APARTMENT BUILDING AND SITEWORK

INDIAN HEALTH SERVICES

BLACKFEET COMMUNITY HOSPITAL

760 HOSPITAL CIRCLE, BROWNING, MT 59417

100% CONSTRUCTION DOCUMENTS

DRAWING SYMBOLS

- 98.5 TOC — NEW ELEVATION
- EXISTING ELEVATION
- 98.5 E TOC — EXISTING ELEVATION
- EXISTING ELEVATION
- 95 — EXISTING CONTOUR
- 95.00 — NEW CONTOUR
- ELEVATION DATUM (SECTIONS, ELEVATIONS ONLY)
- B — TEST BORING (SITE PLANS ONLY)
- PROPERTY LINE
- X / X.X — BUILDING SECTION
- X / X.X — WALL SECTION
- 1 / A101 — DETAIL DRAWING
- A3.1 — BUILDING ELEVATION
- 1 / A7.1 — INTERIOR ELEVATION
- # — PLAN NOTES
- W — WINDOW ID TAG
- A100 — DOOR NUMBER
- ROOM NAME 101 — ROOM NAME & NUMBER
- XXX — PARTITION SYMBOL
- 1 — REVISION TAG
- 0 — COLUMN LINE GRID
- # — DEMOLITION PLAN NOTES
- ? — SITE PLAN NOTES
- EQUIPMENT NUMBER
- PT-XX — PAINT COLOR TAG

VICINITY MAP

NO SCALE

MATERIAL SYMBOLS

- EARTH
- GRANULAR FILL
- CONCRETE
- CONCRETE MASONRY
- FACE BRICK
- LVC FILL
- CUT STONE
- STEEL
- CONT WD FRAMING
- WOOD BLOCKING
- FINISH WOOD
- PLYWOOD
- RIGID OR TAPERED INSULATION, EIFS
- BATT INSUL (R-19)
- GLASS
- ASPHALT
- GYPSUM BOARD

ABBREVIATIONS

+/-	plus or minus	CONC	concrete	FF	finish floor	JAN	janitor	PL	plate/plastic/ property line	STD	standard
A/C	air conditioning	CONF	conference	FG	finish grade	JT	joint	PLBG	plumbing	STL	steel
AB	anchor bolt	CONST	construction	FIN	finish	JST	joist	PLYWD	plywood	STOR	storage
AC	acoustical	CONT	continuous	FL	flow line			PR	pair	STRUCT	structure/structural
ACCU	air cooled condensing unit	CORR	corridor	FLDG	folding	LAM	laminate	PREFIN	prefinished	SUSP	suspended
ADJ	adjustable	CPT	carpet	FLR	floor	LAV	lavatory	PROJ(D)	project(projected)		
AFF	above finish floor	CRS	course	FLUOR	fluorescent	LDR	ladder	PT	pressure treated	T	tread
ALT	alternate	CT	ceramic tile	FRP	fiberglass reinforced plastic	LF	lineal feet	PTD	painted	T&B	top & bottom
ALUM	aluminum			FRT	fire retardant	LOCN	location			T&G	tongue & groove
ANOD	anodized	DBL	double	FS	foot scraper	LVC	low volume change	QT	quarry tile	TB	backboard
APPROX	approximate	DF	drinking fountain	FT(')	foot					TEL	telephone
ARCH	architect/ architectural	DIA	diameter	FTG	footing	MAS	masonry	R	riser	TLT	toilet
@	at	DIM	dimension	FURR	furring	MATL	material	RAD(R)	radius	TO	top of
		DN	down	FURN	furnace	MAX	maximum	RAG	return air grille	TOC	top of curb
BD	board	DO	ditto	FV	field verify	MECH	mechanical	RD	roof drain	TPH	toilet paper holder
BLDG	building	DR	door			MEMB	membrane	REF	refer/reference	TV	television
BLK	block/blocking	DS	downspout	G	gas	MANUF	manufacturer	REFRIG	refrigerator	TW	top of wall
BM	beam	DTL	detail	GA	gauge	MH	manhole	REINF	reinforcing	TYP	typical
BMRK	benchmark	DWG	drawing	GALV	galvanized	MIN	minimum	REQ'D	required		
BOC	back of curb			GB	grab bar	MIRR	mirror	RESIL	resilient	UCL	under cabinet light
BRG	bearing	E	east	GC	general contractor	MISC	miscellaneous	RM	room		
BRK	brick	EA	each	GL	glass/glazing	MO	masonry opening	RO	rough opening	VCT	vinyl composition tile
BRZ	bronze	EC	electrical contractor	GRD	grade	MTL	metal	ROW	right of way	VERT	vertical
BO	bottom of	EG	existing grade	GYP	gypsum	MULL	mullion			VEST	vestibule
BS	both sides	EIFS	exterior insulation finish system					S	south	VWC	vinyl wall covering
BTM	bottom	EJ	expansion joint	HB	hose bib	N	north	SAN	sanitary		
BUR	built-up roof	ELEC	electrical	HDWD	hardwood	NA	not applicable	SAT	suspended acoustical tile	W	west
BW	bottom of wall	ELEV	elevation/elevator	HDWR	hardware	NIC	not in contract			W/	with
		EQUIP	equipment	HM	hollow metal	NO(#)	number	SB	splash block	W/O	with out
CAB	cabinet	EW	each way	HORIZ.	horizontal	NOM	nominal	SECT	section	WC	water closet
CB	chalkboard	EXIST	existing	HPDL	high pressure decorative laminate	NTS	not to scale	SF	square feet	WD	wood
CC	center to center	EXP	exposed					SHT	sheet	WNDW	window
CJ	control joint/ construction joint	EPDM	ethylene propylene diene terpolymer	HT	height	OA	overall	SHWR	shower	WH	water heater
	center line	EXT	exterior	HVAC	heating, ventilating & air conditioning	OC	on center	SIM	similar	WNSCT	wainscot
CL	ceiling			HW	hot water	OD	outside diameter	SND	sanitary napkin dispenser	WP	waterproofing, waterproof
CLG	closet	FD	floor drain			OFF	office	SPECS	specifications	WT	weight
CLO	clear/clearance	FDN	foundation	ID	inside diameter	OPNG	opening	SQ	square	WWF	welded wire fabric
CLR	concrete	FE	fire extinguisher	IN(")	inch	OVHD	overhead	SRT	studded rubber tile		
CMU	mansonry unit	FEC	fire extinguisher cabinet	INSUL	insulation			SS	stainless steel	YD	yard
COL	column			INT	interior	PART	partition				
						PLAS	plaster				

SHEET INDEX

GENERAL	
TS	TITLE SHEET
ABA	ACCESSIBILITY STANDARDS
LS1.1	FIRST FLOOR LIFE SAFETY
LS1.2	SECOND FLOOR LIFE SAFETY
SP1.1	ARCHITECTURAL SITE PLAN
CIVIL SITE & LANDSCAPING	
C0.1	CIVIL GENERAL NOTES
C1.1	EXISTING CONDITIONS - NORTH
C1.2	EXISTING CONDITIONS - SOUTH
CD1.1	DEMO PLAN
CS1.1	SITE PLAN
CS1.2	GEOMETRY PLAN
CG1.1	GRADING PLAN
CG1.2	GRADING PLAN
CG1.3	EROSION CONTROL PLAN
CG1.4	EROSION CONTROL PLAN
CG5.1	EROSION CONTROL DETAILS
CG5.2	WEIR OUTLET DETAILS
CP1.1	PAVING PLAN
CP1.2	JOINTING PLAN
CP5.1	PAVING DETAILS
CP5.2	PAVING DETAILS
CU1.1	OVERALL UTILITY PLAN
CU2.1	SANITARY SEWER PLAN
CU3.1	WATERLINE PLAN
CU3.2	WATERLINE PLAN
CU5.1	SANITARY SEWER DETAILS
CU5.2	WATERLINE DETAILS
LP1.1	NORTH LANDSCAPE PLAN
LP1.2	SOUTH LANDSCAPE PLAN
LP5.1	PLANTING DETAILS AND NOTES
LI1.1	IRRIGATION PLAN
LI5.1	IRRIGATION DETAILS
STRUCTURAL	
S0.1	GENERAL NOTES
S0.2	GENERAL NOTES
S0.3	INSPECTION TABLES
S1.1	FOUNDATION PLAN
S1.3	FLOOR FRAMING PLAN
S2.1	ROOF PLATFORM PLAN
S2.2	ROOF FRAMING PLAN
S3.1	COLUMN SCHEDULE
S3.2	BRACE FRAME SCHEDULE AND FRAMING ELEVATIONS
S3.3	BRACE FRAME DETAILS
S3.4	CANOPY COLUMN LAYOUT
S4.1	TYPICAL FOUNDATION DETAILS
S4.2	FOUNDATION DETAILS
S5.1	TYPICAL FRAMING DETAILS
S5.2	FRAMING DETAILS
S5.3	FRAMING DETAILS
S5.4	FRAMING DETAILS
S5.5	FRAMING DETAILS
S6.1	LIGHT GAGE FRAMING DETAILS
S7.1	STAIR PLANS AND DETAILS

SHEET INDEX

ARCHITECTURAL	
A5.7	WALL SECTIONS
A5.10	SECTION DETAILS
A0.1	FIRST FLOOR PLAN - DIMENSIONS
A0.2	SECOND FLOOR PLAN - DIMENSIONS
A1.1	FIRST FLOOR PLAN
A1.2	SECOND FLOOR PLAN
A1.3	ENLARGED TYPICAL PLANS
A1.4	ENLARGED PLANS
A1.5	ENLARGED PLANS
A1.6	ENLARGED PLANS
A1.7	STAIR DETAILS
A1.8	STAIR DETAILS
A1.9	ELEVATOR DETAILS
A1.10	MAIN ENTRY
A1.11	PATIO
A2.1	ROOF PLAN
A3.1	EXTERIOR ELEVATIONS
A3.2	EXTERIOR ELEVATIONS
A3.3	EXTERIOR ELEVATIONS
A4.1	BUILDING SECTIONS
A4.2	BUILDING SECTIONS
A4.3	BUILDING SECTIONS
A4.4	BUILDING SECTIONS
A5.1	WALL SECTIONS
A5.2	WALL SECTIONS
A5.3	WALL SECTIONS
A5.4	WALL SECTIONS
A5.5	WALL SECTIONS
A5.6	WALL SECTIONS
A5.8	SECTION DETAILS
A5.9	SECTION DETAILS
A6.1	DOOR & WINDOW INFORMATION
A6.2	DOOR & WINDOW DETAILS
A7.1	INTERIOR ELEVATIONS
A7.2	INTERIOR ELEVATIONS
A7.3	INTERIOR ELEVATIONS
A7.4	INTERIOR ELEVATIONS
A8.1	MILLWORK SECTION DETAILS
A9.1	FIRST FLOOR REFLECTED CEILING PLAN
A9.2	SECOND FLOOR REFLECTED CEILING PLAN
A9.3	CEILING DETAILS
A10.1	FIRST FLOOR FINISH PLAN
A10.2	SECOND FLOOR FINISH PLAN
A10.3	FINISH SCHEDULES
A11.1	FIRST FLOOR EQUIPMENT PLAN
A11.2	SECOND FLOOR EQUIPMENT PLAN
A11.3	ENLARGED EQUIPMENT PLAN
A12.1	FIRST FLOOR SIGNAGE PLAN
A12.2	SECOND FLOOR SIGNAGE PLAN
FIRE PROTECTION	
FG0.1	FIRE SUPPRESSION GENERAL NOTES
FX1.1	FIRST FLOOR FIRE SUPPRESSION PLAN
FX1.2	SECOND FLOOR FIRE SUPPRESSION PLAN
F4.1	FIRE SUPPRESSION LARGE-SCALE PLANS

SHEET INDEX

F4.2	FIRE PUMP LARGE-SCALE PLANS
F5.1	FIRE SUPPRESSION DETAILS
MECHANICAL	
MG0.1	MECHANICAL SYMBOLS LEGEND AND GENERAL NOTES
MH1.1	FIRST FLOOR HVAC PLAN
MH1.2	SECOND FLOOR HVAC PLAN
MP1.1	FIRST FLOOR MECHANICAL PIPING PLAN
MP1.2	SECOND FLOOR MECHANICAL PIPING PLAN
M3.1	MECHANICAL SECTIONS
M3.2	MECHANICAL SECTIONS
M4.1	MECHANICAL LARGE-SCALE PLANS
M4.2	MECHANICAL LARGE-SCALE PLANS
M5.1	MECHANICAL DETAILS
M6.1	MECHANICAL PIPING ISOMETRICS
M7.1	MECHANICAL SCHEDULES
PLUMBING	
PL1.0	FOUNDATION PLUMBING PLAN
PL1.1	FIRST FLOOR PLUMBING PLAN
PL1.2	SECOND FLOOR PLUMBING PLAN
P3.1	PLUMBING FIXTURES
P4.1	PLUMBING LARGE-SCALE PLANS
P4.2	PLUMBING LARGE-SCALE PLANS
P5.1	PLUMBING DETAILS
P6.1	PLUMBING DIAGRAMS - ONE BEDROOM APARTMENT
P6.2	PLUMBING RISER DIAGRAMS - TWO BEDROOM APARTMENT
P6.3	PLUMBING RISER DIAGRAMS - FOUR BEDROOM APARTMENT
P6.4	PLUMBING RISER DIAGRAMS - MECHANICAL ROOM, RESTROOMS, LAUNDRY ROOM
P6.5	NATURAL GAS PIPING RISER DIAGRAM
P7.1	PLUMBING SCHEDULES
ELECTRICAL	
EG0.1	ELECTRICAL SYMBOLS LEGEND AND GENERAL NOTES
ES1.1	ELECTRICAL SITE PLAN
EL1.1	FIRST FLOOR LIGHTING PLAN
EL1.2	SECOND FLOOR LIGHTING PLAN
EP1.1	FIRST FLOOR POWER PLAN
EP1.2	SECOND FLOOR POWER PLAN
EP2.1	ELECTRICAL ROOF PLAN
EY1.1	FIRST FLOOR SPECIAL SYSTEMS PLAN
EY1.2	SECOND FLOOR SPECIAL SYSTEMS PLAN
E4.1	ELECTRICAL LARGE-SCALE PLANS
E4.2	ELECTRICAL LARGE-SCALE PLANS
E5.1	ELECTRICAL DETAILS
E5.2	ELECTRICAL DETAILS
E5.3	ELECTRICAL DETAILS
E6.1	ELECTRICAL DIAGRAMS
E7.1	ELECTRICAL SCHEDULES
E7.2	ELECTRICAL SCHEDULES

ADDENDUM 001 (1)	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **TITLE SHEET**	Project Title: **APARTMENT BUILDING AND SITEWORK** Contract No.: HHSI102201800005I Task Order No.: 75H70119F30002	Project Number: **H IH BLAC 19100**	
Approved: Project Director	Location: **BROWNING, MONTANA**	Building Number	
	Date: **09/08/2020** / Checked: **JU** / Drawn: TK	Drawing Number: **TS**	

INDIAN HEALTH SERVICE · PHS · 1955 ·

SELECTED DETAILS FROM ABA ACCESSIBILITY STANDARDS

DETAILS ARE TAKEN FROM THE 2010/2015 STANDARDS

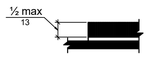


FIGURE 302.2
CARPET PILE HEIGHT

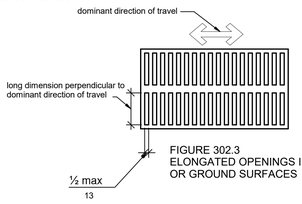


FIGURE 302.3
ELONGATED OPENINGS IN FLOOR OR GROUND SURFACES

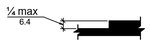


FIGURE 303.2
VERTICAL CHANGE IN LEVEL

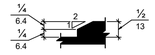
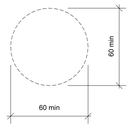


FIGURE 303.3
BEVELED CHANGE IN LEVEL AND THRESHOLDS



CIRCULAR TURNING SPACE

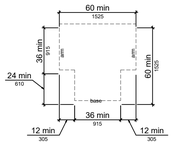


FIGURE 304.3.2
T-SHAPED TURNING SPACE

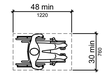


FIGURE 305.3
CLEAR FLOOR OR GROUND SPACE

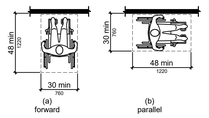


FIGURE 305.5
POSITION OF CLEAR FLOOR OR GROUND SPACE

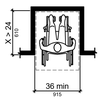


FIGURE 305.7.1
MANEUVERING CLEARANCE
IN AN ALCOVE,
FORWARD APPROACH

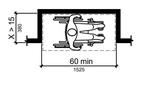


FIGURE 305.7.2
MANEUVERING CLEARANCE IN ALCOVE, PARALLEL APPROACH

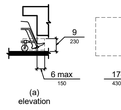


FIGURE 306.2
TOE CLEARANCE

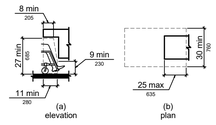


FIGURE 306.3
KNEE CLEARANCE

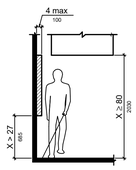


FIGURE 307.2
LIMITS OF
PROTRUDING OBJECTS

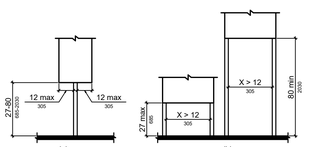


FIGURE 307.3
POST-MOUNTED PROTRUDING OBJECTS

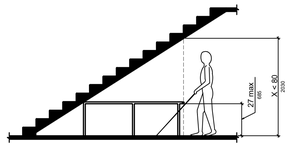


FIGURE 307.4
VERTICAL CLEARANCE

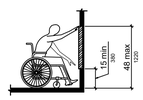


FIGURE 308.2.1
UNOBSTRUCTED
FORWARD REACH

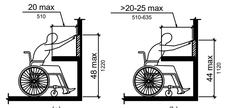


FIGURE 308.2.2
UNOBSTRUCTED HIGH
FORWARD REACH

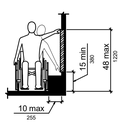


FIGURE 308.3.1
UNOBSTRUCTED
SIDE REACH

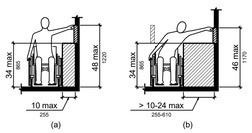


FIGURE 308.3.2
UNOBSTRUCTED HIGH
SIDE REACH

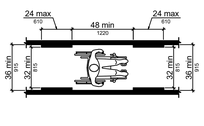


FIGURE 403.5.1
CLEAR WIDTH OF AN
ACCESSIBLE ROUTE

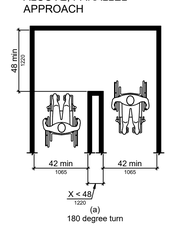


FIGURE 403.5.2
CLEAR WIDTH AT TURN

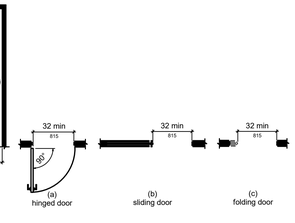
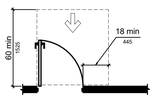
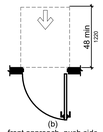
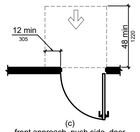
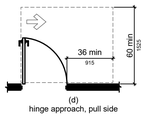


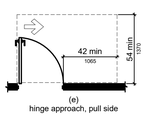
FIGURE 404.2.3
CLEAR WIDTH OF DOORWAYS

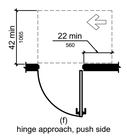


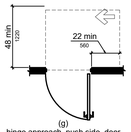


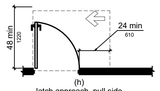


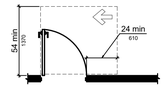


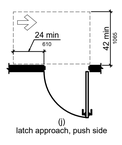


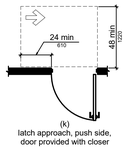












SLOPES AT THE REQUIRED MANEUVERING CLEARANCE EXITS SHALL NOT EXCEED 2% IN ANY DIRECTION.

FIGURE 404.2.4.1
MANEUVERING CLEARANCE AT MANUAL SWINGING DOORS AND GATES

FIGURE 404.2.4.2
MANEUVERING CLEARANCES AT DOORWAYS w/o DOORS, SLIDING DOOR, GATES AND FOLDING DOORS

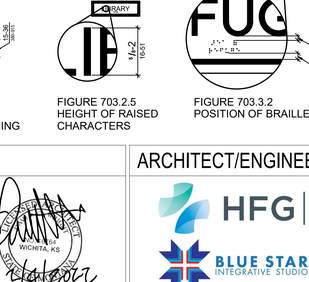


FIGURE 404.2.4.3
MANEUVERING CLEARANCE AT RECESSED DOORS AND GATES

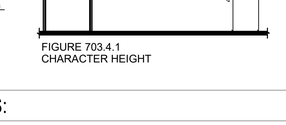


FIGURE 404.2.6
DOORS IN SERIES AND GATES IN SERIES

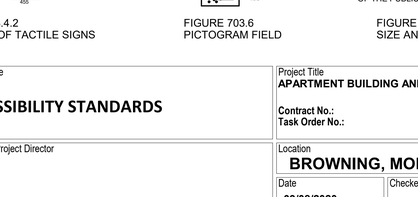


FIGURE 405.7
RAMP LANDINGS

FIGURE 405.9.1
EXTENDED FLOOR OR GROUND SURFACE EDGE PROTECTION

FIGURE 405.9.2
CURB OR BARRIER EDGE PROTECTION

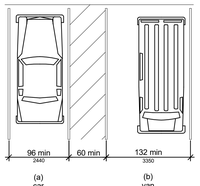


FIGURE 502.2 / 502.3
VEHICLE PARKING SPACES

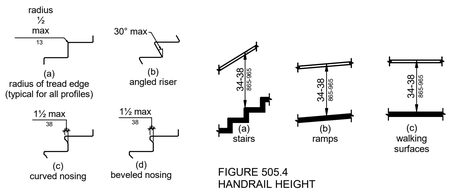


FIGURE 504.5
STAIR NOSINGS

FIGURE 504.4
HANDRAIL HEIGHT

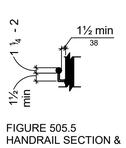


FIGURE 505.5
HANDRAIL SECTION &
CLEARANCE

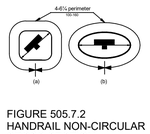


FIGURE 505.7.2
HANDRAIL NON-CIRCULAR
CROSS SECTION

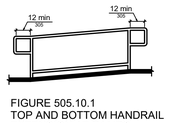


FIGURE 505.10.1
TOP AND BOTTOM HANDRAIL
EXTENSION AT RAMPS

FIGURE 505.10.2
TOP HANDRAIL EXTENSION
AT STAIRS

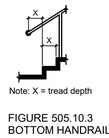


FIGURE 505.10.3
BOTTOM HANDRAIL
EXTENSION AT STAIRS

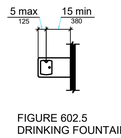


FIGURE 602.5
DRINKING FOUNTAIN
SPOUT LOCATION

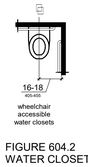


FIGURE 604.2
WATER CLOSET LOCATION

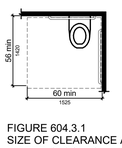


FIGURE 604.3.1
SIZE OF CLEARANCE AT
WATER CLOSETS

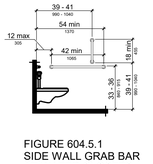


FIGURE 604.5.1
SIDE WALL GRAB BAR
AT WATER CLOSETS

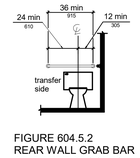


FIGURE 604.5.2
REAR WALL GRAB BAR
AT WATER CLOSETS

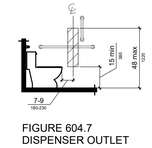


FIGURE 604.7
DISPENSER OUTLET
LOCATION

FIGURE 608.2.2
STANDARD ROLL-IN TYPE SHOWER
COMPARTMENT SIZE AND CLEARANCE

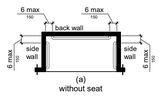


FIGURE 608.3.2
GRAB BARS FOR STANDARD ROLL-IN
TYPE SHOWERS

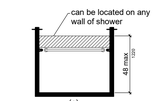


FIGURE 608.5.2
STANDARD ROLL-IN TYPE SHOWER
COMPARTMENT CONTROL LOCATION

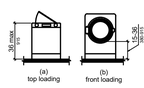


FIGURE 611.4
HEIGHT OF LAUNDRY
COMPARTMENT OPENING

FIGURE 703.2.5
HEIGHT OF RAISED
CHARACTERS

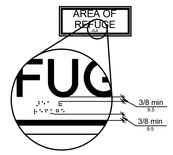


FIGURE 703.3.2
POSITION OF BRAILLE

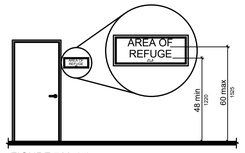


FIGURE 703.4.1
CHARACTER HEIGHT

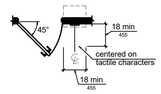
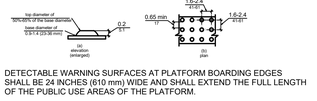


FIGURE 703.4.2
LOCATION OF TACTILE SIGNS
AT DOORS

FIGURE 703.6
PICTOGRAM FIELD



DETECTABLE WARNING SURFACES AT PLATFORM BOARDING EDGES SHALL BE 24 INCHES (610 mm) WIDE AND SHALL EXTEND THE FULL LENGTH OF THE PUBLIC USE AREAS OF THE PLATFORM.

FIGURE 705.1
SIZE AND SPACING OF TRUNCATED DOMES

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title	ACCESSIBILITY STANDARDS
Approved: Project Director	
Project Title	APARTMENT BUILDING AND SITEWORK
Contract No.: / Task Order No.:	
Location	BROWNING, MONTANA
Date	09/08/2020
Checked	JU
Drawn	TK
Project Number	H IH BLAC 19100
Building Number	
Drawing Number	ABA

INDIAN HEALTH SERVICE · IHS · 1955

CODE INFORMATION

PROJECT INFORMATION:

1. CONSTRUCTION PURPOSE: NEW CONSTRUCTION

2. REASON FOR SUBMITTAL: NEW CONSTRUCTION

3. I CERTIFY THAT TO THE BEST OF OUR KNOWLEDGE THE SUBMITTED PLANS FOR THE ABOVE-REFERENCED PROJECT COMPLY WITH THE REQUIREMENTS OF THE FOLLOWING:
   2018 INTERNATIONAL BUILDING CODE (IBC)
   2018 INTERNATIONAL MECHANICAL CODE (IMC)
   2018 INTERNATIONAL PLUMBING CODE (IPC)
   2018 INTERNATIONAL FIRE CODE (IFC)
   2017 NATIONAL ELECTRICAL CODE (NFPA-70)
   2018 LIFE SAFETY CODE (NFPA-101)
   2015 ABA ACCESSIBILITY STANDARDS

4. LOCATION OF ANY ANTICIPATED FUTURE ADDITIONS: UNKNOWN

5. OWNER:
   BILLINGS AREA INDIAN HEALTH SERVICE/ BLACKFEET SERVICE UNIT
   760 HOSPITAL CIRCLE
   BROWNING, MT 59417
   PH (406) 338-8916

6. DATE DEVELOPED: 09/08/2020

7. DESIGN TEAM:
   ARCHITECT:
   HEALTH FACILITIES GROUP, LLC
   1300 E 104TH STREET, SUITE 225
   KANSAS CITY, MO 64131
   CONTACT: ANDREW RUTENBECK
   PHONE: 816-249-1500

   DESIGN CONSULTANTS:
   PROFESSIONAL ENGINEERING CONSULTANTS
   303 S. TOPEKA
   WICHITA, KS 67202 316-262-2691
   CONTACT:
   PAUL RADLEY (STRUCTURAL)
   PAUL.RADLEY@PEC1.COM
   DAR CRONK (CIVIL)
   DAR.CRONK@PEC1.COM
   KURT HUIRAS
   KURT.HUIRAS@PEC1.COM

   FARRIS ENGINEERING
   844 11TH AVENUE
   SIDNEY, NE 69162 308-203-2222
   BEN SCHMITT (MECHANICAL)
   BSCHMITT@FARRIS-USA.COM
   ERICKA NIENHUESER (ELECTRICAL)
   ENIENHUESER@FARRIS-USA.COM
   DONNA KOHLAN (FIRE PROTECTION)
   DKOHLAN@FARRIS-USA.COM

8. ARCHITECTS SEAL: SEE STAMP BELOW

9. FIRE SERVICE: VOLUNTEER FIRE DEPARTMENT

10. WATER SUPPLY: TWO MEDICINE WATER CO.

11. SEWAGE TREATMENT: TWO MEDICINE WATER CO.

11. OCCUPANCY GROUP TYPE:
    OCCUPANCY 1: RESIDENTIAL (R-2)
    OCCUPANCY 2: ASSEMBLY (A-3)

12. CONSTRUCTION TYPE: IIB

13. STRUCTURAL CODE REQUIREMENTS

A. ALLOWABLE FLOOR AREA
   IBC 506.2.4 MIXED-OCCUPANCY,MULTISTORY BUILDING
   EQUATION 5-3: *Aa = [At + (NS × If)]*

   OCCUPANCY 1: RESIDENTIAL (R-2)
   Aa = [16,000 + (16,000 *X 0.75*)]
   Aa = [16,000 + (12,000)]
   Aa = 28,000 SF

   OCCUPANCY 2: ASSEMBLY (A-3)
   Aa = [28,000 + (9,500 × 0.75)]
   Aa = [28,000 + (7,125)]
   Aa = 35,625 SF

   EQUATION 5-5: *If* = [*F*/*P* - 0.25]*W*/30

   If = [620/620 - 0.25]30/30
   If = [0.75]30/30
   If = 0.75

   ACTUAL FLOOR AREA:

   1ST FLOOR:
   RESIDENTIAL OCCUPANCY (R-2)
   10,256 SF (ACTUAL) / 28,000 SF (ALLOWABLE) = 0.37

   ASSEMBLY OCCUPANCY (A-3)
   5,646 SF (ACTUAL) / 35,625 SF (ALLOWABLE) = 0.16

   1ST FLOOR TOTAL = 0.37 + 0.16 = 0.53
   0.53 < 1

   2ND FLOOR:
   RESIDENTIAL OCCUPANCY (R-2)
   10,256 SF (ACTUAL) / 28,000 SF (ALLOWABLE) = 0.37

   ASSEMBLY OCCUPANCY (A-3)
   4,060 SF (ACTUAL) / 35,625 SF (ALLOWABLE) = 0.11

   2ND FLOOR TOTAL = 0.37 + 0.11 = 0.48
   0.48 < 1

B. ALLOWABLE HEIGHT HEIGHT CALCULATIONS

   RESIDENTIAL OCCUPANCY (R-2)
   TYPE OF CONSTRUCTION: TYPE VB
   ALLOWABLE STORIES: 3
   ALLOWABLE HEIGHT: 60' (55' PER 903.3.1.2.3)
   ACTUAL STORIES: 2
   ACTUAL HEIGHT: 51'-8"
   NO HEIGHT MODIFICATIONS REQUIRED

C. FIRE-RESISTANCE RATING FOR BUILDING ELEMENTS:

1. STRUCTURAL FRAME: 0HR
2. BEARING WALLS:
   A. EXTERIOR: 0HR
   B. INTERIOR: 0HR
3. NONBEARING WALLS:
   A. EXTERIOR: PER TABLE 602
   B. INTERIOR: 0HR
4. FLOOR CONSTRUCTION: 0HR
5. ROOF CONSTRUCTION: 0HR

MISCELLANEOUS REQUIREMENTS: (2018 IBC)

14. ACTIVE FIRE SAFETY SYSTEMS

* NOTE:
ALL AREAS OF NEW CONSTRUCTION
OF THIS PROJECT WILL BE FULLY SPRINKLERED.

SPRINKLER SYSTEM SHALL COMPLY WITH NFPA 13 IN ALL PUBLIC AREAS AND NRPA 13R IN RESIDENTIAL AREAS

(a) SMOKE DETECTORS THROUGHOUT
(b) GENERATOR POWERED EMERGENCY LIGHTING
(c) BATTERY POWERED EXIT LIGHTING
(d) HOOD SUPPRESSION SYSTEM
(e) PORTABLE EXTINGUISHERS
(f) AUTOMATIC AIR-HANDLING SHUT-DOWN
(g) FIRE ALARM SYSTEM

17. HANDICAP PROVISIONS:
    ACCESSIBLE ROUTE, TOILETS, LAVATORIES, SIGNAGE AND PARKING

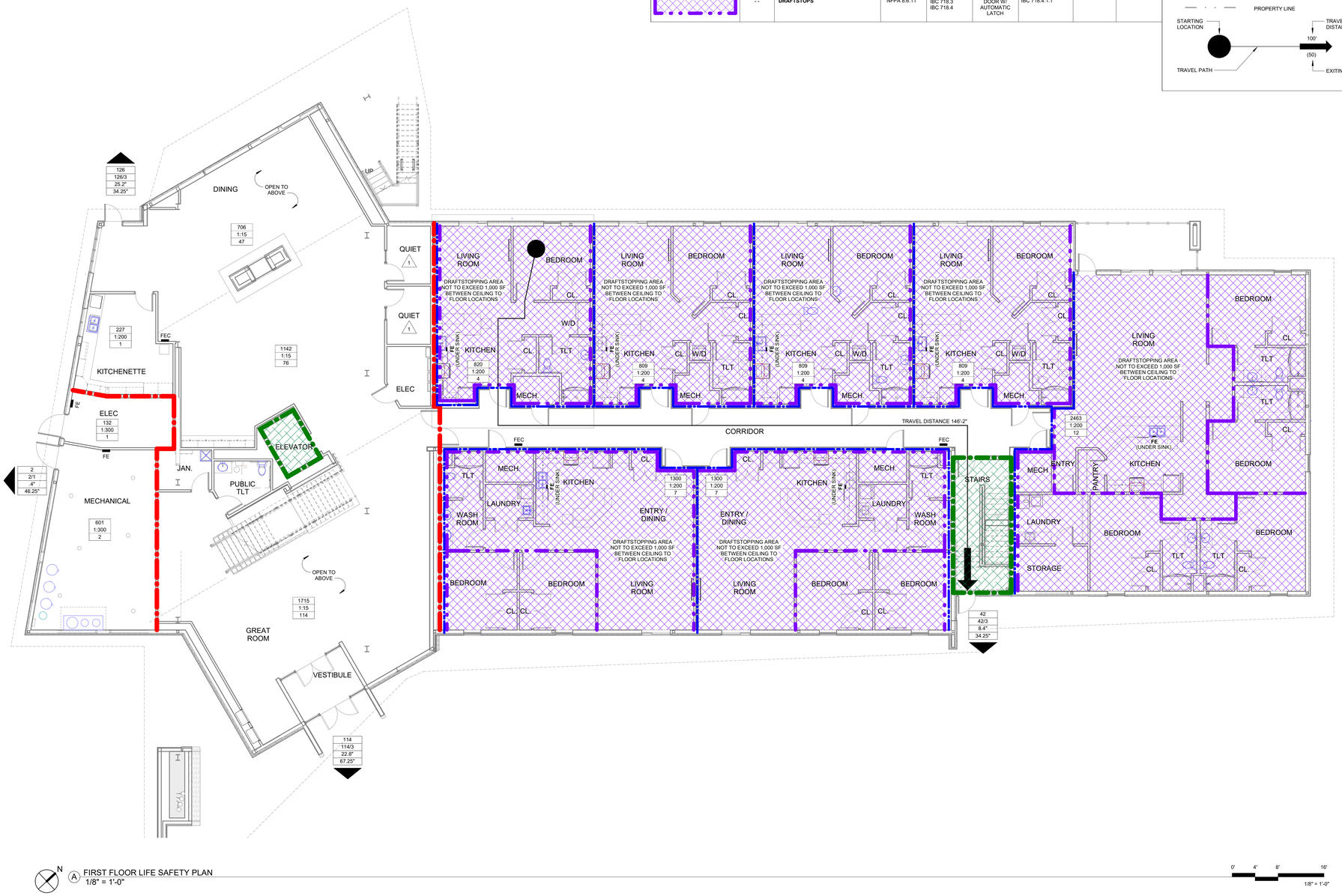
BUILDING & LIFE SAFETY REQUIREMENTS

LEGEND

NEW PARTITION KEY	WALL RATING	DESCRIPTION	NFPA 2018 (NEW APT BLDG)	IBC 2018	OPENINGS		DAMPERS	
					RATING	RFRNC.	TYPE	RFRNC.
	1 HR	**VERT. OPG. (EXIT ENCLSR/SHAFT)** FIRE BARRIER (1 HR = LESS THAN 4 STORIES)	NFPA 30.3.1.1.4	IBC 707.3.3 IBC 713.4	60 MIN	NFPA 8.2.3.2.3.1 IBC 713.7 IBC 716	NOT ALLOWED	NFPA 1005.3.4.1 NFPA 1020.12 IBC 713.10 IBC 717
	1 HR	**ATRIUM SEPARATION** FIRE BARRIER	NFPA 8.6.7	IBC 404.6	45 MIN	NFPA 8.3.3 IBC 707.6 IBC 716	FIRE 90 MIN	IBC 707.10 IBC 717 NFPA 8.3.4.8
	1 HR	**HAZ./INCIDENTAL USE** FIRE BARRIER	NFPA 30.3.2 NFPA 8.7.1	IBC 509 IBC 707.3.7	45 MIN	NFPA 8.3.3.2.2 IBC 707.6 IBC 716.2	FIRE 90 MIN	IBC 717
	1 HR / 1/2 HR	**SEPARATION WALLS** FIRE PARTITION	NFPA 30.3.6.1.2 NFPA 30.3.7.2	IBC 708 IBC 420.2 IBC 1020.1	20 MIN	NFPA 30.3.6.2.1 NFPA 8.3 IBC 716	FIRE 90 MIN	NFPA 30.3.6.4 NFPA 8.3 IBC 708.9 IBC 717
	--	**DRAFTSTOPS**	NFPA 8.6.11	IBC 708.4.2 IBC 718.3 IBC 718.4	SELF CLOSING DOOR W/ AUTOMATIC LATCH	IBC 718.4.1.1	--	--

SYMBOLS

- NO. OF OCC. / NO. OF EXITS / ACTUAL EXIT WIDTH: 10 / 10/1 / 2" / 34" → NO. OF OCC. EXITING; REQ'D. EXIT WIDTH
- 5 → NO. OCC. EXITING (SMALLER ROOMS)
- OCC. LOAD FACTOR: 476 / 1:50 / 10 → AREA; MAXIMUM OCCUPANCY
- FEC — FIRE EXTINGUISHER AND CABINET
- FE — FIRE EXTINGUISHER
- FACP — FIRE ALARM CONTROL PANEL
- FSA — FIRE SYSTEM ANNUNCIATOR ALARM
- FAA — ANNUNCIATOR PANEL
- PROPERTY LINE
- STARTING LOCATION → TRAVEL DISTANCE 100' (50) → EXITING #; TRAVEL PATH



N

A FIRST FLOOR LIFE SAFETY PLAN
1/8" = 1'-0"

0' 4' 8' 16'
1/8" = 1'-0"

ADDENDUM 001 (1)	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **FIRST FLOOR LIFE SAFETY**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **09/08/2020** | Checked | Drawn

Project Number: **H IH BLAC 19100**

Building Number

Drawing Number: **LS1.1**

INDIAN HEALTH SERVICE · PHS · 1955 ·

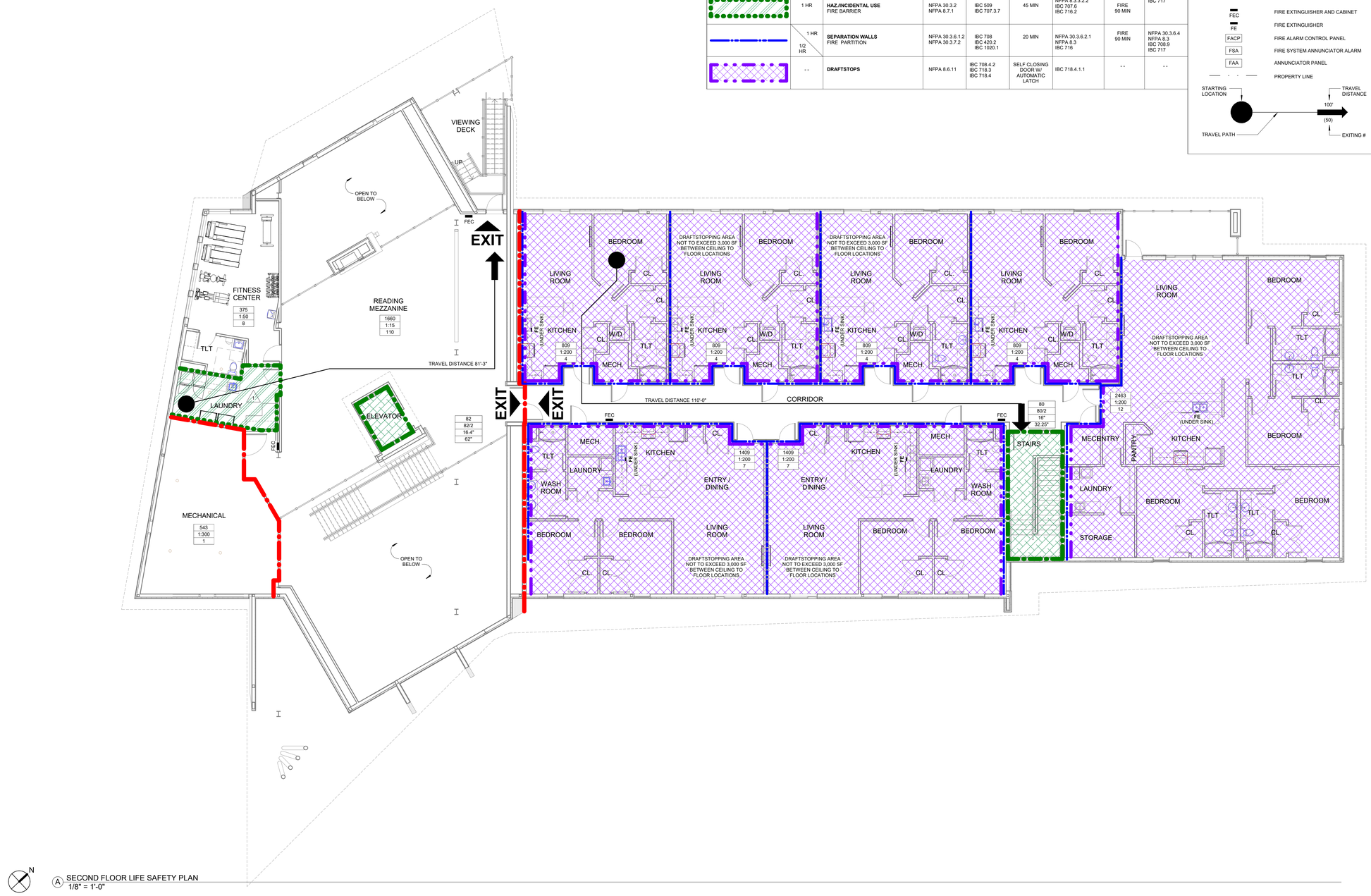
BUILDING & LIFE SAFETY REQUIREMENTS

LEGEND

NEW PARTITION KEY	WALL RATING	DESCRIPTION	NFPA 2018 (NEW APT BLDG)	IBC 2018	OPENINGS		DAMPERS	
					RATING	RFRNC.	TYPE	RFRNC.
	1 HR	**VERT. OPG. (EXIT ENCLSR/SHAFT)** FIRE BARRIER (1 HR = LESS THAN 4 STORIES)	NFPA 30.3.1.1.4	IBC 707.3.3 IBC 713.4	60 MIN	NFPA 8.2.3.2.3.1 IBC 713.7 IBC 716	NOT ALLOWED	NFPA 1005.3.4.1 NFPA 1020.12 IBC 713.10 IBC 717
	1 HR	**ATRIUM SEPARATION** FIRE BARRIER	NFPA 8.6.7	IBC 404.6	45 MIN	NFPA 8.3.3 IBC 707.6 IBC 716	FIRE 90 MIN	IBC 707.10 IBC 717 NFPA 8.3.4.8
	1 HR	**HAZ./INCIDENTAL USE** FIRE BARRIER	NFPA 30.3.2 NFPA 8.7.1	IBC 509 IBC 707.3.7	45 MIN	NFPA 8.3.3.2.2 IBC 707.6 IBC 716.2	FIRE 90 MIN	IBC 717
	1 HR / 1/2 HR	**SEPARATION WALLS** FIRE PARTITION	NFPA 30.3.6.1.2 NFPA 30.3.7.2	IBC 708 IBC 420.2 IBC 1020.1	20 MIN	NFPA 30.3.6.2.1 NFPA 8.3 IBC 716	FIRE 90 MIN	NFPA 30.3.6.4 NFPA 8.3 IBC 708.9 IBC 717
	--	**DRAFTSTOPS**	NFPA 8.6.11	IBC 708.4.2 IBC 718.3 IBC 718.4	SELF CLOSING DOOR W/ AUTOMATIC LATCH	IBC 718.4.1.1	--	--

SYMBOLS

- NO. OF OCC. EXITING (10)
- NO. OF OCC. / NO. OF EXITS / ACTUAL EXIT WIDTH → REQ'D. EXIT WIDTH (10/1 → 2" → 34")
- NO. OCC. EXITING (SMALLER ROOMS) (5)
- OCC. LOAD FACTOR → AREA (476) / MAXIMUM OCCUPANCY (1:50 → 10)
- FEC — FIRE EXTINGUISHER AND CABINET
- FE — FIRE EXTINGUISHER
- FACP — FIRE ALARM CONTROL PANEL
- FSA — FIRE SYSTEM ANNUNCIATOR ALARM
- FAA — ANNUNCIATOR PANEL
- PROPERTY LINE
- STARTING LOCATION → TRAVEL PATH; TRAVEL DISTANCE 100' (50) → EXITING #



N

A SECOND FLOOR LIFE SAFETY PLAN
1/8" = 1'-0"

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **SECOND FLOOR LIFE SAFETY**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

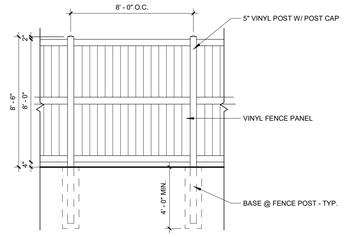
Date: **09/08/2020** | Checked | Drawn

Project Number: **H IH BLAC 19100**

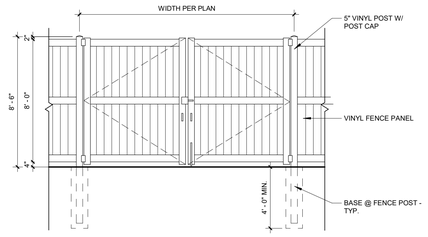
Building Number

Drawing Number: **LS1.2**

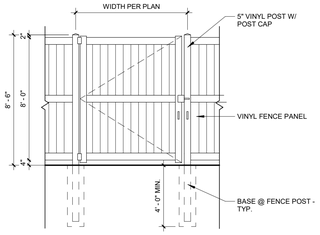
INDIAN HEALTH SERVICE · PHS · 1955



1 ELEVATION - VINYL PRIVACY FENCE
1/4" = 1'-0"



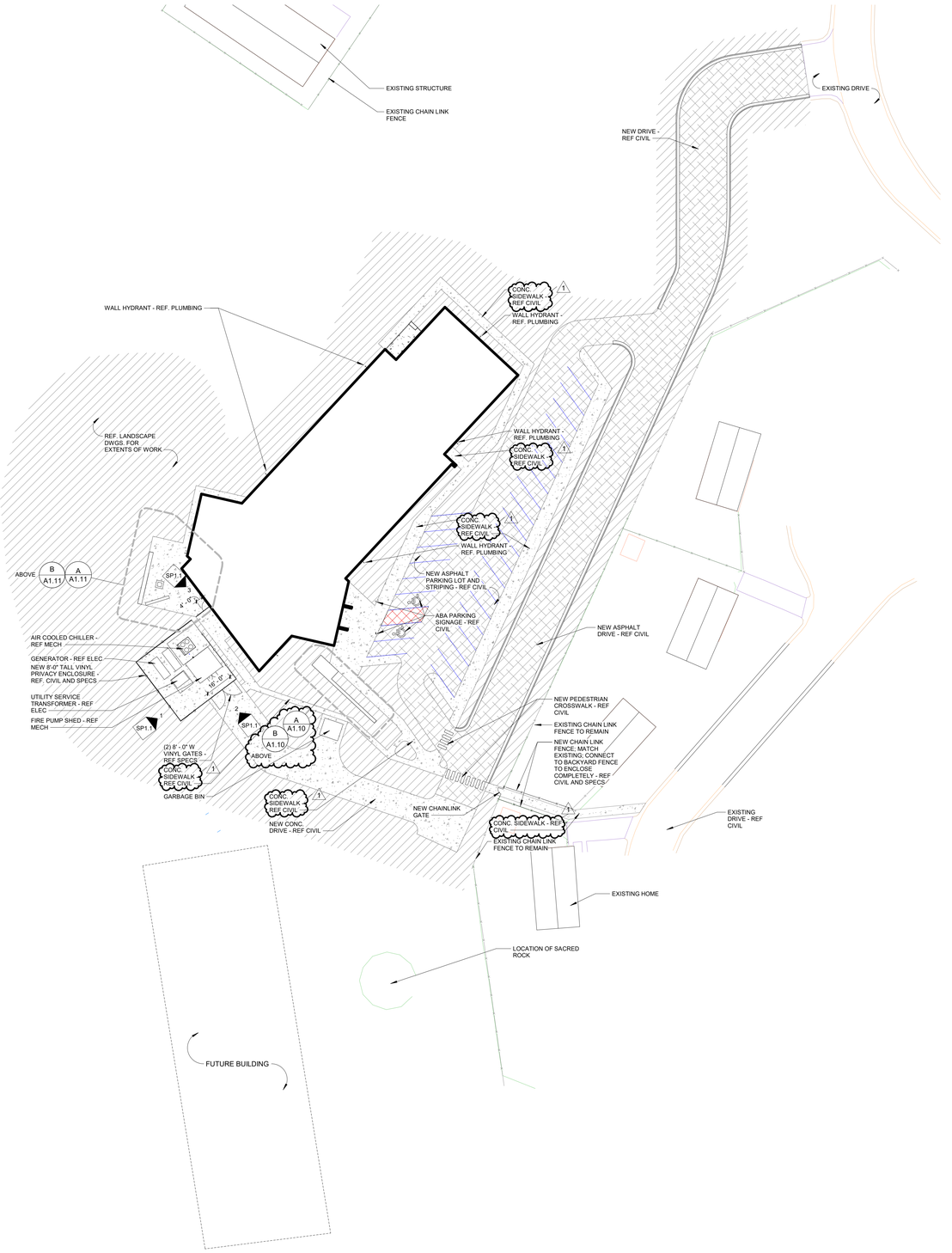
2 ELEVATION - VINYL PRIVACY FENCE GATE
1/4" = 1'-0"



3 ELEVATION - VINYL PRIVACY FENCE GATE
1/4" = 1'-0"

MATERIAL LEGEND

- NEW CONCRETE SIDEWALK OR DRIVE- REF. CIVIL
- NEW ASPHALT PARKING OR DRIVE - REF. CIVIL
- LANDSCAPE AREA (TREES, SHRUBS, PERENNIALS, ORNAMENTAL GRASS, AND NON IRRIGATED SEED MIX) - REF. LANDSCAPE PLAN
- NEW CHAIN LINK FENCE
- EXISTING CHAIN LINK FENCE
- NEW 8' VINYL PRIVACY FENCE



NOTES REPLICATED IN ENLARGED DETAILS HAVE BEEN REMOVED FROM THE SITE PLAN FOR CLARITY

N

A SITE PLAN
1" = 30'-0"

0' 15' 30' 60'
1" = 30'

Revisions:	Date
ADDENDUM 001 1	02/02/2022

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
ARCHITECTURAL SITE PLAN

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

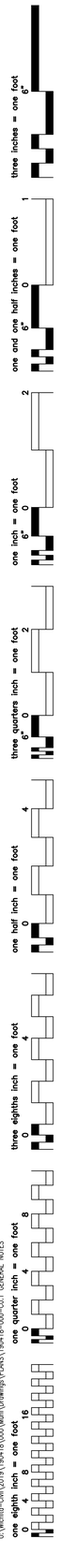
Date **09/08/2020** | Checked | Drawn

Project Number
H IH BLAC 19100

Building Number

Drawing Number
SP1.1

INDIAN HEALTH SERVICE · PHS · 1955 ·



Saved: 05-21-2020, 5:02:22 PM by SAD
Plotted: 02-02-2022, 12:27:48 PM by SAD
U:\Wichita-Civil\2019\190418\000\Mun\Drawings\PLANS\190418-000-C0.1 GENERAL NOTES

CIVIL GENERAL NOTES

1. SEE SURVEY NOTES, SHEET C1.1, FOR HORIZONTAL AND VERTICAL CONTROL.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL RE-ESTABLISH CONTROL POINTS AND BENCH MARKS AND VERIFY THEIR ACCURACY.
3. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE PROJECT DRAWINGS AND SPECIFICATIONS, UNLESS OTHERWISE NOTED IN THE PLANS OR INCLUDED IN THE PROJECT SPECIAL PROVISIONS.
4. AT LEAST 72 HOURS PRIOR TO BEGINNING EXCAVATION (EXCLUDING WEEKENDS AND HOLIDAYS), THE CONTRACTOR SHALL CONTACT THE MONTANA ONE-CALL SYSTEM, A UTILITY LOCATION SERVICE, AT 1-800-424-5555 TO REQUEST THE LOCAL UTILITY COMPANIES MARK ANY EXISTING LINES WITHIN THE PROJECT AREA.
5. THE CONTRACTOR SHALL PROVIDE TO OWNER, ONE SET OF PLANS MARKED IN RED INK INDICATING ALL CHANGES MADE TO THE PROJECT INCLUDING ACTUAL LOCATIONS OF EXCAVATED BURIED UTILITIES. ALL RECORD INFORMATION SHALL BE BASED ON PLAN CONTROL POINTS.
6. THE CONTRACTOR SHALL PREPARE HAUL ROUTE PLAN, WHICH SHALL INCLUDE HAUL LANES FOR CHANNEL CROSSINGS AND SEDIMENT CONTROL MEASURE FOR THE ADDITIONAL AREAS DISTURBED BY HAUL LANE CONSTRUCTION AND UTILIZATION IN ACCORDANCE WITH THE LOCAL EROSION CONTROL REQUIREMENTS, FOR REVIEW AND APPROVAL BY OWNER AND ENGINEER PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL ERECT WARNING SIGNS, FLASHING LIGHTS, AND BARRICADES IN COMPLIANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES LATEST ADDITION TO ENSURE SAFETY. CONTRACTOR SHALL MAINTAIN TRAFFIC ACCESS AT ALL TIMES.
7. EXISTING UTILITIES AND THEIR LOCATIONS, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. LOCATION INFORMATION WAS OBTAINED FROM RECORD DRAWINGS OR FIELD LOCATION. THE PLAN LOCATIONS SHOWN ARE NOT GUARANTEED. ADDITIONAL EXISTING UTILITIES MAY ALSO BE ENCOUNTERED. THE CONTRACTOR SHALL PROTECT ALL EXISTING UNDERGROUND UTILITIES, SHOWN ON THE PLANS OR DISCOVERED DURING THE COURSE OF THE WORK. THE CONTRACTOR SHOULD EXERCISE EXTREME CAUTION IN MAKING EXCAVATIONS FOR STRUCTURES AND PIPELINES. ANY LINES DAMAGED SHALL BE REPLACED OR REPAIRED IMMEDIATELY AS DIRECTED.
8. THE CONTRACTOR SHALL RESTORE ALL AREAS DISTURBED BY CONSTRUCTION TO THEIR ORIGINAL CONDITION, UNLESS OTHERWISE NOTED ON THE PLANS.
9. THE CONTRACTOR SHALL GIVE OWNER OF PROPERTY A MINIMUM OF TEN DAYS ADVANCE NOTICE PRIOR TO THE START OF CONSTRUCTION.
10. CONTRACTOR SHALL MAINTAIN UNINTERRUPTED UTILITY SERVICE TO ADJACENT FACILITIES DURING CONSTRUCTION.
11. CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM ALL VALVE BOXES AND MANHOLES UNLESS OTHERWISE NOTED.
12. CONTRACTORS SHALL SATISFY THEMSELVES OF SUBSURFACE CONDITIONS. A GEOTECHNICAL REPORT IS AVAILABLE UPON REQUEST. ALL EARTHWORK SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT AND THE PROJECT SPECIFICATIONS.
13. THE CONTRACTOR SHALL EXPOSE AND VERIFY THE VERTICAL AND HORIZONTAL LOCATION OF EXISTING UTILITIES THAT ARE WITHIN THE LIMITS OF CONSTRUCTION. THE UTILITY LOCATES SHALL BE PERFORMED PRIOR TO THE START OF CONSTRUCTION AND ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER.
14. THE SITE SHALL BE GRADED TO PROVIDE POSITIVE DRAINAGE AS INDICATED ON THE GRADING PLANS. UNDER NO CIRCUMSTANCES WILL PONDING BE ALLOWED UNLESS DESIGNATED AS A TEMPORARY SEDIMENT BASIN ON THE EROSION CONTROL PLAN. THE CONTRACTOR SHALL REPORT ANY GRADING DISCREPANCIES TO THE ENGINEER FOR RESOLUTION.
15. THE CONTRACTOR SHALL OBTAIN ANY NECESSARY PERMITS INCLUDING NPDES PERMIT PRIOR TO CONSTRUCTION.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR SHALL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAWS.
17. THE CONTRACTOR SHALL ADJUST ALL MANHOLES, INLETS, VALVE BOXES, METERS, MONITORING WELLS, ETC. TO MATCH NEW GRADES.
18. THE CONTRACTOR SHALL ADHERE TO THE LATEST ADA REGULATIONS. ANY DISCREPANCIES WITH GRADES SHOWN SHALL BE REPORTED TO THE ENGINEER FOR RESOLUTION PRIOR TO PLACEMENT OF PAVEMENT, INCLUDING CONCRETE WALKS. THE CONTRACTOR SHALL COMPLY TO THE FOLLOWING GRADING REQUIREMENTS FOR ADA ACCESSIBLE ROUTES:

CURB RAMPS=	SLOPE NOT TO EXCEED 1:12
LENGTH =	6 FEET W/MAX. RISE OF 6 INCHES.
CONCRETE WALKS =	LONGITUDINAL SLOPE NOT TO EXCEED 5%. TRANSVERSE SLOPE NOT TO EXCEED 2%.
LANDING AREAS =	SLOPE NOT TO EXCEED 2% IN ALL DIRECTIONS. 5' LANDING AREA REQUIRED AT DOOR ENTRANCES AND CURB RAMPS.
HC PARKING STALLS =	SLOPE SHALL NOT EXCEED 2%, IN ALL DIRECTIONS

19. CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION STAKING.
20. WRITTEN REQUEST TO THE OWNER WILL BE REQUIRED TEN (10) CALENDAR DAYS PRIOR TO A SCHEDULED UTILITY OUTAGE. THE FIRE DEPARTMENT MUST BE NOTIFIED OF ANY FIRE HYDRANTS OR WATER MAINS TAKEN OUT OF SERVICE.
21. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING BEST MANAGEMENT PRACTICES FOR EROSION CONTROL PER EROSION CONTROL PLAN TO MINIMIZE POLLUTANTS IN STORM WATER DISCHARGES. ADDITIONAL SEDIMENT BARRIERS MAY BE REQUIRED AT THE DIRECTION OF OF THE OWNER OR ENGINEER.
22. EXISTING PAVING, NOT SHOWN TO BE REMOVED, DAMAGED BY CONSTRUCTION SHALL BE REPLACED TO MATCH EXISTING OR BETTER IN ACCORDANCE WITH CURRENT GOVERNING STANDARDS. REFERENCE PAVING DETAILS, SHEET CP5.1 AND CP5.2.
23. EXISTING CURBS, SIDEWALKS, AND DRIVEWAYS DAMAGED OR REMOVED DURING CONSTRUCTION SHALL BE REPLACED TO MATCH EXISTING OR BETTER IN ACCORDANCE WITH CURRENT GOVERNING STANDARDS.
24. COORDINATE ALL SITE CONSTRUCTION WITH ELECTRICAL, MECHANICAL, LANDSCAPING, AND ARCHITECTURAL PLANS, AS WELL AS PRIVATE UTILITY COMPANIES.
25. THE CONTRACTOR SHALL APPLY TEMPORARY SEED AND MULCH TO ALL AREAS DISTURBED BY CONSTRUCTION OPERATIONS WITHIN 14 DAYS AFTER OPERATIONS CEASE IN ACCORDANCE WITH THE EROSION CONTROL PLAN. SEED SHALL BE ANNUAL RYE APPLIED AT THE RATE OF 5 LBS. PER 1,000 SQUARE FEET. MULCH SHALL BE PRAIRIE HAY APPLIED AT THE RATE OF 15 BALES PER ACRE. REFERENCE LANDSCAPE PLANS FOR PERMANENT SEED MIX.
26. THE TOP 6" OF ALL AREAS TO BE SEEDED SHALL BE TOPSOILED WITH MATERIAL SUITABLE FOR GROWTH OF VEGETATION. THRU CUTS, OVER EXCAVATE 6" FOR PLACEMENT OF TOPSOIL. IN FILL, THE TOP 6" OF EMBANKMENT SHALL BE TOPSOIL. NO MEASUREMENT WILL BE MADE FOR MATERIAL REQUIRED TO REPLACE MATERIAL EXCAVATED DURING STRIPPING OPERATIONS.
27. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT A DETAILED "SEQUENCE OF CONSTRUCTION & DEMOLITION PLAN". THE PLAN MUST BE APPROVED BY THE OWNER. THE CONTRACTOR SHALL SUBMIT REQUEST TO THE OWNER IF ADDITIONAL REMOVAL NOT SHOWN ON THE DEMOLITION PLANS IS DEEMED NECESSARY. ALL ADDITIONAL DEMOLITION IS SUBSIDIARY TO THE PROJECT.
28. CONTRACTOR SHALL PROVIDE A MEANS OF ACCESS TO THE CONSTRUCTION SITE AT ALL TIMES. ANY TRAFFIC CLOSURES/REROUTES SHALL BE COORDINATED AND APPROVED BY THE OWNER.
29. WHERE THE IMPROVEMENTS CROSS EXISTING PUBLIC OR PRIVATE UTILITIES WHICH ARE NOT SPECIFIED AS TO BE ADJUSTED BY OTHERS, THE CONTRACTOR SHALL PROVIDE THE MATERIAL AND MEANS TO PROTECT AND SUPPORT SAID UTILITIES DURING CONSTRUCTION TO THE SATISFACTION OF THE ENGINEER.
30. CONTRACTOR SHALL VERIFY ALL PIPE TYPES AND SIZES PRIOR TO BEGINNING CONSTRUCTION AND REPORT ANY DEVIATIONS FROM THE PLANS TO THE ENGINEER.
31. CONTRACTOR SHALL NOT DIVERT ANY SEWAGE FLOW THROUGH NEW PIPE OR MANHOLES UNTIL TESTING HAS BEEN COMPLETED AND ACCEPTED.
32. WATERLINES SHALL HAVE A MINIMUM DEPTH OF BURY OF 60 INCHES, UNLESS SHOWN OTHERWISE.
33. FIRE HYDRANT BURY DEPTHS ARE BASED ON THE TOP ELEVATION OF THE PROPOSED WATER MAIN AND THE APPROXIMATE GROUND ELEVATION AT THE LOCATION OF THE FIRE HYDRANT. THE CONTRACTOR SHALL VERIFY THESE ELEVATIONS PRIOR TO INSTALLING FIRE HYDRANTS. ANY MODIFICATIONS REQUIRED TO THE FIRE HYDRANT BURY DEPTH DUE TO THE CONTRACTOR'S FIELD ADJUSTMENTS TO THE WATER MAIN PROFILE SHALL BE MADE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
34. CONTRACTOR SHALL PROVIDE MATERIALS AS NECESSARY FOR TEMPORARY BLOW OFF OF WATERLINE FOR CONNECTIONS TO THE EXISTING WATERLINE. WATERLINE SHALL BE CONSTRUCTED WITH CLEAN, SWABBED PIPE AND FLUSHED UPON COMPLETION OF TIE-INS.
35. WHERE THE IMPROVEMENTS CROSS EXISTING PUBLIC OR PRIVATE UTILITIES WHICH ARE NOT TO BE ADJUSTED BY OTHERS, THE CONTRACTOR SHALL PROVIDE THE MATERIAL AND MEANS TO PROTECT AND SUPPORT SAID UTILITIES DURING CONSTRUCTION TO THE SATISFACTION OF THE ENGINEER.
36. THE CONTRACTOR MUST SCHEDULE THE CONNECTIONS TO THE EXISTING WATER MAINS WITH TEXTRON AVIATION SUCH THAT THERE IS A MINIMUM OF DISRUPTION TO SERVICE.
37. SEE SHEET CU2.1 FOR ADDITION SANITARY SEWER GENERAL NOTES.

DEMOLITION NOTES

30. MATERIALS FROM GRAVEL ROAD DEMOLITION SHALL BE REMOVED OFF-SITE IF NOT USABLE FOR SITE FILLS.
31. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER PRIOR TO DEMOLITION TO DETERMINE DEMOLITION ITEMS THAT ARE TO BE SALVAGED TO THE OWNER. SALVAGEABLE ITEMS ARE TO BE DELIVERED TO THE OWNER AT LOCATIONS DIRECTED BY THE OWNER. ALL NON-SALVAGED ITEMS ARE TO BE DISPOSED OFF-SITE BY THE CONTRACTOR.
32. CONTRACTOR SHALL PROVIDE NECESSARY MEANS TO PROTECT THE PUBLIC AND TO PROHIBIT ACCESS TO CONSTRUCTION SITE WHILE MAINTAINING ACCESS TO EXISTING FACILITIES.
33. CONTRACTOR SHALL COORDINATE ALL DEMOLITION ACTIVITIES WITH OWNER AND UTILITY COMPANIES. CONTRACTOR SHALL VERIFY UTILITIES ARE OUT OF SERVICE/ABANDONED BEFORE DEMOLITION.
34. CONTRACTOR SHALL PROVIDE NEAT SAW CUTS AT ALL EXISTING CONCRETE AND ASPHALT ABUTTING NEW PAVEMENT AND WHERE EXISTING PAVEMENT IS REMAINING IN PLACE. SAW CUTS IN CONCRETE PAVEMENT SHALL BE AT JOINT LOCATIONS.
35. EXISTING SITE FEATURES (PAVING, UTILITIES, CURBS, SIDEWALK, DRAINAGE, IRRIGATION AND LANDSCAPING) DAMAGED BY CONSTRUCTION AND NOT SHOWN TO BE REMOVED SHALL BE REPLACED TO MATCH EXISTING OR BETTER CONDITIONS PRIOR TO DISTURBANCE.
36. UNLESS OTHERWISE NOTED ON PLANS OR SPECIFICATIONS, ALL DEMOLISHED UTILITIES SHALL BE CAPPED AT THE MAIN CONNECTION. ALL ABANDONED PIPE ENDS SHALL BE PLUGGED.
37. CONTRACTOR SHALL COORDINATE PAVEMENT REMOVAL AND REPLACEMENT WITH PROPOSED UTILITIES CONSTRUCTION. REFERENCE SITE UTILITY PLAN.
38. ALL ITEMS LOCATED IN DEMOLITION LIMITS NOT SHOWN SHALL BE IDENTIFIED AND COORDINATED WITH THE OWNER PRIOR TO DEMOLITION.
39. ALL DEBRIS ASSOCIATED WITH DEMOLITION SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROPERLY DISPOSED OF OFF SITE IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL LAWS. THE CONTRACTOR IS RESPONSIBLE FOR DEMOLITION PERMIT FEES, DISPOSAL FEES, ANY OTHER FEES ASSOCIATED WITH ANY DEMOLITION ITEMS.
40. ASBESTOS CEMENT (AC) WATER LINES EXIST ON THE PROJECT SITE AND WILL BE IMPACTED BY CONSTRUCTION. ALL WORK ON AC WATER LINES SHALL BE IN ACCORDANCE WITH OSHA AND AWWA REQUIREMENTS FOR WORKING WITH ASBESTOS CONTAINING MATERIALS. AC PIPE TO BE REMOVED SHALL BE PROPERLY DISPOSED OF IN A LANDFILL CERTIFIED TO RECEIVE ASBESTOS CONTAINING MATERIALS.

UTILITY RELOCATE NOTES:

EXISTING UTILITIES IN DIRECT CONFLICT WITH THE SITE IMPROVEMENTS SHALL BE RELOCATED BY THE CORRESPONDING UTILITY COMPANY. THIS WORK SHALL BE PERFORMED BY THE UTILITY COMPANY. COORDINATE WITH OWNER PRIOR TO COMMENCING CONSTRUCTION TO VERIFY THIS WORK IS COMPLETED AND THE EXISTING UTILITIES ARE RELOCATED.

UTILITY COMPANY CONTACTS ARE AS FOLLOWS:

DEAN BERKRAM, SUPERVISOR OF STAKING SERVICES
deanbr@glacierelectric.com
(406) 873-5566 (OFFICE)
(406) 470-0543 (MOBILE)
GLACIER ELECTRIC
PO BOX 2090
410 E. MILAN ST.
CUT BANK, MT 59427

JOSH BECHEL
josh.bechel@gmail.com
(406) 338-4858 (OFFICE)
TWO MEDICINE WATER CO.
109 N. PUBLIC SQ.
BROWNING, MT 59417

ERIC SMITH
Eric.smith@northwestern.com
(888) 467-2669 (OFFICE)
NORTHWESTERN ENERGY
890 NORTH MERIDIAN ROAD
KALISPELL, MT 59901

SCOTT KOCAN
scott.kocan@3rivers.coop
(406) 467-4316 (DIRECT)
(406) 467-2535 (OFFICE)
(406) 590-2591 (MOBILE)
3 RIVERS COMMUNICATIONS
202 5TH STREET SOUTH
FAIRCHILD, MT 59436

ADDENDUM 001 (1)	02/02/2022
Revisions:	Date

CONSULTANTS:

--

MATTHEW BILLINGSLEA No. 59820 02/02/2022 LICENSED PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
FARRIS ENGINEERING
BLUE STAR INTEGRATIVE STUDIO
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **CIVIL GENERAL NOTES**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **05/21/2020** | Checked: **DRC** | Drawn: **SAD**

Project Number: **H IH BLAC 19100**

Building Number: (Not Applicable)

Drawing Number: **C0.1**

INDIAN HEALTH SERVICE · IHS · 1955 ·

CONTROL POINT TABLE

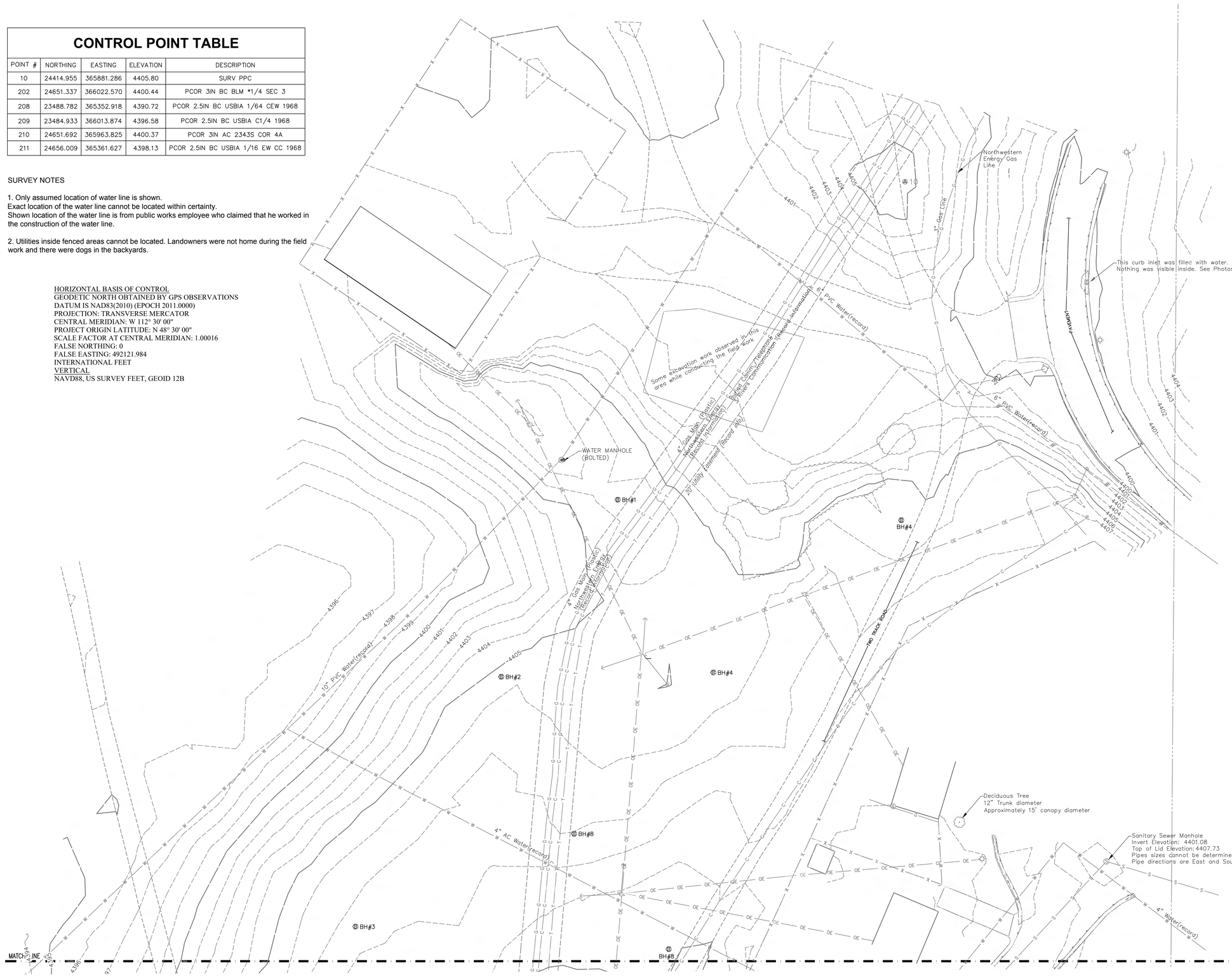
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
10	24414.955	365881.286	4405.80	SURV PPC
202	24651.337	366022.570	4400.44	PCOR 3IN BC BLM *1/4 SEC 3
208	23488.782	365352.918	4390.72	PCOR 2.5IN BC USBIA 1/64 CEW 1968
209	23484.933	366013.874	4396.58	PCOR 2.5IN BC USBIA C1/4 1968
210	24651.692	365963.825	4400.37	PCOR 3IN AC 2343S COR 4A
211	24656.009	365361.627	4398.13	PCOR 2.5IN BC USBIA 1/16 EW CC 1968

SURVEY NOTES

1. Only assumed location of water line is shown.
Exact location of the water line cannot be located within certainty.
Shown location of the water line is from public works employee who claimed that he worked in the construction of the water line.

2. Utilities inside fenced areas cannot be located. Landowners were not home during the field work and there were dogs in the backyards.

HORIZONTAL BASIS OF CONTROL
GEODETIC NORTH OBTAINED BY GPS OBSERVATIONS
DATUM IS NAD83(2010) (EPOCH 2011.0000)
PROJECTION: TRANSVERSE MERCATOR
CENTRAL MERIDIAN: W 112° 30' 00"
PROJECT ORIGIN LATITUDE: N 48° 30' 00"
SCALE FACTOR AT CENTRAL MERIDIAN: 1.00016
FALSE NORTHING: 0
FALSE EASTING: 492121.984
INTERNATIONAL FEET
VERTICAL
NAVD88, US SURVEY FEET, GEOID 12B



LINETYPES

- BUILDING
- EDGE OF GRAVEL
- OE — OE — OVERHEAD ELECTRIC LINE
- UNDERGROUND ELECTRIC
- G — G — UNDERGROUND GAS LINE
- C — C — UNDERGROUND COMMUNICATION LINE
- T — T — UNDERGROUND CABLE TV LINE
- X — X — FENCE
- W — W — WATER LINE
- PAVEMENT
- S — S — SANITARY SEWER LINE
- CONCRETE
- CURB
- SIDEWALK
- SURVEYED BOUNDARY LINE
- CALCULATED BOUNDARY LINE
- SECTION LINE
- INTERIOR SECTION LINE

SYMBOL LEGEND

- COMMUNICATION BOX
- POWER POLE
- WATER VALVE
- FIRE HYDRANT
- SEWER MANHOLE
- SEWER CLEANOUT
- GAS METER
- ELECTRIC PEDESTAL
- LIGHT
- GUY WIRE
- TREE
- STORM INLET
- CONTROL POINT
- BOREHOLE LOCATION

SURVEY PROVIDED BY DOWL
JULY 12, 2019

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:
--

ARCHITECT/ENGINEERS:
HFG HEALTH FACILITIES GROUP architecture
FARRIS ENGINEERING
BLUE STAR INTEGRATIVE STUDIO
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

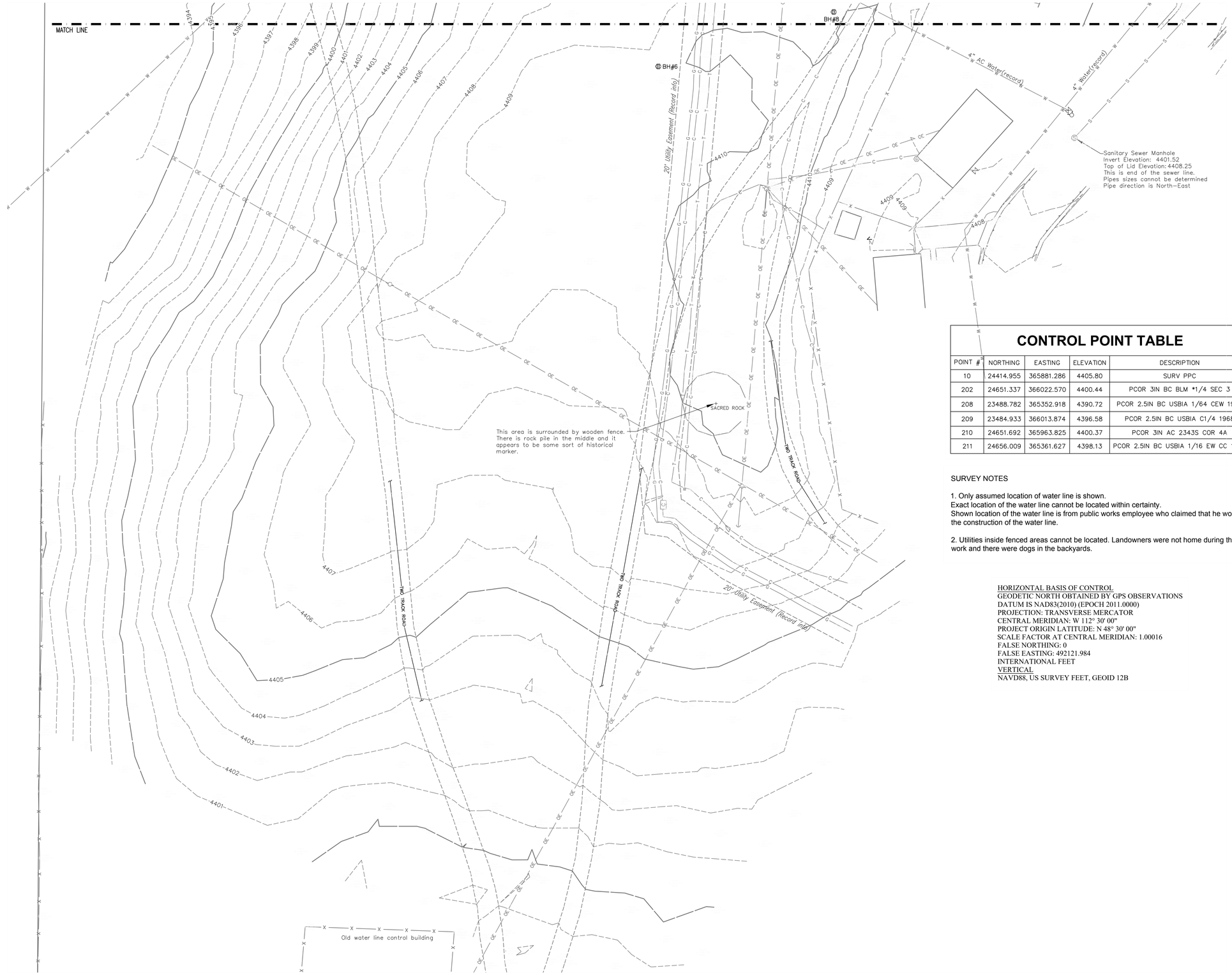
Drawing Title: **EXISTING CONDITIONS - NORTH**
Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002
Location: **BROWNING, MONTANA**
Date: **05/21/2020** | Checked: **DRC** | Drawn: **SAD**

Project Number: **H IH BLAC 19100**
Building Number
Drawing Number: **C1.1**

INDIAN HEALTH SERVICE · PHS · 1955 ·

Saved: 05-20-2020, 5:29:11 PM by SCOTT TURNBULL
Plotted: 05-21-2020, 10:24:47 PM by SAD
U:\Wichita-Civil\2019\190418\000\Mark\Drawings\PLANS\190418-000-C1.1 EXISTING CONDITIONS - NORTH



CONTROL POINT TABLE

POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
10	24414.955	365881.286	4405.80	SURV PPC
202	24651.337	366022.570	4400.44	PCOR 3IN BC BLM *1/4 SEC 3
208	23488.782	365352.918	4390.72	PCOR 2.5IN BC USBIA 1/64 CEW 1968
209	23484.933	366013.874	4396.58	PCOR 2.5IN BC USBIA C1/4 1968
210	24651.692	365963.825	4400.37	PCOR 3IN AC 2343S COR 4A
211	24656.009	365361.627	4398.13	PCOR 2.5IN BC USBIA 1/16 EW CC 1968

SURVEY NOTES

1. Only assumed location of water line is shown.
Exact location of the water line cannot be located within certainty.
Shown location of the water line is from public works employee who claimed that he worked in the construction of the water line.

2. Utilities inside fenced areas cannot be located. Landowners were not home during the field work and there were dogs in the backyards.

HORIZONTAL BASIS OF CONTROL
GEODETIC NORTH OBTAINED BY GPS OBSERVATIONS
DATUM IS NAD83(2010) (EPOCH 2011.0000)
PROJECTION: TRANSVERSE MERCATOR
CENTRAL MERIDIAN: W 112° 30' 00"
PROJECT ORIGIN LATITUDE: N 48° 30' 00"
SCALE FACTOR AT CENTRAL MERIDIAN: 1.00016
FALSE NORTHING: 0
FALSE EASTING: 492121.984
INTERNATIONAL FEET
VERTICAL
NAVD88, US SURVEY FEET, GEOID 12B

LINETYPES

- BUILDING
- EDGE OF GRAVEL
- OE — OE — OVERHEAD ELECTRIC LINE
- UNDERGROUND ELECTRIC
- G — G — UNDERGROUND GAS LINE
- C — C — UNDERGROUND COMMUNICATION LINE
- T — T — UNDERGROUND CABLE TV LINE
- X — X — FENCE
- W — W — WATER LINE
- PAVEMENT
- S — S — SANITARY SEWER LINE
- CONCRETE
- CURB
- SIDEWALK
- SURVEYED BOUNDARY LINE
- CALCULATED BOUNDARY LINE
- SECTION LINE
- INTERIOR SECTION LINE

SYMBOL LEGEND

- COMMUNICATION BOX
- POWER POLE
- WATER VALVE
- FIRE HYDRANT
- SEWER MANHOLE
- SEWER CLEANOUT
- GAS METER
- ELECTRIC PEDESTAL
- LIGHT
- GUY WIRE
- TREE
- STORM INLET
- CONTROL POINT
- BOREHOLE LOCATION

SURVEY PROVIDED BY DOWL
JULY 12, 2019

three inches = one foot 6" 0 1
one and one half inches = one foot 6" 0 2
one inch = one foot 6" 0
three quarters inch = one foot 6" 0 2
one half inch = one foot 0 4
three eighths inch = one foot 0 4
one quarter inch = one foot 0 8
one eighth inch = one foot 0 16

Saved:05-20-2020 5:59:12 PM by SCOTT TURNBULL
Plotted:05-20-2022 1:42:07 PM by SAD
U:\Wichita-Civil\2019\190418.000\Main\Drawings\PLANS\190418-000-C1.2 EXISTING CONDITIONS - SOUTH

Revisions:	Date
ADDENDUM 001 1	02/02/2022

CONSULTANTS:
--

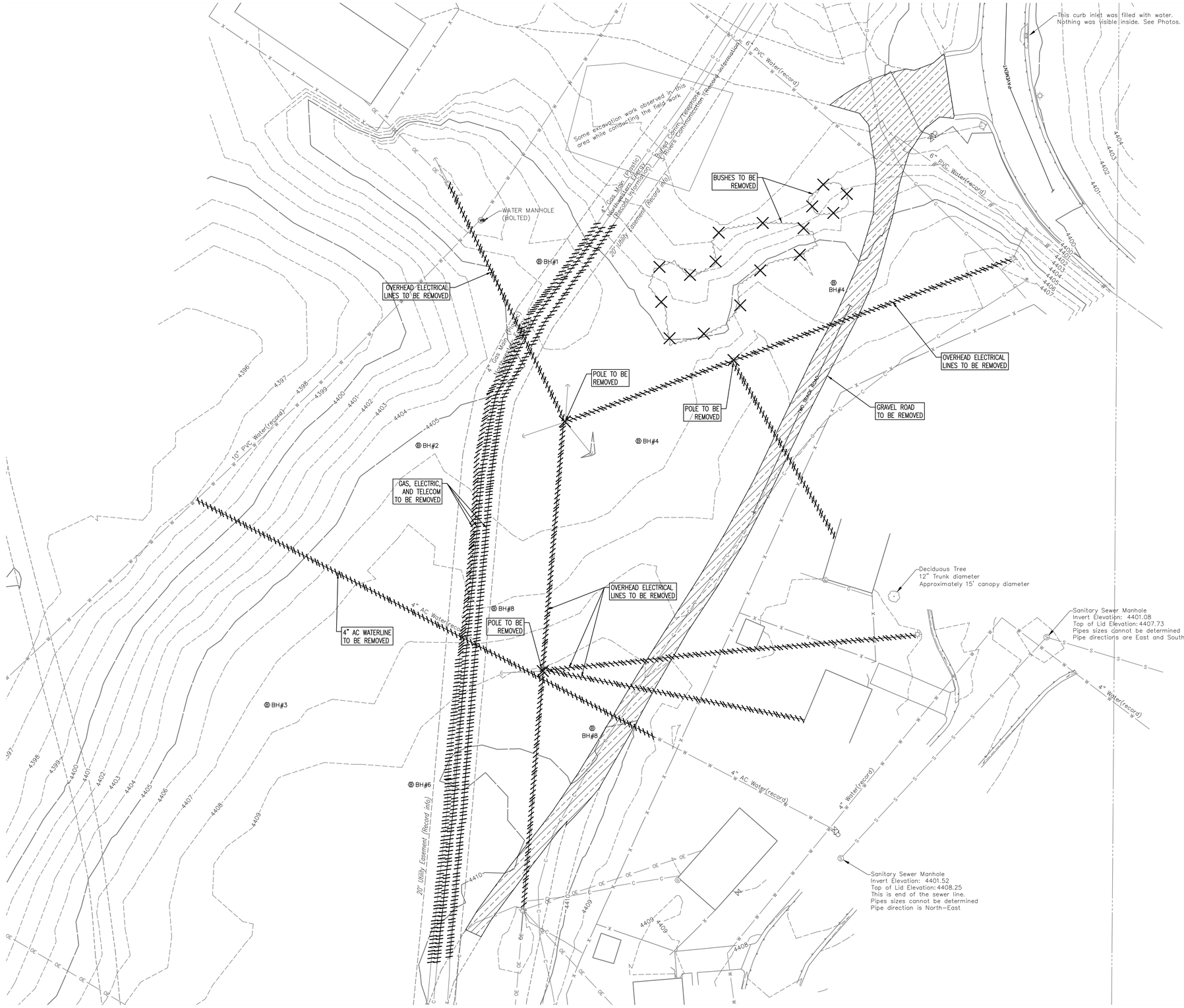
ARCHITECT/ENGINEERS:
HFG HEALTH FACILITIES GROUP architecture
FARRIS ENGINEERING
BLUE STAR INTEGRATIVE STUDIO
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: EXISTING CONDITIONS - SOUTH
Approved: Project Director

Project Title: APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002
Location: BROWNING, MONTANA
Date: 05/21/2020
Checked: DRC
Drawn: SAD

Project Number: H IH BLAC 19100
Building Number: [illegible]
Drawing Number: C1.2

INDIAN HEALTH SERVICE · PHS · 1955 ·



LEGEND

- REMOVAL ITEMS
- UTILITY LIMITS FOR DEMO/ RELOCATION
- GRAVEL ROAD DEMOLITION

REFERENCE SHEET C0.1 FOR DEMOLITION NOTES.

COORDINATE REMOVAL AND RELOCATION OF GAS, COMMUNICATIONS/ TELECOM, AND ELECTRICAL LINES WITH RESPECTIVE UTILITY COMPANIES.

Revisions:	Date
ADDENDUM 001 (1)	02/02/2022

CONSULTANTS:

--

ARCHITECT/EGINEERS:

HFG HEALTH FACILITIES GROUP architecture

FARRIS ENGINEERING

BLUE STAR INTEGRATIVE STUDIO

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

MATTHEW BILLINGSLEA No. 59820 02/02/2022 LICENSED PROFESSIONAL ENGINEER

Drawing Title: **DEMO PLAN**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **05/21/2020** | Checked: **DRC** | Drawn: **SAD**

Project Number: **H IH BLAC 19100**

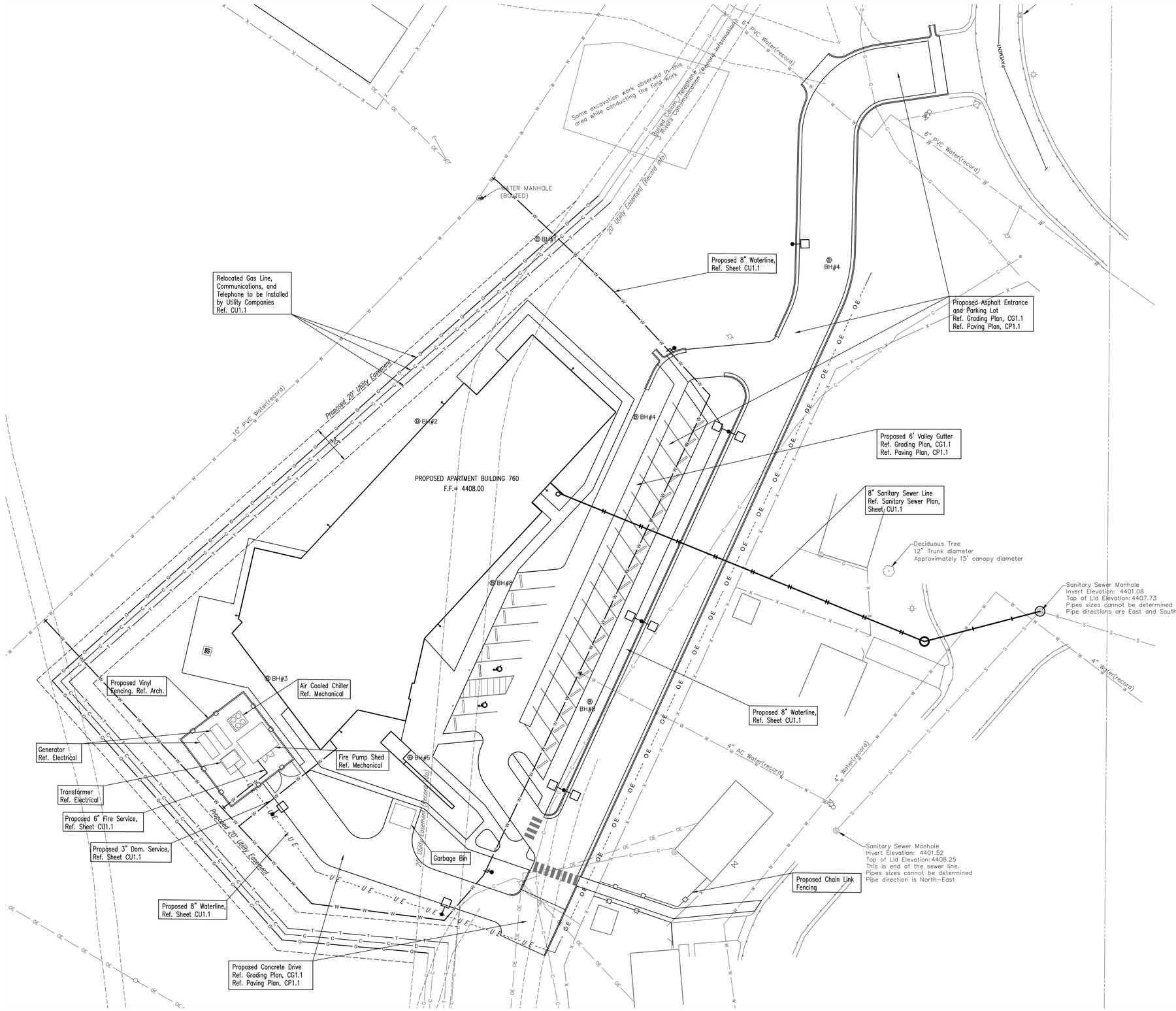
Building Number:

Drawing Number: **CD1.1**

INDIAN HEALTH SERVICE · PHS · 1955 ·

Saved: (6-30-2020 5:41:22 PM by JSCOTT.THRASHELL
Plotted: 02-02-2022 12:20:37 PM by JSCOTT.THRASHELL
U:\Wichita-Civil\2019\190418\000\Mun\Drawings\PLANS\190418-000-CD1.1 DEMO PLAN - NORTH

one eighth inch = one foot 0 4 8 16
one quarter inch = one foot 0 4 8
three eighths inch = one foot 0 4
one half inch = one foot 0 4
three quarters inch = one foot 0 6"
one inch = one foot 0 6"
one and one half inches = one foot 0 6" 1
three inches = one foot 6"



LEGEND

- = PROPOSED WATERLINE
- = PROPOSED SANITARY SEWER LINE
- = PROPOSED SANITARY SEWER MANHOLE
- = PROPOSED FIRE HYDRANT
- = PROPOSED GAS LINE
- = PROPOSED UNDERGROUND ELECTRIC LINE
- = PROPOSED OVERHEAD ELECTRIC LINE
- CO = CLEANOUT
- = PROPOSED COMMUNICATION LINE
- = PROPOSED TELEPHONE LINE

REFERENCE ELECTRICAL PLANS FOR ELECTRIC, COMMUNICATION, AND LIGHTING INSTALLATION NOTES.

three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot

Saved: 05-11-2020, 8:40:27 AM by SCOTT ELDRIDGE
Plotted: 5/11/2020 8:42:22 AM by SCOTT ELDRIDGE
U:\Wichita-Civil\2019\190418\000\Main\Drawings\PLANS\190418-000-CS1.1 SITE PLAN

Revisions:	Date
ADDENDUM 001 1	02/02/2022

CONSULTANTS:

--

MATTHEW BILLINGSLEA No. 59820 02/02/2022 LICENSED PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
FARRIS ENGINEERING
BLUE STAR INTEGRATIVE STUDIO
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **SITE PLAN**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

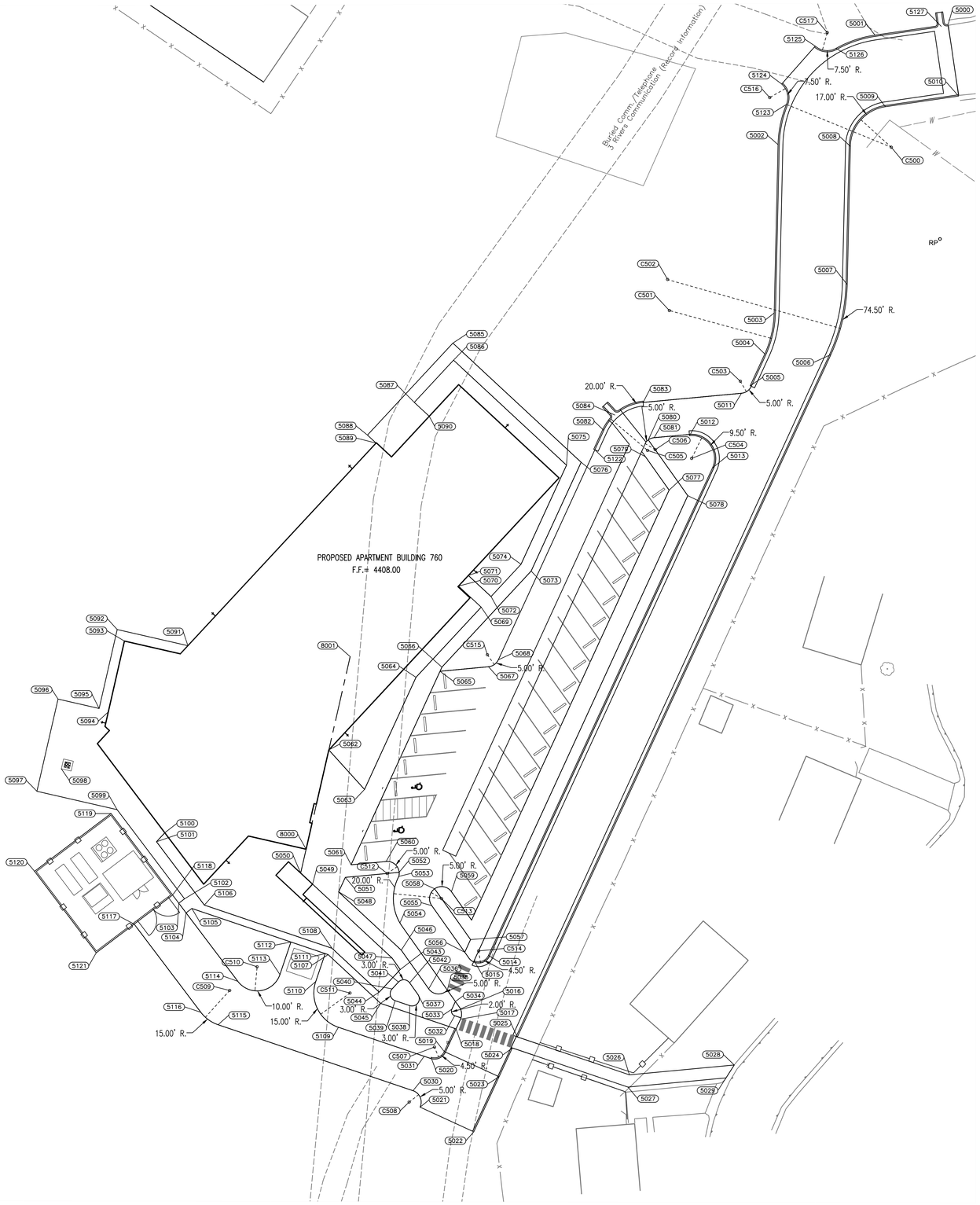
Date: **05/21/2020** | Checked: **DRC** | Drawn: **SAD**

Project Number: **H IH BLAC 19100**

Building Number:

Drawing Number: **CS1.1**

INDIAN HEALTH SERVICE · PHS · 1955 ·



* BUILDING BASE LINE
CONTRACTOR SHALL STAKE AND CONSTRUCT BUILDING TO THE DIMENSIONS SHOWN ON ARCHITECTURE AND STRUCTURAL DRAWINGS.
(8000) N: 24,011.1530, E: 365,668.0553
TO OUTSIDE FACE OF BUILDING CORNER
(8001) N: 24,091.0585, E: 365,686.3459
TO ESTABLISH BUILDING BASE LINE BEARING

0 20 40
SCALE IN FEET

LEGEND
(5000) = COORDINATE LABEL

NOTES:
1. ALL DIMENSIONS ARE TO THE BACK OF CURB UNLESS NOTED OTHERWISE.
2. REFERENCE THE UTILITY PLAN SHEET CU1.1 FOR UTILITY COORDINATES.

COORDINATE LIST		
POINT	NORTHING	EASTING
5000	24,353.2891	365,934.4582
5001	24,348.8628	365,904.0949
5002	24,303.4324	365,863.8871
5003	24,233.6020	365,862.2850
5004	24,216.6065	365,858.3956
5005	24,203.4029	365,852.3282
5006	24,216.3345	365,885.7847
5007	24,245.3946	365,892.5627
5008	24,302.7443	365,893.8792
5009	24,319.1766	365,908.4224
5010	24,323.6029	365,938.7858
5011	24,200.3035	365,848.7028
5012	24,182.7293	365,827.1445
5013	24,169.3033	365,836.6573
5014	23,967.0862	365,743.7261
5015	23,964.8764	365,737.7582
5016	23,944.8984	365,732.0906
5017	23,940.6472	365,732.1261
5018	23,936.6137	365,730.2724
5019	23,927.2095	365,725.4004
5020	23,924.8259	365,719.8693
5021	23,904.1599	365,715.3579
5022	23,893.9293	365,737.6197

COORDINATE LIST		
POINT	NORTHING	EASTING
5023	23,916.7700	365,748.1164
5024	23,928.6713	365,753.5857
5025	23,933.2394	365,755.6851
5026	23,917.5568	365,802.2024
5027	23,912.4792	365,801.6089
5028	23,921.6374	365,845.7130
5029	23,916.2945	365,842.2908
5030	23,910.9841	365,712.4171
5031	23,925.2518	365,717.0503
5032	23,942.0813	365,729.7132
5033	23,944.8110	365,728.5369
5034	23,947.9811	365,729.9937
5035	23,952.6920	365,726.6560
5036	23,953.2206	365,718.9281
5037	23,950.8542	365,714.4769
5038	23,946.2781	365,711.0676
5039	23,948.3334	365,704.9925
5040	23,953.2171	365,703.7560
5041	23,956.0377	365,706.3765
5042	23,955.7301	365,711.0222
5043	23,961.2422	365,707.1168
5044	23,951.8529	365,698.3938
5045	23,947.1932	365,699.0018

COORDINATE LIST		
POINT	NORTHING	EASTING
5046	23,969.2827	365,707.5478
5047	23,965.9709	365,703.7664
5048	23,993.4850	365,681.5713
5049	23,996.6524	365,670.7412
5050	24,001.2530	365,665.7891
5051	23,999.4694	365,684.3215
5052	24,001.6258	365,706.6717
5053	23,999.8965	365,706.5569
5054	23,980.6123	365,706.9764
5055	23,987.7448	365,720.2038
5056	23,968.4301	365,733.8886
5057	23,973.6762	365,736.2995
5058	23,994.7181	365,721.3970
5059	23,993.5260	365,728.3633
5060	24,006.0657	365,701.2373
5061	24,004.7155	365,686.7324
5062	24,052.3454	365,677.4844
5063	24,035.9647	365,692.2890
5064	24,082.4704	365,713.6612
5065	24,084.9800	365,723.6189
5066	24,086.6870	365,724.4034
5067	24,086.8530	365,743.7391
5068	24,089.7435	365,747.8189

CURVE LIST		
POINT	NORTHING	EASTING
C500	24,302.3544	365,910.8747
C501	24,234.6113	365,818.7967
C502	24,247.4440	365,818.0908
C503	24,205.2820	365,848.2393
C504	24,173.2702	365,828.0252
C505	24,176.5895	365,809.7408
C506	24,176.8857	365,812.9225
C507	23,929.0886	365,721.3115
C508	23,906.2478	365,710.8147
C509	23,952.5567	365,636.3429
C510	23,962.3676	365,647.7297
C511	23,951.4974	365,686.2793
C512	24,001.0873	365,701.7008
C513	23,990.6354	365,724.2835
C514	23,968.9653	365,739.6373
C515	24,091.8314	365,743.2757
C516	24,322.9685	365,860.4237
C517	24,349.9266	365,884.2828

COORDINATE LIST		
POINT	NORTHING	EASTING
5069	24,111.5777	365,740.7027
5070	24,120.3124	365,731.3007
5071	24,124.7081	365,735.3845
5072	24,115.9735	365,744.7865
5073	24,126.5387	365,761.4269
5074	24,129.3548	365,757.2184
5075	24,170.4700	365,776.1133
5076	24,171.6701	365,782.1676
5077	24,160.1143	365,818.6776
5078	24,157.8229	365,826.4289
5079	24,173.9951	365,808.8428
5080	24,180.9747	365,810.0450
5081	24,181.8642	365,812.4590
5082	24,184.9410	365,791.5680
5083	24,196.5034	365,807.8868
5084	24,191.2643	365,796.1522
5085	24,221.0981	365,728.9639
5086	24,214.0316	365,729.2237
5087	24,196.5116	365,712.9471
5088	24,182.9450	365,693.5186
5089	24,179.6287	365,697.0883
5090	24,190.7563	365,719.1421
5091	24,095.5828	365,619.0069

COORDINATE LIST		
POINT	NORTHING	EASTING
5092	24,102.2951	365,589.6833
5093	24,097.5034	365,592.6899
5094	24,068.1006	365,585.9595
5095	24,069.5400	365,582.1856
5096	24,073.4448	365,565.1268
5097	24,035.1843	365,556.3690
5098	24,044.5168	365,566.5046
5099	24,027.5717	365,589.6265
5100	24,017.9691	365,609.4297
5101	24,014.2495	365,605.9740
5102	23,990.5685	365,617.6188
5103	23,988.7585	365,615.2263
5104	23,984.7630	365,618.2489
5105	23,986.5729	365,620.6414
5106	23,987.9786	365,625.8475
5107	23,967.4324	365,677.2165
5108	23,970.0681	365,678.7872
5109	23,937.2886	365,681.4721
5110	23,956.3046	365,672.0704
5111	23,967.8517	365,675.9771
5112	23,972.6589	365,661.7682
5113	23,959.1628	365,657.2022
5114	23,956.3345	365,639.7545

COORDINATE LIST		
POINT	NORTHING	EASTING
5115	23,938.3479	365,631.5358
5116	23,943.5072	365,624.3802
5117	23,980.0861	365,596.7089
5118	23,992.1522	365,612.6591
5119	24,025.9781	365,587.1219
5120	24,001.9846	365,555.4051
5121	23,968.1838	365,580.9751
5122	24,176.8644	365,787.8563
5123	24,320.1317	365,867.3665
5124	24,328.5847	365,865.3943
5125	24,344.3103	365,879.3121
5126	24,343.3800	365,887.9422
5127	24,352.4818	365,931.5794

Revisions:	Date
ADDENDUM 001 (1)	02/02/2022

CONSULTANTS:
--

MATTHEW BILLINGSLEA No. 59820 02/02/2022 LICENSED PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:
HFG HEALTH FACILITIES GROUP architecture
FARRIS ENGINEERING
BLUE STAR INTEGRATIVE STUDIO
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **GEOMETRY PLAN**
Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002
Location: **BROWNING, MONTANA**
Date: **05/21/2020** Checked: **DRC** Drawn: **SAD**

Project Number: **H IH BLAC 19100**
Building Number: (Not Applicable)
Drawing Number: **CS1.2**

INDIAN HEALTH SERVICE · IHS · 1955 ·

Saved: 05-21-2020, 1:41:18 PM by: SCOTT TURNBULL
Plotted: 05-21-2020, 1:42:25 PM by: SAD
U:\Wichita-Civil\2019\190418\000\Mark\Drawings\PLANS\190418-000-CS1.2 GEOMETRY PLAN.dwg

LEGEND

- 71.20 — PROPOSED ELEVATION
- 3070 — EXISTING MAJOR CONTOUR
- 3069 — EXISTING MINOR CONTOUR
- 3070 — PROPOSED MAJOR CONTOUR
- 3069 — PROPOSED MINOR CONTOUR
- RIDGE LINE
- DITCH CENTER LINE
- FLOW DIRECTION
- HP = HIGH POINT
- TC = TOP OF CURB
- FL = FLOW LINE
- ME = MATCH EXISTING CONTRACTOR SHALL VERIFY ALL EXISTING ELEVATIONS AND REPORT ALL DISCREPANCIES TO THE ENGINEER PRIOR TO CONSTRUCTION.

SEE SHEET CG1.2 FOR DETENTION POND AND OUTLET CHANNEL GRADING PLANS.

SWALE BOTTOM COORDINATE LIST

POINT	NORTHING	EASTING
6000	24,231.9601	365,751.3553
6001	24,235.9690	365,694.0778
6002	24,161.5585	365,553.4825
6003	24,126.2661	365,515.9210
6004	23,912.7271	365,675.5165
6005	23,954.1824	365,550.6540

three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot

Saved: 05-21-2020 12:36:59 PM by SCOTT.DEMBELL
Plotted: 21 - 2020-02-2022 12:36:59 PM by SCOTT.DEMBELL
U:\Wichita-Civil\2019\190418\000\Main\Drawings\PLANS\190418-000-CG11 GRADING PLAN

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

--

MATTHEW BILLINGSLEA No. 59820 02/02/2022 LICENSED PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
FARRIS ENGINEERING
BLUE STAR INTEGRATIVE STUDIO
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **GRADING PLAN**

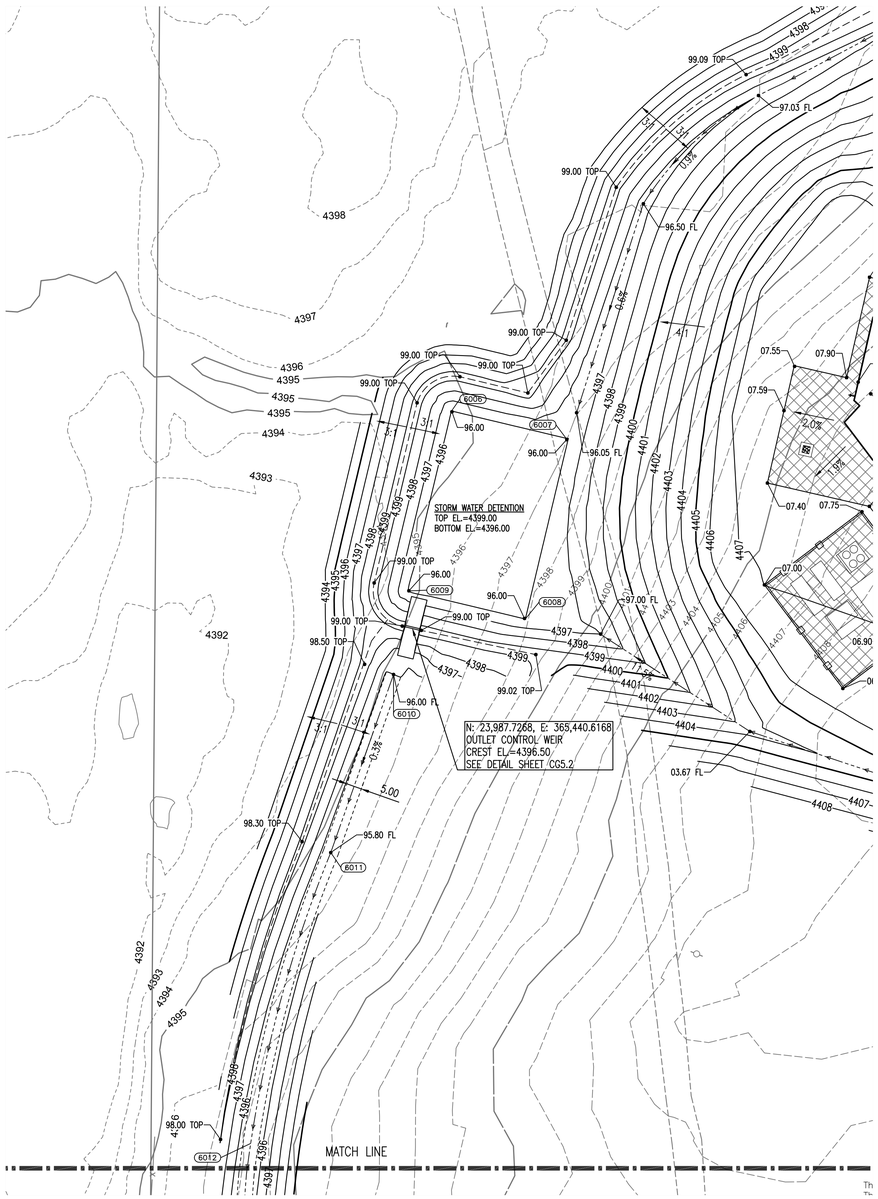
Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

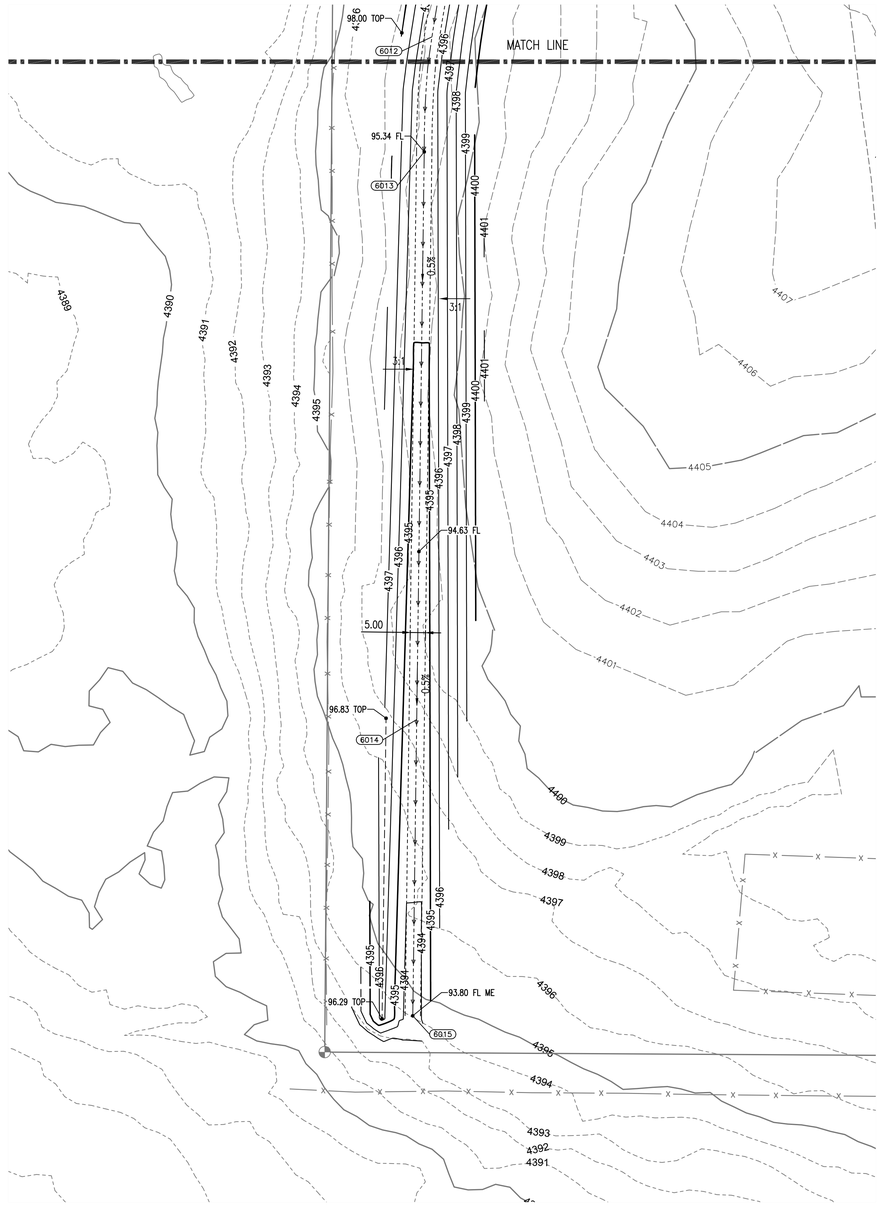
Location: **BROWNING, MONTANA**
Date: **05/21/2020** Checked: **DRC** Drawn: **SAD**

Project Number: **H IH BLAC 19100**
Building Number:
Drawing Number: **CG1.1**

INDIAN HEALTH SERVICE · IHS · 1955 ·



1 DETENTION POND AND NORTH CHANNEL GRADING PLAN
1"=20'



2 SOUTH CHANNEL GRADING PLAN
1"=20'

0 10 20
SCALE IN FEET

LEGEND

- 71.20 — PROPOSED ELEVATION
- 3070 — EXISTING MAJOR CONTOUR
- 3069 — EXISTING MINOR CONTOUR
- 3070 — PROPOSED MAJOR CONTOUR
- 3069 — PROPOSED MINOR CONTOUR
- RIDGE LINE
- DITCH CENTER LINE
- FLOW DIRECTION
- HP = HIGH POINT
- TC = TOP OF CURB
- FL = FLOW LINE
- ME = MATCH EXISTING CONTRACTOR SHALL VERIFY ALL EXISTING ELEVATIONS AND REPORT ALL DISCREPANCIES TO THE ENGINEER PRIOR TO CONSTRUCTION.

SEE SHEET CG1.1 FOR MAIN BUILDING AND SITE GRADING PLAN.

SWALE / POND BOTTOM COORDINATE LIST		
POINT	NORTHING	EASTING
6006	24,058.7118	365,453.4062
6007	24,049.4214	365,490.9899
6008	23,990.8936	365,477.4720
6009	24,000.0010	365,439.2890
6010	23,972.7456	365,434.4552
6011	23,914.6947	365,413.9839
6012	23,819.8423	365,387.8728
6013	23,782.3498	365,385.3579
6014	23,597.2259	365,382.9053
6015	23,500.6334	365,381.6257

Revisions:	Date
ADDENDUM 001 1	02/02/2022

CONSULTANTS:
--

MATTHEW BILLINGSLEA No. 59820 02/02/2022 LICENSED PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:
HFG HEALTH FACILITIES GROUP architecture
FARRIS ENGINEERING
BLUE STAR INTEGRATIVE STUDIO
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

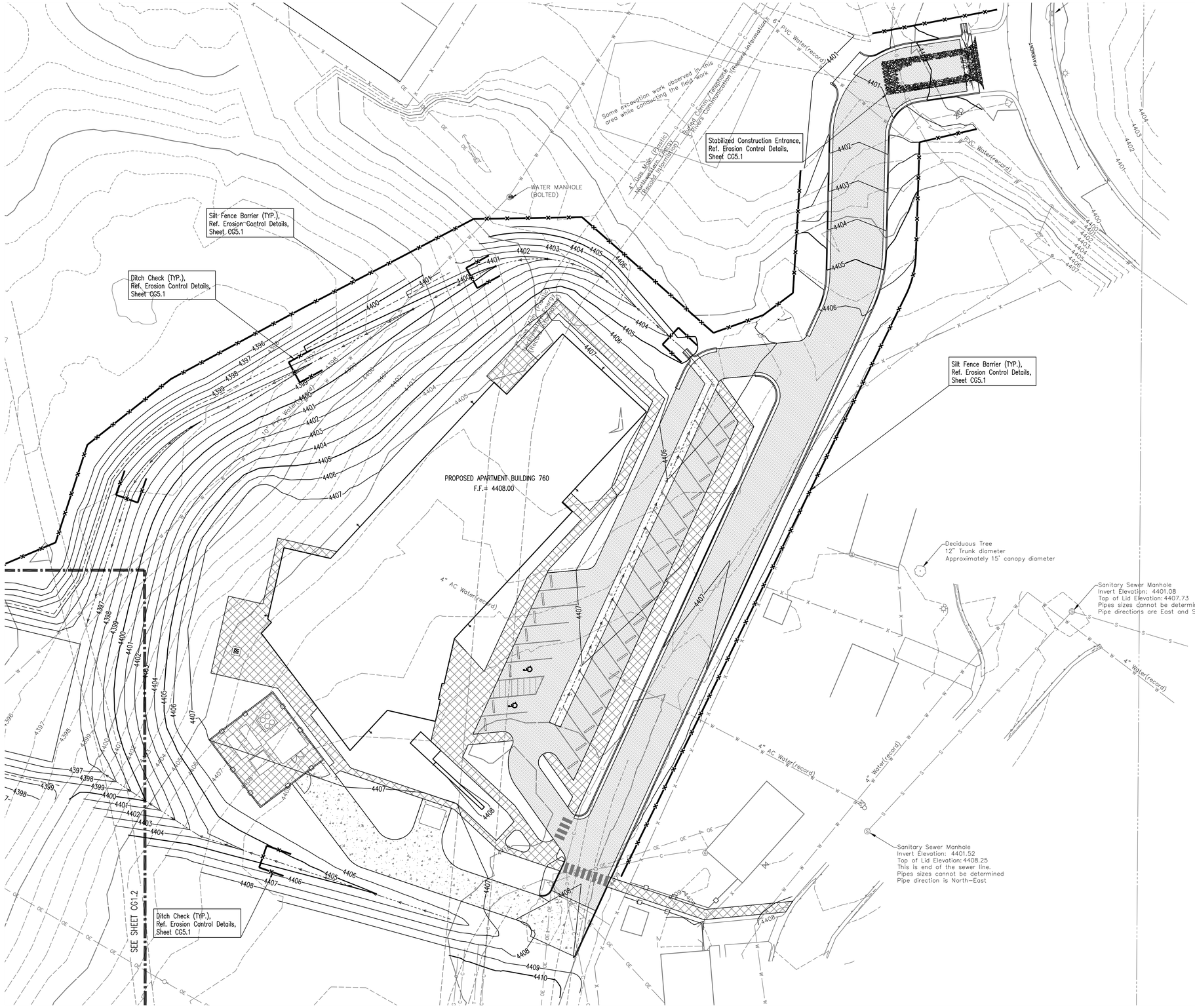
Drawing Title: **GRADING PLAN**
Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002
Location: **BROWNING, MONTANA**
Date: **05/21/2020** | Checked: **DRC** | Drawn: **SAD**

Project Number: **H IH BLAC 19100**
Building Number:
Drawing Number: **CG1.2**

INDIAN HEALTH SERVICE · PHS · 1955 ·

Saved: 05-21-2020 2:10:57 PM by: SCOTT DUNBULL
Plotted: 05-21-2020 2:12:22 PM by: SAD
U:\Wichita-Civil\2019\190418\000\Mech\Drawings\PLANS\190418-000-CG1.2 GRADING PLAN



0 20 40
SCALE IN FEET

LEGEND

STABILIZED CONSTRUCTION ENTRANCE
(FINAL LOCATION DETERMINED BY CONTRACTOR)

SILT FENCE BARRIERS

DITCH CHECK

INSPECTION AND MAINTENANCE:

SILT FENCE DITCH CHECKS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE.

SEE SHEET CG1.4 FOR DETENTION POND AND OUTLET CHANNEL EROSION CONTROL.

