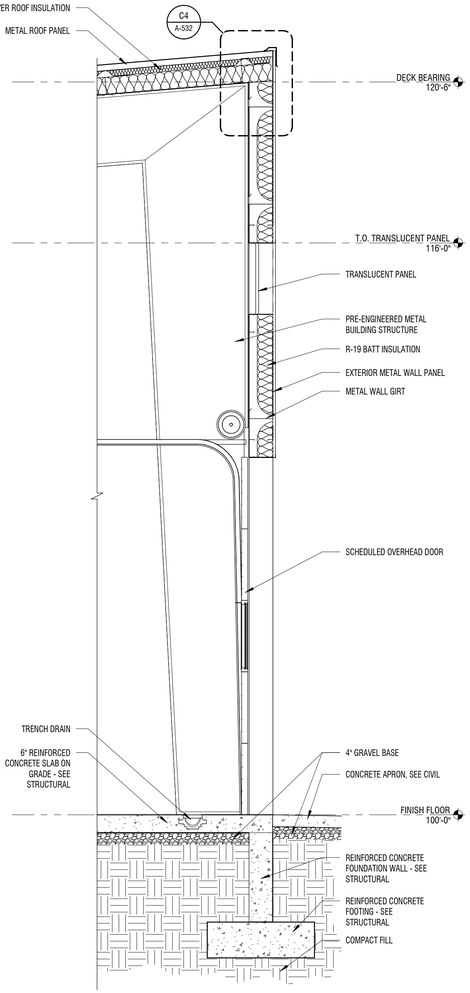


A1 WALL SECTION

1/2" = 1'-0"

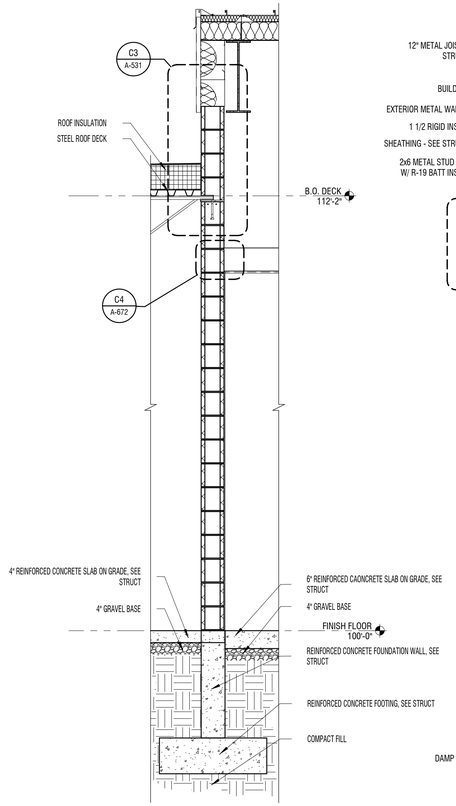


A2 WALL SECTION

1/2" = 1'-0"

A3 WALL SECTION

1/2" = 1'-0"



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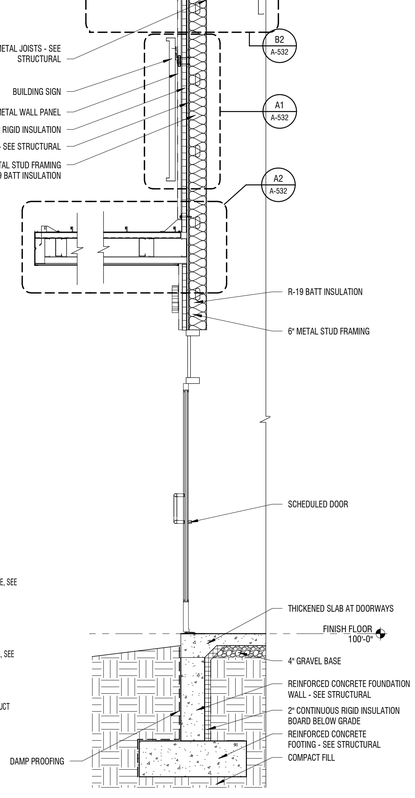
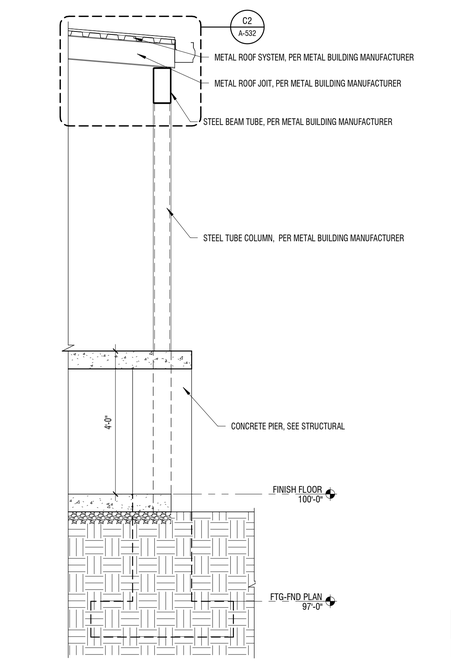
1/2" = 1'-0"



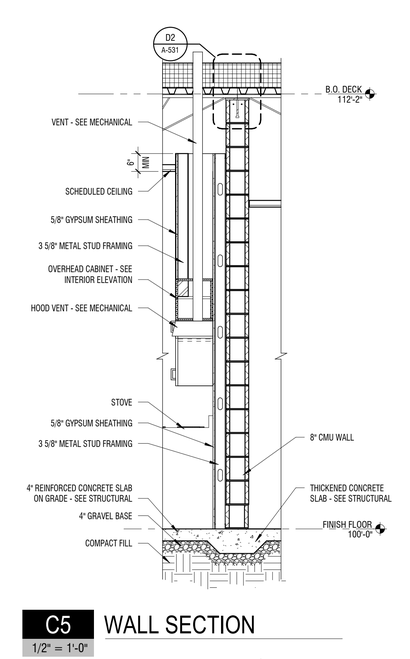
A5 WALL SECTION

1/2" = 1'-0"



C4 WALL SECTION

1/2" = 1'-0"



C5 WALL SECTION

1/2" = 1'-0"

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CACHE MOSQUITO ABATEMENT
DISTRICT HEADQUARTERS

210 W. 3700 N.
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STATE OF UTAH
JUNE 09, 2020
RYAN WAYNE LEMON
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WALL SECTIONS

A-342

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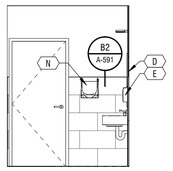
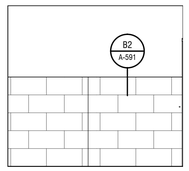
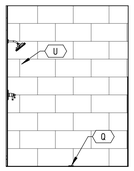
A B C D



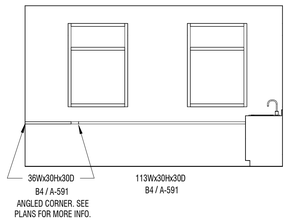
D1 INTERIOR ELEVATION
1/4" = 1'-0"



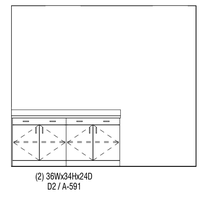
D2 INTERIOR ELEVATION
1/4" = 1'-0"



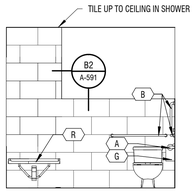
D3 INTERIOR ELEVATION
1/4" = 1'-0"



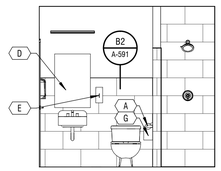
D4 INTERIOR ELEVATION
1/4" = 1'-0"



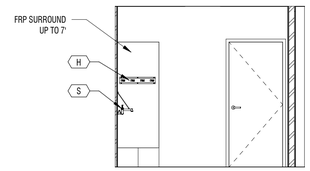
D5 INTERIOR ELEVATION
1/4" = 1'-0"



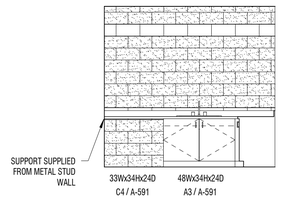
C1 INTERIOR ELEVATION
1/4" = 1'-0"



C2 INTERIOR ELEVATION
1/4" = 1'-0"



C3 INTERIOR ELEVATION
1/4" = 1'-0"



C4 INTERIOR ELEVATION
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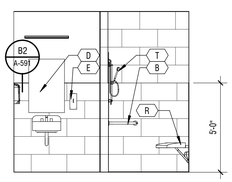
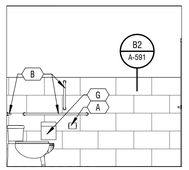
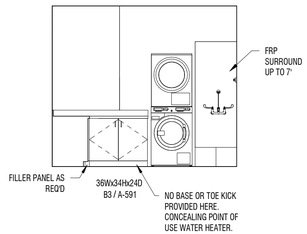


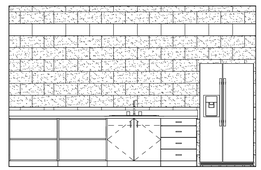
B1 INTERIOR ELEVATION
1/4" = 1'-0"



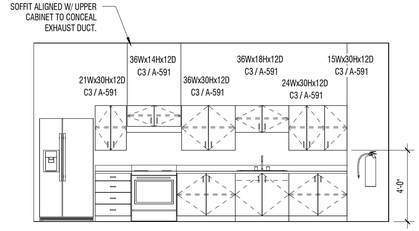
B2 INTERIOR ELEVATION
1/4" = 1'-0"



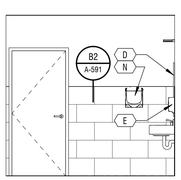
B3 INTERIOR ELEVATION
1/4" = 1'-0"



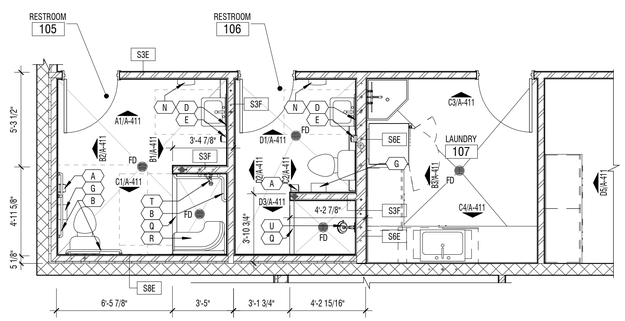
B4 INTERIOR ELEVATION
1/4" = 1'-0"



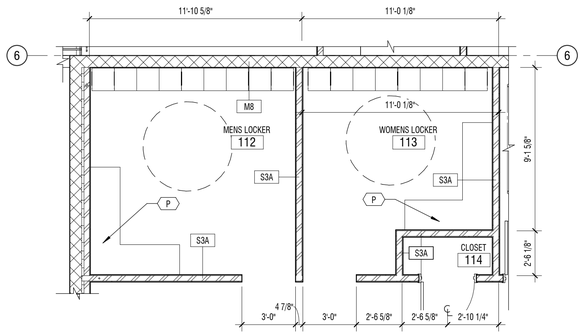
B5 BREAK ROOM NORTH
1/4" = 1'-0"



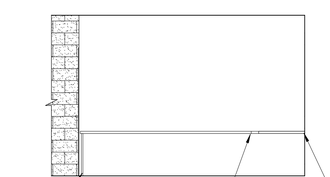
A1 INTERIOR ELEVATION
1/4" = 1'-0"



A2 ENLARGE PLAN
1/4" = 1'-0"
RESTROOM



A4 ENLARGED PLAN
1/4" = 1'-0"
LOCKERS



A5 INTERIOR ELEVATION
1/4" = 1'-0"

GENERAL NOTES

1. PROVIDE SPACERS WHERE GAPS OCCUR DUE TO TILE TO GYP CHANGE UNDER A SINGLE OBJECT SUCH AS: GRAB BARS, MIRRORS, ETC.
2. MILLWORK SIZES ARE INDICATED ON ELEVATIONS. WIDTH x HEIGHT(T.O. COUNTER TOP) x DEPTH
3. DETAILS FOR MILLWORK ARE PROVIDED ON ELEVATIONS BELOW SIZE.
4. T.O. COUNTER TOPS ARE **NOT** TO EXCEED 34" ABOVE FINISH FLOOR U.N.O.
5. REMOVABLE BASE MUST BE PROVIDED AT ALL SINKS IN PUBLIC AND EMPLOYEE ASSESS AREAS U.N.O.

LEGEND

- (A) TOILET TISSUE DISPENSER
  CONTRACTOR PROVIDED, CONTRACTOR INSTALLED.
- (B) GRAB BAR
  LENGTH INDICATED ON PLAN
- (C) NOT USED
- (D) MIRROR
  SIZE INDICATED ON PLAN
- (E) SOAP DISPENSER CONTRACTOR PROVIDED, CONTRACTOR INSTALLED.
- (G) FEMININE NAPKIN DISPOSAL
  CONTRACTOR PROVIDED, CONTRACTOR INSTALLED.
- (H) MOP & BROOM HOLDER
  LENGTH INDICATED ON PLANS
- (K) DRAIN PIPE PROTECTION
  CONTRACTOR PROVIDED, CONTRACTOR INSTALLED.
- (L) ROBE HOOK
  CONTRACTOR PROVIDED, CONTRACTOR INSTALLED
- (M) LOCKERS - CONTRACTOR PROVIDED, CONTRACTOR INSTALLED
  SEE SHEET A-401 FOR MORE INFORMATION
- (N) ELECTIC AIR HAND DRYER
  CONTRACTOR PROVIDED, CONTRACTOR INSTALLED.
- (P) ADA BENCH - CONTRACTOR PROVIDED, CONTRACTOR INSTALLED.
- (Q) GRANITE THRESHOLD
- (R) ADA SHOWER SEAT
- (S) JANITORIAL SERVICE FAUCET
- (T) ADA HANDHELD SHOWER WAND & WATER CONTROL
- (U) SHOWER HEAD & WATER CONTROL

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CACHE MOSQUITO ABATEMENT
DISTRICT HEADQUARTERS
210 W. 3700 N.
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PROJECT #: 819159
DRAWN BY: ALARCON
CHECKED BY: LEMON
ISSUED: 07.09.2020

STATE OF UTAH
JUNE 09, 2020
RYAN WAYNE
LEMON
8668330-0301
LICENSED ARCHITECT

PERMIT SET / BID SET

ENLARGED PLANS
A-411

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7/8/2020 11:19:59 AM C:\Users\mlee\Documents\Cache MAD_mlee@DSAR.rvt

WALL TYPES

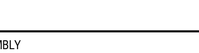
MARK	ASSEMBLY	FIRE RATING
S6L	1/2" PLYWOOD SHEATHING 6" METAL STUD FRAMING @ 16" O.C. 1/2" PLYWOOD SHEATHING	N/A TESTING SOURCE: N/A STC RATING N/A TESTING SOURCE: N/A
DESCRIPTION: N/A		

MARK	ASSEMBLY	FIRE RATING
S3B	5/8" TYPE 'X' GYPSUM BOARD 3-5/8" METAL STUD FRAMING @ 16" O.C.	N/A TESTING SOURCE: N/A STC RATING N/A TESTING SOURCE: N/A
DESCRIPTION: N/A		

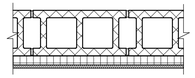
MARK	ASSEMBLY	FIRE RATING
S6E	TILE OVER LATEX-PORTLAND CEMENT MORTAR OR ORGANIC ADHESIVE BOND COAT WHERE OCCURS 5/8" TILE BACKER BOARD, 5/8" TYPE 'X' GYPSUM BOARD ABOVE WHERE OCCURS 6" METAL STUD FRAMING @ 16" O.C. 5/8" TYPE 'X' GYPSUM BOARD	N/A TESTING SOURCE: N/A STC RATING N/A TESTING SOURCE: N/A
DESCRIPTION: N/A		

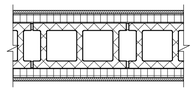
MARK	ASSEMBLY	FIRE RATING
S3L	1/2" PLYWOOD SHEATHING 3-5/8" METAL STUD FRAMING @ 16" O.C. 1/2" PLYWOOD SHEATHING	N/A TESTING SOURCE: N/A STC RATING N/A TESTING SOURCE: N/A
DESCRIPTION: N/A		

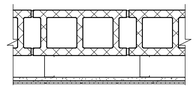
MARK	ASSEMBLY	FIRE RATING
S3F	TILE OVER LATEX-PORTLAND CEMENT MORTAR OR ORGANIC ADHESIVE BOND COAT WHERE OCCURS 5/8" TILE BACKER BOARD, 5/8" TYPE 'X' GYPSUM BOARD ABOVE WHERE OCCURS 3-5/8" METAL STUD FRAMING @ 16" O.C. 5/8" TILE BACKER BOARD, 5/8" TYPE 'X' GYPSUM BOARD ABOVE WHERE OCCURS TILE OVER LATEX-PORTLAND CEMENT MORTAR OR ORGANIC ADHESIVE BOND COAT WHERE OCCURS	N/A TESTING SOURCE: N/A STC RATING N/A TESTING SOURCE: N/A
DESCRIPTION: N/A		

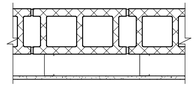
MARK	ASSEMBLY	FIRE RATING
S3E	 TILE OVER LATEX-PORTLAND CEMENT MORTAR OR ORGANIC ADHESIVE BOND COAT WHERE OCCURS 5/8" TILE BACKER BOARD, 5/8" TYPE 'X' GYPSUM BOARD ABOVE WHERE OCCURS 3-5/8" METAL STUD FRAMING @ 16" O.C. 5/8" TYPE 'X' GYPSUM BOARD	N/A TESTING SOURCE: N/A STC RATING N/A TESTING SOURCE: N/A
DESCRIPTION: N/A		

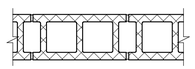
MARK	ASSEMBLY	FIRE RATING
S3A	5/8" TYPE 'X' GYPSUM BOARD 3-5/8" METAL STUD FRAMING @ 16" O.C. 5/8" TYPE 'X' GYPSUM BOARD	N/A TESTING SOURCE: N/A STC RATING N/A TESTING SOURCE: N/A
DESCRIPTION: N/A		

MARK	ASSEMBLY	FIRE RATING
M8H	 8" CONCRETE MASONRY UNITS 1 1/2" RIGID INSULATION 5/8" PLYWOOD SHEATHING	N/A TESTING SOURCE: N/A STC RATING N/A TESTING SOURCE: N/A
DESCRIPTION: N/A		

MARK	ASSEMBLY	FIRE RATING
M8G	 5/8" PLYWOOD SHEATHING 1 1/2" RIGID INSULATION 8" CONCRETE MASONRY UNITS 1 1/2" RIGID INSULATION 5/8" PLYWOOD SHEATHING	N/A TESTING SOURCE: N/A STC RATING N/A TESTING SOURCE: N/A
DESCRIPTION: N/A		

MARK	ASSEMBLY	FIRE RATING
M8E	 8" CONCRETE MASONRY UNITS 3 5/8" METAL STUD FRAMING @ 16" O.C. 5/8" TILE BACKER BOARD, 5/8" TYPE 'X' GYPSUM BOARD ABOVE WHERE OCCURS TILE OVER LATEX-PORTLAND CEMENT MORTAR OR ORGANIC ADHESIVE BOND COAT WHERE OCCURS	N/A TESTING SOURCE: N/A STC RATING N/A TESTING SOURCE: N/A
DESCRIPTION: N/A		

MARK	ASSEMBLY	FIRE RATING
M8B	 8" CONCRETE MASONRY UNITS 3 5/8" METAL STUD FRAMING @ 16" O.C. 5/8" TYPE 'X' GYPSUM BOARD	N/A TESTING SOURCE: N/A STC RATING N/A TESTING SOURCE: N/A
DESCRIPTION: N/A		

MARK	ASSEMBLY	FIRE RATING
M8	 8" CONCRETE MASONRY UNITS	N/A TESTING SOURCE: N/A STC RATING N/A TESTING SOURCE: N/A
DESCRIPTION: N/A		

design west | architects
LOGAN UT 84321
SALT LAKE CITY UT 84103
255 SOUTH 300 WEST
795 NORTH 400 WEST

CACHE MOSQUITO ABATEMENT
DISTRICT HEADQUARTERS
210 W. 3700 N.
HYDE PARK, UT 84318

MARK:	DATE:	DESCRIPTION:

PROJECT #: 819159
DRAWN BY: HARRIS
CHECKED BY: LEMON
ISSUED: 07.09.2020

STATE OF UTAH
JUNE 09, 2020
RYAN WAYNE LEMON
8668330-0301
LICENSED ARCHITECT

PERMIT SET / BID SET

WALL TYPES
A-511

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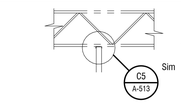
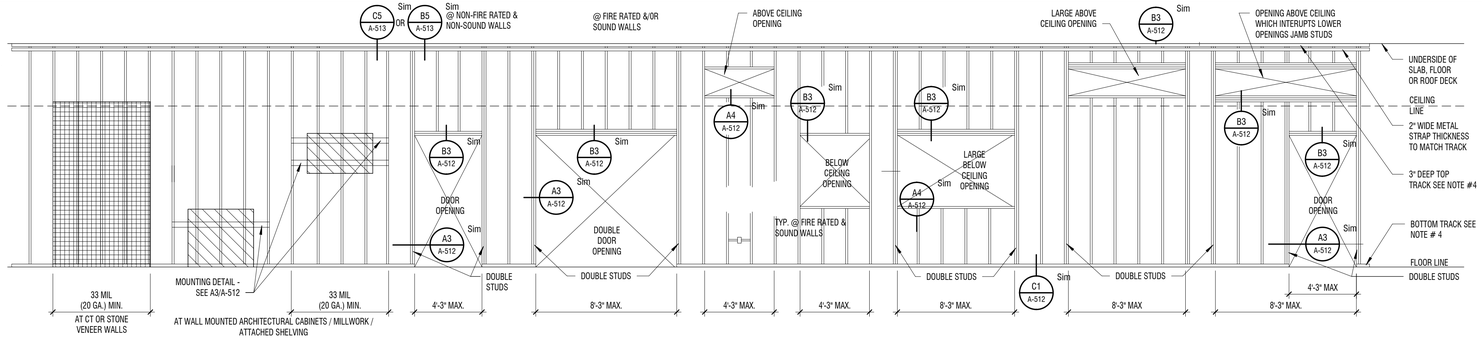


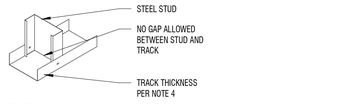
SHELVING, CABINETS, OR OTHER ITEMS ATTACHED TO WALL

CT, STONE, CULTURED STONE, MASONRY PRODUCTS, AND ETC



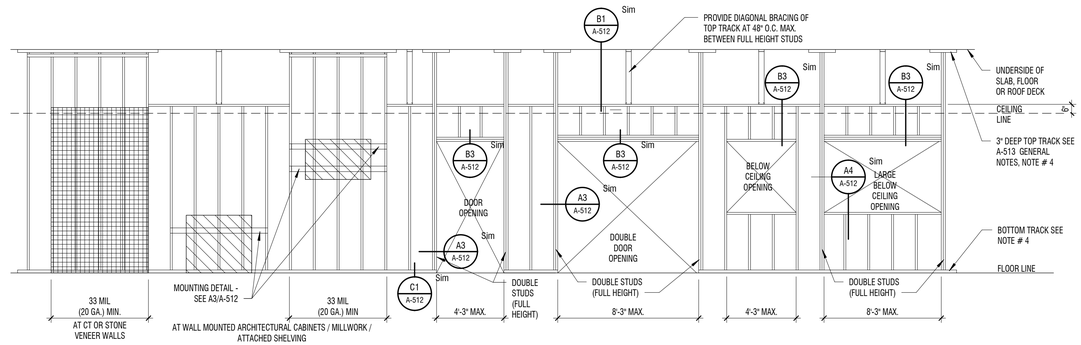
D1 TYP STEEL STUDS TO B.O. STRUCT ELEV

1/4" = 1'-0"



SHELVING, CABINETS, OR OTHER ITEMS ATTACHED TO WALL

CT, STONE, CULTURED STONE, MASONRY PRODUCTS, AND ETC

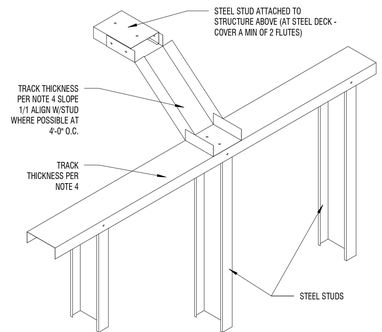


C1 MISC STUD / TRACK DETAILS

1 1/2" = 1'-0"

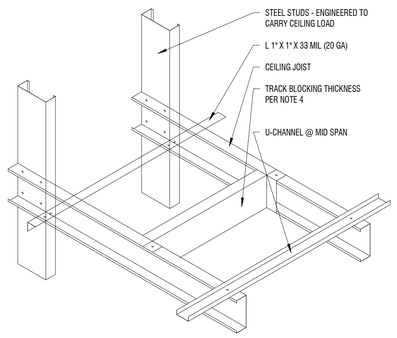
C2 TYP STL STUDS EXT TO CLG HEIGHT ELEV

1/4" = 1'-0"



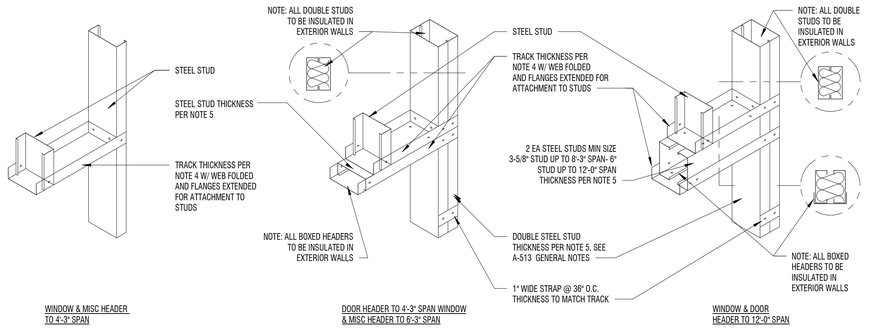
B1 DIAGONAL BRACE DETAIL

1 1/2" = 1'-0"



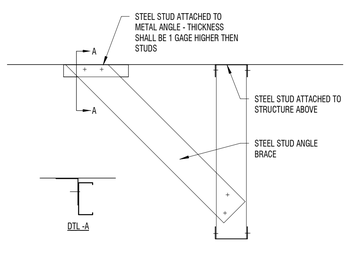
B2 CEILING FRAMING DETAILS

1 1/2" = 1'-0"



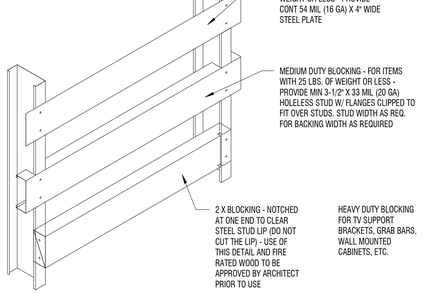
B3 OPENING HEADERS

1 1/2" = 1'-0"



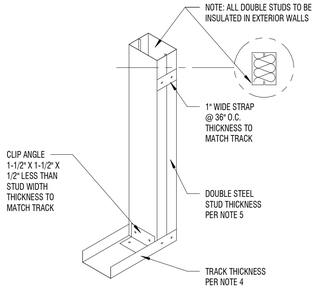
A1 DIAGONAL BRACE DETAIL

1 1/2" = 1'-0"



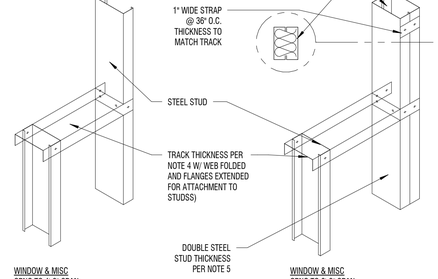
A2 WALL BLOCKING

1 1/2" = 1'-0"



A3 END OF WALL / DOOR JAMB

1 1/2" = 1'-0"



A4 OPENING SILLS

1 1/2" = 1'-0"

GENERAL NOTES

1. STUD SPACING SHALL BE 16" O.C. UNLESS NOTED OTHERWISE.
2. ALL STUDS SHALL BE "C" TYPE STUDS WITH A 1 1/4" FLANGE MINIMUM.
3. DOUBLE STUDS AT SIDE OF OPENINGS ARE NOT ALLOWED TO BE CUT. MINIMUM GAGE OF STUDS AT SIDE OF OPENINGS TO BE 20 GA. AS LONG AS THE HEIGHT FALLS WITHIN THE LIMITS AS SET FORTH IN THE ALLOWABLE STEEL STUD HEIGHTS.
4. ALL TOP AND BOTTOM TRACKS WILL BE A MINIMUM OF ONE LEVEL OF THICKNESS HIGHER THAN THE STUDS SECURED TO IT. THE MINIMUM THICKNESS SHALL BE 33 MIL (20 GA) NO. U.N.O. IN STRUCTURAL DRAWINGS.
   18 MIL (25 GA) STUDS = 33 MIL (20 GA) TRACKS
   33 MIL (20 GA) STUDS = 43 MIL (18 GA) TRACKS
   43 MIL (18 GA) STUDS = 54 MIL (16 GA) TRACKS
   EXAMPLE - IF YOU HAVE A 18 MIL (25 GA) STUD WALL WITH AN OPENING USING 33 MIL (20 GA) STUDS AROUND THE OPENING - A 33 MIL (20 GA) TRACK WILL BE REQUIRED.
5. ALL DOUBLE STUDS AT OPENINGS, HEADERS, AND SILLS WILL BE A MINIMUM OF ONE LEVEL OF THICKNESS HIGHER THAN THE STUDS ADJACENT TO IT. THE MINIMUM THICKNESS SHALL BE 33 MIL (20 GA) UNO.
   18 MIL (25 GA) STUDS = 33 MIL (20 GA) TRACKS
   33 MIL (20 GA) STUDS = 43 MIL (18 GA) TRACKS
   43 MIL (18 GA) STUDS = 54 MIL (16 GA) TRACKS
6. STUD IDENTIFICATION
   CHARACTERS 1-3 = MEMBER DEPTH (362 = 3 5/8")
   CHARACTER 4 = STYLE (S = C-STUD/JOIST)
   CHARACTERS 5-7 = FLANGE WIDTH (125 = 1 1/4")
   CHARACTERS 8-9 = MATERIAL THICKNESS IN MILS
   FOR REFERENCE ONLY: 18 MILS = 25 GA = 33 MILS = 20 GA 43 MILS = 18 GA
7. GYPSUM BOARD USED FOR THIS TABLE TO BE 5/8" ON 1 SIDE OF THE STEEL STUDS.
8. MINIMUM THICKNESS OF STUDS FOR SUPPORT OF CERAMIC TILE SHALL BE 33 MILS (20 GAGE) - ACTUAL THICKNESS WILL BE DETERMINED BY THE HEIGHT OF THE STUD.
9. NOT ALL POSSIBLE OPTIONS OF STEEL STUDS ARE SHOWN IN THIS TABLE. ALL OTHER VARIATIONS ARE TO REVIEWED AND APPROVED BY THE ARCHITECT OR STRUCTURAL ENGINEER.
10. 25 ga STUDS ARE NOT PERMITTED FOR CEILING STUD

NOTE:
INFORMATION IN THESE CHARTS COMES FROM STEEL STUD MANUFACTURERS ASSOCIATION "www.ssma.com". NOT ALL AVAILABLE PRODUCTS HAVE BEEN SHOWN HERE OR LISTED. THESE CHARTS ARE FOR INTERIOR NON LOAD BEARING PARTITIONS ONLY. ALL LOAD BEARING PARTITIONS NEED TO BE ENGINEERED BY THE STRUCTURAL ENGINEER.

ALLOWABLE STEEL STUD HEIGHTS

STUD MEMBER See Note 1	SPACING	GYP BD 1 SIDE see note 2 typ	GYP BD 2 SIDES see note 2 typ	CT ON CEM BD 1 SIDE	CT ON CEM BD 2 SIDES	GYP BD 1 SIDE CT ON CEM BD 1 SIDE	2 LAYER GYP BD 2 SIDES
162S125-18	24" O.C.	6'-0"	7'-11"	NP	NP	NP	NP
	16" O.C.	6'-11"	8'-4	NP	NP	NP	NP
	12" O.C.	7'-7"	8'-10"	NP	NP	NP	NP
162S125-33	24" O.C.	7'-6"	8'-9"	5'-9"	NP	NP	NP
	16" O.C.	8'-7"	9'-8"	6'-7"	NP	NP	NP
	12" O.C.	9'-6"	10'-4"	7'-3"	NP	NP	NP
250S125-18	24" O.C.	8'-4"	10'-7"	NP	NP	NP	8'-5"
	16" O.C.	9'-6"	11'-3"	NP	NP	NP	8'-11"
	12" O.C.	10'-6"	11'-11"	NP	NP	NP	9'-6"
250S125-33	24" O.C.	10'-5"	11'-7"	7'-11"	7'-8"	8'-7"	8'-11"
	16" O.C.	11'-11"	12'-10"	9'-1"	8'-8"	9'-8"	10'-0"
	12" O.C.	13'-2"	13'-11"	10'-0"	9'-5"	10'-6"	10'-11"
250S125-43	24" O.C.	11'-4"	13'-6"	8'-8"	8'-2"	9'-6"	9'-7"
	16" O.C.	13'-0"	14'-9"	9'-11"	9'-3"	10'-7"	10'-10"
	12" O.C.	14'-4"	15'-9"	10'-11"	10'-1"	11'-5"	11'-9"
350S125-18 OR 362S125-18	24" O.C.	10'-10"	13'-5"	NP	NP	NP	9'-5"
	16" O.C.	12'-5"	14'-4"	NP	NP	NP	10'-8"
	12" O.C.	13'-8"	15'-4"	NP	NP	NP	12'-0"
350S125-33 OR 362S125-33	24" O.C.	13'-8"	14'-9"	10'-4"	10'-1"	11'-2"	11'-7"
	16" O.C.	15'-6"	16'-5"	11'-10"	11'-4"	12'-6"	12'-11"
	12" O.C.	17'-1"	17'-10"	13'-0"	12'-4"	13'-7"	14'-1"
350S125-43 OR 362S125-43	24" O.C.	14'-9"	16'-3"	11'-3"	10'-6"	11'-8"	12'-3"
	16" O.C.	16'-11"	18'-0"	12'-11"	11'-11"	13'-3"	13'-10"
	12" O.C.	19'-7"	19'-7"	14'-2"	13'-1"	14'-6'	15'-2"
400S125-18	24" O.C.	12'-0"	14'-2"	NP	NP	NP	10'-5"
	16" O.C.	13'-9"	15'-4"	NP	NP	NP	11'-11"
	12" O.C.	15'-1"	16'-5"	NP	NP	NP	13'-0"
400S125-33	24" O.C.	15'-0"	16'-5"	11'-6"	11'-2"	12'-4"	12'-10"
	16" O.C.	17'-3"	18'-4"	13'-2"	12'-6"	13'-9"	14'-5"
	12" O.C.	18'-11"	19'-11"	14'-5"	13'-7"	15'-0"	15'-8"
400S125-43	24" O.C.	16'-5"	17'-2"	12'-6"	11'-6"	12'-8"	13'-4"
	16" O.C.	18'-9"	19'-5"	14'-4"	13'-2"	14'-6"	15'-2"
	12" O.C.	20'-8"	21'-2"	15'-9"	14'-5"	15'-11"	16'-8"
600S125-18	24" O.C.	NP	16'-9"	NP	NP	NP	11'-5"
	16" O.C.	NP	19'-9"	NP	NP	NP	14'-0"
	12" O.C.	NP	22'-1"	NP	NP	NP	16'-2"
600S125-33	24" O.C.	20'-10"	21'-7"	15'-11"	15'-0"	16'-7"	17'-2"
	16" O.C.	23'-11"	24'-6"	18'-3"	17'-0"	18'-9"	19'-5"
	12" O.C.	26'-3"	26'-9"	20'-1"	18'-7"	20'-6"	21'-3"
600S125-43	24" O.C.	22'-9"	25'-7"	17'-4"	17'-1"	19'-1"	19'-10"
	16" O.C.	26'-0"	28'-3"	19'-10"	19'-1"	21'-3"	22'-1"
	12" O.C.	28'-8"	30'-7"	21'-10"	20'-9"	23'-0"	23'-11"
800S125-43	24" O.C.	28'-11"	30'-8"	22'-0"	21'-0"	23'-5"	24'-2"
	16" O.C.	33'-11"	34'-4"	25'-3"	23'-9"	26'-3"	27'-2"
	12" O.C.	36'-5"	37'-6"	27'-9"	25'-11"	28'-8"	29'-8"

ALLOWABLE STEEL STUD CELING SPANS L/360

STUD MEMBER see note 1	SPACING	1 LAYER OF GYP BD LATERAL SUPPORT OF COMPRESSION FLANGE UNSUPPORTED see note 2	1 LAYER OF GYP BD LATERAL SUPPORT OF COMPRESSION FLANGE MID SPAN see note 2	2 LAYERS OF GYP BD LATERAL SUPPORT OF COMPRESSION FLANGE UNSUPPORTED see note 2	2 LAYERS OF GYP BD LATERAL SUPPORT OF COMPRESSION FLANGE MID SPAN see note 2
162S137-33	24" O.C.	7'-5"	7'-5"	6'-6"	6'-6"
	16" O.C.	8'-6"	8'-6"	7'-5"	7'-5"
	12" O.C.	9'-4"	9'-4"	8'-2"	8'-2"
250S162-33	24" O.C.	10'-10"	10'-10"	9'-5"	9'-5"
	16" O.C.	12'-5"	12'-5"	10'-10"	10'-10"
	12" O.C.	13'-5"	13'-8"	11'-11"	11'-11"
250S162-43	24" O.C.	11'-9"	11'-9"	10'-3"	10'-3"
	16" O.C.	13'-6"	13'-6"	11'-9"	11'-9"
	12" O.C.	14'-10"	14'-10"	13'-0"	13'-0"
362S162-33	24" O.C.	12'-2"	18'-2"	10'-11"	12'-7"
	16" O.C.	13'-7"	16'-6"	12'-2"	14'-5"
	12" O.C.	14'-8"	14'-5"	13'-2"	15'-10"
362S162-43	24" O.C.	13'-4"	15'-8"	11'-11"	13'-8"
	16" O.C.	14'-11"	17'-11	13'-4"	15'-8"
	12" O.C.	16'-2"	19'-9"	14'-5"	17'-3"
400S162-33	24" O.C.	12'-6"	15'-6"	11'-3"	13'-7"
	16" O.C.	13'-11"	17'-10"	12'-6"	15'-6"
	12" O.C.	15'-1"	19'-7"	13'-6"	17'-1"
400S162-43	24" O.C.	13'-8"	16'-11"	12'-2"	14'-9"
	16" O.C.	15'-3"	19'-4"	13'-8"	16'-11"
	12" O.C.	16'-7"	21'-4"	14'-9"	18'-7"
600S162-33	24" O.C.	14'-0"	20'-4"	12'-8"	18'-4"
	16" O.C.	15'-7"	22'-7"	14'-0"	20'-4"
	12" O.C.	16'-10"	24'-4"	15'-2"	21'-11"
600S162-43	24" O.C.	15'-2"	21'-10"	13'-8"	19'-8"
	16" O.C.	16'-11"	24'-4"	15'-2"	21'-10"
	12" O.C.	18'-4"	26'-3"	16'-5"	23'-7"

design west | architects
LOGAN UT 84321
255 SOUTH 300 WEST
SALT LAKE CITY UT 84103
793 NORTH 400 WEST

CACHE MOSQUITO ABATEMENT
DISTRICT HEADQUARTERS
210 W. 3700 N.
HYDE PARK, UT 84318

MARK:	DATE:	DESCRIPTION:

PROJECT #: 819159
DRAWN BY: JOLLEY
CHECKED BY: LEMON
ISSUED: 07.09.2020

STATE OF UTAH
JUNE 09, 2020
RYAN WAYNE LEMON
8668330-0301
LICENSED ARCHITECT

PERMIT SET / BID SET

STANDARD METAL STUD ELEVATIONS & DETAILS

A-512

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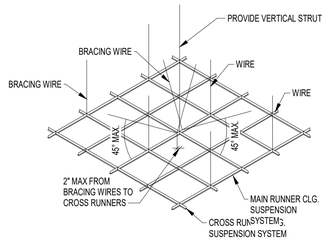
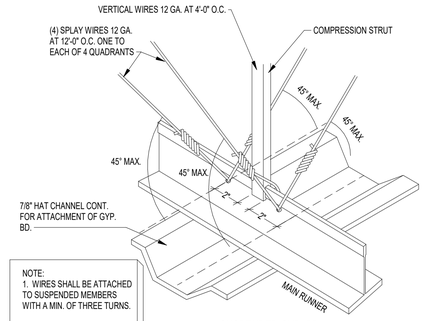
7/8/2020 11:11:54 AM C:\Users\rhorn\Documents\Cache MAD_rhorn95GAR.rvt

NOTE:
1. T-BAR SYSTEM TO BE HEAVY DUTY
2. SPACER BARS ARE REQUIRED AT PERIMETERS
3. SEISMIC JOINTS BE PROVIDED SUCH THAT NO SINGLE CEILING AREA IS LARGER THAN 2,500 SQUARE FEET
4. GYPSUM CEILING SYSTEM SPACING - MAIN RUNNERS @ 4'-0 O.C. FURRING CHANNELS @ 16" O.C. PERP. TO RUNNERS. ACCEPTABLE ATTACHMENT FOR ACOUSTICAL CEILING GRID & GYPSUM CEILING SUSP. SYSTEM.

