material

maximum

manhole

minimum miscellaneous molding, moulding masonry opening mount (ed) (ing)

metal

marker board

mechanic (al)

manufacture (r) (d)

MAX

MECH

MFR

MIN

MTL

MΗ

MB

GENERAL NOTES

1. CONTRACTOR SHALL, PRIOR TO COMMENCEMENT OF WORK, FIELD VERIFY ALL EXISTING PROJECT CONDITIONS, INCLUDING DIMENSIONS AND UTILITY LOCATIONS AND UTILITY SIZES.

FIELD CONFIRMATION OF DISCREPANCIES SHALL BE RECORDED ON A REPRODUCIBLE DOCUMENT AND IMMEDIATELY TRANSMITTED TO ARCHITECT FOR PROJECT RECORD, COORDINATION, AND NECESSARY RESOLUTION PRIOR TO CONTINUING WITH WORK.

CONTRACTOR SHALL VERIFY, AND BE RESPONSIBLE FOR, ALL WORK AND MATERIALS - INCLUDING THOSE FURNISHED BY

SUBCONTRACTORS. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED SIZES; DO NOT SCALE DRAWINGS TO DETERMINE ANY LOCATIONS. THE

ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES, PRIOR TO

CONTINUING WITH WORK. ALL DIMENSIONS ON PLANS ARE TO CENTERLINE OF WALLS AND COLUMNS, AND FACE OF FINISH (FOF) OR FACE OF MASONRY

. ALL WORK SHALL CONFORM TO THE LATEST ADOPTED EDITIONS OF ALL APPLICABLE BUILDING CODES, REFER TO PROJECT DATA, THE AMERICANS WITH DISABILITIES ACT, AS WELL AS ALL OTHER LOCAL

(FOM), UNLESS NOTED OTHERWISE.

GOVERNING CODES AND ORDINANCES.

- 3. CONTRACTOR SHALL REPORT TO THE OWNER ANY ERRORS, OMISSIONS, OR INCONSISTENCIES HE MAY DISCOVER ON THE SPECIFICATIONS OR DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR CORRECTING ANY ERROR AFTER THE START OF CONSTRUCTION, WHICH HAS NOT BEEN BROUGHT TO THE ATTENTION OF THE OWNER, AT THE CONTRACTOR'S EXPENSE. THE MEANS OF CORRECTING ANY ERROR SHALL FIRST BE APPROVED BY
- THE GENERAL BUILDING PERMITS SHALL BE PAID FOR BY THE OWNER AND SECURED BY THE GENERAL CONTRACTOR. ALL OTHER REQUIRED PERMITS SHALL BE SECURED AND PAID FOR BY THE CONTRACTOR OR SUBCONTRACTOR DIRECTLY RESPONSIBLE.
- ALL REQUIRED CITY AND COUNTY LICENSES SHALL BE ACQUIRED AND PAID FOR BY THE INDIVIDUAL TRADES.
- 4. ALL CONTRACTORS SHALL HAVE VALID CERTIFICATES OF WORKMAN'S COMPENSATION ON FILE WITH THE APPROPRIATE AGENCIES. INSURANCE REQUIREMENT MUST BE MET PER LEASE AGREEMENT.
- 5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES, WHETHER SHOWN HEREIN OR NOT, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR ALL EXPENSE FOR THE REPAIR OR REPLACEMENT OF UTILITIES AND ALL OTHER PROPERTY DAMAGED BY OPERATIONS IN CONJUNCTION WITH EXECUTION OF WORK.
- 6. CONTRACTOR SHALL PROVIDE TEMPORARY FIELD OFFICE, TELEPHONES, FAX MACHINE, TEMPORARY SECURITY FENCE, WATER, POWER, AND TOILET FACILITIES. COORDINATE LOCATIONS WITH ALL APPROPRIATE AGENCIES. FIELD OFFICE SHALL ALSO CONTAIN CURRENT COPIES OF ALL GOVERNING BUILDING CODES AND AMENDMENTS.
- 7. CITY APPROVED PLANS SHALL BE KEPT IN A PLAN BOX AND SHALL NOT BE USED BY WORKMEN. ALL CONSTRUCTION SETS SHALL REFLECT THE SAME INFORMATION. THE CONTRACTOR SHALL ALSO MAINTAIN, IN GOOD CONDITION, ONE (1) COMPLETE SET OF Plans $\,$ with all revisions, addenda, and change orders on THE PREMISES AT ALL TIMES. THESE ARE TO BE UNDER THE CARE OF THE JOB SUPERINTENDENT.
- 8. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE SECURITY OF THE SITE WHILE JOB IS IN PROGRESS UNTIL WORK IS COMPLETE.
- 9. CONTRACTOR SHALL MAINTAIN THE JOB SITE IN A CLEAN AND ORDERLY MANNER. ALL DEBRIS SHALL BE REMOVED FROM PREMISES AND ALL AREAS SHALL BE LEFT IN BROOM-CLEAN CONDITION AT ALL TIMES. CONTRACTOR SHALL LOCATE AND MAINTAIN A TRASH BIN AT THE SITE. SUCH BIN SHALL BE OF ADEQUATE DIMENSION TO KEEP SITE CLEAN AT ALL TIMES. DUST RESULTING FROM SALVAGE, DEMOLITION AND REMOVAL WORK SHALL BE CONTROLLED TO PREVENT THE IMPOSITION OF A NUISANCE OR HAZARDOUS CONDITION TO THE ADJOINING PORTION OF THE PROJECT. THE USE OF WATER WILL NOT BE PERMITTED WHEN SUCH USE WOULD RESULT IN HAZARDOUS, OR OTHERWISE OBJECTIONABLE CONDITIONS.
- 10. CONTRACTOR SHALL PROVIDE PEDESTRIAN PROTECTION IN ACCORDANCE WITH ALL APPLICABLE BUILDING CODES.
- 11. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO ENSURE THE SAFETY OF THE OCCUPANTS AND WORKERS AT ALL

CONTRACTOR SHALL PROVIDE REQUIRED PROTECTION INCLUDING, BUT NOT LIMITED TO, SHORING, BRACING, AND ALL OTHER MAINTAIN OVERALL STRUCTURAL INTEGRITY OF THE BUILDING.

ALL DEMOLITION AND CUTTING SHALL BE PERFORMED IN A MANNER AND BY METHODS WHICH ENSURE AGAINST DAMAGE TO

- 12. INTERIOR WALL AND CEILING FINISHES FOR DINING, AND WAITING AREAS SHALL NOT EXCEED FLAME SPREAD CLASSIFICATIONS DICTATED BY ALL APPLICABLE BUILDING CODES.
- 13. NO STRUCTURAL MEMBERS SHALL BE CUT TO ACCEPT PIPES, VENTS, DUCTS, OR OTHER PENETRATIONS, EXCEPT AS DETAILED OR SPECIFIED HEREIN.
- 14. GYPSUM BOARD AND SUSPENDED CEILING SYSTEMS SHALL CONFORM TO ALL LOCAL GOVERNING BUILDING CODES AND ORDINANCES.
- 15. ALL GLASS AND GLAZING SHALL COMPLY WITH ALL APPLICABLE BUILDING CODES AS WELL AS THE U.S. CONSUMER PRODUCT SAFETY COMMISSION, SAFETY STANDARDS FOR ARCHITECTURAL GLAZING MATERIALS (47 FR, 13516 TITLE NO. 16, CHAPTER 11, PART
- 16. CONTRACTOR SHALL ASSIST OWNER IN OBTAINING FINAL APPROVAL OF LOCAL HEALTH DEPARTMENT AND THE TEMPORARY AND FINAL CERTIFICATES OF OCCUPANCY.

17. CONTRACTOR SHALL BE RESPONSIBLE FOR, AND SHALL REMEDY, REPAIR, OR REPLACE ANY FAULTY, IMPROPER OR INFERIOR WORKMANSHIP OR MATERIALS AND ANY RELATED DAMAGE CAUSED BY THESE WHICH SHALL APPEAR WITHIN ONE (1) YEAR AFTER THE COMPLETION AND ACCEPTANCE OF THE WORK UNDER THIS CONTRACT. REFER TO SPECIFICATIONS FOR WARRANTY REQUIREMENTS IN EXCESS OF ONE (1) YEAR.

IN ADDITION TO EQUIPMENT WARRANTIES, FURNISH OWNER A WRITTEN GUARANTEE AGAINST LATENT AND PATENT DEFECTS IN MATERIALS AND WORKMANSHIP FOR ONE (1) YEAR. GUARANTEE SHALL INCLUDE REPAIR, DAMAGE TO, OR REPLACEMENT OF, ANY PART OF EQUIPMENT PROVIDED.

- 18. PIPES, CONDUITS, OR DUCTS EXCEEDING ONE THIRD OF THE SLAB OR MEMBER THICKNESS SHALL NOT BE PLACED IN STRUCTURAL CONCRETE UNLESS SPECIFICALLY DETAILED. REFER TO MECHANICAL, ELECTRICAL, PLUMBING, AND STRUCTURAL DRAWINGS FOR LOCATION OF SLEEVES AND OTHER ACCESSORIES.
- 19. ALL ELECTRICAL, MECHANICAL, AND PLUMBING WORK SHALL CONFORM TO THE REQUIREMENTS OF ALL THE LEGALLY CONSTITUTED AUTHORITIES HAVING JURISDICTION.
- 20. ALL EQUIPMENT ON THE FOOD SERVICE DRAWINGS IS TO BE EXCLUDED FROM THE GENERAL CONTRACT UNLESS OTHERWISE STATED. BACKING, ROUGH-INS, AND FINAL HOOK-UPS ARE A PART OF THE GENERAL CONTRACT. ALL PLUMBING FIXTURE VACUUM BREAKERS NECESSARY, PER LOCAL CODE REQUIREMENTS, ARE TO BE SUPPLIED WITH KITCHEN EQUIPMENT. ELECTRICAL CONNECTIONS AND DISCONNECTS NECESSARY TO MEET LOCAL CODE REQUIREMENTS WILL BE SUPPLIED WITH KITCHEN EQUIPMENT WITH FINAL HOOK-UPS ONLY BY CONTRACTOR.
- 21. CONTRACTOR SHALL PROVIDE BACKING FOR SUPPORT OF ALL WALL, CEILING, AND PARTITION MOUNTED ITEMS SUCH AS TABLE BRACKETS, LIGHT FIXTURES, ARTIFACTS, SHELVING, EQUIPMENT, AND TELEVISIONS. COORDINATE LOCATIONS AND REQUIREMENTS WITH THE PLUMBING, MECHANICAL, ELECTRICAL, AND FOOD SERVICE DRAWINGS AS WELL AS INTERIOR DESIGN CONSULTANT AND OWNER.
- 22. CONTRACTOR SHALL VERIFY LOCATIONS OF FOOD SERVICE EQUIPMENT AND COORDINATE LOCATIONS OF FLOOR SINKS, FLOOR DRAINS, TROUGH DRAINS, SLAB DEPRESSIONS, RAISED CURBS, ELECTRICAL STUB-OUTS, PLUMBING STUB-OUTS, AND ALL OTHER WORK UNDER THE SCOPE OF RESPONSIBILITIES RELATED TO THIS EQUIPMENT. REFER TO THE FOOD SERVICE DRAWINGS FOR ADDITIONAL INFORMATION.
- 23. PROVIDE ATTIC DRAFT STOPS AND VENTILATION IN CONFORMANCE WITH ALL APPLICABLE BUILDING CODES.
- 24. ALL PAINT COLOR AND/OR MATERIAL TRANSITIONS ARE TO OCCUR AT INSIDE CORNERS (UNLESS NOTED OTHERWISE).
- 25. COMPLETE SHOP DRAWINGS AND EQUIPMENT SUBMITTALS SHALL BE PROVIDED TO THE ARCHITECT FOR REVIEW AND COMMENT PRIOR TO FABRICATION OR ORDERING OF ANY EQUIPMENT, FIXTURES, MATERIALS, OR ASSEMBLIES.

OWNER'S REPRESENTATIVE OR ARCHITECT WILL REVIEW AND COMMENT ON ALL SHOP DRAWINGS AND SAMPLES FOR CONFORMANCE WITH THE DESIGN INTENT OF THE PROJECT ONLY. THE APPROVAL OF A SINGLE COMPONENT SHALL NOT INDICATE THE APPROVAL OF AN ASSEMBLY IN WHICH THE ITEM FUNCTIONS.

ALL SHOP DRAWINGS AND SUBMITTALS SHALL BE ROUTED THROUGH THE CONTRACTOR. NO DOCUMENTS SHALL BE SUBMITTED DIRECTLY TO THE ARCHITECT, OR TO THE ARCHITECT'S CONSULTANTS. SUBMIT ALL SHOP DRAWINGS IN THE FORM OF ONE (1) 30" X 42" TRANSPARENCY (SEPIA) OF EACH SHEET. BLUELINES OR BLACKLINES ARE NOT ACCEPTABLE. WHEN SHOP DRAWINGS INVOLVE MANUFACTURER'S DATA OR MATERIAL LIST, SUBMIT A MINIMUM OF FIVE (5) COPIES FOR REVIEW AND COMMENT.

- 26. EXTERIOR OPENINGS SHALL COMPLY WITH ALL SECURITY REQUIREMENTS AS OUTLINED IN ALL LOCAL BUILDING CODES AND
- 27. ACCURATE AS-BUILT DRAWINGS SHALL BE GENERATED BY CONTRACTOR DURING CONSTRUCTION AND SUBMITTED TO OWNER UPON COMPLETION OF FINAL PUNCH LIST, BUT PRIOR TO REQUEST FOR FINAL PAYMENT. WITHIN TWO WEEKS AFTER C.O. IS ACQUIRED.
- 28. FOUR (4) SETS OF EQUIPMENT OPERATING AND MAINTENANCE MANUALS SHALL BE SUBMITTED TO THE OWNER UPON COMPLETION OF PROJECT, BUT PRIOR TO REQUEST FOR FINAL PAYMENT. WITHIN TWO WEEKS AFTER C.O. IS ACQUIRED.
- 29. CONTRACTOR SHALL NOT ALLOW ANY PERSON TO DESCEND INTO ANY TRENCH OR HOLE, OR CREATE ANY SUCH EXCAVATIONS, WITHOUT THE PRIOR APPROVAL OF BUILDING DEPARTMENT AS WELL AS ALL OTHER AGENCIES HAVING JURISDICTION.
- SUPPORTS (INCLUDING ENGINEERING OF SYSTEMS) NECESSARY TO 30. VERIFY FIRE EXTINGUISHER REQUIREMENTS AND LOCATIONS WITH FIRE MARSHAL AND OWNER'S REPRESENTATIVE.
 - 31. CONTRACTOR SHALL SEAL ALL GAPS, HOLES, AND CRACKS IN BUILDING CONSTRUCTION AS REQUIRED TO CONTROL INFILTRATION OF INSECTS.
 - 32. CONTRACTOR SHALL INSTRUCT SUBCONTRACTORS TO CAREFULLY REVIEW THE CONSTRUCTION DOCUMENTS IN THEIR ENTIRETY. INFORMATION REGARDING COMPLETE WORK OF SPECIFIC TRADES AND SUB-TRADES IS DISPERSED THROUGHOUT THE DRAWINGS AND SPECIFICATIONS AND CANNOT BE DETERMINED BY REFERENCE TO ANYTHING OTHER THAN COMPLETE SETS OF DOCUMENTS.
 - 33. NOTHING IN THESE DOCUMENTS IS TO BE INTERPRETED AS RELIEVING THE CONTRACTOR OF SOLE RESPONSIBILITY FOR THE METHODS AND MEANS OF CONSTRUCTION, AS WELL AS SAFETY AT THE JOB SITE.
 - 34. THE LIFE SAFETY INSPECTOR WILL MAKE FINAL DETERMINATION OF FIRE LANES BEFORE FINAL INSPECTION IS MADE. SEE SITE PLAN FOR REQUIREMENTS.

CMU GOLF FACILITY

1240 GUNNISON AVE. GRAND JUNCTION, CO

OWNER:

COLORADO MESA UNIVERSITY

GRAND JUNCTION, CO T. 970.248.1020

ARCHITECT

KRAAI DESIGN ARCHITECTURE

417 MONUMENT RD., SUITE 7 GRAND JUNCTION, CO 81507 T: 970.712.5045 www.kraaidesign.com

CONSULTANTS		
MEP	STRUCTURAL	CIVIL
BIGHORN CONSULTING ENGINEERS 386 INDIAN ROAD GRAND JUNCTION, CO 81501 T: 970.241.8709	LINDAUER DUNN INC. 802 ROOD AVENUE GRAND JUNCTION, CO T. 970.241.0900	AUSTIN CIVIL GROUP, INC. 123 NORTH 7TH STREET, SUITE 300 GRAND JUNCTION, CO 81501 T: 970.242.7540

SHEET INDEX

	SHEET INDEX	SHEET INDEX			
SHEET NUMBER	SHEET NAME	SHEET NUMBER	SHEET NAME		
COVER					
T1.1	TITLE SHEET	MEP			
		M0-1	MECHANICAL COVER SHEET		
ARCHITECTUR	RAL	M1-1	MECHANICAL MAIN LEVEL		
A1.0	LIFE SAFETY PLANS		FLOOR PLAN		
A1.1	MAIN LEVEL PLAN	M1-2	MECHANICAL ROOF PLAN		
A1.2	R.C.P. & ROOF PLAN	M3-1	MECHANICAL DETAILS AND		
A2.1	EXTERIOR ELEVATIONS		SCHEDULES		
A3.1	BUILDING SECTIONS	P0-1	PLUMBING COVER SHEET		
A4.1	INTERIOR ELEVATIONS	P1-1	PLUMBING MAIN LEVEL		
A4.9	ADA DETAILS		FLOOR PLAN		
A5.1	SPECIFICATIONS	P1-2	PLUMBING ROOF PLAN		
A5.2	SPECIFICATIONS	P3-1	PLUMBING DETAILS AND SCHEDULES		
A5.3	SPECIFICATIONS	E0-1	ELECTRICAL COVER SHEET		
A5.4	SPECIFICATIONS	E1-1	LIGHTING MAIN LEVEL		
A5.5	SPECIFICATIONS		FLOOR PLAN		
A5.6	SPECIFICATIONS	ES1-1	LIGHTING SITE PLAN		
A5.7	SPECIFICATIONS	E2-1	ELECTRICAL MAIN LEVEL PLAN		
TRUCTURAL		E2-2	ELECTRICAL ROOF PLAN		
S 1	GENERAL NOTES & DETAILS	E3-1	ELECTRICAL DETAILS AND		
S2	FOUNDATION PLAN		SCHEDULES		
S3	ROOF FRAMING PLAN				

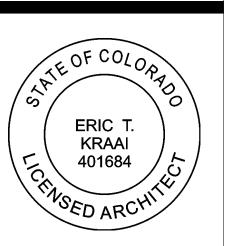
VICINITY MAP



KRAAIDESIGN ARCHITECTURE 417 MONUMENT ROAD, SUITE 7

GRAND JUNCTION, CO 81507

T: 970.712.5045



REVISION:

CONSTRUCTION **DOCUMENTS**

1240 GUNNISON A GRAND JUNCTION

PROJECT NO:

SHEET NAME: TITLE SHEET

09/23/2020 DATE:

SHEET NO:

2018 INTERNATIONAL BUILDING CODE (IBC) 2018 INTERNATIONAL MECHANICAL CODE (IMC) 2009 INTERNATIONAL ENERGY CONSERVATION CODE (IECC) 2018 INTERNATIONAL PLUMBING CODE (IPC) 2018 INTERNATIONAL FUEL GAS CODE (IFGC) 2017 NATIONAL ELECTRICAL CODE (NEC) 2009 ICC A117.1 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES

| TOTAL GSF

CHAPTER 3 - USE AND OCCUPANCY CLASSIFICATION:

1,920 MAIN LEVEL

TOTAL GSF: 1,920 SF

CHAPTER 5 - GENERAL BUILDING HEIGHTS AND AREAS:

ALLOWABLE FLOOR AREA: TYPE V-B

(TABLE 506.2, 504.3, 504.4) 9,000 PER STORY

REQUIRED SEPARATION OF OCCUPANCIES: N/A

(TABLE 508.4)

(TABLE 601)

CHAPTER 6 - TYPES OF CONSTRUCTION:

FIRE RESISTANCE FOR BUILDING ELEMENTS:

STRUCTURAL EXT WALLS EXT WALLS INT WALLS INT WALLS ROOF BEARING NON-BEARING BEARING NON-BEARING ROOF

OCCUPANCY TYPE

FIRE RESISTANCE FOR EXTERIOR WALLS BASED ON SEPARATION: (TABLE 602)

GROUP __B

 $x \ge 30$

SEPARATION

CHAPTER 7 - FIRE AND SMOKE PROTECTION FEATURES:

EXTERIOR WALLS (SECTION 705.5) FIRE WALLS (AREA SEPARATION) (SECTION 706) N/A FIRE BARRIERS (OCCUPANCY SEPARATION) (SECTION 707) N/A FIRE PARTITIONS (CORRIDORS) (SECTION 708) N/A SMOKE BARRIERS (SECTION 709) N/A

FLOOR AND ROOF ASSEMBLIES (SECTION 711) N/A N/A VERTICAL OPENINGS (SECTION 712) SHAFT ENCLOSURES (SECTION 713) N/A FIRE RESISTANT JOINT SYSTEMS (SECTION 715) N/A N/A OPENING PROTECTIVES (SECTION 716) N/A DUCTS AND AIR TRANSFER OPENINGS (SECTION 717) CONCEALED SPACES (SECTION 718) N/A

13

CHAPTER 9 - FIRE PROTECTION AND LIFE SAFETY SYSTEMS:

YES FIRE PUMP AND RISER ROOM (SECTION 902) AUTOMATIC SPRINKLER SYSTEMS (SECTION 903) YES STANDPIPE (SECTION 905) YES YES - 75' PORTABLE FIRE EXTINGUISHERS (SECTION 906) FIRE ALARMS (SECTION 907) NO FIRE DETECTION SYSTEMS (SECTION 907) NO

CHAPTER 10 - MEANS OF EGRESS:

SMOKE PARTITIONS (SECTION 710)

OCCUPANT LOAD:

MAIN LEVEL

(TABLE 1004.5)

1,920

OCCUPANCY TYPE | FLOOR AREA PER OCCUPANT | NUMBER OF OCCUPANTS | TOTAL GSF

150

TOTAL: 1,920 SF

EGRESS WIDTH PER OCCUPANT: (SECTION 1005)

OTHER EGRESS COMPONENTS

 $[0.2 \times 13 = 2.6]$ 36" PROVIDED

NUMBER OF EXITS AND EXIT ACCESS DOORWAYS: (SECTION 1006)

REQ'D 1 EXIT

MAXIMUM COMMON PATH OF EGRESS TRAVEL: (TABLE 1006.2.1)

YES EGRESS ILLUMINATION: (SECTION 1008)

ACCESSIBLE EGRESS:

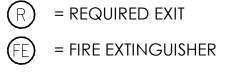
1 PER MEANS OF EGRESS (SECTION 1009.1)

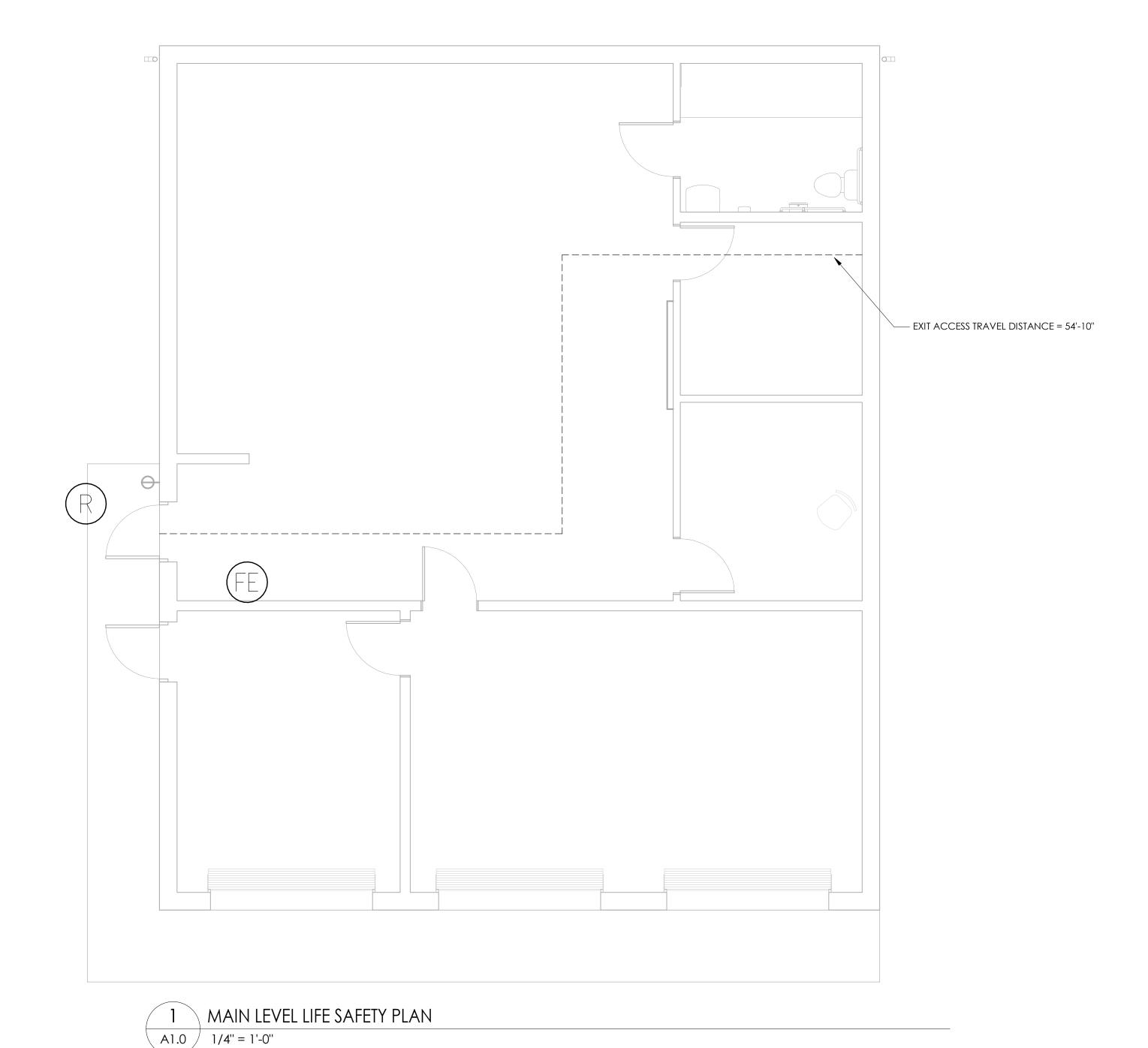
HARDWARE: NO MANUALLY OPERATED FLUSH OR SURFACE MOUNTED BOLTS ARE PERMITTED ON EXIT DOORS AND HARDWARE MUST NOT REQUIRE TIGHT (SECTION 1010.1.9.1) GRASPING, PINCHING OR TWISTING OF THE WRIST

200'

EXIT ACCESS TRAVEL DISTANCE:

(SECTION 1017.2)









REVISION:

CONSTRUCTION **DOCUMENTS**

PROJECT NO:

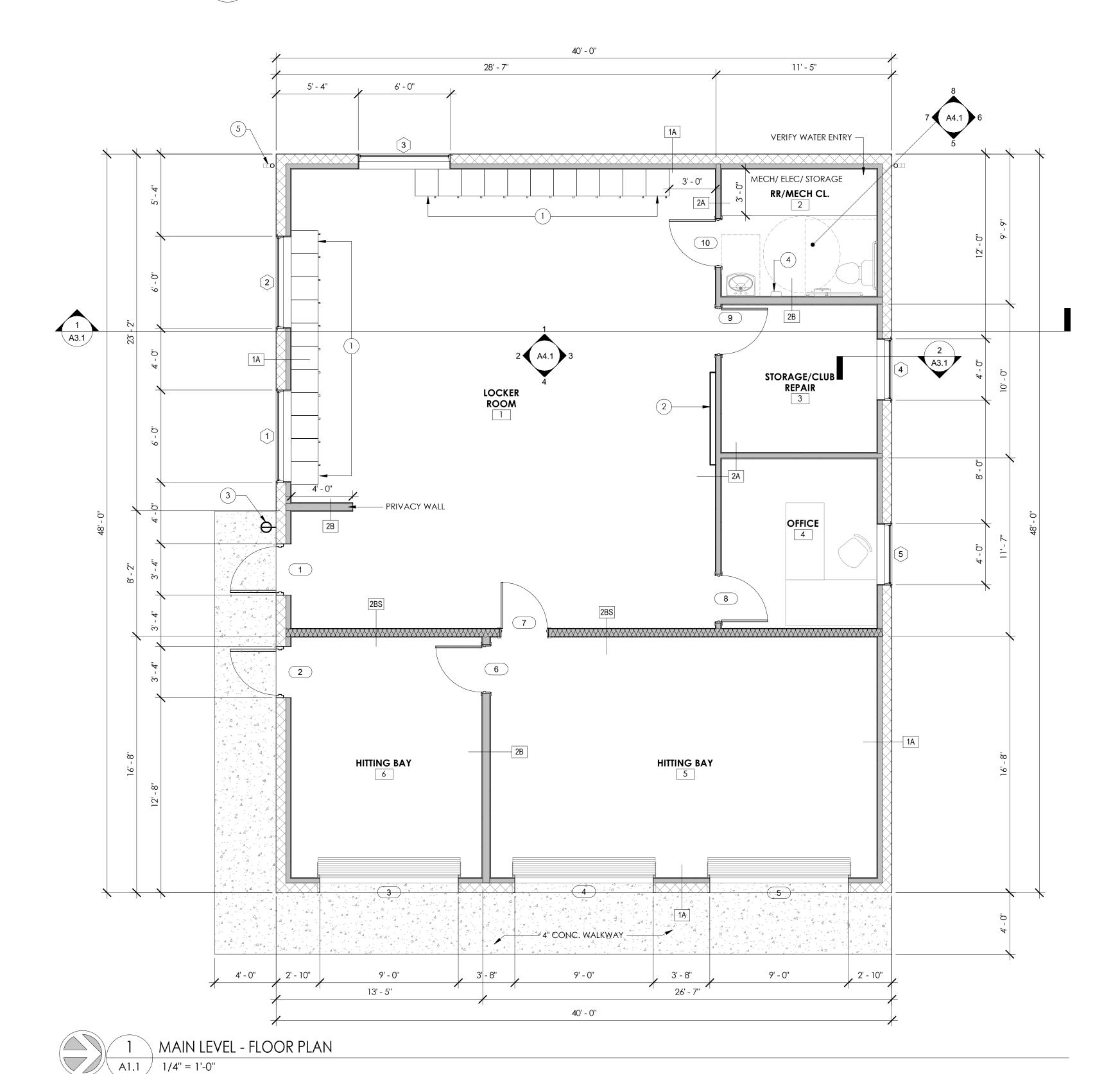
SHEET NAME: LIFE SAFETY PLANS

DATE: 09/23/2020

SHEET NO:

/ 1 1/2" = 1'-0"

<u>KEYNOTES</u>:



	DOOR SCHEDULE								
MARK	TYPE	WIDTH	HEIGHT	COMMENTS					
1	SINGLE	3' - 0''	7' - 0''	4" HEAD					
2	SINGLE	3' - 0''	7' - 0''	4" HEAD					
3	OVERHEAD SECTIONAL	9' - 0''	8' - 0''						
4	OVERHEAD SECTIONAL	9' - 0''	8' - 0''						
5	OVERHEAD SECTIONAL	9' - 0''	8' - 0''						
6	SINGLE HINGED	3' - 0''	7' - 0''						
7	SINGLE HINGED	3' - 0''	7' - 0''						
8	SINGLE HINGED	3' - 0''	7' - 0''						
9	SINGLE HINGED	3' - 0''	7' - 0''						
10	SINGLE HINGED	3' - 0''	7' - 0''						

WINDOW SCHEDULE									
MARK	TYPE	WIDTH	HEIGHT	COMMENTS					
1	PICTURE	6' - 0''	2' - 0''						
2	PICTURE	6' - 0''	2' - 0''						
3	PICTURE	6' - 0''	2' - 0''						
4	PICTURE	4' - 0''	3' - 4''						
5	PICTURE	4' - 0''	3' - 4''						

ROOM FINISH SCHEDULE									
		FLOOR	BASE	'	WALL F	INISHE	S	CEILING	
#	NAME	FINISH	FINISH	N	S	Е	W	FINISH	CEILING HEIGHT
1	LOCKER ROOM	1	1	1	1	1	1	1	VARIES
2	RR/MECH CL.	1	1	1/2	1/2	1/2	1/2	1	VARIES
3	STORAGE/CLU B REPAIR	1	1	1	1	1	1	1	VARIES
4	OFFICE	1	1	1	1	1	1	1	VARIES
5	HITTING BAY	1	1	1	1	1	1	1	VARIES
6	HITTING BAY	1	1	1	1	1	1	1	VARIES

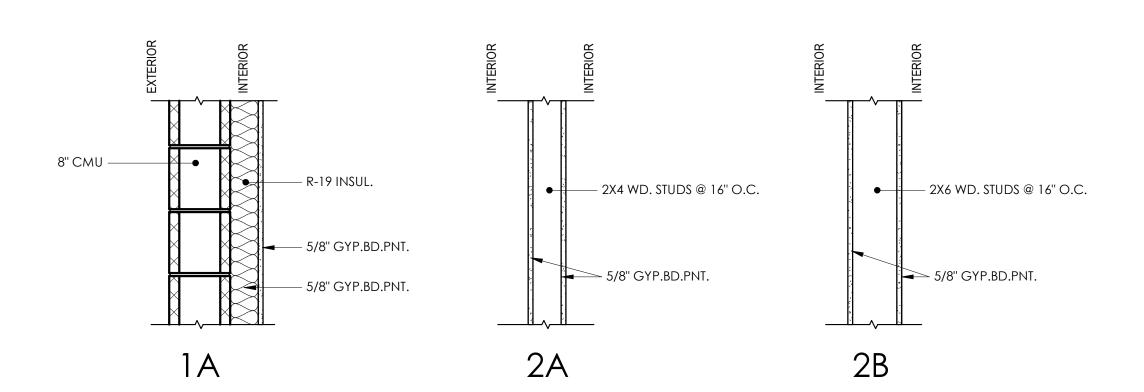
FLOOR	BASE	WALLS	CEILING
 SEALED CONC. IC-1 	1. 4" RUBBER	 GYP.BD. PNT. TILE 	1. GYP. BD. PNT.