Revisions:	Date
ADDENDUM 001	02/02/2022

CONSULTANTS:

--

MATTHEW BILLINGSLEA
No. 59820
02/02/2022
LICENSED PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
FARRIS ENGINEERING
BLUE STAR INTEGRATIVE STUDIO
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **EROSION CONTROL PLAN**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **05/21/2020** | Checked: **DRC** | Drawn: **SAD**

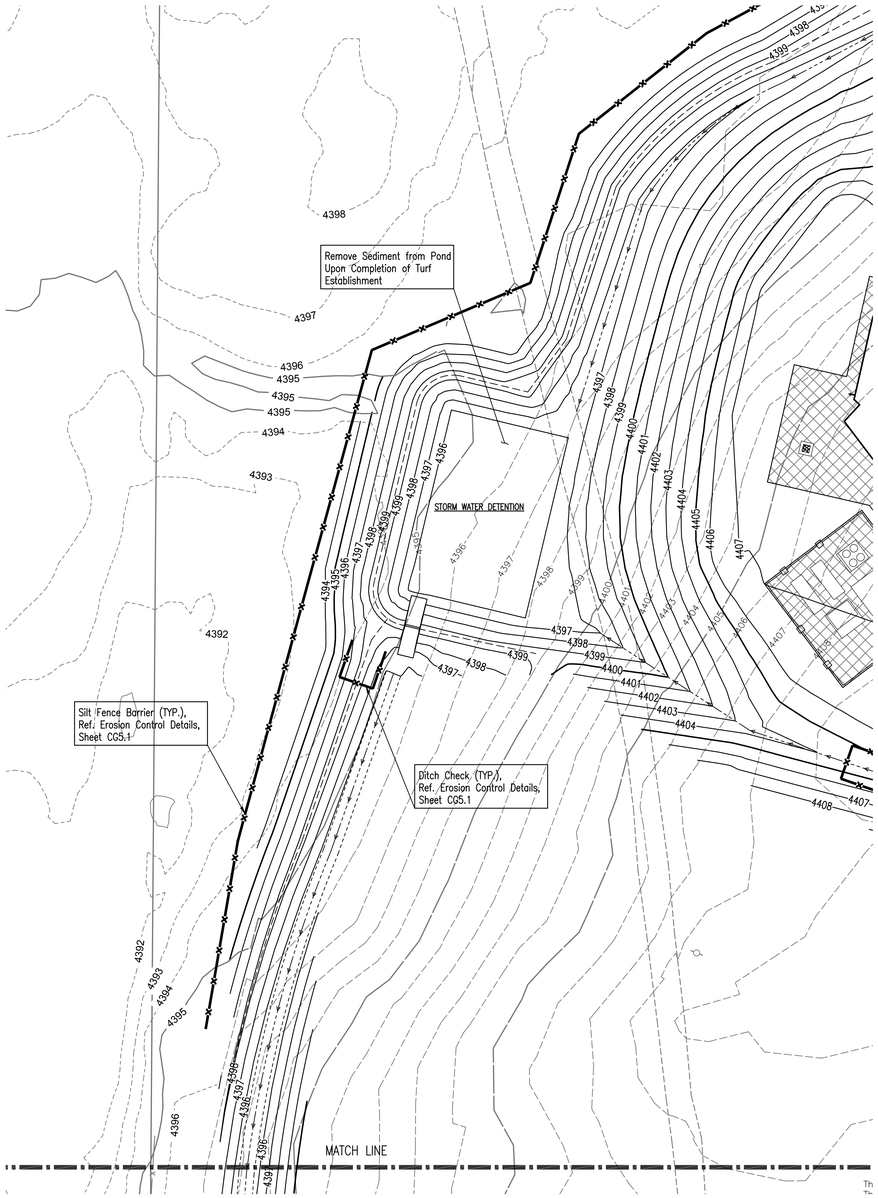
Project Number: **H IH BLAC 19100**

Building Number:

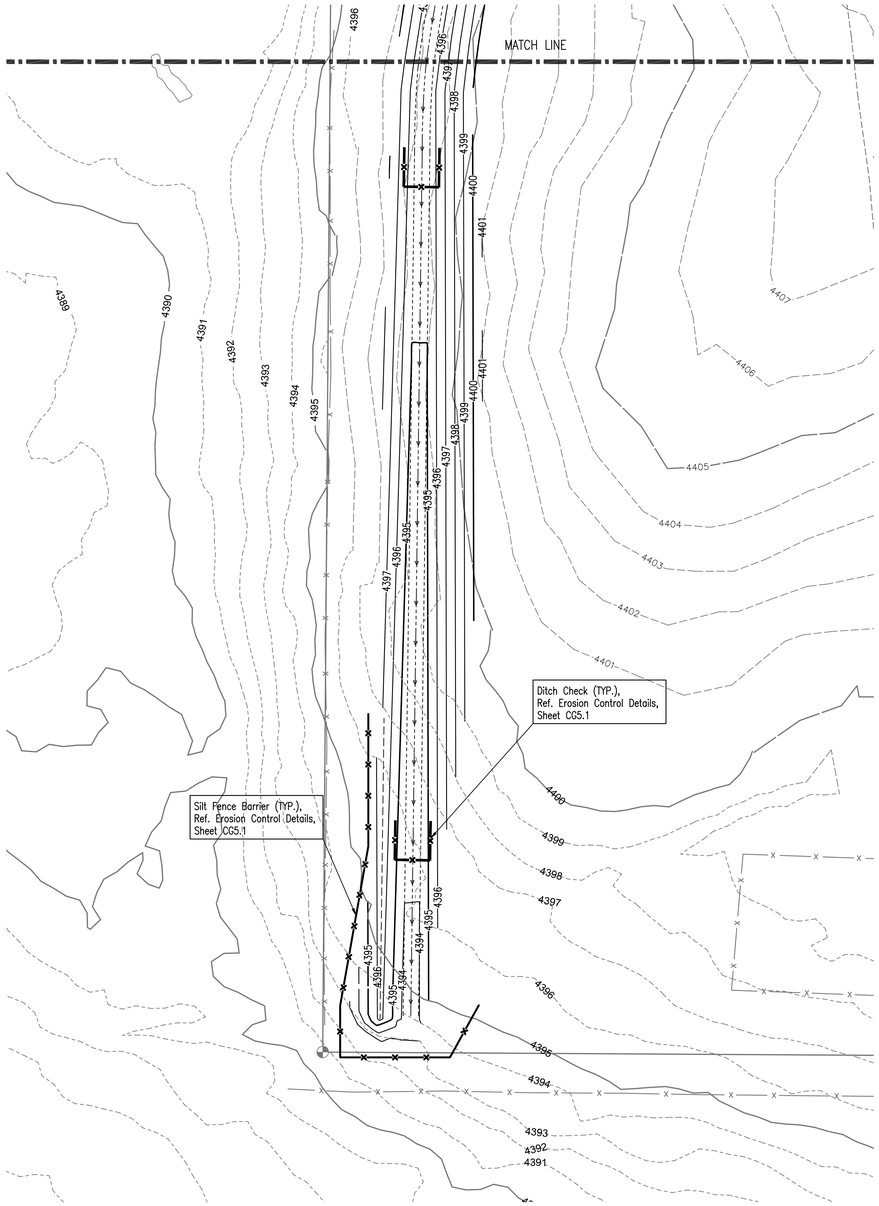
Drawing Number: **CG1.3**

INDIAN HEALTH SERVICE · PHS · 1955 ·

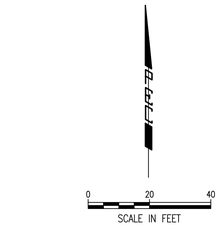
Saved: 05-21-2020, 13:34:51 PM by SCOTT TURNBULL
Plotted: 05-21-2020, 12:28:02 PM by SCOTT TURNBULL
U:\Wichita-Civil\2019\190418\000\Main\Drawings\PLANS\190418-000-CG1.3 EROSION CONTROL PLAN
one eighth inch = one foot one quarter inch = one foot three eighths inch = one foot one half inch = one foot three quarters inch = one foot one inch = one foot one and one half inches = one foot three inches = one foot



1 DETENTION POND AND NORTH CHANNEL EROSION CONTROL
1"=20'



2 SOUTH CHANNEL EROSION CONTROL
1"=20'



LEGEND

STABILIZED CONSTRUCTION ENTRANCE
(FINAL LOCATION DETERMINED BY CONTRACTOR)

SILT FENCE BARRIERS

DITCH CHECK

INSPECTION AND MAINTENANCE:

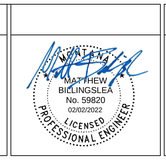
SILT FENCE DITCH CHECKS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE.

SEE SHEET CG1.3 FOR MAIN BUILDING AND SITE EROSION CONTROL.

Revisions:	Date
ADDENDUM 001	02/02/2022

CONSULTANTS:

--



ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

FARRIS ENGINEERING

BLUE STAR INTEGRATIVE STUDIO

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: EROSION CONTROL PLAN

Approved: Project Director

Project Title: APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI10220180000SI
Task Order No.: 75H70119F30002

Location: BROWNING, MONTANA

Date: 05/21/2020 | Checked: DRC | Drawn: SAD

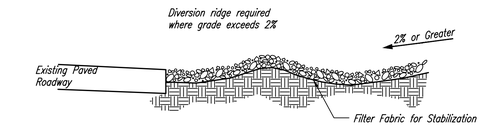
Project Number: H IH BLAC 19100

Building Number

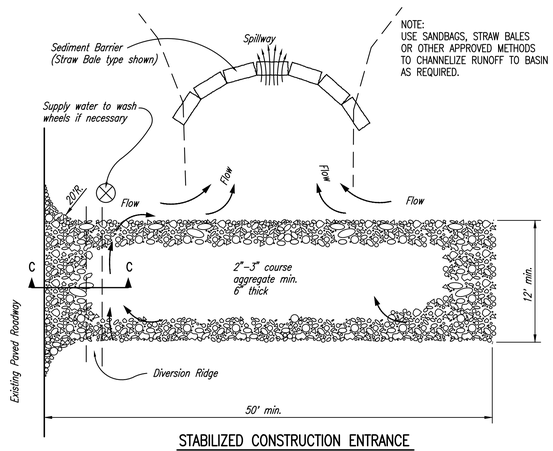
Drawing Number: CG1.4

INDIAN HEALTH SERVICE · PHS · 1955 ·

Saved: 05-20-2020, 5:56:55 PM by SCOTT TURNBULL
Plotted: 02-02-2022, 11:29:27 PM by SAD
U:\Wichita-Civil\2019\1190418.000\Main\Drawings\PLANS\1190418-000-CG1.4 EROSION CONTROL PLAN.dwg



SECTION C–C



STABILIZED CONSTRUCTION ENTRANCE

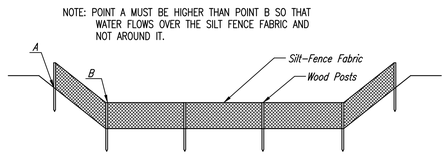
NOTES:

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT–OF–WAY.

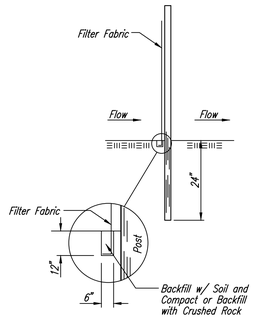
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN, AS SHOWN ABOVE.

4. DRIVE ENTRANCES ONTO RESIDENTIAL LOTS WILL NOT BE REQUIRED TO HAVE THE SEDIMENT BARRIER SHOWN, BUT WHEEL WASHING MAY BE REQUIRED IF STABILIZED ENTRANCE IS NOT SUFFICIENT TO KEEP MUD FROM BEING TRACKED ONTO ADJACENT STREET. ENTRANCE SHALL EXTEND FROM BACK OF CURB TO DWELLING.



ELEVATION

SILT FENCE DITCH CHECKS
(STREAM PROTECTION)



ANCHOR TRENCH DETAIL

MATERIAL SPECIFICATION:

SILT FENCE FABRIC SHOULD CONFORM TO THE AASHTO M288 96 SILT FENCE SPECIFICATION.
THE POSTS USED TO SUPPORT THE SILT FENCE FABRIC SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG.
SILT FENCE FABRIC SHOULD BE ATTACHED TO THE WOODEN POSTS WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

PLACEMENT:

PLACE SILT FENCE IN DITCHES WHERE IT IS UNLIKELY THAT IT WILL BE OVERTOPPED.
WATER SHOULD FLOW THROUGH A SILT FENCE DITCH CHECK, NOT OVER IT. SILT FENCE DITCH CHECKS OFTEN FAIL WHEN OVERTOPPED.
SILT FENCE DITCH CHECKS SHOULD BE PLACED PERPENDICULAR TO THE FLOWLINE OF THE DITCH.
THE SILT FENCE SHOULD EXTEND FAR ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE FENCE IS HIGHER THAN THE TOP OF THE LOW POINT OF THE FENCE. THIS PREVENTS WATER FROM FLOWING AROUND THE CHECK.
SILT FENCE DITCH CHECKS SHOULD NOT BE PLACED IN DITCHES WHERE HIGH FLOWS ARE EXPECTED. ROCK CHECKS SHOULD BE USED INSTEAD.
SILT FENCE SHOULD BE PLACED IN DITCHES WITH SLOPES OF 6% OR LESS. FOR SLOPES STEEPER THAN 6%, ROCK CHECKS SHOULD BE USED.

THE FOLLOWING TABLE PROVIDES CHECK SPACING FOR A GIVEN DITCH GRADE:

DITCH CHECK DITCH GRADE (%)	SPACING CHECK SPACING (FEET)
0.5	200
1.0	200
2.0	100
3.0	65
4.0	50
5.0	40
6.0	30

PROPER INSTALLATION METHOD:

EXCAVATE A TRENCH PERPENDICULAR TO THE DITCH FLOWLINE THAT IS AT LEAST 12" DEEP BY 6" WIDE.
EXTEND THE TRENCH IN A STRAIGHT LINE ALONG THE ENTIRE LENGTH OF THE PROPOSED DITCH CHECK.
PLACE THE SOIL ON THE UPSTREAM SIDE OF THE TRENCH FOR LATER USE.
ROLL OUT A CONTINUOUS LENGTH OF SILT FENCE FABRIC ON THE DOWNSTREAM SIDE OF THE TRENCH.
PLACE THE EDGE OF THE FABRIC IN THE TRENCH STARTING AT THE TOP UPSTREAM EDGE OF THE TRENCH.
LINE TWO SIDES OF THE TRENCH WITH THE FABRIC AS SHOWN ON DETAIL. BACKFILL OVER THE FABRIC IN THE TRENCH WITH THE EXCAVATED SOIL AND COMPACT. AFTER FILLING THE TRENCH, APPROXIMATELY 24" TO 36" OF SILT FENCE FABRIC SHOULD REMAIN EXPOSED.
LAY THE EXPOSED SILT FENCE ON THE UPSTREAM SIDE OF THE TRENCH TO CLEAR AN AREA FOR DRIVING IN THE POSTS. JUST DOWNSTREAM OF THE TRENCH, DRIVE POSTS INTO THE GROUND TO A DEPTH OF AT LEAST 24". PLACE POSTS NO MORE THAN 4' APART.
ATTACH THE SILT FENCE TO THE ANCHORED POST WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

WATER SHOULD FLOW THROUGH A SILT FENCE DITCH CHECK–NOT OVER IT. PLACE SILT FENCE IN DITCHES WHERE IT IS UNLIKELY THAT IT WILL BE OVERTOPPED. SILT FENCE INSTALLATIONS QUICKLY DETERIORATE WHEN WATER OVERTOPS THEM.
DO NOT PLACE SILT FENCE POSTS ON THE UPSTREAM SIDE OF THE SILT FENCE FABRIC. IN THIS CONFIGURATION, THE FORCE OF THE WATER IS NOT RESTRICTED BY THE POSTS, BUT ONLY BY THE STAPLES (WIRE, ZIP TIES, NAILS, ETC.). THE SILT FENCE WILL RIP AND FAIL.
DO NOT PLACE A SILT FENCE DITCH CHECK DIRECTLY IN FRONT OF A CULVERT OUTLET. IT WILL NOT STAND UP TO THE CONCENTRATED FLOW.
DO NOT PLACE SILT FENCE DITCH CHECKS IN DITCHES THAT WILL LIKELY EXPERIENCE HIGH FLOWS. THEY WILL NOT STAND UP TO CONCENTRATED FLOW.
FOLLOW PRESCRIBED DITCH CHECK SPACING GUIDELINES. IF SPACING GUIDELINES ARE EXCEEDED, EROSION WILL OCCUR BETWEEN THE DITCH CHECKS.
DO NOT ALLOW WATER TO FLOW AROUND THE DITCH CHECK. MAKE SURE THAT THE DITCH CHECK IS LONG ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE FENCE IS HIGHER THAN THE LOW POINT ON THE TOP OF THE FENCE.
DO NOT PLACE SILT FENCE DITCH CHECKS IN CHANNELS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE CHECK IS NOT ANCHORED SUFFICIENTLY, IT WILL WASH OUT.

INSPECTION AND MAINTENANCE:

SILT FENCE DITCH CHECKS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:

DOES WATER FLOW AROUND THE DITCH CHECK?
DOES WATER FLOW UNDER THE DITCH CHECK?
DOES THE SILT FENCE SAG EXCESSIVELY?
HAS THE SILT FENCE TORN OR BECOME DETACHED FROM THE POSTS?
DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE DITCH CHECK?

Revisions:	Date
ADDENDUM 001 1	02/02/2022

CONSULTANTS:

--

MATTHEW BILLINGSLEA No. 59820 02/02/2022 LICENSED PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
FARRIS ENGINEERING
BLUE STAR INTEGRATIVE STUDIO
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **EROSION CONTROL DETAILS**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **05/21/2020** | Checked: **DRC** | Drawn: **SAD**

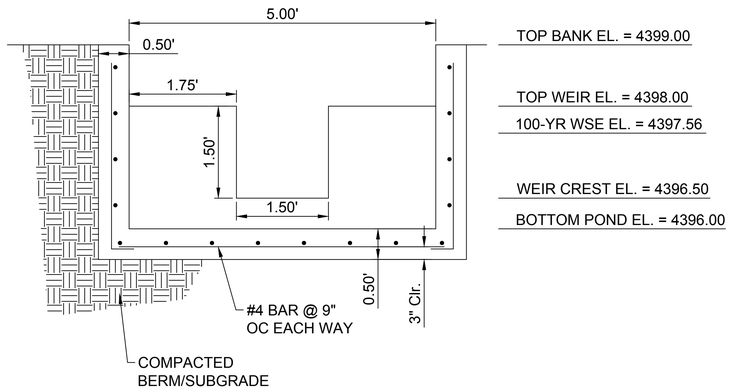
Project Number: **H IH BLAC 19100**

Building Number:

Drawing Number: **CG5.1**

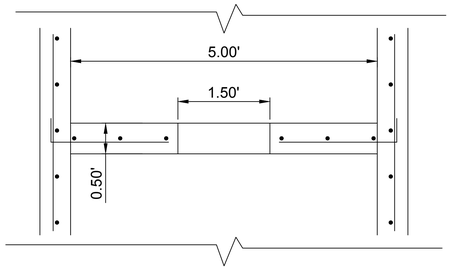
INDIAN HEALTH SERVICE · PHS · 1955

Saved: 05–20–2020 5:58:31 PM by SCOTT DUNDELL
Plotted: 05–21–2020 12:20:42 PM by SCOTT DUNDELL
U:\Wichita–Civil\2019\190418\000\Mark\Drawings\PLANS\190418–000–CG5.1 EROSION CONTROL DETAILS

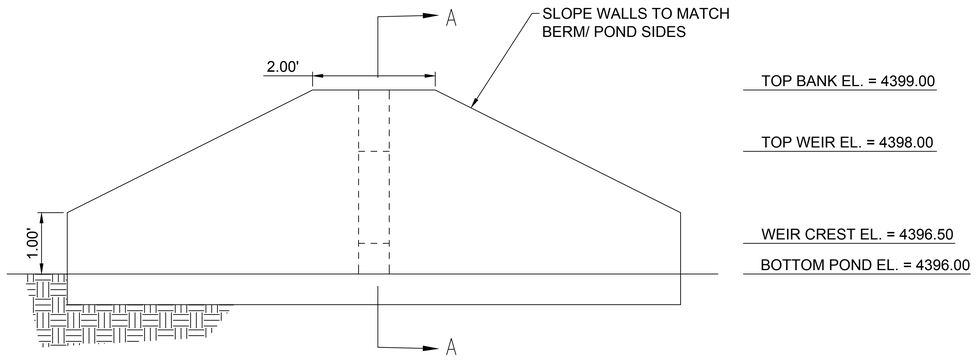


WEIR OUTLET CROSS SECTION

SECTION A-A



WEIR OUTLET TOP VIEW



WEIR OUTLET SIDE VIEW

WEIR NOTES:

1. CONCRETE SHALL BE 4,000 PSI 28-DAY COMPRESSIVE STRENGTH.
2. CHAMFER ALL EXPOSED CONCRETE EDGES.
3. STRUCTURE TO BE REINFORCED WITH #4 BARS @ 9" OC. ALL REBAR PLACEMENT SHALL MEET CURRENT VERSION OF ACI CODE.

Revisions:	Date
ADDENDUM 001	02/02/2022

CONSULTANTS:

--

MATTHEW BILLINGSLEA No. 59820 02/02/2022 LICENSED PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

FARRIS ENGINEERING

BLUE STAR INTEGRATIVE STUDIO

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **WEIR OUTLET DETAILS**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**

Contract No.: HHSI10220180005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **05/21/2020** | Checked: **DRC** | Drawn: **SAD**

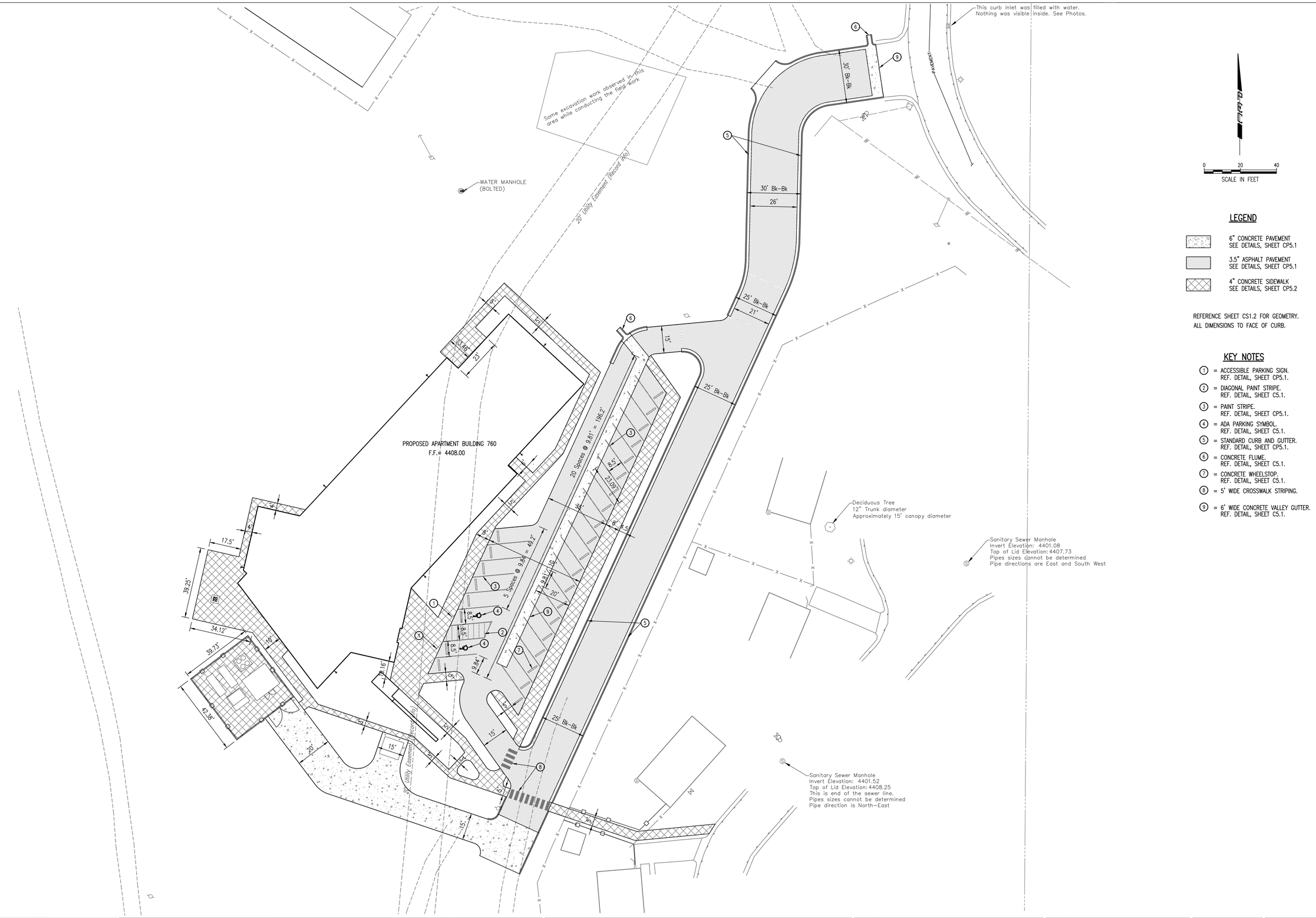
Project Number: **H IH BLAC 19100**

Building Number

Drawing Number: **CG5.2**

INDIAN HEALTH SERVICE · IHS · 1955 ·

Saved: 05-18-2020 2:35:09 PM by SCOTT TURSKILL
Plotted: 05-21-2020 12:29:41 PM by SCOTT TURSKILL
U:\Wichita-Civil\2019\190418\000\Mark\Drawings\PLANS\190418-000-CG5.2 WEIR OUTLET DETAILS



LEGEND

- 6" CONCRETE PAVEMENT SEE DETAILS, SHEET CP5.1
- 3.5" ASPHALT PAVEMENT SEE DETAILS, SHEET CP5.1
- 4" CONCRETE SIDEWALK SEE DETAILS, SHEET CP5.2

REFERENCE SHEET CS1.2 FOR GEOMETRY.
ALL DIMENSIONS TO FACE OF CURB.

KEY NOTES

1. = ACCESSIBLE PARKING SIGN. REF. DETAIL, SHEET CP5.1.
2. = DIAGONAL PAINT STRIPE. REF. DETAIL, SHEET C5.1.
3. = PAINT STRIPE. REF. DETAIL, SHEET CP5.1.
4. = ADA PARKING SYMBOL. REF. DETAIL, SHEET C5.1.
5. = STANDARD CURB AND GUTTER. REF. DETAIL, SHEET CP5.1.
6. = CONCRETE FLUME. REF. DETAIL, SHEET C5.1.
7. = CONCRETE WHEELSTOP. REF. DETAIL, SHEET C5.1.
8. = 5' WIDE CROSSWALK STRIPING.
9. = 6' WIDE CONCRETE VALLEY GUTTER. REF. DETAIL, SHEET C5.1.

Revisions:	Date
ADDENDUM 001 1	02/02/2022

CONSULTANTS:

--

MATTHEW BILLINGSLEA No. 59820 02/02/2022 LICENSED PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

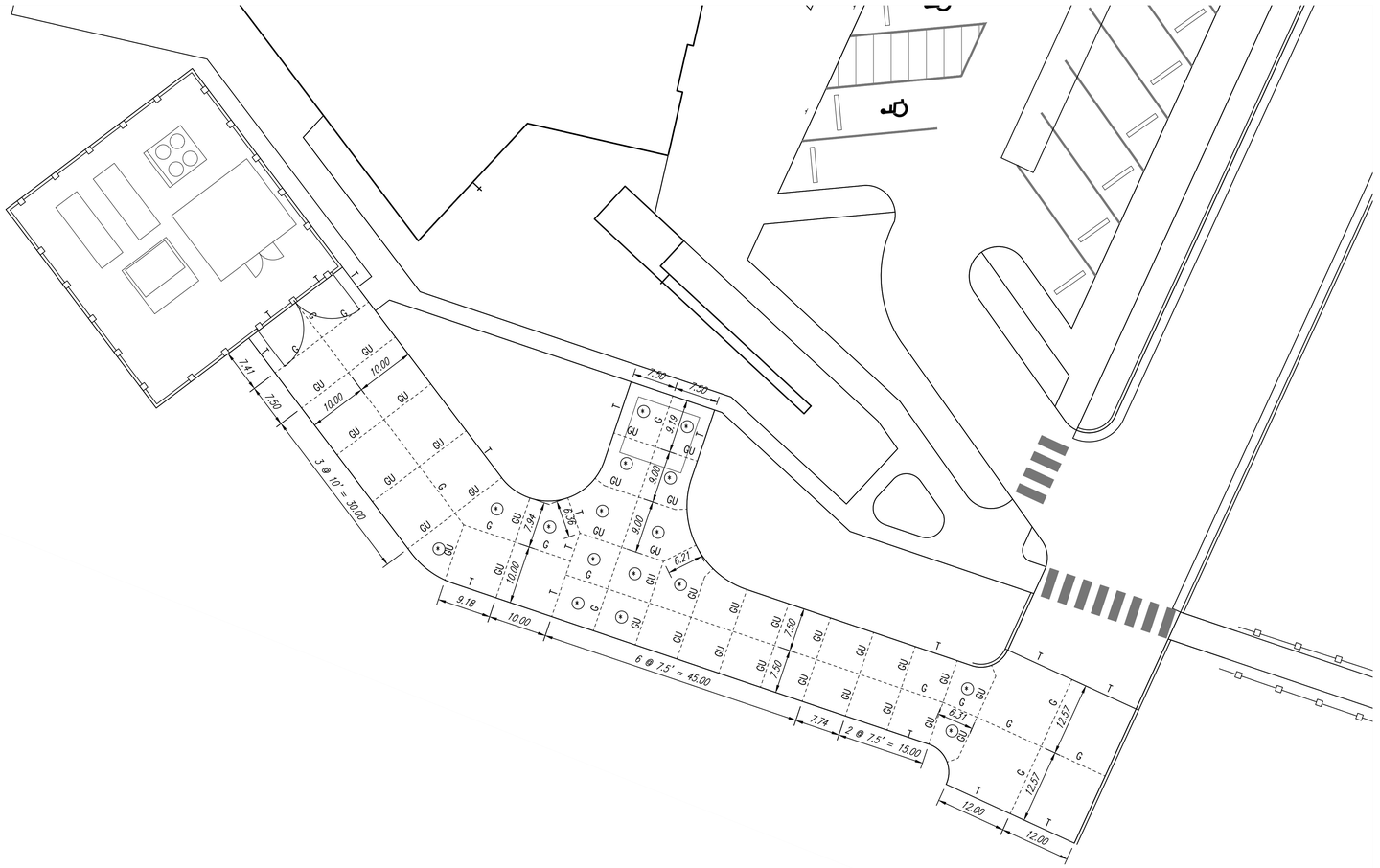
HFG HEALTH FACILITIES GROUP architecture
FARRIS ENGINEERING
BLUE STAR INTEGRATIVE STUDIO
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

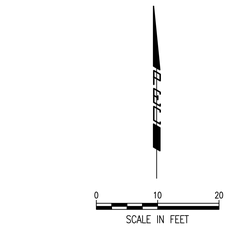
Drawing Title	PAVING PLAN
Approved: Project Director	
Project Title	APARTMENT BUILDING AND SITEWORK
Contract No.:	HHSI102201800005I
Task Order No.:	75H70119F30002
Location	BROWNING, MONTANA
Date	05/21/2020
Checked	DRC
Drawn	SAD
Project Number	H IH BLAC 19100
Building Number	
Drawing Number	CP1.1

INDIAN HEALTH SERVICE · PHS · 1955 ·

Saved: 05-21-2020 11:16:49 AM by: SCOTT.BURGELL
Plotted: 05-21-2020 2:20:37 PM by: SAD
U:\Wichita-Civil\2019\190418\000\Main\Drawings\PLANS\190418-000-CP1.1 PAVING PLAN

one eighth inch = one foot 0 8 16
one quarter inch = one foot 0 4 8
three eighths inch = one foot 0 4
one half inch = one foot 0 4
three quarters inch = one foot 0 2 4
one inch = one foot 0 2
one and one half inches = one foot 0 1 2
three inches = one foot 0 6"



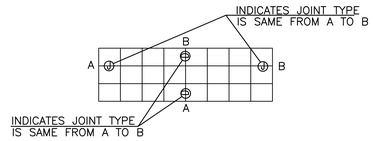


JOINT LEGEND	
TYPE	DESCRIPTION
T	THICKENED EDGE JOINT
G	SAWED CONTRACTION JOINT (TIED)
GU	SAWED CONTRACTION JOINT (UNTIED)

⊙ PANEL TO BE REINFORCED.
SEE DETAIL SHEET CP5.2.

NOTES:

1. ALL JOINT DIMENSIONS ARE MEASURED AT CENTER LINE.
2. REFERENCE CP5.2 FOR JOINT DETAILS.



JOINT CALL-OUT CONVENTIONS

three inches = one foot 6"
one and one half inches = one foot 1 6" 0
one inch = one foot 2 6" 0
three quarters inch = one foot 2 6" 0
one eighth inch = one foot 4 0
one half inch = one foot 4 0
three eighths inch = one foot 4 0
one quarter inch = one foot 8 0
one eighth inch = one foot 16 0

Saved: 05-20-2022 5:45:59 PM by SCOTT EVERGELL
Plotted: 05-21-2022 12:32:31 PM by SAD
U:\Wichita-Civil\2019\19041819\000\Work\Drawings\PLANS\19041819-000-CP1.2 JOINTING PLAN.dwg

Revisions:	Date
ADDENDUM 001 1	02/02/2022

CONSULTANTS:

--

SCOTT A. MATHEW BILLINGSLEA No. 59820 02/02/2022 LICENSED PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
FARRIS ENGINEERING
BLUE STAR INTEGRATIVE STUDIO
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
JOINTING PLAN

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI122018000051
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

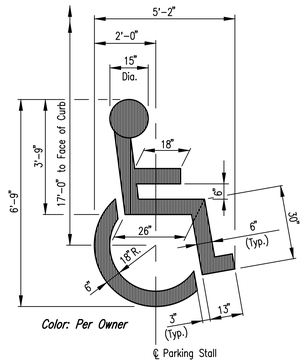
Date **05/21/2020** | Checked **DRC** | Drawn **SAD**

Project Number
H IH BLAC 19100

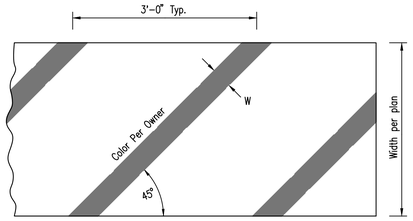
Building Number

Drawing Number
CP1.2

INDIAN HEALTH SERVICE · IHS · 1955 ·

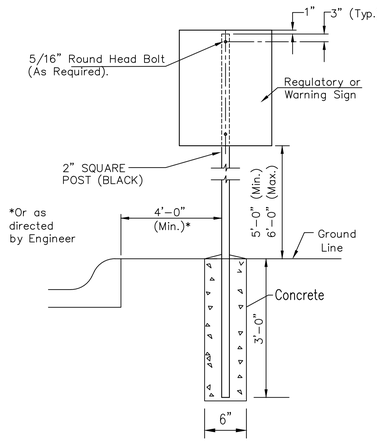


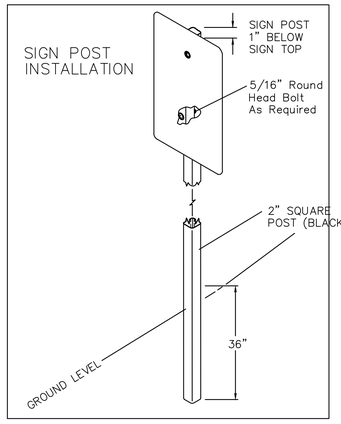
HANDICAP SYMBOL



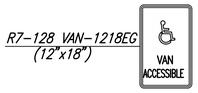
W = 4", Parking Areas
NOTE: PARKING STALL STRIPING ON NEW CONCRETE TO BE 4" WIDE STRIPE.

PAINT STRIPE AND STRIPING CROSS HATCH DETAIL

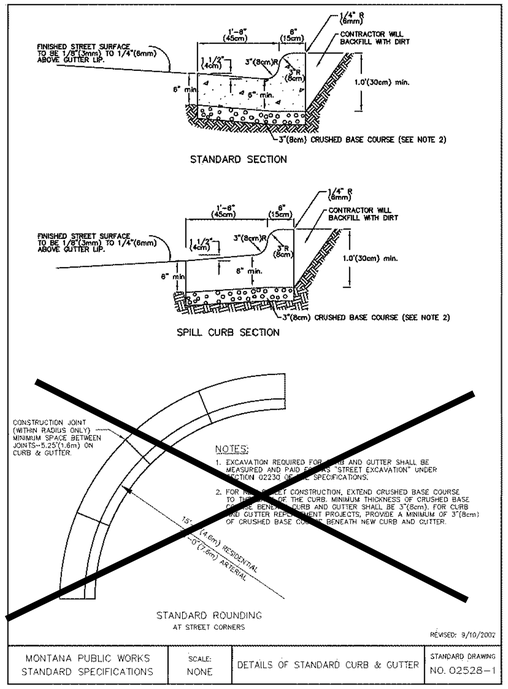


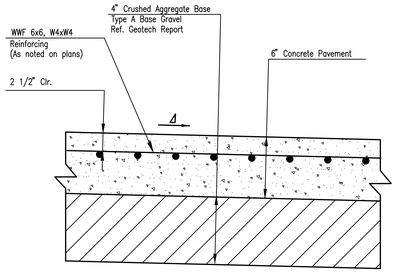


ADA SIGN MOUNTING INSTALLATION



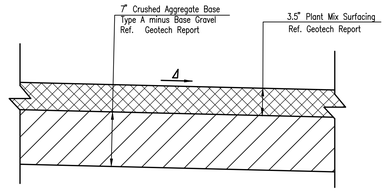
SIGN
(PICTURED)





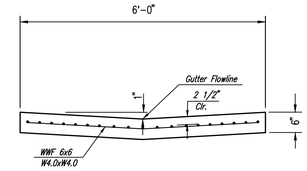
NOTES:
1. STABILIZED SUBBASE SHALL BE EXTENDED TO 1' BEYOND THE LIMITS OF ALL PAVING, EXCEPT WHERE ADJACENT TO EXISTING PAVING.
2. REF. GEOTECH REPORT SECT. 4.6.9 FOR GEOSYNTHETIC FABRIC RECOMMENDATIONS.

CONCRETE PAVEMENT
Δ See Grading Plan for Pavement Slopes



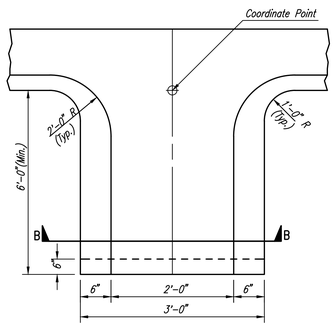
NOTES:
1. STABILIZED SUBBASE SHALL BE EXTENDED TO 1' BEYOND THE LIMITS OF ALL PAVING, EXCEPT WHERE ADJACENT TO EXISTING PAVING.
2. REF. GEOTECH REPORT SECT. 4.6.9 FOR GEOSYNTHETIC FABRIC RECOMMENDATIONS.

ASPHALT PAVEMENT
Δ See Grading Plan for Pavement Slopes

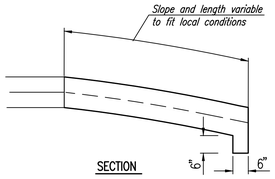


NOTES:
1. BASE COURSE AND SUBGRADE PREPARATION TO MATCH ADJACENT PAVEMENT SECTION.
2. INSTALL CONTROL JOINTS AT 10' (MAX) INTERVALS.

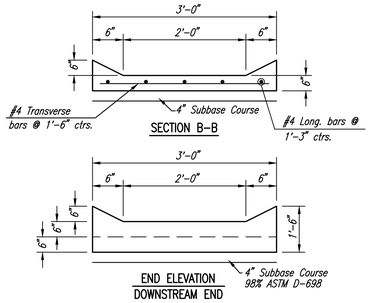
6' CONCRETE GUTTER DETAIL

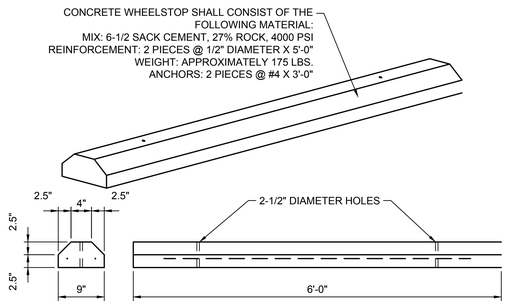


CONCRETE FLUME DETAIL
No Scale



SECTION





CONCRETE WHEELSTOP

Revisions:	Date
ADDENDUM 001	02/02/2022

CONSULTANTS:
--

MATTHEW BILLINGSLEA No. 59820 02/02/2022 LICENSED PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:
HFG HEALTH FACILITIES GROUP architecture
FARRIS ENGINEERING
BLUE STAR INTEGRATIVE STUDIO
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

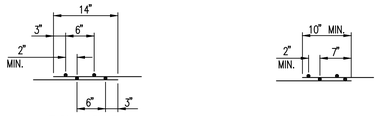
Drawing Title: **PAVING DETAILS**
Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002
Location: **BROWNING, MONTANA**
Date: **05/21/2020** | Checked: **DRC** | Drawn: **SAD**

Project Number: **H IH BLAC 19100**
Building Number:
Drawing Number: **CP5.1**

INDIAN HEALTH SERVICE · PHS · 1955 ·

Saved: 05-21-2020 8:45:27 AM by SCOTT.TUMBULL
Plotted: 1:1 (22x34) 2022-02-02 12:03:59 PM by SCOTT.TUMBULL
U:\Wichita-Civil\2019\190418\1000\Main\Drawings\PLANS\190418-000-CP5.1 PAVING DETAILS

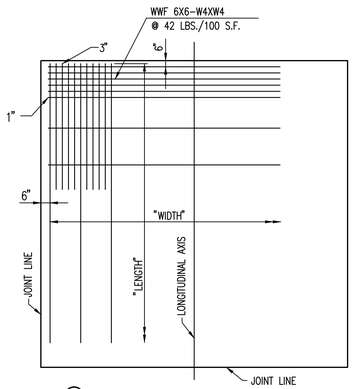


TYPICAL PANEL
TRANSVERSE SPLICE

TYPICAL PANEL
LONGITUDINAL
OR TYPICAL "MINIMUM"
LAP SPLICE

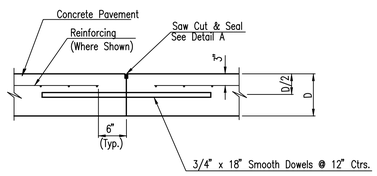
TYPICAL SPLICE
DETAILS

REINFORCING DETAILS

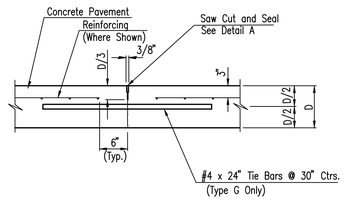


⊛ WELDED WIRE FABRIC

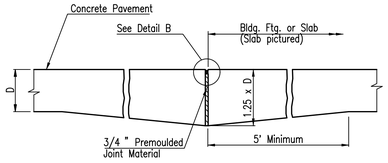
REINFORCING FABRIC SHALL BE FURNISHED IN FLAT SHEETS. THE CONTRACTOR MAY PROVIDE A DIFFERENT PATTERN OF FABRIC AS LONG AS A MINIMUM OF 0.054 SQ. IN./ FT. OF REINFORCING IS PROVIDED IN EACH DIRECTION. WELDED WIRE FABRIC SHALL BE CUT IN THE FIELD AS REQUIRED TO CONFORM TO THE SHAPE OF THE PANEL TO BE REINFORCED.



TYPE D JOINT DETAIL (TIED)
TYPE EU (UNTIED)

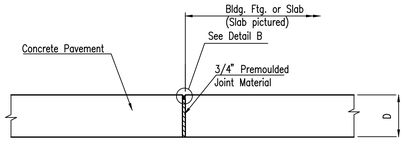


TYPE G (TIED)
TYPE GU (UNTIED)
(CONTRACTION JOINT)

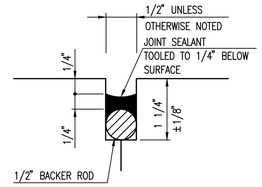


TYPE T

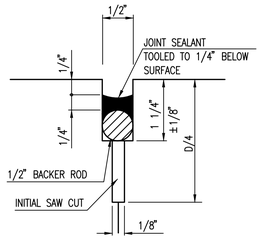
NOTE: PLACE AGAINST, ABUTTING STRUCTURES
(BUILDINGS, CANOPY COLUMNS, CATCH BASINS, ETC.)



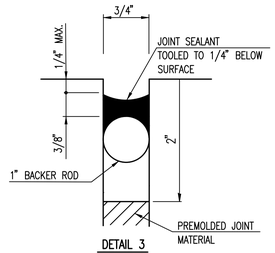
TYPE B
(BUTT JOINT)



DETAIL 1

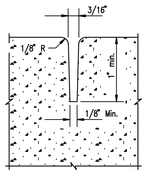


DETAIL 2

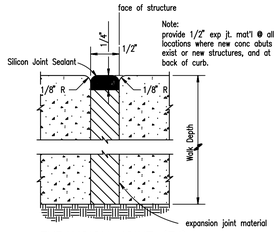


DETAIL 3

JOINT SEAL DETAILS

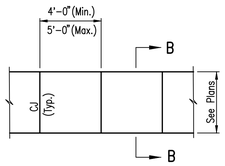


CONTRACTION JOINT (CJ)

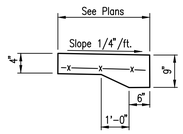


EXPANSION JOINT (EJ)

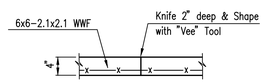
CONCRETE WALK JOINT DETAILS



PLAN



SECTION B-B



CONTRACTION JOINT (CJ)
Note: No sawn contraction
joints will be allowed

SIDEWALK DETAILS

Revisions:	Date
ADDENDUM 001	02/02/2022

CONSULTANTS:

--

MATTHEW BILLINGSLEA
No. 59820
02/02/2022
LICENSED PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
FARRIS ENGINEERING
BLUE STAR INTEGRATIVE STUDIO
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **PAVING DETAILS**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **05/21/2020** | Checked: **DRC** | Drawn: **SAD**

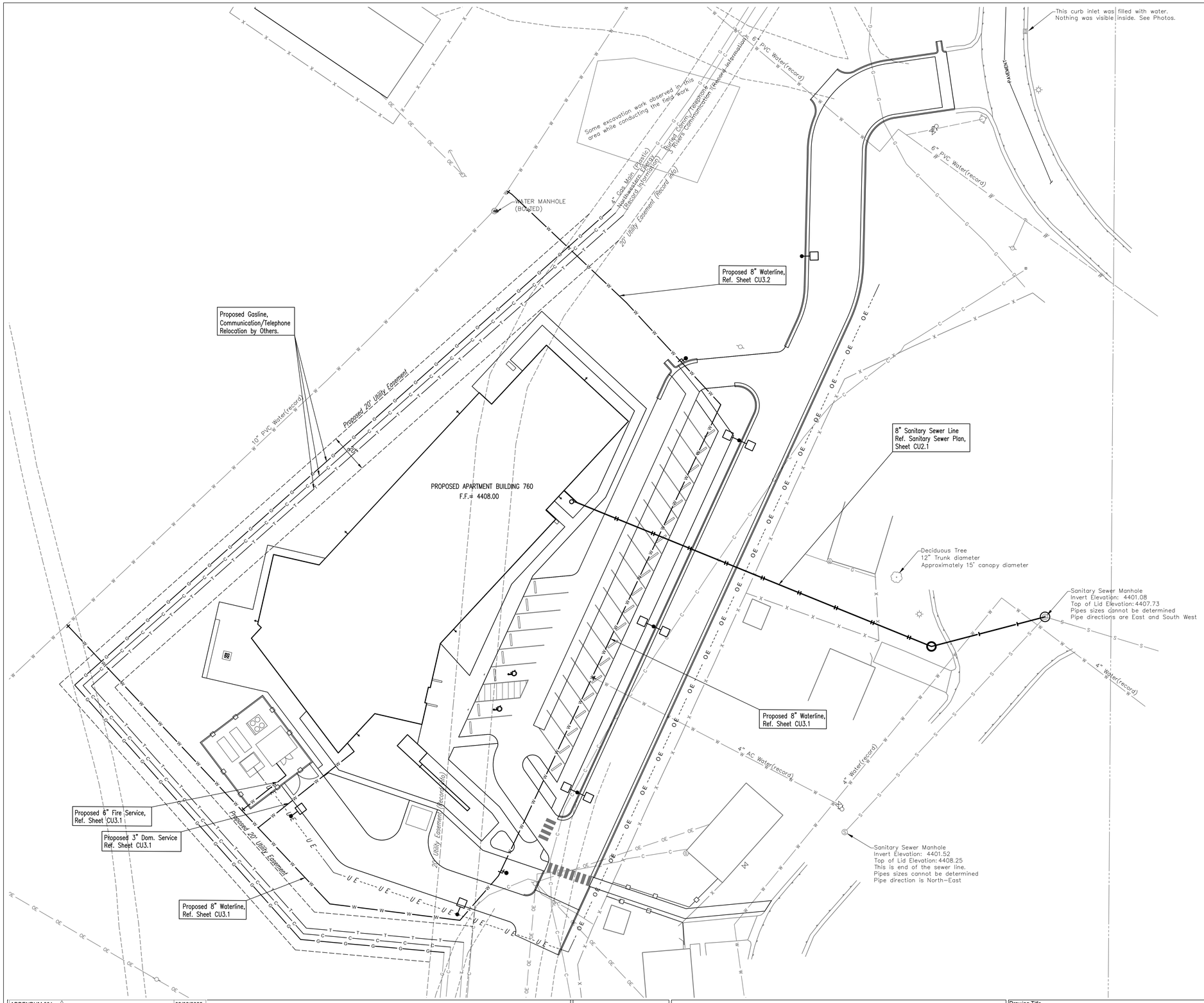
Project Number: **H IH BLAC 19100**

Building Number:

Drawing Number: **CP5.2**

INDIAN HEALTH SERVICE · PHS · 1955 ·

Saved: 04-10-2020 4:37:26 PM by SCOTT EUNDELL
Plotted: 04-10-2020 12:25:25 PM by SAD
U:\Wichita-Civil\2019\190418\000\Mark\Drawings\PLANS\190418-000-CP5.2 PAVING DETAILS



three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot

Sheet Set: 20_0522_CIMS_PM_SAD
Plot Date: 02/02/2022 12:23:47 PM by SAD
U:\Wichita-Civil\2019\190418.000\Main\Drawings\PLANS\190418-000-CU1.1 OVERALL UTILITY PLAN

ADDENDUM 001 1	02/02/2022
Revisions:	Date

CONSULTANTS:

--

MATTHEW BILLINGSLEA
No. 59820
02/02/2022
LICENSED PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
FARRIS ENGINEERING
BLUE STAR INTEGRATIVE STUDIO
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
OVERALL UTILITY PLAN

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

Date **05/21/2020** | Checked **DRC** | Drawn **SAD**

Project Number
H IH BLAC 19100

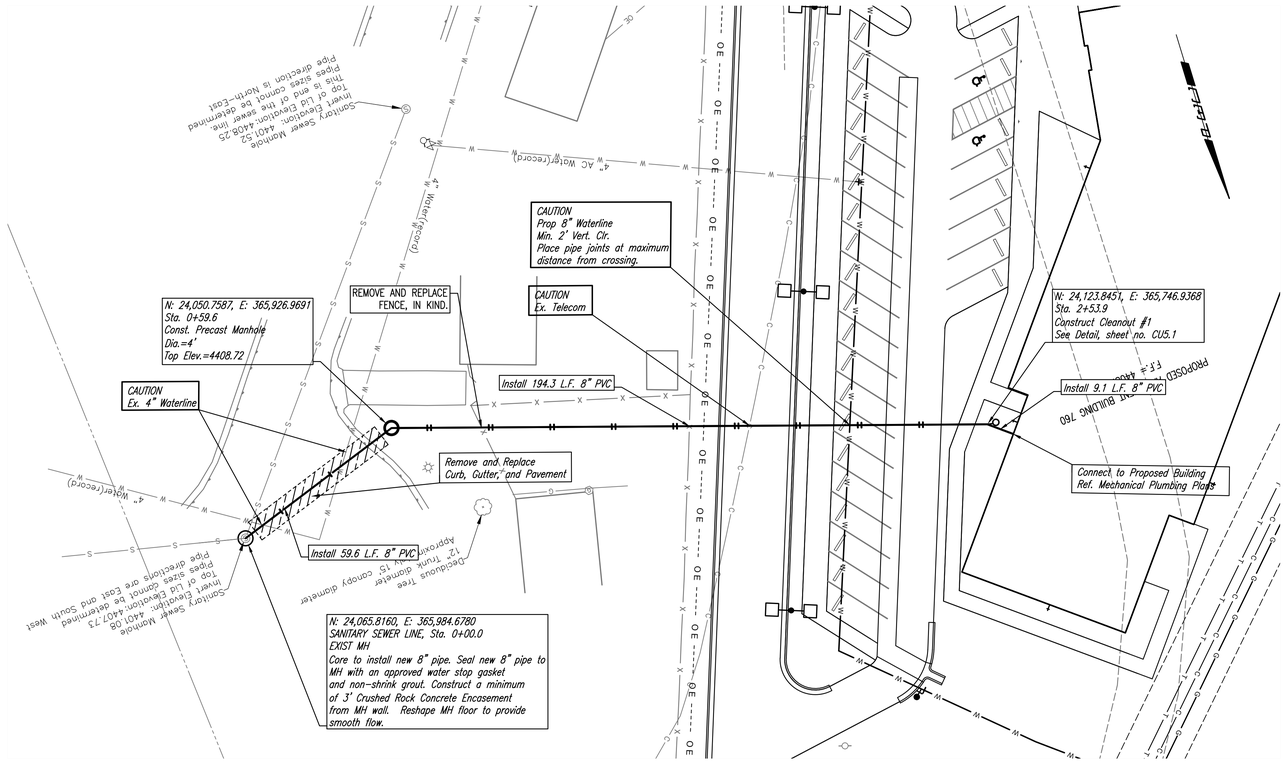
Building Number
NOT APPLICABLE

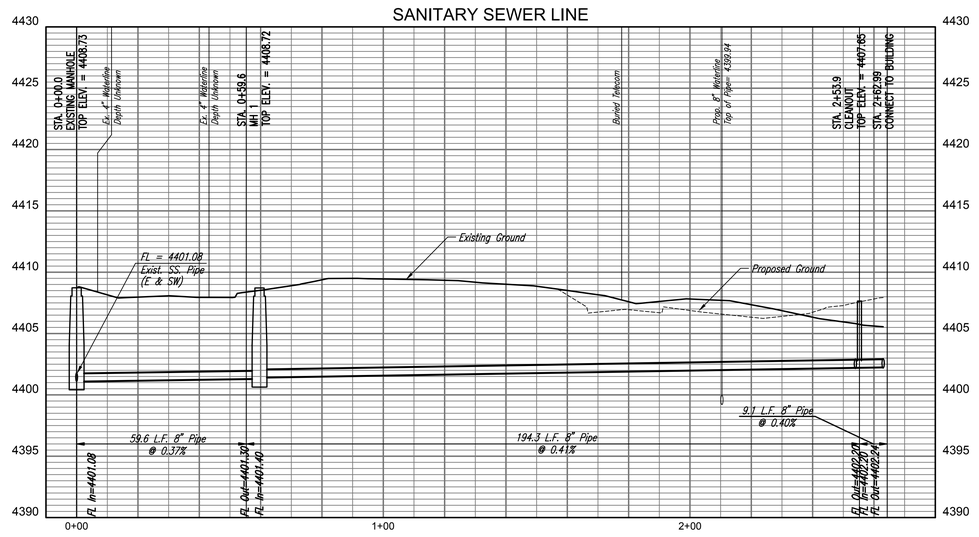
Drawing Number
CU1.1

INDIAN HEALTH SERVICE · PHS · 1955 ·

SANITARY SEWER GENERAL NOTES:

1. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY EXISTING ELEVATIONS AND FLOW DIRECTIONS AT SS MANHOLE STA. 0+00.00.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING CONTINUOUS FLOW OF SEWAGE THROUGH CONSTRUCTION. CONTRACTOR'S PROPOSED METHOD FOR MAINTAINING SEWAGE FLOW SHALL BE SUBMITTED AND APPROVED BY THE ENGINEER PRIOR TO STARTING ANY BY-PASSING OF SEWAGE FLOWS.
3. THE CONTRACTOR SHALL PREVENT ANY CONSTRUCTION DEBRIS FROM ENTERING THE EXISTING SANITARY SEWER DURING CONSTRUCTION.
4. THE CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM ALL MANHOLE COVERS.
5. ANY SERVICE CONNECTION DISRUPTED OR DAMAGED AS PART OF THIS PROJECT MUST BE REINSTALLED AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
6. THE CONTRACTOR SHALL NOT BURY MANHOLES OR CLEANOUTS THAT HAVE TOP ELEVATIONS WHICH ARE LOWER THAN EXISTING GROUND. THE GROUND AROUND SUCH MANHOLES AND CLEANOUTS AND ALONG THE SEWER ALIGNMENT SHALL BE BACKFILLED TO APPROXIMATE ELEVATION OF THE PROPOSED GROUND ELEVATION SHOWN ON THE PROFILE. THE CONTRACTOR SHALL PROVIDE DRAINAGE AWAY FROM THESE MANHOLES OR CLEANOUTS AND SEWER LINES BY CONSTRUCTION OF TEMPORARY DITCHES OR SLOPING THE GROUND AS REQUIRED.





ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

--

MONTANA
MATTHEW J. BILLINGSLEA
No. 59820
02/02/2022
LICENSED PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **SANITARY SEWER PLAN**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **05/21/2020** | Checked: **DRC** | Drawn: **SAD**

Project Number: **H IH BLAC 19100**

Building Number:

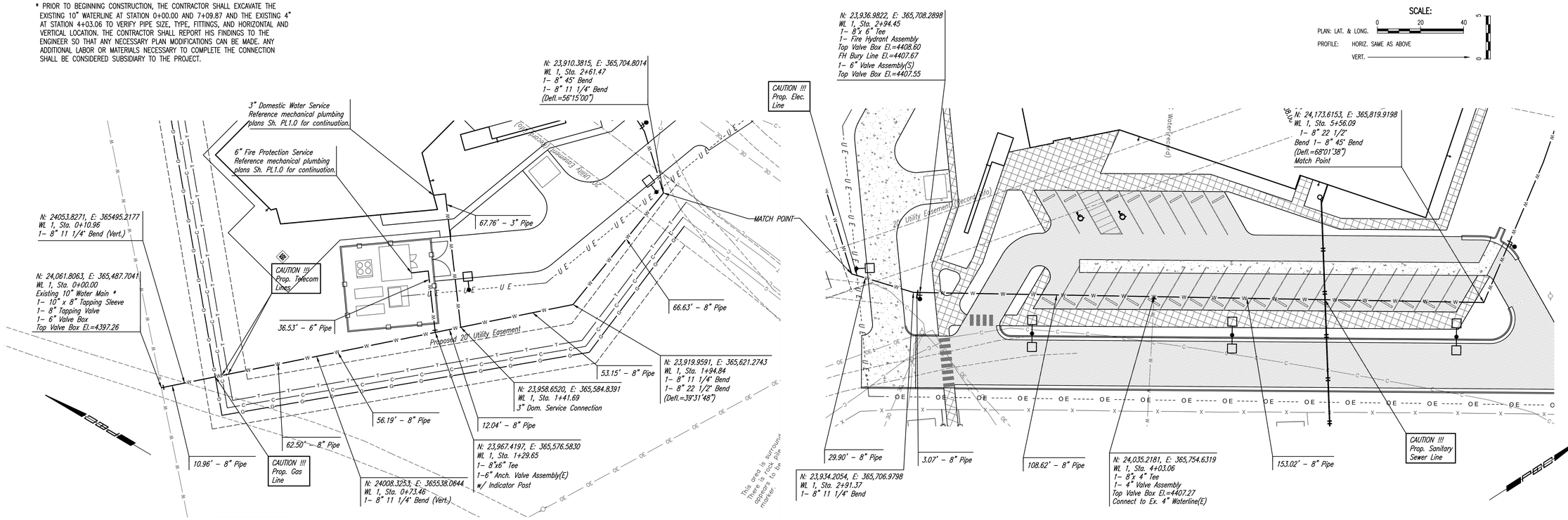
Drawing Number: **CU2.1**

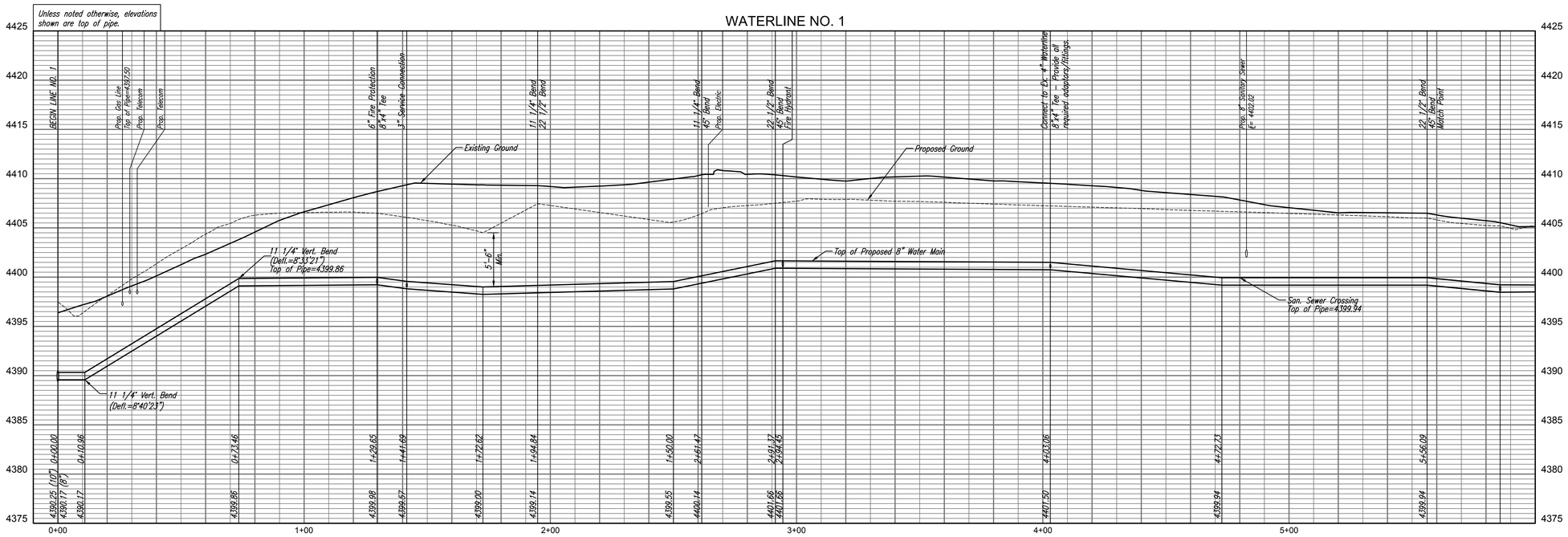
INDIAN HEALTH SERVICE · PHS · 1955 ·

Saved: 05-20-2020 5:10:45 PM by SAD
Plotted: 05-21-2020 12:25:25 PM by SAD
U:\Wichita-Civil\2019\190418\000\Mech\Drawings\PLANS\190418-000-CU2.1 SANITARY SEWER PLAN

three inches = one foot 6"
one and one half inches = one foot 6"
one inch = one foot 6"
three quarters inch = one foot 6"
one half inch = one foot 0
three eighths inch = one foot 0
one quarter inch = one foot 0
one eighth inch = one foot 0

* PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE THE EXISTING 10" WATERLINE AT STATION 0+00.00 AND 7+09.87 AND THE EXISTING 4" AT STATION 4+03.06 TO VERIFY PIPE SIZE, TYPE, FITTINGS, AND HORIZONTAL AND VERTICAL LOCATION. THE CONTRACTOR SHALL REPORT HIS FINDINGS TO THE ENGINEER SO THAT ANY NECESSARY PLAN MODIFICATIONS CAN BE MADE. ANY ADDITIONAL LABOR OR MATERIALS NECESSARY TO COMPLETE THE CONNECTION SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT.





ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

--

MATTHEW BILLINGSLEA No. 59820 02/02/2022 LICENSED PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
FARRIS ENGINEERING
BLUE STAR INTEGRATIVE STUDIO
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **WATERLINE PLAN**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **05/21/2020** | Checked: **DRC** | Drawn: **SAD**

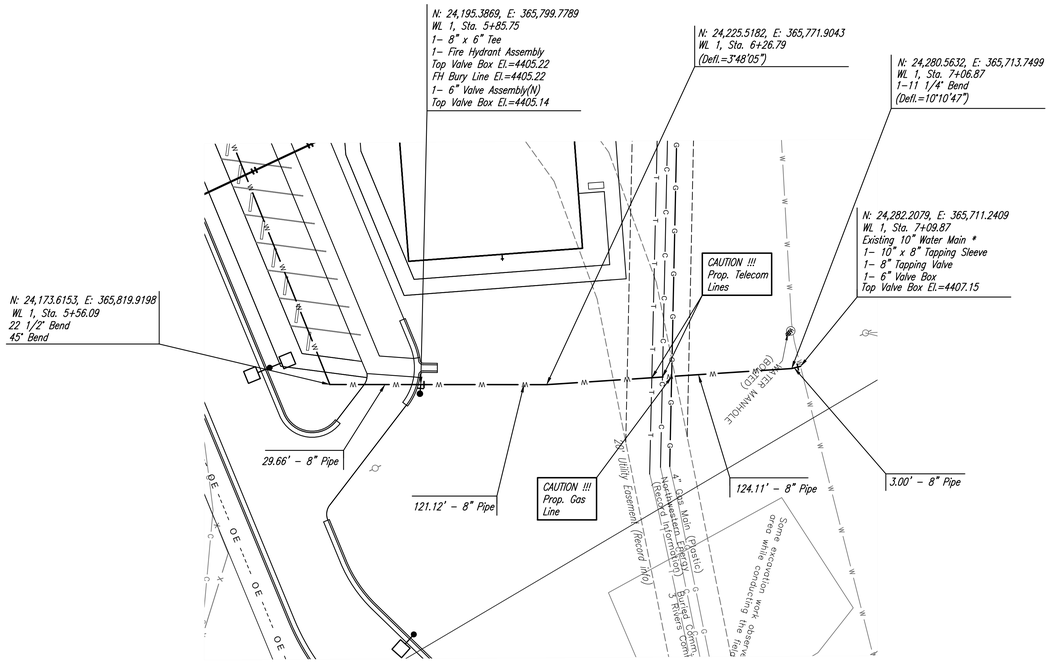
Project Number: **H IH BLAC 19100**

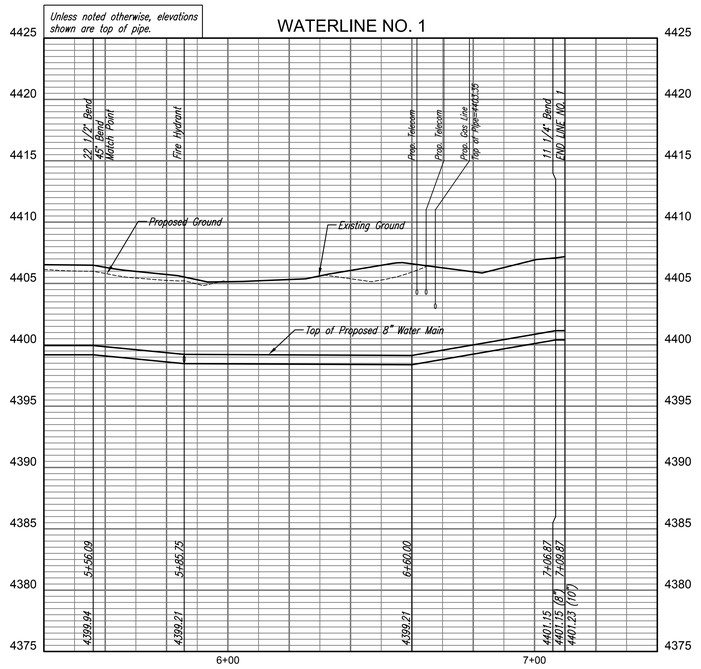
Building Number:

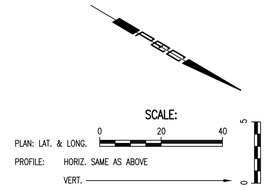
Drawing Number: **CU3.1**

INDIAN HEALTH SERVICE · PHS · 1955

three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot
Saved: 05-21-2020 11:28:26 AM by TBS
Plotted: 05-21-2020 12:42:23 PM by SAD
U:\Wichita-Civil\2019\190418\000\Work\Drawings\PLANS\190418-000-CU3.1 WATERLINE PLAN







* PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE THE EXISTING 10" WATERLINE AT STATION 0+00.00 AND 7+09.87 TO VERIFY PIPE SIZE, TYPE, FITTINGS, AND HORIZONTAL AND VERTICAL LOCATION. THE CONTRACTOR SHALL REPORT HIS FINDINGS TO THE ENGINEER SO THAT ANY NECESSARY PLAN MODIFICATIONS CAN BE MADE. ANY ADDITIONAL LABOR OR MATERIALS NECESSARY TO COMPLETE THE CONNECTION SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT.

Revisions:	Date
ADDENDUM 001	02/02/2022

CONSULTANTS:

--

MATTHEW BILLINGSLEA No. 59820 02/02/2022 LICENSED PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

FARRIS ENGINEERING

BLUE STAR INTEGRATIVE STUDIO

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **WATERLINE PLAN**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **05/21/2020** | Checked: **DRC** | Drawn: **SAD**

Project Number: **H IH BLAC 19100**

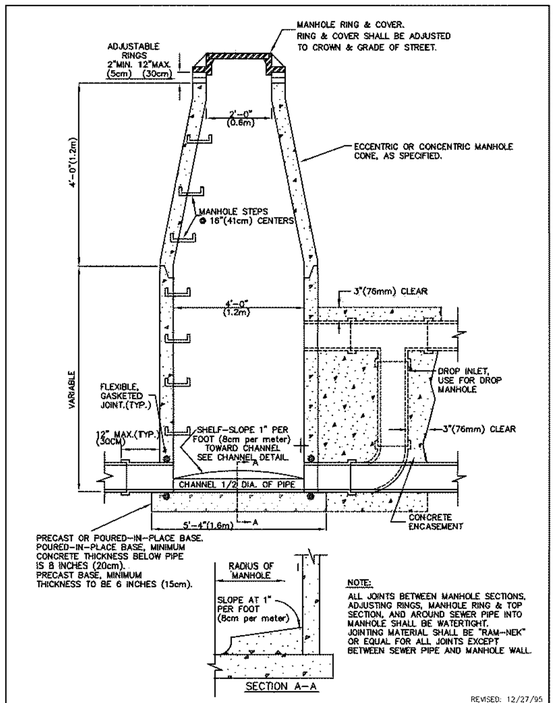
Building Number

Drawing Number: **CU3.2**

INDIAN HEALTH SERVICE · PHS · 1955 ·

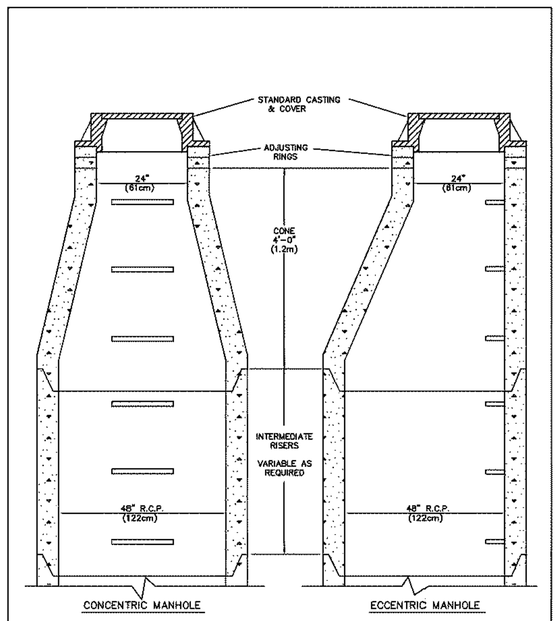
Saved: 05-21-2020, 11:26:25 AM by TDS
Plotted: 05-21-2020, 11:26:25 AM by SAD
U:\Wichita-Civil\2019\190418\000\Work\Drawings\PLANS\190418-000-CU3.2 WATERLINE PLAN

one inch = one foot 0 6" 1
one and one half inches = one foot 0 6" 1 2
three inches = one foot 6"
one quarter inch = one foot 0 4 8
three quarters inch = one foot 0 6"
one half inch = one foot 0 4
three eighths inch = one foot 0 4 8
one eighth inch = one foot 0 4 8 16



REVISED: 12/27/95

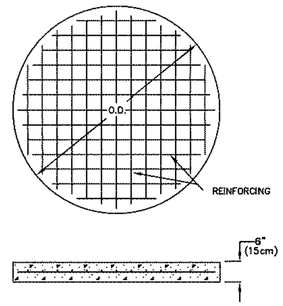
MONTANA PUBLIC WORKS STANDARD SPECIFICATIONS	SCALE: NONE	SANITARY SEWER AND STORM DRAIN MANHOLE	STANDARD DRAWING NO. 02720-3



NOTE:
APPLICABLE ASTM STANDARD C-478

REVISED: 12/27/95

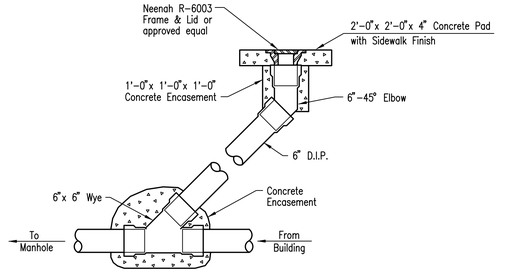
MONTANA PUBLIC WORKS STANDARD SPECIFICATIONS	SCALE: NONE	48" STANDARD MANHOLES SHOWING TWO TYPES OF CONE SECTIONS	STANDARD DRAWING NO. 02720-5



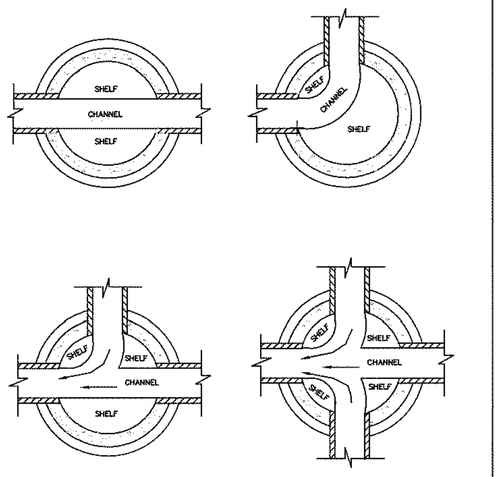
SIZE	O.D.	REIN.	WT.
48" (122cm)	64" (163cm)	#4@8" EACH WAY (#4@20cm)	1675# (760kg)
54" (137cm)	71" (180cm)	#4@8" EACH WAY (#4@20cm)	4125# (1870kg)
60" (152cm)	78" (198cm)	#4@8" EACH WAY (#4@20cm)	4975# (2260kg)
72" (183cm)	92" (234cm)	#4@6" EACH WAY (#4@15cm)	6925# (3140kg)

REVISED: 12/27/95

MONTANA PUBLIC WORKS STANDARD SPECIFICATIONS	SCALE: NONE	PRECAST MANHOLE BASES 48", 54", 60", 72"	STANDARD DRAWING NO. 02720-6



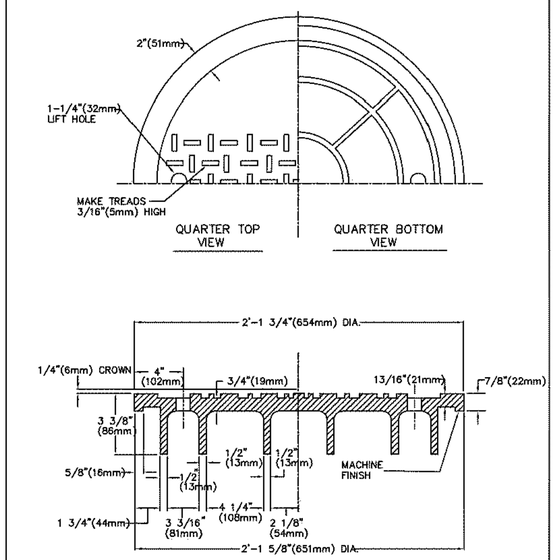
6" CLEANOUT DETAIL



NOTES:
1. SLOPE ALL SHELVES TO CHANNEL AT 1" PER FOOT (8cm per meter).
2. SEE PLAN-PROFILE SHEETS FOR SLOPE OF CHANNEL.

REVISED: 12/27/95

MONTANA PUBLIC WORKS STANDARD SPECIFICATIONS	SCALE: NONE	TYPICAL MANHOLE CHANNEL DETAILS	STANDARD DRAWING NO. 02720-7

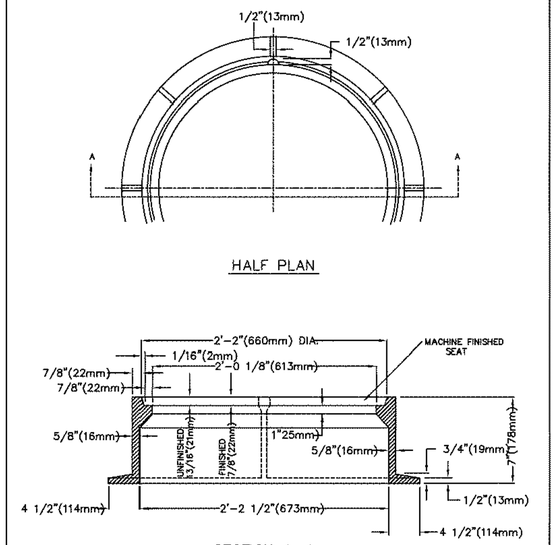


SECTION

WEIGHT=190 lbs. (86kg)

REVISED: 12/27/95

MONTANA PUBLIC WORKS STANDARD SPECIFICATIONS	SCALE: NONE	STANDARD CAST IRON COVER	STANDARD DRAWING NO. 02720-8



SECTION A-A

NOTE:
WEIGHT 210 lbs. (95kg)

REVISED: 12/27/95

MONTANA PUBLIC WORKS STANDARD SPECIFICATIONS	SCALE: NONE	STANDARD 24" CAST IRON RING	STANDARD DRAWING NO. 02720-9

Revisions:	Date
ADDENDUM 001 ⚠1	02/02/2022

CONSULTANTS:

--

MONTANA MATTHEW BILLINGSLEA No. 59820 02/02/2022 LICENSED PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
FARRIS ENGINEERING
BLUE STAR INTEGRATIVE STUDIO
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **SANITARY SEWER DETAILS**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **05/21/2020** | Checked: **DRC** | Drawn: **SAD**

Project Number: **H IH BLAC 19100**

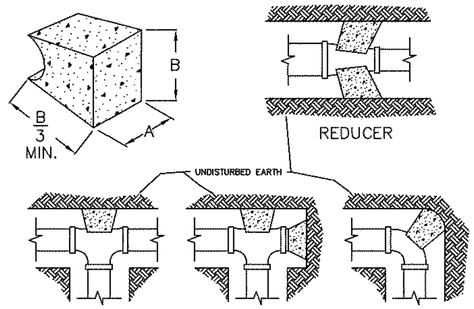
Building Number:

Drawing Number: **CU5.1**

INDIAN HEALTH SERVICE · PHS · 1955 ·

Saved: 04-13-2022 3:04:42 PM by DJE
Plotted: 04-13-2022 3:07 PM by SAD
G:\Wichita-Civil\2019\190418\000\Mun\Drawings\PLANS\190418-000-CU5.1 SANITARY SEWER DETAILS

three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot



STANDARD DIMENSIONS FOR THRUST BLOCKING

FITTING SIZES	TEES & PLUGS		90° BEND		45° BEND & WYES		REDUCERS & 22 1/2° BEND	
	A	B	A	B	A	B	A	B
4"	1'-7"	1'-2"	1'-9"	1'-6"	1'-8"	0'-10"	1'-7"	0'-6"
6"	2'-0"	1'-11"	2'-5"	2'-2"	1'-10"	1'-7"	1'-9"	0'-10"
8"	2'-8"	2'-6"	3'-2"	3'-0"	2'-5"	2'-1"	1'-9"	1'-6"
10"	3'-4"	3'-3"	4'-0"	3'-10"	3'-0"	2'-9"	2'-2"	1'-11"
12"	4'-0"	3'-10"	4'-8"	4'-8"	3'-8"	3'-3"	2'-7"	2'-3"
14"	5'-5"	3'-10"	6'-8"	4'-11"	4'-9"	3'-5"	3'-5"	2'-5"

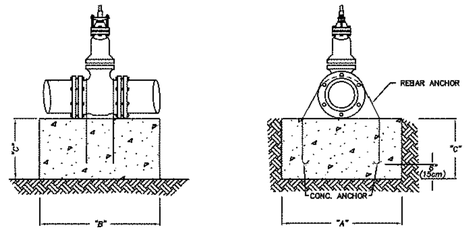
METRIC DIMENSIONS FOR THRUST BLOCKING

FITTING SIZES	TEES & PLUGS		90° BEND		45° BEND & WYES		REDUCERS & 22 1/2° BEND	
	A	B	A	B	A	B	A	B
10cm	0.5m	0.4m	0.5m	0.5m	0.5m	0.3m	0.5m	0.2m
15cm	0.6m	0.6m	0.7m	0.7m	0.6m	0.5m	0.5m	0.3m
20cm	0.8m	0.8m	1.0m	0.9m	0.7m	0.6m	0.5m	0.5m
25cm	1.0m	1.0m	1.2m	1.2m	0.9m	0.8m	0.7m	0.6m
30cm	1.2m	1.2m	1.4m	1.4m	1.1m	1.0m	0.8m	0.7m
36cm	1.6m	1.2m	2.0m	1.5m	1.4m	1.0m	1.0m	0.7m

NOTES:
1. THESE TABLES ARE BASED ON 150 PSI(1030 kpa) MAIN PRESSURE 2000 PSF(9800 kg/m²) SOIL BEARING PRESSURE
2. WRAP ALL FITTINGS WITH POLYETHYLENE.

REVISED: 12/27/95

MONTANA PUBLIC WORKS STANDARD SPECIFICATIONS	SCALE: NONE	THRUST BLOCKING FOR WATER MAIN FITTINGS	STANDARD DRAWING NO. 02660-1



NOTE:
COAT RODS WITH "KOPPERS" BITUMASTIC NO. 50 COATING OR EQUAL.

STANDARD THRUST BLOCK DIMENSIONS

ANCHOR ROD SIZE	VALVE SIZE	100 PSI "A"	100 PSI "B"	100 PSI "C"	150 PSI "A"	150 PSI "B"	150 PSI "C"	200 PSI "A"	200 PSI "B"	200 PSI "C"	250 PSI "A"	250 PSI "B"	250 PSI "C"	300 PSI "A"	300 PSI "B"	300 PSI "C"
3/4"	6" & 8"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-7"
3/4"	10"	2'-0"	2'-0"	2'-0"	2'-6"	2'-6"	2'-0"	2'-8"	2'-8"	2'-6"	3'-0"	3'-0"	3'-0"	3'-7"	3'-0"	3'-9"
3/4"	12"	2'-3"	2'-0"	2'-0"	3'-0"	3'-0"	2'-8"	3'-5"	3'-0"	3'-0"	4'-3"	3'-0"	3'-0"	5'-1"	3'-0"	3'-9"
1"	14"	2'-3"	2'-0"	2'-4"	3'-5"	3'-0"	3'-0"	4'-8"	3'-0"	3'-0"	4'-0"	4'-0"	4'-0"	4'-9"	4'-0"	4'-0"
1 1/8"	18"	3'-0"	3'-0"	2'-11"	4'-4"	3'-0"	3'-0"	4'-1"	4'-0"	4'-0"	5'-1"	4'-0"	4'-0"	6'-1"	4'-0"	4'-0"
1 1/4"	18"	3'-6"	3'-0"	3'-0"	5'-5"	3'-0"	3'-0"	5'-1"	4'-0"	4'-0"	6'-4"	4'-0"	4'-0"	6'-9"	5'-0"	5'-0"
1 3/8"	24"	4'-4"	4'-0"	4'-0"	6'-5"	4'-0"	4'-0"	6'-6"	5'-0"	5'-0"	8'-5"	6'-0"	8'-0"	7'-6"	8'-0"	6'-9"

METRIC THRUST BLOCK DIMENSIONS

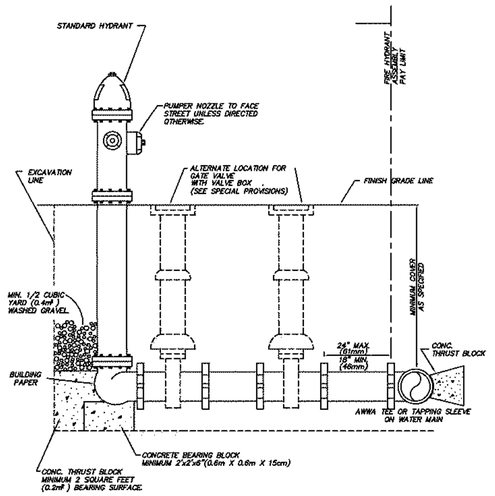
ANCHOR ROD SIZE	VALVE SIZE	690 KPA "A"	690 KPA "B"	690 KPA "C"	1030 KPA "A"	1030 KPA "B"	1030 KPA "C"	1380 KPA "A"	1380 KPA "B"	1380 KPA "C"	1720 KPA "A"	1720 KPA "B"	1720 KPA "C"	2070 KPA "A"	2070 KPA "B"	2070 KPA "C"
18mm	15cm 20cm	0.6m	0.6M	0.6M	0.6m	0.6M	0.6M	0.6m	0.6M	0.6M	0.6m	0.6M	0.6M	0.6m	0.6M	0.6M
19mm	25cm	0.6m	0.6M	0.6M	0.8m	0.8M	0.6M	0.8m	0.8M	0.8M	0.9m	0.9M	0.9M	1.1m	0.9M	0.9M
19mm	30cm	0.7m	0.6M	0.6M	0.9m	0.9M	0.8M	1.0m	0.9M	0.9M	1.3m	0.9M	0.9M	1.5m	0.9M	0.9M
25mm	38cm	0.7m	0.6M	0.7M	1.0m	0.9M	0.9M	1.4m	0.9M	0.9M	1.2m	1.2M	1.2M	1.4m	1.2M	1.2M
29mm	41cm	0.9m	0.9M	0.9M	1.3m	0.9M	0.9M	1.2m	1.2M	1.2M	1.5m	1.2M	1.2M	1.9m	1.2M	1.2M
32mm	46cm	1.1m	0.9M	0.9M	1.7m	0.9M	0.9M	1.5m	1.2M	1.2M	1.9m	1.2M	1.2M	1.8m	1.5M	1.5M
35mm	61cm	1.3m	1.2M	1.2M	2.0m	1.2M	1.2M	2.0m	1.5M	1.5M	2.0m	1.8M	1.8M	2.3m	1.8M	1.8M

NOTE: Pressures shown above are maximum working pressure in system.

THRUST BLOCKING AND ANCHORS ARE REQUIRED ON VALVES ONLY WHEN SPECIFIED ON THE PLANS OR IN THE SPECIAL PROVISIONS.

REVISED: 12/27/95

MONTANA PUBLIC WORKS STANDARD SPECIFICATIONS	SCALE: NONE	THRUST BLOCKING FOR WATER MAIN VALVES	STANDARD DRAWING NO. 02660-3

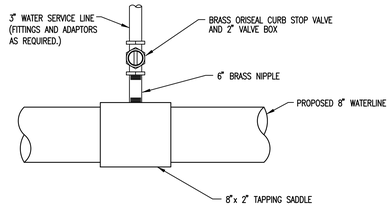


NOTES:
1. THRUST BLOCKING TO BE IN CONFORMANCE WITH STANDARD DRAWING 2713-1.
2. FOR BOLTED FITTINGS, BLOCKING SHALL NOT OBSTRUCT BOLTS.
3. HYDRANT WEEP HOLES TO REMAIN UNOBSTRUCTED.

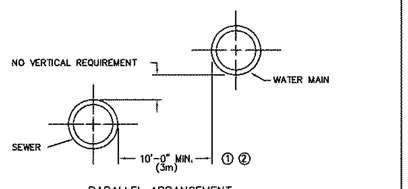
SUPPLEMENTAL NOTES:
1. COORDINATE WITH LOCAL FIRE DEPARTMENT OR UTILITY COMPANY TO VERIFY HYDRANT TYPE.

REVISED: 12/27/95

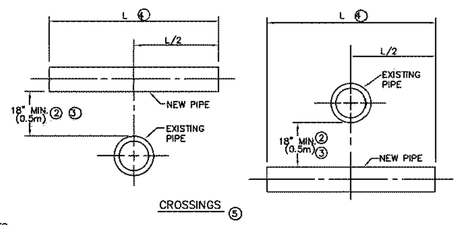
MONTANA PUBLIC WORKS STANDARD SPECIFICATIONS	SCALE: NONE	FIRE HYDRANT SETTING	STANDARD DRAWING NO. 02660-4



SERVICE TAP DETAIL



PARALLEL ARRANGEMENT



CROSSINGS ⑤

NOTES:
① SPECIFIC MONTANA DEPART. OF HEALTH AND ENVIROMENTAL SCIENCES APPROVAL IS REQUIRED FOR A DISTANCE LESS THAN 10 FEET(3m) BETWEEN WATER MAIN AND GRAVITY SEWER.

② NO EXCEPTION TO THE MIN. SEPARATION REQUIREMENT IS PERMITTED WHEN THE SEWAGE CARRYING PIPE IS A FORCE MAIN. AT CROSSINGS, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE LOCATED SO THAT BOTH JOINTS WILL BE AS FAR FROM THE FORCE MAIN AS POSSIBLE.

③ LESS THAN 18 INCHES(0.5m) OF SEPARATION IS PERMITTED WHEN THE GRAVITY SEWER AT THE CROSSING IS MADE FROM A SINGLE 20 FOOT(6.1m) LENGTH OF AWWA PRESSURE PIPE AND THE CROSSING ANGLE IS APPROXIMATELY 90 DEGREES. SPECIFIC MONTANA DEPART. OF HEALTH AND ENVIROMENTAL SCIENCES APPROVAL IS REQUIRED FOR A VERTICAL SEPARATION OF LESS THAN 18 INCHES(0.5m) BETWEEN WATER MAIN AND SANITARY SEWER

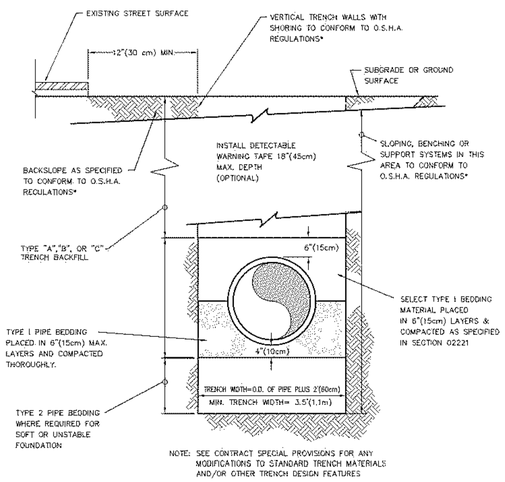
④ "L" IS A STANDARD LENGTH OF PIPE AS SUPPLIED BY A PIPE MANUFACTURER.

⑤ ADEQUATE STRUCTURAL SUPPORT FOR PIPES AT CROSSINGS SHALL BE PROVIDED.

REVISED: 12/27/95

MONTANA PUBLIC WORKS STANDARD SPECIFICATIONS	SCALE: NONE	WATER AND SEWER MAIN SEPARATION	STANDARD DRAWING NO. 02660-2

NOTE: WHERE TRENCH PASSES THROUGH EXISTING PAVEMENT THE PAVEMENT SHALL BE CUT ALONG A NEAT VERTICAL LINE A MINIMUM OF 12" (30cm) FROM THE EDGE OF THE TRENCH OPENING. WHERE NEAT LINE IS LESS THAN 3' (0.9m) FROM EDGE OF EXISTING PAVEMENT OR CURB AND GUTTER SECTION, REMOVE AND REPLACE ENTIRE PAVEMENT SECTION BETWEEN TRENCH AND EDGE OF PAVEMENT.

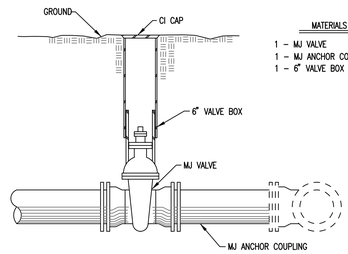


NOTE: SEE CONTRACT SPECIAL PROVISIONS FOR ANY MODIFICATIONS TO STANDARD TRENCH MATERIALS AND/OR OTHER TRENCH DESIGN FEATURES

* SEE O.S.H.A. CONSTRUCTION STANDARDS FOR EXCAVATIONS.

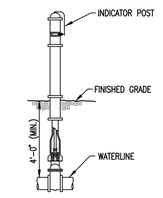
REVISED: 10/25/02

CITY OF BILLINGS STANDARD SPECIFICATIONS	SCALE: NONE	TYPICAL UTILITY TRENCH DETAILS	STANDARD DRAWING NO. 02221-1

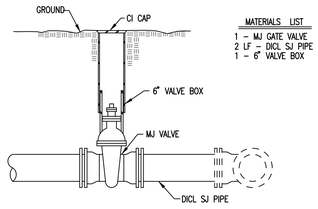


MATERIALS LIST
1 - MJ VALVE
1 - MJ ANCHOR COUPLING (12" OR SMALLER)
1 - 6" VALVE BOX

ANCHORED VALVE ASSEMBLY



GATE VALVE WITH INDICATOR POST



MATERIALS LIST
1 - MJ GATE VALVE
2 LF - DICL SJ PIPE
1 - 6" VALVE BOX

VALVE ASSEMBLY

Revisions:	Date
ADDENDUM 001 ⚠1	02/02/2022

CONSULTANTS:
--

MONTANA MATTHEW BILLINGSLEA No. 59820 02/02/2022 LICENSED PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:
HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **WATERLINE DETAILS**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **05/21/2020** | Checked: **DRC** | Drawn: **SAD**

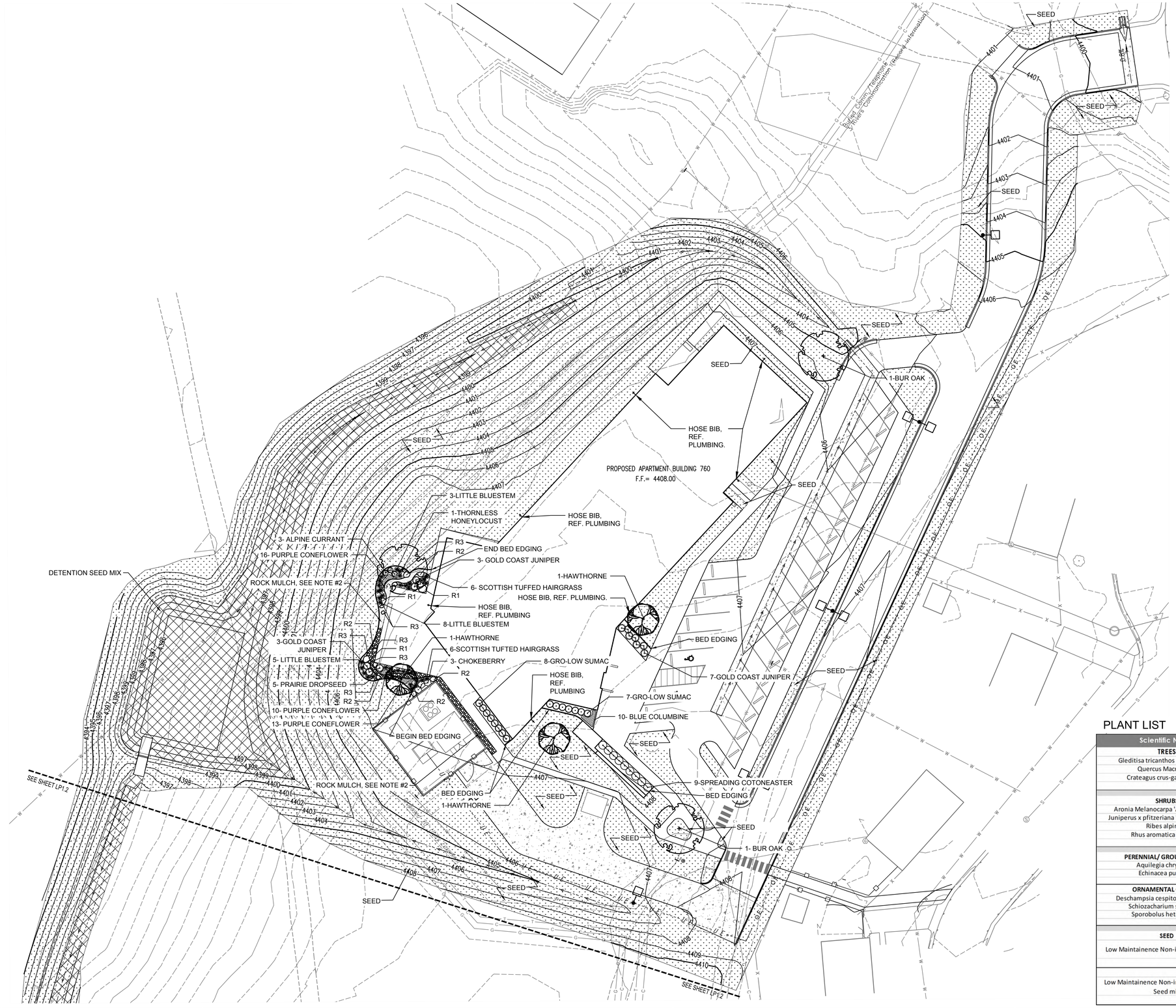
Project Number: **H IH BLAC 19100**

Building Number:

Drawing Number: **CU5.2**

INDIAN HEALTH SERVICE · PHS · 1955 ·

Saved: (15-Jan-2020, 8:09:48 PM) by: TTE
Plotted: (02-Feb-2022, 12:25:39 PM) by: SAD
U:\Wichita-Civil\2019\190418\000\Mun\Drawings\PLANS\190418-000-CU5.2 WATERLINE DETAILS



LEGEND

- SHADE TREE, SEE TREE PLANTING DETAIL, SHEET LP5.1
- ORNAMENTAL TREE, SEE TREE PLANTING DETAIL, SHEET LP5.1
- SHRUB, SEE SHRUB PLANTING DETAIL, SHEET LP5.1
- ORNAMENTAL GRASS, SEE ORNAMENTAL GRASS PLANTING DETAIL, SHEET LP5.1
- PERENNIALS, SEE GROUNDCOVER PLANTING DETAIL, SHEET LP5.1
- BOULDER, SEE BOULDER BURY DETAIL, SHEET LP5.1, SEE ALSO BOULDER SCHEDULE
- ROCK MULCH/ DRY STREAMBED, SEE NOTE #2
- AREA TO BE SEEDED WITH NON IRRIGATED SEED MIX. MIX TO INCLUDE FAIRWAY CRESTED WHEATGRASS, STREAMBANK WHEATGRASS, MEADOW BROMEGRASS, AND SMOOTH BROMEGRASS, MOWABLE TO 3" MIN. HEIGHT
- AREA TO BE SEEDED WITH NON IRRIGATED DETENTION SEED MIX. MIX TO INCLUDE , STREAMBANK WHEATGRASS, MEADOW BROMEGRASS, AND SMOOTH BROMEGRASS, MOWABLE TO 3" MIN. HEIGHT (NOTE: MIX IS SIMILAR TO NON-IRRIGATED SEED MIX, BUT WITH FAIRWAY CRESTED WHEATGRASS OMITTED.

SCALE IN FEET
0 20 40

NOTES:

1. SEE SHEET LP5.1 FOR PLANTING NOTES.
2. ROCK MULCH AREAS SHALL BE 2-3" COLORADO RIVER ROCK OVER 5 OZ. NONWOVEN GEOTEXTILE WEED BARRIER. WEED BARRIER SHALL ONLY BE USED UNDER ROCK MULCH.
3. CONTRACTOR SHALL PROVIDE EROSION CONTROL BLANKETS ON ALL SEEDED AREAS WITH SLOPES AT 4:1 OR GREATER, WITHIN DETENTION AREAS, OR DITCHES

BOULDER SCHEDULE

SYMBOL	AVERAGE SIZE	
	DIAMETER	HEIGHT
R-1	48"+	48"+
R-2	36" - 48"	24" - 48"
R-3	24" - 36"	18" - 24"

PLANT LIST

Scientific Name	Common Name	Plant Size	Container Size	Condition	Remarks
TREES					
Gleditisa tricanthos 'Shademaster	Honeylocust	2 1/2" Cal.	b&b		
Quercus Macrocarpa	Bur Oak	2 1/2" Cal.	b&b		
Crateagus crus-galli inermis	Hawthorn	1 1/2" Cal.	b&b		
SHRUBS					
Aronia Melanocarpa 'Autumn Magic'	Chokeberry	medium	#3	Container	Full & Healthy
Juniperus x pfitzeriana 'Aurea Improved'	Gold Coast Juniper	medium	#3	Container	Full & Healthy
Ribes alpinum	Alpine Currant	medium	#3	Container	Full & Healthy
Rhus aromatica 'Gro-Low	Gro-low Sumac	medium	#3	Container	Full & Healthy
PERENNIAL/ GROUND COVER					
Aquilegia chrysantha	Blue Columbine	groundcover	#1	Container	Plant at 18" o.c.
Echinacea purpurea	Purple Coneflower	groundcover	#1	Container	Plant at 12" o.c.
ORNAMENTAL GRASSES					
Deschampsia cespitosa 'Schottland'	Scottish Tufted Hair Grass	Orn. Grass	#1	container	Full & Healthy
Schiozacharium scoparium	Little Bluestem	Orn. Grass	#1	Container	Plant at 18" o.c.
Sporobolus heterolepsis	Prairie Dropseed	Orn. Grass	#1	Container	Plant at 12" o.c.
SEED					
Low Maintainence Non-irrigated Seed Mix	Mix to include Fairway Crested Wheatgrass, Streambank Wheatgrass, Meadow Bromegrass, and Smooth Bromegrass.				
Low Maintainence Non-irrigated Detention Seed mix	Mix to include , Streambank Wheatgrass, Meadow Bromegrass, and Smooth Bromegrass.				

Revisions:	Date
ADDENDUM 001	02/02/2022

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
FARRIS ENGINEERING
BLUE STAR INTEGRATIVE STUDIO
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

STATE OF MONTANA — NICHOLAS C. STAHL — 20008 — LICENSED LANDSCAPE ARCHITECT — 02/03/2022

Drawing Title: **NORTH LANDSCAPE PLAN**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **05/21/2020** | Checked: **DRC** | Drawn: **SAD**

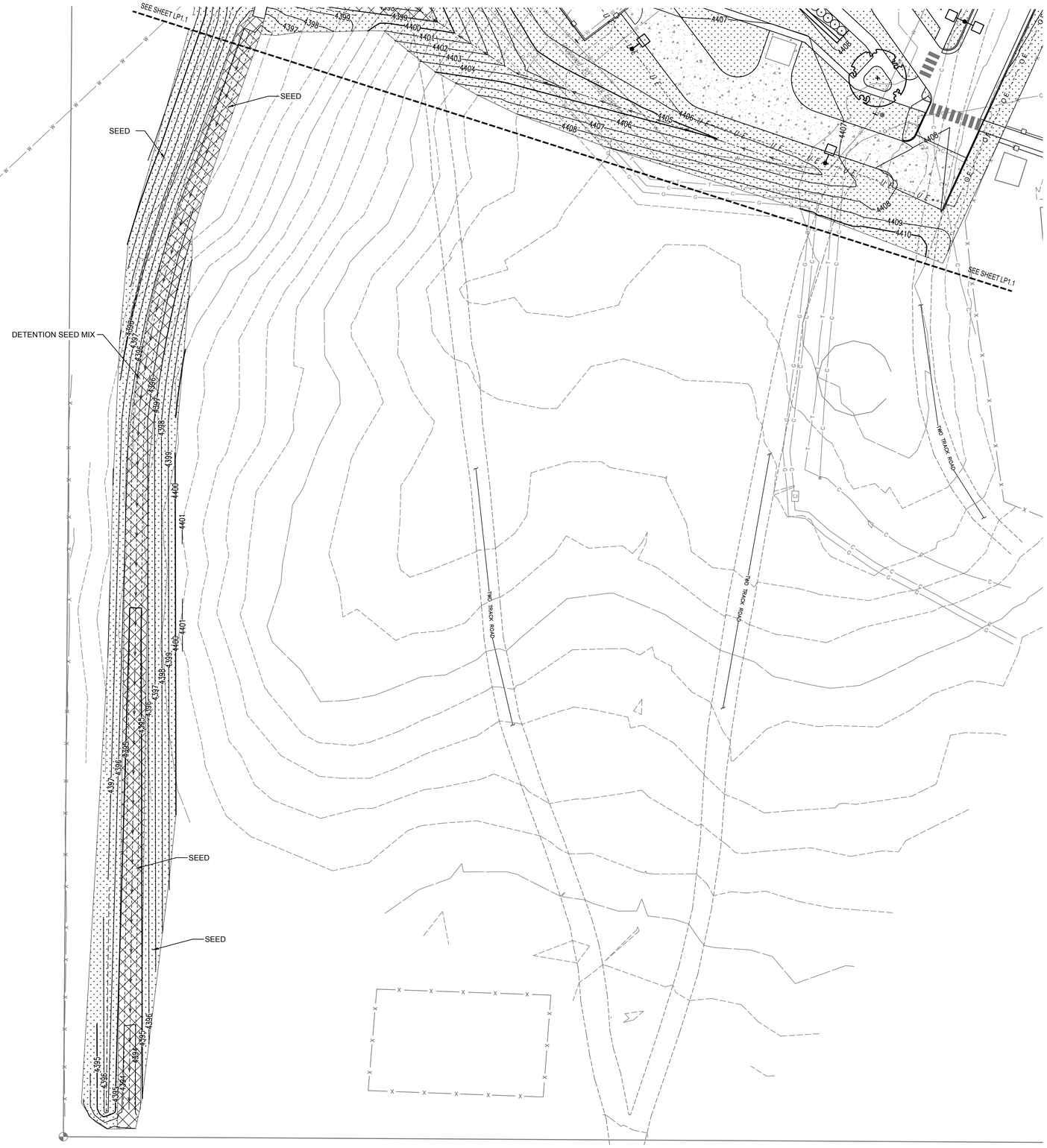
Project Number: **H IH BLAC 19100**

Building Number

Drawing Number: **LP1.1**

INDIAN HEALTH SERVICE · PHS · 1955 ·

Scale: 1/8" = 1'-0" 02-02-2022 4:53:44 AM by KIMT-HP\KIMS
File Name: U:\Wichita-Civil\2019\190418\000\Mark\Drawings\PLANS\190418-000-LP1.1 NORTH LANDSCAPE PLAN.dwg



LEGEND

- SHADE TREE, SEE TREE PLANTING DETAIL, SHEET LP5.1
- ORNAMENTAL TREE, SEE TREE PLANTING DETAIL, SHEET LP5.1
- SHRUB, SEE SHRUB PLANTING DETAIL, SHEET LP5.1
- ORNAMENTAL GRASS, SEE ORNAMENTAL GRASS PLANTING DETAIL, SHEET LP5.1
- PERENNIALS, SEE GROUNDCOVER PLANTING DETAIL, SHEET LP5.1
- BOULDER, SEE BOULDER BURY DETAIL, SHEET LP5.1, SEE ALSO BOULDER SCHEDULE
- ROCK MULCH/ DRY STREAMBED, SEE NOTE #2
- AREA TO BE SEEDED WITH NON IRRIGATED SEED MIX. MIX TO INCLUDE FAIRWAY CRESTED WHEATGRASS, STREAMBANK WHEATGRASS, MEADOW BROMEGRASS, AND SMOOTH BROMEGRASS, MOWABLE TO 3" MIN. HEIGHT
- AREA TO BE SEEDED WITH NON IRRIGATED DETENTION SEED MIX. MIX TO INCLUDE , STREAMBANK WHEATGRASS, MEADOW BROMEGRASS, AND SMOOTH BROMEGRASS, MOWABLE TO 3" MIN. HEIGHT (NOTE: MIX IS SIMILAR TO NON-IRRIGATED SEED MIX, BUT WITH FAIRWAY CRESTED WHEATGRASS OMITTED.

NOTES:

1. SEE SHEET LP5.1 FOR PLANTING NOTES.
2. ROCK MULCH AREAS SHALL BE 2-3" COLORADO RIVER ROCK OVER 5 OZ. NONWOVEN GEOTEXTILE WEED BARRIER. WEED BARRIER SHALL ONLY BE USED UNDER ROCK MULCH.
3. CONTRACTOR SHALL PROVIDE EROSION CONTROL BLANKETS ON ALL SEEDED AREAS WITH SLOPES AT 4:1 OR GREATER, WITHIN DETENTION AREAS, OR DITCHES

GRAPHIC SCALE
0 20 40
SCALE IN FEET

three inches = one foot 6"
one and one half inches = one foot 1 0 6"
one inch = one foot 2 0 6"
three quarters inch = one foot 2 0 6"
one half inch = one foot 4 0
three eighths inch = one foot 4 0
one quarter inch = one foot 8 4 0
one eighth inch = one foot 16 8 4 0

Saved: 05-12-2020 4:53:32 AM by KURT HUNAS
Plotted: 05-12-2020 12:39:00 PM by SAD
U:\Wichita-Civil\2019\190418\1000\Main\Drawings\PLANS\190418-000-LP1.2 SOUTH LANDSCAPE PLAN

Revisions:	Date
ADDENDUM 001 1	02/02/2022

CONSULTANTS:

--

STATE OF MONTANA — NICHOLAS L. STAHL — 17866 — LICENSED LANDSCAPE ARCHITECT — 12/31/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
FARRIS ENGINEERING
BLUE STAR INTEGRATIVE STUDIO
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: SOUTH LANDSCAPE PLAN

Approved: Project Director

Project Title: APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: BROWNING, MONTANA

Date: 05/21/2020 | Checked: DRC | Drawn: SAD

Project Number: H IH BLAC 19100

Building Number:

Drawing Number: LP1.2

INDIAN HEALTH SERVICE · PHS · 1955 ·

GENERAL PLANTING NOTES

1. PRIOR TO BEGINNING ANY WORK ON THE SITE, THE CONTRACTOR SHALL CONTACT THE OFFICE OF THE LANDSCAPE ARCHITECT FOR SPECIFIC INSTRUCTIONS RELEVANT TO THE SEQUENCING OF WORK. REPORT ANY ISSUES IN SITE CONDITIONS AND CONSTRUCTION THAT MAY AFFECT THE PLANTING LAYOUT TO THE LANDSCAPE ARCHITECT PRIOR TO STARTING CONSTRUCTION.

2. LANDSCAPE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, AND SERVICE NECESSARY TO FURNISH AND INSTALL PLANTINGS AS SPECIFIED HEREIN AND AS SHOWN ON THESE PLANS.

3. NO MATERIAL SUBSTITUTIONS SHALL BE MADE WITHOUT LANDSCAPE ARCHITECT'S APPROVAL. ALTERNATIVE MATERIALS OF SIMILAR SIZE AND CHARACTER MAY BE CONSIDERED IF SPECIFIED PLANT MATERIALS CANNOT BE OBTAINED. LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REVISE PLANT LIST AS DEEMED NECESSARY.

4. LANDSCAPE CONTRACTOR IS TO STAKE ALL PLANT MATERIAL (TREE AND SHRUB) LOCATIONS AS WELL AS PLANTER BED EDGER LOCATIONS PRIOR TO INSTALLATION. CONTRACTOR IS TO CONTACT OWNER'S REPRESENTATIVE FOR PRE-INSTALLATION CONFERENCE AND FINAL APPROVAL OF STAKING. ADJUST PLANT LOCATIONS ONLY AS NECESSARY TO AVOID SITE CONFLICTS.

5. UTILITIES HAVE BEEN SHOWN ON THE PLAN FOR ROUGH LOCATION OF SERVICES. CONTRACTOR SHALL LOCATE ALL UTILITIES BEFORE WORK. LOCATE EXACT UTILITY LOCATIONS BY CONTACTING UTILITY LOCATOR SERVICES. CONTRACTOR WILL BE RESPONSIBLE FOR THE REPAIR OF ANY DAMAGE HE MAY CAUSE TO UTILITIES.

6. GENERAL CONTRACTOR SHALL PROVIDE 4" OF TOPSOIL AT ALL SOD AND PLANTING AREAS. GRADE SHALL BE ADJUSTED FOR SOD THICKNESS. ANY BERMS SHOWN ON PLANS ARE REFLECTED ON GRADING PLAN. FINISH GRADING SHALL BE PERFORMED BY LANDSCAPE CONTRACTOR.

7. WHEN CLAY SOIL IS ENCOUNTERED IN THE ESTABLISHMENT OF THE LAWN OR THE INSTALLATION OF THE PLANT MATERIAL IT SHALL BE IMPROVED IN ACCORDANCE WITH STANDARD TRADE PRACTICE.

8. BACKFILL FOR PLANT EXCAVATIONS TO BE CLEAN NATURAL SOIL, EXCAVATED FROM PLANTING PITS MIXED WITH COMPOST AND WELL-ROTTED MANURE AT A RATIO OF THREE (3) PARTS SOIL TO ONE (1) PART COMPOST AND WELL-ROTTED MANURE.

9. CULTIVATE GROUND COVER PLANTING BEDS TO A DEPTH OF 6". TILL COMPOST AND WELL-ROTTED MANURE INTO THE PLANTING BED AT THE APPROXIMATE RATIO OF ONE (1) PART COMPOST/ MANURE TO THREE (3) PARTS SOIL.

10. ALL PLANT MATERIALS SHALL BE PROTECTED FROM THE DRYING ACTION OF THE SUN AND WIND AFTER BEING DUG, WHILE BEING TRANSPORTED, AND WHILE AWAITING PLANTING. BALLS OF PLANTS WHICH CANNOT BE PLANTED IMMEDIATELY SHALL BE PROTECTED FROM DRYING ACTION BY COVERING THEM WITH MOIST MULCH. PERIODICALLY, APPLY WATER TO MULCH-COVERED BALLS TO KEEP MOIST. IF PLANTING SHOULD OCCUR DURING GROWING SEASON, APPLY ANTI-DESICCANT TO LEAVES BEFORE TRANSPORT TO REDUCE LIKELIHOOD OF WINDBURN. REAPPLY ANTI-DESICCANT AFTER PLANTING TO REDUCE TRANSPIRATION.

11. AFTER PLANTING IS COMPLETED, REPAIR INJURIES TO ALL PLANTS AS REQUIRED. LIMIT AMOUNT OF PRUNING TO A MINIMUM NECESSARY TO REMOVE DEAD OR INJURED TWIGS AND BRANCHES. PRUNE IN SUCH A MANNER AS NOT TO CHANGE NATURAL HABIT OR SHAPE OF PLANT. MAKE CUTS FLUSH, LEAVING NO STUBS. CUTS OF ONE INCH (1") OR MORE TO BE PAINTED WITH TREE PAINT. CENTRAL LEADERS SHALL NOT BE REMOVED.

12. TREE TRUNKS SHALL BE STRAIGHT.

13. PLANT GROUNDCOVER/ PERENNIALS WITHIN ONE FOOT (1') OF TRUNK OF TREES OR SHRUBS PLANTED WITHIN AREA. PLANTING ARRANGEMENTS SHALL BE TRIANGULAR, WITH PROPER ON-CENTER SPACING BETWEEN PLANTS.

14. STEEL EDGING MATERIAL SHALL BE USED TO SEPARATE ALL TURF AREAS FROM PLANTING BEDS. PLACE EDGING FLUSH WITH GRADE. SECURE EDGE MATERIAL IN SOIL WITH MINIMUM TWO STAKES PER SECTION.

15. PLANTING BEDS ARE TO BE FREE OF WEEDS AND GRASS. TREAT PLANTING BEDS WITH A PRE-EMERGENT HERBICIDE PRIOR TO PLANTING. APPLY IN ACCORDANCE WITH STANDARD TRADE PRACTICE. DO NOT APPLY HERBICIDE IN PERENNIAL BEDS.

16. THE CONTRACTOR SHALL PROVIDE ALL WATER, WATERING DEVICES AND LABOR NEEDED TO IRRIGATE PLANT MATERIALS UNTIL ACCEPTANCE OF PLANT MATERIALS AS DESCRIBED WITHIN SPECIFICATIONS. THE CONTRACTOR SHALL SUPPLY ENOUGH WATER TO MAINTAIN THE PLANT'S HEALTHY CONDITION.

17. USE DOUBLE SHREDDED HARDWOOD MULCH IN ALL PLANTING BEDS UNLESS OTHERWISE NOTED ON PLANS. LANDSCAPE CONTRACTOR SHALL SUBMIT A SAMPLE OF MULCH FOR APPROVAL PRIOR TO STARTING CONSTRUCTION. SIZE OF MATERIAL TO RANGE FROM 1" TO 3" ONLY. PLACE 3" TO 4" OF MULCH IN ALL SHRUB BEDS. PLACE 1" OF MULCH IN GROUNDCOVER BEDS. PLACE 4" OF MULCH IN ALL TREE SAUCERS.

18. REMOVE ALL RUBBISH, EQUIPMENT AND MATERIAL AND LEAVE THE AREA IN A NEAT, CLEAN CONDITION EACH DAY. MAINTAIN PAVED AREAS UTILIZED FOR HAULING EQUIPMENT AND MATERIALS BY OTHER TRADES IN A CLEAN AND UNOBSTRUCTED CONDITION AT ALL TIMES. REMOVE SOIL OR DIRT THAT ACCUMULATED DURING OR AS A RESULT OF PLANTING OPERATIONS EACH DAY.

19. ALL PLANTS SHALL BE INSPECTED BY THE OWNER AND LANDSCAPE ARCHITECT AT SUBSTANTIAL COMPLETION. CONTRACTOR SHALL REPLACE IMMEDIATELY ANY PLANTS NOT IN HEALTHY AND VIGOROUS CONDITION AT THAT TIME AT NO EXPENSE TO THE OWNER.

20. ANY VEGETATED AREAS DISTURBED BY THE CONSTRUCTION PROCESS MUST BE RESTORED BY REPAIRING THE SOIL BED AND RE-ESTABLISHING ORIGINAL PLANTINGS.

21. LANDSCAPE CONTRACTOR IS REQUIRED TO REMOVE THE TREE STAKES AND ALL DEAD WOOD ON TREES ONE YEAR AFTER PROVISIONAL/ FINAL ACCEPTANCE.

22. ALL TREES SHALL BE CALLIPERED, AND UNDERSIZED TREES SHALL BE REJECTED.

23. ANY DEVIATION TO THE APPROVED FINAL LANDSCAPE PLAN SHALL REQUIRE THE WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

24. IF SHOWN, CONTRACTOR SHALL VERIFY THE AMOUNT OF PLANT MATERIALS SHOWN ON THE PLANS MATCHES THE QUANTITY SHOWN ON THE PLANT SCHEDULE. QUANTITIES LISTED ON PLANS SUPERSEDE THOSE ON PLANT MATERIALS LIST. REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT IMMEDIATELY.

25. FERTILIZE ALL PLANT MATERIALS AND TURF WITH MILORGANITE FERTILIZER AT MANUFACTURERS RECOMMENDED RATE.

26. REFER TO IRRIGATION CONCEPT PLAN FOR AREAS AND METHODS FOR IRRIGATION.

27. APPLY MYKE (OR EQUAL) MYCORRHIZAL FUNGI TO PLANT MATERIAL PER THE MANUFACTURERS INSTRUCTIONS.

28. PROTECT AND SAVE THE EXISTING PLANT MATERIALS SHOWN ON THE PLANS UNLESS NOTED OTHERWISE.

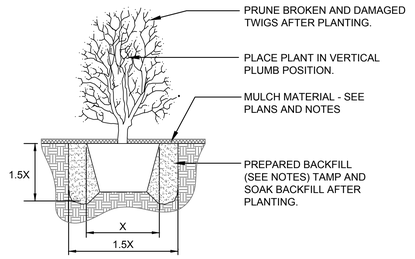
29. ALL PLANT MATERIALS SHALL HAVE BACKFILL CAREFULLY PLACED AROUND BASE AND SIDES OF BALL TO TWO-THIRDS (2/3) DEPTH OF BALL, THEN THOROUGHLY SOAKED WITH WATER TO ALLOW SETTLEMENT. ALL WIRE, BURLAP FASTENERS AND LOOSE BURLAP AROUND BASE OF TREE SHALL BE REMOVED AT THIS TIME. REMAINDER OF PIT SHALL THEN BE BACKFILLED, ALLOWING FOR DEPTH OF MULCH, SAUCER AND SETTLEMENT OF BACKFILL. BACKFILL SHALL THEN BE THOROUGHLY WATERED ONCE AGAIN.

30. SEEDED TURF AREAS WILL NOT BE IRRIGATED, THE CONTRACTOR SHALL PROVIDE TEMPORARY IRRIGATION FOR ALL SEEDED AREAS UNTIL TURF IS ESTABLISHED. THE CONTRACTOR SHALL COORDINATE WITH OWNER FOR WATER SUPPLY. IF WATER IS NOT AVAILABLE FROM THE OWNER, THE CONTRACTOR SHALL PROVIDE WATER THROUGH ESTABLISHMENT OF TURF .

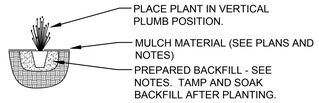
31. PROVIDE TREE WATERING BAGS ON ALL TREES.

32. THE LANDSCAPE CONTRACTOR IS TO REMOVE TREE STAKES AND ALL DEAD WOOD ON TREES ONE YEAR AFTER PROVISIONAL/FINAL ACCEPTANCE.

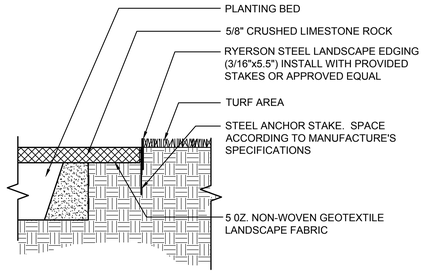
33. TREE DIAMETER MEASUREMENT SHALL BE TAKEN FROM DBH (DIAMETER AT BREAST HEIGHT OF 4.5' ABOVE GROUND).



1 SHRUB PLANTING DETAIL
NO SCALE

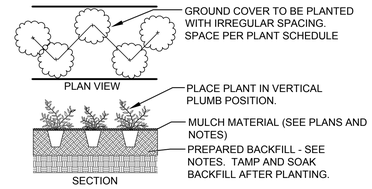


2 ORNAMENTAL GRASS PLANTING DETAIL
NO SCALE



NOTE: STAPLE GEOTEXTILE AT EVERY 3' O.C ALONG ALL EDGES AND 12" O.C AT ALL SEAMS WITH 8" GALV.STAPLES.

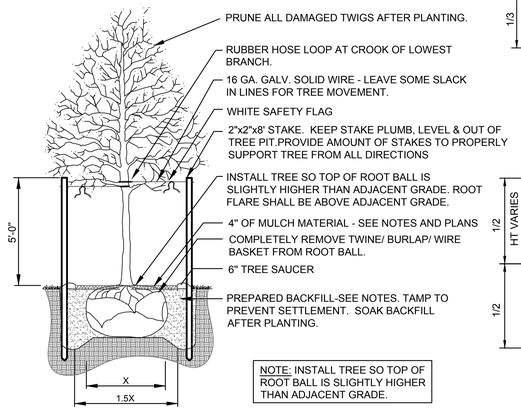
3 STEEL EDGING DETAIL
NO SCALE



5 GROUNDCOVER PLANTING DETAIL
NO SCALE

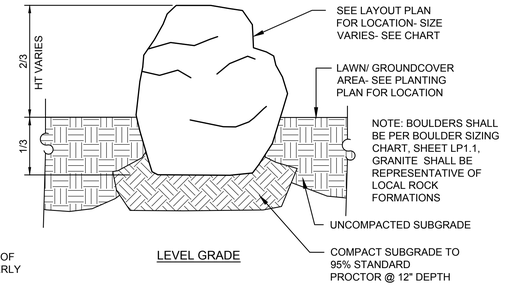
NOTE:
1) BOULDERS SHALL BE GRANITE
2) FINAL FIELD LOCATIONS TO BE APPROVED BY LANDSCAPE ARCHITECT/ OWNER
3) SIZES INCLUDE ALLOWANCE FOR BURY DEPTHS
4) ALL BOULDERS SHALL HAVE AGED WEATHERED LOOK, AND SHALL BE ROUNDED IN APPEARANCE

NOTE: TREES THAT NATURALLY GROW WITH CENTRAL LEADERS WILL NOT BE ACCEPTED IF CENTRAL LEADER IS PRUNED, DAMAGED OR DOES NOT EXIST.

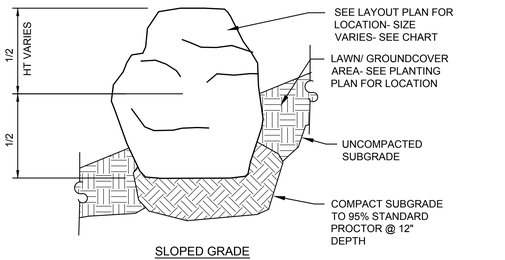


NOTE: INSTALL TREE SO TOP OF ROOT BALL IS SLIGHTLY HIGHER THAN ADJACENT GRADE.