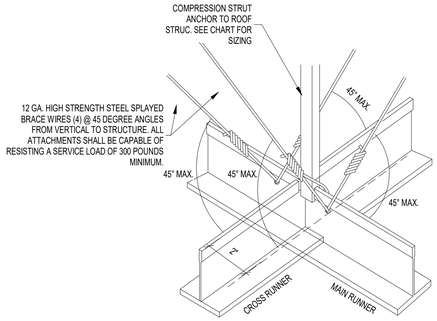


SUSPENDED LAYOUT

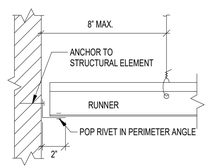


NOTE:
1. WIRES SHALL BE ATTACHED TO SUSPENDED MEMBERS WITH A MIN. OF THREE TURNS.
2. CUT EXCESS WIRE

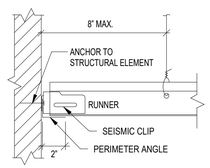
SUSPENDED GYP. BD.



SUSPENDED LAY-IN CEILING

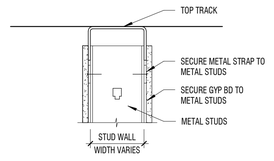


EDGE DETAIL

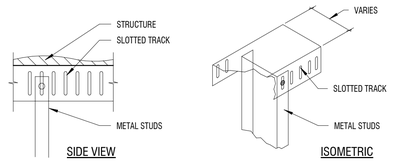


EDGE DETAIL

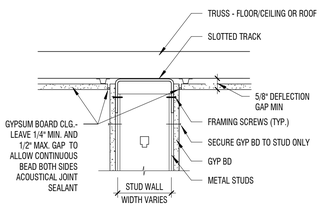
A4 SUSPENDED DETAILS
1/4" = 1'-0"



C5 TOP TRACK
1 1/2" = 1'-0"



B5 SLOTTED TOP TRACK
1 1/2" = 1'-0"



A5 SLOTTED TOP TRACK
1 1/2" = 1'-0"

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HYDE PARK, UT 84318

MARK:	DESCRIPTION:	DATE:

PROJECT #: 819159
DRAWN BY: JOLLEY
CHECKED BY: LEMON
ISSUED: 07.09.2020

STATE OF UTAH
JUNE 09, 2020
RYAN WAYNE LEMON
8668330-0301
LICENCED ARCHITECT

GRID CEILING DETAILS

A-513

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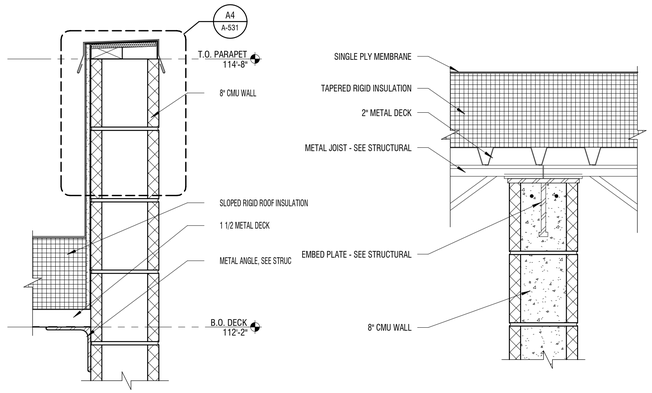
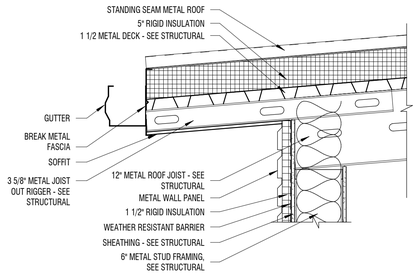
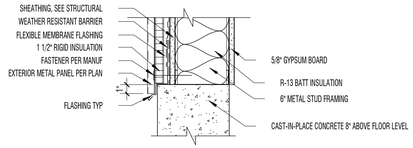


D1 PARAPET DETAIL
1 1/2" = 1'-0"

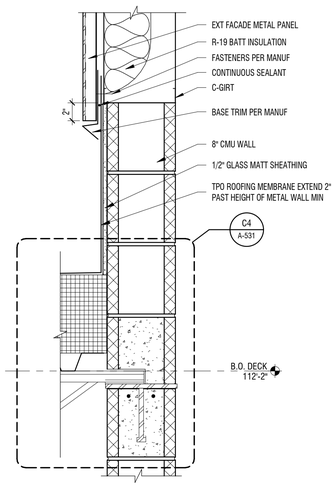
D2 B.O. STRUC CENTER WALL
1 1/2" = 1'-0"



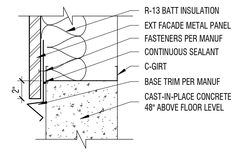
C1 BUILDING DETAIL
1" = 1'-0"



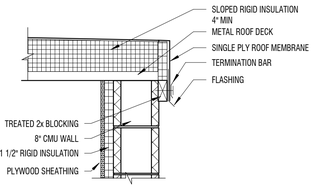
C2 BUILDING DETAIL
1 1/2" = 1'-0"



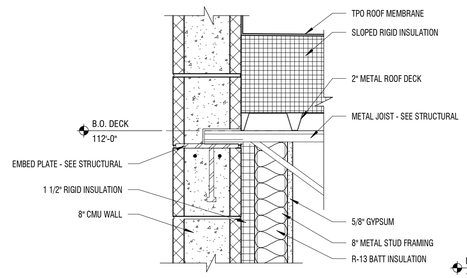
C3 BUILDING DETAIL
1 1/2" = 1'-0"



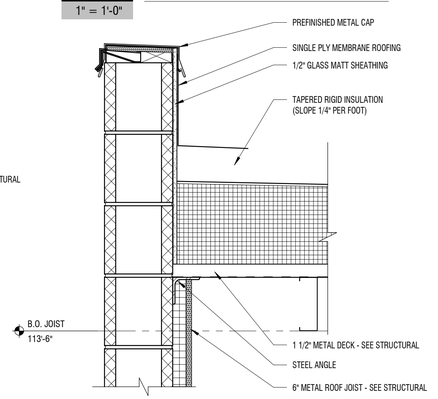
D4 BUILDING DETAIL
1 1/2" = 1'-0"



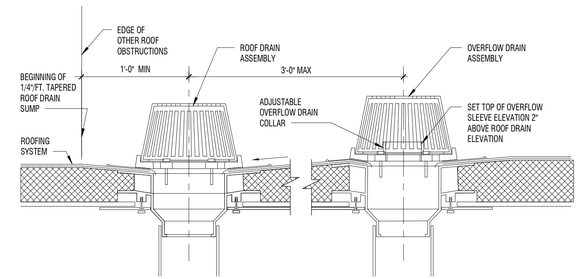
D5 SHED BUILDING DETAIL
1" = 1'-0"



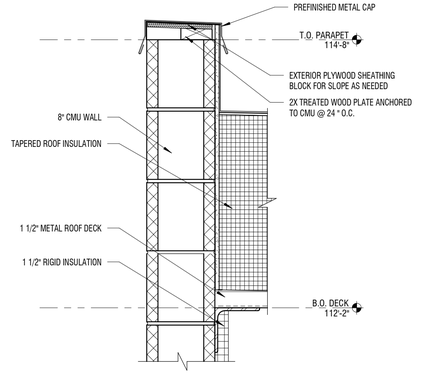
C4 B.O. STRUC CMU DETAIL
1 1/2" = 1'-0"



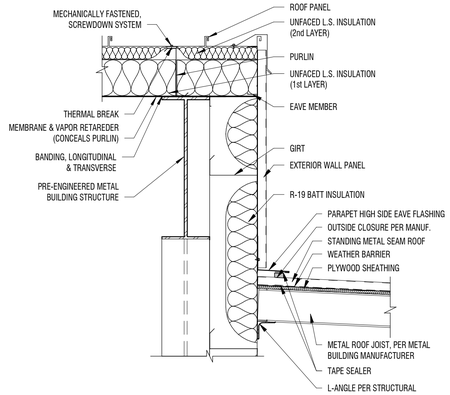
C5 SHED BUILDING DETAIL
1 1/2" = 1'-0"



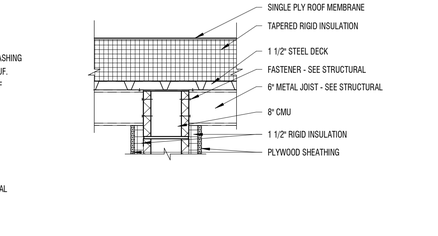
B1 ROOF AND OVERFRLOW DRAIN SECTION
1 1/2" = 1'-0"



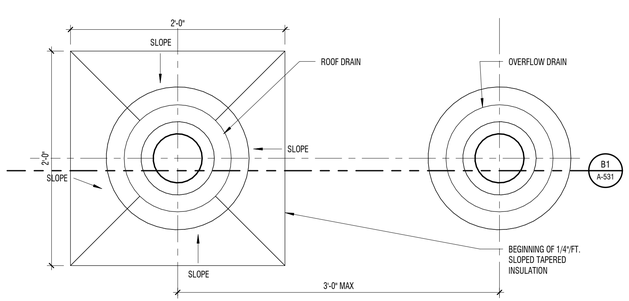
B3 BUILDING DETAIL
1 1/2" = 1'-0"



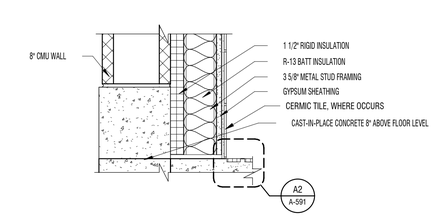
B4 ROOF DETAIL
1" = 1'-0"



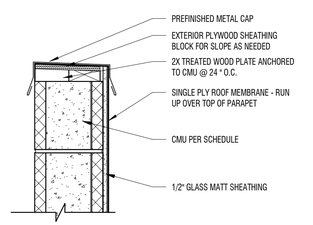
B5 SHED BUILDING DETAIL
1" = 1'-0"



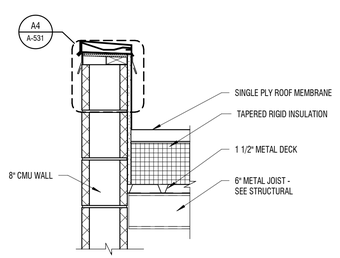
A1 ROOF DRAIN
1 1/2" = 1'-0"



A3 BUILDING DETAIL
1 1/2" = 1'-0"



A4 PARAPET CAP DETAIL
1 1/2" = 1'-0"



A5 SHED BUILDING DETAIL
1" = 1'-0"

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HYDE PARK, UT 84318

MARK:	DESCRIPTION:	DATE:

PROJECT #: 819159
DRAWN BY: HARRIS
CHECKED BY: LEMON
ISSUED: 07.09.2020

STATE OF UTAH
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RYAN WAYNE LEMON
8668330-0301
LICENCED ARCHITECT

PERMIT SET / BID SET

BUILDING DETAILS

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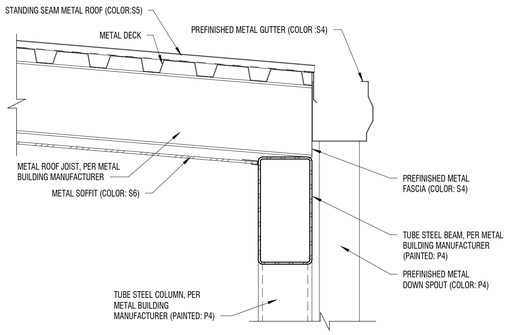
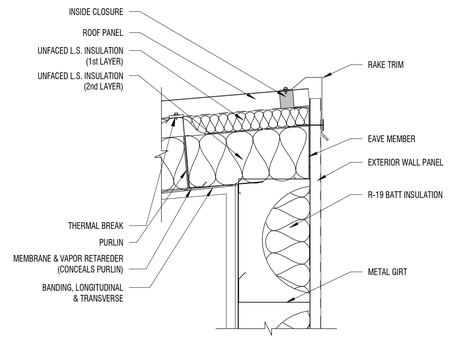
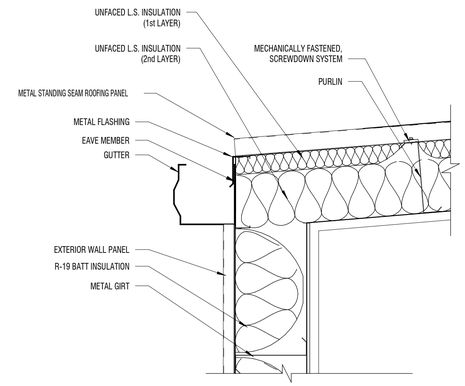


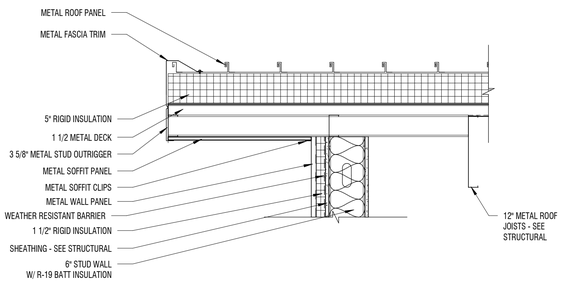
C2 BUILDING DETAIL
1 1/2" = 1'-0"



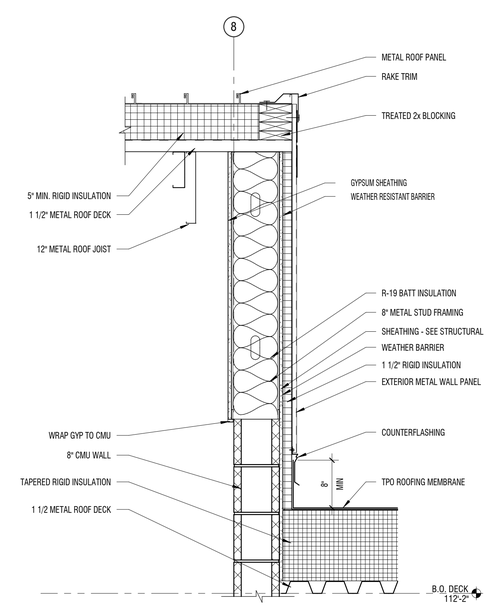
C4 BUILDING DETAIL
1 1/2" = 1'-0"



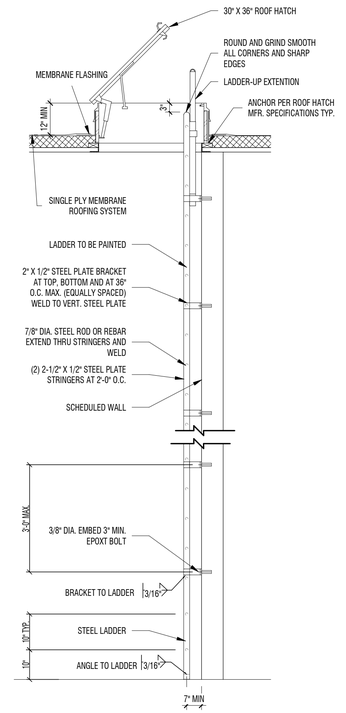
C5 ROOF DETAIL
1 1/2" = 1'-0"



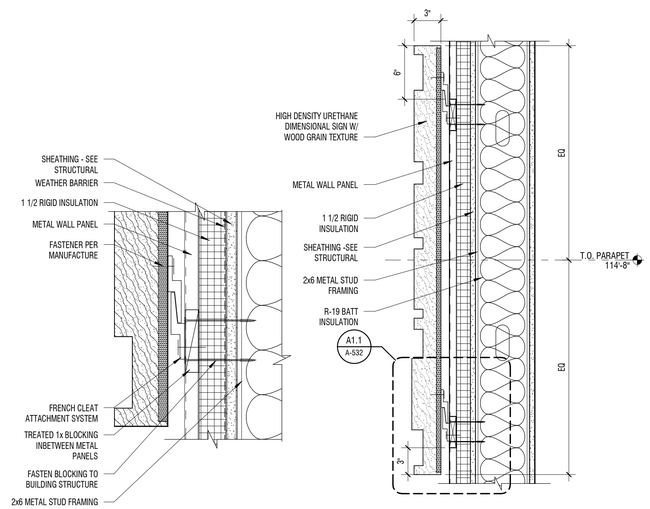
B2 ROOF DETAIL
1" = 1'-0"



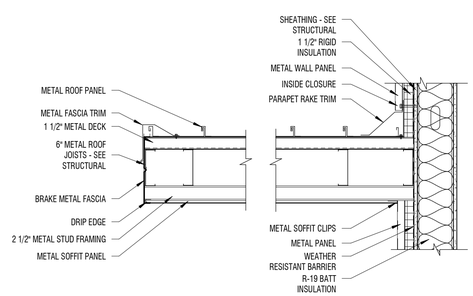
A4 BUILDING DETAIL
1" = 1'-0"



A5 ROOF ACCESS LADDER
1/2" = 1'-0"



A1 SIGN DETAIL
1 1/2" = 1'-0"



A2 FRONT ENTRY ROOF
1" = 1'-0"

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HYDE PARK, UT 84318

MARK:	DATE:	DESCRIPTION:

PROJECT #: 819159
DRAWN BY: ALARCON
CHECKED BY: LEMON
ISSUED: 07.09.2020

STATE OF UTAH
JUNE 09, 2020
RYAN WAYNE LEMON
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PERMIT SET / BID SET

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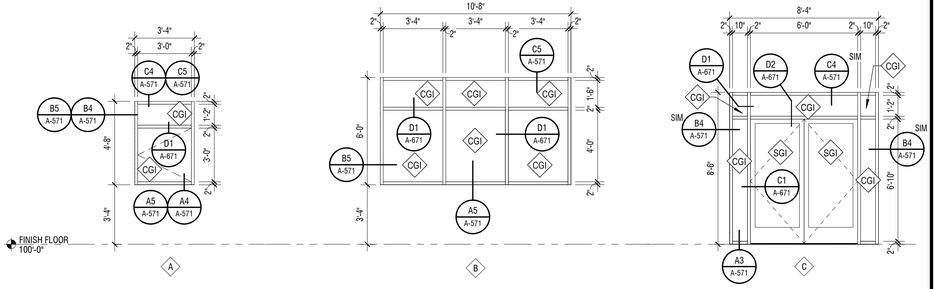
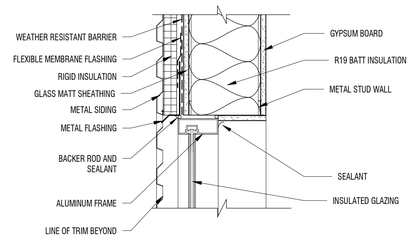
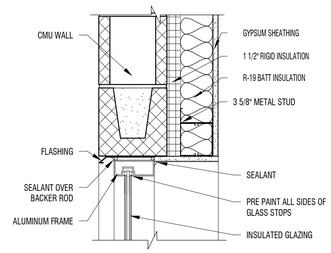
WINDOW TYPES

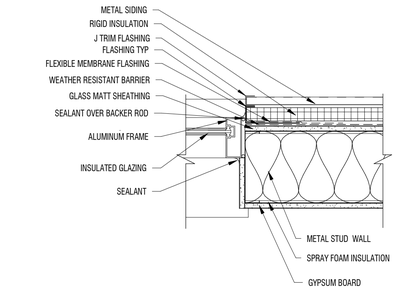




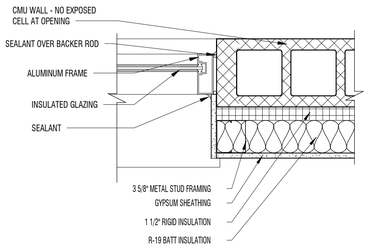
C4 WINDOW HEAD DETAIL
1 1/2" = 1'-0"



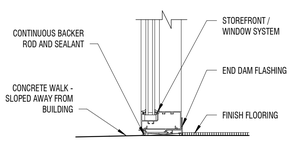
C5 WINDOW HEAD DETAIL
1 1/2" = 1'-0"



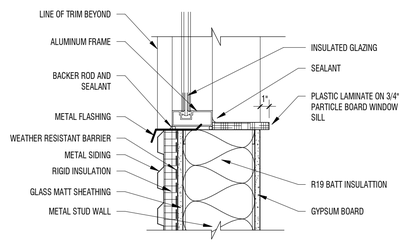
B4 WINDOW JAMB DETAIL
1 1/2" = 1'-0"



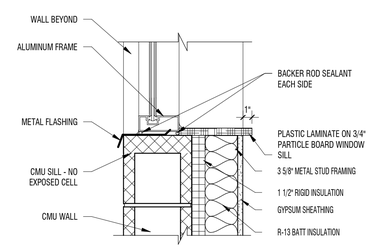
B5 WINDOW JAMB DETAIL
1 1/2" = 1'-0"



A3 STORE FRONT SILL
1 1/2" = 1'-0"



A4 WINDOW SILL DETAIL
1 1/2" = 1'-0"



A5 WINDOW SILL DETAIL
1 1/2" = 1'-0"

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ISSUED: 07.09.2020

STATE OF UTAH
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ALUMINUM WINDOW DETIALS

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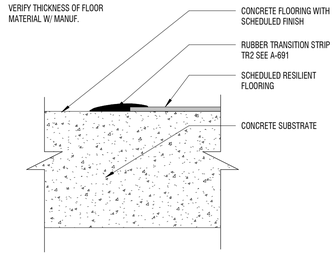
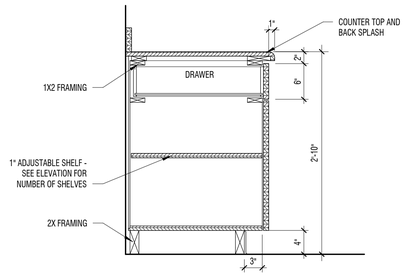


D1 TRANSITION DETAIL

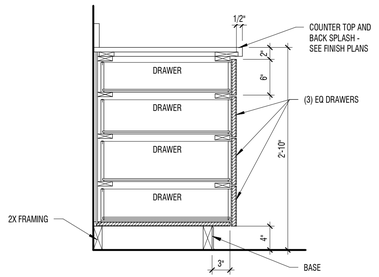
6" = 1'-0"

RESILIENT FLOOR TO CONCRETE



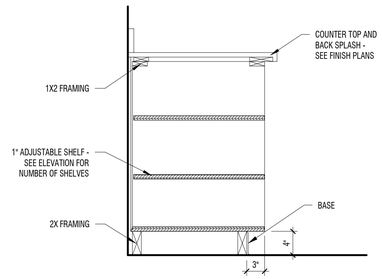
D2 BASE CABINET W/ DRAWER

1" = 1'-0"



D3 FOUR DRAWER BASE

1" = 1'-0"

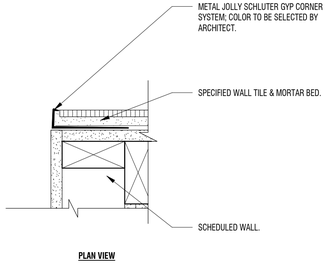


D4 BASE CABINET

1" = 1'-0"

GENERAL NOTES

1. MILLWORK SIZES ARE INDICATED ON ELEVATIONS. WIDTH x HEIGHT(T.O. COUNTER TOP) x DEPTH
2. T.O. COUNTER TOPS ARE NOT TO EXCEED 34" ABOVE FINISH FLOOR U.N.O.
3. REMOVABLE BASE MUST BE PROVIDED AT ALL SINKS IN PUBLIC AND EMPLOYEE ASSESS AREAS U.N.O.

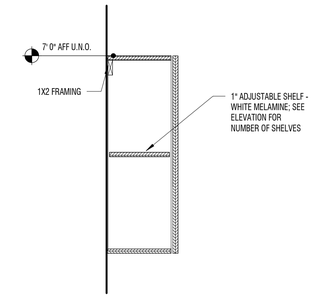


PLAN VIEW

C1 TRANSITION DETAIL

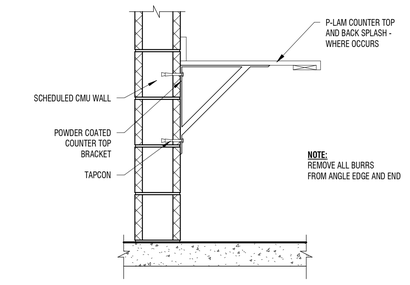
3" = 1'-0"

GYP WALL TO TILE @ CORNER



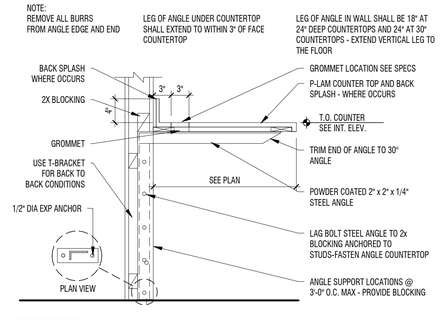
C3 UPPER CABINET

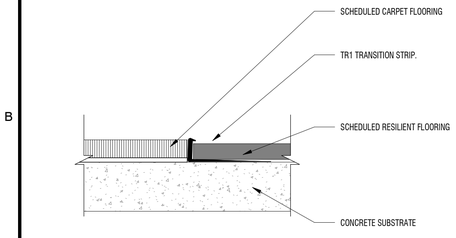
1" = 1'-0"



C4 COUNTER SUPPORT

1" = 1'-0" @CMU

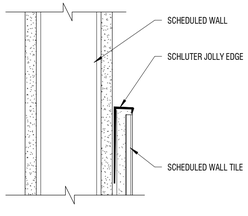




B1 TRANSITION DETAIL

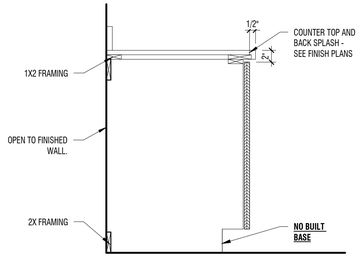
3" = 1'-0"

CARPET TO RESILIENT FLOOR



B2 TILE EDGE DETAIL

3" = 1'-0"

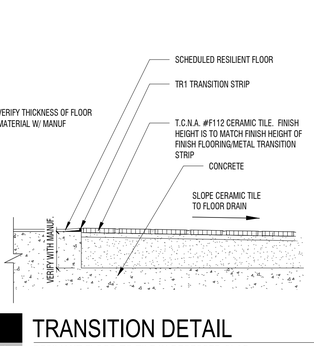


B3 BASE CABINET

1" = 1'-0"

B4 COUNTER SUPPORT

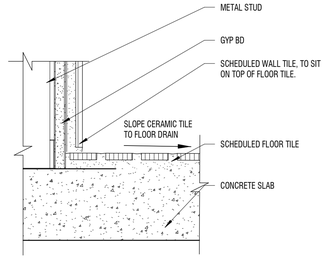
1" = 1'-0" @ STUD WALL



A1 TRANSITION DETAIL

3" = 1'-0"

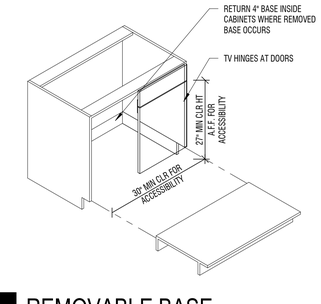
RESILIANT FLOOR TO TILE IN RECESSED SLAB



A2 FINISH DETAIL

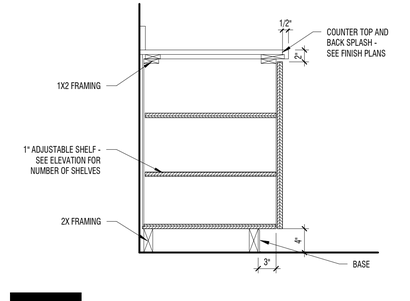
3" = 1'-0"

TILE FLOOR TO WALL



A3 REMOVABLE BASE

1/2" = 1'-0"



A4 BASE CABINET

1" = 1'-0"

PERMIT SET / BID SET

MILLWORK & FINISH DETAILS

A-591

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LOGAN UT 84321
255 SOUTH 300 WEST
SALT LAKE CITY UT 84103
795 NORTH 400 WEST

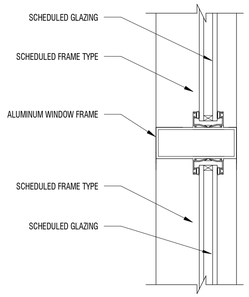
CACHE MOSQUITO ABATEMENT
DISTRICT HEADQUARTERS
210 W. 3700 N.
HYDE PARK, UT 84318

MARK:	DATE:	DESCRIPTION:

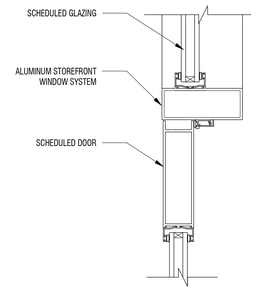
PROJECT #: 819159
DRAWN BY: ALLRED
CHECKED BY: LEMON
ISSUED: 07.09.2020

STATE OF UTAH
JUNE 09, 2020
RYAN WAYNE LEMON
8668330-0301
LICENSED ARCHITECT

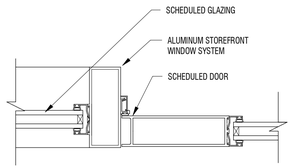
7/9/2020 11:11:19 AM C:\Users\rlemon\Documents\Cache MAD_rlemon95GM.rvt



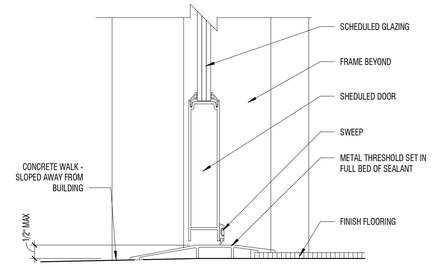
D1 DETAIL - MULLION
3" = 1'-0" @STOREFRONT



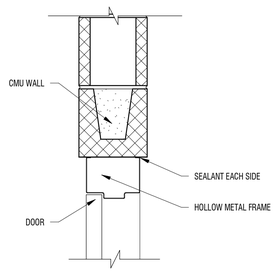
D2 DETAIL - HEAD
3" = 1'-0" @STOREFRONT DOOR



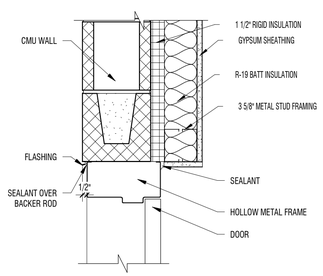
C1 DETAIL - JAMB
3" = 1'-0" @STOREFRONT



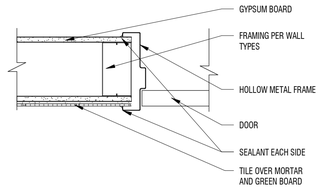
C2 DETAIL - THRESHOLD
3" = 1'-0" @STOREFRONT



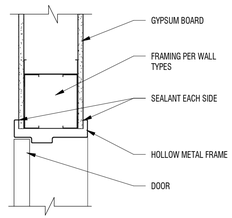
B1 DETAIL - HEAD
1 1/2" = 1'-0" @DOOR



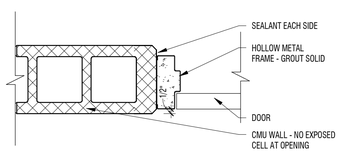
B2 DETAIL - HEAD
1 1/2" = 1'-0" @DOOR



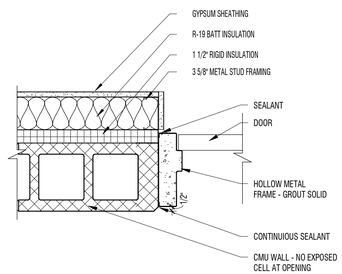
B3 DETAIL - JAMB
1 1/2" = 1'-0" @DOOR



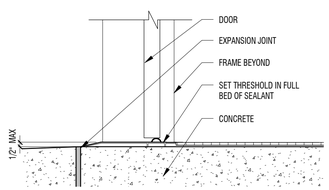
B4 DETAIL - HEAD
1 1/2" = 1'-0" @DOOR



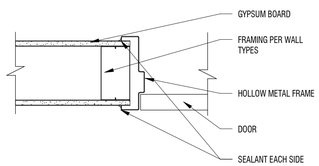
A1 DETAIL - JAMB
1 1/2" = 1'-0" @DOOR



A2 DETAIL - JAMB
1 1/2" = 1'-0" @DOOR



A3 DETAIL - THRESHOLD
1 1/2" = 1'-0"



A4 DETAIL - JAMB
1 1/2" = 1'-0"

DOOR SCHEDULE

WT	LEAF SIZE W	H	D	TYPE (2)	CONST. (3)	FINISH (4)	GLASS (5)	RATING (6)	FRAME TYPE (7)	DETAILS (8) HEAD	JAMB	SILL	HARDWARE (9)	NOTES
101	3'-0"	7'-0"	1 3/4"	HM03	HM	5A	---		HM-A	B4/A-671	A4/A-671	---	10	
102	6'-0"	7'-0"	1 3/4"	AL01	ALUM	5A	SGI		C	C3/A-672	B3/A-672	C2/A-671	A1	
103	3'-0"	7'-0"	1 3/4"	HM03	HM	5A	SGI		HM-B	B1/A-671	A1/A-671	---	07	
104	3'-0"	7'-0"	1 3/4"	HM03	HM	5A	SGI		HM-A	B4/A-671	A4/A-671	---	10	
105	3'-0"	7'-0"	1 3/4"	HM01	HM	5A	---		HM-A	B4/A-671	B3/A-671	---	09	
106	3'-0"	7'-0"	1 3/4"	HM01	HM	5A	---		HM-A	B4/A-671	B3/A-671	---	09	
107	3'-0"	7'-0"	1 3/4"	HM01	HM	5A	---		HM-A	B4/A-671	A4/A-671	---	08	
109	3'-0"	7'-0"	1 3/4"	HM01	HM	5A	---		HM-A	B4/A-671	A4/A-671	---	11	
110A	3'-0"	7'-0"	1 3/4"	HM01	HM	5A	---		HM-A	B4/A-671	A4/A-671	---	10	
110B	3'-0"	7'-0"	1 3/4"	HM01	HMI	5A	---		HM-A	B1/A-671	A1/A-671	A3/A-671	02	
111A	3'-0"	7'-0"	1 3/4"	HM03	HMI	5A	SGI		HM-B	B1/A-671	A1/A-671	A3/A-671	02	
111B	3'-0"	7'-0"	1 3/4"	HM03	HMI	5A	SGI		HM-B	B2/A-671	A2/A-671	A3/A-671	02	
114	3'-0"	7'-0"	1 3/4"	HM01	HM	5A	---		HM-A	B4/A-671	A4/A-671	---	08	
115	3'-0"	7'-0"	1 3/4"	HM01	HM	5A	---		HM-A	B4/A-671	A4/A-671	---	12	
117	6'-0"	7'-0"	1 3/4"	HM02	HM	5A	---		HM-A	B4/A-671 SIM	A4/A-671 SIM	---	04	
118	6'-0"	7'-0"	1 3/4"	HM02	HM	5A	---		HM-A	B4/A-671 SIM	A4/A-671 SIM	---	04	
119	6'-0"	8'-0"	2"	OH01	ALUM	MFR	SGI		MFR	C4/A-672	B4/A-672	---	01	A
120A	3'-0"	7'-0"	1 3/4"	HM03	HMI	5A	SGI		HM-A	C5/A-672	B5/A-672	A3/A-671	03	
120B	12'-0"	10'-0"	2"	OH01	ALUM	MFR	SGI		MFR	D2/A-672	B2,C2/A-672	A2/A-672	01	
120C	12'-0"	10'-0"	2"	OH01	ALUM	MFR	SGI		MFR	D2/A-672	B2,C2/A-672	A2/A-672	01	
120D	12'-0"	10'-0"	2"	OH01	ALUM	MFR	SGI		MFR	D2/A-672	B2,C2/A-672	A2/A-672	01	
120E	12'-0"	10'-0"	2"	OH01	ALUM	MFR	SGI		MFR	D2/A-672	B2,C2/A-672	A2/A-672	01	
120F	12'-0"	10'-0"	2"	OH01	ALUM	MFR	SGI		MFR	D2/A-672	B2,C2/A-672	A2/A-672	01	
120G	12'-0"	10'-0"	2"	OH01	ALUM	MFR	SGI		MFR	D2/A-672	B2,C2/A-672	A2/A-672	01	
120H	12'-0"	10'-0"	2"	OH01	ALUM	MFR	SGI		MFR	D2/A-672	B2,C2/A-672	A2/A-672	01	
120J	12'-0"	10'-0"	2"	OH01	ALUM	MFR	SGI		MFR	D2/A-672	B2,C2/A-672	A2/A-672	01	
120K	12'-0"	10'-0"	2"	OH01	ALUM	MFR	SGI		MFR	D2/A-672	B2,C2/A-672	A2/A-672	01	
120L	12'-0"	10'-0"	2"	OH01	ALUM	MFR	SGI		MFR	D2/A-672	B2,C2/A-672	A2/A-672	01	
120M	3'-0"	7'-0"	1 3/4"	HM01	HMI	5A	---		HM-A	C5/A-672	B5/A-672	A3/A-671	03	
120N	3'-0"	7'-0"	1 3/4"	HM01	HMI	5A	---		HM-A	C5/A-672	B5/A-672	A3/A-671	03	
201	6'-0"	7'-0"	1 3/4"	HM04	HM	5A	---		HM-B	B1/A-671	A1/A-671	---	04	
202	6'-0"	7'-0"	1 3/4"	HM02	HMI	5A	---		HM-B	B1/A-671 SIM	A1/A-671 SIM	---	04	
203	6'-0"	7'-0"	1 3/4"	HM02	HMI	5A	---		HM-B	B1/A-671 SIM	A1/A-671 SIM	---	04	

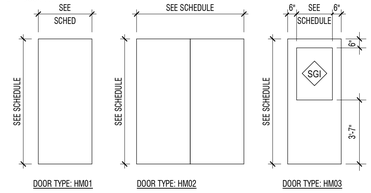
GENERAL NOTES

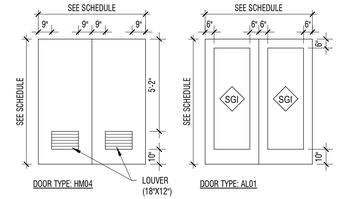
1. PROVIDE SEALANT AT JOINTS AT DISSIMILAR MATERIAL CONNECTIONS, ISOLATE DISSIMILAR METALS.
2. ALL DIMENSIONS FOR DOOR AND WINDOW OPENINGS TO BE FIELD VERIFIED PRIOR TO MANUFACTURING AND INSTALLATION.