Exterior Finishes

CMU Brick - Red Rocks MV - Robinson Block CO. Metal Doors - Paint Color - Grizzly Gray -SW 7068 - Sherwin Williams Rolling Coil Doors - Color Gray - RAL 7039 - Overhead Door Standing Seam Metal Roof - Charcoal Gray - Western States Metal Roofing Soffit & B&B - Traditional Red (or) Country Lane Red (is Darker) - James Hardie

Interior Finishes

Interior Doors - Plain Sliced White Maple Restroom Floor Tile - Silver (1) EN02 Daltile Wall Based - Colonial Gray - Johnsonite Tarkett Grout - Cobblestone - Mapei's Wall Tile - Arctic White - 0190(1) - Daltile Main Area Floors - Sealed Concrete Interior Wall Color - Mindful Gray - SW 7016 Window Shades - White/Gray 10% - Hunter Douglas Window Sills - Medea (c) - Corian Window Mullions - Dark Bronze - Colorado Window Systems

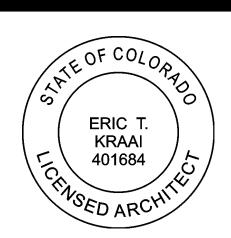


WALL NOTES:

- 1. ALL EXTERIOR WALL TYPES ARE SHOWN WITH THE EXTERIOR WALL FACING LEFT UNLESS OTHERWISE NOTED.
- 2. WALL TAGS BEGINING WITH #1 DENOTES FOR EXTERIOR WALLS
- 3. WALL TAGS BEGINING WITH #2 DENOTES FOR INTERIOR WALLS
- 4. TAG WITH #3 DENOTES FOR EXTERIOR AND INTERIOR FLOORS.
- 5. PROVIDE GLASS MAT WATER-RESISTANT BACKER BOARD IN LIEU OF GYPSUM WALL BOARD BEHIND ALL WALL TILE.
- 6. GYPSUM BOARD SHALL BE MOISTURE-RESISTANT AT THE FOLLOWING LOCATIONS: WALLS AND
- CEILINGS OF ALL RESTROOMS AND SHOWERS 7. WALL TYPE CHANGES OCCUR AT CORNERS OR INTERSECTIONS OF WALLS UNLESS NOTED OTHERWISE.
- 8. ALL INTERIOR WALLS TO BE TYPE [2A] UNLESS NOTED OTHERWISE.
- 9. REFER TO FINISH PLANS AND INTERIOR ELEVATIONS FOR WALL FINISHES. 10. ALL WALLS TO EXTEND TO STRUCTURE
- 11. "S" AFTER WALL DESIGNATION DENOTES WALL TO HAVE SOUND BATT. INSUL.

___WALL TYPES





REVISION:

CONSTRUCTION **DOCUMENTS**

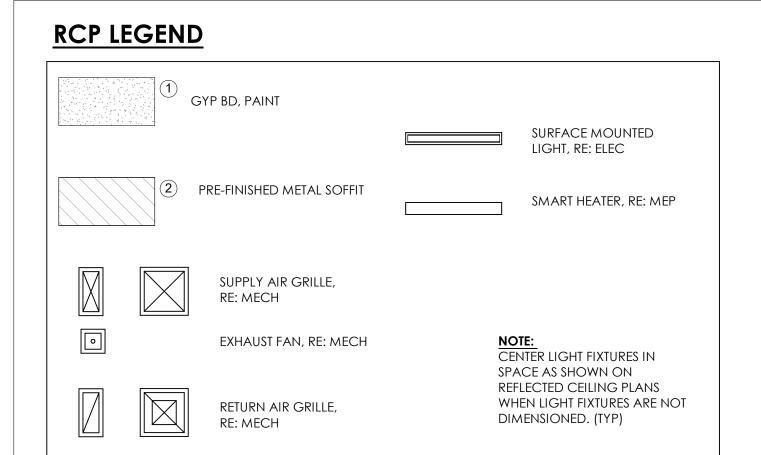
1240 GUNNISON AV GRAND JUNCTION,

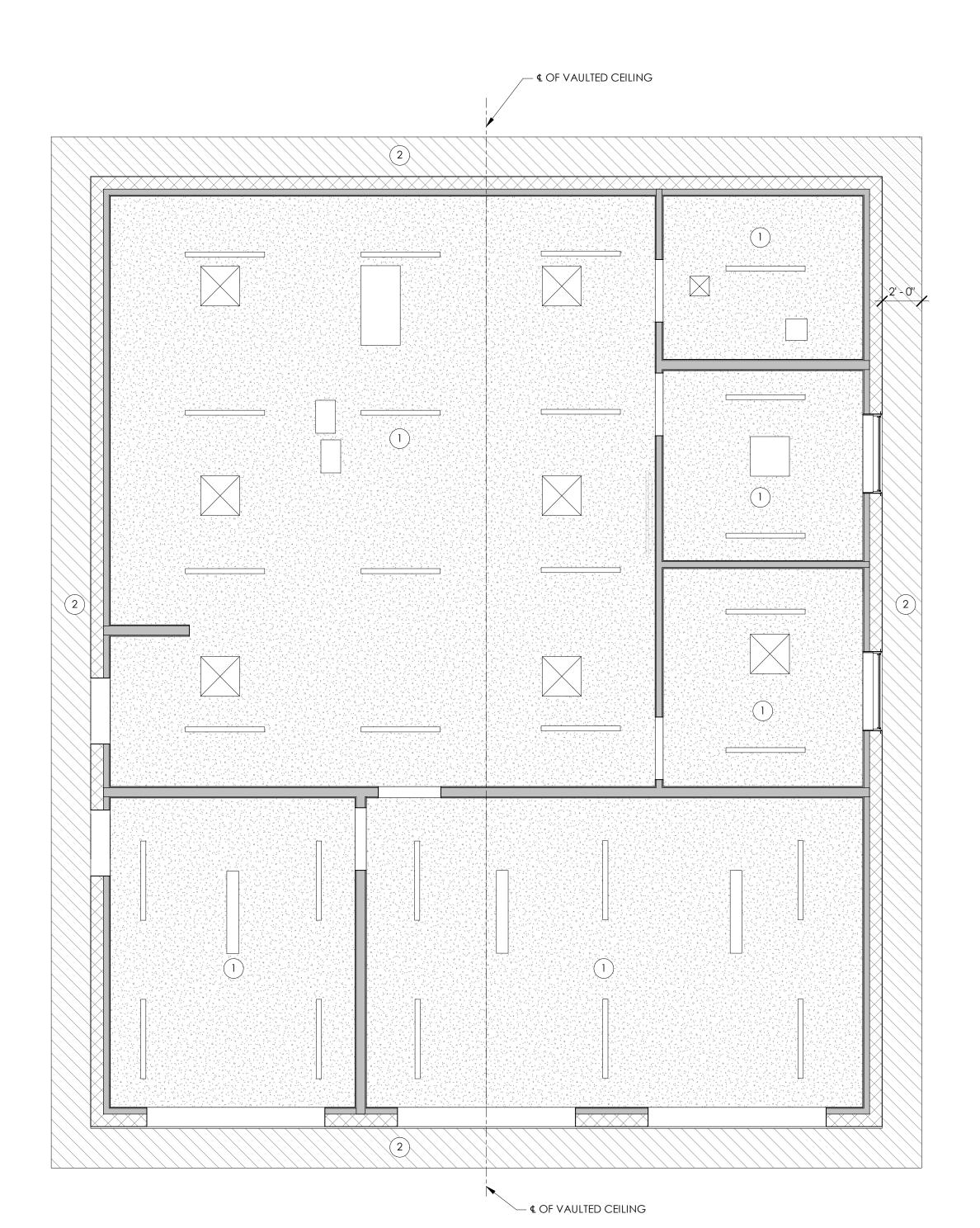
PROJECT NO:

2075 SHEET NAME: MAIN LEVEL PLAN

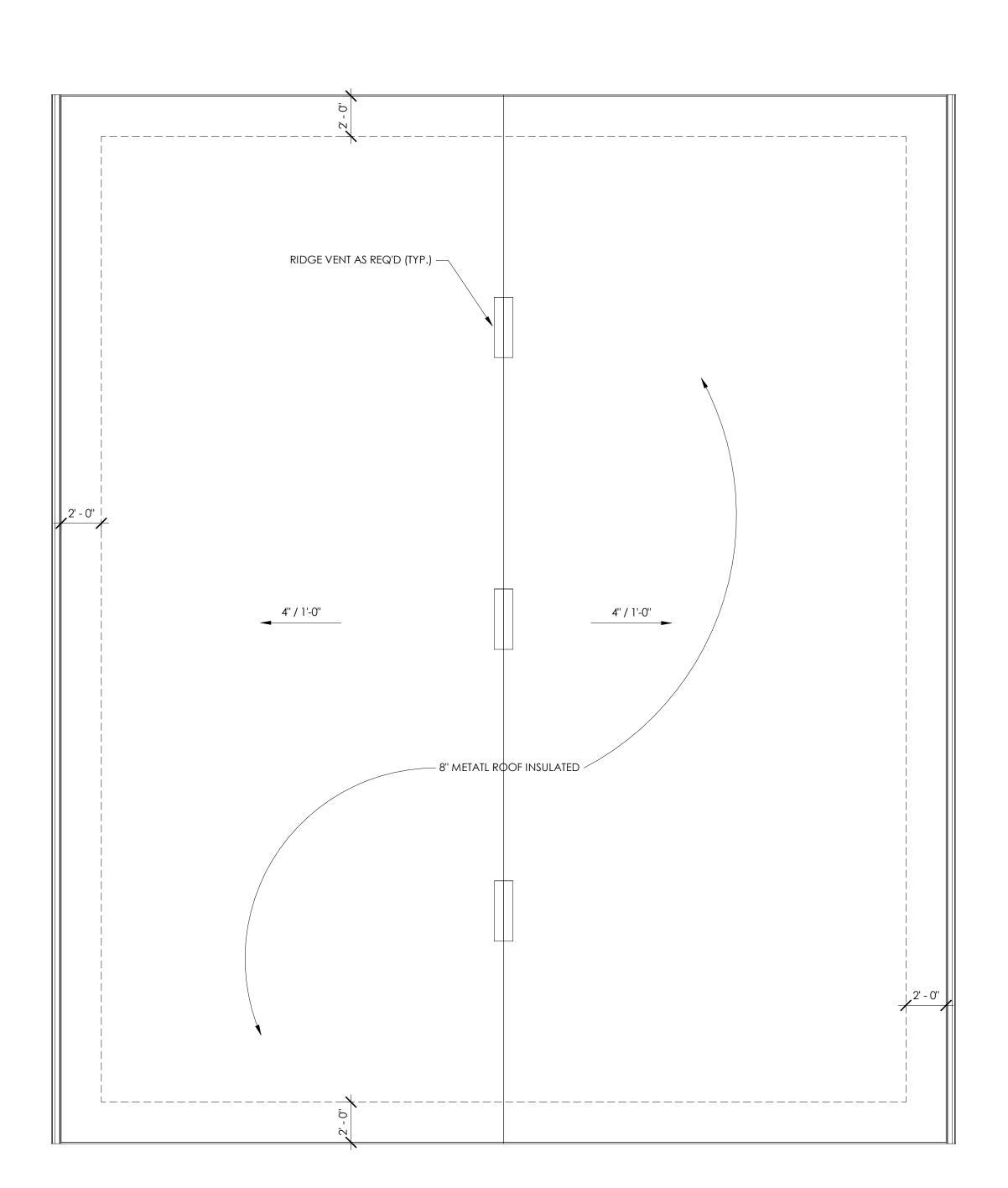
DATE: 09/23/2020

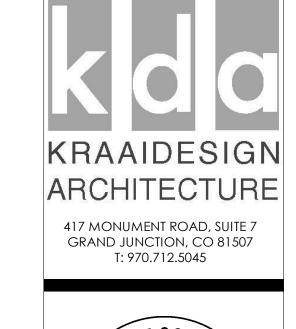
SHEET NO:

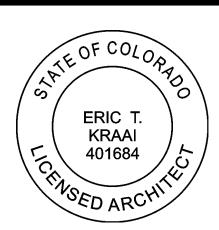




2 MAIN LEVEL REFLECTED CEILING PLAN
A1.2 1/4" = 1'-0"







OLF FACILITY

REVISION:

CONSTRUCTION DOCUMENTS

PROJECT NO:

2075

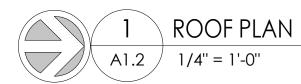
SHEET NAME: R.C.P. & ROOF PLAN

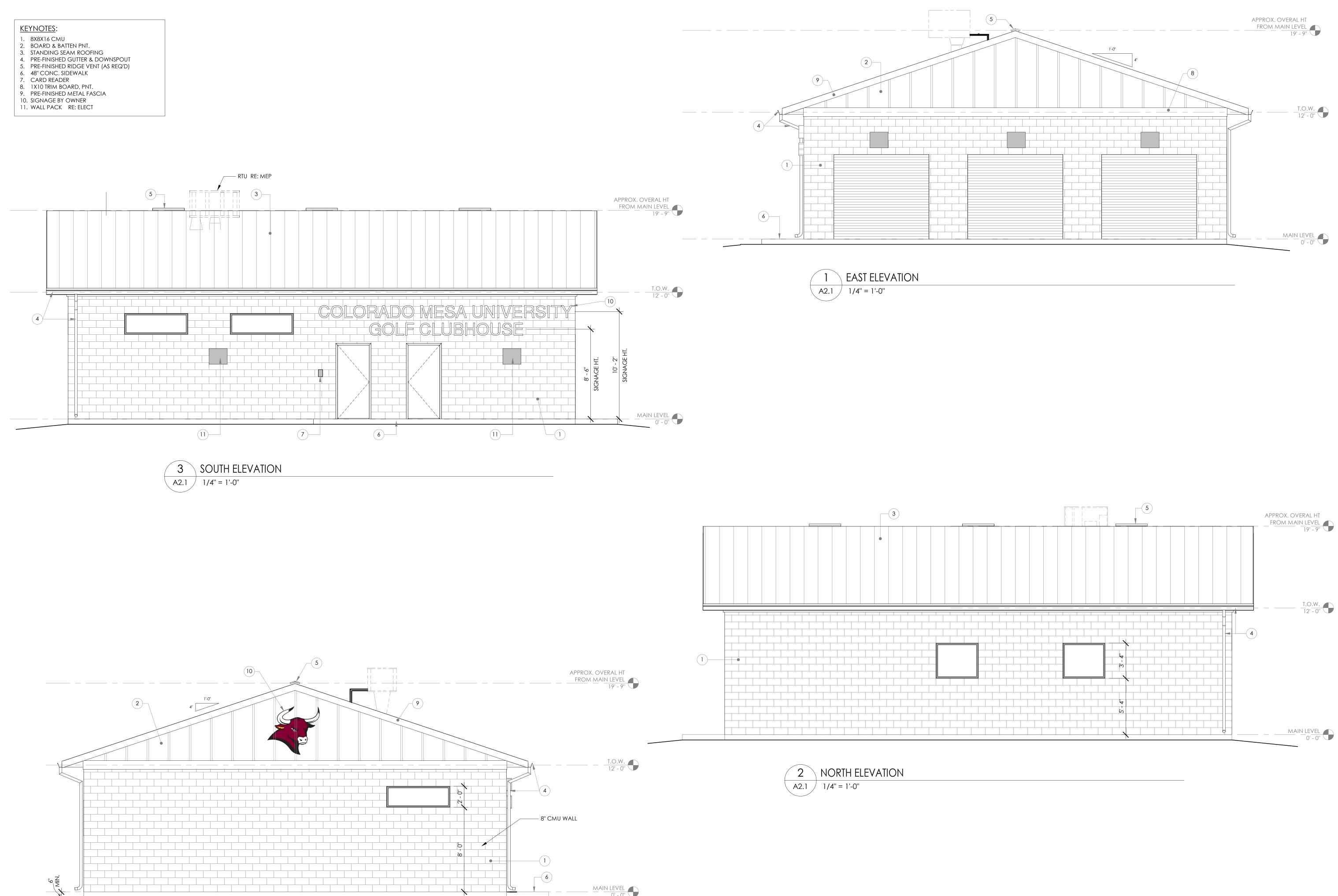
DATE: 09/23/2020

2HEEL NC

A1.2

SCALE: 1/4" = 1'-0"

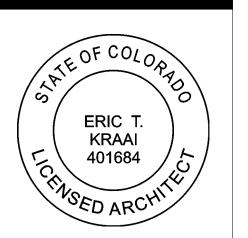




4 WEST ELEVATION

KRAAIDESIGN
ARCHITECTURE

417 MONUMENT ROAD, SUITE 7
GRAND JUNCTION, CO 81507
T: 970.712.5045



LF FACILITY

REVISION:

CONSTRUCTION

DOCUMENTS

1240 GUNNISON AVE. GRAND JUNCTION, CO 81501

PROJECT NO:

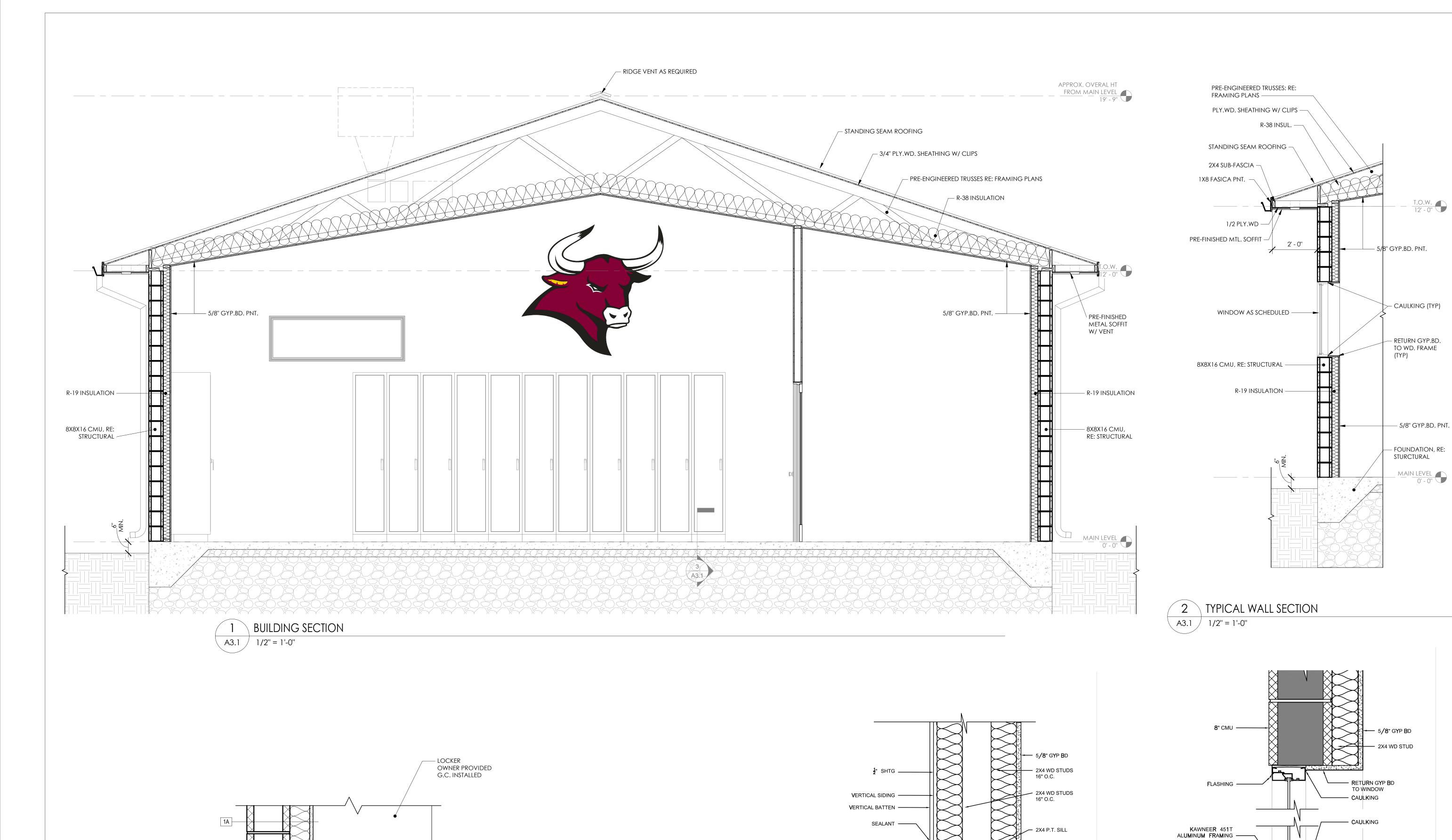
2075

SHEET NAME:
EXTERIOR ELEVATIONS

DATE: 09/23/2020

SHEET NO:

A2.1



— CALUK

— 4" RUBBER BASE,

TRIM TO FIT

— 2X4 WD BASE

___ 1/2" PLW.WD.

BASE DETAIL @ LOCKER

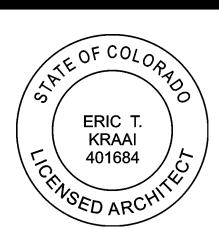
A3.1 1 1/2" = 1'-0"

MAIN LEVEL 0' - 0"

9.25" TRIM, PAINT —

8" CMU —





4U GOLF FACILITY

REVISION:

CONSTRUCTION

DOCUMENTS

1240 GUNNISON AVE. GRAND JUNCTION, CO 81501

PROJECT NO:

—— SOLID SURFACE SILL

FLASHING —

8" CMU —

2075

SHEET NAME:
BUILDING SECTIONS

DATE: 09/23/2020

SHEET NO:

A3.1

1240 GUNNISON AV GRAND JUNCTION,



CONSTRUCTION **DOCUMENTS**

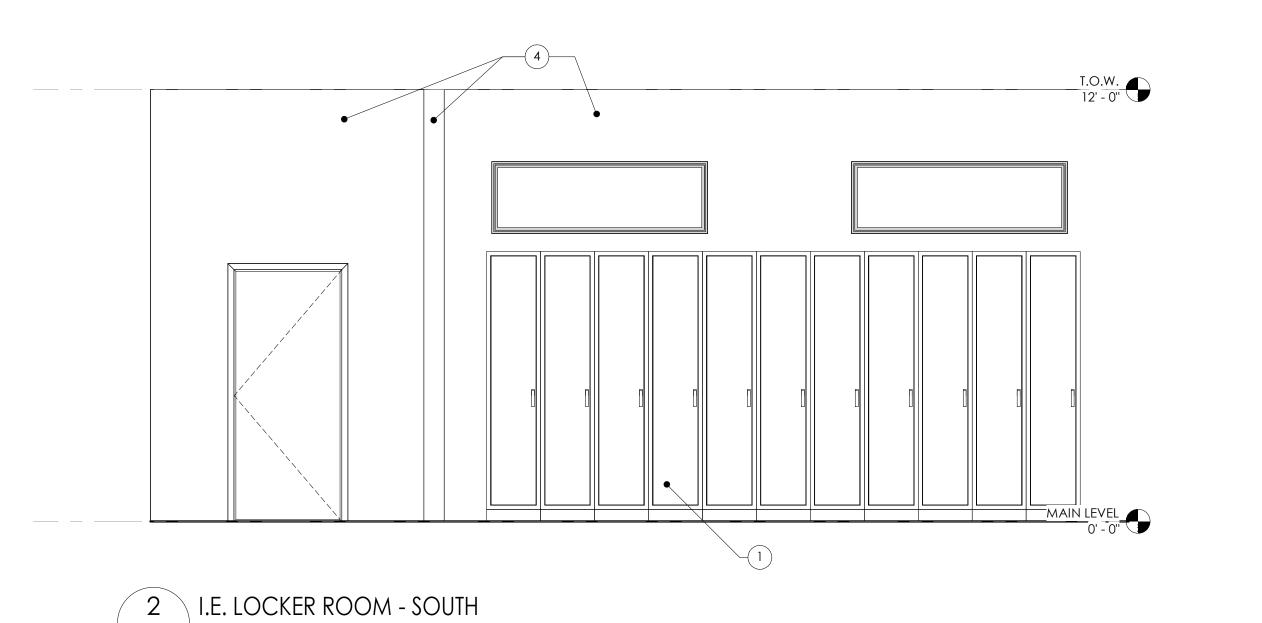
PROJECT NO:

SHEET NAME: INTERIOR ELEVATIONS

09/23/2020 DATE:

SHEET NO:

SCALE: As indicated



RESTROOM SCHEDULE

<u>KEYNOTES</u>:

1. LOCKERS (OFCI)

4. GYP.BD. PNT. 5. TILE FINISH 6. EQUIP. RE: MEP

2. T.V. (OFCI)
3. WATER BOTTLER FILLER, RE: MEP

1. FOR ADA CLEARANCE AND MOUNTING DETAILS REFER TO SHEET A4.2 RESTROOM ACCESSORIES

PROVIDE INDICATED PRODUCTS BY BRADLEY CORPORATION, BOBRICK, OR APPROVED EQUAL.

NOTE: ACCESSORY ITEMS SHALL BE THE STANDARD PRODUCTS OF "BOBRICK WASHROOM EQUIPMENT COMPANY", "AMERICAN STANDARD" OR APPROVED EQUAL, CATALOGUE NO. AS LISTED. ITEMS ESTABLISH MINIMUM APPEARANCE, FUNCTION AND QUALITY STANDARDS AS ACCEPTABLE.

<u>Q1</u>	TY ITEM	MFG.	MODEL NUMBER	<u>NOTES</u>
(1)) 18" GRAB BAR	BOBRICK OR EQUAL	#B-6206 X 18"	1-1/4" (O.D.) STAINLESS STEEL
(1)) 36" GRAB BAR) 42" GRAB BAR	BOBRICK OR EQUAL BOBRICK OR EQUAL	#B-6206 X 36" #B-6202 X 42"	1-1/4" (O.D.) STAINLESS STEEL 1-1/4" (O.D.) STAINLESS STEEL
(1)) MIRROR) TOILET PAPER DISPENSER	BOBRICK OR EQUAL BOBRICK OR EQUAL	#B-290 X 1836 #B-3474	
(1)	SOAP DISPENSER	BOBRICK OR EQUAL	#B-2111	
(1)	PAPER TOWEL DISPENSER	BOBRICK OR EQUAL	#B-3944	
MAIL	ERIALS:			

STAINLESS STEEL:

ASTM A666, TYPE 304 WITH SATIN NO. 4 FINISH, 22 GAUGE MINIMUM UNLESS OTHERWISE INDICATED.

SHEET STEEL:

COLD-ROLLED, COMMERCIAL QUALITY ASTM A366, 20 GAUGE MINIMUM, UNLESS OTHERWISE INDICATED. SURFACE PREPARATION AND METAL PRETREATMENT AS REQUIRED FOR APPLIED FINISH.

NICKEL AND CHROMIUM ELECTRO-DEPOSITED ON BASE METAL, ASTM B456, TYPE SC 2.

MIRROR GLASS:

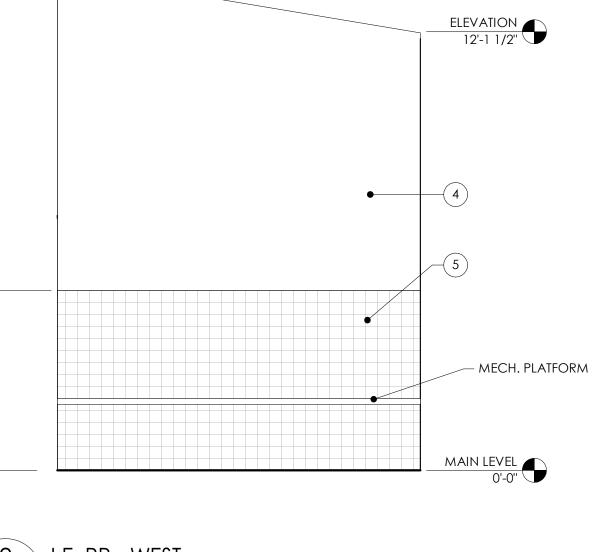
ASTM C1036, TYPE I, CLASS I, QUALITY Q2, 24"X30", 1/4 INCH THICK, WITH SILVER COATING, COPPER PROTECTIVE COATING AND NON-METALLIC PAINT COATING COMPLYING WITH FS DD-M-411.

GALVANIZED STEEL MOUNTING DEVICES:

ASTM A153, HOT-DIP GALVANIZED AFTER FABRICATION.

SCREWS, BOLTS AND OTHER DEVICES OF SAME MATERIAL AS ACCESSORY UNIT OR OF GALVANIZED STEEL WHERE CONCEALED. **ACCESSORIES**:

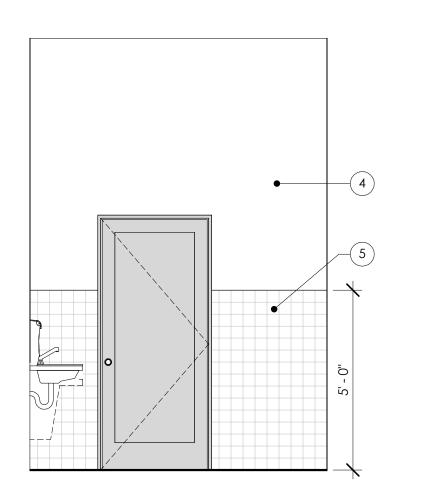
INCLUDE ANCHORAGE DEVICES, TRIM, ACCESSORIES AS REQUIRED, FOR COMPLETE INSTALLATION.