4 TREE PLANTING DETAIL
NO SCALE



LEVEL GRADE



SLOPED GRADE

6 BOULDER BURY DETAIL
NO SCALE

Revisions:	Date
ADDENDUM 001 (1)	02/02/2022

CONSULTANTS:
--

ARCHITECT/ENGINEERS:
HFG HEALTH FACILITIES GROUP architecture
FARRIS ENGINEERING
BLUE STAR INTEGRATIVE STUDIO
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: PLANTING DETAILS AND NOTES
Approved: Project Director

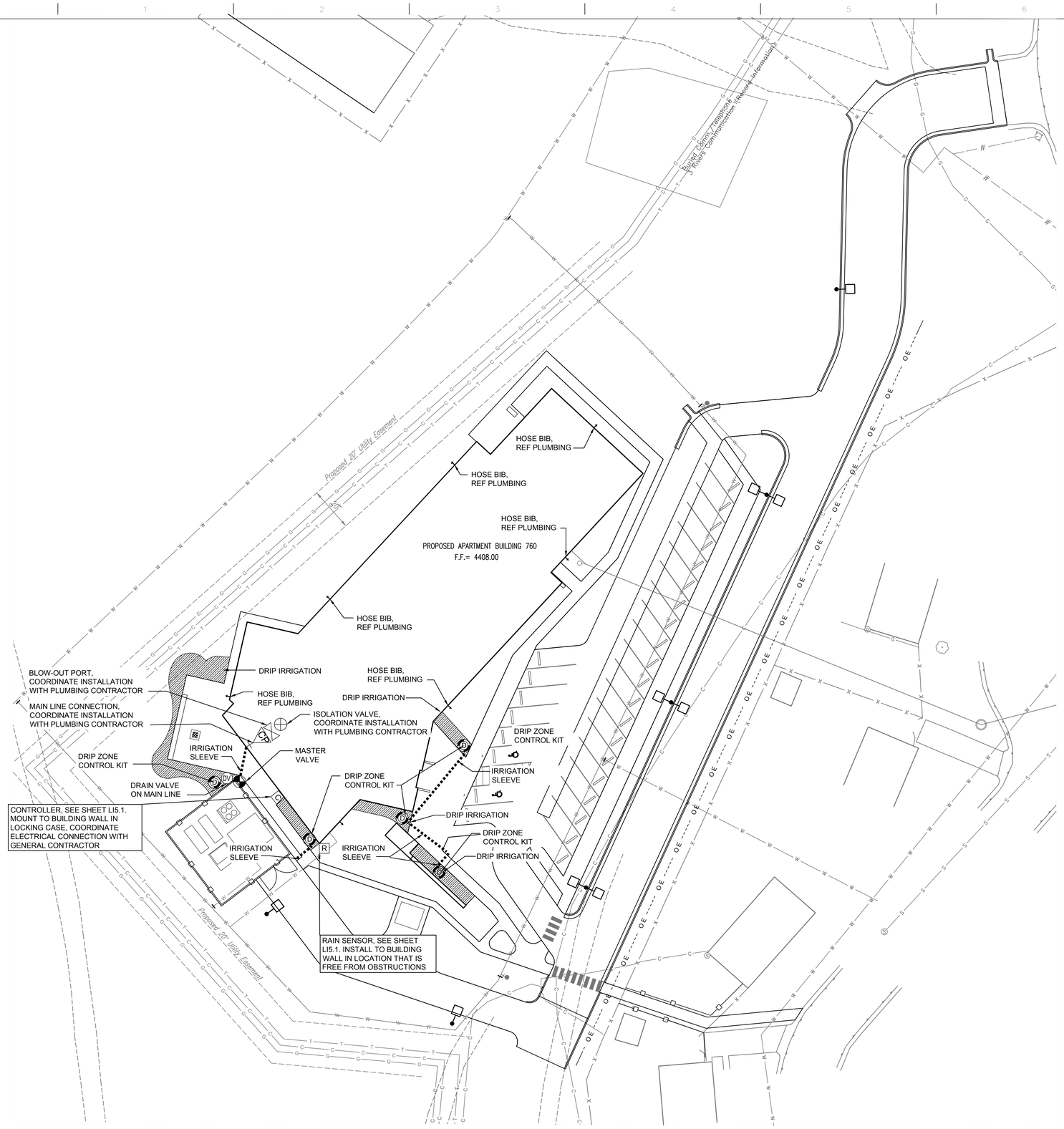
Project Title: APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002
Location: BROWNING, MONTANA
Date: 05/21/2020 | Checked: DRC | Drawn: SAD

Project Number: H IH BLAC 19100
Building Number: [illegible]
Drawing Number: LP5.1

INDIAN HEALTH SERVICE · PHS · 1955 ·

Saved: 05-21-2020 5:08:02 PM by: KURT HUBAS
Plotted: 05-21-2020 11:36:47 PM by: SAD
U:\Wichita-Civil\2019\190418\000\Main\Drawings\PLANS\190418-000-LP5.1 PLANTING DETAILS AND NOTES

one eighth inch = one foot 0 4 8 16
one quarter inch = one foot 0 4 8
three eighths inch = one foot 0 4
one half inch = one foot 0 4
three quarters inch = one foot 0 2 4
one inch = one foot 0 2
one and one half inches = one foot 0 1
three inches = one foot 0 6"



LEGEND

- C — CONTROLLER, SEE SPECS AND SHEET LI5.1
- R — RAIN SENSOR, SEE SHEET LI5.1
- CP — IRRIGATION CONNECTION POINT: CONTRACTOR SHALL COORDINATE WITH PLUMBING CONTRACTOR
- ISOLATION VALVE: COORDINATE WITH PLUMBING CONTRACTOR TO INSTALL MANUAL SHUT OF VALVE ON IRRIGATION CONNECTION PRIOR BLOW-OUT PORT AND PRIOR TO LINE EXITING BUILDING.
- BLOW OUT PORT: COORDINATE WITH PLUMBING CONTRACTOR FOR THE INSTALLATION OF DEVICE TO ALLOW FOR THE WINTERIZATION OF THE IRRIGATION SYSTEM VIA AIR COMPRESSOR TO BE INSTALLED ON IRRIGATION LINE PRIOR TO THE LINE EXITING THE BUILDING.
- MASTER CONTROL VALVE: AUTOMATIC IRRIGATION VALVE, SHEET SHEET L5.1.
- DRIP ZONE CONTROL KIT: TO INCLUDE A LOW VOLUME AUTOMATIC IRRIGATION VALVE, PRESSURE REGULATION, AND IRRIGATION FILTER, SEE SHEET L5.1
- DV — DRAIN VALVE ON MAIN LINE, COORDINATE WITH FINAL MAIN LINE LAYOUT TO INSURE LOCATION IS AT LOW POINT IN IRRIGATION MAIN. SEE SHEET LI5.1
- PLANTING BED TO BE IRRIGATED WITH DRIP IRRIGATION
- IRRIGATION SLEEVE, SEE SHEET L5.1.

NOTES:

1. ALL IRRIGATION LATERALS SHALL BE 1" MIN. UNLESS OTHERWISE NOTED.
2. SEE SPECIFICATIONS FOR PIPE TYPES AND BURY DEPTHS
3. ALL PIPE SLEEVES SHALL BE A MINIMUM OF 2 TIMES THE DIAMETER OF THE PIPE. COORDINATE WITH PAVEMENT CONTRACTOR TO ENSURE INSTALLATION.
4. COORDINATE ALL PIPE INSTALLATIONS WITH UTILITIES
5. SEE SHEET LI501 FOR IRRIGATION DETAILS AND NOTES.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS ASSOCIATED WITH DOING WORK WITHIN THE STREET RIGHT OF WAY.

GENERAL IRRIGATION NOTES

1. THE DESIRED AREAS OF IRRIGATION SYSTEM COVERAGE IS SCHEMATICALLY SHOWN ON THE DRAWINGS. THE CONTRACTOR IS TO COMPLETE THE SYSTEM DESIGN, SUBMIT IT AS SHOP DRAWINGS AND INSTALL EQUIPMENT NECESSARY TO PROVIDE A COMPLETE, FUNCTIONAL SYSTEM THAT IS IN COMPLIANCE WITH THE SPECIFICATIONS, APPLICABLE CODES, AND REGULATIONS. THE CONTRACTOR WILL VERIFY THE SITE'S STATIC PRESSURE AND VOLUME OF SITE WATER SUPPLY AND DESIGN ENTIRE IRRIGATION SYSTEM ACCORDINGLY.
2. THE LOCATION OF THE IRRIGATION CONNECTION, RAIN SWITCH, SLEEVES AND CONTROLLER ARE SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE WITH THE PLUMBING CONTRACTOR TO INSTALL SHUT-OFF VALVE AND BLOW-OUT PORT ON IRRIGATION CONNECTION PRIOR TO LINE EXITING THE BUILDING.
3. SHOP DRAWINGS SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION FOR REVIEW. ILLUSTRATING, VALVES, PIPING, CONTROLLER, BLOW OUT VALVE, ISOLATION GLOBE VALVES, DRAIN VALVES AND ACCESSORIES. SHOW DESIGN PRESSURE, VALVE SIZES, GPM REQUIREMENTS, PIPE SIZES AND PRESSURE LOSS CALCULATIONS FROM THE SITE WATER SUPPLY TO THE FURTHEST DRIP ZONE.
4. THE CONTRACTOR SHALL LOCATE ALL UTILITIES BEFORE COMMENCEMENT OF ANY WORK. IDENTIFY EXACT UTILITY LOCATIONS BY CONTACTING UTILITY OWNERS. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE HE MAY CAUSE TO UTILITIES.
5. PROVIDE PVC SLEEVES FOR IRRIGATION THRU WALL, PIPES AND WIRING THAT CROSSES UNDER WALKS, STREETS AND CONCRETE PADS. DO NOT COMBINE PIPES WITHIN SLEEVES.
6. WHEN INSTALLING IRRIGATION PIPE ALONG CURBS OR IN ISLANDS, PLACE PIPE AS CLOSE TO CURB AS POSSIBLE TO ALLOW FOR PLANTING TREES AND SHRUBS.
7. MANUAL DRAIN VALVES ARE TO BE LOCATED AT THE ENDS AND LOW POINTS OF THE IRRIGATION MAINLINE. PLACE MANUAL VALVES IN LATCHABLE VALVE BOX FOR EASY ACCESS. PLACE ONE CUBIC FOOT OF GRAVEL BELOW VALVE.
8. AUTOMATIC DRAIN VALVES ARE TO BE LOCATED AT ALL LOW POINTS OF IRRIGATION LATERAL LINES, WHERE LOW POINT IS AT END OF LINE . PLACE VALVES ON TOP OF ONE CUBIC FOOT OF FILL GRAVEL.
9. THE SYSTEM IS TO CONSIST OF DRIP IRRIGATION IN LANDSCAPE BEDS ONLY.
10. THE IRRIGATION CONTROLLER, AUTOMATIC CONTROL, VALVES AND DRIPLINES ARE TO BE FROM A SINGLE MANUFACTURER. ALL EQUIPMENT MUST HAVE A MANUFACTURES FIVE YEAR WARRANTY.
11. IRRIGATION CONTROLLER IS TO BE HYBRID SOLID STATE TYPE WITH PLASTIC LOCKABLE CABINET. CONTROLLER MUST BE CAPABLE OF ALLOWING MULTIPLE VALVES PER STATION. CONDUIT IS TO BE PROVIDED TO ALLOW CONTROL WIRES TO PASS THROUGH BUILDING AND OR UNDER PAVEMENT FROM CONTROLLER LOCATION.
12. THE RAIN SWITCH SHALL BE LOCATED NEAR CONTROLLER ON ROOF OF BUILDING. WIRE SO RAIN SWITCH INTERRUPTS VALVE COMMON AND LEAVES CLOCK ACTIVATED.
13. ADJUST ALL IRRIGATION EQUIPMENT SO SIDEWALKS, PAVING AND BUILDING REMAIN DRY OF DIRECT SPRAY OR EXCESS WATER RUN-OFF.
14. CONTRACTOR SHOULD BE FAMILIAR WITH WATER REQUIREMENTS OF ALL PLANT MATERIALS AND DESIGN SYSTEM ACCORDINGLY. GROUP LIKE PLANTS ON SAME ZONES WITH SIMILAR WATER REQUIREMENTS. COORDINATE RUNNING TIMES OF EACH ZONE WITH LANDSCAPE ARCHITECT.
15. CONTRACTOR SHALL PROVIDE TEMPORARY IRRIGATION FOR SEEDED TURF AREAS THROUGH ESTABLISHMENT. CONTRACTOR SHALL COORDINATE WITH OWNER FOR WATER SUPPLY. IF WATER IS NOT AVAILABLE FROM OWNER THE CONTRACTOR SHALL PROVIDE.
16. SEE SHEET LI5.1 FOR IRRIGATION EQUIPMENT DETAILS.
17. DESIGN SYSTEM FOR A MAXIMUM RUN TIME TO IRRIGATE A MINIMUM OF 2" OF WATER PER WEEK , WITH A MAXIMUM RUN TIME OF 4 HOURS PER DAY.

0 20 40
SCALE IN FEET

ADDENDUM 001 (1)	02/02/2022
Revisions:	Date

CONSULTANTS:

--

STATE OF MONTANA — NICHOLAS A. FAUS — LICENSED LANDSCAPE ARCHITECT — 02/03/2022

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
FARRIS ENGINEERING
BLUE STAR INTEGRATIVE STUDIO
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **IRRIGATION PLAN**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **05/21/2020** | Checked: **DRC** | Drawn: **SAD**

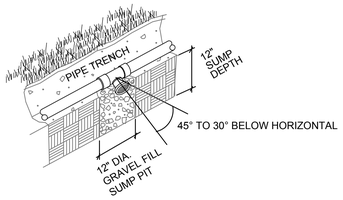
Project Number: **H IH BLAC 19100**

Building Number:

Drawing Number: **LI1.1**

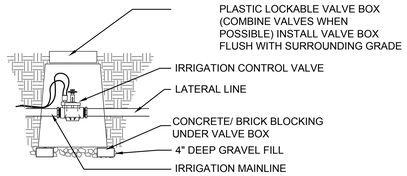
INDIAN HEALTH SERVICE · PHS · 1955 ·

Saved: 05--22--2020, 1:04:48 PM by: HUBERT.HARMS
Plotted: 11:: 02--03--2022 12:: 20:: 00 PM by: HUBERT.HARMS
I:\Wichita--Civil\2019\190418\000\Mun\Drawings\PLANS\190418--000--LI1.1 IRRIGATION PLAN

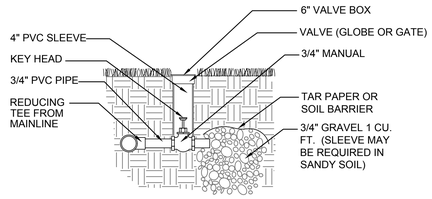


NOTE: AUTOMATIC VALVES ARE TO BE LOCATED AT LOW POINTS AND ENDS OF LATERAL LINES. LOCATE END AUTO. DRAIN VALVE 12" UP STREAM FROM LAST HEAD

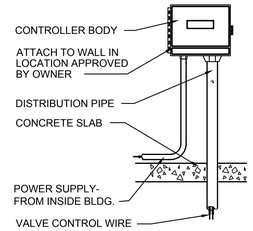
1 AUTOMATIC DRAIN VALVE
NOT TO SCALE



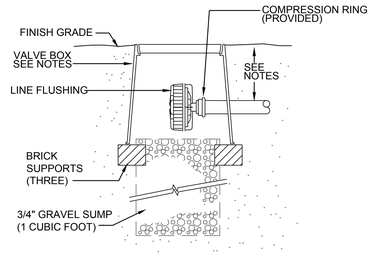
2 AUTOMATIC VALVE
NOT TO SCALE



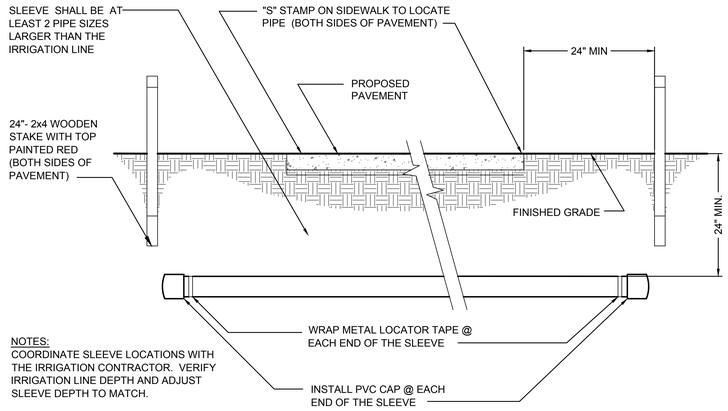
3 MANUAL VALVE
NOT TO SCALE



4 IRRIGATION CONTROLLER
NOT TO SCALE

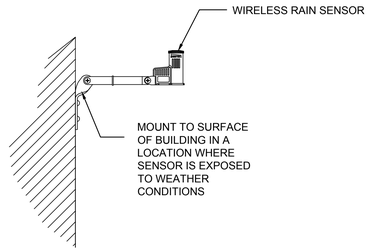


5 LINE FLUSHING VALVE
NOT TO SCALE

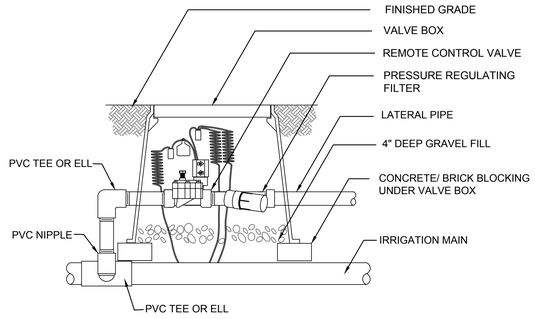


NOTES:
COORDINATE SLEEVE LOCATIONS WITH THE IRRIGATION CONTRACTOR. VERIFY IRRIGATION LINE DEPTH AND ADJUST SLEEVE DEPTH TO MATCH.

6 IRRIGATION SLEEVE
NOT TO SCALE



7 RAIN SENSOR
NOT TO SCALE



8 DRIP ZONE CONTROL KIT
NOT TO SCALE

ADDENDUM 001 ⚠1	02/02/2022
Revisions:	Date

CONSULTANTS:

--

STATE OF MONTANA · NICHOLAS DAVID STAHL · 02/03/2022 · LICENSED LANDSCAPE ARCHITECT

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

FARRIS ENGINEERING

BLUE STAR INTEGRATIVE STUDIO

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **IRRIGATION DETAILS**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**

Contract No.: HHSI122018000051
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **05/21/2020** | Checked: **DRC** | Drawn: **SAD**

Project Number: **H IH BLAC 19100**

Building Number:

Drawing Number: **LI5.1**

INDIAN HEALTH SERVICE · PHS · 1955

Saved: 05--21--2020, 1:45:12 PM by HERT.NORE
Plotted: 05--21--2020, 1:45:22 PM by Alyssa Dahl
U:\Wichita--Civil\2019\190418\000\Mech\Drawings\PLANS\190418--000--LI5.1 IRRIGATION DETAILS

DESIGN CRITERIA

1. BUILDING CODE:
   INTERNATIONAL BUILDING CODE (IBC), 2018 EDITION, INCLUDING LOCAL SUPPLEMENTS. THE STRUCTURE IS CLASSIFIED AS A RISk CATEGORY II FACILITY.

2. DEAD AND LIVE LOADS:

LOCATION	UNIFORM LIVE LOAD	CONCENTRATED LIVE LOAD	TOTAL DEAD LOAD*
ROOF	20 PSF	----------	60 PSF
RESIDENTIAL	40 PSF	----------	28 PSF
PARTITIONS	----------	_____	15 PSF
CORRIDORS	100 PSF	----------	28 PSF
STAIRS	100 PSF	300 LB	28 PSF
SLABS ON GRADE	100 PSF	2000 LB	----------
LIGHT STORAGE	125 PSF	2000LB	28 PSF
BALCONY (RESIDENTIAL)	60 PSF	----------	28 PSF
BALCONY (PUBLIC)	100 PSF	----------	28 PSF

   FLOOR LIVE LOADS ON SUPPORTING ELEMENTS SHALL NOT BE REDUCED IN ACCORDANCE WITH THE BUILDING CODE. ROOF LIVE LOADS ON SUPPORTING ELEMENTS SHALL NOT BE REDUCED.
   * TOTAL DEAD LOAD INCLUDES WEIGHT OF STRUCTURAL ELEMENTS.

3. SNOW LOADS:

GROUND SNOW LOAD:	86.1 PSF
BALANCED ROOF SNOW LOAD:	60.3 PSF
SNOW EXPOSURE FACTOR:	1.0
SNOW IMPORTANCE FACTOR:	1.0
THERMAL FACTOR:	1.0

   DRIFTING OF SNOW AND UNBALANCED SNOW SHALL BE IN ACCORDANCE WITH CODE.

4. WIND:

ULTIMATE DESIGN WIND SPEED, V_{ult}:	107 MPH (3 SECOND GUST)
NOMINAL DESIGN WIND SPEED, V_{asd}:	83 MPH (3 SECOND GUST)
WIND EXPOSURE:	C
INTERNAL PRESSURE COEF:	±0.18

   COMPONENTS AND CLADDING PRESSURE SHALL BE USED FOR DESIGN OF EXTERIOR WALLS, WINDOWS, DOORS, AND MISCELLANEOUS MATERIALS NOT SPECIFICALLY SHOWN ON THE PLANS.

5. SEISMIC:

SITE CLASS:	D
SEISMIC DESIGN CATEGORY:	C
SEISMIC IMPORTANCE FACTOR:	1.0
Ss:	0.428
S1:	0.125
Sds:	0.416
Sd1:	0.196
LATERAL SYSTEM:	STEEL SYSTEMS NOT SPECIFICALLY DESIGNED FOR SEISMIC RESISTANCE (R=3)
METHOD OF ANALYSIS:	EQUIVALENT LATERAL FORCE
Cs:	0.139
BASE SHEAR:	145 KIPS

6. VIBRATION

   THIS STRUCTURE HAS NOT BEEN ANALYZED FOR VIBRATION CAUSED BY FOOTFALL, EQUIPMENT, ETC.

CONSTRUCTION DETAILS FOR STRUCTURAL MOVEMENT

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ACCOMMODATIONS IN GLAZING, ARCHITECTURAL FINISHES, PLUMBING, HVAC AND ELECTRICAL ELEMENTS TO PREVENT DAMAGE DUE TO DEFLECTION OF ROOF, WALL AND FLOOR MEMBERS.

2. VERTICAL DEFLECTIONS DUE TO GRAVITY LOADS:

ROOF TRUSSES	LENGTH IN INCHES/240
WIDE FLANGE ROOF BEAMS & GIRDERS	LENGTH IN INCHES/240
FLOOR TRUSSES*	LENGTH IN INCHES/360
WIDE FLANGE FLOOR GIRDERS*	LENGTH IN INCHES/360

   * AFTER THE FLOOR CONCRETE IS POURED. DO NOT ATTACH ANY ELEMENT TO A FLOOR SYSTEM BEFORE THE FLOOR SLAB IS POURED AND SHORING IS REMOVED.

3. HORIZONTAL DEFLECTIONS DUE TO WIND (W) OR SEISMIC (E):

CONVENTIONAL METAL STUDS	LENGTH IN INCHES/240(W), 200(E)*
CONVENTIONAL BUILDING (FLOOR TO ROOF)	HEIGHT IN INCHES/360(W), 200 (E)
CONVENTIONAL BUILDING (FLOOR TO FLOOR)	HEIGHT IN INCHES/360(W), 200 (E)

   *LENGTH IN INCHES/600 FOR BRICK VENEER

DELEGATED ENGINEERING OF STRUCTURAL COMPONENTS AND SYSTEMS

1. ALL STRUCTURAL COMPONENTS AND SYSTEMS SPECIFIED TO BE DELEGATED SHALL BE DESIGNED AND SEALED BY A SPECIALTY STRUCTURAL ENGINEER (SSE) AND SHALL MEET THE GUIDELINES PUBLISHED BY THE COUNCIL OF AMERICAN STRUCTURAL ENGINEERS (CASE) FOR DELEGATED SPECIALTY STRUCTURAL ENGINEERING.

2. REFERENCE THE GENERAL NOTES & DRAWINGS FOR BUILDING CODE, SERVICE CRITERIA, AND DESIGN LOADS.

3. SUBMITTALS FOR DELEGATED COMPONENETS AND SYSTEMS SHALL INCLUDE THE FOLLOWING:

   A. A FULL DESIGN ANALYSIS, INCLUDING CALCULATIONS FOR GRAVITY AND LATERAL LOADS, WITH A SEALED COVER SHEET IDENTIFYING THE PROJECT NAME AND ADDRESS.

   B. THE SSE THAT SEALED THE CALCULATIONS SHALL ALSO SEAL THE FABRICATION, PLACING, AND ERECTION PLANS. EACH PLAN SHALL IDENTIFY THE PROJECT NAME AND ADDRESS.

   C. IF THE SSE THAT SEALED THE CALCULATIONS AND PLANS IS AN EMPLOYEE OF A COMPANY, THE COMPANY'S CERTIFICATE OF AUTHORIZATION NUMBER SHALL BE INCLUDED ON THE SUBMITTALS. BOTH THE SSE SEAL AND THE CERTIFICATE OF AUTHORIZATION NUMBER SHALL BE INCLUDED ON THE SUBMITTALS. BOTH THE SSE SEAL AND THE CERTIFICATE OF AUTOROIZATION SHALL BE ISSUED BY THE STATE IN WHICH THE PROJECT IS LOCATED, INCLUDING PROJECTS ON FEDERAL LAND.

   D. THE COMPANY THAT EMPLOYS THE SSE SHALL PROVIDE AN INSURANCE CERTIFICATE FOR PROFESSIONAL LIABILITY INSURANCE WITH AN AGGREGATE AMOUNT OF NO LESS THAN TWO MILLION DOLLARS ($2,000,000). CONTRACTS OR SUB-CONTRACTS FOR THIS PROJECT SHALL NOT INCLUDE A LIMIT OF LIABILITY CLAUSE.

   E. THE SSE THAT SEALED THE PLANS SHALL INCORPORATE A WRITTEN STATEMENT THAT THE CONTRACT DOCUMENT'S CRITERIA HAVE BEEN INCORPORATED INTO THE DESIGN.

4. THE CONTRACTOR SHALL REVIEW THE SUBMITTAL FOR QUANTITIES AND DIMENSIONS AND VERIFY THAT THE ABOVE INFORMATION HAS BEEN INCLUDED IN THE SUBMITTAL.

5. NO SUBMITTAL WILL BE REVIEWED UNLESS ALL OF THE ABOVE INFORMATION IS INCLUDED. THE ENGINEER OF RECORD SHALL NOT BE RESPONSIBLE FOR DELAYS CAUSED BY INCOMPLETE SUBMITTALS.

6. OVER FRAMED ROOF SYSTEMS AND SCREEN WALL SYSTEMS

   A. THE SSE SHALL VERIFY THAT THE OVER-FRAMING SYSTEM WILL TRANSFER ALL VERTICAL AND HORIZONTAL LOADS THROUGH THE EXISTING ROOFING SYSTEM TO THE STRUCTURE WITHOUT OVER-STRESSING ANY EXISTING COMPONENTS.

   B. OVER-FRAMING STRUCTURAL MEMBERS SHALL BE SYMMETRICAL ABOUT THE VERTICAL AXIS AND BE CONNECTED CONCENTRICALLY AT EACH JOINT.

   C. LIGHT GAUGE STRUCTURAL COMPONENTS SHALL BE A MINIMUM OF 16 GAUGE THICK (0.054") UNLESS NOTED OTHERWISE.

   D. TRANSFER CONNECTIONS SHALL HAVE AT LEAST (2) BOLTS/SCREWS/WELDS THAT PROVIDE SYMMETRICAL LOAD.

   E. DESIGN AND PROVIDE BOTH TEMPORARY AND PERMANENT BRACING REQUIRED FOR STABILITY.

   F. REFERENCE ARCHITECTURAL DRAWINGS FOR ROOF PANELS.

7. PRE-FABRICATED METAL TRUSS SYSTEMS

   A. ALL TRUSS COMPONENTS SHALL BE SYMMETRICAL ABOUT THE VERTICAL AXIS AND BE CONNECTED CONCENTRICALLY AT EACH JOINT.

   B. REFERENCE ARCHITECTURAL DRAWINGS FOR ROOF PANELS.

   C. LIGHT GAUGE STRUCTURAL COMPONENTS SHALL BE A MINIMUM OF 16 GAUGE THICK (0.054") UNLESS NOTED OTHERWISE.

   D. TRANSFER CONNECTIONS SHALL HAVE AT LEAST (2) BOLTS/SCREWS/WELDS THAT PROVIDE SYMMETRICAL LOAD.

   E. PROVIDE BOTH TEMPORARY AND PERMANENT BRACING REQUIRED FOR STABILITY.

   F. PROVIDE ALL TRUSS TO TRUSS CONNECTIONS.

   G. PROVIDE REACTIONS AND CONNECTIONS AT EACH SUPPORT.

   H. SUBMITTED CALCULATIONS SHALL INDICATE ALL LOADS AND LOAD COMBINATIONS USED IN THE ANALYSIS.

SOIL PREPARATION AND FOUNDATIONS

1. THE FOUNDATION SYSTEM IS DESIGNED AS RECOMMENDED IN THE GEOTECHNICAL INVESTIGATION PREPARED BY DOWL, JOB NO. 4027.21815.01. A COPY IS IN THE SPECIFICATIONS.

2. REMOVE TOP SOIL CONTAINING ORGANIC MATERIAL AND PREPARE THE BUILDING PAD IN ACCORDANCE WITH THE CIVIL ENGINEERING PLANS, SPECIFICATIONS, AND GEOTECHNICAL INVESTIGATION.

3. SOIL SUPPORTED FOUNDATIONS:

   A. DESIGN BEARING PRESSURE (NET) IS 2,400 PSF FOR FOUNDATIONS BEARING ON UNDISTURBED SOIL OR APPROVED ENGINEERED FILL MATERIAL. BEARING MATERIALS SHALL BE VERIFIED BY A LICENSED GEOTECHNICAL ENGINEER.

   B. ALL FOUNDATIONS ARE DESIGNED WITH EARTH FORMED SIDES; THE TOP 7¼" OF THE FOUNDATION SHALL BE FORMED TO THE DESIGN DIMENSION WHEN VISIBLE AFTER CONSTRUCTION IS COMPLETE. THE CONSTRUCTED FOUNDATION DIMENSION SHALL BE NO LESS THAN THE DESIGN DIMENSION, AND NO MORE THAN 6" GREATER THAN THE DESIGN DIMENSION.

CONCRETE

1. ALL CONCRETE HAS BEEN DESIGNED IN ACCORDANCE WITH ACI 318 AND THE BUILDING CODE, AND IN CONFORMANCE WITH THE CURRENT "ACI MANUAL OF CONCRETE PRACTICE".

2. THE CONCRETE REQUIREMENTS ARE:

   A. CEMENT SHALL BE TYPE I OR II CONFORMING TO ASTM C150. FLY ASH CONFORMING TO ASTM C618 TYPE C OR F MAY BE USED TO REPLACE A MAXIMUM OF 20% OF THE CEMENT BY WEIGHT.

   B. FINE AGGREGATE FOR NORMAL WEIGHT CONCRETE SHALL MEET ASTM C33.

   C. COARSE AGGREGATES FOR NORMAL WEIGHT CONCRETE SHALL CONFORM TO ASTM C33, GRADE 67 OR LARGER. COARSE AGGREGATES SHALL BE NO LESS THAN 50% OF THE TOTAL AGGREGATE BY WEIGHT, UNLESS APPROVED BY THE ENGINEER PRIOR TO MIX DESIGN SUBMITTAL.

   D. MIX REQUIREMENTS ARE:

LOCATION	MINIMUM F'c (PSI)	MINIMUM CEM. (PCY)	MAX W/C RATIO	AIR CONTENT	SLUMP INCHES[X]
FOUNDATIONS	4000	470	0.45	5% ± 1%	2-5
INTERIOR SLAB***	4000	470	0.45	5% ± 1%	2-5
LEAN CONC. FILL**	250	N/A	N/A	5% ± 2%	N/A

   **CELLULAR CONCRETE WITH A DRY UNIT WEIGHT OF 30 PCF.
   ***SLAB ON GRADE SHALL HAVE A FLEXURAL STRENGTH OF 650 PSI WHERE SUBJECT TO VEHICLE TRAFFIC.
   ****ADD 35 PCY OF SILICA FUME TO THE MINIMUM CEMENT CONTENT.
   XPRIOR TO THE ADDITION OF WATER REDUCING ADMIXTURES, IF APPROVED BY ENGINEER, AFTER ADDITION THE SLUMP MAY NOT EXCEED 8"

   F'c SPECIFIED IS BASED ON THE 28 DAY COMPRESSIVE STRENGTH IN ACCORDANCE WITH ACI 318 ACCEPTANCE CRITERIA.

3. ADMIXTURES, HARDENERS AND CURING COMPOUNDS

   A. ALL CONCRETE ADMIXTURES SHALL, WHEN MIXED INTO CONCRETE, BE NON-CHLORIDE AND NON-CHLORIDE FORMING.

   B. ALL ADMIXTURES MUST CONFORM TO ASTM C-494 AND C-260.

   C. CONCRETE CURING COMPOUND AND SEALERS SHALL MEET ASTM C-309 TYPE 1 OR 1D.

   D. USE OF "SELF CONSOLIDATING" CONCRETE MUST BE SUBMITTED FOR APPROVAL WITH THE CONCRETE MIX DESIGN.

   E. CONCRETE PENETRATING HARDENER SEALERS SHALL BE USED ON ALL EXPOSED CONCRETE FLOORS UNLESS OTHER COATINGS ARE REQUIRED BY THE ARCHITECT.

4. MISCELLANEOUS CONCRETE DETAILS

   A. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 3/4" INSIDE THE FORMS OR TOOLED 3/4" RADIUS UNLESS NOTED OTHERWISE.

   B. SLABS ON GRADE SHALL HAVE CONSTRUCTION JOINTS AND/OR CONTROL JOINTS (SAWN JOINTS) TO DIVIDE THE SLAB INTO PANELS, NOT TO EXCEED 256 SQUARE FEET. THE LONG DIMENSION SHALL NOT EXCEED THE SHORT DIMENSION BY MORE THAN 20%. CONTRACTOR TO SUBMIT PROPOSED LOCATIONS FOR APPROVAL.

   C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL FORMING AND SHORING.

   D. NO ALUMINUM SHALL BE EMBEDDED IN CONCRETE. CONDUITS AND PIPING EMBEDDED IN CONCRETE WALLS, SLABS OR BEAMS SHALL BE SPACED A MINIMUM OF FOUR DIAMETERS AND THE OUTSIDE DIAMETER SHALL BE LESS THAN 30% OF THE MEMBER THICKNESS AND PLACED BETWEEN LAYERS OF REINFORCING.

   E. SAW CUTTING OF EXISTING STRUCTURAL CONCRETE:

      1. THE CONTRACTOR SHALL HAVE ALL STRUCTURAL CONCRETE INTENDED TO BE CORED OR CUT INVESTIGATED WITH GROUND PENETRATING RADAR (GPR) PRIOR TO CUTTING/CORING. LOCATION OF REINFORCING SHALL BE REPORTED TO THE ENGINEER OF RECORD (EOR). THE EOR MAY DIRECT THE CONTRACTOR TO ADJUST THE OPENING LOCATION TO REDUCE THE QUANTITY OF EXISTING REINFORCING THAT WILL BE CUT.

      2. ALL NEW CIRCULAR OPENINGS SHALL BE CORE DRILLED. ALL NEW RECTANGULAR OPENINGS SHALL BE CORE DRILLED IN EACH CORNER TO PREVENT OVERCUTTING BEYOND THE INTENDED CORNERS. THE CONTRACTOR SHALL APPLY APPROPRIATE PRESSURE TO THE EQUIPMENT TO PREVENT SPALLING OVER 1/2" ON THE BACK SIDE OF THE OPENING.

CONCRETE REINFORCING

1. MATERIALS

	ASTM	GRADE
PLATE & ANGLE	A36	___
REINFORCING STEEL	A615	60
WELDED WIRE FABRIC (WWF)	A185	60 (MIN)
HEADED STUDS	A108	___
DEFORMED BAR ANCHORS	A706	60
ANCHOR RODS (BOLTS)	F1554	36

2. DETAILS:

   A. WELDING OF REINFORCING STEEL IS PROHIBITED.

   B. WELDED WIRE FABRIC SHALL BE FURNISHED IN FLAT SHEETS.

   C. SHOP DRAWINGS SHALL BE SUBMITTED WITH REINFORCING STEEL IN ACCORDANCE WITH ACI 315.

   D. WHEN MECHANICAL SPLICES ARE INDICATED ON THE PLANS, THE SPLICE SHALL DEVELOP 125% OF THE SPECIFIED YIELD STRENGTH OF THE REINFORCING STEEL. REQUESTS BY THE CONTRACTOR FOR MECHANICAL SPLICES MUST BE SUBMITTED IN WRITING.

3. PLACEMENT

   A. ALL REINFORCING AND EMBEDMENTS SHALL BE SUPPORTED ON CHAIRS/BOLSTERS TO THE DESIGN DIMENSIONS. SPACING SHALL BE SUFFICIENTLY CLOSE TO PREVENT DISPLACEMENT OR PERMANENT DEFORMATION DUE TO CONCRETE PLACEMENT, FOOT TRAFFIC OR VIBRATION. "PUDDLING IN" OR "PULLING UP" REINFORCING IS NOT AN ACCEPTABLE METHOD FOR PLACING REINFORCING. CHAIRS/BOLSTERS SHALL HAVE PLASTIC COATED FEET OR BE MADE OF STAINLESS STEEL. CHAIRS/BOLSTERS IN CONTACT WITH EARTH SHALL HAVE BOTTOM PLATES AND BE COATED TO PREVENT CORROSION. ANCHOR RODS SHALL BE HELD IN PLACE WITH TEMPLATES SUFFICIENTLY STRONG TO PREVENT DISPLACEMENT OR TILTING.

   B. MAINTAIN ACI CLEAR COVER ON REINFORCING AS LISTED BELOW UNLESS NOTED OTHERWISE.

CAST AGAINST EARTH (BOTTOM OR SIDES)	3"
FORMED - EXPOSED TO SOIL, WEATHER OR LIQUIDS	2"
FORMED SLABS - INTERIOR	1"
FORMED MEMBERS - INTERIOR	1.5"
SLABS ON GRADE (FROM TOP OF SLAB)	1.5"

   C. PROVIDE CORNER BARS OF THE SAME SIZE AND SPACING AS ADJACENT REINFORCING.

   D. OPENINGS IN WALLS OR SLABS SHALL BE REINFORCED PER DETAIL 4/S4.1.

   E. REINFORCING STEEL SHALL BE LAPPED PER TABLE A.

   F. WELDED WIRE FABRIC SHALL BE LAPPED ONE FULL SQUARE PLUS 2"

MASONRY

1. MASONRY HAS BEEN DESIGNED IN ACCORDANCE WITH THE ACI 530 AND THE BUILDING CODE USING THE ORDINARY REINFORCED METHOD.

2. MATERIALS:

   A. ALL CONCRETE MASONRY UNITS (CMU) SHALL BE TWO-CELL LIGHTWEIGHT AGGREGATE UNITS WITH A SPECIFIED MINIMUM COMPRESSIVE STRENGTH OF 1900 PSI ON NET AREA AT 28 DAYS CONFORMING TO ASTM C90.

   B. ALL MORTAR SHALL BE TYPE "S" CONFORMING TO ASTM C270.

   C. THE MINIMUM COMPRESSIVE STRENGTH (f'_m) OF A PRISM ASSEMBLED OF CMU AND FULL MORTAR BEDDING SHALL BE 1500 PSI AT 28 DAYS ON THE NET AREA .

   D. GROUT SHALL CONFORM TO ASTM C476 WITH 3/8" AGGREGATE WITH TYPE I CEMENT, A MAXIMUM WATER/CEMENT RATION OF 0.65 AND A SLUMP OF 5" TO 9". THE MINIMUM GROUT COMPRESSIVE STRENGTH (f'_c) SHALL BE 2500 PSI.

   E. REINFORCING STEEL SHALL MEET THE REQUIREMENTS OF ASTM A615, GRADE 60.

   F. CMU LOCATED BELOW GRADE SHALL BE NORMAL-WEIGHT AGGREGATE UNITS WITH ALL CELLS GROUTED SOLID.

3. HORIZONTAL WALL REINFORCING:

   A. PROVIDE CONTINUOUS HORIZONTAL REINFORCING AT THE TOP OF THE WALL AND AT A MAXIMUM OF 4'-0" ON CENTER IN KNOCK-OUT BOND BEAMS UNLESS NOTED OTHERWISE. REINFORCING STEEL SHALL LAP PER TABLE.

   B. PROVIDE CONTINUOUS HORIZONTAL REINFORCING AT 16" ON CENTER WITH HOT-DIP GALVANIZED JOINT REINFORCING (W1.7 WIRES, MINIMUM). JOINT REINFORCING SHALL LAP TWO SQUARES PLUS 2". DISCONTINUE THE REINFORCING AT ISOLATION JOINTS.

   C. PROVIDE HORIZONTAL REINFORCING AT THE HEAD OF ALL OPENINGS IN A "U" SHAPED SOLID BOTTOM LINTEL BLOCK. CUT OFF THE BOTTOM SHELL OF THE LINTEL BLOCKS AT VERTICAL REINFORCING LOCATION FOR JAMBS. PROVIDE HORIZONTAL REINFORCING AT THE SILL OF ALL OPENINGS IN A KNOCK-OUT BOND BEAM. REINFORCING STEEL SHALL EXTEND BEYOND OPENING PER DETAILS.

   D. MINIMUM HORIZONTAL REINFORCING IN ALL LINTELS AND BOND BEAMS SHALL BE AS FOLLOWS (UNLESS NOTED OTHERWISE):

WALL THICKNESS	REINFORCING
8"	(2)-#4
12"	(2)-#5

4. VERTICAL REINFORCING:

   A. PROVIDE VERTICAL REINFORCING (NORMAL REINFORCING) IN FULLY GROUTED CELLS, CENTERED AND HELD IN PLACE BY REINFORCING GUIDES IN ALL WALLS AS FOLLOWS (UNLESS NOTED OTHERWISE):

THICKNESS	INTERIOR NON-LOAD BEARING WALLS	EXTERIOR & LOAD BEARING WALLS
8"	#5 @ 48"oc	#5 @ 48"oc
12"	(2)-#5 @ 48"oc	(2)-#5 @ 48"oc

   B. PROVIDE VERTICAL FULLY GROUTED REINFORCED CELLS AT EACH SIDE OF AN ISOLATION JOINT, AT INTERSECTIONS OF WALLS, EACH SIDE OF A WALL OPENING, AT EACH BEAM BEARING AND AT THE ENDS OF A WALL.

   C. VERTICAL REINFORCING SHALL EXTEND CONTINUOUSLY FROM THE TOP OF THE SUPPORTING MEMBER TO THE TOP BOND BEAM. THERE SHALL BE A DOWEL, CAST INTEGRAL WITH THE SUPPORTING MEMBER, FOR EACH VERTICAL REINFORCING BAR EXCEPT AS NOTED. ALL VERTICAL REINFORCING STEEL SHALL BE HOOKED INTO TOP BOND BEAM. ALL HOOKS, STRAIGHT EMBEDMENTS AND LAPS SHALL BE PER TABLE.

5. LOCATION AND DETAILS OF CONTROL AND ISOLATION JOINTS IN MASONRY WALLS SHALL BE PER THE ARCHITECTURAL DRAWINGS. IF NOT SHOWN OR NOTED ON THE ARCHITECTURAL DRAWINGS THE MAXIMUM SPACING OF CONTROL OR ISOLATION JOINTS SHALL BE AT A LENGTH TO HEIGHT RATIO OF 2:1 OR 30'-0"oc, WHICHEVER IS LESS. REINFORCING IN ALL BOND BEAMS, INCLUDING THE TOP BOND BEAM, SHALL BE DISCONTINUOUS AT CONTROL AND ISOLATION JOINTS. CONTRACTOR SHALL SUBMIT A JOINT LAYOUT PLAN FOR APPROVAL PRIOR TO CONSTRUCTION.

6. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING WALL ELEVATIONS AS PART OF THE SUBMITTAL. WALL ELEVATIONS SHALL INCLUDE HORIZONTAL AND VERTICAL REINFORCING, EMBEDS, CONTROL JOINTS, OPENINGS, ETC., IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR ALL OPENING LOCATIONS.

7. EMBEDDED CONDUIT, PIPES OR SLEEVES SHALL BE NO CLOSER THAN (3) DIAMETERS ON CENTER OR DISPLACE MORE THAN 2% OF THE NET AREA.

8. LINTELS SUPPORTING CMU WALL OVER OPENINGS, UNLESS NOTED OTHERWISE, SHALL BE:

OPENING WIDTH	LINTEL
< 4'-0"	8"x8" CMU "U" SHAPED BOND BEAM w/ (2)-#5 12"x8" CMU "U" SHAPED BOND BEAM w/ (2)-#6
> 4'-0"	REFERENCE PLANS

   ALL LINTELS SHALL BEAR A MINIMUM OF 8" ON EACH END. EXTERIOR LINTELS SHALL BE GALVANIZED UNLESS NOTED OTHERWISE BY ARCHITECT.

STRUCTURAL STEEL

1. STRUCTURAL STEEL SHALL MEET THE LATEST "CODE OF STANDARD FOR STEEL BUILDINGS AND BRIDGE," AND HAS BEEN DESIGNED IN ACCORDANCE WITH THE BUILDING CODE AND THE LATEST EDITION OF AISC "MANUAL OF STEEL CONSTRUCTION".

2. STRUCTURAL STEEL SHALL BE NEW AND MEET THE FOLLOWING REQUIREMENTS UNLESS NOTED OTHERWISE ON THE DRAWINGS:

TYPE	ASTM	GRADE
W & WT SHAPES	A992	---------
PLATES, CHANNELS & ANGLES	A36	---------
ROUND HSS SECTIONS	A500	B (Fy=42 KSI)
RECTANGULAR HSS SECTIONS	A500	B (Fy=46 KSI)
STRUCTURAL BOLTS	A325	---------(ASTM F1852)
ERECTION BOLTS	A307	---------

3. ALL BOLTED CONNECTIONS SHALL BE STANDARD AISC BEARING TYPE FRAMING CONNECTIONS. BOLTS SHALL BE TENSION-INDICATING FOR INSPECTION PURPOSES.

   A. BOLTED MOMENT CONNECTIONS INDICATED ON DRAWINGS SHALL USE FRICTION TYPE PRETENSIONED BOLTS AND INDICATED AS SLIP CRITICAL (SC).

4. ALL CONNECTIONS NOT DETAILED OR OTHERWISE NOTED SHALL BE PROVIDED BY THE FABRICATOR AND HIGHLIGHTED FOR THE ENGINEER OF RECORD'S REVIEW.

   A. ALL MOMENT CONNECTIONS AS INDICATED ON THE DRAWINGS SHALL DEVELOP THE FULL MOMENT CAPACITY OF THE CONNECTED MEMBERS. MOMENT CONNECTIONS SHALL BE WELDED TYPE UNLESS NOTED OTHERWISE.

   B. SLIP CRITICAL (SC) CONNECTIONS SHALL HAVE UNCOATED CLASS A FAYING SURFACES.

5. ALL WELDING SHALL BE IN ACCORDANCE WITH LATEST AWS CODE, SECTION D1.1 ALL WELD MATERIAL SHALL BE 70 KSI TENSILE STRENGTH.

6. STEEL FRAMING MEMBERS SHALL NOT BE SPLICED.

7. OPENINGS SHALL NOT BE FIELD-CUT IN THE FLANGE OR WEBS OF STEEL MEMBERS.

8. GALVANIZED STRUCTURAL STEEL SHALL CONFORM TO ASTM A123 FOR MEMBERS AND ASTM A153 FOR CONNECTION ELEMENTS. REPAIR ANY DAMAGED GALVANIZING COATING IN ACCORDANCE WITH ASTM A780.

THERMAL BREAK MATERIALS

1. PROVIDE PLATES OF NOTED THICKNESS OF LOAD-BEARING FIBERGLASS REINFORCED LAMINATE COMPOSITE BY FABREEKA, OR APPROVED EQUAL.

2. MATERIAL SHALL MAINTAIN STRUCTURAL INTEGRITY OF CONNECTIONS.

3. ULTIMATE MATERIAL PROPERTIES:

TENSILE STRENGTH:	11 KSI	ASTM D638
FLEXURAL STRENGTH:	25 KSI	ASTM D790
COMPRESSIVE STRENGTH:	38 KSI	ASTM D695
COMPRESSIVE MODULUS:	500 KSI	ASTM D695
SHEAR STRENGTH:	15 KSI	ASTM D732
THERMAL CONDUCTIVITY:	1.8 BTU/HR/ft²/in./°F	ASTM C177

4. INSTALL WITH COMPATIBLE THERMAL BREAK WASHERS AND BUSHINGS PER MANUFACTURER'S RECOMMENDATIONS.

5. STEEL CONNECTIONS SHALL BE MADE USING STAINLESS STEEL BOLTS, A193 B8.

STEEL DECKING

1. DECK SHALL BE ATTACHED TO ALL SUPPORTING MEMBERS.

   A. ATTACH ROOF AND NON-COMPOSITE METAL DECK TO STEEL MEMBER WITH #12 TEK SCREWS. SCREWS SHALL FULLY CLAMP METAL DECK TO STEEL OR REPLACE WITH 5/8" DIAMETER PUDDLE WELDS. REFERENCE DECK ATTACHMENT DETAIL.

   B. SIDE LAPS OF METAL DECK SHALL BE FASTENED TOGETHER WITH #10 TEK SCREWS WITH METAL IN FULL CONTACT. REFERENCE DECK ATTACHMENT DETAIL.

2. STEEL ROOF DECK SHALL BE 1 1/2" DEEP, 18 GAUGE, WIDE RIB METAL DECKING WITH THE FOLLOWING PROPERTIES:

MINIMUM Fy:	33 KSI
MINIMUM Ip:	0.289 IN⁴
MINIMUM Sp:	0.318 IN³
MINIMUM In:	0.295 IN⁴
MINIMUM Sn:	0.327 IN³

   ROOF DECK SHALL RECIEVE FINISH PER SPECIFICATION. DECK SHALL BE CONTINUOUS OVER A MINIMUM OF THREE SPANS. EACH DECK UNIT SHALL BE ATTACHED TO SUPPORTING MEMBERS AND ADJACENT PANELS PER THE DIAPHRAGM ATTACHMENT DETAIL.

3. PROVIDE ANGLE FRAME SUPPORT METAL DECK AT ALL ROOF DRAINS AND OTHER OPENINGS GREATER THAN 8"X8". OPENINGS SMALL THAN 8" REQUIRE NO REINFORCEMENT.

COLD FORMED STEEL FRAMING

1. ALL COLD-FORMED STEEL STUDS, PURLINS, AND TRUSS SYSTEMS SHALL BE GALVANIZED PER AISI STANDARDS. APPLY ZINC-RICH PAINT TO ALL AREAS WHERE FINISH IS DAMAGED DUE TO WELDING.

2. THIS STRUCTURE IS DESIGNED AS CONVENTIONAL FIELD FRAMED CONSTRUCTION. SHOULD PANELIZED CONSTRUCTION BE USED, THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL ENGINEERING, COORDINATION WITH ALL OTHER BUILDING SYSTEMS, AND REVIEW OF SHOP DRAWINGS. COORDINATION AND REVIEW OF PANELIZED CONSTRUCTION SHOP DRAWINGS ARE NOT INCLUDED IN THE ENGINEER OF RECORD'S SCOPE OF SERVICES FOR THIS PROJECT. REQUESTS FOR INFORMATION PERTAINING TO, OR DIRECTLY ASSOCIATED WITH, PANELIZED CONSTRUCTION WILL NOT BE REVIEWED.

3. PRODUCTS SHALL BE FORMED FROM STEEL MEETING THE REQUIREMENTS OF AISI, SPECIFICATIONS FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, UNLESS NOTED OTHERWISE.

4. STUD TRACK SECTIONS SHALL MEET OR EXCEED THICKNESS OF STUD MEMBERS, UNLESS NOTED OTHERWISE.

5. ALL FRAMING COMPONENTS SHALL BE CUT SQUARELY FOR ATTACHMENT TO PERPENDICULAR MEMBERS.

6. PROVIDE ALL ACCESSORIES INCLUDING, BUT NOT LIMITED TO, TRACKS, CLIPS, WEB STIFFENERS, FASTENERS, ANCHORAGE DEVICES, CONNECTION ANGLES, BRIDGING, AND MISCELLANEOUS HARDWARE REQUIRED TO COMPLETE ALL CONNECTIONS AND INSTALLATION.

7. FASTENING OF FRAMING COMPONENTS SHALL BE WITH SELF-TAPPING SCREWS OR WELDING OF SUFFICIENT SIZE TO INSURE THE STRENGTH OF THE CONNECTION. WELDS SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST AWS D1.3 CODE.

8. COLD-FORMED STEEL STUD PRODUCTS SHALL BE MANUFACTURED BY A CURRENT MEMBER OF THE STEEL STUD MANUFACTURER ASSOCIATION (SSMA) OR THE STEEL FRAMING INDUSTRY ASSOCIATION (SFIA).

   A. THE PHYSICAL AND STRUCTURAL PROPERTIES SHALL BE EQUIVALENT TO THOSE LISTED BY THE SSMA "PRODUCT TECHNICAL INFORMATION" AND ICC-ES ER-3064P FOR "S" AND "T" SECTIONS.

   B. PROVIDE WALL STUD BRIDGING SPACES AT 4'-0"O.C. MAXIMUM IN ALL EXTERIOR WALLS AND INTERIOR LOAD BEARING WALLS.

   C. PROVIDE DEFLECTION TRACK AT THE TOP OF ALL NON-LOAD BEARING STUD WALLS WHERE THE TOP OF WALL ABUTS THE BOTTOM OF THE STRUCTURE. DEFLECTION TRACK SHALL ACCOMMODATE A DEFLECTION DESCRIBED UNDER CONSTRUCTION DETAILS FOR STRUCTURAL MOVEMENT.

   D. ATTACH STUDS TO TRACK WITH A MINIMUM OF ONE SCREW IN EACH STUD FLANGE, UNLESS NOTED OTHERWISE.

   E. PROVIDE DIAGONAL TENSION STRAP BRACING AT LOCATIONS INDICATED ON DESIGN DRAWINGS.

ADDENDUM 001 ⚠1	02/02/2022
Revisions:	Date

CONSULTANTS:

--

MONTANA — MICHAEL W. KEISO — No. 37000PE — 10/01/2020 — PROFESSIONAL ENGINEER — LICENSED

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **GENERAL NOTES**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI1022018000051
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **09/04/2020** | Checked: **MWK** | Drawn: **JBR**

Project Number: **H IH BLA

MISCELLANEOUS METALS

1. ALL CONNECTIONS SHALL BE COMPATIBLE WITH MATERIALS BEING CONNECTED UNLESS FULL ISOLATED WITH A DI-ELECTRIC MATERIAL.
2. ALUMINUM SHALL CONFORM TO ASTM B221, ALLOY 6063-T52 FOR HANDRAIL AND ALLOY 6061-T6 FOR STRUCTURAL SHAPES. TOOLS USED FOR ALUMINUM SHALL BE FREE OF RESIDUE FROM OTHER METALS.
3. STAINLESS STEEL SHAPES SHALL CONFORM TO ASTM A276, TYPE 304. WHEN WELDING IS REQUIRED, STAINLESS STEEL SHAPES SHALL CONFORM TO ASTM A276, TYPE 304 L. TOOLS USED FOR STAINLESS SHALL BE FREE OF RESIDUE FROM OTHER METALS.

POST INSTALLED ANCHORING SYSTEMS

1. SUBSTITUTION OF POST INSTALLED ANCHORS FOR EMBEDDED ANCHORS SHOWN ON THE DRAWINGS WILL NOT BE PERMITTED UNLESS APPROVED BY THE ENGINEER IN ADVANCE.
2. ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII) AND THE EVALUATION REPORT (ER/ESR) SPECIFIED INCLUDING HOLE PREPARATION, TEMPERATURE AND MOISTURE CONDITIONS.
3. ADHESIVE ANCHORS:
   A. THE CONTRACTOR SHALL ARRANGE ANCHOR MANUFACTURER'S REPRESENTATIVE TO PROVIDE ONSITE INSTALLATION TRAINING FOR ALL ANCHOR PRODUCTS SPECIFIED. THE CONTRACTOR MUST MAINTAIN TRAINING RECORDS OF ALL CONTRACTOR PERSONNEL INSTALLING ANCHORS AND SUBMIT TO THE ENGINEER OF RECORD PRIOR TO INSTALLING ANCHORS UPON REQUEST.
   B. ADHESIVE ANCHORS SHALL BE USED IN CONJUNCTION WITH THE APPROPRIATE ADHESIVE SYSTEM. STANDARD REINFORCING STEEL ANCHORED IN CONCRETE SHALL BE IN ACCORDANCE WITH ASTM A615 GRADE 60 UNLESS NOTED OTHERWISE.
   C. APPROVED ADHESIVE ANCHORS FOR PREVIOUSLY CAST CONCRETE:

MANUFACTURER/PRODUCT	REPORT NUMBER
HILTI HIT-HY200 SSS* WITH HIT-Z ROD	ICC-ES ESR-3187
HILTI HIT-HY200 SSS* WITH HOLLOW BIT & HAS-E ROD	ICC-ES ESR-3187
HILTI HIT-HY200 SSS* WITH HOLLOW BIT & STEEL REINFORCING *SAFE SET SYSTEM	ICC-ES ESR-3187
SIMPSON STRONG-TIE SET-XP WITH SPEED CLEAN DXS SYSTEM	ICC-ES ESR-2508
SIMPSON STRONG-TIE AT-XP WITH SPEED CLEAN DXS SYSTEM	IAPMO-UES ER-263

   D. APPROVED ADHESIVE ANCHORS FOR GROUTED MASONRY

MANUFACTURER/PRODUCT	REPORT NUMBER
HILTI HIT-HY 70 SAFE SET SYSTEM WITH HAS-E ROD	ICC-ES ESR-2682
SIMPSON STRONG-TIE SET	IAPMO-UES ER-265
SIMPSON STRONG-TIE AT	IAPMO-UES ER-281

   E. APPROVED ADHESIVE ANCHORS FOR BRICK MASONRY

MANUFACTURER/PRODUCT	REPORT NUMBER
HILTI HIT-HY 70 SAFE SET SYSTEM WITH HAS-E ROD	ICC-ES ESR-3342
SIMPSON STRONG-TIE SET	ICC-ES ESR-1772
SIMPSON STRONG-TIE AT	ICC-ES ESR-1958

4. EXPANSION ANCHORS:
   A. APPROVED EXPANSION ANCHORS FOR PREVIOUSLY CAST CONCRETE:

MANUFACTURER/PRODUCT	REPORT NUMBER
HILTI KWIK BOLT TZ	ICC-ES ESR-1917
SIMPSON STRONG-TIE STRONG BOLT 2	ICC-ES ESR-3037

5. POWDER ACTUATED FASTENERS
   A. WHEN CALLED FOR ON THE PLANS, THE APPROVED ANCHORS ARE:

MANUFACTURER AND PRODUCT	USE	REPORT NUMBER
HILTI X-CP-72	TREATED WOOD 2X TO CONCRETE	ICC-ES ESR-2379
HILTI X-GN (1" EMBED)	METAL STUD TRACK TO CONCRETE	ICC-ES ESR-1752
HILTI X-EGN	METAL STUD TRACK TO STEEL	ICC-ES ESR-1752
HILTI* X-EDNK22 THQ12 (1/8<t<1/4)	METAL DECK TO STEEL	ICC-ES ESR-2197
X-EDN-19 THQ12 (3/16<t<3/8)		ICC-ES ESR-2776
X-ENP-19 L15 (t<1/4)		
HILTI* ENP2-21 L15		
SIMPSON STRONG-TIE PDPAW	TREATED WOOD 2X TO CONCRETE	ICC-ES ESR-2138
SIMPSON STRONG-TIE PDPA	METAL STUD TRACK TO CONCRETE	ICC-ES ESR-2138
SIMPSON STRONG-TIE PDPA	METAL STUD TRACK TO STEEL	ICC-ES ESR-2138

   * ALL FASTENERS SHALL MEET THE MINIMUM FULLY SEATED DEPTH INDICATED BY THE HILTI DEPTH GAUGE. NO EXCEPTIONS WILL BE APPROVED.

STRUCTURAL WOOD

1. ALL WOOD STRUCTURES HAVE BEEN DESIGNED IN ACCORDANCE WITH THE BUILDING CODE AND THE LATEST EDITION OF THE NATIONAL SPECIFICATION FOR WOOD CONSTRUCTION (NDS).
2. THIS STRUCTURE IS DESIGNED AS CONVENTIONAL FIELD FRAMED CONSTRUCTION. SHOULD PANELIZED CONSTRUCTION BE USED, THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL ENGINEERING, COORDINATION WITH ALL OTHER BUILDING SYSTEMS AND REVIEW OF SHOP DRAWINGS. COORDINATION AND REVIEW OF PANELIZED CONSTRUCTION SHOP DRAWINGS ARE NOT INCLUDED IN THE ENGINEER OF RECORD'S SCOPE OF SERVICES FOR THIS PROJECT. REQUESTS FOR INFORMATION PERTAINING TO, OR DIRECTLY ASSOCIATED WITH, PANELIZED CONSTRUCTION WILL NOT BE REVIEWED.
3. GLUE LAMINATED (GLULAM) MEMBERS AND CONNECTIONS SHALL BE DESIGNED BY THE MANUFACTURER FOR THE LOADS SHOWN ON THE DRAWINGS AND IN ACCORDANCE WITH THE AITC SPECIFICATIONS AND RECOMMENDATIONS.
   A. GLULAM MEMBERS SHALL BE CAMBERED IN ACCORDANCE WITH AITC SPECIFICATIONS AND RECOMMENDATIONS.
   B. GLULAM DECKING SHALL BE 3X6 NOMINAL (UNLESS NOTED OTHERWISE) AND INSTALLED IN A CONTROLLED RANDOM LAYUP PATTERN, PERPENDICULAR TO THE SUPPORTS. EACH DECKING MEMBER SHALL BE CONTINUOUS OVER A MINIMUM OF THREE SPANS. DECKING SHALL BE SCREWED TO SUPPORTING MEMBERS. ALL GLULAM MEMBER CALCULATIONS AND CONNECTION DETAILS SHALL BE SUBMITTED FOR APPROVAL PRIOR TO FABRICATION. THE GLULAM MEMBER CALCULATIONS AND CONNECTION DETAILS SHALL BE SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED.
4. MANUFACTURED WOOD PRODUCTS SHALL BE BY I-LEVEL UNLESS NOTED OTHERWISE.
5. THE DESIGN OF THE STRUCTURE IS BASED UPON THE USE OF THE FOLLOWING WOOD PRODUCTS:

USE	WOOD TYPE	GRADE	Fb (PSI)	Fcp (PSI)	E (PSI)
GLULAM	DF/DF	16F-V2	1,600	1,550	1,400,000
GLULAM DECKING	DF/DF	---------	--------	---------	1,800,000

   ALL MEMBERS SHALL BE SURFACED DRY AND HAVE A MAXIMUM MOISTURE CONTENT OF 19%. STRESS INCREASE SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NDS.
   A. ROOF SHEATHING SHALL BE 15/32" (19/32" FOR 32" O.C. SPACING OF FRAMING) APA RATED PLYWOOD OR ORIENTED STRAND BOARD, 32/16 (40/20 FOR 32" O.C. SPACING OF FRAMING) SPAN RATING, EXPOSURE 1, LAID IN A CONTROLLED RANDOM STAGGERED PATTERN, WITH EDGE CLIPS BETWEEN SUPPORTS, LONG PANEL DIMENSION PERPENDICULAR TO THE FRAMING MEMBERS, AND CONTINUOUS OVER A MINIMUM OF THREE SUPPORTS. ALLOW FOR 1/8" GAP AT ALL PANEL EDGE AND END JOINTS UNLESS OTHERWISE RECOMMENDED BY MANUFACTURER. [NOTE: USE SOLID BLOCKING IN LIEU OF EDGE CLIPS FOR SUPPORTING MEMBERS SPACING GREATER THAN 2'-0" OR WHERE HIGH LOAD DIAPHRAGM IS REQUIRED.]
   A. FLOOR SHEATHING SHALL BE 25/32" APA RATED STURD-I-FLOOR, 48/24 SPAN RATING, EXPOSURE 1, TONGUE AND GROOVE. FLOOR SHEATHING SHALL BE INSTALLED IN A STAGGERED PATTERN WITH TH LONG PANEL DIMENSION PERPENDICULAR TO THE FRAMING MEMBERS AND CONTINUOUS OVER A MINIMUM OF THREE SUPPORTS.
   B. ALL WOOD PRODUCTS IN DIRECT CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED WITH CCA-C, ACQ, CBA-A, CA-B OR SBX AND SHALL NOT BE IN CONTACT WITH SOIL.
6. CONNECTIONS SHALL MEET THE FOLLOWING REQUIREMENTS:
   A. ALL BOLTS SHALL BE ASTM A307. WASHERS WITH AN OUTSIDE DIAMETER EQUAL TO AT LEAST TWICE THE BOLT DIAMETER ARE REQUIRED BETWEEN THE BOLT HEAD OR NUT AND THE WOOD SURFACE.
   B. ALL FASTENERS (SCREWS, NAILS, BOLTS, ETC.) AND CONNECTORS INSTALLED IN CONTACT WITH PRESSURE TREATED LUMBER SHALL MEET THE REQUIREMENTS OF THE "COMPATIBILITY OF FASTENERS AND CONNECTORS WITH PRESSURE TREATED LUMBER" TABLE.
   C. GLULAM DECKING SHALL BE FASTENED WITH (2)-#12 x 5" FLAT HEAD WOOD SCREWS FOR EACH COURSE PERPENDICULAR TO SUPPORTS AND WITH #12 x 5" FLAT HEAD WOOD SCREWS AT 3" O.C. FOR DECK COURSING PARALLEL TO SPAN. PROVIDE ELASTROMERIC ADHESIVE AT ALL TONGUE AND GROOVE JOINTS AND TOENAIL WITH #12 x 3" FLAT HEAD WOOD SCREWS AT 30" O.C., STAGGERED ON ADJACENT COURSE EDGES.
   D. ALL MANUFACTURED CONNECTORS SHALL BE BY SIMPSON STRONG-TIE COMPANY, INC., OR U.S.P., AND CONNECTED WITH THE FASTENERS SPECIFIED BY THE MANUFACTURER.
   E. FASTEN MULTIPLE LAYER MANUFACTURED WOOD MEMBERS TOGETHER IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
7. PROVIDE BRIDGING AT 8'-0" O.C. MAXIMUM FOR JOISTS AND RAFTERS USING SOLID BLOCKING UNLESS RIGID CEILING IS FASTENED DIRECTLY TO THE JOIST OR RAFTER.
8. HOLES SHALL BE PREDRILLED FOR ALL WOOD SCREW CONNECTIONS. PREDRILLED HOLE DIAMETERS SHALL BE:

SCREW DIAMETER	HOLE DIAMETER
NO. 8	3/32"
NO. 10	7/64"
NO. 12	1/8"

9. HOLES SHALL BE PREDRILLED FOR ALL LAG SCREW CONNECTIONS WITH LAG SCREWS GREATER THAN 3/8" DIAMETER. PREDRILLED HOLE DIAMETER SHALL EQUAL 60% OF THE SHANK DIAMETER. PREDRILLED HOLE DEPTH SHALL EQUAL THE LENGTH OF THE THREADED PORTION.

CONTRACT/CONSTRUCTION DOCUMENTS

1. THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN A FULL SET OF THE MOST RECENT REVISIONS OF EACH DOCUMENT INCLUDING ALL PLANS, SPECIFICATIONS, ADDENDA, AND SUPPLEMENTAL INSTRUCTIONS.
2. THE CONSTRACTOR SHALL REVIEW THE DOCUMENTS PRIOR TO FABRICATION AND/OR INSTALLATION OF ANY MATERIALS FOR CONFLICTS. IF CONFLICTS OCCUR THE CONTRACTOR SHALL USE THE MOST STRINGENT REQUIREMENT OR REQUEST A CLARIFICATION THROUGH A REQUEST FOR INFORMATION (RFI).
3. THE DOCUMENTS MAY NOT BE REPRODUCED IN WHOLE OR IN PART FOR USE ON PROJECTS OTHER THEN IDENTIFIED IN THE TITLE BLOCK. SHOULD THE CONTRACTOR USE THE DOCUMENTS AS A PORTION OF A SHOP DRAWING SUBMITTAL, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CONSEQUENCES RESULTING FROM ERRORS IN THE REPRODUCED DOCUMENTS.
4. DETAILS LABELED TYPICAL ARE INTENDED TO REPRESENT A CONDITION THAT OCCURS AT SEVERAL LOCATIONS IN THE PLANS WHETHER OR NOT THE DETAIL IS REFERENCED.
5. DO NOT SCALE THE PLANS AND DETAILS FOR THE PURPOSE OF ESTABLISHING DIMENSIONS.

CONTRACTOR'S RESPONSIBILITY

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING ALL SUB-CONTRACTOR SUBMITTALS AND NOTING ALL DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS PRIOR TO SUBMITTING TO THE ENGINEER FOR REVIEW.
2. SUBSTITUTION REQUESTS SHALL BE SUBMITTED IN WRITING WITH THE COST REDUCTION AMOUNT AND THE SCHEDULE IMPACT FOR THE OWNER (SUBMITTALS WITHOUT THE COST AND SCHEDULE IMPACT WILL NOT BE REVIEWED). A COMPARISON OF THE DATA WITH THE MATERIAL SPECIFIED INCLUDING CODE APPROVALS SHALL BE PROVIDED.
3. REQUESTS FOR INFORMATION (RFI) SHALL BE SUBMITTED IN WRITING WITH COST, SCHEDULE IMPACT AND SUGGESTED SOLUTION INCLUDED. AN RFI THAT DOES NOT INCLUDE THE COST AND SCHEDULE IMPACT WILL NOT BE REVIEWED.
4. DEFECTIVE WORK REPORT (DWR) SHALL BE SUBMITTED TO THE ENGINEER WITHIN (2) WORKING DAYS OF THE OCCURENCE. THE DWR SHALL REPORT THE DEFECT AND PROPOSE A REMEDIATION OF THE DEFECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE REMEDIATION OF THE DEFECT INCLUDING ENGINEERING COSTS, IF ANY.
5. WHEN THE CONTRACTOR BECOMES AWARE OF WHAT MAY BE AN UNFORSEEN CONDITION THAT COULD AFFECT COST OR SCHEDULE, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING WITHIN (2) WORKING DAYS. AFTER REVIEW AND ENGINEER'S DETERMINATION THAT AN UNFORSEEN CONDITION EXISTS; THE CONTRACTOR SHALL SUBMIT A CHANGE ORDER REQUEST FOR APPROVAL WITH BOTH COST AND SCHEDULE IMPACT ATTACHED.
6. THE CONTRACTOR'S SCHEDULE MUST PROVIDE A REASONABLE TIME ALLOWANCE FOR THE ENGINEERING REVIEW AND APPROVAL.
7. THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR SITE SAFETY. THE ENGINEER IS RESPONSIBLE FOR FOLLOWING THE CONTRACTOR'S CONSTRUCTION SITE SAFETY INSTRUCTIONS PROVIDED IN WRITING. ALTERNATELY, THE CONTRACTOR SHALL ASSIGN AN ESCORT TO ADVISE THE ENGINEER OF SITE SAFETY ISSUES DURING SITE VISITS. THE ENGINEER'S PURPOSE OF A SITE VISIT IS SOLELY TO BECOME FAMILIAR WITH THE GENERAL PROGRESS AND QUALITY OF THE PROJECT. THE ENGINEER'S SITE VISIT IS NOT A QUALITY CONTROL FUNCTION.

CONSTRUCTION MEANS AND METHODS ISSUES

1. SLAB ON GRADE AND ELEVATED SLABS ARE NOT DESIGNED TO SUPPORT CRANES, FORKLIFTS, TRUCKS, MANLIFTS OR OTHER CONSTRUCTION RELATED EQUIPMENT UNLESS NOTED AS SUCH. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE IF CONSTRUCTION EQUIPMENT CAN BE SAFELY OPERATED ON THESE SLABS AND TO REPAIR ANY DAMAGE THE EQUIPMENT MAY CAUSE.
2. THE CONSTRUCTION DOCUMENTS REPRESENT A STABLE STRUCTURE IN THE COMPLETED FORM. THE CONTRACTOR SHALL PROVIDE ANY TEMPORARY BRACING AND/OR SHORES TO SAFELY CONSTRUCT THE BUILDING AND PREVENT DAMAGE DURING CONSTRUCTION.
3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS OF EXISTING CONSTRUCTION THAT MAY AFFECT THE PROJECT AND REPORT DISCREPENCIES TO THE ENGINEER. ANY DIMENSIONS FOR ELEVATIONS THAT IMPACT NEW WORK SHALL BE VERIFIED PRIOR TO FABRICATION OF ANY MATERIAL. EXISTING BUILDING ELEMENTS THAT ARE TO BE ABANDONED THAT INTERFERE WITH NEW CONSTRUCTION SHALL BE REMOVED.
4. WHEN A PIECE OF EQUIPMENT (HVAC, ELECTRICAL, KITCHEN, ETC.) IS PROVIDED THAT IS DIFFERENT THAN THE EQUIPMENT THAT THE STRUCTURE WAS DESIGNED FOR EITHER BY SIZE, WEIGHT OR CONFIGURATION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE REMEDY OF THE SITUATION. THOSE COSTS SHALL INCLUDE THE ENGINEERING COSTS TO REDESIGN PORTIONS OF THE STRUCTURE TO ACCOMODATE THE SUBSTITUTED EQUIPMENT.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STRUCTURAL DESIGN AND MATERIALS FOR ATTACHING NON-STRUCTURAL ELEMENTS TO ANY PORTION OF THE STRUCTURE TO RESIST ALL LOADS, INCLUDING SEISMIC, IN A WAY THAT DOES NOT OVERSTRESS STRUCTURAL MEMBERS. NON-STRUCTURAL ELEMENTS CAN BE FOUND IN EACH OF THE OTHER DISCIPLINES (ARCHITECTURAL, MECHANICAL, ELECTRICAL, ETC.)

STRUCTURAL TESTS, INSPECTIONS, AND QUALITY ASSURANCE

ALL STRUCTURAL TESTS AND INSPECTIONS SHALL BE PERFORMED PER CHAPTER 17 OF THE BUILDING CODE WITH LOCAL SUPPLEMENTS, UNLESS MORE STRINGENT REQUIREMENTS ARE SPECIFIED.

TABLE A - REINFORCEMENT LAPS, EMBEDMENTS AND HOOK LENGTHS
fy = 60000 psi f'c = 4000 psi

BAR SIZE (d)	CLEAR SPACING (S) (in.)			EMBEDMENT & CLASS A LAP (in.)				CLASS B LAP (in.)				HOOK EMBED (in.)
				TOP BAR		OTHER BARS		TOP BAR		OTHER BARS		
	2d	3d	5d	2d<S<3d	S≥3d	2d<S<3d	S≥3d	2d<S<3d	S≥3d	2d<S<3d	S≥3d	
3	3/4	1 1/8	1 7/8	28	18	21	14	36	24	28	18	8
4	1	1 1/2	2 1/2	37	25	28	19	48	32	37	25	10
5	1 1/4	1 7/8	3 1/8	46	31	36	24	60	40	46	31	12
6	1 1/2	2 1/4	3 3/4	55	37	43	28	72	48	55	37	15
7	1 3/4	2 5/8	4 3/8	81	54	62	42	105	70	81	54	18
8	2	3	5	92	62	71	47	120	80	92	62	20
9	2 1/4	3 3/8	5 5/8	104	70	80	54	136	90	104	70	22
10	2 1/2	3 3/4	6 3/8	117	78	90	60	153	102	117	78	25
11	2 7/8	4 1/4	7	130	87	100	67	170	113	130	87	27

NOTES
1. LENGTHS SHOWN CONFORM WITH NON-SEISMIC PROVISIONS OF ACI 318 FOR UNCOATED BARS.
2. BAR CLEAR SPACING IS THE CENTER TO CENTER BAR SPACING MINUS ONE BAR DIAMETER.
3. CLASS A LAP LENGTHS APPLY WHEN BAR LAPS ARE STAGGERED TO LAP HALF THE BARS AT THE SAME LOCATION. USE CLASS B LAP FOR ALL OTHER CASES.
4. TOP BARS ARE HORIZONTAL REINFORCEMENT PLACED SO THAT MORE THAN 12 INCHES OF CONCRETE IS CAST BELOW THE REINFORCEMENT.
5. MULTIPLY LAP AND EMBEDMENT LENGTHS GIVEN BY 2.0 FOR BARS WITH CLEAR SPACING OF TWO BAR DIAMETERS OR LESS, OR CONCRETE COVER OF ONE BAR DIAMETER OR LESS.

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:
--

MONTANA — MICHAEL W. KELSO — NO. 9700005PE — 02/01/2020 — PROFESSIONAL ENGINEER — LICENSED

ARCHITECT/ENGINEERS:
HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **GENERAL NOTES**
Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**
Date: **09/04/2020** | Checked: **MWK** | Drawn: **JBR**

Project Number: **H IH BLAC 19100**
Building Number:
Drawing Number: **S0.2**

INDIAN HEALTH SERVICE · PHS · 1955 ·

TMS 402 / 602-16

REQUIRED QUALITY ASSURANCE PROTOCAL FOR MASONRY CONSTRUCTION

MINIMUM VERIFICATION REQUIREMENTS

Minimum Verification	REQUIRED FOR QUALITY ASSURANCE[a]			REFERENCE FOR CRITERIA	
	Level 1	Level 2	Level 3		TMS 602
Prior to construction, verification of compliance of submittals.	R	R	R		Art. 1.5
Prior to construction verification of f'_m and f'_{AAC} except where specifically exempted by the Code.	NR	R	R		Art. 1.4 B
During construction, verification of Slump flow and Visual Stability Index (VSI) when self-consolidating grout is delivered to the project site.	NR	R	R		Art. 1.5 & 1.6.3
During construction, verification of f'_m and f'_{AAC} for every 5,000 sq. ft (465 sq. m).	NR	NR	R		Art. 1.4 B
During construction verification of proportions of materials as delivered to the project site for premixed or preblended mortar, prestressing grout, and grout other than self-consolidation grout.	NR	NR	R		Art. 1.4 B

[a] R = Required, NR = Not Required

MINIMUM SPECIAL INSPECTION

Inspection Task	FREQUENCY[a]			REFERENCE FOR CRITERIA	
	Level 1	Level 2	Level 3	TMS 402	TMS 602
1. As masonry constructon begins, verify that the following are in compliance:					
a. Proportions of site-prepared mortar	NR	P	P		Art. 2.1, 2.6 A & 2.6 C
b. Grade and size of prestressing tendons and anchorages	NR	P	P		Art. 2.4B & 2.4 H
c. Grade, type and size of reinforcement, connectors, anchor bolts, and prestressing tendons and anchorages	NR	P	P		Art. 3.4 & 3.6 A
d. Prestressing technique	NR	P	P		Art. 3.6 B
e. Properties of thin-bed mortar for AAC masonry	NR	C[b]/P[c]	C		Art. 2.1 C.1
f. Sample panel construction	NR	P	C		Art. 1.6 D
2. Prior to grouting, verify that the following are in compliance:					
a. Grout space	NR	P	C		Art. 3.2 D & 3.2 F
b. Placement of prestressing tendons and anchorages	NR	P	P	Sec. 10.8 & 10.9	Art. 2.4 & 3.6
c. Placement of reinforcement, connectors, and anchor bolts	NR	P	C	Sec. 6.1, 6.3.1, 6.3.6 & 6.3.7	Art. 3.2 E & 3.4
d. Proportions of site-prepared grout and prestressing grout for bonded tendons	NR	P	P		Art. 2.6 B & 2.4 G.1.b
3. Verify compliance of the following during construction:					
a. Materials and procedures with the approved submittals	NR	P	P		Art. 1.5
b. Placement of masonry units and mortar joint construction	NR	P	P		Art. 3.3 B
c. Size and location of structural members	NR	P	P		Art. 3.3 F
d. Type, size and location of anchors, including other details of anchorage of masonry to structural members, frames, or other construction	NR	P	C	Sec. 1.2.1 (e), 6.2.1 & 6.3.1	
e. Welding reinforcement	NR	C	C	Sec. 6.1.6.1.2	
f. Preparation, construction, and protection of masonry during cold weather (temperature below 40°F(4.4°C)) or hot weather (temperature above 90°F (32.2°C))	NR	P	P		Art. 1.8 C & 1.8 D
g. Application and measurement of prestressing force	NR	C	C		Art. 3.6 B
h. Placement of grout and prestressing grout for bonded tendons is in compliance	NR	C	C		Art. 3.5 & 3.6 C
i. Placement of AAC masonry units and construction of thin-bed mortar joints	NR	C[b]/P[c]	C		Art. 3.3 B.9, & 3.3 F.1.b
4. Observe preparation of grout specimens, mortar specimens, and/or prisms	NR	P	C		Art. 1.4 B.2.a.3, 1.4 B.2.b.3, 1.4 B.2.c.3, 1.4 B.3 & 1.4 B.4

(a) Frequency refers to the frequency of inspection, which may be continuous during the task listed or periodically during the listed task, as defined in the table.
NR = Not Required, P = Periodic, C = Continuous
(b) Required for the first 5000 square feet (465 square meters) of AAC masonry
(c) Required after the first 5000 square feet (465 square meters) of AAC masonry

REQUIRED SPECIAL INSPECTIONS AND TESTS OF STRUCTURAL STEEL FOR WELDING PROCESS

Inspection Tasks Prior to Welding

Inspection Tasks Prior to Welding	QUALITY CONTROL	QUALITY ASSURANCE
Welding procedure specifications (WPSs) available	P	P
Manufacturer certifications for welding consumables available	P	P
Material identification (type/grade)	O	O
Welder identification system[1]	O	O
Fit-up of groove welds (including joint geometry) • Joint preparation • Dimensions (alignment, root opening, root face, bevel) • Cleanliness (condition of steel surfaces) • Tacking (tack weld quality and location) • Backing type and fit (if applicable)	O	O
Configuration and finish of access holes	O	O
Fit-up of fillet welds • Dimensions (alignment, gaps at root) • Cleanliness (condition of steel surfaces) • Tacking (tack weld quality and location)	O	O
Check welding equipment	O	--

Inspection Tasks During Welding

Inspection Tasks During Welding	QUALITY CONTROL	QUALITY ASSURANCE
Use of qualified welders	O	O
Control and handling of welding consumables • Packaging • Exposure Control	O	O
No welding over cracked tack welds	O	O
Environmental conditions • Wind speed within limits • Precipitation and temperature	O	O
WPS followed • Settings on welding equipment • Travel speed • Selected welding materials • Shielding gas type/flow rate • Preheat applied • Interpass temperature maintained (min/max) • Proper position (F, V, H, OH)	O	O
Welding Techniques • Interpass and final cleaning • Each pass within profile limitations • Each pass meets quality requirements	O	O

Inspection Tasks After Welding

Inspection Tasks After Welding	QUALITY CONTROL	QUALITY ASSURANCE
Welds cleaned	O	O
Size, length and location of welds	P	P
Welds meet visual acceptance criteria • Crack prohibition • Weld/base-metal fusion • Crater cross section • Weld profiles • Weld size • Undercut • Porosity	P	P
Arc strikes	P	P
k-area[2]	P	P
Backing removed and weld tabs removed (if required)	P	P
Repair activities	P	P
Document acceptance or rejection of welded joint or member	P	P

Quality Control - Requirements on the part of the steel fabricator and erector.
Quality Assurance - Requirements on the part of the project owner's representative.
P - Perform these tasks for each weld joint or member.
O - Observe these items on a random basis. Operations need not be delayed pending these inspections
[1] - The fabricator or erector, as applicable, shall maintain a system by which a welder who has welded a joint or member can be identified. Stamps, if used, shall be the low-stress type.
[2] - When welding of doubler plates, continuity plates or stiffeners has been performed in the k-area, visually inspect the web k-area for cracks within 3 inches (75 mm) of the weld.

REQUIRED SPECIAL INSPECTIONS AND TESTS OF STRUCTURAL STEEL FOR BOLTING PROCESS

Inspection Tasks Prior to Bolting

Inspection Tasks Prior to Bolting	QUALITY CONTROL	QUALITY ASSURANCE
Manufacturer certifications available for fastener materials	O	P
Fasteners marked in accordance with ASTM requirements	O	O
Proper fasteners selected for the joint detail (grade, type, bolt length if threads are to be excluded from shear plane)	O	O
Proper bolting procedure selected for joint detail	O	O
Connecting elements, including the appropriate faying surface condition and hole preparation, if specified, meet applicable requirements	O	O
Pre-installation verification testing by installation personnel observed and documented for fastener assemblies and methods used	P	O
Proper storage provided for bolts, nuts, washers and other fastener components	O	O

Inspection Tasks During Bolting

Inspection Tasks During Bolting	QUALITY CONTROL	QUALITY ASSURANCE
Fastener assemblies, of suitable condition, placed in all holes and washers (if required) are positioned as required	O	O
Joint brought to the snug-tight condition prior to the pretensioning operation	O	O
Fastener component not turned by the wrench prevented from rotating	O	O
Fasteners are pretentioned in accordance with the RCSC Specification, progressing systematically from the most rigid point toward the free edges	O	O

Inspection Tasks After Bolting

Inspection Tasks After Bolting	QUALITY CONTROL	QUALITY ASSURANCE
Document acceptance or rejection of bolted connections	P	P

Quality Control - Requirements on the part of the steel fabricator and erector.
Quality Assurance - Requirements on the part of the project owner's representative.
P - Perform these tasks for each weld joint or member.
O - Observe these items on a random basis. Operations need not be delayed pending these inspections

Special Inspection Additional Requirements:

- Additional items that need special inspection, in the opinion of the building official, shall be inspected.

- Coordination of Special Inspections with construction of the inspected items shall be the responsibility of the contractor.

- If Special Inspection is waived by the Authority having Jurisdiction, the general contractor shall provide the designer of record with a copy of the written exemption for each item that has been waived.

- The building official may perform inspections in addition to and/or concurrently with the Special Inspection's outlined in the tables.

- The general contractor is responsible for implementing a quality control program. The quality control program is in addition to the Special Inspection requirements and must meet or exceed those responsibilities required as part of the contract drawings and specifications.

REQUIRED SPECIAL INSPECTIONS AND TESTS OF SOILS

TYPE	FREQUENCY
1. Verify materials below shallow foundations are adequate to achieve the design bearing capacity.	Periodic
2. Verify excavations are extended to proper depth and have reached proper material.	Periodic
3. Perform classification and testing of compacted fill materials.	Periodic
4. Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill.	Continuous
5. Prior to placement of compacted fill, inspect subgrade and verify that site has beem prepared properly.	Periodic

REQUIRED SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION

TYPE	FREQUENCY	REFERENCED STANDARD	IBC REFERENCE
1. Inspect reinforcement, including prestressing tendons, and verify placement.	Periodic	ACI 318 Ch. 20, 25.2, 25.3, 26.6.1-26.6.3	1908.4
2. Reinforcing bar welding:		AWS D1.4	
a. Verify weldability of reinforcing bars other than ASTM A706	Periodic	ACI 318: 26.6.4	—
b. Inspect single-pass fillet welds, maximum 5/16"; and	Periodic		
c. Inspect all other welds.	Continuous		
3. Inspect anchors cast in concrete.	Periodic	ACI 318: 17.8.2	
4. Inspection of anchors post installed in hardened concrete members.[b]			
a. Adhesive anchors installed in horizontally or upwardly inclined orientations to resist sustained tension loads.	Continuous	ACI 318: 17.8.2.4	—
b. Mechanical anchors and adhesive anchors not defined in 4.a.	Periodic	ACI 318: 17.8.2	
5. Verify use of required design mix.	Periodic	ACI 318: Ch. 19, 26.4.3, 26.4.4	1904.1, 1904.2 1908.2, 1908.3
6. Prior to concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete.	Continuous	ASTM C172, ASTM C31, ACI 318: 26.5, 26.12	1908.10
7. Inspection of concrete and shotcrete placement for proper application techniques.	Continuous	ACI 318: 26.5	1908.6, 1908.7, 1908.8
8. Verify maintenance of specified curing temperature and techniques.	Periodic	ACI 318: 26.5.3-26.5.5	1908.9
9. Inspection of prestressed concrete for:			
a. Application of prestressing forces; and	Continuous	ACI 318: 26.10	—
b. Grouting of bonded prestressing tendons.	Continuous	ACI 318: 26.10	
10. Inspect erection of precast concrete members.	Periodic	ACI 318: Ch. 26.9	
11. Verify in-situ concrete strength, prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beams and structural slabs.	Periodic	ACI 318: 26.11.2	—
12. Inspect formwork for shape, location and dimensions of the concrete member being formed.	Periodic	ACI 318: 26.11.1.2(b)	—

(a) Where applicable, see Section 1705.12, Special inspections for seismic resistance.
(b) Specific requirements for special inspection shall be included in the research report for the anchor issued by an approved source in accordance with 17.8.2 in ACI 318, or other qualification procedures. Where specific requirements are not provided, special inspection requirements shall be specified by the registered design professional and shall be approved by the building official prior to the commencement of the work.

REQUIRED SPECIAL INSPECTIONS OF STEEL CONSTRUCTION OTHER THAN STRUCTURAL STEEL

TYPE	FREQUENCY	REFERENCED STANDARD
1. Material verification of cold-formed steel deck:		
a. Identification markings to conform to ASTM standards specified in the approved construction documents.	Periodic	Applicable ASTM material standards
b. Manufacturer's certified test reports.	Periodic	
2. Inspection of welding:		
a. Cold-formed steel deck:		
1) Floor and roof deck welds.	Periodic	AWS D1.3

Revisions:	Date
ADDENDUM 001 (1)	02/02/2022

CONSULTANTS:
--

ARCHITECT/ENGINEERS:
HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

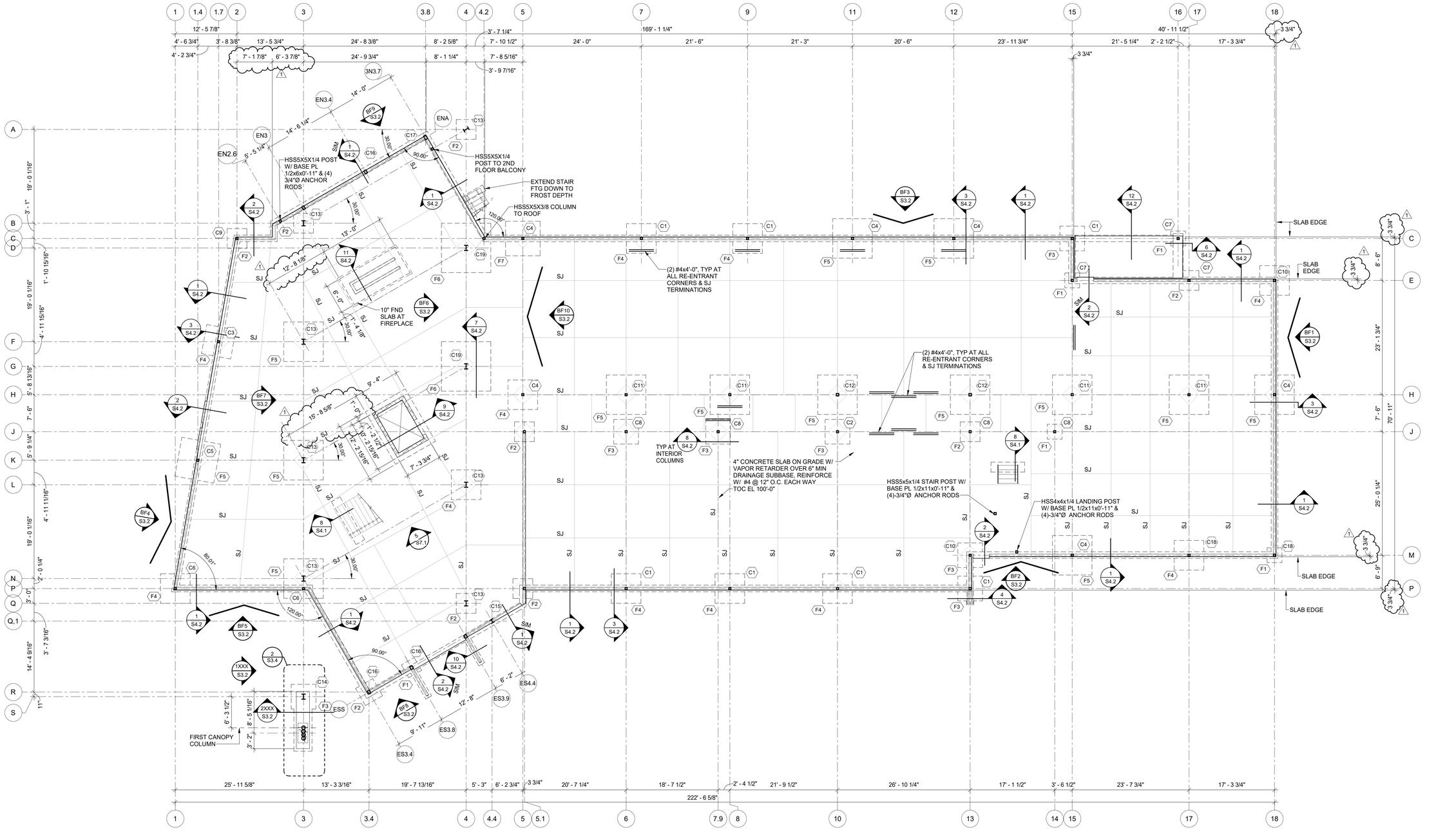
Drawing Title: **INSPECTION TABLES**
Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**
Date: **09/04/2020** Checked: **MWK** Drawn: **JBR**

Project Number: **H IH BLAC 19100**
Building Number:
Drawing Number: **S0.3**

INDIAN HEALTH SERVICE · PHS · 1955 ·



FOUNDATON PLAN NOTES:

1. TOP OF FOUNDATION 99'-4" UNLESS NOTED OTHERWISE.
2. SEE SHEET S0.1 AND S0.2 FOR GENERAL STRUCTURAL NOTES AND SHEET S0.3 FOR SPECIAL INSPECTION REQUIREMENTS.
3. CENTER ALL COLUMN FOOTINGS BELOW GRID LINE INTERSECTIONS UNLESS SHOWN OR NOTED OTHERWISE.
4. SEE SHEET S4.1 FOR TYPICAL FOUNDATION DETAILS.
5. PROVIDE 1/2" EXPANSION JOINT MATERIAL BETWEEN EXTERIOR CONCRETE AND THE BUILDING, TYPICAL.
6. REFERENCE MECHANICAL DRAWINGS FOR MISCELLANEOUS FLOOR DRAINS AND OTHER SLAB PENETRATIONS.
7. REFERENCE ARCHITECTURAL DRAWINGS FOR NON-LOAD BEARING WALLS.

FOUNDATION PLAN MARKS:

- C# — COLUMN MARK, REFERENCE COLUMN SCHEDULE, SHEET S3.1
- F# — FOOTING MARK, REFERENCE FOOTING SCHEDULE, SHEET S3.1
- BRACE FRAME, REFERENCE BRACING SCHEDULE, SHEET S3.2
- SJ — SLAB CONSTRUCTION JOINT, REFERENCE 1/ S4.1

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

--

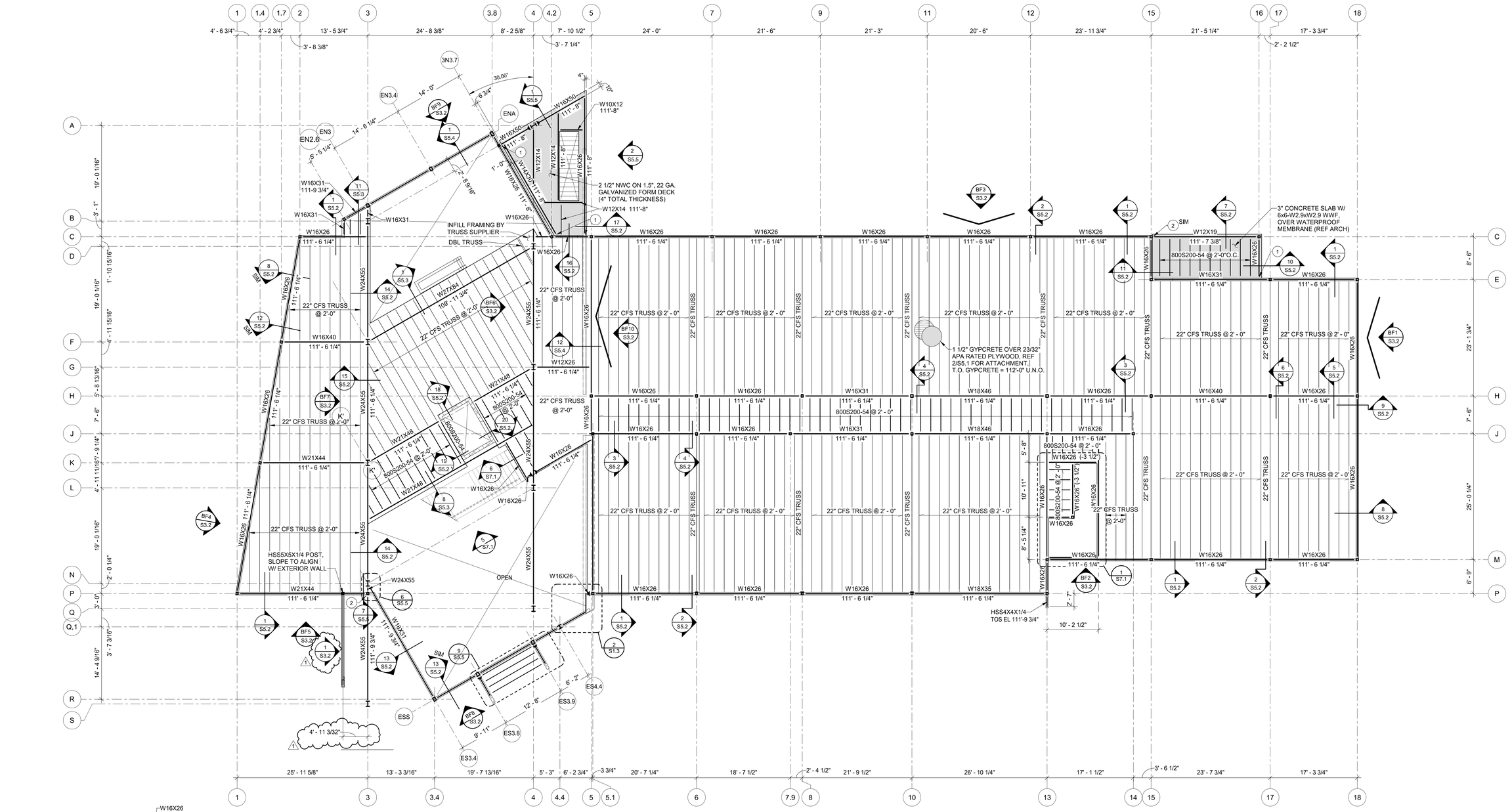
ARCHITECT/ENGINEERS:

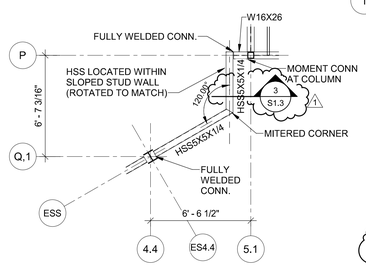
HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

MONTANA — MICHAEL W. KESO — No. 17002SE — 02/01/2022 — PROFESSIONAL ENGINEER — LICENSED

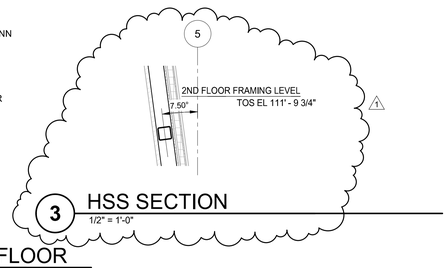
Drawing Title	**FOUNDATION PLAN**
Approved: Project Director	
Project Title	**APARTMENT BUILDING AND SITEWORK** **Contract No.:** HHSI102201800005I **Task Order No.:** 75H70119F30002
Location	**BROWNING, MONTANA**
Date	**09/04/2020**
Checked	**MWK**
Drawn	**JBR**
Project Number	**H IH BLAC 19100**
Building Number	
Drawing Number	**S1.1**

INDIAN HEALTH SERVICE · PHS · 1955 ·





2 CORNER FRAMING AT SECOND FLOOR
1/4" = 1'-0"



3 HSS SECTION
1/2" = 1'-0"

1 SECOND FLOOR FRAMING PLAN
1/8" = 1'-0"

FRAMING PLAN NOTES:

1. TOP OF STEEL ELEVATION = 111'-9 3/4" UNLESS NOTED OTHERWISE.
2. TOP OF SLAB ELEVATION = 112'-0" UNLESS NOTED OTHERWISE.
3. SEE SHEETS S0.1 AND S0.2 FOR GENERAL STRUCTURAL NOTES AND SHEET S0.3 FOR SPECIAL INSPECTION REQUIREMENTS.
4. SEE SHEET S5.1 FOR TYPICAL FRAMING DETAILS.
5. SEE SHEET S5.2 FOR TYPICAL OPENINGS IN THE FLOOR. REFERENCE MECHANICAL, ELECTRICAL AND ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATION OF OPENINGS NOT NOTED ON FRAMING PLANS. ROOF DRAINS SHALL BE CONSIDERED A ROOF OPENING.

FRAMING PLAN MARKS:

- C# — COLUMN MARK, REFERENCE COLUMN SCHEDULE, SHEET S3.1
- BRACE FRAME, REFERENCE BRACING SCHEDULE, SHEET S3.2
- MOMENT FRAME CONNECTION
- (1) DENOTES THERMAL BREAK AT BEAM CONNECTION, REFERENCE DETAIL 6/ S5.1
- (2) DENOTES THERMAL BREAK AT BEAM/COLUMN CONNECTION, REFERENCE DETAIL 7/ S5.5

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

--

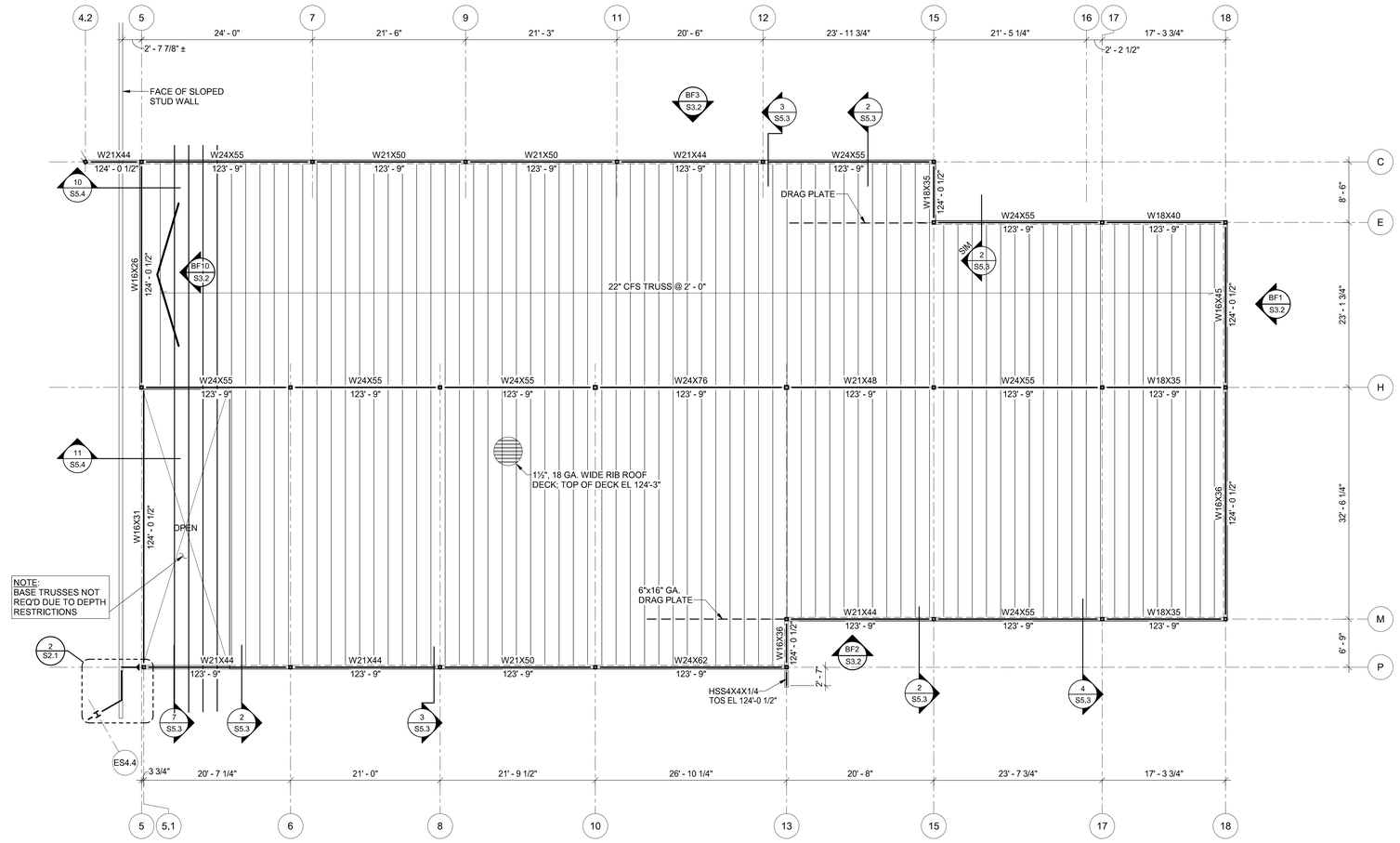
MONTANA — MICHAEL W. KELSO — 19A 31000 — 02/01/2022 — LICENSED PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

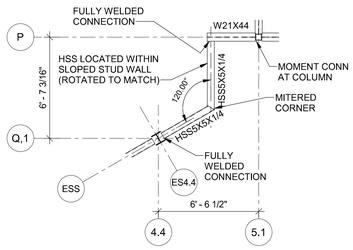
Drawing Title	**FLOOR FRAMING PLAN**
Approved: Project Director	
Project Title	**APARTMENT BUILDING AND SITEWORK**
Contract No.:	HHSI102201800005I
Task Order No.:	75H70119F30002
Project Number	**H IH BLAC 19100**
Building Number	
Location	**BROWNING, MONTANA**
Date	**09/04/2020**
Checked	**MWK**
Drawn	**JBR**
Drawing Number	**S1.3**

INDIAN HEALTH SERVICE · PHS · 1955 ·



1 ROOF PLATFORM PLAN

1/8" = 1'-0"



2 CORNER FRAMING AT ROOF PLATFORM

1/4" = 1'-0"

ADDENDUM 001 (1)	02/02/2022
Revisions:	Date

CONSULTANTS:

--

MONTANA — MICHAEL W. KESSO — No. 37000PE — 02/01/2022 — LICENSED PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **ROOF PLATFORM PLAN**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**

Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

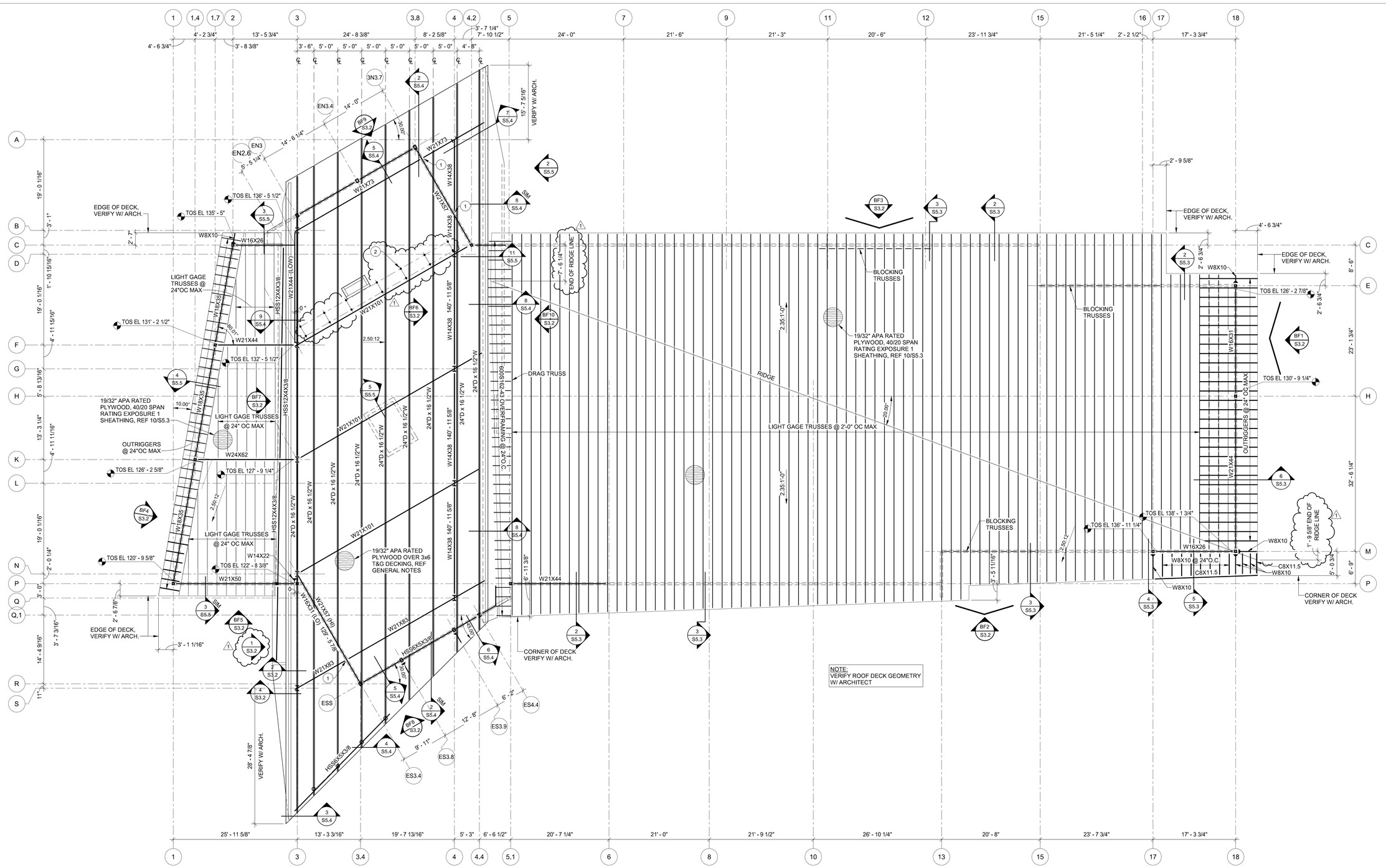
Date: **09/04/2020** | Checked: **MWK** | Drawn: **JBR**

Project Number: **H IH BLAC 19100**

Building Number:

Drawing Number: **S2.1**

INDIAN HEALTH SERVICE · PHS · 1955 ·



ROOF FRAMING PLAN NOTES:

1. SEE SHEETS S0.1 AND S0.2 FOR GENERAL STRUCTURAL NOTES AND SHEET S0.3 FOR SPECIAL INSPECTION REQUIREMENTS.
2. SEE SHEET S5.1 FOR TYPICAL FRAMING DETAILS.
3. SEE SHEET S5.1 FOR TYPICAL OPENINGS IN THE ROOF. REFERENCE MECHANICAL, ELECTRICAL AND ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATION OF OPENINGS NOT NOTED ON FRAMING PLANS. ROOF DRAINS SHALL BE CONSIDERED A ROOF OPENING.
4. VERIFY THE SIZE AND LOCATIONS OF ALL SUSPENDED MECHANICAL UNITS, ELECTRICAL UNITS, ROOF TOP UNITS AND ROOF OPENINGS WITH THE MECHANICAL AND ELECTRICAL DRAWINGS AND THE CONTRACTORS. DESIGN ROOF JOISTS FOR THE ADDITION LOADS FROM THE UNITS.