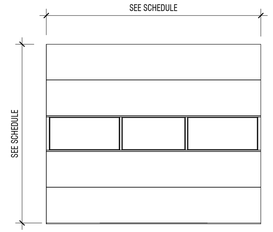
SCHEDULE NOTES

- IF SCHEDULE FIELD SHOWS A HYPHEN (-) OR IS BLANK, THERE ARE NO ITEMS APPLICABLE OR IS DETERMINED BY MANUFACTURER.
- SWING LINES SHOWN BELOW ARE REPRESENTATIONAL AND DO NOT INDICATE ACTUAL SWING. SEE PLANS FOR INDIVIDUAL SWINGS.

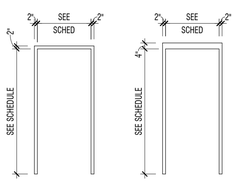
1. LEAF SIZING: SEE SCHEDULE
2. DOOR TYPES:







3. THICKNESS: SEE SCHEDULE
4. CONSTRUCTION:
   - GL GLASS
   - AL ALUMINUM
   - HMI HOLLOW METAL, INSULATED
   - HM HOLLOW METAL
   - SC SOLID CORE
5. FINISH: SEE DOOR FINISHES ON SHEET A-691
6. GLAZING: (DOOR AND WINDOW)
   - SG SAFETY GLASS (TEMPERED OR LAMINATED)
   - SGI SAFETY GLASS INSULATED, LOW E
   - CG CLEAR FLOAT GLASS
   - CGI CLEAR FLOAT GLASS INSULATED - LOW E
   - SP SPANDREL PANEL
7. RATING: 20, 45, 60 AND ETC. INDICATES FIRE RATING
   NOTE: ALL FIRE RATED DOORS SHALL BE AUTOMATIC CLOSING OR SELF-CLOSING AS PROVIDED IN THE IBC, IN ADDITION SEE THE IBC FOR SPECIAL PROVISIONS RELATING TO DOORS.
8. FRAME TYPE: (NUMBER(S) INDICATE(S) FRAME TYPE(S) SHOWN



9. DETAILS: (REFER TO SHEETS INDICATED FOR DOOR AND WINDOW DETAILS)
10. HARDWARE: (GROUP #, SEE SPECIFICATIONS FOR HARDWARE GROUPS)
11. KEYNOTES:
    A. PROVIDE ABILITY FOR DOOR LOCKING WITH PADLOCK.

design west | architects
LOGAN UT 84321
255 SOUTH 300 WEST
SALT LAKE CITY UT 84103
795 NORTH 400 WEST

CACHE MOSQUITO ABATEMENT DISTRICT HEADQUARTERS

210 W. 3700 N.
HYDE PARK, UT 84318

DESCRIPTION: | DATE: | MARK:

PERMIT SET / BID SET

PROJECT #: 819159
DRAWN BY: ALARCON
CHECKED BY: LEMON
ISSUED: 07.09.2020

STATE OF UTAH
JUNE 09, 2020
RYAN WAYNE LEMON
8668330-0301
LICENSED ARCHITECT

DOOR SCHEDULE & DETAILS

A-671

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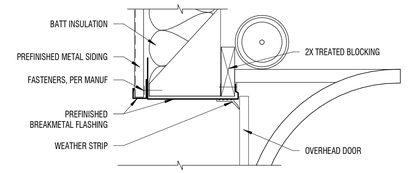
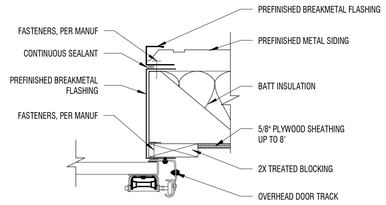
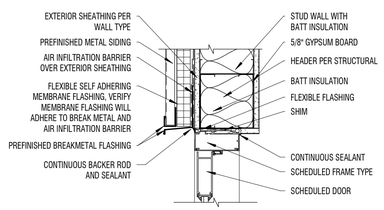


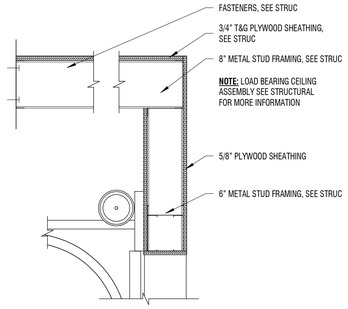
D2 EXT HEAD DETAIL
1 1/2" = 1'-0"



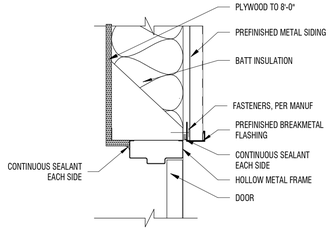
C2 OVERHEAD DOOR JAMB
1 1/2" = 1'-0"



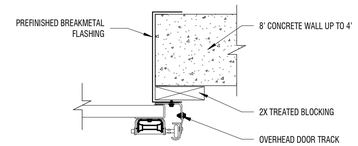
C3 EXT DOOR HEAD DETAIL
1 1/2" = 1'-0"



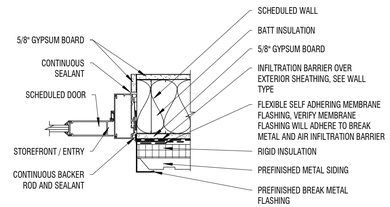
C4 INT HEAD DETAIL
1" = 1'-0"



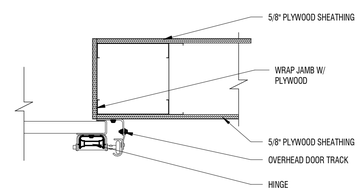
C5 DOOR HEAD DETAIL
1 1/2" = 1'-0"



B2 OVERHEAD DOOR JAMB
1 1/2" = 1'-0"



B3 DOOR JAMB DETAIL
1 1/2" = 1'-0"



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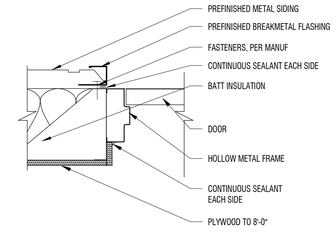
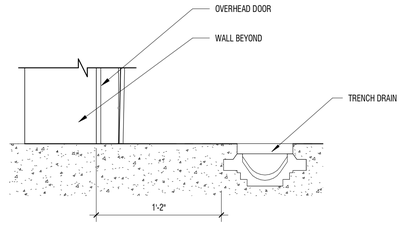
1 1/2" = 1'-0"



B5 DOOR JAMB DETAIL
1 1/2" = 1'-0"



A2 OVERHEAD DOOR THRESHOLD
1 1/2" = 1'-0"

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CACHE MOSQUITO ABATEMENT
DISTRICT HEADQUARTERS
210 W. 3700 N.
HYDE PARK, UT 84318

DESCRIPTION: DATE: MARK:

PROJECT #: 819159
DRAWN BY: ALARCON
CHECKED BY: LEMON
ISSUED: 07.09.2020

STATE OF UTAH
JUNE 09, 2020
RYAN WAYNE LEMON
8668330-0301
LICENSED ARCHITECT

PERMIT SET / BID SET

DOOR DETAILS
A-672

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FINISH LEGEND

CARPET

MARK:	C1	C2
MANUFACTURER:	MANNINGTON	MANNINGTON
COLLECTION:	-	-
SERIES:	FORCE	SPAN
COLOR:	SLIDE - 34368	BOROUGH - 15217
SIZE:	18"X36"	18"X36"
INSTALL:	VERITCAL ASHLAR	VERITICAL ASHLAR
NOTES:	-	-

RESILIENT FLOORING

MARK:	R1
TYPE:	HETEROGENEOUS SHEET
MANUFACTURER:	MANNINGTON
COLLECTION:	REALITIES II
SERIES:	-
COLOR:	ENGLISH WALNUT - KELEN 5684R
SIZE:	-
INSTALL:	SEE BELOW
NOTES:	SEAMLESS COVED BASE 4" UP WALL WHERE *B2* OCCURS. HATCH PATTERN TO INDICATE ROLL DIRECTION.

TILE

MARK:	T1	T2
MANUFACTURER:	DALTILE	DALTILE
COLLECTION:	HAUT MONDE	SLATE ATTACHE
SERIES:	-	-
COLOR:	EMPIRE BLACK - HM06	META WHITE - SA04
SIZE:	2"X2" MOSAIC	12"x24"
INSTALL:	STACKED	BRICK LAY
GROUT:	SANDED - CHARCOAL - 47	SANDED - WHITE
NOTES:	-	UP TO CEILING IN SHOWER AREAS - UP TO 5' MIN OUTSIDE SHOWERS ENDING WITH A FULL TILE ROW AT TOP.

CONCRETE FINISH

MARK:	CF1	CF2
TYPE:	SEALED CONCRETE	EPOXY TOP COAT
COLOR:	DARK GRAY	SW-7074
SHEEN:	SEMI-GLOSS	GLOSS
NOTES:	-	ARMORSEAL 1000 HS W/ SHARK GRIP ADDITIVE

TRANSITIONS

MARK:	TR1	TR2	TR3
TYPE:	RUBBER	RUBBER	GRANITE
MANUFACTURER:	MANNINGTON	MANNINGTON	-
COLOR:	CHARCOAL 217	CHARCOAL 217	ABSOLUTE BLACK
MODEL:	FUSION 720 or 721	DRY BACK UNDER SLUNG REDUCER 735	STANDARD BEVEL BOTH SIDES
LOCATION:	RESILIENT TO CARPET	RESILIENT TO CONCRETE	SHOWER TO RESTROOM
NOTES:			

BASE

MARK:	B1	B2
TYPE:	RUBBER	HETERGENOUS SHEET VINYL
MANUFACTURER:	MANNINGTON	MANNINGTON
COLOR:	ORE - 628	ENGLISH WALNUT - KELEN 5684R
SIZE:	4"	4"
STYLE:	THERMO PLASTIC COVED.	SEAMLESS COVE OF FLOOR MATERIAL UP
NOTES:	AT GYPSUM WALLS ONLY	WALL.

CEILING

MARK:	AC1
TYPE:	LAY IN ACOUSTICAL TILE
MANUFACTURER:	ARMSTRONG
SIZE:	24"X24"
COLOR:	WHITE
NOTES:	24X48 GRID WITH 24X24 SCORED TILES

PAINT

MARK:	P1	P2	P3
MANUFACTURER:	SHERWIN WILLAIMS	SHERWIN WILLIAMS	SHERWIN-WILLIAMS
COLOR:	PURE WHITE - SW 7005	REPOSE GRAY - SW 7015	SANTORINI BLUE - SW 7607
SHEEN:	SATIN	SATIN	SATIN
NOTES:	-	-	DTM GRADE WHERE OCCURS

EPOXY PAINT

MARK:	EP1
MANUFACTURER:	SHERWIN WILLIAMS
COLOR:	PURE WHITE - SW 7005
SHEEN:	SEMI-GLOSS
NOTES:	-

MILLWORK FINISHES

MARK:	MW1
TYPE:	P-LAM
MANUFACTURER:	FORMICA
COLOR:	MILLENNIM OAK - 5887 - NT
FINISH:	NATURELLE
NOTES:	-

MILLWORK HARDWARE

MARK:	HW1
MANUFACTURER:	-
COLOR:	SATIN NICKEL
STYLE:	D-PULL
SIZE:	3" O.C.
NOTES:	-

COUNTER TOPS

MARK:	CT1
TYPE:	P-LAM
MANUFACTURER:	FORMICA
COLOR:	BLACK - 909C-AN
FINISH:	MATTE
EDGE:	EASED
BACKSPLASH:	4" COVED
NOTES:	-

WINDOW COVERINGS

MARK:	SH1	SH2
TYPE:	MANUAL ROLLER SHADE	MANUAL ROLLER SHADE
MANUFACTURER:	MECHO	MECHO
SIZE:	FIELD VERIFY EACH EXT WINDOW	FIELD VERIFY EACH EXT WINDOW
COLOR:	ACOUSTIVEIL DIMOUT - 0893 PEARL GRAY	EQUINOX - BLACKOUT SHADE- 0106 DUSK
NOTES:	0 - 1% OPEN	0% OPEN (OPAQUE)

MISCELLANEOUS

MARK:	M1
TYPE:	RUBBER CORNER GUARDS
MANUFACTURER:	ROPPE
MODEL:	#19 CORNER GUARD
COLOR:	TO BE SELECTED BY ARCHITECT
SIZE:	2-1/4" X 54"
INSTALL:	-
NOTES:	-

FINISH COMBINATIONS

WALL COMBINATIONS

MARK:	2A
DESCRIPTION:	WALL TILE T2 UP TO 5' MIN START AND END IN FULL TILE. EP1 ABOVE TILE TO CEILING. **TILE UP TO CEILINGS IN SHOWER.

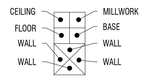
MILLWORK GROUPING

MARK:	4A
UPPER CABINETS:	MW1
BACKSPLASH:	CT1
COUNTERTOP:	CT1
BASE CABINETS:	MW1
HARDWARE:	HW1
FRAME CONSTRUCTION:	AWS TYPE A
DOOR INTERFACE STYLE:	FRAMELESS
NOTES:	-

DOOR FINISHES

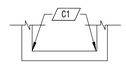
MARK:	5A
DOOR FINISH:	P3
JAMB FINISH:	P3
HARDWARE COLOR:	SEE SPEC
NOTES:	HM DOORS, TYP

FINISH LEGEND

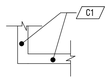


ROOM FINISH TAG

FINISH TAG - INDICATES SPECIFIC APPLIED FINISH



INDICATES FINISH IS APPLIED TO AREA BETWEEN ARROWS



INDICATES FINISH IS APPLIED TO FACE OF SURFACE(S)

INDICATES A MANUAL ROLLER SHADE.

INDICATES SIGNAGE LOCATION, SEE SPECIFICATIONS FOR SCHEDULE

FINISH NOTES

1. ROOM FINISH TAG REPRESENT TYPICAL FINISHES. SPECIFIC WALLS IN SELECTED AREAS WILL HAVE MULTIPLE FINISHES WHICH WILL BE INDICATED BY AN ELEVATION.
2. **CG** (CORNER GUARD) SEE SPECIFICATIONS - COLOR TO BE SELECTED BY ARCHITECT
3. FLOOR MATERIAL TRANSITIONS WILL OCCUR BELOW DOORS. U.N.O.

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CACHE MOSQUITO ABATEMENT
DISTRICT HEADQUARTERS
210 W. 3700 N.
HYDE PARK, UT 84318

DESCRIPTION
DATE:
MARK:

PERMIT SET / BID SET

PROJECT #: 819159
DRAWN BY: Author
CHECKED BY: Checker
ISSUED: 07.09.2020

STATE OF UTAH
JUNE 09, 2020
RYAN WAYNE LEMON
8668330-0301
LICENCED ARCHITECT

FINISH LEGEND
A-691

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LEGEND OF MECHANICAL SYMBOLS AND ABBREVIATIONS

DUCTWORK/GRILLES

- POSITIVE PRESSURE DUCT - RISE
- POSITIVE PRESSURE DUCT - DROP
- NEGATIVE PRESSURE DUCT - RISE
- NEGATIVE PRESSURE DUCT - DROP
- ROUND DUCT - RISE
- ROUND DUCT - DROP
- UNDER FLOOR DUCT
- TURNING VANES
- FRESH AIR LOUVER
- RELIEF AIR OR EXHAUST AIR LOUVER
- 12X12 200 — CEILING SUPPLY DIFFUSER
- 22X22 200 — CEILING RETURN REGISTER
- 12X12 200 — CEILING EXHAUST REGISTER, (BALANCE TO MATCH SUPPLY IF RETURN CFM IS NOT SHOWN)
- 24X10 200 — SIDEWALL SUPPLY REGISTER
- 24X10 200 — SIDEWALL EXHAUST OR RETURN REGISTER
- 12X12 200 — CEILING SUPPLY DIFFUSER WITH FLEXIBLE DUCT
- 12X12 200 — CEILING AIR GRILLE WITH FLEXIBLE DUCT

(TOP FIGURES INDICATE NECK SIZE, BOTTOM FIGURE INDICATES CFM.)

- CEILING RETURN AIR GRILE W/ SOUND BOOT
- 2-1" SLOTS @ 48" OC — LINEAR DIFFUSER WITH PLENUM AND FLEXIBLE DUCT CONNECTION. NO. OF SLOTS & SIZE OF SLOT ON TOP, ACTIVE LENGTH AND CFM ON BOTTOM
- FLEXIBLE DUCT CONNECTION
- FLEXIBLE DUCT
- 12/8 FO — FLAT OVAL DUCT WITH NET INSIDE DIMENSIONS SHOWN IN INCHES.
- 12/8 — RECTANGULAR DUCT WITH NET INSIDE DIMENSIONS SHOWN IN INCHES.
- 12ø — ROUND DUCT WITH NET INSIDE DIMENSIONS SHOWN IN INCHES.
- UP — INCLINED RISE
- DN — INCLINED DROP

(WITH RESPECT TO AIR FLOW 15° NOMINAL INCLINE WITH RADIUS TURNS=DEPTH OF DUCT.)

- W R — R/W=1. ROUND DUCT SIMILAR TO RECTANGULAR
- 12/12 8/8 — RECTANGULAR TO RECTANGULAR OR ROUND TO ROUND DUCT TRANSFORMATION MAXIMUM 15° INCLUDED ANGLE EXCEPT WHERE SHOWN OTHERWISE.
- 12/12 12ø — RECTANGULAR TO ROUND DUCT TRANSFORMATION
- 1.5D 1.25D 45° D D — TAP ENTRY AREA EQUALS 150% OF BRANCH AREA
- 12/8 12/12 — HIGH EFFICIENCY FITTING
- MANUAL VOLUME DAMPER

PIPING

- OR — SHUT OFF VALVE
- OR — BALL VALVE
- OR — BUTTERFLY VALVE
- OR — ANGLE VALVE
- OR — GLOBE VALVE
- OR — PLUG VALVE
- SHUT OFF PLUG VALVE FOR FOR USE WITH PRESSURE GAUGE
- OR — CHECK VALVE
- OR — LATERAL STRAINER WITH BLOW-OFF VALVE, PROVIDE HOSE END WITH CAP WHERE DISCHARGE IS NOT PIPED TO DRAIN
- RPBP — REDUCED PRESSURE BACKFLOW PREVENTOR W/ DRAIN PAN
- OR — PRESSURE REDUCING VALVE EXTERNAL PRESSURE
- OR — PRESSURE REDUCING VALVE SELF CONTAINED
- OR — RELIEF VALVE
- AIR VENT-MANUAL
- A — AIR VENT-AUTO
- THERMOMETER - TEMP RANGE AS INDICATED
- PRESSURE GAUGE WITH SHUT OFF PLUG VALVE
- P — PRESSURE GAUGE WITH PIGTAIL
- OR — UNION
- OR — FLANGE
- OR — FLEXIBLE EXPANSION JOINT
- REDUCER
- ECCENTRIC REDUCER
- BRANCH - BOTTOM CONNECTION
- BRANCH - TOP CONNECTION
- BRANCH - SIDE CONNECTION
- RISE OR DROP
- RISER - DOWN (ELBOW)
- RISER - UP (ELBOW)
- PIPE CAP
- ARROW INDICATES DIRECTION OF FLOW IN PIPE
- LEADER INDICATES DOWNWORD SLOPE
- VALVE IN RISE
- OR — 90° ELBOW
- 45° ELBOW

PLUMBING

- HOSE BIBB
- FLOOR DRAIN
- FCO COTG — FLOOR CLEAN-OUT OR CLEAN-OUT TO GRADE
- ROOF DRAIN
- DOWNSPOUT NOZZLE
- VTR — VENT THRU ROOF
- WATER HAMMER ARRESTOR
- CLEAN-OUT

ANNOTATIONS

- P-1 — PLUMBING FIXTURES
- POINT OF CONNECTION
- A / M101 — DETAIL TAG - TOP FIGURE IS DETAIL NO. BOTTOM FIGURE IS SHEET NO.
- EF 1 — EQUIPMENT IDENTIFICATION
- 1 — KEYED NOTE IDENTIFICATION
- S — SENSOR
- SW — SWITCH
- T — THERMOSTAT

LINETYPES

- CA — COMPRESSED AIR
- DOMESTIC COLD WATER (DCW)
- DOMESTIC HOT WATER (DHW)
- DOMESTIC HOT WATER RETURN (DHWR)
- G — NATURAL GAS
- RD — ROOF DRAIN
- RDO — ROOF DRAIN OVERFLOW
- SEWER (BELOW GRADE)
- SEWER (ABOVE GRADE)
- VENT (SEWER)

MECHANICAL GENERAL NOTES

1. PROVIDE CD-1 TYPE DIFFUSER, AS SCHEDULED, FOR ALL CEILING SUPPLY DIFFUSERS UNLESS NOTED OTHERWISE. SEE DETAIL 1/M503.
2. PROVIDE BALANCING DAMPERS AT EACH BRANCH TAKE OFF TO SERVE DIFFUSER OR GRILLE AS WELL AS WHERE INDICATED.
3. COORDINATE EXACT LOCATION OF DUCTS WITH STRUCTURAL MEMBERS, LIGHTS, REFLECTED CEILING, CABLE TRAY, PLUMBING, MECHANICAL PIPING, ETC.
4. BRANCH DUCTWORK SHALL BE SIZED TO MATCH THE NECK SIZE OF THE DIFFUSER, REGISTER OR GRILLE IT SERVES UNLESS NOTED OTHERWISE.
5. INSTALL HARD ELBOWS AS SHOWN. HARD ELBOWS ARE REQUIRED FOR SOUND ATTENUATION.
6. INSTALL EQUIPMENT WITH CLEARANCE PER MANUFACTURER'S RECOMMENDATIONS. MAINTAIN PROPER SPACE FOR COIL PULL, CONTROLS, AND MAINTENANCE ACCESS.
7. INSTALL TURNING VANES IN ALL SQUARE AND RECTANGULAR LOW PRESSURE DUCTWORK.
8. DETAILS REFERENCE ALL SHEETS.
9. DO NOT ROUTE DUCTS OR PIPES ABOVE ELECTRICAL PANELS. DO NOT ROUTE DUCTS OR PIPES IN ELECTRICAL ROOMS, EXCEPT DUCTS AND PIPES SERVING THE ROOM.
10. PROVIDE CEILING ACCESS PANELS AS REQUIRED WHERE MECHANICAL EQUIPMENT, VALVES, VAV BOXES, FIRE DAMPERS, ETC, ARE LOCATED ABOVE INACCESSIBLE CEILINGS.
11. ALL DUCT DIMENSIONS ARE INSIDE FREE AREA DIMENSIONS. ADJUST SHEET METAL DIMENSION FOR LINED DUCT.

PLUMBING GENERAL NOTES

1. SLOPE PIPING AS FOLLOWS, UNLESS OTHERWISE NOTED. WASTE: BRANCHES 1/4" PER FOOT. WASTE MAINS: 1/8" PER FOOT.
2. SLEEVE PIPING THRU WALLS/FOUNDATIONS WHERE REQUIRED.
3. PLUMBING DRAWINGS ARE SCHEMATIC IN NATURE. FIELD VERIFY EXACT ROUTING AND COORDINATE WITH ALL OTHER TRADES.
4. NO PIPING TO RUN OVER ELECTRICAL PANELS, VFD'S, OR MCC'S.
5. SLEEVE/CONFIGURE CMU WALLS FOR EMBEDDED PIPING AND PIPE PENETRATIONS AS REQUIRED.
6. REFER TO ARCHITECTURAL DRAWINGS FOR FIXTURE MOUNTING HEIGHTS, DIMENSIONS, AND OTHER REQUIREMENTS.
7. CONTRACTOR TO VERIFY CONNECTION SIDE OF ADA FIXTURES AND ADJUST ACCORDINGLY.
8. LOCATE ALL VENTS MINIMUM 25 FT AWAY FROM AIR INTAKES.
9. INSTALL DOMESTIC WATER LINES BELOW DUCTWORK.
10. INSTALL A 24"x24" ACCESS DOOR BELOW ALL ISOLATION VALVES AND CIRCUIT SETTERS WHERE MOUNTED ABOVE HARD CEILINGS.
11. MOUNT ALL CEILING TYPE ISOLATION VALVES, CONTROL VALVES, CIRCUIT SETTERS, ETC. NEAR CEILING FOR ACCESSIBILITY.
12. DETAILS REFERENCE ALL SHEETS.

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MARK:	DATE:	DESCRIPTION:

PROJECT #: 819159
DRAWN BY: KJM
CHECKED BY: KJM
ISSUED: 07.08.2020

LICENSED PROFESSIONAL ENGINEER
NO. 275661
RAYMOND D. BROOK
STATE OF UTAH

PERMIT SET / BID SET

MECHANICAL SYMBOLS LEGEND AND GENERAL NOTES

M001

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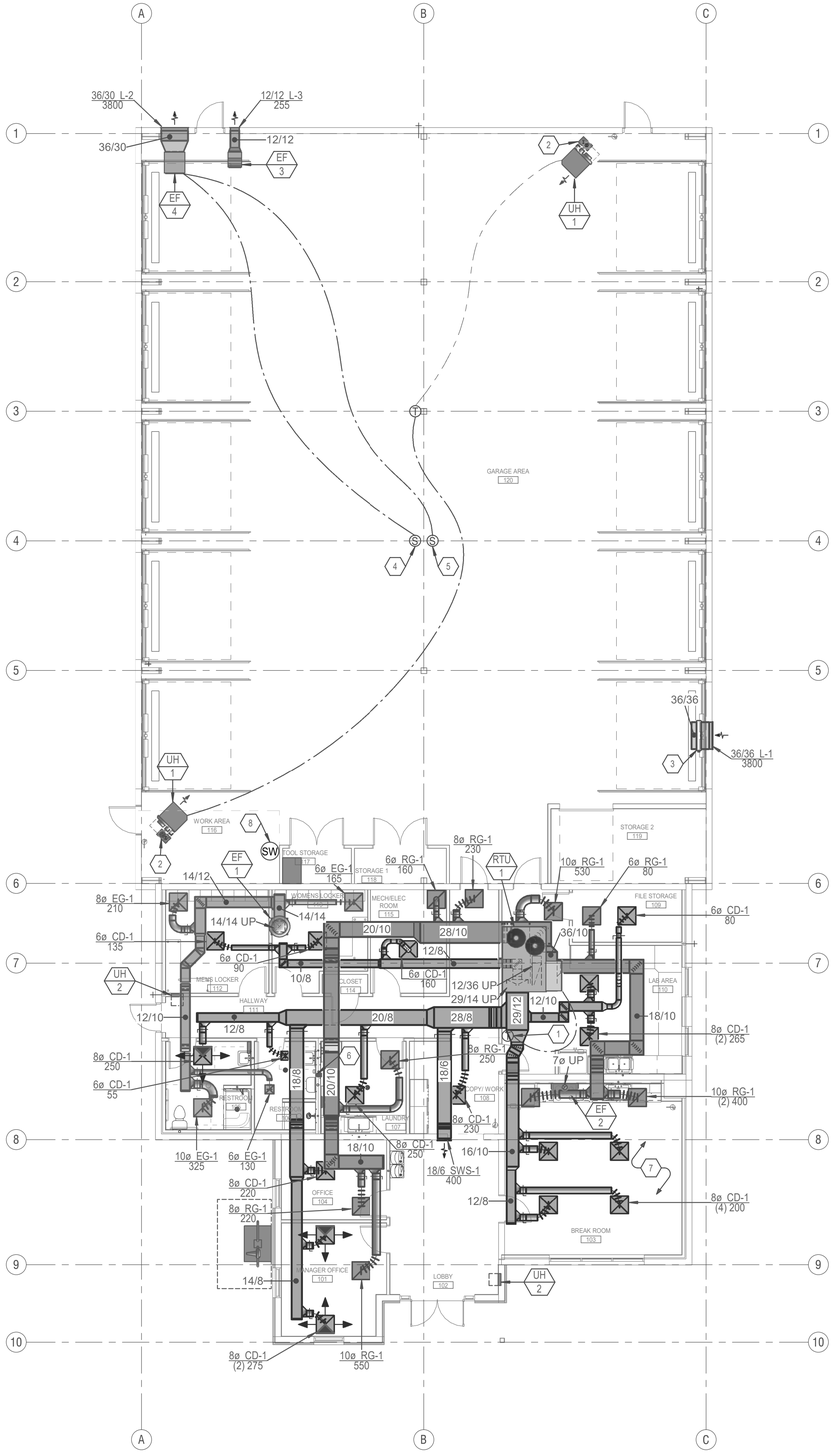
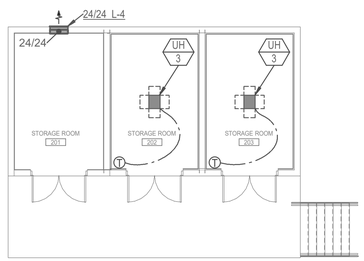
SHEET KEYNOTES

1. INSTALL THE THERMOSTAT/CONTROLLER FOR RTU-1 ON THE WALL IN THIS LOCATION.
2. VERTICAL CONCENTRIC COMBUSTION AIR INTAKE/EXHAUST VENT. INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
3. AIR-TIGHT AUTOMATIC CONTROL DAMPER. DAMPER IS TO NORMALLY BE SHUT. DAMPER IS TO FULLY OPEN UPON OPERATION OF EXHAUST FAN EF-4. DAMPER IS TO FULLY SHUT UPON DEACTIVATION OF EXHAUST FAN EF-4.
4. INSTALL A UL 2075-LISTED CARBON MONOXIDE DETECTOR ON THE STRUCTURAL COLUMN PER THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
5. INSTALL A UL 2075-LISTED NITROGEN DIOXIDE DETECTOR ON THE STRUCTURAL COLUMN PER THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
6. 4" ROUND DRYER EXHAUST VENT. EXTEND THE DRYER VENT FROM THE CONNECTION ON THE DRYER INTO THE WALL AND THEN UP THROUGH THE ROOF. THE VENT IS TO TERMINATE 14" ABOVE THE FINISHED ROOF. PROVIDE A BACKDRAFT DAMPER AND A RAIN COVER AT THE VENT TERMINATION.
7. RUN THE 8" ROUND SUPPLY DUCTS IN THE BREAK ROOM THROUGH THE WEBBING OF THE ROOF TRUSSES.
8. PROVIDE A MANUAL OVERRIDE SWITCH FOR EXHAUST FAN EF-4 NEXT TO THE DOOR IN THIS LOCATION. PLEASE REFER TO THE SEQUENCES OF OPERATION IN SPECIFICATION 230993 FOR ADDITIONAL INFORMATION.