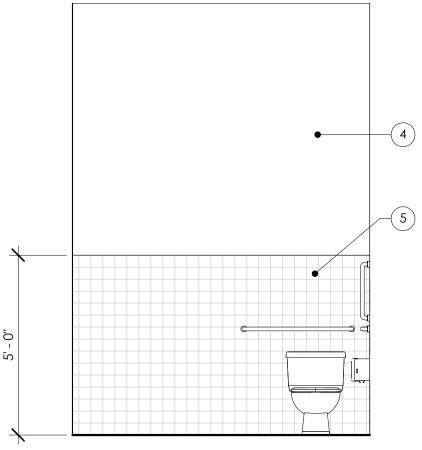
8 \ I.E. RR - WEST

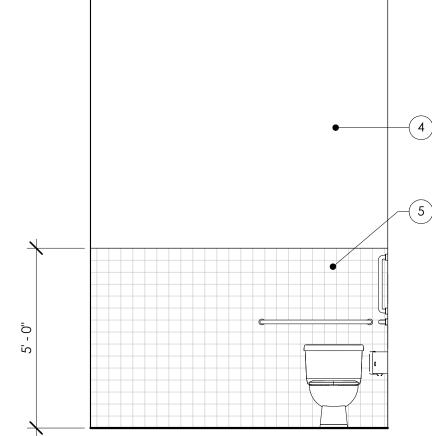
A4.1 / 3/8" = 1'-0"

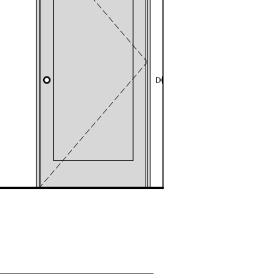
A4.1 $\sqrt{3/8'' = 1'-0''}$



I.E. RR - SOUTH A4.1 $\int 3/8'' = 1'-0''$



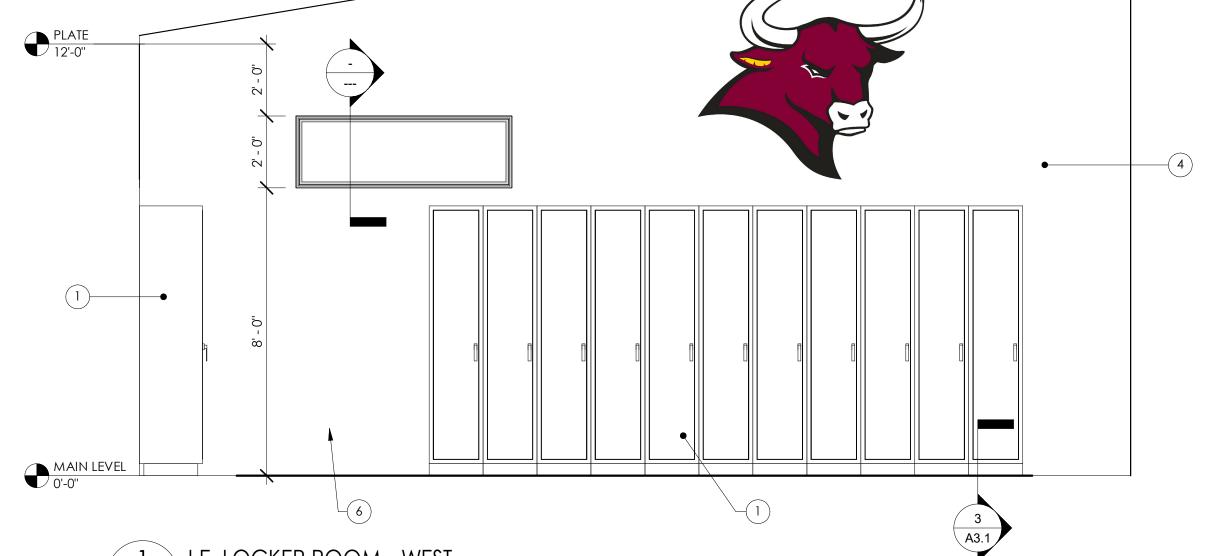


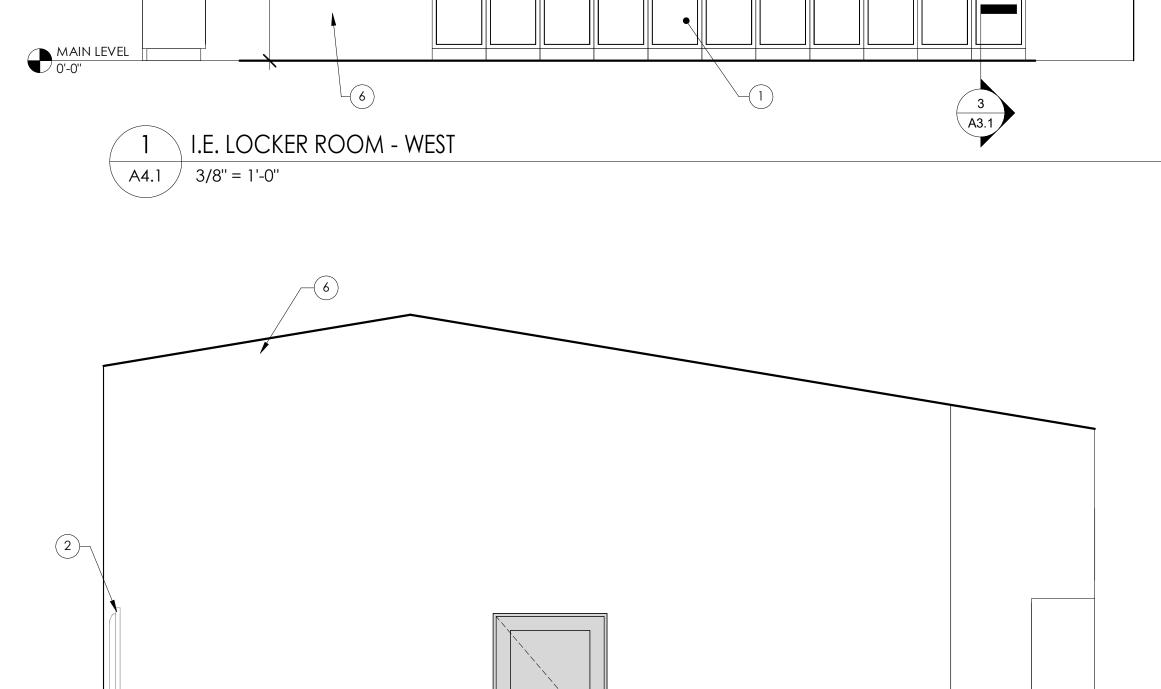






— GRAB BAR DIMENSIONS RE: A4.9





I.E. LOCKER ROOM - EAST A4.1 / 3/8" = 1'-0"

3 I.E. LOCKER ROOM - NORTH

A4.1 $\sqrt{3/8''} = 1'-0''$

4 1

4

5

8150

0

1240 GUNNISON A GRAND JUNCTION

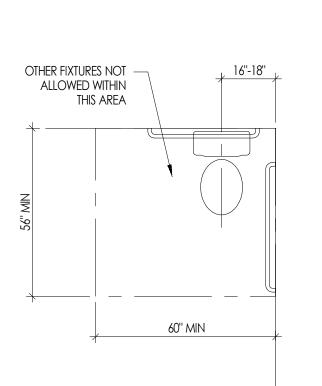
DOCUMENTS

REVISION:

ADA DETAILS

09/23/2020

SHEET NO:



TOILET LOCATION

AND CLEARANCE

SCALE: 3/8'' = 1'-0''

SIDE

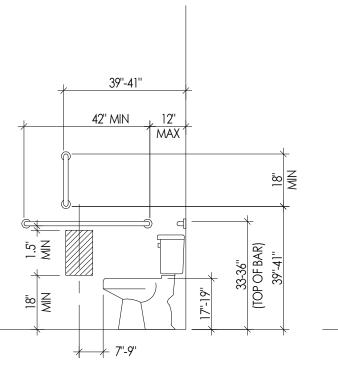
ADA HAND DRYER

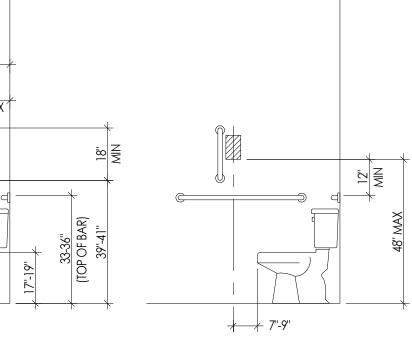
SCALE: 3/8'' = 1'-0''

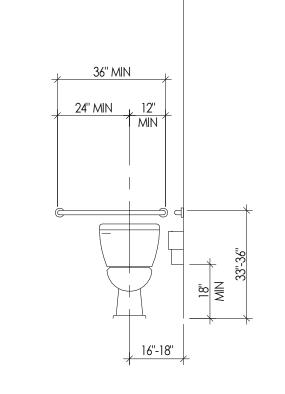
URINAL HEIGHT AND

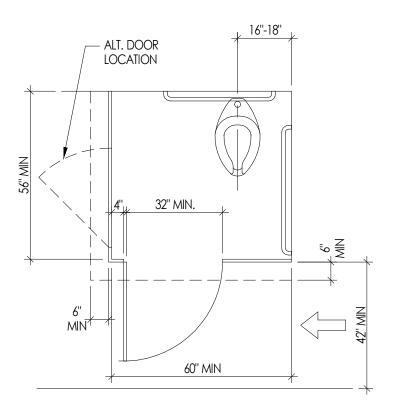
SCALE: 3/8'' = 1'-0''

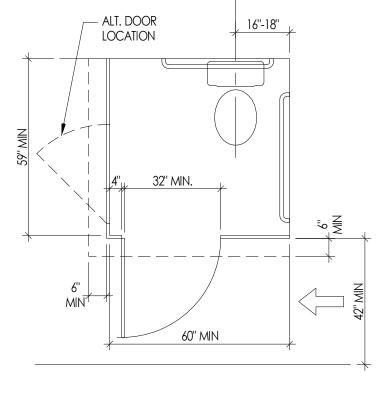
FLUSH CONTROL HEIGHT



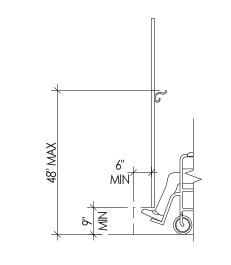






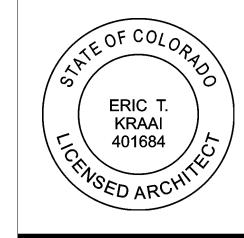


FLR. MOUNTED TOILET COMPARTMENT









LAVATORIES AND MIRRORS ICC A117.1 GENERAL: THE REQUIREMENTS OF SEC 606 SHALL APPLY TO LAVATORY

WITH IBC 2015 & ICC A117.1.

WATER CLOSETS

HANDED APPROACH.

ICC A117.1 HEIGHT AND CLEARANCES: LAVATORIES SHALL BE MOUNTED WITH THE RIM OR COUNTER SURFACE NO HIGHER THAN 34" (865 mm) ABOVE THE FINISH FLOOR. PROVIDE A CLEARANCE OF AT LEAST 29" (735 mm) ABOVE THE FINISH FLOOR TO THE BOTTOM OF THE APRON. KNEE AND TOE CLEARANCE SHALL COMPLY WITH SEC 306.

FIXTURES, VANITIES AND BUILT-IN LAVATORIES.

ADA REQUIREMENTS FOR RESTROOM

ICC A117.1 GENERAL: ACCESSIBLE WATER CLOSETS SHALL COMPLY WITH SEC 604.1

NOT IN STALLS SHALL COMPLY WITH SEC 604.3.1. CLEAR FLOOR SPACE

MAY BE ARRANGED TO ALLOW EITHER A LEFT-HANDED OR RIGHT-

(430mm TO 485 mm) MEASURED TO THE TOP OF THE TOILET SEAT SEATS SHALL NOT BE SPRUNG TO RETURN TO A LIFTED POSITION.

STALLS SHALL COMPLY WITH SEC 604.5. THE GRAB BAR BEHIND THE

OR AUTOMATIC AND SHALL COMPLY WITH SEC 604.6. CONTROLS FOR FLUSH VALVES SHALL BE MOUNTED ON THE WIDE SIDE OF TOILET.

WITHIN REACH. DISPENSERS THAT CONTROL DELIVERY OR THAT

DO NOT PERMIT CONTINUOUS PAPER FLOW SHALL NOT BE USED.

ICC A117.1 CLEAR FLOOR SPACE: CLEAR FLOOR SPACE FOR WATER CLOSETS

ICC A117.1 HEIGHT: THE HEIGHT OF WATER CLOSETS SHALL BE 17" TO 19"

ICC A117.1 GRAB BARS: GRAB BARS FOR WATER CLOSETS NOT LOCATED IN

WATER CLOSET SHALL BE 36" (915 mm) MINIMUM.

ICC A117.1 FLUSH CONTROLS: FLUSH CONTROLS SHALL BE HAND OPERATED

ICC A117.1 DISPENSERS: TOILET PAPER DISPENSERS SHALL BE INSTALLED

ICC A117,1 CLEAR FLOOR SPACE: A CLEAR FLOOR SPACE 30" X 48" (760 mm X 1220 mm) COMPLYING SEC 305.3 SHALL BE PROVIDED IN FRONT OF A LAVATORY TO ALLOW FORWARD APPROACH. SUCH CLEAR FLOOR SPACE SHALL ADJOIN OR OVERLAP AN ACCESSIBLE ROUTE AND SHALL EXTEND A MAXIMUM OF 19" (485 mm) UNDERNEATH THE

ICC A117.1 EXPOSED PIPES AND SURFACES: HOT WATER AND DRAIN PIPES UNDER LAVATORIES SHALL BE INSULATED OR OTHERWISE CONFIGURED TO PROTECT AGAINST CONTACT. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES.

ICC A117.1 FAUCETS: FAUCETS SHALL COMPLY WITH SEC 606.3. LEVER-OPERATED. PUSH-TYPE AND ELECTRONICALLY CONTROLLED MECHANISMS ARE EXAMPLES OF ACCEPTABLE DESIGN. IF SELF-CLOSING VALVES ARE USED THE FAUCET SHALL REMAIN OPEN FOR AT LEAST 10 SECONDS.

ICC A117.1 MIRRORS: MIRRORS SHALL BE MOUNTED WITH THE BOTTOM EDGE OF THE REFLECTING SURFACE NO HIGHER THAN 40" (1015 mm) ABOVE THE FINISH FLOOR.

ICC A117.1 GENERAL. ALL HANDRAILS, GRAB BARS, AND TUB AND SHOWER SEATS, REQUIRED TO BE ACCESSIBLE BY SEC 505, 604.5, 604.5.1, 604.5.2, 607.4.1.2, 607.4.2

ICC A117.1 SIZE AND SPACING OF GRAB BARS AND HANDRAILS THE DIAMETER OR WIDTH OF THE GRIPPING SURFACES OF A HANDRAIL OR GRAB BAR SHALL BE 1-1/4 IN. TO 1-1/2 IN. (32MM TO 38MM), OR THE SHAPE SHALL PROVIDE AN EQUIVALENT GRIPPING SURFACE. IF HANDRAILS OR GRAB BARS ARE MOUNTED ADJACENT TO A WALL, THE SPACE BETWEEN THE WALL AND THE GRAB BAR SHALL BE 1-1/2 IN. (38 MM). HANDRAILS MAY BE LOCATED IN A RECESS IF THE RECESS IS A MAXIMUM OD 3 IN. (75MM) DEEP AND EXTENDS AT LEAST 18 IN. (455MM) ABOVE THE TOP OF THE RAIL.

IBC 2015 STRUCTURAL STRENGTH. THE STRUCTURAL STRENGTH OF THE GRABS SEC 1607.8 BARS, TUB AND SHOWER SEATS, FASTENERS, AND MOUNTING DEVICES SHALL MEET THE FOLLOWING SPECIFICATIONS:

(1) BENDING STRESS IN A GRAB BAR OR SEAT INDUCED BY THE MAXIMUM BENDING MOMENT FROM THE APPLICATION OF 250 IBF (1112N) SHALL BE LESS THAN THE ALLOWABLE STRESS FOR THE MATERIAL OF THE GRAB BAR OR SEAT.

(2) SHEAR STRESS INDUCED IN A GRAB BAR OR SEAT BY THE APPLICATION OF 250 IBF (1112N) SHALL BE LESS THAN THE ALLOWABLE SHEAR STRESS FOR THE MATERIAL OF THE GRAB BAR OR SEAT. IF THE CONNECTION BETWEEN THE BRAB BAR OR SEAT AND ITS MOUNTING BRACKET OR OTHER SUPPORT IS CONSIDERED TO BE FULLY RESTRAINED, THEN DIRECT AND TORSIONAL SHEAR STRESSES SHALL BE TOTALED FOR THE COMBINED SHEAR STRESS, WHICH SHALL NOT EXCEED THE ALLOWABLE SHEAR STRESS.

(3) SHEAR FORCE INDUCED IN A FASTENER OR MOUNTING DEVICE FROM THE APPLICATION OF 250 IBF (1112N) SHALL BE LESS THAN THE ALLOWABLE LATERAL LOAD OF EITHER THE FASTENER OR MOUNTING DEVICE OR THE SUPPORTING STRUCTURE, WHICHEVER IS THE SMALLER A ALLOWABLE LOAD.

(4) TENSILE FORCE INDUCED IN A FASTENER BY A DIRECT TENSION FORCE OF 250 IBF (1112N) PLUS THE MAXIMUM MOMENT FROM THE APPLICATION OF 250 IBF (1112N) SHALL BE LESS THAN THE ALLOWABLE WITHDRAWAL LOAD BETWEEN THE FASTENER AND THE SUPPORTING STRUCTURE.

(5) GRAB BARS SHALL NOT ROTATE WITHIN THEIR FITTINGS.

ELIMINATING HAZARDS. A HANDRAIL OR GRAB BAR AND ANY WALL OR OTHER SURFACE ADJACENT TO IT SHALL BE FREE OF ANY SHARP OR ABRASIVE ELEMENTS. EGRESS SHALL HAVE A MINIMUM RADIUS OF 60 IN.

THE PLANS AND ELEVATIONS ON THIS SHEET ARE FOR ADA REFRENCE FOR SPACE AND HEIGHT REQUIREMENTS. SEE SHEET A4.1 FOR ACTUAL PLANS, ELEVATIONS, AND ACCESSORIES USED ON THIS

PROJECT.

DIMENSIONS ARE TAKEN FROM FACE OF FINISH MATERIAL.

TOILET HEIGHT, SIDE WALL GRAB BAR, AND DISPENSER LOCATION BELOW GRAB BAR SCALE: 3/8'' = 1'-0''

SEMI-RECESSED WASTE CAN NOT

LAVATORY

CLEAR SPACE

SCALE: 3/8'' = 1'-0''

TO ENCROACH INTO CLEAR

DISPENSER LOCATION ABOVE GRAB BAR SCALE: 3/8'' = 1'-0''

LAVATORY HEIGHT

KNEE CLEAR SPACE

SCALE: 3/8'' = 1'-0''

MIRROR, AND

PARTITION -

SCREEN

URINAL CLEAR FLOOR SPACE

SCALE: 3/8'' = 1'-0''

REAR WALL GRAB BAR SCALE: 3/8'' = 1'-0''

- SEMI-RECESSED PAPER TOWEL

AND WASTE CAN

— TRAP WRAP, ALL PIPING & VALVES TO BE

COVERED UNDERNEATH LAVATORY

WALL HUNG TOILET COMPARTMENT COMPARTMENT DOOR, AND COMPARTMENT TOE CLEARANCE SCALE: 3/8'' = 1'-0''

- SEMI-RECESSED PAPER TOWEL

AND WASTE CAN

8" MIN

17" MIN

1 (DEPTH)

60" MIN

36" MIN

TURNING SPACE

SCALE: 3/8'' = 1'-0''

T-SHAPED

(KNEE CLR)

Trap Wrap, all —

BE COVERED

UNDERNEATH LAVATORY

6" MAX

(TOE CLR)

WALL HUNG LAVATORY

HEIGHT, MIRROR AND

KNEE CLEAR SPACE

SCALE: 3/8'' = 1'-0''

60" MIN

CIRCULAR

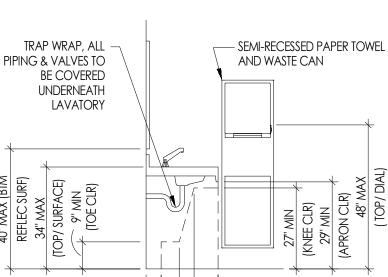
TURNING SPACE

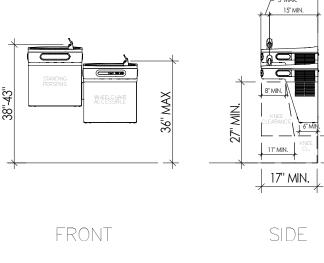
SCALE: 3/8'' = 1'-0''

PIPING & VALVES TO

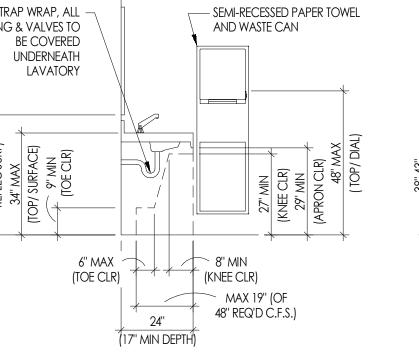
COMPARTMENT DOOR, AND COMPARTMENT TOE CLEARANCE

SCALE: 3/8'' = 1'-0''

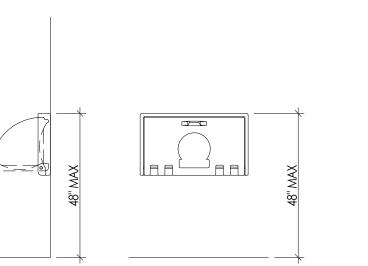


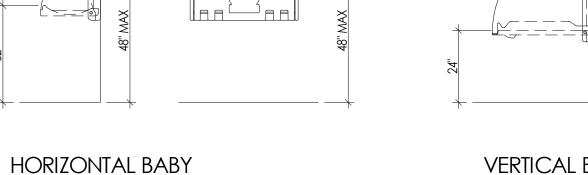


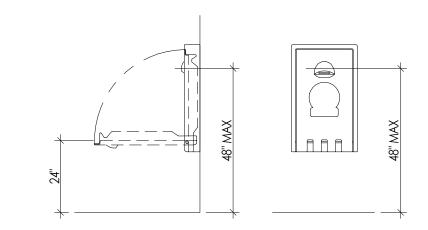
DRINKING FOUNTAIN



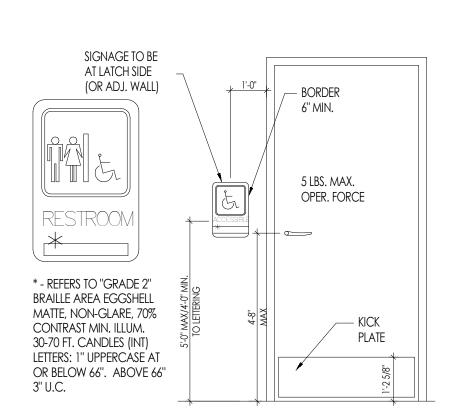








VERTICAL BABY CHANGING HEIGHT CHANGING HEIGHT SCALE: 3/8'' = 1'-0''SCALE: 3/8'' = 1'-0''



RESTROOM SIGNS & DOOR

PUSH SIDE PULL SIDE

SWINGING DOOR MANEUVERING CLEARANCES PER ICC A117.1-2009 (ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES), SECTION 404.2.3.2

CONFIG	APPROACH	SIDE	DIST 1	DIST 2	DIST 3	HARDWARE
a)	FRONT	PULL	18" MIN.	60" MIN.	0''	ANY
b1)	FRONT	PUSH	0''	48" MIN.	0''	NONE or CLOSER or LATCH
b2)	FRONT	PUSH	12" MIN.	48" MIN.	0''	CLOSER & LATCH
c)	SIDE (HINGE)	PULL	36" MIN.	60" MIN.	0''	ANY
d)	SIDE (HINGE)	PULL	42" MIN.	54" MIN.	0''	ANY
e1)	SIDE (HINGE)	PUSH	0''	42" MIN.	22" MIN.	NONE or CLOSER or LATCH
e2)	SIDE (HINGE)	PUSH	12" MIN.	48" MIN.	22" MIN.	CLOSER & LATCH
f1)	SIDE (LATCH)	PULL	24" MIN.	48" MIN.	0''	NONE or LATCH
f2)	SIDE (LATCH)	PULL	24" MIN.	54" MIN.	0''	CLOSER or CLOSER & LATCH
g1)	SIDE (LATCH)	PUSH	24" MIN.	42" MIN.	0''	NONE or LATCH
g2)	SIDE (LATCH)	PUSH	24" MIN.	48" MIN.	0''	CLOSER or CLOSER & LATCH

SCALE: N.T.S.

DATE:

3/8" = 1'-0" SCALE:

1. GENERAL RESPONSIBILITY:

- A. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS THAT AFFECT ALL ALTERATIONS, ADJUSTMENTS TO DELIVER A COMPLETE PROJECT CONFORMING TO THE CONTRACT DRAWINGS AND SPECIFICATIONS.
- B. THE OWNER RESERVES THE RIGHT TO INSTALL FIXTURE WORK OR TO USE PORTIONS OF THE CONSTRUCTION AREA AFTER SUBSTANTIAL COMPLETION BY THE CONTRACTOR. SUCH OCCUPANCY SHALL IN NO WAY IMPLY ACCEPTANCE OF ANY PORTION OF THE WORK.
- C. FOR SIZE AND OPENINGS FOR ALL MECHANICAL DUCTWORK, REFER TO MECHANICAL DRAWINGS.
- D. CONTRACTOR SHALL PERFORM ANY AND ALL CUTTING, PATCHING, REPAIRING, RESTORING, AND THE LIKE TO COMPLETE THE WORK. THE GENERAL CONTRACTOR SHALL ALSO RESTORE ANY DAMAGED OR AFFECTED SURFACES (RESULTING FROM THIS WORK) TO THEIR ORIGINAL CONDITION AND TO THE SATISFACTION OF THE ARCHITECT.
- E. GENERAL CONTRACTOR SHALL COORDINATE THE WORK PERFORMED BY THE G.C.'s SUB-CONTRACTORS FOR RESOLUTION BEFORE PROCEEDING.
- F. SHOULD CONFLICTS OCCUR WITHIN THE CONTRACT DRAWINGS OR SPECIFICATIONS, THE HIGHER QUALITY OR LARGER QUANTITY SHALL BE ADOPTED FOR ESTIMATION PURPOSES AND SHALL BE FURNISHED AND
- G. IF ANY ERRORS OR OMISSIONS APPEAR IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL NOTIFY THE OWNER, ARCHITECT, AND ENGINEERS IN WRITING OF SUCH ERROR OR OMISSION IMMEDIATELY UPON DISCOVERING THE ERROR OR OMISSION.
- H. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE TIMELY ARRIVAL OF ALL SPECIFIED FINISH MATERIALS, EQUIPMENT, AND ANY OTHER MATERIALS UTILIZED ON THIS PROJECT. THE GENERAL CONTRACTOR SHALL NOTIFY THE OWNER IN WRITING WITHIN TEN (10) DAYS OF DATE OF CONTRACT OF THOSE SPECIFIED ITEMS THAT MAY NOT BE READILY AVAILABLE. IF NOTIFICATION IS NOT RECEIVED BY OWNER WITHIN THAT TIME FRAME, THE CONTRACTOR ACCEPTS RESPONSIBILITY FOR THE PROPER ORDERING AND FOLLOW-UP OF SPECIFIED ITEMS AND SHALL PURSUE WHATEVER MEANS NECESSARY, AT NO ADDITIONAL COST TO THE OWNER, TO ASSURE AVAILABILITY OF ALL SPECIFIED ITEMS SO AS NOT TO CREATE A HARDSHIP ON THE OWNER AND NOT DELAY THE PROGRESS OF THE WORK. NO EXTENSION OF TIME TO THE CONTRACT WILL BE ALLOWED.

ALL CONTRACTORS SHALL HAVE VALID CERTIFICATES OF WORKMAN'S COMPENSATION ON FILE WITH THE APPROPRIATE AGENCIES.

END OF SECTION

SECTION 00010 - TABLE OF CONTENTS

INTRODUCTORY INFORMATION

-Section 00010 Table of Contents

PROPOSAL REQUIREMENTS

-Section 00100 Instructions to Bidders -Section 00220 Subsurface Investigation

DIVISION 1 - GENERAL REQUIREMENTS

-Section 01018 Owner Furnished Items -Section 01030 Alternates -Section 01050 Field Engineering -Section 01140 Work Restrictions -Section 01300 Submittals -Section 01520 Security

-Section 01000 Supplementary General Conditions

-Section 01530 Project Identification and Signs

DIVISION 6 - WOOD AND PLASTICS

-Section 06100 Rough Carpentry -Section 06200 Finish Carpentry

DIVISION 7 - THERMAL AND MOISTURE PROTECTION

-Section 07142 Waterproofing -Section 07200 Insulation -Section 07211 Batt and Blanket Insulation -Section 07260 Water and Air Retarder / Building Wrap -Section 07600 Sheet Metal and Roof Accessories -Section 07610 Standing Seam Metal Roofing -Section 07720 Type "S" Roof Scuttle -Section 07900 Joint Sealers -Section 07920 Sealants and Caulking

DIVISION 8 - DOORS AND WINDOWS -Section 08100 Steel Doors and Frames

-Section 08210 Wood Doors -Section 08700 Finish Hardware -Section 08800 Glazing -Section 08811 Glass

DIVISION 9 - FINISHES

-Section 09111 Metal Stud Framing System -Section 09250 Gypsum Board -Section 09300 Tile -Section 09390 Tile Backer Board Panels

-Section 09900 Painting **DIVISION 10 - SPECIALTIES**

-Section 10200 Louvers & Vents -Section 10801 Toilet and Bath Accessories

DIVISION 12 - FURNISHINGS

-Section 122413 Roller Window Shades

END OF SECTION

D. Sub-Contractor: Any person(s), company (ies), or corporation(s) with whom a contractor makes a Contract to furnish labor and/or service and/or material in connection with the project. Within the drawing and specifications, the term "Contractor" is interpreted to mean subcontractor where applicable unless further defined.

E. Project: The project is defined as the complete labor, materials and services required for the construction and all related work as described on the Contract document.

F. Site: The property on which the project is located.

G. Contract Documents: The contract documents consist of

1. The Construction Contract, 2. The Drawings

3. The Specifications, and 4. The Soils Report.

H. Include the dates and revision dates of all drawings and specifications on the proposal form

01000.12 GENERAL CONDITIONS:

A. The Standard Form of General Conditions published by the American Institute of Architects (A.I.A.) form A201, latest edition, is binding and the General Conditions included herein are supplementary thereto. In the event of conflict, the Supplementary General Conditions govern over the General Conditions, and the Owner's Construction Contract governs over the Supplementary General Conditions.

B. It is accepted as a fact that all Contractors have inspected the site prior to submitting their bid and no additional compensation is allowed for failure to fulfill this requirement. It is to be construed however, that the Contractors have

included in their bids amounts to cover unforeseen conditions of obstacles other than those indicated on the drawings or visually apparent at the site. Should unforeseen conditions arise, notify the Owner immediately. C. The following specifications are divided into chapters and each Contractor is to figure on that portion in which each is

concerned. It is the responsibility of each Contractor to read and familiarize himself with the General Conditions and Supplementary General Conditions which are considered equally binding with the remaining specifications. D. Settle any controversy or claim arising due to a labor conflict caused by the wording of assignment or these specifications

in accordance with local governing labor practice. E. List alternates, whether specified by the Owner or suggested by the Contractor, separately on the proposal. Indicate the cost of materials and labor required to complete the alternate and the credit due the Owner for any materials and/or labor not required due to the alternate installation.

01000.13 DRAWINGS AND SPECIFICATIONS:

A. Execute all work according to the true meaning and intent of the drawings and specifications which are intended to include everything required and necessary for the proper and entire finishing of the work, notwithstanding, that each and every item necessarily involved in the work is not specifically mentioned. Deliver the completed work to the Owner in a perfect and undamaged condition without exception.

B. The drawings and specifications are intended to be cooperative. Furnish and perform the work or materials called for by the drawings and not mentioned in the specifications or vice-versa in as faithful a manner as though treated by both.

C. Before submitting an estimate; carefully check the drawings and specifications. Should a conflict, uncertainty or discrepancy be found, report it to the Architect immediately, who will notify all bidders as to the resolution.

01000.14 PRECEDENCE OF DRAWINGS:

The order of precedence of drawings is as follows: . Larger scale drawings over smaller scale drawings.

Figured dimensions over scale dimensions.

Supplementary General Conditions over A.I.A. General Conditions.

4. Architectural drawings over mechanical and electrical drawings. Any addenda over all material of an earlier date.

6. Notice of conflict.

01000.15 SUBSTITUTION:

Any substitution must be approved in ADVANCE OF CONSTRUCTION in writing by the Architect after receipt and study of complete information regarding same, including any credits or additional costs.

01000.16 MATERIALS AND WORKMANSHIP:

Unless otherwise particularly stated, furnish and install ALL materials and labor mentioned in these specifications and/or shown on the drawings. Execute all work in a neat and skillful manner to the entire satisfaction of the Owner.

01000.17 SUB-CONTRACTS:

Provide a list of sub-contractors proposed prior to award of the Contract with their best and final offer. The Sub-contractor is bound by the specifications. No Contractor or Subcontractor may sublet or assign his Contract or any part thereof without the written approval of the Owner.

01000.18 LAWS AND ORDINANCES: Comply in all respects with all laws and ordinances having jurisdiction over the work and/or materials or methods employed. No additional compensation will be allowed to Contractors for failure to familiarize themselves with all conditions under which they will perform their work unless these conditions are brought to the Owner's attention prior to signing of Contracts, and provisions for adjusting costs are made at that time.

01000.19 PERMITS, BONDS, LICENSES:

Take out and pay for all permits, bonds, licenses and similar items. Should separate Contracts be awarded, each Contractor is responsible for permits, fees, bonds, licenses, and similar items as may be required by work covered under his/her portion of the Contract. Turn over receipts for same to the Owner upon completion. At the Owner's election, the Owner may obtain any of the Permits. The General Contractor is required to obtain the building permit and to be reimbursed with no markup.

- 01000.20 PROTECTION: A. Barricade and/or shelter the work as to protect it from damage. Arrange all barricades so as to insure a reasonable visual
- and physical warning for workmen and the public. Provide flashing type blinkers around open trenches. B. The Contractor(s) is held responsible for any damage to his/her work as may be due to negligence of the above, or as may be caused by accident, wind, rain snow, freezing, riot, malicious mischief, theft, or similar reasons, if due to his/her acts, omissions or negligence. If such damage occurs, restore the work to its previous condition at no cost to the Owner.
- C. Protect all adjoining property from damage during the course of the work. If required by local laws or ordinances, issue notices to Owner of said property. No use of adjacent privately owned property by a Contractor without written permission by its Owner is allowed. D. Contractor is responsible for any damage or loss to Owner's building package or equipment in said Contractor's
- possession. At Owner's election, the cost of repair or replacement of any missing items will be borne by said Contractor.

01000.23 CONTRACTOR'S QUALIFIED JOB SITE SUPERINTENDENT: Have the Contractor or his/her designated and qualified representative/job superintendent, with full authority to act on behalf of

Contractor under the Construction Contract, in attendance at the job site and supervising said work, at all times during the progress of the work.