1 ROOF FRAMING PLAN

1/8" = 1'-0"

ROOF FRAMING PLAN MARKS:

- BRACE FRAME, REFERENCE BRACING SCHEDULE, SHEET S3.2
- (1) DENOTES THERMAL BREAK IN FRAMING, REFERENCE DETAIL 6/ S5.1
- (2) HANGER RODS FOR SOFFIT SUPPORT, REFERENCE DETAIL 12/ S5.5

ADDENDUM 001 (1)	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title	**ROOF FRAMING PLAN**
Approved: Project Director	
Project Title	**APARTMENT BUILDING AND SITEWORK**
Contract No.:	HHSI102201800005I
Task Order No.:	75H70119F30002
Location	**BROWNING, MONTANA**
Date	**09/04/2020**
Checked	**MWK**
Drawn	**JBR**
Project Number	**H IH BLAC 19100**
Building Number	
Drawing Number	**S2.2**

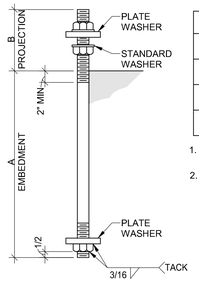
INDIAN HEALTH SERVICE · PHS · 1955 ·

COLUMN SCHEDULE

MARK (C#)	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16	C17	C18	C19
HIGH ROOF / MECHANICAL ROOF BEARING / APARTMENT ROOF BEARING / SECOND FLOOR / FINISH FLOOR EL. 100' - 0"	HSS5X5X1/4	HSS5X5X1/4	HSS5X5X1/4	HSS5X5X3/8	HSS5X5X3/8	HSS5X5X3/8	HSS5X5X1/4	HSS5X5X1/4	HSS5X5X1/4	HSS5X5X1/4	HSS5X5X1/2	HSS6X6X3/8	W12X50	W12X50	W8X31	HSS8X6X1/4	HSS10X6X1/4	HSS5X5X3/8	W12X50
BASE PLATE	2/ S3.1	2/ S3.1	2/ S3.1	3/ S3.1	3/ S3.1	3/ S3.1	2/ S3.1	2/ S3.1	2/ S3.1	3/ S3.1	2/ S3.1	2/ S3.1	4/ S3.1	4/ S3.1	4/ S3.1	2/ S3.1	2/ S3.1	2/ S3.1	5/ S3.1
PLATE DIMENSIONS LxWxD	7"x11"x3/4"	11"x11"x3/4"	11"x11"x3/4"	14"x11"x3/4"	14"x11"x3/4"	14"x11"x3/4"	11"x11"x1/2"	11"x11"x1/2"	11"x11"x1/2"	14"x11"x3/4"	11"x11"x1"	12"x12"x1"	18"x14"x1"	18"x14"x1"	9"x14"x1"	9"x12"x1/2"	11"x12"x1/2"	11"x11"x3/4"	19"x14"x3/8"
ANCHOR BOLTS DETAIL	(4) 3/4" DIA. 1/S3.1	(4) 3/4" DIA. 1/S3.1	(4) 3/4" DIA. 1/S3.1	(4) 3/4" DIA. 1/S3.1	(4) 3/4" DIA. 1/S3.1	(4) 3/4" DIA. 1/S3.1	(4) 3/4" DIA. 1/S3.1	(4) 3/4" DIA. 1/S3.1	(4) 3/4" DIA. 1/S3.1	(4) 3/4" DIA. 1/S3.1	(4) 3/4" DIA. 1/S3.1	(4) 3/4" DIA. 1/S3.1	(4) 3/4" DIA. 1/S3.1	(4) 3/4" DIA. 1/S3.1	(4) 3/4" DIA. 1/S3.1	(4) 3/4" DIA. 1/S3.1	(4) 3/4" DIA. 1/S3.1	(4) 3/4" DIA. 1/S3.1	(6) 1" DIA. 1/S3.1

FOOTING SCHEDULE

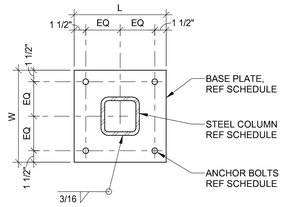
MARK (F#)	F1	F2	F3	F4	F5	F6	F7
FOOTING SIZE (LxWxD)	3'-0" SQ. x 1'-0"	4'-0" SQ. x 1'-0"	5'-0" SQ. x 1'-0"	6'-0" SQ. x 1'-0"	8'-0" SQ. x 1'-6"	10'-0" SQ. x 1'-6"	7'-0" SQ. x 1'-6"
BOTTOM ELEVATION	95-4"	95-4"	95-4"	95-4"	95-4"	95-4"	95-4"
LONGITUDINAL REINFORCING	(4)-#5 TOP & BOT AT BRACE FRAMES	(5)-#5 TOP & BOT AT BRACE FRAMES	(6)-#5 TOP & BOT AT BRACE FRAMES	(7)-#5 TOP & BOT AT BRACE FRAMES	(8)-#6 TOP & BOT AT BRACE FRAMES	(13)-#7 TOP & BOT	(8)-#5 TOP & BOT
TRANSVERSE REINFORCING	(4) #5 TOP & BOT AT BRACE FRAMES	(5) #5 TOP & BOT AT BRACE FRAMES	(6) #5 TOP & BOT AT BRACE FRAMES	(7) #5 TOP & BOT AT BRACE FRAMES	(8) #6 TOP & BOT AT BRACE FRAMES	(13)-#7 TOP & BOT	(8)-#5 TOP & BOT
PILASTER WHERE OCCURS REF PLAN / REF DETAIL							
REMARKS							



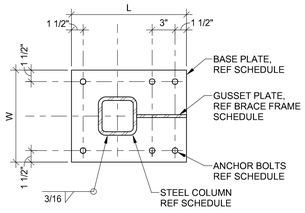
DIAMETER	A	B	PLATE SIZE
3/4"	1'-0"	6"	1/4"X2"Ø
1"	1'-6"	6"	3/8"X2 1/2"Ø
1 1/4"	2'-2"	8"	1/2"X3"Ø
1 1/2"	2'-10"	8"	1/2"X3"Ø

1. ALL ANCHOR BOLTS ARE TO BE SUPPLIED WITH 3 NUTS.
2. MINIMUM EMBEDMENT LENGTH OF ANCHOR MUST BE PLACED INTO A SINGLE POUR OF CONCRETE

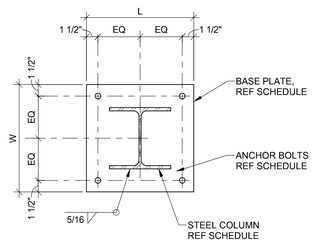
1 TYPICAL ANCHOR ROD DETAIL
3/4" = 1'-0"



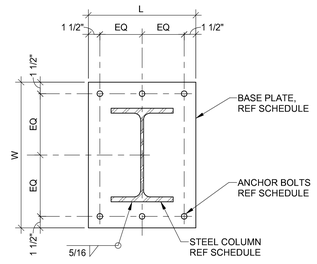
2 BASE PLATE DETAIL
1 1/2" = 1'-0"



3 BASE PLATE DETAIL
1 1/2" = 1'-0"



4 BASE PLATE DETAIL
1 1/2" = 1'-0"



5 BASE PLATE DETAIL
1 1/2" = 1'-0"

Revisions:	Date
ADDENDUM 001 1	02/02/2022

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

MONTANA LICENSED PROFESSIONAL ENGINEER — MICHAEL W. KELSO No. 31002045 02/01/2022

Drawing Title: **COLUMN SCHEDULE**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **09/04/2020** | Checked: **MWK** | Drawn: **JBR**

Project Number: **H IH BLAC 19100**

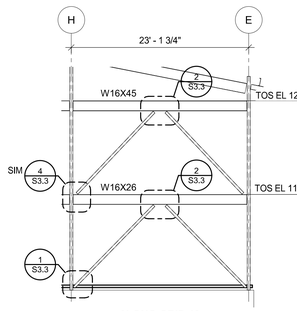
Building Number

Drawing Number: **S3.1**

INDIAN HEALTH SERVICE · PHS · 1955 ·

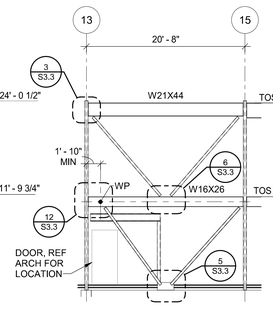
BRACING SCHEDULE

MARK	LEVEL	BRACE MEMBER	GUSSET TO BEAM, COLUMN AND BASEPLATE							HSS BRACE TO GUSSET (EACH SIDE-4 TOTAL)		NOTES
			GUSSET THICKNESS	BEAM		COLUMN						
				MIN WIDTH	WELD SIZE	MIN WIDTH	MIN HEIGHT	WELD SIZE	NO. OF BOLTS (3/4"Ø A325-SC)	MIN WELD LENGTH	WELD SIZE	
BF1	2ND	HSS5X5X1/4	3/8"	4"	1/4"	4"	4"	1/4"	2	5"	1/4"	
	1ST	HSS5X5X1/4	3/8"	4"	1/4"	4"	4"	1/4"	2	5"	1/4"	
BF2	2ND	HSS5X5X1/4	3/8"	6"	1/4"	6"	7"	1/4"	4	5"	1/4"	
	1ST	HSS5X5X1/4	1/2"	5"	1/4"	5"	7"	1/4"	4	5"	1/4"	
BF3	2ND	HSS5X5X1/4	3/8"	4"	1/4"	4"	5"	1/4"	3	5"	1/4"	
	1ST	HSS5X5X1/4	3/8"	4"	1/4"	4"	5"	1/4"	3	5"	1/4"	
BF4	2ND	HSS5X5X1/4	3/8"	3"	1/4"	3"	3"	1/4"	2	5"	1/4"	
	1ST	HSS5X5X1/4	3/8"	3"	1/4"	3"	3"	1/4"	2	5"	1/4"	
BF5	2ND	HSS5X5X1/4	3/8"	3"	1/4"	3"	3"	1/4"	2	5"	1/4"	
	1ST	HSS5X5X1/4	3/8"	3"	1/4"	3"	3"	1/4"	2	5"	1/4"	
BF6	3RD	HSS5X5X1/4	3/8"	4"	1/4"	4"	3"	1/4"	2	5"	1/4"	
	2ND	HSS5X5X1/4	3/8"	4"	1/4"	4"	3"	1/4"	2	5"	1/4"	
BF7	3RD	HSS5X5X1/4	3/8"	3"	1/4"	3"	3"	1/4"	2	5"	1/4"	
	2ND	HSS5X5X1/4	3/8"	3"	1/4"	3"	3"	1/4"	2	5"	1/4"	
	1ST	HSS5X5X1/4	3/8"	3"	1/4"	3"	3"	1/4"	2	5"	1/4"	
BF8	4TH	HSS5X5X1/4	3/8"	4"	1/4"	4"	3"	1/4"	2	5"	1/4"	
	3RD	HSS5X5X1/4	3/8"	3"	1/4"	3"	3"	1/4"	2	5"	1/4"	
	2ND	HSS5X5X1/4	3/8"	3"	1/4"	3"	3"	1/4"	2	5"	1/4"	
	1ST	HSS5X5X1/4	3/8"	3"	1/4"	3"	3"	1/4"	2	5"	1/4"	
BF9	4TH	HSS5X5X1/4	3/8"	3"	1/4"	3"	3"	1/4"	2	5"	1/4"	
	3RD	HSS5X5X1/4	3/8"	3"	1/4"	3"	3"	1/4"	2	5"	1/4"	
	2ND	HSS5X5X1/4	3/8"	3"	1/4"	3"	3"	1/4"	2	5"	1/4"	
	1ST	HSS5X5X1/4	3/8"	3"	1/4"	3"	3"	1/4"	2	5"	1/4"	
BF10	2ND	HSS5X5X1/4	3/8"	4"	1/4"	4"	4"	1/4"	2	5"	1/4"	
	1ST	HSS5X5X1/4	3/8"	4"	1/4"	4"	4"	1/4"	2	5"	1/4"	



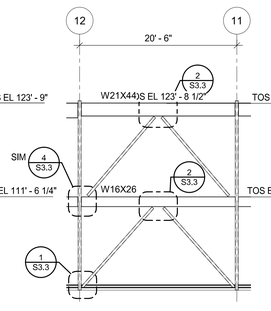
ALONG GRID 18

BF1



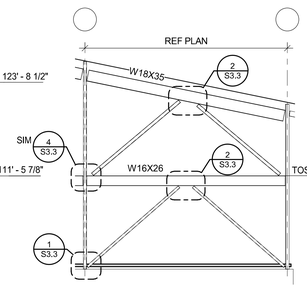
ALONG GRID M

BF2

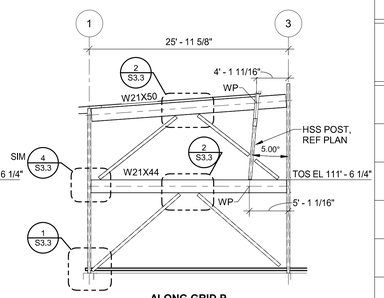


ALONG GRID C

BF3

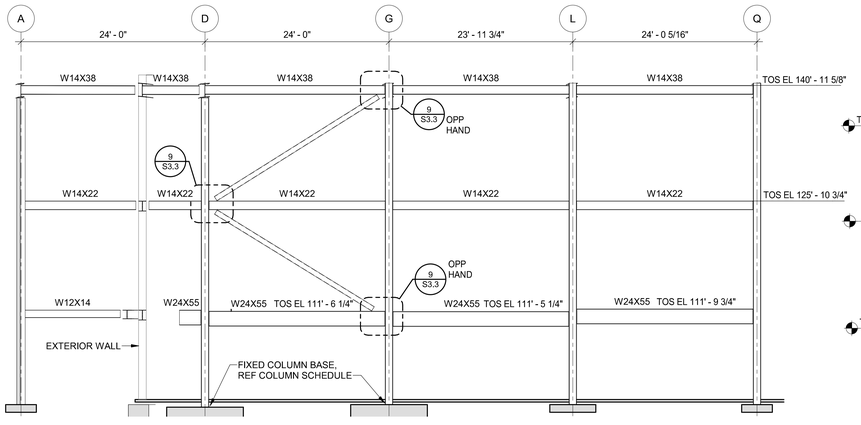


BF4



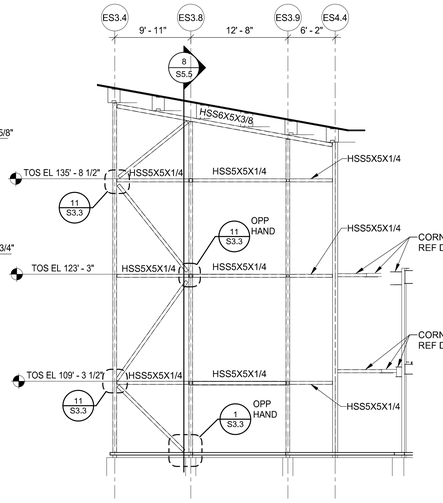
ALONG GRID P

BF5



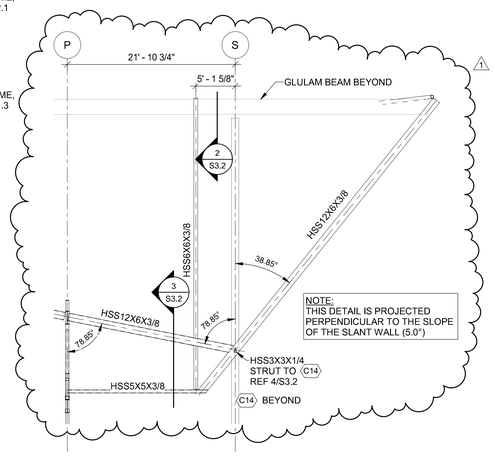
ALONG GRID 4

BF6



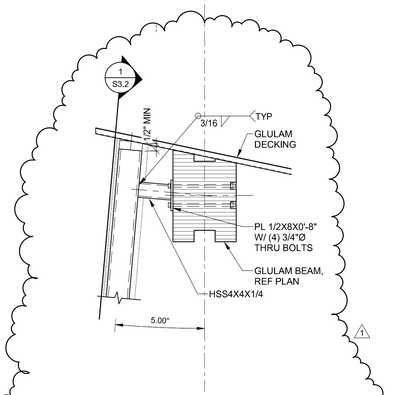
BF8

ELEVATIONS ADDED TO FRAMING 1



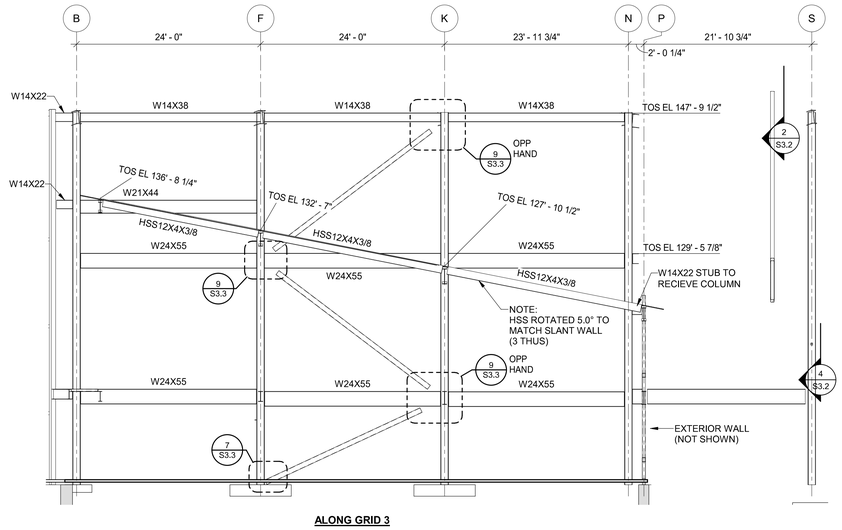
1 TRUE LENGTH VIEW AT SLANT WALL

1/8" = 1'-0"



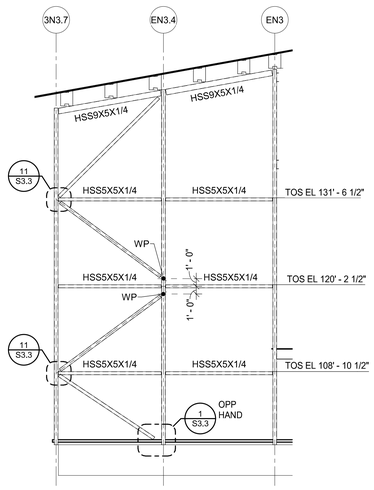
2 GLULAM HSS CONNECTION

3/4" = 1'-0"

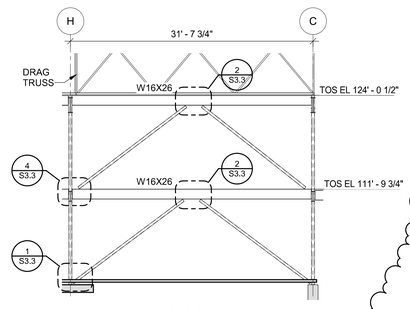


ALONG GRID 3

BF7

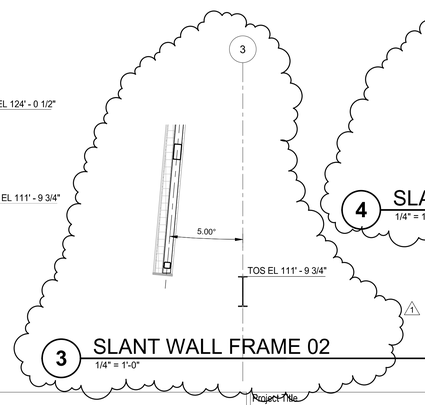


BF9



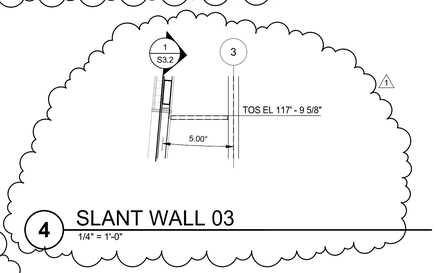
ALONG GRID 5

BF10



3 SLANT WALL FRAME 02

1/4" = 1'-0"



4 SLANT WALL 03

1/4" = 1'-0"

ADDENDUM 001 1	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

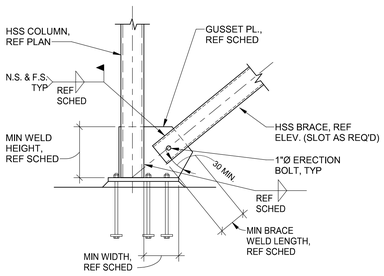
BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

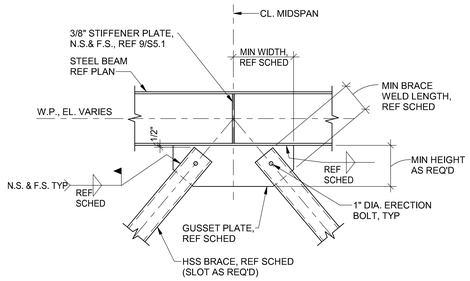
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title	BRACE FRAME SCHEDULE AND FRAMING ELEVATIONS
Approved: Project Director	
Project Title	APARTMENT BUILDING AND SITEWORK
Contract No.:	HHSI102201800005I
Task Order No.:	75H70119F30002
Location	BROWNING, MONTANA
Date	09/04/2020
Checked	MWK
Drawn	JBR
Project Number	H IH BLAC 19100
Building Number	
Drawing Number	S3.2

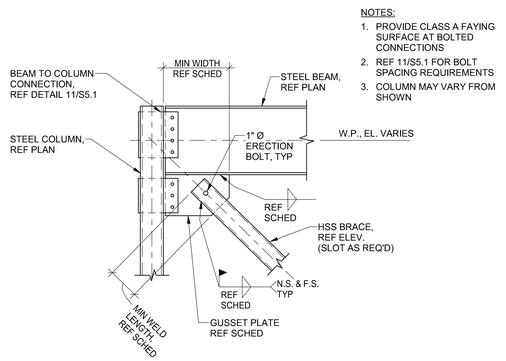
INDIAN HEALTH SERVICE · PHS · 1955 ·



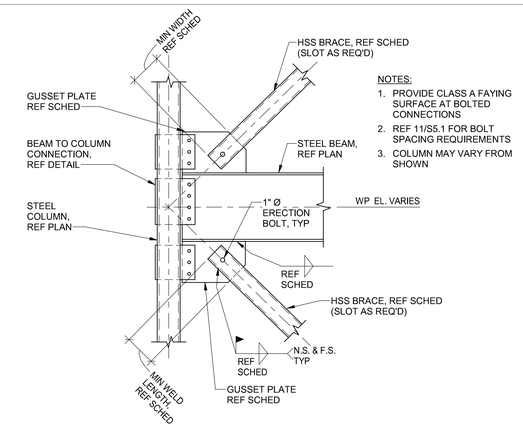
1 BRACE FRAME CONNECTION DETAIL
NO SCALE



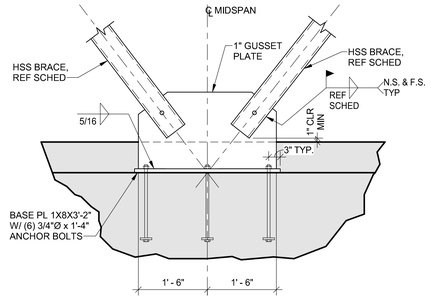
2 BRACE FRAME CONNECTION DETAIL
NO SCALE



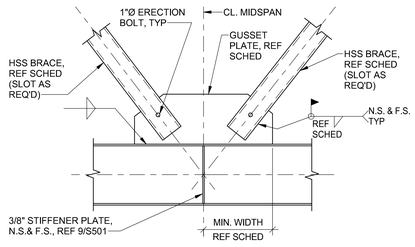
3 BRACE FRAME CONNECTION DETAIL
NO SCALE



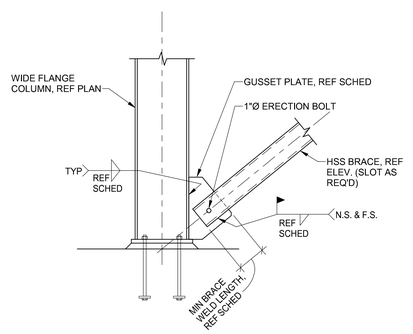
4 BRACE FRAME CONNECTION DETAIL
NO SCALE



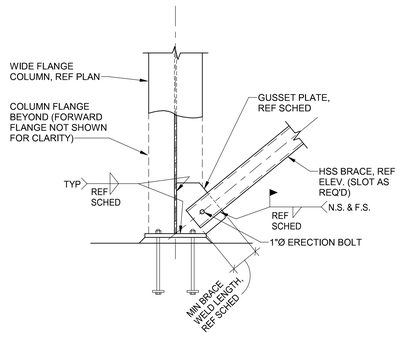
5 BRACE FRAME CONNECTION DETAIL
3/4" = 1'-0"



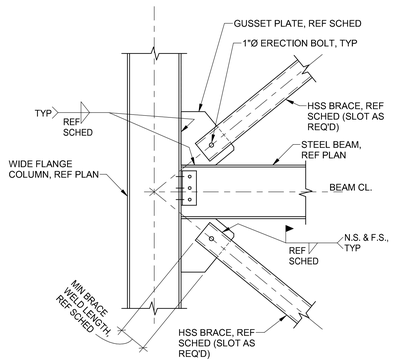
6 BRACE FRAME CONNECTION DETAIL
NO SCALE



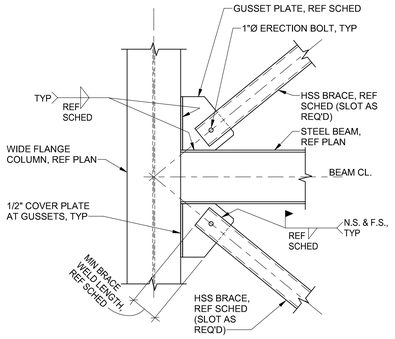
7 BRACE FRAME CONNECTION DETAIL
NO SCALE



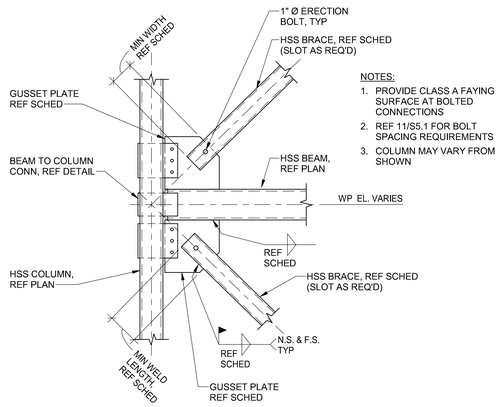
8 BRACE FRAME CONNECTION DETAIL
NO SCALE



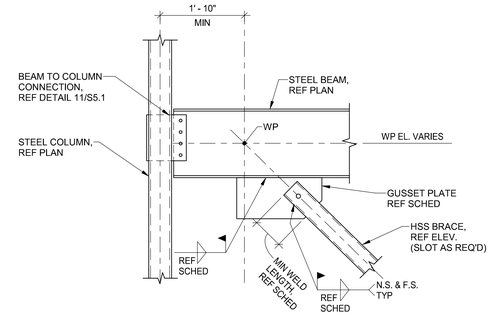
9 BRACE FRAME CONNECTION DETAIL
NO SCALE



10 BRACE FRAME CONNECTION DETAIL
NO SCALE



11 BRACE FRAME CONNECTION DETAIL
NO SCALE



12 BRACE FRAME CONNECTION DETAIL
NO SCALE

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

--

MONTANA — MICHAEL W. KELSO — No. 31002PE — 02/01/2022 — LICENSED PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **BRACE FRAME DETAILS**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

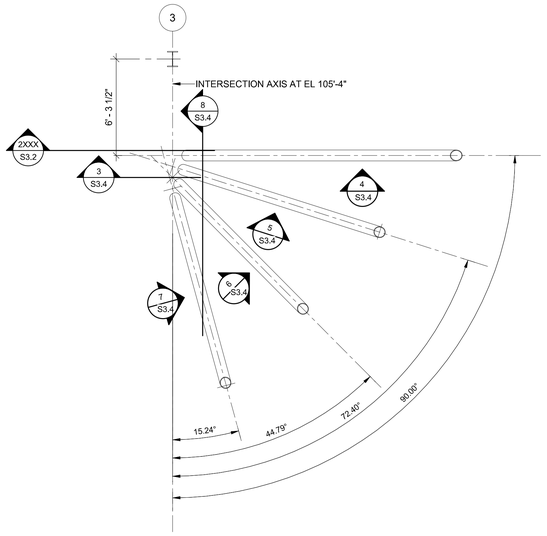
Date: **09/04/2020** | Checked: **MWK** | Drawn: **JBR**

Project Number: **H IH BLAC 19100**

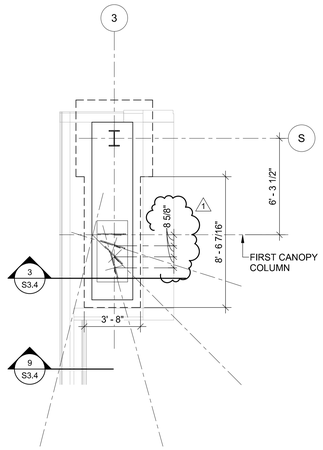
Building Number:

Drawing Number: **S3.3**

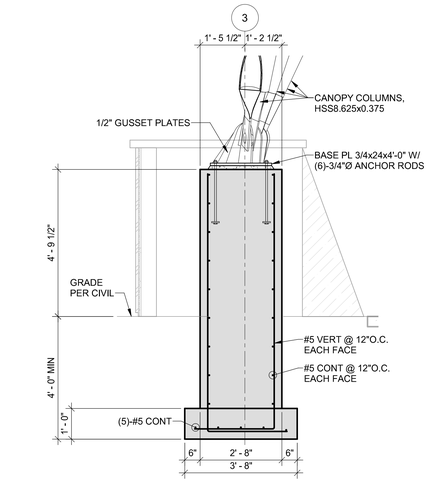
INDIAN HEALTH SERVICE · PHS · 1955 ·



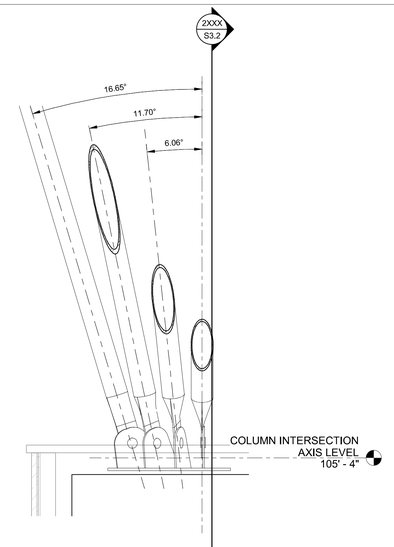
1 CANOPY COLUMN LAYOUT PLAN
1/4" = 1'-0"



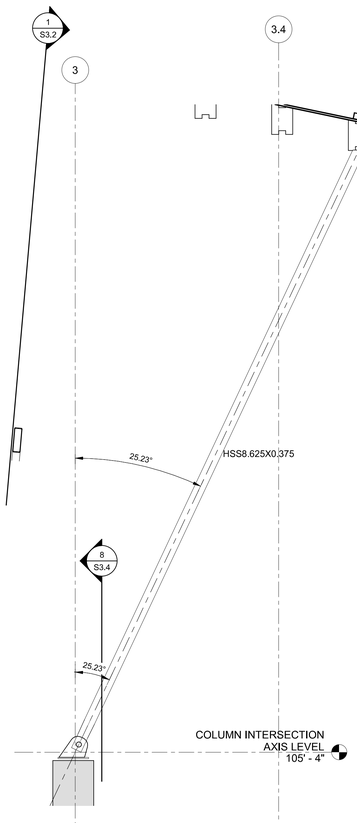
2 CANOPY COLUMN FOUNDATION PLAN
1/4" = 1'-0"



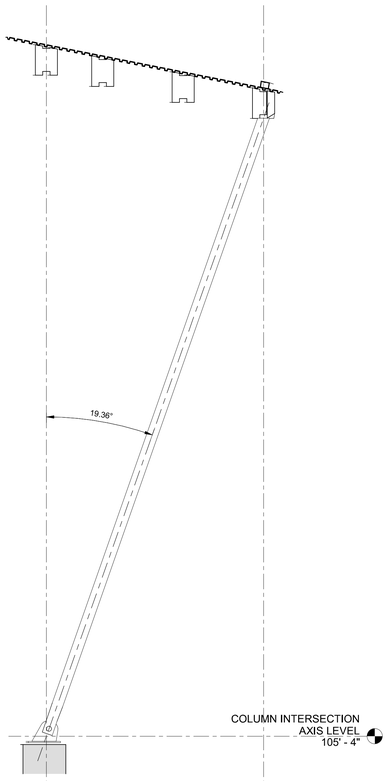
3 CANOPY COLUMN FOUNDATION SECTION
1/2" = 1'-0"



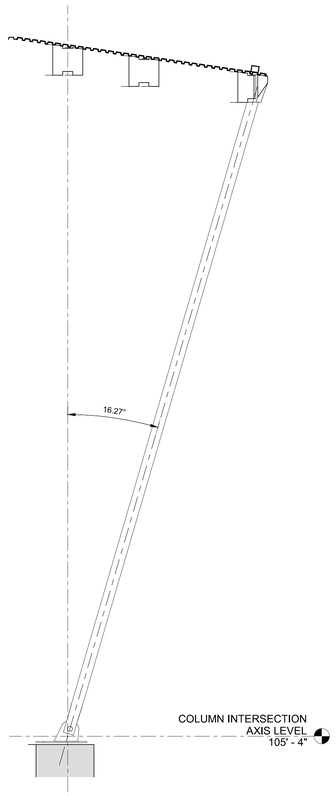
8 COLUMN TILT ELEVATION (ALONG GRID 3)
1/2" = 1'-0"



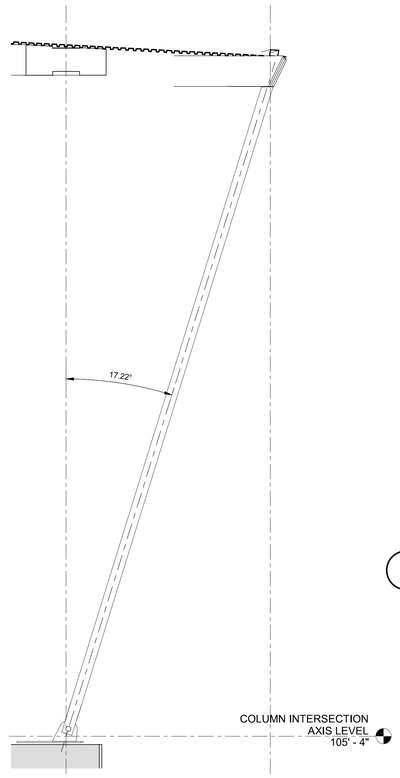
4 CANOPY COLUMN ELEVATION
1/4" = 1'-0"



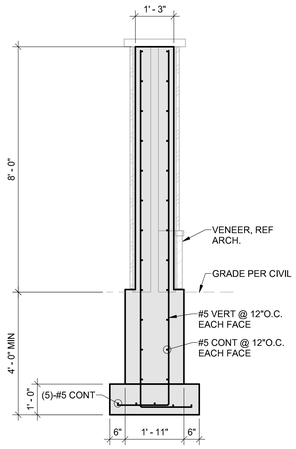
5 CANOPY COLUMN ELEVATION
1/4" = 1'-0"



6 CANOPY COLUMN ELEVATION
1/4" = 1'-0"



7 CANOPY COLUMN ELEVATION
1/4" = 1'-0"



9 FOUNDATION SECTION AT SIGNAGE
1/2" = 1'-0"

ADDENDUM 001 (1)	02/02/2022
Revisions:	Date

CONSULTANTS:

--

MONTANA — MICHAEL W. KEISO — 10/01/2020 — LICENSED PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

FARRIS ENGINEERING

BLUE STAR INTEGRATIVE STUDIO

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **CANOPY COLUMN LAYOUT**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**

Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

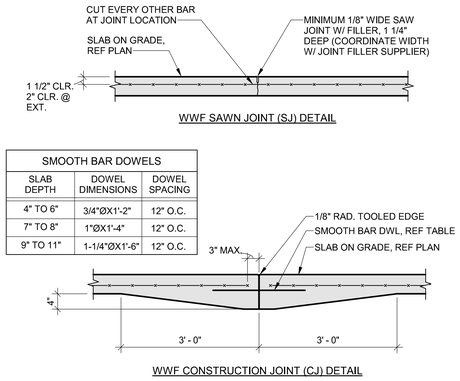
Date: **09/04/2020** | Checked: **MWK** | Drawn: **JBR**

Project Number: **H IH BLAC 19100**

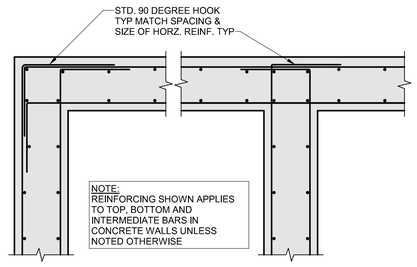
Building Number:

Drawing Number: **S3.4**

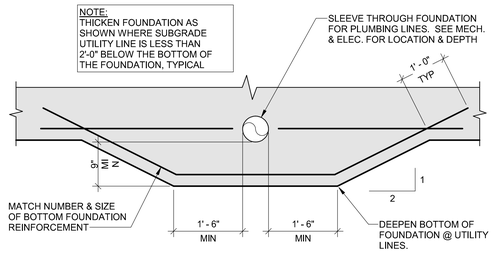
INDIAN HEALTH SERVICE · PHS · 1955 ·



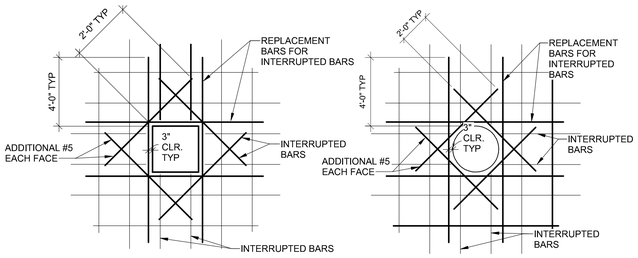
1 SLAB ON GRADE JOINT DETAIL
3/4" = 1'-0"



2 CORNER AND INTERSECT. REINF.
NO SCALE



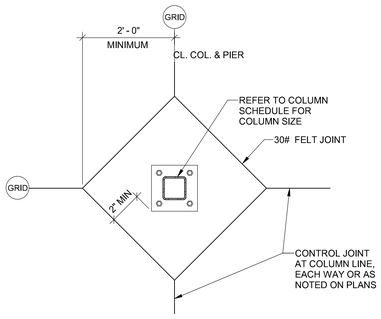
3 THICKENED FOUNDATION DETAIL
NO SCALE



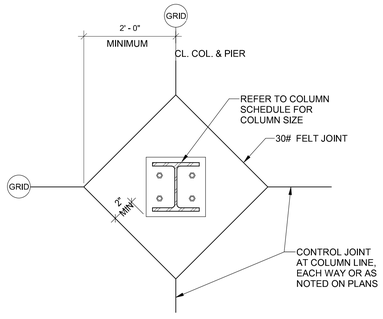
NOTES:

1. USE THIS DETAIL FOR ALL OPENINGS GREATER THAN 8" IN CONCRETE WALLS AND SLABS. PROVIDE (2) #5 ON DIAGONAL AT EACH CORNER AS SHOWN. EXTEND BARS 2'-0" PAST OPENING. REPLACE ALL VERTICAL AND HORIZONTAL BARS INTERUPTED BY THE OPENING WITH AN EQUAL NUMBER AND SIZE BARS EVENLY DIVIDED ON EACH SIDE OF THE OPENING UNLESS NOTED OTHERWISE.
2. REFER TO PLAN FOR ALL OPENING LOCATIONS.

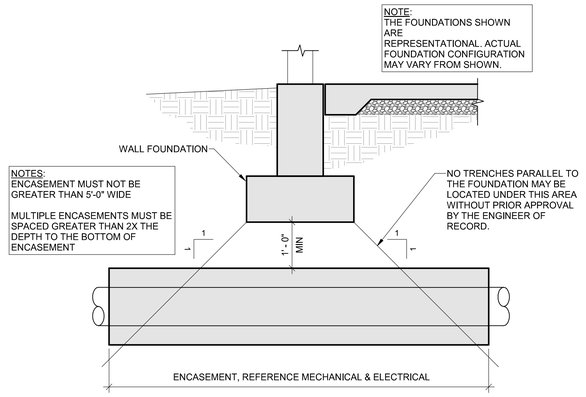
4 TYPICAL SLAB/WALL OPENINGS
NO SCALE



5 ISOLATION JOINTS AT COLUMN HSS
NO SCALE

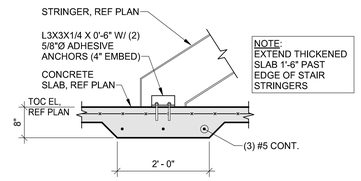


6 ISOLATION JOINTS AT COLUMN WIDE FLANGE
NO SCALE

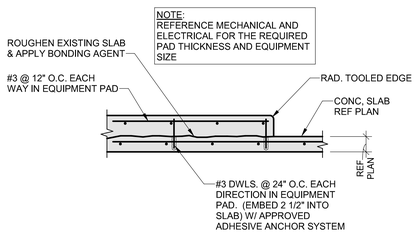


7 ENCASEMENT OF UTILITIES UNDER FOUNDATION
NO SCALE

NOTE: IF THESE CONDITIONS CANNOT BE MET, THE CONTRACTOR SHALL NOTIFY THE ENGINEER BEFORE PROCEEDING



8 THICKENED SLAB AT STAIR
3/4" = 1'-0"



9A INTERIOR EQUIPMENT PAD SECTION
NO SCALE

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

--

MONTANA LICENSED PROFESSIONAL ENGINEER — MICHAEL W. RENSO — No. 37000PE — 02/01/2022

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **TYPICAL FOUNDATION DETAILS**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**

Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

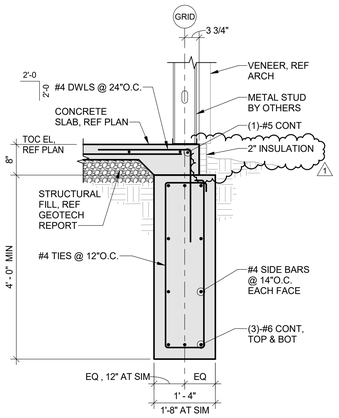
Date: **09/04/2020** | Checked: **MWK** | Drawn: **JBR**

Project Number: **H IH BLAC 19100**

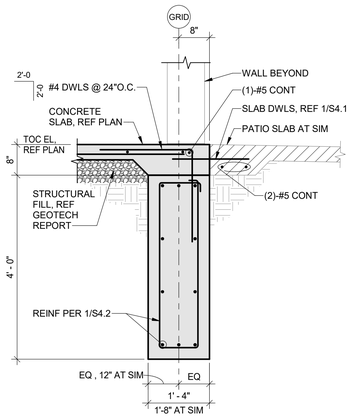
Building Number:

Drawing Number: **S4.1**

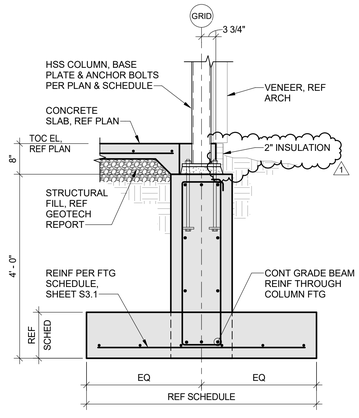
INDIAN HEALTH SERVICE · PHS · 1955 ·



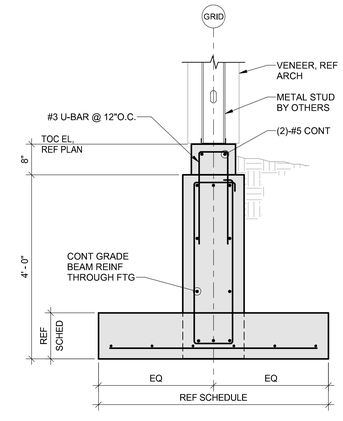
1 FOUNDATION SECTION
3/4" = 1'-0"



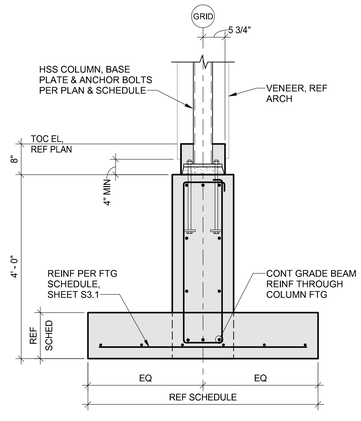
2 FOUNDATION SECTION
3/4" = 1'-0"



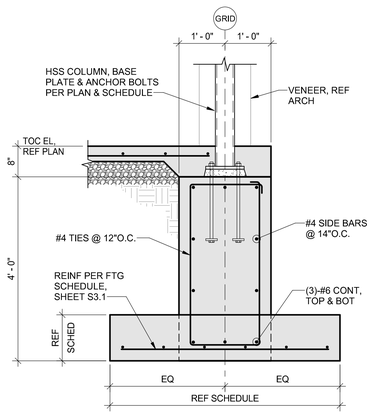
3 FOUNDATION SECTION
3/4" = 1'-0"



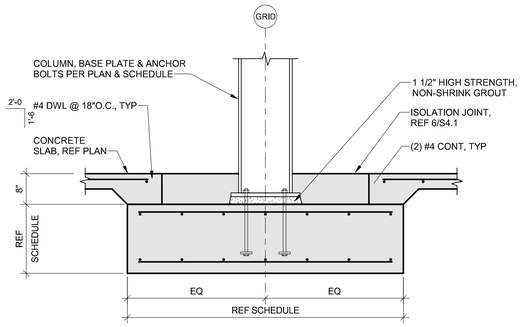
4 FOUNDATION SECTION
3/4" = 1'-0"



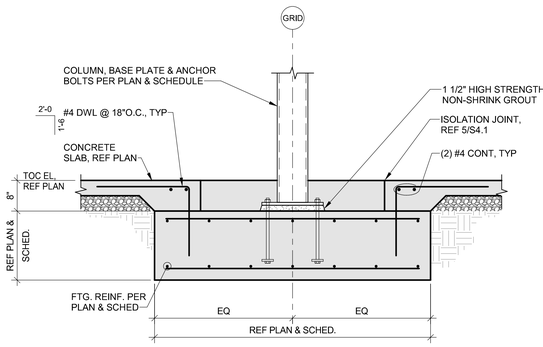
5 FOUNDATION SECTION
3/4" = 1'-0"



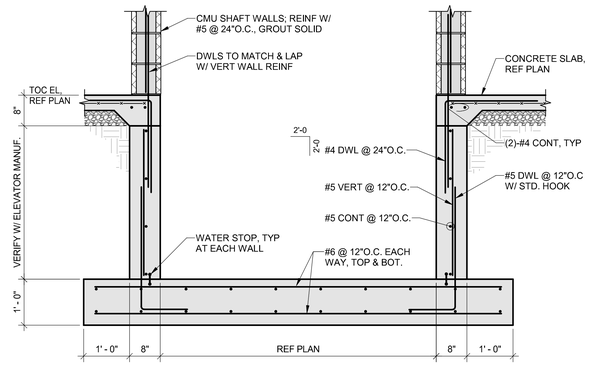
6 FOUNDATION SECTION
3/4" = 1'-0"



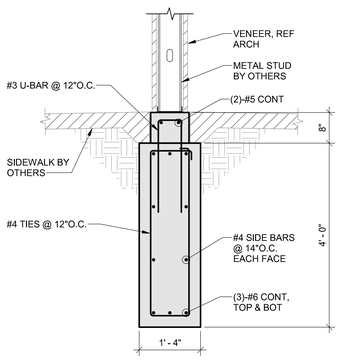
7 FOUNDATION SECTION
3/4" = 1'-0"



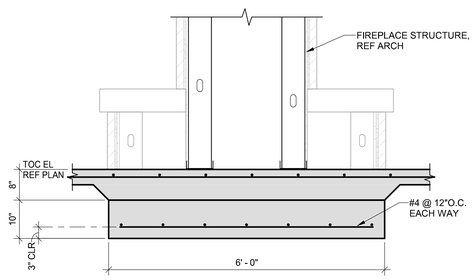
8 INTERIOR COLUMN FOUNDATION SECTION
3/4" = 1'-0"



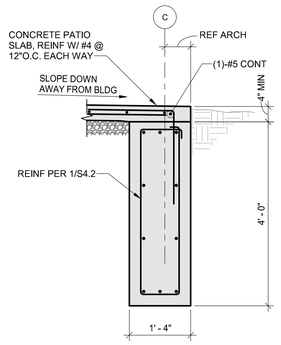
9 ELEVATOR PIT FOUNDATION SECTION
3/4" = 1'-0"



10 FOUNDATION SECTION
3/4" = 1'-0"



11 FIREPLACE FOUNDATION SECTION
3/4" = 1'-0"



12 FOUNDATION SECTION
3/4" = 1'-0"

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **FOUNDATION DETAILS**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

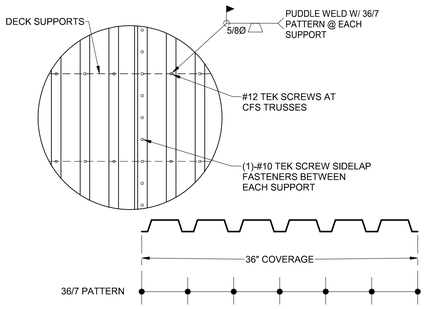
Date: **09/04/2020** | Checked: **MWK** | Drawn: **JBR**

Project Number: **H IH BLAC 19100**

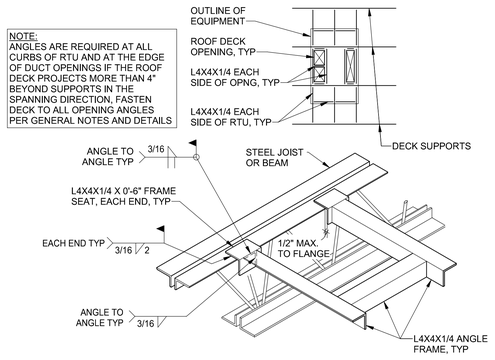
Building Number

Drawing Number: **S4.2**

INDIAN HEALTH SERVICE · PHS · 1955 ·

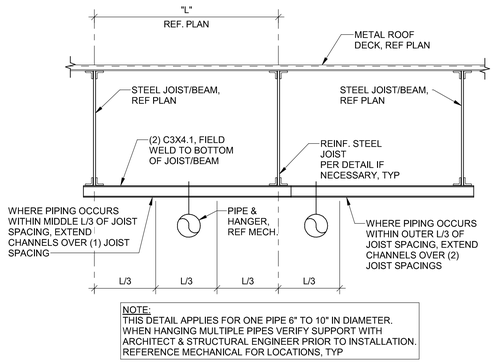


1 NOT USED
NO SCALE

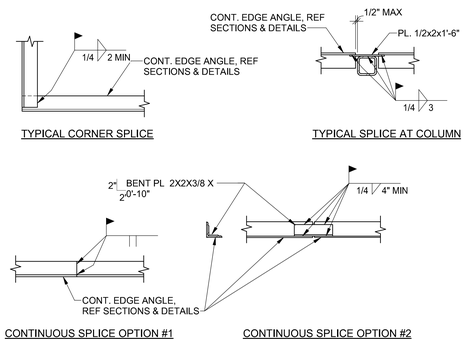


2 NOT USED
NO SCALE

3 NOT USED
NO SCALE

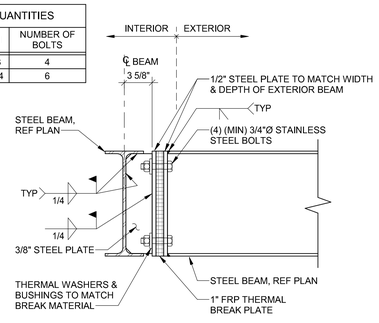


4 PIPE SUPPORT DETAIL
NO SCALE

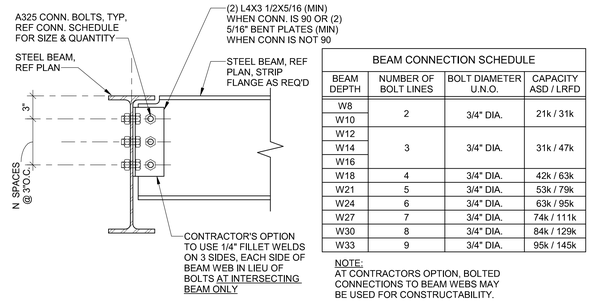


5 TYPICAL EDGE ANGLE SPLICE
NO SCALE

BOLT QUANTITIES	
BEAM DEPTH	NUMBER OF BOLTS
W8 THRU W18	4
W21 THRU W24	6



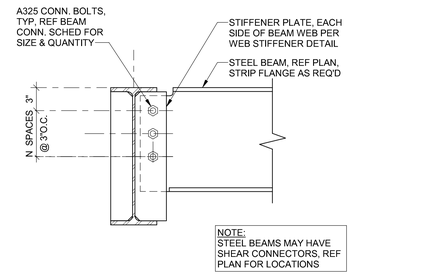
6 THERMAL BREAK DETAIL
1 1/2" = 1'-0"



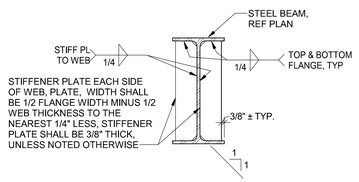
BEAM CONNECTION SCHEDULE			
BEAM DEPTH	NUMBER OF BOLT LINES	BOLT DIAMETER U.N.O.	CAPACITY ASD / LRFD
W8	2	3/4" DIA.	21k / 31k
W10			
W12	3	3/4" DIA.	31k / 47k
W14			
W16			
W18	4	3/4" DIA.	42k / 63k
W21	5	3/4" DIA.	53k / 79k
W24	6	3/4" DIA.	63k / 95k
W27	7	3/4" DIA.	74k / 111k
W30	8	3/4" DIA.	84k / 129k
W33	9	3/4" DIA.	95k / 145k

NOTE:
AT CONTRACTORS OPTION, BOLTED CONNECTIONS TO BEAM WEBS MAY BE USED FOR CONSTRUCTABILITY.

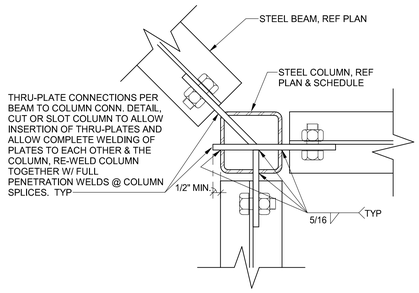
7 DOUBLE ANGLE CONNECTION
NO SCALE



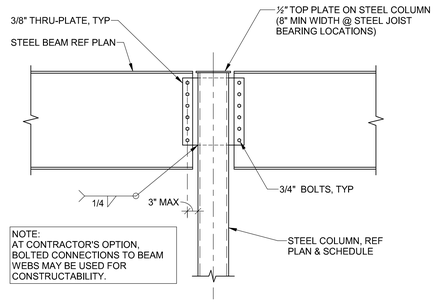
8 WEB PLATE CONNECTION
NO SCALE



9 WEB STIFFENER DETAIL
NO SCALE



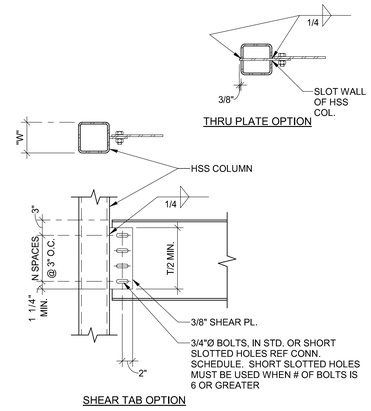
10 COLUMN CONN. PLATES
3" = 1'-0"



11 BEAM TO HSS COLUMN CONNECTION
3/4" = 1'-0"

HSS MINIMUM WALL THICKNESS (SHEAR TAB)	
W	THICKNESS*
3"	3/16"
4"	3/16"
5"	3/16"
6"	3/16"
7"	1/4"
8"	1/4"
9"	5/16"
10"	5/16"
12"	3/8"
14"	1/2"
16"	1/2"

* WHERE WALL THICKNESS IS LESS THAN MIN, PROVIDE THRU PLATE CONNECTION, AS SHOWN.



12 CONNECTION TO HSS COLUMN OPTION
NO SCALE

Revisions:	Date
ADDENDUM 001 1	02/02/2022

CONSULTANTS:
--

MONTANA LICENSED PROFESSIONAL ENGINEER
MICHAEL W. KELSO
No. 22004
02/01/2022

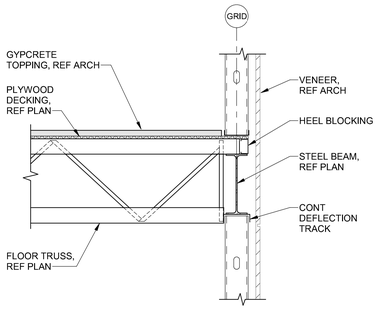
ARCHITECT/ENGINEERS:
HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **TYPICAL FRAMING DETAILS**
Approved: Project Director

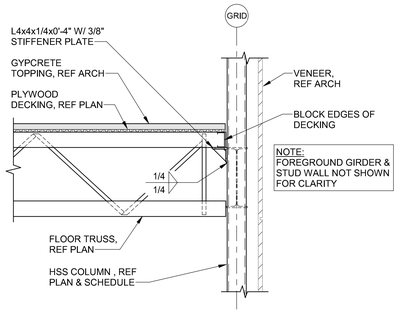
Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002
Location: **BROWNING, MONTANA**
Date: **09/04/2020** | Checked: **MWK** | Drawn: **JBR**

Project Number: **H IH BLAC 19100**
Building Number:
Drawing Number: **S5.1**

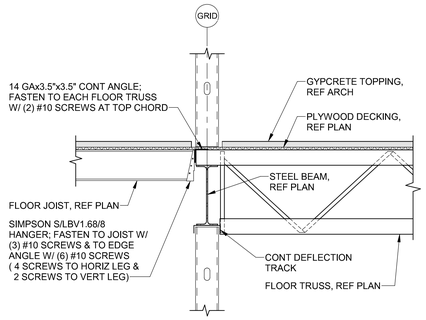
INDIAN HEALTH SERVICE · PHS · 1955 ·



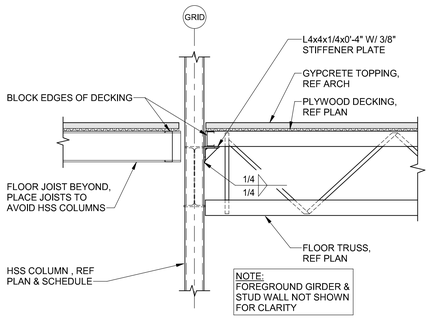
1 FLOOR FRAMING SECTION
3/4" = 1'-0"



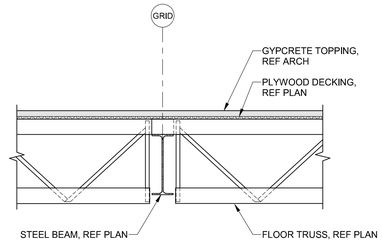
2 FLOOR FRAMING SECTION
3/4" = 1'-0"



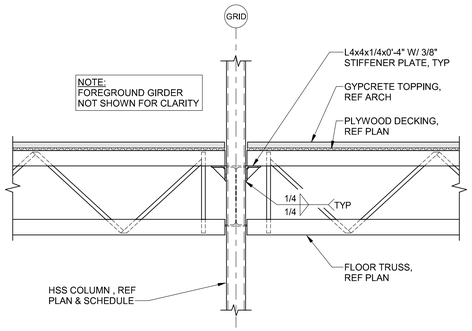
3 FLOOR FRAMING SECTION
3/4" = 1'-0"



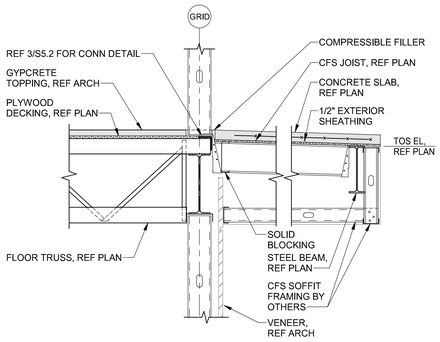
4 FLOOR FRAMING SECTION
3/4" = 1'-0"



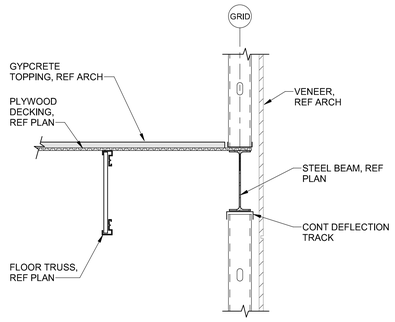
5 FLOOR FRAMING SECTION
3/4" = 1'-0"



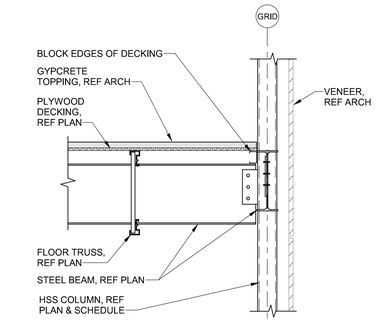
6 FLOOR FRAMING SECTION
3/4" = 1'-0"



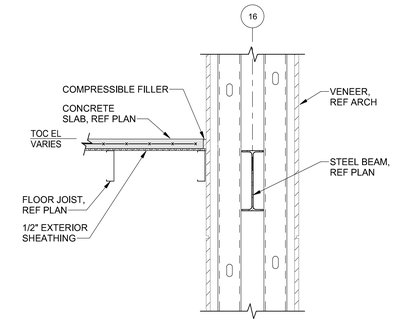
7 FLOOR FRAMING SECTION
3/4" = 1'-0"



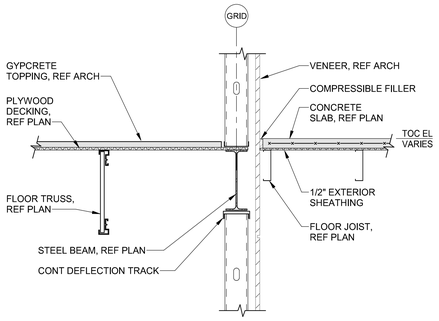
8 FLOOR FRAMING SECTION
3/4" = 1'-0"



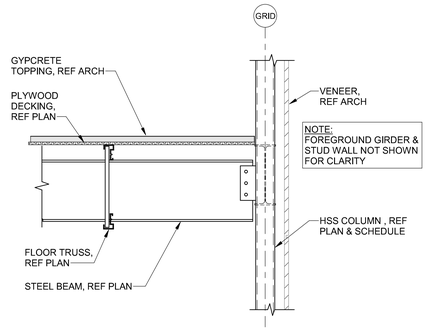
9 FLOOR FRAMING SECTION
3/4" = 1'-0"



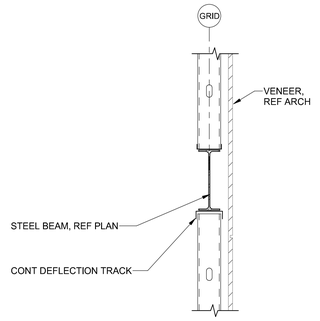
10 FLOOR FRAMING SECTION
3/4" = 1'-0"



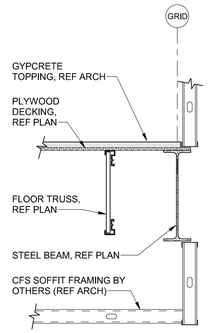
11 FLOOR FRAMING SECTION
3/4" = 1'-0"



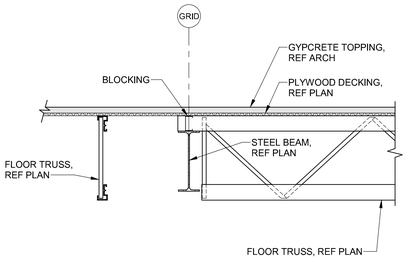
12 FLOOR FRAMING SECTION
3/4" = 1'-0"



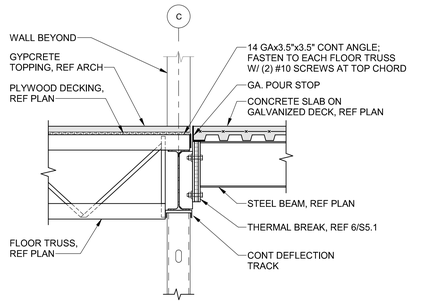
13 FLOOR FRAMING SECTION
3/4" = 1'-0"



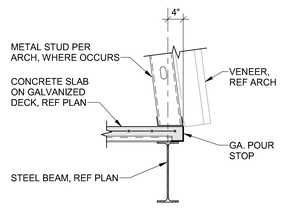
14 FLOOR FRAMING SECTION
3/4" = 1'-0"



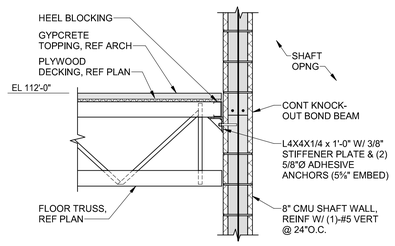
15 FLOOR FRAMING SECTION
3/4" = 1'-0"



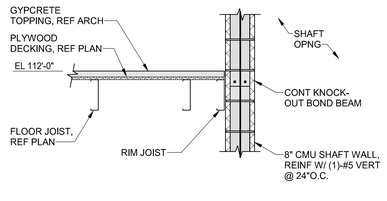
16 FLOOR FRAMING SECTION
3/4" = 1'-0"



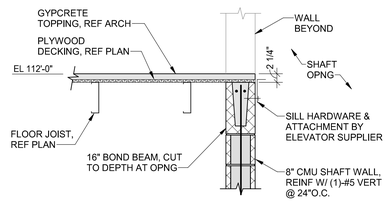
17 FRAMING SECTION
3/4" = 1'-0"



18 FRAMING SECTION AT ELEVATOR
3/4" = 1'-0"



19 FRAMING SECTION AT ELEVATOR
3/4" = 1'-0"



20 FRAMING SECTION AT ELEVATOR
3/4" = 1'-0"

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

--

MONTANA LICENSED PROFESSIONAL ENGINEER
MICHAEL W. KELSO
No. 17703PE
02/01/2022

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **FRAMING DETAILS**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

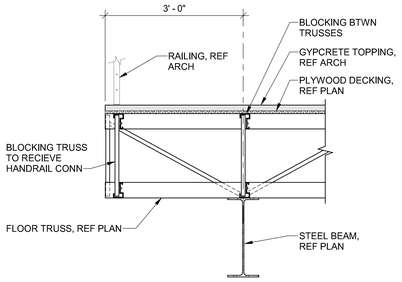
Date: **09/04/2020** | Checked: **MWK** | Drawn: **JBR**

Project Number: **H IH BLAC 19100**

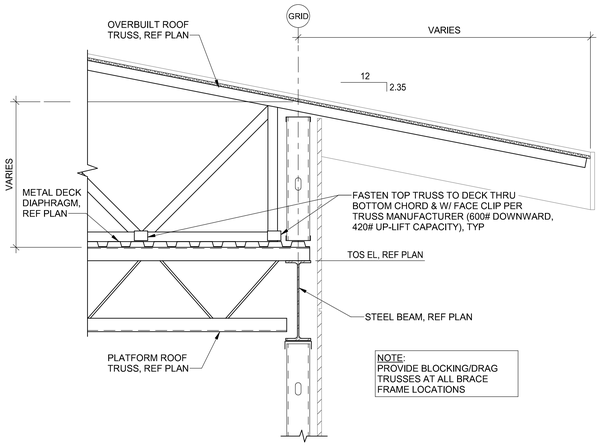
Building Number:

Drawing Number: **S5.2**

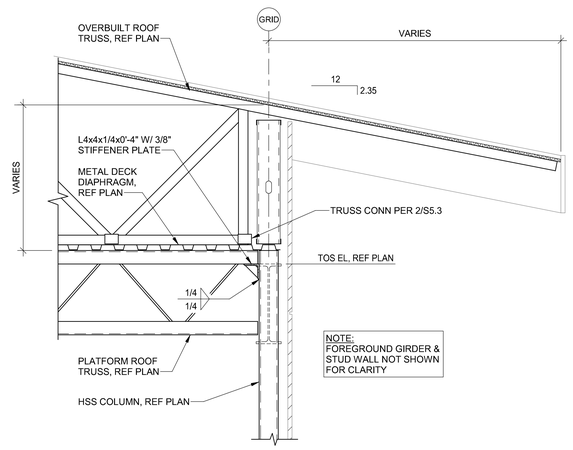
INDIAN HEALTH SERVICE · PHS · 1955 ·



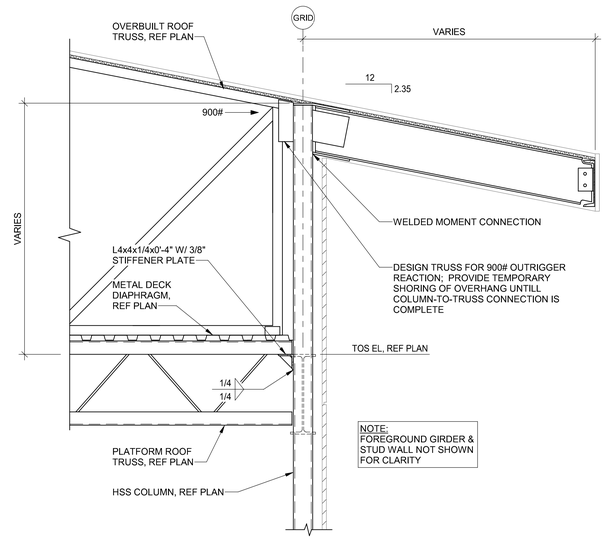
1 FLOOR FRAMING SECTION
3/4" = 1'-0"



2 ROOF FRAMING SECTION
3/4" = 1'-0"



3 ROOF FRAMING SECTION
3/4" = 1'-0"



4 ROOF FRAMING SECTION
3/4" = 1'-0"

5 ROOF FRAMING SECTION
3/4" = 1'-0"

6 ROOF FRAMING SECTION
3/4" = 1'-0"

7 ROOF FRAMING SECTION
3/4" = 1'-0"

8 FLOOR FRAMING SECTION
3/4" = 1'-0"

9 FLOOR SHEATHING FASTENING DETAIL
3/4" = 1'-0"

10 APARTMENT AREA ROOF SHEATHING FASTENING DETAIL
3/4" = 1'-0"

11 FRAMING SECTION
3/4" = 1'-0"

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **FRAMING DETAILS**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**

Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

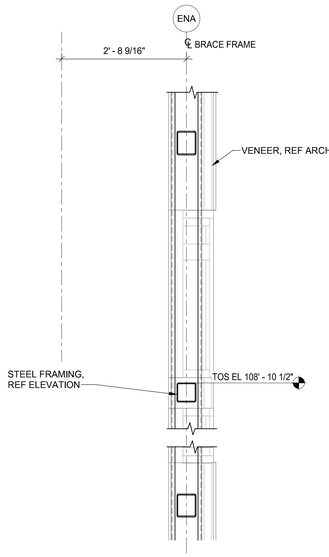
Date	Checked	Drawn
09/04/2020	MWK	JBR

Project Number: **H IH BLAC 19100**

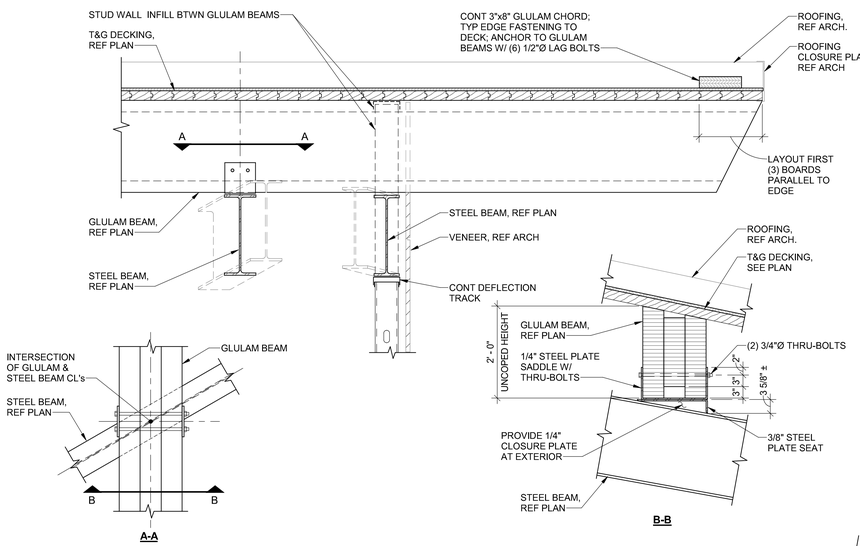
Building Number:

Drawing Number: **S5.3**

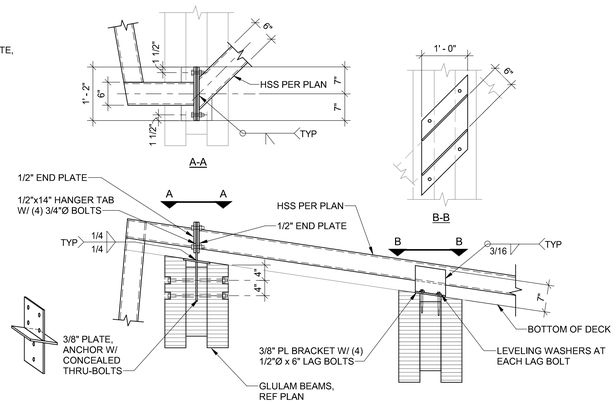
INDIAN HEALTH SERVICE · PHS · 1955 ·



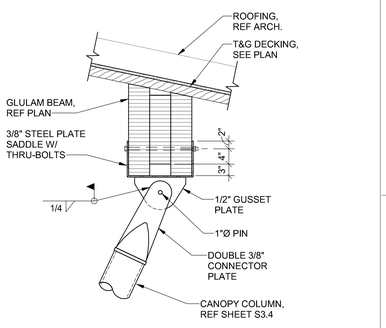
1 FRAMING SECTION
3/4" = 1'-0"



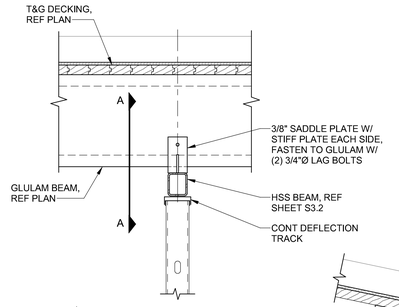
2 HIGH ROOF FRAMING SECTION
3/4" = 1'-0"

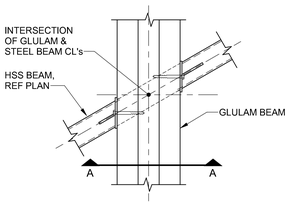


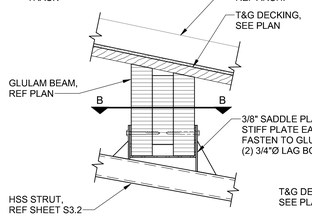
3 COLUMN SUPPORT AT ROOF
3/4" = 1'-0"



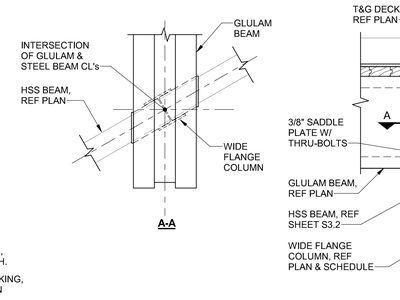
4 CANOPY COLUMN CONNECTION
3/4" = 1'-0"

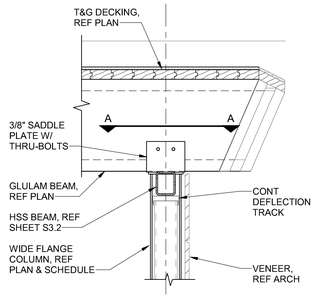




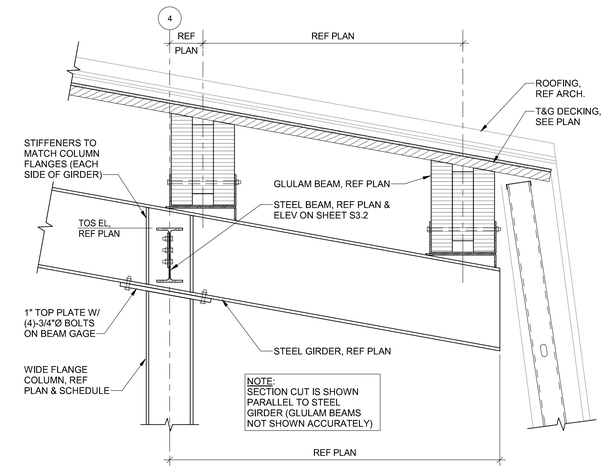


5 HIGH ROOF FRAMING SECTION
3/4" = 1'-0"

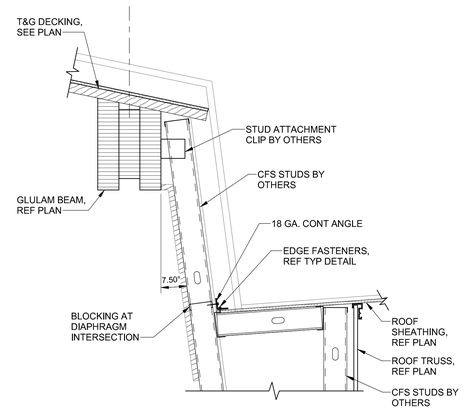




6 HIGH ROOF FRAMING SECTION
3/4" = 1'-0"

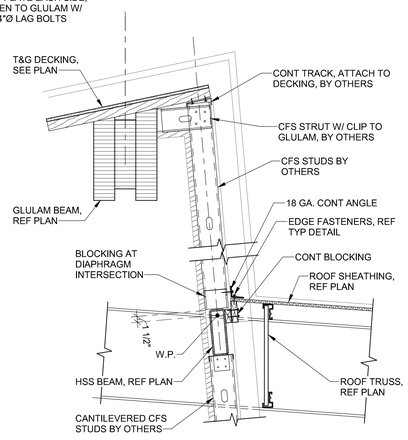


7 HIGH ROOF FRAMING SECTION
3/4" = 1'-0"

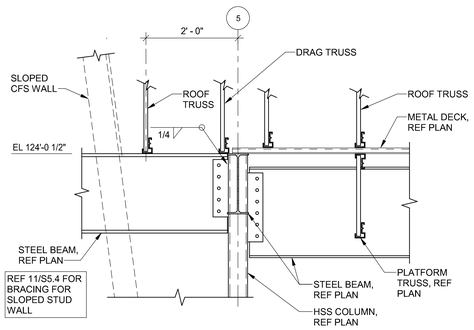


8 HIGH ROOF FRAMING SECTION
3/4" = 1'-0"

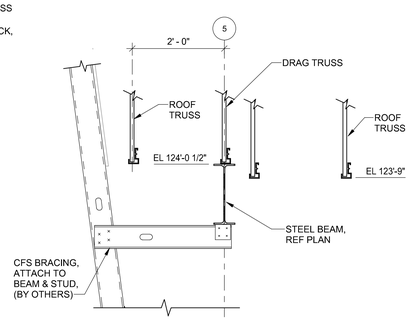
5 HIGH ROOF FRAMING SECTION
3/4" = 1'-0"



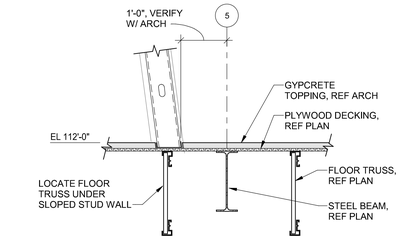
9 HIGH ROOF FRAMING SECTION
3/4" = 1'-0"



10 FRAMING SECTION
3/4" = 1'-0"



11 FRAMING SECTION
3/4" = 1'-0"



12 FRAMING SECTION
3/4" = 1'-0"

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

--

MONTANA LICENSED PROFESSIONAL ENGINEER
MICHAEL W. KEISO
02/01/2022

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
FRAMING DETAILS

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

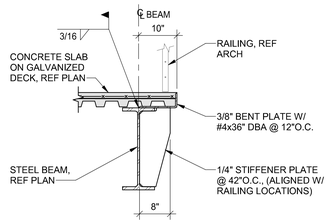
Date **09/04/2020** | Checked **MWK** | Drawn **JBR**

Project Number
H IH BLAC 19100

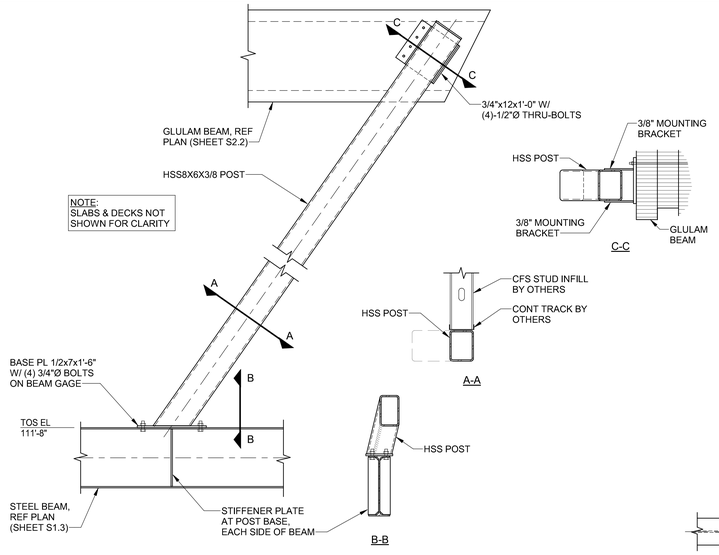
Building Number

Drawing Number
S5.4

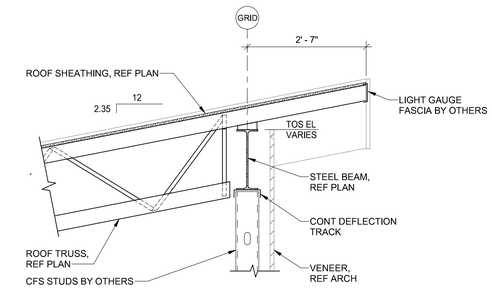
INDIAN HEALTH SERVICE · PHS · 1955 ·



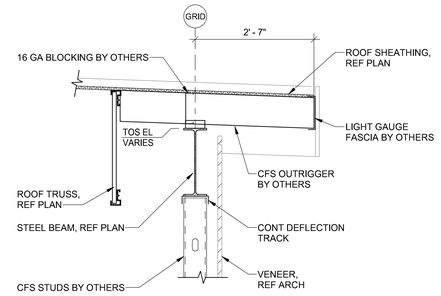
1 FLOOR FRAMING SECTION
3/4" = 1'-0"



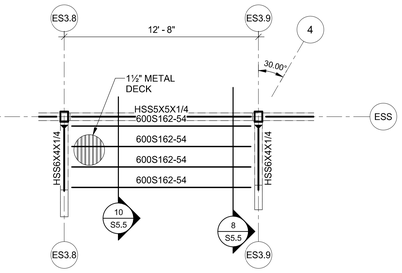
2 FLY WALL FRAME DETAIL
3/4" = 1'-0"



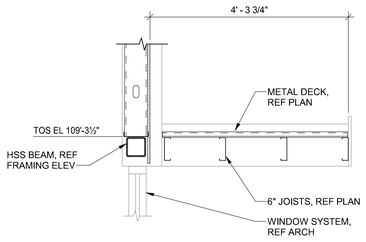
3 MECHANICAL ROOF FRAMING SECTION
3/4" = 1'-0"



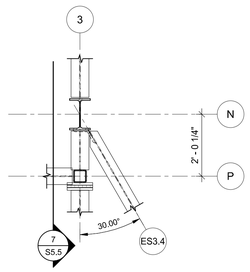
4 MECHANICAL ROOF FRAMING SECTION
3/4" = 1'-0"



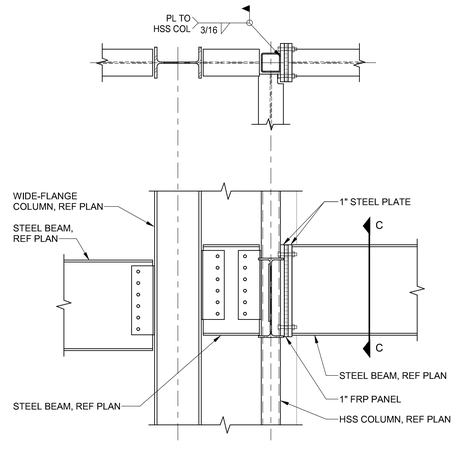
9 SOUTH ENTRANCE CANOPY
1/4" = 1'-0"



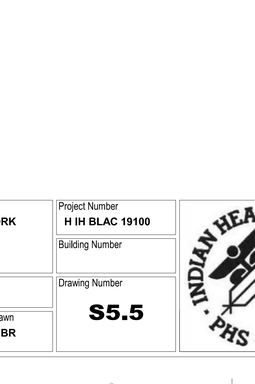
10 FRAMING SECTION
3/4" = 1'-0"



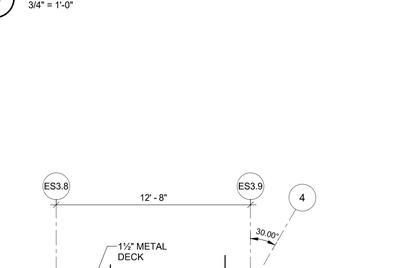
6 ENLARGED FRAMING PLAN
1/2" = 1'-0"



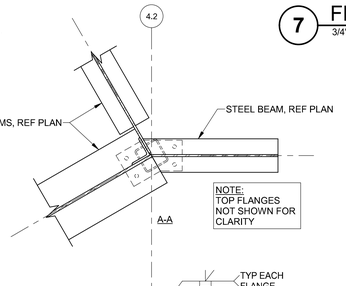
7 FRAMING SECTION
3/4" = 1'-0"



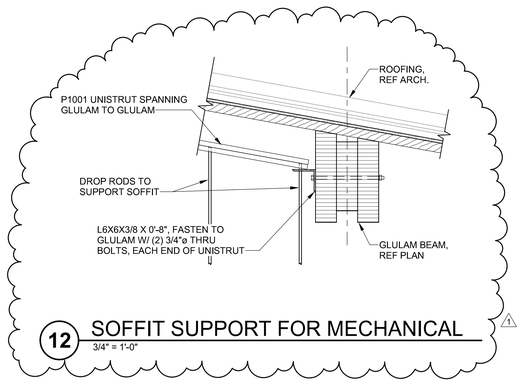
8 SOUTH ENTRANCE WING WALL
1/4" = 1'-0"



5 FRAMING SECTION AT ELEVATOR
3/4" = 1'-0"



11 FRAMING DETAIL
1" = 1'-0"



12 SOFFIT SUPPORT FOR MECHANICAL
3/4" = 1'-0"

ADDENDUM 001 ⚠1	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

FARRIS ENGINEERING

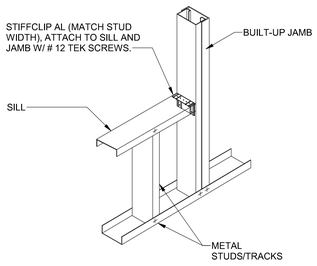
BLUE STAR INTEGRATIVE STUDIO

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

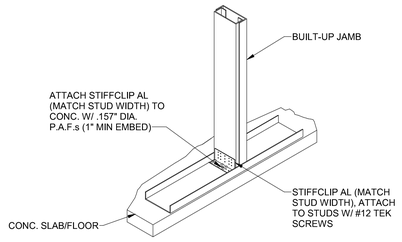
MONTANA — MICHAEL W. KELSO — No. 37000PE — 09/01/2020 — LICENSED PROFESSIONAL ENGINEER

Drawing Title	**FRAMING DETAILS**
Approved: Project Director	
Project Title	**APARTMENT BUILDING AND SITEWORK** **Contract No.:** HHSI102201800005I **Task Order No.:** 75H70119F30002
Location	**BROWNING, MONTANA**
Date	**09/04/2020**
Checked	**MWK**
Drawn	**JBR**
Project Number	**H IH BLAC 19100**
Building Number	
Drawing Number	**S5.5**

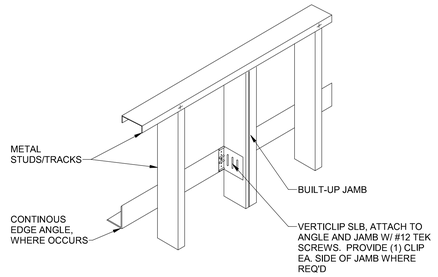
INDIAN HEALTH SERVICE · PHS · 1955 ·



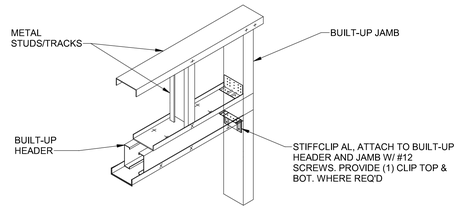
1 SILL CONNECTION TO JAMB
3/4" = 1'-0"



2 JAMB CONNECTION AT BASE
3/4" = 1'-0"



3 JAMB CONNECTION AT TOP
3/4" = 1'-0"



4 HEADER CONNECTION DETAIL
3/4" = 1'-0"

ADDENDUM 001 1	02/02/2022
Revisions:	Date

CONSULTANTS:

--

MONTANA
MICHAEL W. KEASO
PO. 27000PE
10/01/2020
LICENSED PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG | HEALTH FACILITIES GROUP architecture

FARRIS ENGINEERING

BLUE STAR INTEGRATIVE STUDIO

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **LIGHT GAGE FRAMING DETAILS**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**

Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

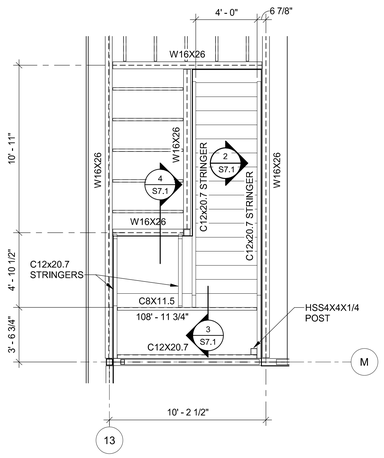
Date: **09/04/2020** | Checked: **MWK** | Drawn: **JBR**

Project Number: **H IH BLAC 19100**

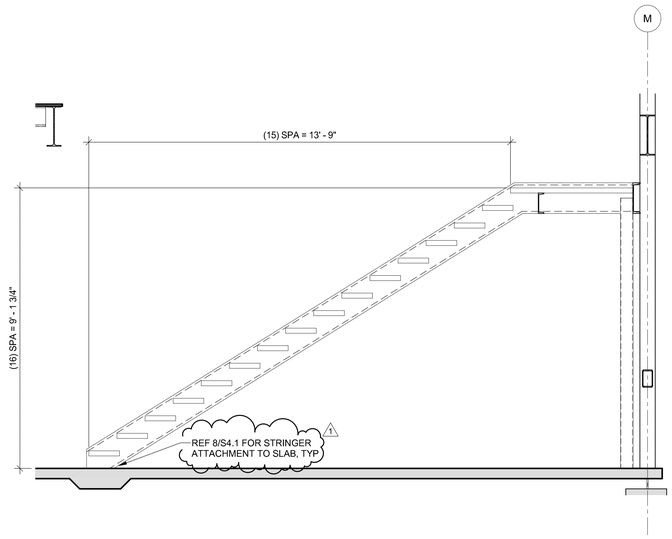
Building Number:

Drawing Number: **S6.1**

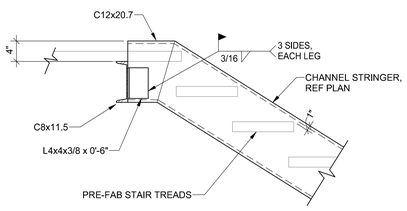
INDIAN HEALTH SERVICE · PHS · 1955 ·



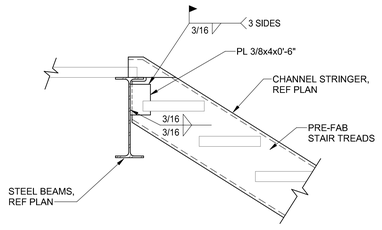
1 SECONDARY STAIR PLAN
1/4" = 1'-0"



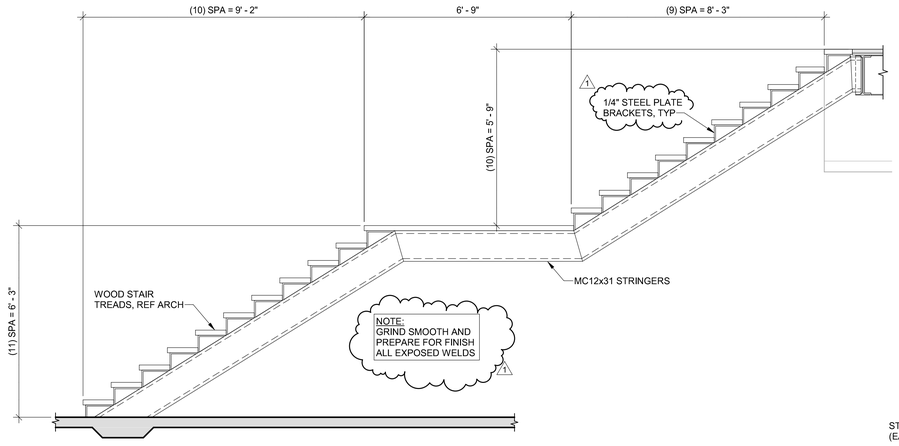
2 SECONDARY STAIR ELEVATION
1/2" = 1'-0"



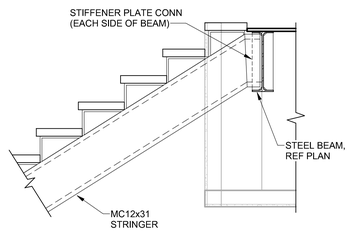
3 STAIR FRAME SECTION
1" = 1'-0"



4 STAIR FRAME SECTION
1" = 1'-0"



5 MAIN STAIR ELEVATION
1/2" = 1'-0"



6 MAIN STAIR CONNECTION DETAIL
3/4" = 1'-0"

ADDENDUM 001 (1)	02/02/2022
Revisions:	Date

CONSULTANTS:

--

MONTANA — MICHAEL W. KELSO — No. 37000PE — 12/01/2022 — LICENSED PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **STAIR PLANS AND DETAILS**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**

Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **09/04/2020** | Checked: **MWK** | Drawn: **JBR**

Project Number: **H IH BLAC 19100**

Building Number:

Drawing Number: **S7.1**

INDIAN HEALTH SERVICE · PHS · 1955 ·

LEGEND FOR WALL TAGS

MATERIAL
WIDTH
INSULATION
CODE (REF. SHT. LS1.1 & LS1.2)

WALL HEIGHT

SHADED WALLS INDICATE WALLS THAT EXTEND TO DECK

WALL MATERIALS

L - LIGHT GAUGE METAL STUDS. 25 ga. (REF SPECS)

B - CONCRETE MASONRY UNIT, REF. STRUCT.

WALL WIDTHS

1 - 1 5/8" HAT CHANNEL/STUDS
3 - 3 5/8" METAL STUD FRAMING
6 - 6" METAL STUD FRAMING

WALL INSULATION

N - NONE
A - ACOUSTICAL (TO DECK)

OTHER

R - RATED - REF. LIFE SAFETY PLAN
C - TYP. CORRIDOR WALL
D - TYP. DOUBLE WALL

NOTES:

PER IBC 1206.2 AIRBORNE SOUND ALL WALLS, PARTITIONS AND FLOOR-CEILING ASSEMBLIES SEPARATING DWELLING UNITS FROM EACH OTHER OR FROM PUBLIC OR SERVICE AREAS SHALL HAVE A SOUND TRANSMISSION CLASS OF NOT LESS THAN 50. PENETRATIONS OR OPENINGS IN CONSTRUCTION ASSEMBLIES FOR PIPING; ELECTRICAL DEVICES; RECESSED CABINETS; BATHTUBS; SOFFITS; OR HEATING, VENTILATING OR EXHAUST DUCTS SHALL BE SEALED, LINES, INSULATED OR OTHERWISE TREATED TO MAINTAIN THE REQUIRED RATINGS. THIS REQUIREMENT SHALL NOT APPLY TO ENTRANCE DOORS, HOWEVER. SUCH DOORS SHALL BE TIGHT FITTING TO THE FRAME AND SILL.

PER IBC 1206.3 STRUCTURE-BORNE SOUND ALL FLOOR CEILING ASSEMBLIES BETWEEN DWELLING UNITS OR BETWEEN A DWELLING UNIT AND A PUBLIC OR SERVICE AREA WITHIN THE STRUCTURE SHALL HAVE AN IMPACT INSULATION CLASS RATING OF NOT LESS THAN 50.

NOTES CONT.:

WALLS TO RECEIVE GYPSUM BOARD PRODUCT ON BOTH FACES OF METAL STUD AND WALLS THAT REQUIRE ACOUSTICAL SOUND BATT INSUL (R-19) SHALL BE CONSTRUCTED TO MEET A MINIMUM 45 STC UNLESS OTHERWISE NOTED.

ALL STUD FRAMING TO BE 16" O.C., TYP.

PROVIDE CEMENTITIOUS BACKER BOARD AT ALL SHOWER & WET AREAS AND AS BACKER FOR CERAMIC WALL TILE. TOILET & SINK AREAS TO RECEIVE MOISTURE-RESISTANT GYP BOARD.

PROVIDE ACOUSTICAL SEALANT AT TOP & BOTTOM AND ALL PENETRATIONS OF WALLS WITH SOUND BATT.

PROVIDE SEALANT AT TOP & BOTTOM AND ALL PENETRATIONS OF SMOKE PARTITION WALLS AS REQUIRED BY CODE.

PROVIDE ALL NEW WALLS THAT GO TO STRUCTURE w/ 1 1/2" MTL. DEFLECTION TRACK - REF. STRUCT.

PROVIDE SEALANT AT TOP & BOTTOM AND ALL PENETRATIONS ON ONE SIDE OF SMOKE PARTITION WALLS AS REQUIRED BY CODE - REF SPECS

BRACE ALL STUD WALLS TO STRUCTURE ABOVE @ 4'-0" O.C. OR EXTEND ALL STUDS TO DECK ABOVE, TYP.

FIRE TAPE AND/OR FILL VOIDS AT TOP OF WALL - FIRE RATED WALL AS REQUIRED BY CODE - REF. SPEC.

INSTALL 5/8" TYPE X GYP BD ON ONE SIDE OF FURRING, TYP. INSTALL 5/8" TYPE X GYP BD ON BOTH SIDES OF STUD FRAMING, TYP., UNLESS NOTED OTHERWISE. EXTEND GYP BD TO 6" ABOVE CEILING UNLESS REQUIRED OTHERWISE. PROVIDE ACOUSTICAL SEALANT AT TOP AND BOTTOM OF ALL PENETRATIONS OF WALL WITH SOUND BATT.

INSTALL FIRE RATED SEAL/CLOSURE @ ALL OPENINGS, GAPS AND TOP & BOTTOM OF FRAMING AS SPECIFIED.

GENERAL NOTES:

1. ALL WALL DIMENSIONS ARE TO THE FACE OF STUD U.N.O.
2. ALL WINDOW DIMENSIONS ARE TO THE CENTER OF THE WINDOW U.N.O.

DASHED LINE REPRESENTS OUTLINE OF ROOF ABOVE

1 TYP. CORRIDOR WALL - 54 STC - UL U451
1" = 1'-0"

2 TYP. DOUBLE WALL - 59 STC - UL U493
1" = 1'-0"

3 TYP. L3 WALL PARTITION - 44 STC - UL U419
1" = 1'-0"

4 TYP. L6 WALL PARTITION - 44 STC - UL U419
1" = 1'-0"

5 TYP. FLOOR - UL L551
1" = 1'-0"

A FIRST FLOOR PLAN - DIMENSIONS
1/8" = 1'-0"

0' 4' 8' 16'
1/8" = 1'-0"

Revisions:	Date
ADDENDUM 001 1	02/02/2022

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
FIRST FLOOR PLAN - DIMENSIONS

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

Date **09/08/2020** | Checked | Drawn

Project Number
H IH BLAC 19100

Building Number

Drawing Number
A0.1

INDIAN HEALTH SERVICE · PHS · 1955 ·

LEGEND FOR WALL TAGS

MATERIAL
WIDTH
INSULATION
CODE (REF. SHT. LS1.1 & LS1.2)

WALL HEIGHT

SHADED WALLS INDICATE WALLS THAT EXTEND TO DECK

WALL MATERIALS

L - LIGHT GAUGE METAL STUDS. 25 ga. (REF SPECS)

B - CONCRETE MASONRY UNIT, REF. STRUCT.

WALL WIDTHS

1 - 1 5/8" HAT CHANNEL/STUDS
3 - 3 5/8" METAL STUD FRAMING
6 - 6" METAL STUD FRAMING

WALL INSULATION

N - NONE
A - ACOUSTICAL (TO DECK)

OTHER

R - RATED - REF. LIFE SAFETY PLAN
C - TYP. CORRIDOR WALL
D - TYP. DOUBLE WALL

NOTES:

PER 1BC 1206.2 AIRBORNE SOUND ALL WALLS, PARTITIONS AND FLOOR-CEILING ASSEMBLIES SEPARATING DWELLING UNITS FROM EACH OTHER OR FROM PUBLIC OR SERVICE AREAS SHALL HAVE A SOUND TRANSMISSION CLASS OF NOT LESS THAN 50. PENETRATIONS OR OPENINGS IN CONSTRUCTION ASSEMBLIES FOR PIPING; ELECTRICAL DEVICES; RECESSED CABINETS; BATHTUBS; SOFFITS; OR HEATING, VENTILATING OR EXHAUST DUCTS SHALL BE SEALED, LINES, INSULATED OR OTHERWISE TREATED TO MAINTAIN THE REQUIRED RATINGS. THIS REQUIREMENT SHALL NOT APPLY TO ENTRANCE DOORS; HOWEVER, SUCH DOORS SHALL BE TIGHT FITTING TO THE FRAME AND SILL.

PER IBC 1206.3 STRUCTURE-BORNE SOUND ALL FLOOR CEILING ASSEMBLIES BETWEEN DWELLING UNITS OR BETWEEN A DWELLING UNIT AND A PUBLIC OR SERVICE AREA WITHIN THE STRUCTURE SHALL HAVE AN IMPACT INSULATION CLASS RATING OF NOT LESS THAN 50.

NOTES CONT.:

WALLS TO RECEIVE GYPSUM BOARD PRODUCT ON BOTH FACES OF METAL STUD AND WALLS THAT REQUIRE ACOUSTICAL SOUND BATT INSUL (R-19) SHALL BE CONSTRUCTED TO MEET A MINIMUM 45 STC UNLESS OTHERWISE NOTED.

ALL STUD FRAMING TO BE 16" O.C., TYP.

PROVIDE CEMENTITIOUS BACKER BOARD AT ALL SHOWER & WET AREAS AND AS BACKER FOR CERAMIC WALL TILE. TOILET & SINK AREAS TO RECEIVE MOISTURE-RESISTANT GYP BOARD.

PROVIDE ACOUSTICAL SEALANT AT TOP & BOTTOM AND ALL PENETRATIONS OF WALLS WITH SOUND BATT.

PROVIDE SEALANT AT TOP & BOTTOM AND ALL PENETRATIONS OF SMOKE PARTITION WALLS AS REQUIRED BY CODE.

PROVIDE ALL NEW WALLS THAT GO TO STRUCTURE w/ 1 1/2" MTL. DEFLECTION TRACK - REF. STRUCT.

PROVIDE SEALANT AT TOP & BOTTOM AND ALL PENETRATIONS ON ONE SIDE OF SMOKE PARTITION WALLS AS REQUIRED BY CODE - REF SPECS

BRACE ALL STUD WALLS TO STRUCTURE ABOVE @ 4'-0" O.C. OR EXTEND ALL STUDS TO DECK ABOVE, TYP.

FIRE TAPE AND/OR FILL VOIDS AT TOP OF WALL - FIRE RATED WALL AS REQUIRED BY CODE - REF. SPEC.

INSTALL 5/8" TYPE X GYP BD ON ONE SIDE OF FURRING, TYP. INSTALL 5/8" TYPE X GYP BD ON BOTH SIDES OF STUD FRAMING, TYP., UNLESS NOTED OTHERWISE. EXTEND GYP BD TO 6" ABOVE CEILING UNLESS REQUIRED OTHERWISE. PROVIDE ACOUSTICAL SEALANT AT TOP AND BOTTOM OF ALL PENETRATIONS OF WALL WITH SOUND BATT.

INSTALL FIRE RATED SEAL/CLOSURE @ ALL OPENINGS, GAPS AND TOP & BOTTOM OF FRAMING AS SPECIFIED.

GENERAL NOTES:

1. ALL WALL DIMENSIONS ARE TO THE FACE OF STUD U.N.O.
2. ALL WINDOW DIMENSIONS ARE TO THE CENTER OF THE WINDOW U.N.O.

N
A SECOND FLOOR PLAN - DIMENSIONS
1/8" = 1'-0"

0' 4' 8' 16'
1/8" = 1'-0"

Revisions:	Date
ADDENDUM 001 1	02/02/2022

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **SECOND FLOOR PLAN - DIMENSIONS**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **09/08/2020** | Checked | Drawn

Project Number: **H IH BLAC 19100**

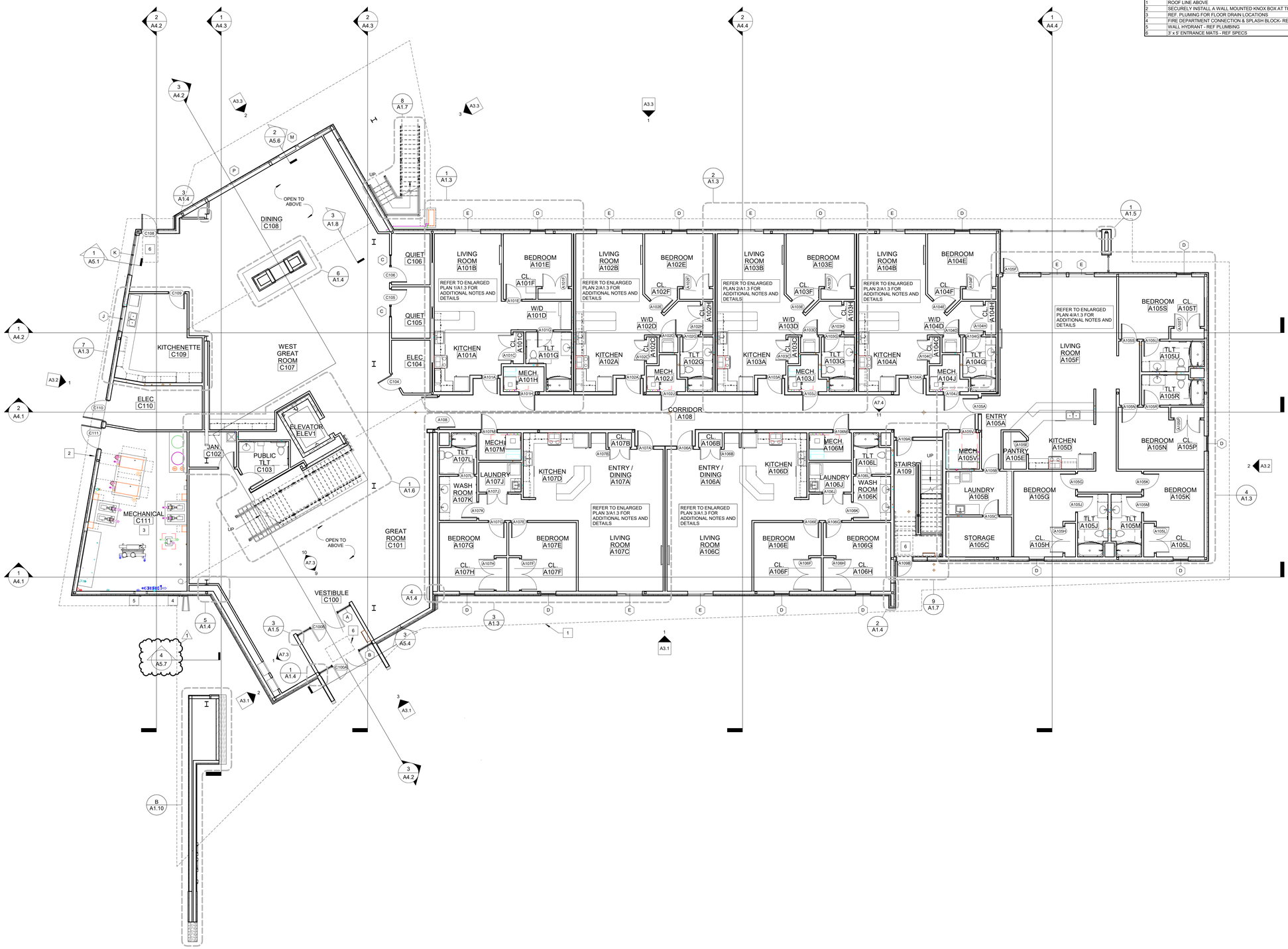
Building Number

Drawing Number: **A0.2**

INDIAN HEALTH SERVICE · PHS · 1955 ·

PLAN NOTES - FLOOR PLAN

1	ROOF LINE ABOVE
2	SECURELY INSTALL A WALL MOUNTED KNOX BOX AT THIS LOCATION - REF. SPECS
3	REF. PLUMING FOR FLOOR DRAIN LOCATIONS
4	FIRE DEPARTMENT CONNECTION & SPLASH BLOCK- REF FIRE PROTECTION
5	WALL HYDRANT - REF PLUMBING
6	3' x 5' ENTRANCE MATS - REF SPECS



N

A FIRST FLOOR PLAN
1/8" = 1'-0"

0' 4' 8' 16'
1/8" = 1'-0"

Revisions:	Date
ADDENDUM 001 1	02/02/2022

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **FIRST FLOOR PLAN**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI122201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **09/08/2020** | Checked | Drawn

Project Number: **H IH BLAC 19100**

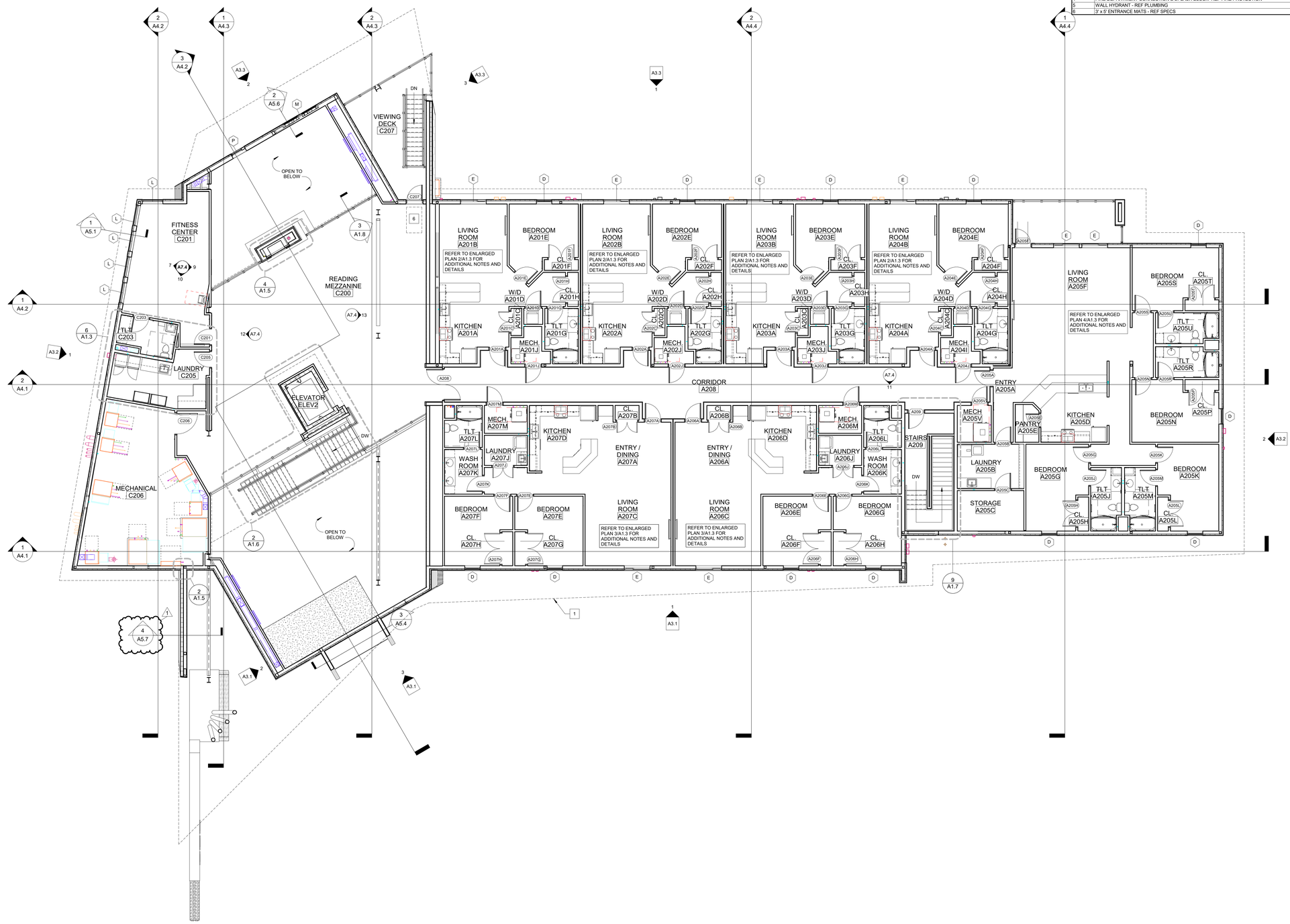
Building Number

Drawing Number: **A1.1**

INDIAN HEALTH SERVICE · PHS · 1955 ·

PLAN NOTES - FLOOR PLAN

1	ROOF LINE ABOVE
2	SECURELY INSTALL A WALL MOUNTED KNOX BOX AT THIS LOCATION - REF. SPECS
3	REF. PLUMING FOR FLOOR DRAIN LOCATIONS
4	FIRE DEPARTMENT CONNECTION & SPLASH BLOCK- REF FIRE PROTECTION
5	WALL HYDRANT - REF PLUMBING
6	3' x 5' ENTRANCE MATS - REF SPECS



N

A SECOND FLOOR PLAN
1/8" = 1'-0"

0' 4' 8' 16'
1/8" = 1'-0"

ADDENDUM 001 1	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **SECOND FLOOR PLAN**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**

Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

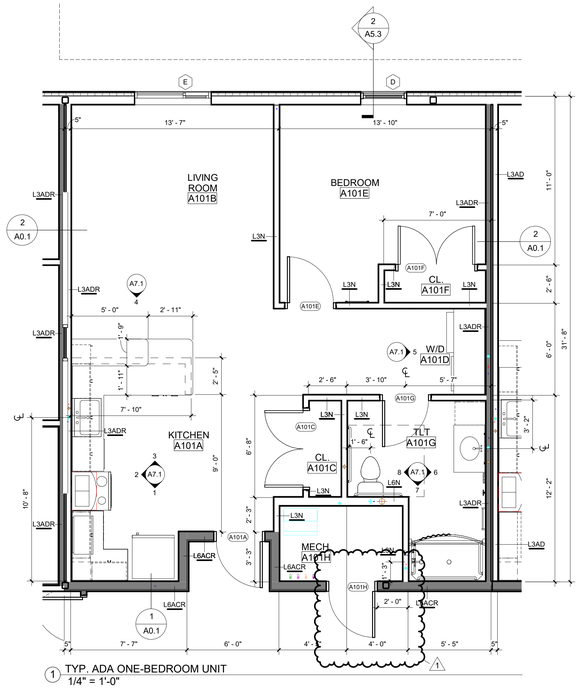
Date: **09/08/2020** | Checked | Drawn

Project Number: **H IH BLAC 19100**

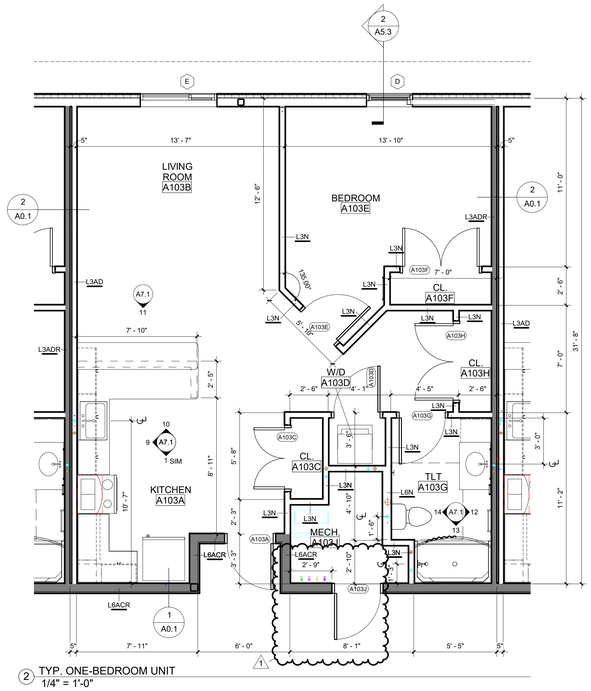
Building Number

Drawing Number: **A1.2**

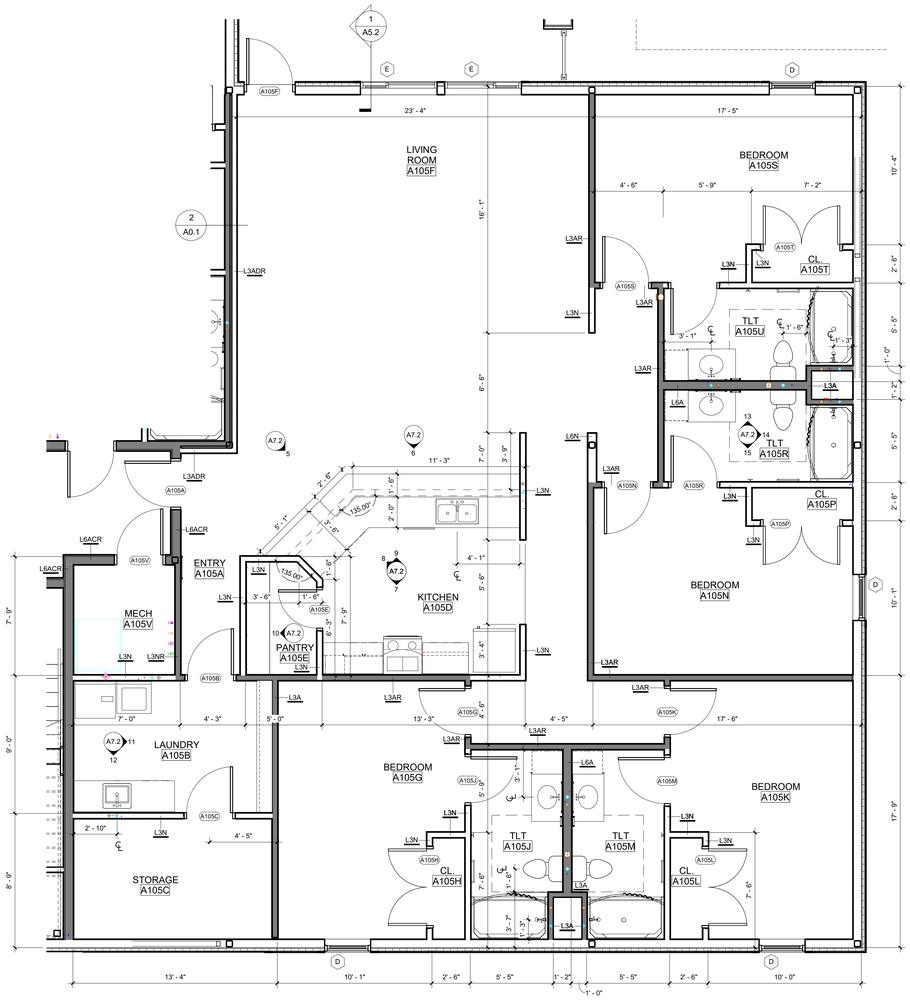
INDIAN HEALTH SERVICE · PHS · 1955 ·



1 TYP. ADA ONE-BEDROOM UNIT
1/4" = 1'-0"



2 TYP. ONE-BEDROOM UNIT
1/4" = 1'-0"

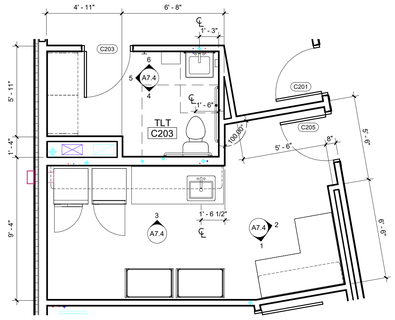


4 TYP. FOUR-BEDROOM UNIT
1/4" = 1'-0"

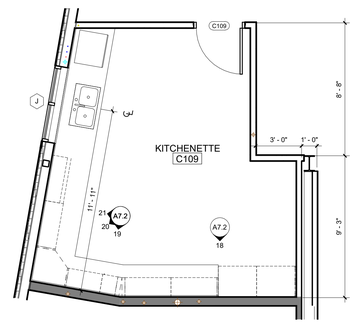
3 TYP. TWO-BEDROOM UNIT
1/4" = 1'-0"

GENERAL NOTES:

1. ALL WALL DIMENSIONS ARE TO THE FACE OF STUD U.N.O.
2. ALL WINDOW DIMENSIONS ARE TO THE CENTER OF THE WINDOW U.N.O.



6 ENLARGED TLT C203
1/4" = 1'-0"



7 ENLARGED KITCHENETTE C109
1/4" = 1'-0"

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
ENLARGED TYPICAL PLANS

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

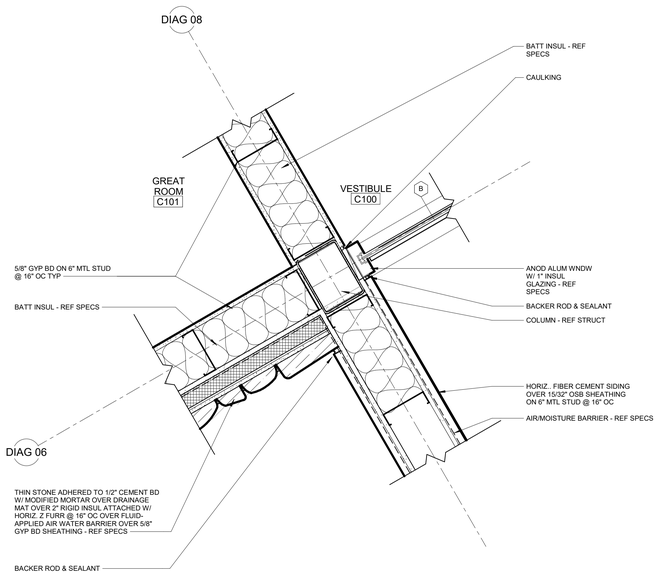
Date **09/08/2020** | Checked | Drawn

Project Number
H IH BLAC 19100

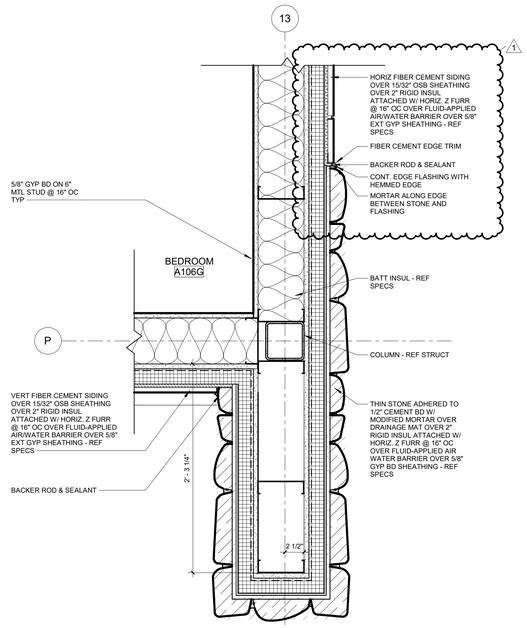
Building Number

Drawing Number
A1.3

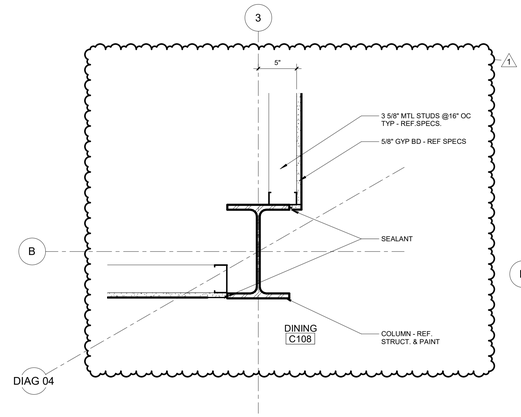
INDIAN HEALTH SERVICE · PHS · 1955 ·



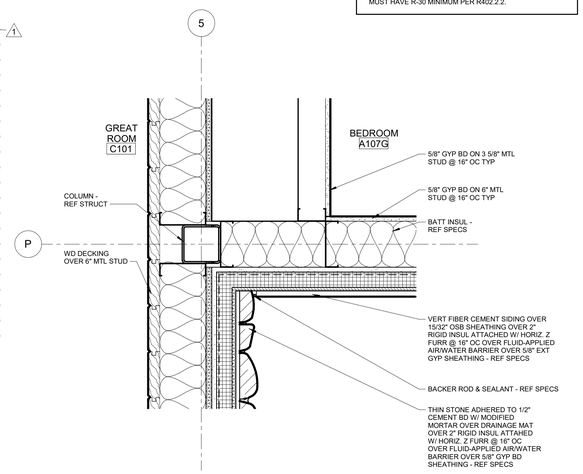
1 PLAN DETAIL - VESTIBULE
1 1/2" = 1'-0"



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



3 PLAN DETAIL - WEST COLUMN IN DINING
1 1/2" = 1'-0"



4 PLAN DETAIL
1 1/2" = 1'-0"

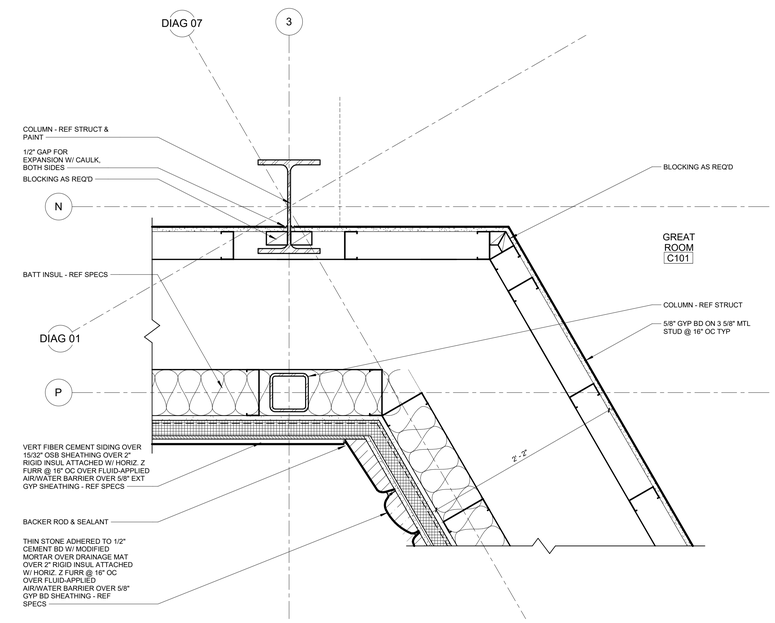
INSULATION REQUIREMENTS

1. SLAB INSULATION SHALL MEET OR EXCEED ZONE 6 REQUIREMENT OF R-10 FOR 4' IN DEPTH.

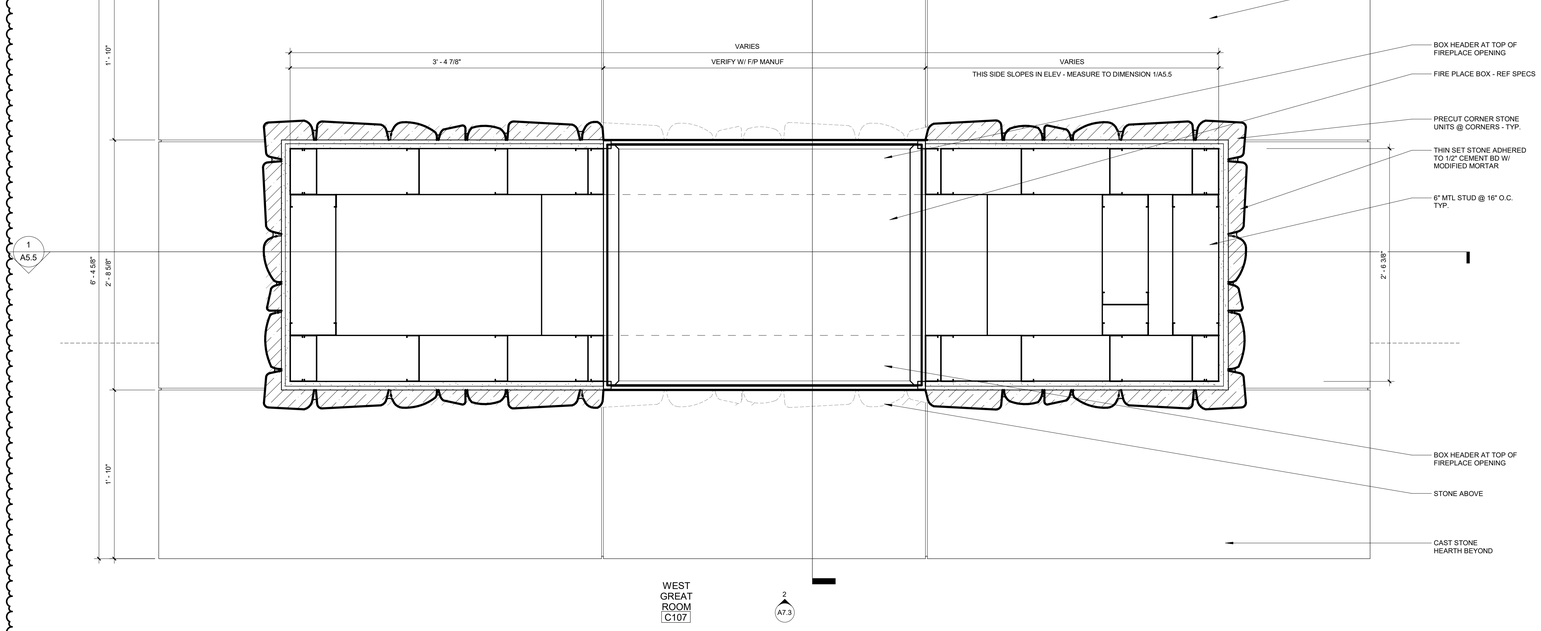
2. EXTERIOR WALL INSULATION SHALL MEET OR EXCEED ZONE 6 REQUIREMENT OF R-21 BATT INSUL + R-11.3 RIGID INSUL.

3. FLOOR INSULATION SHALL MEET OR EXCEED ZONE 6 REQUIREMENT OF R-30 OR PROVIDE INSULATION SUFFICIENT TO FILL THE FRAMING CAVITY PROVIDING NOT LESS THAN R-19.

4. CEILING INSULATION SHALE MEET OR EXCEED ZONE 6 REQUIREMENT OF R49. CEILINGS WITHOUT ATTIC SPACES MUST HAVE R-30 MINIMUM PER R402.2.2.



5 PLAN DETAIL
1 1/2" = 1'-0"



6 PLAN DETAIL AT FIRST FLOOR FIREPLACE
1 1/2" = 1'-0"

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **ENLARGED PLANS**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**

Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **09/08/2020** | Checked | Drawn

Project Number: **H IH BLAC 19100**

Building Number

Drawing Number: **A1.4**

INDIAN HEALTH SERVICE · PHS · 1955 ·

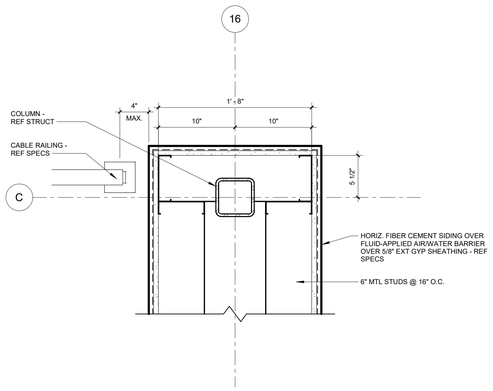
INSULATION REQUIREMENTS

1. SLAB INSULATION SHALL MEET OR EXCEED ZONE 6 REQUIREMENT OF R-10 FOR 4' IN DEPTH.

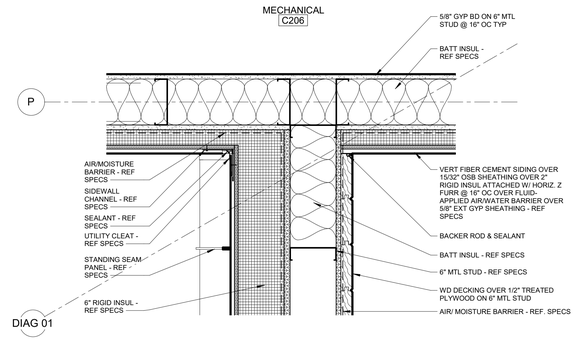
2. EXTERIOR WALL INSULATION SHALL MEET OR EXCEED ZONE 6 REQUIREMENT OF R-21 BATT INSUL + R-11.3 RIGID INSUL.

3. FLOOR INSULATION SHALL MEET OR EXCEED ZONE 6 REQUIREMENT OF R-30 OR PROVIDE INSULATION SUFFICIENT TO FILL THE FRAMING CAVITY PROVIDING NOT LESS THAN R-19.

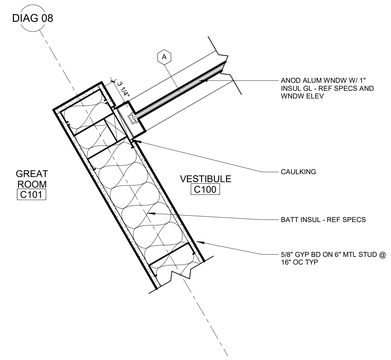
4. CEILING INSULATION SHALE MEET OR EXCEED ZONE 6 REQUIREMENT OF R49. CEILINGS WITHOUT ATTIC SPACES MUST HAVE R-30 MINIMUM PER R402.2.2.