2 STORAGE ROOMS MECHANICAL PLAN
1/8" = 1'-0"

1 LEVEL 1 MECHANICAL PLAN
1/8" = 1'-0"

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795 NORTH 400 WEST

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HYDE PARK, UT 84318

MARK:	DATE:	DESCRIPTION:

PROJECT #: 819159
DRAWN BY: KJM
CHECKED BY: KJM
ISSUED: 07.08.2020

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LEVEL 1
MECHANICAL PLAN

M101

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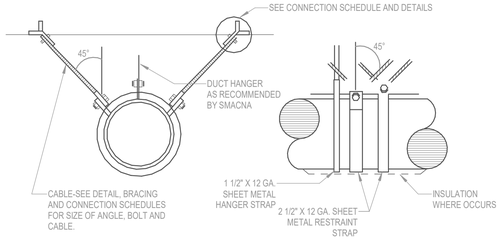
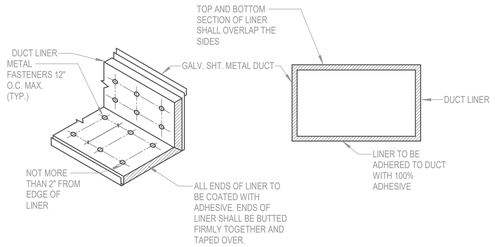
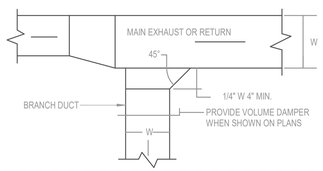


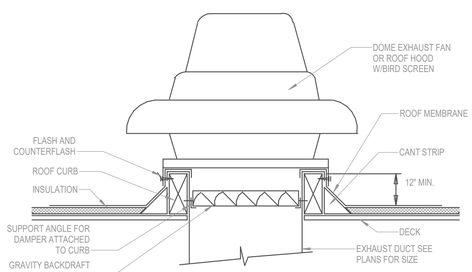
7 CABLE BRACING FOR ROUND AND OVAL DUCTS
NTS



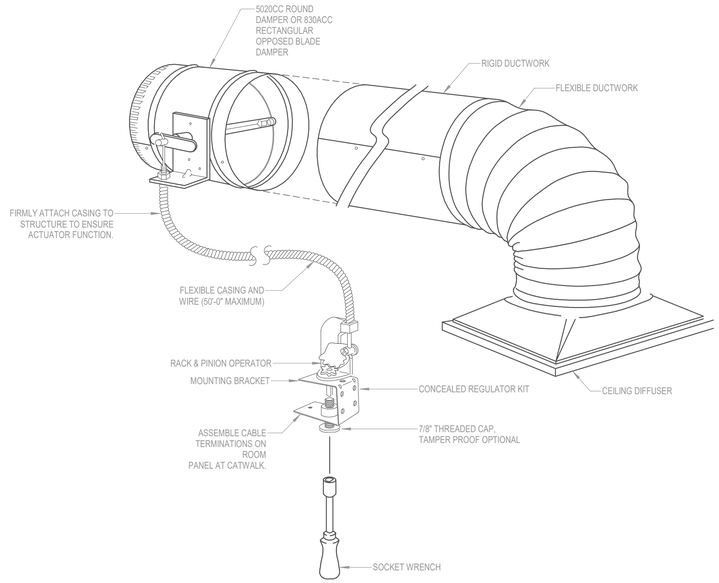
8 DUCT LINER DETAIL
NTS



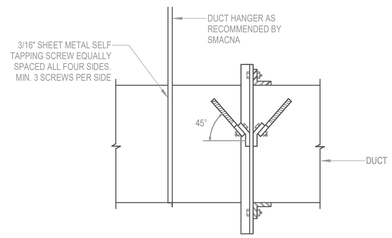
9 EXHAUST AND/OR RETURN BRANCH DUCT DETAIL
NTS

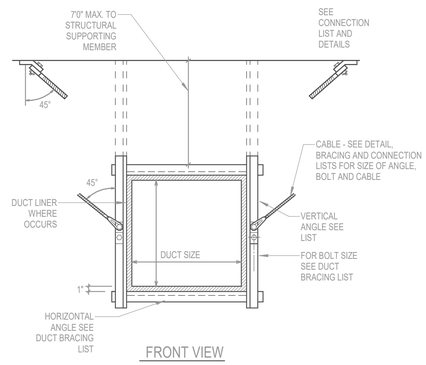


10 EXHAUST FAN DETAIL
NTS



5 BOWDEN CABLE CONTROL SYSTEM
NTS





6 CABLE BRACING FOR RECTANGULAR DUCTS
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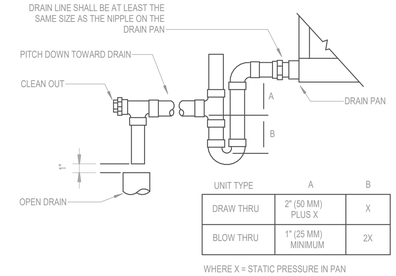
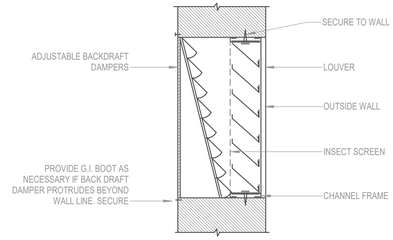


UNIT TYPE	A	B
DRAW THRU	2" (50 MM) PLUS X	X
BLOW THRU	1" (25 MM) MINIMUM	2X

WHERE X = STATIC PRESSURE IN PAN

1 AIR HANDLING UNIT DRAIN TRAP
NTS



2 EXHAUST AIR LOUVER SECTION
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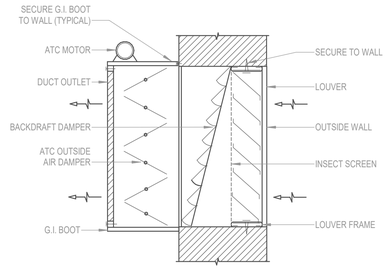

3 ATC OUTSIDE AIR DAMPER & LOUVER SECTION
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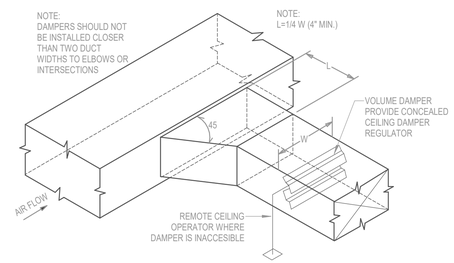

4 BRANCH DUCT TAKE-OFF & DAMPER DETAIL
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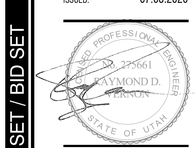

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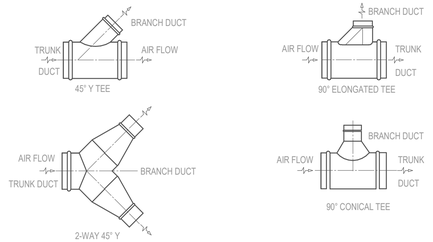

9 ROUND DUCT BRANCH TAKE-OFF DETAILS
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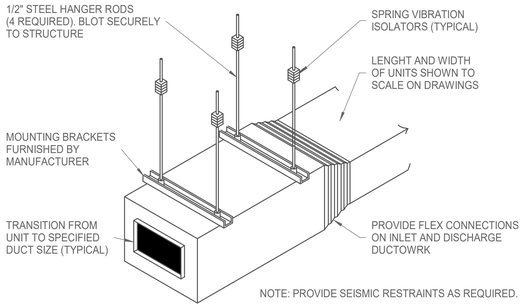

5 INLINE EXHAUST FAN DETAIL
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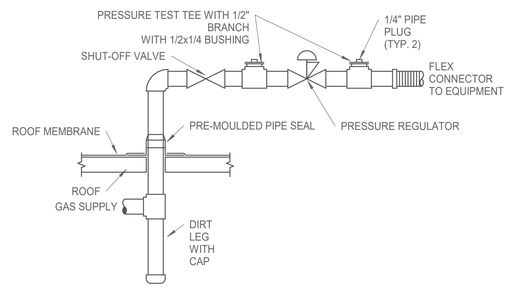

1 GAS CONNECTION TO ROOF EQUIPMENT
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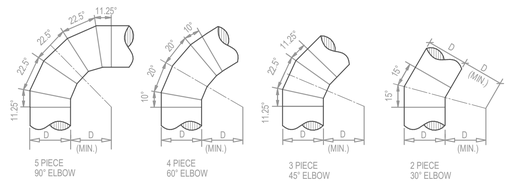

10 ROUND DUCT ELBOW DETAILS
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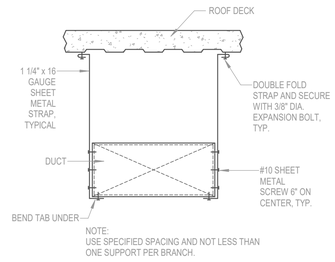

6 RECTANGULAR DUCT SUPPORT
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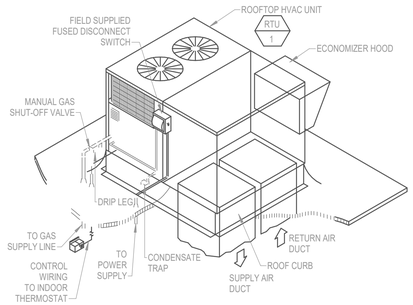
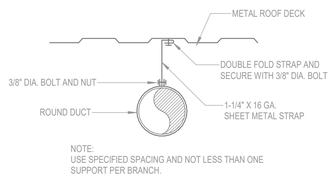


2 GAS FIRED ROOFTOP HVAC UNIT DETAIL
NTS



11 ROUND DUCT SUPPORT DETAIL
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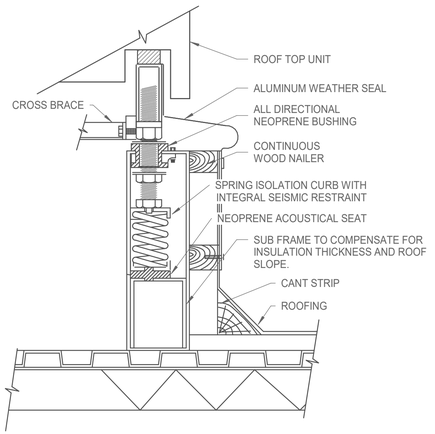

7 ROOFTOP UNIT CURB DETAIL
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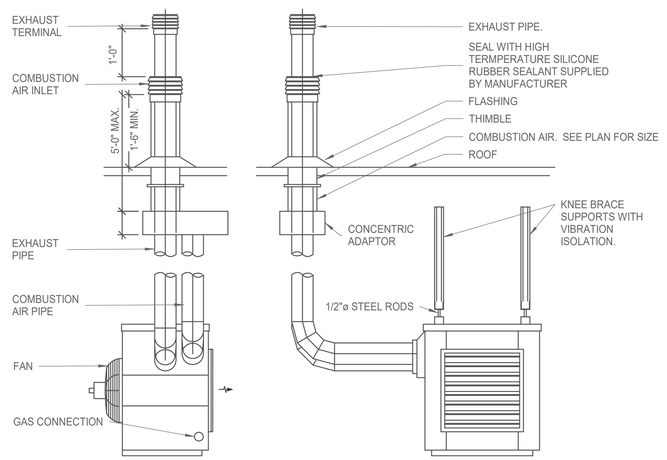

3 GAS FIRED UNIT HEATER THRU ROOF DETAIL
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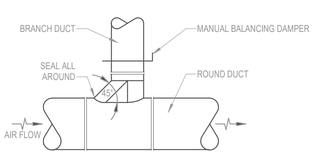

8 ROUND COMBINATION TEE DETAIL
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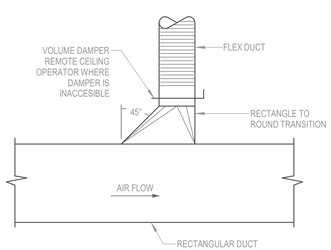

4 HIGH EFFICIENCY TAKE-OFF DETAIL
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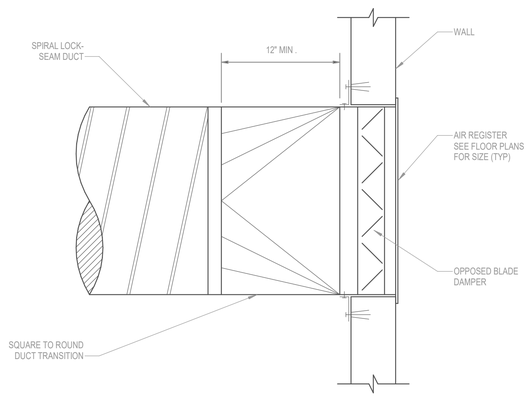

12 SIDEWALL REGISTER/OBD
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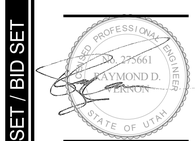

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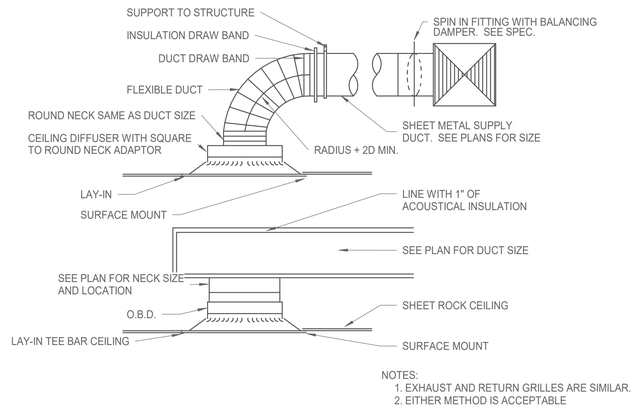
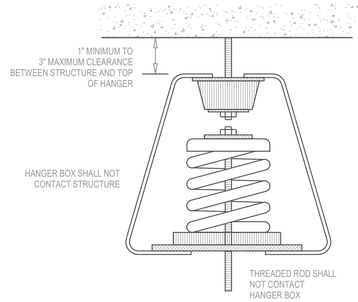
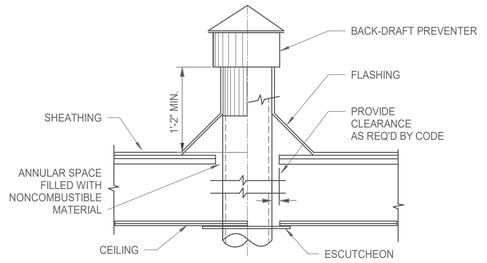


NOTES:
1. EXHAUST AND RETURN GRILLES ARE SIMILAR.
2. EITHER METHOD IS ACCEPTABLE

1 SUPPLY DIFFUSER WITH FLEX DUCT DETAIL
NTS



2 VIBRATION ISOLATION HANGER CLEARANCE
NTS



3 DRYER FLUE THROUGH ROOF DETAIL
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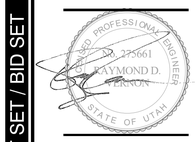

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PACKAGED ROOFTOP UNIT SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	AREA SERVED	AIR: MINIMUM OUTSIDE AIRFLOW RATE (CFM)	AIR: MAXIMUM COOLING AIRFLOW CAPACITY (CFM)	AIR: MAXIMUM HEATING AIRFLOW CAPACITY (CFM)	AIR: EXTERNAL STATIC PRESSURE (IN. H2O)	AIR: SUMMER/ WINTER AMBIENT AIR TEMP. (°F)	HEATING SECTION: MEDIUM	HEATING SECTION: NATURAL GAS PRESSURE (IN WG)	HEATING SECTION: MAXIMUM HEATING INPUT (BTUH)	HEATING SECTION: MAXIMUM HEATING OUTPUT (BTUH)	HEATING SECTION: ENTERING/ LEAVING AIR TEMP. (°F)	DX COOLING SECTION: COOLING LOAD (BTUH)	DX COOLING SECTION: NET COOLING CAPACITY (BTUH)	DX COOLING SECTION: ENTERING/ LEAVING AIR TEMP. (°F)	ELECTRICAL: SINGLE POINT VOLT/PH/HZ	ELECTRICAL: FLA	ELECTRICAL: MCA	ELECTRICAL: MOCP	PHYSICAL: LENGTH/ WIDTH/ HEIGHT (IN)	PHYSICAL: OPERATIONAL WEIGHT (LBS)	PHYSICAL: REFRIGERANT TYPE	PHYSICAL: REFRIGERANT CHARGE (LB-OZ)	PHYSICAL: FILTER RATING (MERV)	NOTES
RTU-1	CARRIER WEATHERMASTER 48HCFE08K3A5ADBGH0	ROOF	OFFICE	930	3750	3780	1.4	95 / -20	NAT. GAS	4 - 13	179200	147200	51.4/92.5	65760	89000	79.9/54.2	208/3/60	51	48	60	88.125/59.5/49.375	1375	R-410A	19-4	8	1 - 10

1. WITH TWO STAGE DX COOLING WITH HUMIDI-MIZER ADAPTIVE DEHUMIDIFICATION SYSTEM. CAPACITIES ARE TO BE AT SITE ELEVATION.
2. NATURAL GAS HEAT WITH TWO STAGE CONTROLS. CAPACITIES ARE TO BE AT SITE ELEVATION.
3. PROVIDE FULL ECONOMIZER CAPABILITY AND ADDED STATIC PRESSURE CAPACITY BY INCLUDING POWERED EXHAUST AND BAROMETRIC RELIEF.
4. WITH 2-SPEED FAN CONTROLLER WITH VARIABLE FREQUENCY DRIVE (VFD), FACTORY MOUNTED ELECTRICAL DISCONNECT WITH HACR BREAKER.
5. WITH FOIL FACED INSULATION, HINGED PANELS, AND UNPOWERED CONVENIENCE OUTLET. CONNECT THE CONVENIENCE OUTLET TO A SEPARATE 115/120 VOLT POWER SOURCE.
6. PROVIDE UNIT WITH SMOKE DETECTOR IN THE RETURN AIR PATH & A CONDENSATE OVERFLOW SWITCH.
7. PROVIDE A VIBRATION ISOLATION ROOF CURB FOR THE UNIT TO BE MOUNTED ON. CURB HEIGHT TO BE AT LEAST 24". CURB TO COMPENSATE FOR ANY SLOPE IN THE ROOF. UNIT IS TO HAVE NO SLOPE WHEN OPERATIONAL.
8. WITH COMFORTLINK UNIT CONTROLLER.
9. CONFIGURE UNIT FOR VERTICAL SUPPLY AND RETURN CONNECTIONS.
0 10. WITH HIGH ALTITUDE CONVERSION KIT & ECONOMIZER HOOD.

GRILLES, REGISTERS AND DIFFUSERS

ID	MANUFACTURER	MODEL	SIZE	MAX CFM	MAX NC	DESCRIPTION
CD-1	EH PRICE	SPD	6" DIA 8" DIA 10" DIA 12" DIA 14" DIA	175 330 475 630 860	30	SQUARE PLAQUE CEILING DIFFUSERS. REMOVABLE FACE & CORE FRAME SHALL BE FOR SURFACE OR LAY-IN MOUNTING AS REQUIRED BY CEILING TYPE. LAY-IN FRAMES SHALL BE 24" x 24", 24" x 12" OR 12" x 12" AS REQUIRED TO FIT CEILING TILE SPACE AVAILABLE. PROVIDE ROUND NECK ADAPTER. COLOR SHALL BE WHITE.
RG-1 / EG-1	EH PRICE	PDDR	6" DIA 8" DIA 10" DIA 12" DIA 14" DIA 18"x18"	200 350 550 785 1050 2250	30	PERFORATED FACE RETURN AIR GRILLE, REMOVABLE FACE & CORE. FRAME SHALL BE FOR SURFACE OR LAY-IN MOUNTING AS REQUIRED BY CEILING TYPE. LAY-IN FRAMES SHALL BE 24" x 24", 24" x 12" OR 12" x 12" AS REQUIRED TO FIT CEILING TILE SPACE AVAILABLE. PROVIDE ROUND NECK ADAPTER. COLOR SHALL BE WHITE.
SWS-1	EH PRICE	510	6"x6" 8"x8" 18"x6" 12"x12" 18"x12"	180 325 480 700 1000	30	LOUVERED FACE SUPPLY AIR GRILLE, REMOVABLE FACE & CORE. FRAME SHALL BE FOR SURFACE MOUNTING. SINGLE DEFLECTION GRILLE WITH HORIZONTALLY MOUNTED BLADES. BLADES TO HAVE A 22.5 DEGREE DEFLECTION TOWARDS THE GROUND. COLOR SHALL BE WHITE.

UNIT HEATER SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	AIR: AIRFLOW RATE (CFM)	AIR: RPM	CAPACITY: MEDIUM	CAPACITY: NATURAL GAS PRESSURE (IN WC)	CAPACITY: HEATING INPUT (BTUH)	CAPACITY: HEATING OUTPUT (BTUH)	ELECTRICAL: MOTOR SIZE (HP)	ELECTRICAL: VOLT/PH/HZ	ELECTRICAL: TOTAL FLA	ELECTRICAL: TOTAL MCA	PHYSICAL: DEPTH/ WIDTH/ HEIGHT (IN)	PHYSICAL: WEIGHT (LBS)	PHYSICAL: OUTSIDE AIR INLET DUCT SIZE (IN)	PHYSICAL: FLUE VENT SIZE (IN)	NOTES
UH-1	TRANE GTNE009AVA10000B0DG00K000EH0YWX0057508	GARAGE	1100	1050	NAT. GAS	5 - 14	72,000	59,040	1/10	115/1/60	6.4	7.5	27/30/24	95	5	5	1 - 6
UH-2	TRANE UHAA031AT-D0A	OFFICE	175	600	ELECTRIC	-.-	-.-	10,240	-.-	208/1/60	14.4	20	4/16/21	27	-.-	-.-	6, 7
UH-3	TRANE UHEC031A0C0	STORAGE	400	1550	ELECTRIC	-.-	-.-	11,260	1/125	208/1/60	15.9	20	6.5/15/18	36	-.-	-.-	2, 6, 8, 9

1. HEATER IS FOR FREEZE PROTECTION. WITH 2-STAGE LINE VOLTAGE DIGITAL THERMOSTAT SET FOR 55 DEGREES (ADJUSTABLE).
2. PLACE THE LINE VOLTAGE DIGITAL THERMOSTAT IN THE LOCATION SHOWN ON THE DRAWINGS.
3. WITH 30-DGREE DOWNWARD DISCHARGE NOZZLE.
4. WITH FACTORY-MOUNTED OSHA FAN GUARD.
5. WITH VERTICAL CONCENTRIC COMBUSTION AIR INLET KIT. INCLUDING CONCENTRIC VENT BOX, 8" ROUND COMBUSTION AIR PIPE, 5" ROUND FLUE PIPE, AND FLUE TERMINAL ASSEMBLY INSTALLED PER MANUFACTURER'S INSTRUCTIONS.
6. HEATING CAPACITY IS AT SITE ELEVATION.
7. WITH BUILT-IN TAMPERPROOF THERMOSTAT SET FOR 55 DEGREES (ADJUSTABLE) & SURFACE MOUNTING KIT.
8. UNIT TO BE ORDERED FOR VERTICAL AIR DELIVERY WITH CEILING MOUNTING BRACKET V5105.
9. UNIT TO BE CONTROLLED WITH A LINE-VOLTAGE THERMOSTAT IN CONJUNCTION WITH A STRATIFICATION THERMOSTAT. THERMOSTAT IS TO BE SET FOR 55 DEGREES (ADJUSTABLE).

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LICENSED PROFESSIONAL ENGINEER
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RAYMOND D. KRANK
STATE OF UTAH

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EXHAUST AIR FAN SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	QUAN.	TYPE	AIR			FAN		ELECTRICAL				PHYSICAL		NOTES
					MAXIMUM AIRFLOW RATE (CFM)	STATIC PRESSURE (IN. H2O)	MAX AIR TEMP. (°F)	FAN SPEED (RPM)	FAN WHEEL DIA. (IN)	MOTOR SIZE (HP)	MOTOR BHP (HP)	MOTOR SPEED (RPM)	VOLT/PH/HZ	LENGTH/ WIDTH/ HEIGHT (IN)	WEIGHT (LBS)	
EF-1	COOK ACED-120C15D	ROOF	1	DOWNBLAST CENTRIFUGAL	830	0.5	72	1228	12	0.25	0.108	1550	120/1/60	29/29/27	30	1, 2, 3, 4, 5
EF-2	BROAN 46000 SERIES	BREAK ROOM	1	KITCHEN RANGE HOOD	220	2	72	-.-	-.-	-.-	-.-	-.-	120/1/60	17.5/36/6	162	6
EF-3	COOK SQND-120SQN17D (VF)	GARAGE	1	CENTRIFUGAL SQUARE INLINE	255	0.75	72	1519	12	0.125	0.108	1725	120/1/60	22/19/19	71	2, 3, 4, 5
EF-4	COOK SQND-180SQN17D (VF2)	GARAGE	1	CENTRIFUGAL SQUARE INLINE	3800	0.75	72	1282	18	1.5	1.04	1725	208/3/60	30/28/28	161	2, 3, 7, 8, 9, 10

1. PROVIDE 24" HIGH VIBRATION ISOLATION CURB, BIRD SCREEN, THERMAL OVERLOAD PROTECTION, AND BACKDRAFT DAMPER.
2. PROVIDE FACTORY DISCONNECT.
3. CAPACITIES ARE AT ALTITUDE.
4. EXHAUST FAN TO RUN CONTINUOUSLY.
5. WITH FAN-MOUNTED SPEED CONTROL.
6. 36" WIDE UNIT WITH ROUND TOP EXHAUST CONNECTION, BROAN ROOF CAP 634M ORIENTED TO DISCHARGE AWAY FROM RTU-1. COLOR AS SELECTED BY ARCHITECT.
7. WITH A WIRE HARNESS THAT ALLOWS FOR 0 - 10 VOLT EXTERNAL CONTROL. INCLUDE A VARI-FLOW AIR BALANCE KIT (VFABK) FOR EASY INTERCONNECTION OF MOTOR & CONTROLS.
8. EXHAUST FAN TO NORMALLY BE OFF. UPON CALL FROM EITHER THE CARBON MONOXIDE DETECTOR OR NITROGEN DIOXIDE DETECTOR THE EXHAUST FAN IS TO TURN ON AND RAMP UP TO THE MAXIMUM LISTED AIRFLOW RATE UNTIL THE DETECTOR IS SATISFIED.
9. INTERLOCK THE OPERATION OF THIS EXHAUST FAN WITH THE ATC DAMPER ON LOUVER L-1. WHEN THE EXHAUST FAN IS OPERATIONAL THE ATC DAMPER IS TO BE OPEN AND IT IS TO BE CLOSED WHEN THE FAN IS OFF.
10. PROVIDE A BACKDRAFT DAMPER WITH THIS EXHAUST FAN.

LOUVER SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	AIR TYPE	AIR		PHYSICAL	NOTES
					MAXIMUM AIRFLOW RATE (CFM)	STATIC PRESSURE DROP (IN. H2O)	WIDTH/ HEIGHT/ THICKNESS (IN)	
L-1	RUSKIN ELF6375DX	GARAGE	STATIONARY	INTAKE	3800	0.1	36/36/6	1
L-2	RUSKIN ELF6375DX	GARAGE	STATIONARY	EXHAUST	3800	0.1	36/30/6	
L-3	RUSKIN ELF6375DX	GARAGE	STATIONARY	EXHAUST	255	0.1	12/12/6	
L-4	RUSKIN ELF6375DX	STORAGE 121	STATIONARY	EXHAUST	-.-	0.1	24/24/6	

1. PROVIDE A NORMALLY CLOSED AIR-TIGHT ATC DAMPER IN THE OUTLET DUCTWORK THAT IS INTERLOCKED WITH THE OPERATION OF EXHAUST EF-4.

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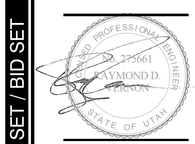

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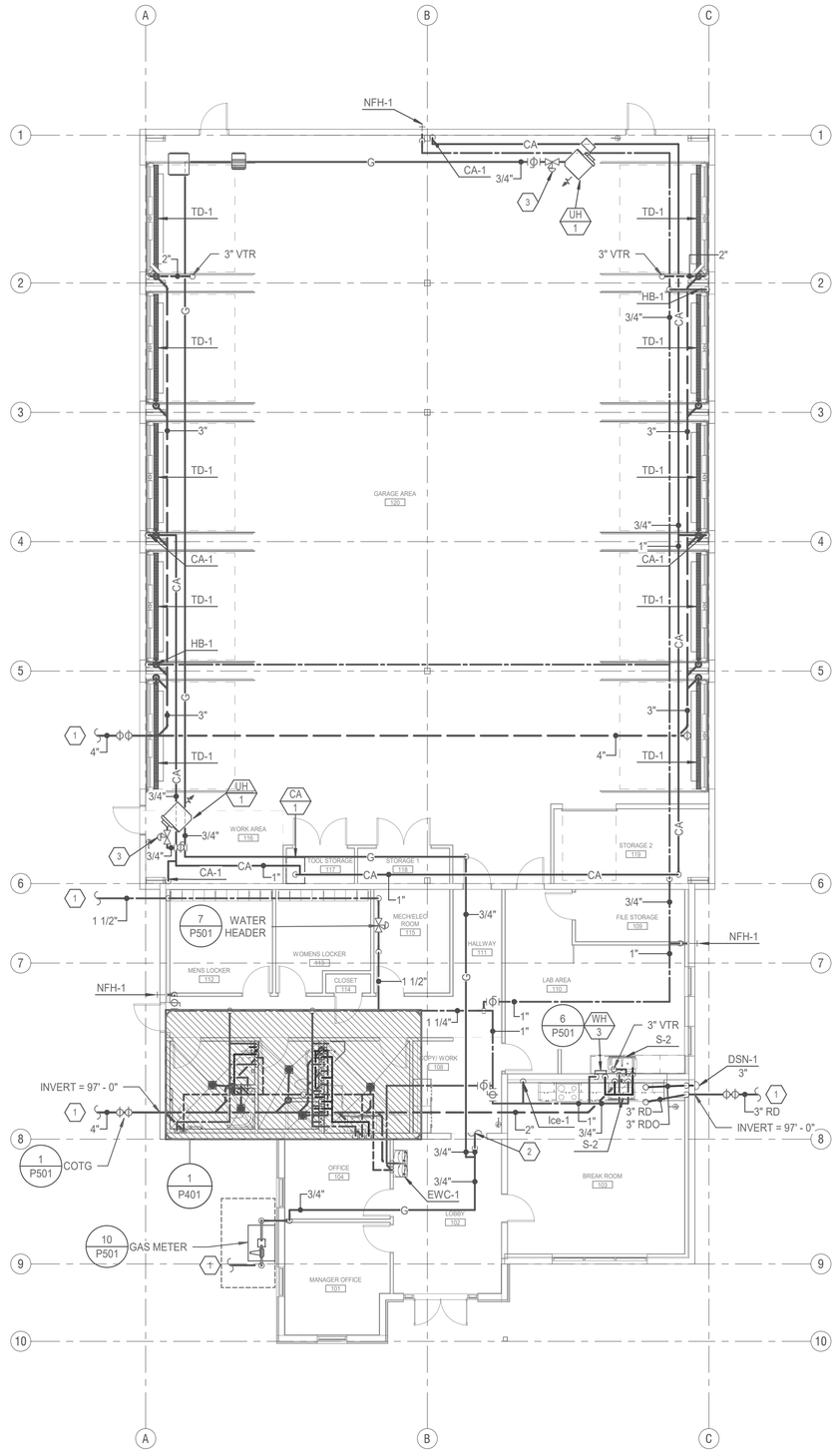

1 LEVEL 1 PLUMBING PLAN

1/8" = 1'-0"

SHEET KEYNOTES

1. SEE CIVIL PLANS FOR CONTINUATION.
2. EXTEND GAS PIPING ONTO ROOF. SEAL PENETRATION WEATHER TIGHT.
3. 2 PSIG TO 4 OZ GAS PRESSURE REGULATOR. 82 CFH. VENT TO OUTSIDE.

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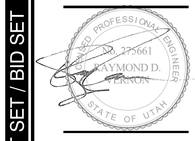
CACHE COUNTY MOSQUITO ABATEMENT

210 W. 3700 N.
HYDE PARK, UT 84318

MARK:	DESCRIPTION:	DATE:

PROJECT #: 819159
DRAWN BY: DBB
CHECKED BY: JLJ
ISSUED: 07.08.2020



PERMIT SET / BID SET

LEVEL 1 PLUMBING PLAN

P101

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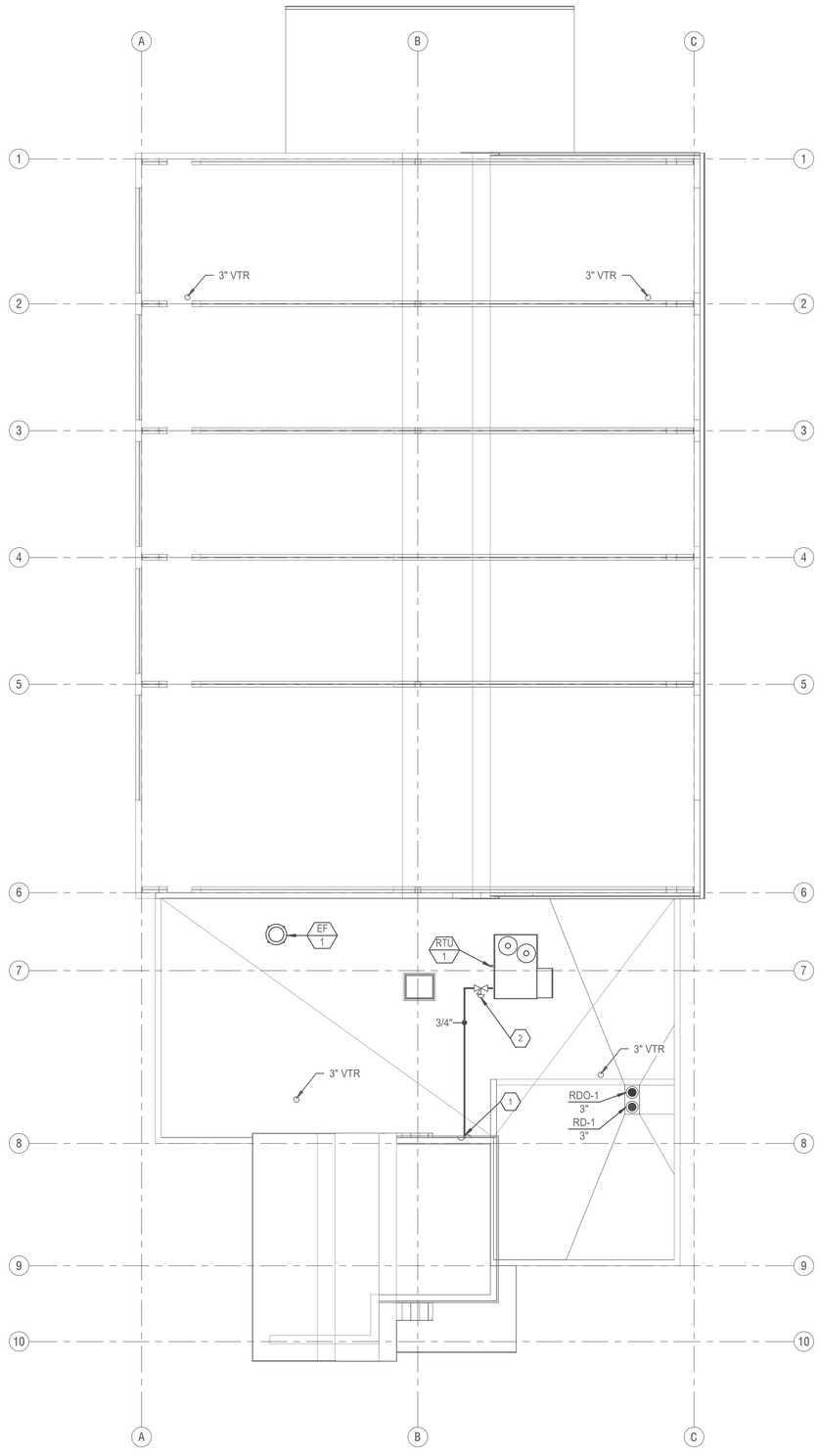

1 ROOF LEVEL PLUMBING PLAN
SCALE: 1/8" = 1'-0"

SHEET KEYNOTES

1. RUN GAS PIPING ON ROOF. SEAL PENETRATION WEATHER TIGHT.
2. 2 PSIG TO 4 OZ GAS PRESSURE REGULATOR. 204 CFH.

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CACHE COUNTY MOSQUITO ABATEMENT

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NO. 275661
RAYMOND D. GERSON
STATE OF UTAH

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ROOF LEVEL PLUMBING PLAN

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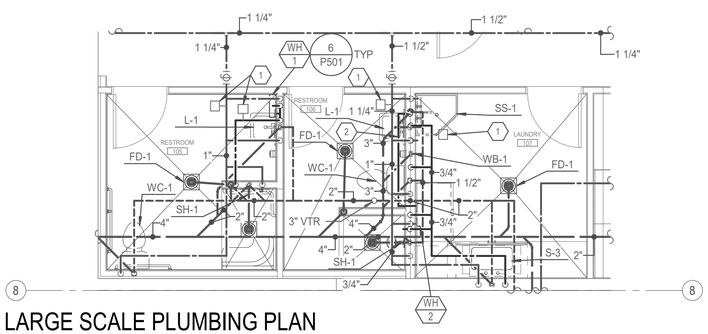
SHEET KEYNOTES

1. WATER HAMMER ARRESTOR.
2. RUN 1/4" HOT WATER LINE IN WALL FROM WH-2 TO L-1. SHOWN OUTSIDE OF WALL FOR CLARITY. MAX LENGTH SHALL BE 6 FEET FROM WATER HEATER TO LAVATORY.