01000.24 TEMPORARY FACILITIES:

- A. Take charge of the premises from the start to the completion of the project and furnish the following: 1. Laying out of all work and establishing building lines and levels, confirm this information with the Owner.
- 2. Temporary electric power, two telephone lines, and one Contractor provided fax machine, during the period of construction. This does not include portable generators for use of other trades.
- 3. Heating of building for working and drying purposes during the period of construction.
- 4. Temporary ladders as required for access to all work.
- 5. Water for construction use.
- 6. Acceptance, protection, unloading and storage of Owner's equipment delivered to the site are the responsibility of the

7. Temporary toilet facilities.

01000.25 INSPECTION AND TESTS:

- A. Call for all inspections as required by local authorities, allowing a minimum of two (2) day notice for inspections to be
- C. The Owner has the right to order tests and/or laboratory examination of any material or work used or performed on the project should he suspect such material or work to be of lesser quality than specified herein. The costs of all such tests will be paid by the Owner unless they indicate work or materials to be of lesser quality, in which case the Contractor pays the costs along with any expenses incurred in correction of the work.

01000.26 PRECEDING WORK:

Before starting work, examine work previously installed and immediately report to the Owner any visible defects or conditions which adversely affect the quality and/or completion of this work. It is assumed all conditions are acceptable if no such report is received.

01000.27 CUTTING AND FITTING:

A. Execute all cutting and fitting of work as may be required by other trades so as to insure as near perfect fit of materials as

01000.28 DAMAGED WORK:

A. Pay for replacement of any work damaged in connection with the Contract, and perform such patching or replacement by skilled personnel specializing in the particular trade so as to restore damaged work to completely acceptable condition. Should responsibility for damage be unable to be determined, prorate the cost of repairing same among Contractors working on the job at the time the damage occurred as determined by the Owner. The decision of the Owner is final.

01000.29 ADVERTISING:

A. No advertising is allowed.

01000.30 COMPLETED WORK: A. Deliver completed work as called for by the Contract to the Owner free from liens, claims or encumbrances of any

description whatsoever against the Owner. Acceptance of such work is defined as approval of final payout. B. If Owner receives "notice of claim" to be filed or if a claim is filed as a result of Contractor's non-payment, Owner possesses the right under the Construction Contract to either settle the claim and deduct same from the Contract sum or to require the Contractor to bond over such small claims, including any associated expenses as defined in the

Construction Contract and to promptly defend to conclusion Owner and Owner's interest against said claim of claims. C. Completion of Work on the project requires the submission by the Contractor of certain documentation in order for the Final Retention Draw to be paid to the Contractor. The submission of these documents is defined in the Construction

- Contract and is inclusive of the following items: Record Drawings and Specifications including microfiche copies,
- 2. Lien Waivers from Contractor and Subcontractors and Material men, 3. List of all Subcontractors and Material men Contractor's Guarantee and Completion Affidavit,
- 4. Final Signed Punch List,
- 5. Any Work Orders and Associated Contract Change Orders,
- Certificate of occupancy and any related public agency, Certification of project completion,

01000.31 MAINTENANCE AND CLEANING:

- 8. Copies of project Inspection Reports,
- 9. Permitted Set of Drawings and Specification,
- 10. All warranties, 11. All certifications noted in the drawings including civil drawings, the bid documents and Construction Contract,

And any required test and/or engineering reports.

A. Throughout the period of construction, be responsible for satisfactorily maintaining the premises in a neat and clean condition. This means removal of all refuse and debris from the premises.

B. Store all equipment and materials in a neat manner and protect them from any damage from the elements. Maintain building in a generally clean condition during the period of construction, and upon final completion provide a professional service to thoroughly clean all glass, floors, furniture and equipment.

01000.32 GUARANTEE: A. Fully and unconditionally guarantee all labor, materials, and equipment required by the Owner-contractor agreement(s) for a period of one (1) year from the date of final acceptance or the date the building is opened for business by the Owner, unless otherwise specified in specific chapters herein.

- A. The Owner, without invalidating the Contract, may order changes in the work within the general scope of the Contract, consisting of additions, deletions, or other revision. The Contract sum and the contract time will be adjusted accordingly.
- B. The cost or credit to the Owner resulting from a change in the work will be determined by mutual agreement. Perform all work under the applicable conditions of the Contract documents. C. Obtain written authorization for changes in the work (Construction Work Order) from the Owner prior to completion of the

01000.34 RECEIPT OF EQUIPMENT:

- A. During the course of construction, the Contractor is the receiving party responsible for deliveries of equipment and miscellaneous items made to the job site by common carrier. If, during the receipts of those items by the Contractor's representatives, any missing or damaged items are observed, the receiving person must:
- 1. Make a notation of the discrepancy on the delivery ticket. 2. Call the supplier and advise of the problem within 24 hours. 3. Call the delivery carrier and/or vendor to file a claim.

01000.35 EQUIPMENT UNDER THIS CONTRACT & FURNISHED BY OTHERS:

A. The general contractor shall acquaint himself with the dimensions of all equipment under this contract so that sufficient clearances and adequate floor area is available for receipt and storage of that equipment.

01000.36 PROGRESS:

A. The general contractor shall cause the work to be diligently pursued to entire completion. Should he/she fail to supply a sufficient number of workers or materials or fail to make timely arrangements which may be required for progress, then the contractor shall provide evidence satisfactory to the owner and architect that said deficiencies are due to causes beyond their control. Unless the contractor provides such evidence, the owner shall have the right, after one (1) day notice in writing, to make such arrangements and supply such workers and materials at the contractor's expense. The same relationship shall exist between the general contractor and all sub-contractors.

01000.37 DRAWING DIMENSIONING & VERIFICATION:

- A. Inspect site and verify field dimensions before commencing construction. Notify the architect immediately if any significant discrepancies occur. Provide letter of acceptance of existing conditions at bidding and at construction start.
- B. Do not scale drawings.

END OF SECTION

SECTION 01140 - WORK RESTRICTIONS

01140.1 GENERAL:

01140.11 RELATED DOCUMENTS:

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

- **01140.12 USE OF PREMISES:** A. Use of Site: Limit use of premises to work in areas indicated. Do not disturb portions of site beyond areas in which the
- Work is indicated 1. Limits: Confine constructions operations and all personnel to specific areas of work.
- 2. Driveways and Entrances: Keep driveways and entrances serving premises clear and available to Owner, Owner's employees, parishioners, and emergency vehicles at all times. Do not use these areas for parking or storage of
- a. Schedule deliveries to minimize use of driveways and entrances. b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.

01140.13 OCCUPANCY REQUIREMENTS:

A. Partial Owner Occupancy: Owner reserves the right to occupy and to place and install equipment in completed areas of building, before Substantial Completion, provided such occupancy does not interfere with completion of the Work. Such placement of equipment and partial occupancy shall not constitute acceptance of the total Work.

1. Owner will prepare a Certificate of Substantial Completion for each specific portion of the Work to be occupied before

- Owner occupancy. 2. Obtain a Certificate of Occupancy from authorities having jurisdiction before Owner occupancy.
- 3. Before partial Owner occupancy, mechanical and electrical systems shall be fully operational, and required tests and inspections shall be successfully completed. On occupancy, Owner will provide, operate, and maintain mechanical and electrical systems serving occupied portions of building.

4. On occupancy, Owner will assume responsibility for maintenance and custodial service for occupied portions of building. 01140.2 PRODUCTS:

01140.3 EXECUTION: Not used.

END OF SECTION

Not used.

SECTION 01300 SUBMITTALS

01300.1 GENERAL: 01300.11 REQUIREMENTS INCLUDED:

- A. Procedures.
- B. Construction Progress Schedules. Shop Drawings.
- D. Product Data. E. Samples.

01300.12 PROCEDURES:

- A. No submittals should be made for items which are to be provided per plans and specifications unless specifically required
- by the specifications or requested by Owner
- B. Delivery Address: Deliver submittals to Owner at address listed on Invitation to Bid. C. Transmittal Form and Identification: Identify project, Contractor, subcontractor, major supplier; identify pertinent Drawing

sheet and detail number, and Specification Section number, as appropriate. Identify deviations from Contract Documents. Provide space for Contractor and Owner/Architect review tamps. D. Review:

deviations from requirements of Contract Documents.

- 1. Contractor: a. General: Review submittals prior to transmittal; determine and verify field measurements, field construction criteria, manufacturer's catalog numbers, and conformance of submittal with requirements of Contract Documents.
- Coordination: Coordinate submittals with requirements of Work and of Contract Documents. Certification: Apply stamp and sign or initial each sheet of shop drawings and product data, and each sample label to certify compliance with requirements of Contract Documents. Notify Owner in writing at time of submittal, of

Submittal information deviating from requirements of contract documents shall be clearly circled in red.

- Owner: a. General: Owner will review shop drawings, product data, and samples and return submittals within 14 days.
- b. Acceptance and Fabrication: Do not fabricate products or begin work which requires submittals until return of submittal with Owner's acceptance. E. Revisions: After Owner review of submittal, revise and resubmit as required, identifying changes made since previous
- Distribution: Distribute copies of reviewed submittals to concerned persons. Instruct recipients to promptly report any inability to comply with provisions.

01300.13 CONSTRUCTION PROGRESS SCHEDULES:

- A. Construction Schedules: Along with the Invitation to Bid, the Owner will submit to Contractor copies of his Anticipated Construction Schedule.
- Type: Network analysis system using the critical path method, generally as outlined in Associated General Contractors of America (AGC) publication "Construction Planning and Scheduling" is preferred, but a horizontal bar chart with separate
- bar for each major trade or operation, identifying first work day of each week is acceptable. C. Sequence of Construction: Show complete sequence of construction by activity, identifying work of separate stages and
- other logically grouped activities. D. Percentage of Completion: Show projected percentage of completion for each item of work as of time of each Application
- Submittal Dates: Show submittal dates required for shop drawings, product data, and samples, and product delivery dates, including those furnished by Owner.
- 1. Initial Issue: Submit three copies within 10 days after date of notice to proceed. After review by Owner, revise and

01300.14 SHOP DRAWINGS:

Copies Required:

A. General: Present in a clear and thorough manner. Title each drawing with Project name and number; identify each element of drawings by reference to sheet number and detail, schedule, or room number of Contract Documents. Identify field dimensions; show relation to adjacent or critical features or work or products.

2. Revised: Submit three copies with each Application for Payment, reflecting changes since previous submittal.

B. Copies Required: Submit four (4) copies of each sheet. C. Reproduction and Distribution: After Owner review and acceptance; reproduce and distribute in accord with "procedures" above. Owner will make and retain copies required for his own use.

01300.15 PRODUCT DATA:

capacities; wiring and piping diagrams and controls; component parts; finishes; dimensions; and required clearances. Modifications: Modify manufacturer's standard schematic drawings and diagrams to supplement standard information and to provide information specifically applicable to the work. Delete information not applicable.

A. General: Submit full range of manufacturer's standard finishes except when more restrictive requirements are specified,

referenced to Project Manual Section and Article number. Show reference standards, performance characteristics, and

A. General: Submit only pages which are pertinent; mark each copy of standard printed data to identify pertinent products,

- indicating colors, textures, and patterns. Submit samples to illustrate functional characteristics of products, including parts

Identification: Label each sample with identification required for transmittal letter.

C. Number Required: Two sets of samples, charts, color plates and manufacturer's data.

C. Copies Required: Submit number Contractor requires, plus three copies for Owner's use.

4. PAINTING:

5. TILE:

A. Submit two samples, per Submittals Section, of each material proposed to the Architect for acceptance, if submitting other than specified item for approval of a substitution.

A. Provide color match sample(s) to the Architect for acceptance.

A. Submit two samples, per Submittals Section, of each material proposed to the Architect for acceptance.

A. Submit two samples of the acoustical ceiling panel and tounge and groove ceiling panels.

- A. Provide 12-inch by 12-inch (300mm by 300mm) samples of applied finish coating materials for coating, color and texture
- B. Product Data: Submit manufacturer's product specifications and data on system materials, product characteristics, performance criteria and limitations. Include handling, installation and repair instructions.

8. Concrete Submittals:

through concrete structures.

A. Product Data: For each type of manufactured material and product indicated. B. Design Mixes: For each concrete mix. Include alternate mix designs when characteristics of materials, project conditions,

diagrams, arrangement, and supports of concrete reinforcement. Include special reinforcement required for openings

D. Formwork Shop Drawings: Prepared by or under the supervision of a qualified professional engineer detailing fabrication,

weather, test results, or other circumstances warrant adjustments Indicate amounts of mix water to be withheld for later addition at Project site. C. Steel Reinforcement Shop Drawings: Details of fabrication, bending, and placement, prepared according to ACI 315, "Details and Detailing of Concrete Reinforcement." Include material, grade, bar schedules, stirrup spacing, bent bar

assembly, and support of formwork. Design and engineering of formwork are Contractor's responsibility.

417 MONUMENT ROAD, SUITE 7 GRAND JUNCTION, CO 81507 T: 970.712.5045

ERIC T. KRAAI 401684

0

1240 GUNNISON A GRAND JUNCTION

REVISION:

CONSTRUCTION

DOCUMENTS

PROJECT NO:

SHEET NAME: **SPECIFICATIONS**

DATE:

SHEET NO:

SCALE: 1/4'' = 1'-0''

09/23/2020

- 1. The submittal data shall be handled as hereinbefore specified in the "General Conditions" section of these specifications as specified for "Shop Drawings".
- 2. Before submittal of all data, the Contractor shall check each piece of apparatus, equipment and accessory to insure compliance with requirements of the plans and specifications and shall clearly mark each submittal with his signature to indicate that they are in full compliance. Any submittals received without the Contractor's signature may be returned without being checked. It shall be the Contractor's responsibility to point out all deviations between the plans and specifications and the materials submitted.
- 3. Each set of data from any one manufacturer shall be bound in an individual folder properly indexed and marked to indicate job, Contractor, supplier and purpose for which data enclosed is being offered. Data submitted shall show proposed equipment only and shall not be catalogues showing a manufacturer's complete line. Each sheet shall indicate the name of manufacturer of the equipment being submitted. Sufficient data shall be included to prove compliance with the specifications as far as use, capacity, efficiencies, physical size, quality of materials and all other pertinent specified
- 4. Submittal data (manufacturers' catalog data) shall include the following:
- Fire protection system components and devices (when applicable to project).
- b. Insulation. c. Domestic water heaters.
- d. Plumbing fixtures and trim.
- e. Packaged roof-top cooling/heating units. f. Exhaust Fans
- g. Testing, adjusting and balancing.

11. Shop Drawings:

- A. Each Contractor shall submit shop drawings whenever equipment proposed varies in physical size and arrangement of equipment space; where tight spaces require extreme coordination between ductwork, piping, and other equipment; where called for elsewhere in these specifications; and where specifically requested by the Owner. Shop drawings shall be made at no additional charge.
- B. All required shop drawings, except as hereinafter specified shall be prepared at a scale of not less than 1/4 inch equals one foot by the Contractor. He shall submit prints as hereinbefore described under "submittal data".
- C. Shop drawings shall be prepared on the following items: 1. For installation of roof top units and duct systems where units furnished differ in physical size and arrangement from
- those scheduled and shown. 2. In other locations, as directed by the Owner

the coordination with other trades.

- 3. Complete fire sprinkler system drawings, including indication of proper coordination with ceiling pattern. Drawings shall
- be approved by required government and insurance authorities before submittal. 4. Each Contractor shall submit shop drawings as herein listed. These drawings shall be complete working drawings prepared in a neat reproducible form and shall indicate the work of all trades the areas involved. Unless otherwise directed, they shall be prepared by the Heating, Ventilating and Air Conditioning Contractor who shall be responsible for

12. Electrical Work:

- A. Submittal Data: 1. The submittal data shall be handled as hereinbefore specified in the "General Conditions" section of these specifications as specified for "Shop Drawings"
- 2. Before submittal of all data, the Contractor shall check each requirement of the plans and specifications and shall clearly mark each submittal with his signature to indicate that they are in full compliance. Any submittals received
- without the Contractor's signature may be returned without being checked.
- 3. It shall be the Contractor's responsibility to point out all deviations between the plans and specifications and the
- 4. Each set of data from any one manufacturer shall be bound in an individual folder properly indexed and marked to indicate job, Contractor, Architect, Engineer, supplier and purpose for which data enclosed is being offered. Data submitted shall show proposed equipment only and shall not be catalogues showing manufacturers complete line. Each sheet shall indicate the name of manufacturer of the equipment being submitted. Sufficient data shall be included to provide compliance with the specifications as far as use, capacity, efficiencies, physical size, quality of materials and all other pertinent specified particulars. Data shall include manufacturer's name for each item of equipment submitted.
- 5. Submittal data (manufacturer's catalog data) shall include, but shall not be limited to, the following:
- b. 600V and below: switchboards, panel boards, safety switches, fuses, wire ways. c. Light fixtures.

01300.17 CONSTRUCTION CLEAN UP CHECK-LIST:

A. Upon completion of work of this Section, remove related debris from the premises.

01300.2 PRODUCTS: Not used.

01300.3 EXECUTION:

Not used. **END OF SECTION**

SECTION 042200 - CONCRETE UNIT MASONRY

A. Refer to Section 01300 - Submittal Procedures:

Product Data: Manufactured masonry and application materials including weather resistive

- 2. Samples: Panel containing full-size samples of specified manufactured masonry showing full range of colors and textures complete with specified mortar. Size of masonry sample is approx.16 by 24
- 3. Quality Assurance Submittals:
- a. Installer Qualifications: Proof of installer qualifications 5 years minimum. b. Installation Instructions: Manufacturer's instructions for veneer and other materials.
- 1.GROUT SHALL BE PROPORTIONED BY VOLUME AND SHALL HAVE SUFFICIENT WATER ADDED TO PRODUCE CONSISTENCY WITHOUT SEGREGATION.
 - A. FINE GROUT SHALL BE COMPOSED OF ONE PART PORTLAND CEMENT TO WHICH MAY BE ADDED NOT MORE THAN ONE-TENTH PART HYDRATED LIME OR LIME PUTTY, AND TWO AND ONE-FOURTH TO
 - B. COURSE GROUT SHALL BE COMPOSED OF ONE PART PORTLAND CEMENT TO WHICH MAY BE ADDED NOT MORE THAN ONE-TENTH PART HYDRATED LIME OR LIME PUTTY, AND TWO TO THREE PARTS SAND, AND NOT MORE THAN TWO PARTS GRAVEL.
 - C. TRANSIT MIXED GROUT FOR MASONRY MINIMUM 28-DAY COMPRESSIVE STRENGTH-2000 PSI AGGREGATE SIZE-3/8" MAXIMUM SLUMP-7 INCH MINIMUM, 10 INCH MAXIMUM

COURSE GROUT MAY BE USED IN GROUT SPACES IN BRICK MASONRY 2 INCHES OR MORE IN HORIZONTAL DIMENSION AND IN GROUT SPACES IN FILLED-CELL CONSTRUCTION 3 INCHES OR MORE IN BOTH HORIZONTAL DIMENSIONS.

OR LESS IN HEIGHT SHALL BE MECHANICALLY VIBRATED OR PUDDLED.

GROUT SHALL BE CONSOLIDATED BY MECHANICAL VIBRATION DURING PLACING BEFORE LOSS OF PLASTICITY IN A MANNER TO FILL THE GROUT SPACE. GROUT POURS GREATER THAN 12 INCHES SHALL BE RECONSOLIDATED BY MECHANICAL

VIBRATION TO MINIMIZE VOIDS DUE TO WATER LOSS. GROUT POURS 12 INCHES

2. ALL MASONRY DESIGN, FABRICATION AND CONSTRUCTION SHALL CONFORM TO THE INTERNATIONAL BUILDING CODE, 2003 EDITION UTILIZED IN THE CITY OF GRAND JUNCTION,

COLORADO.

3. ALL HOLLOW CONCRETE UNIT (BLOCK) ASSEMBLIES SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH, F'M, OF 1500 PSI CONCRETE BLOCK SHALL CONFORM TO TYPE N-1 AND SHALL BE LIGHTWEIGHT. HOLLOW UNIT MASONRY SHALL

HAVE FULL MORTAR COVERAGE ON THE FACE SHELLS AND ON THE WEBS. SURROUNDING CELLS TO BE FILLED WITH GROUT. VERTICAL HEAD JOINTS SHALL BE WELL BUTTERED FOR A FULL THICKNESS EQUAL TO THE FACE SHELL OF THE UNIT.

4. SOLID UNIT MASONRY SHALL HAVE FULL MORTAR COVERAGE ON THE FULL WIDTH OF THE UNIT, VERTICAL HEAD JOINTS SHALL BE WELL BUTTERED FOR THE FULL WIDTH OF THE UNIT.

5. HORIZONTAL WIRE REINFORCEMENT IN PARAPETS SHALL BE PLACED IN BED JOINTS AT 16" O.C. VERTICAL SPACING. ADDITIONAL REINFORCEMENT SHALL BE PLACED IN THE FIRST BED JOINT ABOVE AND BELOW OPENINGS AND SHALL EXTEND 2'-0" BEYOND OPENINGS.

6. NOMINAL WIDTH OF JOINT REINFORCEMENTS SHALL BE EQUAL TO THE NOMINAL WIDTH OF THE WALL, OR AS DETAILED. JOINT REINFORCEMENT AT CORNERS AND INTERSECTIONS SHALL BE PREFABRICATED UNITS.

7. CONTROL JOINTS SHALL BE PLACED IN ALL MASONRY WALLS AT A MAXIMUM SPACING OF 30'-0" O.C. OR AS NOTED ON THE DRAWINGS. HORIZONTAL WIRE REINFORCEMENT SHALL BE DISCONTINUOUS AT ALL CONTROL JOINTS. BOND BEAM REINFORCEMENT SHALL BE CONTINUOUS THROUGH CONTROL JOINTS. STEP BOND BEAMS AS REQUIRED AND DETAILED TO ACCOMMODATE JOIST BEARINGS, EMBEDDED PLATES, ETC IN ORDER TO MAINTAIN CONTINUOUS UNOBSTRUCTED ROOF OR FLOOR DIAPHRAGM CONNECTIONS.

8. WHERE CONCRETE BLOCK WALLS INTERSECT CONCRETE FOUNDATION WALLS, PROVIDE #4 BARS @16" O.C. EXTENDING 24" EACH WAY.

9. VERTICAL REINFORCEMENT SHALL BE DEFORMED BILLET STEEL CONFORMING TO ASTM A615, GRADE 60. ALL SPLICES IN VERTICAL REINFORCEMENT SHALL BE LAPPED A MINIMUM OF 48 BAR DIAMETERS INTO THE BLOCK WALL AND SHALL BE GROUTED SOLID. SPLICED BARS SHALL BE SEPARATED BY ONE BAR DIAMETER OR WIRED TOGETHER.

10. PROVIDE TWO FULL HEIGHT BARS AT ALL WALL CORNERS, WALL ENDS, AND AT EACH JAMB OF ALL WALL

11. VERTICAL REINFORCEMENT SHALL BE SECURED IN PLACE IN LOCATION SHOWN ON DRAWINGS AND SHALL BE HELD IN POSITION AT TOP AND BOTTOM.

12. GROUT FOR VERTICAL REINFORCING AND BOND BEAMS SHALL BE PEA-GRAVEL CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH IN 28 DAYS OF 2000 PSI, MIX DESIGNS SHALL BE SUBMITTED AND APPROVED PRIOR TO GROUTING.

13. CELLS CONTAINING REINFORCEMENT SHALL BE SOLIDLY FILLED WITH GROUT. GROUT SHALL BE POURED IN LIFTS OF NOT MORE THAN 6'-0", THEN THE GROUT SHALL BE VIBRATED INTO PLACE AND SHALL BE STOPPED 1-1/2" BELOW THE TOP OF A COURSE TO FORM A KEY WITH THE NEXT COURSE ABOVE.

14. ALL CORNERS, BOND BEAMS AND CELLS BELOW FINISH GRADE SHALL BE GROUTED SOLID. VERTICAL CELLS OR CORES TO BE GROUTED SHALL MAINTAIN A CONTINUOUS UNOBSTRUCTED AREA NOT LESS 2 -1/2" X 3"

15. MORTAR FOR ALL EXTERIOR WALLS AND BEARING WALLS SHALL BE TYPE S

16. WHERE OTHER REINFORCING IS NOT REQUIRED BY THE DRAWINGS, PROVIDE ONE #5 BAR AT ALL SIDES OF, AND ADJACENT TO, EVERY OPENING WHICH EXCEEDS 24" IN EITHER DIRECTION. EXTEND VERTICAL BARS FULL HEIGHT OF WALL. EXTEND HORIZONTAL BARS 24" BEYOND EACH SIDE OF THE OPENING. WHERE POSSIBLE PROVIDE A U-BLOCK IMMEDIATELY BELOW AND ONE COURSE ABOVE THE OPENING AND GROUT THE

17. CONTINUE BOND BEAMS MINIMUM 2'-0" AROUND CORNERS. WHERE BOND BEAM STEPS, LAP BOND BEAM COURSES MINIMUM 2'-0".

18. ALL INTERIOR MASONRY PARTITIONS SHALL BE REINFORCED WITH #4 VERTICAL BARS AT 48" O.C. AND GROUTED FULL UNLESS DETAILED OTHERWISE.

19. MASONRY DESIGN IS BASED ON FULL ALLOWABLE DESIGN STRESSES

END OF SECTION

DIVISION 6 WOOD AND PLASTICS

SECTION 06100 ROUGH CARPENTRY

06100.1 GENERAL: 06100.11 RELATED DOCUMENTS:

A. Drawings, Specifications, Division 1 and Contract.

06100.12 DESCRIPTION OF WORK:

- A. Rough carpentry includes carpentry work not specified as part of other sections and which is generally not exposed, except as otherwise indicated. Types of work in this section include rough carpentry for:
- Wood framing/Glued Laminated Beams.
- 2. Wood grounds, nailers, blocking and sleepers. Wood Furring.
- Sheathing.
- Building Wrap

06100.13 REFERENCES: A. Comply with Product Standard 20 for lumber.

B. Comply with Product Standard 1 for plywood or with applicable APA Performance Standard for type of panel indicated.

C. Comply with Product Standard 56 for glued laminated timber.

06100.14 PRODUCT HANDLING: Keep materials dry at all times. Protect against exposure to weather and contact with damp or wet surfaces.

06100.15 JOB CONDITIONS:

Fit carpentry work to other work; scribe and cope as required for accurate fit. Correlate location of furring, nailers, blocking, grounds and similar supports to allow proper attachment of other work.

06100.2 PRODUCTS:

06100.21 MATERIALS:

- A. Nominal sizes are indicated, except as, shown by detail dimensions.
- Provide dressed lumber, S4S, unless otherwise indicated.
- Provide seasoned lumber with 19% maximum moisture content at time of dressing. B. Framing (2 X 4, 6 & 8 Interior): Construction grade Douglas Fir, Western Hemlock or Southern Pine.
- C. Structural Framing (4" & 6" Nominal Thickness): No. 1 Douglas Fir or No. 1 K.D. Southern Yellow Pine with minimum fb =
- D. Rafters, Ledgers, and Exterior 2 x 6 Walls: No. 2 Grade Douglas Fir or No. 2 Dense K.D. Southern Pine with minimum fb = 1250 p.s.i.
- E. Plywood Panels: APA performance rated panels complying with requirements indicated for grade designation, span rating, exposure durability classification. Identify each panel with appropriate APA trademark. Wall Sheathing:
- a. Exposure Durability Classification: Exterior.
- b. Span Rating: 24/0 (16/0 for curved members). 2. Roof Sheathing:
- a. Exposure Durability Classification: Exterior
- Span Rating: 32/16 F. Termite Shield at all Exterior Walls: 20 gauge sheet metal with a hot-dip zinc coating and mechanically broke to
- G. Fasteners and Anchors: Size, type material and finish as indicated. Provide metal hangers and framing anchors of the size and type recommended by the manufacturer. Provide hot-dip zinc coated fasteners in contact with stucco, used with floor plates, and exposed-to-weather location.
- H. In high humidity areas similar to Florida and Hawaii, hot-dip galvanize all metal hangers, anchors, and fasteners. I. Building Wrap: Tyvek "Stucco Wrap" by DuPont Company, Wilmington, Delaware.
- J. Glued Laminated Beams: Construct of any softwood lumber meeting or exceeding Fb=2400 p.s.i., Fv = 165 p.s.i., (tension face) = 650 p.s.i., (compression face = 650 p.s.i. and E =1,600,000 p.s.i. (U.B.C. 24 F-V4). Use waterproof adhesive and end sealer. Provide units manufactured by AITC-licensed firm; industrial grade AITC 110 with a camber of 1600-R.

06100.3 EXECUTION:

06100.31 INSTALLATION: A. General:

Set carpentry work accurately to required levels and lines, with members plumb and true and accurately cut and fitted. 2. Securely attach carpentry work to substrate by anchoring and fastening as shown. Countersink nail heads on exposed carpentry work and fill holes. Use common wire nails, except as otherwise indicated. Select fasteners of size that will

not penetrate members where opposite side will be exposed to view or will receive finish materials.

- B. Stud Framing: 1. Provide stud framing as shown. Provide single bottom plate and double-top plates 2" nominal thickness each by width of studs. Nail or anchor plates to supporting construction.
- Construct corners and intersections with 3 studs. Provide miscellaneous blocking and framing as shown and as required for support of facing materials, fixtures, specialty items and trim.
- a. Provide continuous horizontal blocking row at mid-height of walls, using 2" nominal thick members of same width as b. Wood curbs, blocking and nailers located above the roof sheathing.
- 3. Frame openings with headers, beams, columns or posts of multiple members of size and quantity as noted on drawings. Set headers and beams on edge and support as noted by not less than width of studs. Extend stud full of wall at each end of header and beam.
- a. Headers and posts to be nailed units of wood members. Use nails of sufficient length to penetrate all members. Nail from both sides with two rows of nails on each side and space nails 12" o.c. staggered over lengths.
- 1. Provide framing of sizes and spacing shown. Install with crown edge up and support ends of each member with joist hangers of 1 1/2" of bearing on wood or metal and/or 3" on masonry where applicable. Do not notch in middle third of joists; limit notches joists or locate closer than 2" from top or bottom.
- 1. Install roof sheathing with face grain across supports using panels continuous over 2 or more spans with end joints between panels staggered and located over center of supports as noted on shear wall schedule. Provide edge
- as noted. Use nails as noted on shear wall schedule. 2. Install wall sheathing vertically with long edges parallel to and centered over studs. Provide solid wood blocking wherever end joints do not bear against framing sills or plates. Stagger horizontal joints. Nail to each support around perimeter at edge, end supports, and at intermediate supports as noted on shear wall schedule. Use nails as noted
- shear wall schedule Allow 1/8" open space between edges and ends of adjacent panels for all sheathing.
- Install in compliance with AITC 108 "Standard for Heavy Timber Construction". 2. Do not cut beams in the field except for fastener drilling and other minor cutting. No holes are to be cut thru units in field.
- 1. Apply Tyvek "Stucco Wrap" over sheathing using Tyvek "Flexwrap" around windows and doors. Install per manufacturers specifications.
- G. Miscellaneous Installation: 1. Install telephone and electrical panel boards with plywood sheathing material where required. Oversize the panel by 12-

END OF SECTION

SECTION 06200 FINISH CARPENTRY

06200.1 GENERAL:

06200.11 RELATED DOCUMENTS: A. Drawings, Specifications, Division 1 and Contract.

06200.12 DESCRIPTION OF WORK:

- A. Finish carpentry includes carpentry work which is exposed to view, and is non-structural. Types of finish carpentry work in this section include:
- Exterior trim Plastic laminated cabinets, countertops and backsplashes.
- Wood shelving 4. Pre-finished paneling.

06200.13 QUALITY ASSURANCE:

A. Perform work in accordance with AWI Premium Quality Standards.

06200.14 PRODUCT DELIVERY, STORAGE AND HANDLING: A. Protect finish carpentry materials during transit, delivery, storage, and handling.

A. Do not install interior finish carpentry materials until the building is weather tight and wet work has been completed in B. Perform installation of all finish carpentry materials to coordinate with application of finishes without undo exposure.

06200.2 PRODUCTS:

06200.22 MATERIALS: A. Nominal sizes are indicated, except as shown by detailed dimensions. Provide dressed or worked and dressed lumber.

- Provide kiln-dried lumber having moisture content not greater than values required by the applicable grading rules. C. Exterior Trim: "C Select" (IWP-Choice) SS Douglas Fir or Southern Pine. D. Shelving Material:
- A-A interior grade Douglas Fir plywood with solid wood edge band (exposed edges).
- "Clear" S4S Douglas Fir or Southern Pine. E. Plastic Laminate Cabinets, Countertops and Backsplashes: Interior grade plywood or 45# particle board of minimum 3/4" thickness.
- .039" thick, General Purpose Type (high-pressure) plastic laminate with Glossometer rating lengthwise of 6+-2.
- 3. Fabricate countertops and backsplashes as single units. F. Provide nails, screws and other anchoring devices of the proper type, size, material and finish for application indicated
- to provide secure attachment, concealed where possible. G. Provide cabinet hardware as indicated on drawings.