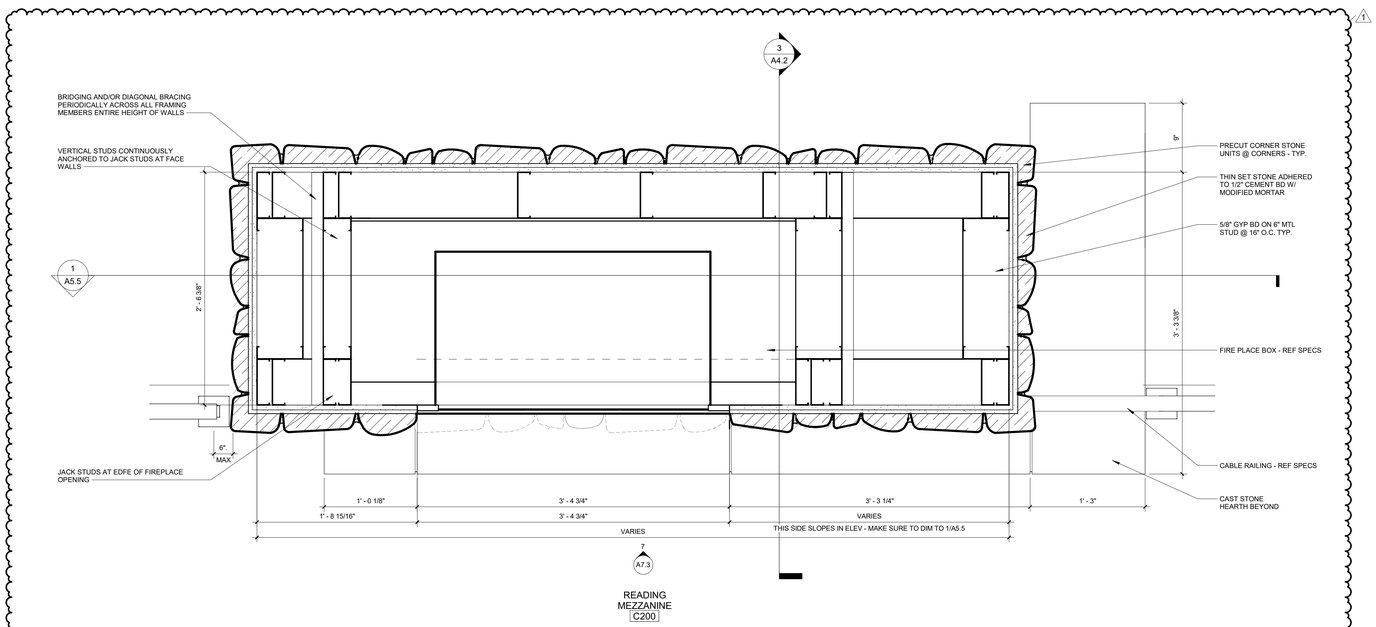
1 PLAN DETAIL AT PATIO
1 1/2" = 1'-0"



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



3 PLAN DETAIL
1 1/2" = 1'-0"



4 PLAN DETAIL AT 2ND FLOOR FIREPLACE
1 1/2" = 1'-0"

Revisions:	Date
ADDENDUM 001 ⚠1	02/02/2022

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **ENLARGED PLANS**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

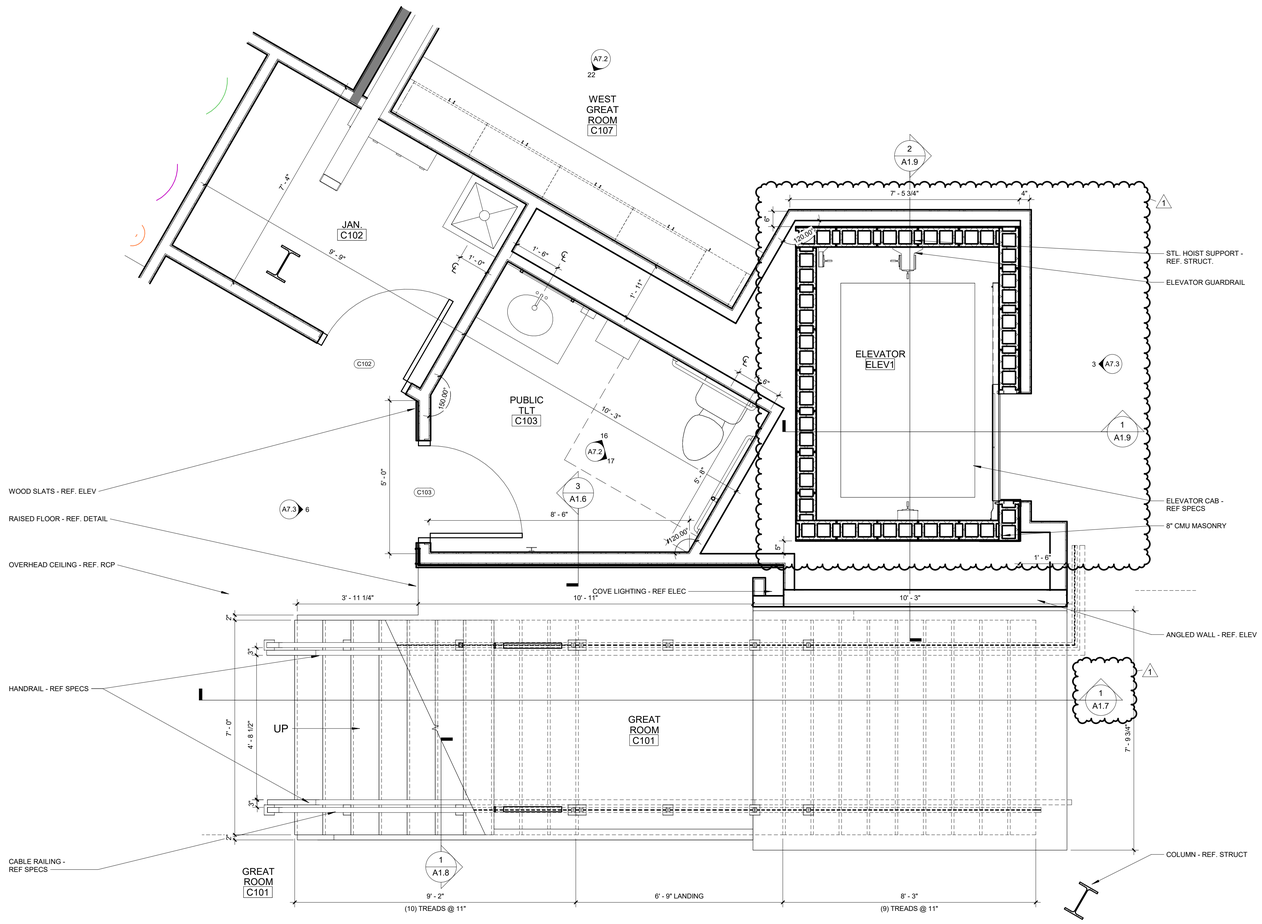
Date: **09/08/2020** | Checked | Drawn

Project Number: **H IH BLAC 19100**

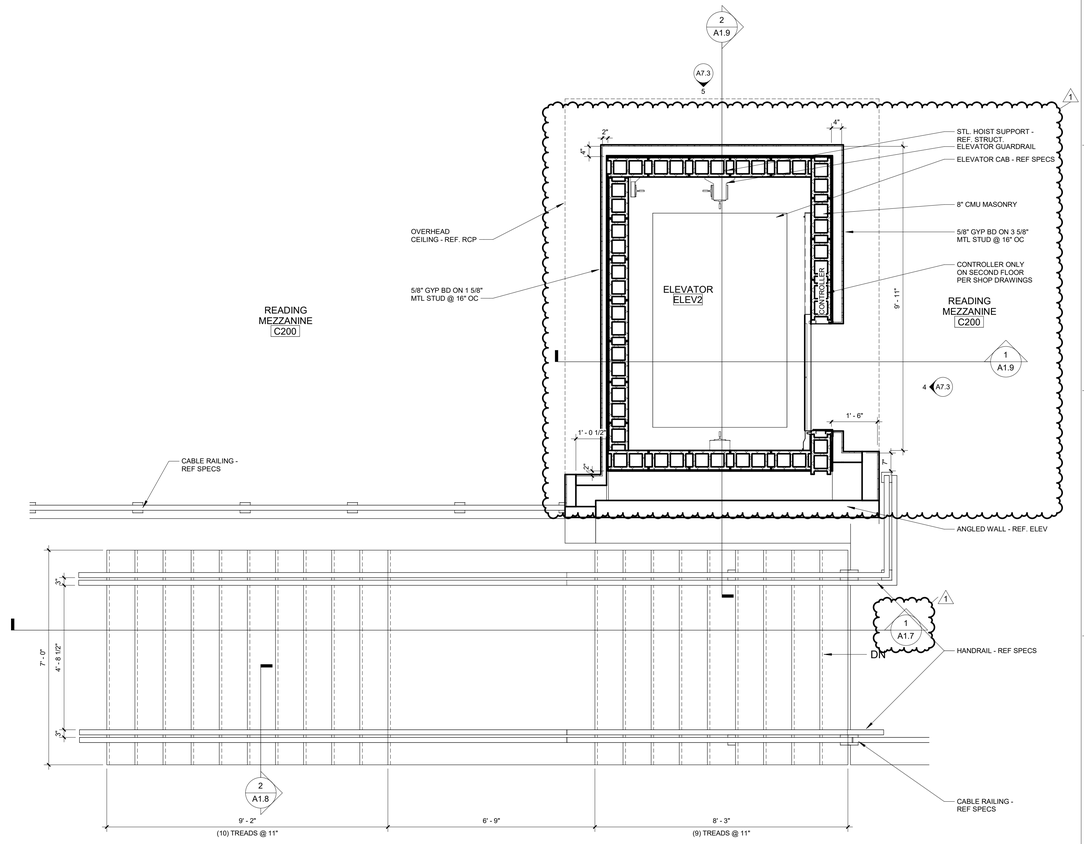
Building Number

Drawing Number: **A1.5**

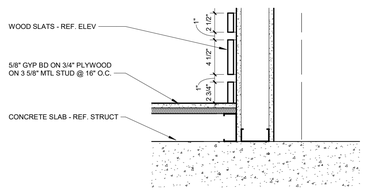
INDIAN HEALTH SERVICE · PHS · 1955 ·



1 STAIRS & ELEV @ C101 GREAT ROOM
1/2" = 1'-0"



2 STAIRS & ELEV @ 2ND FLOOR
1/2" = 1'-0"



3 DETAIL @ RAISED FLOOR
1 1/2" = 1'-0"

ADDENDUM 001 1	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
ENLARGED PLANS

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

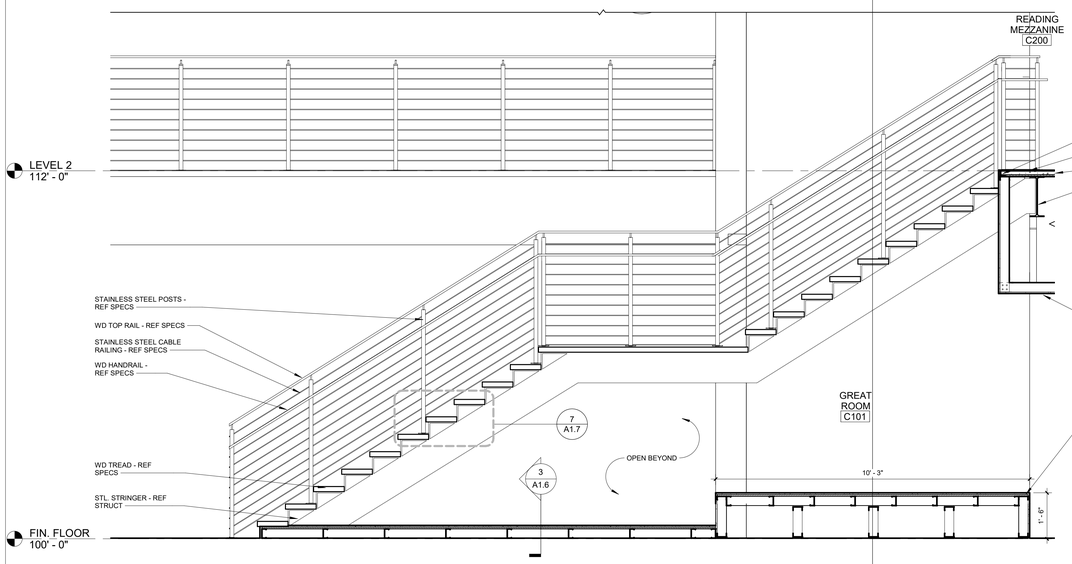
Date **09/08/2020** | Checked | Drawn

Project Number
H IH BLAC 19100

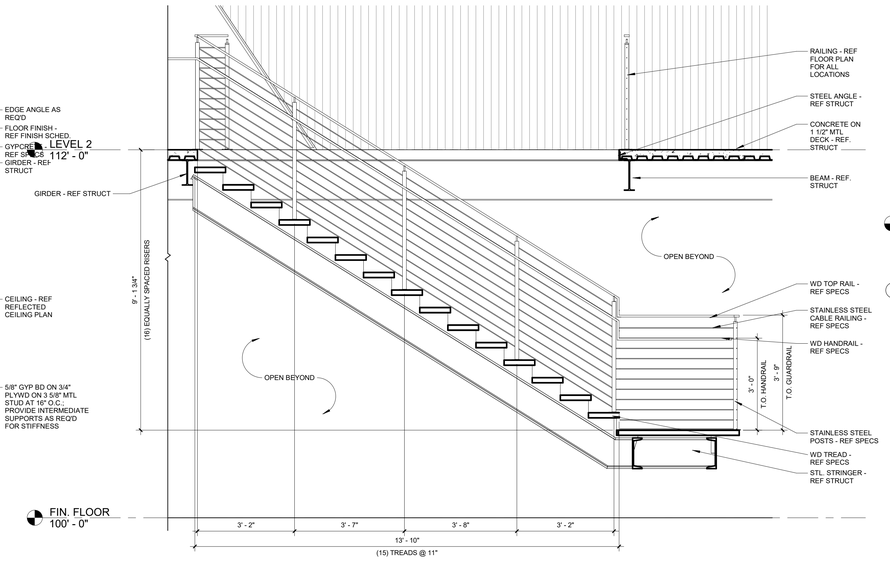
Building Number

Drawing Number
A1.6

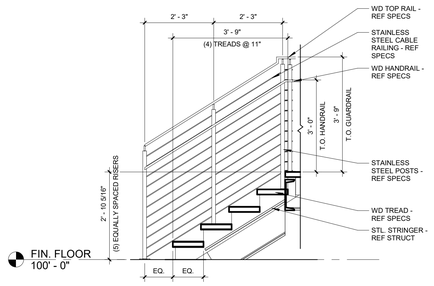
INDIAN HEALTH SERVICE · PHS · 1955 ·



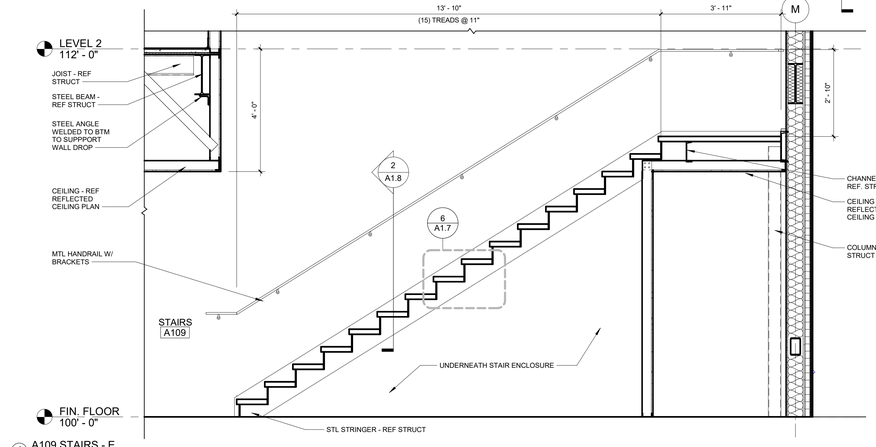
1 C101 GREAT ROOM - W
1/2" = 1'-0"



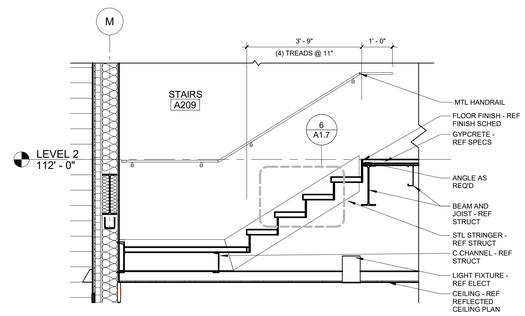
2 EXTERIOR STAIRS - E
1/2" = 1'-0"



3 EXTERIOR STAIRS - E
1/2" = 1'-0"



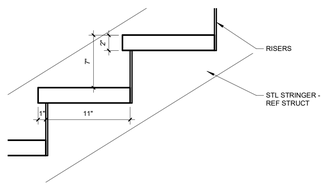
4 A109 STAIRS - E
1/2" = 1'-0"



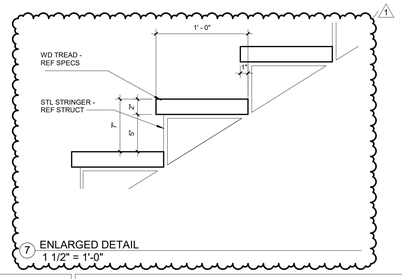
5 A109 STAIRS - W
1/2" = 1'-0"

8 EXTERIOR STAIRS
1/2" = 1'-0"

9 A109 STAIRS
1/2" = 1'-0"



6 ENLARGED DETAIL
1 1/2" = 1'-0"



7 ENLARGED DETAIL
1 1/2" = 1'-0"

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
STAIR DETAILS

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

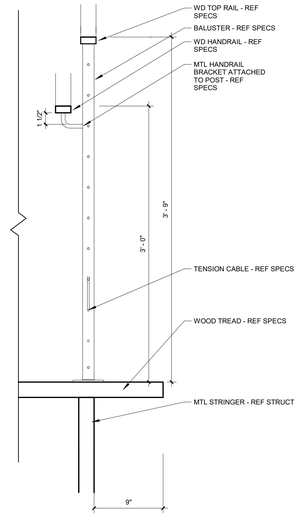
Date **09/08/2020** | Checked | Drawn

Project Number
H IH BLAC 19100

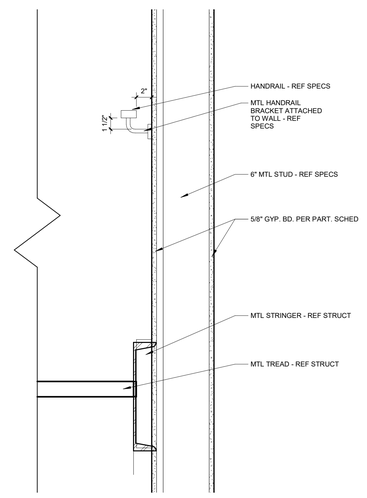
Building Number

Drawing Number
A1.7

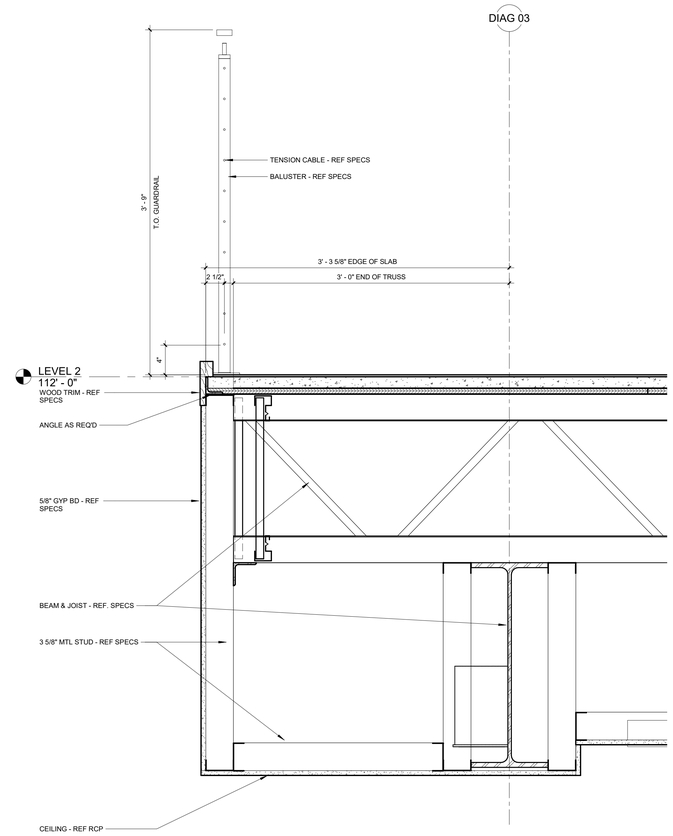
INDIAN HEALTH SERVICE · PHS · 1955 ·



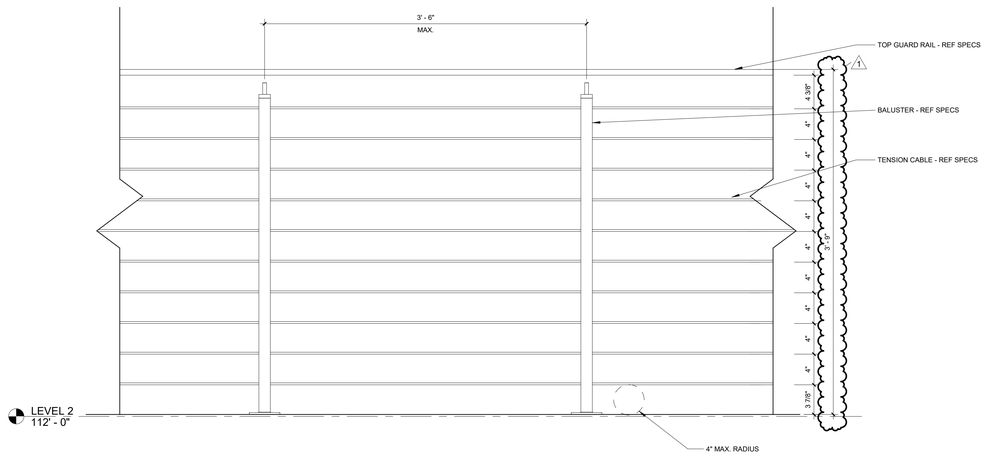
1 C101 GREAT ROOM STAIRS SECTION
1 1/2" = 1'-0"



2 A109 STAIRS SECTION
1 1/2" = 1'-0"



3 CABLE RAILING SECTION
1 1/2" = 1'-0"



4 CABLE RAILING ELEVATION
1 1/2" = 1'-0"

Revisions:	Date
ADDENDUM 001 (1)	02/02/2022

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
STAIR DETAILS

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

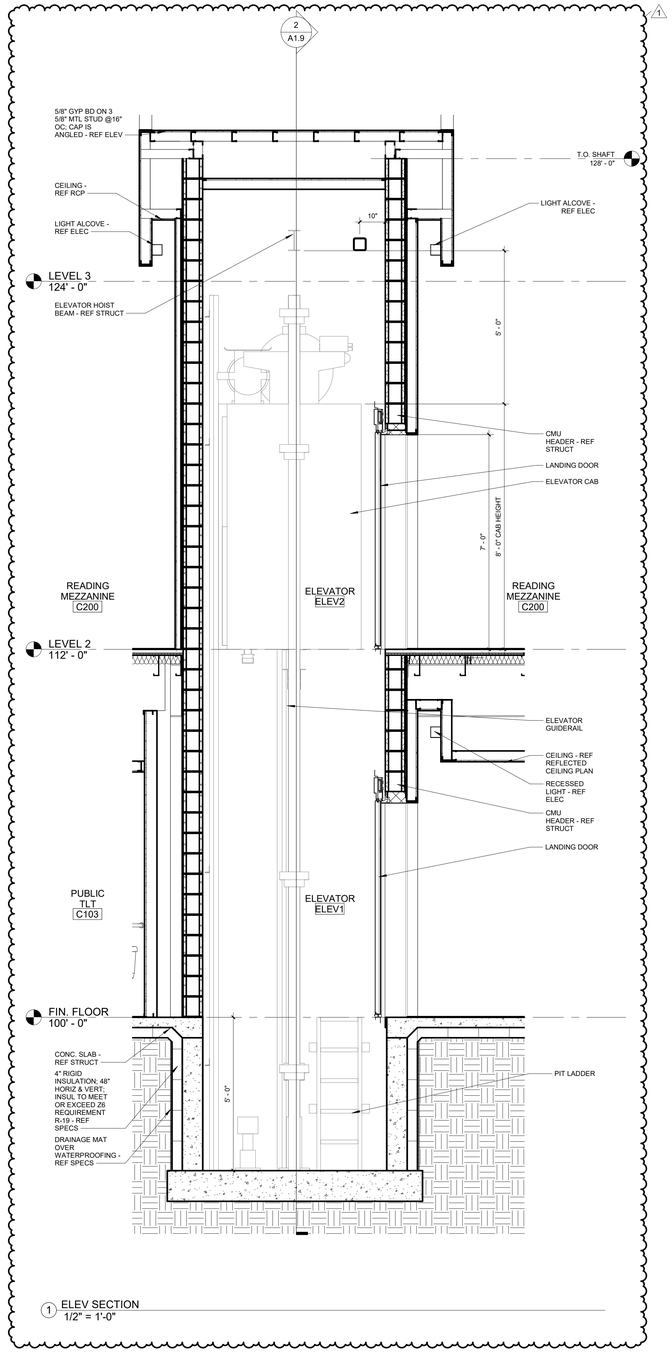
Date **09/08/2020** | Checked | Drawn

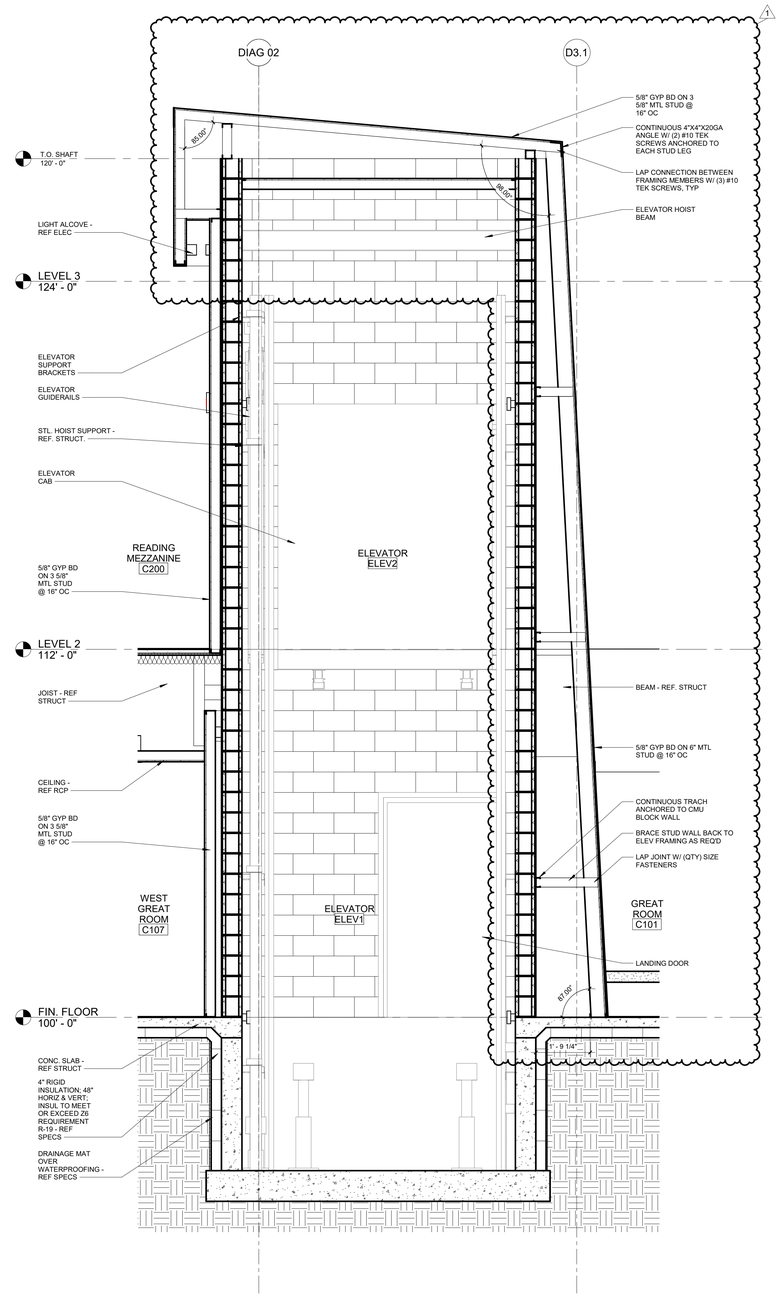
Project Number
H IH BLAC 19100

Building Number

Drawing Number
A1.8

INDIAN HEALTH SERVICE · PHS · 1955 ·





ADDENDUM 001 (1)	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title

ELEVATOR DETAILS

Approved: Project Director

Project Title

APARTMENT BUILDING AND SITEWORK

Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location

BROWNING, MONTANA

Date	Checked	Drawn
09/08/2020		

Project Number

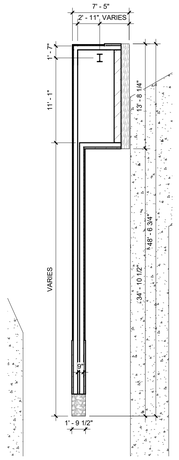
H IH BLAC 19100

Building Number

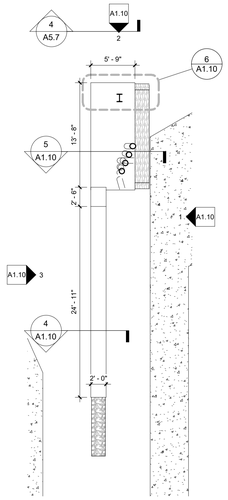
Drawing Number

A1.9

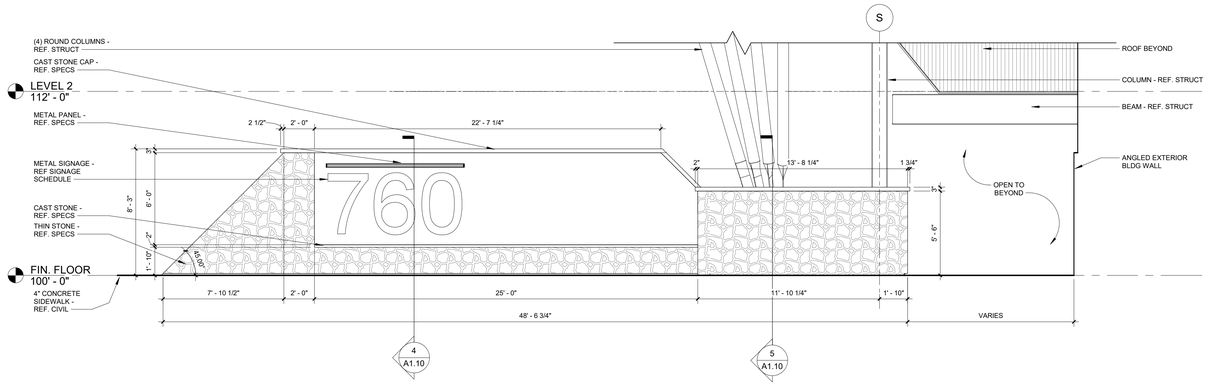
INDIAN HEALTH SERVICE · PHS · 1955 ·



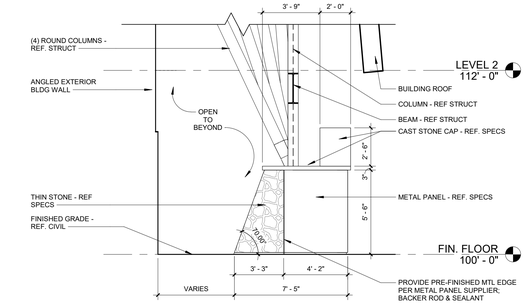
A ENLARGED PLAN - LOW ENTRY WALL
1/8" = 1'-0"



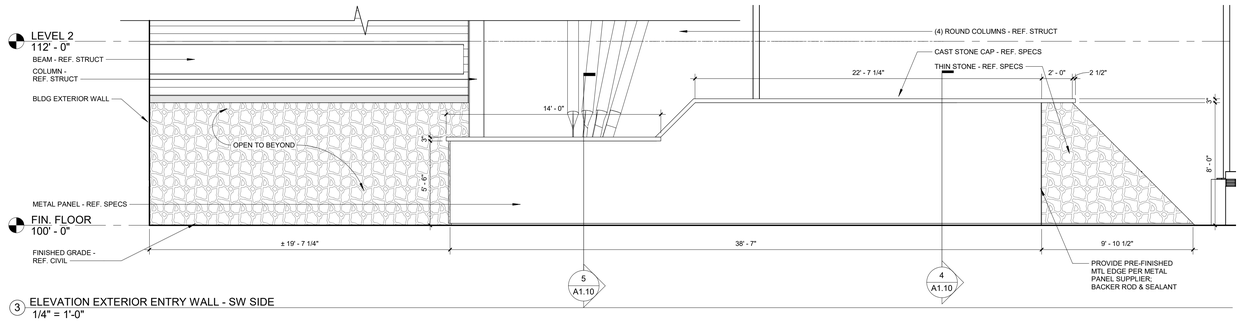
B ENLARGED PLAN - HIGH ENTRY WALL
1/8" = 1'-0"



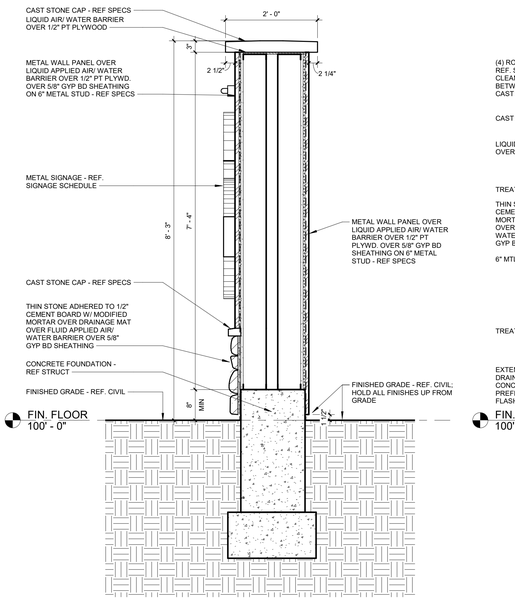
1 ELEVATION EXTERIOR ENTRY WALL - NE SIDE
1/4" = 1'-0"



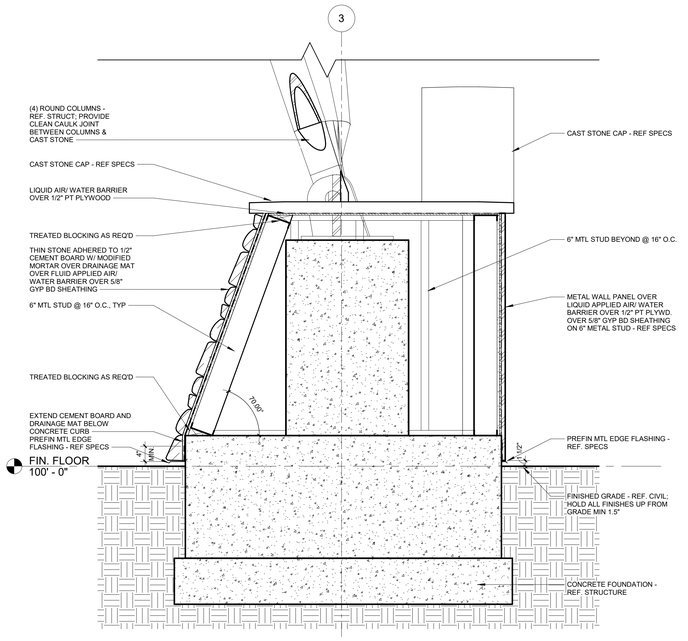
2 ELEVATION EXTERIOR ENTRY WALL - NW SIDE
1/4" = 1'-0"



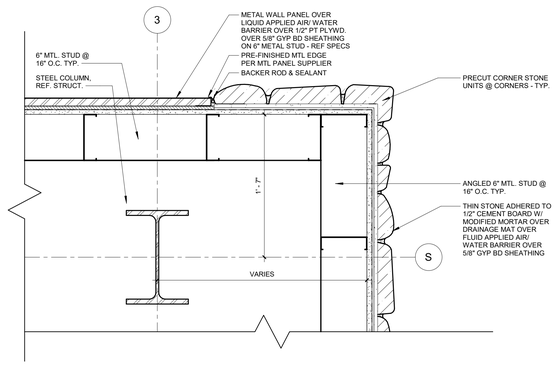
3 ELEVATION EXTERIOR ENTRY WALL - SW SIDE
1/4" = 1'-0"



4 WALL SECTION @ EXTERIOR ENTRY WALL
3/4" = 1'-0"



5 FRONT SIGNAGE SECTION
3/4" = 1'-0"



6 PLAN DETAIL
1 1/2" = 1'-0"

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
MAIN ENTRY

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

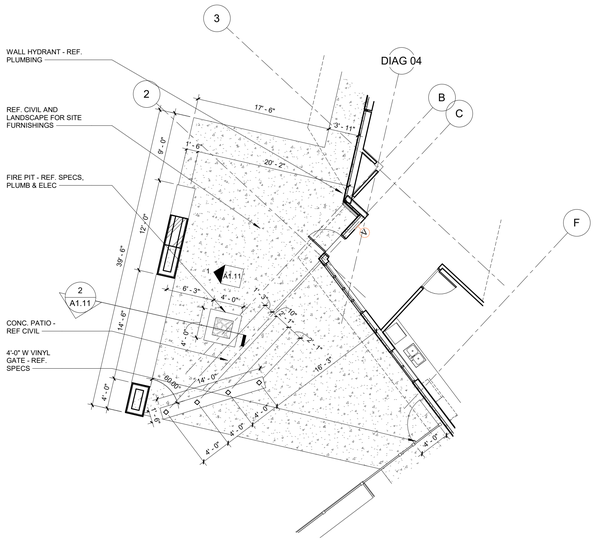
Date **09/08/2020** | Checked | Drawn

Project Number
H IH BLAC 19100

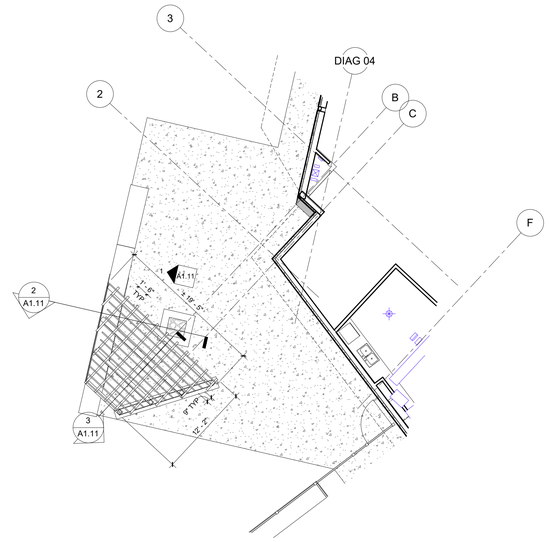
Building Number

Drawing Number
A1.10

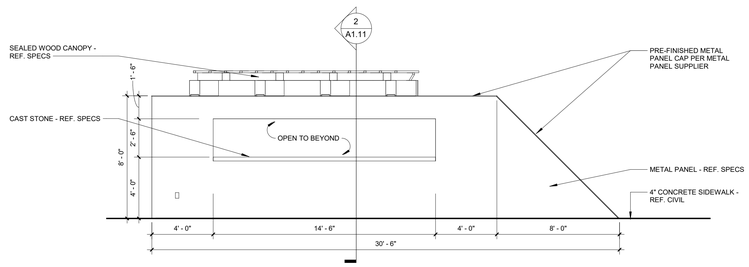
INDIAN HEALTH SERVICE · IHS · 1955 ·



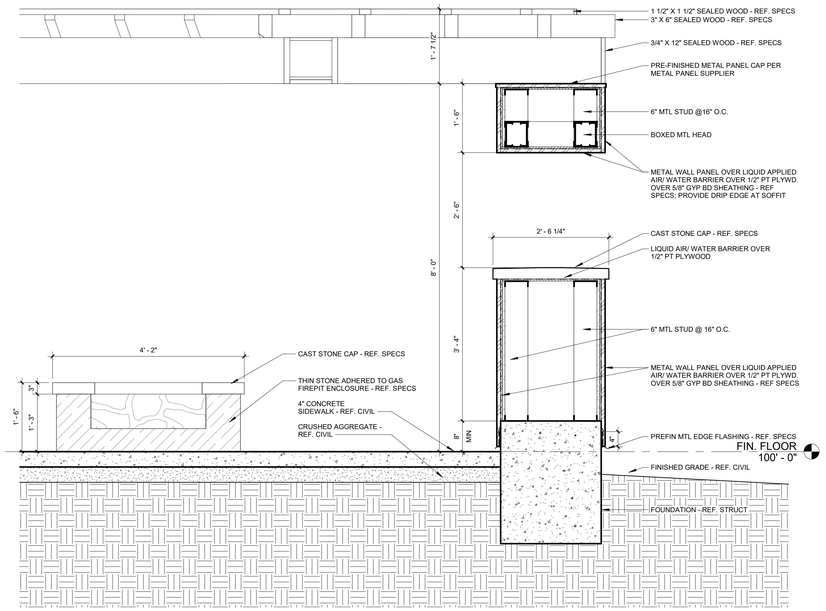
A ENLARGED PLAN - LOW EXTERIOR BACK PATIO
1/8" = 1'-0"



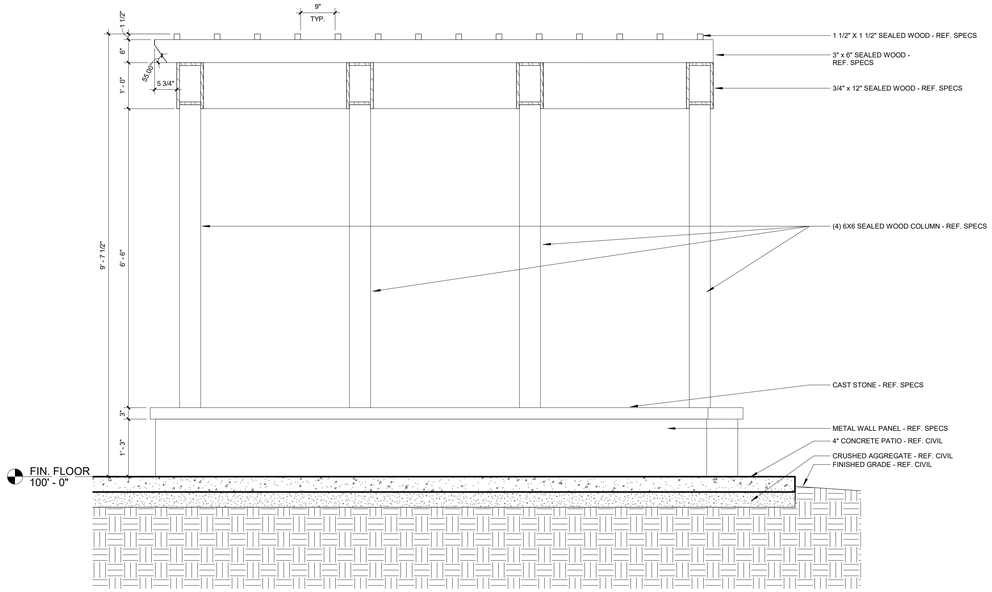
B ENLARGED PLAN - HIGH EXTERIOR BACK PATIO
1/8" = 1'-0"



1 C112 MAIN PATIO - E
1/4" = 1'-0"



2 CANOPY & WALL SECTION
3/4" = 1'-0"



3 CANOPY SECTION
3/4" = 1'-0"

ADDENDUM 001 1	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
PATIO

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI122018000051
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

Date **09/08/2020** | Checked | Drawn

Project Number
H IH BLAC 19100

Building Number

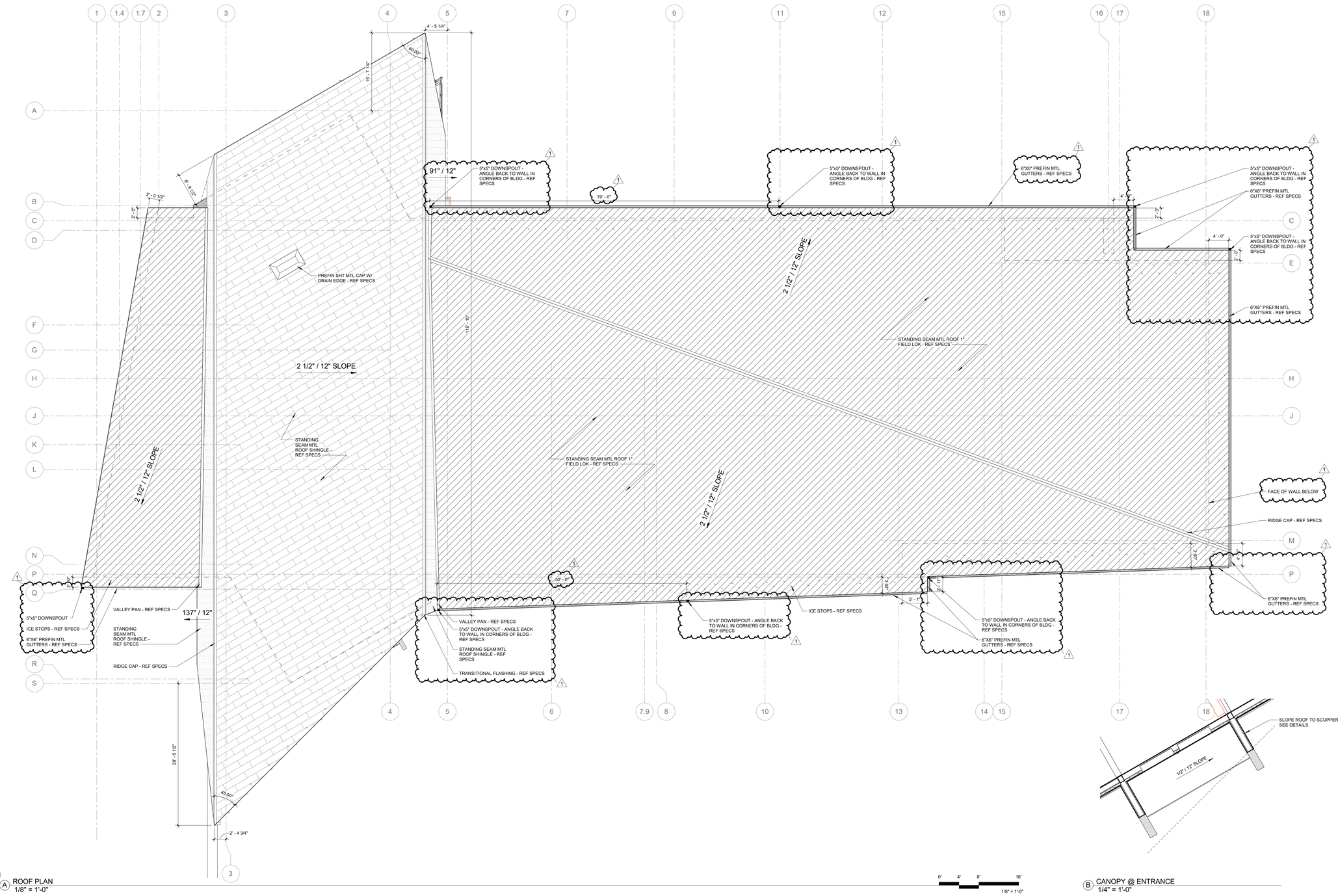
Drawing Number
A1.11

INDIAN HEALTH SERVICE · PHS · 1955 ·

GENERAL NOTES:

1. REFER TO MECH. ROOF PLAN SHEET FOR ADDITIONAL INFORMATION INDICATING LOCATIONS OF EXHAUST FANS, VENTS AND OTHER ROOF PENETRATIONS.

2. FLASH ALL ROOF PENETRATIONS, ETC. PER ROOFING MANUFACTURER RECOMMENDATIONS - REFER TO/COORDINATE WITH MECHANICAL AND PLUMBING PLANS AND FLASH ALL PENETRATIONS AS REQUIRED.



N

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

0' 4' 8' 16'
1/8" = 1'-0"

B CANOPY @ ENTRANCE
1/4" = 1'-0"

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
ROOF PLAN

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

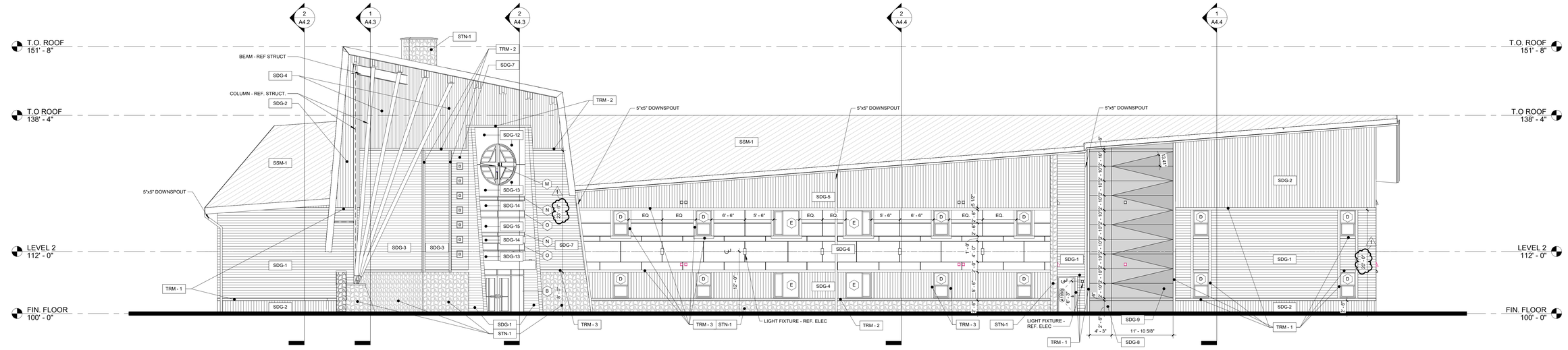
Date **09/08/2020** | Checked | Drawn

Project Number
H IH BLAC 19100

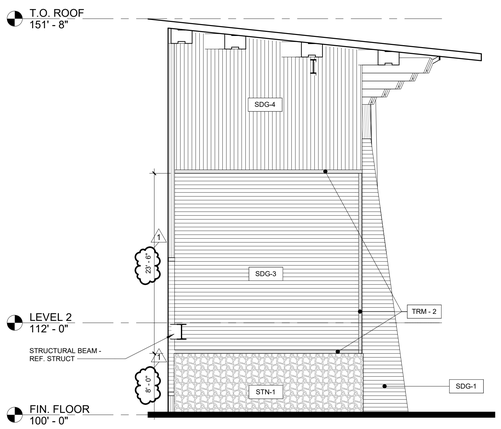
Building Number

Drawing Number
A2.1

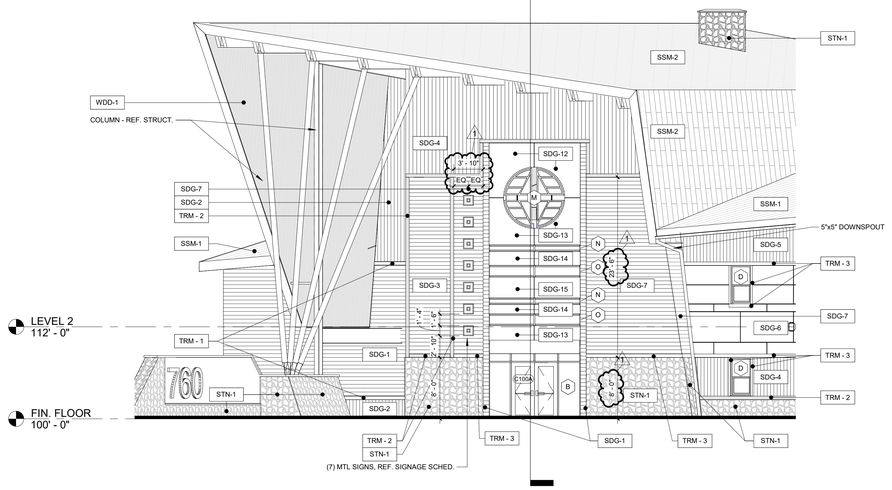
INDIAN HEALTH SERVICE · PHS · 1955 ·



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



2 SOUTH - WEST LOBBY ELEVATION
1/8" = 1'-0"



3 SOUTH - EAST LOBBY ELEVATION
1/8" = 1'-0"

EXTERIOR FINISH LEGEND

CODE	DESCRIPTION	MANUFACTURER	STYLE NAME	STYLE / COLOR	SPECIAL INFO.
TRM-4					
DIVISION 4 - MASONRY					
STN-1	STONE THIN VENEER	SELECT STONE	THIN VENEER	ROUNDED RIVER ROCK	OR APPROVED EQUAL
DIVISION 6 - WOOD, PLASTICS, AND COMPOSITES					
SDG-3	PRIMED TRIM BOARD	JAMES HARDIE	4/4 SMOOTH	COLOR: SHERWIN WILLIAMS; SUNBEAM YELLOW; SW 0078	OR APPROVED EQUAL
TRM - 1	PRIMED TRIM BOARD	JAMES HARDIE	4/4 SMOOTH	COLOR: SHERWIN WILLIAMS; PERLE NOIR, SW 9154	OR APPROVED EQUAL
TRM - 2	PRIMED TRIM BOARD	JAMES HARDIE	4/4 SMOOTH	COLOR: SHERWIN WILLIAMS; INKY BLUE, SW 9149	OR APPROVED EQUAL
TRM - 3	PRIMED TRIM BOARD	JAMES HARDIE	4/4 SMOOTH - 5 1/2" WIDE	COLOR: SHERWIN WILLIAMS; HIGH REFLECTIVE WHITE, SW 7757	OR APPROVED EQUAL
TRM - 4	PRIMED TRIM BOARD	JAMES HARDIE	4/4 SMOOTH	COLOR: SHERWIN WILLIAMS; SUNBEAM YELLOW; SW 0078	OR APPROVED EQUAL
WDD-1	WOOD DECKING	TBD	SOLID WOOD	CLEAR WHITE PINE	OR APPROVED EQUAL
DIVISION 7 - THERMAL AND MOISTURE PROTECTION					
SDG-1	HORIZONTAL FIBER CEMENT SIDING	JAMES HARDIE	ARTISAN SHIPLAP SIDING	COLOR: SHERWIN WILLIAMS; PERLE NOIR, SW 9154	OR APPROVED EQUAL
SDG-2	VERTICAL FIBER CEMENT SIDING	JAMES HARDIE	ARTISAN SHIPLAP SIDING	COLOR: SHERWIN WILLIAMS; PERLE NOIR, SW 9154	OR APPROVED EQUAL
SDG-3					OR APPROVED EQUAL
SDG-4	VERTICAL FIBER CEMENT SIDING	JAMES HARDIE	ARTISAN SHIPLAP SIDING	COLOR: SHERWIN WILLIAMS; INKY BLUE, SW 9149	OR APPROVED EQUAL
SDG-5	VERTICAL FIBER CEMENT SIDING	JAMES HARDIE	ARTISAN SHIPLAP SIDING	COLOR: SHERWIN WILLIAMS; HIGH REFLECTIVE WHITE, SW 7757	OR APPROVED EQUAL
SDG-6	FIBER CEMENT PANEL	JAMES HARDIE	REVEAL PANEL WITH SURROUND TRIM	COLOR: SHERWIN WILLIAMS; HIGH REFLECTIVE WHITE, SW 7757	OR APPROVED EQUAL
SDG-7	HORIZONTAL FIBER CEMENT SIDING	JAMES HARDIE	ARTISAN SHIPLAP SIDING	COLOR: SHERWIN WILLIAMS; HIGH REFLECTIVE WHITE, SW 7757	OR APPROVED EQUAL
SDG-8	FIBER CEMENT PANEL	JAMES HARDIE	REVEAL PANEL WITH SURROUND TRIM	COLOR: SHERWIN WILLIAMS; FIREWEED, SW 6328	OR APPROVED EQUAL
SDG-9	FIBER CEMENT PANEL	JAMES HARDIE	REVEAL PANEL WITH SURROUND TRIM	COLOR: SHERWIN WILLIAMS; HEARTTHROB, SW 6866	OR APPROVED EQUAL
SDG-10	FIBER CEMENT PANEL	JAMES HARDIE	REVEAL PANEL WITH SURROUND TRIM	COLOR: SHERWIN WILLIAMS; INKY BLUE, SW 9149	OR APPROVED EQUAL
SDG-12	HORIZONTAL FIBER CEMENT SIDING	JAMES HARDIE	REVEAL PANEL WITH SURROUND TRIM	COLOR: SHERWIN WILLIAMS; RAPTURE BLUE, SW 6773	OR APPROVED EQUAL
SDG-13	HORIZONTAL FIBER CEMENT SIDING	JAMES HARDIE	REVEAL PANEL WITH SURROUND TRIM	COLOR: SHERWIN WILLIAMS; FRESHWATER, SW 6774	OR APPROVED EQUAL
SDG-14	HORIZONTAL FIBER CEMENT SIDING	JAMES HARDIE	REVEAL PANEL WITH SURROUND TRIM	COLOR: SHERWIN WILLIAMS; BRINY, SW 6775	OR APPROVED EQUAL
SDG-15	HORIZONTAL FIBER CEMENT SIDING	JAMES HARDIE	REVEAL PANEL WITH SURROUND TRIM	COLOR: SHERWIN WILLIAMS; GENTILE AQUAMARINE, SW 9046	OR APPROVED EQUAL
SSM-1	STANDING SEAM METAL ROOF	ATAS INTERNATIONAL, INC.	1" FIELD-LOK	BLACK	OR APPROVED EQUAL
SSM-2	STANDING SEAM METAL ROOF	ATAS INTERNATIONAL, INC.	STANDING SEAM SHINGLE	BLACK	OR APPROVED EQUAL

MANUFACTURER'S TRADE NAMES AND NUMBERS USED HEREIN ARE ONLY TO IDENTIFY COLORS, FINISHES, TEXTURES, AND PATTERNS. PRODUCTS OF OTHER MANUFACTURER'S EQUIVALENT TO COLORS, FINISHES, TEXTURES AND PATTERNS OF MANUFACTURERS LISTED THAT MEET REQUIREMENTS OF TECHNICAL SPECIFICATIONS WILL BE ACCEPTABLE UPON APPROVAL IN WRITING BY CONTRACTING OFFICER FOR FINISH REQUIREMENTS.

- THIS NOTE APPLIES TO ALL SUCH INSTANCES IN THE DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.

ADDENDUM 001 (1)	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
EXTERIOR ELEVATIONS

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

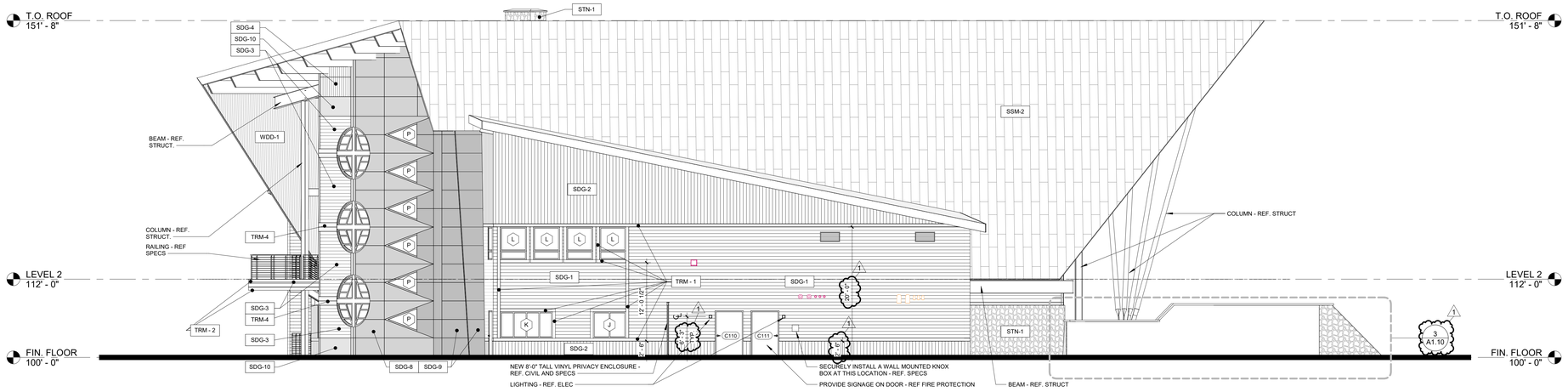
Date **09/08/2020** | Checked | Drawn

Project Number
H IH BLAC 19100

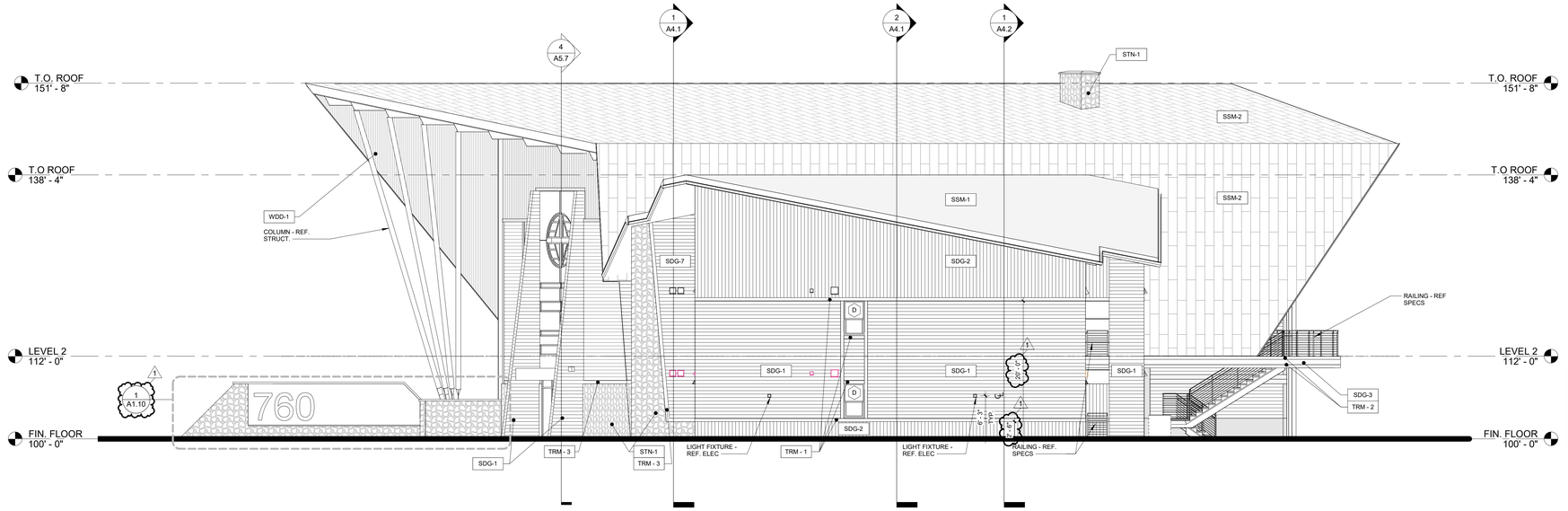
Building Number

Drawing Number
A3.1

INDIAN HEALTH SERVICE · PHS · 1955 ·



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



2 NORTH - EAST ELEVATION
1/8" = 1'-0"

EXTERIOR FINISH LEGEND

CODE	DESCRIPTION	MANUFACTURER	STYLE NAME	STYLE / COLOR	SPECIAL INFO.
TRM-4					
DIVISION 4 - MASONRY					
STN-1	STONE THIN VENEER	SELECT STONE	THIN VENEER	ROUNDED RIVER ROCK	OR APPROVED EQUAL
DIVISION 6 - WOOD, PLASTICS, AND COMPOSITES					
SDG-3	PRIMED TRIM BOARD	JAMES HARDIE	4/4 SMOOTH	COLOR: SHERWIN WILLIAMS; SUNBEAM YELLOW; SW 0078	OR APPROVED EQUAL
TRM - 1	PRIMED TRIM BOARD	JAMES HARDIE	4/4 SMOOTH	COLOR: SHERWIN WILLIAMS; PERLE NOIR, SW 9154	OR APPROVED EQUAL
TRM - 2	PRIMED TRIM BOARD	JAMES HARDIE	4/4 SMOOTH	COLOR: SHERWIN WILLIAMS; INKY BLUE, SW 9149	OR APPROVED EQUAL
TRM - 3	PRIMED TRIM BOARD	JAMES HARDIE	4/4 SMOOTH - 5 1/2" WIDE	COLOR: SHERWIN WILLIAMS; HIGH REFLECTIVE WHITE, SW 7757	OR APPROVED EQUAL
TRM - 4	PRIMED TRIM BOARD	JAMES HARDIE	4/4 SMOOTH	COLOR: SHERWIN WILLIAMS; SUNBEAM YELLOW; SW 0078	OR APPROVED EQUAL
WDD-1	WOOD DECKING	TBD	SOLID WOOD	CLEAR WHITE PINE	OR APPROVED EQUAL
DIVISION 7 - THERMAL AND MOISTURE PROTECTION					
SDG-1	HORIZONTAL FIBER CEMENT SIDING	JAMES HARDIE	ARTISAN SHIPLAP SIDING	COLOR: SHERWIN WILLIAMS; PERLE NOIR, SW 9154	OR APPROVED EQUAL
SDG-2	VERTICAL FIBER CEMENT SIDING	JAMES HARDIE	ARTISAN SHIPLAP SIDING	COLOR: SHERWIN WILLIAMS; PERLE NOIR, SW 9154	OR APPROVED EQUAL
SDG-3					OR APPROVED EQUAL
SDG-4	VERTICAL FIBER CEMENT SIDING	JAMES HARDIE	ARTISAN SHIPLAP SIDING	COLOR: SHERWIN WILLIAMS; INKY BLUE, SW 9149	OR APPROVED EQUAL
SDG-5	VERTICAL FIBER CEMENT SIDING	JAMES HARDIE	ARTISAN SHIPLAP SIDING	COLOR: SHERWIN WILLIAMS; HIGH REFLECTIVE WHITE, SW 7757	OR APPROVED EQUAL
SDG-6	FIBER CEMENT PANEL	JAMES HARDIE	REVEAL PANEL WITH SURROUND TRIM	COLOR: SHERWIN WILLIAMS; HIGH REFLECTIVE WHITE, SW 7757	OR APPROVED EQUAL
SDG-7	HORIZONTAL FIBER CEMENT SIDING	JAMES HARDIE	ARTISAN SHIPLAP SIDING	COLOR: SHERWIN WILLIAMS; HIGH REFLECTIVE WHITE, SW 7757	OR APPROVED EQUAL
SDG-8	FIBER CEMENT PANEL	JAMES HARDIE	REVEAL PANEL WITH SURROUND TRIM	COLOR: SHERWIN WILLIAMS; FIREWEED, SW 6328	OR APPROVED EQUAL
SDG-9	FIBER CEMENT PANEL	JAMES HARDIE	REVEAL PANEL WITH SURROUND TRIM	COLOR: SHERWIN WILLIAMS; HEARTTHROB, SW 6866	OR APPROVED EQUAL
SDG-10	FIBER CEMENT PANEL	JAMES HARDIE	REVEAL PANEL WITH SURROUND TRIM	COLOR: SHERWIN WILLIAMS; INKY BLUE, SW 9149	OR APPROVED EQUAL
SDG-12	HORIZONTAL FIBER CEMENT SIDING	JAMES HARDIE	REVEAL PANEL WITH SURROUND TRIM	COLOR: SHERWIN WILLIAMS; RAPTURE BLUE, SW 6773	OR APPROVED EQUAL
SDG-13	HORIZONTAL FIBER CEMENT SIDING	JAMES HARDIE	REVEAL PANEL WITH SURROUND TRIM	COLOR: SHERWIN WILLIAMS; FRESHWATER, SW 6774	OR APPROVED EQUAL
SDG-14	HORIZONTAL FIBER CEMENT SIDING	JAMES HARDIE	REVEAL PANEL WITH SURROUND TRIM	COLOR: SHERWIN WILLIAMS; BRINY, SW 6775	OR APPROVED EQUAL
SDG-15	HORIZONTAL FIBER CEMENT SIDING	JAMES HARDIE	REVEAL PANEL WITH SURROUND TRIM	COLOR: SHERWIN WILLIAMS; GENTLE AQUAMARINE, SW 9046	OR APPROVED EQUAL
SSM-1	STANDING SEAM METAL ROOF	ATAS INTERNATIONAL, INC.	1" FIELD-LOK	BLACK	OR APPROVED EQUAL
SSM-2	STANDING SEAM METAL ROOF	ATAS INTERNATIONAL, INC.	STANDING SEAM SHINGLE	BLACK	OR APPROVED EQUAL

MANUFACTURER'S TRADE NAMES AND NUMBERS USED HEREIN ARE ONLY TO IDENTIFY COLORS, FINISHES, TEXTURES, AND PATTERNS. PRODUCTS OF OTHER MANUFACTURER'S EQUIVALENT TO COLORS, FINISHES, TEXTURES AND PATTERNS OF MANUFACTURERS LISTED THAT MEET REQUIREMENTS OF TECHNICAL SPECIFICATIONS WILL BE ACCEPTABLE UPON APPROVAL IN WRITING BY CONTRACTING OFFICER FOR FINISH REQUIREMENTS.

- THIS NOTE APPLIES TO ALL SUCH INSTANCES IN THE DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.

Revisions:	Date
ADDENDUM 001 1	02/02/2022

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
EXTERIOR ELEVATIONS

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI122018000051
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

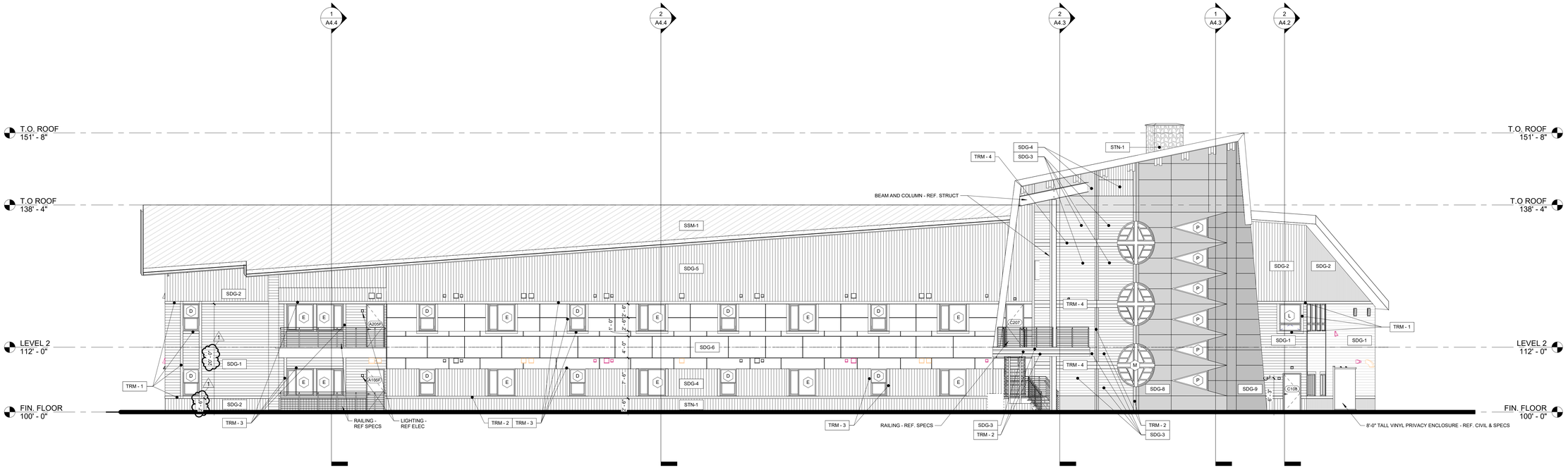
Date **09/08/2020** | Checked | Drawn

Project Number
H IH BLAC 19100

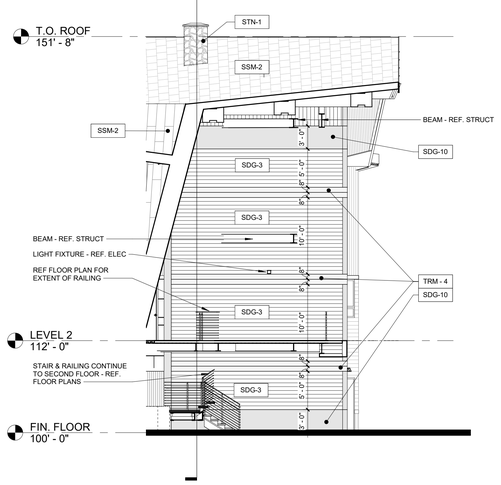
Building Number

Drawing Number
A3.2

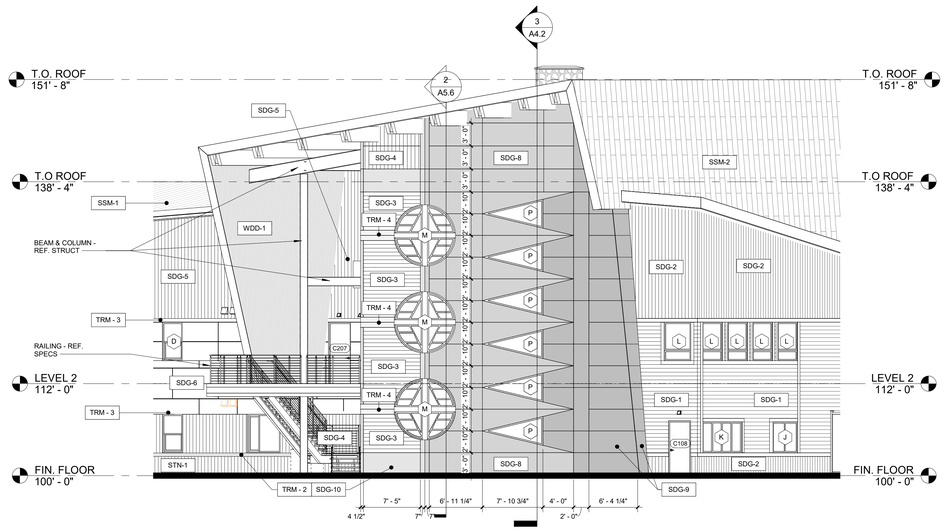
INDIAN HEALTH SERVICE · IHS · 1955 ·



1 NORTH - WEST ELEVATION
1/8" = 1'-0"



3 NORTH GREAT RM ELEVATION
1/8" = 1'-0"



2 NORTH - WEST GREAT RM ELEVATION
1/8" = 1'-0"

EXTERIOR FINISH LEGEND

CODE	DESCRIPTION	MANUFACTURER	STYLE NAME	STYLE / COLOR	SPECIAL INFO.
TRM-4					
DIVISION 4 - MASONRY					
STN-1	STONE THIN VENEER	SELECT STONE	THIN VENEER	ROUNDED RIVER ROCK	OR APPROVED EQUAL
DIVISION 6 - WOOD, PLASTICS, AND COMPOSITES					
SDG-3	PRIMED TRIM BOARD	JAMES HARDIE	4/4 SMOOTH	COLOR: SHERWIN WILLIAMS; SUNBEAM YELLOW; SW 0078	OR APPROVED EQUAL
TRM - 1	PRIMED TRIM BOARD	JAMES HARDIE	4/4 SMOOTH	COLOR: SHERWIN WILLIAMS; PERLE NOIR, SW 9154	OR APPROVED EQUAL
TRM - 2	PRIMED TRIM BOARD	JAMES HARDIE	4/4 SMOOTH	COLOR: SHERWIN WILLIAMS; INKY BLUE, SW 9149	OR APPROVED EQUAL
TRM - 3	PRIMED TRIM BOARD	JAMES HARDIE	4/4 SMOOTH - 5 1/2" WIDE	COLOR: SHERWIN WILLIAMS; HIGH REFLECTIVE WHITE, SW 7757	OR APPROVED EQUAL
TRM - 4	PRIMED TRIM BOARD	JAMES HARDIE	4/4 SMOOTH	COLOR: SHERWIN WILLIAMS; SUNBEAM YELLOW; SW 0078	OR APPROVED EQUAL
WDD-1	WOOD DECKING	TBD	SOLID WOOD	CLEAR WHITE PINE	OR APPROVED EQUAL
DIVISION 7 - THERMAL AND MOISTURE PROTECTION					
SDG-1	HORIZONTAL FIBER CEMENT SIDING	JAMES HARDIE	ARTISAN SHIPLAP SIDING	COLOR: SHERWIN WILLIAMS; PERLE NOIR, SW 9154	OR APPROVED EQUAL
SDG-2	VERTICAL FIBER CEMENT SIDING	JAMES HARDIE	ARTISAN SHIPLAP SIDING	COLOR: SHERWIN WILLIAMS; PERLE NOIR, SW 9154	OR APPROVED EQUAL
SDG-3					OR APPROVED EQUAL
SDG-4	VERTICAL FIBER CEMENT SIDING	JAMES HARDIE	ARTISAN SHIPLAP SIDING	COLOR: SHERWIN WILLIAMS; INKY BLUE, SW 9149	OR APPROVED EQUAL
SDG-5	VERTICAL FIBER CEMENT SIDING	JAMES HARDIE	ARTISAN SHIPLAP SIDING	COLOR: SHERWIN WILLIAMS; HIGH REFLECTIVE WHITE, SW 7757	OR APPROVED EQUAL
SDG-6	FIBER CEMENT PANEL	JAMES HARDIE	REVEAL PANEL WITH SURROUND TRIM	COLOR: SHERWIN WILLIAMS; HIGH REFLECTIVE WHITE, SW 7757	OR APPROVED EQUAL
SDG-7	HORIZONTAL FIBER CEMENT SIDING	JAMES HARDIE	ARTISAN SHIPLAP SIDING	COLOR: SHERWIN WILLIAMS; HIGH REFLECTIVE WHITE, SW 7757	OR APPROVED EQUAL
SDG-8	FIBER CEMENT PANEL	JAMES HARDIE	REVEAL PANEL WITH SURROUND TRIM	COLOR: SHERWIN WILLIAMS; FIREWEED, SW 6328	OR APPROVED EQUAL
SDG-9	FIBER CEMENT PANEL	JAMES HARDIE	REVEAL PANEL WITH SURROUND TRIM	COLOR: SHERWIN WILLIAMS; HEARTTHROB, SW 6866	OR APPROVED EQUAL
SDG-10	FIBER CEMENT PANEL	JAMES HARDIE	REVEAL PANEL WITH SURROUND TRIM	COLOR: SHERWIN WILLIAMS; INKY BLUE, SW 9149	OR APPROVED EQUAL
SDG-12	HORIZONTAL FIBER CEMENT SIDING	JAMES HARDIE	REVEAL PANEL WITH SURROUND TRIM	COLOR: SHERWIN WILLIAMS; RAPTURE BLUE, SW 6773	OR APPROVED EQUAL
SDG-13	HORIZONTAL FIBER CEMENT SIDING	JAMES HARDIE	REVEAL PANEL WITH SURROUND TRIM	COLOR: SHERWIN WILLIAMS; FRESHWATER, SW 6774	OR APPROVED EQUAL
SDG-14	HORIZONTAL FIBER CEMENT SIDING	JAMES HARDIE	REVEAL PANEL WITH SURROUND TRIM	COLOR: SHERWIN WILLIAMS; BRINY, SW 6775	OR APPROVED EQUAL
SDG-15	HORIZONTAL FIBER CEMENT SIDING	JAMES HARDIE	REVEAL PANEL WITH SURROUND TRIM	COLOR: SHERWIN WILLIAMS; GENTILE AQUAMARINE, SW 9046	OR APPROVED EQUAL
SSM-1	STANDING SEAM METAL ROOF	ATAS INTERNATIONAL, INC.	1" FIELD-LOK	BLACK	OR APPROVED EQUAL
SSM-2	STANDING SEAM METAL ROOF	ATAS INTERNATIONAL, INC.	STANDING SEAM SHINGLE	BLACK	OR APPROVED EQUAL

MANUFACTURER'S TRADE NAMES AND NUMBERS USED HEREIN ARE ONLY TO IDENTIFY COLORS, FINISHES, TEXTURES, AND PATTERNS. PRODUCTS OF OTHER MANUFACTURER'S EQUIVALENT TO COLORS, FINISHES, TEXTURES AND PATTERNS OF MANUFACTURERS LISTED THAT MEET REQUIREMENTS OF TECHNICAL SPECIFICATIONS WILL BE ACCEPTABLE UPON APPROVAL IN WRITING BY CONTRACTING OFFICER FOR FINISH REQUIREMENTS.

- THIS NOTE APPLIES TO ALL SUCH INSTANCES IN THE DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.

Revisions:	Date
ADDENDUM 001 (1)	02/02/2022

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
EXTERIOR ELEVATIONS

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

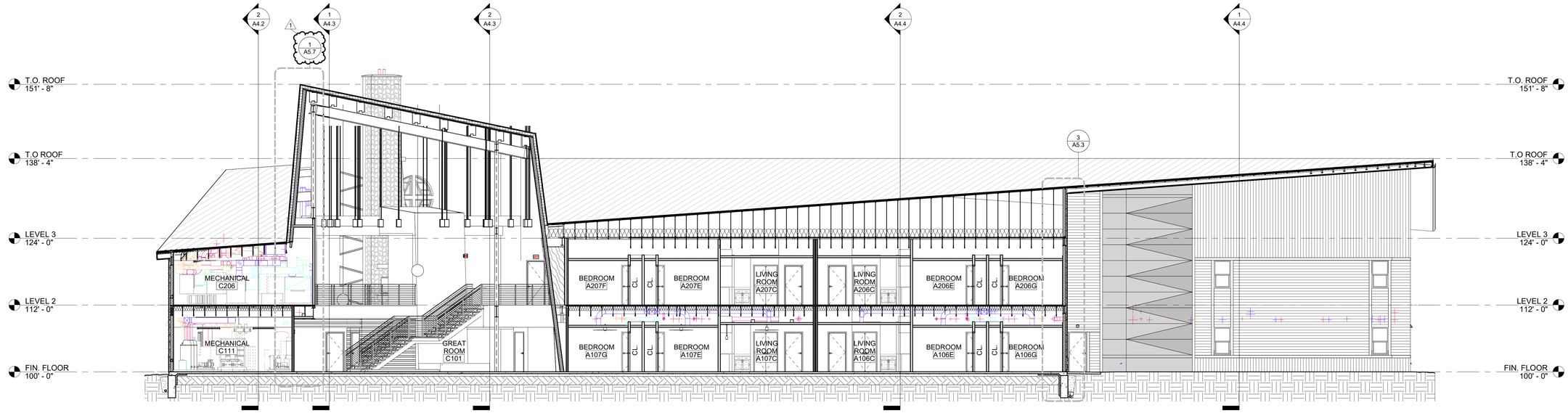
Date **09/08/2020** | Checked | Drawn

Project Number
H IH BLAC 19100

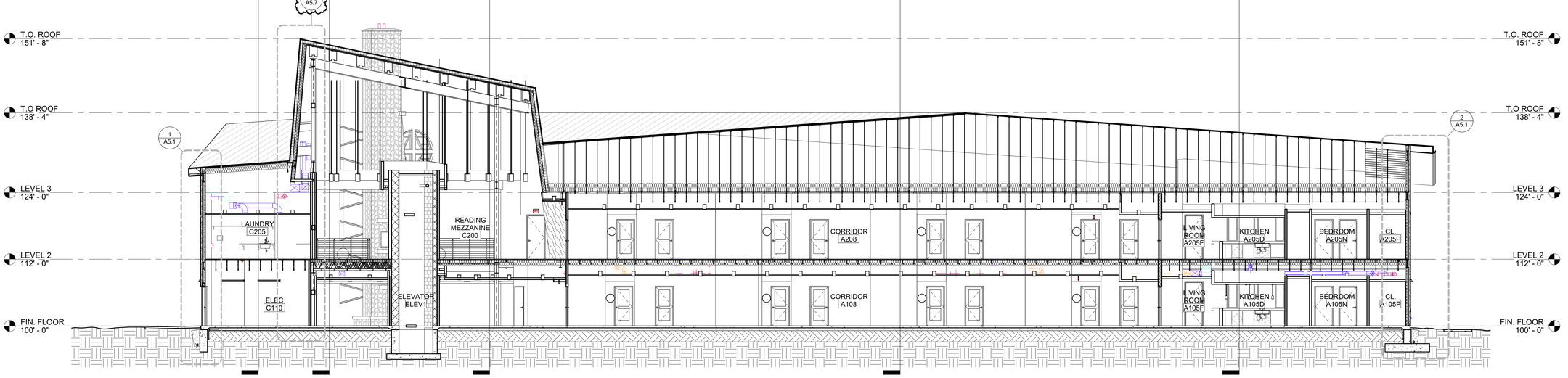
Building Number

Drawing Number
A3.3

INDIAN HEALTH SERVICE · PHS · 1955 ·



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



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

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

FARRIS ENGINEERING

BLUE STAR INTEGRATIVE STUDIO

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
BUILDING SECTIONS

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

Date
09/08/2020

Checked

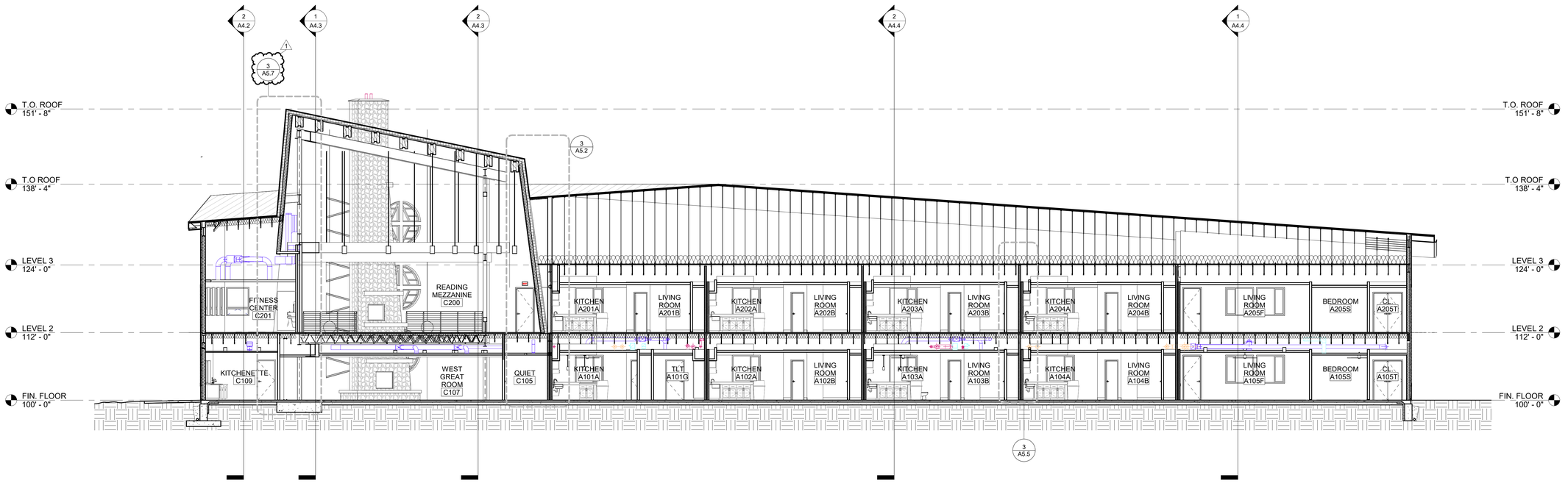
Drawn

Project Number
H IH BLAC 19100

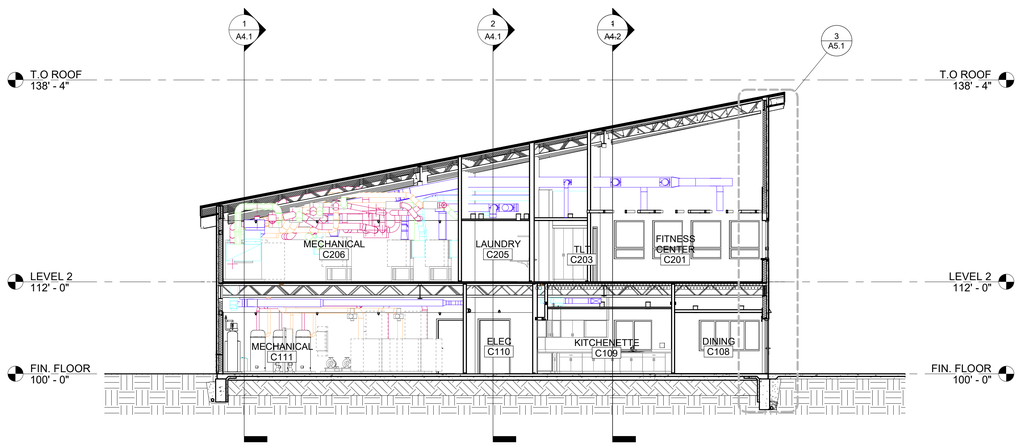
Building Number

Drawing Number
A4.1

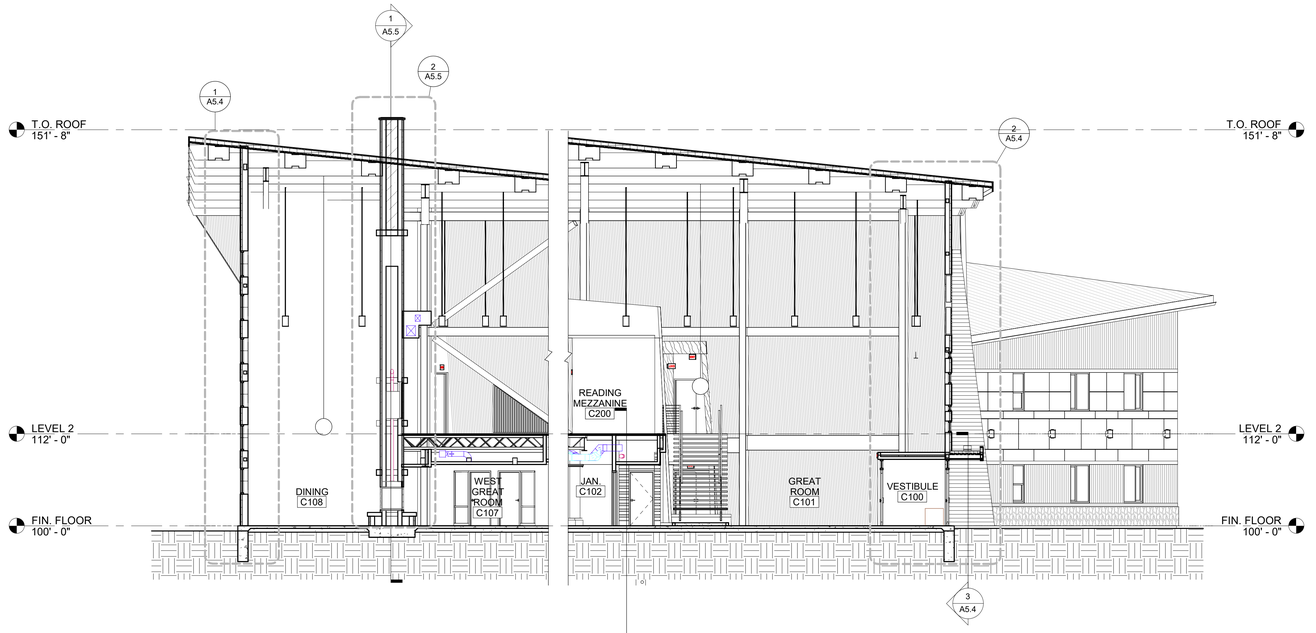
INDIAN HEALTH SERVICE · PHS · 1955 ·



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



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



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

ADDENDUM 001 1	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

FARRIS ENGINEERING

BLUE STAR INTEGRATIVE STUDIO

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
BUILDING SECTIONS

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

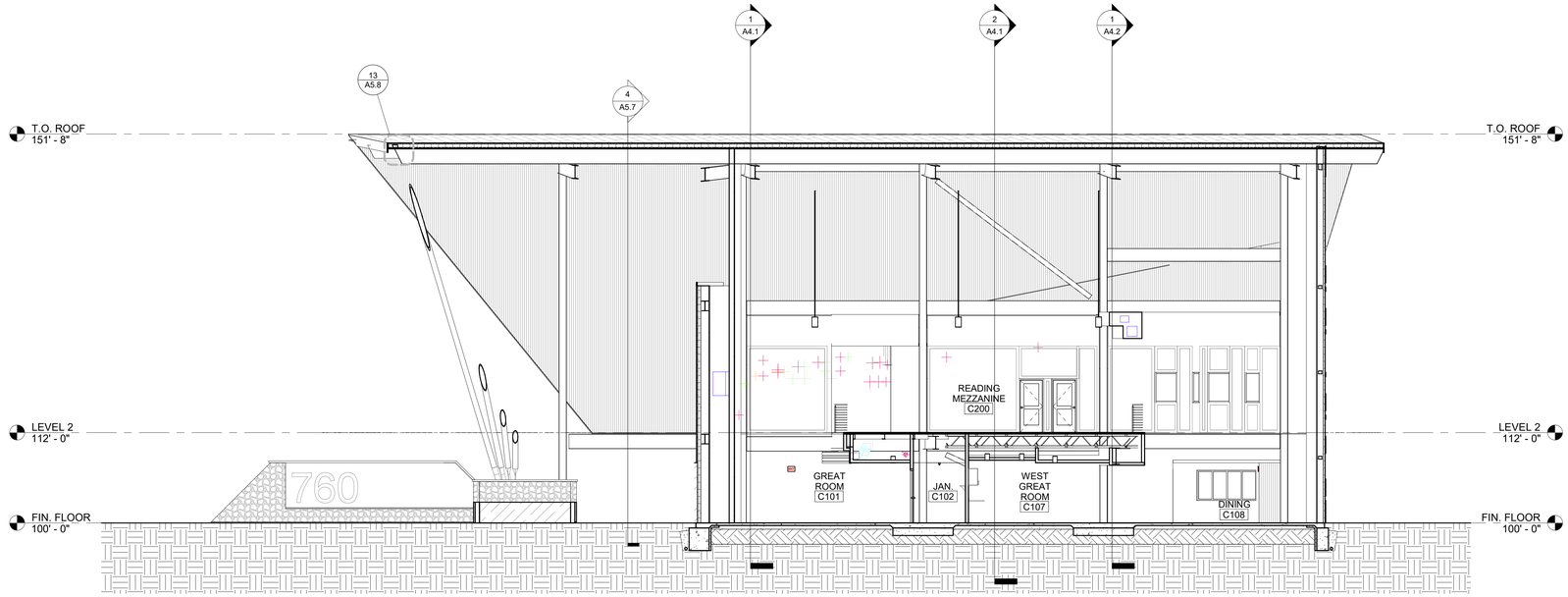
Date **09/08/2020** | Checked | Drawn

Project Number
H IH BLAC 19100

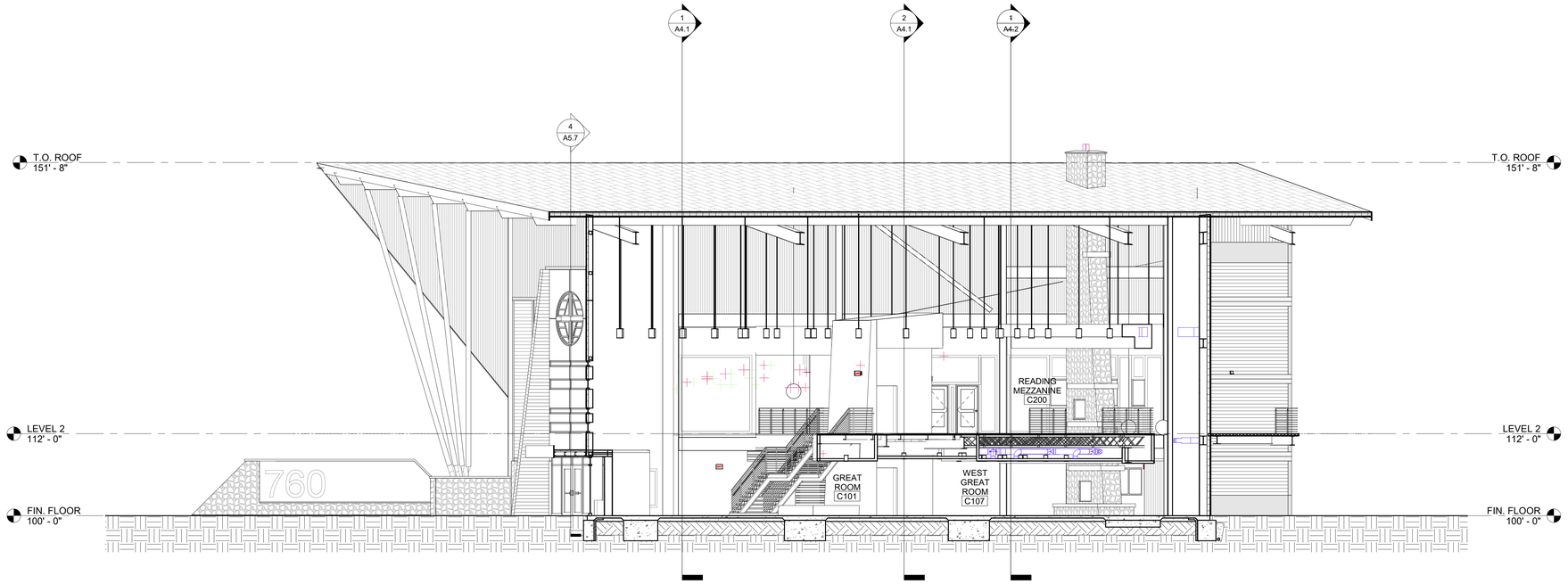
Building Number

Drawing Number
A4.2

INDIAN HEALTH SERVICE · PHS · 1955 ·



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



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

Revisions:	Date
ADDENDUM 001 1	02/02/2022

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title

BUILDING SECTIONS

Approved: Project Director

Project Title

APARTMENT BUILDING AND SITEWORK

Contract No.: HHSI122201800005I
Task Order No.: 75H70119F30002

Location

BROWNING, MONTANA

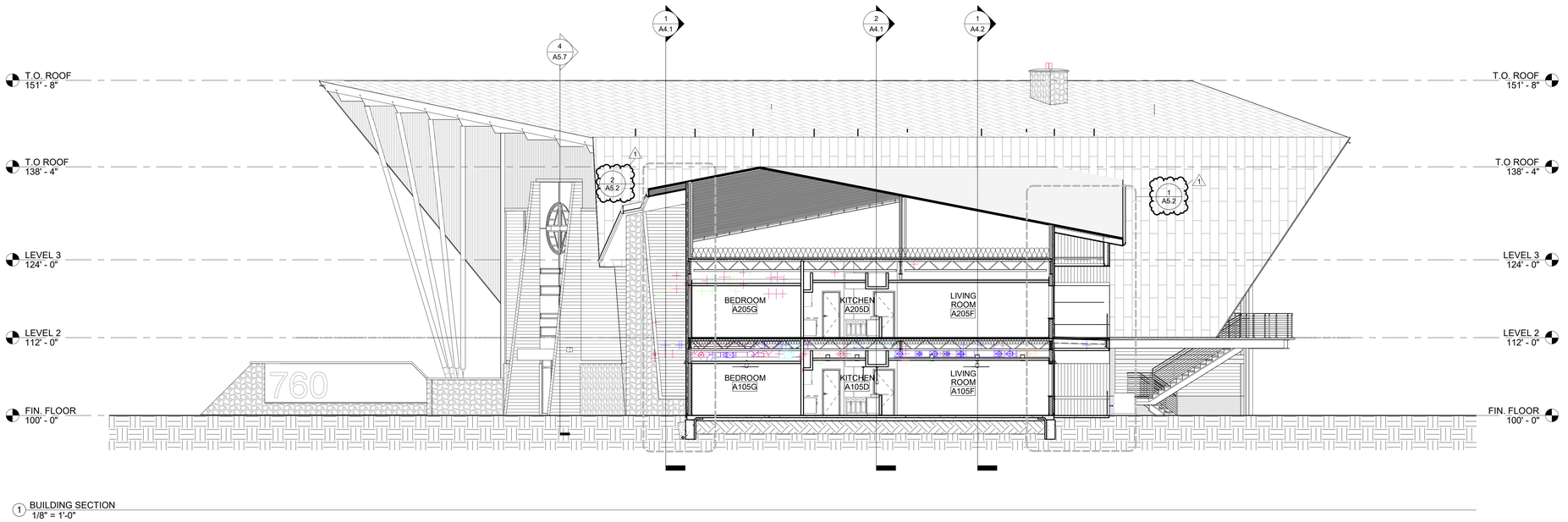
Date **09/08/2020** | Checked | Drawn

Project Number **H IH BLAC 19100**

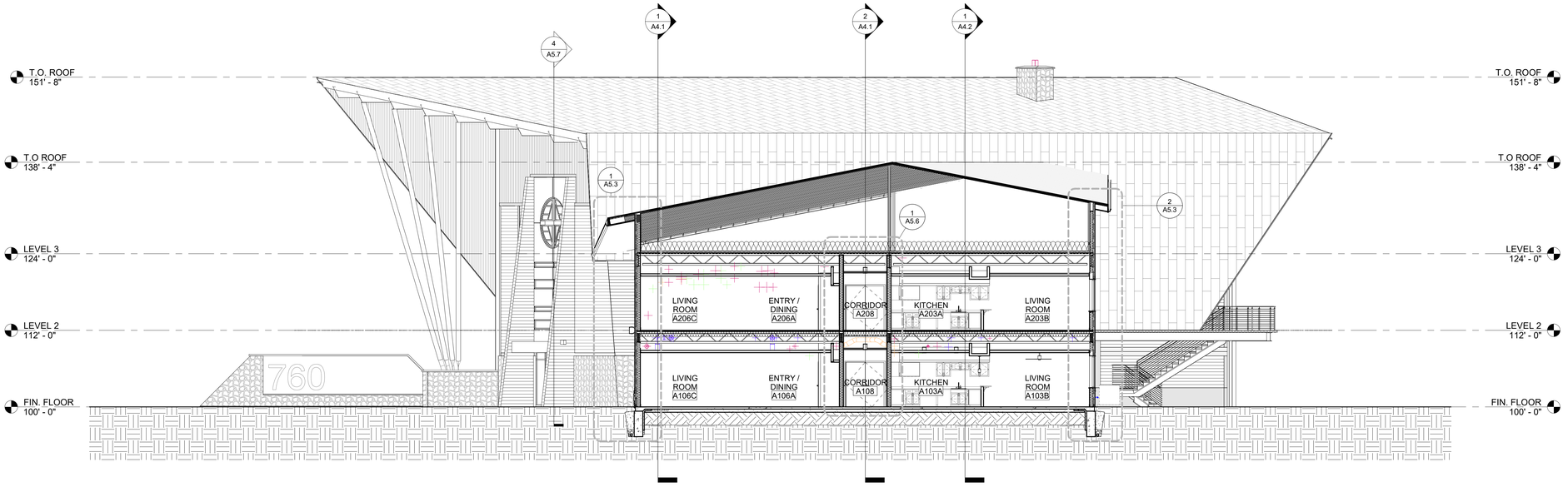
Building Number

Drawing Number **A4.3**

INDIAN HEALTH SERVICE · PHS · 1955 ·



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



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

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

FARRIS ENGINEERING

BLUE STAR INTEGRATIVE STUDIO

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
BUILDING SECTIONS

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

Date **09/08/2020** | Checked | Drawn

Project Number
H IH BLAC 19100

Building Number

Drawing Number
A4.4

INDIAN HEALTH SERVICE · IHS · 1955 ·

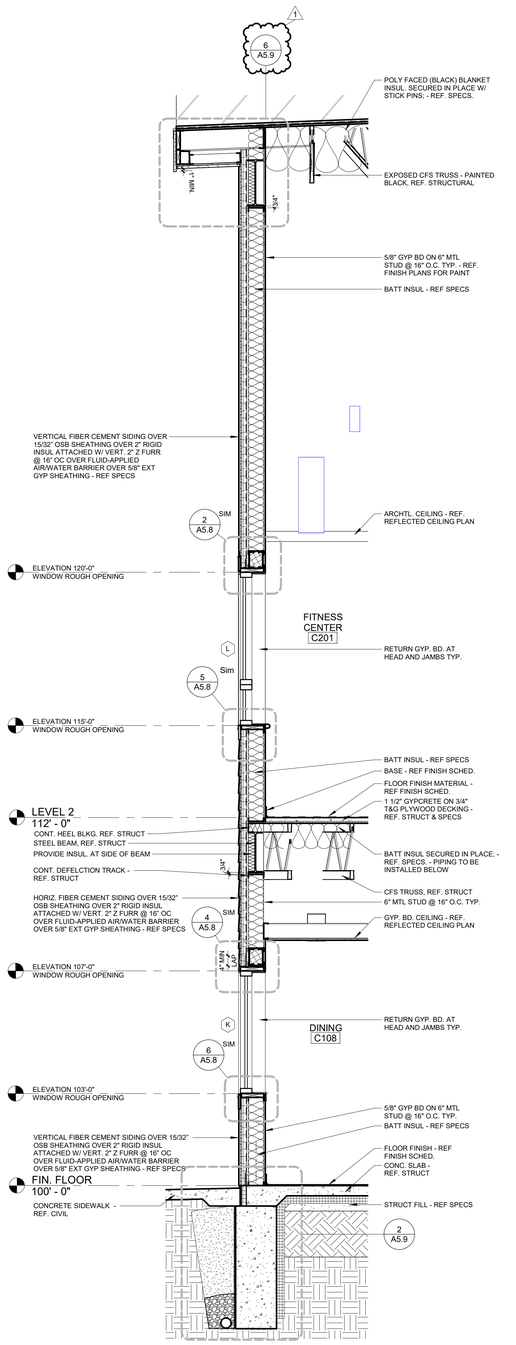
INSULATION REQUIREMENTS

1. SLAB INSULATION SHALL MEET OR EXCEED ZONE 6 REQUIREMENT OF R-10 FOR 4' IN DEPTH.

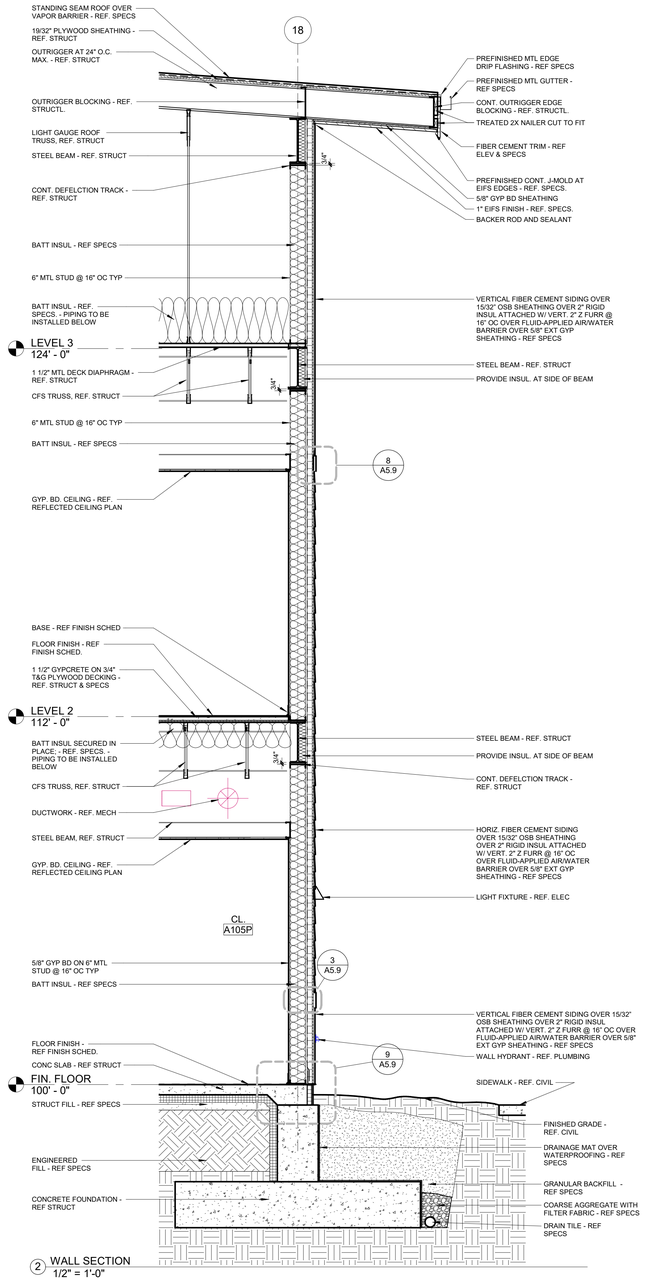
2. EXTERIOR WALL INSULATION SHALL MEET OR EXCEED ZONE 6 REQUIREMENT OF R-21 BATT INSUL + R-11.3 RIGID INSUL.

3. FLOOR INSULATION SHALL MEET OR EXCEED ZONE 6 REQUIREMENT OF R-30 OR PROVIDE INSULATION SUFFICIENT TO FILL THE FRAMING CAVITY PROVIDING NOT LESS THAN R-19.

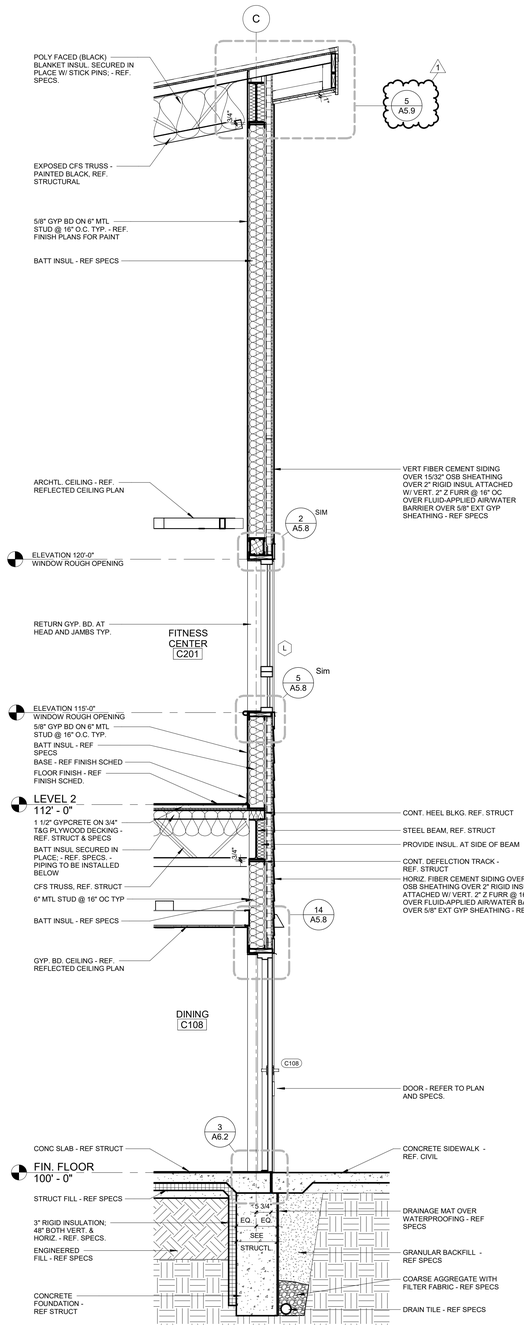
4. CEILING INSULATION SHALE MEET OR EXCEED ZONE 6 REQUIREMENT OF R49. CEILINGS WITHOUT ATTIC SPACES MUST HAVE R-30 MINIMUM PER R402.2.2.



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



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



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

1 NOTES REPLICATED IN THE SECTION DETAILS HAVE BEEN REMOVED FROM WALL SECTIONS FOR CLARITY.

ADDENDUM 001 1	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

FARRIS ENGINEERING

BLUE STAR INTEGRATIVE STUDIO

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
WALL SECTIONS

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

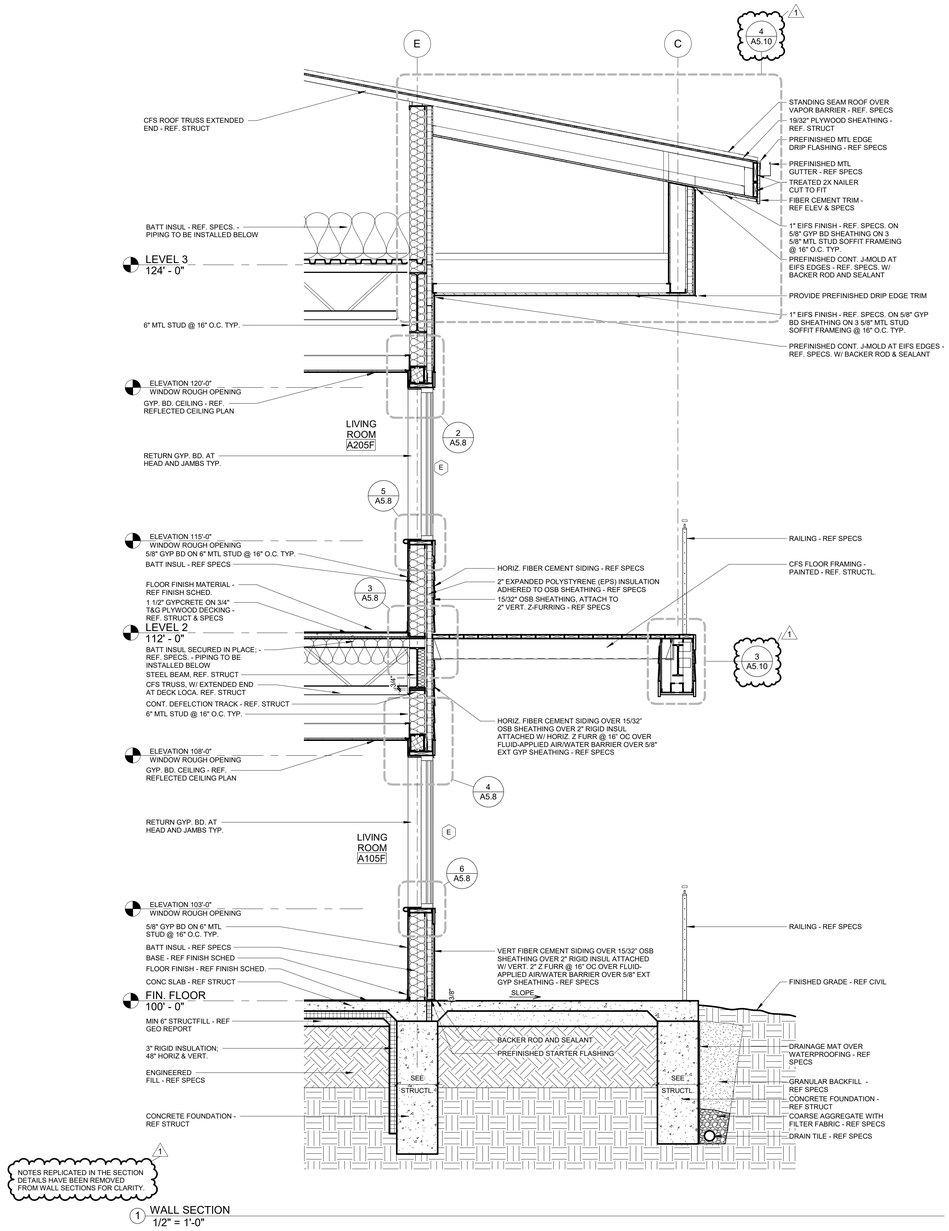
Date **09/08/2020** | Checked | Drawn

Project Number
H IH BLAC 19100

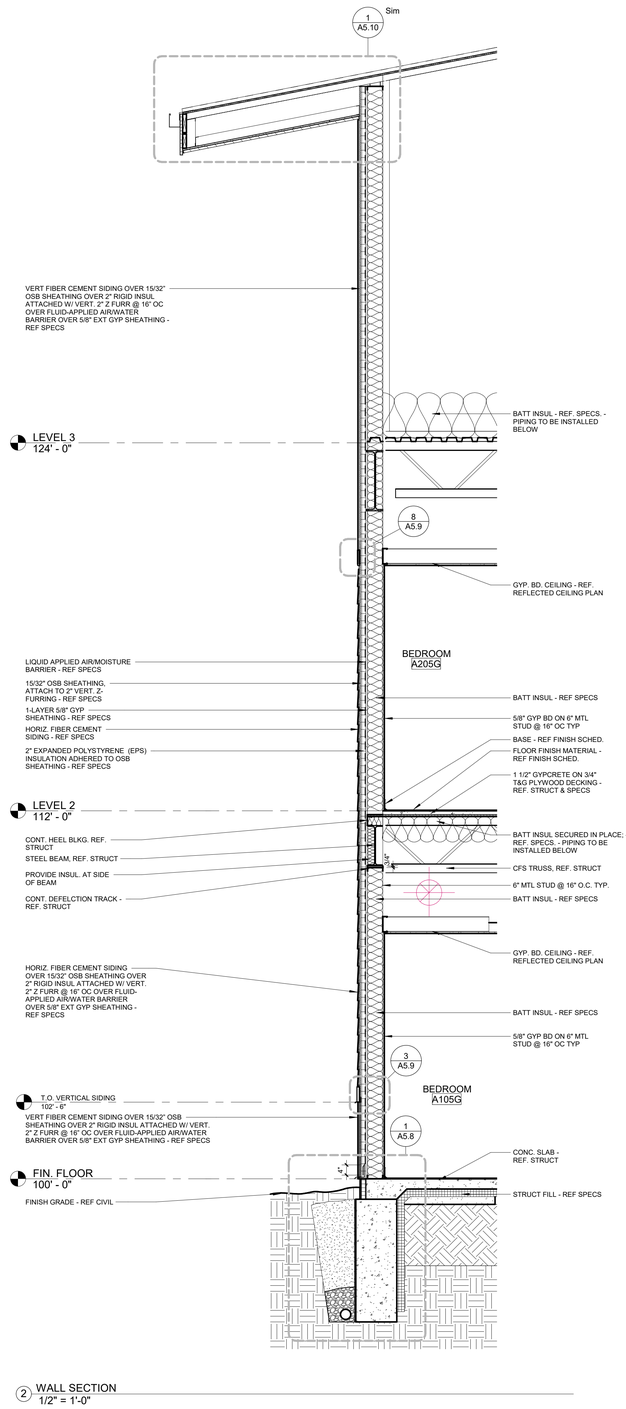
Building Number

Drawing Number
A5.1

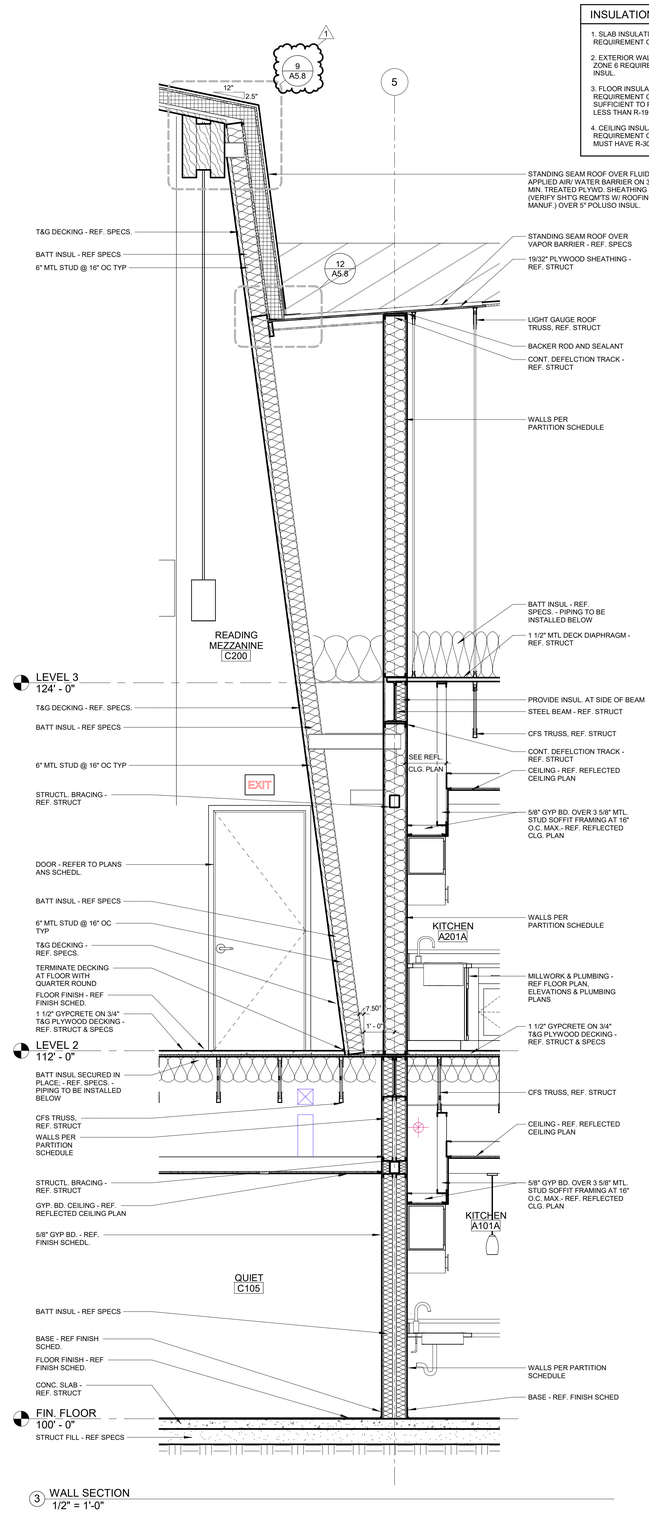
INDIAN HEALTH SERVICE · PHS · 1955 ·



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



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



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

INSULATION REQUIREMENTS

1. SLAB INSULATION SHALL MEET OR EXCEED ZONE 6 REQUIREMENT OF R-10 FOR 4' IN DEPTH.
2. EXTERIOR WALL INSULATION SHALL MEET OR EXCEED ZONE 6 REQUIREMENT OF R-21 BATT INSUL + R-11.3 RIGID INSUL.
3. FLOOR INSULATION SHALL MEET OR EXCEED ZONE 6 REQUIREMENT OF R-30 OR PROVIDE INSULATION SUFFICIENT TO FILL THE FRAMING CAVITY PROVIDING NOT LESS THAN R-19.
4. CEILING INSULATION SHALE MEET OR EXCEED ZONE 6 REQUIREMENT OF R49. CEILINGS WITHOUT ATTIC SPACES MUST HAVE R-30 MINIMUM PER R402.2.2.

ADDENDUM 001 1	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title

WALL SECTIONS

Approved: Project Director

Project Title

APARTMENT BUILDING AND SITEWORK

Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location

BROWNING, MONTANA

Date **09/08/2020** | Checked | Drawn

Project Number **H IH BLAC 19100**

Building Number

Drawing Number **A5.2**

INDIAN HEALTH SERVICE · PHS · 1955 ·

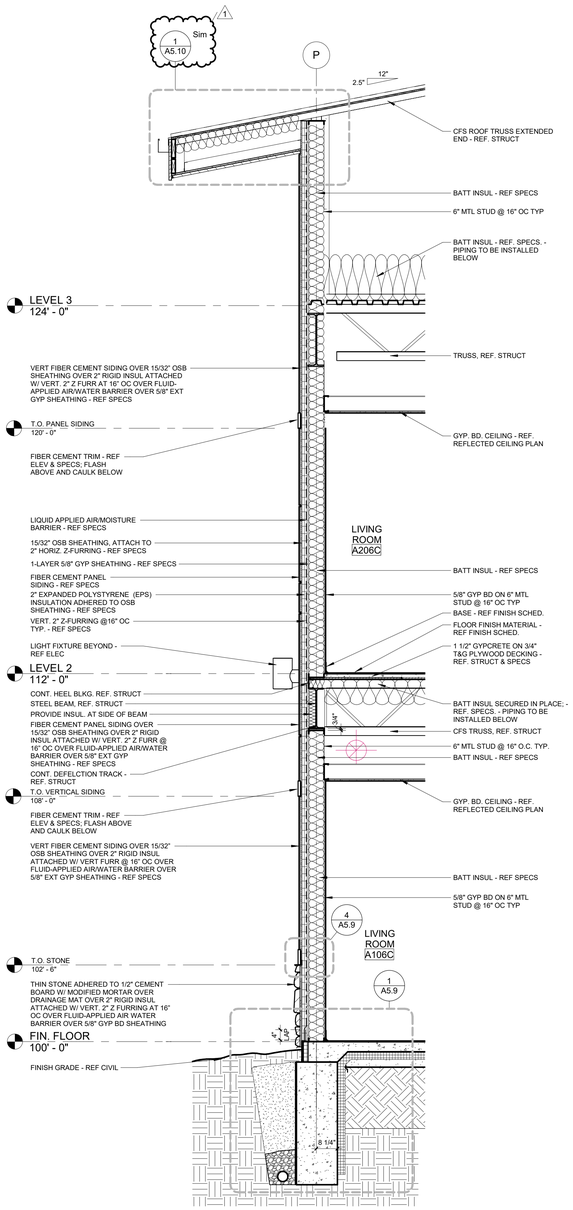
INSULATION REQUIREMENTS

1. SLAB INSULATION SHALL MEET OR EXCEED ZONE 6 REQUIREMENT OF R-10 FOR 4' IN DEPTH.

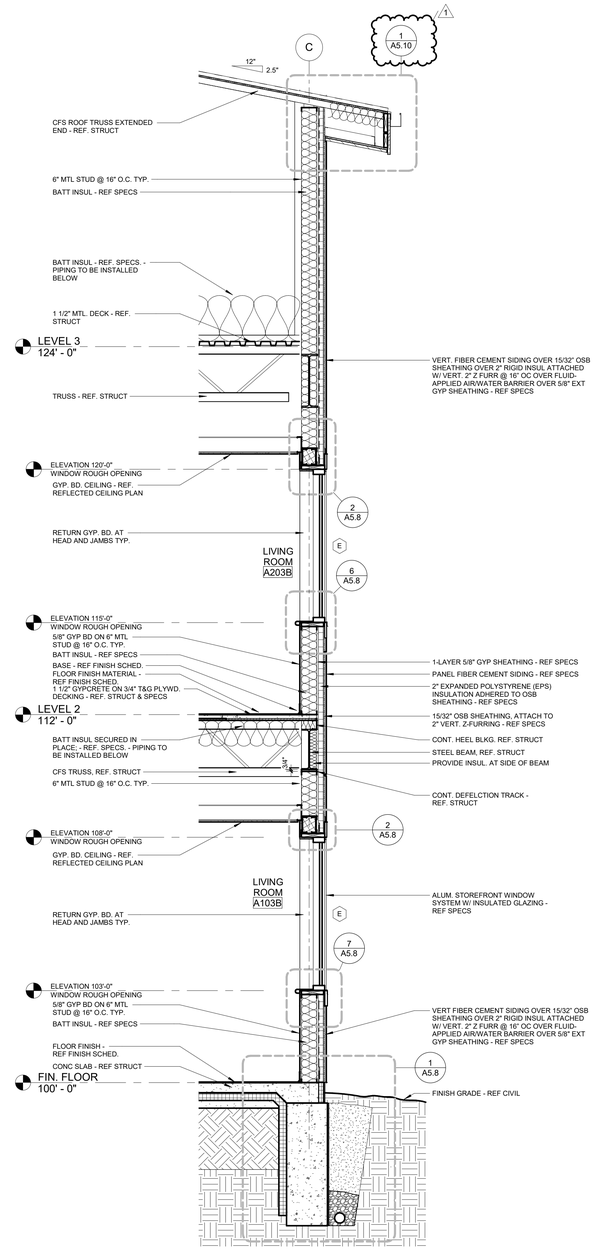
2. EXTERIOR WALL INSULATION SHALL MEET OR EXCEED ZONE 6 REQUIREMENT OF R-21 BATT INSUL + R-11.3 RIGID INSUL.