1 LARGE SCALE PLUMBING PLAN

1/4" = 1'-0"

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CHECKED BY: JLJ
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275661
RAYMOND D. LANGAK
STATE OF UTAH

LARGE SCALE PLUMBING PLANS

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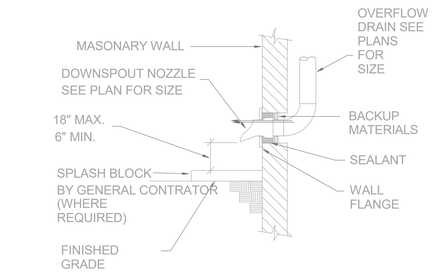
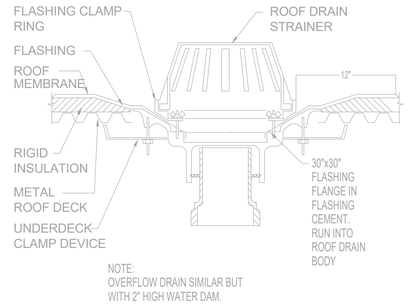
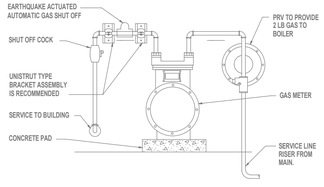


12 P501 DOWNSPOUT NOZZLE DETAIL
NO SCALE

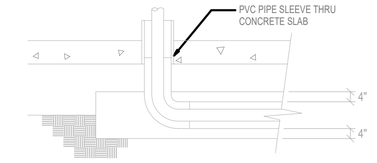


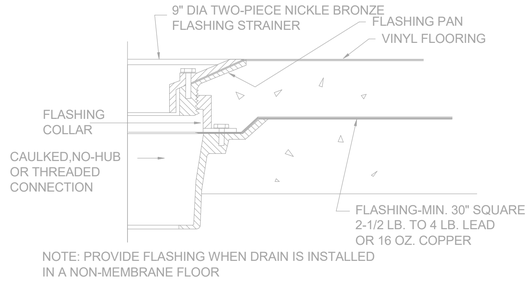
11 P501 ROOF DRAIN
NO SCALE



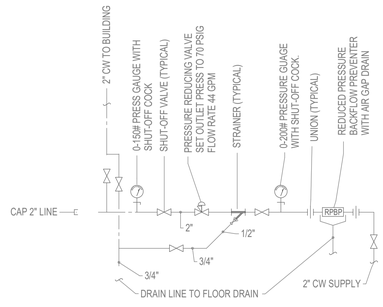
10 P501 GAS METER DETAIL
NO SCALE

9 P501 NOT USED
NO SCALE

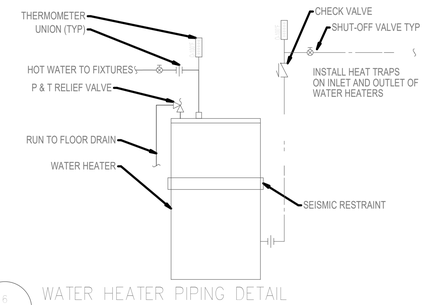




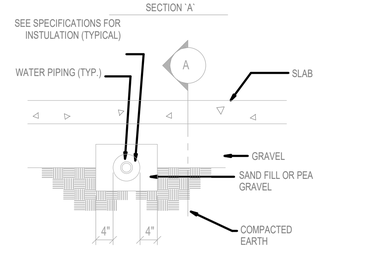
8 P501 FLOOR DRAIN
NO SCALE



7 P501 WATER HEADER DETAIL
NO SCALE

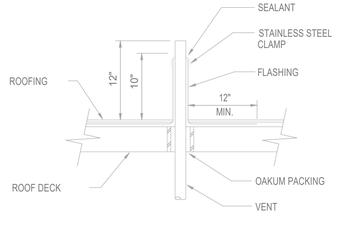


6 P501 WATER HEATER PIPING DETAIL
NO SCALE

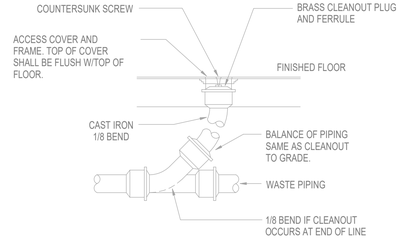


SECTION 'A'

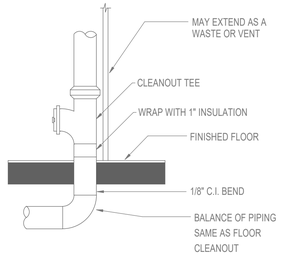
5 P501 UNDER SLAB WATER PIPING
NO SCALE



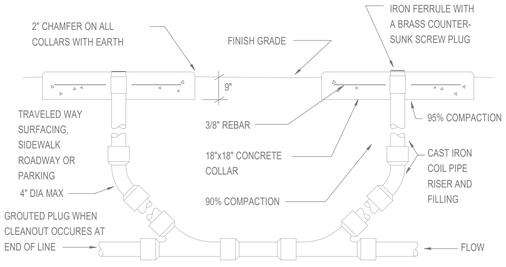
4 P501 VENT THRU ROOF FLASHING & SLEEVING
NO SCALE



3 P501 FLOOR CLEANOUT DETAIL
NO SCALE



2 P501 WALL CLEANOUT DETAIL
NO SCALE



1 P501 DOUBLE CLEAN-OUT TO GRADE DETAIL (COTG)
NO SCALE

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CACHE COUNTY MOSQUITO ABATEMENT
210 W. 3700 N.
HYDE PARK, UT 84318

DESCRIPTION:
DATE:
MARK:

PERMIT SET / BID SET

PROJECT #: 819159
DRAWN BY: DBB
CHECKED BY: JLJ
ISSUED: 07.08.2020

LICENSED PROFESSIONAL ENGINEER
NO. 275661
RAYMOND D. PRYOR
STATE OF UTAH

PLUMBING DETAILS
P501

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PLUMBING FIXTURE SCHEDULE

ID	FIXTURE	CW (IN)	HW (IN)	W (IN)	V (IN)	SPECIFICATION
WC-1	ADA WATER CLOSET	1	-	4	2	WATER CLOSET (FLOOR MOUNTED, TANK TYPE, ADA): KOHLER K-3493-SS, HIGHLINE CLASSIC COMFORT HEIGHT TOILET, FLOOR MOUNTED, VITREOUS CHINA, 1.6 GALLON FLUSH. ELONGATED BOWL DESIGN, 2-1/4" PASSAGEWAY. BEMIS 3155-C "DURAGUARD" WHITE, SOLID PLASTIC, OPEN-FRONT SEAT, LESS COVER.
EWC-1	ELECTRIC WATER COOLER	1/2	-	1 1/2	1 1/2	WATER COOLER: ELKAY MODEL EZSTL8WSLK WALL MOUNTED BARRIER FREE SPLIT LEVEL WATER COOLER WITH BOTTLE FILLER. BOTTLE FILLER SHALL BE INSTALLED ON THE LOWER FOUNTAIN. ONE-PIECE STAINLESS STEEL TOPS AND RECEPTORS; WELDED STEEL FRAME AND STAINLESS STEEL PANELS WITH BAKED ENAMEL COATING; HERMETICALLY SEALED MOTOR COMPRESSOR WITH OVERLOAD PROTECTION, 1/5 HP 115V/SINGLE PHASE/60 CYCLE; FAN COOLED CONDENSER; PERMANENTLY LUBRICATED FAN MOTOR; COOLER SHALL DELIVER 8 GPH AND BOTTLE FILLER SHALL PROVIDE 1.1 GPM OF 50ºF DRINKING WATER WITH 80ºF INLET TEMPERATURE AND 90ºF ROOM TEMPERATURE.
L-1	COUNTER MOUNT LAVATORY	1/2	1/2	1 1/2	1 1/2	LAVATORY (COUNTER MOUNTED): KOHLER K-2007, KINGSTON, 21 X 18-INCH WALL HUNG, VITREOUS CHINA LAVATORY. CHICAGO 116.201.AB.1 BATTERY SENSOR FAUCET 0.5 GPM MAXIMUM FLOW AERATOR AND ESCUTHEON. FAUCET TO BE PROVIDED WITH WATTS LFMMV THERMOSTATIC MIXING VALVE TO MEET ASSE 1070. PROVIDE WATTS LF7 DUAL CHECKS IN HOT AND COLD SUPPLIES. PROVIDE VANDAL RESISTANT AERATOR. PROVIDE LOOSE KEY ANGLE STOPS AND CHROME PLATED COPPER SUPPLIES AND 17 GA. CAST BRASS, CHROME PLATED P-TRAP. COVER ALL EXPOSED PIPING WITH WHITE "HANDI-LAV GUARD" PROTECTOR AS NEEDED TO MEET ADA REQUIREMENTS.
FD-1	FLOOR DRAIN	-	-	2	2	FLOOR DRAIN: SMITH 2005 WITH 6-INCH NICKEL BRONZE STRAINER, CAST-IRON BODY, NO-HUB CONNECTION, 2" OUTLET SIZE.PROVIDE AND INSTALL TRAP GUARD TRAP SEAL.
TD-1	TRENCH DRAIN	-	-	3	2	TRENCH DRAIN: SMITH MODEL 9930 POLYDRAIN PRECAST POLYMER CONCRETE TRENCH DRAIN SYSTEM WITH TOP WIDTH OF 6" X LENGTH INDICATED AND REINFORCED GALVANIZED STEEL LOAD CLASS C SLOTTED GRATE. TRENCH DRAIN SYSTEM SHALL BE COMPRISED OF INTERLOCKING PRE-SLOPED DRAIN SECTION WITH MINIMUM SLOPE OF 0.6%. PROVIDE LENGTHS AS SHOWN ON DRAWINGS
HB-1	HOSE BIB	3/4	-	-	-	HOSE BIBB: CHICAGO 293-CP ½" NPT FEMALE INLET, 3/4" MALE HOSE THREAD OUTLET, CHROME PLATED, ESCUTCHEON PLATE. CHICAGO E-27JKCP INLINE VACUUM BREAKER 3/4" HOSE THREAD OUTLET.
NFH-1	NON FREEZE WALL HYDRANT	3/4	-	-	-	NON-FREEZE WALL HYDRANT: SMITH 5609 NON-FREEZE WALL HYDRANT FOR WALL THICKNESS SHOWN ON PLAN. HYDRANT SHALL HAVE POLISHED BRONZE FACE, 3/4-INCH CONNECTION WITH BRASS CASING, INTEGRAL SELF-DRAINING VACUUM BREAKER, AND LOOSE KEY.
RD-1	ROOF DRAIN	-	-	-	-	ROOF DRAIN: J.R. SMITH 1010-R-C-CID CAST IRON ROOF DRAIN WITH COMBINED FLASHING CLAMP AND GRAVEL STOP, SUMP RECEIVER, UNDER-DECK CLAMP AND CAST IRON DOME. PROVIDE ADJUSTABLE EXTENSIONS WHERE NECESSARY; ACCORDING TO ARCHITECTURAL DETAIL OF ROOF INSULATION THICKNESS.
RDO-1	ROOF DRAIN OVERFLOW	-	-	-	-	ROOF DRAIN OVERFLOW: J.R. SMITH 1080-R-C-CID CAST IRON ROOF DRAIN WITH COMBINED FLASHING CLAMP AND GRAVEL STOP, 2" CAST IRON WATER DAM, SUMP RECEIVER, UNDERDECK CLAMP AND CAST IRON DOME. PROVIDE ADJUSTABLE EXTENSIONS WHERE NECESSARY; ACCORDING TO ARCHITECTURAL DETAIL OF ROOF INSULATION THICKNESS.
DSN-1	DOWN SPOUT NOZZLE	-	-	-	-	DOWNSPOUT NOZZLE: SMITH 1770-PB CAST BRONZE BODY AND FLANGE, POLISHED BRONZE FINISH. SIZE SHOWN ON DRAWINGS.
ICE-1	REFRIGERATOR CONNECTION	1/2	-	-	-	WATER CONNECTION: WATER-TITE AB9200HA WATER OUTLET BOX WITH QUARTER TURN BALL VALVE AND WATER HAMMER ARRESTER.
WB-1	WASHER BOX	1/2	1/2	-	-	WATER OUTLET BOX: WATER-TITE MBS1200HA WASHING MACHINE OUTLET BOX WITH DRAIN, QUARTER-TURN BALL VALVES AND WATER HAMMER ARRESTERS.
SS-1	SERVICE SINK	3/4	3/4	3	2	SERVICE SINK (FLOOR MOUNTED, CORNER): KOHLER K6710, WHITBY, 28 X 28-INCH, ENAMELED CAST IRON FLOOR-MOUNTED CORNER MODEL, K9146-3" DRAIN WITH STRAINER, NO. K8940 REMOVABLE VINYL-COATED RIM GUARD; T&S BRASS B-0665-CR-BSTR WALL MOUNT FAUCET WITH LEVER HANDLES, HOSE END OUTLET, VACUUM BREAKER SPOUT WITH PAIL HOOK, BUILT-IN SERVICE STOPS, AND WALL BRACE, 5 FOOT RUBBER HOSE AND 853 WALL HOOK. WATTS 1-1/4" LF7 DUAL CHECK VALVES ON HOT AND COLD WATER LINES INSTALLED IN THE CEILING NEXT TO ISOLATION VALVES.
S-2	SINK	1/2	1/2	2	1 1/2	SINK (COUNTER MOUNTED DUAL COMPARTMENT): ELKAY MODEL LRADQ332265 33" X 22" X 6.5" DEEP 18 GA STAINLESS STEEL SINK; LK-35 CUP STRAINERS. T&S BRASS B-2347-01 WIDESPREAD FAUCET WITH 8" SWING SPOUT AND 2.2 GPM FLOW CONTROL. PROVIDE AND INSTALLWATTS LFMMV THERMOSTATIC MIXING VALVE TO MEET ASSE 1070. PROVIDE WATTS LF7 DUAL CHECKS IN HOT AND COLD SUPPLIES. 17 GA CAST BRASS P-TRAP WITH CLEAN-OUT PLUG.
S-3	SINK	1/2	1/2	2	1 1/2	SINK (COUNTER MOUNTED SINGLE COMPARTMENT): ELKAY MODEL LRADQ252165 25" X 21.25" X 6.5" DEEP 18 GA STAINLESS STEEL SINK; LK-35 CUP STRAINER. CHICAGO NO. 1100-E35-317ABCP FAUCET WITH L-SPOUT AND 1.5 GPM FLOW CONTROL AERATOR. PROVIDE AND INSTALL POWERS 480 UNDER COUNTER THERMOSTATIC MIXING VALVE WITH STRAINERS AND ADDITIONAL ZURN MODEL 40XL CHECK VALVES ON HOT AND COLD WATER INLETS. 17 GA CAST BRASS P-TRAP WITH CLEAN-OUT PLUG.
SH-1	SHOWER	3/4	3/4	2	1 1/2	SHOWER (ADA, W/ DRAIN): SYMMONS T736 PACKAGED CHROME SHOWER UNIT WITH HAND SPRAY AND HOSE; TEMPTROL II PRESSURE BALANCE VALVE WITH TEMPERATURE STOP, 1.5 GPM FLOW RESTRICTOR; HAND SPRAY UNIT WITH FLEXIBLE HOSE, 36" SLIDE BAR, WALL CONNECTION AND IN-LINE VACUUM BREAKER. ADJUST HOT WATER HANDLE STOP TO 108 DEGREES F. SMITH 2005-1-U WITH 6-INCH CHROME STRAINER, CAST-IRON BODY, NO-HUB CONNECTION, 2" OUTLET SIZE.
CA-1	LAB AIR CONNECTION	-	-	-	-	PIPE AND VALVE SIZE 3/4". PROVIDE AND INSTALL ISOLAITON VALVE AND QUICK CONNECTION FITTING.

1. ALL UNDER GROUND WASTE AND VENT SHALL BE 2" OR GREATER PER DRAWINGS.

ELECTRIC WATER HEATER SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	DISCHARGE WATER TEMPERATURE (F)	RECOVERY RATE @ 61 F DELTA T	ELECTRICAL (KW)	ELECTRICAL V/PH	PHYSICAL L/W/H (IN)	NOTES
WH-1	BRADFORD WHITE EFT-18000-2-T-10	RESTROOM 105	TANKLESS	110	2 GPM	18	208/3	15.25/4.25/12.25	
WH-2	BRADFORD WHITE EFT-18000-2-T-10	RESTROOM 106	TANKLESS	110	2 GPM	18	208/3	15.25/4.25/12.25	
WH-3	BRADFORD WHITE EFT-18000-2-T-10	LAB AREA 110	TANKLESS	110	2 GPM	18	208/3	15.25/4.25/12.25	

AIR COMPRESSOR SCHEDULE

ID	MANUFACTURER	MODEL NUMBER	LOCATION	MAXIMUM FLOW (SCFM)	MAXIMUM PUMP PRESS. (PSIG)	RECEIVER SIZE (GAL)	RECEIVER TYPE	ELECTRICAL MOTOR QUAN.	MOTOR SIZE (HP)	VOLT/PH	NOTES
CA-1	FS CURTIS	FCA07E57V8S-A9L1XX/120GALLONMTC	TOOL STORAGE 118	23.2	175	120	VERTICAL	1	7.5	208/3	1,2,3,4

1. CAPACITIES SHOWN ARE SEA-LEVEL CAPACITIES.
2. TWO STAGE, HEAVY-DUTY, CAST IRON, AIR-COOLED, SPLASH LUBRICATED, TANK MOUNTED AND MANUAL DRAIN.
3. SYSTEM COMPLETE WITH, TANK, AFTER COOLER, CONTROL PANEL WITH STARTER.
4. SYSTEM SHALL INCLUDE A PRESSURE REGULATOR AND PRESSUER GUAGE ON THE DISCHARGE. SET DISCHARGE TO 100 PSI.

NATURAL GAS REQUIREMENTS

EQUIP. NO.	QTY.	LOCATION	EQUIPMENT	EQUIP BTUH INPUT	TOTAL CFH
UH-1	**2**	**SEE PLANS**	**UNIT HEATER**	**72,000**	**164**
RTU-1	**1**	**SEE PLANS**	**ROOFTOP UNIT**	**179,200**	**204**
TOTAL (BTUH) =	**323,200**				
BTU/CUBIC FT. =	880				
TOTAL CFH=	**367**				

NEW 2 PSIG GAS METER TO BE...

METER COMPLETE WITH EARTHQUAK...

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CACHE COUNTY MOSQUITO ABATEMENT
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LICENSED PROFESSIONAL ENGINEER
275661
RAYMOND D. JENSEN
STATE OF UTAH

PERMIT SET / BID SET

PLUMBING SCHEDULES

P601

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GENERAL PROJECT NOTES

1. ALL ELECTRICAL INSTALLATIONS TO CONFORM TO THE LATEST NEC AND LOCAL CODES.
2. THE ELECTRICAL CONTRACTOR SHALL HAVE A COORDINATION MEETING WITH THE MECHANICAL CONTRACTOR, CONSTRUCTION SUPERINTENDANT AND ANY OTHER TRADES AS REQUIRED WITHIN SEVEN DAYS OF THE START OF THE JOB TO REVIEW CODE CLEARANCE REQUIREMENTS FOR PANELS, SWITCHES, AND OTHER ELECTRICAL GEAR SPECIFICALLY FOR THIS JOB. RECORD THE MEETING IN THE SUPERINDENT'S LOG. REPORT UNRESOLVED CONFLICTS TO THE ARCHITECT IMMEDIATELY.
3. ELECTRICAL CONTRACTOR'S PROJECT MANAGER AND ON-SITE PROJECT FOREMAN SHALL REVIEW VENDOR SUBMITTALS FOR ACCURACY PRIOR TO SUBMITTING TO ENGINEER. INACCURACIES SHALL BE CORRECTED PRIOR TO ENGINEER SUBMITTAL.
4. SUBMITTALS FOR EACH SYSTEM WILL BE REVIEWED BY ENGINEER UP TO TWO TIMES—ONE FULL SUBMITTAL FOR OVERALL COMPLIANCE AND ONE RESUBMITTAL. ADDITIONAL REVIEWS WILL BE CHARGED TO CONTRACTOR AT ENGINEER'S STANDARD BILLING RATE.
5. SUBMITTALS TO ENGINEER SHALL INCLUDE ALL SPECIFIED SYSTEMS IN FIRST SUBMITTAL. PARTIAL SUBMITTALS WILL BE RETURNED TO CONTRACTOR AS INCOMPLETE AND WILL BE CONSIDERED ONE OF TWO INCLUDED SUBMITTAL REVIEWS.
6. THE CLARITY OF RECORD DRAWING CHANGES MADE BY THE CONTRACTOR SHALL BE EQUAL TO THE ORIGINAL DRAWINGS AS JUDGED BY THE ARCHITECT OR THE RECORD SET WILL BE RETURNED TO THE CONTRACTOR FOR CLARIFICATION.
7. WHEN THE GENERAL CONTRACT CALLS FOR "RECORD" OR "AS-BUILT" DRAWINGS TO BE FURNISHED BY THE CONTRACTOR AT JOB COMPLETION, THE ELECTRICAL CONTRACTOR SHALL BE REQUIRED TO FURNISH A COMPLETE SET OF "BLUE-PRINT READY" AUTOCAD ELECTRICAL DRAWINGS FOR ALL CONTRACTOR GENERATED CHANGES FROM THE DRAWINGS OF A CLARITY EQUAL TO THE ORIGINAL DRAWINGS AS JUDGED BY THE ENGINEER. CONTACT ARCHITECT FOR DISKS OR REPRODUCIBLE ORIGINAL MEDIA. PROVIDE DRAWINGS ON CD IN AUTOCAD FORMAT.
8. DO NOT SCALE ELECTRICAL FLOOR PLANS. SEE ARCHITECTURAL DRAWINGS FOR ACCURATE DIMENSIONS AND FLOOR PLANS.
9. ELECTRICAL DEVICES CANNOT BE SHOWN TO SCALE AND SOMETIMES OVERLAP BUILDING ELEMENTS. REFER TO ARCHITECTURAL ELEVATIONS FOR ACCURATE MOUNTING LOCATIONS.
10. ELECTRICAL CONTRACTOR SHALL CONTACT POWER COMPANY, TELEPHONE COMPANY, AND TV COMPANY WITHIN THE FIRST WEEK OF THE START OF CONSTRUCTION AND NOTIFY THEM OF THE PROBABLE DATE WHEN THE NEW ELECTRICAL, TELEPHONE, AND/OR TV SERVICE CONNECTION WILL BE NEEDED.
11. CONTRACTOR SHALL LOCATE AND INSTALL TRANSFORMER PAD PER POWER COMPANY SPECIFICATIONS. VERIFY PROPER CLEARANCES FROM BUILDING AND OTHER EQUIPMENT BEFORE INSTALLATION. THE LOCATION OF THE TRANSFORMER SHOWN ON THE PLANS IS AN APPROXIMATE LOCATION.
12. THE MAIN TELEPHONE AND TV SERVICES AS SHOWN ON THE DRAWINGS HAVE NOT BEEN COORDINATED WITH THE RESPECTIVE UTILITY COMPANIES DURING DESIGN. THE CONTRACTOR SHALL VERIFY THE TELEPHONE AND TV SERVICE AS SHOWN OR ANY CHANGES REQUIRED BY THE TELEPHONE COMPANY BEFORE INSTALLATION BEGINS. NOTIFY THE ARCHITECT IF CHANGES FROM THE DRAWING ARE REQUIRED.
13. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO FIELD VERIFY ALL PANEL CLEARANCES PER NEC 110.26 AND NOTIFY ALL OTHER TRADES ON THE JOB OF THESE CODE REQUIREMENTS.
14. PANEL INDEXES SHALL INCLUDE ALL PERTINENT INFORMATION ON THE PANEL SCHEDULES INCLUDING INFORMATION ON LIGHTS AND OUTLETS. DO NOT SIMPLY COPY THE CIRCUIT DESCRIPTION COLUMN. INDEXES TO BE TYPEWRITTEN.
15. CONDUITS ENTERING MAIN PANEL FROM THE BOTTOM SHALL BE ARRANGED IN STRAIGHT ROWS FASTENED TO UNISTRUT. HOLES SHALL BE PUNCHED IN PANEL BOTTOM AND CONDUITS FASTENED BY TWO LOCKNUTS AND A CONDUIT BUSHING. CUTTING OUT THE BOTTOM OF THE PANEL IS NOT PERMITTED.
16. DO NOT INSTALL PANELS IN FIRE WALLS.
17. ALL PARALLEL CONDUCTORS TO BE INSTALLED IN ACCORDANCE WITH NEC ARTICLE 310.4. WIRE IS TO BE LAID ON A FLAT SURFACE FOR MEASUREMENT. USE TORQUE WRENCH ON TERMINATIONS.
18. COORDINATE MOUNTING HEIGHT AND LOCATION OF ALL OUTLETS, SWITCHES, AUXILIARY EQUIPMENT, AND OTHER DEVICES WITH THE ARCHITECTURAL DRAWINGS. PRIOR TO INSTALLATION, REVIEW WITH THE GENERAL CONTRACTOR THE LOCATION OF MILLWORK AS A FINAL CHECK TO PREVENT COVERING OF ELECTRICAL ITEMS.
19. MOUNTING HEIGHT OF GENERAL PURPOSE OUTLETS AND SWITCHES SHALL BE 16" TO BOTTOM AND 48" TO TOP RESPECTIVELY UNLESS OTHERWISE NOTED.
20. ALL ELECTRICAL EQUIPMENT SHALL BE LOCATED SO AS NOT TO INTERFERE WITH WOOD TRIM AND MOLDINGS. THE ELECTRICAL CONTRACTOR SHALL REVIEW FINISH SCHEDULES AND ARCHITECTURAL DETAILS BEFORE ROUGH-IN OF OUTLET OR SWITCH BOXES TO PREVENT BOXES AND PLATES FROM BEING PLACED BEHIND OR IN TRIMS AND MOLDINGS. REFER SPECIAL CONDITIONS TO ARCHITECT PRIOR TO ROUGH-IN.
21. DO NOT INSTALL DISPOSAL SWITCHES OR GFCI PROTECTION BEHIND SINKS.
22. EMT IS NOT ALLOWED OUT OF DOORS.
23. DO NOT INSTALL FEEDERS OR CIRCUITING EXPOSED ON ROOFTOPS OR RUNNING HORIZONTALLY WITHIN 36" OF ROOFTOPS.
24. CIRCUIT WIRE SIZES MUST, AT MINIMUM, MATCH NEC REQUIRED CONDUUCTOR SIZES FOR CORRESPONDING OVERCURRENT PROCTECTIVE DEVICES. VERIFY WITH PANEL SCHEDULES BEFORE PULLING WIRE.
25. HOME RUNS MUST BE RUN EXACTLY AS SHOWN ON PLANS UNLESS OTHERWISE NOTED. DO NOT COMBINE HOME RUNS INTO ONE CONDUIT THAT ARE NOT SHOWN COMBINED ON THE DRAWINGS.
26. THE ELECTRICAL CONTRACTOR SHALL RUN BRANCH CIRCUIT CONDUITS IN ATTIC SPACES IN A NEAT AND WORKMANLIKE MANNER SO AS TO CONSERVE OPEN SPACES AS MUCH AS POSSIBLE. HVAC DUCTWORK AND PLUMBING SHALL HAVE LOCATION PRIORITY OVER BRANCH CIRCUIT CONDUIT RUNS.
27. CIRCUIT WIRING SHALL BE INSTALLED AS SHOWN ON THE DRAWINGS. ANY DEVIATIONS SHALL BE INITIATED BY A CHANGE ORDER FROM THE ARCHITECT. OTHERWISE THE RECORD SET SHALL MATCH THE CONSTRUCTION SET.
28. PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR, PULLED INTO THE CONDUIT WITH THE PHASE CONDUCTOR, IN ALL SERVICE, FEEDER, AND BRANCH CIRCUITS.
29. PROVIDE A NEUTRAL CONDUCTOR FOR EACH BREAKER TRIP HANDLE. NEUTRALS SHALL NOT BE SHARED BETWEEN BRANCH CIRCUITS.
30. ALL CIRCUITS TO BE MINIMUM #12 CU IN MINIMUM 3/4" CONDUIT UNLESS OTHERWISE NOTED.
31. WHERE ALLOWED BY CODE, MC CABLE IS AN APPROVED ALTERNATE TO CONDUCTORS IN CONDUIT FOR CONCEALED BRANCH CIRCUIT WIRING BETWEEN DEVICES, BUT NOT FOR HOME-RUNS. HOME RUNS TO BE RAN IN CONDUIT COMPLETE FROM PANEL TO FIRST DEVICE OR FIXTURE ON CIRCUIT.
32. DO NOT INSTALL MORE THAN THREE PHASE CONDUCTORS IN ANY HOME-RUN CONDUITS UNLESS SPECIFICALLY INDICATED ON DRAWINGS.
33. INCLUDE AS PART OF THE JOB THE INSTALLATION OF AN EXTRA 200 FT OF 3/4" EMT WITH 4 #10 WIRES INSTALLED AND TWO J-BOX TERMINATIONS.
34. IDENTIFY ALL OUTLET COVER PLATES WITH THE PANEL AND CIRCUIT NUMBER.
35. DO NOT INSTALL ELECTRICAL BOXES BACK-TO-BACK IN PARTITION WALLS. LOCATE DEVICES ON OPPOSITE SIDES OF STUD OR PROVIDE MINIMUM 12" HORIZONTAL SEPARATION.
36. A GFI OUTLET SHALL BE INSTALLED AT EACH LOCATION DESIGNATED BY "GFI" ON THE DRAWINGS. DOWNSTREAM PROTECTION BY A GFI OUTLET UPSTREAM IS NOT ALLOWED.
37. OUTLETS, SWITCHES, AND COVER PLATES TO BE COLOR CODED (BROWN, WHITE, IVORY, OR GRAY) TO THE WALL THEY ARE MOUNTED ON AS DIRECTED BY THE ARCHITECT.
38. ALL CONVENIENCE OUTLETS MUST BE MOUNTED FLUSH WITH THE COVER PLATE AND SECURED FIRMLY TO THE OUTLET BOX.
39. THE CONTRACTOR SHALL TAKE SPECIAL CARE TO MAKE SURE OUTLET BOXES ARE SET FLUSH WITH FINISH WALL SURFACES WHERE WALL PANELING OR ACOUSTICAL WALLS ARE INSTALLED OR WHERE OUTLETS ARE INSTALLED ON CARPETED RISERS.
40. ALL PATCH, REPAIR, REPAINT AND COVER UP REQUIRED AS A RESULT OF ELECTRICAL REMODEL IS TO BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR, BUT ACTUAL WORK IS TO BE PERFORMED BY QUALIFIED PERSONNEL.
41. ALL RECESSED LIGHT FIXTURES MUST CONFORM TO NEC 410.
42. ALL RECESSED LIGHT FIXTURES THAT PENETRATE THE BUILDING THERMAL ENVELOPE SHALL BE SEALED WITH A GASKET OR CAULK BETWEEN THE HOUSING AND INTERIOR WALL OR CEILING COVERING.
43. COORDINATE LOCATION OF CEILING LIGHT FIXTURES WITH THE REFLECTED CEILING PLAN.
44. FIXTURE COUNTS SHOWN ON DRAWINGS ARE FOR REFERENCE ONLY. CONTRACTOR IS RESPONSIBLE TO VERIFY FIXTURE COUNTS AS PART OF BIDDING PROCESS.
45. ELECTRICAL CONTRACTOR SHALL VERIFY CEILING THICKNESSES AND USE CEILING TRIM EXTENDERS ON DOWNLIGHTS AS REQUIRED.
46. COORDINATE LOCATION OF ALL CLOSET LIGHTS WITH MILLWORK. CENTER OUTLET BOX FOR LIGHT FIXTURE 6" FROM WALL ABOVE DOOR.
47. SUPPORT RECESSED T-BAR MOUNT FIXTURES WITH FOUR EXTRA GALVANIZED WIRE SUPPORTS ON OPPOSITE CORNERS PER IBC. CONNECT WIRES TO BUILDING STRUCTURE.
48. CONNECT EMERGENCY CIRCUIT OF EMERGENCY LIGHT BATTERY PACK TO UNSWITCHED LIGHTING CIRCUIT SERVING FIXTURES IN AREA. INSTALL EXTRA CONDUCTORS AS REQUIRED. WIRE SO LAMPS IN NORMAL MODE ARE CONTROLLED AS NOTED ON LIGHTING PLANS. PROVIDE ADDITIONAL BALLASTS AS REQUIRED.
49. WHERE LIGHT FIXTURES AS SPECIFIED AS COLOR PER ARCHITECT, THIS SHALL BE INTERPRETED AS A NON-STANDARD COLOR.
50. THE CONTRACTOR SHALL PROVIDE A WIRE MESH COVER OVER ALL RECESSED LIGHTS TO KEEP BLOWN IN INSULATION AT LEAST THREE INCHES AWAY FROM THE FIXTURE HOUSING.
51. EMERGENCY LIGHT BATTERY PACKS SHALL BE CONNECTED SO AS TO BE ABLE TO OPERATE IN THE TEST MODE WHEN THE NORMAL SWITCH LEG IS TURNED ON, AND SHALL ILLUMINATE ONE FIXTURE LAMP UNLESS OTHERWISE NOTED.
52. OVER-MIRROR WALL LIGHTS ARE TO BE MOUNTED SO THE LENS FACES DOWNARD.
53. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO REVIEW ALL SWITCH LOCATIONS WITH THE GENERAL CONTRACTOR PRIOR TO ROUGH-IN TO PREVENT ANY SWITCHES FROM BEING LOCATED ON THE WRONG SIDE OF THE DOOR.
54. COORDINATE LOCATION OF EXIT LIGHTS WITH ARCHITECT.
55. INSTALL MANUAL OVERRIDE ON PARKING LIGHTS.
56. COORDINATE LOCATION OF LIGHT FIXTURES IN MECHANICAL ROOMS WITH MECHANICAL EQUIPMENT. DETERMINE FINAL FIXTURE LOCATIONS AFTER DUCTWORK INSTALLATION HAS BEEN COMPLETED. CHAIN SUSPEND FIXTURES UNDER DUCTWORK AND CONDUIT RACKS AS REQUIRED.
57. FIELD VERIFY MOUNTING OF SURFACE FIXTURES SHOWN IN CONTINUOUS ROWS. MAKE ADJUSTMENTS SIDEWAYS OR UNDER OBSTRUCTIONS AS REQUIRED AND PROVIDE NECESSARY RACEWAY CONNECTIONS.
58. PENDANT FIXTURES SHALL HAVE SEISMIC RATED PENDANT CONNECTIONS AND SWIVEL JOINTS.
59. VERIFY FIXTURE COUNT WITH REFLECTED CEILING PLAN.
60. THE BOTTOM OF WALL MOUNTED FIXTURES MUST BE A MINIMUM OF 6'-8" AFF UNLESS FIXTURES ARE ADA COMPLIANT.
61. EXHAUST FANS FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR.
62. REFER TO MECHANICAL PLANS FOR EXACT LOCATION OF MECHANICAL EQUIPMENT.
63. ELECTRICAL CONTRACTOR SHALL FURNISH ALL MOTOR DISCONNECTS, STARTERS, AND CONTROL STATIONS FOR MECHANICAL EQUIPMENT UNLESS THE SAME IS FURNISHED AS AN INTEGRAL PART OF THE EQUIPMENT. VERIFY WITH MECHANICAL CONTRACTOR PRIOR TO BID.
64. THERMOSTAT AND CONTROL WIRING FOR MECHANICAL EQUIPMENT BY MECHANICAL CONTRACTOR UNLESS OTHERWISE NOTED.
65. PROVIDE SAFETY DISCONNECTS AS REQUIRED AT ALL CONNECTIONS TO MECHANICAL EQUIPMENT. PROVIDE FUSING AND RATINGS PER NAMEPLATE INFORMATION OF EQUIPMENT SERVED.
66. WHERE AUTOMATIC SPRINKLER CONTROLS ARE SHOWN ON THE LANDSCAPE OR ARCHITECTURAL DRAWINGS, PROVIDE A FLUSH SINGLE-GANG J-BOX BEHIND THE CONTROL AND CONNECT TO THE NEAREST OUTLET CIRCUIT WITH AVAILABLE CAPACITY.
67. INSTALL WEATHERPROOF GFI DUPLEX OUTLETS ADJACENT TO EACH ROOFTOP HVAC UNIT (UNLESS OUTLET IS PROVIDED AS PART OF EQUIPMENT). SEE MECHANICAL PLANS AND SPECIFICATIONS.
68. LOCATE OUTLETS FOR ELECTRIC WATER COOLERS SO THAT THE OUTLET AND EXTENSION CORDS ARE CONCEALED FROM VIEW.
69. DISCONNECT SWITCHES ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. CONTRACTOR SHALL FIELD VERIFY LOCATION OF ALL ELECTRICAL SWITCHES AND MOTOR CONTROL FOR PROPER CODE CLEARANCES. NOTIFY ARCHITECT IMMEDIATELY OF ANY CONFLICTS WITH OTHER TRADES REGARDING PROPER EQUIPMENT CLEARANCES.
70. ALL DISCONNECT SWITCHES FOR MOTORS SHALL BE RATED A MINIMUM OF 22000 AIC UNLESS OTHERWISE SHOWN.
71. COORDINATE LOCATION OF THERMOSTATS, SENSORS, AND ATC JUNCTION BOXES WITH MECHANICAL CONTRACTOR BEFORE INSTALLATION.
72. BEFORE RUNNING CONDUITS, PLACING OUTLETS OR ORDERING EQUIPMENT, THE CONTRACTOR SHALL REVIEW THE SPECIFICATIONS AND DESIGN AND SHOP DRAWINGS OF THE OTHER TRADES SERVED BY THE CONDUIT, OUTLETS, AND/OR EQUIPMENT.
73. PROVIDE NEUTRAL CONNECTION TO 208/240/480V, SINGLE-PHASE EQUIPMENT. RUN SEPARATE GROUND WIRE TO ALL OUTDOOR UNITS AND BOND TO THE EQUIPMENT GROUND LUG.
74. ELECTRICAL CONTRACTOR SHALL INSTALL A PULL STRING IN ALL COMMUNICATIONS, SECURITY, AND OTHER LOW VOLTAGE CONDUITS FOR USE BY LOW VOLTAGE SYSTEM CONTRACTOR.
75. ELECTRICAL CONTRACTOR SHALL INSTALL A PULL STRING IN ALL UNUSED POWER AND LIGHTING CONDUITS.
76. WHERE THE MECHANICAL CONTRACTOR HAS INSTALLED SMOKE DETECTORS WITHIN ANY DUCTWORK, THE ELECTRICAL CONTRACTOR SHALL INSTALL ADDITIONAL HARDWARE AND CONTROL WIRING TO THE FIRE-ALARM PANEL AS REQUIRED FOR FIRE-ALARM DETECTION AND NOTIFICATION. PROVIDE ADDITIONAL SMOKE DETECTOR IF FACTORY INSTALLED DETECTOR IS INCOMPATIBLE WITH FIRE-ALARM SYSTEM.
77. INSTALL CEILING SMOKE AND HEAT DETECTORS A MINIMUM OF THREE FEET AWAY FROM ANY SUPPLY AIR DUCT.
78. FIELD VERIFY THE EXACT LOCATION OF THE MAIN DUCT DETCTION AND NOTIFICATION SYSTEM PANEL WITH THE ARCHITECT PRIOR TO INSTALLATION.
79. COORDINATE LOCATION OF ALL DUCT DETCTION AND NOTIFICATION SYSTEM DEVICES WITH NFPA AND ADA REQUIREMENTS. COORDINATE LOCATIONS WITH MILLWORK AS REQUIRED.
80. REVIEW THE STATE DESIGN REQUIREMENTS MANUAL PRIOR TO BID.
81. WHERE THERE ARE CONFLICTS IN THE DRAWINGS AND/OR SPECIFICATIONS THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER PRIOR TO BID. WHERE NO NOTIFICATION IS GIVEN THE MORE STRINGENT INTERPRETATION (GENERALLY INTERPRETED TO BE THE MORE COSTLY) WILL BE ENFORCED.