06200.3 EXECUTION:

- **06200.31 INSTALLATION:** A. Discard units of material which are unsound, warped, bowed, twisted, or too small to fabricate work. B. Install the work plumb, level, true and straight with no distortion. Shim as required using concealed shims. Install to a
- tolerance of 1/8" in 8'-0" for plumb and level countertops C. Scribe and cut work to fit adjoining work, and refinish cut surfaces or repair damaged finish at cuts.
- D. Install trim with minimum number of joints possible, using full-length pieces. Stagger joints in adjacent and related members. Cope at returns, miter at corners and use scarf joints for end-to-end joints.
- E. Anchor finish carpentry work to blocking with countersunk, concealed fasteners and blind nailing as required for a complete installation. Use fine finishing nails for exposed nailings, countersunk and filled flush with finished surface. Install pre-finished paneling in accordance with manufacturer's instructions using the manufacturer's adhesive, clips and

suggested nailing. Install division, corner and edge moldings as supplied by paneling manufacturer for color and design

G. Anchor countertops securely to base units and other support systems using concealed screws. Seal joint between backsplashes and vertical/horizontal surfaces with continuous silicone rubber sealant.

06200.32 ADJUSTMENT, CLEANING, FINISHING AND PROTECTION: A. Repair or replace damaged and defective finish carpentry work whenever possible to eliminate defects functionally and

- B. Clean finish carpentry work on exposed and semi-exposed surfaces. Touch-up shop-applied finishes to restore damaged or solid areas.

END OF SECTION

DIVISION 7 THERMAL AND MOISTURE PROTECTION

SECTION 07100 WATERPROOFING

07100.1 GENERAL:

07100.11 RELATED DOCUMENTS: A. Drawings, Specifications Division 1 and Contract.

07100.12 DESCRIPTION OF WORK: A. Extent of waterproofing work is shown on drawings.

07100.13 ENVIRONMENTAL REQUIREMENTS:

- A. Concrete surfaces shall be water cured and in place a minimum of 14 days. B. Surface to receive coating, sealant or liquid applied flashing material shall be sound, dry, clean and free of all dirt, dust, oil, grease, wax, tar, asphalt, mildew, mold, paint, sealers, coating, curing agents, loose particles, laitance and other
- contaminants or foreign matter which may interfere with the adhesion C. Do not apply sealant or coatings to a frosty, damp or wet surface or when air temperature is below 40 degrees F or the

surface temperature is above 110 degrees F.

END OF SECTION

INTERIOR PARTITION ACOUSTICAL INSULATION

Part 1 General

1.01 SUMMARY

A. Provide glass fiber acoustical insulation for interior partitions as indicated in building plans.

1.02 MATERIALS PROVIDED IN OTHER SECTIONS

- These sections are typically cross referenced. Delete section(s) not included in project manual.
- A. Section 09250-Gypsum Board
- B. Section 09260-Gypsum Board Systems C. Section 09100-Metal Support Systems
- A. American Society for Testing and Materials (ASTM).
- Insulation for Light Frame Construction and Manufactured

1. C 665 Specification for Mineral Fiber Blanket Thermal

- 2. E 84 Test Method for Surface Burning Characteristics of Building Materials.
- Tube Furnace at 750°C. 4. C 518 Test Method for Steady-State Thermal Transmission

3. E 136 Test Method for Behavior of Materials in a Vertical

- Properties by Means of the Heat Flow Meter 5. C423 Test Method for Sound Absorption Coefficient by the Reverberation Room Method
- 1.04 SUBMITTALS A. Product Data: Submit Owens-Corning product literature, samples

1.05 DELIVERY, STORAGE AND HANDLING

and installation instructions for specified insulation.

- A. Protect insulation from physical damage and from becoming wet, soiled, or covered with ice or snow. Comply with manufacturer's recommendations for handling, storage and protection during installation.
- B. Label insulation packages to include material name, production date and/or product code. Delete paragraph below if section 01600 or 01620 are not included

C. Deliver and store materials under provision of Section (01600) (01620).

- A. Do not use unfaced insulation in exposed applications where there
- is potential for skin contact and irritation. B. Kraft and standard foil facings will burn and must not be left exposed. The facing must be installed in substantial contact with the unexposed surface of the ceiling, wall or floor finish. Protect facing

PART 2 PRODUCTS

2.01 Manufacturer A. Owens-Corning.

from any open flame or heat source.

2.02 Sound Attenuation Batts

- A. Type: Unfaced glass fiber acoustical insulation complying with ASTM C 665, Type I.
- B. Size: Thickness
- 3½" 89mm 16" 406mm 24" 609mm 96" 2438mm

D. Combustion Characteristics:

Passes ASTM E 136.

- C. Surface Burning Characteristics: . Maximum flame spread: 10
- 2. Maximum smoke developed: 10 When tested in accordance with ASTM E 84.

E. Fire Resistance Ratings: Passes ASTM E 119 as part of a complete fire tested

SECTION 07211 BATT AND BLANKET INSULATION

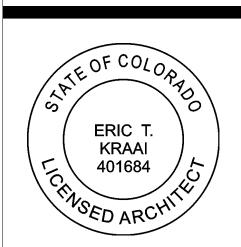
wall assembly.

- 07211.1 GENERAL: 07211.11 SECTION INCLUDES: A. Thermal insulation for exterior walls.
- 07211.23 EXTERIOR WALL INSULATION: A. "Thermal-Shield" kraft-faced ASTM C-665, Type II, Class C, 6 inch thick (R-19) for 2x6 walls and 3-1/2 inches thick (R-13)

for 2x4 walls, fiberglass with stapling flanges, Perm Rating of 1.0; HH-I-521F. R-Value designations in accordance with ASTM C518. R-30 between CMU walls.

END OF SECTION

417 MONUMENT ROAD, SUITE 7 GRAND JUNCTION, CO 81507 T: 970.712.5045



0

1240 GUNNISON A GRAND JUNCTION

REVISION:

CONSTRUCTION

DOCUMENTS

SPECIFICATIONS

PROJECT NO:

SHEET NO:

DATE:

SHEET NAME:

09/23/2020

SCALE: 1/4'' = 1'-0'' 1.2 SUMMARY

A. Section includes:

1. Preformed metal roof panels.

1.3 ADMINISTRATIVE REQUIREMENTS

A. Pre-installation Conference: Conduct conference at project site. B. Coordination: 1. Coordinate sizes and locations of roof curbs, equipment supports, and roof penetrations with actual equipment

2. Coordinate metal panel installation with rain drainage work, flashing, trim, construction of soffits, and other adjoining work to provide a leak proof, secure, and noncorrosive installation.

1.4 SUBMITTALS A. Product Data:

1. Include construction details, material descriptions, dimensions of individual components and profiles and finishes for each type of panel and accessory.

B. Shop Drawings:

1. Include fabrication and installation layouts of metal panels; details of edge conditions, joints, panel profiles, corners, anchorages, attachment system, trim, flashings, closures, accessories and special details. 2. Accessories: Include details of the flashing, trim, and anchorage systems, at a scale of not less than 1-1/2 inches per 12 inches.

C. Samples:

1. Metal Panels: 12 inches long by actual panel width. Include fasteners, closures, and other metal panel accessories.

D. Qualification Data: For Installer.

E. Product Test Reports: For each product, for tests performed by a qualified testing agency. F. Filed quality – control G. Sample Warranties: For special warranties.

1.5 QUALITY ASSURANCE

Installer Qualifications: An entity that employs installers and supervisors who have a minimum of 3 years' experience in the installation of metal roof / wall panels.

B. Mockups: Build mockup; to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for fabrication and installation.

1.6 DELIVERY, STORAGE AND HANDLING

A. Deliver components, metal panels and other manufactured items so as not to be damaged or deformed. Package metal panels for protection during transportation and handling.

B. Store metal panels in a manner to prevent bending, warping, twisting and surface damage.

C. Stack metal panels horizontally on platforms or pallets, covered with suitable weather tight and ventilated covering. Store metal panels to ensure dryness with positive slope for drainage of water. Do not store metal panels in contact with other materials that might cause staining, denting or other surface damage.

D. Retain strippable protective covering on metal panels during installation.

1.7 FIELD CONDITIONS

A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit assembly of metal panels to be performed according to manufacturers' written instructions and warranty requirements.

1.8 WARRANTY

A. MANUFACTURER'S PRODUCT WARRANTY

1. Manufacturer's standard coating performance warranty, as available for specified installation and environmental conditions. (Contact a WSMR Representative to determine actual warranty criteria)

B. CONTRACTORS WARRANTY

1. Warrant panels, flashings, sealants, fasteners, and accessories against defective materials and/ or workmanship, to remain watertight and weatherproof with normal usage for two (2) years following Project Substantial Completion date.

PART 2 – PRODUCTS

2.1 MANUFACTURER

A. Western States Decking, Inc., DBA - Western States Metal Roofing, 901 W. Watkins St., Phoenix, AZ 85007; Ph. (877) 787-5467, Fax: (602) 261-7726.

Email: HYPERLINK "mailto:sales@metalforroofing.com"sales@metalforroofing.com Website: HYPERLINK "http://www.metalforroofing.com"www.metalforroofing.com

B. Substitutions: In accordance with contract documents.

2.2 METAL ROOF PANELS

A. Western Lock ®; Concealed Fastener Metal Roof Panels: Metal roof panels

consisting of formed metal sheet with vertical ribs at panel edges, installed by lapping and interlocking edges of adjacent panels, and attaching panels to supports / substrate using concealed clips and fasteners.

1. Panel Designation: Western Lock ®

2. Metallic- Coated Steel Sheet: Aluminum- zinc alloy- coated steel sheet minimum (Zincalume® or Galvalume®) complying with ASTM A 792/ A 792M, Class AZ50 coating designation; structural

a. Nominal Thickness: [22 Gauge] b. Exterior Finish Available In: Cool Tech ® 500 PVDF Paint System i. Charcoal Gray

3. Grade of Steel:

a. 22 Gauge – Grade 50

4. Clips: One- piece fixed to accommodate thermal movement.

5. Panel Width: 16 inches. 6. Panel Height: 1.75 inches.

2.3 ACCESSORIES

A. Self-Adhering, High- Temperature Underlayment: Provide self-adhering, cold applied, sheet underlayment, a minimum of 30 mils thick, specifically designed to withstand high metal temperatures beneath metal roofing. Provide primer when recommended by underlayment manufacturer.

1. Thermal Stability: Stable after testing at 220 deg F; ASTM D 1970.

2. Low-Temperature Flexibility: Passes after testing at minus 20 deg F; ASTM D 1970.

B. Miscellaneous Metal Sub framing and Furring: ASTM C 645; cold formed, metallic- coated steel sheet, ASTM A 653/ A 653M, G90 coating designation or ASTM A 792/A 792M, Class AZ55 aluminum- zinc alloy coating designation unless otherwise indicated. Provide manufacture's standard sections as required for support and alignment of metal panel system.

C. Panel accessories; Provide components required for a complete, weather tight panel system including trim, clips, flashings, sealants, gaskets, fillers, closure strips, and similar items. Match material and finish of metal panels unless otherwise indicated.

. Closures: Provide closures at eaves and ridges, fabricated of same metal as metal panels. 2. Backing Plates; Provide metal backing plates at panel end splices, fabricated from material recommended by

3. Closure Strips: Closed-cell, expanded, cellular, rubber or cross linked, polyolefin-foam or closed-cell laminated polyethylene; minimum I -inch-thick, flexible closure strips; cut or

pre-molded to match metal panel profile. Provide closure strips where indicated or necessary to ensure weather tight construction.

D. Flashing and Trim: Provide flashing and trim formed from same material as metal panels as required to seal against weather and to provide finished appearance. Finish flashing and trim with same finish systems adjacent metal panels.

E. Panel Fasteners: Self-tapping screws designed to withstand design loads. Provide EPDM or PVC sealing washers for exposed fasteners.

F. Panel Sealants: Provide sealant type recommended by manufacturers that are compatible with panel materials, are nonstaining and do not damage panel finish.

G. Metal Protection: When dissimilar metals contact each other or corrosive substrates, protect against galvanic.

2.4 FABRICATION

A. General: Fabricate and finish metal panels and accessories at the factory, by manufacturer's standard procedures and processes, as necessary to fulfill indicated performance requirements demonstrated by laboratory testing. Comply with indicated profiles and with dimensional and structural requirements.

B. Provide panel profile, including major ribs and intermediate stiffening ribs, if any, for full length of panel.

C. Sheet Metal Flashing and Trim: Fabricate flashing and trim to comply with manufacturer's recommendations and recommendation in SMACNA's "Architectural Sheet Metal Manual" that apply to design, dimensions, metal, and other characteristics of item indicated.

2.5 FINISHES

A. Protect mechanical and painted finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

B. Steel Panels Finish:

1. Exterior Finish: Western States Metal Roofing, Cool Tech ® 500 PVDF Paint System, Fluoropolymer Two – Coat System: 0.2 – 0.3 mil primer with 0.7 – 0.8 mil 70 percent PVDF fluoropolymer color coat, AAMA 621, meeting solar

0.4 mil wash coat with a minimum total dry film thickness of 0.5 – 0.7 mil.

PART 3- EXECUTION

3.1 EXAMINATION

A. Examine substrates, area, and conditions, with installer present, for compliance with requirements for

1. Examine wall framing to verify that girths, angles, channels, study, and other structural panel support members and anchorage have been installed within alignment tolerance required by metal wall panel manufacturer.

2. Examine solid roof sheathing to verify that sheathing joints are supported by framing or blocking and that installation is within flatness tolerances required by metal roof panel manufacturer.

a. Verify that air or water-resistive barriers have been installed over sheathing or backing substrate to prevent air

B. Examine roughing-in for components and systems penetrating metal panels to verify actual locations of penetrations relative to seam locations of metal panels before installation.

3.2 PREPARATION

A. Miscellaneous Supports; Install sub framing, furring and other miscellaneous panel support members and anchorage according to ASTM C 754 and metal panel manufacturer's written recommendations.

A. Self- Adhering Sheet Underlayment: Apply primer if required by manufacturer. Comply with temperature restrictions of underlayment manufacturer for installation. Apply at locations indicated on Drawings, wrinkle free, in shingle fashion to shed water, and with end laps of not less than 6 inches staggered 24 inches between courses. Overlap side edges not less than 3-

B. Felt Underlayment: Apply at locations indicated [below] [on drawings], in shingle fashion to shed water. And with lapped joints of not less than 2 inches.

1. Apply over the entire roof surface.

2. Apply on roof not covered by self- adhering sheet underlayment. Lap over edges of self- adhering sheet underlayment not less than 3 inches, in shingle fashion to shed water.

C. Slip Sheet: Apply slip sheet over underlayment before installing metal roof panels.

D. Flashings: Install flashings to cover underlayment to comply with requirements specified in Section 076200 "Sheet Metal Flashing and Trim."

3.4 METAL PANEL INSTALLATION

securely in place, with provisions for thermal and structural movement.

2. Flash and seal metal panels at perimeter of all openings. Fasten with self-tapping screws, do not begin installation until air or water- resistive barriers and flashings that are concealed by metal panels are installed.

4. Locate and space fastenings in uniform vertical and horizontal alignment.

Install flashing and trim as metal panel work proceeds. 6. Locate panel splices over, but not attached to, structural supports. Stagger panel splices and end laps to avoid a

Fasten flashings and trim around openings and similar elements with self-tapping screws.

D. Lap-Seam Metal Panels: Fasten metal panels to supports with fasteners at each lapped joint at location and spacing recommended by manufacturer.

1. Lap ribbed or fluted sheets one full rib. Apply panels and associated items true to line for neat and weather tight

3. Locate and space exposed fasteners in uniform vertical and horizontal alignment. Use proper tools to obtain controlled uniform compression for positive seal without rupture of washer.

4. Install screw fasteners with power tools having controlled torque adjusted to compress Washer tightly without damage to washer, screw threads or panels. Install screws in predrilled holes. 5. Flash and seal pans with weather closures at perimeter of all openings.

E. Accessory Installation: install accessories with positive anchorage to building and weather tight Mounting, and provide for thermal expansion. Coordinate installation with flashings and other components.

F.Flashing and Trim: Comply with performance requirements manufacturer's written installation instructions, and SMACNA's "Architectural Sheet Metal Manual." Provide concealed fasteners where possible, and set units true to line and level. Install

1. Install exposed flashing and trim that is without buckling and tool marks, and that is true to line and levels indicated, with exposed edges folded back to form hems. Install sheet metal flashing and trim to fit substrates and achieve waterproof performance.

2. Expansion Provisions: Provide for thermal expansion of exposed flashing and trim. Space movement joint at a maximum of 10 feet with no joints allowed within 24 inches of corner or intersection. Where lapped expansion provisions cannot be used or would not be sufficiently waterproof, form expansion joints of intermeshing hooked flanges, not less

1 inch deep, filled with mastic sealant (concealed within joints).

A. Installation Tolerances: Shim and align metal panel units within installed tolerance of ¼ inch in profiles

3.6 CLEANING AND PROTECTION

A. Remove temporary protective coverings and strippable films, if any, as metal panels are installed, unless otherwise indicated in manufacturer's written installation instructions, on completion of metal panel installation, clean finished surfaces as recommended by metal panel manufacturer, Maintain in a clean condition during construction.

SECTION 07457 - CEMENTITIOUS PANELS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Cementitious board and batten, and trim

B. Product Data: Manufacturer's data sheets on each product to be used, including: 1. Installation instructions and recommendations 2. Storage and handling requirements and recommendations 3. Manufacturer's best practice guide.

4. Technical data sheet. 5. Standard CAD drawings

C. Shop Drawings: Provide detailed drawings of atypical non-standard applications of cladding junctions and penetrations which are

D. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.

E. Verification Samples: For each finish product specified, two samples, minimum size 4 by 6 inches (100 by 150 mm), representing actual product, color, and patterns.

1.4 DELIVERY, STORAGE, AND HANDLING

B. Store siding flat on a smooth level surface. Protect edges and corners from chipping. Store sheets under cover and keep dry prior to

C. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

1.5 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

1.6 WARRANTY

A. Manufacturer's Warranty: Provide Hardie Panel Limited Product Warranty, with 30-year limited product warranty against manufacturing defects.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturer: James Hardie Building Products, Inc., which is located at: 231 South LaSalle Street Unit 2000, Chicago, IL 60606. ASD. Toll Free Tel: 866-274-3464; Tel: 312-705-6000; Email: HYPERLINK "http://admin.arcat.com/users.pl? action=UserEmail&company=James%20Hardie%20Building%20Products,%20Inc.&coid=33418&rep=&fax=&message=RE:%20Spec% 20Question%20(07458jhi):%20%20&mf="request info (info@jameshardie.com); Web: http://www.jameshardiepros.com/Products/Hardie-

B. Substitutions: As approved by Architect.

2.2 CLADDING

Cement Cladding Panels: Hardie Smooth Vertical Siding Panel as manufactured by James Hardie Building Products, Inc. 48" wide by 7 feet 11.5 inches (2426 mm) long. Product shall be engineered for climate conditions.

1. Manufacturer's Climate Zone Product: For freezing wet climates with a green tint primer. B. 3/4" Hardie Trim Batten Strips @ 16" O.C.

A. Weather Barrier: James Hardie Hardie Wrap and Hardie Wrap Flashing and Seam Tapes. B. Code Compliance Requirement for Weather Barrier: 1. Thickness, 11 mil sheet. 2. Breathability in accordance with ASTM E96.

4. Water resistance in accordance with AATCC127. 5. Air Penetration in accordance with TAPPI – T460.

2.4 FURRING (STRAPPING)

A. Rainscreen Cavity: Install Hardie Reveal Panels on a drained and vented rainscreen cavity, with a minimum 3/4 inch (19mm) air cavity. Selection of cavity vent materials shall be incorporated into the design to prevent insect and pest entry.

2.5 ACCESSORIES

A. Trims: Reveal™ Trims manufactured by Custom Aluminum of Elgin, IL in the following profiles supplied by James Hardie. Aluminum alloy 6063-T5 with a minimum thickness of 0.050 inch. All reveal trims are 8 feet in length.

1. Recess horizontal trim. Recess vertical trim. 3. Recess horizontal edge trim 4. Recess vertical F-trim. Recess outside corner trim.

Recess drainage flashing.

B. Finishes of Reveal Trims: 1. Primed for field painting; coating tested to ASTM D3363, ASTM D3359, D2794, D4585, D523, and D1308.

A. Fasteners: For attaching Hardie Reveal Panel direct to sheathing to a rain screen provide the following: 1. Wood Framing, Exposed Screws: No. 10 by 0.472 inch head diameter by 1.5 inch long.

2.7 FINISHES

A. Factory Primer: Provide factory applied universal primer. 1. Primer: Factory applied sealer/primer by James Hardie. Apply flat sheen finishes to panels. 2. Topcoat: Refer to Section 09900 and Exterior Paint Schedule.

B. Factory Finish for Trim: 1. Trim for Factory-Applied Coating and Field-Applied Finish: Chem Film.

PART 3 EXECUTION 3.1 EXAMINATION

A. Do not begin installation until substrates have been properly prepared.

B. If framing preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

Clean surfaces thoroughly prior to installation.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

C. Ensure that drainage plane in intact and all penetrations are sealed.

3.3 INSTALLATION

A. Wood Framing: Nominal 2 inch by 4 inch (51 m by 102 mm) wood framing selected for minimal shrinkage and complying with local building codes, including the use of water-resistive barriers or vapor barriers where required. Minimum 1-1/2 inches (38 mm) face and straight, true, of uniform dimensions and properly aligned. 1. Install water-resistive barriers and claddings to dry surfaces.

B. Furring: Install furring on a minimum 3/4 inch (19mm) rainscreen cavity, or in accordance with local building code for

2. Repair any punctures or tears in the water-resistive barrier prior to the installation of the siding. 3. Protect siding from other trades.

C. Installation: Install materials in strict accordance with manufacturer's installation instructions.

4. Install a kickout flashing to deflect water away from the siding at the roof intersection.

manufacturer's installation instructions and as determined by James Hardie Zone.

7. Maintain clearance between siding and adjacent finished grade.

A. Protect installed products until completion of project.

1. Place fasteners no closer than 3/4 inch (9.5 mm) from panel edges and 2 inches (51 mm) from panel corners. 2. Use fasteners as specified in the James Hardie Tech Data sheet and in the Hardie Reveal Panel Installation Instruction. 3. Install panel using 1/2 inch (13 mm) spacers at horizontal joints. Leave bottom edge of panel above all horizontal trims exposed,

no caulking shall be placed at this overlap of Horizontal Reveal Trim. Factory primed edge shall always be used.

5. Install a self-adhering membrane on the wall before the subfascia and trim boards are nailed in place, and then install the 6. Allow minimum vertical clearance between the bottom edge of siding and any other material in strict accordance with the

8. Specific framing and fastener requirements - refer to the applicable building code compliance reports.

END OF SECTION

instructions.

rainscreen requirements.

A. Finish factory primed siding with a minimum of one coat of high quality 100 percent acrylic exterior flat grade paint with flat finish within 180 days of installation. Follow paint manufacturer's written product recommendation and written application

B. Field cut edges shall be coated during the installation process using an exterior grade primer/sealer that is compatible with the

type of paint to used on project. 3.5 PROTECTION

B. Touch-up, repair or replace damaged products before Substantial Completion

417 MONUMENT ROAD, SUITE 7 GRAND JUNCTION, CO 81507

> ERIC T 401684

T: 970.712.5045

8150

0

1240 GUNNISON A GRAND JUNCTION

CONSTRUCTION

DOCUMENTS

PROJECT NO:

DATE:

09/23/2020

END OF SECTION

reflectance index requirements. 2. Interior Finish: Standard Poly backer finish consisting of 0.2 – 0.3 mil primer coat and 0.3 –

installation tolerances, metal panel supports, and other conditions affecting performance of the work.

infiltration or water penetration.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.3 UNDERLAYMENT INSTALLATION

A. General: Install metal panels according to manufacturer's written instructions in orientation, sizes, and locations indicated. Install panels perpendicular to supports unless otherwise indicated. Anchor metal panels and other components of the work

3. Install screw fasteners in predrilled holes.

four – panel lap splice condition. 7. Align bottoms of metal panels and fasten with blind rivets, bolts, or self- tapping screws.

1. Steel Panels: Use galvanized steel fasteners. C. Metal Protection: When dissimilar metals contact each other or corrosive substrates, protect against galvanic action.

2. Provide metal backed washers under heads of exposed fasteners bearing on weather side of metal panels.

work with laps, joints and seams that are permanently watertight.

3.5 ERECTION TOLERANCES

20 feet on slope and location lines and within 1/8- inch offset of adjoining faces and of alignment of matching

B. Replace metal panels that have been damaged.

½ inches. Roll laps with roller. Cover underlayment within 14 days.

1. Shim or otherwise plumb substrates receiving metal panels.

1. Install components, required for a complete metal panel system including trim, copings, corners, seam covers, flashings, sealants, gaskets, fillers, closure strips and similar items. Provide types indicated by metal wall panel manufacturer; or, if not indicated, provide types recommended by metal panel manufacturer.

8. Provide weather tight escutcheons for pipe—and conduit- penetrating panels. B. Fasteners:

1.2 RELATED SECTIONS

A. Section 06100 – Rough Carpentry: Wood framing and bracing.

B. Section 06100 – Rough Carpentry: Sheathing. 1.3 SUBMITTALS

A. Submit under provisions of Section 01300.

outside the scope of the standard details and specifications provided by the manufacturer.

A. Store products in manufacturer's unopened packaging until ready for installation.

1. Application Warranty: Application limited warranty for 2 years.

C. Requests for approval of equal substitutions will be considered in accordance with provisions of Section 01600.

C. 9.25" Hardie Trim- Smooth. 2.3 WEATHER BARRIER

3. Tear strength in accordance with ASTM D1117.

6. HardieWrap Weather Barrier ICC-ES Evaluation Report ESR-2258

REVISION:

SHEET NAME: **SPECIFICATIONS**

SHEET NO:

SCALE: 1/4'' = 1'-0''

07600.11 RELATED DOCUMENTS:

A. Drawings, Specifications Division 1 and Contract.

07600.12 DESCRIPTION OF WORK:

A. The extent of roof accessories and sheet metal work is indicated on the drawings and by provisions of this section with the

following work specified herein but not limited to this list:

1. Flashing and counter flashing.

Wall cap. 3. Exhaust fan curbs.

4. Fascia cap.

Scupper. 6. Roof hatch.

7. Vent flashing. 8. Gas line.

9. Condensate line. Refrigeration line.

Roof drains.

12. HVAC curbs.

07600.13 JOB CONDITIONS:

07600.2 PRODUCTS:

Coordinate work with interfacing and adjoining work for proper sequencing of each installation.

07600.21 SHEET METAL MATERIALS:

A. Zinc-Coated Steel: Commercial quality with 0.20% copper, hot-dip galvanized; 0.0359" thick (20 gauge) except as otherwise indicated. Provide equivalent gauge copper or stainless steel 304 Grade or higher in high humidity areas similar to Florida and

B. Mastic Sealant: Polyisobutylene; Non hardening, non-skinning, nondrying, non migrating sealant. C. Roof Hatch: Bilco Type "S" or approved equivalent; size as indicated on drawings.

D. Provide sheet metal clips, straps, anchoring devices and similar accessory units as required for installation of work, matching or compatible with material being installed.

A. Shop-fabricate work to greatest extent possible. Comply with details shown, and with applicable requirements of Sheet Metal and Air Conditioning Contractors National Association "Architectural Sheet Metal Manual". Fabricate for waterproof and weatherresistant performance; with expansion provisions for running work. Form work to fit substrates. Form exposed sheet metal work without excessive oil-canning, buckling and tool marks, true to line and levels as indicated, with exposed edges folded back to form hems.

B. Fabricate non-moving seams in sheet metal with flat -lock seams. Tin edges to be seamed, form seams and solder. C. Non-Expansion Type Joints: Provide for proper installation of elastomeric sealant.

D. Provide for separation of metal from non compatible metal or corrosive substrates by coating concealed surfaces to location of contact, with bituminous coating or other permanent separation.

E. Wall Cap: Snap in place system with concealed clips at a maximum of 24" O.C. 1. Provide a minimum 12" long joint plate at all splices.

2. Corners and Ends: Shop fabricated having a minimum leg.

F.Back paint concealed metal surfaces with protective backing paint to a minimum dry film thickness of 15 mils.

07600.3 EXECUTION:

07600.31 INSTALLATION REQUIREMENTS:

A. Comply with manufacturer's installation instruction and recommendations, and with Sheet Metal and Air Condition Contractors National Association "Architectural Sheet Metal Manual". Anchor units of work securely in place, providing for thermal expansion of metal units; conceal fasteners where possible, and set units true to line and level. Install work with laps, joints and seams which will be permanently watertight and weatherproof.

B. Set cap flashings in a thick bead of mastic sealant at all splice plates. C. Install roof hatch in accordance with manufacturer's instructions.

07600.32 CLEANING AND PROTECTION:

A. Clean exposed metal surfaces, removing substances which might cause corrosion of metal or deterioration of finishes.

END OF SECTION

SECTION 07720 TYPE "S" ROOF SCUTTLE

07720.1 GENERAL:

07720.11 SUMMARY: A. Work included: Furnishing and installing factory fabricated roof scuttles.

B. Related Work: Section 07600 "Sheet Metal and Roof Accessories"

07720.12 REFERENCES:

A. ASTM A 36-93a: Standard Specification for Structural Steel

07720.13 SUBMITTALS:

A. Product Data: Provide manufacturer's product data for all materials in this specification.

B. Shop Drawings: Show profiles, accessories, location, and dimensions. Samples: Manufacturer to provide upon request; sized to represent material adequately.

D. Contract Close-out: Roof scuttle manufacturer shall provide the manufacturer's Warranty prior to the contract closeout.

07720.14 PRODUCT HANDLING:

A. All materials shall be delivered in manufacturer's original packaging.

B. Store materials in a dry, protected, well-vented area. The contractor shall thoroughly inspect product upon receipt and report damaged material immediately to delivery carrier and note such damage on the carrier's freight bill of lading. C. Remove protective wrapping immediately after installation.

07720.15 SUBSTITUTIONS: Proposals for substitution products shall be accepted only from bidding contractors and not less than (10) working days before bid due date. Contractor guarantees that proposed substitution shall meet the performance and quality standards of this specification.

07720.16 JOB CONDITIONS: A. Verify that other trades with related work are complete before installing roof scuttle(s).

B. Mounting surfaces shall be straight and secure; substrates shall be of proper width. C. Refer to the construction documents, shop drawings, and manufacturer's installation instructions.

D. Coordinate installation with roof membrane and roof insulation manufacturer's instructions before starting.

E. Observe all appropriate OSHA safety guidelines for this work. 07720.17 WARRANTY/GUARANTEE:

Manufacturer's standard warranty: Materials shall be free of defects in material and workmanship for a period of five years from the date of purchase. Should a part fail to function in normal use within this period, manufacturer shall furnish a new part at no charge. Electric motors, special finishes, and other special equipment shall be warranted separately by the manufacturers of those products.

07720.2 PRODUCTS: 07720.21 MANUFACTURER:

> A. The BILCO Company P.O. Box 1203 New Haven, CT 06505

Phone: (203)-934-6363 Fax: (203)-933-8478 Web: www.bilco.com www.bilco.com

END OF SECTION

SECTION 07920 SEALANTS AND CAULKING

07920.1 GENERAL:

07920.11 SECTION INCLUDES:

A. Exterior sealing; waterproofing and visual requirements.

B. Interior sealing; painting requirements. Interior mildew-resistant sealant.

D. Fire-resistant joint sealant. Preparing sealant substrate surfaces.

F.Sealant and backing.

07920.12 INTENT:

A. Requirements of this Section control the kinds and quality of sealing work of the Technical Sections of these

Specifications unless specifically directed otherwise in other Sections and/or on the Drawings. B. Provide sealant required to close joints that would allow moisture or air to enter structure between fixed materials as

shown on the drawings and as herein specified including but not limited to:

Sealing of interior perimeter joints of window framing, door frames, and other openings in walls.

Setting of thresholds in sealant.

Sealing of joints between countertops and wall surfaces for a sanitary joint. 4. Sealing of joints of every nature and description that would allow moisture or air penetration.

Sealing of joints indicated to be caulked or sealed whether specifically mentioned herein or not. 6. Sealing around all pipe, duct and vent penetrations.

F. Primer: Non-staining type, recommended by sealant manufacturer, to suit application. Joint Cleaner: Non-corrosive and non-staining; recommended by sealant manufacturer;

compatible with joint forming materials.

H. Joint Backing:

1. Closed cell non-gassing polyethylene foam rod, over-sized 30 to 50 percent for joint

size, compatible with sealant, sized and shaped to provide proper compression upon

insertion in accordance with manufacturer's recommendations. 2. Acceptable Products:

a. "Sonolastic Soft Backer-Rod" by Sonneborn

b. "SofRod" by Namaco I. Bond Breaker: Pressure sensitive tape recommended by sealant manufacturer to suit

application. J. Masking Tape: FS UU-T-106.

07920.39 CLEANING AND REPAIRING:

A. Remove masking tapes and clean adjacent soiled surfaces. Repair or replace defaced or

disfigured finishes caused by work of this Section. B. Remove excess sealant from adjacent surfaces immediately after contact with xylene or

they are without deterioration or damage at time of Final Completion.