3. FLOOR INSULATION SHALL MEET OR EXCEED ZONE 6 REQUIREMENT OF R-30 OR PROVIDE INSULATION SUFFICIENT TO FILL THE FRAMING CAVITY PROVIDING NOT LESS THAN R-19.

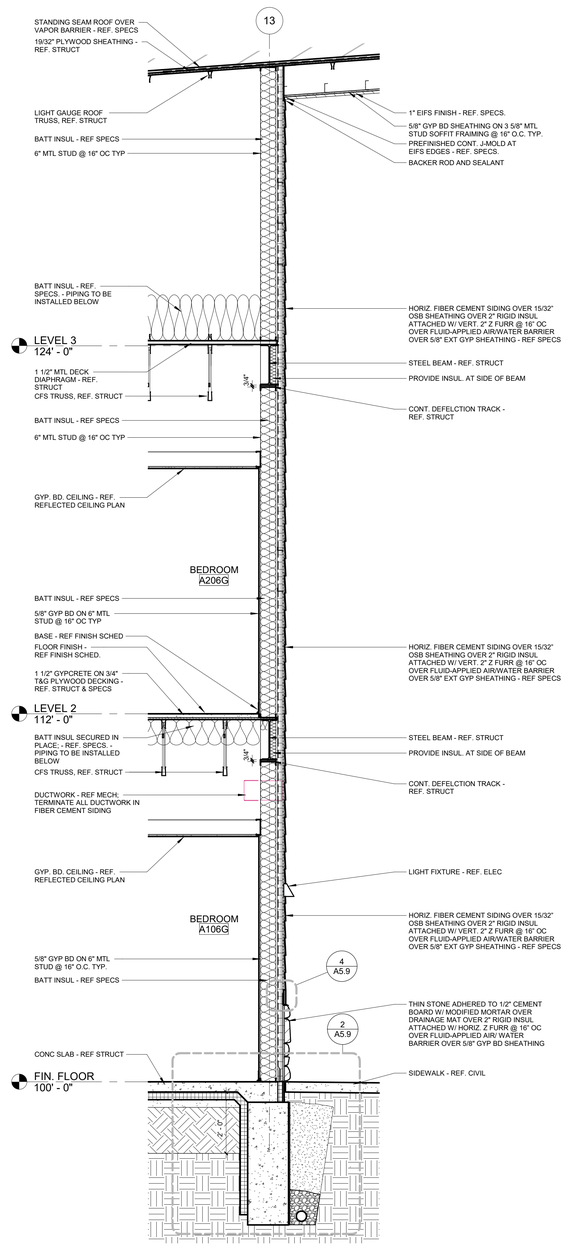
4. CEILING INSULATION SHALE MEET OR EXCEED ZONE 6 REQUIREMENT OF R49. CEILINGS WITHOUT ATTIC SPACES MUST HAVE R-30 MINIMUM PER R402.2.2.



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



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



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

1 NOTES REPLICATED IN THE SECTION DETAILS HAVE BEEN REMOVED FROM WALL SECTIONS FOR CLARITY.

Revisions:	Date
ADDENDUM 001 (1)	02/02/2022

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
WALL SECTIONS

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

Date	Checked	Drawn
09/08/2020		

Project Number
H IH BLAC 19100

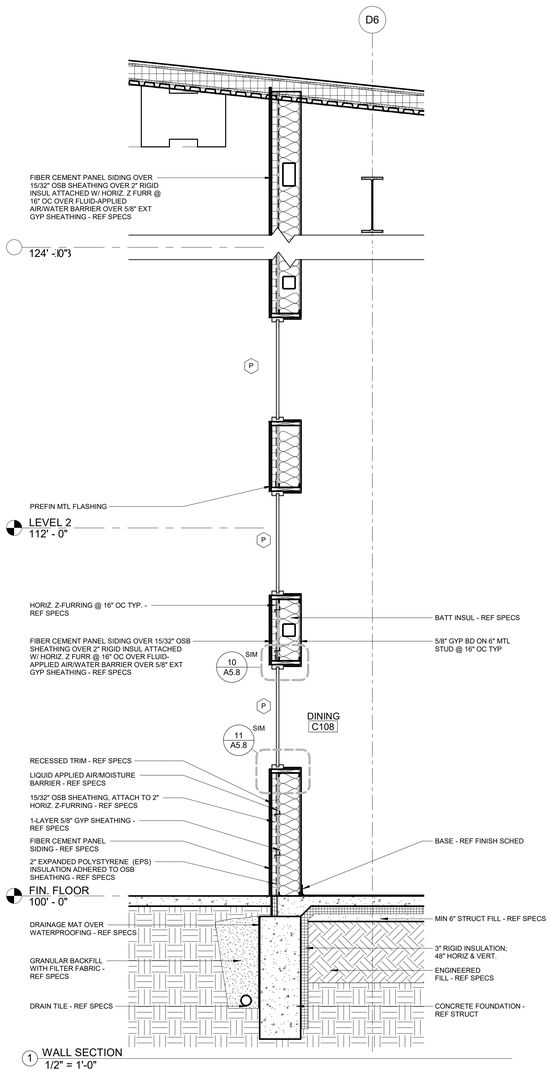
Building Number

Drawing Number
A5.3

INDIAN HEALTH SERVICE · PHS · 1955 ·

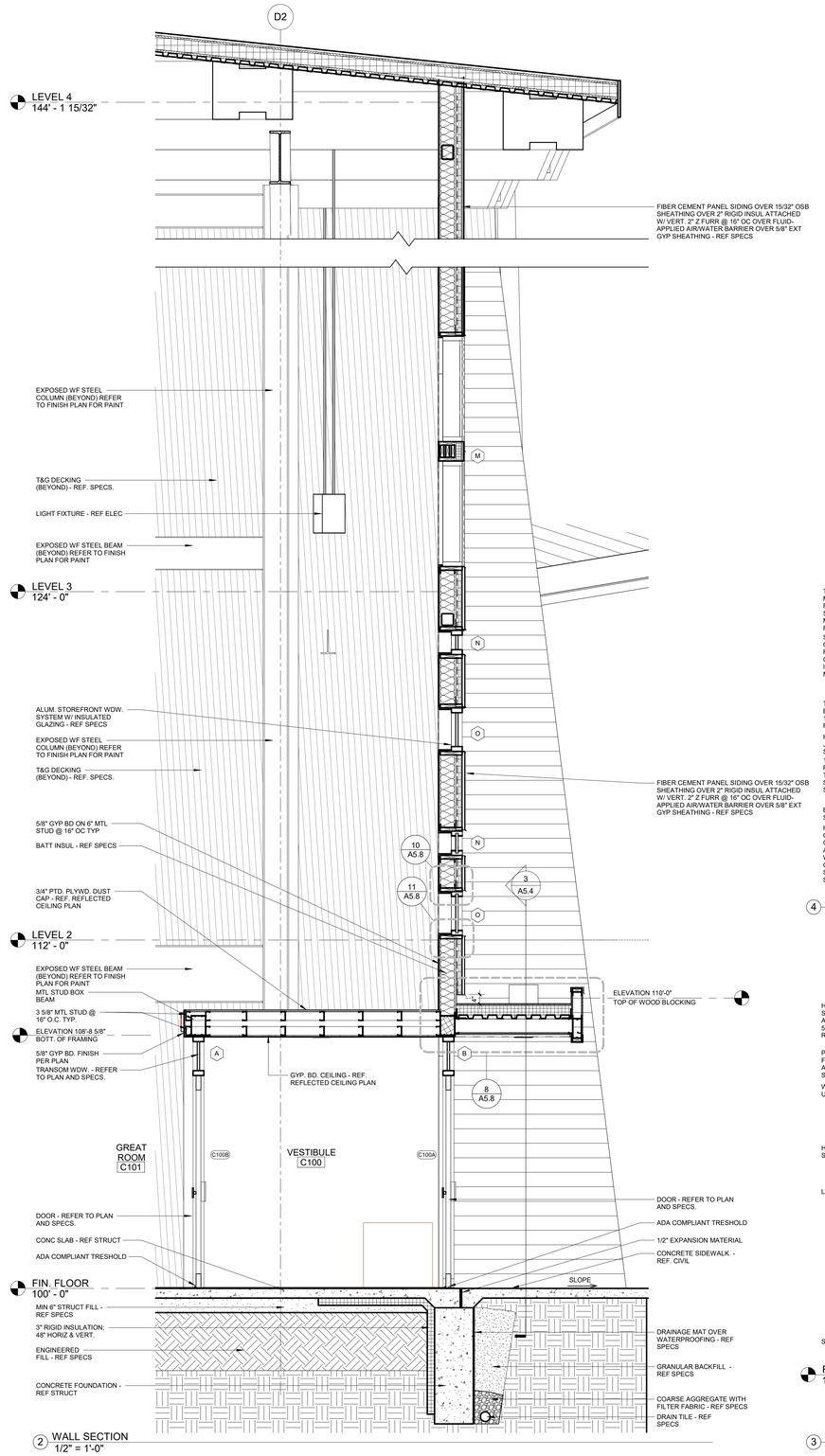
INSULATION REQUIREMENTS

1. SLAB INSULATION SHALL MEET OR EXCEED ZONE 6 REQUIREMENT OF R-10 FOR 4' IN DEPTH.
2. EXTERIOR WALL INSULATION SHALL MEET OR EXCEED ZONE 6 REQUIREMENT OF R-21 BATT INSUL + R-11.3 RIGID INSUL.
3. FLOOR INSULATION SHALL MEET OR EXCEED ZONE 6 REQUIREMENT OF R-30 OR PROVIDE INSULATION SUFFICIENT TO FILL THE FRAMING CAVITY PROVIDING NOT LESS THAN R-19.
4. CEILING INSULATION SHALE MEET OR EXCEED ZONE 6 REQUIREMENT OF R49. CEILINGS WITHOUT ATTIC SPACES MUST HAVE R-30 MINIMUM PER R402.2.2.

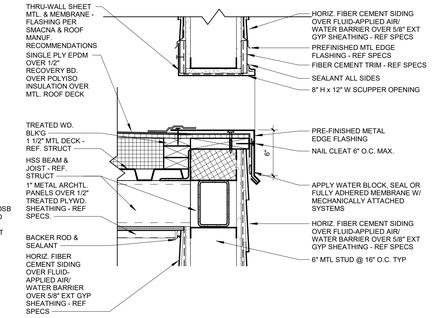


1 NOTES REPLICATED IN THE SECTION DETAILS HAVE BEEN REMOVED FROM WALL SECTIONS FOR CLARITY.

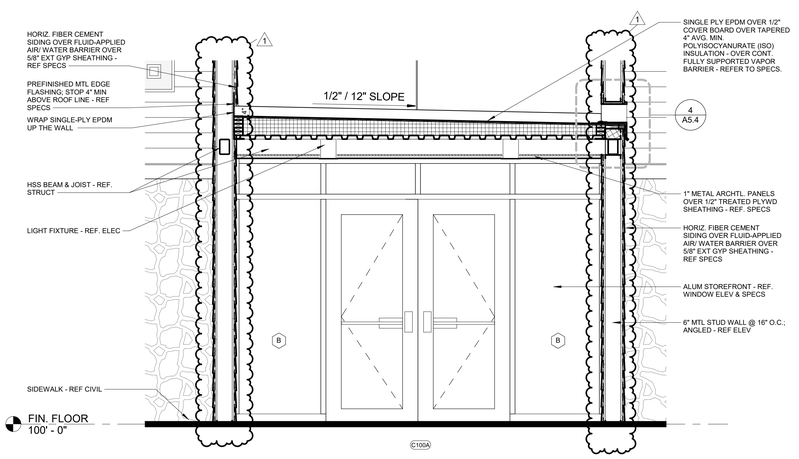
1 WALL SECTION
1/2" = 1'-0"



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



4 SCUPPER DETAIL
1 1/2" = 1'-0"



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

ADDENDUM 001 1	02/02/2022
Revisions:	Date

CONSULTANTS:

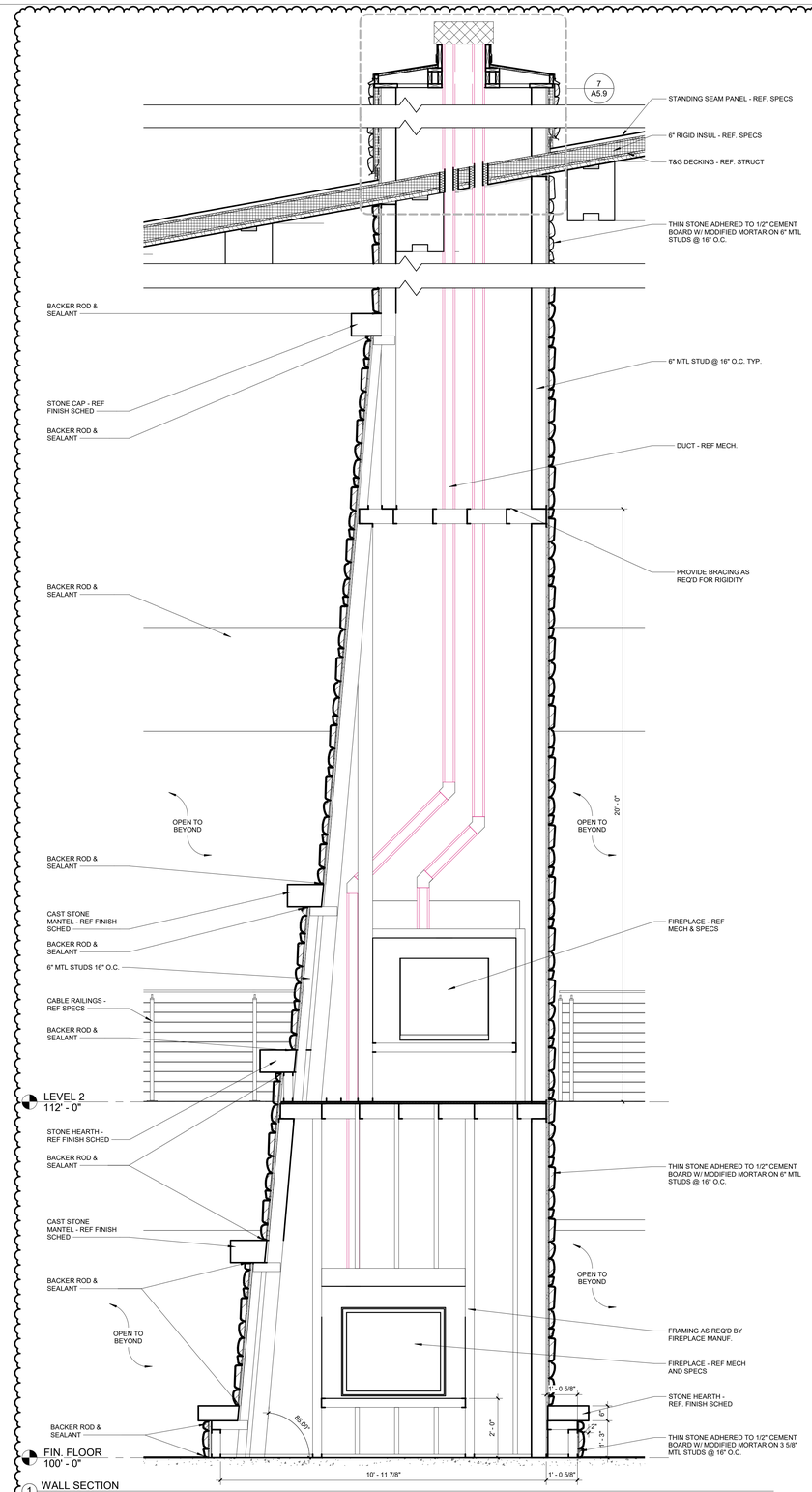
--

ARCHITECT/EDGINEERS:

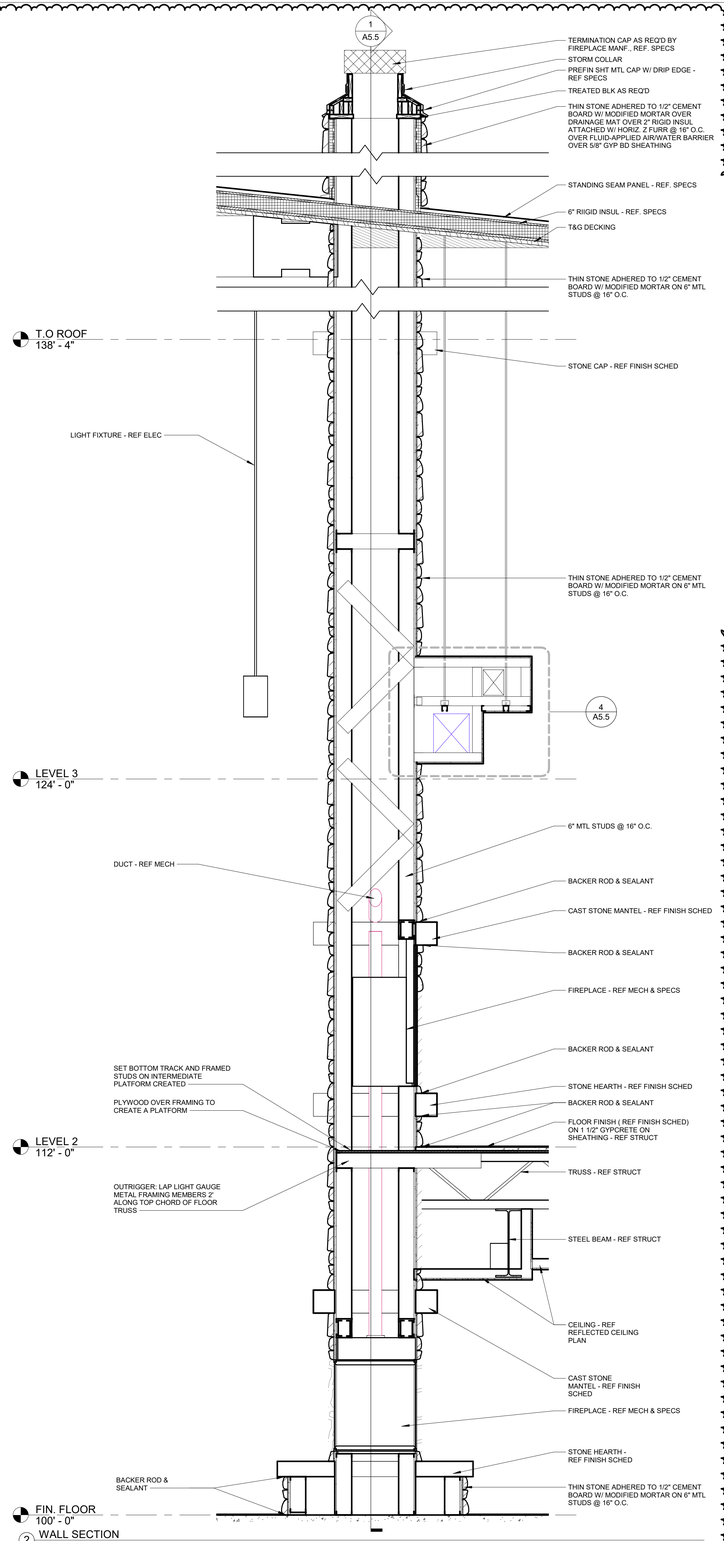
HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title	**WALL SECTIONS**
Approved: Project Director	
Project Title	**APARTMENT BUILDING AND SITEWORK** **Contract No.:** HHSI102201800005I **Task Order No.:** 75H70119F30002
Location	**BROWNING, MONTANA**
Date	**09/08/2020**
Checked	
Drawn	
Project Number	**H IH BLAC 19100**
Building Number	
Drawing Number	**A5.4**

INDIAN HEALTH SERVICE · PHS · 1955 ·



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



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

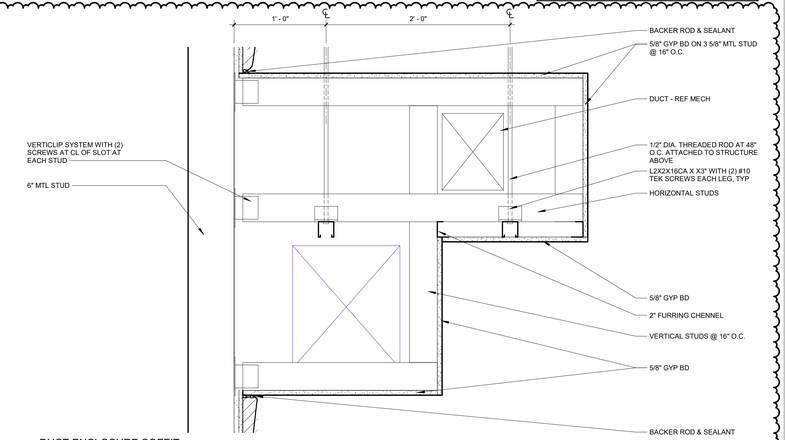
INSULATION REQUIREMENTS

1. SLAB INSULATION SHALL MEET OR EXCEED ZONE 6 REQUIREMENT OF R-10 FOR 4' IN DEPTH.

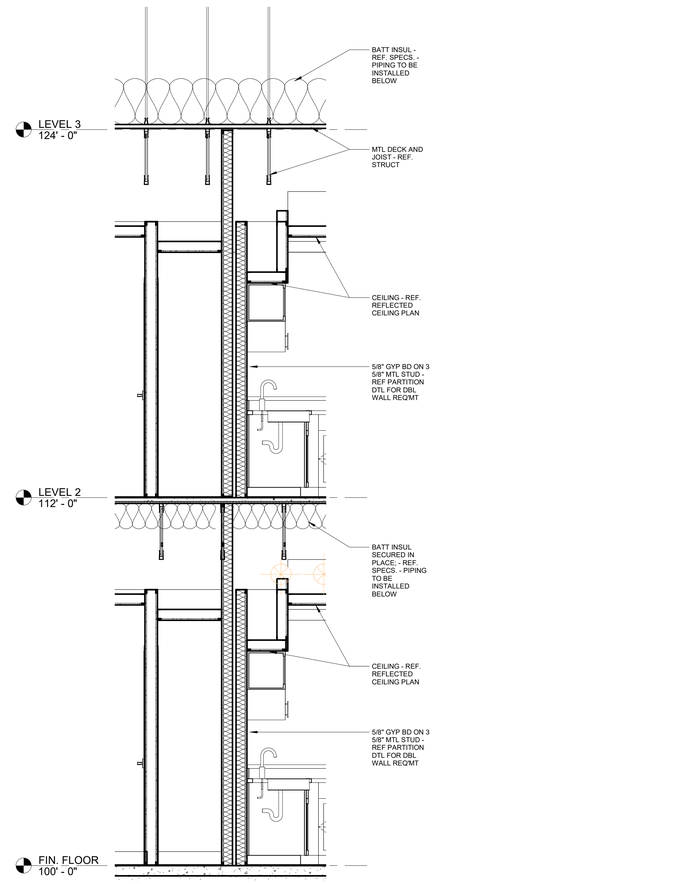
2. EXTERIOR WALL INSULATION SHALL MEET OR EXCEED ZONE 6 REQUIREMENT OF R-21 BATT INSUL + R-11.3 RIGID INSUL.

3. FLOOR INSULATION SHALL MEET OR EXCEED ZONE 6 REQUIREMENT OF R-30 OR PROVIDE INSULATION SUFFICIENT TO FILL THE FRAMING CAVITY PROVIDING NOT LESS THAN R-19.

4. CEILING INSULATION SHALE MEET OR EXCEED ZONE 6 REQUIREMENT OF R49. CEILINGS WITHOUT ATTIC SPACES MUST HAVE R-30 MINIMUM PER R402.2.2.



4 DUCT ENCLOSURE SOFFIT
1 1/2" = 1'-0"



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

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

FARRIS ENGINEERING

BLUE STAR INTEGRATIVE STUDIO

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
WALL SECTIONS

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

Date **09/08/2020** | Checked | Drawn

Project Number
H IH BLAC 19100

Building Number

Drawing Number
A5.5

INDIAN HEALTH SERVICE · PHS · 1955 ·

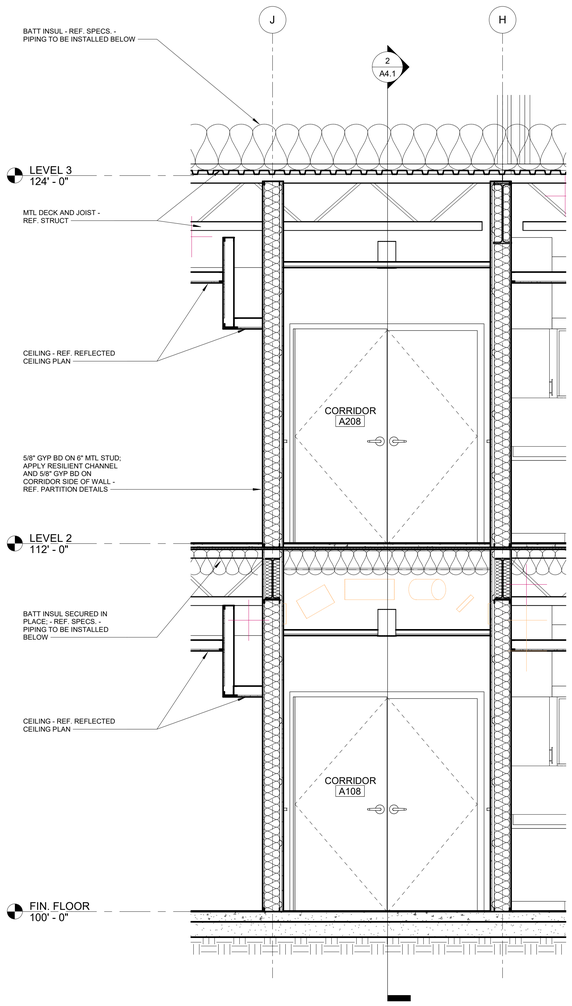
INSULATION REQUIREMENTS

1. SLAB INSULATION SHALL MEET OR EXCEED ZONE 6 REQUIREMENT OF R-10 FOR 4' IN DEPTH.

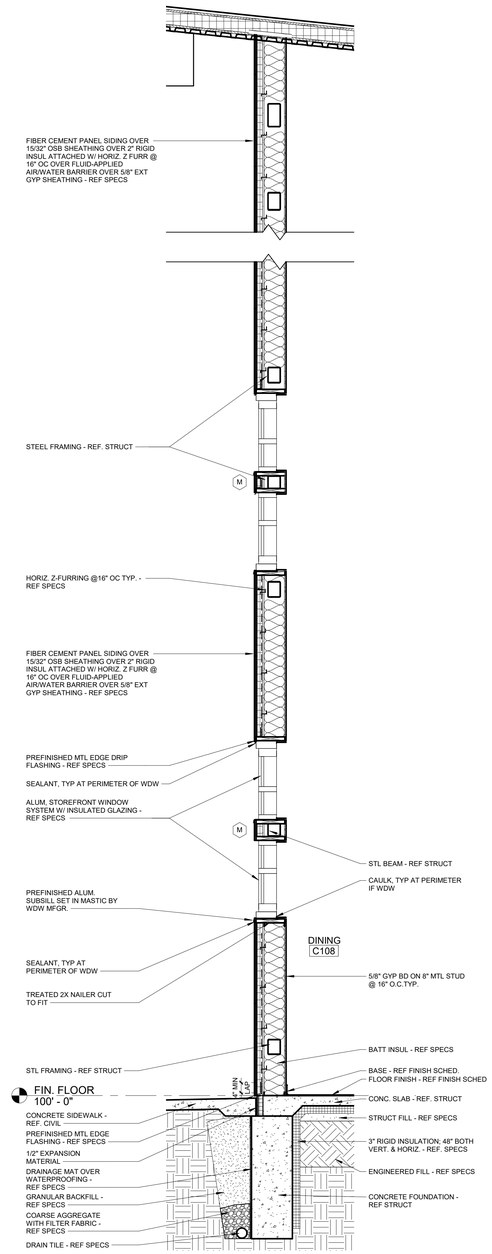
2. EXTERIOR WALL INSULATION SHALL MEET OR EXCEED ZONE 6 REQUIREMENT OF R-21 BATT INSUL + R-11.3 RIGID INSUL.

3. FLOOR INSULATION SHALL MEET OR EXCEED ZONE 6 REQUIREMENT OF R-30 OR PROVIDE INSULATION SUFFICIENT TO FILL THE FRAMING CAVITY PROVIDING NOT LESS THAN R-19.

4. CEILING INSULATION SHALE MEET OR EXCEED ZONE 6 REQUIREMENT OF R49. CEILINGS WITHOUT ATTIC SPACES MUST HAVE R-30 MINIMUM PER R402.2.2.



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



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

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
WALL SECTIONS

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

Date
09/08/2020

Checked

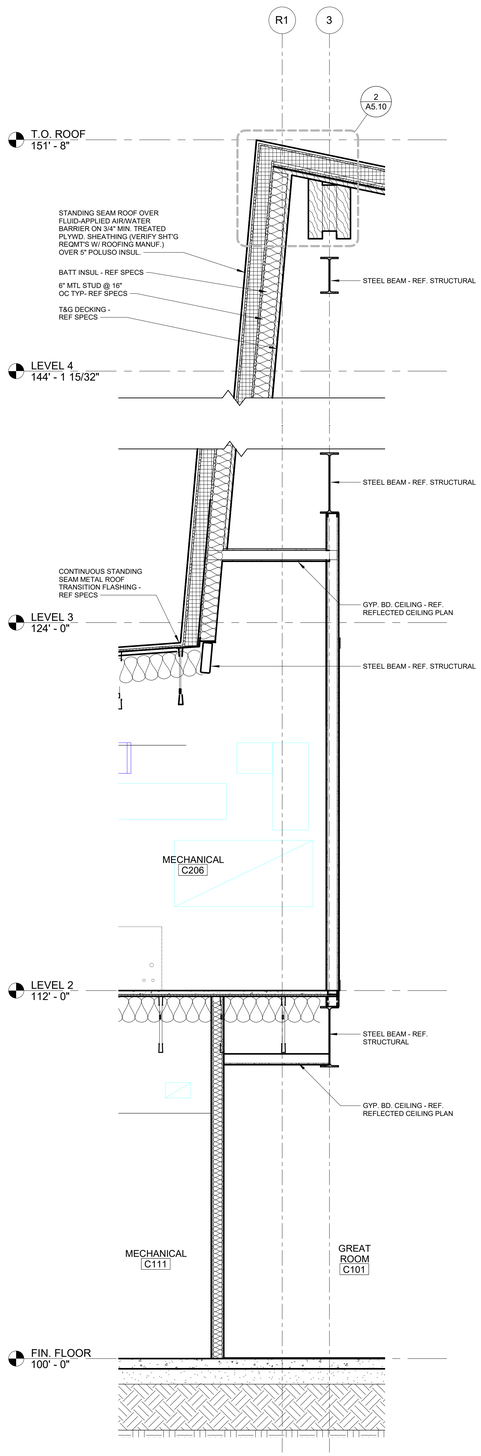
Drawn

Project Number
H IH BLAC 19100

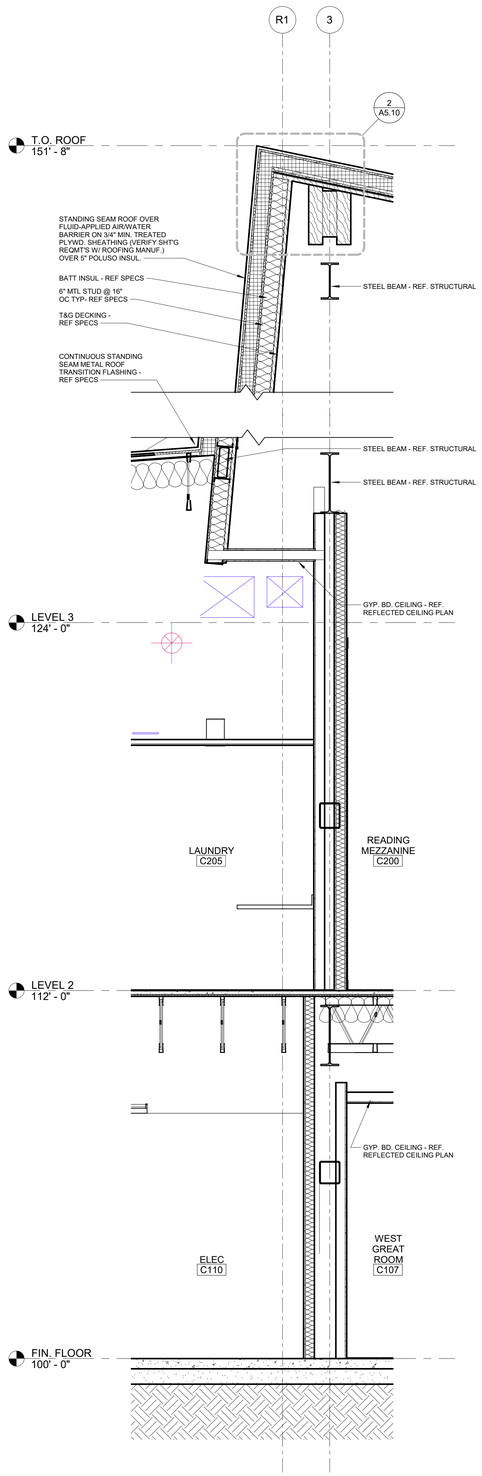
Building Number

Drawing Number
A5.6

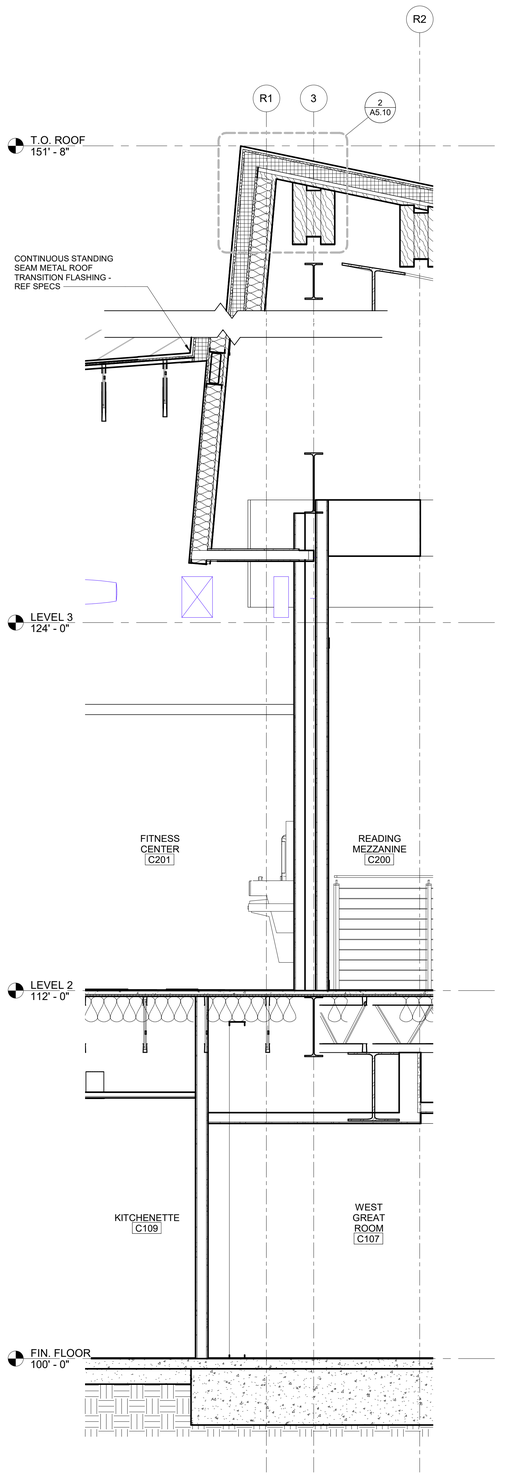
INDIAN HEALTH SERVICE · PHS · 1955 ·



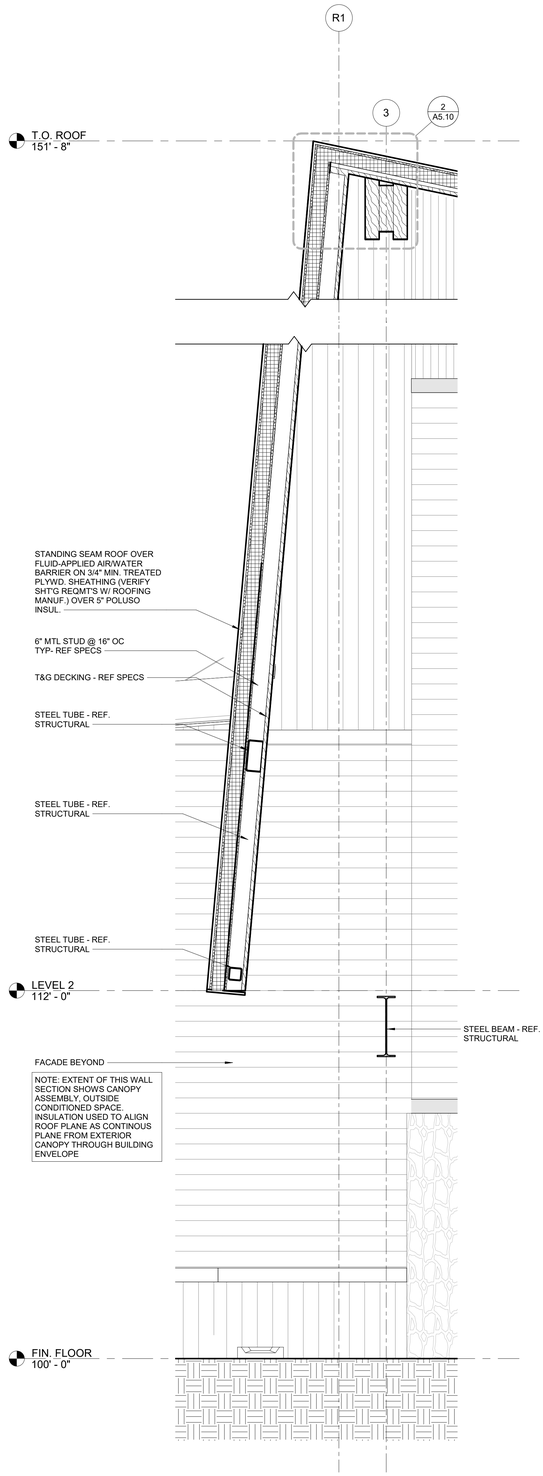
1 WALL SECTION
1/2" = 1'-0"



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



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



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

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
WALL SECTIONS

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

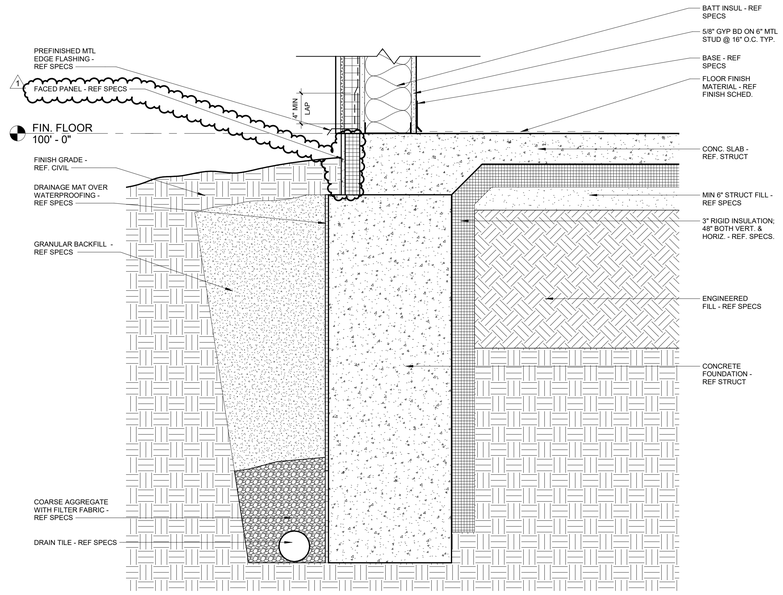
Date **09/08/2020** | Checked | Drawn

Project Number
H IH BLAC 19100

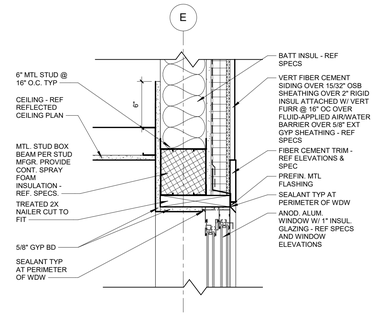
Building Number

Drawing Number
A5.7 1

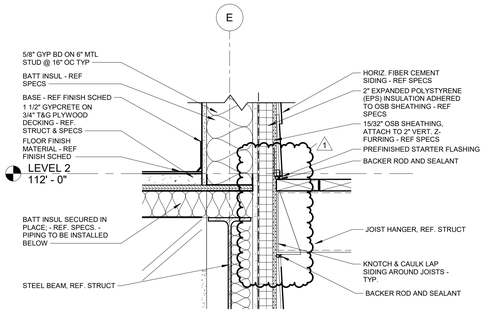
INDIAN HEALTH SERVICE · PHS · 1955 ·



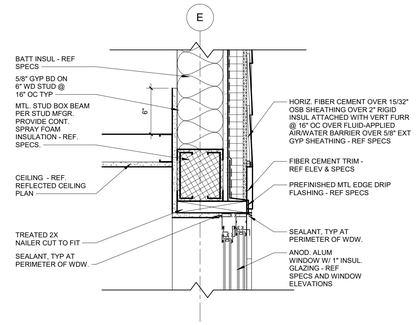
1 WALL SECTION DETAIL
1 1/2" = 1'-0"



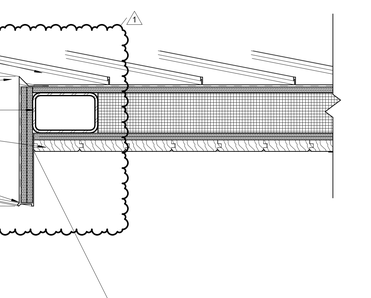
2 WALL SECTION DETAIL
1 1/2" = 1'-0"



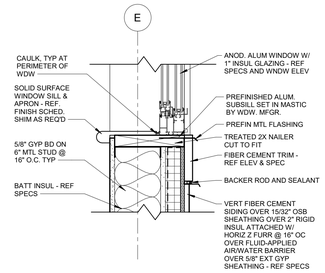
3 WALL SECTION DETAIL
1 1/2" = 1'-0"



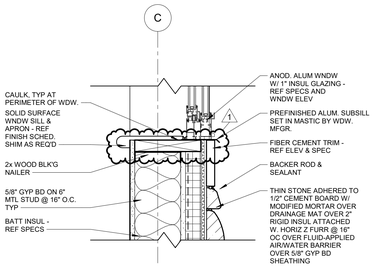
4 WALL SECTION DETAIL
1 1/2" = 1'-0"



5 WALL SECTION DETAIL
1 1/2" = 1'-0"



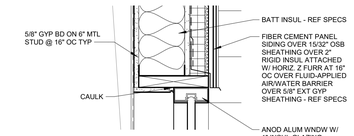
6 WALL SECTION DETAIL
1 1/2" = 1'-0"



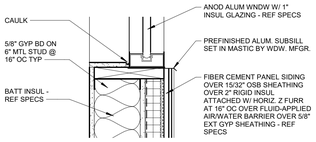
7 WALL SECTION DETAIL
1 1/2" = 1'-0"

8 WALL SECTION DETAIL
1 1/2" = 1'-0"

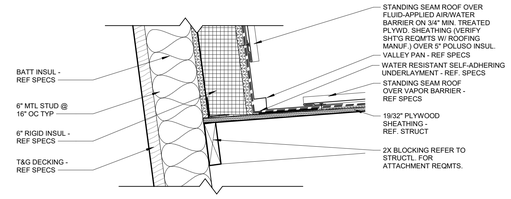
9 WALL SECTION DETAIL
1 1/2" = 1'-0"



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

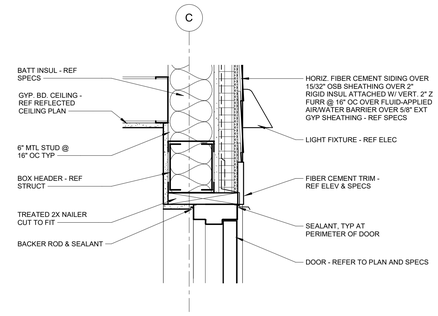


11 WALL SECTION DETAIL
1 1/2" = 1'-0"



12 WALL SECTION DETAIL
1 1/2" = 1'-0"

13 WALL SECTION DETAIL
1 1/2" = 1'-0"



14 WALL SECTION DETAIL
1 1/2" = 1'-0"

INSULATION REQUIREMENTS

1. SLAB INSULATION SHALL MEET OR EXCEED ZONE 6 REQUIREMENT OF R-10 FOR 4' IN DEPTH.
2. EXTERIOR WALL INSULATION SHALL MEET OR EXCEED ZONE 6 REQUIREMENT OF R-21 BATT INSUL + R-11.3 RIGID INSUL.
3. FLOOR INSULATION SHALL MEET OR EXCEED ZONE 6 REQUIREMENT OF R-30 OR PROVIDE INSULATION SUFFICIENT TO FILL THE FRAMING CAVITY PROVIDING NOT LESS THAN R-19.
4. CEILING INSULATION SHALE MEET OR EXCEED ZONE 6 REQUIREMENT OF R49. CEILINGS WITHOUT ATTIC SPACES MUST HAVE R-30 MINIMUM PER R402.2.2.

Revisions:	Date
ADDENDUM 001 1	02/02/2022

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **SECTION DETAILS**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

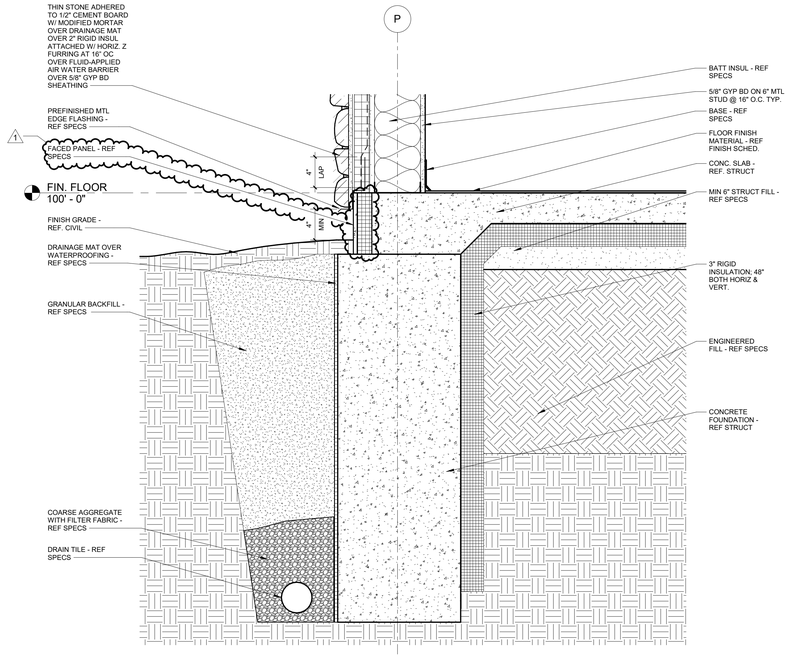
Date: **09/08/2020** | Checked | Drawn

Project Number: **H IH BLAC 19100**

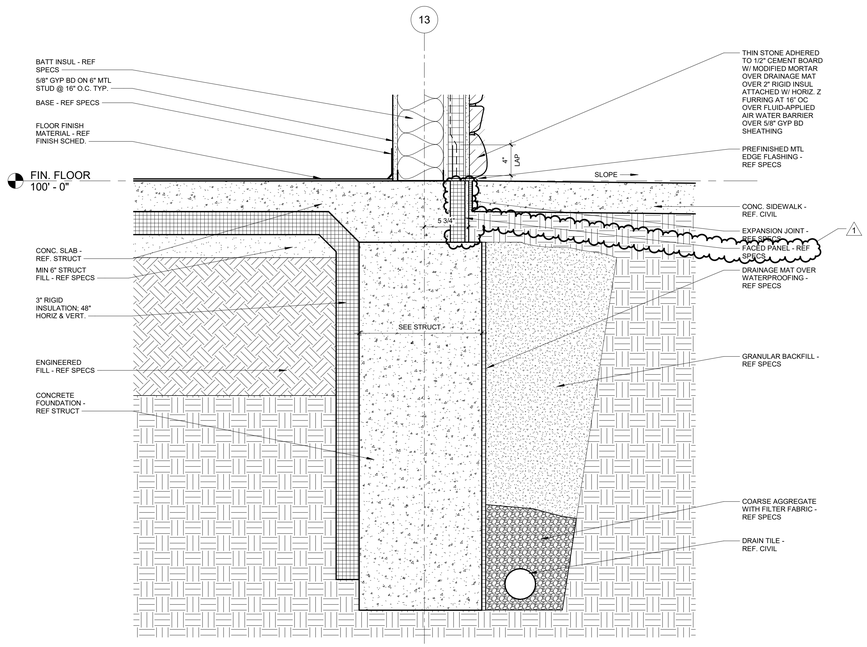
Building Number

Drawing Number 1: **A5.8**

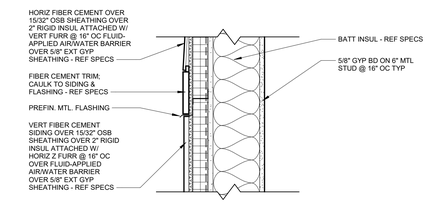
INDIAN HEALTH SERVICE · PHS · 1955 ·



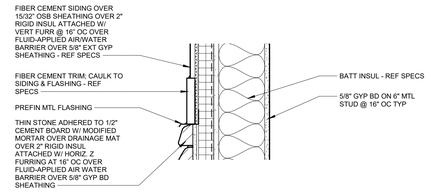
1 WALL SECTION DETAIL
1 1/2" = 1'-0"



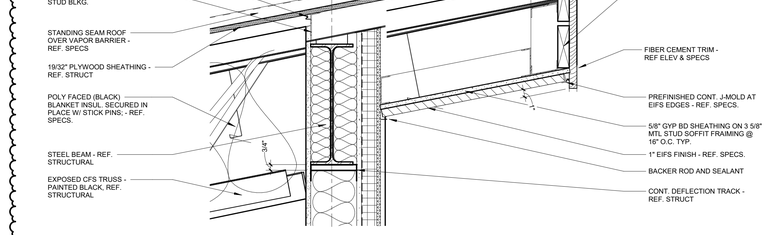
2 WALL SECTION DETAIL
1 1/2" = 1'-0"



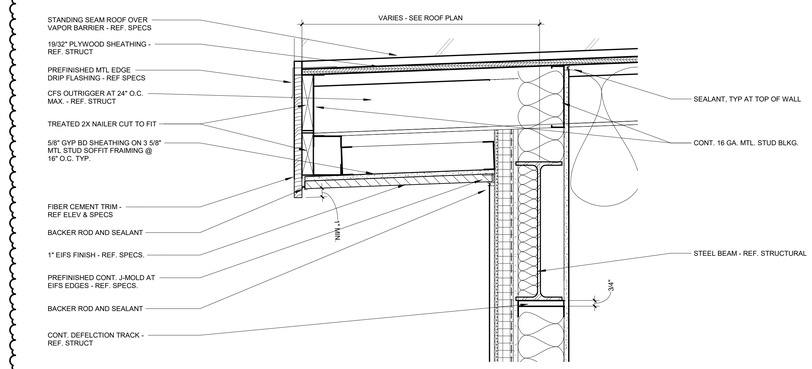
3 WALL SECTION DETAIL
1 1/2" = 1'-0"



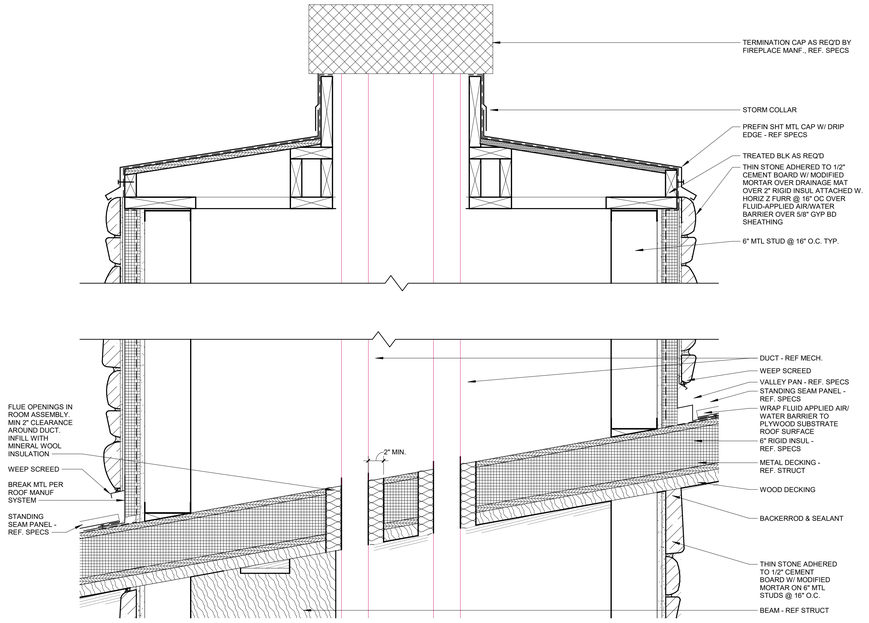
4 WALL SECTION DETAIL
1 1/2" = 1'-0"



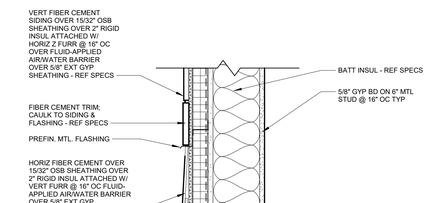
5 WALL SECTION DETAIL
1 1/2" = 1'-0"



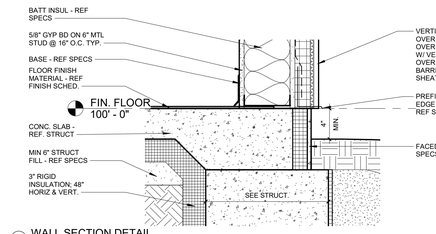
6 WALL SECTION DETAIL
1 1/2" = 1'-0"



7 WALL SECTION AT CHIMNEY
1 1/2" = 1'-0"



8 WALL SECTION DETAIL
1 1/2" = 1'-0"



9 WALL SECTION DETAIL
1 1/2" = 1'-0"

INSULATION REQUIREMENTS

1. SLAB INSULATION SHALL MEET OR EXCEED ZONE 6 REQUIREMENT OF R-10 FOR 4' IN DEPTH.
2. EXTERIOR WALL INSULATION SHALL MEET OR EXCEED ZONE 6 REQUIREMENT OF R-21 BATT INSUL + R-11.3 RIGID INSUL.
3. FLOOR INSULATION SHALL MEET OR EXCEED ZONE 6 REQUIREMENT OF R-30 OR PROVIDE INSULATION SUFFICIENT TO FILL THE FRAMING CAVITY PROVIDING NOT LESS THAN R-19.
4. CEILING INSULATION SHALE MEET OR EXCEED ZONE 6 REQUIREMENT OF R49. CEILINGS WITHOUT ATTIC SPACES MUST HAVE R-30 MINIMUM PER R402.2.2.

Revisions:	Date
ADDENDUM 001 1	02/02/2022

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **SECTION DETAILS**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

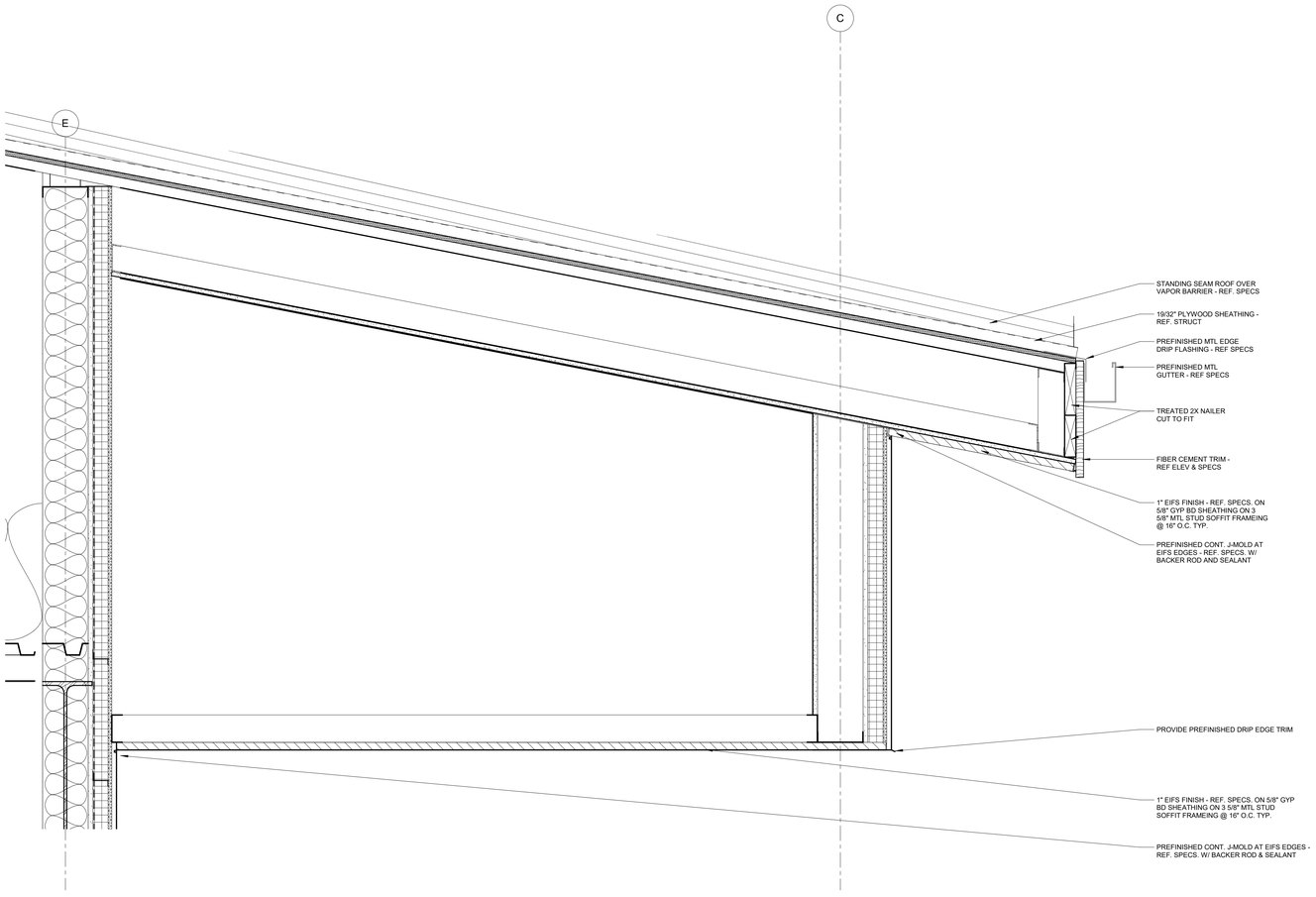
Date: **09/08/2020** | Checked | Drawn

Project Number: **H IH BLAC 19100**

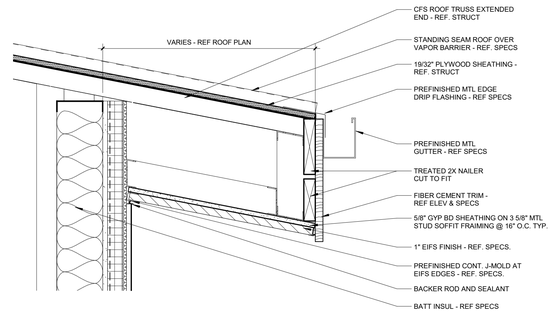
Building Number

Drawing Number: **A5.9** 1

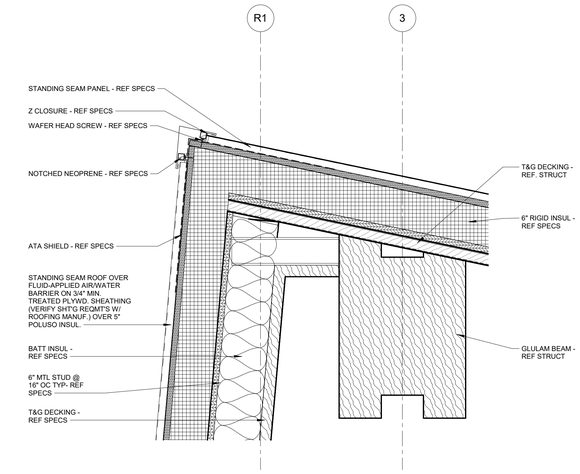
INDIAN HEALTH SERVICE · PHS · 1955 ·



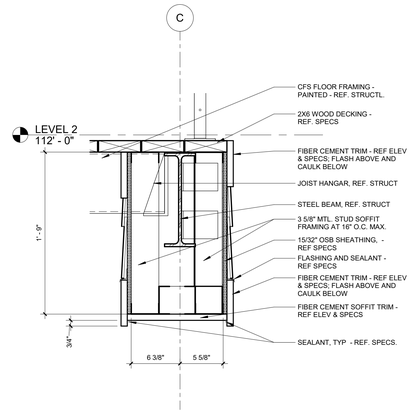
4 BLDG SECTION - PLAN N/S 5 - Callout 1 - Callout 2
1 1/2" = 1'-0"



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



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



3 WALL SECTION DETAIL
1 1/2" = 1'-0"

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
SECTION DETAILS

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

Date **09/08/2020** | Checked | Drawn

Project Number
H IH BLAC 19100

Building Number

Drawing Number
A5.10

INDIAN HEALTH SERVICE · PHS · 1955 ·

DOOR SCHEDULE

DOOR NO.	SIZE	HDWR SET	FIRE RATING	DOOR TYPE	DOOR MAT'L	DOOR GLASS	FRAME TYPE	FRAME MAT'L	DETAILS HEAD	DETAILS JAMB	DETAILS THRESHOLD	REMARKS
A101A	3'-0" x 7'-0" x 1 3/4"	01	20 MIN	E	WD	-	1	HM	5 / A6.2	8 / A6.2		
A101C	2'-6" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A101E	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A101F	2'-6" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A101G	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A101H	3'-0" x 7'-0" x 1 3/4"	13	20 MIN	E	WD	-	1	HM	5 / A6.2	8 / A6.2		
A102A	3'-0" x 7'-0" x 1 3/4"	01	20 MIN	E	WD	-	1	HM	5 / A6.2	8 / A6.2		
A102C	2'-0" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A102D	3'-0" x 7'-0" x 1 3/4"	03		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A102E	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A102F	2'-6" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A102G	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A102H	2'-6" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A102J	3'-0" x 7'-0" x 1 3/4"	13	20 MIN	E	WD	-	1	HM	5 / A6.2	8 / A6.2		
A103A	3'-0" x 7'-0" x 1 3/4"	01	20 MIN	E	WD	-	1	HM	5 / A6.2	8 / A6.2		
A103C	2'-0" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A103D	3'-0" x 7'-0" x 1 3/4"	03		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A103E	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A103F	2'-6" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A103G	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A103H	2'-6" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A103J	3'-0" x 7'-0" x 1 3/4"	13	20 MIN	E	WD	-	1	HM	5 / A6.2	8 / A6.2		
A104A	3'-0" x 7'-0" x 1 3/4"	01	20 MIN	E	WD	-	1	HM	5 / A6.2	8 / A6.2		
A104C	2'-0" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A104D	3'-0" x 7'-0" x 1 3/4"	03		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A104E	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A104F	2'-6" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A104G	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A104H	2'-6" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A104J	3'-0" x 7'-0" x 1 3/4"	13	20 MIN	E	WD	-	1	HM	5 / A6.2	8 / A6.2		
A105A	3'-0" x 7'-0" x 1 3/4"	01	20 MIN	E	WD	-	1	HM	5 / A6.2	8 / A6.2		
A105B	3'-0" x 7'-0" x 1 3/4"	05		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A105C	3'-0" x 7'-0" x 1 3/4"	05		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A105E	2'-6" x 7'-0" x 1 3/4"	05		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A105F	3'-0" x 8'-0" x 1 3/4"	06		A	HM	-	1	HM	9 / A5.7 SIM			
A105G	3'-0" x 7'-0" x 1 3/4"	07		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A105H	2'-6" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A105J	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A105K	3'-0" x 7'-0" x 1 3/4"	07		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A105L	2'-6" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A105M	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A105N	3'-0" x 7'-0" x 1 3/4"	07		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A105P	2'-6" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A105R	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A105S	3'-0" x 7'-0" x 1 3/4"	07		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A105T	2'-6" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A105U	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A105V	3'-0" x 7'-0" x 1 3/4"	13	20 MIN	E	WD	-	1	HM	5 / A6.2	8 / A6.2		
A106A	3'-0" x 7'-0" x 1 3/4"	01	20 MIN	E	WD	-	1	HM	5 / A6.2	8 / A6.2		
A106B	2'-0" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A106E	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A106F	3'-0" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A106G	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A106H	3'-0" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A106J	2'-0" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A106K	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A106L	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A106M	3'-0" x 7'-0" x 1 3/4"	13	20 MIN	E	WD	-	1	HM	5 / A6.2	8 / A6.2		
A107A	3'-0" x 7'-0" x 1 3/4"	01	20 MIN	E	WD	-	1	HM	5 / A6.2	8 / A6.2		
A107B	2'-0" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A107E	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A107F	3'-0" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A107G	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A107H	3'-0" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A107J	2'-0" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A107K	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A107L	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A107M	3'-0" x 7'-0" x 1 3/4"	13	20 MIN	E	WD	-	1	HM	5 / A6.2	8 / A6.2		
A108	3'-0" x 7'-0" x 1 3/4" PR	14	45 MIN	B	WD	-	3	HM	5 / A6.2	8 / A6.2		
A109A	3'-0" x 7'-0" x 1 3/4"	15	60 MIN	E	WD	SAFETY	1	HM	5 / A6.2	8 / A6.2		
A109B	3'-0" x 7'-0" x 1 3/4" Painted	24		A	HM	-	1	HM	9 / A5.7 SIM			
A201A	3'-0" x 7'-0" x 1 3/4"	01	20 MIN	E	WD	-	1	HM	5 / A6.2	8 / A6.2		
A201C	2'-0" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A201D	3'-0" x 7'-0" x 1 3/4"	03		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A201E	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A201F	2'-6" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A201G	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A201H	2'-6" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A201J	3'-0" x 7'-0" x 1 3/4"	13	20 MIN	E	WD	-	1	HM	5 / A6.2	8 / A6.2		
A202A	3'-0" x 7'-0" x 1 3/4"	01	20 MIN	E	WD	-	1	HM	5 / A6.2	8 / A6.2		

DOOR SCHEDULE

DOOR NO.	SIZE	HDWR SET	FIRE RATING	DOOR TYPE	DOOR MAT'L	DOOR GLASS	FRAME TYPE	FRAME MAT'L	DETAILS HEAD	DETAILS JAMB	DETAILS THRESHOLD	REMARKS
A202C	2'-0" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A202D	3'-0" x 7'-0" x 1 3/4"	03		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A202E	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A202F	2'-6" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A202G	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A202H	2'-6" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A202J	3'-0" x 7'-0" x 1 3/4"	13	20 MIN	E	WD	-	1	HM	5 / A6.2	8 / A6.2		
A203A	3'-0" x 7'-0" x 1 3/4"	01	20 MIN	E	WD	-	1	HM	5 / A6.2	8 / A6.2		
A203C	2'-0" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A203D	3'-0" x 7'-0" x 1 3/4"	03		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A203E	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A203F	2'-6" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A203G	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A203H	2'-6" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A203J	3'-0" x 7'-0" x 1 3/4"	13	20 MIN	E	WD	-	1	HM	5 / A6.2	8 / A6.2		
A204A	3'-0" x 7'-0" x 1 3/4"	01	20 MIN	E	WD	-	1	HM	5 / A6.2	8 / A6.2		
A204C	2'-0" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A204D	3'-0" x 7'-0" x 1 3/4"	03		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A204E	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A204F	2'-6" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A204G	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A204H	2'-6" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A204J	3'-0" x 7'-0" x 1 3/4"	13	20 MIN	E	WD	-	1	HM	5 / A6.2	8 / A6.2		
A205A	3'-0" x 7'-0" x 1 3/4"	01	20 MIN	E	WD	-	1	HM	5 / A6.2	8 / A6.2		
A205B	3'-0" x 7'-0" x 1 3/4"	05		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A205C	3'-0" x 7'-0" x 1 3/4"	05		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A205E	2'-6" x 7'-0" x 1 3/4"	05		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A205F	3'-0" x 8'-0" x 1 3/4"	25		A	HM	-	1	HM	9 / A5.7 SIM			
A205G	3'-0" x 7'-0" x 1 3/4"	07		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A205H	2'-6" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A205J	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A205K	3'-0" x 7'-0" x 1 3/4"	07		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A205L	2'-6" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A205M	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A205N	3'-0" x 7'-0" x 1 3/4"	07		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A205P	2'-6" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A205R	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A205S	3'-0" x 7'-0" x 1 3/4"	07		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A205T	2'-6" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A205U	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A205V	3'-0" x 7'-0" x 1 3/4"	13	20 MIN	E	WD	-	1	HM	5 / A6.2	8 / A6.2		
A206A	3'-0" x 7'-0" x 1 3/4"	01	20 MIN	E	WD	-	1	HM	5 / A6.2	8 / A6.2		
A206B	2'-0" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A206E	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A206F	3'-0" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A206G	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A206H	3'-0" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A206J	2'-0" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A206K	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A206L	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A206M	3'-0" x 7'-0" x 1 3/4"	13	20 MIN	E	WD	-	1	HM	5 / A6.2	8 / A6.2		
A207A	3'-0" x 7'-0" x 1 3/4"	01	20 MIN	E	WD	-	1	HM	5 / A6.2	8 / A6.2		
A207B	2'-0" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A207E	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A207F	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A207G	3'-0" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A207H	3'-0" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A207J	2'-0" x 7'-0" x 1 3/4" PR	04		A	WD	-	2	HM	5 / A6.2	8 / A6.2		
A207K	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A207L	3'-0" x 7'-0" x 1 3/4"	02		A	WD	-	1	HM	5 / A6.2	8 / A6.2		
A207M	3'-0" x 7'-0" x 1 3/4"	13	20 MIN	E	WD	-	1	HM	5 / A6.2	8 / A6.2		
A208	3'-0" x 7'-0" x 1 3/4" PR	14	45 MIN	B	WD	-	3	HM	5 / A6.2	8 / A6.2		
A209	3'-0" x 7'-0" x 1 3/4"	15	60 MIN	E	WD	SAFETY	1	HM	5 / A6.2	8 / A6.2		
C100A	3'-0" X 7'-0" X 1 3/4" PR	20		C	ALMN	SAFETY	-	ALMN	8 / A5.7			
C100B	3'-0" X 7'-0" X 1 3/4" PR	21		C	ALMN	SAFETY	-	ALMN	2 / A6.2 SIM			
C102	3'-0" x 7'-0" x 1 3/4"	13		E	WD	-	1	HM	5 / A6.2	8 / A6.2		
C103	3'-0" x 7'-0" x 1 3/4"	11		E	WD	-	1	HM	5 / A6.2	8 / A6.2		
C104	3'-0" x 7'-0" x 1 3/4"	13		E	WD	-	1	HM	5 / A6.2	8 / A6.2		
C105	3'-0" x 7'-0" x 1 3/4"	10		E	WD	-	1	HM	5 / A6.2	8 / A6.2		
C106	3'-0" x 7'-0" x 1 3/4"	10		E	WD	-	1	HM	5 / A6.2	8 / A6.2		
C108	3'-0" x 7'-0" x 1 3/4"	24		A	HM	-	1	HM	9 / A5.7			
C109	3'-0" x 7'-0" x 1 3/4"	10		E	WD	-	1	HM	5 / A6.2	8 / A6.2		
C110	4'-0" x 7'-0" x 1 3/4"	22		A	HM	-	1	HM	9 / A5.7 SIM			
C111	4'-0" x 7'-0" x 1 3/4"	23		A	HM	-	1	HM	9 / A5.7 SIM			PROVIDE SIGNAGE ON DOOR - REF. FIRE PROTECTION
C201	3'-0" x 7'-0" x 1 3/4"	10		E	WD	-	1	HM	5 / A6.2	8 / A6.2		
C203	3'-0" x 7'-0" x 1 3/4"	02		E	WD	-	1	HM	5 / A6.2	8 / A6.2		
C205	3'-0" x 7'-0" x 1 3/4"	12		E	WD	-	1	HM	5 / A6.2	8 / A6.2		
C206	4'-0" x 7'-0" x 1 3/4"	13	45 MIN	A	HM	-	1	HM	5 / A6.2	8 / A6.2		
C207	3'-0" x 8'-0" x 1 3/4"	24		A	HM	-	1	HM	9 / A5.7 SIM			

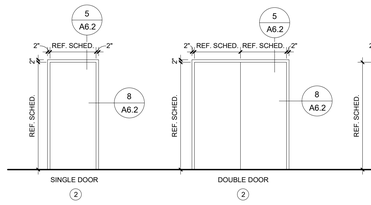
LEGEND

/// = GLASS - REF SPECS

T = TEMPERED SAFETY GLASS - REF SPECS

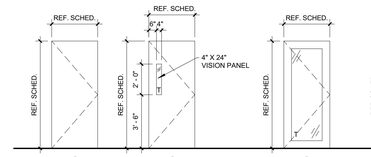
NOTE:

1. CONTRACTOR TO VERIFY SIZE OF ROUGH OPENINGS REQUIRED PER MANUF. SPECIFICATIONS PRIOR TO WALL CONSTRUCTION.
2. THE FENESTRATION U-FACTOR MUST MAINTAIN 0.30. THERE IS NO SHGC REQUIREMENT FOR GLAZING



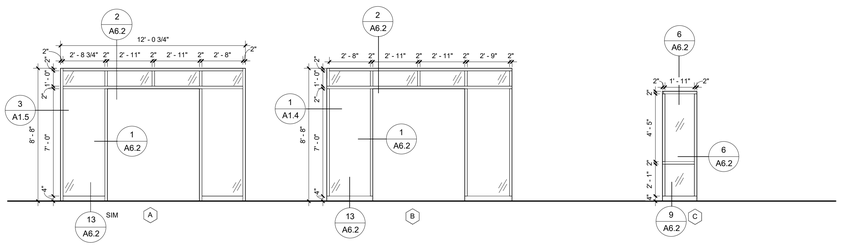
DOOR FRAME ELEVATIONS

1/4" = 1'-0"



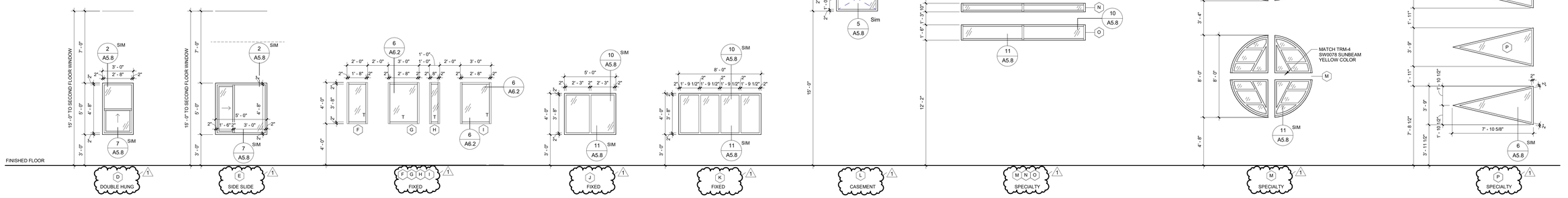
DOOR TYPE ELEVATIONS

1/4" = 1'-0"



ALUMINUM FRAME & WINDOW ELEVATIONS

1/4" = 1'-0"



WINDOW ELEVATIONS

1/4" = 1'-0"

ADDENDUM 001 1	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **DOOR & WINDOW INFORMATION**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**

Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

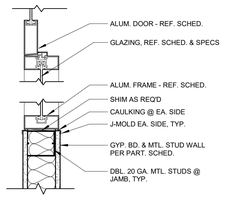
Date: **09/08/2020** | Checked | Drawn

Project Number: **H IH BLAC 19100**

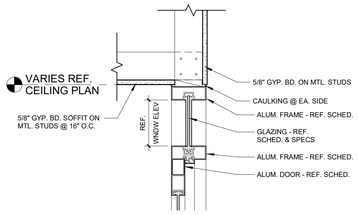
Building Number

Drawing Number: **A6.1**

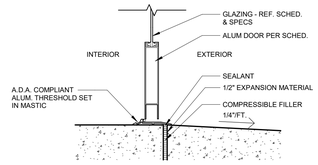
INDIAN HEALTH SERVICE · PHS · 1955 ·



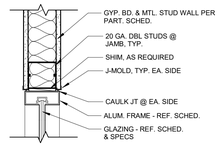
1 ALUM DR & SIDELT (JAMB)
1 1/2" = 1'-0"



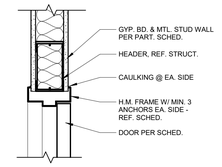
2 ALUM DR & TRANSOM (HEAD)
1 1/2" = 1'-0"



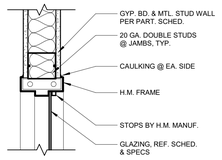
3 ALUM DR TO EXTERIOR (SILL)
1 1/2" = 1'-0"



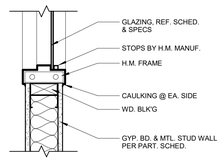
4 ALUM STOREFRONT INTERIOR (HEAD/JAMB)
1 1/2" = 1'-0"



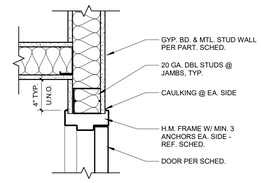
5 HM DOOR (HEAD)
1 1/2" = 1'-0"



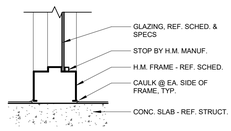
6 HM WDW (HEAD/JAMB)
1 1/2" = 1'-0"



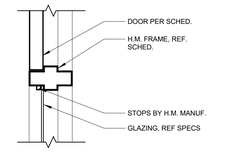
7 HM WDW (SILL)
1 1/2" = 1'-0"



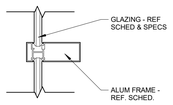
8 HM DOOR FRAME (JAMB)
1 1/2" = 1'-0"



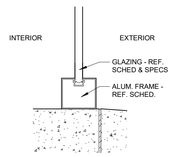
9 HM WDW @ SLAB (SILL)
1 1/2" = 1'-0"



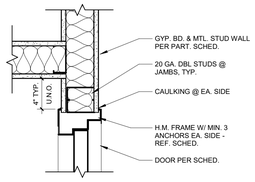
10 HM DOOR & SIDELIGHT (JAMB)
1 1/2" = 1'-0"



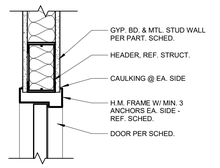
11 ALUM. WDW MULLION
1 1/2" = 1'-0"



13 ALUM WDW (SILL)
1 1/2" = 1'-0"



14 HM DBL EGRESS DR (JAMB)
1 1/2" = 1'-0"



15 HM DBL EGRESS DR (HEAD)
1 1/2" = 1'-0"

ADDENDUM 001 1	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title

DOOR & WINDOW DETAILS

Approved: Project Director

Project Title

APARTMENT BUILDING AND SITEWORK

Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location

BROWNING, MONTANA

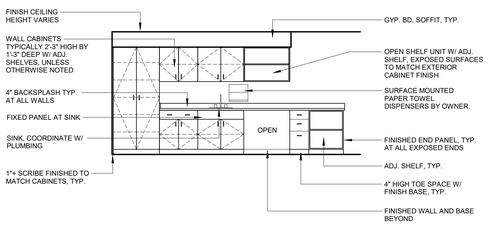
Date **09/08/2020** | Checked | Drawn

Project Number **H IH BLAC 19100**

Building Number

Drawing Number **A6.2**

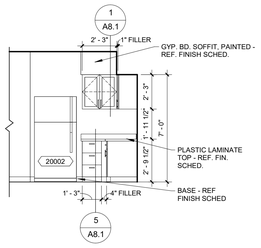
INDIAN HEALTH SERVICE · PHS · 1955 ·



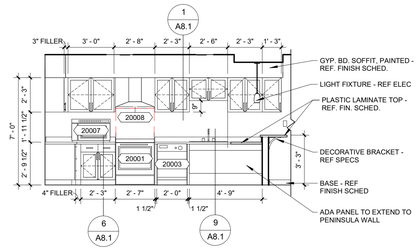
X TYPICAL CASEWORK ELEVATION
1/4" = 1'-0"

GENERAL NOTES:

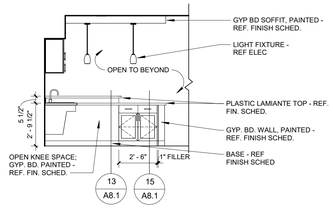
1. PROVIDE FINISHED PANELS AT ALL EXPOSED SURFACES. FINISH IS PLASTIC LAMINATE UNLESS OTHERWISE NOTED.
2. BASE CABINETS ARE 2'-0" DEEP UNLESS OTHERWISE NOTED.
3. WALL CABINETS ARE EITHER 1'-0" DEEP OR 1'-3" DEEP (SEE DETAIL FOR DEPTH) UNLESS OTHERWISE NOTED.
4. REFER TO COLOR SCHEDULE KEY FOR PLASTIC LAMINATE COLOR SELECTIONS.
5. FIELD VERIFY ALL DIMENSIONS.
6. COORDINATE CASEWORK WITH OWNER FURNISHED EQUIPMENT LOCATED WITHIN, ON, OR ADJACENT TO CASEWORK.
7. REFER TO LEGEND ON SHEETS A11.1 & A11.2 TO REFERENCE EQUIPMENT NUMBERS TO ACTUAL EQUIPMENT
8. CASEWORK TO BE ANCHORED TO WALL AND FLOOR.
9. DIMENSIONS ARE FROM FACE OF GYP TO FACE OF GYP
10. ABBREVIATIONS:
    UCL = UNDER CABINET LIGHTING
    KB = KEYBOARD TRAY
    PD = PENCIL DRAWER
    UCB = UNDER COUNTER BRACKET
    UCR = UNDER COUNTER REFRIGERATOR
    RVS = RIGID VINYL SHEET
11. APPLY COLORED CAULK TO MATCH ADJACENT SURFACE BETWEEN 2 JOINTS: ONE JOINT BETWEEN TOP OF BACKSPLASH AND WALL; A SECOND JOINT BETWEEN COUNTERTOP AND BOTTOM OF BACKSPLASH. APPLY CLEAR SILICONE CAULKING OVER THE COLORED CAULK IN BOTH JOINT AREAS.
12. COUNTERTOP SUPPORT BRACKETS SHALL SPAN A MAXIMUM OF 36" O.C.. PRIME AND PAINT BRACKETS TO MATCH ADJACENT WALL SURFACE.
13. 1/4" REVEALS IN MILLWORK, STAIN BLACK AND APPLY CLEAR SEALANT TO REVEALS, REF ELEVATIONS & DETAILS FOR LOCATIONS.
14. G.C. TO INSTALL ALL TOILET ACCESSORIES ACCORDING TO ADA AND ANSI REGULATIONS.
15. G.C. TO PROVIDE AND INSTALL BABY CHANGING STATIONS.
16. KEYBOARD TRAYS PROVIDED BY OWNER, INSTALLED BY G.C.
17. REFER TO ELEVATIONS FOR LOCK LOCATIONS.



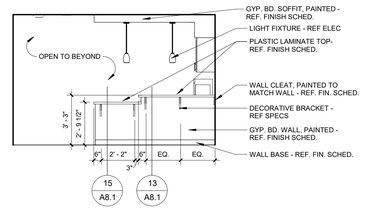
1 A101A ADA KITCHEN - S
1/4" = 1'-0"



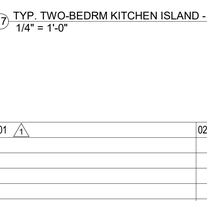
2 A101A ADA KITCHEN - W
1/4" = 1'-0"



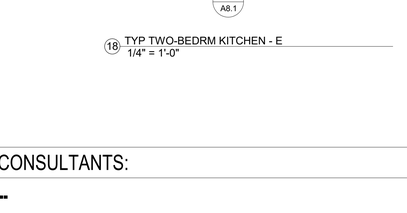
3 A101A ADA KITCHEN - N
1/4" = 1'-0"



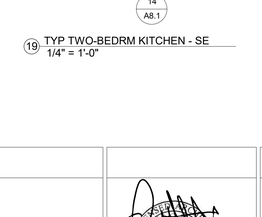
4 A101B ADA LIVING ROOM - S
1/4" = 1'-0"



5 A101D WASHER/ DRYER - E
1/4" = 1'-0"

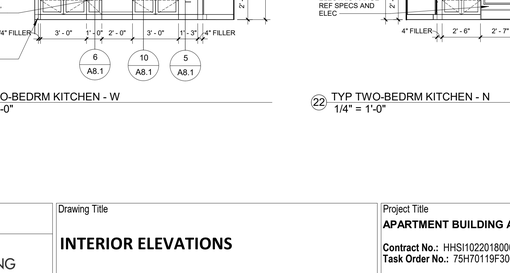


6 A101G ADA TLT - E
1/4" = 1'-0"



7 A101G ADA TLT - S
1/4" = 1'-0"

8 A101G ADA TLT - W
1/4" = 1'-0"



9 TYP ONE-BEDRM KITCHEN - W
1/4" = 1'-0"

10 TYP ONE-BEDRM KITCHEN - N
1/4" = 1'-0"

11 TYP ONE-BEDRM LIVING ROOM - S
1/4" = 1'-0"

12 TYP ONE-BEDRM TLT - E
1/4" = 1'-0"

13 TYP ONE-BEDRM TLT - S
1/4" = 1'-0"

14 TYP ONE-BEDRM TLT - W
1/4" = 1'-0"

15 TYP. TWO-BEDRM KITCHEN ISLAND - W
1/4" = 1'-0"

16 TYP. TWO-BEDRM KITCHEN ISLAND - NW
1/4" = 1'-0"

17 TYP. TWO-BEDRM KITCHEN ISLAND - N
1/4" = 1'-0"

18 TYP TWO-BEDRM KITCHEN - E
1/4" = 1'-0"

19 TYP TWO-BEDRM KITCHEN - SE
1/4" = 1'-0"

20 TYP TWO-BEDRM KITCHEN - S
1/4" = 1'-0"

21 TYP TWO-BEDRM KITCHEN - W
1/4" = 1'-0"

22 TYP TWO-BEDRM KITCHEN - N
1/4" = 1'-0"

ADDENDUM 001 1	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
INTERIOR ELEVATIONS

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

Date
09/08/2020

Checked

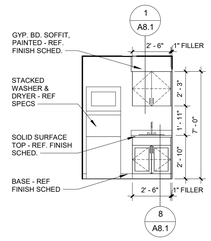
Drawn

Project Number
H IH BLAC 19100

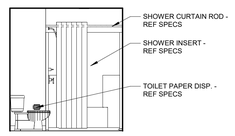
Building Number

Drawing Number
A7.1

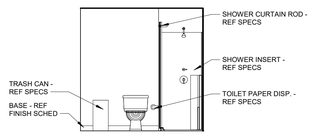
INDIAN HEALTH SERVICE · PHS · 1955 ·



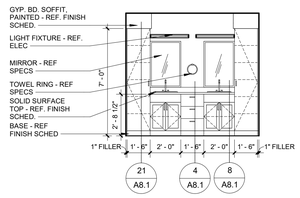
1 TYP TWO-BEDRM LAUNDRY - E
1/4" = 1'-0"



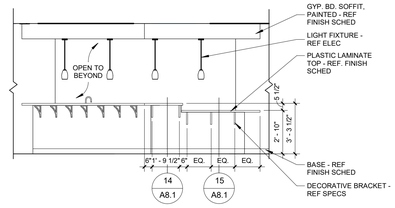
2 TYP TWO-BEDRM TLT - N
1/4" = 1'-0"



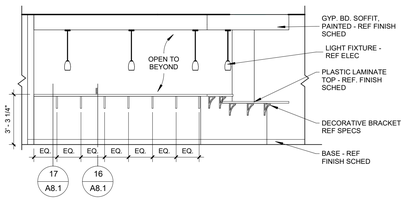
3 TYP TWO-BEDRM TLT - W
1/4" = 1'-0"



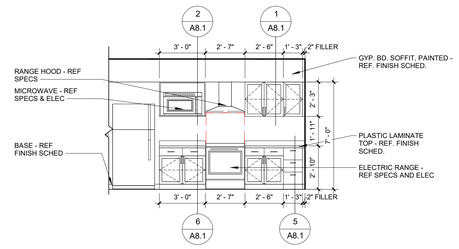
4 TYP TWO-BEDRM WASH RM - W
1/4" = 1'-0"



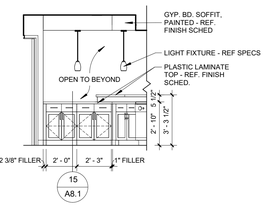
5 TYP 4-BEDRM ENTRY - SW
1/4" = 1'-0"



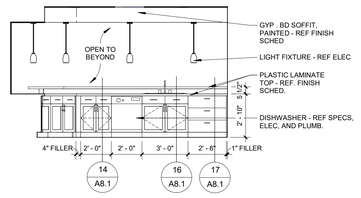
6 TYP 4-BEDRM LIVING ROOM - S
1/4" = 1'-0"



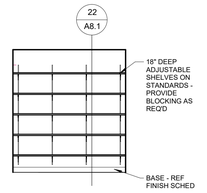
7 TYP 4-BEDRM KITCHEN ISLAND - S
1/4" = 1'-0"



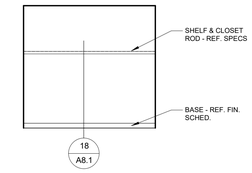
8 TYP. 4-BEDRM KITCHEN ISLAND - NW
1/4" = 1'-0"



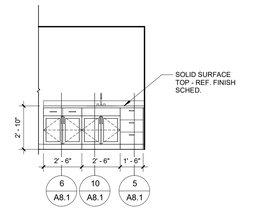
9 TYP 4-BEDRM KITCHEN - N
1/4" = 1'-0"



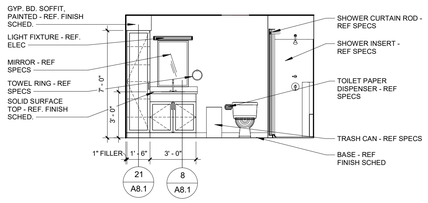
10 TYP 4-BEDRM PANTRY - W
1/4" = 1'-0"



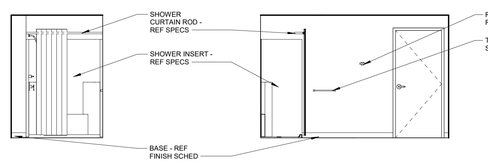
11 TYP 4-BEDRM LAUNDRY - N
1/4" = 1'-0"



12 TYP 4-BEDRM LAUNDRY - S
1/4" = 1'-0"

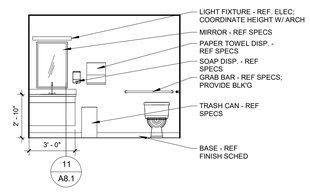


13 TYP 4-BEDRM PRIVATE TLT - N
1/4" = 1'-0"

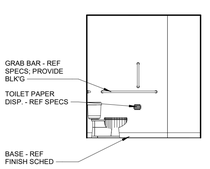


14 TYP 4-BEDRM PRIVATE TLT - E
1/4" = 1'-0"

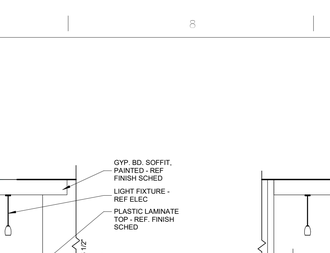
15 TYP 4-BEDRM PRIVATE TLT - S
1/4" = 1'-0"



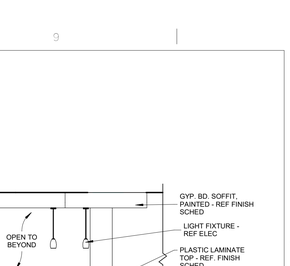
16 C103 PUBLIC TLT - N
1/4" = 1'-0"



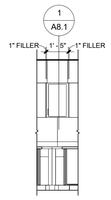
17 C103 PUBLIC TLT - E
1/4" = 1'-0"



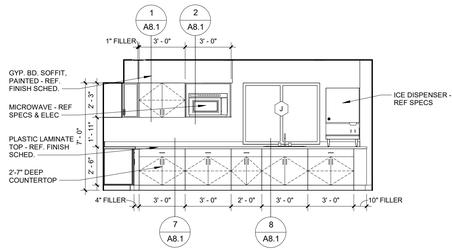
18 C109 KITCHENETTE - S
1/4" = 1'-0"



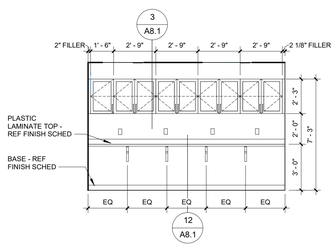
19 C109 KITCHENETTE - SW
1/4" = 1'-0"



20 C109 KITCHENETTE - CORNER CAB
1/4" = 1'-0"



21 C109 KITCHENETTE - W
1/4" = 1'-0"



22 C107 - WEST GREAT ROOM - S
1/4" = 1'-0"

Revisions:	Date
ADDENDUM 001 1	02/02/2022

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
INTERIOR ELEVATIONS

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

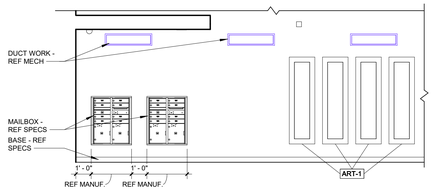
Date **09/08/2020** | Checked | Drawn

Project Number
H IH BLAC 19100

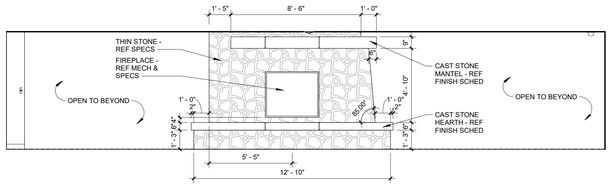
Building Number

Drawing Number
A7.2

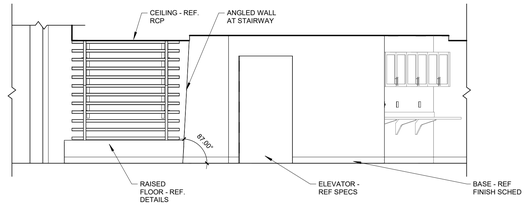
INDIAN HEALTH SERVICE · PHS · 1955 ·



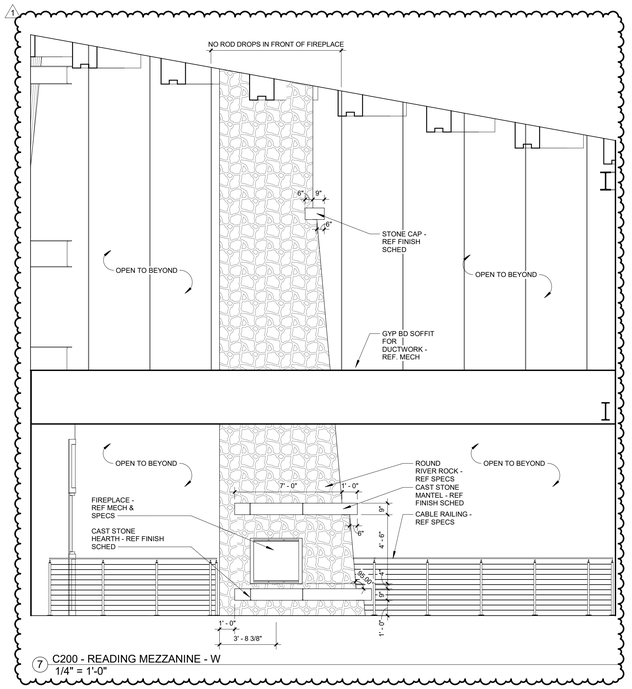
1 C101 - GREAT ROOM - S
1/4" = 1'-0"



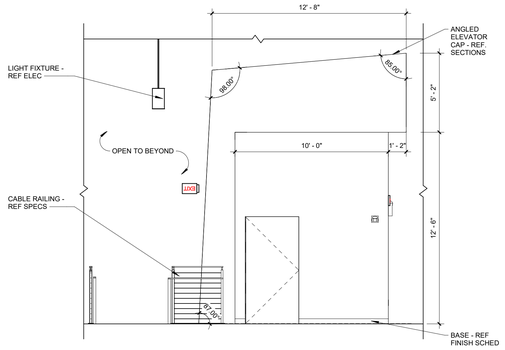
2 C107 - WEST GREAT ROOM - W
1/4" = 1'-0"



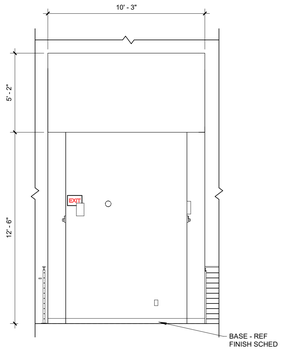
3 C101 - ELEVATOR - S
1/4" = 1'-0"



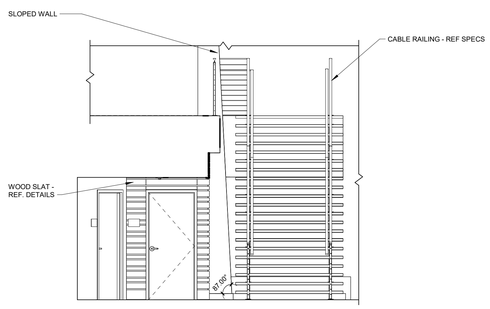
7 C200 - READING MEZZANINE - W
1/4" = 1'-0"



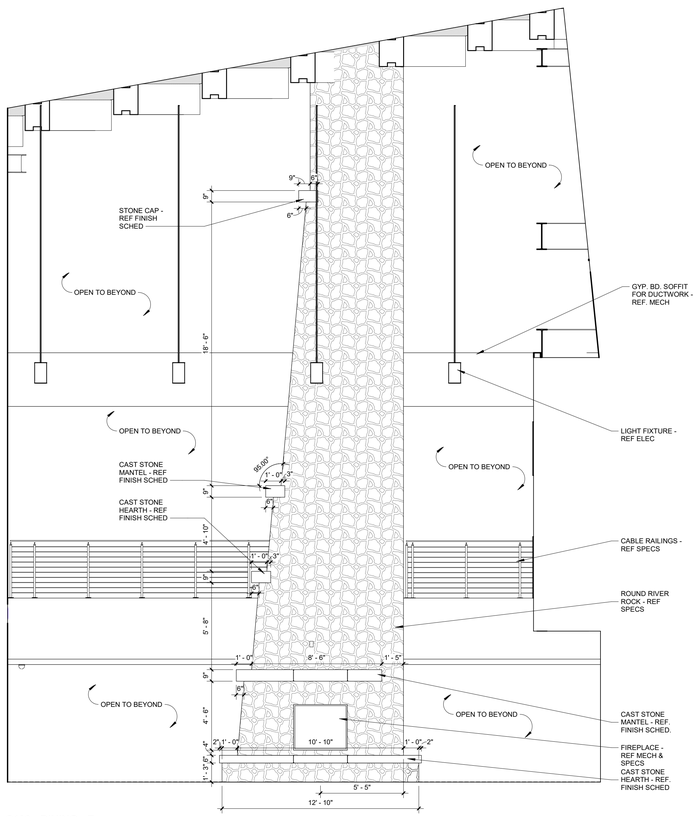
4 C200 - ELEVATOR - N
1/4" = 1'-0"



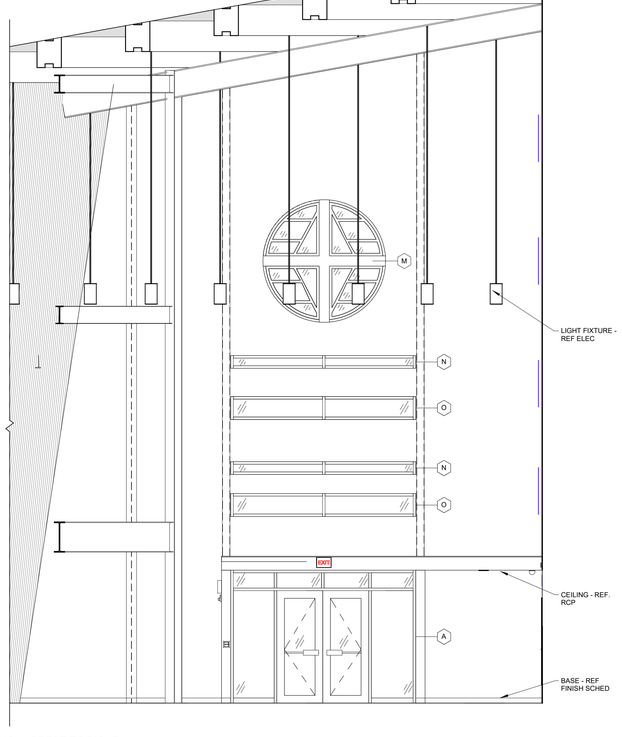
5 C200 - ELEVATOR - W
1/4" = 1'-0"



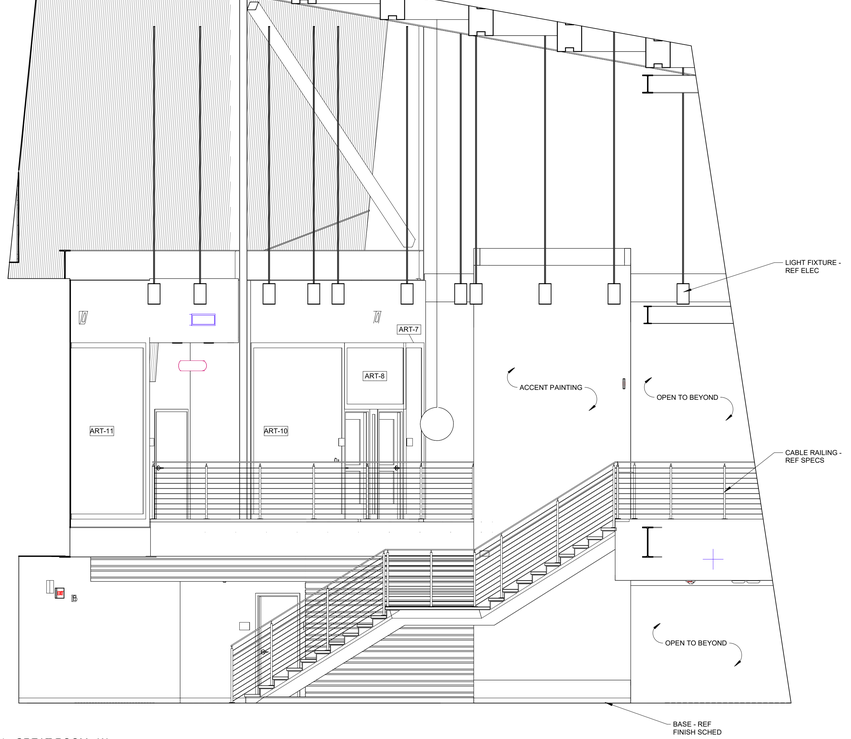
6 C101 - GREAT ROOM - N
1/4" = 1'-0"



8 C108 - DINING - E
1/4" = 1'-0"



9 C101 - GREAT ROOM - E
1/4" = 1'-0"



10 C101 - GREAT ROOM - W
1/4" = 1'-0"

ADDENDUM 001 1	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
INTERIOR ELEVATIONS

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

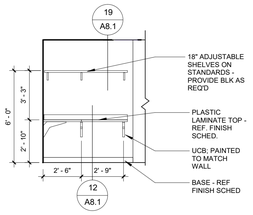
Date **09/08/2020** | Checked | Drawn

Project Number
H IH BLAC 19100

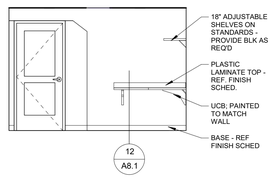
Building Number

Drawing Number
A7.3

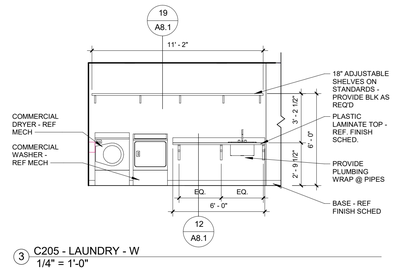
INDIAN HEALTH SERVICE · PHS · 1955 ·



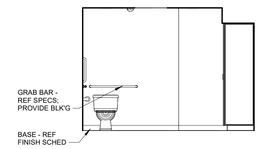
1 C205 - LAUNDRY - E
1/4" = 1'-0"



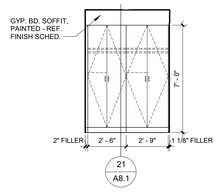
2 C205 - LAUNDRY - N
1/4" = 1'-0"



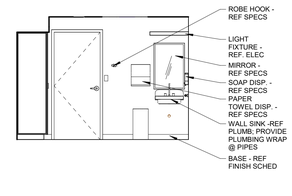
3 C205 - LAUNDRY - W
1/4" = 1'-0"



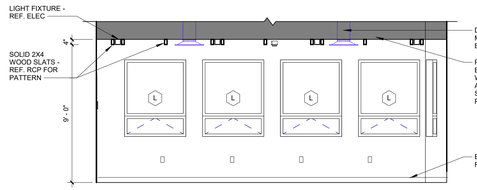
4 C203 - TLT - E
1/4" = 1'-0"



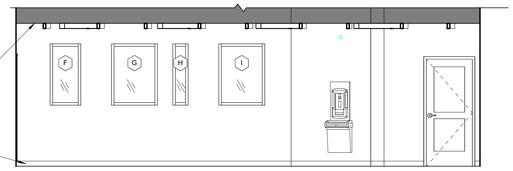
5 C203 TLT - S
1/4" = 1'-0"



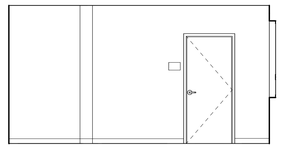
6 C203 TLT - W
1/4" = 1'-0"



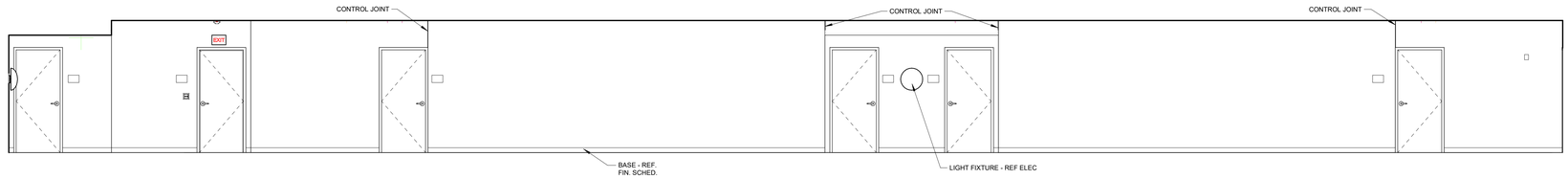
7 C201 - FITNESS CENTER - S
1/4" = 1'-0"



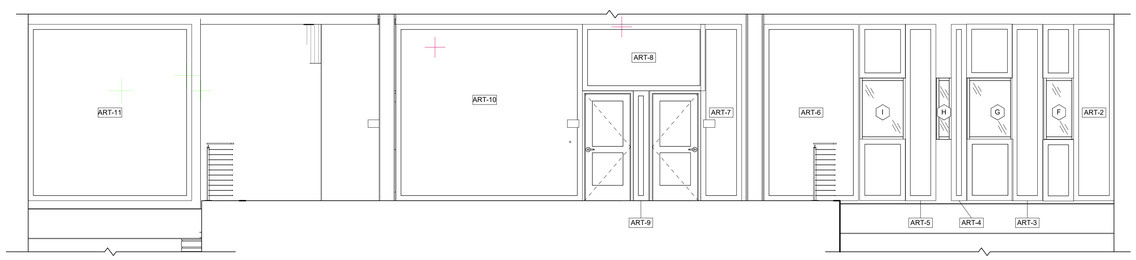
9 C201 - FITNESS CENTER - N
1/4" = 1'-0"



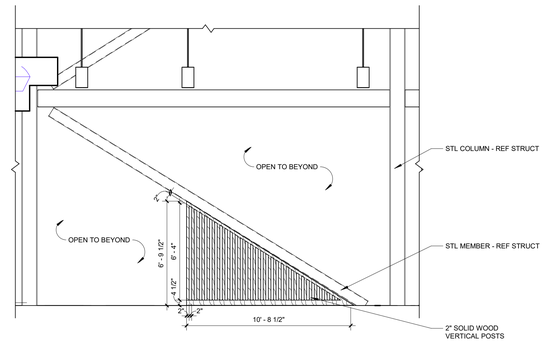
10 C201 - FITNESS CENTER - E
1/4" = 1'-0"



11 A108 - CORRIDOR - E
1/4" = 1'-0"



12 C200 - READING MEZZANINE - ARTWORK
1/4" = 1'-0"



13 C200 - READING MEZZANINE - E
1/4" = 1'-0"

Revisions:	Date
ADDENDUM 001 1	02/02/2022

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
INTERIOR ELEVATIONS

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI122201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

Date **09/08/2020** | Checked | Drawn

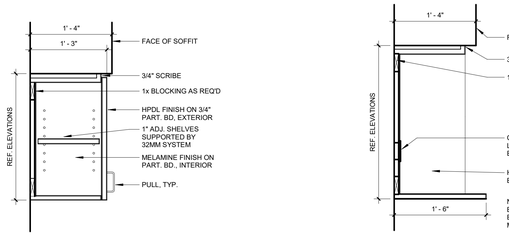
Project Number
H IH BLAC 19100

Building Number

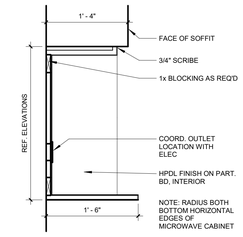
Drawing Number
A7.4

INDIAN HEALTH SERVICE · PHS · 1955 ·

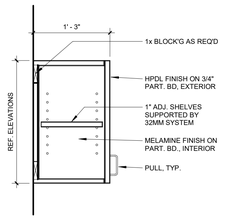
IMPORTANT NOTE: FOR ALL BASE CABINETS (REFER TO SPECS FOR MORE DETAILS): APPLY COLORED CAULK TO MATCH ADJACENT SURFACE BETWEEN 2 JOINTS: ONE JOINT BETWEEN TOP OF BACKSPLASH AND WALL AND A SECOND JOINT BETWEEN COUNTERTOP AND BOTTOM OF BACKSPLASH. THEN APPLY CLEAR SILICONE CAULKING OVER THE COLORED CAULK IN BOTH JOINT AREAS.



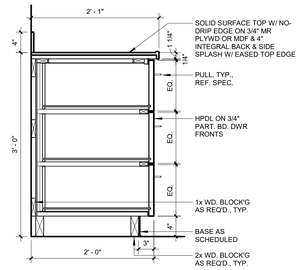
1 SECTION
1" = 1'-0"



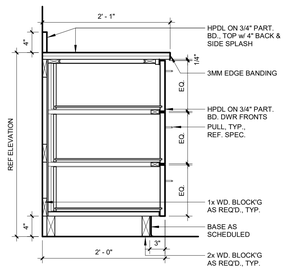
2 SECTION
1" = 1'-0"



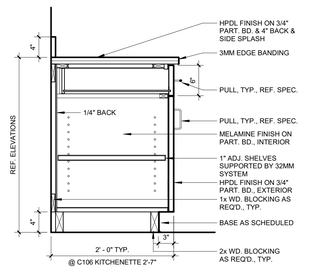
3 SECTION
1" = 1'-0"



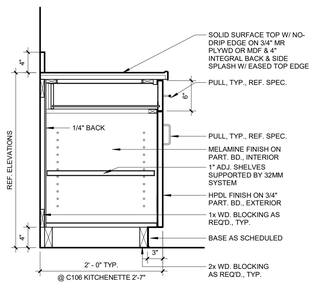
4 SECTION
1" = 1'-0"



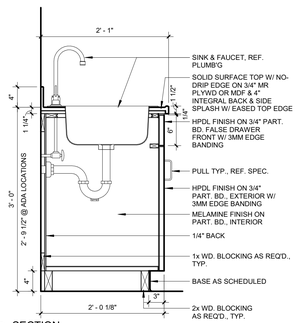
5 SECTION
1" = 1'-0"



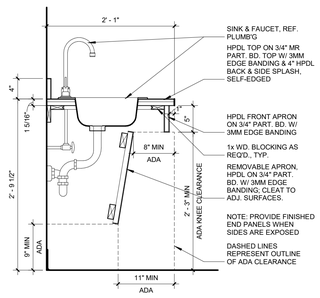
6 SECTION
1" = 1'-0"



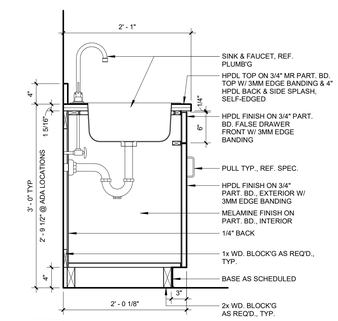
7 SECTION
1" = 1'-0"



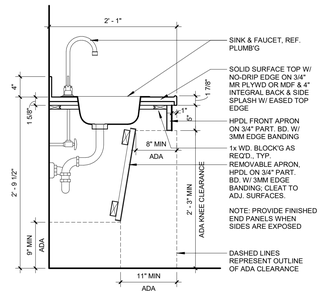
8 SECTION
1" = 1'-0"



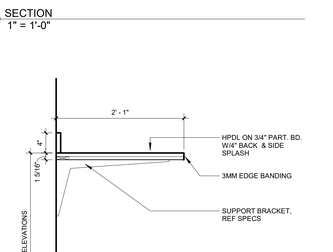
9 SECTION
1" = 1'-0"



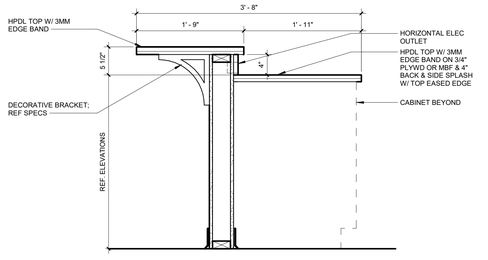
10 SECTION
1" = 1'-0"



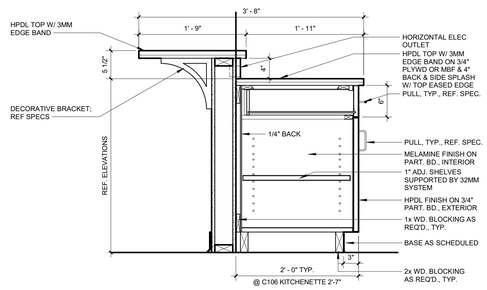
11 SECTION
1" = 1'-0"



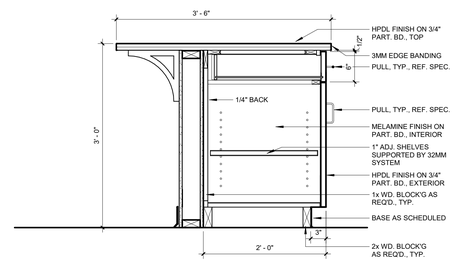
12 SECTION
1" = 1'-0"



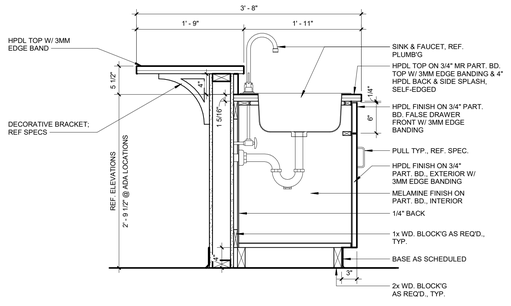
13 SECTION
1" = 1'-0"



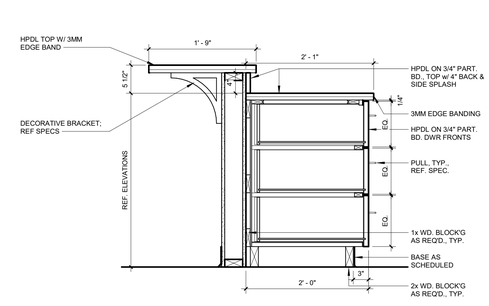
14 SECTION
1" = 1'-0"



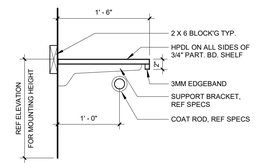
15 SECTION
1" = 1'-0"



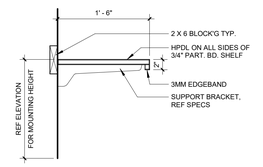
16 SECTION
1" = 1'-0"



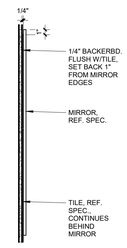
17 SECTION
1" = 1'-0"



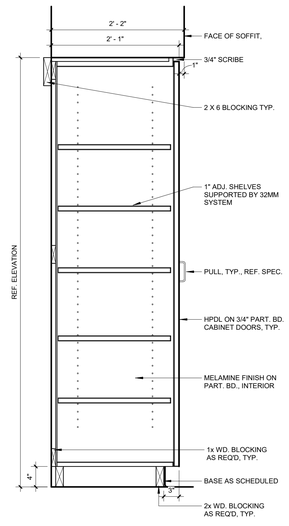
18 SECTION
1" = 1'-0"



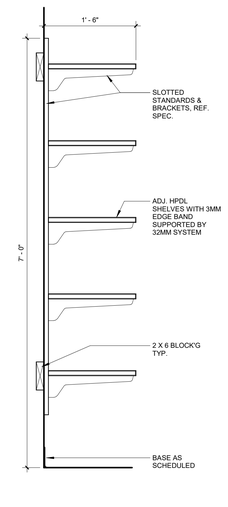
19 SECTION
1" = 1'-0"



20 SECTION
1" = 1'-0"



21 SECTION
1" = 1'-0"



22 SECTION
1" = 1'-0"

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

FARRIS ENGINEERING

BLUE STAR INTEGRATIVE STUDIO

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
MILLWORK SECTION DETAILS

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

Date
09/08/2020

Checked

Drawn

Project Number
H IH BLAC 19100

Building Number

Drawing Number
A8.1

INDIAN HEALTH SERVICE · PHS · 1955 ·

SYMBOL LEGEND

- (8'-0") CEILING HEIGHT
- (EX) EXISTING CEILING
- (S) OPEN TO STRUCTURE
- 2X4 FIXTURE - REF. ELEC
- RECESSED CAN FIXTURE - REF. ELEC
- PENDANT LIGHT- REF. ELEC
- WALL FIXTURE - REF. ELEC
- UTILITY FIXTURE - SURFACE OR SUSPENDED - REF ELEC
- CEILING FAN - REF. ELEC
- EXIT LIGHTING - REF. ELEC
- LINEAR FIXTURE - REF. ELEC
- (S) SPEAKER - REF. ELEC
- CEILING ACCESS PANEL. COORDINATE LOCATION WITH MECH/ PLUMBING CONTRACTOR
- RETURN AIR GRILLE
- EXHAUST AIR GRILLE
- SUPPLY AIR GRILLE
- GYP BD CEILING
- S.A.T. CEILING
- ROOF EIFS FINISH
- WOOD DECKING

NOTE: REFERENCE MECHANICAL & ELECTRICAL DRAWINGS FOR SYMBOLS NOT SHOWN HERE.