ELECTRICAL LEGEND

ANNOTATIONS

- DETAIL CALL-OUT; TOP "X" REFERS TO DETAIL NUMBER & BOTTOM "XXX" REFERS TO SHEET NUMBER
- KEYED NOTE CALLOUT
- EQUIPMENT CALLOUT
- PRODUCTION EQUIPMENT CALLOUT

LIGHTING FIXTURES

- EMERGENCY LIGHT
- BATTERY PACK
- EXIT LIGHT: CEILING - FACE(S) AS SHOWN
- EXIT LIGHT: WALL - FACE(S) AS SHOWN
- EXIT LIGHT: FACE SIDE
- EXIT LIGHT: DIRECTIONAL ARROWS, DOUBLE FACE
- RECESSED FIXTURE
- STRIP LIGHT
- LINEAR FIXTURE
- EMERGENCY FIXTURE
- WALL MOUNT FIXTURE
- POLE LIGHT; ONE HEAD
- POLE LIGHT; TWO HEAD
- DECORATIVE POLE LIGHT
- CEILING FIXTURE

LIGHTING CONTROL

- S^X SINGLE POLE SWITCH; "x" INDICATES SWITCH GROUP
- S_3 THREE WAY SWITCH
- S_4 FOUR WAY SWITCH
- S_K SWITCH: KEYED
- $S_{LSX/SY}$ DIGITAL LIGHTING CONTROL SWITCH; SX = SWITCH CONTROL TYPE #1; SY = SWITCH CONTROL TYPE #2; ETC.
- S_P PILOT LIGHT SWITCH
- S_{DL} SWITCH: DAYLIGHT ZONE AS DETAILED
- S_{2P} SWITCH: SINGLE-THROW; DOUBLE-POLE
- D DIMMER SWITCH: INCANDESCENT; 1000 W MINIMUM
- D_F DIMMER SWITCH: FLUORESCENT; 100 W MINIMUM
- D_L DIMMER SWITCH: LED; 600 W MINIMUM
- WALL MOUNT OCCUPANCY SENSOR: ADAPTIVE TECHNOLOGY
- D DIMMER SWITCH WITH WALL MOUNT OCCUPANCY SENSOR: ADAPTIVE TECHNOLOGY
- S_{VS} WALL MOUNT OCCUPANCY SENSOR: VACANCY SENSOR FUNCTION
- S_{OS} WALL MOUNT OCCUPANCY SENSOR: OCCUPANCY SENSOR FUNCTION
- S_{DT} OCCUPANCY SENSOR: DUAL TECHNOLOGY
- S_{VS} OCCUPANCY SENSOR: VACANCY SENSOR FUNCTION
- S_{OS} OCCUPANCY SENSOR: OCCUPANCY SENSOR FUNCTION
- S_{PR}^{HB} OCCUPANCY SENSOR: HIGH BAY
- S_{PR} OCCUPANCY SENSOR: PASSIVE INFRARED
- P P# PHOTOCELL: INTEGRATED TO LIGHTING CONTROL SYSTEM; P# = LIGHTING CONTROL TYPE
- TIME CLOCK
- PUSH BUTTON

POWER AND DISTRIBUTION

- DISTRIBUTION PANEL
- PANELBOARD
- METER / METER SOCKET

BRANCH CIRCUITING

- SIMPLEX OUTLET
- SIMPLEX OUTLET: GROUND FAULT INTERRUPTER
- USB SIMPLEX OUTLET WITH (2)USB; LEVITON T5830 SERIES OR EQUIVALENT
- NL SINGLE RECEPTACLE WITH INTEGRAL LED NIGHT LIGHT; (LEVITON T6525 OR EQUIVALENT)
- DUPLEX OUTLET
- USB DUPLEX RECEPTACLE WITH (2)USB; LEVITON T5832 SERIES OR EQUIVALENT
- FACELESS GFCI PROTECTION DEVICE
- DUPLEX OUTLET: GROUND FAULT INTERRUPTER
- EWC ELECTRIC WATER COOLER OUTLET: GFCI UNLESS NOTED
- WP DUPLEX OUTLET: WEATHERPROOF
- WPIU DUPLEX OUTLET: WEATHERPROOF-IN-USE COVER
- DOUBLE DUPLEX OUTLET
- DOUBLE DUPLEX OUTLET: GROUND FAULT INTERRUPTER
- DOUBLE DUPLEX OUTLET: EMERGENCY GROUND FAULT INTERRUPTER - RED DEVICE AND PLATE UNLESS OTHERWISE SPECIFIED
- D ELECTRIC DRYER OUTLET (NEMA 14-30R)
- SPECIAL OUTLET: SEE PANEL SCHEDULE
- J JUNCTION BOX
- DISCONNECT; NO OVER-CURRENT PROTECTION
- DISCONNECT WITH OVER-CURRENT PROTECTION (CIRCUIT BREAKER STYLE OR AS SPECIFIED)
- COMBINATION DISCONNECT/MOTOR STARTER; NO OVER-CURRENT PROTECTION
- COMBINATION DISCONNECT/MOTOR STARTER WITH OVERCURRENT PROTECTION (CIRCUIT BREAKER STYLE OR AS SPECIFIED)
- S_m MOTOR PROTECTIVE THERMAL SWITCH
- QUANTITY OF CONDUCTORS: SHORT LINES = PHASE /SWITCH, LONG LINES = NEUTRAL
- HOME-RUN
- WX WELDER OUTLET: "X" = WELDER SIZE AS IDENTIFIED ON EQUIPMENT SCHEDULE. DEVICE NEMA CONFIGURATION TO MATCH WELDER SIZE

ONE-LINE

- XA YP BREAKER : "x" = BREAKER AMPERAGE "y" = QUANTITY OF POLES
- BRANCH PANEL
- BRANCH PANEL WITH MAIN BREAKER
- BRANCH PANEL WITH SUB FEED BREAKER
- x FEEDER SIZE (REFER TO CONDUIT AND CONDUCTOR SCHEDULE UNLESS OTHERWISE NOTED)
- GROUND
- M CT AND METER
- TRANSFORMER
- SPD SURGE PROTECTIVE DEVICE
- XA YP SWITCH : "x" = SWITCH AMPERAGE, "y" = QUANTITY OF POLES
- XA YP SWITCH : SHUNT TRIP
- x-y FUSE : "x" = FUSE TYPE, "y" = FUSE AMPERAGE
- hp MOTOR : hp = MOTOR HORSEPOWER

FIRE ALARM

- HDDNC HVAC DUCT DETECTION AND NOTIFICATION CONTROL PANEL
- FSD FIRE SMOKE DAMPER
- S SMOKE DETECTOR
- DD DUCT DETECTOR
- FS FIRE ALARM FLOW SWITCH
- TS FIRE ALARM TAMPER SWITCH
- CM FIRE ALARM CONTROL / RELAY MODULE
- S_x FIRE ALARM STROBE; "X" = MINIMUM CANDELA RATING
- S_x FIRE ALARM HORN AND STROBE; "X" = MINIMUM CANDELA RATING
- F FIRE ALARM PULL STATION
- RTS REMOTE TEST SWITCH WITH VISUAL INDICATOR

COMMUNICATIONS

- CMJ COMMUNICATIONS RACEWAY; OPEN D-RINGS OR J-HOOKS. SEE DETAILS AND SPECIFICATIONS
- PHONE BACKBOARD
- COMMUNICATIONS ENCLOSURE
- COMMUNICATIONS OUTLET (5" SQ x 2-7/8"D J-BOX; 1-GANG x 5/8"D MUD-RING; 1" CONDUIT, 1 CAT 6 CABLE)
- COMMUNICATIONS OUTLET (5" SQ x 2-7/8"D J-BOX; 1-GANG x 5/8"D MUD-RING; 1" CONDUIT, 2 CAT 6 CABLES)
- COMMUNICATIONS OUTLET (5" SQ x 2-7/8"D J-BOX; 1-GANG x 5/8"D MUD-RING; 1" CONDUIT; 3 CAT 6 CABLES)
- WAP COMMUNICATIONS OUTLET: WIRELESS ACCESS POINT (5" SQ x 2-7/8"D J-BOX; 1-GANG x 5/8"D MUD-RING; 1" CONDUIT, 1 CAT 6 CABLE)
- W WALL PHONE OUTLET: +60" TO TOP OF BOX (5" SQ x 2-7/8"D J-BOX; 1-GANG x 5/8"D MUD-RING; 1" CONDUIT, 2 CAT 6 CABLES)

SHEET INDEX

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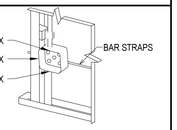
EE101	ELECTRICAL PLANS
EE102	ELECTRICAL PLANS
EL501	LIGHTING CONTROL RISER DIAGRAM & SCHEDULES
EL601	LIGHTING SCHEDULE & DETAILS
EP501	ELECTRICAL DETAILS
EP601	ELECTRICAL ONE-LINE DIAGRAM
EP602	ELECTRICAL SCHEDULES

SITE ELECTRICAL

- 1ØOP 1-PHASE OVERHEAD PRIMARY POWER
- 1ØOS 1-PHASE OVERHEAD SECONDARY POWER
- 1ØUP 1-PHASE UNDERGROUND PRIMARY POWER
- 1ØUS 1-PHASE UNDERGROUND SECONDARY POWER
- (E)3ØOP 3-PHASE OVERHEAD PRIMARY POWER : EXISTING
- 3ØOP 3-PHASE OVERHEAD PRIMARY POWER
- 3ØOS 3-PHASE OVERHEAD SECONDARY POWER
- (E)3ØUP 3-PHASE UNDERGROUND PRIMARY POWER : EXISTING
- (E)3ØUS 3-PHASE UNDERGROUND SECONDARY POWER : EXISTING
- 3ØUP 3-PHASE UNDERGROUND PRIMARY POWER
- 3ØUS 3-PHASE UNDERGROUND SECONDARY POWER
- OT OVERHEAD TELEPHONE
- OTV OVERHEAD TV
- (E)UT UNDERGROUND TELEPHONE : EXISTING
- (E)UTV UNDERGROUND TV : EXISTING
- UT UNDERGROUND TELEPHONE
- UTV UNDERGROUND TV
- UTILITY POLE

GENERAL WALL-MOUNTED BOX HEIGHT DETAIL



REFER TO POWER, LIGHTING AND COMMUNICATIONS PLANS FOR SPECIFIC DIMENSIONS. SEE GENERAL NOTES AND SPECIFICATIONS WHERE NO HEIGHTS ARE INDICATED.

ELECTRICAL ABBREVIATIONS

A	AMPERE	MAX	MAXIMUM
AF	AMP FUSE	MCB	MAIN CIRCUIT BREAKER
AFF	ABOVE FINISHED FLOOR	MECH	MECHANICAL
AFG	ABOVE FINISHED GRADE	MFR	MANUFACTURER
AFI	ARC-FAULT CIRCUIT-INTERRUPTER	MIN	MINIMUM
AIC	AMPERE INTERRUPTING CAPACITY	MLO	MAIN LUGS ONLY
AL	ALUMINUM	MTD	MOUNTED
ARCH	ARCHITECT(URAL)	NEC	NATIONAL ELECTRICAL CODE
AS	AMP SWITCH	NECA	NATIONAL ELECTRICAL CONTRACTOR'S ASSOCIATION
AWG	AMERICAN WIRE GAUGE	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
BLDG	BUILDING	NEUT	NEUTRAL
BKBD	BACKBOARD	NFC	NATIONAL FIRE CODE
C	CONDUIT	NC	NORMALLY CLOSED
CAB	CABINET	NIC	NOT IN CONTRACT
CAT	CATALOG/CATEGORY	NL	NIGHT LITE
C/B	CIRCUIT BREAKER	NO	NORMALLY OPEN
CKT	CIRCUIT	NTS	NOT TO SCALE
CLG	CEILING	OCP	OVERCURRENT PROTECTION
CO	CONDUIT ONLY	P	POLE
COMM	COMMUNICATION	PH	PHASE
CONN	CONNECTION	PNL	PANEL
CU	COPPER	PWR	POWER
DEMO	DEMOLITION/DEMOLISH	QTY	QUANTITY
DISC	DISCONNECT	RECEP	RECEPTACLE
DN	DOWN	REQ'D	REQUIRED
DWG	DRAWING	RGSC	RIGID GALVANIZED STEEL CONDUIT
EA	EACH	RM	ROOM
ELEC	ELECTRICAL	SCHED	SCHEDULE
ELEV	ELEVATOR	SECT	SECTION
EMER, EM	EMERGENCY	SP	SINGLE POLE
EMT	ELECTRICAL METALLIC TUBING	SN	SOLID NEUTRAL
EOLR	END OF LINE RESISTOR	SPEC	SPECIFICATION
EQUIP	EQUIPMENT	SW	SWITCH
EX, EXIST	EXISTING	SWBD	SWITCHBOARD
FBO	FURNISHED BY OTHERS	SWGR	SWITCH GEAR
FCU	FAN COIL UNIT	SYS	SYSTEM
FF	FINISHED FLOOR	TEMP	TEMPORARY
FIXT	FIXTURE	TELE	TELEPHONE
FLEX	FLEXIBLE METALLIC CONDUIT (STEEL)	TWP	TWISTED PAIR
FLUOR	FLUORESCENT	TWSP	TWISTED SHEILDED PAIR
FT	FEET OR FOOT	XFMR	TRANSFORMER
GFI	GROUND FAULT INTERRUPTER	T-STAT	THERMOSTAT
GND	GROUND	TYP	TYPICAL
HP	HORSEPOWER	UBC	UNIFORM BUILDING CODE
HVAC	HEATING, VENTILATING & AIR CONDITIONING	UL	UNDERWRITERS LABORATORY
IG	ISOLATED GROUND	UMC	UNIFORM MECHANICAL CODE
IMC	INTERMEDIATE METAL CONDUIT	UNO	UNLESS NOTED OTHERWISE
IN	INCH(ES)	V	VOLT OR VOLTAGE
ISC	SHORT CIRCUIT AMPERES, KA	VA	VOLT AMPERE
JB, J-BOX	JUNCTION BOX	W	WATT
KCMIL	THOUSAND CIRCULAR MILS	W/	WITH
KVA	KILOVOLT AMPERE	WG	WIRE GUARD
KW	KILOWATT	WP	UL LISTED WEATHERPROOF, NEMA 3R or 4
LTG	LIGHTING		

design west | architects
LOGAN UT 84321
255 SOUTH 300 WEST
SALT LAKE CITY UT 84103
795 NORTH 400 WEST

CACHE COUNTY MOSQUITO ABATEMENT
210 W. 3700 N.
HYDE PARK, UT 84318

DESCRIPTION:
DATE:
MARK:

PROJECT #: 819159
DRAWN BY: D.PATTON
CHECKED BY: S.SWENSON
ISSUED: 07.08.2020

REGISTERED PROFESSIONAL ENGINEER
NO. 204172
STEVEN D. SWENSON
7/8/2020
STATE OF UTAH

PERMIT SET/BID SET

ABBREVIATIONS, G.P.N., LEGEND & SHEET INDEX

EE001

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7/8/2020 5:15:08 PM

1 2 3 4 5

A B C D

SHEET KEYED NOTES

1. ANTICIPATED LOCATION OF NEW UTILITY JUNCTION CAN. COORDINATE WITH LOCAL UTILITY REP.
2. ANTICIPATED LOCATION OF COMMUNICATIONS CONNECTIONS. VERIFY WITH LOCAL UTILITY REP PRIOR TO ROUGH-IN.
3. STUB 5" CONDUIT PAST PROPERTY LINE. FUTURE POWER COMPANY EXTENSION.
4. STUB (2)4"CONDUITS PAST PROPERTY LINE FOR FUTURE COMM UTILITIES EXTENSIONS.
5. PROVIDE POWER TO GATE AS REQUIRED.
6. PROVIDE NETWORK CONNECTION TO GATE AS REQUIRED.
7. PROVIDE GATE KEYPAD MOUNTING ARM MOUNTED TO CONCRETE PAD ADJACENT TO CURB. PROVIDE CONTROL WIRING TO GATE. PROVIDE CONTROL WIRING TO GATE THROUGH (1)CONDUIT NOTED BELOW.
8. PROVIDE EMPTY CONDUITS ACROSS DRIVE TERMINATED IN 12"x24". FLUSH HANDHOLES AS SPECIFIED.
9. INCLUDE IN BID ALTERNATE #1 PRICING.

GENERAL SHEET NOTES

1. EXISTING ITEMS TO BE REMOVED ARE INDICATED AS BOLD/DASHED. ITEMS TO REMAIN ARE SHOWN AS LIGHT/SOLID.
2. CIRCUIT ROUTING IS SCHEMATIC UNLESS OTHERWISE NOTED.
3. COORDINATE ALL UTILITY INSTALLATIONS WITH LOCAL UTILITY REPS.
4. COMPLY WITH ALL UTILITY REQUIREMENTS FOR NEW UTILITY INSTALLATIONS.

A1 ELECTRICAL SITE PLAN
1" = 50'-0"

NORTH

design west | architects
LOGAN UT 84321
255 SOUTH 300 WEST
SALT LAKE CITY UT 84103
795 NORTH 400 WEST

CACHE COUNTY MOSQUITO ABATEMENT

210 W. 3700 N.
HYDE PARK, UT 84318

MARK:	DATE:	DESCRIPTION:

PROJECT #: 819159
DRAWN BY: D. PATTON
CHECKED BY: S. SWENSON
ISSUED: 06.09.2020

REGISTERED PROFESSIONAL ENGINEER
No. 294174
SHANE D. SWENSON
7/8/2020
STATE OF UTAH

PERMIT SET/BID SET

ELECTRICAL SITE PLAN

ES101

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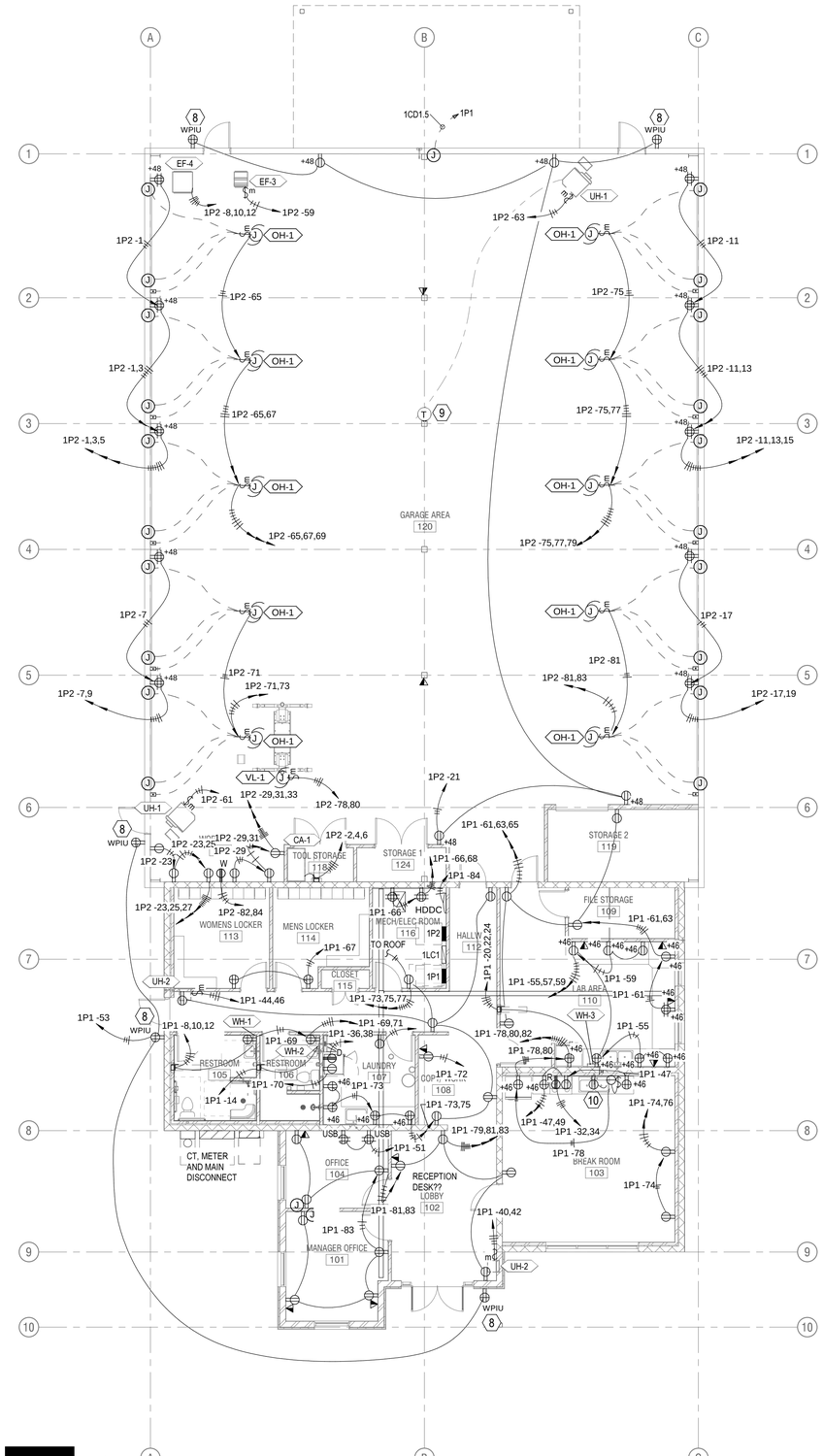
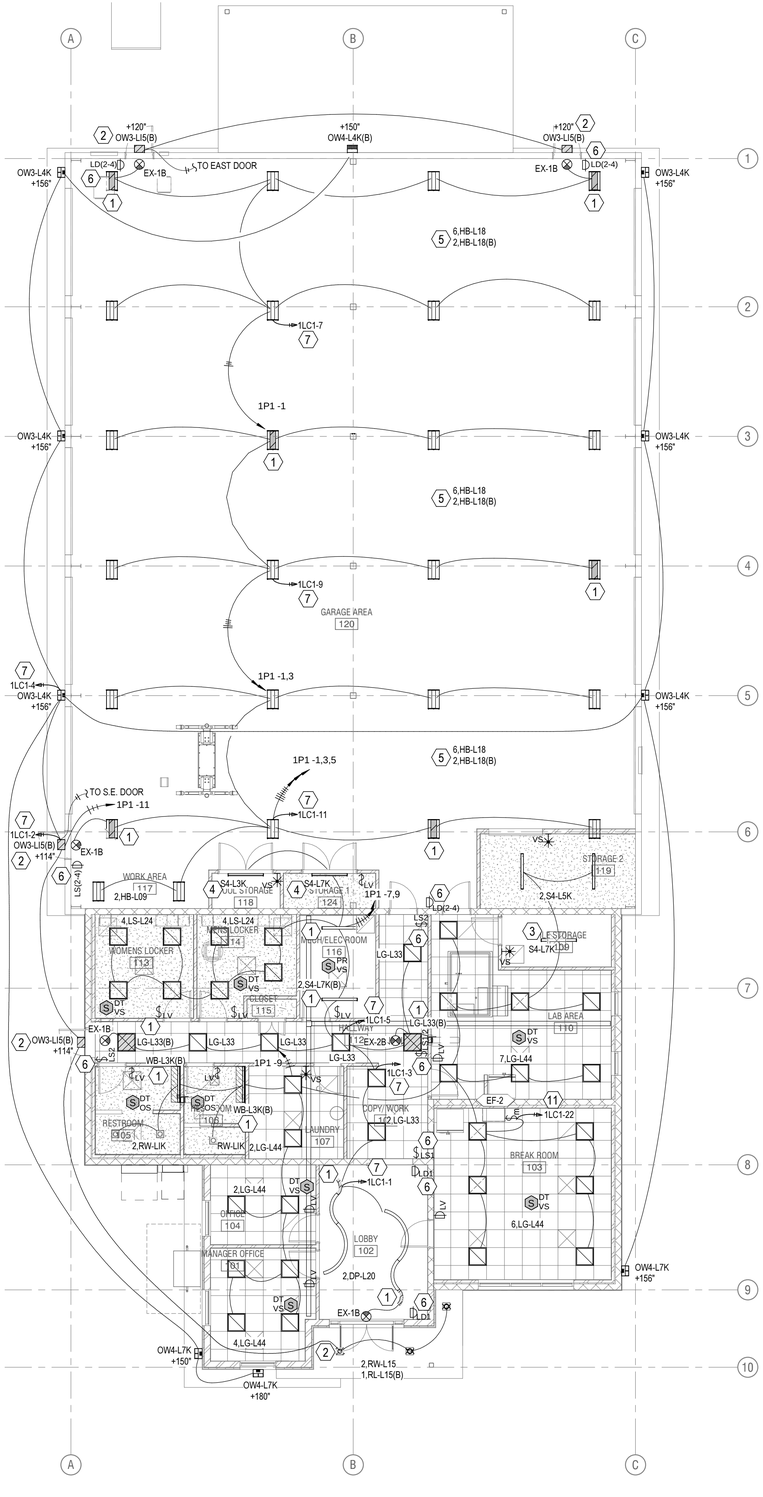


2 POWER PLAN - MAIN LEVEL

1/8" = 1'-0"



1 LIGHTING PLAN - MAIN LEVEL

1/8" = 1'-0"

KEYED NOTES

1. PROVIDE EM BATTERY IN FIXTURES NOTED. CONNECT BATTERY TO UNSWITCHED CIRCUIT CONDUCTOR OF CIRCUIT SERVING FIXTURE. CONNECT LAMPS TO OPERATE WITH SWITCH(S) IN NORMAL MODE.
2. PROVIDE COLD WEATHER OR REMOTE EM BATTERY FOR FIXTURE INDICATED. CONNECT BATTERY TO UNSWITCHED CIRCUIT CONDUCTOR OF CIRCUIT SERVING FIXTURE. CONNECT LAMPS TO OPERATE WITH SWITCH(S) IN NORMAL MODE.
3. SUSPEND FIXTURES TO 10'-0" A.F.F.
4. MOUNT FIXTURES CENTERED BETWEEN TOP OF DOOR FRAME AND CEILING.
5. SUSPEND FIXTURES TO 14' A.F.F.
6. PROVIDE LIGHTING CONTROL OVERRIDE SWITCHES AT LOCATIONS INDICATED. PROVIDE CONTROL WIRING PER MANUFACTURER'S REQUIREMENTS. SEE DETAILS AND SCHEDULES FOR ADDITIONAL INFORMATION. ENGRAVE COVER PLATE WITH ZONES CONTROLLED. PROVIDE SEPARATE BUTTON/LABELING FOR EACH ZONE INDICATED. MULTIPLE BUTTONS SHALL BE MOUNTED IN A SINGLE-GANG COVER.
7. LIGHTING CONTROL PANEL SWITCH LEGS. REFER TO LIGHTING CONTROL PANEL SCHEDULES AND DETAILS FOR ADDITIONAL INFORMATION. SWITCH LEGS MAY BE ROUTED TO PANEL IN SAME CONDUITS AS CONSTANT POWER FEEDS. CONTRACTOR TO DERATE/UPSIZE CONDUCTORS & CONDUIT WHERE REQUIRED.
8. PROVIDE LOCKABLE, WP-IN-USE COVER FOR EXTERIOR OUTLETS AS SPECIFIED.
9. ANTICIPATED LOCATION FOR LINE VOLTAGE THERMOSTAT. VERIFY LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
10. PROVIDE SWITCHED RECEPTACLE UNDER KITCHEN BASIN FOR DISPOSAL. DISPOSAL BY OTHERS. COORDINATE DISPOSAL CORD WITH PLUMBING CONTRACTOR AND PROVIDE AND/OR INSTALL CORD AS REQUIRED. ROUTE CIRCUIT THROUGH FACELESS GFCI (LEVITON 7590 OR EQUIVALENT) MOUNTED ABOVE COUNTER LEVEL WITH COUNTER-TOP OUTLETS. LABEL GFCI FOR APPLIANCE SERVED.
11. ROUTE CIRCUIT THROUGH LIGHTING CONTROL PANEL TO ALLOW OFF-SEASON SHUT-OFF CONTROL.

GENERAL NOTES

1. COORDINATE ALL SWITCH, OUTLET, LIGHT AND OTHER DEVICE LOCATIONS WITH ARCHITECTURAL ELEMENTS (CABINETS, WINDOWS ETC.) PRIOR TO ROUGH-IN. REVIEW ARCHITECTURAL INTERIOR ELEVATIONS PRIOR TO ROUGH-IN OF EACH AREA FOR ADDITIONAL INFORMATION.
2. ALL EMERGENCY LIGHTING BATTERIES SHALL PROVIDE A MINIMUM OF 90 MINUTES ILLUMINATION PER NEC 700.12(A) AND IBC 1006. SEE SPEC SECTION 265100 FOR ADDITIONAL REQUIREMENTS.
3. ALL BALLASTS, INCLUDING BATTERY BACKUP AND ASSOCIATED SELF-DIAGNOSTICS, SHALL BE FACTORY MOUNTED.
4. ALL OCCUPANCY SENSORS SHALL HAVE INTEGRAL PHOTOCELL CONTROL AS SPECIFIED.
5. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR CEILING HEIGHTS AND DROPPED DECORATIVE CEILING ELEMENTS.
6. CONTRACTOR TO FURNISH OCCUPANCY SENSORS WITH COVERAGE PATTERNS APPROPRIATE FOR THEIR INSTALLED LOCATIONS. COORDINATE WITH EQUIPMENT SUPPLIER PRIOR TO BID.
7. CONNECT OCCUPANCY SENSORS TO ENABLE ALL SWITCHES IN CONTROLLED SPACE.
8. CONNECT OCCUPANCY SENSORS, BATTERY BALLASTS, EXIT SIGNS, ETC. TO UNSWITCHED SOURCE CONDUCTOR.
9. NO INTERIOR OR EXTERIOR RACEWAYS SHALL BE SURFACE MOUNTED WITHOUT PRIOR WRITTEN APPROVAL FROM OWNER AND ARCHITECT.
10. ALL LOCAL LIGHTING CONTROL SHALL BE LOW VOLTAGE - LITHONIA N-LIGHT, DOUGLAS DIALOG OR EQUIVALENT.
11. PROVIDE 4SD J-BOX WITH 1 GANG MUD RING AND 1" CONDUIT TO ACCESSIBLE CEILING SPACE FOR ALL VOICE/DATA/COMBO OUTLETS SHOWN ON FLOOR PLANS. PROVIDE INSULATED THROAT CONNECTORS ON BOTH ENDS OF CONDUIT.

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CACHE COUNTY MOSQUITO ABATEMENT

210 W. 3700 N.
HYDE PARK, UT 84318

MARK:	DESCRIPTION:	DATE:

PROJECT #: 819159
DRAWN BY: D.PATTON
CHECKED BY: S.SWENSON
ISSUED: 07.08.2020

REGISTERED PROFESSIONAL ENGINEER
No. 294171
SHANE D. SWENSON
4/8/2020
STATE OF UTAH

PERMIT SET/BID SET

ELECTRICAL PLANS

EE101

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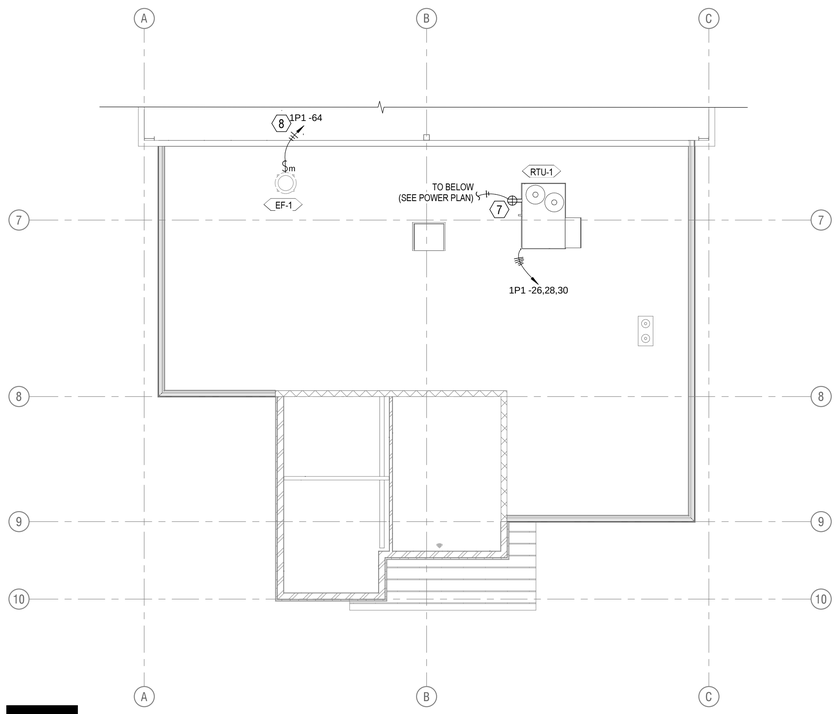
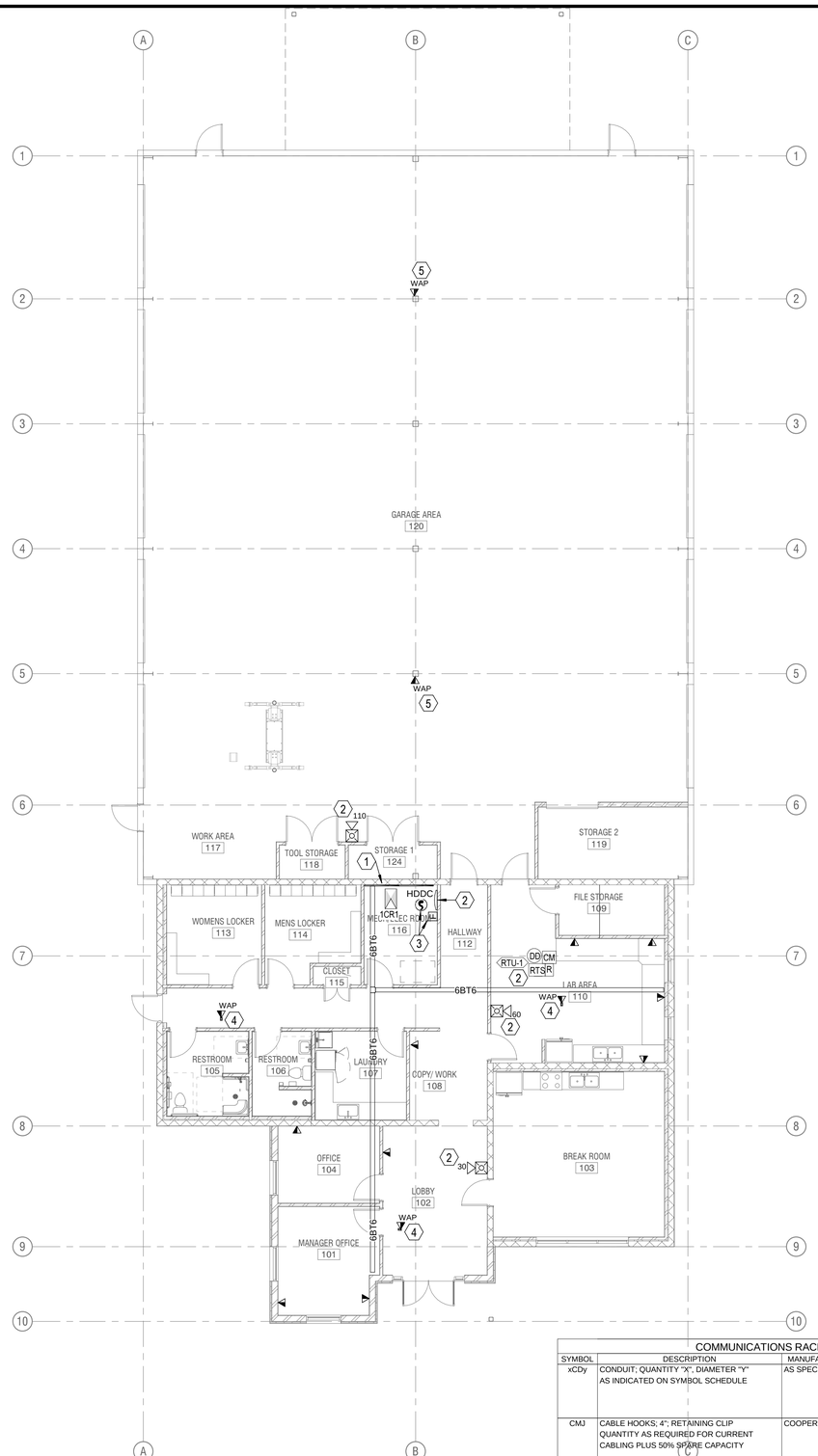


4 ELECTRICAL PLAN - ROOF

1/8" = 1'-0"



1 FIRE ALARM & ELECTRONIC SYSTEMS PLAN - MAIN LEVEL

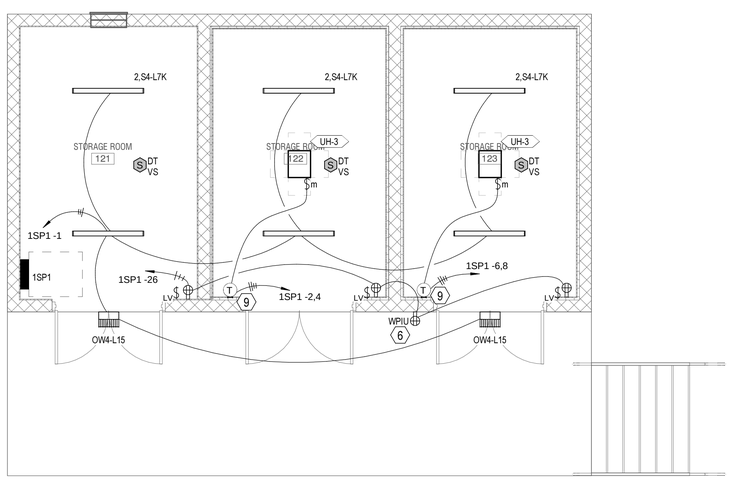
1/8" = 1'-0"

KEYED NOTES

1. PROVIDE 3/4" PLYWOOD BACKBOARD ON WALL AS SHOWN. MOUNT 8' SHEETS VERTICALLY. PAINT BACKBOARD WITH FIRE RETARDANT PAINT COLORED TO MATCH ADJACENT WALL SURFACE.
2. PROVIDE DUCT DETECTOR AND FAN SHUTDOWN FOR HVAC UNITS WITH NOTIFICATION AT LOCATION APPROVED BY AHJ. PROVIDE TROUBLE SIGNAL FOR DETECTOR AT CONTROL PANEL. SEE HVAC DUCT SMOKE DETECTION AND MONITORING DETAIL FOR ADDITIONAL INFORMATION. LABEL NOTIFICATION PER NEC 907.3.1 EXCEPTION #2.
3. PROVIDE DUAL ACTION PULL STATION AND PHOTOELECTRIC SMOKE DETECTOR WHERE REQUIRED BY AHJ BECAUSE OF EQUIPMENT USED BY VENDOR ELIMINATE OTHERWISE.
4. PROVIDE CEILING CONNECTION FOR WIRELESS ACCESS POINT. VERIFY LOCATION WITH OWNER'S IT REP PRIOR TO ROUGH-IN.
5. PROVIDE ROUGH-IN FOR SURFACE MOUNT WIRELESS ACCESS POINT. VERIFY LOCATION WITH OWNER'S IT REP PRIOR TO ROUGH-IN.
6. PROVIDE LOCKABLE, WP-IN-USE COVER FOR EXTERIOR OUTLETS AS SPECIFIED.
7. PROVIDE ROOF EQUIPMENT SERVICE OUTLET LOCATED PER NEC REQUIREMENTS. OUTLETS SHOWN ADJACENT TO ROOF-TOP UNITS ARE FURNISHED INTEGRAL TO UNIT.
8. ROUTE CIRCUIT THROUGH LIGHTING CONTROL PANEL TO ALLOW OFF-SEASON SHUT-OFF CONTROL.
9. ANTICIPATED LOCATION FOR LINE VOLTAGE THERMOSTAT. VERIFY LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.