A. Upon completion of work of this Section, remove related debris from premises.

07920.391 PROTECTION:

A. Protect joint sealants during and after curing period from contact with contaminating substances or from damage resulting from construction operations or other causes so that

END OF SECTION DIVISION 8 DOORS AND WINDOWS

SECTION 08100 STEEL DOORS AND FRAMES

08100.11 RELATED DOCUMENTS:

A. Drawings, Specifications Division 1 and Contract.

See drawings for extent of doors and frames furnished by owner and installed by contractor

08100.12 DESCRIPTION OF WORK: Extent of standard steel doors and frames is shown and scheduled on drawings.

08100.13 QUALITY ASSURANCE:

Provide doors and frames complying with Steel Door Institute "Recommended Specifications: Standard Steel Doors and Frames". 08100.14 DELIVERY, STORAGE, AND HANDLING:

A. Deliver hollow metal work cartoned or crated to provide protection during transit and job storage. B. Store doors and frames at building site under cover in vertical position. Place units on wood sills and provide spaces

between each unit.

08100.2 PRODUCT:

08100.21 MATERIALS:

A. Provide standard steel doors and frames by one of the following:

1. Amweld Building Products Division

2. Ceco Corporation 3. SteelCraft Manufacturing Company

B. Hot-Rolled Steel Sheets and Strip: Commercial quality carbon steel, pickled and oiled. Cold-Rolled Steel Sheets: Commercial quality carbon steel.

Galvanized Steel Sheets: Zinc-coated carbon steel sheets of commercial quality.

Fabricate supports and anchors of not less than 18 gauge galvanized sheet steel. Inserts, Bolts, and Fasteners: Manufacturer's standard units except hot-dip galvanize items built into exterior walls.

Provide hot-dip galvanized units at all conditions in high humidity areas similar to Florida and Hawaii. G. Shop Applied Primer: Rust inhibitive enamel or paint suitable as a base for specified finish paints. **08100.22 FABRICATION:**

A. General: 1. Fabricate steel door and frame units rigid, neat in appearance and free from defects, warp or buckle.

2. Fabricate exposed faces of doors and panels from only cold-rolled steel.

3. Fabricate frames, concealed stiffeners, reinforcement, and edge channels, from either cold-rolled or hot-rolled steel (at fabricator's option).

4. Fabricate exterior doors, panels, and frames from galvanized sheet steel. Close top and bottom edges of doors with flush channel as integral part of door construction

5. Fabricate all doors, panels, frames, components, fasteners, and related items from hot-dip galvanized steel in high humidity areas similar to Florida and Hawaii. 6. Unless otherwise indicated, provide countersunk flat Phillips heads for exposed screws and bolts.

B. Finish Hardware Preparation: 1. Prepare doors and frames to receive mortised and concealed finish hardware in accordance with finish hardware manufacturer's recommendations.

2. Reinforce doors and frames to receive surface-applied hardware. Drilling and tapping for surface-applied finish hardware may be performed at project site. 3. Locate finish hardware in accordance with "Recommended Locations for Builder's Hardware", published by Door

and Hardware Institute and local codes. C. Shop Painting: 1. Clean, treat and paint exposed surfaces of steel door and frame units, including galvanized surfaces.

A. Provide metal doors equal to Ceco Regent for full flush type design with 16 gauge skins and stiffened with onepiece resin impregnated full honeycomb core. Provide flush top and bottom channels. Fill door with thermal insulation equivalent to R19.

08100.24 STANDARD STEEL FRAMES:

08100.23 STANDARD STEEL DOORS:

A. Provide 16 gauge metal frames for doors and other openings, of sizes shown on drawings with concealed fastenings, unless otherwise

1. Fabricate frames with mitered corners, welded construction for exterior applications and interior applications. Ship welded frames to site with removable steel spreader at bottom. Do not remove spreader until completion of wall construction.

B. Provide two (2) silencers on strike jambs of single-swing frames.

C. Interior frames- provide "C" Series, 1.2 mm (18 gage) thick, other areas, non standard jamb depths by Timely Industries, A Division of SDS Industries, Inc., 10241 Norris Avenue, Pacoima, CA, 91331-2292; Phone toll free: 800-247-6242; Fax: 818-492-3530. Web site: www.timelyframes.com.,

08100.32 Installation

Finish to be: SC103 Black.

A. Install frames in accordance with manufacturer's requirements. B. Anchor frames with screws located at every casing clip or every 11" as shown on manufacturer's instructions.

Field verify quantity and location of fasteners prior to installing casing. C. Install Pre-finished frames near end of the project after wall painting and wall coverings are applied.

D. Install frames using qualified installers familiar with installation of pre-finished drywall frames.

 E. Coordinate installation of glass and glazing in glazed units. F. Touch-up blemishes on finished frames with factory prepared touch up paint.

08100.3 EXECUTION:

Examine substrate and conditions where steel doors and frames are installed and notify architect of any conditions detrimental to proper and timely completion of work.

08100.32 INSTALLATION:

B. Placing Frames:

A. Install standard steel doors, frames, and accessories in accordance with manufacturer's data, and as herein

. Comply with provision of "Recommended Erection instructions for Steel Frames", unless otherwise indicated. 2. Place frames prior to construction of enclosing walls and ceilings. Set frames accurately in position, plumbed, aligned, and braced securely until permanent anchors are set.

a. Locate three (3) concealed wall anchors of proper design for wall condition per jamb, one each at hinge and strike levels. Provide angle floor clip for each jamb with floor fastener to suit floor construction. C. Door Installation:

1. Fit hollow metal doors accurately in frames, within clearances specified in "Recommended Specifications Standard Steel Doors and Frames". D. Adjust and Clean:

1. After erection, sand smooth all rusted or damaged areas of prime coat and apply touchup of compatible air-2. Check and readjust operating finish hardware items, leaving steel doors and frames in proper operating

END OF SECTION

SECTION 08210 WOOD DOORS

A. Section Includes: Wood doors as shown on the drawings and in schedules as follows

Solid core flush wood doors 2. 20-Minute rated wood doors

1.2 REFERENCE STANDARDS A. Architectural Woodwork Institute (AWI)

B. Quality Standards Illustrated, 7th Edition C. National Wood Window and Door Association (NWWDA) I.S. 1-A

D. National Fire Protection Association (NFPA) NFPA 80 - Standard for Fire Doors and Windows E. American National Standard Institute ANSI A115. W Series. Wood Door Hardware Standards

1.3 SUBMITTALS A. Product Data: Submit product literature of the door, describing the type of construction of the component parts.

1. Submit shop drawings indicating the locations, types, sizes, thickness, grade, undercuts, cutouts label requirements and the pre-machining of hardware location of each opening.

2. Indicate on door elevations the location and size of cutouts for lites and louvers.

A. Manufacturer: Obtain flush doors and stile and rail doors each from a single manufacturer to assure uniformity of

appearance and construction. 3. Non-Fire Rated Flush Wood Doors: Factory mark each door certifying compliance with

C. Fire-Rated Wood Flush Doors: 1. Where fire-rated door assemblies are indicated or required, provide doors which comply with the requirements of

NFPA No. 80 and which have been tested, listed and labeled in accordance with ASTM E152. 2. Provide UL label on each door and panel.

1.5 DELIVERY, STORAGE AND HANDLING A. Protect wood doors during transit, storage and handling to prevent damage, soiling and deterioration. Deliver to jobsite with a protective wrap clearly marked and viewed with the manufacturer's name, brand name and identifying number. Comply with recommendations of NWWDA I.S. 1-A, G-20, and with manufacturer's instructions. Storage area

A. Submit written lifetime of the installation warranty on door manufacturer's standard form. Comply with the

shall be free of wet operations and must reach an average prevailing relative humidity of the locality.

provisions of NWWDA I.S. 1-A-1 Show-Through, T-2 Warp and delamination. PART 2 PRODUCTS

A. A specific product by any of the following manufacturers is acceptable, if that manufacturer and product comply with the contract documents, and materials specified in 2.2 Material

Assa Abloy- Heavy Duty Architectural - or approved equal Plain White Sliced Maple

2.3 FABRICATION

A. The basic core of the door shall be particleboard complying with NWWDA I.S. 1-A, S-3 Core Requirements. For

doors that are to be labeled, use a listed approved mineral fire core. B. Vertical and horizontal edges shall be bonded to the solid core, NWWDA I.S. 1-A, S-4 Vertical and Horizontal

Edge, Core Interface.

Adhesives shall comply to NWWDA TM-6. For exterior and high moisture area doors, use Type 1. For interior doors, use Type II.

D. Door assembly shall comply with the following:

Non-rated: NWWDA I.S. 1-A, S-5 Veneer, Particleboard Core, Bonded 2. Fire-rated: NWWDA I.S. 1-A, S-17 Fire Doors

E. For All Doors: 1. Overlapping astragals shall not be required for pairs of doors. 20-minute pairs-of-doors shall be furnished with fire retardant stiles.

2. Doors shall be suitable for hanging on butt hinges using No. 12 by 1-1/4 inch flat, full-threaded, steel wood screws run into 1/8 inch diameter pilot holes, or half surface hinges using through bolts. Three (3) hinges will be used for doors through 7'6" in height, four (4) hinges for taller doors. In the event that hinges which are installed in accordance with the above criteria become loose, it shall be considered a failure of the door's ability to properly hold hardware. Coordinate with hardware Section 08700 for proper screws and installation

F. Molding, Edging, Trimming: Molding, edging and trimming is to comply with NWWDA I.S. 1-A, G-12 Construction Details and as shown on drawings.

1. Vision panels: Type M4 metal vision panel, sizes as indicated on the door schedule 2. Louvers: Type L2 wood slats, rounded edges, sizes as indicated on the door schedule

3. Transom: Type E2 meeting edge beveled 4. Dutch doors: Type D1 one side shelf

5. Pairs of Doors: Type T2 non-rabbetted G. Vision Panels:

2. For fire-rated doors, provide manufacturer's standard steel light frames for UL labeled doors. 3. Weyerhaeuser Slim Line #115 with fire glass stop or equal. Stop profile shall be square edged, not beveled.

1. Factory cut with not less than 20 gage cold-rolled steel channel glass stops, mitered welded corners, UL approved.

H. Blocking and Reinforcements for Hardware: Conform with NWWDA I.S. 1-A, S-5. 1. HB-1-5" 5-inch top rail blocking

2. HB-2-5" 5-inch bottom rail blocking I. Hardware reinforcement and blocking on labeled door to be high density mineral, listed by an industry-recognized

J. Comply with the tolerance requirements of NWMA for pre-fitting. Machine doors for hardware requiring cutting of doors. Comply with final hardware schedules and door frame shop drawings and with hardware templates and other

essential information required to ensure proper coordination of doors, frames and hardware.

K. Take accurate field measurements of hardware mortises in metal frames to verify dimensions and alignment before 1. Finish: Protect all doors during transit and storage. Perform on-site finishing on all six (6) sides as specified under

PART 3 EXECUTION

3.1 EXAMINATION

Section 09900.

A. Examine to insure that the frames are the type required for the proper installation of the door. The Contractor shall remedy conditions detrimental to the proper and orderly completion of the work.

3.2 INSTALLATION A. Perform installation under Section 06100 as specified herein. B. Installation of the wood doors and labeled wood doors shall comply with NWWDA I.S. 1-A, G-20 Installation, and NFPA 80. Dimensional tolerances for hardware cutouts, undercuts, meeting edges, height and width shall comply

NWWDA I.S. 1-A, G-14. C. Job Fit Doors: Fit doors to frame for proper fit and uniform clearance at each edge and machine for hardware. Seal cut surfaces after fitting and machining.

1. Bevel non-fire-rated doors 0.125 inch in two (2) inches at lock and hinge edges. 2. Bevel fire-rated doors 1/16 inch at two (2) inches at lock edge.

required for proper fit and uniform clearance at each edge.

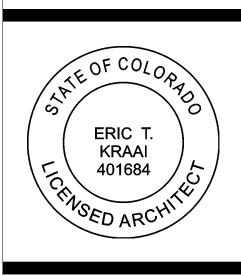
A. Affirm that each wood door swings and operates freely. Replace and rehang doors that do not swing and operate freely; that need to be refinished; that are warped, twisted, show-through or not true in plane; and that do not follow

D. Pre-fit Doors: Fit to frames and machine for hardware to whatever extent not previously worked at factory as

B. Clean all surfaces following the recommendations of the manufacturer. Protect each door during the construction period to leave clean and free from defects.

END OF SECTION

417 MONUMENT ROAD, SUITE 7 GRAND JUNCTION, CO 81507 T: 970.712.5045



CONSTRUCTION **DOCUMENTS**

PROJECT NO:

SHEET NAME: **SPECIFICATIONS**

09/23/2020 DATE:

SHEET NO:

1/4" = 1'-0"

1240 GUNNISON A GRAND JUNCTION **REVISION:**

8150

0

SECTION 08 33 36 OVERHEAD COILING DOORS

This section is based on the products of Overhead Door Corp., which is located at: 2501 S. State Hwy. 121

Suite 200 Lewisville, TX 75067 Toll Free: (800) 275-3290 Phone: (469) 549-7100 Fax: (972) -906-1499 Web Site: www.overheaddoor.com

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Overhead coiling insulated doors

1.2 RELATED SECTIONS

1.3 REFERENCES

A. Section 05500 - Metal Fabrications: Support framing and framed opening.

B. Section 06200 - Finish Carpentry: Wood jamb and head trim.

C. Section 08333 - Security Grilles.

D. Section 08710 - Door Hardware: Product Requirements for cylinder core and keys.

E. Section 09900 - Painting: Field applied finish.

F. Section 16130 - Raceway and Boxes: Conduit from electric circuit to door operator and from door operator to control

A. ANSI/DASMA 108 - American National Standards Institute Standard Method For Testing Sectional Garage Doors And Rolling Doors: Determination Of Structural Performance Under Uniform Static Air Pressure Difference.

B. NFRC 102 - Test Procedure for Measuring the Steady-State Thermal Transmittance of Fenestration Systems.

C. ASTM E 90 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Element.

D. ASTM E 330 - Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference.

E. ASTM A 653 - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.

F. ASTM A 666 - Standard Specification for Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar.

G. ASTM A 924 - Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process.

H. ASTM B 221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.

I. NEMA 250 - Enclosures for Electrical Equipment (1000 Volts Maximum).

J. NEMA MG 1 - Motors and Generators.

1.4 DESIGN / PERFORMANCE REQUIREMENTS

A. Overhead coiling insulated doors:

1. Wind Loads: Design door assembly to withstand wind/suction load of 20 psf (958 Pa) without damage to door or assembly components in conformance with ASTM E 330. 2. Operation: Design door assembly, including operator, to operate for not less than 20,000 cycles.

B. Single-Source Responsibility: Provide doors, tracks, motors, and accessories from one manufacturer for each type of door.

C. Products Requiring Electrical Connection: Listed and classified by Underwriters Laboratories, Inc. acceptable to authority

having jurisdiction as suitable for purpose specified.

1.5 SUBMITTALS

A. Submit under provisions of Section 01300.

B. Product Data: Manufacturer's data sheets on each product to be used, including: 1. Preparation instructions and recommendations.

Provide secondary components from source acceptable to manufacturer of primary components.

2. Storage and handling requirements and recommendations.

3. Details of construction and fabrication. 4. Installation instructions.

C. Shop Drawings: Include detailed plans, elevations, details of framing members, anchoring methods, required clearances, hardware, and accessories. Include relationship with adjacent construction.

G. Operation and Maintenance Data: Submit lubrication requirements and frequency, and periodic adjustments required.

1.6 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in performing Work of this section with a minimum of five years experience in the fabrication and installation of security closures.

B. Installer Qualifications: Installer Qualifications: Company specializing in performing Work of this section with minimum three years and approved by manufacturer.

Finish areas designated by Architect.

. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.

Refinish mock-up area as required to produce acceptable work. 1.7 DELIVERY, STORAGE, AND HANDLING

A. Store products in manufacturer's unopened packaging until ready for installation.

B. Protect materials from exposure to moisture. Do not deliver until after wet work is complete and dry.

C. Store materials in a dry, warm, ventilated weathertight location.

1.8 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

1.9 COORDINATION

SECTION 08700 FINISH HARDWARE

A. Coordinate Work with other operations and installation of adjacent materials to avoid damage to installed materials.

1.10 WARRANTY

A. Warranty: Manufacturer's limited door and operator system, except the counterbalance spring and finish, to be free from defects in materials and workmanship for 3 years or 20,000 cycles, whichever occurs first.

B. Warranty: Manufacturer's limited door system warranty for 2 years for all parts and components.

C. PowderGuard Finish

1. PowderGuard Premium Applied to curtain, guides, bottom bar, headplates: Manufacturer's limited Premium Finish warranty for 2 years.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturer: Overhead Door Corp., 2501 S. State Hwy. 121, Suite 200, Lewisville, TX 75067. ASD. Tel. Toll Free: (800) 275-3290. Phone: (469) 549-7100. Fax: (972) 906-1499. Web Site: HYPERLINK "http://www.overheaddoor.com" www.overheaddoor.com. E-mail: HYPERLINK "mailto:info@overheaddoor.com" info@overheaddoor.com.

B. Requests for substitutions will be considered.

2.2 INSULATED OVERHEAD COILING SERVICE DOORS

A. Overhead Coiling Stormtite Insulated Service Doors: Overhead Door Corporation Model 625.

1. Curtain: Interlocking roll-formed slats as specified following. Endlocks shall be attached to each end of alternate slats to prevent lateral movement

a. Flat profile type F-265i for doors up to 40 feet (12.19 m) wide. b. Front slat fabricated of:

20 gauge galvanized steel.

c. Back slat fabricated of:

1) 24 gauge galvanized steel. d. Slat cavity filled with CFC-free foamed-in-place, polyurethane insulation.

1) R-Value: 7.7, U-Value: 0.13. Sound Rating: STC-21.

Slats and Hood Finish:

a. Galvanized Steel: Slats and hood galvanized in accordance with ASTM A 653 and receive rust-inhibitive, roll coating process, including 0.2 mils thick baked-on prime paint, and 0.6 mils thick baked-on polyester top coat.

1) Polyester Top Coat.

(a) Gray polyester. b. Stainless Steel: Slats and hood shall be stainless steel finished as follows.

1) Finish: 2B mill finish.

2) Finish: No. 4 satin finish Aluminum: Slats and hood shall be aluminum finished as follows.

1) Finish: Mill finish.

2) Finish: Clear anodized finish. 3) Finish: Bronze anodized finish.

4) Finish: Powder Coat:

(a) PowderGuard Premium powder coat color as selected by the Architect.

Weatherseals:

a. Vinyl bottom seal, exterior guide and internal hood seals.

 b. Interior guide weatherseal. c. Lintel weatherseal.

Bottom Bar:

a. Extruded aluminum angle minimum thickness 1/8 inch (3 mm) bolted back to back to reinforce curtain in the guides.

Guides: Three structural steel angles.

Brackets: a. Hot rolled prime painted steel to support counterbalance, curtain and hood.

7. Finish; Bottom Bar, Guides, Headplate and Brackets:

a. Finish: Black powdercoat finish.

8. Counterbalance: Helical torsion spring type housed in a steel tube or pipe barrel, supporting the curtain with deflection limited to 0.03 inch per foot of span. Counterbalance is adjustable by means of an adjusting tension wheel.

9. Hood: Provide with internal hood baffle weatherseal.

a. 24 gauge galvanized steel with intermediate supports as required.

10. Manual Operation:

11. Windload Design:

a. Standard windload shall be 20 PSF.

12. Locking:

a. Chain hoist.

a. Chain keeper locks for chain hoist operation.

13. Wall Mounting Condition: a. Between jambs mounting.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify opening sizes, tolerances and conditions are acceptable.

B. Examine conditions of substrates, supports, and other conditions under which this work is to be performed.

C. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before

3.2 PREPARATION

A. Clean surfaces thoroughly prior to installation.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions

3.3 INSTALLATION

A. Install in accordance with manufacturer's instructions

B. Use anchorage devices to securely fasten assembly to wall construction and building framing without distortion or stress.

C. Securely and rigidly brace components suspended from structure. Secure guides to structural members only.

D. Fit and align assembly including hardware; level and plumb, to provide smooth operation.

H. Instruct Owner's personnel in proper operating procedures and maintenance schedule.

F. Coordinate installation of sealants and backing materials at frame perimeter as specified in Section 07900.

G. Install perimeter trim and closures.

3.4 ADJUSTING

A. Test for proper operation and adjust as necessary to provide proper operation without binding or distortion.

A. Clean curtain and components using non-abrasive materials and methods recommended by manufacturer.

3.5 CLEANING

B. Remove labels and visible markings.

B. Adjust hardware and operating assemblies for smooth and noiseless operation.

C. Touch-up, repair or replace damaged products before Substantial Completion. 3.6 PROTECTION

A. Protect installed products until completion of project.

END OF SECTION

SECTION 08700 FINISH HARDWARE

08700.1 GENERAL:

08700.11 RELATED DOCUMENTS: A. "Finish Hardware" includes items known commercially as builders' hardware which are required for swing, sliding and

folding doors. Types of items in this section include (but are not necessarily limited to):

2. Locks, lock cylinders, and keys;

Exit devices; Push/pull units;

Closers (brass);

Door trim units; 7. Weather-stripping and threshold for exterior doors.

08700.13 QUALITY ASSURANCE:

A. Obtain each kind of hardware (latch, and lock set, hinges, closers, & related items) from only one manufacturer. B. Perform working accordance with the following requirements: 1. ANSI A117.1.

08700.14 JOB CONDITIONS:

08700.2 PRODUCTS:

08700.21 SCHEDULED HARDWARE: A. Products are identified by using hardware designation numbers of one manufacturer for each hardware type required. All

Coordinate hardware with other work. Furnish hardware items of proper design for use on doors and frames of the

thickness, profile, swing, security and similar requirements indicated, as necessary for proper installation and function.

items (except locks) are listed by Manufacturer for the purpose of establishing minimum requirements. Supply locks and lock cylinders only by the listed manufacturer and supplier.

2. Provide all other hardware from listed alternate manufacturers.

08700.22 MATERIAL AND FABRICATION: A. The drawings show the direction of swing or hand of each door. Furnish each item of hardware for proper installation and operation of the door movement as shown.

B. Produce hardware units of the base metal and forming method using the manufacturer's standard. C. Conform manufactured hardware to published templates, generally prepared for machine screw installation.

D. Furnish screws for installation, with each hardware item. Provide Phillips flathead screws with finish of exposed (exposed under any condition), screws to match the hardware finish. E. Provide concealed fasteners for hardware units which are exposed when the door is closed, except to the extent no

standard units of the type specified are available with concealed fasteners.

08700.23 HINGES, BUTTS: See hardware schedule in construction documents.

08700.24 LOCKS, LOCK CYLINDERS, AND KEYING: See hardware schedule in construction documents.

08700.25 PANIC DEVICES AND ASTRAGALS:

See hardware schedule in construction documents. 08700.26 CLOSERS AND DOOR CONTROL DEVICES:

See hardware schedule in construction documents.

08700.27 DOOR TRIM UNITS: See hardware schedule in construction documents.

08700.28 WEATHER-STRIPPING AND THRESHOLDS:

See hardware schedule in construction documents

08700,29 HARDWARE FINISHES: See hardware schedule in construction documents

08700.3 EXECUTION:

08700.31 INSTALLATION: A. Mount hardware units at heights indicated in "Recommended Locations for Builders Hardware" for Standard Steel Doors and Frames, by the Door and Hardware Institute, except as specifically indicated or required to comply with

B. Install each hardware item in compliance with the manufacturer's instructions and recommendations. Do not install surface mounted items until finishes have been completed on the substrate.

C. Set units level, plumb and true to line and locations. Reinforce the attachment substrate as necessary for proper

installation and operation. D. Drill and counter sink units which are not factory-prepared for anchorage fasteners.

END OF SECTION

08811.1GENERAL:

SECTION 08811 GLASS

08811.11 SECTION INCLUDES: A. Float Glass

B. Tempered Glass C. Insulating Glass D. Mirror Glass

08811.12 RELATED SECTIONS: A. Section 08800 "Glazing"

08811.13 INTENT (SAFETY OF PERSONS) A. It shall be the responsibility of the glazing subcontractor to comply with all safety laws, ordinances and regulations, etc. which control type of glass related to safety of persons. The drawings and specifications attempt to comply with all such laws, etc., but in case of failure to comply, the most restrictive requirement shall govern the work of this section.

B. Design Criteria: Glass shall conform to Fed. Spec. DD-G-001 403 and tested to pass IGCC, CBA, ASTM E-774-83.

08811.14 COORDINATION OF WORK: A. Coordinate with the work of glazing subcontractor(s).

08811.2 PRODUCTS:

08811.21 MANUFACTURER: A. The drawings were prepared and this specification written on the basis of using the products of PPG Industries, Inc., Pittsburgh, Pennsylvania unless noted otherwise. It is not the intent to limit competitive bidding. Products with equal characteristics by other manufacturers are acceptable under the conditions of these specifications.

A. Submit samples per Section 01300 "Submittals". Submit 6 inch square samples of all glass and glass units.

08811.22 MATERIALS:

A. General: Glass sizes shown are approximate. Sizes and proper edge clearances shall be determined by measuring the actual opening to receive glass. Labels shall not be removed until final approval is obtained. Types of glass as called out on

window and door schedules on drawings. B. Float Glass: 1/4-inch thick, clear float (plate) glass

C. Tempered Glass: 1/4-inch thick, clear tempered safety glass D. Insulating Glass: Viracon 1" insulating w/ room side Low E VE1-85 (tempered where noted on drawings)

08811.3 EXECUTION:

08811.31 PROTECTION OF MATERIALS:

A. Protect glass from damage of any kind, during packaging, transporting and storage. Do not move partially unpacked cases of glass, as this is apt to cause glass damage or breakage. Ship glass with protective plastic coating to prevent scratching.

08811.32 GLAZING:

A. Not part of the work of this section.

08811.33 CLEAN-UP: A. Upon completion of work of this section remove related debris from premises.

END OF SECTION

SECTION 09250 GYPSUM BOARD

09250.1 GENERAL:

09250.11 RELATED DOCUMENTS: A. DRAWING, SPECIFICATION DIVISION 1 AND CONTRACT

09250.12 DESCRIPTION OF WORK: A. TYPES OF WORK INCLUDES:

GYPSUM BOARD APPLIED TO STUD FRAMING AND FURRING.

FINISHING (JOINT TAPE-AND-COMPOUND TREATMENT).

3. GYPSUM BOARD CEILING ON DIRECT SUSPENSION SYSTEM.

09250.13 QUALITY ASSURANCE: A. GYPSUM BOARD STANDARD IS GA-216 BY GYPSUM ASSOCIATION.

B. WHERE GYPSUM BOARD SYSTEMS WITH FIRE RESISTANCE RATINGS ARE REQUIRED TO COMPLY WITH

GOVERNING REGULATION. PROVIDE MATERIALS AND INSTALLATION IDENTICAL WITH APPLICABLE

ASSEMBLIES WHICH HAVE BEEN TESTED AND LISTED BY RECOGNIZED AUTHORITIES.

09250.14 PRODUCT HANDLING: A. DELIVER, IDENTIFY, STORE AND PROTECT GYPSUM DRYWALL MATERIALS TO COMPLY WITH MANUFACTURER'S RECOMMENDATIONS.

09250.2 PRODUCTS:

09250.21 GYPSUM BOARD PRODUCTS:

A. EXPOSED GYPSUM BOARD: REGULAR TYPE WITH TAPERED LONG EDGES AND THICKNESS OF 5/8"

EXCEPT WHERE OTHERWISE INDICATED. SHEET SIZE: MAXIMUM LENGTH AVAILABLE WHICH WILL MINIMIZE END JOINTS. GYPSUM WALLBOARD: ASTM C36, TAPERED EDGES FOR EXPOSED SURFACES, REGULAR GRADE

EXCEPT USE TYPE X WHERE INDICATED OR REQUIRED BY THE CODE. TYPE W/R (WATER-

SCREWS: ASTM C646, CORROSION-RESISTANT SELF-TAPPING BUGLE-HEAD SPIRAL-THREADED

ALL SUPPORTING METAL AT LEAST 3/8". FURNISH SPECIALLY HARDENED TYPE SCREWS FOR

TYPE, MINIMUM 1-1/4" LONG EXCEPT 1-5/8" FOR DOUBLE LAYER WALLS. LENGTHS TO PENETRATE

RESISTANT) FOR WALLS IN TOILETS, WET AREAS (SUCH AS IN KITCHEN DISHWASHING AREA, ICE MACHINE AREA, SINK AREA, ETC.), WALLS RECEIVING CERAMIC TILE AND WHERE INDICATED PROVIDE GYPSUM WALLBOARD TYPE W/R FLOOR TO CEILING. TYPE X W/R BOARDS AS REQUIRED AT RATED PARTITIONS WHERE WET AREAS SUCH AS DEFINED ABOVE IN TYPE W/R.

SUPPORTS HEAVIER THAN 25 GAGE.

B. ATTACHMENT:

09250.22 TRIM ACCESSORIES: Provide standard trim accessories of types indicated for gypsum board work, formed of electro galvanized steel, with either knurled and perforated flanges for nailing or stapling, and beaded for concealment of flanges in joint compound. Metal Trim and Corner Beads: Of electro galvanized steel with taping flanges, as manufactured or recommended by drywall manufacturer,

09250.23 JOINT TREATMENT MATERIALS:

A. Type recommended by the manufacturer for the application indicated. B. Joint Tape: Perforated type.

C. Joint compound: Ready-mixed vinyl-type for interior use.

09250.24 MISCELLANEOUS MATERIALS:

A. Provide auxiliary materials for gypsum board work of the type and grade recommended by the manufacturer of the B. Textured Finish Materials: Latex based texturing material containing fine aggregate.

corner beads at all outside corners and "J" shaped trim members where abutting other materials.

09250.25 DIRECT SUSPENSION SYSTEM:

A. Direct Suspension System: Manufacturers standard zinc-coated system of furring runners, furring tees and accessories designed for concealed support of ceiling.

09250.3 EXECUTION:

09250.31 GENERAL GYPSUM BOARD INSTALLATION REQUIREMENTS:

A. Locate exposed end-butt joints as far from center of wall and ceilings as possible. B. Install exposed gypsum board with face side out. Butt boards together for a light contact at edges and ends with not more than 1/16" open space between boards.

C. Locate either edge or end joints over supports. Position boards so that both tapered edge joints abut, and mill-cut or fieldcut end joints abut. Stagger vertical joints over different studs on opposite side of partitions. Locate end-butt joints as far as possible from center of wall and ceiling.

E. Space fasteners in gypsum boards in accordance with referenced standards and manufacturer's recommendations.

F. Attach gypsum board directly to direct-hung metal support system for ceilings with member spacing 16" o.c. maximum.

D. Attach gypsum board to framing and blocking as required for additional support at openings and cutouts.

REVISION:

PROJECT NO:

SHEET NAME:

DATE:

09/23/2020

SCALE: 1/4'' = 1'-0''

ERIC T KRAAI 401684

417 MONUMENT ROAD, SUITE 7

GRAND JUNCTION, CO 81507

T: 970.712.5045

0 1240 GUNNISON A GRAND JUNCTION

CONSTRUCTION **DOCUMENTS**

SPECIFICATIONS

SHEET NO:

- 1. On partitions/walls over 8' 1" apply gypsum board vertically (parallel).
- 2. On partitions/walls 8' 1" less in height apply gypsum board horizontally (perpendicular); use maximum length
- sheets possible to minimize end joints. 3. On ceilings, apply prior to installation of partitions/walls.
- B. Where gypsum board is base for thin-set ceramic tile, and in toilet rooms, install water-resistant board. Where gypsum board is base for stainless steel, install Durock.
- D. Apply gypsum boards to supports with screws or nails for walls and screws only for ceilings.

09250.33 INSTALLATION OF DRYWALL FINISHING:

- A. Apply treatment at gypsum board joints (both directions), flanges of trim accessories, penetrations, fastener heads, surface defects and elsewhere as required to prepare work for decoration.
- Apply joint tape at joints between gypsum boards, except where a trim accessory is indicated. Apply joint compound in 3 coats (not including prefill of openings in base), and sand between last 2 coats and
- B. Tape joints at water-resistant gypsum board base for ceramic tile, pre-finished panels and textured finish.

LEVEL 4 FINISH

All joints and interior angles shall have tape embedded in joint compound and shall be immediately wiped with a joint knife leaving a thin coating of joint compound over all joints and interior angles. Two separate coats of joint compound shall be applied over all flat joints and one separate coat of joint compound shall be applied over interior angles. Fastener heads and accessories shall be covered with three separate coats of joint compound. All joint compound shall be smooth and free of tool marks and ridges. Note: It is recommended that the prepared surface be coated with a drywall primer prior to the application of final finishes

END OF SECTION

SECTION 09300 TILE

09300.1 GENERAL:

09300.11 RELATED DOCUMENTS: A. Drawings, Specifications Division 1 and Contract.

09300.12 DESCRIPTION OF WORK:

A. Tile includes ceramic surfacing units made from clay or other ceramic materials and includes:

1. Glazed Wall Tile: As specified on drawings.

09300.13 QUALITY ASSURANCE: A. Tile Council of America Standard 137.1 is the basis for requirements.

09300.14 PRODUCT HANDLING:

Deliver packaged materials and store in original containers with seals unbroken and labels intact until time of use.