N

A FIRST FLOOR REFLECTED CEILING PLAN
1/8" = 1'-0"

0' 4' 8' 16'
1/8" = 1'-0"

Revisions:	Date
ADDENDUM 001 1	02/02/2022

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **FIRST FLOOR REFLECTED CEILING PLAN**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

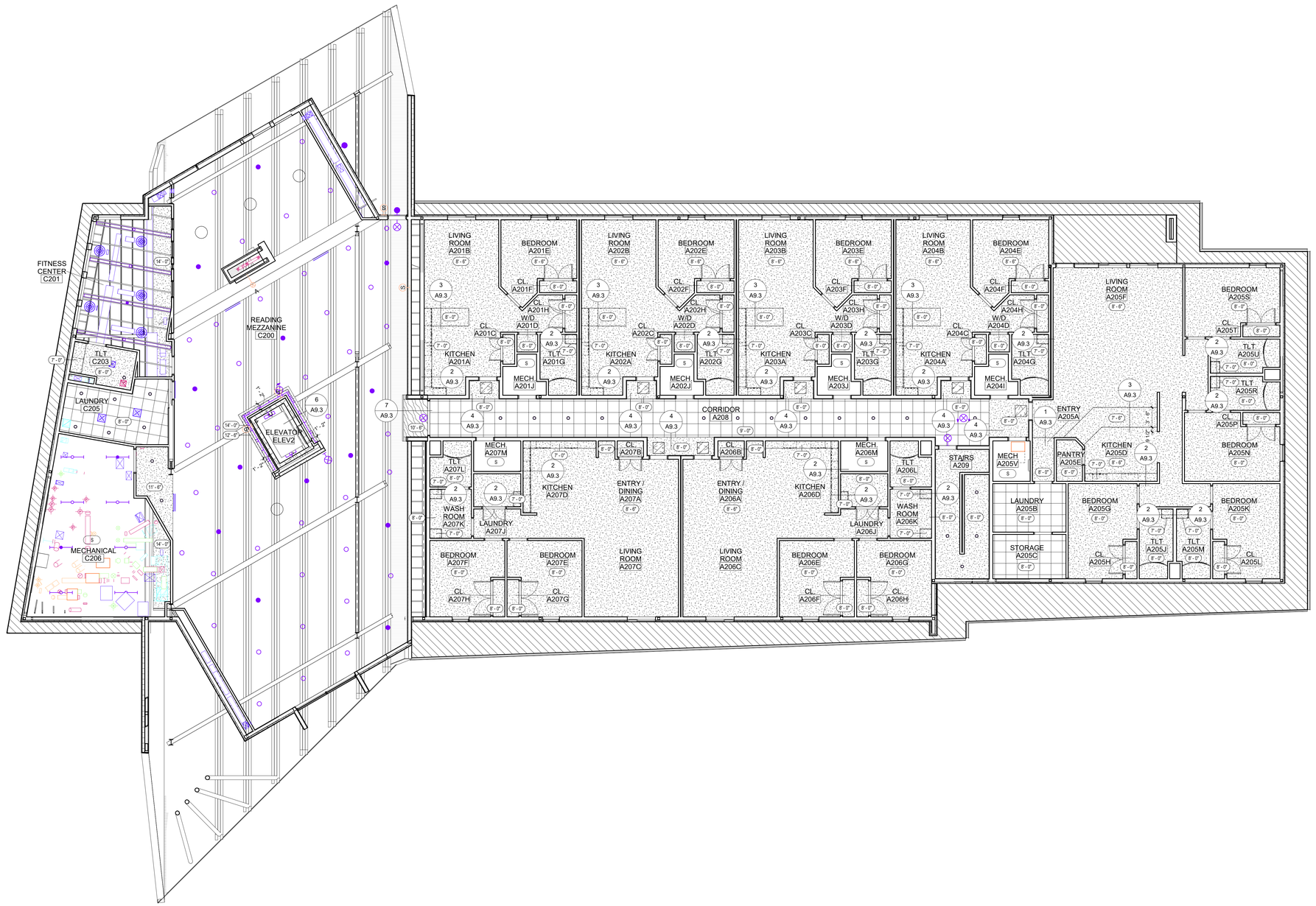
Date: **09/08/2020** | Checked | Drawn

Project Number: **H IH BLAC 19100**

Building Number

Drawing Number: **A9.1**

INDIAN HEALTH SERVICE · PHS · 1955 ·



SYMBOL LEGEND

- (8'-0") CEILING HEIGHT
- (EX) EXISTING CEILING
- (S) OPEN TO STRUCTURE
- 2X4 FIXTURE - REF. ELEC
- RECESSED CAN FIXTURE - REF. ELEC
- PENDANT LIGHT- REF. ELEC
- WALL FIXTURE - REF. ELEC
- UTILITY FIXTURE - SURFACE OR SUSPENDED - REF ELEC
- CEILING FAN - REF. ELEC
- EXIT LIGHTING - REF. ELEC
- LINEAR FIXTURE - REF. ELEC
- (S) SPEAKER - REF. ELEC
- CEILING ACCESS PANEL; COORDINATE LOCATION WITH MECH/ PLUMBING CONTRACTOR
- RETURN AIR GRILLE
- EXHAUST AIR GRILLE
- SUPPLY AIR GRILLE
- GYP BD CEILING
- S.A.T. CEILING
- ROOF EIFS FINISH
- WOOD DECKING

NOTE: REFERENCE MECHANICAL & ELECTRICAL DRAWINGS FOR SYMBOLS NOT SHOWN HERE.

N

A SECOND FLOOR REFLECTED CEILING PLAN
1/8" = 1'-0"

0' 4' 8' 16'
1/8" = 1'-0"

Revisions:	Date
ADDENDUM 001 1	02/02/2022

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
FARRIS ENGINEERING
BLUE STAR INTEGRATIVE STUDIO
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **SECOND FLOOR REFLECTED CEILING PLAN**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

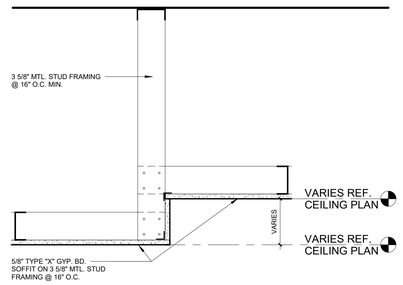
Date: **09/08/2020** Checked: Drawn:

Project Number: **H IH BLAC 19100**

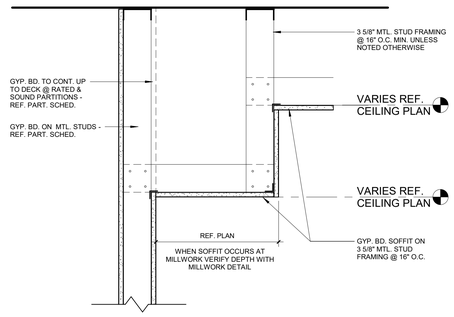
Building Number:

Drawing Number: **A9.2**

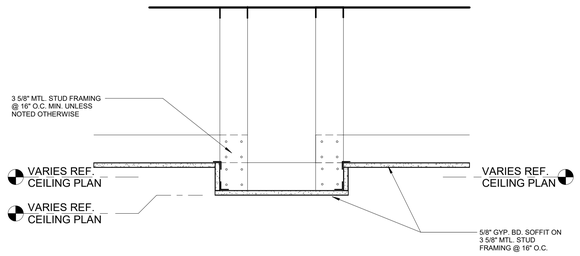
INDIAN HEALTH SERVICE · PHS · 1955 ·



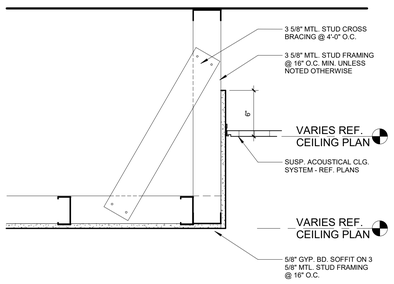
1 RCP DTL - CHANGE IN CEILING HEIGHT
1 1/2" = 1'-0"



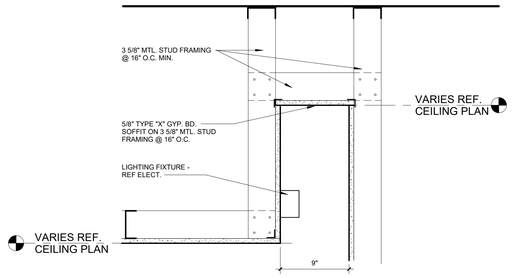
2 RCP DTL - MILLWORK SOFFIT
1 1/2" = 1'-0"



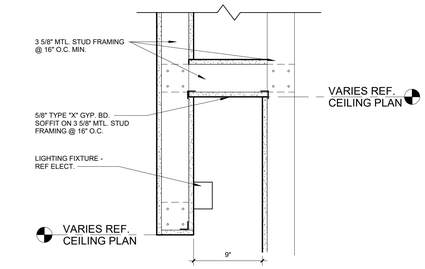
3 RCP DTL - SOFFIT
1 1/2" = 1'-0"



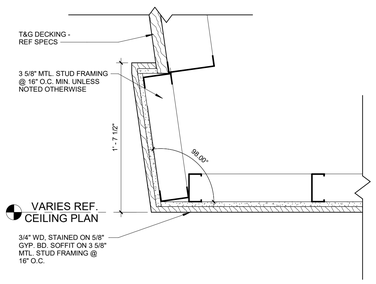
4 RCP DTL - GYP SOFFIT (SAT CLG ONE SIDE)
1 1/2" = 1'-0"



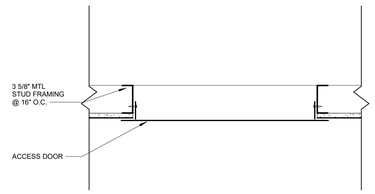
5 RCP DTL - LIGHT ALCOVE
1 1/2" = 1'-0"



6 RCP DTL - LIGHT ALCOVE
1 1/2" = 1'-0"



7 RCP DTL - GYP SOFFIT (WOOD)
1 1/2" = 1'-0"



8 TYP. ACCESS DOOR DETAIL
1 1/2" = 1'-0"

ADDENDUM 001 1	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title

CEILING DETAILS

Approved: Project Director

Project Title

APARTMENT BUILDING AND SITEWORK

Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location

BROWNING, MONTANA

Date **09/08/2020** | Checked | Drawn

Project Number **H IH BLAC 19100**

Building Number

Drawing Number **A9.3**

INDIAN HEALTH SERVICE · PHS · 1955 ·

FLOOR FINISH LEGEND

CARPET (CPT-1)	CPT-1	RUBBER TILE (RBT-1)	RBT-1
CARPET (CPT-2)	CPT-2	RUBBER TILE (RBT-2)	RBT-2
CARPET (CPT-3)	CPT-3	RUBBER TILE (RBT-3)	RBT-3
SEALED CONCRETE (CONC)	CONC	RUBBER TILE (RBT-4)	RBT-4
LUXURY VINYL TILE (LVT-1)	LVT-1		
LUXURY VINYL TILE (LVT-2)	LVT-2		
LUXURY VINYL TILE (LVT-3)	LVT-3		
PORCELAIN TILE (TIL-2)	TIL-2		
SHEET VINYL (SV-1)	SV-1		

NOTE: THIS PLAN DEPICTS FLOOR FINISH MATERIALS & ACCENT PAINT LOCATIONS IN **AREAS OF SPECIAL SIGNIFICANCE** (IE. BORDER AREAS, PATTERNS, AND MATERIAL CHANGES WITHIN A SINGLE ROOM OR SPACE). **REFER TO FINISH SCHEDULE** AND COLOR SCHEDULE KEY IN SPECIFICATIONS FOR THE MATERIAL AND COLOR SELECTION OF EACH INDIVIDUAL ROOM NOT OTHERWISE DESIGNATED ON THIS PLAN.

SUGGESTED FLOORING DIRECTION

SUGGESTED FLOORING SEAM

MANUFACTURER'S TRADE NAMES AND NUMBERS USED HEREIN ARE ONLY TO IDENTIFY COLORS, FINISHES, TEXTURES, AND PATTERNS. PRODUCTS OF OTHER MANUFACTURER'S EQUIVALENT TO COLORS, FINISHES, TEXTURES AND PATTERNS OF MANUFACTURERS LISTED THAT MEET REQUIREMENTS OF TECHNICAL SPECIFICATIONS WILL BE ACCEPTABLE UPON APPROVAL IN WRITING BY CONTRACTING OFFICER FOR FINISH REQUIREMENTS.

- THIS NOTE APPLIES TO ALL SUCH INSTANCES IN THE DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.

N

A FIRST FLOOR FINISH PLAN
1/8" = 1'-0"

0' 4' 8' 16'
1/8" = 1'-0"

COLOR SCHEDULE KEY

CODE	DESCRIPTION	MANUFACTURER	STYLE NAME	STYLE / COLOR	SIZE / TYPE	SPECIAL INFO	TESTING	REV. #
CPT-1	CARPET TILE	MILLIKEN	LINEATION THREE CORNERS	THC139-25-152 BACKLIGHT		BRICK INSTALLATION		
CPT-2	CARPET TILE	MILLIKEN	ARCHIPELAGO CASSIA	CAS6-204-171 SAND		BRICK INSTALLATION		
CPT-3	CARPET TILE	MOHAWK	ANGLED PERCEPTION 12BY36	INDIGO INK 593	12" x 36"	RANDOM INSTALLATION		
LVT-1	LUXURY VINYL TILE	TO MARKET	OZOGRIP GALLERY	TATE TM 404	7.08" X 47.24" / 5.0MM GAUGE	ASHLAR INSTALLATION WITH VARIABLE DROP. SEE FINISH PLAN		
LVT-2	LUXURY VINYL TILE	TO MARKET	OZOGRIP GALLERY	TATE TM 302	7.08" X 47.24" / 5.0MM GAUGE	ASHLAR INSTALLATION WITH VARIABLE DROP. SEE FINISH PLAN		
LVT-3	LUXURY VINYL TILE	SHAW CONTRACT	NOBLE MATERIALS EMERGE 0618V	SLATE PALLADIUM 18595	24" x 24"	ASHLAR INSTALLATION		
MW-1	PRE-MANUFACTURED CABINETRY	SHENANDOAH CABINETRY	WINCHESTER	COGNAC MAPLE		SEE INT. ELEV.		
P-LAM-1	PLASTIC LAMINATE COUNTERTOP	WILSONART	BIANCO ROMANO	1872K-35		MIRAGE FINISH		
PT-1	INTERIOR CEILING PAINT	SHERWIN-WILLIAMS	WHITETAIL	SW 7103				
PT-2	INTERIOR WALL PAINT	SHERWIN-WILLIAMS	SOFTER TAN	SW 6141				
PT-3	INTERIOR WALL PAINT	SHERWIN-WILLIAMS	EAGLET BEIGE	SW 7573				
PT-4	INTERIOR ACCENT WALL PAINT	SHERWIN-WILLIAMS	INTERESTING AQUA	SW 6220				
PT-5	INTERIOR ACCENT WALL PAINT	SHERWIN-WILLIAMS	HAZEL	SW 6471				
PT-6	INTERIOR ACCENT WALL PAINT	SHERWIN-WILLIAMS	RAINSTORM	SW 6230				
PT-7	INTERIOR ACCENT WALL PAINT	SHERWIN-WILLIAMS	CORAL ISLAND	SW 6332				
PT-8	INTERIOR ACCENT WALL PAINT	SHERWIN-WILLIAMS	REFLECTING POOL	SW 6486				
PT-9	INTERIOR ACCENT WALL PAINT	SHERWIN-WILLIAMS	DYER'S WOAD	SW 9071				
RB-1	RUBBER WALL BASE	TARKETT	PERCEPTIONS ROYALE	167 FUDGE	4.25" H / THERMOPLASTIC RUBBER			
RB-2	RUBBER WALL BASE	TARKETT	DURACOVE	47 BROWN	4" H W TOE / THERMOPLASTIC RUBBER			
RBT-1	RUBBER TILE	TO MARKET	ATMOSPHERE PROTEC	TM 3011 BRIGHT BLUE	38" x 38" STRAIGHT EDGE			
RBT-2	RUBBER TILE	TO MARKET	ATMOSPHERE PROTEC	TM 3009 LIME	38" x 38" STRAIGHT EDGE			
RBT-3	RUBBER TILE	TO MARKET	ATMOSPHERE PROTEC	TM 3010 CRIMSON	38" x 38" STRAIGHT EDGE			
RBT-4	RUBBER TILE	TO MARKET	ATMOSPHERE PROTEC	TM 3001 STERLING	38" x 38" STRAIGHT EDGE			
SC-1	VINYL SHOWER CURTAIN	TARKETT	DURACOVE	47 BROWN	4" H W TOE / THERMOPLASTIC RUBBER			
SS-1	SOLID SURFACE COUNTERTOP	WILSONART	SEA STONE	9202CS	0.5" THICK, STANDARD SHEET SIZE			
STONE	LOCAL STONE WALL TREATMENT							
SV-1	SHEET VINYL SAFETY FLOORING	ALTRO	WALKWAY 20	VMI2012P SWAN	2.0MM			
TIL-1	NOT USED							
TIL-2	GLAZED PORCELAIN TILE	EMSER TILE	TERRANE	F45TERRBE1224 BEIGE	12" x 24"			
WD-1	WOOD WALL BASE	ALEXANDRIA MOULDING	COLONIAL	90545	5/8" x 5"			
WD-2	WOOD BASE SHOE	ALEXANDRIA MOULDING		00101	7/16" x 11/16"			
WD-3	CUSTOM PATTERN WAINSCOTTING							
WT-1	ROLLER SHADES	HUNTER DOUGLAS	RB 500 ROLLER SHADES	SHEARWEAVE 2701 OYSTER/CHESNUT				

Revisions:	Date
ADDENDUM 001 1	02/02/2022

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **FIRST FLOOR FINISH PLAN**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **09/08/2020** | Checked | Drawn

Project Number: **H IH BLAC 19100**

Building Number

Drawing Number: **A10.1**

INDIAN HEALTH SERVICE · IHS · 1955 ·

FLOOR FINISH LEGEND

CARPET (CPT-1)	CPT-1	RUBBER TILE (RBT-1)	RBT-1
CARPET (CPT-2)	CPT-2	RUBBER TILE (RBT-2)	RBT-2
CARPET (CPT-3)	CPT-3	RUBBER TILE (RBT-3)	RBT-3
		RUBBER TILE (RBT-4)	RBT-4
SEALED CONCRETE (CONC)	CONC		
LUXURY VINYL TILE (LVT-1)	LVT-1		
LUXURY VINYL TILE (LVT-2)	LVT-2		
LUXURY VINYL TILE (LVT-3)	LVT-3		
PORCELAIN TILE (TIL-2)	TIL-2		
SHEET VINYL (SV-1)	SV-1		

NOTE: THIS PLAN DEPICTS FLOOR FINISH MATERIALS & ACCENT PAINT LOCATIONS IN **AREAS OF SPECIAL SIGNIFICANCE** (IE. BORDER AREAS, PATTERNS, AND MATERIAL CHANGES WITHIN A SINGLE ROOM OR SPACE). **REFER TO FINISH SCHEDULE** AND COLOR SCHEDULE KEY IN SPECIFICATIONS FOR THE MATERIAL AND COLOR SELECTION OF EACH INDIVIDUAL ROOM NOT OTHERWISE DESIGNATED ON THIS PLAN.

⟷ SUGGESTED FLOORING DIRECTION

– – – SUGGESTED FLOORING SEAM

MANUFACTURER'S TRADE NAMES AND NUMBERS USED HEREIN ARE ONLY TO IDENTIFY COLORS, FINISHES, TEXTURES, AND PATTERNS. PRODUCTS OF OTHER MANUFACTURER'S EQUIVALENT TO COLORS, FINISHES, TEXTURES AND PATTERNS OF MANUFACTURERS LISTED THAT MEET REQUIREMENTS OF TECHNICAL SPECIFICATIONS WILL BE ACCEPTABLE UPON APPROVAL IN WRITING BY CONTRACTING OFFICER FOR FINISH REQUIREMENTS.

- THIS NOTE APPLIES TO ALL SUCH INSTANCES IN THE DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.

COLOR SCHEDULE KEY

CODE	DESCRIPTION	MANUFACTURER	STYLE NAME	STYLE / COLOR	SIZE / TYPE	SPECIAL INFO	TESTING	REV. #
CPT-1	CARPET TILE	MILLIKEN	LINEATION THREE CORNERS	THC139-25-152 BACKLIGHT		BRICK INSTALLATION		
CPT-2	CARPET TILE	MILLIKEN	ARCHIPELAGO CASSIA	CASSI-204-171 SAND		BRICK INSTALLATION		
CPT-3	CARPET TILE	MOHAWK	ANGLED PERCEPTION 12BY36	INDIGO INK 593	12" x 36"	RANDOM INSTALLATION		
LVT-1	LUXURY VINYL TILE	TO MARKET	OZOGRIP GALLERY	TATE TM 404	7.08" X 47.24" / 5.0MM GAUGE	ASHLAR INSTALLATION WITH VARIABLE DROP, SEE FINISH PLAN		
LVT-2	LUXURY VINYL TILE	TO MARKET	OZOGRIP GALLERY	TATE TM 302	7.08" X 47.24" / 5.0MM GAUGE	ASHLAR INSTALLATION WITH VARIABLE DROP, SEE FINISH PLAN		
LVT-3	LUXURY VINYL TILE	SHAW CONTRACT	NOBLE MATERIALS EMERGE 0618V	SLATE PALLADIUM 18595	24" x 24"	ASHLAR INSTALLATION		
MW-1	PRE-MANUFACTURED CABINETRY	SHENANDOAH CABINETRY	WINCHESTER	COGNAC MAPLE		SEE INT. ELEV.		
P-LAM-1	PLASTIC LAMINATE COUNTERTOP	WILSONART	BIANCO ROMANO	1872K-35		MIRAGE FINISH		
PT-1	INTERIOR CEILING PAINT	SHERWIN-WILLIAMS	WHITETAIL	SW 7103				
PT-2	INTERIOR WALL PAINT	SHERWIN-WILLIAMS	SOFTER TAN	SW 6141				
PT-3	INTERIOR WALL PAINT	SHERWIN-WILLIAMS	EAGLET BEIGE	SW 7573				
PT-4	INTERIOR ACCENT WALL PAINT	SHERWIN-WILLIAMS	INTERESTING AQUA	SW 6220				
PT-5	INTERIOR ACCENT WALL PAINT	SHERWIN-WILLIAMS	HAZEL	SW 6471				
PT-6	INTERIOR ACCENT WALL PAINT	SHERWIN-WILLIAMS	RAINSTORM	SW 6230				
PT-7	INTERIOR ACCENT WALL PAINT	SHERWIN-WILLIAMS	CORAL ISLAND	SW 6332				
PT-8	INTERIOR ACCENT WALL PAINT	SHERWIN-WILLIAMS	REFLECTING POOL	SW 6486				
PT-9	INTERIOR ACCENT WALL PAINT	SHERWIN-WILLIAMS	DYER'S WOAD	SW 9071				
RB-1	RUBBER WALL BASE	TARKETT	PERCEPTIONS ROYALE	167 FUDGE	4.25" H / THERMOPLASTIC RUBBER			
RB-2	RUBBER WALL BASE	TARKETT	DURACOVE	47 BROWN	4" H W TOE / THERMOPLASTIC RUBBER			
RBT-1	RUBBER TILE	TO MARKET	ATMOSPHERE PROTEC	TM 3011 BRIGHT BLUE	36" x 36" STRAIGHT EDGE			
RBT-2	RUBBER TILE	TO MARKET	ATMOSPHERE PROTEC	TM 3009 LIME	36" x 36" STRAIGHT EDGE			
RBT-3	RUBBER TILE	TO MARKET	ATMOSPHERE PROTEC	TM 3010 CRIMSON	36" x 36" STRAIGHT EDGE			
RBT-4	RUBBER TILE	TO MARKET	ATMOSPHERE PROTEC	TM 3001 STERLING	36" x 36" STRAIGHT EDGE			
SC-1	VINYL SHOWER CURTAIN	TARKETT	DURACOVE	47 BROWN	4" H W TOE / THERMOPLASTIC RUBBER			
SS-1	SOLID SURFACE COUNTERTOP	WILSONART	SEA STONE	9202CS	0.5" THICK, STANDARD SHEET SIZE			
STONE	LOCAL STONE WALL TREATMENT							
SV-1	SHEET VINYL SAFETY FLOORING	ALTRO	WALKWAY 20	VMI2012P SWAN	2.0MM			
TIL-1	NOT USED							
TIL-2	GLAZED PORCELAIN TILE	EMSER TILE	TERRANE	F45TERRBE1224 BEIGE	12" x 24"			
WD-1	WOOD WALL BASE	ALEXANDRIA MOULDING	COLONIAL	90545	5/8" x 5"			
WD-2	WOOD BASE SHOE	ALEXANDRIA MOULDING		00101	7/16" x 11/16"			
WD-3	CUSTOM PATTERN WAINSCOTTING							
WT-1	ROLLER SHADES	HUNTER DOUGLAS	RB 500 ROLLER SHADES	SHEARWEAVE 2701 OYSTER/CHESNUT				

N

A SECOND FLOOR FINISH PLAN
1/8" = 1'-0"

0' 4' 8' 16'
1/8" = 1'-0"

ADDENDUM 001 (1)	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
SECOND FLOOR FINISH PLAN

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

Date **09/08/2020** | Checked | Drawn

Project Number
H IH BLAC 19100

Building Number

Drawing Number
A10.2

INDIAN HEALTH SERVICE · PHS · 1955 ·

FINISH SCHEDULE

RM #	ROOM NAME	FLOOR	BASE	WALLS N.	WALLS E.	WALLS S.	WALLS W.	MILLWORK VERT.	MILLWORK HORIZ.	CEILING TYPE	CEILING COLOR	NOTES	REV. #
A101A	KITCHEN	LVT-2	RB-1	N/A	PT-2	PT-2	PT-2	MW-1	PLAM-1	GWB	PT-1		
A101B	LIVING ROOM	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A101C	CL.	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A101D	W/D	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A101E	BEDROOM	CPT-3	RB-1	PT-2	PT-9	PT-2	PT-2			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A101F	CL.	CPT-3	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A101G	TLT	LVT-2	RB-1	PT-2E	PT-2E	PT-2E	PT-2E	MW-1	SS-1	GWB	PT-1	INSTALL SC-1 AT SHOWER. REF. SPECS.	
A101H	MECH.	LVT-2	N/A	PT-2	PT-2	PT-2	PT-2			OPEN	N/A		
A102A	KITCHEN	LVT-2	RB-1	N/A	PT-2	PT-2	PT-2	MW-1	PLAM-1	GWB	PT-1		
A102B	LIVING ROOM	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A102C	CL.	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A102D	W/D	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A102E	BEDROOM	CPT-3	RB-1	PT-2	PT-9	PT-2	PT-2			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A102F	CL.	CPT-3	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A102G	TLT	LVT-2	RB-1	PT-2E	PT-2E	PT-2E	PT-2E	MW-1	SS-1	GWB	PT-1	INSTALL SC-1 AT SHOWER. REF. SPECS.	
A102H	CL.	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A102J	MECH.	LVT-2	N/A	PT-2	PT-2	PT-2	PT-2			OPEN	N/A		
A103A	KITCHEN	LVT-2	RB-1	N/A	PT-2	PT-2	PT-2	MW-1	PLAM-1	GWB	PT-1		
A103B	LIVING ROOM	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A103C	CL.	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A103D	W/D	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A103E	BEDROOM	CPT-3	RB-1	PT-2	PT-9	PT-2	PT-2			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A103F	CL.	CPT-3	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A103G	TLT	LVT-2	RB-1	PT-2E	PT-2E	PT-2E	PT-2E	MW-1	SS-1	GWB	PT-1	INSTALL SC-1 AT SHOWER. REF. SPECS.	
A103H	CL.	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A103J	MECH.	LVT-2	N/A	PT-2	PT-2	PT-2	PT-2			OPEN	N/A		
A104A	KITCHEN	LVT-2	RB-1	N/A	PT-2	PT-2	PT-2	MW-1	PLAM-1	GWB	PT-1		
A104B	LIVING ROOM	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A104C	CL.	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A104D	W/D	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A104E	BEDROOM	CPT-3	RB-1	PT-2	PT-9	PT-2	PT-2			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A104F	CL.	CPT-3	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A104G	TLT	LVT-2	RB-1	PT-2E	PT-2E	PT-2E	PT-2E	MW-1	SS-1	GWB	PT-1	INSTALL SC-1 AT SHOWER. REF. SPECS.	
A104H	CL.	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A104J	MECH.	LVT-2	N/A	PT-2	PT-2	PT-2	PT-2			OPEN	N/A		
A105A	ENTRY	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A105B	LAUNDRY	LVT-2	RB-2	PT-2	PT-2	PT-2	PT-2		PLAM-1	SAT	PT-1		
A105C	STORAGE	LVT-2	RB-2	PT-2	PT-2	PT-2	PT-2			SAT	PT-1		
A105D	KITCHEN	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2	MW-1	PLAM-1	GWB	PT-1		
A105E	PANTRY	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2		PLAM-1	GWB	PT-1		
A105F	LIVING ROOM	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A105G	BEDROOM	CPT-3	RB-1	PT-2	PT-2	PT-2	PT-8			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A105H	CL.	CPT-3	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A105J	TLT	LVT-2	RB-1	PT-2E	PT-2E	PT-2E	PT-2E	MW-1	SS-1	GWB	PT-1	INSTALL SC-1 AT SHOWER. REF. SPECS.	
A105K	BEDROOM	CPT-3	RB-1	PT-2	PT-8	PT-2	PT-2			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A105L	CL.	CPT-3	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A105M	TLT	LVT-2	RB-1	PT-2E	PT-2E	PT-2E	PT-2E	MW-1	SS-1	GWB	PT-1	INSTALL SC-1 AT SHOWER. REF. SPECS.	
A105N	BEDROOM	CPT-3	RB-1	PT-2	PT-2	PT-8	PT-2			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A105P	CL.	CPT-3	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A105R	TLT	LVT-2	RB-1	PT-2E	PT-2E	PT-2E	PT-2E	MW-1	SS-1	GWB	PT-1	INSTALL SC-1 AT SHOWER. REF. SPECS.	
A105S	BEDROOM	CPT-3	RB-1	PT-8	PT-2	PT-2	PT-2			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A105T	CL.	CPT-3	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A105U	TLT	LVT-2	RB-1	PT-2E	PT-2E	PT-2E	PT-2E	MW-1	SS-1	GWB	PT-1	INSTALL SC-1 AT SHOWER. REF. SPECS.	
A105V	MECH	LVT-2	N/A	PT-2	PT-2	PT-2	PT-2			OPEN	N/A		
A106A	ENTRY / DINING	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A106B	CL.	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A106C	LIVING ROOM	LVT-2	RB-1	N/A	PT-2	PT-2	PT-2			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A106D	KITCHEN	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2	MW-1	PLAM-1	GWB	PT-1		
A106E	BEDROOM	CPT-3	RB-1	PT-2	PT-2	PT-2	PT-5			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A106F	CL.	CPT-3	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A106G	BEDROOM	CPT-3	RB-1	PT-2	PT-5	PT-2	PT-2			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A106H	CL.	CPT-3	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A106J	LAUNDRY	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2		PLAM-1	GWB	PT-1		
A106K	WASH ROOM	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2	MW-1	SS-1	GWB	PT-1		
A106L	TLT	LVT-2	RB-1	PT-2E	PT-2E	PT-2E	PT-2E			GWB	PT-1	INSTALL SC-1 AT SHOWER. REF. SPECS.	
A106M	MECH.	LVT-2	N/A	PT-2	PT-2	PT-2	PT-2			OPEN	N/A		
A107A	ENTRY / DINING	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A107B	CL.	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A107C	LIVING ROOM	LVT-2	RB-1	N/A	PT-2	PT-2	PT-2			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A107D	KITCHEN	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2	MW-1	PLAM-1	GWB	PT-1		
A107E	BEDROOM	CPT-3	RB-1	PT-2	PT-4	PT-2	PT-2			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A107F	CL.	CPT-3	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A107G	BEDROOM	CPT-3	RB-1	PT-2	PT-2	PT-2	PT-4			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A107H	CL.	CPT-3	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A107J	LAUNDRY	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2		PLAM-1	GWB	PT-1		
A107K	WASH ROOM	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2	MW-1	SS-1	GWB	PT-1		
A107L	TLT	LVT-2	RB-1	PT-2E	PT-2E	PT-2E	PT-2E			GWB	PT-1	INSTALL SC-1 AT SHOWER. REF. SPECS.	
A107M	MECH.	LVT-2	N/A	PT-2	PT-2	PT-2	PT-2			OPEN	N/A		
A108	CORRIDOR	LVT-3	WB-1	PT-4	PT-4	PT-4	PT-4			GWB / SAT	PT-1		
A109	STAIRS	LVT-1	RB-1	PT-6	PT-5	PT-7	PT-4			GWB	PT-1		
A201A	KITCHEN	LVT-2	RB-1	N/A	PT-2	PT-2	PT-2	MW-1	PLAM-1	GWB	PT-1		
A201B	LIVING ROOM	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A201C	CL.	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A201D	W/D	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A201E	BEDROOM	CPT-3	RB-1	PT-2	PT-9	PT-2	PT-2			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A201F	CL.	CPT-3	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A201G	TLT	LVT-2	RB-1	PT-2E	PT-2E	PT-2E	PT-2E	MW-1	SS-1	GWB	PT-1	INSTALL SC-1 AT SHOWER. REF. SPECS.	
A201H	CL.	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A201J	MECH.	LVT-2	N/A	PT-2	PT-2	PT-2	PT-2			OPEN	N/A		
A202A	KITCHEN	LVT-2	RB-1	N/A	PT-2	PT-2	PT-2	MW-1	PLAM-1	GWB	PT-1		
A202B	LIVING ROOM	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A202C	CL.	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A202D	W/D	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A202E	BEDROOM	CPT-3	RB-1	PT-2	PT-9	PT-2	PT-2			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A202F	CL.	CPT-3	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A202G	TLT	LVT-2	RB-1	PT-2E	PT-2E	PT-2E	PT-2E	MW-1	SS-1	GWB	PT-1	INSTALL SC-1 AT SHOWER. REF. SPECS.	
A202H	CL.	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A202J	MECH.	LVT-2	N/A	PT-2	PT-2	PT-2	PT-2			OPEN	N/A		
A203A	KITCHEN	LVT-2	RB-1	N/A	PT-2	PT-2	PT-2	MW-1	PLAM-1	GWB	PT-1		
A203B	LIVING ROOM	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A203C	CL.	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A203D	W/D	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A203E	BEDROOM	CPT-3	RB-1	PT-2	PT-9	PT-2	PT-2			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A203F	CL.	CPT-3	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A203G	TLT	LVT-2	RB-1	PT-2E	PT-2E	PT-2E	PT-2E	MW-1	SS-1	GWB	PT-1	INSTALL SC-1 AT SHOWER. REF. SPECS.	
A203H	CL.	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A203J	MECH.	LVT-2	N/A	PT-2	PT-2	PT-2	PT-2			OPEN	N/A		
A204A	KITCHEN	LVT-2	RB-1	N/A	PT-2	PT-2	PT-2	MW-1	PLAM-1	GWB	PT-1		
A204B	LIVING ROOM	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A204C	CL.	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A204D	W/D	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A204E	BEDROOM	CPT-3	RB-1	PT-2	PT-9	PT-2	PT-2			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A204F	CL.	CPT-3	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A204G	TLT	LVT-2	RB-1	PT-2E	PT-2E	PT-2E	PT-2E	MW-1	SS-1	GWB	PT-1	INSTALL SC-1 AT SHOWER. REF. SPECS.	
A204H	CL.	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A204I	MECH.	LVT-2	N/A	PT-2	PT-2	PT-2	PT-2			OPEN	N/A		
A205A	ENTRY	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A205B	LAUNDRY	LVT-2	RB-2	PT-2	PT-2	PT-2	PT-2		PLAM-1	SAT	PT-1		
A205C	STORAGE	LVT-2	RB-2	PT-2	PT-2	PT-2	PT-2			SAT	PT-1		
A205D	KITCHEN	LVT-2	RB-1	N/A	PT-2	PT-2	PT-2	MW-1	PLAM-1	GWB	PT-1		
A205E	PANTRY	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2		PLAM-1	GWB	PT-1		
A205F	LIVING ROOM	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A205G	BEDROOM	CPT-3	RB-1	PT-2	PT-2	PT-2	PT-9			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A205H	CL.	CPT-3	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A205J	TLT	LVT-2	RB-1	PT-2E	PT-2E	PT-2E	PT-2E	MW-1	SS-1	GWB	PT-1	INSTALL SC-1 AT SHOWER. REF. SPECS.	
A205K	BEDROOM	CPT-3	RB-1	PT-2	PT-2	PT-9	PT-2			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A205L	CL.	CPT-3	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A205M	TLT	LVT-2	RB-1	PT-2E	PT-2E	PT-2E	PT-2E	MW-1	SS-1	GWB	PT-1	INSTALL SC-1 AT SHOWER. REF. SPECS.	
A205N	BEDROOM	CPT-3	RB-1	PT-2	PT-2	PT-9	PT-2			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A205P	CL.	CPT-3	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A205R	TLT	LVT-2	RB-1	PT-2E	PT-2E	PT-2E	PT-2E	MW-1	SS-1	GWB	PT-1	INSTALL SC-1 AT SHOWER. REF. SPECS.	
A205S	BEDROOM	CPT-3	RB-1	PT-9	PT-2	PT-2	PT-2			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A205T	CL.	CPT-3	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A205U	TLT	LVT-2	RB-1	PT-2E	PT-2E	PT-2E	PT-2E	MW-1	SS-1	GWB	PT-1	INSTALL SC-1 AT SHOWER. REF. SPECS.	
A205V	MECH	LVT-2	N/A	PT-2	PT-2	PT-2	PT-2			OPEN	N/A		
A206A	ENTRY / DINING	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A206B	CL.	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A206C	LIVING ROOM	LVT-2	RB-1	N/A	PT-2	PT-2	PT-2			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A206D	KITCHEN	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2	MW-1	PLAM-1	GWB	PT-1		
A206E	BEDROOM	CPT-3	RB-1	PT-5	PT-2	PT-2	PT-2			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A206F	CL.	CPT-3	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A206G	BEDROOM	CPT-3	RB-1	PT-2	PT-5	PT-2	PT-2			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A206H	CL.	CPT-3	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A206J	LAUNDRY	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2	MW-1	PLAM-1	GWB	PT-1		
A206K	WASH ROOM	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2	MW-1	SS-1	GWB	PT-1		
A206L	TLT	LVT-2	RB-1	PT-2E	PT-2E	PT-2E	PT-2E			GWB	PT-1	INSTALL SC-1 AT SHOWER. REF. SPECS.	
A206M	MECH.	LVT-2	N/A	PT-2	PT-2	PT-2	PT-2			OPEN	N/A		
A207A	ENTRY / DINING	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A207B	CL.	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A207C	LIVING ROOM	LVT-2	RB-1	N/A	PT-2	PT-2	PT-2			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A207D	KITCHEN	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2	MW-1	PLAM-1	GWB	PT-1		
A207E	BEDROOM	CPT-3	RB-1	PT-2	PT-4	PT-2	PT-2			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A207F	BEDROOM	CPT-3	RB-1	PT-2	PT-2	PT-2	PT-4			GWB	PT-1	INSTALL WT-1 AT WINDOWS. REF. SPECS.	
A207G	CL.	CPT-3	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A207H	CL.	CPT-3	RB-1	PT-2	PT-2	PT-2	PT-2			GWB	PT-1		
A207J	LAUNDRY	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2	MW-1	PLAM-1	GWB	PT-1		
A207K	WASH ROOM	LVT-2	RB-1	PT-2	PT-2	PT-2	PT-2	MW-1	SS-1	GWB	PT-1		
A207L	TLT	LVT-2	RB-1	PT-2E	PT-2E	PT-2E	PT-2E			GWB	PT-1	INSTALL SC-1 AT SHOWER. REF. SPECS.	
A207M	MECH.	LVT-2	N/A	PT-2	PT-2	PT-2	PT-2			OPEN	N/A		

FINISH SCHEDULE

RM #	ROOM NAME	FLOOR	BASE	WALLS N.	WALLS E.	WALLS S.	WALLS W.	MILLWORK VERT.	MILLWORK HORIZ.	CEILING TYPE	CEILING COLOR	NOTES	REV. #
A208	CORRIDOR	LVT-3	WD-1	PT-4	PT-4	PT-4	PT-4			GWB / SAT	PT-1		
A209	STAIRS	LVT-1	RB-1	PT-6	PT-5	PT-7	PT-4			GWB	PT-1		
C100	VESTIBULE	TIL-2	WD-1	-	PT-3	-	PT-3			GWB	PT-1		
C101	GREAT ROOM	LVT-1 / TIL-2	WD-1	PT-3	PT-3	PT-3	PT-3			OPEN / GWB	PT-1		
C102	JAN.	CONC	RB-2	PT-2	PT-2	PT-2	PT-2			OPEN	N/A		
C103	PUBLIC TLT	TIL-2	RB-2	PT-6E	PT-2E	PT-2E	PT-2E	MW-1	SS-1	GWB	PT-1		
C104	ELEC	CONC	N/A	PT-2	PT-2	PT-2	PT-2			OPEN	N/A		
C105	QUIET	CPT-2	WD-1	PT-4	PT-4	PT-4	PT-4			GWB	PT-1		
C106	QUIET	CPT-2	WD-1	PT-4	PT-4	PT-4	PT-4			GWB	PT-1		
C107	WEST GREAT ROOM	LVT-1	WD-1	STONE	PT-3	PT-3	PT-3	MW-1	SS-1	GWB	PT-1		
C108	DINING	LVT-1	WD-1	PT-3	PT-3	STONE/ PT-3	PT-3			OPEN	N/A		
C109	KITCHENETTE	SV-1	RB-1	PT-3	PT-3	PT-3	PT-3	MW-1	SS-1	GWB / SAT	PT-3		
C110	ELEC	CONC	N/A	PT-2	PT-2	PT-2	PT-2						
C111	MECHANICAL	CONC	N/A	PT-2	PT-2	PT-2	PT-2						
C200	READING MEZZANINE	CPT-1 / LVT-2	WD-1	PT-3	PT-3	PT-3	PT-3						
C201	FITNESS CENTER	RBT-1 / RBT-2 / RBT-3 / RBT-4	RB-1	PT-1	PT-1	PT-1	PT-1						
C203	TLT	LVT-1	RB-1	PT-2	PT-2	PT-2	PT-2						
C205	LAUNDRY	CONC	RB-2	PT-2	PT-2	PT-2	PT-2		PLAM-1	SAT	PT-1		
C206	MECHANICAL	CONC	N/A	PT-2	PT-2	PT-2	PT-2			OPEN	N/A		
C207	VIEWING DECK	CONC	N/A										
ELEV1	ELEVATOR	LVT-1	MANF	MANF	MANF	MANF	MANF	MANF		MANF	MANF	WALL AND CEILING FINISH BY ELEVATOR MANUFACTURER - REF. SPECS.	

MANUFACTURER'S TRADE NAMES AND NUMBERS USED HEREIN ARE ONLY TO IDENTIFY COLORS, FINISHES, TEXTURES, AND PATTERNS. PRODUCTS OF OTHER MANUFACTURER'S EQUIVALENT TO COLORS, FINISHES, TEXTURES AND PATTERNS OF MANUFACTURERS LISTED THAT MEET REQUIREMENTS OF TECHNICAL SPECIFICATIONS WILL BE ACCEPTABLE UPON APPROVAL IN WRITING BY CONTRACTING OFFICER FOR FINISH REQUIREMENTS.

- THIS NOTE APPLIES TO ALL SUCH INSTANCES IN THE DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.

FINISH SCHEDULE NOTES

GENERAL NOTES

A. ALL FLOORING TRANSITIONS OCCUR AT THE CENTERLINE OF THE DOOR. FLOOR COVERINGS SHALL BE BUILT UP TO HAVE MINIMAL HEIGHT DIFFERENCES.
B. REFER TO FLOOR FINISH PLAN(S) TO DEPICT FINISH MATERIALS, FLOOR PATTERNS, AND ACCENT WALL PAINT IN AREAS AND/OR ROOMS OF SPECIAL SIGNIFICANCE. REFER TO FINISH SCHEDULE FOR INDIVIDUAL ROOM MATERIAL SELECTIONS.
C. REFERENCE SPECIFICATIONS, ELEVATIONS, AND DETAIL DRAWINGS FOR SPECIAL MATERIALS.
D. CAULK BASE OF DOOR FRAME TO ALL FINISHED HARD SURFACE FLOORING.
E. DOOR FRAMES TO BE PAINTED (**PT-1**) U.N.O. REFERENCE FS KEY NOTES FOR ALTERNATE COLORS.
F. WOOD GRAIN LAMINATES TO BE INSTALLED WITH WOOD GRAIN RUNNING VERTICALLY U.N.O.
G. PAINT ALL WORKSURFACE BRACKETS COLOR OF ADJACENT SURFACE U.N.O.
H. REFER TO ELEVATIONS FOR TILE PATTERNS.
I. SOFFIT PAINT COLOR WILL BE APPLIED TO BOTH THE VERTICAL AND HORIZONTAL SURFACES. ALL SOFFITS TO BE PAINTED THE COLOR OF ADJACENT WALL U.N.O.; SPECIALTY SOFFITS WILL BE INDICATED IN THE REFLECTED CEILING PLAN AND FINISH SCHEDULE.
J. REFERENCE REFLECTED CEILING PLAN FOR CEILING HEIGHTS AND SOFFIT ACCENT PAINT LOCATIONS.
K. ALL GYP BD CEILINGS TO BE PAINTED CEILING WHITE (**PT-1**) U.N.O.
L. **INSTALL GROUT COLOR MATCHING FLEXIBLE SEALANT MAPEI "MAPESIL T" AT ALL TILED MOVEMENT JOINTS PER TCNA: FLOOR TO WALL PERIMETER, WALL TO CEILING PERIMETER, INSIDE CORNERS (TILE TO TILE), OUTSIDE CORNERS (TILE TO TILE AND/OR TILE TO SCHLUTER TRIM).**
M. FLOOR FINISH PLAN MAY NOT INDICATE FLOORING UNDER OPEN COUNTERTOPS/CABINETRY/EQUIPMENT/MISCELLANEOUS; REFERENCE ELEVATION DRAWINGS AND EQUIPMENT/FURNITURE PLANS.
N. COVE BASE HAS STANDARD HEIGHT OF 4" U.N.O.
O. INSTALL SCHLUTER TRIM AT TOP OF TILE. U.N.O. ON ELEVATIONS.
P. CAULK ALL JOINTS BETWEEN RESILIENT BASE AND HARD SURFACE FLOOR TO CABINET BODIES.
Q. ALL WINDOW SILLS TO BE SOLID SURFACE (**SS-1**).

KEY NOTES

1. INSTALL SHOWER CURTAIN (**SC-1**) WITH SHOWER CURTAIN ROD.
2. REFER TO FINISH PLAN AND/OR ELEVATIONS FOR MULTIPLE FINISH LOCATIONS AND ADDITIONAL MATERIALS NOT NOTED IN SCHEDULE.
3. INSTALL WINDOW TREATMENT (**WT-1**) AT ALL WINDOWS IN THIS ROOM.

COLOR SCHEDULE KEY

CODE	DESCRIPTION	MANUFACTURER	STYLE NAME	STYLE / COLOR	SIZE / TYPE	SPECIAL INFO	TESTING	REV. #
CPT-1	CARPET TILE	MILLIKEN	LINEATION THREE CORNERS	THC139-25-152 BACKLIGHT		BRICK INSTALLATION		
CPT-2	CARPET TILE	MILLIKEN	ARCHIPELAGO CASSIA	CAS6-204-171 SAND		BRICK INSTALLATION		
CPT-3	CARPET TILE	MOHAWK	ANGLED PERCEPTION 12BY36	INDIGO INK 593	12" x 36"	RANDOM INSTALLATION		
LVT-1	LUXURY VINYL TILE	TO MARKET	OZOGRIP GALLERY	TATE TM 404	7.08" X 47.24" / 5.0MM GAUGE	ASHLAR INSTALLATION WITH VARIABLE DROP, SEE FINISH PLAN		
LVT-2	LUXURY VINYL TILE	TO MARKET	OZOGRIP GALLERY	TATE TM 302	7.08" X 47.24" / 5.0MM GAUGE	ASHLAR INSTALLATION WITH VARIABLE DROP, SEE FINISH PLAN		
LVT-3	LUXURY VINYL TILE	SHAW CONTRACT	NOBLE MATERIALS EMERGE 06189	SLATE PALLADIUM 18595

N

A FIRST FLOOR EQUIPMENT PLAN
1/8" = 1'-0"

0' 4' 8' 16'
1/8" = 1'-0"

FURNITURE SCHEDULE

FURNITURE #	DESCRIPTION	COUNT	MANUFACTURER	MODEL	SIZE	FINISH
10001	SECTIONAL SOFA	4	DARBY HOME CO	ERIN	OVERALL 37.8" H x 128" W x 128"D	CHOCOLATE BROWN
10002	OCCASIONAL TABLE	4	FAIRFIELD CHAIR	CHURCHILL BUNCHING	24" W x 24" L x 18" H	TOBACCO
10003	SOFA	1	KIMBALL	#3447ASOA	78" W x 35" D x 35" H	REIN II EARTHTONE
10004	WESTERN ARMCHAIR	2	HILL COUNTRY INTERIORS	WESTERN ARMCHAIR	CUSTOM	CUSTOM
10006	COUNTER HEIGHT TABLE	2	HILLSDALE	JENNINGS ROUND TABLE	36"W x 36" L x 36" H	DISTRESSED
10007	BENCH	1	WILLISTON FORGE	LORILEE LEATHER BENCH	55" W x 17.5" D x 17.5" H	DARK SIENNA
10008	DINING BARSTOOL	11	SUPERIOR SEATING	#225WL-V	17"W x 19"D x 43"H	WALNUT
10009	BAR HEIGHT TABLE TOP	2	SUPERIOR SEATING	RUSTIC PLANK TABLE TOP TWG-WLPL	36" W x 36" L x 1.75" D	WALNUT
10010	BAR HEIGHT TABLE BASE	2	SUPERIOR SEATING	C3232-42	32" W x 32" D x 42" H	CAST IRON
10011	DINING CHAIR	12	WOODLAND CREEK'S LOG FURNITURE PLACE	BARN DOOR DINGING SIDE CHAIR #143100	21" W x 21-22"D x 45" H	ANTIQUE BARNWOOD
10012	DINING TABLE	2	WOODLAND CREEK'S LOG FURNITURE PLACE	LAUREL HOLLOW #233000	72" W x 42" D x 30" H	BARNWOOD LAGER
10013	WORK TABLE	1	ADVANCE TABCO	MODEL #MSLAG-368-X	72" W x 36" D	
10014	END TABLE	2	MERCURY ROW SHOP	PELLEY	12"W x 12"D x 20"H	WALNUT OIL
10015	DINING CHAIR - COUNTER HEIGHT	8	TRENT AUSTIN DESIGN	LAGUNA	22.5"W x 18.63"D x 42"H	CARAMEL
10016	END TABLE	2	STEELCASE	TREMONT PULL UP TABLE	14"W x 14"D x 19"H	NATURAL
10017	BARSTOOL	32	ALCOTT HILL	REMILLARD	18" W x 22" D x 42" H	
10018	END TABLE	2	FOUNDRY SELECT	BLOM	20"W x 20" D x 20"H	
10019	OCCASIONAL TABLE	6	CHARLTON HOME	TIPTON BUNCHING CUBE	20"W x 20"L x 20"H	CHESNUT
10020	END TABLE	20	EBERN DESIGNS	KENLY	19"W x 19"D X 18"H	
10021	DESK	16	CORRIGAN STUDIO	CABRAL DESK	48" W x 20" D x 30" H	NATURAL
10022	ARMCHAIR	2	FLEXSTEEL	CONCLUSION #C3990-10B	37.5" W x 36" D x 36" H	C37-80
10023	SQUARE TABLE	2	GEORGE OLIVER	GILBERSTON DINING TABLE	30" W x 30" D x 30" H	
10024	SIDE CHAIR	2	WILLISTON FORGE	HENNESSY UPHOLSTERED	21.25"W x 20.5"D x 31..5"H	
10025	ARMCHAIR - SWIVEL	3	LOON PEAK	RAMM SWIVEL LOUNGE CHAIR	29" W x 36" D x 36" H	CASTLE SEDONA
10026	QUEEN HEADBOARD	24	WHOLESALE INTERIORS	BAXTON STUDIO-RAUREY-MG5110-WALNUT-QUEEN	QUEEN	
10027	COFFEE TABLE	14	CORRIGAN STUDIO	CABRAL COFFEE TABLE	16" H x 45" L x 22" W	NATURAL

FURNITURE SCHEDULE

FURNITURE #	DESCRIPTION	COUNT	MANUFACTURER	MODEL	SIZE	FINISH
10028	ARMCHAIR	18	FLEXSTEEL	MATHIS #C3966-10	36" H x 34" W x 36" D	C00-80
10029	NIGHTSTAND	24	CORRIGAN STUDIO	CABRAL END TABLE	19" W x 16" D x 24" H	NATURAL
10030	SOFA 3-SEAT	20	STEELCASE	CARA SOFA #MGB1237003, MGB1237015	77" W x 35" D x 34" H	BIG GAME: ASHANTI
10031	DESK CHAIR	16	MILLWOOD PINES	STAUFFER TASK CHAIR	24.4" W x 26.2" D x 33.1" H	
10033	DRESSER	24	LOON PEAK	HAMERTON SIX DRAWER DRESSER	47.25"W x 17.8"D x 34"H	
10035	72" SHELVING UNIT	28	ELFA	10048533	72"W x 78"H x 16" D	
10036	48" SHELVING UNIT	9	ELFA	10077258	24"W x 48"H x 16" D	
10037	36" SHELVING UNIT	4	ELFA	10073496	24"W x 48"H x 16" D	
10039	DINING CHAIR	16	RESTAURANT FURNITURE	RFC-EIRAT-241-WL	17" W x 17 "D x 36" H	
10040	BREAKFAST TABLE	4	FLASH FURNITURE	HERCULES #XA-F-46X30-GG	30" W x 46" D x 30" H	ANTIQUE RUSTIC
10042	SOFA 3-SEAT	1	DARBY HOME CO	FALLSBURG SOFA	86" W x 38" D x 37" H	CHOCOLATE BROWN
10043	OUTDOOR BARSTOOL	16	PATIO LIVING	TELESCOPE CASUAL AVANT	16.75"W x 20.25"D x 44.5"H	KONA
10044	OUTDOOR BAR HEIGHT TABLE	4	PATIO LIVING	TELESCOPE CASUAL ALUMINUM TOP #TC3230BAR	36" ROUND TOP	ALUMINUM
10045	OUTDOOR END TABLE - ROUND	4	PATIO LIVING	GENSUN #GES1019STB1	14"W x 14"D x 18"H	DOVE
10046	OUTDOOR SECTIONAL SOFA	2	COMPAMIA	SIESTA MONACO #COMP252	81.5"W x 81.5D" x 31"H	BROWN
10047	OUTDOOR LOUNGE CHAIR	5	COMPAMIA	SIESTA MONACO #COMP242	33"W x 31"D x 31"H	BROWN
10048	OUTDOOR END TABLE - SQUARE	2	PATIO LIVING	FOREVER PATIO CYPRESS #NCFPCYPETHR	20"W x 20"D x 21"H	HEATHER

ARTWORK SCHEDULE

#	DESCRIPTION	NOTES
ART-1	PRINTED CANVAS	CONTRACTOR TO FIELD VERIFY DIM. - REF SPECS
ART-1	PRINTED CANVAS	CONTRACTOR TO FIELD VERIFY DIM. - REF SPECS
ART-1	PRINTED CANVAS	CONTRACTOR TO FIELD VERIFY DIM. - REF SPECS
ART-1	PRINTED CANVAS	CONTRACTOR TO FIELD VERIFY DIM. - REF SPECS
ART-2	PRINTED CANVAS	CONTRACTOR TO FIELD VERIFY DIM. - REF SPECS
ART-3	PRINTED CANVAS	CONTRACTOR TO FIELD VERIFY DIM. - REF SPECS
ART-4	PRINTED CANVAS	CONTRACTOR TO FIELD VERIFY DIM. - REF SPECS
ART-5	PRINTED CANVAS	CONTRACTOR TO FIELD VERIFY DIM. - REF SPECS
ART-6	PRINTED CANVAS	CONTRACTOR TO FIELD VERIFY DIM. - REF SPECS
ART-7	PRINTED CANVAS	CONTRACTOR TO FIELD VERIFY DIM. - REF SPECS
ART-8	PRINTED CANVAS	CONTRACTOR TO FIELD VERIFY DIM. - REF SPECS
ART-9	PRINTED CANVAS	CONTRACTOR TO FIELD VERIFY DIM. - REF SPECS
ART-10	PRINTED CANVAS	CONTRACTOR TO FIELD VERIFY DIM. - REF SPECS
ART-11	PRINTED CANVAS	CONTRACTOR TO FIELD VERIFY DIM. - REF SPECS

MANUFACTURER'S TRADE NAMES AND NUMBERS USED HEREIN ARE ONLY TO IDENTIFY COLORS, FINISHES, TEXTURES, AND PATTERNS. PRODUCTS OF OTHER MANUFACTURER'S EQUIVALENT TO COLORS, FINISHES, TEXTURES AND PATTERNS OF MANUFACTURERS LISTED THAT MEET REQUIREMENTS OF TECHNICAL SPECIFICATIONS WILL BE ACCEPTABLE UPON APPROVAL IN WRITING BY CONTRACTING OFFICER FOR FINISH REQUIREMENTS.

- THIS NOTE APPLIES TO ALL SUCH INSTANCES IN THE DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.

EQUIPMENT SCHEDULE

EQUIPMENT #	DESCRIPTION	QTY.	PROVIDED BY	INSTALLED BY	REQUIREMENTS ELEC.	DATA	MECH.	PLUMB.	NOTES
20001	RANGE	14	GC	GC	Yes	No	No	No	
20002	REFRIGERATOR	14	GC	GC	Yes	No	No	Yes	
20003	DISHWASHER	14	GC	GC	Yes	No	No	Yes	
20004	DRYER	3	GC	GC	Yes	No	Yes	No	
20005	WASHER	3	GC	GC	Yes	No	No	Yes	
20006	STACKABLE WASHER & DRYER	11	GC	GC	Yes	No	No	Yes	
20007	MICROWAVE	15	GC	GC	Yes	No	No	No	
20008	RANGE HOOD	14	GC	GC	Yes	No	Yes	No	
20009	TREADMILL	2	GC	GC	Yes	Yes	No	No	
20010	DUMBELL RACK	1	GC	GC	No	No	No	No	
20011	EXCERCISE BIKE	1	GC	GC	Yes	Yes	No	No	
20012	ELLIPTICAL MACHINE	1	GC	GC	Yes	Yes	No	No	
20013	LIFTING BENCH	1	GC	GC	No	No	No	No	
20014	COMMERCIAL WASHER	1	GC	GC	Yes	No	No	Yes	
20015	COMMERCIAL DRYER	1	GC	GC	Yes	No	No	Yes	
20016	LAUNDRY TROLLEY	2	GC	GC	No	No	No	No	
20017	ICE DISPENSER	1	GC	GC	Yes	No	No	Yes	
20018	48" FLAT SCREEN TV & WALL BRACKET	14	GC	GC	Yes	Yes	No	No	
20019	MAILBOX	2	GC	GC	No	No	No	No	

ACCESSORIES SCHEDULE

ACCESSORY #	COUNT	DESCRIPTION	PROVIDED BY	INSTALLED BY
A100	20	TOWEL RING	GC	GC
A101	22	TOILET PAPER DISPENSER	GC	GC
A102	20	TOWEL BAR	GC	GC
A103	20	SHOWER CURTAIN ROD & CURTAINS	GC	GC
A104	26	MIRROR (24" X 36")	GC	GC
A107	3	GRAB BARS - 36" & 42"	GC	GC
A110	14	BEDROOM MIRROR	GC	GC
A111	2	SHELVES ON STANDARDS - REF ELEVATIONS & SPECS	GC	GC
A112	22	TRASH CAN	GC	GC
A113	26	ROBE HOOK	GC	GC
A117	15	LARGE TRASH CAN	GC	GC
A118	2	PAPER TOWEL DISPENSER	GC	
A119	2	SOAP DISPENSER	GC	GC
A120	1	UTILITY SHELF		
A121	1	FULL LENGTH MIRROR	GC	GC

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
FIRST FLOOR EQUIPMENT PLAN

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI1022018000051
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

Date **09/08/2020** | Checked | Drawn

Project Number
H IH BLAC 19100

Building Number

Drawing Number
A11.1

INDIAN HEALTH SERVICE · PHS · 1955 ·

FURNITURE SCHEDULE

FURNITURE #	DESCRIPTION	COUNT	MANUFACTURER	MODEL	SIZE	FINISH
10001	SECTIONAL SOFA	4	DARBY HOME CO	ERIN	OVERALL 37.8" H x 128" W x 128"D	CHOCOLATE BROWN
10002	OCCASIONAL TABLE	4	FAIRFIELD CHAIR	CHURCHILL BUNCHING	24" W x 24" L x 18" H	TOBACCO
10003	SOFA	1	KIMBALL	#3447ASOA	78" W x 35" D x 35" H	REIN II EARTHTONE
10004	WESTERN ARMCHAIR	2	HILL COUNTRY INTERIORS	WESTERN ARMCHAIR	CUSTOM	CUSTOM
10006	COUNTER HEIGHT TABLE	2	HILLSDALE	JENNINGS ROUND TABLE	36"W x 36" L x 36" H	DISTRESSED
10007	BENCH	1	WILLISTON FORGE	LORILEE LEATHER BENCH	55" W x 17.5" D x 17.5" H	DARK SIENNA
10008	DINING BARSTOOL	11	SUPERIOR SEATING	#229WL-V	17"W x 19"D x 43"H	WALNUT
10009	BAR HEIGHT TABLE TOP	2	SUPERIOR SEATING	RUSTIC PLANK TABLE TOP TWG-WLPL	36" W x 36" L x 1.75" D	WALNUT
10010	BAR HEIGHT TABLE BASE	2	SUPERIOR SEATING	CI3232-42	32" W x 32" D x 42" H	CAST IRON
10011	DINING CHAIR	12	WOODLAND CREEK'S LOG FURNITURE PLACE	BARN DOOR DINGING SIDE CHAIR #143100	21" W x 21-22"D x 45" H	ANTIQUE BARNWOOD
10012	DINING TABLE	2	WOODLAND CREEK'S LOG FURNITURE PLACE	LAUREL HOLLOW #233000	72" W x 42" D x 30" H	BARNWOOD LAGER
10013	WORK TABLE	1	ADVANCE TABCO	MODEL #MSLAG-366-X	72" W x 36" D	
10014	END TABLE	2	MERCURY ROW SHOP	PELLEY	12"W x 12"D x 20"H	WALNUT OIL
10015	DINING CHAIR - COUNTER HEIGHT	8	TRENT AUSTIN DESIGN	LAGUNA	22.5"W x 18.63"D x 42"H	CARAMEL
10016	END TABLE	2	STEELCASE	TREMONT PULL UP TABLE	14"W x 14"D x 19"H	NATURAL
10017	BARSTOOL	32	ALCOTT HILL	REMILLARD	18" W x 22" D x 42" H	
10018	END TABLE	2	FOUNDRY SELECT	BLOM	20"W x 20" D x 20"H	
10019	OCCASIONAL TABLE	6	CHARLTON HOME	TIPTON BUNCHING CUBE	20"W x 20"L x 20"H	CHESNUT
10020	END TABLE	20	EBERN DESIGNS	KENLY	19"W x 19"D X 18"H	
10021	DESK	16	CORRIGAN STUDIO	CABRAL DESK	48" W x 20" D x 30" H	NATURAL
10022	ARMCHAIR	2	FLEXSTEEL	CONCLUSION #C3990-10B	37.5" W x 36" D x 36" H	C37-80
10023	SQUARE TABLE	2	GEORGE OLIVER	GILBERSTON DINING TABLE	30" W x 30" D x 30" H	
10024	SIDE CHAIR	2	WILLISTON FORGE	HENNESSY UPHOLSTERED	21.25"W x 20.5"D x 31..5"H	
10025	ARMCHAIR - SWIVEL	3	LOON PEAK	RAMM SWIVEL LOUNGE CHAIR	29" W x 36" D x 36" H	CASTLE SEDONA
10026	QUEEN HEADBOARD	24	WHOLESALE INTERIORS	BAXTON STUDIO RAUREY #MG5110-WALNUT-QUEEN	QUEEN	
10027	COFFEE TABLE	14	CORRIGAN STUDIO	CABRAL COFFEE TABLE	16" H x 45" L x 22" W	NATURAL

FURNITURE SCHEDULE

FURNITURE #	DESCRIPTION	COUNT	MANUFACTURER	MODEL	SIZE	FINISH
10028	ARMCHAIR	18	FLEXSTEEL	MATHIS #C3966-10	36" H x 34" W x 36" D	C00-80
10029	NIGHTSTAND	24	CORRIGAN STUDIO	CABRAL END TABLE	19" W x 16" D x 24" H	NATURAL
10030	SOFA 3-SEAT	20	STEELCASE	CARA SOFA, #MGB1237003, MGB1237015	77" W x 35" D x 34" H	BIG GAME: ASHANTI
10031	DESK CHAIR	16	MILLWOOD PINES	STAUFFER TASK CHAIR	24.4" W x 26.2" D x 33.1" H	
10033	DRESSER	24	LOON PEAK	HAMERTON SIX DRAWER DRESSER	47.25"W x 17.8"D x 34"H	
10035	72" SHELVING UNIT	28	ELFA	10048533	72"W x 76"H x 16" D	
10036	48" SHELVING UNIT	9	ELFA	10077258	24"W x 48"H x 16" D	
10037	36" SHELVING UNIT	4	ELFA	10073496	24"W x 48"H x 16" D	
10039	DINING CHAIR	16	RESTAURANT FURNITURE	RFC-ERAT-241-WL	17" W x 17 "D x 36" H	
10040	BREAKFAST TABLE	4	FLASH FURNITURE	HERCULES #XA-F-46X30-GG	30" W x 46" D x 30" H	ANTIQUE RUSTIC
10042	SOFA 3-SEAT	1	DARBY HOME CO	FALLSBURG SOFA	86" W x 38" D x 37" H	CHOCOLATE BROWN
10043	OUTDOOR BARSTOOL	16	PATIO LIVING	TELESCOPE CASUAL AVANT	16.75"W x 20.25"D x 44.5"H	KONA
10044	OUTDOOR BAR HEIGHT TABLE	4	PATIO LIVING	TELESCOPE CASUAL ALUMINUM TOP #TC3230BAR	36" ROUND TOP	ALUMINUM
10045	OUTDOOR END TABLE - ROUND	4	PATIO LIVING	GENSUN #GES1019STB1	14"W x 14"D x 18"H	DOVE
10046	OUTDOOR SECTIONAL SOFA	2	COMPAMIA	SIESTA MONACO #COMP252	81.5"W x 81.5D" x 31"H	BROWN
10047	OUTDOOR LOUNGE CHAIR	5	COMPAMIA	SIESTA MONACO #COMP242	33"W x 31"D x 31"H	BROWN
10048	OUTDOOR END TABLE - SQUARE	2	PATIO LIVING	FOREVER PATIO CYPRESS #NCFPCYPETHR	20"W x 20"D x 21"H	HEATHER

ARTWORK SCHEDULE

#	DESCRIPTION	NOTES
ART-1	PRINTED CANVAS	CONTRACTOR TO FIELD VERIFY DIM. - REF SPECS
ART-1	PRINTED CANVAS	CONTRACTOR TO FIELD VERIFY DIM. - REF SPECS
ART-1	PRINTED CANVAS	CONTRACTOR TO FIELD VERIFY DIM. - REF SPECS
ART-1	PRINTED CANVAS	CONTRACTOR TO FIELD VERIFY DIM. - REF SPECS
ART-2	PRINTED CANVAS	CONTRACTOR TO FIELD VERIFY DIM. - REF SPECS
ART-3	PRINTED CANVAS	CONTRACTOR TO FIELD VERIFY DIM. - REF SPECS
ART-4	PRINTED CANVAS	CONTRACTOR TO FIELD VERIFY DIM. - REF SPECS
ART-5	PRINTED CANVAS	CONTRACTOR TO FIELD VERIFY DIM. - REF SPECS
ART-6	PRINTED CANVAS	CONTRACTOR TO FIELD VERIFY DIM. - REF SPECS
ART-7	PRINTED CANVAS	CONTRACTOR TO FIELD VERIFY DIM. - REF SPECS
ART-8	PRINTED CANVAS	CONTRACTOR TO FIELD VERIFY DIM. - REF SPECS
ART-9	PRINTED CANVAS	CONTRACTOR TO FIELD VERIFY DIM. - REF SPECS
ART-10	PRINTED CANVAS	CONTRACTOR TO FIELD VERIFY DIM. - REF SPECS
ART-11	PRINTED CANVAS	CONTRACTOR TO FIELD VERIFY DIM. - REF SPECS

MANUFACTURER'S TRADE NAMES AND NUMBERS USED HEREIN ARE ONLY TO IDENTIFY COLORS, FINISHES, TEXTURES, AND PATTERNS. PRODUCTS OF OTHER MANUFACTURER'S EQUIVALENT TO COLORS, FINISHES, TEXTURES AND PATTERNS OF MANUFACTURERS LISTED THAT MEET REQUIREMENTS OF TECHNICAL SPECIFICATIONS WILL BE ACCEPTABLE UPON APPROVAL IN WRITING BY CONTRACTING OFFICER FOR FINISH REQUIREMENTS.

- THIS NOTE APPLIES TO ALL SUCH INSTANCES IN THE DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.

EQUIPMENT SCHEDULE

EQUIPMENT #	DESCRIPTION	QTY.	PROVIDED BY	INSTALLED BY	REQUIREMENTS				NOTES
					ELEC.	DATA	MECH.	PLUMB.	
20001	RANGE	14	GC	GC	Yes	No	No	No	
20002	REFRIGERATOR	14	GC	GC	Yes	No	No	Yes	
20003	DISHWASHER	14	GC	GC	Yes	No	No	Yes	
20004	DRYER	3	GC	GC	Yes	No	Yes	No	
20005	WASHER	3	GC	GC	Yes	No	No	Yes	
20006	STACKABLE WASHER & DRYER	11	GC	GC	Yes	No	No	Yes	
20007	MICROWAVE	15	GC	GC	Yes	No	No	No	
20008	RANGE HOOD	14	GC	GC	Yes	No	Yes	No	
20009	TREADMILL	2	GC	GC	Yes	Yes	No	No	
20010	DUMBELL RACK	1	GC	GC	No	No	No	No	
20011	EXCERCISE BIKE	1	GC	GC	Yes	Yes	No	No	
20012	ELLIPTICAL MACHINE	1	GC	GC	Yes	Yes	No	No	
20013	LIFTING BENCH	1	GC	GC	No	No	No	No	
20014	COMMERCIAL WASHER	1	GC	GC	Yes	No	No	Yes	
20015	COMMERCIAL DRYER	1	GC	GC	Yes	No	No	Yes	
20016	LAUNDRY TROLLEY	2	GC	GC	No	No	No	No	
20017	ICE DISPENSER	1	GC	GC	Yes	No	No	Yes	
20018	46" FLAT SCREEN TV & WALL BRACKET	14	GC	GC	Yes	Yes	No	No	
20019	MAILBOX	2	GC	GC	No	No	No	No	

ACCESSORIES SCHEDULE

ACCESSORY #	COUNT	DESCRIPTION	PROVIDED BY	INSTALLED BY
A100	20	TOWEL RING	GC	GC
A101	22	TOILET PAPER DISPENSER	GC	GC
A102	20	TOWEL BAR	GC	GC
A103	20	SHOWER CURTAIN ROD & CURTAINS	GC	GC
A104	26	MIRROR (24" X 36")	GC	GC
A107	3	GRAB BARS - 36" & 42"	GC	GC
A110	14	BEDROOM MIRROR	GC	GC
A111	2	SHELVES ON STANDARDS - REF ELEVATIONS & SPECS	GC	GC
A112	22	TRASH CAN	GC	GC
A113	26	ROBE HOOK	GC	GC
A117	15	LARGE TRASH CAN	GC	GC
A118	2	PAPER TOWEL DISPENSER	GC	GC
A119	2	SOAP DISPENSER	GC	GC
A120	1	UTILITY SHELF	GC	GC
A121	1	FULL LENGTH MIRROR	GC	GC

N
A SECOND FLOOR EQUIPMENT PLAN
1/8" = 1'-0"

0' 4' 8' 16'
1/8" = 1'-0"

ADDENDUM 001 1	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
SECOND FLOOR EQUIPMENT PLAN

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

Date **09/08/2020** | Checked | Drawn

Project Number
H IH BLAC 19100

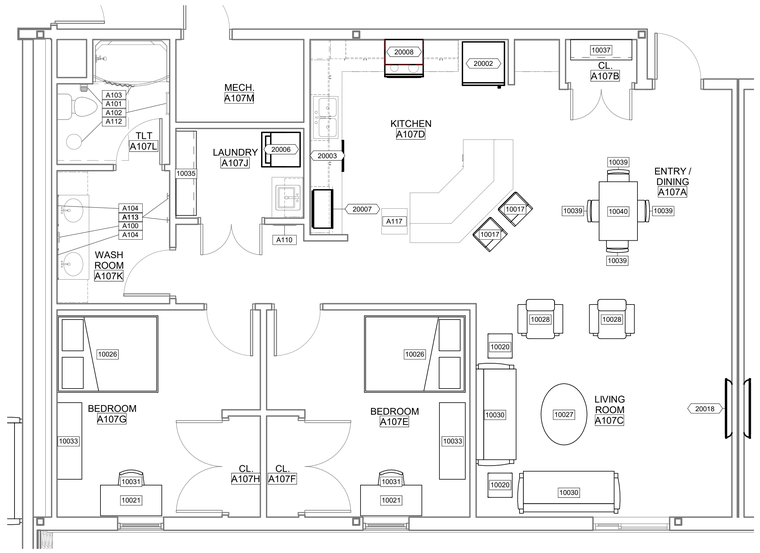
Building Number

Drawing Number
A11.2

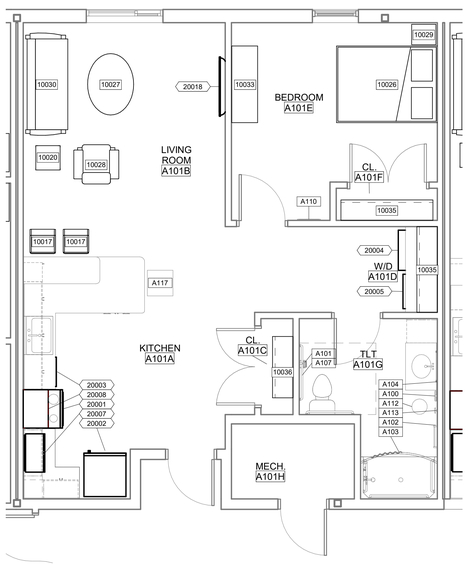
INDIAN HEALTH SERVICE · PHS · 1955 ·

MANUFACTURER'S TRADE NAMES AND NUMBERS USED HEREIN ARE ONLY TO IDENTIFY COLORS, FINISHES, TEXTURES, AND PATTERNS. PRODUCTS OF OTHER MANUFACTURER'S EQUIVALENT TO COLORS, FINISHES, TEXTURES AND PATTERNS OF MANUFACTURERS LISTED THAT MEET REQUIREMENTS OF TECHNICAL SPECIFICATIONS WILL BE ACCEPTABLE UPON APPROVAL IN WRITING BY CONTRACTING OFFICER FOR FINISH REQUIREMENTS.

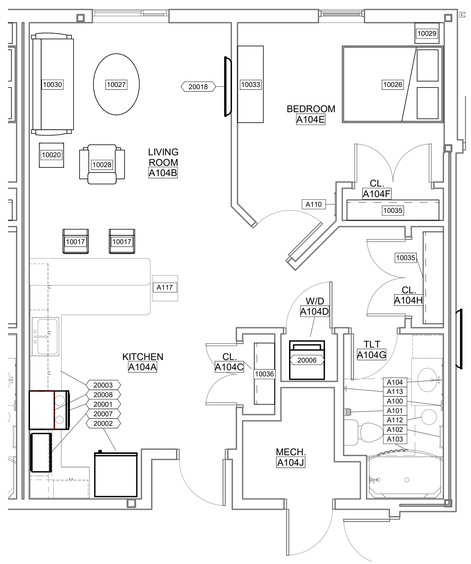
- THIS NOTE APPLIES TO ALL SUCH INSTANCES IN THE DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.



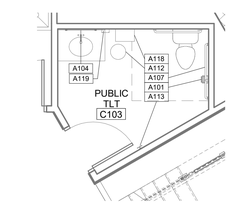
1 TYP. TWO-BEDROOM UNIT - FURNITURE, EQUIPMENT, & ARTWORK PLAN
1/4" = 1'-0"



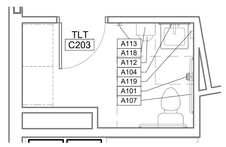
2 TYP. ADA ONE-BEDROOM UNIT - FURNITURE, EQUIPMENT, & ARTWORK PLAN
1/4" = 1'-0"



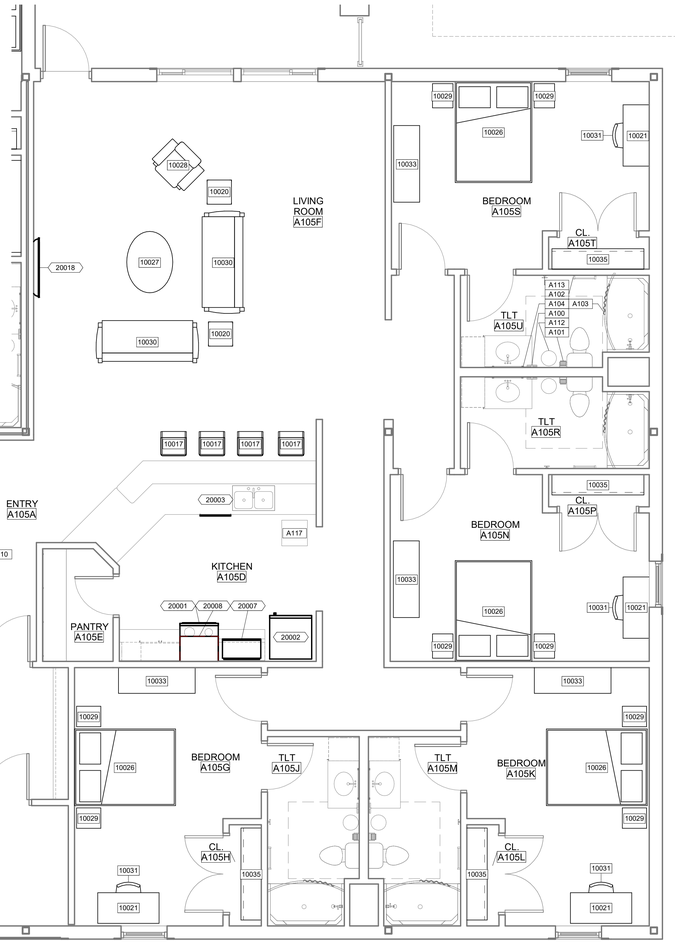
3 TYP. ONE-BEDROOM UNIT - FURNITURE, EQUIPMENT, & ARTWORK PLAN
1/4" = 1'-0"



4 PUBLIC TLT C103 - EQUIPMENT PLAN
1/4" = 1'-0"



5 TLT C203 - EQUIPMENT PLAN
1/4" = 1'-0"



6 TYP. FOUR-BEDROOM UNIT - FURNITURE, EQUIPMENT, & ARTWORK PLAN
1/4" = 1'-0"

FURNITURE SCHEDULE

FURNITURE #	DESCRIPTION	COUNT	MANUFACTURER	MODEL	SIZE	FINISH
10001	SECTIONAL SOFA	4	DARBY HOME CO	ERIN	OVERALL 37.8" H x 128" W x 128"D	CHOCOLATE BROWN
10002	OCCASIONAL TABLE	4	FAIRFIELD CHAIR	CHURCHILL BUNCHING	24" W x 24" L x 18" H	TOBACCO
10003	SOFA	1	KIMBALL	#3447A50A	78" W x 35" D x 35" H	REIN II EARTHTONE
10004	WESTERN ARMCHAIR	2	HILL COUNTRY INTERIORS	WESTERN ARMCHAIR	CUSTOM	CUSTOM
10006	COUNTER HEIGHT TABLE	2	HILLSDALE	JENNINGS ROUND TABLE	36"W x 36" L x 36" H	DISTRESSED
10007	BENCH	1	WILLISTON FORGE	LORILEE LEATHER BENCH	55" W x 17.5" D x 17.5" H	DARK SIENNA
10008	DINING BARSTOOL	11	SUPERIOR SEATING	#225WL-V	17"W x 19"D x 43"H	WALNUT
10009	BAR HEIGHT TABLE TOP	2	SUPERIOR SEATING	RUSTIC PLANK TABLE TOP TWG-WLPL	36" W x 36" L x 1.75" D	WALNUT
10010	BAR HEIGHT TABLE BASE	2	SUPERIOR SEATING	CI3232-42	32" W x 32" D x 42" H	CAST IRON
10011	DINING CHAIR	12	WOODLAND CREEK'S LOG FURNITURE PLACE	BARN DOOR DINGING SIDE CHAIR #143100	21" W x 21-22"D x 45" H	ANTIQUE BARNWOOD
10012	DINING TABLE	2	WOODLAND CREEK'S LOG FURNITURE PLACE	LAUREL HOLLOW #233000	72" W x 42" D x 30" H	BARNWOOD LAGER
10013	WORK TABLE	1	ADVANCE TABCO	MODEL #MSLAG-366-X	72" W x 36" D	
10014	END TABLE	2	MERCURY ROW SHOP	PELLEY	12"W x 12"D x 20"H	WALNUT OIL
10015	DINING CHAIR - COUNTER HEIGHT	8	TRENT AUSTIN DESIGN	LAGUNA	22.5"W x 18.63"D x 42"H	CARAMEL
10016	END TABLE	2	STEELCASE	TREMONT PULL UP TABLE	14"W x 14"D x 19"H	NATURAL
10017	BARSTOOL	32	ALCOTT HILL	REMILLARD	18" W x 22" D x 42" H	
10018	END TABLE	2	FOUNDRY SELECT	BLOM	20"W x 20" D x 20"H	
10019	OCCASIONAL TABLE	6	CHARLTON HOME	TIPTON BUNCHING CUBE	20"W x 20"L x 20"H	CHESNUT
10020	END TABLE	20	EBERN DESIGNS	KENLY	19"W x 19"D X 18"H	
10021	DESK	16	CORRIGAN STUDIO	CABRAL DESK	48" W x 20" D x 30" H	NATURAL
10022	ARMCHAIR	2	FLEXSTEEL	CONCLUSION #C3990-10B	37.5" W x 36" D x 36" H	C37-80
10023	SQUARE TABLE	2	GEORGE OLIVER	GILBERSTON DINING TABLE	30" W x 30" D x 30" H	
10024	SIDE CHAIR	2	WILLISTON FORGE	HENNESSY UPHOLSTERED	21.25"W x 20.5"D x 31..5"H	
10025	ARMCHAIR - SWIVEL	3	LOON PEAK	RAMM SWIVEL LOUNGE CHAIR	29" W x 36" D x 36" H	CASTLE SEDONA
10026	QUEEN HEADBOARD	24	WHOLESALE INTERIORS	BAXTON STUDIO RAUREY #MG5110-WALNUT-QUEEN	QUEEN	
10027	COFFEE TABLE	14	CORRIGAN STUDIO	CABRAL COFFEE TABLE	16" H x 45" L x 22" W	NATURAL

EQUIPMENT SCHEDULE

EQUIPMENT #	DESCRIPTION	QTY.	PROVIDED BY	INSTALLED BY	REQUIREMENTS				NOTES
					ELEC.	DATA	MECH.	PLUMB.	
20001	RANGE	14	GC	GC	Yes	No	No	No	
20002	REFRIGERATOR	14	GC	GC	Yes	No	No	Yes	
20003	DISHWASHER	14	GC	GC	Yes	No	No	Yes	
20004	DRYER	3	GC	GC	Yes	No	Yes	No	
20005	WASHER	3	GC	GC	Yes	No	No	Yes	
20006	STACKABLE WASHER & DRYER	11	GC	GC	Yes	No	No	Yes	
20007	MICROWAVE	15	GC	GC	Yes	No	No	No	
20008	RANGE HOOD	14	GC	GC	Yes	No	Yes	No	
20009	TREADMILL	2	GC	GC	Yes	Yes	No	No	
20010	DUMBELL RACK	1	GC	GC	No	No	No	No	
20011	EXCERCISE BIKE	1	GC	GC	Yes	Yes	No	No	
20012	ELLIPTICAL MACHINE	1	GC	GC	Yes	Yes	No	No	
20013	LIFTING BENCH	1	GC	GC	No	No	No	No	
20014	COMMERCIAL WASHER	1	GC	GC	Yes	No	No	Yes	
20015	COMMERCIAL DRYER	1	GC	GC	Yes	No	No	Yes	
20016	LAUNDRY TROLLEY	2	GC	GC	No	No	No	No	
20017	ICE DISPENSER	1	GC	GC	Yes	No	No	Yes	
20018	46" FLAT SCREEN TV & WALL BRACKET	14	GC	GC	Yes	Yes	No	No	
20019	MAILBOX	2	GC	GC	No	No	No	No	

FURNITURE SCHEDULE

FURNITURE #	DESCRIPTION	COUNT	MANUFACTURER	MODEL	SIZE	FINISH
10028	ARMCHAIR	18	FLEXSTEEL	MATHIS #C3966-10	36" H x 34" W x 36" D	C00-80
10029	NIGHTSTAND	24	CORRIGAN STUDIO	CABRAL END TABLE	19" W x 16" D x 24" H	NATURAL
10030	SOFA 3-SEAT	20	STEELCASE	CARA SOFA, #MGB1237003, MGB1237015	77" W x 35" D x 34" H	BIG GAME: ASHANTI
10031	DESK CHAIR	16	MILLWOOD PINES	STAUFFER TASK CHAIR	24.4" W x 26.2" D x 33.1" H	
10033	DRESSER	24	LOON PEAK	HAMERTON SIX DRAWER DRESSER	41.25"W x 17.8"D x 34"H	
10035	72" SHEVING UNIT	28	ELFA	10048533	72"W x 78"H x 16" D	
10036	48" SHELVING UNIT	9	ELFA	10077258	24"W x 48"H x 16" D	
10037	36" SHELVING UNIT	4	ELFA	10073496	24"W x 48"H x 16" D	
10039	DINING CHAIR	16	RESTAURANT FURNITURE	RFC-ERAT-241-WL	17" W x 17 "D x 36" H	
10040	BREAKFAST TABLE	4	FLASH FURNITURE	HERCULES #XA-F-46X30-GG	30" W x 46" D x 30" H	ANTIQUE RUSTIC
10042	SOFA 3-SEAT	1	DARBY HOME CO	FALLSBURG SOFA	86" W x 38" D x 37" H	CHOCOLATE BROWN
10043	OUTDOOR BARSTOOL	16	PATIO LIVING	16.75"W x 20.25"D x 44.5"H	KONA	
10044	OUTDOOR BAR HEIGHT TABLE	4	PATIO LIVING	TELESCOPE CASUAL ALUMINUM TOP #TC3230BAR ROUND	36" ROUND TOP	ALUMINUM
10045	OUTDOOR END TABLE - ROUND	4	PATIO LIVING	GENSUN #GES1019STB1	14"W x 14"D x 18"H	DOVE
10046	OUTDOOR SECTIONAL SOFA	2	COMPAMIA	SIESTA MONACO #COMP252	81.5"W x 81.5D" x 31"H	BROWN
10047	OUTDOOR LOUNGE CHAIR	5	COMPAMIA	SIESTA MONACO #COMP242	33"W x 31"D x 31"H	BROWN
10048	OUTDOOR END TABLE - SQUARE	2	PATIO LIVING	FOREVER PATIO CYPRESS #NCFPCYPETHR	20"W x 20"D x 21"H	HEATHER

ACCESSORIES SCHEDULE

ACCESSORY #	COUNT	DESCRIPTION	PROVIDED BY	INSTALLED BY
A100	20	TOWEL RING	GC	GC
A101	22	TOILET PAPER DISPENSER	GC	GC
A102	20	TOWEL BAR	GC	GC
A103	20	SHOWER CURTAIN ROD & CURTAINS	GC	GC
A104	26	MIRROR (24" X 36")	GC	GC
A107	3	GRAB BARS - 36" & 42"	GC	GC
A110	14	BEDROOM MIRROR	GC	GC
A111	2	SHELVES ON STANDARDS - REF ELEVATIONS & SPECS	GC	GC
A112	22	TRASH CAN	GC	GC
A113	26	ROBE HOOK	GC	GC
A117	15	LARGE TRASH CAN	GC	GC
A118	2	PAPER TOWEL DISPENSER		
A119	2	SOAP DISPENSER	GC	GC
A120	1	UTILITY SHELF		
A121	1	FULL LENGTH MIRROR	GC	GC

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

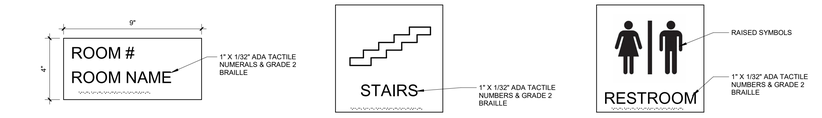
HFG HEALTH FACILITIES GROUP architecture

FARRIS ENGINEERING

BLUE STAR INTEGRATIVE STUDIO

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

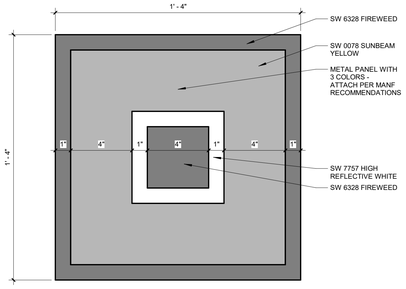
Drawing Title: **ENLARGED EQUIPMENT PLAN**	Project Title: **APARTMENT BUILDING AND SITEWORK** **Contract No.:** HHSI102201800005I **Task Order No.:** 75H70119F30002	Project Number: **H IH BLAC 19100**	INDIAN HEALTH SERVICE · PHS · 1955 ·
Approved: Project Director	Location: **BROWNING, MONTANA**	Building Number	
	Date: **09/08/2020** / Checked / Drawn	Drawing Number: **A11.3**	



S1 GENERAL SIGNAGE
3" = 1'-0"

S2 EXIT STAIRS SIGN
3" = 1'-0"

S3 PUBLIC TLT SIGN
3" = 1'-0"



E EXTERIOR DECORATIVE PANEL
3" = 1'-0"

SIGNAGE - FIRST FLOOR

VG	SIGN TYPE	MOUNTING SURFACE
100	S1	WALL
101	S1	DOOR
102	S1	DOOR
103	S1	WALL
104	S3	WALL
105	S1	WALL
106	S1	WALL
107	S1	WALL
108	S1	WALL
109	S1	WALL
110	S1	WALL
111	S1	WALL
112	S1	WALL
113	S1	WALL
114	S1	WALL
115	S1	WALL
116	S2	WALL
117	S1	WALL
118	S1	WALL
119	S1	WALL
120	S1	WALL
121	EXTERIOR	WALL
122	EXTERIOR	WALL

NOTE: PROVIDE EXTERIOR SIGNAGE AT MAIN ENTRY. 121 IS A 3" DEEP STEEL SIGN WITH ENAMEL FINISH. COLOR TBD. 122 ARE 7 DECORATIVE PANELS. SEE DETAIL "E"

N

A FIRST FLOOR SIGNAGE PLAN
1/8" = 1'-0"

0' 4' 8' 16'
1/8" = 1'-0"

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/EDUCATED AT WORK WICHITA, KS REGISTERED ARCHITECT

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
FIRST FLOOR SIGNAGE PLAN

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

Date **09/08/2020** | Checked | Drawn

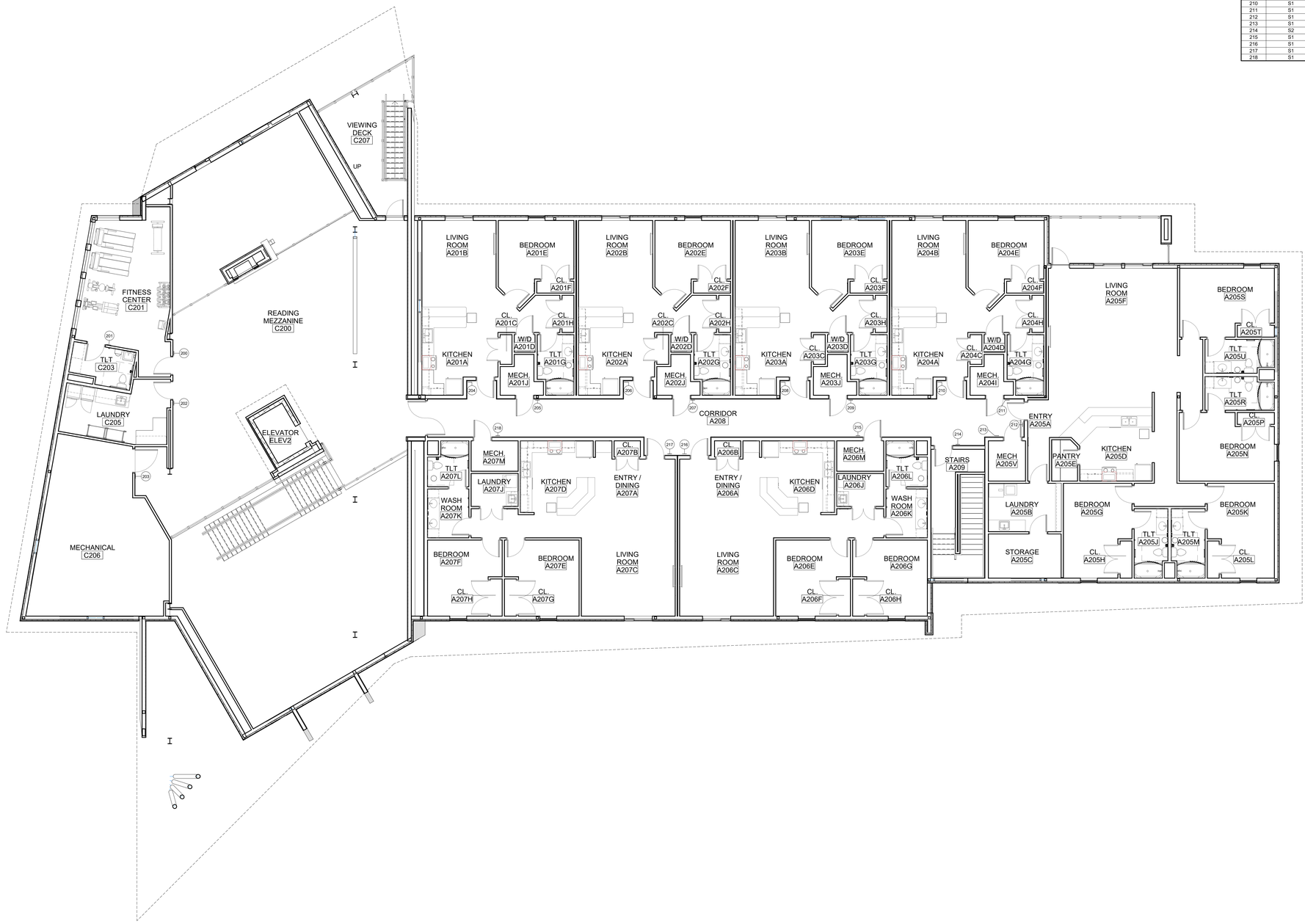
Project Number
H IH BLAC 19100

Building Number

Drawing Number
A12.1

INDIAN HEALTH SERVICE · PHS · 1955 ·

SIGNAGE - SECOND FLOOR		
#	SIGN TYPE	MOUNTING SURFACE
200	S1	WALL
201	S1	WALL
202	S1	WALL
203	S1	WALL
204	S1	WALL
205	S1	WALL
206	S1	WALL
207	S1	WALL
208	S1	WALL
209	S1	WALL
210	S1	WALL
211	S1	WALL
212	S1	WALL
213	S1	WALL
214	S2	WALL
215	S1	WALL
216	S1	WALL
217	S1	WALL
218	S1	WALL



N

A SECOND FLOOR SIGNAGE PLAN
1/8" = 1'-0"

0' 4' 8' 16'
1/8" = 1'-0"

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

--

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **SECOND FLOOR SIGNAGE PLAN**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **09/08/2020** | Checked | Drawn

Project Number: **H IH BLAC 19100**

Building Number

Drawing Number: **A12.2**

INDIAN HEALTH SERVICE · PHS · 1955 ·

GENERAL FIRE SUPPRESSION NOTES

APPLY TO ALL FIRE SUPPRESSION SHEETS

FIRE PROTECTION WORK SHALL INCLUDE, BUT IS NOT LIMITED TO, THE FOLLOWING:

A. PROVIDE A COMPLETE AND OPERABLE SYSTEM IN COMPLIANCE WITH ALL APPLICABLE STATE AND LOCAL CODES, LAWS AND REGULATIONS. SYSTEM SHALL INCLUDE ALL REQUIRED SPRINKLERS, PIPING, SUPPORTS, VALVES, SWITCHES, OUTSIDE AUDIO/VISUAL NOTIFICATION DEVICE, FIRE DEPARTMENT CONNECTION (FDC), COMBINATION MAIN DRAIN AND INSPECTOR'S TEST CONNECTION AND ALL VALVES, ETC. ADDITIONALLY, DESIGN SHALL HAVE A COMPLETE FIRE PUMP SYSTEM WITH JOCKEY PUMP AND CONTROLLERS FOR EACH IN A SELF CONTAINED PACKED, PRE-FABRICATED FACILITY. PRE-FABRICATED FACILITY SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. COORDINATE FOOTING LOCATIONS FOR THE BUILDING, ALONG WITH SLAB INSTALLATION WITH THE GENERAL CONTRACTOR. COORDINATE ALL UTILITY TIE-IN POINTS WITH THE SITE UTILITY INTALLING CONTRACTOR(S).

B. ALL AREAS OF THE BUILDING INDICATED SHALL BE SPRINKLERED ACCORDING TO THE LATEST STATE ADOPTED EDITION OF APPLICABLE NFPA STANDARDS, SPECIFICALLY NFPA 13, 13R, 20 AND 24. ENTIRE SYSTEM SHALL BE INSTALLED PER MONTANA STATE FIRE MARSHAL REQUIREMENTS AND REQUIREMENTS OF THE GLACIER COUNTY FIRE DEPARTMENT.

C. DESIGN SHALL BE BASED ON HYDRAULIC CALCULATIONS PER NFPA 13, WITH SHOP DRAWINGS PREPARED ACCORDING TO THE REQUIREMENTS OF THE MONTANA STATE FIRE MARSHAL. CALCULATIONS SHALL BEGIN WITH THE REMOTE SPRINKLER AND END AT THE TEST HYDRANT NEAREST PLANNED TAP OF THE EXISTING DOMESTIC WATER SUPPLY.

D. COORDINATE ALL FIRE ALARM CONNECTION REQUIREMENTS WITH THE FIRE ALARM INSTALLING CONTRACTOR.

E. COORDINATE WATER SUPPLY REQUIREMENTS WITH THE PLUMBING INSTALLING CONTRACTOR. UNDERGROUND INSTALLING CONTRACTOR SHALL FLUSH THE UNDERGROUND FIRE MAIN IN ACCORDANCE WITH NFPA 24 GUIDELINES AND PROVIDE THE UNDERGROUND PIPING MATERIALS AND TESTING CERTIFICATE TO THE FIRE SPRINKLER INSTALLING CONTRACTOR FOR INCLUSION IN THE FINAL FIRE SUPPRESSION O&M MANUAL. THIS APPLIES BOTH TO THE MAIN FIRE SUPPLY TO THE PRE-FABRICATED PACKAGED FIRE PUMP FACILITY AND THE PUMPED FIRE MAIN THAT EXTENDS FROM THE PUMP FACILITY TO THE MAIN BUILDING.

F. DRAWINGS ARE DIAGRAMMATIC, INTENDED TO CONVEY THE SCOPE OF WORK AND GENERAL ARRANGEMENT OF THE SYSTEM. COORDINATE THE SPRINKLER SYSTEM LAYOUT WITH ALL ARCHITECTURAL, STRUCTURAL, HVAC, PLUMBING AND ELECTRICAL COMPONENTS. PROVIDE OFFSETS AS NECESSARY TO AVOID CONFLICTS.

G. THE CONTRACT DRAWINGS DEPICT THE APPROXIMATE ROUTING OF KEY FIRE SUPPRESSION PIPE THAT IS LOCATION SPECIFIC AND IDENTIFIES THE GENERAL AREAS TO BE SERVED AND THE DESIGN REQUIREMENTS FOR EACH AREA. THE EXACT NUMBER, TYPE, COVERAGE, ETC., OF SPRINKLERS SHALL BE DETERMINED BY THE CONTRACTOR AND SHALL BE SUBJECT TO APPROVAL BY ALL AUTHORITIES HAVING JURISDICTION.

H. SIZE PER NFPA AND ROUTE FIRE DEPARTMENT CONNECTION (FDC) PIPE THROUGH WALL FOR FLUSH, WALL-MOUNTED FDC. FDC SHALL BE INSTALLED WITH CENTER OF HOSE CONNECTION LOCATED 3'-0" ABOVE FINAL EXTERNAL GRADE. PROVIDE HOSE CONNECTION THREADS TO MATCH LOCAL FIRE DEPARTMENT REQUIREMENTS. PROVIDE FLUSH WALL-MOUNTED FDC WITH BRONZE FINISH. SEE PLANS FOR LOCATION OF FDC.

I. REFER TO ARCHITECTURAL PLANS FOR CEILING TYPES AND HEIGHTS, AND LOCATIONS OF EXPOSED STRUCTURE. COORDINATE ALL SPRINKLER LOCATIONS IN AS AESTHETIC SPACING AS POSSIBLE. REVIEW SPRINKLER PLANS WITH ARCHITECT/ENGINEER BEFORE INSTALLATION.

J. ALL PIPING AND SPRINKLERS IN EXPOSED AREAS SHALL BE CLOSELY COORDINATED WITH ARCHITECTURAL AND STRUCTURAL FEATURES, DUCTWORK AND LIGHTS. EXPOSED SPRINKLERS SHALL BE UPRIGHT UNLESS SPECIFICALLY SHOWN OTHERWISE ON THE DRAWINGS. PROVIDE ADDITIONAL SPRINKLERS AS NECESSARY TO OVERCOME ANY OBSTRUCTIONS TO THE SPRINKLER SPRAY PATTERNS AS REQUIRED BY NFPA 13.

K. ALL SPRINKLERS IN GYP. BOARD AND LAY-IN CEILINGS SHALL BE CONCEALED STYLE WITH FACTORY APPLIED WHITE FINISH, UNLESS NOTED OTHERWISE. ALL SPRINKLERS IN SOFFITS SHALL BE CONCEALED STYLE SIDEWALLS WITH FLAT FACE AND FACTORY APPLIED WHITE FINISH, UNLESS NOTED OTHERWISE. PROVIDE RESIDENTIAL STYLE CONCEALED SPRINKLERS IN ALL DWELLING UNITS.

L. PROVIDE AUXILIARY DRAINS FOR ALL LOW SPOTS, TYPICAL. WHERE TRAPPED WATER IS 5 GALLONS OR LESS, A PLUGGED TEE IS ACCEPTABLE IN LIEU OF A DRAIN VALVE AS NOTED IN NFPA 13 DESIGN GUIDELINES.

M. SPRINKLER TYPES AND LOCATIONS, AND SPRINKLER PIPING SHOWN FOR AESTHETIC AND COORDINATION PURPOSES. ACTUAL SYSTEM LAYOUT SHALL BE BASED ON HYDRAULIC DESIGN AND SHOP DRAWINGS. SPRINKLERS SHOWN ADJACENT TO AIR OUTLETS/INLETS AND LIGHT FIXTURES SHALL BE LOCATED 6" MINIMUM FROM BOTH. ALL SPRINKLERS IN LAY-IN CEILINGS SHALL BE INSTALLED WITHIN 3" OF THE CENTER OF CEILING TILE. NOTIFY ARCHITECT/ENGINEER OF CONFLICTS.

N. SEE SPECIFICATION SECTIONS 21 00 00, 21 05 00 AND 21 13 13 FOR ADDITIONAL REQUIREMENTS.

O. SPRINKLER CONTRACTOR TO DETERMINE AVAILABLE WATER PRESSURES AND FLOW FROM LOCAL WATER DEPARTMENT. CONTRACTOR SHALL SUBMIT HYDRANT FLOW TEST DATA THAT IS NOT MORE THAN ONE YEAR OLDER THAN THE DATE OF SHOP DRAWING SUBMITTAL.

P. PROVIDE A COMBINED MAIN DRAIN AND INSPECTOR'S TEST CONNECTION VALVE FOR ALL WET PIPE SPRINKLER SYSTEMS AND ROUTE COMBINED DRAIN THROUGH EXTERIOR WALL. LOCATE COMBINED DRAIN 0'-6" ABOVE FINAL EXTERNAL GRADE. PROVIDE A CONCRETE SPLASH BLOCK BELOW OUTLET ON GRADE. OUTLET SHALL BE A THREADED 45 DEGREE ELBOW. ALL DRAIN PIPING SHALL BE GALVANIZED.

Q. SPRINKLER CONTRACTOR SHALL COORDINATE ALL CEILING HEIGHTS WITH GENERAL CONTRACTOR BEFORE MAKING FINAL PIPE DROPS TO SPRINKLERS. A COST EXTRA TO RELOCATE SPRINKLERS IS NOT ACCEPTED IF CEILING HEIGHTS CHANGE AFTER DROPS HAVE BEEN INSTALLED AND COORDINATION DID NOT OCCUR PRIOR TO INSTALLATION.

R. COORDINATE INSTALLATION OF ALL PIPING SYSTEMS WITH GENERAL CONTRACTOR TO PREVENT PIPING FREEZEUPS. NOTIFY ARCHITECT AND ENGINEER OF AREAS FOR POTENTIAL FREEZEUP CONCERNS.

S. PROVIDE DRY TYPE SPRINKLERS DESIGNED TO BE INSTALLED ON WET PIPE SPRINKLER SYSTEMS AT ALL VESTIBULE ENTRANCE LOCATIONS.

T. ALL EXPOSED PIPING IN ALL PUBLIC AND STORAGE SPACES SHALL BE PAINTED. **SPRINKLER INSTALLER SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE SPRINKLERS DURING THE PAINTING OF ALL EXPOSED PIPING.** SPRINKLER CONTRACTOR SHALL INSPECT ALL SPRINKLERS UPON COMPLETION OF PAINTING TO VERIFY NO OVERSPRAY. **SPRINKLER CONTRACTOR SHALL CLEAN ANY OVER-SPRAY OR REPLACE AFFECTED SPRINKLERS WHERE OVER-SPRAY CANNOT BE REMOVED.** PAINT COLOR TO MATCH CEILING FINISH IN AREA OF PIPE UNLESS NOTED OTHERWISE ON DRAWING. PROVIDE PIPE MATERIAL ACCEPTABLE FOR PAINTING.

U. APPLICABLE UL CONSTRUCTION DETAILS SHALL BE USED WHERE RATED ASSEMBLIES ARE PENETRATED BY SPRINKLER PIPING SYSTEM.

V. PIPE OPENINGS THROUGH FIRE RATED WALLS SHALL BE CAULKED WITH A FIRE RETARDANT INTUMESCENT MATERIAL. SEE SPECIFICATIONS.

W. PROVIDE SPRINKLER PROTECTION BELOW ALL EXPOSED MECHANICAL AND ELECTRICAL EQUIPMENT AND HVAC DUCTS 4'-0" AND GREATER, AS REQUIRED BY THE LATEST EDITION OF NFPA 13.

X. COORDINATE WITH MECHANICAL AND ELECTRICAL WORK. DO NOT INSTALL SPRINKLER PIPING BELOW SUSPENDED EQUIPMENT, EXCEPT AS REQUIRED TO BE IN ACCORDANCE WITH NFPA 13 DESIGN GUIDELINES FOR EXPOSED CONSTRUCTION. DO NOT INSTALL SPRINKLER PIPING WITHIN CLEARANCE SPACES FOR MECHANICAL OR ELECTRICAL EQUIPMENT.

Y. ROUTE SPRINKLER PIPING AS HIGH AS POSSIBLE THROUGHOUT STRUCTURE, UNLESS SPECIFICALLY NOTED OTHERWISE ON DRAWINGS.

Z. SUPPORT ALL PIPING FROM STRUCTURE. SEE DETAIL 5 ON SHEET F5.1.

AA. ALL HOLES FOR PIPING AND CONDUIT SHALL BE DRILLED OR CORE DRILLED, NO BREAKING OF CONCRETE OR C.M.U. SHALL BE PERMITTED.

BB. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING, PAINTING, REPAIRING OR REPLACEMENT OF ALL WALLS, CEILINGS, OR OTHER BUILDING ELEMENTS WHICH ARE DISTURBED AS PART OF THE DEMOLITION OR INSTALLATION OF FIRE SPRINKLER WORK.

CC. PROVIDE SPRINKLING OF THE AREA ABOVE THESE CEILINGS AS REQUIRED BY REFERENCED CODES.

DD. ROUTE SPRINKLER PIPING AROUND ELECTRICAL, DATA, IT, COMM AND ALL OTHER ROOMS DESIGNATED TO ELECTRICAL COMPONENTS AND/OR PANELS. PROTECT THESE AREAS WITH SIDEWALL SPRINKLERS WHEN POSSIBLE WITHOUT ROUTING PIPE EXPOSED IN PUBLIC AREAS.

EE. SLEEVE AND SEAL FLOOR PENETRATIONS PER DETAIL 7 ON SHEET F5.1.

NOTICE:
DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS AND CLEARANCES FROM ARCHITECTURAL, STRUCTURAL, SHOP AND OTHER APPROPRIATE DRAWINGS OR AT SITE. LAY OUT AND COORDINATE ALL WORK PRIOR TO INSTALLATION TO PROVIDE CLEARANCES REQUIRED FOR OPERATION, MAINTENANCE, AND CODES. VERIFY NON-INTERFERENCE WITH OTHER WORK. DO NOT FABRICATE PRIOR TO VERIFICATION OF CLEARANCES FOR ALL TRADES. THIS NOTICE APPLIES TO ALL FIRE SUPPRESSION PLANS.

ADDENDUM 001 1	02/02/2022
Revisions:	Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-uso.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA
BENJAMIN SCHMITT
No. 62524PE
LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
FIRE SUPPRESSION GENERAL NOTES

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI1022018000051
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

Date	Checked	Drawn
05/19/2020	**DGK**	**DGK**

Project Number
H IH BLAC 19100

Building Number

Drawing Number
FG0.1

INDIAN HEALTH SERVICE · PHS · 1955 ·

KEYNOTES

1	ROOM SHALL BE DESIGNED FOR A LIGHT HAZARD OCCUPANCY WITH A DESIGN DENSITY OF 0.10 GPM/SF OVER 1500 SQUARE FEET. DESIGN AREA MAY BE REDUCED IN ACCORDANCE WITH NFPA 13 DESIGN GUIDELINES WITH THE USE OF QUICK RESPONSE SPRINKLERS.
2	ELECTRICAL OR DATA ROOM. DO NOT ROUTE THOUGH THIS SPACE TO SERVE OTHER AREAS OF THE FACILITY. IF POSSIBLE WITHOUT ROUTING EXPOSED PIPING IN PUBLIC SPACES OR VIOLATING ELECTRICAL CODE, SERVE ROOM WITH SIDEWALL STYLE SPRINKLERS FROM ADJACENT ROOMS. IF REQUIRED TO SERVE WITH UPRIGHT STYLE SPRINKLERS, PROVIDE PROTECTIVE WIRE GUARDS.
3	MECHANICAL ROOM SHALL BE SERVED WITH UPRIGHT SPRINKLERS THAT ARE, AT A MINIMUM, INTERMEDIATE TEMPERATURE RATED. PROVIDE HIGHER TEMPERATURE RATED SPRINKLERS, AS REQUIRED, FOR ALL SPRINKLERS INSTALLED WITHIN 7'-0" OF A HEAT PRODUCING PIECE OF EQUIPMENT, PER NFPA 13 DESIGN GUIDELINES. PROVIDE SIDEWALL PROTECTION BENEATH ALL SUSPENDED DUCTWORK AND EQUIPMENT THAT IS GREATER THAN 4'-0" IN WIDTH. ALL SPRINKLERS IN THIS ROOM SHALL HAVE PROTECTIVE WIRE GUARDS. ROOM SHALL BE DESIGNED FOR AN ORDINARY HAZARD GROUP 2 OCCUPANCY WITH A DESIGN DENSITY OF 0.20 GPM PER SF OVER 1500 SQUARE FEET.
4	PROVIDE A SIDEWALL STYLE SPRINKLER WITH PROTECTIVE WIRE GUARD WITHIN 24 INCHES OF PIT OF ELEVATOR. LOCATE AS CLOSE TO DOOR SIDE OF ELEVATOR AS POSSIBLE. COORDINATE LOCATION WITH ELEVATOR INSTALLING CONTRACTOR.
5	INSTALL FLUSH WALL MOUNTED FIRE DEPARTMENT CONNECTION (FDC) AT THIS LOCATION.
6	AREA ENCLOSED WITHIN BOLD DASHED LINE IS A 4-STORY SPACE TO BE SERVED FROM SECOND FLOOR. SEE SHEET FX1.2 FOR ADDITIONAL INFORMATION. SPACE IS OPEN TO ADJACENT AREAS ON THE SECOND LEVEL.
7	WORKING FIRE PLACE WITH OPENINGS ON BOTH SIDES. PROVIDE HIGH TEMPERATURE RATED SPRINKLERS ON ALL INSTALLED WITHIN 7' OF CHIMNEY.
8	PROTECT VESTIBULE WITH FLEXIBLE DRY SPRINKLERS DESIGNED TO BE SERVED FROM WET SPRINKLER SYSTEM.
9	ROOM SHALL BE DESIGNED FOR AN ORDINARY HAZARD GROUP 2 OCCUPANCY WITH A DESIGN DENSITY OF 0.20 GPM PER SF OVER 1500 SQUARE FEET. COORDINATE SPRINKLER LAYOUT WITH PERMANENT SHELVING. DO NOT INSTALL SPRINKLERS OVER THE SHELVING FOOTPRINT. SPRINKLERS SERVING THIS SPACE SHALL BE CONCEALED STYLE SPRINKLERS.
10	ROOM SHALL BE DESIGNED FOR ORDINARY HAZARD GROUP 2 OCCUPANCY WITH A DESIGN DENSITY OF 0.20 GPM PER SF OVER 1500 SQUARE FEET. SPRINKLERS SHALL BE CORROSION RESISTANT AND SHALL BE INTERMEDIATE TEMPERATURE RATED.
11	PROVIDE PERMANENT SIGN ON DOOR THAT READS "SPRINKLER SHUT-OFF VALVES INSIDE" ON EXTERIOR SURFACE OF DOOR. CENTER SIGN ON DOOR LEFT TO RIGHT AND MOUNT WITH BOTTOM OF SIGN LOCATED 4'-0" ABOVE PAVED SURFACE. SIGHT SHALL BE WHITE WITH RED LETTERS 1" THICK AND 3" IN HEIGHT.

PRIMARY BUILDING DESIGN IS FOR AN NFPA 13R SYSTEM. ALL RESIDENTIAL AREAS OF FLOOR SHALL BE DESIGNED TO NFPA 13R DESIGN GUIDELINES. ALL PUBLIC SPACES SHALL BE DESIGNED TO NFPA 13 DESIGN STANDARDS. OCCUPANCY HAZARD AND DESIGN DENSITY AS NOTED ON PLANS. PER NFPA 13 GUIDELINES, PROTECTION NOT REQUIRED FOR EXTERNAL BALCONIES, OVERHANGS, SMALL CLOSETS 24 SF OR LESS, AND ATTIC SPACES.

CEILING PLAN PROVIDED COMPLETE WITH ALL HVAC, LIGHTING, SPEAKERS, FIRE ALARM DEVICES AND EXPOSED STRUCTURAL ELEMENTS. SEE RESPECTIVE DISCIPLINE SYMBOLS LEGENDS FOR SYMBOL IDENTIFICATION.

1 FIRST FLOOR FIRE SUPPRESSION PLAN
SCALE: 1/8" = 1'-0"

0' 4' 8' 16'
1/8" = 1'-0"

Revisions:	Date
ADDENDUM 001 1	02/02/2022

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-usa.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA
BENJAMIN SCHMITT
No. 62524PE
LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: FIRST FLOOR FIRE SUPPRESSION PLAN	Project Title: APARTMENT BUILDING AND SITEWORK Contract No.: HHSI102201800005I Task Order No.: 75H70119F30002	Project Number: H IH BLAC 19100	
Approved: Project Director	Location: BROWNING, MONTANA	Building Number	
	Date: 05/19/2020 / Checked: DGK / Drawn: DGK	Drawing Number: FX1.1	

INDIAN HEALTH SERVICE · PHS · 1955 ·

KEYNOTES

1	ROOM SHALL BE DESIGNED FOR A LIGHT HAZARD OCCUPANCY WITH A DESIGN DENSITY OF 0.10 GPM/SF OVER 1500 SQUARE FEET. DESIGN AREA MAY BE REDUCED IN ACCORDANCE WITH NFPA 13 DESIGN GUIDELINES WITH THE USE OF QUICK RESPONSE SPRINKLERS.
2	MECHANICAL ROOM SHALL BE SERVED WITH UPRIGHT SPRINKLERS THAT ARE, AT A MINIMUM, INTERMEDIATE TEMPERATURE RATED. PROVIDE HIGHER TEMPERATURE RATED SPRINKLERS, AS REQUIRED, FOR ALL SPRINKLERS INSTALLED WITHIN 7'-0" OF A HEAT PRODUCING PIECE OF EQUIPMENT, PER NFPA 13 DESIGN GUIDELINES. PROVIDE SIDEWALL PROTECTION BENEATH ALL SUSPENDED DUCTWORK AND EQUIPMENT THAT IS GREATER THAN 4'-0" IN WIDTH. ALL SPRINKLERS IN THIS ROOM SHALL HAVE PROTECTIVE WIRE GUARDS. ROOM SHALL BE DESIGNED FOR AN ORDINARY HAZARD GROUP 2 OCCUPANCY WITH A DESIGN DENSITY OF 0.20 GPM PER SF OVER 1500 SQUARE FEET.
3	ROOM SHALL BE DESIGNED FOR AN ORDINARY HAZARD GROUP 2 OCCUPANCY WITH A DESIGN DENSITY OF 0.20 GPM PER SF OVER 1500 SQUARE FEET. COORDINATE SPRINKLER LAYOUT WITH PERMANENT SHELVING. DO NOT INSTALL SPRINKLERS OVER THE SHELVING FOOTPRINT. SPRINKLERS SERVING THIS SPACE SHALL BE CONCEALED STYLE SPRINKLERS.
4	ROOM SHALL BE DESIGNED FOR ORDINARY HAZARD GROUP 2 OCCUPANCY WITH A DESIGN DENSITY OF 0.20 GPM PER SF OVER 1500 SQUARE FEET. SPRINKLERS SHALL BE CORROSION RESISTANT AND SHALL BE INTERMEDIATE TEMPERATURE RATED.
5	CEILING ACCESS PANEL. DO NOT ROUTE PIPING OVER THE TOP OF PANEL. COORDINATE LAYOUT WITH PANEL INSTALLING CONTRACTOR.
6	WORKING FIREPLACE. PROVIDE HIGH TEMPERATURE RATED SPRINKLERS FOR THOSE INSTALLED WITHIN 20' OF FIREPLACE CHIMNEY FOOTPRINT.

PRIMARY BUILDING DESIGN IS FOR AN NFPA 13R SYSTEM. ALL RESIDENTIAL AREAS OF FLOOR SHALL BE DESIGNED TO NFPA 13R DESIGN GUIDELINES. ALL PUBLIC SPACES SHALL BE DESIGNED TO NFPA 13 DESIGN STANDARDS, OCCUPANCY HAZARD AND DESIGN DENSITY AS NOTED ON PLANS. PER NFPA 13 GUIDELINES, PROTECTION NOT REQUIRED FOR EXTERNAL BALCONIES, OVERHANGS, SMALL CLOSETS 24 SF OR LESS, AND ATTIC SPACES.

CEILING PLAN PROVIDED COMPLETE WITH ALL HVAC, LIGHTING, SPEAKERS, FIRE ALARM DEVICES AND EXPOSED STRUCTURAL ELEMENTS. SEE RESPECTIVE DISCIPLINE SYMBOLS LEGENDS FOR SYMBOL IDENTIFICATION.