GENERAL NOTES

1. COORDINATE ALL SWITCH, OUTLET, LIGHT AND OTHER DEVICE LOCATIONS WITH ARCHITECTURAL ELEMENTS (CABINETS, WINDOWS ETC.) PRIOR TO ROUGH IN. REVIEW ARCHITECTURAL INTERIOR ELEVATIONS PRIOR TO ROUGH-IN OF EACH AREA FOR ADDITIONAL INFORMATION.
2. PROVIDE 4SD J-BOX WITH 1 GANG MUD RING AND 1" CONDUIT TO PHONE BOARD FOR ALL VOICE/DATA/COMBO OUTLETS SHOWN ON FLOOR PLANS. PROVIDE INSULATED THROAT CONNECTORS ON BOTH ENDS OF CONDUIT. SEE SYMBOL SCHEDULES FOR COMMUNICATIONS CABLING REQUIREMENTS.
3. NO INTERIOR OR EXTERIOR RACEWAYS SHALL BE SURFACE MOUNTED WITHOUT PRIOR WRITTEN APPROVAL FROM OWNER AND ARCHITECT.
4. LABEL ALL AUXILIARY SYSTEMS CONDUIT STUBS AT COMM BOARD WITH PTAC LABEL IDENTIFYING ITEM SERVED BY CONDUIT.
5. PROVIDE INSULATED THROAT CONNECTORS ON ALL ENDS OF ALL COMMUNICATIONS CONDUITS.
6. PROVIDE WIDE SWEEP BENDS FOR ALL COMMUNICATIONS CONDUITS. NO MORE THAN (2)90° BENDS SHALL BE INSTALLED BETWEEN PULL POINTS.
7. PROVIDE PULL STRING IN ALL COMMUNICATIONS CONDUITS.



2 ELECTRICAL PLAN - SHED

1/4" = 1'-0"

COMMUNICATIONS RACEWAY SCHEDULE

SYMBOL	DESCRIPTION	MANUFACTURER	MODEL	ACCESSORIES
xCDy	CONDUIT; QUANTITY "X", DIAMETER "Y" AS INDICATED ON SYMBOL SCHEDULE	AS SPECIFIED		INSULATED THROAT CONNECTORS ON ALL ENDS; PULL STRING
CMJ	CABLE HOOKS; 4"; RETAINING CLIP QUANTITY AS REQUIRED FOR CURRENT CABLING PLUS 50% SPARE CAPACITY	COOPER B-LINE	BCH64 SERIES (OR EQUIVALENT)	RETAINER (BCHR64) OTHER ACCESSORIES AS REQUIRED
CTy	XW(X)X(Y)D STEEL, WIRE MESH TRAY (W)=6", (X)=4" OR 6" SUPPORT SPACING (MIN 83 LBS/FT LOAD CAPACITY)	COOPER	FT(X)X(Y)-EG SERIES (OR EQUIVALENT)	ACCESSORIES AS REQUIRED
OUTLET BOX	5" SQUARE X 2 7/8" DEEP 3/4" MUD RING (1 OR 2-GANG AS NOTED)	STEEL CITY STEEL CITY	82181T-1 SERIES 82C-*G-3/4 (OR EQUIVALENT)	

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REGISTERED PROFESSIONAL ENGINEER
No. 294171
SHANE D. SWENSON
4/8/2020
STATE OF UTAH

PERMIT SET/BID SET

ELECTRICAL PLANS

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RELAY PANEL SCHEDULE

RELAY PANEL	FEEDS	REMARKS	LOCATION	MOUNTING
1LC1	X INDIVIDUAL		MECH/ELEC 116	FLUSH
X NEW	MAIN LUGS			X SURFACE
EXISTING	MAIN BKR			
	MAX VOLTAGE 208			
	MAX PHASE 1			

No.	RELAY A	RELAY P	CONTROLLED CKT	CONTROL ZONE	CONTROL TYPE (SEE SCHEDULE)	DIMMING (SEE SCHED)	No.	No.	CONTROL TYPE (SEE SCHEDULE)	DIMMING (SEE SCHED)	CONTROL ZONE	CONTROLLED CKT	RELAY A	RELAY P	No.
1	20	1	1P1- 9	LOBBY	T1,B1,SS	D1	1	2	T2,P1	NS	BLDG ENTRIES	1P1- 11	20	1	2
3	20	1	1P1- 9	COPY/WORK	T1,B1,SS,S1	N/A	3	4	T2,P1	N/A	BLDG AREA LTG	1P1- 11	20	1	4
5	20	1	1P1- 9	HALL	T1,B1,SS,S2	N/A	5	6				SPA RE	20	1	6
7	20	1	1P1- 1	GARAGE S	T1,B1,SS	D2	7	8				SPA RE	20	1	8
9	20	1	1P1- 3	GARAGE CNTR	T1,B1,SS	D3	9	10				SPA RE	20	1	10
11	20	1	1P1- 5	GARAGE N	T1,B1,SS	D4	11	12				SPA RE	20	1	12
13	20	1	SPA RE				13	14				SPA RE	20	1	14
15	20	1	SPA RE				15	16				SPA RE	20	1	16
17	20	1	SPA RE				17	18				SPA RE	20	1	18
19	20	1	SPA RE				19	20				SPA RE	20	1	20
21	20	1	SPA RE				21	22	PER OWNER	N/A	EX FAN: BREAK	1P1- 9	20	1	22
23	20	1	SPA RE				23	24	PER OWNER	N/A	EX FAN: RR'S	1P1- 64	20	1	24

CONTROL TYPES

CLK = TIMECLOCK
SW = SWITCH (1, 3, OR 4)

OVER = 2-HOUR TIMED OVERRIDE ON
PHOTO = PHOTOCELL

LIGHTING CONTROL INPUT SCHEDULE

TYPE	DESCRIPTION	CONTROLLED RELAYS
T1	INTERIOR TIMECLOCK ON/OFF (SCHEDULE PER OWNER)	1LC1:1-11O
T2	EXTERIOR TIMECLOCK ON/OFF (ON AT DUSK, OFF PER OWNER)	1LC1:4
T3	EXTERIOR SECURITY ON/OFF (ON AT DUSK, OFF PER OWNER)	1LC1:2
SS	SECURITY SYSTEM INTERFACE	1LC1:1-5,7,9,11
B1	BLINK WARNING	1LC1:1-11O
D1	TOGGLE W/ TIME OUT + DIMMING: LOBBY	1LC1:1
D2	TOGGLE W/ TIME OUT + DIMMING: GARAGE S	1LC1:7
D3	TOGGLE W/ TIME OUT + DIMMING: GARAGE CNTR	1LC1:9
D4	TOGGLE W/ TIME OUT + DIMMING: GARAGE N	1LC1:11
D5	DIMMING SPARE INPUT	
D6	DIMMING SPARE INPUT	
D7	DIMMING SPARE INPUT	
D8	DIMMING SPARE INPUT	
NS	NIGHT SETBACK: 30% DIMMING	1LC1:2
O1	OCC SENSOR SPARE INPUT	
O2	OCC SENSOR SPARE INPUT	
O3	OCC SENSOR SPARE INPUT	
O4	OCC SENSOR SPARE INPUT	
O5	OCC SENSOR SPARE INPUT	
O6	OCC SENSOR SPARE INPUT	
O7	OCC SENSOR SPARE INPUT	
O8	OCC SENSOR SPARE INPUT	
P1	PHOTOCELL: EXTERIOR	
P2	PHOTOCELL SPARE INPUT	
P3	PHOTOCELL SPARE INPUT	
S1	TOGGLE W/ TIME OUT: COPY/WORK	1LC1:3
S2	TOGGLE W/ TIME OUT: HALL	1LC1:5
S3	SWITCH SPARE INPUT	
S4	SWITCH SPARE INPUT	
S5	SWITCH SPARE INPUT	
S6	SWITCH SPARE INPUT	
S7	SWITCH SPARE INPUT	
S8	SWITCH SPARE INPUT	

NOTES

DETAIL KEYED NOTES

1. PROVIDE LIGHTING CONTROL PANEL WITH ALL OPTIONS NECESSARY TO PROVIDE CONTROLS AS SHOWN AND SPECIFIED.
2. SEE LIGHTING PLANS FOR DIGITAL, ADDRESSABLE SWITCH LOCATIONS. PROGRAM FOR CONTROL AS SCHEDULED. PROVIDE ENGRAVED COVER PLATES AS DESCRIBED ON LIGHTING SHEET. (*) INDICATES CONTROL TYPE.
3. COORDINATE CONNECTIONS WITH OWNER'S SECURITY SYSTEM PROVIDER.
4. PROVIDE CONTROL WIRING PER EQUIPMENT REQUIREMENTS.
5. PROVIDE HOME-RUN OR DAISY CHAIN WIRING PER EQUIPMENT REQUIREMENTS.
6. PROVIDE INTERIOR AND/OR EXTERIOR PHOTOCELLS. REFER TO LIGHTING PLAN FOR INTERIOR COUNTS AND LOCATIONS. PROVIDE (1)EXTERIOR SENSOR ROOF MOUNTED PER MANUFACTURER RECOMMENDATIONS. (*)INDICATES CONTROL TYPE.
7. REFER TO LIGHTING PLANS FOR SWITCHING GROUPS/HOME RUNS.
8. PROVIDE CONSTANT POWER TO EXIT SIGNS, EM BALLASTS, NIGHT-LIGHTS, OCCUPANCY SENSORS, ETC.
9. PROVIDE LAN CONNECTION TO CONTROL PANEL FOR REMOTE OWNER CONTROL. PROVIDE ALL HARDWARE/PROGRAMMING REQUIRED FOR SYSTEM INTERFACES AS SPECIFIED.
10. PROVIDE OCCUPANCY SENSORS/RELAYS COMPATIBLE WITH LIGHTING CONTROL SYSTEM. SENSORS MY BE USED FOR LOCAL AND SYSTEM CONTROL. (*)INDICATES CONTROL TYPE.

1 LIGHTING CONTROL RISER DIAGRAM
N.T.S.

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REGISTERED PROFESSIONAL ENGINEER No. 294472 STEVEN K. SWENSON 7/8/2020 STATE OF UTAH

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LIGHTING CONTROL RISER DIAGRAM & SCHEDULES

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LIGHT FIXTURE SCHEDULE

	TYPE	MANUFACTURER/CATALOG NO.	DESCRIPTION	MOUNTING	POWER	LAMPS
	DP- L20	BETA CALCO 1@AX1-(E1),1@AX11,1@AX12 + J4-K4-*-CB1-CC1-L0-C0-W1-U2	DECORATIVE PENDANT, MULTI-VOLT, ELECTRONIC, DIMMABLE DRIVERS; SEPARATE UP/DOWN SWITCHING; FINISH AS SELECTED BY ARCHITECT	CABLE SUSPENDED	201 W	20000 LUMEN NOMINAL LED 4000K
	EX- 1B	LITHONIA LE-S-1-G-120/277-ELN-SD COOPER CX7-1-SD-G DUAL LITE SE-S-G-BN-E-I EXITRONIX G400S-WB-BL-G2 NO EQUIVALENTS	UNIVERSITY STANDARD/MODIFIED EXIT SIGN; LED; SINGLE-FACE; BRUSHED ALUMINUM FACE; BLACK HOUSING (SIDE); BATTERY BACKUP; SELF DIAGNOSTICS;	WALL OR CEILING 1-FACE	3W	LED
	EX- 2B	DUAL LITE NV3-G-EN-W-CVS SURE-LITES CCX7-0-70-G-WH-SD LIGHTOLIER LT-N-U-G-W-SD LITHONIA LQM S W 3 G 120/277 EL N SD EELP XE-2-GW-EM-SD EXITRONIX MCPHILBEN CXXL-3-G-W	EXIT SIGN; DOUBLE FACE; UNIVERSAL MOUNTING; WHITE, THERMOPLASTIC HOUSING; SELF DIAGNOSTICS; WIRE GUARD WHERE NOTED ON DRAWINGS	WALL OR CEILING 1-FACE	3W	LED
	HB- L09	LITHONIA IBG-SEF-12000LM-AFL-GND-MVOLT-GZ10-40K-80CRII-(PS30250)-XX-DWH GE ABV3-0-9-T-48-9D-Q-V-^-W-(EL1) OR EQUIVALENT	LED HIGH BAY; MULTI-VOLT, ELECTRONIC, DIMMABLE DRIVER; DIFFUSE LENS; MEDIUM DISTRIBUTION; MOUNTING ACCESSORIES AS REQUIRED; EM BATTERY WHERE (B) OPTION INDICATED ON DRAWINGS	CABLE SUSPENDED	55 W	9000 LUMEN NOMINAL LED 4000K
	HB- L18 HB- L18(B)	LITHONIA IBG-SEF-18000LM-AFL-GND-MVOLT-GZ10-40K-80CRII-(PS30250)-XX-DWH GE ABV3-0-18-T-48-9D-Q-V-^-W-(EL1) OR EQUIVALENT	LED HIGH BAY; MULTI-VOLT, ELECTRONIC, DIMMABLE DRIVER; DIFFUSE LENS; MEDIUM DISTRIBUTION; MOUNTING ACCESSORIES AS REQUIRED; EM BATTERY WHERE (B) OPTION INDICATED ON DRAWINGS	CABLE SUSPENDED	137 W	18000 LUMEN NOMINAL LED 4000K
	LG- L33 LG- L33(B)	LITHONIA CPANL-2X2-24/33/44LM-40K-(PS1055CP) OR EQUIVALENT WITH PRIOR APPROVAL	LED FLAT PANEL; LOW PROFILE, MULTI-VOLT, ELECTRONIC, DIMMABLE DRIVER; LOW PROFILE	GRID	28 W	3300 LUMEN NOMINAL LED 4000K
	LG- L44	LITHONIA CPANL-2X2-24/33/44LM-40K-(PS1055CP) OR EQUIVALENT WITH PRIOR APPROVAL	LED FLAT PANEL; LOW PROFILE, MULTI-VOLT, ELECTRONIC, DIMMABLE DRIVER; LOW PROFILE	GRID	39 W	4400 LUMEN NOMINAL LED 4000K
	LS- L24	LITHONIA CPANL-2X2-24/33/44LM-40K-(PS1055CP)-2X2CFMK OR EQUIVALENT WITH PRIOR APPROVAL	LED FLAT PANEL; LOW PROFILE, MULTI-VOLT, ELECTRONIC, DIMMABLE DRIVER; LOW PROFILE SURFACE MOUNT	SURFACE	20 W	2400 LUMEN NOMINAL LED 4000K
	OW3- L15 OW3- L15(B)	LITHONIA DSXW1-10C-350-40K-T3M-MVOLT-DMG-(ELCW)-SCBA OR EQUIVALENT	EXTERIOR WALL FIXTURE; MULTI-VOLT, ELECTRONIC, DIMMABLE DRIVER; WET LOCATION RATED; TYPE 3 OPTICAL DISTRIBUTION	EXTERIOR WALL PER ARCHITECT	13 W	1500 LUMEN NOMINAL LED 4000K
	OW3- L4K	LITHONIA DSXW2-20C-530-40K-T3M-MVOLT-DMG-SCBA-PIR1H1FC3V OR EQUIVALENT	EXTERIOR WALL FIXTURE; MULTI-VOLT, ELECTRONIC, DIMMABLE DRIVER; WET LOCATION RATED; TYPE 3 OPTICAL DISTRIBUTION; INTEGRAL AMBIENT/MOTION SENSOR WITH NIGHT SETBACK	EXTERIOR WALL	35 W	4000 LUMEN NOMINAL LED 4000K
	OW4- L15	LITHONIA DSXW1-10C-350-40K-T4M-MVOLT-PIR-SCBA OR EQUIVALENT	EXTERIOR WALL FIXTURE; MULTI-VOLT, ELECTRONIC, DIMMABLE DRIVER; WET LOCATION RATED; TYPE 4 OPTICAL DISTRIBUTION; INTEGRAL MOTION/AMBIENT SENSOR	EXTERIOR WALL PER ARCHITECT	13 W	1500 LUMEN NOMINAL LED 4000K
	OW4- L4K	LITHONIA DSXW2-20C-530-40K-T4M-MVOLT-DMG-SCBA-PIR1H1FC3V OR EQUIVALENT	EXTERIOR WALL FIXTURE; MULTI-VOLT, ELECTRONIC, DIMMABLE DRIVER; WET LOCATION RATED; TYPE 4 OPTICAL DISTRIBUTION; INTEGRAL AMBIENT/MOTION SENSOR WITH NIGHT SETBACK	EXTERIOR WALL	35 W	4000 LUMEN NOMINAL LED 4000K
	OW4- L7K	LITHONIA DSXW2-20C-1000-40K-T4M-MVOLT-DMG-SCBA-PIR1H1FC3V OR EQUIVALENT	EXTERIOR WALL FIXTURE; MULTI-VOLT, ELECTRONIC, DIMMABLE DRIVER; WET LOCATION RATED; TYPE 4 OPTICAL DISTRIBUTION; INTEGRAL AMBIENT/MOTION SENSOR WITH NIGHT SETBACK	EXTERIOR WALL	73 W	7000 LUMEN NOMINAL LED 4000K
	RW- L1K	GOTHAM EVO6-40-10-AR-MWD-LSS-MVOLT-GZ*-(ELSD) OR EQUIVALENT	WET LOCATION SHOWER LIGHT; LED LAMPING; RECESSED LENS; 6" NOMINAL OPENING; SELF-FLANGED TO MATCH CONE; DIMMABLE; EM BATTERY WHERE (B) OPTION NOTED ON DRAWINGS	RECESS	10 W	1000 LUMEN NOMINAL LED 4000K
	RW- L15 RW- L15(B)	SPECTRUM LIGHTING SGE6LEDOS-15L-40K-DS10-MVOLT-(EMIT)/AR6223OS-SCBA-WL-(EMIT) OR EQUIVALENT	WET LOCATION LIGHT; LED LAMPING; RECESSED LENS; 6" NOMINAL OPENING; 5.75" MAX OVERALL HEIGHT; SELF-FLANGED TO MATCH CONE; DIMMABLE; EM BATTERY WHERE (B) OPTION NOTED ON DRAWINGS	RECESS	13 W	1500 LUMEN NOMINAL LED 4000K
	S4- L3K	LITHONIA CLX-L48-3000LM-SEF-FDL-MVOLT-GZ10-35K-80CRI-(PS1050)-SCBA HE WILLIAMS 75-4-L30-840-DIM-UNV OR EQUIVALENT	LED STRIP FIXTURE; MULTI-VOLT, ELECTRONIC, DIMMABLE DRIVER; DIFFUSE LENS; EM BATTERY WHERE NOTED ON DRAWINGS	SURFACE OR CABLE SUSPENDED WHERE NOTED	21 W	3000 LUMEN NOMINAL LED 3500K
	S4- L5K	LITHONIA CLX-L48-5000LM-SEF-FDL-MVOLT-GZ10-35K-80CRI-(PS1050)-SCBA HE WILLIAMS 75-4-L50-840-DIM-UNV OR EQUIVALENT	LED STRIP FIXTURE; MULTI-VOLT, ELECTRONIC, DIMMABLE DRIVER; DIFFUSE LENS; EM BATTERY WHERE NOTED ON DRAWINGS	SURFACE OR CABLE SUSPENDED WHERE NOTED	35 W	5000 LUMEN NOMINAL LED 3500K
	S4- L7K S4- L7K(B)	LITHONIA CLX-L48-7000LM-SEF-FDL-MVOLT-GZ10-40K-80CRI-SCBA HE WILLIAMS LIGHTOLIER 75-4-L85-840-DIM-UNV COOPER 4SNLED-LD5-74SL-SLW-UNV-L840-CD-1	LED STRIP FIXTURE; MULTI-VOLT, ELECTRONIC, DIMMABLE DRIVER; DIFFUSE LENS; EM BATTERY WHERE (B) OPTION SHOWN ON DRAWINGS	SURFACE OR CABLE SUSPENDED WHERE NOTED	51 W	7000 LUMEN NOMINAL LED 4000K
	WB- L3K WB- L3K(B)	TERON VCY48-L24-MVOLT-SCBA-40K-(EB) OR EQUIVALENT WITH PRIOR APPROVAL	DECORATIVE WALL BRACKET; MULTI-VOLT, ELECTRONIC, DIMMABLE DRIVER; EM BATTERY WHERE (B) OPTION INDICATED ON DRAWINGS	WALL ABOVE MIRROR	24 W	3000 LUMEN NOMINAL LED 4000K

CONTRACTOR AND LIGHTING SUPPLIER SEE (*) FOR MULTIPLE BALLAST REQUIREMENTS AND (+) FOR QUARTZ EM REQUIREMENTS

NOTES

LIGHT FIXTURE ACCESSORY SCHEDULE

	B	AS SPECIFIED	APPENDED TO FIXTURE TYPE; 1100 LUMEN EM BATTERY SUPPLY	AS SPECIFIED		PER FIXTURE TYPE

NOTES

-FIXTURE APPENDS ARE ADDED TO STANDARD FIXTURE TYPES. APPENDS ARE INTENDED TO MODIFY FIXTURE CATALOG NUMBERS GIVEN ABOVE AS NOTED IN APPEND DESCRIPTION

2 SEISMIC SUPPORT DETAIL

N.T.S.

design west | architects
LOGAN UT 84321
255 SOUTH 300 WEST
SALT LAKE CITY UT 84103
795 NORTH 400 WEST

CACHE COUNTY MOSQUITO ABATEMENT

210 W. 3700 N.
HYDE PARK, UT 84318

DESCRIPTION:
DATE:
MARK:

PROJECT #: 819159
DRAWN BY: D.PATTON
CHECKED BY: S.SWENSON
ISSUED: 07.08.2020

REGISTERED PROFESSIONAL ENGINEER
No. 204171
SHANE D. SWENSON
7/8/2020
STATE OF UTAH

PERMIT SET/BID SET

LIGHTING SCHEDULE & DETAILS

EL601

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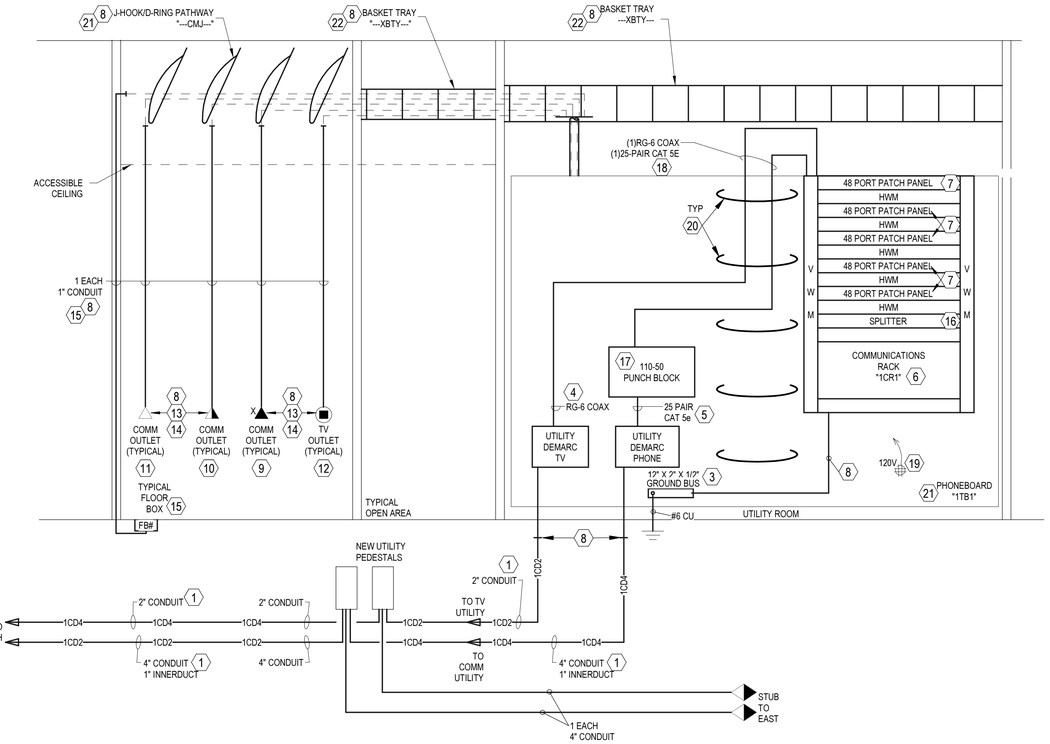
COMMUNICATIONS RACEWAY SCHEDULE				
SYMBOL	DESCRIPTION	MANUFACTURER	MODEL	ACCESSORIES
xCDy	CONDUIT; QUANTITY "X", DIAMETER "Y" AS INDICATED ON SYMBOL SCHEDULE	AS SPECIFIED		INSULATED THROAT CONNECTORS ON ALL ENDS; PULL STRING
CMJ	CABLE HOOKS; 4"; RETAINING CLIP QUANTITY AS REQUIRED FOR CURRENT CABLING PLUS 50% SPARE CAPACITY	COOPER B-LINE	BCH64 SERIES (OR EQUIVALENT)	RETAINER (BCHR64) OTHER ACCESSORIES AS REQUIRED
xBTy	X"W X Y"D STEEL, WIRE MESH TRAY MAXIMUM 6' SUPPORT SPACING (MIN 83 LBS/FT LOAD CAPACITY)	COOPER	FT(X)X(Y)-EG SERIES (OR EQUIVALENT)	ACCESSORIES AS REQUIRED
OUTLET BOX	5" SQUARE X 2 7/8" DEEP 3/4" MUD RING (1 OR 2-GANG AS NOTED)	STEEL CITY STEEL CITY	82181T-1 SERIES 82C-*G-3/4 (OR EQUIVALENT)	

GENERAL NOTES

1. ALL INSTALLATIONS TO COMPLY WITH TIA/EIA STANDARD 586B FOR CAT 6 CABLE.
2. ALL STATION OUTLETS AND ASSOCIATED CABLING AND DATA RACKS, RACEWAYS, PUNCH BLOCKS, PATCH PANELS AND CROSS CONNECTS PROVIDED BY CONTRACTOR. ELECTRONICS BY OWNERS.
3. PROVIDE ONE PATCH CORD FOR EACH NEW CABLE/PORT INSTALLED. FIELD VERIFY LENGTHS, BUT ASSUME EQUAL QUANTITIES OF 2', 4', AND 10' CABLES FOR BID.
4. CONTRACTOR SHALL TEST ALL COPPER RUNS TO VERIFY dB LOSSES AND SHALL PROVIDE TEST RESULTS TO OWNER AND ENGINEER.
5. PROVIDE WIDE-SWEEP BENDS FOR ALL CONDUITS.
6. PROVIDE CONNECTORS WITH INSULATED THROATS OR PLASTIC BUSHINGS ON ALL CONDUIT ENDS.
7. ALL CABLING SHALL BE PLENUM RATED.
8. FOLLOW OWNER'S INDENTIFICATION STANDARDS FOR ALL NEW INSTALLATIONS. COORDINATE WITH OWNER'S VOICE AND DATA PERSONNEL.

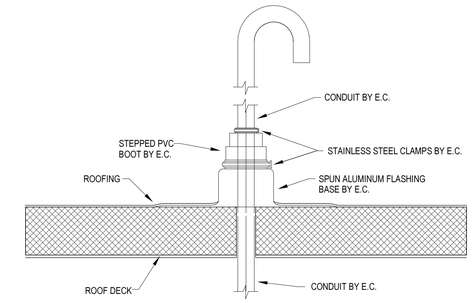
KEYED NOTES

1. CONDUIT BY CONTRACTOR. CONDUCTORS BY UTILITY.
2. PROVIDE 3/4" PLYWOOD BACKBOARD (4'x8' MINIMUM) ON WALLS OF NEW COMMUNICATIONS ROOM. SEE E401 FOR LOCATION. FIELD PAINT TO MATCH ADJACENT WALL SURFACES.
3. PROVIDE PRE-DRILLED, CU GROUNDING BAR WITH STANDOFFS MOUNTED AT 12" AFF IN COMMUNICATIONS ENCLOSURE. PROVIDE #6 CU GROUND TO GROUNDING ELECTRODE SYSTEM. PROVIDE #6 BONDING CONDUCTORS TO ALL EQUIPMENT RACKS, CABLE-TRAYS, RACEWAYS, AND OTHER ASSOCIATED COMMUNICATIONS AND AUXILIARY SYSTEMS EQUIPMENT AS NECESSARY.
4. PROVIDE CONNECTION TO UTILITY DEMARC. EXTEND TO DISTRIBUTION AS SHOWN.
5. PROVIDE CONNECTIONS TO UTILITY DEMARC. PROVIDE PUNCH BLOCK FOR DISTRIBUTION.
6. PROVIDE 60"x19" WALL-MOUNT DATA RACK WITH WIRING HOLDER FRAME.
7. PROVIDE CAT 6 PATCH PANELS AS INDICATED WITH QUANTITY OF PORTS TO TERMINATE EACH VOICE AND DATA CABLE PLUS 100% SPARE CAPACITY. ALLOW (1)CABLE PER STATION PORT.
8. PROVIDE ELECTRICALLY BONDED RACEWAY SYSTEM - BOND COMM DEVICE CONDUITS TO COMM RACK, GROUND BUS, ETC. WHERE OUTLETS STUB TO ACCESSIBLE CEILING, BOND DEVICE BOX/CONDUIT TO ADJACENT ELECTRICAL OUTLET.
9. PROVIDE (3)DATA JACKS WITH (1)CAT 6 CABLE PER JACK FROM DATA RACK TO EACH COMPLETELY FILLED TRIANGLE OUTLET SHOWN ON FLOOR PLANS. WHERE OUTLETS HAVE A NUMERICAL SUPERSCRIPT, PROVIDE "X" QUANTITY OF JACKS AND CABLES WHERE "X" IS THE ASSOCIATED SUPERSCRIPT NUMBER.
10. PROVIDE (2)DATA JACKS WITH (1)CAT 6 CABLE PER JACK FROM DATA RACK TO EACH HALF-FILLED TRIANGLE OUTLET SHOWN ON FLOOR PLANS.
11. PROVIDE (1)DATA JACK WITH (1)CAT 6 CABLE FROM DATA RACK TO EACH EMPTY TRIANGLE OUTLET SHOWN ON FLOOR PLANS.
12. PROVIDE (2)F-CONNECTORS WITH (2)RG-6 COAX CABLES FROM TV DISTRIBUTION TO EACH TV OUTLET SHOWN ON PLAN.
13. PROVIDE "OUTLET BOX" FOR OUTLETS. SEE ELECTRONIC SYSTEMS SHEETS, FOR LOCATIONS AND COUNTS. TV OUTLETS SHOWN ADJACENT TO COMM OUTLETS ON FLOOR PLAN MAY BE COMBINED INTO THE SAME BOX/RACEWAY/FACEPLATE.
14. PROVIDE 6-PORT, MODULAR FACEPLATE FOR EACH COMMUNICATIONS OR TV OUTLET SHOWN. PROVIDE JACKS/CONNECTORS FOR EACH CABLE AS NOTED ABOVE. PROVIDE BLANK INSERTS FOR UNUSED PLATE OPENINGS.
15. PROVIDE CONDUIT FROM DEVICE TO ENCLOSURE OR STUBBED TO OPEN RACEWAY PATH PER CONTRACTOR PREFERENCE. PROVIDE INSULATED THROAT CONNECTORS AND WIDE SWEEP BENDS FOR ALL CONDUIT RUNS.
16. PROVIDE SPLITTER TO DISTRIBUTE TO TV OUTLETS. PROVIDE PORTS FOR CURRENT DEVICES PLUS MINIMUM 50% SPARE CAPACITY.
17. PROVIDE 110 PUNCH BLOCK FOR INCOMING PHONE LINES.
18. PROVIDE CROSS-CONNECTS FROM PUNCH BLOCK TO PATCH MODULES AND BETWEEN PATCH MODULES FOR PHONE CONNECTIONS.
19. PROVIDE POWER TO PHONE BOARD AS SHOWN ON E301.
20. PROVIDE WIRE MANAGEMENT HOOKS 18" ON CENTER UP PHONE BOARD.
21. PROVIDE J-HOOKS OR D-RINGS, SIZED FOR CABLES PLUS 150% MINIMUM SPARE CAPACITY. SPACE 4' MAX ON CENTER. SEE E4 SERIES SHEETS FOR PATHS.
22. PROVIDE BASKET TRAY AS SPECIFIED. SEE E4 SERIES SHEETS FOR ROUTING.



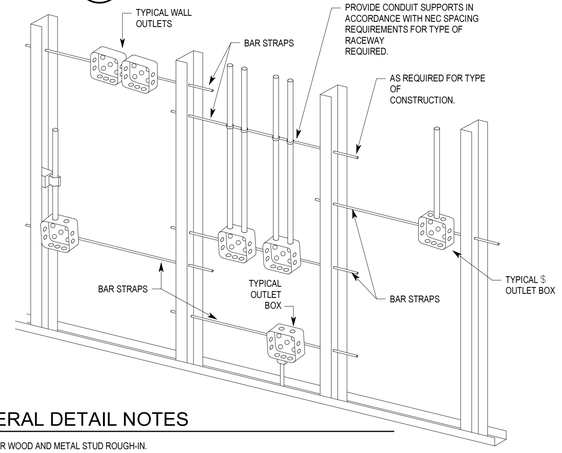
5 COMMUNICATIONS RISER DIAGRAM

N.T.S.



3 CONDUIT/ROOF PENETRATION DETAIL

N.T.S.

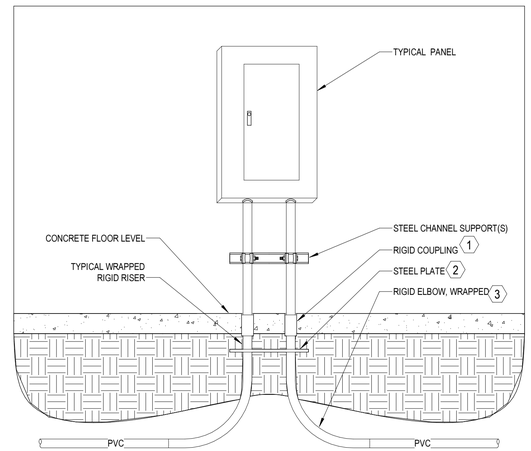


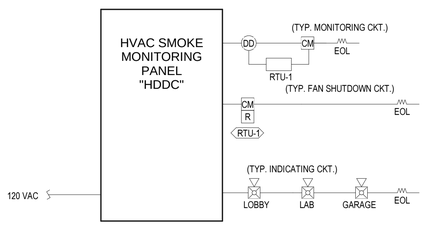
GENERAL DETAIL NOTES

1. TYPICAL FOR WOOD AND METAL STUD ROUGH-IN.
2. PLASTER RINGS NOT SHOWN.
3. LOCATE ALL OUTLET BOXES IN ACCORDANCE WITH ARCHITECTURAL AND MECHANICAL DRAWINGS AND WITH ALL APPLICABLE SHOP DRAWINGS.
4. OUTLETS ON OPPOSITE SIDES OF WALLS OR PARTITIONS IN THE SAME STUD SPACE IN A RATED FIRE SEPARATION WALL MUST BE SEPARATED BY A MINIMUM OF 24" HORIZONTAL DISTANCE.
5. IN NON-RATED WALLS, OUTLETS ON OPPOSITE SIDES OF WALLS OR PARTITIONS MUST BE SEPARATED BY 16" FOR SOUND ATTENUATION.