A. Maintain environmental conditions and protect work during and after installation in accordance with manufacturer's recommendations.

09300.2 PRODUCTS:

09300.21 TILE PRODUCTS:

A. Glazed Wall Tile and Floor Tile: Size per drawings.

B. Provide trim shapes of same material and finish as field tile, and as follows:

09300.22 MORTAR AND GROUT: Wall and Floor Tile:

A. Chemical-Resistant, Water-Cleanable, Tile-Setting and Grouting Epoxy: ANSI A118.3.

1. Provide product capable of withstanding continuous and intermittent exposure to temperatures of up to 140 deg F and 212 deg F, respectively, and certified by manufacturer for intended use.

09300.3 EXECUTION:

09300.31 TILE INSTALLATION STANDARDS:

A. Comply with applicable requirements of the following American National Standards Institute standards.

- A108.4 for tile installed with organic adhesive.
- 2. A108.5 for tile installed with dry-set Portland cement mortar or latex-Portland cement mortar. 3. A108.6 for tile installed with epoxy adhesive.
- B. Comply with manufacturer's instructions for mixing and installation of proprietary materials.

09300.32 CLEANING AND PROTECTION:

A. Upon completion of placement and grouting, clean all tile surfaces so they are free of foreign matter. B. Leave finished installation clean and free of cracked, chipped, broken, unbonded, or otherwise defective tile work.

C. Prohibit foot and wheel traffic from using tiled floors for at least three (3) day after grouting is completed.

END OF SECTION

SECTION 09390 TILE BACKER BOARD PANELS

09390 GENERAL: 09390 SECTION INCLUDES:

A. Backer board for ceramic tile B. Fasteners

09390.12 RELATED SECTIONS:

A. Section 06100 "Rough Carpentry" B. Section 09250 "Gypsum Board"

C. Section 09300 "Tile"

09390.13 INTENT: A. This Specification generally outlines requirements for backer board work, it is not intended to modify, amend or otherwise change manufacturer's specifications for uses intended; manufacturer's specifications govern.

09390.14 REFERENCE STANDARDS:

A. American Society for Testing Materials (ASTM)

A. Submit per Section 01300 "Submittals" for acceptance prior to beginning work of this section. Owner's acceptance is

B. Product Data: Submit manufacturers detailed technical product data and installation instructions and recommendations,

including necessary data to document that materials comply with requirements. C. Samples: Two representative samples indicating range of finish, color and texture of actual materials, of manufacturer's standard colors if proposing alternate to material as specified in drawings.

09390.2 PRODUCTS:

09390.21 MANUFACTURER:

A. The Drawings were prepared and this Specification written on the basis of using the products of Georgia Pacific Corporation, Atlanta, Georgia. It is not the intent to limit competitive bidding.

09390.22 MATERIALS: A. Tile backer board panels: "Dens-Shield Firestop", type "X", 5/8" thick, non-structural, fiberglass-faced, silicone treated

gypsum core panel. B. Joint Reinforcement: 2 inch wide, coated fiberglass mesh tape.

C. Fasteners: Screws, 1-1/4 inch corrosion resistant; type specified by panel manufacturer for system used.

09390.3 EXECUTION:

09390.31 DELIVERY AND STORAGE: A. Deliver materials in original unopened packages. Store to provide protection from damage and exposure to elements. Remove damaged or deteriorated materials from premises.

09390.32 PREPARATION:

Inspect substrate to insure it is flat (not cupped), dry and securely fastened to framing. Shim as necessary to provide flat surface for panels.

A. Install behind all ceramic tile walls and where indicated on the Drawings; in accord with manufacturer's specifications for complete system of leveling, laminating, furring, fastening, and joint treatment, as required for system indicated.

B. Use maximum lengths possible to minimize number of joints. Locate edge joints parallel to and on framing.

A. Upon completion of work of this Section remove related debris from premises.

END OF SECTION

SECTION 09800 FIBERGLASS REINFORCED POLYESTER PANELS (FRP)

Provide fiberglass reinforced polyester panels (FRP) as indicated, specified and required. Provide at Janitors Closet. 09800.2 RELATED DOCUMENTS:

Drawing, Specification Division 9 and Contract

Submit to Architect for review 12" x 12" sample of FRP board and 12" length of trim cap. Submit in accordance with Section 01300 Submittals.

09800.4 PRODUCT HANDLING:

Deliver product to jobsite with all finish surfaces protected against scratches, stains and all damage. Lay panels and trim flat in original containers raised off floor away from moisture. Fiberglass Reinforced Polyester (F.R.P.) Panels: Panels shall be 4' x 8', 9', or 10' x 3/32" fiberglass reinforced polyester panels. FRP panels shall be installed with 8' or 10' with harmonizing moldings, adhesive and sealant as supplied by the Commercial Division, Masonite Corporation, Dover, Ohio. Material must be applied strictly in accordance with the printed installation instructions provided.

09800.5 INSTALLATION:

Install per manufacturer's instructions, including sealant in moldings. Prepare all surfaces for proper installation against clean untextured smooth sanded taped gypsum board. Room temperature during installation must by 60 degrees or above. Place FRP board before vinyl base is installed. Panels shall be flush, level and plumb. All trim and joints shall be level, plumb and true. Use large 4 x 10 or 4 x 8 panels so as to create no seams in small rooms. (10'-0" dimension or less). In larger rooms, coordinate panels seams with Architect.

09800.6 CLEANUP:

Clean panels and trim for final acceptance with products as recommended by manufacturer. Protect from damage until construction is complete. Remove all scrap, debris and packaging from site.

END OF SECTION

SECTION 09900 PAINTING

09900.1 GENERAL: 0990.11 RELATED DOCUMENTS:

- PART 1 GENERAL
- A. Section Includes: Painting work as shown on the drawings and schedules, and as follows:
- 1. Painting and finishing of all interior and exterior exposed items and surfaces throughout the project, except as otherwise
- 2. Painting of exposed bare and covered pipes and ducts, and of hangers, exposed steel and iron work and primed metal surfaces of equipment installed under the mechanical and electrical work, except as otherwise indicated. Coordinate with Division 15 and 16 Installers for color coding, if any.
- 3. Painting of mechanical grilles, registers, louvers (except aluminum) and panel covers and frame for electrical work and
- 4. Painting roof and exterior wall mounted equipment including aluminum and factory finished items. "Paint" as used herein means all coating systems materials, including primers, emulsions, enamels, stains, sealers and
- fillers, and other applied materials whether used as prime, intermediate or finish coats. 6. Painting all exposed surfaces whether or not colors are designated in "schedules," except where the natural finish of the material is specifically noted as a surface not to be painted.
- 7. Where items or surfaces are not specifically mentioned, paint these the same as adjacent similar materials or areas.
- 1.2 PAINTING NOT INCLUDED A. The following categories of work are not included as part of the field-applied finish work, or are included in other sections of these specifications:
- 1. Shop Priming: Unless otherwise specified, surface preparation and shop priming of ferrous metal items is included under the various sections for structural steel, miscellaneous metal, hollow metal work and similar items. Also, for fabricated
- components such as shop-fabricated or factory-built mechanical and electrical equipment or accessories. 2. Mechanical and Electrical Work: Pipe and raceway identification taping or stenciled painting is specified in Division 15 and
- 3. Pre-Finished Items: Unless otherwise indicated, do not include painting when factory-finishing or installer finishing is specified for such items as (but not limited to) exterior concrete, integrally colored CMU, metal toilet enclosures, aluminum windows, pre-finishing partition systems, acoustic materials, factory finished casework, finished mechanical and electrical equipment including light fixtures, main switch gear and distribution cabinets and equipment.
- 4. Concealed Surfaces: Unless otherwise indicated, painting is not required on surfaces such as walls or ceiling in concealed areas and generally inaccessible areas, foundation spaces, furred areas, utility tunnels, pipe spacers, duct shafts and elevator
- 5. Finished Metal Surfaces: Metal surfaces of anodized aluminum, factory-painted aluminum, stainless steel, chromium plate, copper, bronze and similar finished materials will not require finish painting, unless otherwise indicated.

- 1. Moving parts of operating units, mechanical and electrical parts, such as valve and damper operators, linkages, sinkages, sensing devices, motor and fan shafts will not require finish painting, unless otherwise indicated.
- 2. Do not paint over any code-required labels, such as Underwriter's Laboratories and Factory Mutual, or any equipment identification, performance rating, name or nomenclature plates. C. Unfinished Areas: Do not paint floors, walls or ceilings of rooms or spaces not scheduled or scheduled as unfinished.
- 1.3 SUBMITTALS A. Product Data: Submit manufacturer's technical data, recommendations and installation instructions for each type of material
- 1. Include manufacturer's product data sheet and Material Safety Data Sheet for each sealant, primer or adhesive showing compliance with listed VOC limits. B. Samples: Submit samples for Architect's review of color and texture only. Provide a listing of the material and application
- for each coat of each finish sample. 1. On 12 inch by 12 inch gypsum board, provide two samples of each color and material with texture to simulate actual conditions. Resubmit each sample as requested until acceptable sheen, color and texture is achieved. 2. On actual wood surfaces, provide two 4 inch by 8 inch samples of each natural and stained wood finish as required. Label
- and identify each as to location and application. 3. On concrete masonry, provide two (2), four (4) inch square, samples of masonry for each type of finish and color, defining filler, prime and finish coat. 4. On actual wall surfaces and other exterior and interior building components, duplicate painted finishes of prepared samples.
- obtained; simulate finished lighting conditions for review of in-place work. 1.4 QUALITY ASSURANCE: A. Standard: Where not otherwise specified, follow recommendations of "Painting Specifications" by Painting & Decorating Contractors of America, "Type 1, Recommended Jobs." B. Single Source Responsibility: Provide primers and other undercoat paint produced by same manufacturer as finish coats.

On at least 100 square feet of surface as directed, provide full-coat finish samples until required sheen, color and texture is

compatibility of total coatings system for various substrates. Upon request from other trades, furnish information or characteristics of finish materials provided for use, to ensure compatible prime coats are used. 1.5 DELIVERY, STORAGE AND HANDLING A. Deliver all materials to the job site in original, new and unopened packages and containers bearing manufacturer's name and label, and name of material, FS number if applicable, stock number, date of manufacture, contents by volume for major

constituents, thinning and application instructions, color number and name. Do not remove or make label information illegible.

C. Coordination of Work: Review other sections of these specifications in which prime paints are to be provided to ensure

Use only thinners approved by paint manufacturer, and use only within recommended limits.

- B. Assign room or space for Installer use and storage, adequately illuminated and ventilated. Follow applicable safety laws and regulations. Maintain ambient temperature above 45°F. 1.6 PROJECT/SITE CONDITIONS A. Apply water-base paints only when the temperature of surfaces to be painted and the surrounding air temperatures are
- between 50°F and 90°F unless otherwise permitted by the paint manufacturer's printed instructions. B. Apply solvent-thinned paints only when the temperature of surfaces to be painted and the surrounding air temperatures are between 45°F and 95°F, unless otherwise permitted by the paint manufacturer's printed instructions.
- C. Do not apply paint in snow, rain, fog or mist; or when relative humidity exceeds 85%; or to damp or wet surfaces unless otherwise permitted by the paint manufacturer's printed instructions. D. Painting may be continued during inclement weather only if the areas and surfaces to be painted are enclosed and heated within the temperature limits specified by the paint manufacturer during application and drying periods.
- 1.7 MAINTENANCE A. Maintenance Materials: Leave on premises not less than one gallon of each color and type used. 2. Containers to be tightly sealed and clearly labeled for identification.
- PART 2 PRODUCTS 2.1 COLORS AND FINISHES
- A. Prior to beginning work, furnish color chips for selection of paint colors. Use representative colors when preparing samples for review.
- 2. Final acceptance of colors will be from samples applied on the job. B. Color Pigments: Pure, non-fading, applicable types to suit the substrates and services indicated. Limit lead content as required by law. C. Colors:
- Provide deeptone accent colors for selected areas as shown on the drawings.
- Assume a maximum of four (4) exterior and six (6) interior colors.
- D. Paint Coordination: Provide finish coats which are compatible with prime paint used.
- 2. Provide barrier coats over incompatible primers or remove and re-prime as required. Notify the Architect in writing of any anticipated problems using specified coating systems with substrates primed by others.
- 1. Provide finish coats with gloss rating on gloss meter as shown on paint schedule and as follows:
- a. Flat = $0 \text{ to } 15 \text{ (60}^{\circ} \text{ meter)}$ = 5 to 20 (60° meter)
- Satin = 15 to 35 (60° meter) d. Semi-Gloss = 30 to 65 (60° meter)
- e. Gloss = over 65 (60 $^{\circ}$ meter)
- 2.2 MATERIALS AND SYSTEMS
- A. Quality: Provide the best quality grade of the various types of coatings as regularly manufactured by acceptable paint materials manufacturers. Materials not displaying the manufacturer's identification as a standard, best-grade product will not be acceptable, regardless of other indicated requirements.
- B. Manufacturers: Refer to schedule of surfaces and systems at the end of this Section covering materials to be used. Proprietary names are listed to establish materials and quality required. Equivalent materials, subject to the Contracting Officer's approval, by PPG, Benjamin Moore, Sinclair, Kelly-Moore, DeVoe, Glidden, KWAL Paints may be used. Unless otherwise indicated, product identification numbers or names are those of Sherwin-Williams. C. VOC Limits: Use only paints and coatings which have volatile organic compound (VOC) limits as indicated below:
- Flat Finishes: Limited to 50 grams per liter. Non-flat Finishes: Limited to 150 grams per liter.
- Wood Stains: Limited to 100 grams per liter. 4. Polyurethane Wood Finish: Limited to 150 grams per liter.

PART 3 EXECUTION

- 3.1 EXAMINATION
- A. Refer to Section 01600 for examination of substrate and job conditions. B. Starting of painting work will be construed as the Applicator's acceptance of the surfaces and conditions within any particular

3.2 PREPARATION

- A. General: 1. Perform preparation and cleaning procedures in strict accordance with the paint manufacturer's instructions and as herein specified, for each particular substrate condition
- 2. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces or conditions otherwise detrimental to the formation of a durable paint film. 3. Mask off or remove all hardware, hardware accessories, machined surfaces, plates, lighting fixtures and similar items in place and not to be finish painted. Following completion of painting of each space or area, remove masking. Reinstall all removed items by workmen skilled in the trades involved.
- B. Surfaces: 1. Clean surfaces to be painted before applying paint or surface treatments. Remove oil and grease prior to mechanical cleaning. Program the cleaning and painting so that contaminants from the cleaning process will not fall onto wet, newly-painted
- 2. Prime, stain or seal wood required to be job-painted immediately upon delivery to job. Prime edges, ends, faces, undersides and backsides of such wood, including cabinets, counters, cases, paneling. 3. When transparent finish is required, use spar varnish for backpriming.
- 4. Seal tops, bottoms and cut-outs of un-primed wood doors with a heavy coat of varnish or equivalent sealer immediately upon delivery to job.
- C. Surface Preparation 1. Drying - Touch up minor imperfections with thinned shellac or spackling compound finished smooth. Dust down with clean painter's brush.
- 2. Gypsum Wallboard Apply paint on gypsum wallboard with a roller, brush or spray. Ceiling and wall finishes shall be smooth or "slick" wall, with no texture.
- 3. Ferrous Metals Remove grease, rust, scale and dirt. Touch up chipped or abraded areas on shop-coated items. Where steel and iron have a coating of scale, remove by grinding, wire brushing, or sandblast to produce a satisfactory painting 4. Galvanized Metal - Thoroughly clean with solvent. Prime surface with one coat of galvanized iron primer, as specified.
- Finish with two coats of exterior alkyd enamel. 5. Woodwork - Touch up knots, pitch steaks and sappy spots with recommended sealer before priming. Putty nail holes, cracks and other defects after first coat with putty color to match finish on transparent finish. Sand surfaces smooth and remove
- D. Materials: . Store, mix and prepare painting materials in accordance with manufacturer's directions.
- 2. Stir materials before application to produce a mixture of uniform density and stir as required during the application of the
- 3. Do not stir surface film into the material. Remove the film and, if necessary, strain the material before using 3.3 APPLICATION
- A. General: . Apply paint in accordance with the manufacturer's directions. Use applicators and techniques best suited for the substrate and type of materials being applied.
- 2. Form true, straight lines against other materials, finishes and color changes. 3. Apply additional coats when undercoats, stains or other conditions show through the final coat of paint, until the paint film is of uniform finish, color and appearance. Give special attention to ensure that all surfaces, including edges, corners, crevices, welds and exposed fasteners received a dry film thickness equivalent to that of flat surfaces.
- 4. Paint surfaces behind movable equipment and furniture the same as similar exposed surfaces. Paint surfaces behind permanently fixed equipment or furniture with prime coat only before final installation of equipment. 5. Paint interior surfaces of ducts, where visible through registers or grilles, with a flat, non-specular black paint.
- 5. Finish exterior and interior doors on tops, bottoms and side edges the same as the faces, unless otherwise indicated. B. Scheduling Painting: 1. Apply the first-coat material to surfaces that have been cleaned, pre-treated or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration.
- 2. Allow sufficient time between successive coatings to permit proper drying. Do not recoat until paint has dried to where it feels firm, does not deform or feel sticky under moderate thumb pressure, and the application of another coat of paint does not cause lifting or loss of adhesion of the undercoat. C. Prime Coats: Apply a prime coat of material which is required to be painted or finished, and which has not been prime
- 1. Re-coat primed and sealed surfaces where there is evidence of suction spots or unsealed areas in first coat, to assure a finish coat with no burn-through or other defects due to insufficient sealing.
- 1. Roll and re-distribute paint to an even and fine texture. Leave no evidence of rolling such as laps, irregularity in texture, skid marks or other surface imperfections. E. Pigmented (Opaque) Finishes: Completely cover to provide an opaque, smooth surface of uniform finish, color, appearance and coverage. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness or other surface imperfections will not be
- F. <u>Transparent (Clear) Finishes</u>: Use multiple coats to produce glass-smooth surface film of even luster. Provide a finish free of laps, cloudiness, color irregularity, runs, brush marks, orange peel, nail holes or other surface imperfections. 1. Provide satin finish for final coats, unless otherwise indicated.
- G. Completed Work: Match approved samples for color, texture and coverage. Remove, refinish or repaint work not in compliance with specified requirements. H. Existing Surfaces: Clean, fill, patch, sand as required. Roughen glossy surfaces and prepare for finish painting as recommended by manufacturer for surface and finish to be applied. Prime or seal patched areas and apply one or two finish coats as scheduled for same or similar surfaces.
- 3.4 CLEANUP AND PROTECTION A. Cleanup: 1. During the progress of the work, remove from the site all discarded paint materials, rubbish, cans and rags at the end of each work day.

D. Texture Finish:

B. Protection: 1. Protect work of other trades, whether to be painted or not, against damage by painting and finishing work. Correct any damage by cleaning, repairing or replacing, and repainting, as acceptable to the Contracting Officer. 2. Provide "Wet Paint" signs as required to protect newly-painted finishes. Remove temporary, protective wrappings provided by others for protection of their work, after completion of painting operations.

2. Upon completion of painting work, clean glass and other paint-spattered surfaces. Remove spattered paint by proper

methods of washing and scraping, using care not to scratch or otherwise damage finished surfaces.

- 3. At the completion of work of other trades, touch-up and restore all damaged or defaced painted surfaces. 3.5 PAINT SCHEDULE
- Wood, open grain IW-1 Fill, sand, putty nail holes after sealing

GWB (Typical) IG-3 Clean See Paint Systems on next column.

Wood, paint IW-3 Fill, sand, seal knots with Kilz

PAINT SYSTEMS

Sys. Type Prime/

latex

Gloss Film Notes

- EC-1 Acrylic 1 Heavy Duty Block Filler B46W42 Flat 1.3 enamel A100 Flat Latex House & Trim EM-2 Epoxy 1 Hi-Solids Epoxy B62W201 Semi 6.0
- 1 Hi-Bild Aliphatic Urethane B65W100 urethane EM-3 Epoxy 1 Hi-Solids Epoxy B62W201 Semi 6.0
- urethane 1 Hi-Bild Aliphatic Urethane B65W100 EM-4 Acrylic 1 Kem Kromik Metal Primer enamel 2 Industrial Enamel B54 Series Semi 4.5
- EM-5 Alkyd 1 Kem Kromik Metal Primer enamel 2 Industrial Enamel B54 Series Semi 7.0 C EW-3 Acrylic 1 Weather Perfect Wood Primer Y24W538Semi 4.0
- IM-1 Alkyd 1 Kem Kromik Metal Primer 2 Industrial Enamel B54 Series Semi 7.0 C enamel IM-2 Alkyd 1 Galvite Primer B50W3 Semi 4.0 enamel Classic 99 Alkyd Semi-Gloss A40 Series IW-1 Alkyd 1 Oil Stain A48 Series Satin 3.0

enamel 2 Pro-Mar 200 Latex Semi-Gloss B31W200

2 A-100 Flat Latex A6 Series

IW-3 Alkyd 1 Wall & Wood Primer B49W2 Satin 3.5 enamel 2 Pro-Mar 200 Alkyd E/S B33W200 IC-1Acrylic

varnish 2 Oil Based Polyurethane Varnish Satin 2.0 B

Sherwin Williamns- Armorseal 1K Urethane Enamal Clear Coat IC-4Acrylic 1 PrepRite Block Filler B25W25 Semi 4.0 enamel 2 Pro-Mar 200 LTX Semi-Gloss B31W200

IG-3 Acrylic 1 PrepRite Classic LTX Primer B28W101 Semi 3.0 A

Notes:

- 1. Numbers before description of prime and finish coats indicate the number of coats required.
- 2. Systems indicated are by Sherwin Williams, unless noted otherwise. Equivalent materials, subject to the Contracting
- Officer's approval, by PPG, Benjamin Moore, Sinclair, Kelly-Moore, DeVoe, Glidden, KWAL Paints may be used.
- B = Mix stain with paste wood filler for open grained wood

END OF SECTION 09900

SECTION 10200 - LOUVERS & VENTS

PART 1 GENERAL

END OF SECTION

construction.

- A. Furnish and install louvers, bird screens, blank-off panels, structural supports and attachment brackets as shown on
- the drawings, as specified, and as needed for a complete and proper installation. B. The louvers to be furnished include the following:
- Drainable fixed extruded louvers. C. Related sections include:

1. Division 7 Section "Joint Sealants" for sealants installed in perimeter joints between louver frames and adjoining

- 1.02 References A. Air Movement and Control Association International, Inc.
- AMCA Standard 500-L-99 Laboratory Methods of Testing Louvers for Rating AMCA Publication 501 Application Manual for Louvers
- B. The Aluminum Association Incorporated Aluminum Standards and Data
- American Society of Civil Engineers Minimum Design Loads for Buildings and Other Structures D. American Society for Testing and Materials
- ASTM B209 ASTM B211
- 3. ASTM B221
- 4. ASTM E90-90 Architectural Aluminum Manufacturers Association

Specifications and Guidelines for Aluminum Structures

- AAMA 800 Voluntary Specifications and Test Methods for Sealants AAMA 605.2 Voluntary Specification for High Performance Organic Coatings on Aluminum Extrusions and Panels.
- 3. AAMA TIR Metal Curtain Wall Fasteners
- 4. AAMA 2605-98 Superior Performing Organic Coatings on Aluminum Extrusions and Panels
- Canadian Standards Association CAN3-S157-M83 Strength Design in Aluminum

2. S136 94 Cold Formed Steel Structural Members

1.03 Submittals

- A. Product Data 1. Air flow and water entrainment performance test results.
- Material types and thickness. B. Shop Drawings Include elevations, sections and specific details for each louver.
- Show anchorage details and connections for all component parts. Include signed and sealed structural calculations.

C. Submit color chips for approval.

and Noise Reduction requirements.

1.05 Delivery, Storage and Handling

for a period of one year from date of installation.

- A. Single subcontract responsibility: Subcontract the work to a single firm that has had not less than six years experience in the design and manufacturing of work similar to that shown and required.
- B. Performance Requirements: Provide AMCA and BSRIA test data as required to confirm that the louvers have the specified air and water performance characteristics. C. Acoustical Performance: Where applicable, submit test reports to confirm that the louvers meet the specified STC

D. Structural Requirements: Design all materials to withstand wind and snow loads as required by the applicable building code. Maximum allowable deflection for the louver structural members to be I/180 or 0.75 inch, whichever is less. Maximum allowable deflection for the louver blades to be I/120 or 0.50 inch across the weak axis, whichever is less. E. Warranty: Provide written warranty to the owner that all products will be free of defective materials or workmanship

- A. Delivery: At the time of delivery all materials shall be visually inspected for damage. Any damaged boxes, crates, louver sections, etc. shall be noted on the receiving ticket and immediately reported to the shipping company and the material
- B. Storage: 1. Material may be stored flat, on end or on its side.
- Material may be stored either indoors or outdoors. 3. If stored outdoors the material must be raised sufficiently off the ground to prevent it being flooded. 4. If stored out doors the material must be covered with a weather proof flame resistant sheeting or tarpaulin.
- 1. Material shall be handled in accordance with sound material handling practices and in such a way as to minimize 2. Louver sections may be hoisted by attaching straps to the jambs and lifting the section while it is in a vertical position. 3. Louver sections should only be lifted and carried by the jambs. Heads, sills and blades are not to be used for lifting or

hoisting louver sections.

PART 2 PRODUCTS

2.02 Materials

2.01 Manufacturers A. The louvers and related materials herein specified and indicated on the drawings shall be as manufactured by the following, or approved equal:

2. Construction Specialties, LTD. 895 Lakefront Promenade Mississauga, Ontario L5E 2C2 Telephone: 888-895-8955B.

A. Aluminum Extrusions: ASTM B211, Alloy 6063-T5, 6063-T6 or 6061-T6. B. Aluminum Sheet: ASTM B3209, Alloy 1100, 3003 or 5005.

1. Construction Specialties, Inc. 49 Meeker Avenue Cranford, New Jersey 07016 Telephone: 800-631-7379

2.03 Fabrication, General A. Provide C/S louver models, bird / insect screens, blank-off panels, structural supports and accessories as specified and/or shown on the drawings. Materials, sizes, depths, arrangements and material thickness to be as indicated or as required for optimal performance with respect to strength; durability; and uniform appearance.

Intake Pressure drop at the point of beginning water penetration 0.19 in. H2O (2.91 mm)

fluorocarbon coating containing "Kynar 500" resin, 1.0 mil minimum dry film thickness.

B. Louvers to be mechanically assembled using stainless steel or aluminum fasteners. C. Include supports, anchorage, and accessories required for complete assembly.

2.04 Louver Models A. C/S 4" (101.6mm) Double Drainable Fixed Extruded Mullion Louver Model 4157 1. **Material:** Heads, sills, jambs and mullions to be one piece structural aluminum members with integral caulking slot and retaining beads. Mullions shall be sliding interlock with internal drains. Blades to be one piece aluminum extrusions with gutters designed to catch and direct water to jamb and mullion drains. Compression gaskets shall be provided between

bottom of mullion or jamb and top of sill to insure leak tight connections. Material thickness to be as follows: Heads, sills,

- jambs and mullions: 0.081" (2.06mm). Fixed blades 0.081" (2.06mm). 2. AMCA Performance: A 4' x 4' unit shall conform to the following: Free Area7.93 sq. ft. (0.74 sq. m.)Free area velocity at the point of beginning water penetration1123 FPM (342.3 m/min)
- A. General: Comply with NAAMM "Metal Finishes Manual" for finish designations and application recommendations, except as otherwise indicated. Apply finishes in factory. Protect finishes on exposed surfaces prior to shipment. Remove scratches and blemishes from exposed surfaces that will be visible after completing finishing process. Provide color as indicated or, if not otherwise indicated, as selected by architect. B. Fluorocarbon Coating 1. Louvers to be finished with an inhibitive thermo-cured primer, 0.2 mil minimum dry film thickness, and a thermo-cured

the Kynar/Hylar coating. The coating shall receive a bake cycle of 17 minutes at 4500F. All finishing procedures shall be one continuous operation in the plant of the manufacturer. 3. Manufacturer to furnish an extended 20 limited warranty for the Kynar/Hylar coating. This limited warranty shall begin on the date of material shipment.

2. All aluminum shall be thoroughly cleaned, etched and given a chromated conversion pre-treatment before application of

2.06 Bird / Insect Screens A. Unless otherwise indicated, all louvers to be furnished with mill finish bird or insect screens. B. Screens to be 18 x 16 aluminum mesh 0.011" (0.279mm) diameter wire insect screens secured within 0.055" (1.40mm) thick extruded aluminum frames. Frames to have mitered corners and corner locks.

2.07 Blank Offs A. Furnish where indicated on the drawings blank-off panels fabricated by the louver manufacturer. B. Blank-off panels to be 2" (50.8mm) thick and to be faced on both sides with 0.032" (0.81 mm) thick aluminum sheet. Panels to be fabricated with an expanded polystyrene (EPS) core having an R-value of 8 (0F*ft2*h/Btu). Panel perimeter frame to be 0.050" (1.27mm) thick-formed aluminum channels. Panel frame to be mitered at the corners. Panels to be finished to match louvers. PART 3 EXECUTION

3.01 Examination: Examine openings to receive the work. Do not proceed until any unsatisfactory conditions have been

417 MONUMENT ROAD, SUITE 7 GRAND JUNCTION, CO 81507 T: 970.712.5045 ERIC T.

KRAAI 401684

REVISION:

CONSTRUCTION

PROJECT NO:

DOCUMENTS

SHEET NAME: **SPECIFICATIONS**

DATE: 09/23/2020

SHEET NO:

1/4'' = 1'-0''

0 1240 GUNNISON A GRAND JUNCTION

3.02 Installation:

A. Comply with manufacturer's instructions and recommendations for installation of the work. B. Verify dimensions of supporting structure at the site by accurate field measurements so that the work will be accurately designed, fabricated and fitted to the structure.

C. Anchor louvers to the building substructure as indicated on architectural drawings. D. Erection Tolerances:

1. Maximum variation from plane or location shown on the approved shop drawings: 1/8" per 12 feet of length, but not exceeding 1/2" in any total building length or portion thereof (non-cumulative).

2. Maximum offset from true alignment between two members abutting end to end, edge-to-edge in line or separated by less than 3": 1/16" (shop or field joints). This limiting condition shall prevail under both load and no load conditions. E. Cut and trim component parts during erection only with the approval of the manufacturer or fabricator, and in accordance

with his recommendations. Restore finish completely. Remove and replace members where cutting and trimming has impaired

the strength or appearance of the assembly. F. Do not erect warped, bowed, deformed or otherwise damaged or defaced members. Remove and replace any members

damaged in the erection process as directed. G. Set units level, plumb and true to line, with uniform joints.

A. Protect installed materials to prevent damage by other trades. Use materials that may be easily removed without leaving

3.03 Protection:

- 3.04 Adjusting and Cleaning: A. Immediately clean exposed surfaces of the louvers to remove fingerprints and dirt accumulation during the installation process. Do not let soiling remain until the final cleaning.
- B. Before final inspection, clean exposed surfaces with water and a mild soap or detergent not harmful to the to the material
- finishes. Thoroughly rinse surfaces and dry. C. Restore louvers and accessory components damaged during installation and construction so no evidence remains of corrective work. If results of restoration are unsuccessful, as determined by the Architect, remove damaged materials and
- 1. Touch up minor abrasions in finishes with a compatible air-dried coating that matches the color and gloss of the factory applied coating.

END OF SECTION

SECTION 122413 - ROLLER WINDOW SHADES

1.1 SUBMITTALS

A. Product Data: For each type of product indicated. Include styles, material descriptions, construction details, dimensions of individual components and profiles, features, finishes, and operating instructions.

B. Shop Drawings: Show location and extent of roller shades. Include elevations, sections, details, and dimensions not shown in Product Data. Show installation details, mountings, attachments to other work, operational clearances, and relationship to adjoining work.

C. Coordination Drawings: Reflected ceiling plans, drawn to scale, on which the following items are shown and coordinated with each other, based on input from installers of the items involved:

Edit subparagraphs below to suit Project.

1. Ceiling suspension system members and attachment to building structure.

Install an intrusion detection alarm system which detects entry into the room/building and which broadcasts a local alarm of

1.1 DELIVERY, STORAGE, AND HANDLING

A. Deliver shades in factory packages, marked with manufacturer and product name, [fire-test-response characteristics,] [lead-free designation,] and location of installation using same designations indicated on Drawings and in a window treatment schedule.

painting, is complete and ambient temperature and humidity conditions are maintained at the levels indicated for Project when

1.2 PROJECT CONDITIONS A. Environmental Limitations: Do not install roller shades until construction and wet and dirty finish work in spaces, including

occupied for its intended use. B. Field Measurements: Where roller shades are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication and indicate measurements on Shop Drawings. Allow clearances for operable glazed units' operation hardware throughout the entire operating range. Notify Architect of discrepancies. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

PART 1 - PRODUCTS

See Editing Instruction No. 1 in the Evaluations for cautions about naming manufacturers and products. Retain one of three paragraphs below. Retain list of manufacturers with either of first two paragraphs; insert list of manufacturers if retaining third paragraph. See Division 01 Section "Product Requirements."

A. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the following:

B. Products: Subject to compliance with requirements, provide one of the following:

1. Hunter Douglas, Inc.; Hunter Douglas Window Fashions Division; Glacier Screen Clear HD1005 White/Grey. 2. Approved Equal

1.1 ROLLER SHADE INSTALLATION

Coordinate requirements for distance between roller shades and glass with clearances between shade perimeter and surrounding construction, glass type, and placement of heating/cooling air supplies to avoid heat buildup and possible damage to glass. Generally retain option for 2 inches (50 mm) in paragraph below. See Evaluations and GANA's "Glazing Manual." A. Install roller shades level, plumb, and aligned with adjacent units according to manufacturer's written instructions, and located so shade band is not closer than [2 inches (50 mm)] < Insert dimension > to interior face of glass. Allow clearances for window operation hardware.

Delete paragraph below if roller shades are manually operated only. See Evaluations for cautions about improper wiring. B. Connections: Connect motorized operators to building electrical system.

A. Adjust and balance roller shades to operate smoothly, easily, safely, and free from binding or malfunction throughout entire

operational range.

1.3 CLEANING AND PROTECTION

A. Clean roller shade surfaces after installation, according to manufacturer's written instructions.

B. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer, that ensure that roller shades are without damage or deterioration at time of Substantial Completion.

C. Replace damaged roller shades that cannot be repaired, in a manner approved by Architect, before time of Substantial

Completion. 1.4 DEMONSTRATION

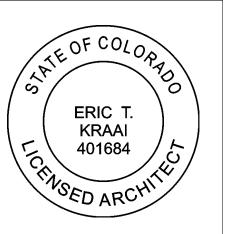
Delete this Article if roller shades are manually operated.

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain roller shades. Refer to Division 01 Section Demonstration and Training."

END OF SECTION

417 MONUMENT ROAD, SUITE 7 GRAND JUNCTION, CO 81507

T: 970.712.5045



REVISION:

0

1240 GUNNISON AV GRAND JUNCTION,

CONSTRUCTION

DOCUMENTS

PROJECT NO:

2075

SPECIFICATIONS

09/23/2020 DATE:

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

	ABBREVIATIONS								
		ADDK	CATA LION2						
A.B.	-ANCHOR BOLT	F.O.B.	-FACE OF BRICK	P.T.	-PRESSURE TREATED				
ADD'L	-ADDITIONAL		-FACE OF CONCRETE	R.	-RADIUS				
ADJ.	-ADJACENT	F.O.W.	-FACE OF WALL	REINF.	-REINFORCEMENT				
A.I.S.C.	-AMERICAN INSTITUTE OF	FS.	-FLAT SLAB	REQ'D	-REQUIRED				
	STEEL CONSTRUCTION	FT.	-FOOT	RM.	-ROOM				
ALT.	-ALTERNATE	FTG.	-FOOTING	SCHED.	-SCHEDULE				
ARCH.	-ARCHITECTURAL	F.W.	-FILLET WELD	SECT.	-SECTION				
A.S.T.M.	-AMERICAN SOCIETY FOR	GA.	-GAUGE	SHT.	-SHEET				
DI DC	TESTING & MATERIALS	GAL.	-GALVANIZED	s.d.l.	-SUPERIMPOSED DEAD LOAD				
BLDG.	-BUILDING	G.L. GR.	-GLU-LAM BEAM	SIM.	-SIMILAR				
BM.	-BEAM	GR. BM.	-GRADE -GRADE BEAM	s.l. S.L.V.	-SNOW LOAD				
B.O. BOT.	-BOTTOM OF -BOTTOM	GR. BM. H.A.S.		S.L.V. SPC.	-SHORT LEG VERTICAL -SPACE				
BSMT.	-BASEMENT	п.А.S. H.D.G.	-HEADED ANCHOR STUD -HOT DIPPED GALVANIZED	SPEC.	-SPACE -SPECIFICATION				
BTWN.	-BASEMENT -BETWEEN	HORIZ.	-HOT DIPPED GALVANIZED -HORIZONTAL	SPEC. SQ.	-SPECIFICATION -SQUARE				
CANT.	-CANTILEVER	H.S.B.	-HIGH STRENGTH BOLT	SQ. STD.	-SQUARE -STANDARD				
CB.	-CANTILLVER -CARDBOARD	HSS	-HOLLOW STRUCTURAL SECTION	STIFF.	-STIFFENER				
CH.	-CHAMFER	I.D.	-INSIDE DIAMETER	STL.	-STEEL				
C.J.	-CONTROL/CONSTRUCTION JOINT	I.F.	-INSIDE FACE	STOR.	-STORAGE				
CJP	-COMPLETE JOINT PENETRATION	IN.	-INCH	SYM.	-SYMMETRICAL				
CLR.	-CLEAR, CLEARANCE	INT.	-INTERIOR	T.&B.	-TOP & BOTTOM				
C.M.U.	-CONCRETE MASONRY UNIT	JNT.	-JOINT	THK.	-THICKNESS				
COL.	-COLUMN	K	-KIP (1,000 lbs.)	T.O.	-TOP OF				
CONC.	-CONCRETE	K.C.I.	-KIP PER CUBIC INCH	TYP.	-TYPICAL				
CONN.	-CONNECTION	LB.	-POUND	U.N.O.	-UNLESS NOTED OTHERWISE				
CONST.	-CONSTRUCTION	LIN. FT.	-LINEAL FEET	VAR.	-VARIES				
CONT.	-CONTINUOUS	I.I.	-LIVE LOAD	VERT.	-VERTICAL				
CONTR.	-CONTRACTOR	L.L.V.	-LONG LEG VERTICAL	V.I.F.	-VERIFY IN FIELD				
CTRD.	-CENTERED	L.S.L.	-LAMINATED STRAND LUMBER	WT.	-WEIGHT				
C.W.	-CURTAIN WALL	L.V.L.	-LAMINATED VENEER LUMBER		<u>SYMBOLS</u>				
DET.	-DETAIL	MAT'L.	-MATERIAL	C	CENTER LINE				
DIAG.	-DIAGONAL	MAX.	-MAXIMUM	~	3				
DIAM.	-DIAMETER	MECH.	-MECHANICAL	Ø	DIAMETER				
DIM.	-DIMENSION	MID.	-MIDDLE						
DISCONT.	-DISCONTINUOUS	MIN.	-MINIMUM	_	ELEVATION				
d.l.	-DEAD LOAD	MISC.	-MISCELLANEOUS	7					
DWG.	-DRAWING	MTL.	-METAL	&	AND				
EA.	-EACH	N.I.C.	-NOT IN CONTRACT						
E.F.	-EACH FACE	NO.	-NUMBER	W/	WITH				
EL.	-ELEVATION	NOM.	-NOMINAL						
ELECT.	-ELECTRICAL	N.T.S.	-NOT TO SCALE	PL	PLATE				
ELEV.	-ELEVATOR	O.C.	-ON CENTER						
EQ.	-EQUAL -END WALL BARS	O.F.	-OUTSIDE PLAMETER	Χ	BY				
E.W.B. E.W.	-END WALL BARS -EACH WAY	O.D. O.H.	-OUTSIDE DIAMETER -OPPOSITE HAND						
E.W. EXIST.	-EACH WAY -EXISTING	O.H. OPNG.	-OPPOSITE HAND -OPENING	#	NUMBER				
EXIST. EXP. JNT.	-EXISTING -EXPANSION JOINT	P.A.F.	-POWDER ACTUATED FASTENERS	_	A.T.				
EXP. JIVI.	-EXPANSION JOINT -EXTERIOR	P.A.F. PL	-PLATE	@	AT				
FDN.	-FOUNDATION	P.S.F.	-POUND PER SQUARE FOOT	ф	COLIABE				
FIN.	-FINISH	P.S.I.	-POUND PER SQUARE INCH	ф	SQUARE				
FLR.	-FLOOR	P.S.L.	-PARALLEL STRAND LUMBER		ANCLE				
. =				L	ANGLE				

C.M.U. REINFORCING SCHEDULE

- PROVIDE #5 @ 32 VERTICAL REINFORCING AT 8" C.M.U. GROUT ALL VERTICAL REINFORCING SOLID. VERTICAL REINFORCEMENT SHALL EXTEND THROUGH BOND BEAMS TO 2" CLR. BELOW TOP OF C.M.U. USE STANDARD "DUR-O-WAL" "LADUR TYPE" @ 16" O.C. HORIZONTAL REINFORCING.
- PROVIDE #5 CONT. VERTICAL EACH SIDE OF ALL OPENINGS AND CONTROL JOINTS. EXTEND 2'-0" MINIMUM EACH SIDE OF OPENING. GROUT SOLID.
- LAP ALL VERTICAL REINFORCING MINIMUM OF 40 BAR DIAMETERS.
- PROVIDE #5 x 4'-0" # 32 DOWELS FROM STEMWALL TO C.M.U. LAP 2'-0" WITH VERTICAL REINFORCING AND GROUT SOLID.

R	REINFORCED MAS LINTEL SCHEDULE									
TYPE	MAX. OPENING WIDTH	NOMINAL DEPTH	REINF.	TYPICAL DETAIL						
A	4'-0"	16"	(2) #4 BOT.	-^√- ∠— GROUT CORES						
B	6'-4"	16"	(2) #5 T.&B.	SOLID						
\bigcirc	9'-4"	24"	(2) #5 T.&B.	TEA VERT REINE ~						
			VERT. REINF. ~ RE: WALL DETAILS							

- 1. PROVIDE 8" MIN. BEARING FOR CLEAR SPAN 8'-0" OR LESS AND 16" MIN. BEARING FOR CLEAR
- SPAN GREATER THAN 8'-0". 2. EXTEND TOP & BOTTOM REINFORCEMENT 2'-0 BEYOND EDGE OF OPENING EACH SIDE.
- TERMINATE TOP REINFORCEMENT W/ STD. HOOK AT CONTROL JOINTS OR FREE EDGES.
- 3. PROVIDE SOLID GROUTED OR SOLID MASONRY JAMB UNDER LINTEL EACH SIDE OF OPENING.
- 5. PROVIDE LINTEL "D" FOR 12'-4 OPENINGS U.N.O. ON DRAWINGS. 6. FOR OPENINGS GREATER THAN 12'-4, NOTIFY THE ENGINEER.

4. SEE TYP. WALL REINFORCEMENT FOR ADDITIONAL REQUIREMENTS.

GENERAL NOTES CONT.

- A. ALL REINFORCING IN MASONRY WALLS SHALL CONFORM TO ASTM A615, GRADE 60 AND SHALL BE
- FULLY ENCLOSED WITH GROUT. USE PEA GRAVEL WITH fc = 3,000 PSI. B. CONCRETE MASONRY SHALL CONSIST OF LIGHTWEIGHT CONCRETE BLOCK WITH A COMPRESSIVE STRENGTH OF 1,900 PSI.
- C. FILL ALL VOIDS AND BLOCK CELLS SOLID WITH MORTAR FOR A DISTANCE OF 24" BENEATH AND 12" EACH SIDE OF ALL BEAM REACTIONS OR OTHER CONCENTRATED
- LOADS, UNLESS OTHERWISE SHOWN OR NOTED. D. MASONRY IS TO BE LAID IN TYPE "M" OR "S" MORTAR IN ACCORDANCE WITH SECTION 2103 OF THE INTERNATIONAL BUILDING CODE. TYPE "N" MASONRY CEMENT MORTAR IS NOT
- E. MASONRY WALLS MUST BE ADEQUATELY BRACED DURING CONSTRUCTION TO
- WITHSTAND WIND AND SEISMIC LOADS. BRACING MUST REMAIN IN PLACE UNTIL ROOF (AND FLOOR) DIAPHRAGMS ARE FULLY CAPABLE OF PROVIDING LATERAL SUPPORT.

FOUNDATIONS:

- FOUNDATION DESIGN IS BASED ON RECOMMENDATIONS BY HUDDLESTON-BERRY ENGINEERING AND TESTING, L.L.C., PROJECT NO. 00569-0028. RECOMMENDATIONS IN THIS REPORT SHOULD BE FOLLOWED. ---1,500 P.S.F. A. ALLOWABLE SOIL BEARING PRESSURE------250 P.C.I.
- B. MODULUS OF SUBGRADE REACTION----SOILS ENGINEER OF RECORD SHALL EXAMINE THE EXCAVATION AND OBSERVE STRUCTURAL FILL COMPACTION TO VERIFY THAT ALLOWABLE SOIL BEARING CAPACITY HAS BEEN ATTAINED.
- A. SPECIAL INSPECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE SCHEDULE ON THIS SHEET.
- ALL DIMENSIONS ON STRUCTURAL DRAWINGS TO BE CHECKED AGAINST ARCHITECTURAL AND AGAINST PRE-MANUFACTURED BUILDING DIMENSIONS. NOTIFY ARCHITECT AND STRUCTURAL ENGINEER OF ANY DISCREPANCIES BEFORE PROCEEDING WITH CONSTRUCTION.
- VERIFY ALL OPENINGS THROUGH FLOORS, ROOF, AND WALLS WITH MECHANICAL AND ELECTRICAL REQUIREMENTS.

GENERAL NOTES

GOVERNING CODES USED FOR DESIGN:
2015 INTERNATIONAL BUILDING COD

ASCE/SEI 7-10 LIVE LOADS USED IN DESIGN:

A. ROOF LOADS: GROUND SNOW LOAD --FLAT ROOF SNOW LOAD ----30 PSF SNOW EXPOSURE FACTOR Ce ---SNOW LOAD IMPORTANCE FACTOR -THERMAL FACTOR -B. FLOOR LOADS: SECOND FLOOR PLATFORM-STORAGE ROOMS --125 PSF

C. WIND: LATERAL DESIGN VALUES FOR PRE-MANUFACTURED STRUCTURE TO BE PROVIDED BY THE MANUFACTURER. THE PARAMETERS BELOW ARE FOR THE EXISTING MASONRY

STORAGE BUILDING. EXPOSURE --RISK CATEGORY INTERNAL PRESSURE COEFFICIENT GCpi ----COMPONENTS AND CLADDING (ASD VALUES BASED ON EFFECTIVE AREA = 20 SQ. FT.) TYPICAL WALL AREA (INWARD PRESSURE) --TYPICAL WALL AREA (OUTWARD PRESSURE) WALL CORNERS (OUTWARD PRESSURE) ----33 PSF TYPICAL FLAT ROOF AREA (OUTWARD PRESSURE) ---27 PSF TYPICAL SLOPED ROOF AREA (OUTWARD PRESSURE) ---21PSF

SLOPED ROOF RAKES, RIDGES & CORNERS (OUTWARD PRESSURE) -ROOF OVERHANGS ----PARAPETS (INWARD OR OUTWARD PRESSURE) -D. SEISMIC: LATERAL DESIGN VALUES FOR PRE-ENGINEERED STRUCTURE TO BE PROVIDED BY THE MANUFACTURER. THE FOLLOWING PARAMETERS ARE FOR THE EXISTING MASONRY

STORAGE BUILDING. RISK CATEGORY IMPORTANCE FACTOR (le) --R COEFFICIENT-SPECTRAL RESPONSE COEFFICIENTS: --0.069 ---0.250 --0.111

SEISMIC RESPONSE COEFFICIENTS EXISTING STORAGE ROOM-SITE CLASS ---SEISMIC DESIGN CATEGORY BASIC SEISMIC:

DESIGN BASE SHEAR ANALYSIS PROCEDURE ---- EQUIVALENT LATERAL FORCE PROCEDURE

3. CONCRETE: A. <u>CONCRETE MIX TABLE</u> (NORMAL WEIGHT CONCRETE):

FORCE RESISTING SYSTEM -

INTENDED USE	28 DAY STRENGTH F'C (KSI)	MAX W.C. (INCLUDING FLY ASH)	MAX AGGR. (IN) (1)	SLUMP LIMITS (IN)	TOTAL AIR LIMITS (%) (2)	CEMENT TYPE	CONCRETE TYPE NORMAL WEIGHT-NW LIGHT WEIGHT-LW	REQ'D ADMIXTURES (3)	OTHER REQUIREMENTS (4)
CONCRETE MAT	4.5	0.45	1	4	6	II	NW	AE, WPA	FAR

(1) FOR THE MAXIMUM COARSE AGGREGATE SIZE INDICATED, USE THE FOLLOWING AGGREGATE SIZE NUMBERS PER ASTM C33: 3/4" - #67 AGGREGATE

1" - #57 AGGREGATE (2) TOTAL AIR CONTENT LIMITS INCLUDE BOTH ENTRAINED AND ENTRAPPED AIR +/- 1 1/2%. 'N' IN COLUMN INDICATES ADDITION OF ENTRAINED AIR IS NOT

(3) ABBREVIATIONS FOR REQUIRED ADMIXTURES AS FOLLOWS: AE = AIR-ENTRAINING ADMIXTURE. DO NOT USE ENTRAINED AIR FOR STEEL TROWELED FINISHED FLOORS.

WRA = WATER REDUCING ADMIXTURE. WPA = WATERPROOFING ADMIXTURE - SEE PROJECT SPECIFICATIONS (4) ABBREVIATIONS FOR OTHER REQUIREMENTS AS FOLLOWS:

FAR = 20% CLASS F FLY ASH REQUIRED. SOG = CONTRACTOR TO VERIFY ALKALINITY OF CONCRETE SURFACE, SLAB VAPOR TRANSMISSION, AND SLAB FLATNESS/LEVELNESS ARE COMPATIBLE WITH FLOORING SYSTEM AND ADHESIVES PRIOR TO INSTALLING FLOORING. AMOUNT OF CEMENTITIOUS MATERIALS LISTED SHALL BE PROVIDED, DO NOT USE LESS AND DO NOT SUPPLY OVER 5% MORE.

(5) FOR CONCRETE PLACED BY PUMPING, PROVIDE CONCRETE MIX FLOWABILITY TO FACILITY PUMPING.

B. ALL REINFORCING SHALL CONFORM TO ASTM A615, GRADE 60, EXCEPT COLUMN TIES, BEAM STIRRUPS, AND DOWELS TO SLAB ON GRADE WHICH MAY BE GRADE 40. C. NO SPLICES OF REINFORCEMENT SHALL BE MADE EXCEPT AS DETAIL OR AUTHORIZED BY THE STRUCTURAL ENGINEER. LAP SPLICES, WHERE NOT SPECIFICALLY DETAILED , SHALL BE A MINIMUM OF 48 BAR DIAMETERS. MAKE ALL BARS CONTINUOUS AROUND CORNERS. D. STAGGER SPLICES A MINIMUM OF 4'-0" FOR CONTINUOUS TOP AND BOTTOM

BARS IN FOUNDATIONS, UNLESS OTHERWISE SHOWN OR NOTED. E. DETAIL BARS IN ACCORDANCE WITH A.C.I. DETAILING MANUAL AND A.C.I. BUILDING CODE

REQUIREMENTS FOR REINFORCED CONCRETE, LATEST EDITIONS. F. PROVIDE ALL ACCESSORIES NECESSARY TO SUPPORT REINFORCING (INCLUDING W.W.F.) AT POSITIONS SHOWN ON THE DRAWINGS. DO NOT ATTEMPT TO POSITION ANY REINFORCEMENT BY LIFTING DURING CONCRETE PLACEMENT.

G. REINFORCEMENT PROTECTION SHALL BE AS FOLLOWS: (1) CONCRETE POURED AGAINST EARTH--

(2) FORMED CONCRETE EXPOSED TO EARTH OR WEATHER---(3) FORMED STAIRS OR WALLS NOT EXPOSED TO WEATHER-----H. PLACE 2-#5 (ONE EACH FACE) WITH 2'-0 PROJECTION AROUND ALL OPENINGS IN CONCRETE UNLESS OTHERWISE SHOWN OR NOTED.

I. SLABS, BEAMS, AND GRADE BEAMS SHALL NOT HAVE JOINTS IN A HORIZONTAL PLANE. ANY STOP IN CONCRETE WORK MUST BE MADE AT MIDDLE OF SPAN WITH VERTICAL BULKHEADS AND KEYS AS SHOWN PER THE TYPICAL CONCRETE WALL CONSTRUCTION JOINT DETAIL. ALL CONSTRUCTION JOINTS SHALL BE AS DETAILED OR AS APPROVED BY THE ARCHITECT AND THE STRUCTURAL ENGINEER.

5

ISSUE:

 \triangleleft

DE

Lindauer · Dunn, structural eng

---51 PSF

--69 PSF

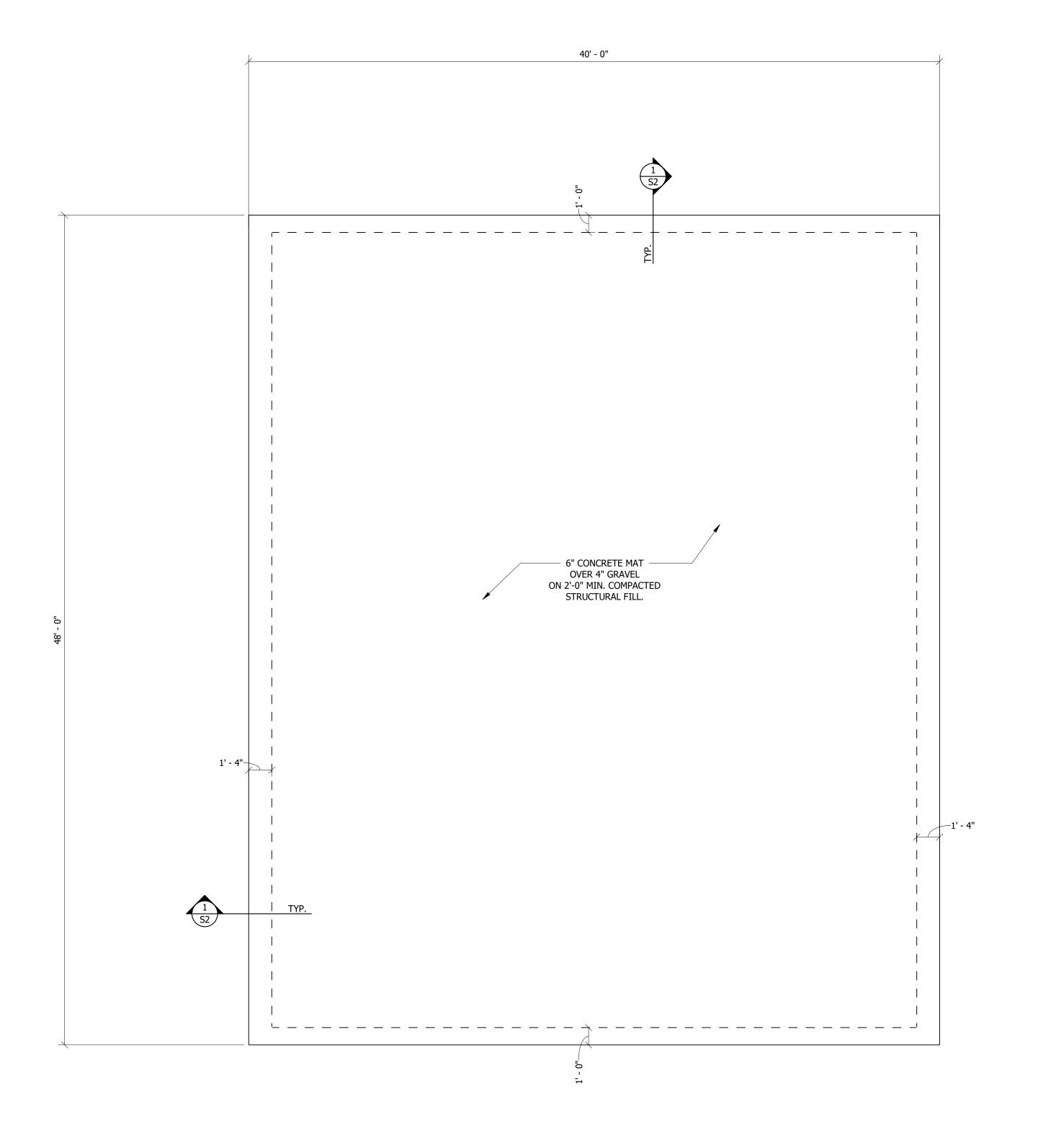
--ORDINARY REINFORCED CONCRETE

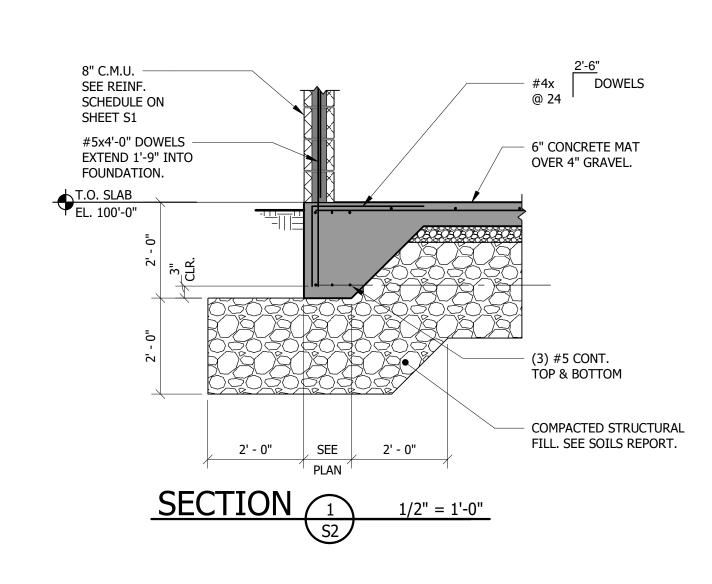
MASONRY SHEAR WALLS

--70 PSF

GENERAL NOTES & DETAILS

20.078 DRAWN BY: KDN CHECKED BY: FNR DATE: 09/09/20





FOUNDATION PLAN

1/4" = 1'-0"

REINFORCE CONCRETE MAT SLAB W/ #5 @ 12 EACH WAY. PLACE IN MIDDLE OF SLAB. REINFORCEMENT SHALL BEAR ON CHAIRS.
 DO NOT CUT JOINTS IN CONCRETE MAT SLAB.

GOLF

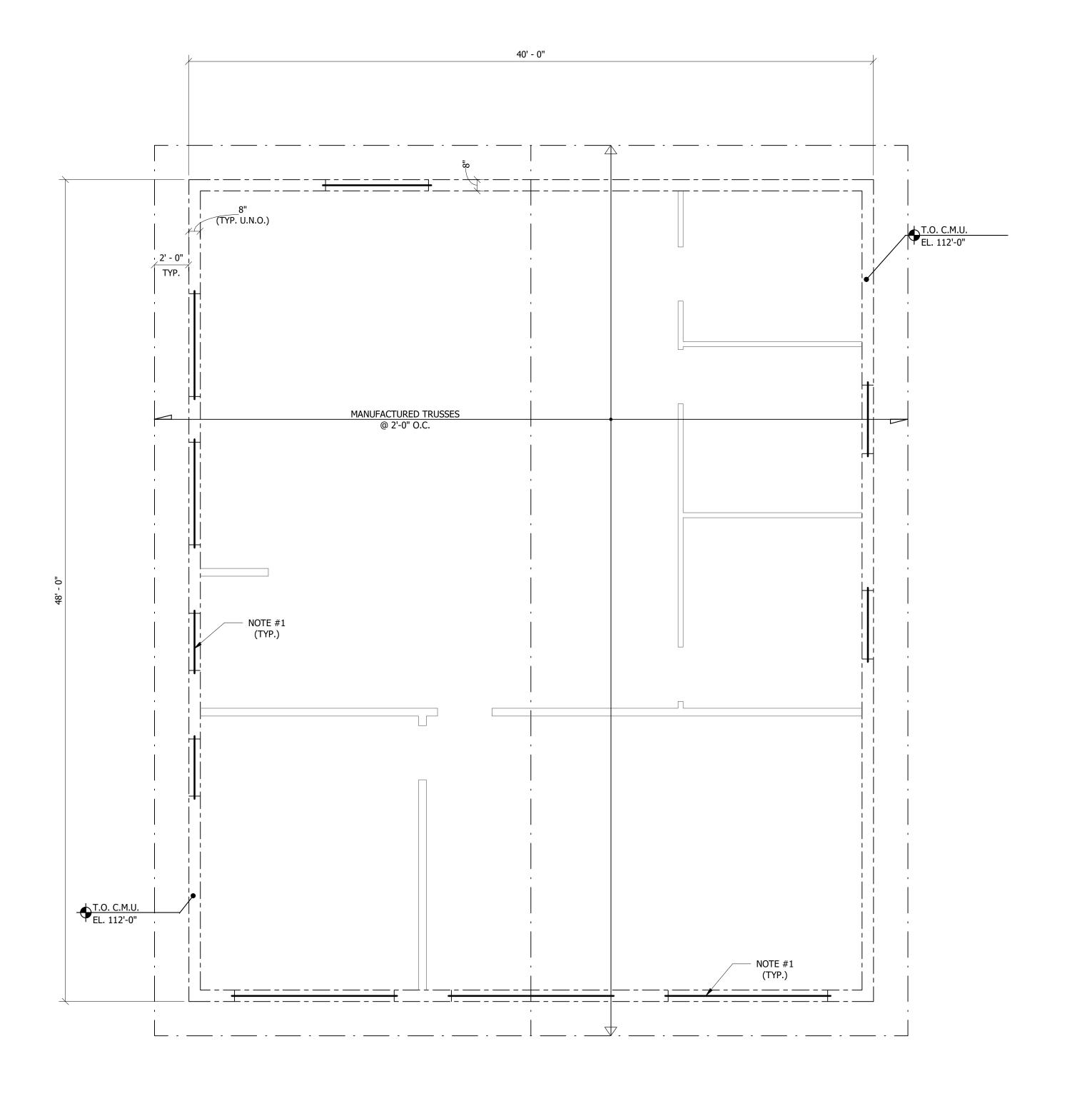
Lindauer Dunn, Inc. structural engineers

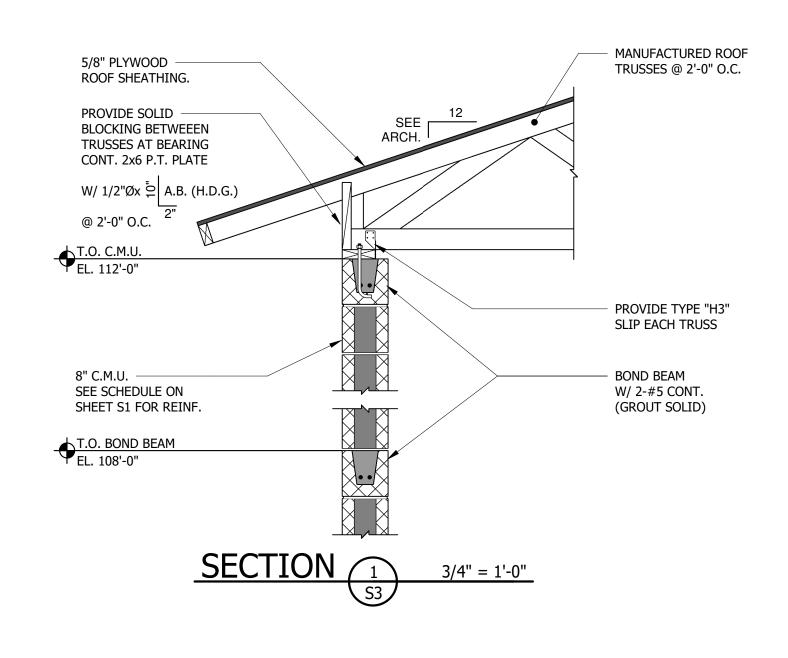
FOR: KRAAI DESIGN

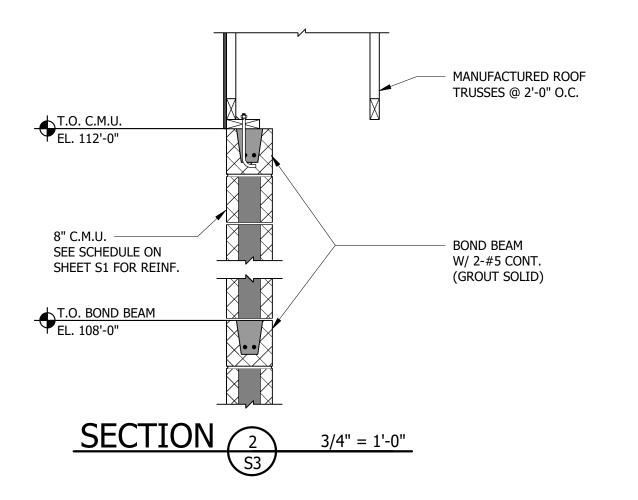
FOUNDATION PLAN

FOUNDATION P
ISSUE:

JOB #	20.078
DRAWN BY:	JDG
CHECKED BY:	FNR
DATE:	09/09/20







ROOF FRAMING PLAN 1/4" = 1'-0" 1. SEE TYP. LINTEL SCHEDULE ON SHEET S1.

GOLF

Lindauer Dunn, Inc. structural engineers

DESIGN

ROOF FRAMING PLAN

ISSUE:

JOB #	20.078
DRAWN BY:	JDG
CHECKED BY:	FNR
DATE:	09/09/20