2 TYPICAL ROUGH-IN REQUIREMENTS DETAIL

N.T.S.





DETAIL NOTES

1. ALL DUCT MONITORING CIRCUITS TO BE CONDUCTORS IN CONDUIT OR MC CABLE AND MARKED RED AS SPECIFIED.
2. VERIFY ALL CABLE SIZES WITH SYSTEM ALARM VENDOR PRIOR TO BID AND ADJUST PER MANUFACTURER'S REQUIREMENTS.

4 HVAC DUCT SMOKE DETECTION AND NOTIFICATION SYSTEM DETAIL

N.T.S.

DETAIL KEYED NOTES

1. SET COUPLING FLUSH WITH FINISH FLOOR.
2. PROVIDE STEEL PLATE WITH SAME DIMENSIONS AS PANEL BOTTOM PLATE. PUNCH PLATE PER CONDUITS ENTERING PANEL TO STRAIGHTEN/ORGANIZE CONDUITS PRIOR TO FINAL RISE INTO PANEL.
3. TRANSITION TO WRAPPED RIGID CONDUIT PRIOR TO RISING ABOVE FLOOR AS SPECIFIED.

1 EQUIPMENT CONDUIT RISER DETAIL

N.T.S.

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LOGAN UT 84321
SALT LAKE CITY UT 84103
255 SOUTH 300 WEST
795 NORTH 400 WEST

CACHE COUNTY MOSQUITO ABATEMENT

210 W. 3700 N.
HYDE PARK, UT 84318

MARK:	DATE:	DESCRIPTION:

PROJECT #:	819159
DRAWN BY:	D.PATTON
CHECKED BY:	S.SWENSON
ISSUED:	07.08.2020

REGISTERED PROFESSIONAL ENGINEER No. 291171 SHANE D. SWENSON 7/8/2020 STATE OF UTAH

PERMIT SET/BID SET

ELECTRICAL DETAILS

EP501

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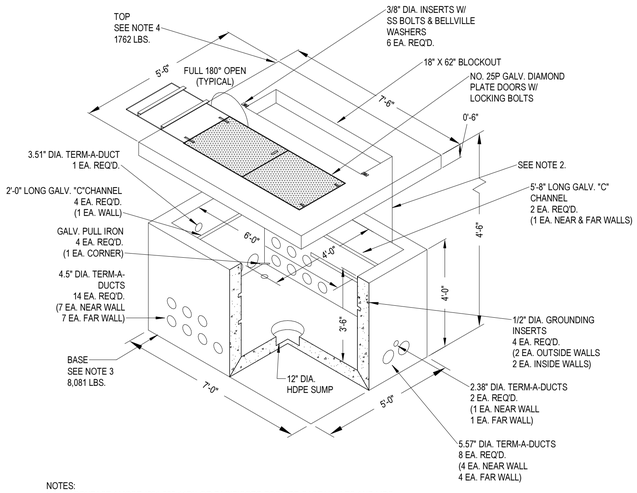
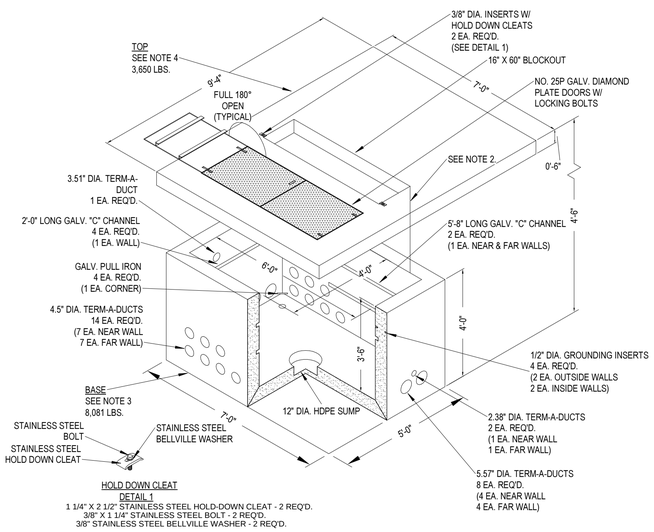


NOTES:
1. CONTACT AMCOR (801-388-1171) OR PACIFICORP FOR PRE-CAST VAULTS AND LIDS.
2. ALIGN BACK OF 18"x62" LID BLOCKOUT WITH BACK OF VAULT.
3. THREE-PHASE SECTIONALIZING CABINET PADVAULT: PCORP #7992605-SI 1720630
4. TOP: PCORP #7992605-SI 1720630

3 4X6 15KV 3Φ SECTIONALIZING CABINET PAD-VAULT

N.T.S.



HOLD DOWN CLEAT
DETAIL 1
1 1/4" X 2 1/2" STAINLESS STEEL HOLD-DOWN CLEAT - 2 REQ'D.
3/8" X 1 1/4" STAINLESS STEEL BOLT - 2 REQ'D.
3/8" STAINLESS STEEL BELLVILLE WASHER - 2 REQ'D.

NOTES:
1. CONTACT AMCOR (801-388-1171) OR PACIFICORP FOR PRE-CAST VAULTS AND LIDS.
2. ALIGN BACK OF 16"x60" LID BLOCKOUT WITH BACK OF VAULT.
3. 2.4 - 25kV, 3-PHASE TRANSFORMER PADVAULT WITH ACCESS: PCORP 7992600 - SI 1790023
4. TOP: PCORP # 7992600 - SI 1750023

2 3Φ TRANSFORMER PAD DETAIL

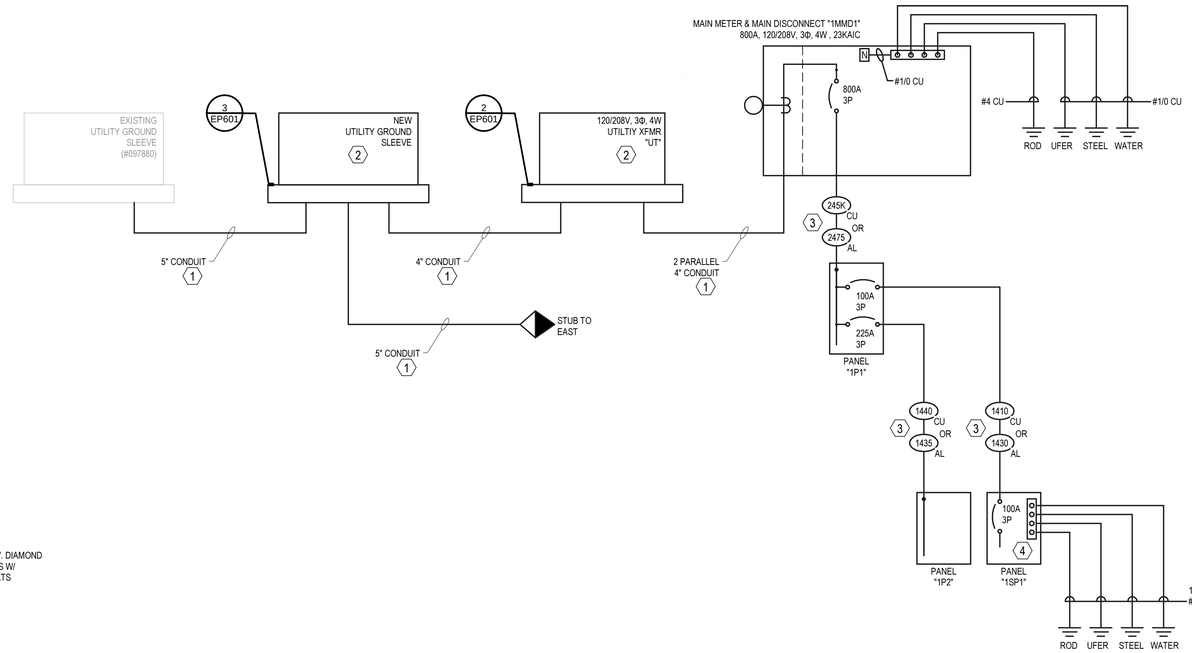
N.T.S.

GENERAL NOTES

1. COMPLY WITH POWER UTILITY'S REQUIREMENTS FOR ALL UTILITY RELATED INSTALLATIONS. REVIEW CURRENT UTILITY STANDARDS MANUAL PRIOR TO BID. NOTIFY ENGINEER OF CONFLICTS PRIOR TO BID.
2. AIC RATINGS SHOWN INDICATE MINIMUM REQUIRED VALUES. SCCR RATINGS ARE TO MATCH OR EXCEED AIC RATINGS.
3. ALL CONDUCTORS ARE CONSIDERED TO BE COPPER UNLESS SPECIFICALLY NOTED OTHERWISE.
4. A FULL SIZE EQUIPMENT GROUNDING CONDUCTOR SIZED FOR THE OVERCURRENT PROTECTIVE DEVICE PROTECTING THE CIRCUIT IS REQUIRED IN EACH RACEWAY OR CABLE FOR PARALLELED CIRCUITS.
5. CONTRACTOR SHALL DOCUMENT FEEDER CONDUCTOR LENGTH ON FIELD REDLINE SET. FEEDER LENGTHS ARE REQUIRED FOR ARC FAULT STUDIES AS SPECIFIED.
6. FIELD MARK SERVICE EQUIPMENT WITH AVAILABLE FAULT CURRENT AND CALCULATION DATE PER NEC 110.24(A).
7. RUN PORTIONS OF GROUNDING ELECTRODE CONDUCTORS NOT CONCEALED IN BUILDING FINISHES IN CONDUIT.
8. REFER TO SPECIFICATIONS FOR SERIES VS. FULLY RATED REQUIREMENTS.
9. FIELD MARK ALL SERVICE EQUIPMENT WITH REQUIRED BREAKER CLEARING TIME. CONTRACTOR VERIFY WITH MANUFACTURER'S PUBLISHED DATA FOR MAIN BREAKER.

KEYED NOTES

1. PRIMARY AND SECONDARY CONDUIT, TRENCHING, AND BACKFILL BY CONTRACTOR. CONDUCTORS BY UTILITY.
2. EQUIPMENT PAD BY CONTRACTOR. EQUIPMENT BY UTILITY.
3. ALTERNATE CONFIGURATIONS OF PARALLEL FEEDERS CAN BE USED WITH ENGINEER'S, PRIOR WRITTEN APPROVAL.
4. PROVIDE GROUNDING AND BONDING PER NEC 250.32(B)(1) FOR SEPARATE STRUCTURES. DO NOT BOND NEUTRAL AND GROUND AT THIS LOCATION.



1 ELECTRICAL ONE-LINE DIAGRAM

N.T.S.

CONDUCTOR AND CONDUIT SCHEDULE

SIZE OF CONDUCTORS
QUANTITY OF PHASE/
NEUTRAL CONDUCTORS
QUANTITY OF PARALLEL RUNS
SCHEDULE NUMBER
XX CONDUCTOR MATERIAL
S1 SUBSCRIPTS (SEE NOTE 5)
S2

SYM	AMP		CONDUIT		CONDUCTOR (NOTE 1,6,7)								NOTES
					SIZE	G		IG		SE (NOTE 4)			
	CU	AL	QTY	SIZE	QTY	P/N	CU	AL	CU	AL	CU	AL	
1 2 12	20	N/A	1	3/4"	2	12	12	N/A	12	N/A	8	N/A	2
1 3 12					3								2,3
1 4 12					4								2,3
1 2 0	30				2	10	10		10				2
1 3 0					3								2
1 4 0					4								2
1 2 8	40			1"	2	8			8				2
1 3 8					3								2
1 4 8					4								2
1 2 6	55				2	6			6				2
1 3 6					3								2
1 4 6				1.25"	4								2
1 2 4	70	55			2	4	8	6	4	4			2
1 3 4					3								2
1 4 4					4								2
1 2 3	85	65			2	3			3	3			2
1 3 3					3								2
1 4 3					4								2
1 3 2	95	75			3	2			2	2		6	2
1 4 2				1.5"	4								2
1 3 1	130	100			3	1	6				6		2
1 4 1					4								2,8
1 3 10	150	120		2"	3	1/0		4		1			2
1 4 10					4								2
1 3 20	175	135			3	2/0					4	4	2
1 4 20					4								2
1 3 30	200	155			3	3/0							2
1 4 30				2.5"	4								2
1 3 40	230	180			3	4/0	4		1		2	2	2
1 4 40					4								2
1 3 25	255	205			3	250		2		2/0			2
1 4 25				3"	4								2,8
1 3 3K	285	230			3	300						1/0	2,8
1 4 3K					4								2
1 3 35	310	250			3	350	3		1/0				2
1 4 35					4								2,8
1 3 4K	335	270		3.5"	3	400					1/0		2
1 4 4K					4								2
1 3 5K	380	310		4"	3	500		1		3/0			2,4
1 4 5K					4								2,4
1 3 75	475	385			3	750	2		2/0		2/0	3/0	2,4
1 4 75					4								2,4
2 3 30	400	310	2	2"	3	3/0	3	1	1/0	3/0	2	1/0	2,4
2 4 30				2.5"	4								2,4
2 3 40	460	360			3	4/0	2		2/0		1/0		2,4
2 4 40					4								2,4
2 3 25	510	410			3	250	1	1/0	3/0	4/0			2,4
2 4 25				3"	4								2,4,8
2 3 3K	570	460			3	300						3/0	2,4,8
2 4 3K					4								2,4
2 3 35	620	500	2	3"	3	350	1/0	1/0	4/0	4/0	2/0	3/0	2,4
2 4 35					4								2,4,8
2 3 4K	670	540		3.5"	3	400		2/0					2,4
2 4 4K					4								2,4
2 3 5K	760	620		4"	3	500		3/0		300		4/0	2,4
2 4 5K					4								2,4
2 3 75	950	770			3	750					4/0		2,4
2 4 75					4								2,4

CONDUIT AND CONDUCTOR SCHEDULE NOTES

1. CONDUCTORS SHOWN ARE SHOWN FOR EACH CONDUIT WITH MODIFICATIONS AS NOTED IN NOTE #5. ALL CONDUCTORS SHOWN ARE THWN FOR CU OR THWN OR XHHW FOR AL UNLESS OTHERWISE NOTED.
2. PROVIDE EQUIPMENT GROUNDING CONDUCTORS PER NEC TABLE 250-122 WHEN CIRCUIT BREAKERS ARE SIZED GREATER THAN AMPERE RATING SHOWN IN TABLE.
3. PROVIDE #10 NEUTRALS FOR MULTIWIRE BRANCH CIRCUITS SERVING COMPUTERS.
4. GROUND (G) CONDUCTOR MAY BE DELETED ON SERVICE ENTRANCE CONDUCTORS.
5. SYMBOL SUBSCRIPTS:
   - "IG": INCLUDE IG (INSULATED/ISOLATED GROUND CONDUCTOR) SCHEDULED ALONG WITH THE GROUND OF EQUIPMENT GROUND CONDUCTOR.
   - "SE": SUBSTITUTE "SE" CONDUCTOR FOR "G" CONDUCTOR SHOWN, WHICH IS SIZED FOR THE GROUNDING OF THE SECONDARY OF THE SEPARATELY DERIVED SYSTEM.
   - "2N": INCLUDE TWO NEUTRAL CONDUCTORS, SIZED AS SCHEDULED FOR PHASED AND NEUTRAL CONDUCTORS.
   - "R": RACEWAY ONLY. CONDUCTORS PROVIDED BY UTILITY.
   - "V": PHASE AND NEUTRAL CONDUCTORS UPSIZED FOR VOLTAGE DROP.
   - "A": UPSIZE GROUNDING CONDUCTOR(G) PER NEC 250.122(B). ALUMINUM CONDUCTORS ALLOWED FOR FEEDER INDICATED. ALUMINUM CONDUCTORS ARE NOT TO BE USED FOR CONNECTIONS TO MOTORS OR MOTOR DRIVEN EQUIPMENT.
6. A FULL SIZE GROUNDING CONDUCTOR (SE OR G AND/OR IG) SHALL BE INSTALLED IN EACH RACEWAY OR CABLE FOR PARALLELED CIRCUITS.
7. GROUNDING CONDUCTORS (G, IG, AND SE) SHALL BE OF THE SAME CONDUCTOR MATERIAL AS THE CORRESPONDING PHASE CONDUCTORS TO KEEP TABLE CALCULATIONS IN 7. ACCORDANCE WITH NEC REQUIREMENTS.
8. INCREASE CONDUIT TO NEXT LARGEST STANDARD CONDUIT SIZE WHEN IG IS USED.

* -CONDUIT SIZED FOR COMPACT ALUMINUM CONDUCTORS. USE COPPER CONDUIT SIZE FOR STANDARD SIZE CONDUCTORS

PERMIT SET/BID SET

design west | architects
LOGAN UT 84321
255 SOUTH 300 WEST
SALT LAKE CITY UT 84103
795 NORTH 400 WEST

CACHE COUNTY MOSQUITO ABATEMENT
210 W. 3700 N.
HYDE PARK, UT 84318

DESCRIPTION:
DATE:
MARK:

PROJECT #: 819159
DRAWN BY: D.PATTON
CHECKED BY: S.SWENSON
ISSUED: 07.08.2020

REGISTERED PROFESSIONAL ENGINEER
No. 294171
STEVE D.
SWENSON
7/8/2020
STATE OF UTAH

ELECTRICAL
ONE-LINE DIAGRAM

EP601

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PANEL 1SP1 | TYPE NQOD | 3 Ø 4 WIRE 120/208 VOLTS | LOCATION: STORAGE SHED | MOUNTING: X FLUSH, X SURFACE

X NEW, 1 NEMA RATING, X BOLT ON BREAKERS, 120K SURGE PROTECT (SPD)

REMARKS: -*=VERIFY WITH EQUPMENT NAMEPLATE AND/OR SUBMITTAL PRIOR TO GEAR RELEASE

100 AMP MAIN, X LUGS, X BREAKER

No.	BRKR A	BRKR P	CIRCUIT DESCRIPTION	L	O	M	WIRE/CND P	WIRE/CND N	WIRE/CND G	WIRE/CND C	CIRC. LOAD	A	B	C	CIRC. LOAD	WIRE/CND P	WIRE/CND N	WIRE/CND G	WIRE/CND C	L	O	M	CIRCUIT DESCRIPTION	BRKR A	BRKR P	No.
1	20	1	LTG: STORAGE ROOMS				12S	12S	12S	3/4S	332	2240			1908	12S	12S	12S	3/4S			1	UNIT HTR: STG 122	20H*	2	2
3	20	1	SPARE										1908		1908	12S						1	-	-	-	4
5	20	1	SPARE											1908	1908	12S	12S	12S	3/4S			1	UNIT HTR: STG 123	20H*	2	6
7	20	1	SPARE									1908			1908	12S						1	-	-	-	8
9	20	1	SPARE										0										SPARE	20	1	10
11	20	1	SPARE											0									SPARE	20	1	12
13	20	1	SPARE									0											SPARE	20	1	14
15	20	1	SPARE										0										SPARE	20	1	16
17	20	1	SPARE											0									SPARE	20	1	18
19	20	1	SPARE									0											SPARE	20	1	20
21	20	1	SPARE										0										SPARE	20	1	22
23	20	1	SPARE											0									SPARE	20	1	24
25	20	1	SPARE									720			720	12S	12S	12S	3/4S		4		PLUGS: STORAGE	20	1	26
27	20	1	SPARE										0										SPARE	20	1	28
29	20	1	SPARE											0									SPARE	20	1	30
											TOTALS	4868	1908	1908											

AIC 10000 | SCCR 10000 | PARALLEL RUNS SEE ONE-LINE

FEEDER SEE ONE-LINE | AMPS/PHASE 41 16 16

BREAKER CODES
A=ARC-FAULT; G=GROUND FAULT; H=HACR; L=LOCKING HANDLE; S=SHUNT TRIP; R=RED PAINTED HANDLE
WIRE CODES
I=ADD'L ISO GROUND TO MATCH SAFETY GROUND; S=UNLESS OTHERWISE SPECIFIED
GENERAL CODES
1LIN=SEE ONE-LINE DIAGRAM

MECHANICAL EQUIPMENT SCHEDULE

SYM	DESCRIPTION	LOAD	VOLTS	PHASE	FIRE ALARM SHUTDOWN	CONTROL CIRCUITS BY	* STARTER BY	SAFETY DISCONNECT BY	REMARKS
CA- 1	AIR COMPRESSOR	7.5 HP	208	3	NO	EQUIP	EQUIP	ELEC	
EF- 1	EXHAUST FAN	1/4 HP	120	1	NO	ELEC	ELEC	MECH	
EF- 2	EXHAUST FAN	1/8 HP	120	1	NO	ELEC	ELEC	ELEC	
EF- 3	EXHAUST FAN	1/8 HP	120	1	NO	ELEC	ELEC	MECH	INTERLOCK TO BE CONTROLLED WITH LIGHTING IN SPACE SERVED BY FANS
EF- 4	EXHAUST FAN	1.5 HP	208	3	NO	MECH	ELEC	MECH	
MG- 1	MOTORIZED GATE OPERATOR	2 HP	208	1	NO	ELEC	EQUIP	ELEC	TYPICAL FOR MULTIPLE UNITS--SEE SITE PLAN FOR COUNTS AND LOCATIONS. PROVIDE CONTROL CONNECTIONS TO GATE ACCESSORIES AS REQUIRED BY VENDOR DOCUMENTS
OH- 1	OVERHEAD DOOR	1/2 HP	120	1	NO	ELEC	MECH	ELEC	PROVIDE 1/2" CONDUIT WITH CONTROL WIRING FROM MOTOR TO BUTTON AND SENSORS ON EACH SIDE OF DOOR PER EQUIPMENT REQUIREMENTS. TYPICAL FOR MULTIPLE LOCATIONS, SEE FLOOR PLAN FOR COUNTS AND LOCATIONS
RTU- 1	ROOF-TOP UNIT	48 MCA 60 MOCP	208	3	YES	MECH	EQUIP	MECH	
UH- 1	UNIT HEATER	6.4 FLA 7.5 MCA	120	1	NO	MECH	EQUIP	ELEC	INSTALL LINE VOLTAGE, REMOTE THERMOSTAT FURNISHED WITH UNIT. TYPICAL FOR MULTIPLE UNITS--SEE POWER PLAN FOR COUNTS AND LOCATIONS
UH- 2	UNIT HEATER: ELECTRIC	14.4 FLA 20 MOCP	208	1	NO	MECH	EQUIP	ELEC	TYPICAL FOR MULTIPLE UNITS--SEE POWER PLAN FOR COUNTS AND LOCATIONS
UH- 3	UNIT HEATER	15.9 MCA 20 MOCP	208	1	NO	MECH	EQUIP	ELEC	INSTALL LINE VOLTAGE, REMOTE THERMOSTAT FURNISHED WITH UNIT. TYPICAL FOR MULTIPLE UNITS--SEE POWER PLAN FOR COUNTS AND LOCATIONS
VL- 1	VEHICLE LIFT	2 HP	208	1	NO	ELEC	MECH	ELEC	VERIFY LOAD WITH OWNER PRIOR TO ROUGH-IN
WH- 1	WATER HEATER	18 KW	208	3	NO	MECH	N/A	ELEC	
WH- 2	WATER HEATER	18 KW	208	3	NO	MECH	N/A	ELEC	
WH- 3	WATER HEATER	18 KW	208	3	NO	MECH	N/A	ELEC	

* ELECTRICAL CONTRACTOR VERIFY SINGLE SPEED OR TWO SPEED STARTERS WITH MECHANICAL DRAWINGS.

PANEL 1P1 | TYPE NQOD | 3 Ø 4 WIRE 120/208 VOLTS | LOCATION: ELEC/MECH 116 | MOUNTING: X SURFACE

X NEW, 1 NEMA RATING, X BOLT ON BREAKERS, 120K SURGE PROTECT (SPD)

REMARKS: -*=VERIFY WITH EQUPMENT NAMEPLATE AND/OR SUBMITTAL PRIOR TO GEAR RELEASE

800 AMP MAIN, X LUGS

No.	BRKR A	BRKR P	CIRCUIT DESCRIPTION	L	O	M	WIRE/CND P	WIRE/CND N	WIRE/CND G	WIRE/CND C	CIRC. LOAD	A	B	C	CIRC. LOAD	WIRE/CND P	WIRE/CND N	WIRE/CND G	WIRE/CND C	L	O	M	CIRCUIT DESCRIPTION	BRKR A	BRKR P	No.
1	20	1	LTG: GARAGE S				12S	12S	12S	3/4S	1096	5964			4868	1LIN	1LIN	1LIN	1LIN			1	PANEL 1SP1	1LIN	3	2
3	20	1	LTG: GARAGE CNTR				12S	12S	12S	3/4S	1096		3004		1908	1LIN						1	-	-	-	4
5	20	1	LTG: GARAGE N				12S	12S	12S	3/4S	1206			3114	1908	1LIN						1	-	-	-	6
7	20	1	LTG: OFFICES, BREAK,LAB				12S	12S	12S	3/4S	967	6967			6000	4	4	8	1.25			1	WATER HTR: RR 105 (WH-1)	70H*	3	8
9	20	1	LTG: OFFICE GNRL				12S	12S	12S	3/4S	939		6939		6000	4						1	-	-	-	10
11	20	1	LTG: EXTERIOR				10	10	10	3/4S	546			6546	6000	4						1	-	-	-	12
13	20	1	SPARE									6000			6000	4	4	8	1.25			1	WATER HTR RR 106 (WH-2)	70H*	3	14
15	20	1	SPARE										6000		6000	4						1	-	-	-	16
17	20	1	SPARE											6000	6000	4						1	-	-	-	18
19	20	1	SPARE									6000			6000	4	4	8	1.25			1	WATER HTR LAB (WH-3)	70H*	3	20
21	20	1	SPARE										6000		6000	4						1	-	-	-	22
23	20	1	SPARE											6000	6000	4						1	-	-	-	24
25	20	1	SPARE									5760			5760	4	4	10	1.25			1	ROOF-TOP UNIT	60H*	3	26
27	20	1	SPARE										5760		5760	4						1	-	-	-	28
29	20	1	SPARE											5760	5760	4						1	-	-	-	30
31	20	1	SPARE									4000			4000	6	6	10	1.25			1	RANGE	50	2	32
33	20	1	SPARE										4000		4000	6						1	-	-	-	34
35	20	1	SPARE											2500	2500	10	10	10	3/4			1	DRYER	30	2	36
37	20	1	SPARE									2500			2500	10						1	-	-	-	38
39	20	1	SPARE										1728		1728	12S	12S	12S	3/4S			1	UNIT HEATER: LOBBY 102	20H*	2	40
41	20	1	SPARE											1728	1728	12S						1	-	-	-	42
43	20	1	SPARE									1728			1728	12S	12S	12S	3/4S			1	UNIT HEATER: HALL 113	20H*	2	44
45	20	1	SPARE										1728		1728	12S						1	-	-	-	46
47	20	1	PLUGS: BREAK CNTR CKT 1	1			12S	12S	12S	3/4S	180			1764	1584	12S	12S	12S	3/4S			1	MOTORIZED GATE: EAST	20H*	2	48
49	20	1	PLUGS: BREAK CNTR CKT 2	1			12S	12S	12S	3/4S	180	1764			1584	12S						1	-	-	-	50
51	20	1	PLUGS: 104 CHRGING	4			12S	12S	12S	3/4S	720		2304		1584	12S	12S	12S	3/4S			1	MOTORIZED GATE: WEST	20H*	2	52
53	20	1	PLUGS: EXTERIOR	3			12S	12S	12S	3/4S	540			2124	1584	12S						1	-	-	-	54
55	20	1	PLUGS: LAB CNTR #1	2			12S	12S	12S	3/4S	360	360											SPARE	20	1	56
57	20	1	PLUGS: LAB CNTR #2	2			12S	12S	12S	3/4S	360		360										SPARE	20	1	58
59	20	1	PLUGS: LAB CNTR #3	2			12S	12S	12S	3/4S	360			360									SPARE	20	1	60
61	20	1	PLUGS: LAB CNTR #4	2			12S	12S	12S	3/4S	360	360											SPARE	20	1	62
63	20	1	PLUGS: LAB CNTR #5	1			12S	12S	12S	3/4S	180		888		708	12S	12S	12S	3/4S			1	EX FAN EF-1	20	1	64
65	20	1	PLUGS: LAB GENERAL	4			12S	12S	12S	3/4S	720			2220	1500	12S	12S	12S	3/4S		2		PHONE BOARD	20	1	66
67	20	1	PLUGS: LOCKER ROOMS	2			12S	12S	12S	3/4S	360	1860			1500	12S	12S	12S	3/4S		2		PHONE BOARD	20	1	68
69	20	1	PLUGS: RR 105	1			12S	12S	12S	3/4S	180		1380		1200	12S	12S	12S	3/4S			1	WASHER	20	1	70
71	20	1	PLUGS: RR 106	1			12S	12S	12S	3/4S	180			1380	1200	12S	12S	12S	3/4S			1	COPIER: COPY/WORK	20	1	72
73	20	1	PLUGS: LAUNDRY CNTR	2			12S	12S	12S	3/4S	360	1560			1200	12S	12S	12S	3/4S			1	BREAK: VENDING #1	20	1	74
75	20	1	PLUGS: LAUNDRY CNTR	2			12S	12S	12S	3/4S	360		1560		1200	12S	12S	12S	3/4S			1	BREAK: VENDING #2	20	1	76
77	20	1	PLUGS: COPY/WORK, HALL	5			12S	12S	12S	3/4S	900			2100	1200	12S	12S	12S	3/4S			1	BREAK: DISPOSAL	20	1	78
79	20	1	PLUGS: LOBBY	4			12S	12S	12S	3/4S	720	1920			1200	12S	12S	12S	3/4S			1	REFER: BREAK	20	1	80
81	20	1	PLUGS: OFF 104	3			12S	12S	12S	3/4S	540		1740		1200	12S	12S	12S	3/4S			1	REFER: LAB	20	1	82
83	20	1	PLUGS: MANAGER OFF	4			12S	12S	12S	3/4S	720			1920	1200	12S	12S	12S	3/4S			1	DUCT DETECT & NOTIFICATION	20	1	84
SFB	1LIN	3	PANEL 1P2				1LIN	1LIN	1LIN	1LIN	11448	11448														
	-	-	-				1LIN				14784		14784													
	-	-	-				1LIN				15984			15984												
											TOTALS	58191	58175	59500											

AIC 22000 | SCCR 22000 | PARALLEL RUNS SEE ONE-LINE

FEEDER SEE ONE-LINE | AMPS/PHASE 485 485 496

BREAKER CODES
A=ARC-FAULT; G=GROUND FAULT; H=HACR; L=LOCKING HANDLE; S=SHUNT TRIP; R=RED PAINTED HANDLE; SFB=SUB-FEED BREAKER
WIRE CODES
I=ADD'L ISO GROUND TO MATCH SAFETY GROUND; S=UNLESS OTHERWISE SPECIFIED
GENERAL CODES
1LIN=SEE ONE-LINE DIAGRAM

PANEL 1P2 | TYPE NQOD | 3 Ø 4 WIRE 120/208 VOLTS | LOCATION: ELEC/MECH 116 | MOUNTING: X SURFACE

X NEW, 1 NEMA RATING, X BOLT ON BREAKERS, 120K SURGE PROTECT (SPD)

REMARKS: -*=VERIFY WITH EQUPMENT NAMEPLATE AND/OR SUBMITTAL PRIOR TO GEAR RELEASE

225 AMP MAIN, 225 LUGS

No.	BRKR A	BRKR P	CIRCUIT DESCRIPTION	L	O	M	WIRE/CND P	WIRE/CND N	WIRE/CND G	WIRE/CND C	CIRC. LOAD	A	B	C	CIRC. LOAD	WIRE/CND P	WIRE/CND N	WIRE/CND G	WIRE/CND C	L	O	M	CIRCUIT DESCRIPTION	BRKR A	BRKR P	No.
1	20	1	PLUGS: GARAGE BAY SSE		2		12S	12S	12S	3/4S	360	3264			2904	6	6	10	1.25			1	COMPRESSOR	50H*	2	2
3	20	1	PLUGS: GARAGE BAY SE		2		12S	12S	12S	3/4S	360		3264		2904	6						1	-	-	-	4
5	20	1	PLUGS: GARAGE BAY E		2		12S	12S	12S	3/4S	360			3264	2904	6						1	-	-	-	6
7	20	1	PLUGS: GARAGE BAY NE		2		12S	12S	12S	3/4S	360	1152			792	12S	12S	12S	3/4S			1	EX FAN EF-4	20H*	3	8
9	20	1	PLUGS: GARAGE BAY NNE		2		12S	12S	12S	3/4S	360		1152		792	12S						1	-	-	-	10
11	20	1	PLUGS: GARAGE BAY SSW		2		12S	12S	12S	3/4S	360			1152	792	12S						1	-	-	-	12
13	20	1	PLUGS: GARAGE BAY SW		2		12S	12S	12S	3/4S	360	360											SPARE	20	1	14
15	20	1	PLUGS: GARAGE BAY W CNTR		2		12S	12S	12S	3/4S	360		360										SPARE	20	1	16
17	20	1	PLUGS: GARAGE BAY NW		2		12S	12S	12S	3/4S	360			360									SPARE	20	1	18
19	20	1	PLUGS: GARAGE BAY NNW		2		12S	12S	12S	3/4S	360	360											SPARE	20	1	20
21	20	1	PLUGS: GARAGE GENERAL		6		12S	12S	12S	3/4S	1080		1080										SPARE	20	1	22
23	20	1	PLUGS: WORK AREA CKT 1		1		12S	12S	12S	3/4S	180			180									SPARE	20	1	24
25	20	1	PLUGS: WORK AREA CKT 2		1		12S	12S	12S	3/4S	180	180											SPARE	20	1	26
27	20	1	PLUGS: WORK AREA CKT 3		1		12S	12S	12S	3/4S	180		180										SPARE	20	1	28
29	20	1	PLUGS: WORK AREA CKT 4		1		12S	12S	12S	3/4S	180			180									SPARE	20	1	30
31	20	1	PLUGS: WORK AREA CKT 5		1		12S	12S	12S	3/4S	180	180											SPARE	20	1	32
33	20	1	PLUGS: WORK AREA CKT 6		1		12S	12S	12S	3/4S	180		180										SPARE	20	1	34
35	20	1	SPARE											0									SPARE	20	1	36
37	20	1	SPARE									0											SPARE	20	1	38
39	20	1	SPARE										0										SPARE	20	1	40
41	20	1	SPARE											0									SPARE	20	1	42
43	20	1	SPARE									0											SPARE	20	1	44
45	20	1	SPARE										0										SPARE	20	1	46
47	20	1	SPARE											0									SPARE	20	1	48
49	20	1	SPARE									0											SPARE	20	1	50
51	20	1	SPARE										0										SPARE	20	1	52
53	20	1	SPARE											0									SPARE	20	1	54
55	20	1	SPARE									0											SPARE	20	1	56
57	20	1	SPARE										0										SPARE	20	1	58
59	20	1	EX FAN: EF-3		1		12S	12S	12S	3/4S	264			264									SPARE	20	1	60
61	20	1	UNIT HTR: NE		1		12S	12S	12S	3/4S	768	768											SPARE	20	1	62
63	20	1	UNIT HTR: SW		1		12S	12S	12S	3/4S	768		768										SPARE	20	1	64
65	20	1	OH DOOR OPENER: SSE		1		12S	12S	12S	3/4S	1200			1200									SPARE	20	1	66
67	20	1	OH DOOR OPENER: SE		1		12S	12S	12S	3/4S	1200	1200											SPARE	20	1	68
69	20	1	OH DOOR OPENER: E CNTR		1		12S	12S	12S	3/4S	1200		1200										SPARE	20	1	70
71	20	1	OH DOOR OPENER: NE		1		12S	12S	12S	3/4S	1200			1200									SPARE	20	1	72
73	20	1	OH DOOR OPENER: NNE		1		12S	12S	12S	3/4S	1200	1200											SPARE	20	1	74
75	20	1	OH DOOR OPENER: SSW		1		12S	12S	12S	3/4S	1200		1200										SPARE	20	1	76
77	20	1	OH DOOR OPENER: SW		1		12S	12S	12S	3/4S	1200			2784	1584	12S	12S	12S	3/4S			1	VEHICLE LIFT	20	2	78
79	20	1	OH DOOR OPENER: W CNTR		1		12S	12S	12S	3/4S	1200	2784			1584	12S						1	-	-	-	80
81	20	1	OH DOOR OPENER: NW		1		12S	12S	12S	3/4S	1200		5400		4200	6	6	10	1.25			1	WELDER	50*	2	82
83	20	1	OH DOOR OPENER: NNW		1		12S	12S	12S	3/4S	1200			5400	4200	6						1	-	-	-	84
											TOTALS	11448	14784	15984											

AIC 21000 | SCCR 21000 | PARALLEL RUNS SEE ONE-LINE

FEEDER SEE ONE-LINE | AMPS/PHASE 95 123 133

BREAKER CODES
A=ARC-FAULT; G=GROUND FAULT; H=HACR; L=LOCKING HANDLE; S=SHUNT TRIP; R=RED PAINTED HANDLE
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GENERAL CODES
1LIN=SEE ONE-LINE DIAGRAM

design west | architects
LOGAN UT 84321
SALT LAKE CITY UT 84103
255 SOUTH 300 WEST
795 NORTH 400 WEST

CACHE COUNTY MOSQUITO ABATEMENT

210 W. 3700 N.
HYDE PARK, UT 84318

DESCRIPTION: | DATE: | MARK:

PROJECT #: 819159
DRAWN BY: D.PATTON
CHECKED BY: S.SWENSON
ISSUED: 07.08.2020

REGISTERED PROFESSIONAL ENGINEER
No. 294174
SHANE D. SWENSON
7/8/2020
STATE OF UTAH

PERMIT SET/BID SET

ELECTRICAL SCHEDULES

EP602

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