1 SECOND FLOOR FIRE SUPPRESSION PLAN
SCALE: 1/8" = 1'-0"

0' 4' 8' 16'
1/8" = 1'-0"

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-usa.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

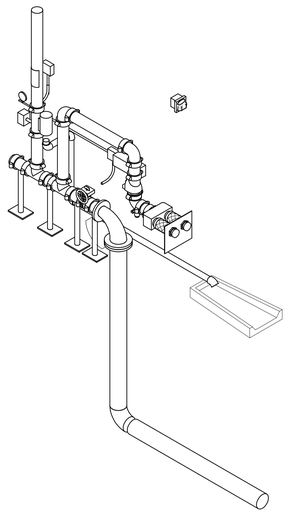
BENJAMIN SCHMITT
No. 62524PE
LICENSED PROFESSIONAL ENGINEER
MONTANA
05/19/2020

ARCHITECT/ENGINEERS:

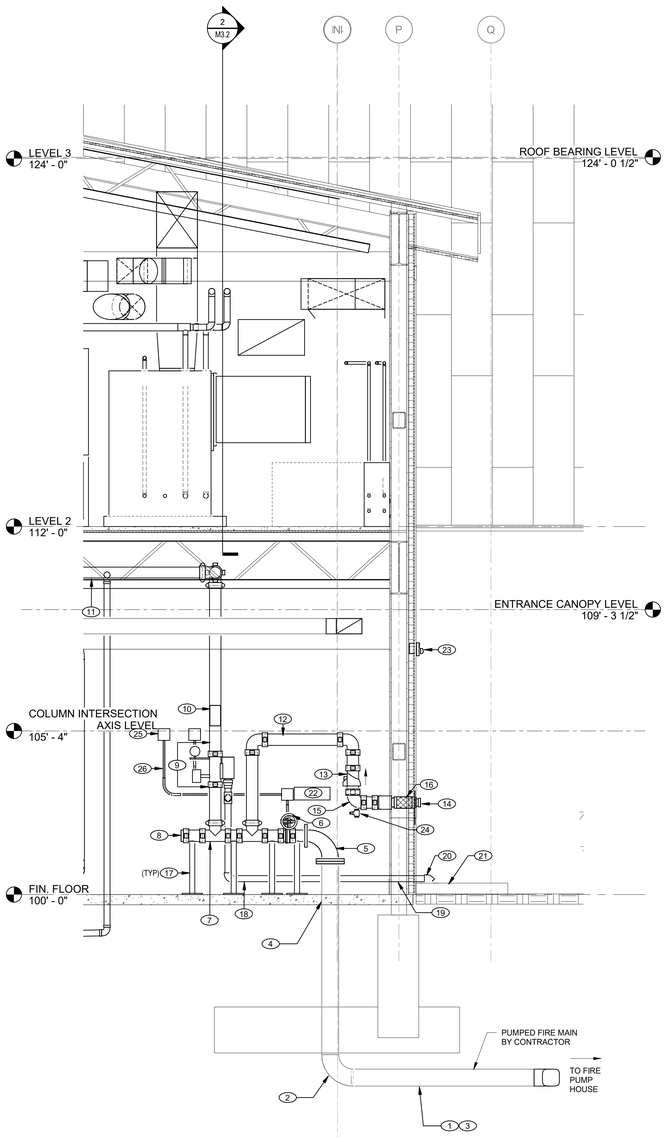
HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title	SECOND FLOOR FIRE SUPPRESSION PLAN
Approved: Project Director	
Project Title	APARTMENT BUILDING AND SITEWORK
Contract No.:	HHSI102201800005I
Task Order No.:	75H70119F30002
Location	BROWNING, MONTANA
Date	05/19/2020
Checked	DGK
Drawn	DGK
Project Number	H IH BLAC 19100
Building Number	
Drawing Number	FX1.2

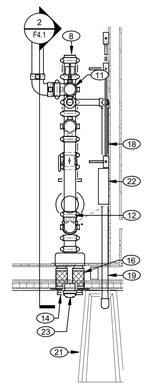
INDIAN HEALTH SERVICE · PHS · 1955 ·



3 FIRE SPRINKLER ENTRANCE ISOMETRIC
SCALE:



2 DETAILED FIRE ENTRY SECTION
SCALE: 1/2" = 1'-0"



1 FIRE ENTRY FLOOR PLAN
SCALE: 1/2" = 1'-0"

KEYNOTES

1	PUMPED 6" FIRE MAIN FROM PUMP HOUSE. SEE SITE UTILITY PLAN FOR PIPE ROUTE FROM 5' OUTSIDE BUILDING FOOTPRINT TO 5' OUTSIDE PUMP HOUSE. UNDERGROUND PIPING FROM 1' ABOVE FINISHED FLOOR OF THE PUMP HOUSE TO 1' ABOVE FINISHED FLOOR OF MAIN FACILITY TO BE PROVIDED BY THE BUILDING PLUMBING INSTALLATION CONTRACTOR. COORDINATE FIRE ENTRY WITH PLUMBING INSTALLATION CONTRACTOR. DO NOT CONNECT TO UNDERGROUND UNTIL PROPER UNDERGROUND CERTIFICATION DOCUMENTS HAVE BEEN RECEIVED. INCLUDE COPIES OF THOSE DOCUMENTS WITH THE FINAL FIRE SUPPRESSION O&M MANUAL.
2	RESTRAIN ALL CHANGES IN DIRECTION WITH ANY METHOD APPROVED BY NFPA 24. MOST COMMON METHOD IS WITH THE USE OF REINFORCED CONCRETE AND TIE RODS AS SHOWN IN DETAIL 3 ON SHEET F5.1.
3	MINIMUM DEPTH OF BURY FOR PIPE SHALL BE 5'-0".
4	SEAL FLOOR PENETRATION PER DETAIL 2 ON SHEET F5.1.
5	IF SUPPORTED HYDRAULICALLY, TRANSITION TO SMALLER PIPE SIZE USING A REDUCING ELBOW. REDUCING COUPLERS ARE NOT PERMITTED.
6	SUPERVISED SHUT-OFF VALVE NORMALLY OPEN. SUPERVISOR SWITCH TO BE MONITORED BY THE BUILDING'S FIRE ALARM SYSTEM. PROVIDE A UNIQUE FIRE ALARM ADDRESS FOR THIS DEVICE THAT IDENTIFIES BOTH FUNCTION OF VALVE AND VALVE LOCATION.
7	FIRE HEADER. ENTRY SHALL BE INSTALLED HORIZONTALLY AS SHOWN. IT IS NOT PERMITTED TO INSTALL ALL PIPING IN THE VERTICAL.
8	CAPPED HEADER TO ALLOW FOR FUTURE EXPANSION OF SYSTEM.
9	PROVIDE A FACTORY MANUFACTURED RISER MANIFOLD ASSEMBLY PER DETAIL 1 ON SHEET F5.1.
10	REMOTE AREA HYDRAULIC DESIGN PLACARD(S). PLACARD SHALL BE PERMANENTLY AFFIXED TO RISER. MULTIPLE PLACARDS MAY BE CONNECTED TOP TO BOTTOM USING CHAIN PROVIDED THEY DO NOT OBSTRUCT PROPER ACCESS TO VALVES.
11	TO BUILDING'S FIRE SPRINKLER SYSTEM.
12	FIRE DEPARTMENT CONNECTION (FDC) PIPING. SIZE PER NFPA 13 DESIGN GUIDELINES AND ROUTE TO FDC.
13	SWING CHECK VALVE.
14	FIRE DEPARTMENT CONNECTION (FDC). PROVIDE FLUSH WALL MOUNTED FDC WITH THREADS TO MATCH RESPONDING FIRE DEPARTMENT REQUIREMENTS. INSTALL WITH CENTER OF HOSE THREADS LOCATED 3'-0" ABOVE FINAL EXTERNAL GRADE AT THIS LOCATION. PROVIDE WEATHERPROOF COMBINATION BELL/STROBE FIRE ALARM DEVICE CENTERED ABOVE FDC. DEVICE SHALL BE RATED FOR OUTSIDE INSTALLATION AND SHALL BE INSTALLED AT THE HIGHEST LOCATION ABOVE FDC POSSIBLE. CONNECT TO FLOW SWITCH. PROVIDE DEVICE COMPATIBLE WITH BUILDING'S FIRE ALARM SYSTEM TO ALLOW FOR CONNECTION TO SYSTEM.
15	PROVIDE A DRAIN ELBOW ON FIRE DEPARTMENT CONNECTION (FDC) PIPING PRIOR TO ROUTING THROUGH EXTERIOR WALL TO SERVE FDC.
16	CORE DRILL OPENING FOR FIRE DEPARTMENT CONNECTION (FDC). PROVIDE A MECHANICAL LINK SEAL ON BOTH SIDES OF THE WALL. WALL PENETRATION SHALL BE WEATHER AND BUG TIGHT. PROVIDE FDC PLATE ON EXTERIOR SIDE OF WALL AND WALL PLATE WITH FACTORY WHITE FINISH ON INTERIOR SIDE OF WALL PENETRATION.
17	PIPE STAND. PROVIDE PIPE STAND IN ACCORDANCE WITH DETAIL 4 ON SHEET F5.1.
18	SIZE SYSTEM MAIN DRAIN IN ACCORDANCE WITH NFPA 13 DESIGN GUIDELINES AND ROUTE OUT EXTERIOR WALL. ALL DRAIN PIPING SHALL BE GALVANIZED AND SHALL BE SLOPED TO DRAIN.
19	CORE DRILL WALL OPENING AND PROVIDE A WALL PLATE ON BOTH SIDES OF THE WALL.
20	45 DEGREE THREADED DRAIN OUTLET. ROUTE THROUGH EXTERIOR WALL WITH CENTER OF PIPE LOCATED 6" ABOVE FINAL EXTERNAL GRADE. CORE DRILL OPENING. PROVIDE WEATHER AND INSECT TIGHT SEAL ON BOTH SIDES OF THE WALL. PROVIDE WALL PLATE ON BOTH SIDES OF WALL PENETRATION.
21	INSTALL A CONCRETE SPLASH BLOCK BENEATH DRAIN OUTLET THAT IS 24" X 36" X 3".
22	SPARE SPRINKLER CABINET. PROVIDE SPARE SPRINKLERS AND SPRINKLER WRENCHES IN ACCORDANCE WITH DIRECTION NOTED WITHIN NFPA 13 DESIGN GUIDELINES AND PROJECT SPECIFICATIONS.
23	WEATHERPROOF COMBINATION BELL/STROBE/SIGN LIKE POTTER ELECTRIC SASH SERIES, OR APPROVED EQUAL. DEVICE SHALL BE RATED FOR OUTSIDE INSTALLATION AND SHALL BE INSTALLED WITH THE BOTTOM OF DEVICE LOCATED 8'-0" TO 10'-0" ABOVE FINAL EXTERIOR GRADE. CENTER DEVICE OVER THE TOP OF THE FDC. WIRING BY FIRE ALARM INSTALLING CONTRACTOR. CONNECT TO FLOW SWITCH INSTALLED AT FIRE SPRINKLER RISER AND TO BUILDING'S FIRE ALARM SYSTEM. COORDINATE ELECTRICAL REQUIREMENTS WITH ELECTRICAL INSTALLING CONTRACTOR AND PROVIDE DEVICE WITH VOLTAGE APPROVED BY ELECTRICAL INSTALLING CONTRACTOR.
24	DRAIN VALVE. NORMALLY CLOSED.
25	FIRE ALARM JUNCTION BOX. JUNCTION BOX SHALL BE PAINTED RED.
26	FIRE ALARM WIRING INSTALLED IN RED CONDUIT SECURED TIGHT TO STRUCTURE. SEE FIRE ALARM AND ELECTRICAL PLANS AND SPECIFICATIONS FOR WIRING REQUIREMENTS.

ADDENDUM 001 1	02/02/2022
Revisions:	Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-usa.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

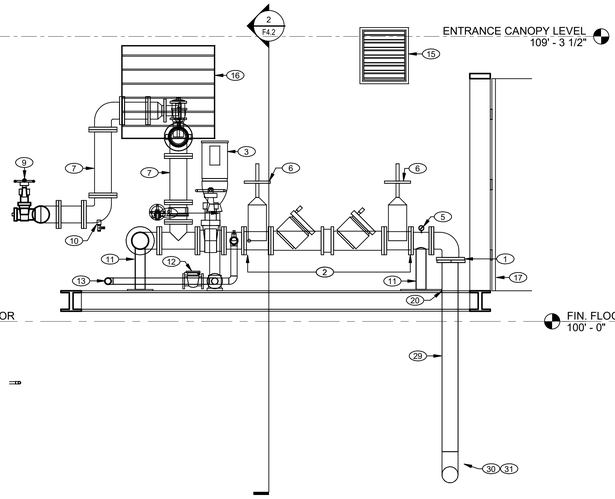
MONTANA
BENJAMIN SCHMIDT
No. 62524PE
LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

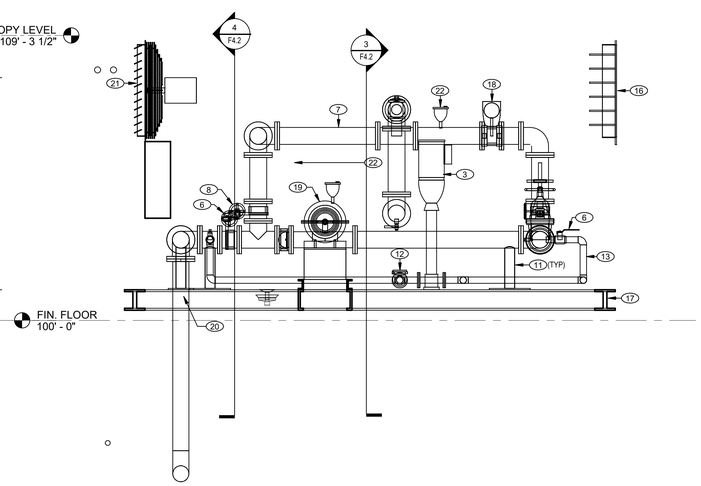
HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title	FIRE SUPPRESSION LARGE-SCALE PLANS
Approved: Project Director	
Project Title	APARTMENT BUILDING AND SITEWORK
Contract No.:	HHSI102201800005I
Task Order No.:	75H70119F30002
Location	BROWNING, MONTANA
Date	05/19/2020
Checked	DGK
Drawn	DGK
Project Number	H IH BLAC 19100
Building Number	
Drawing Number	F4.1

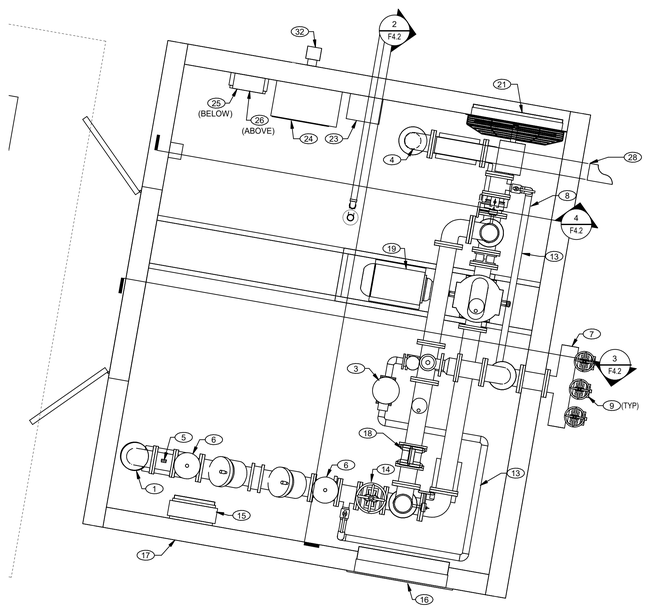
INDIAN HEALTH SERVICE · PHS · 1955 ·



3 FIRE PUMP SHED SECTION 2
SCALE: 1/2" = 1'-0"

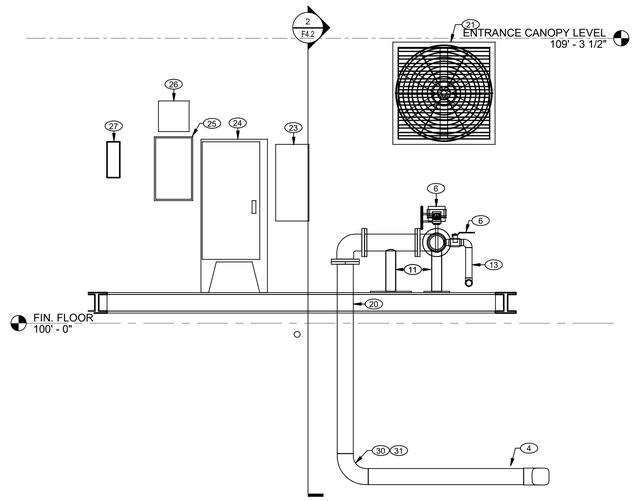


2 FIRE PUMP SHED SECTION 1
SCALE: 1/2" = 1'-0"

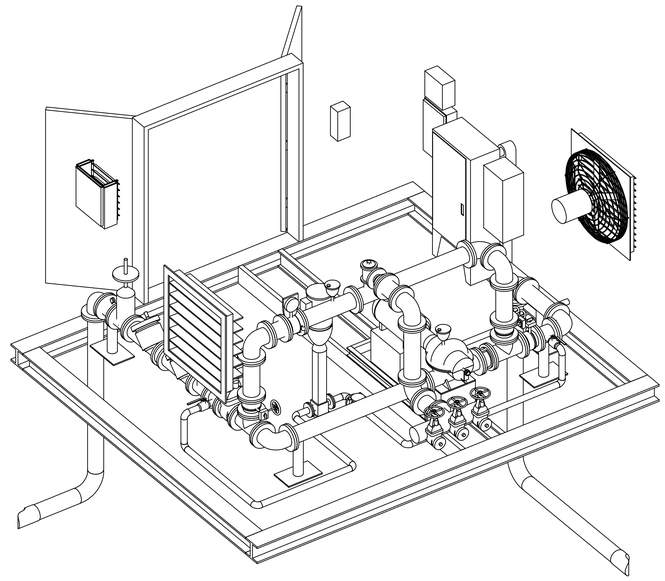


1 FIRST FLOOR FIRE SUPPRESSION PLAN - FIRE PUMP/ENCLOSURE
SCALE: 1/2" = 1'-0"

KEYNOTES	
1	ALL ITEMS FROM CONNECTION TO UNDERGROUND ENTERING AND EXITING PUMP HOUSE FOR ALL UTILITIES AND DISCIPLINES TO BE PROVIDED AS A PACKAGED ASSEMBLY PER THE PUMP HOUSE SPECIFICATIONS.
2	6" DOUBLE-CHECK BACKFLOW PREVENTER WITH SUPERVISED OS&Y GATE VALVE ON EACH SIDE OF THE DOUBLE CHECK VALVE ASSEMBLY. VALVES SHALL BE MONITORED BY THE MAIN FACILITIES FIRE ALARM SYSTEM. EACH VALVE SHALL HAVE A UNIQUE FIRE ALARM ADDRESS THAT DESCRIBES THE FUNCTION AND LOCATION OF THE VALVE BEING SUPERVISED.
3	JOCKEY PUMP, JP-1.
4	6" PUMPED FIRE SPRINKLER MAIN TO BUILDING. SEE SITE UTILITY PLAN FOR PIPING FROM 5' OUTSIDE THIS PUMP HOUSE TO 5' OUTSIDE ENTRANCE TO FACILITY.
5	WATER PRESSURE GAUGE.
6	PROVIDE A SUPERVISED SHUT-OFF VALVE. TAMPER SWITCH TO BE MONITORED BY THE BUILDING'S FIRE ALARM SYSTEM. PROVIDE A UNIQUE FIRE ALARM ADDRESS THAT PROPERLY DEPICTS THIS VALVE'S FUNCTION AND LOCATION. VALVE NORMALLY OPEN.
7	6" FIRE PUMP TEST HEADER.
8	SUPERVISED SHUT-OFF VALVE MONITORED BY THE BUILDING'S FIRE ALARM SYSTEM. VALVE NORMALLY CLOSED.
9	2-1/2" HOSE VALVE CONNECTION.
10	DRAIN ELBOW WITH A BALL DRIP DRAIN VALVE.
11	PIPE STAND. PROVIDE PIPE STAND IN ACCORDANCE WITH DETAIL 4 ON SHEET F5.1.
12	SWING CHECK VALVE.
13	JOCKEY PUMP PRESSURE MAINTENANCE PIPING.
14	SUPERVISED SHUT-OFF VALVE. VALVE MUST BE AN OS&Y STYLE GATE VALVE.
15	7.5 KW ELECTRIC UNIT HEATER WITH THERMOSTAT, WALL MOUNTED.
16	WALL VENTILATION LOUVER PER PUMP HOUSE SPECIFICATIONS.
17	STEEL BUILDING FRAME PER PUMP HOUSE SPECIFICATIONS. POUR FLOOR SLAB CONCRETE ONCE FRAME IS ANCHORED PER PUMP HOUSE SPECIFICATIONS.
18	FLOW METER.
19	FIRE PUMP, FP-1, ON STEEL BASE. PROVIDE PER PUMP HOUSE SPECIFICATIONS.
20	SEAL FLOOR PENETRATION PER DETAIL 2 ON SHEET F5.1.
21	WALL VENTILATION FAN PER PUMP HOUSE SPECIFICATIONS.
22	PRESSURE RELIEF VALVE.
23	POWER PACK, 15 KVA.
24	FIRE PUMP CONTROLLER.
25	JOCKEY PUMP CONTROLLER.
26	LOAD CENTER PANEL.
27	POWER DISCONNECT.
28	6" PUMPED FIRE SPRINKLER MAIN ROUTED BELOW GRADE TO SERVE BUILDING FIRE SPRINKLER SYSTEM ONLY. SEE SHEET FX1.1 FOR CONTINUATION OF PIPING. PIPING SHOWN FOR CLARIFICATION AND COORDINATION PURPOSES.
29	6" FIRE MAIN FROM CONNECTION TO SITE TO 6" ABOVE PUMP HOUSE FLOOR BY SITE PIPING PROVIDER. COORDINATE LOCATION REQUIREMENT WITH SITE PIPING INSTALLING CONTRACTOR.
30	RESTRAIN ALL CHANGES IN DIRECTION WITH ANY METHOD APPROVED BY NFPA 24. MOST COMMON METHOD IS WITH THE USE OF REINFORCED CONCRETE AND TIE RODS AS SHOWN IN DETAIL 3 ON SHEET F5.1.
31	DO NOT INSTALL FITTINGS WITH 24" OF BUILDING FOOTINGS.
32	POWER CONNECTIONS. PROVIDE POWER TO BUILDING PER PUMP HOUSE MANUFACTURER'S REQUIREMENTS. COORDINATE FINAL POWER LOCATION AND CONNECTION REQUIREMENTS WITH PUMP HOUSE INSTALLING CONTRACTOR.



4 FIRE PUMP SHED SECTION 3
SCALE: 1/2" = 1'-0"



5 FIRE PUMP ISOMETRIC
SCALE:

ADDENDUM 001 (1)	02/02/2022
Revisions:	Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-uso.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA
BENJAMIN SCHMITT
No. 62524PE
LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
FIRE PUMP LARGE-SCALE PLANS

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

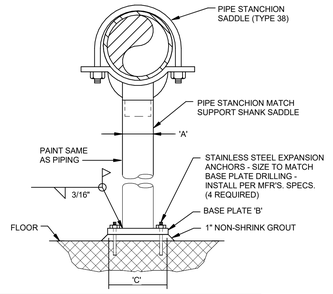
Date	Checked	Drawn
05/19/2020	DGK	DGK

Project Number
H IH BLAC 19100

Building Number

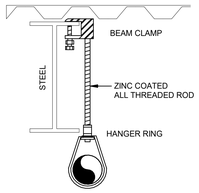
Drawing Number
F4.2

INDIAN HEALTH SERVICE · PHS · 1955 ·



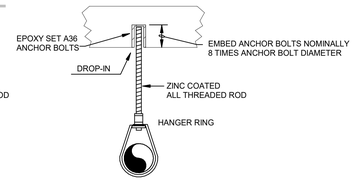
SUPPORT SCHEDULE				
PIPE SIZE	'A' SUPPORT PIPE DIA.	'B' PLATE THICKNESS (IN.)	'C' PLATE SIZE (IN.)	ANCHOR BOLTS DIA.
≤4	2"	3/8	8x8	1/2"
≤12	3"	1/2	10x10	5/8"

4 PIPE SUPPORT DETAIL
SCALE: 12" = 1'-0"



HANGER NOTES

1"-1 1/4"	EVERY 12'-0"
1 1/2"-6"	EVERY 15'-0"
3/8" ROD 1"-4", 1/2" ROD 6"	

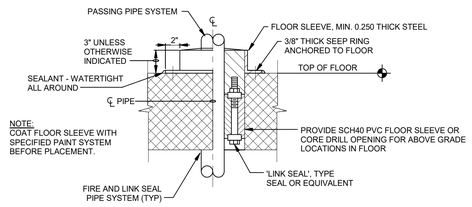


HANGER NOTES

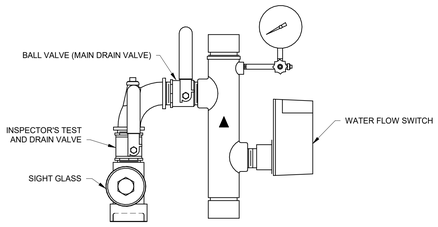
1"-1 1/4"	EVERY 12'-0"
1 1/2"-3"	EVERY 15'-0"
4"-6"	EVERY 10'-0"
3/8" ROD 1"-4", 1/2" ROD 6"	

GENERAL NOTES:
1. HANG ALL ARMOVERS LONGER THAN 2'-0".
2. ALL HANGERS PER NFPA 13.
3. THERE SHALL BE NOT LESS THAN ONE HANGER FOR EACH SECTION OF PIPE.
4. ALL RODS SHALL BE ZINC COATED UNLESS OTHERWISE NOTED.

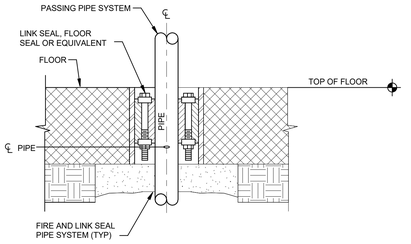
5 HANGER DETAILS
SCALE: 12" = 1'-0"



6 PIPE FLOOR SLEEVE
SCALE: 12" = 1'-0"

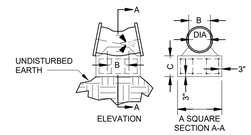


1 RISER MANIFOLD ASSEMBLY
SCALE: 12" = 1'-0"



NOTE: SEE "BASIC HVAC MATERIALS AND METHODS" AND "BASIC PLUMBING MATERIALS AND METHODS" FOR FURTHER SLEEVE REQUIREMENTS.

2 PIPE SLEEVE FOR PIPE THROUGH SLAB ON GRADE
SCALE: 12" = 1'-0"



REINFORCED CONCRETE THRUST BLOCKS

REINFORCED CONCRETE THRUST BLOCKS

PIPE DIA.	Ø = 11-1/4"							Ø = 22-1/2"						
	A FT. IN.	B FT. IN.	C FT. IN.	BAR SIZE	# BARS EACH WAY	STEEL (LBS)	CONC. CUBIC YARDS	A FT. IN.	B FT. IN.	C FT. IN.	BAR SIZE	# BARS EACH WAY	STEEL (LBS)	CONC. CUBIC YARDS
6"	1'-3"	0'-9"	1'-0"	-	-	-	0.1	1'-6"	0'-9"	1'-0"	-	-	-	0.1
8"	1'-6"	1'-0"	1'-0"	-	-	-	0.1	1'-6"	1'-0"	1'-0"	-	-	-	0.1
10-12"	1'-6"	1'-0"	1'-0"	NO. 4	3	4.0	0.1	2'-3"	1'-0"	1'-0"	NO. 4	3	7.0	0.2
16"	2'-3"	1'-0"	1'-0"	NO. 4	3	7.0	0.2	3'-0"	1'-0"	1'-0"	NO. 4	6	16.7	0.4
20"	2'-9"	1'-3"	1'-0"	NO. 4	4	12.0	0.4	3'-9"	1'-3"	1'-0"	NO. 4	7	30.4	0.6
24"	3'-3"	1'-6"	1'-0"	NO. 4	6	22.0	0.5	4'-6"	1'-6"	1'-3"	NO. 5	6	50.1	1.1

PIPE DIA.	Ø = 45°							Ø = 90°						
	A FT. IN.	B FT. IN.	C FT. IN.	BAR SIZE	# BARS EACH WAY	STEEL (LBS)	CONC. CUBIC YARDS	A FT. IN.	B FT. IN.	C FT. IN.	BAR SIZE	# BARS EACH WAY	STEEL (LBS)	CONC. CUBIC YARDS
6"	1'-9"	1'-0"	1'-0"	-	-	-	0.2	2'-3"	1'-0"	1'-0"	-	-	-	0.2
8"	2'-3"	1'-0"	1'-0"	-	-	-	0.2	3'-0"	1'-0"	1'-0"	-	-	-	0.4
10-12"	3'-3"	1'-0"	1'-0"	NO. 4	6	22.0	0.4	4'-3"	1'-0"	1'-3"	NO. 5	6	47.0	0.9
16"	4'-3"	1'-0"	1'-3"	NO. 5	6	46.9	0.9	5'-9"	1'-0"	1'-6"	NO. 5	10	109.5	2.0
20"	5'-3"	1'-3"	1'-6"	NO. 5	8	79.3	1.6	7'-0"	1'-3"	1'-9"	NO. 5	15	203.4	3.3
24"	6'-3"	1'-6"	1'-6"	NO. 5	11	131.9	2.3	8'-6"	1'-6"	2'-0"	NO. 6	15	360.5	5.6

3 REINFORCED CONCRETE THRUST BLOCK
SCALE: 12" = 1'-0"

Revisions:	Date
ADDENDUM 001 ⚠1	02/02/2022

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-usa.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA
BENJAMIN SCHMITT
No. 62524PE
LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
FIRE SUPPRESSION DETAILS

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

Date **05/19/2020** | Checked **DGK** | Drawn **DGK**

Project Number
H IH BLAC 19100

Building Number

Drawing Number
F5.1

INDIAN HEALTH SERVICE · PHS · 1955 ·

MECHANICAL SYMBOLS LEGEND
(AS APPLICABLE)

PIPING AND SPECIALTIES

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
RD	REFRIGERANT DISCHARGE	PGR	PROPYLENE GLYCOL RETURN		INLINE PUMP
RL	REFRIGERANT LIQUID	PGS	PROPYLENE GLYCOL SUPPLY	MV	AIR VENT - MANUAL
RS	REFRIGERANT SUCTION	FOR	FUEL OIL RETURN	A	AIR VENT - AUTOMATIC
CD	COIL CONDENSATE DRAIN	FOS	FUEL OIL SUPPLY	FS	FLOW SWITCH
LPS (XX)	LOW PRESSURE STEAM (PRESSURE)	FOV	FUEL OIL VENT	PS	PRESSURE SWITCH
MPS (XX)	MEDIUM PRESSURE STEAM (PRESSURE)	CR	CONDENSER WATER RETURN	AS	AIR SEPARATOR
HPS (XX)	HIGH PRESSURE STEAM (PRESSURE)	CS	CONDENSER WATER SUPPLY		THERMOMETER
LPC	LOW PRESSURE CONDENSATE	HPWR	HEAT PUMP WATER RETURN	TW	THERMOMETER WELL
MPC	MEDIUM PRESSURE CONDENSATE	HPWS	HEAT PUMP WATER SUPPLY		BALL JOINT
HPC	HIGH PRESSURE CONDENSATE	D / R	PITCH OF PIPE, RISE (R) OR DROP (D)	PSD	PUMP SUCTION DIFFUSER
PC	PUMPED CONDENSATE		PIPE ANCHOR - MAIN		FLOAT THERMOSTATIC TRAP
MU	MAKE-UP WATER		PIPE ANCHOR - INTERMEDIATE		FLOWMETER - ORIFICE
HCR	HOT/CHILLED WATER RETURN	H	HANGER - ROD		FLOWMETER - VENTURI
HCS	HOT/CHILLED WATER SUPPLY	H	HANGER - SPRING		DUPLEX STRAINER
HWR	HEATING WATER RETURN		ALIGNMENT GUIDE		
HWS	HEATING WATER SUPPLY		FLEX CONNECTOR		
CWR	CHILLED WATER RETURN		EXPANSION - LOOP		
CWS	CHILLED WATER SUPPLY		EXPANSION - JOINT		
EGR	ETHYLENE GLYCOL RETURN				
EGS	ETHYLENE GLYCOL SUPPLY				

DUCTWORK

RECT. RND. OVAL	SUPPLY (SA), OUTSIDE (OA), VENTILATION (VA) AIR DUCT (UP/DOWN/SECTION)	R	ELEVATION CHANGE (RISE OR DROP)
	RETURN (RA) AIR DUCT (UP/DOWN/SECTION)	BD	HIGH EFF. TAKE OFF FITTING WITH VOLUME DAMPER
	EXHAUST (EA) AIR DUCT (UP/DOWN/SECTION)		BACKDRAFT DAMPER
10/6 SA	RECTANGLE DUCT (WIDTH/HEIGHT/SYSTEM)		TURNING VANES
10 Ø SA	ROUND DUCT (DIAMETER/SYSTEM)	VD	VOLUME CONTROL DAMPER
10/6 Ø SA	FLAT OVAL DUCT (WIDTH/HEIGHT/SYSTEM)		VOLUME CONTROL DAMPER
	FLEXIBLE DUCTWORK		OPPOSED BLADE DAMPER
			PARALLEL BLADE DAMPER

FD	FIRE DAMPER (IN HORIZONTAL DUCT)
SD	SMOKE DAMPER (IN HORIZONTAL DUCT)
FD	FIRE DAMPER (IN VERTICAL DUCT)
SD	SMOKE DAMPER (IN VERTICAL DUCT)
FSD	FIRE/SMOKE DAMPER (IN HORIZONTAL DUCT)
FSD	FIRE/SMOKE DAMPER (IN VERTICAL DUCT)
AD	DUCT ACCESS PANEL
RP	RELIEF PANEL
CAP	DUCT END CAP

H.V.A.C.

	SUPPLY DIFFUSER		VAV TERMINAL UNIT
	SUPPLY REGISTER		FAN POWERED VAV TERMINAL UNIT
	SUPPLY SLOT DIFFUSER		SIDE WALL DIFFUSER
	RETURN REGISTER		ROUND DIFFUSER
	RETURN GRILLE		EXTERIOR LOUVER
	EXHAUST REGISTER	X / CFM	SUPPLY IDENTIFICATION TAG X DENOTES TYPE
	EXHAUST GRILLE	X / CFM / Y	RETURN/ EXHAUST/LOUVER IDENTIFICATION TAG X DENOTES TYPE
	DUAL DUCT TERMINAL UNIT	M	MOTORIZED ACTUATOR
			PNEUMATIC ACTUATOR

T	THERMOSTAT
TG	THERMOSTAT WITH GUARD
S XX-X	TEMPERATURE SENSOR - XX-X DENOTES SERVED
SCO	CARBON MONOXIDE SENSOR
SCO2	CARBON DIOXIDE SENSOR
SNOX	NITROGEN DIOXIDE SENSOR
SH	HUMIDITY SENSOR
SP	PRESSURE SENSOR
SG	TEMPERATURE SENSOR WITH GUARD
H	HUMIDISTAT
H	EMERGENCY SHUTDOWN SWITCH

FITTINGS

SINGLE LINE	DOUBLE LINE		SINGLE LINE	DOUBLE LINE		SINGLE LINE	DOUBLE LINE	
		ELBOW			ELBOW - DOUBLE BRANCH			REDUCER - CONCENTRIC
		LONG RADIUS ELBOW			ELBOW - SIDE OUTLET UP			REDUCER - ECCENTRIC
SR	SR	SHORT RADIUS ELBOW			ELBOW - SIDE OUTLET DOWN			CAPPED CONNECTION
		45° ELBOW			ELBOW - OUTLET DOWN			THREADED CONNECTION
		TEE			ELBOW - OUTLET UP			FLANGED CONNECTION
		CROSS			TEE - OUTLET DOWN			STRAINER
		LATERAL			TEE - OUTLET UP			STRAINER WITH BALL VALVE DRAIN
		TEE - SINGLE SWEEP			TEE - SIDE OUTLET DOWN			STRAINER WITH COUPLER
					TEE - SIDE OUTLET UP			BUSHING
					SIAMESE CONNECTION			FLOW DIRECTION

VALVES

	GATE VALVE	STOP/CHECK GATE VALVE (ARROW IND. FLOW)
	ANGLE GATE VALVE	SPRING GATE CHECK VALVE (ARROW IND. FLOW)
	BALL VALVE	SWING GATE CHECK VALVE (ARROW IND. FLOW)
L	LOCKABLE BALL VALVE	ANGLE STOP/CHECK VALVE
	BUTTERFLY VALVE	2-WAY ELECTROMOTOR VALVE
	GLOBE VALVE	2-WAY AIRMOTOR VALVE
	ANGLE GLOBE VALVE	2-WAY MANUAL VALVE
	PLUG VALVE	3-WAY ELECTROMOTOR VALVE
	DIAPHRAGM VALVE	3-WAY AIRMOTOR VALVE
	DIAPHRAGM ACTUATED VALVE	3-WAY MANUAL VALVE
	VALVE IN VERTICAL LINE	SAFETY PRESSURE RELIEF VALVE
	HOSE GATE VALVE	PRESSURE RELIEF VALVE
	HOSE GLOBE VALVE	TEMPERATURE MIXING VALVE
	HOSE ANGLE VALVE	AUTO FLOW VALVE
S	SOLENOID VALVE	FLOAT VALVE
PIV	POST INDICATOR VALVE	LOCK SHIELD
		CIRCUIT SETTER

	MULTIPURPOSE VALVE
PRV-X	PRESSURE REDUCING VALVE
PRV-X	PRESSURE REDUCING PILOT VALVE
RPBP	REDUCED PRESS. BACKFLOW ASSY.
DC	DOUBLE CHK VALVE BACKFLOW ASSY.
DDC	DOUBLE DETECTOR CHECK VALVE
	OUTSIDE STEM & YOKE VALVE
	QUICK CLOSING FUSIBLE LINK VALVE
	QUICK OPENING VALVE
	PRESSURE GAUGE & BALL VALVE
	GATE VALVE WITH GLOBE VALVE BY-PASS
	GLOBE VALVE WITH GLOBE VALVE BY-PASS
	SPRINKLER - CONCEALED
R	SPRINKLER - RECESSED
	SPRINKLER - SIDEWALL
	SPRINKLER - UPRIGHT
	SPRINKLER - ZONE CONTROL

PLUMBING

	PIPE REMOVAL	NPCW	NON-POTABLE COLD WATER
DCW	DOMESTIC COLD WATER	NPHW	NON-POTABLE HOT WATER
DHW	DOMESTIC HOT WATER	NPSW	NON-POTABLE SOFT WATER
RHW	DOMESTIC HOT WATER RECIRC.	PD	PUMPED DISCHARGE
DSW	DOMESTIC SOFT WATER	G (XX)	NATURAL GAS (PSIG)
SAN	SANITARY	PG (XX)	PROPANE GAS (PSIG)
ST	STORM	V	VENT
SO	STORM OVERFLOW	AW	ACID WASTE
GW	GREASE WASTE	AV	ACID VENT
CA	COMPRESSED AIR	OSW	OILSAND
PA	PROCESSED AIR	IR	IRRIGATION

P	TRAP PRIMER
HB	HOSE BIBB
WH	WALL HYDRANT
RH	ROOF HYDRANT
CO	CLEAN OUT
FCO	FLOOR CLEAN OUT
FD	FLOOR DRAIN
VTR	VENT THRU ROOF (X DENOTES IDENTIFICATION)
RD	ROOF DRAIN
ORD	OVERFLOW ROOF DRAIN
DSN	DOWNSPOUT NOZZLE

MISCELLANEOUS

XX / X	EQUIPMENT IDENTIFICATION TAG (ELECTRICAL CONNECTION REQUIRED)		NEW CONNECTION POINT
X / XX	DETAIL REFERENCE SHEET REFERENCE		POINT OF DISCONNECT
Y / X / XX / XX	SECTION CUT REFERENCE SHEET REFERENCE	OA	OUTSIDE AIR
		VA	VENTILATION AIR
		EA	EXHAUST AIR
	ELECTRICAL PANEL - SHOWN FOR COORDINATION PURPOSES ONLY	RA	RELIEF OR RETURN AIR
		SA	SUPPLY AIR
	ELECTRICAL PANEL - SHOWN FOR COORDINATION PURPOSES ONLY.	MA	MIXED AIR
		RF	RELIEF OR RETURN FAN
	ELECTRICAL PANEL - SHOWN FOR COORDINATION PURPOSES ONLY	EF	EXHAUST FAN
T	ELECTRICAL TRANSFORMER - SHOWN FOR COORDINATION PURPOSES ONLY	(TYP)	TYPICAL

WC	WATER CLOSET
UR	URINAL
L	LAVATORY
S	SINK
DF	DRINKING FOUNTAIN
EWC	ELECTRIC WATER COOLER
SS	SERVICE SINK
SH	SHOWER
DWH	DOMESTIC WATER HEATER
MSB	MOP SINK BASIN
	DASHED DARK LINEWORK = DEMOLITION
	LIGHT LINEWORK = EXISTING
	DARK LINEWORK = NEW

GENERAL MECHANICAL NOTES

APPLY TO ALL MECHANICAL DUCTWORK SHEETS

A. BOLD LINE WEIGHT INDICATES NEW WORK TO BE INSTALLED UNDER THIS CONTRACT.
B. ROUTING INDICATED ON DRAWINGS IS APPROXIMATE AND DOES NOT INCLUDE ALL OFFSETS, FITTINGS, VALVES, ETC. CONTRACTOR TO FIELD VERIFY DUCT SIZE AND SERVICE PRIOR TO FINAL CONNECTION. COORDINATE LOCATION OF HVAC WORK WITH LIGHTING, STRUCTURAL MEMBERS, PIPING SYSTEMS, ETC. PROVIDE OFFSETS AND CLEARANCES OR RELOCATE HVAC WORK AS REQUIRED TO AVOID CONFLICTS WITH WORK OF ALL OTHER TRADES.
C. HVAC WORK SHALL NOT BE LOCATED OVER ELECTRICAL, DATA, OR COMMUNICATION EQUIPMENT ROOMS. HVAC WORK SHALL NOT BE LOCATED ABOVE ELECTRICAL / DATA / COMMUNICATION EQUIPMENT OR PANELS.
D. SUPPORT ALL DUCTWORK, PIPING, EQUIPMENT, ETC. FROM BUILDING STRUCTURE. HOLD PIPING TIGHT TO BOTTOM OF STRUCTURAL MEMBERS OR RUN THROUGH JOIST WEBS IF POSSIBLE. DO NOT USE WIRE OR PERFORATED METAL TO SUPPORT PIPING. DO NOT SUPPORT PIPING FROM OTHER PIPING, DUCTWORK AND/OR ELECTRICAL CONDUITS. DO NOT SUPPORT FROM BOTTOM OF CHORD OF BAR JOIST OR FROM METAL ROOF DECK.
E. ALL DUCT SIZES SHOWN ARE CLEAR AIRWAY DIMENSIONS. INCREASE SHEET METAL SIZE TO ACCOMMODATE DUCT LINER AS REQUIRED.
F. ELBOWS SHALL BE CONSTRUCTED WITH CENTERLINE RADIUS OF NOT LESS THAN 1-1/2 TIMES THE WIDTH OF DUCT. WHERE SPACE CONDITIONS DO NOT PERMIT THIS RADIUS OR WHERE INDICATED ON DRAWINGS SQUARE ELBOWS WITH TURNING VANES SHALL BE USED.
G. SIZE TRANSITIONS WITH A MINIMUM SLOPE OF 1:4.
H. PROVIDE DRAW BANDS AND SEAL END OF DUCT INSULATION ON ALL FLEXIBLE CONNECTIONS. MAXIMUM LENGTH OF FLEXIBLE DUCTS SHALL BE THREE FEET.
I. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SEALING PENETRATIONS THROUGH A FIRE RATED, SMOKE RATED OR COMBINATION FIRE & SMOKE RATED SEPARATIONS. SEE SPECIFICATIONS FOR FIRE & SMOKE RATED SEALANTS. SEE ARCHITECTURAL PLANS FOR RATED SEPARATIONS.
J. COORDINATE ALL GRILLE, REGISTER AND DIFFUSER LOCATIONS WITH REFLECTED CEILING PLAN, LIGHT FIXTURES, SPRINKLER HEADS, COMMUNICATION/SOUND DEVICES AND FIRE ALARM DEVICES.
K. INSTALL ESCUTCHEON PLATES ON ALL WALL PENETRATIONS SERVING ROUND DUCT WALL PENETRATIONS. FABRICATE ESCUTCHEON PLATES TO TRIM THE OPENING IN THE WALL.
L. INSTALL WALL ANGLE FOR ALL RECTANGULAR DUCT PENETRATIONS THROUGH WALLS.
M. FOR EXPOSED DUCTWORK THOROUGHLY CLEAN, REMOVE ALL SHIPPING LABELS AND OTHER IDENTIFICATION TAGS. DUCTWORK DESIGNATED TO BE PAINTED SHALL HAVE PHOSPHATIZED FINISH. PROVIDE MILL-PHOSPHATIZED FINISH FOR EXPOSED NOT DESIGNATED TO BE PAINTED. COORDINATE WITH ARCHITECTURAL DRAWINGS DUCTWORK DESIGNATED FOR PAINTING AND EXPOSED DUCTWORK REQUIREMENTS.
N. PROVIDE DUCT MOUNTED ACCESS DOOR AT FIRE DAMPER, SMOKE DAMPER OR COMBINATION FIRE/SMOKE DAMPERS TO ALLOW FOR MAINTENANCE AND VISUAL INSPECTION PER NFPA REQUIREMENTS.
O. VOLUME DAMPERS ABOVE INACCESSIBLE CEILINGS SHALL HAVE EXTENSION RODS AND ESCUTCHEON PLATES.
P. LOCATE AND INSTALL EQUIPMENT TO PROVIDE ALL CODE AND MANUFACTURER'S RECOMMENDED CLEARANCES. KEEP HVAC PIPING, DUCTWORK, ETC. OUT OF CLEARANCE AREAS.
Q. ALL OPENINGS IN WALLS AND FLOORS FOR PIPING SHALL BE CORE DRILLED OR SAW CUT, UNLESS OTHERWISE NOTED.
R. ALL HVAC PIPING WORK SHALL BE LOCATED ABOVE CEILINGS, IN A PIPE CHASE, OR OTHER CONCEALED LOCATIONS, UNLESS OTHERWISE NOTED. LOCATE AND ARRANGE VALVES, DRAIN FITTINGS, ETC. TO BE ACCESSIBLE THROUGH LAY-IN CEILINGS, ACCESS PANELS OR ACCESS DOORS. PROVIDE ACCESS PANEL OR ACCESS DOOR FOR ALL VALVES, DRAIN FITTINGS, ETC. AT NON-ACCESSIBLE LOCATIONS.
S. INSTALL SECTIONAL VALVES ON EACH BRANCH AND/OR RISER SERVING TWO OR MORE HYDRONIC TERMINALS OR EQUIPMENT CONNECTIONS. INSTALL VALVES ADJACENT TO MAIN.
T. INSTALL SHUTOFF VALVES ON INLET AND OUTLET OF EACH MECHANICAL EQUIPMENT ITEM AND/OR EACH HYDRONIC TERMINAL.
U. SLOPE HVAC PIPING TO DRAIN VALVES. PROVIDE MANUAL AIR VENTS AT HIGH POINTS AND AT TOP OF RISERS.
V. SEAL ALL HVAC PENETRATIONS. SEAL PENETRATIONS THROUGH RATED WALLS, FLOORS OR CEILINGS WITH MATERIALS APPROPRIATE FOR RATING.
W. PIPING IN EXTERIOR WALLS SHALL BE LOCATED ON THE INTERIOR SIDE OF BUILDING INSULATION AND VAPOR BARRIER.
X. COORDINATE INSTALLATION OF BUILDING INSULATION TO RUN CONTINUOUS BETWEEN PIPING AND EXTERIOR WALL SURFACE.
Y. PVC PIPING SHALL NOT BE INSTALLED IN ANY RETURN AIR PLENUM UNLESS THE PIPING IS INSTALLED IN A PRE-APPROVED RATED ASSEMBLY.
Z. COORDINATE DUCTWORK WITH STRUCTURAL CROSS BRACING. PROVIDE TOP AND BOTTOM BRIDGING BETWEEN JOISTS WHERE DUCTWORK IS TO BE INSTALLED BETWEEN THE JOISTS. COORDINATE WITH ALL TRADES.

GENERAL PLUMBING NOTES

APPLY TO ALL PLUMBING SHEETS

A. BOLD LINE WEIGHT INDICATES NEW WORK TO BE INSTALLED UNDER THIS CONTRACT.
B. ROUTING INDICATED ON DRAWINGS IS APPROXIMATE AND DOES NOT INCLUDE ALL OFFSETS, FITTINGS, VALVES, ETC. CONTRACTOR TO FIELD VERIFY PIPE SIZE AND SERVICE PRIOR TO FINAL CONNECTION. COORDINATE LOCATION OF PLUMBING PIPING WORK WITH LIGHTING, STRUCTURAL MEMBERS, HVAC, PIPING SYSTEMS, ETC. PROVIDE OFFSETS AND CLEARANCES OR RELOCATE PLUMBING WORK AS REQUIRED TO AVOID CONFLICTS WITH WORK OF ALL OTHER TRADES.
C. PLUMBING WORK SHALL NOT BE LOCATED OVER ELECTRICAL, DATA OR COMMUNICATION EQUIPMENT ROOMS. PLUMBING WORK SHALL NOT BE LOCATED ABOVE ELECTRICAL / DATA / COMMUNICATION EQUIPMENT OR PANELS.
D. SUPPORT ALL PLUMBING PIPING, EQUIPMENT, ETC. FROM BUILDING STRUCTURE. HOLD PIPING TIGHT TO BOTTOM OF STRUCTURAL MEMBERS OR RUN THROUGH JOIST WEBS IF POSSIBLE. DO NOT USE WIRE OR PERFORATED METAL TO SUPPORT PIPING. DO NOT SUPPORT PIPING FROM OTHER PIPING, DUCTWORK AND/OR ELECTRICAL CONDUITS. DO NOT SUPPORT FROM BOTTOM OF CHORD OF BAR JOIST OR FROM METAL ROOF DECK.
E. ROUTE ABOVE GRADE DRAINAGE PIPING AS HIGH AS POSSIBLE AND COORDINATE WITH OTHER TRADES.
F. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SEALING PENETRATIONS THROUGH A FIRE RATED, SMOKE RATED OR COMBINATION FIRE & SMOKE RATED SEPARATIONS. SEE SPECIFICATIONS FOR FIRE & SMOKE RATED SEALANTS. SEE ARCHITECTURAL PLANS FOR RATED SEPARATIONS.
G. INSTALL ESCUTCHEON PLATES ON ALL WALL AND FLOOR PENETRATIONS SERVING EXPOSED PLUMBING PIPING WALL PENETRATIONS.
H. ALL OPENINGS IN WALLS AND FLOORS FOR PIPING SHALL BE CORE DRILLED OR SAW CUT, UNLESS OTHERWISE NOTED.
I. LOCATE AND INSTALL EQUIPMENT TO PROVIDE ALL CODE AND MANUFACTURER'S RECOMMENDED CLEARANCES. KEEP HVAC PIPING, DUCTWORK, ETC. OUT OF CLEARANCE AREAS.
J. ALL PLUMBING PIPING WORK SHALL BE LOCATED ABOVE CEILINGS, IN A PIPE CHASE, OR OTHER CONCEALED LOCATIONS, UNLESS OTHERWISE NOTED. LOCATE AND ARRANGE VALVES, DRAIN FITTINGS, ETC. TO BE ACCESSIBLE THROUGH LAY-IN CEILINGS. ACCESS PANELS OR ACCESS DOORS. PROVIDE ACCESS PANEL OR ACCESS DOOR FOR ALL VALVES, DRAIN FITTINGS, ETC. AT NON-ACCESSIBLE LOCATIONS.
K. INSTALL SECTIONAL VALVES ON EACH BRANCH AND/OR RISER SERVING TWO OR MORE PLUMBING FIXTURES OR EQUIPMENT CONNECTIONS. INSTALL VALVES ADJACENT TO MAIN.
L. INSTALL SHUTOFF VALVES ON INLET AND OUTLET OF PLUMBING EQUIPMENT.
M. INSTALL STOPS AT EACH PLUMBING FIXTURE EXCEPT AT FLUSHOMETER LOCATIONS.
N. SEAL ALL PLUMBING PIPING PENETRATIONS. SEAL PENETRATIONS THROUGH RATED WALLS, FLOORS OR CEILINGS WITH MATERIALS APPROPRIATE FOR RATING.
O. PIPING IN EXTERIOR WALLS SHALL BE LOCATED ON THE INTERIOR SIDE OF BUILDING INSULATION AND VAPOR BARRIER.
P. COORDINATE INSTALLATION OF BUILDING INSULATION TO RUN CONTINUOUS BETWEEN PIPING AND EXTERIOR WALL SURFACE.
Q. COORDINATE EXACT LOCATION OF FLOOR DRAINS AND FLOOR SINKS. TOP OF GRATE SHALL BE 1/8" BELOW FINISHED FLOOR ELEVATION.
R. COMPLY WITH LOCAL UTILITY COMPANY RULES AND REGULATIONS FOR ALL GAS METER INSTALLATIONS. COORDINATE EXACT LOCATION OF GAS CONNECTIONS WITH EQUIPMENT SUPPLIED.
S. COPPER PIPING LOCATED ABOVE GRADE SHALL BE TYPE "L"; COPPER PIPING LOCATED BELOW GRADE SHALL BE TYPE "K" AND RUN CONTINUOUS WITHOUT JOINTS BELOW GRADE. TYPE "M" COPPER SHALL NOT BE USED ON PRESSURIZED PIPING SYSTEMS.
T. DRAINAGE PIPING 3 INCHES AND SMALLER SHALL SLOPE NO LESS THAN 1/4 INCH PER FOOT. DRAINAGE PIPING 4 INCHES AND LARGER SHALL SLOPE NO LESS THAN 1/8 INCH PER FOOT.
U. INSTALL WALL CLEAN OUTS (WCO) WHEN LOCATED BEHIND A WATER CLOSET AT 30" A.F.F. OR AT 42" A.F.F. ABOVE CABINETRY ON ALL SANITARY & STORM STACKS.
V. COORDINATE EXACT STORM PIPE CONNECTIONS WITH STORM DRAIN LOCATIONS SHOWN ON ARCHITECTURAL ROOF PLAN.
W. INSTALL VENT-THRU-ROOF (VTR) A MINIMUM OF 10'-0" AWAY FROM ANY OUTSIDE AIR INTAKE.
X. REMOVE, REPAIR AND REPLACE WALLS, FLOORS, ROOFS AND CEILINGS TO MATCH EXISTING, WHERE NECESSARY FOR PIPING AND FIXTURE REMOVAL & INSTALLATION.
Y. KITCHEN EQUIPMENT FURNISHED BY KITCHEN EQUIPMENT CONTRACTOR - PLUMBING CONTRACTOR SHALL ROUGH-IN AND MAKE FINAL CONNECTIONS TO UTILITIES REQUIRED AND PROVIDE PIPING, STOPS, WATER HAMMER ARRESTERS, TRAPS AND FITTINGS FOR EQUIPMENT TO BE IN OPERATIONAL ORDER. COORDINATE WITH KITCHEN EQUIPMENT SUPPLIER FOR CONNECTIONS AND LOCATIONS. SEE KITCHEN EQUIPMENT CONNECTION SCHEDULE FOR RESPONSIBILITY OF WHO FURNISHES VACUUM BREAKERS AND PRESSURE REDUCING VALVES.
Z. PVC PIPING SHALL NOT BE INSTALLED IN ANY RETURN AIR PLENUM UNLESS THE PIPING IS INSTALLED IN A PRE-APPROVED RATED ASSEMBLY.
AA. PROVIDE ACCESSIBLE SHUTOFF VALVE INSIDE THE BUILDING FOR EACH WALL HYDRANT.
BB. CONTRACTOR SHALL COORDINATE ALL CONNECTIONS OF PLUMBING SYSTEMS WITH EXTERIOR SITE UTILITIES AND SERVICES PRIOR TO INSTALLING ANY PIPING ON THE INTERIOR. CONTRACTOR SHALL CONFIRM THAT ALL INTERIOR PIPE INVERTS AND PIPE INVERTS AT THE 5' LINE MATCH EXTERIOR PIPE INVERTS, PRIOR TO INSTALLING ANY INTERIOR PIPING BELOW FLOOR.

NOTICE:
DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS AND CLEARANCES FROM ARCHITECTURAL, STRUCTURAL, SHOP AND OTHER APPROPRIATE DRAWINGS OR AT SITE. LAY OUT AND COORDINATE ALL WORK PRIOR TO INSTALLATION TO PROVIDE CLEARANCES REQUIRED FOR OPERATION, MAINTENANCE, AND CODES. VERIFY NON-INTERFERENCE WITH OTHER WORK. DO NOT FABRICATE PRIOR TO VERIFICATION OF CLEARANCES FOR ALL TRADES. THIS NOTICE APPLIES TO ALL MECHANICAL PLANS.

NOTICE:
DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS AND CLEARANCES FROM ARCHITECTURAL, STRUCTURAL, SHOP AND OTHER APPROPRIATE DRAWINGS OR AT SITE. LAY OUT AND COORDINATE ALL WORK PRIOR TO INSTALLATION TO PROVIDE CLEARANCES REQUIRED FOR OPERATION, MAINTENANCE, AND CODES. VERIFY NON-INTERFERENCE WITH OTHER WORK. DO NOT FABRICATE PRIOR TO VERIFICATION OF CLEARANCES FOR ALL TRADES. THIS NOTICE APPLIES TO ALL PLUMBING PLANS.

ADDENDUM 001 (1)	02/02/2022
Revisions:	Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-usa.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

BENJAMIN SCHMITT No. 022APE — LICENSED PROFESSIONAL ENGINEER — MONTANA
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **MECHANICAL SYMBOLS LEGEND AND GENERAL NOTES**
Approved: Project Director

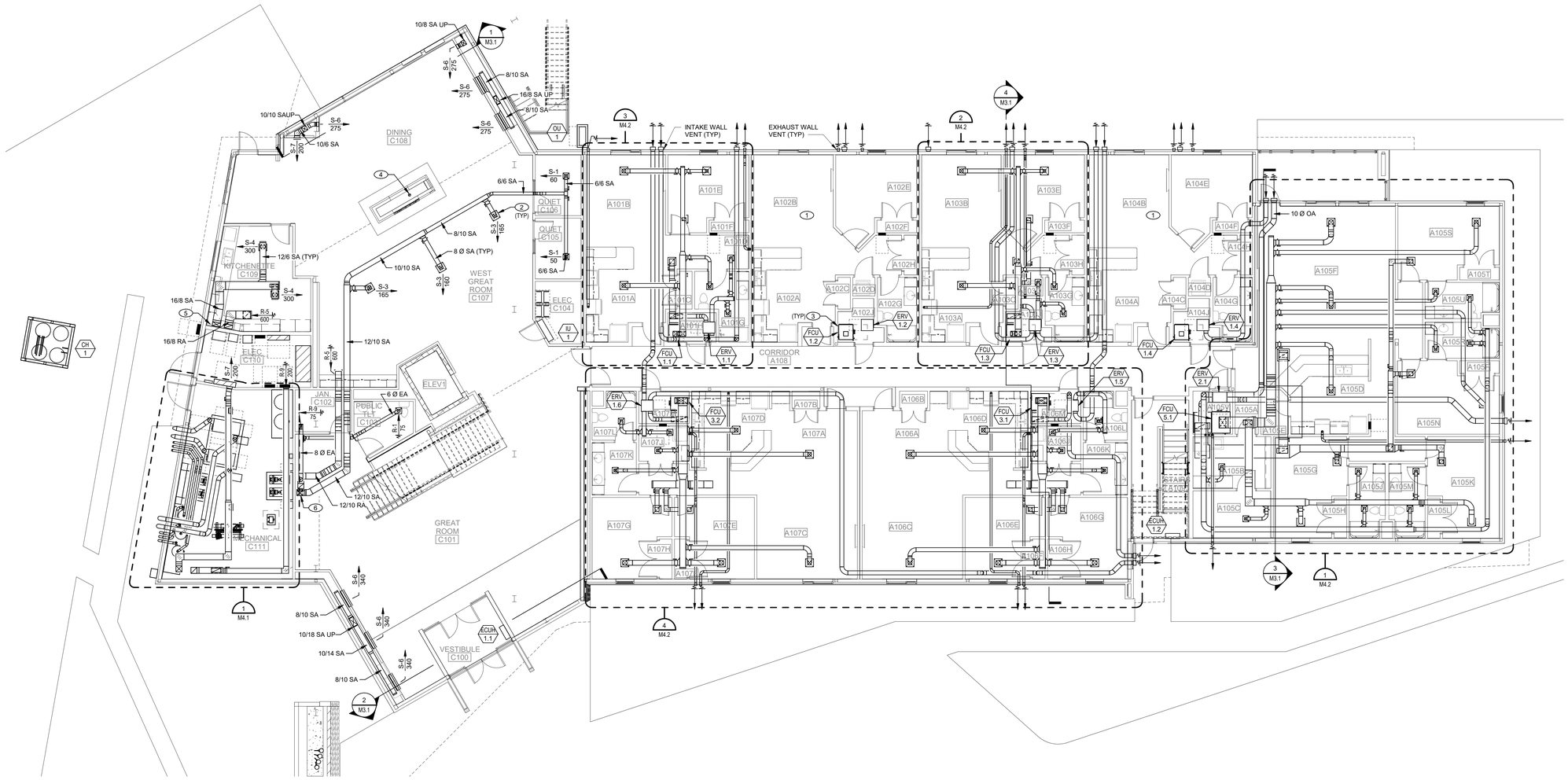
Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**
Date: **05/19/2020** | Checked: **BMS** | Drawn: **LMB**

Project Number: **H IH BLAC 19100**
Building Number:
Drawing Number: ***MG0.1***

INDIAN HEALTH SERVICE · IHS · 1955 ·

KEYNOTES	
1	REFER TO TYPICAL ONE BEDROOM APARTMENT HVAC PLAN 2/M4.2 FOR WORK IN THIS AREA.
2	REFER TO DIFFUSER CONNECTION DETAIL 1/M5.1.
3	REFER TO FAN COIL UNIT DETAIL 6/M5.1.
4	PROVIDE 5'Ø EXHAUST FLUE FOR FIREPLACE. OFFSET AROUND STRUCTURE WITH 45° ELBOWS AS NECESSARY. FLUE SHALL BE DOUBLE WALL WITH 1-1/2" AIR GAP. TERMINATE FLUE PER FIREPLACE MANUFACTURER'S RECOMMENDATIONS AND REQUIREMENTS.
5	16/8 RA AND 16/8 SA UP. REFER TO SHEET MH1.2 FOR CONTINUATION.
6	8Ø EA, 12/10 RA AND 12/10 SA UP. REFER TO SHEETS MH1.1 AND M4.1 FOR CONTINUATION.



N

1 FIRST FLOOR HVAC PLAN

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

0' 4' 8' 16'

1/8" = 1'-0"

ADDENDUM 001 (1)	02/02/2022
Revisions:	Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-usa.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA
BENJAMIN SCHMITT
No. 62524PE
LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **FIRST FLOOR HVAC PLAN**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **05/19/2020** Checked: **BMS** Drawn: **LMB**

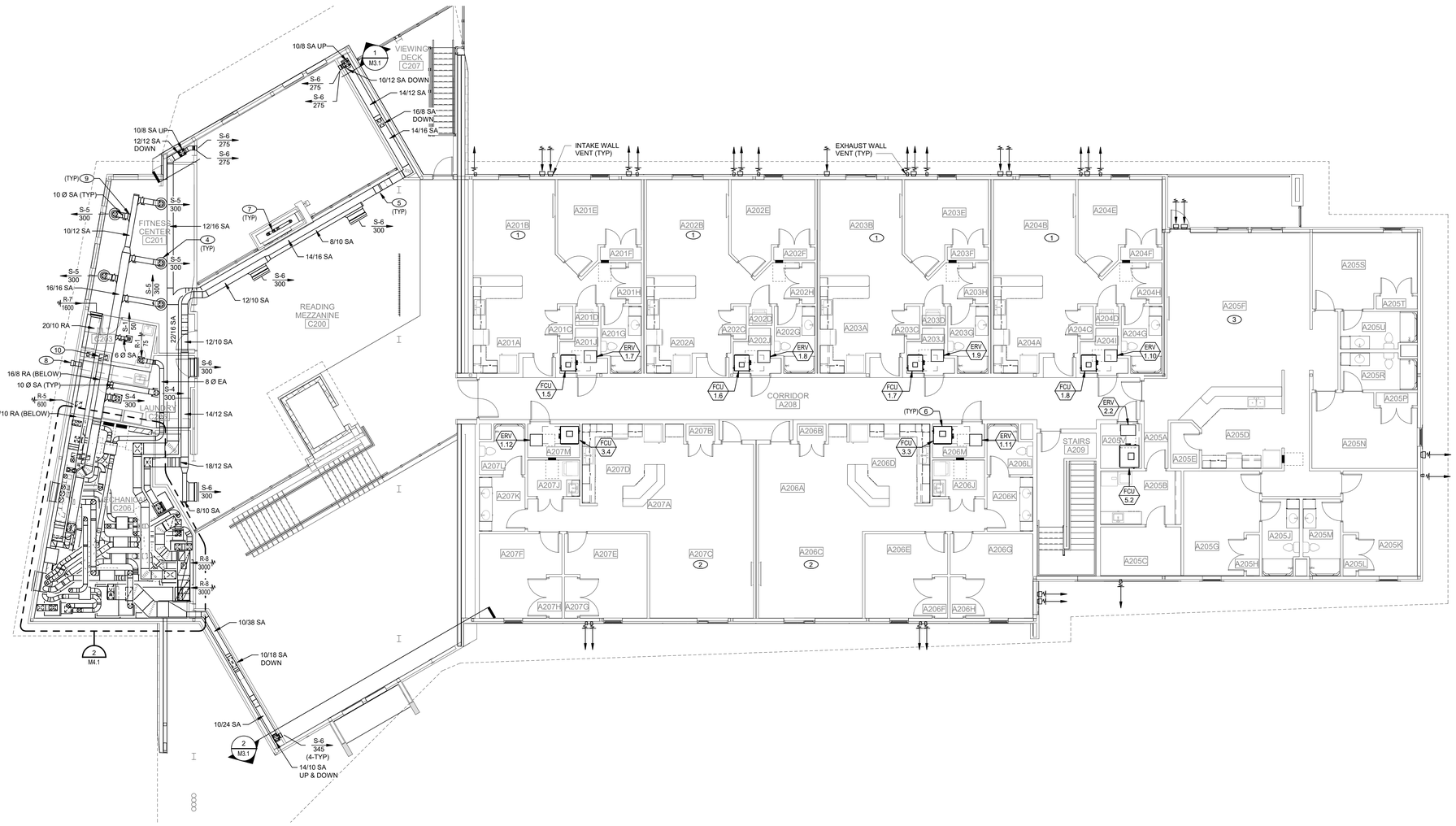
Project Number: **H IH BLAC 19100**

Building Number:

Drawing Number: **MH1.1**

INDIAN HEALTH SERVICE · PHS · 1955 ·

KEYNOTES	
1	REFER TO TYPICAL ONE BEDROOM APARTMENT HVAC PLAN 2/M4.2 FOR WORK IN THIS AREA.
2	REFER TO TYPICAL TWO BEDROOM APARTMENT HVAC PLAN 4/M4.2 FOR WORK IN THIS AREA.
3	REFER TO TYPICAL FOUR BEDROOM APARTMENT HVAC PLAN 1/M4.2 FOR WORK IN THIS AREA.
4	REFER TO DIFFUSER CONNECTION DETAIL 1/M5.1.
5	REFER TO DUCTWORK HANGERS 3/M5.1.
6	REFER TO FAN COIL UNIT DETAIL 6/M5.1.
7	PROVIDE 5'0 EXHAUST FLUE FOR FIREPLACE. OFFSET AROUND STRUCTURE WITH 45° ELBOWS AS NECESSARY. FLUE SHALL BE DOUBLE WALL WITH 1-1/2" AIR GAP. TERMINATE FLUE PER FIREPLACE MANUFACTURER'S RECOMMENDATIONS AND REQUIREMENTS.
8	SIZE AND ROUTE DRYER EXHAUST PER MANUFACTURER'S RECOMMENDATIONS. TERMINATE WITH WALL VENT CAP.
9	REFER TO TYPICAL LOW PRESSURE DUCT DETAIL 2/M5.1.
10	16/8 RA AND 16/8 SA DOWN. REFER TO SHEET MH1.1 FOR CONTINUATION.



1 SECOND FLOOR HVAC PLAN
SCALE: 1/8" = 1'-0"

0' 4' 8' 16'
1/8" = 1'-0"

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-usa.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA BENJAMIN SCHMIDT No. 62524PE LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **SECOND FLOOR HVAC PLAN**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **05/19/2020** Checked: **BMS** Drawn: **LMB**

Project Number: **H IH BLAC 19100**

Building Number:

Drawing Number: ***MH1.2***

INDIAN HEALTH SERVICE · PHS · 1955 ·

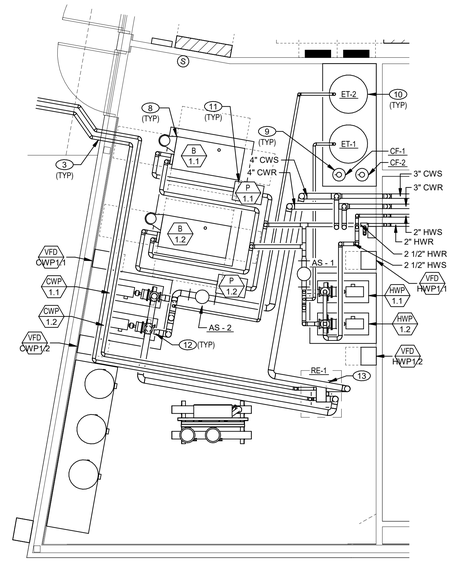
BRANCH PIPE SIZING SCHEDULE

MARK	PIPE SIZE			MARK	PIPE SIZE		
	*HWS/HWR	*CWS/CWR	CONDENSATE		*HWS/HWR	*CWS/CWR	CONDENSATE
FCU-1	3/4"	1"	3/4"	FCU-5	1"	1 1/2"	1"
FCU-2	3/4"	1"	3/4"	FCU-6	1"	1 1/2"	1 1/4"
FCU-3	1"	1 1/4"	1"	FCU-7	3/4"	3/4"	3/4"
FCU-4	1"	1 1/4"	1"				

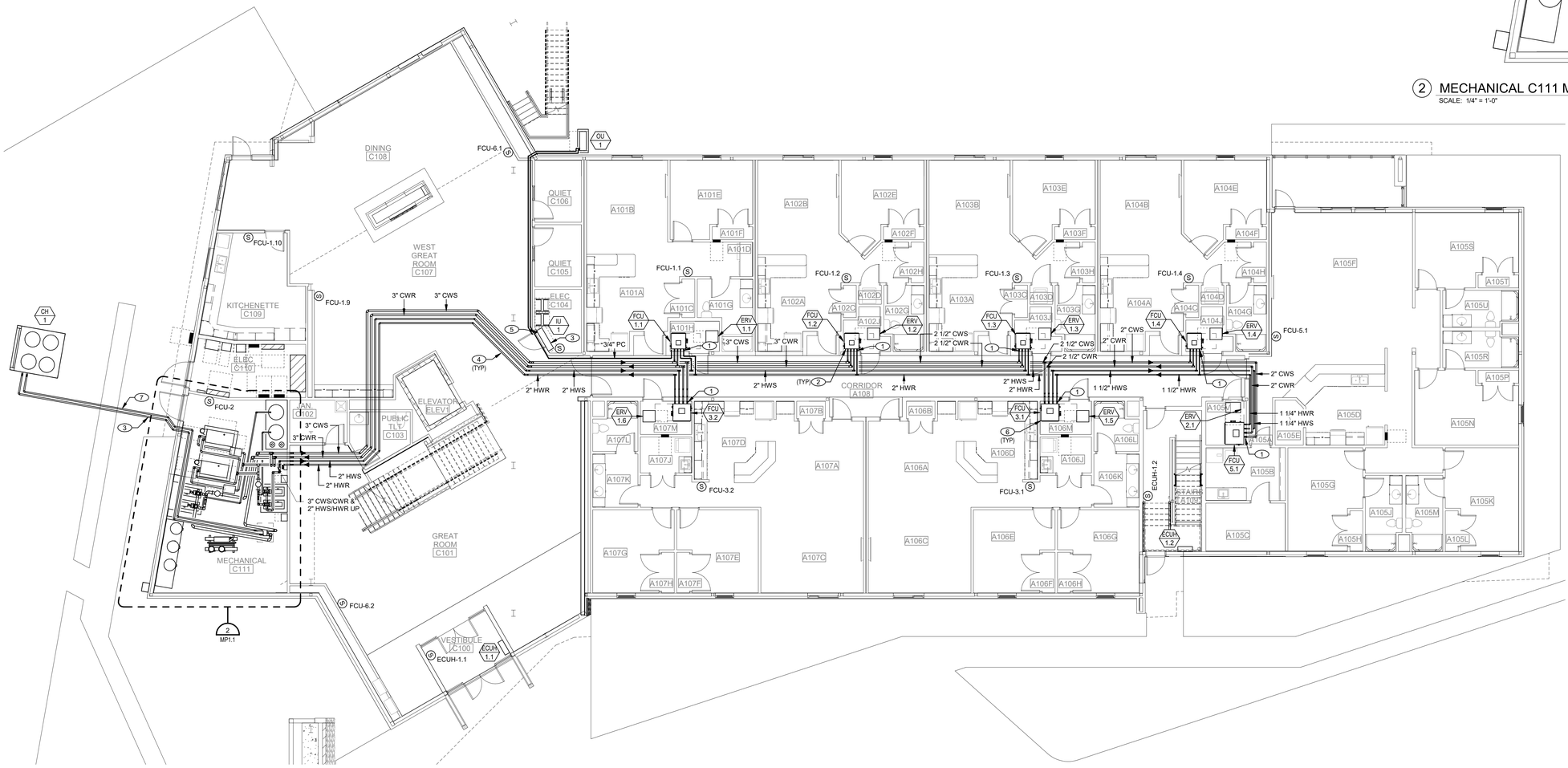
* BRANCH PIPING AND HOSE KIT

KEYNOTES

1	HWS, HWR, CWS AND CWR DOWN TO FAN COIL ON FIRST FLOOR AND UP TO FAN COIL ON SECOND FLOOR. CD DOWN FROM FAN COIL ON SECOND FLOOR. SEE SHEET MP1.2 FOR CONTINUATION OF PIPING.
2	CONDENSATE ROUTED FROM FAN COIL TO DRAIN BOX. REFER TO PLUMBING PLANS FOR ADDITIONAL INFORMATION.
3	ROUTE INSULATED REFRIGERANT PIPING FROM INDOOR UNIT TO OUTDOOR UNIT. SIZE REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS. SUBMIT REFRIGERANT PIPING SCHEMATIC DRAWING SHOWING ROUTING, VALVES AND ALL ACCESSORIES DURING SHOP DRAWINGS REVIEW PHASE. EXTERIOR PIPING INSULATION TO HAVE WEATHERPROOF JACKET.
4	REFER TO PIPE INSULATION DETAIL 4/M5.1.
5	ROUTE CONDENSATE FROM INDOOR UNIT TO DRAIN BOX IN MECH A101H.
6	REFER TO FAN COIL UNIT DETAIL 6/M5.1 AND CONDENSER HOSE CONNECTION 5/M5.1.
7	ROUTE REFRIGERANT PIPING OVERHEAD (2 CIRCUITS).
8	REFER TO HOT WATER BOILER PIPING DETAIL 7/M5.1.
9	REFER TO POT FEEDER DETAIL 9/M5.1.
10	REFER TO EXPANSION TANK & AIR SEPARATOR DETAIL 8/M5.1.
11	REFER TO INLINE PUMP DETAIL 12/M5.1.
12	REFER TO BASE MOUNT PUMP DETAIL 14/M5.1.
13	REFER TO PLATE & FRAME HEAT EXCHANGER DETAIL 17/M5.1.



2 MECHANICAL C111 MECHANICAL PIPING PLAN
SCALE: 1/4" = 1'-0"



1 FIRST FLOOR MECHANICAL PIPING PLAN
SCALE: 1/8" = 1'-0"

Revisions:	Date
ADDENDUM 001 1	02/02/2022

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-usa.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA BENJAMIN SCHMIDT No. 62524PE LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **FIRST FLOOR MECHANICAL PIPING PLAN**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **05/19/2020** | Checked: **BMS** | Drawn: **LMB**

Project Number: **H IH BLAC 19100**

Building Number:

Drawing Number: ***MP1.1***

INDIAN HEALTH SERVICE · PHS · 1955 ·

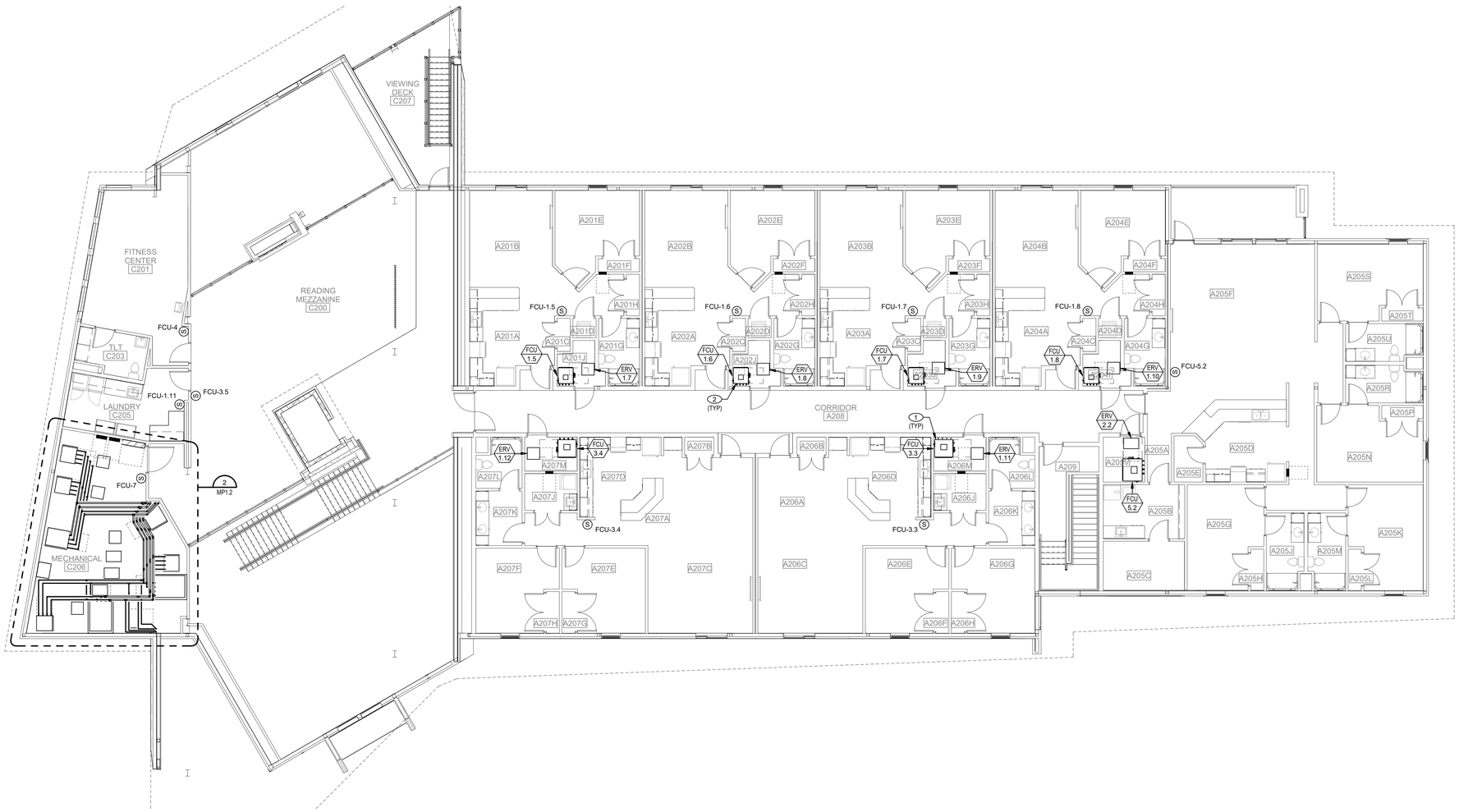
BRANCH PIPE SIZING SCHEDULE

MARK	PIPE SIZE			MARK	PIPE SIZE		
	*HWS/HWR	*CWS/CWR	CONDENSATE		*HWS/HWR	*CWS/CWR	CONDENSATE
FCU-1	3/4"	1"	3/4"	FCU-5	1"	1 1/2"	1"
FCU-2	3/4"	1"	3/4"	FCU-6	1"	1 1/2"	1 1/4"
FCU-3	1"	1 1/4"	1"	FCU-7	3/4"	3/4"	3/4"
FCU-4	1"	1 1/4"	1"				

* BRANCH PIPING AND HOSE KIT

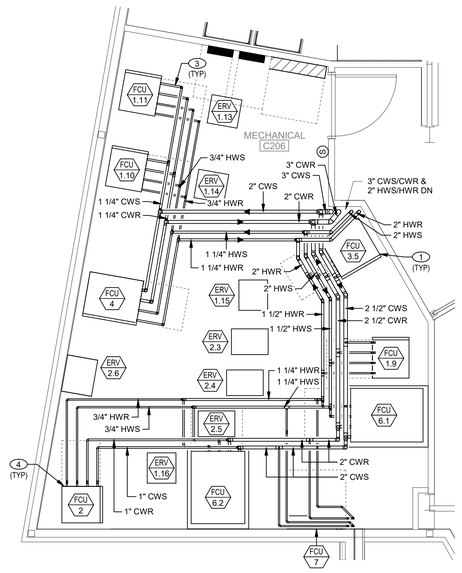
KEYNOTES

1	REFER TO FAN COIL UNIT DETAIL 6/M5.1 AND CONDENSER HOSE CONNECTION 5/M5.1.
2	ROUTE CONDENSATE FROM FAN COIL TO DRAIN BOX ON FIRST FLOOR. SEE SHEET MP1.1 FOR CONTINUATION OF PIPING.
3	REFER TO PIPE INSULATION DETAIL 4/M5.1.
4	ROUTE CONDENSATE FROM FAN COIL(S) TO NEAREST FLOOR DRAIN IN MECHANICAL ROOM.



1 SECOND FLOOR MECHANICAL PIPING PLAN
SCALE: 1/8" = 1'-0"

0' 4' 8' 16'
1/8" = 1'-0"



2 MECHANICAL C206 MECHANICAL PIPING PLAN
SCALE: 1/4" = 1'-0"

0' 2' 4' 8'
1/4" = 1'-0"

Revisions:	Date
ADDENDUM 001 1	02/02/2022

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-usa.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA BENJAMIN SCHMITT No. 62524PE LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **SECOND FLOOR MECHANICAL PIPING PLAN**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

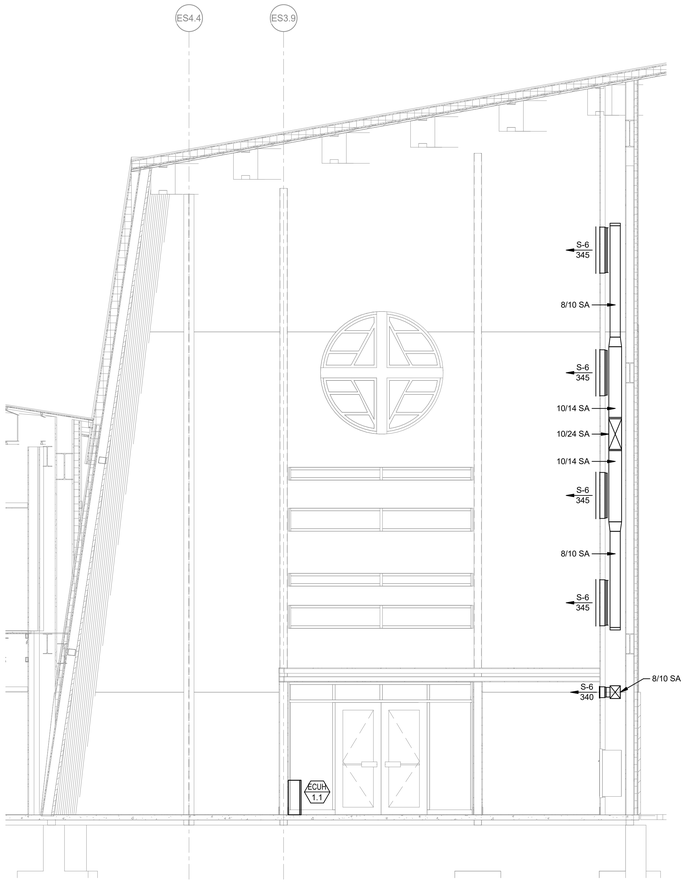
Date: **05/19/2020** | Checked: **BMS** | Drawn: **LMB**

Project Number: **H IH BLAC 19100**

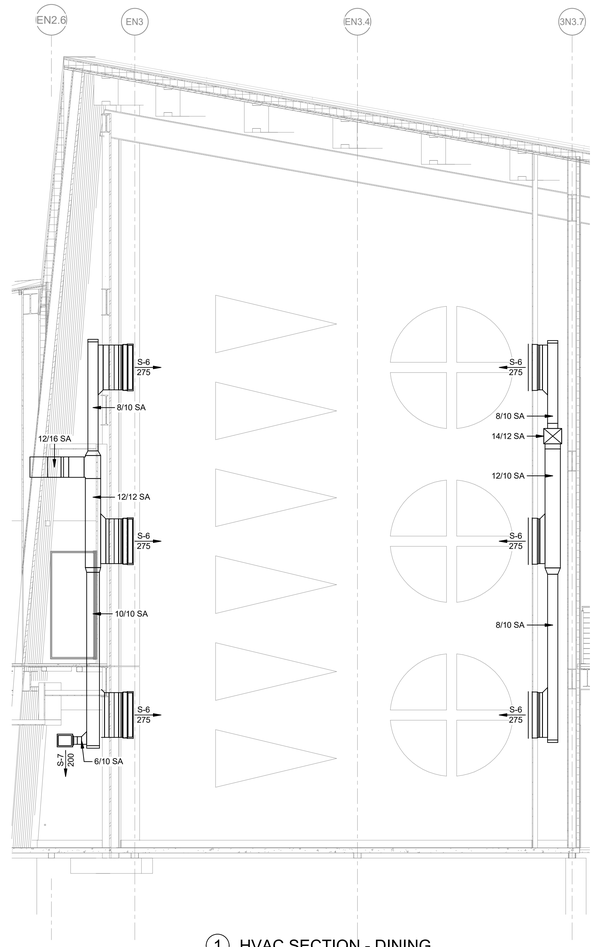
Building Number:

Drawing Number: ***MP1.2***

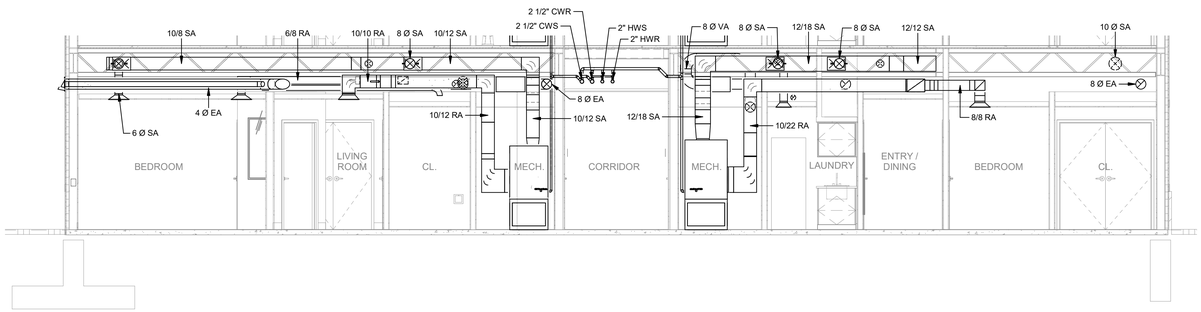
INDIAN HEALTH SERVICE · PHS · 1955 ·



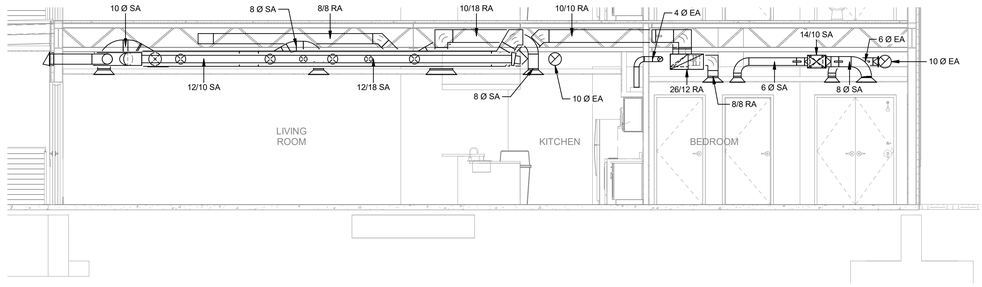
2 HVAC SECTION - GREAT ROOM
SCALE: 1/4" = 1'-0"



1 HVAC SECTION - DINING
SCALE: 1/4" = 1'-0"



4 ONE AND TWO BEDROOM APARTMENTS HVAC SECTION
SCALE: 1/4" = 1'-0"



3 FOUR BEDROOM APARTMENT HVAC SECTION
SCALE: 1/4" = 1'-0"

ADDENDUM 001 1	02/02/2022
Revisions:	Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-uso.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA
BENJAMIN SCHMITT
No. 62524PE
LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
MECHANICAL SECTIONS

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

Date **05/19/2020** | Checked **BMS** | Drawn **LMB**

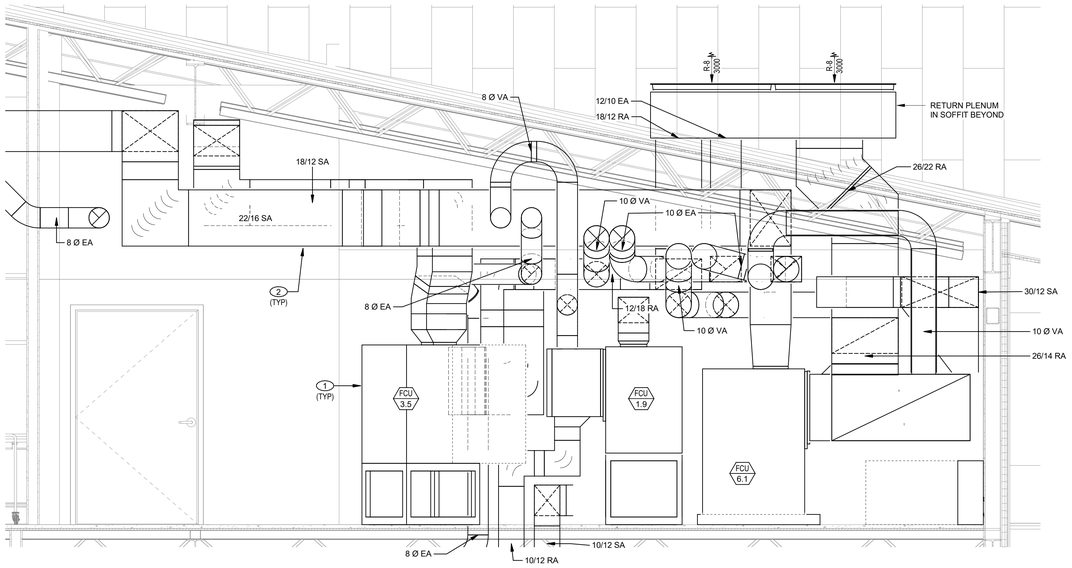
Project Number
H IH BLAC 19100

Building Number

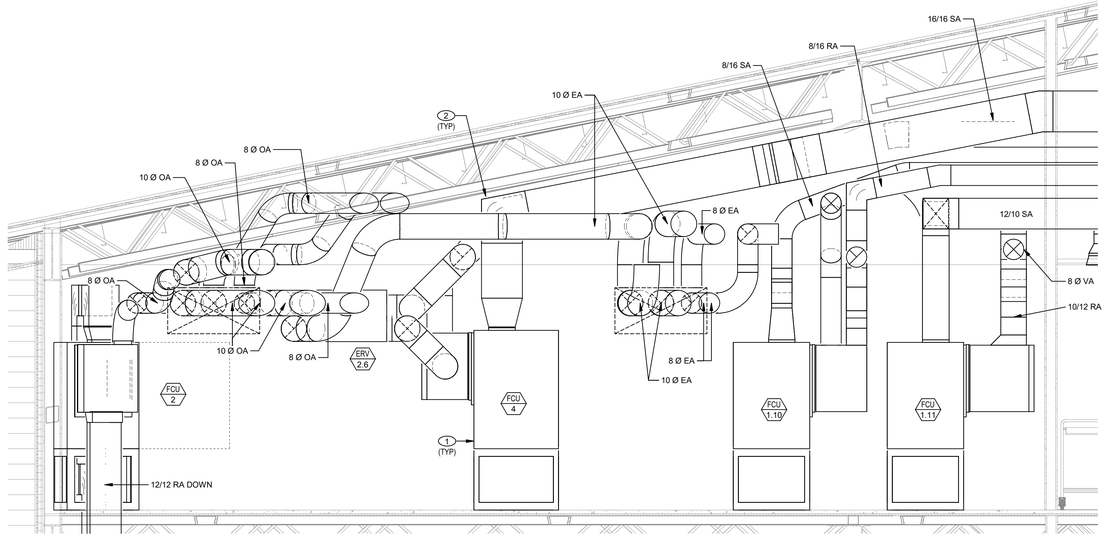
Drawing Number
M3.1

INDIAN HEALTH SERVICE · PHS · 1955 ·

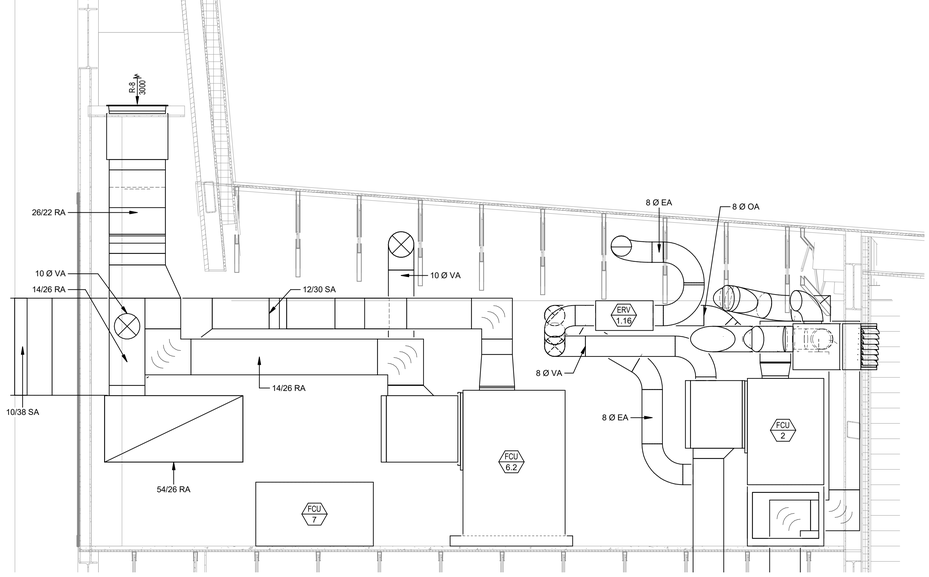
KEYNOTES	
1	REFER TO FAN COIL UNIT DETAIL 6/M5.1.
2	REFER TO DUCTWORK HANGERS 3/M5.1.



1 MECHANICAL C206 MECHANICAL SECTION LOOKING @ NE WALL
SCALE: 1/2" = 1'-0"



3 MECHANICAL C206 MECHANICAL SECTION LOOKING @ SW WALL
SCALE: 1/2" = 1'-0"



2 MECHANICAL C206 MECHANICAL SECTION LOOKING @ SE WALL
SCALE: 1/2" = 1'-0"

Revisions:	Date
ADDENDUM 001 1	02/02/2022

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-usa.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA
BENJAMIN SCHMITT
No. 62524PE
LICENSED PROFESSIONAL ENGINEER
05/19/2020

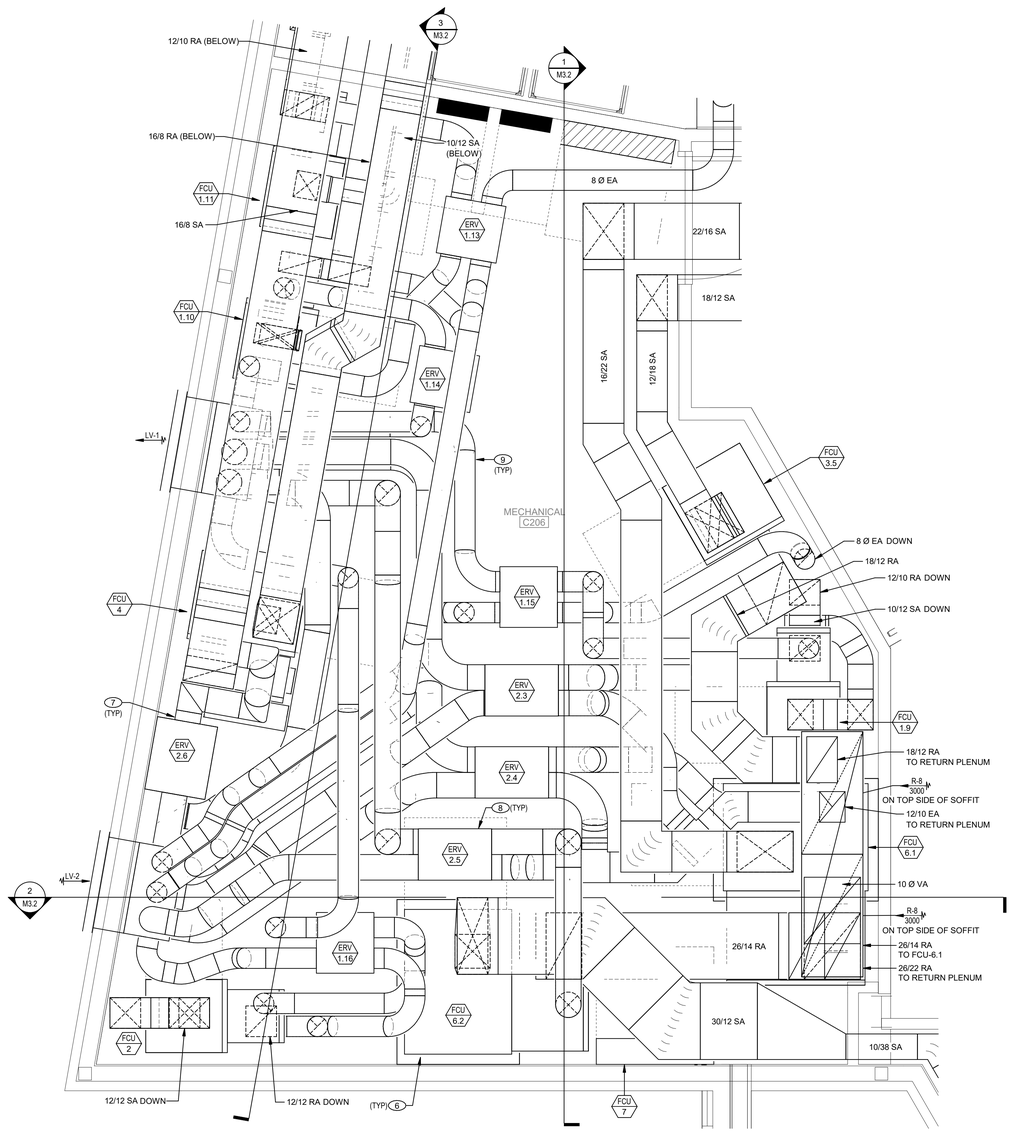
ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

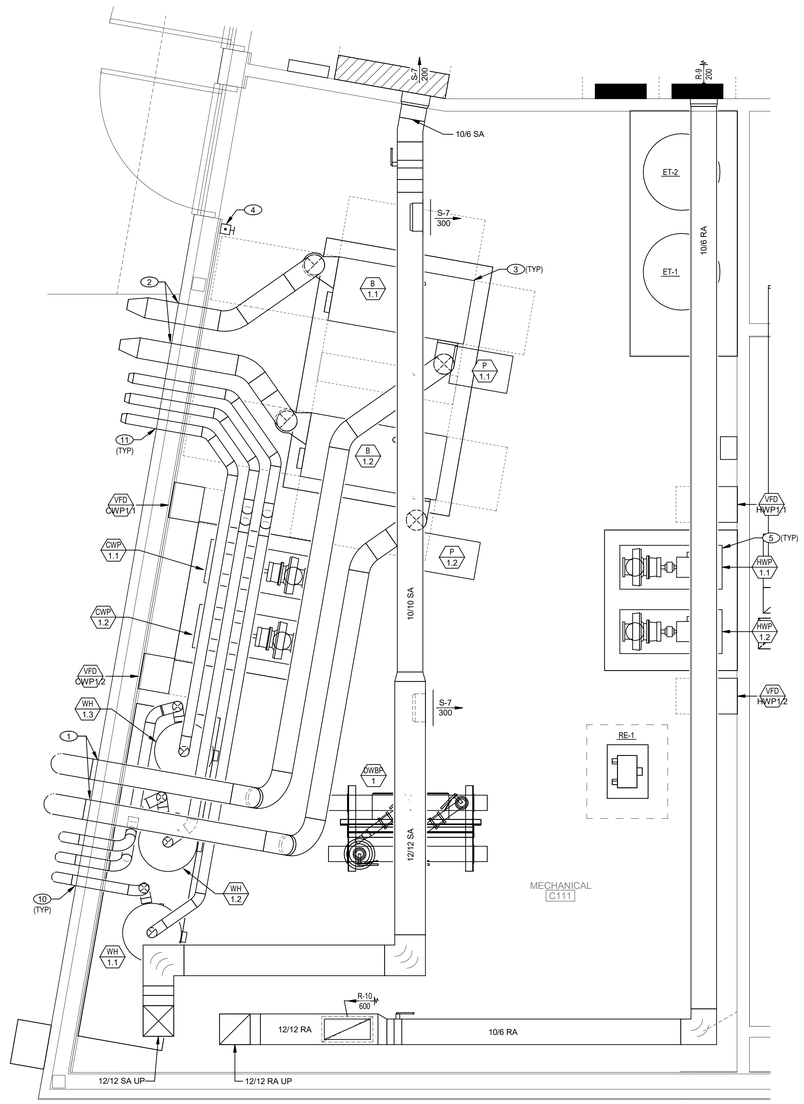
Drawing Title	MECHANICAL SECTIONS
Approved: Project Director	
Project Title	APARTMENT BUILDING AND SITEWORK
Contract No.:	HHSI122018800005I
Task Order No.:	75H70119F30002
Location	BROWNING, MONTANA
Date	05/19/2020
Checked	BMS
Drawn	LMB
Project Number	H IH BLAC 19100
Building Number	
Drawing Number	M3.2

INDIAN HEALTH SERVICE · PHS · 1955 ·

KEYNOTES	
1	SIZE AND ROUTE BOILER INTAKE PER MANUFACTURER'S RECOMMENDATIONS. REFER TO BOILER/WATER HEATER COMBUSTION AIR INTAKE DETAIL 16/M5.1.
2	SIZE AND ROUTE BOILER FLUE PER MANUFACTURER'S RECOMMENDATIONS. REFER TO BOILER/WATER HEATER FLUE STACK DETAIL 15/M5.1.
3	REFER TO HOT WATER BOILER PIPING DETAIL 7/M5.1.
4	REFER TO TYPICAL BOILER EMERGENCY OFF PUSHBUTTON DETAIL 10/M5.1.
5	REFER TO BASE MOUNT PUMP DETAIL 14/M5.1.
6	REFER TO FAN COIL UNIT DETAIL 6/M5.1.
7	ERV DUCTWORK SIZES SHALL BE AS FOLLOWS, UNLESS NOTED OTHERWISE. ERV-1: 8Ø OA, EA, VA AND RA. ERV-2: 10Ø OA, EA, VA AND RA.
8	ERV ACCESS SHALL BE FROM UNDERSIDE OF CABINET.
9	ROUTE DUCTWORK AS HIGH AS POSSIBLE THROUGHOUT MECHANICAL ROOM.
10	SIZE AND ROUTE WATER HEATER INTAKE PER MANUFACTURER'S RECOMMENDATIONS. REFER TO BOILER/WATER HEATER COMBUSTION AIR INTAKE DETAIL 16/M5.1.
11	SIZE AND ROUTE WATER HEATER FLUE PER MANUFACTURER'S RECOMMENDATIONS. REFER TO BOILER/WATER HEATER FLUE STACK DETAIL 15/M5.1.



2 MECHANICAL C206 MECHANICAL PLAN
SCALE: 1/2" = 1'-0"



1 MECHANICAL C111 MECHANICAL PLAN
SCALE: 1/2" = 1'-0"

ADDENDUM 001 (1)	02/02/2022
Revisions:	Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-usa.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA
BENJAMIN SCHMITT
No. 62524PE
LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
MECHANICAL LARGE-SCALE PLANS

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

Date **05/19/2020** | Checked **BMS** | Drawn **LMB**

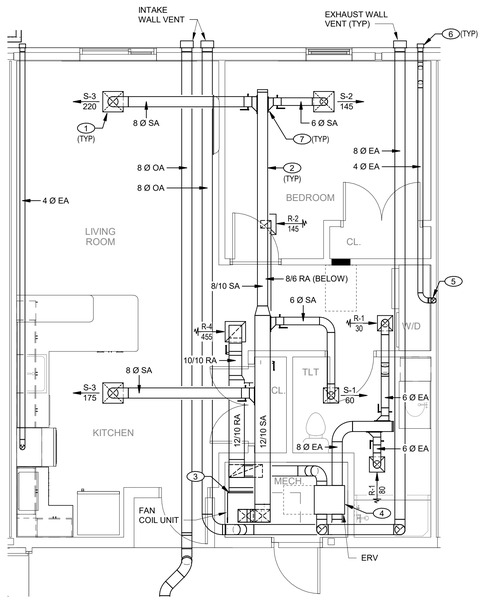
Project Number
H IH BLAC 19100

Building Number

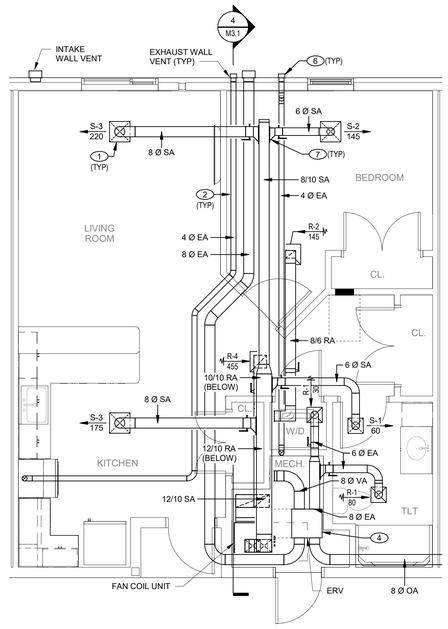
Drawing Number
M4.1

INDIAN HEALTH SERVICE · PHS · 1955 ·

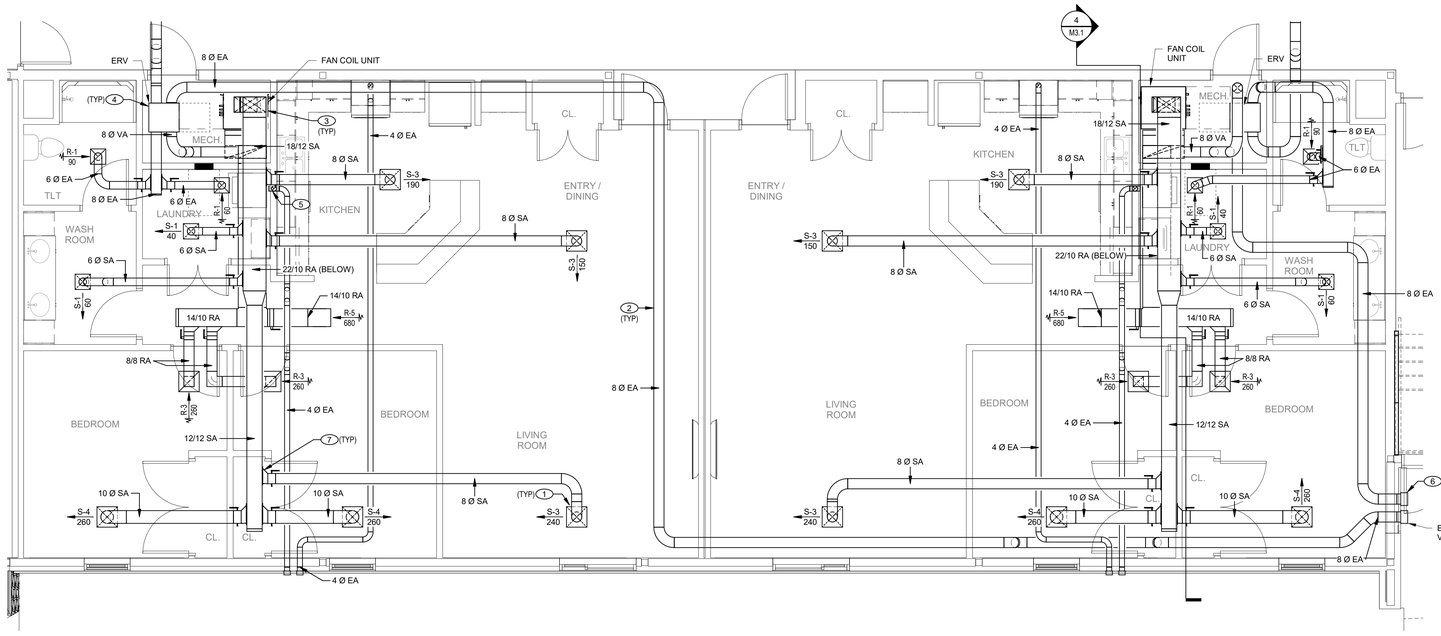
KEYNOTES	
1	REFER TO DIFFUSER CONNECTION DETAIL 1/M5.1.
2	REFER TO DUCTWORK HANGERS 3/M5.1.
3	REFER TO FAN COIL UNIT DETAIL 6/M5.1.
4	REFER TO ERV DUCTWORK DETAIL 13/M5.1.
5	REFER TO DRYER VENTING DETAIL 11/M5.1. SIZE AND ROUTE DRYER EXHAUST PER MANUFACTURER'S RECOMMENDATIONS. TERMINATE WITH WALL VENT CAP.
6	MAINTAIN MINIMUM 10'-0" SEPARATION BETWEEN EXHAUST AND INTAKE.
7	REFER TO TYPICAL LOW PRESSURE DUCT DETAIL 2/M5.1.



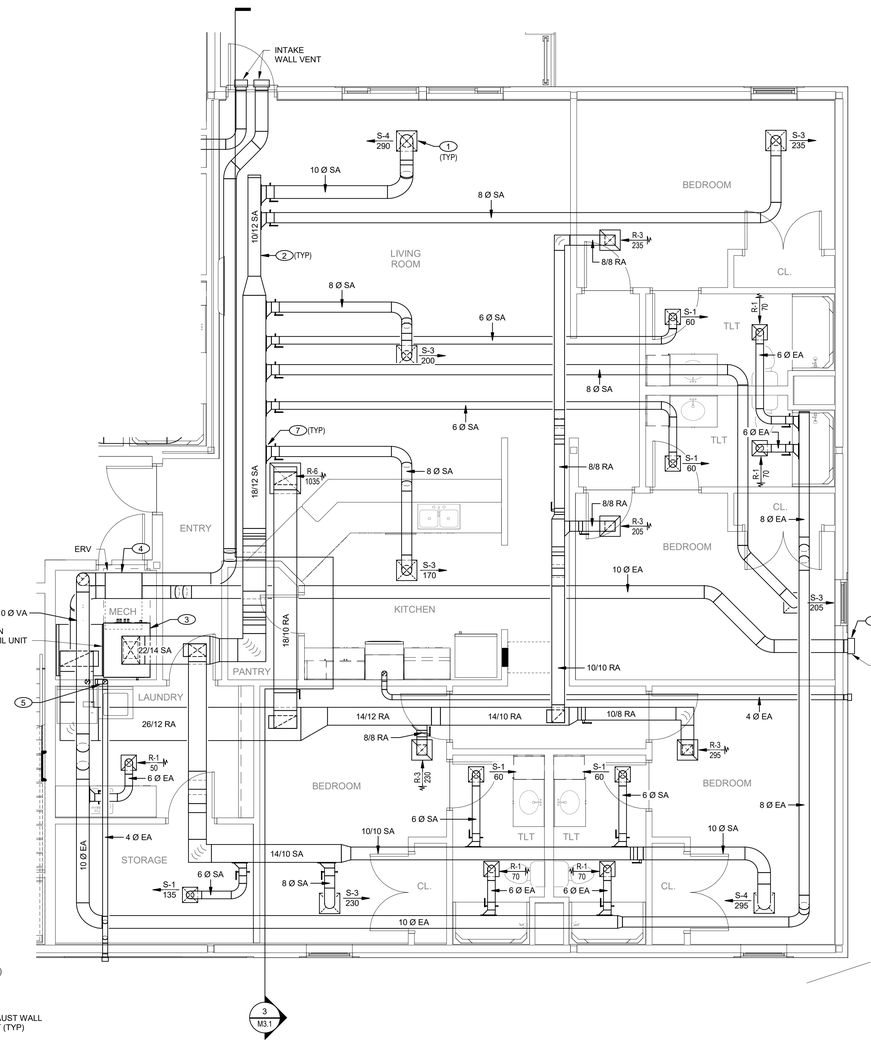
3 ONE BEDROOM HANDICAP APARTMENT HVAC PLAN - FIRST FLOOR
SCALE: 1/4" = 1'-0"



2 TYPICAL ONE BEDROOM APARTMENT HVAC PLAN
SCALE: 1/4" = 1'-0"



4 TYPICAL TWO BEDROOM APARTMENT HVAC PLAN
SCALE: 1/4" = 1'-0"



1 TYPICAL FOUR BEDROOM APARTMENT HVAC PLAN
SCALE: 1/4" = 1'-0"

Revisions:	Date
ADDENDUM 001 1	02/02/2022

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-usa.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA
BENJAMIN SCHMITT
No. 62524PE
LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
MECHANICAL LARGE-SCALE PLANS

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

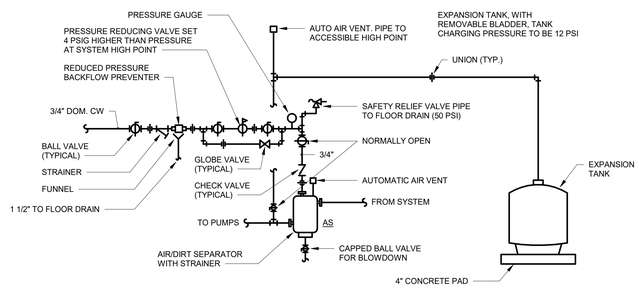
Date **05/19/2020** | Checked **BMS** | Drawn **LMB**

Project Number
H IH BLAC 19100

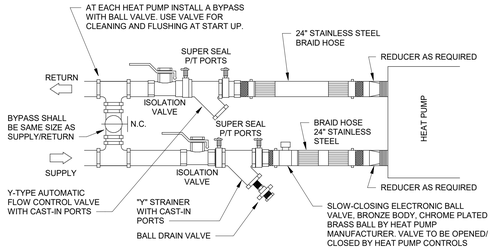
Building Number

Drawing Number
M4.2

INDIAN HEALTH SERVICE · PHS · 1955 ·



8 EXPANSION TANK & AIR SEPARATOR DETAIL
NOT TO SCALE



NOTE:
VALVES AND HOSE KITS SHALL BE LINE SIZE SHOWN ON PIPING PLANS WITH REDUCER FOR CONNECTION AT HEAT PUMP AS REQUIRED. HOSE KITS SHALL BE THE SAME FOR VERTICAL HEAT PUMPS.

5 CONDENSER HOSE CONNECTION
NOT TO SCALE

SPECIFICATIONS

HB VALVE BALL VALVE/PORT SECTION-BRONZE/BRASS CONSTRUCTION. LARGE DIAMETER PLATED BALL, TEFLON SEATS. BLOW OUT PROOF STEM, TEFLON PACKING NUT, FULL SIZE HANDLE WITH VINYL GRIP. PORT SECTION FOR FACTORY INSTALLED OPTIONS. AVAILABLE WITH THREADED (FPT) AND SOLDER CONNECTIONS. ALSO THREADED (MPT) PORT END ONLY.

AUTOMATIC FLOW CONTROL VALVE BRASS AND STAINLESS STEEL CONSTRUCTION, +5% ACCURATE FACTORY CALIBRATED PISTON REGULATOR ASSEMBLY AVAILABLE IN 2-32 PSID & 5-60 PSID CONTROL RANGES. RATED AT 400 PSIG @ 275°F.

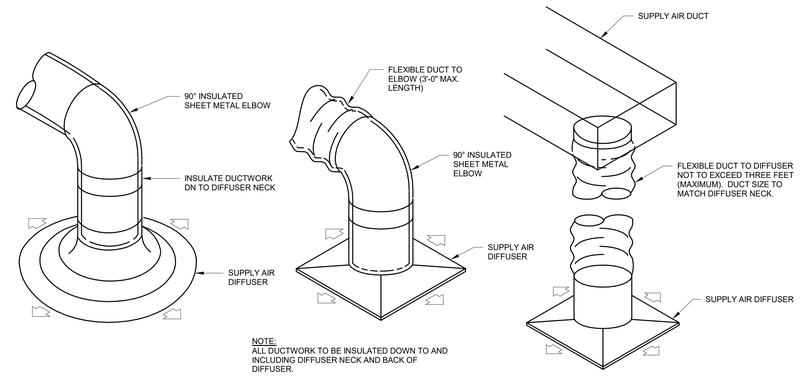
Y-STRAINER CAST BRASS WITH 20 MESH STAINLESS SCREEN AND REMOVABLE CAP. AVAILABLE WITH THREADED (FPT) CONNECTIONS ONLY. RATED AT 400 PSIG @ 275°F. MAY BE COMBINED WITH OTHER PRODUCTS FOR FACTORY ASSEMBLY. FURNISHED WITH FACTORY INSTALLED OPTIONS. SEE OPTIONS LIST.

SUPERSEAL PRESSURE/TEMPERATURE TEST PORT 1/4" BRASS BODY/DUAL DUROMETER NORDEL VALVE WITH RETAINED SAFETY CAP. STANDARD AND EXTRA LONG AVAILABLE. RATED AT 500 PSIG @ 275°F.

BALL TYPE DRAIN VALVE BRONZE/BRASS BALL VALVE ASSEMBLY. PLATED BALL, TEFLON SEATS, PACKING NUT, AND T-HANDLE RATED AT 400 PSIG @ 275°F. 1/2" FPT OUTLET CONNECTION.

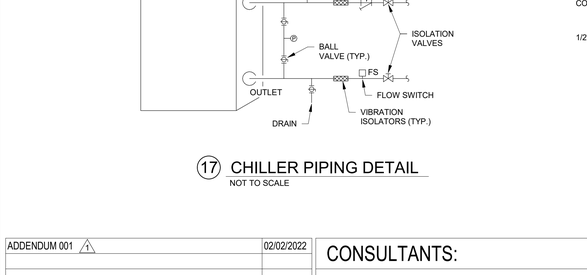
HOSE ASSEMBLIES INNER CORE OF NON-TOXIC SYNTHETIC POLYMER, SUITABLE FOR WATER TEMPERATURES BETWEEN 40°F. AND 239°F. THIS TUBE HAS AN OUTER BRAIDED COVER OF STAINLESS STEEL. THE FITTINGS ARE BRASS. PRODUCT IS FIRE RETARDANT AND WILL MEET ASTM-84, 81A AND WILL NOT EXCEED THE FOLLOWING FLAME SPREAD-25. FUEL CONTRIBUTION-25. SMOKE DENSITY-50.

THE COMBINED MAXIMUM PRESSURE DROP THRU HOSE KIT ASSEMBLY AND HEAT PUMP UNIT SHALL BE 30 FT. OF WATER. SUBMIT DATA WITH SHOP DRAWING FOR EACH HEAT PUMP UNIT WITH VERIFIED MAXIMUM PRESSURE DROP AT INSTALLED FLOW CONDITIONS.

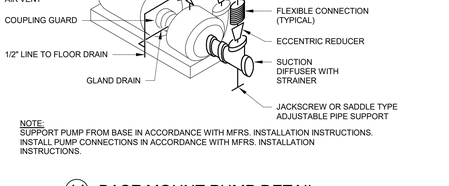


NOTE:
ALL DUCTWORK TO BE INSULATED DOWN TO AND INCLUDING DIFFUSER NECK AND BACK OF DIFFUSER.

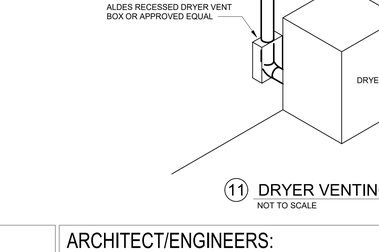
1 DIFFUSER CONNECTION DETAIL
NOT TO SCALE



15 BOILER/WATER HEATER FLUE STACK DETAIL
NOT TO SCALE



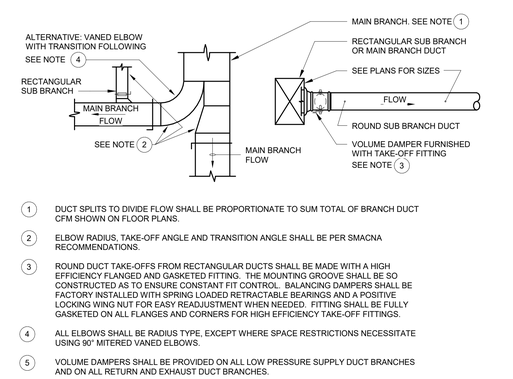
12 INLINE PUMP DETAIL
NOT TO SCALE



NOTE: MOUNT AT +48" ABOVE FINISHED FLOOR

9 POT FEEDER DETAIL
NOT TO SCALE

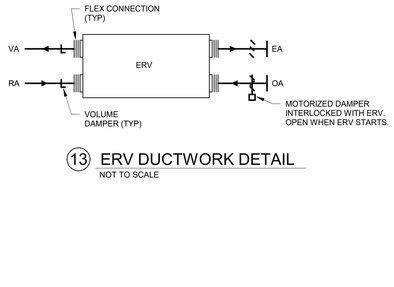
6 FAN COIL UNIT DETAIL
NOT TO SCALE



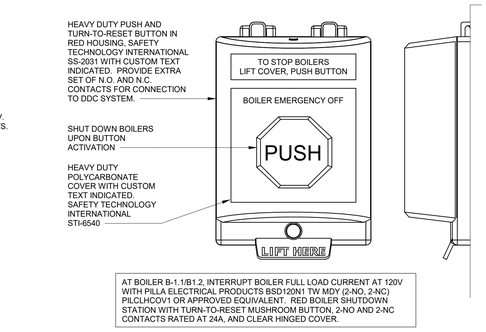
1. DUCT SPLITS TO DIVIDE FLOW SHALL BE PROPORTIONATE TO SUM TOTAL OF BRANCH DUCT CFM SHOWN ON FLOOR PLANS.
2. ELBOW RADIUS, TAKE-OFF ANGLE AND TRANSITION ANGLE SHALL BE PER SMACNA RECOMMENDATIONS.
3. ROUND DUCT TAKE-OFFS FROM RECTANGULAR DUCTS SHALL BE MADE WITH A HIGH EFFICIENCY FLANGED AND GASKETED FITTING. THE MOUNTING GROOVE SHALL BE SO CONSTRUCTED AS TO ENSURE CONSTANT FIT CONTROL. BALANCING DAMPERS SHALL BE FACTORY INSTALLED WITH SPRING LOADED RETRACTABLE BEARINGS AND A POSITIVE LOCKING WING NUT FOR EASY READJUSTMENT WHEN NEEDED. FITTING SHALL BE FULLY GASKETED ON ALL FLANGES AND CORNERS FOR HIGH EFFICIENCY TAKE-OFF FITTINGS.
4. ALL ELBOWS SHALL BE RADIUS TYPE, EXCEPT WHERE SPACE RESTRICTIONS NECESSITATE USING 90° MITERED VANED ELBOWS.
5. VOLUME DAMPERS SHALL BE PROVIDED ON ALL LOW PRESSURE SUPPLY DUCT BRANCHES AND ON ALL RETURN AND EXHAUST DUCT BRANCHES.

2 TYPICAL LOW PRESSURE DUCT DETAIL
NOT TO SCALE

16 BOILER/WATER HEATER COMBUSTION AIR INTAKE DETAIL
NOT TO SCALE

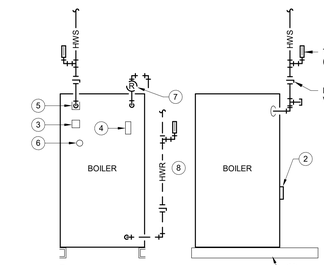


13 ERV DUCTWORK DETAIL
NOT TO SCALE

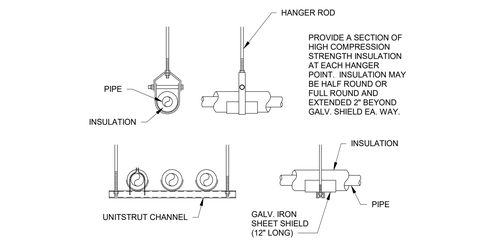


AT BOILER B-1 1/B1.2, INTERRUPT BOILER FULL LOAD CURRENT AT 120V WITH PILLA ELECTRICAL PRODUCTS BSD120N1 TW MDY (2-NO, 2-NC) PILCLHCOV1 OR APPROVED EQUIVALENT. RED BOILER SHUTDOWN STATION WITH TURN-TO-RESET MUSHROOM BUTTON, 2-NO AND 2-NC CONTACTS RATED AT 24A, AND CLEAR HINGED COVER.

10 TYPICAL BOILER EMERGENCY OFF PUSHBUTTON DETAIL
NOT TO SCALE



7 HOT WATER BOILER PIPING DETAIL
NOT TO SCALE



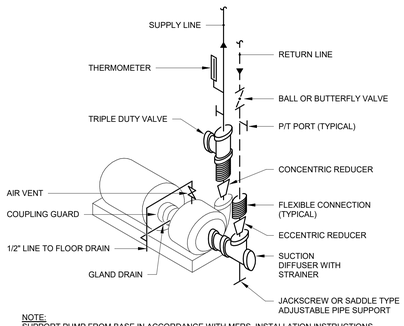
NOTES:
1. DO NOT EXCEED ALLOWABLE LOAD LIMITS OF ANY OR ALL OF THE INDIVIDUAL TRAPEZE PARTS.
2. DO NOT PENETRATE DUCT OR DUCT INSULATION VAPOR BARRIER WHEN SECURING HANGERS TO DUCTWORK. EVENTUALLY THE PENETRATIONS WILL LEAK.
3. USE HANGER CLAMPS OR BANDS FOR ROUND DUCT AS ROUND DUCT TENDS TO DEFORM ON TRAPEZE HANGERS.
4. TEARS, PUNCTURES, ETC. SHALL BE REPAIRED WITH TAPE OR MASTIC TO MAINTAIN THE INTEGRITY OF THE VAPOR BARRIER.
5. DO NOT USE ANY STRAP HANGERS WITH SCREWS ON ANY DUCTWORK THAT IS EXTERNALLY WRAPPED.

3 DUCTWORK HANGERS
NOT TO SCALE

NOTES:
1. ATTACH SUPPORTS FOR ALL PIPING SUSPENDED FROM THE STRUCTURE TO THE TOP CORD OF JOISTS OF BEAMS.
2. PROVIDE COPPER OR PLASTIC COATED HANGERS FOR NON-INSULATED COPPER PIPE.

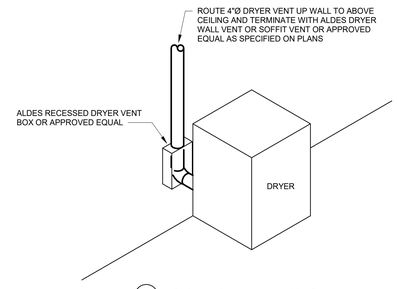
4 PIPE INSULATION DETAIL
NOT TO SCALE

17 CHILLER PIPING DETAIL
NOT TO SCALE



NOTE:
SUPPORT PUMP FROM BASE IN ACCORDANCE WITH MFRS. INSTALLATION INSTRUCTIONS. INSTALL PUMP CONNECTIONS IN ACCORDANCE WITH MFRS. INSTALLATION INSTRUCTIONS.

14 BASE MOUNT PUMP DETAIL
NOT TO SCALE



11 DRYER VENTING DETAIL
NOT TO SCALE

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-uso.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA BENJAMIN SCHMITT No. 62524PE LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
FARRIS ENGINEERING
BLUE STAR INTEGRATIVE STUDIO
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **MECHANICAL DETAILS**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHS1022018000051
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **05/19/2020** | Checked: **BMS** | Drawn: **LMB**

Project Number: **H IH BLAC 19100**

Building Number

Drawing Number: ***M5.1***

INDIAN HEALTH SERVICE · PHS · 1955 ·

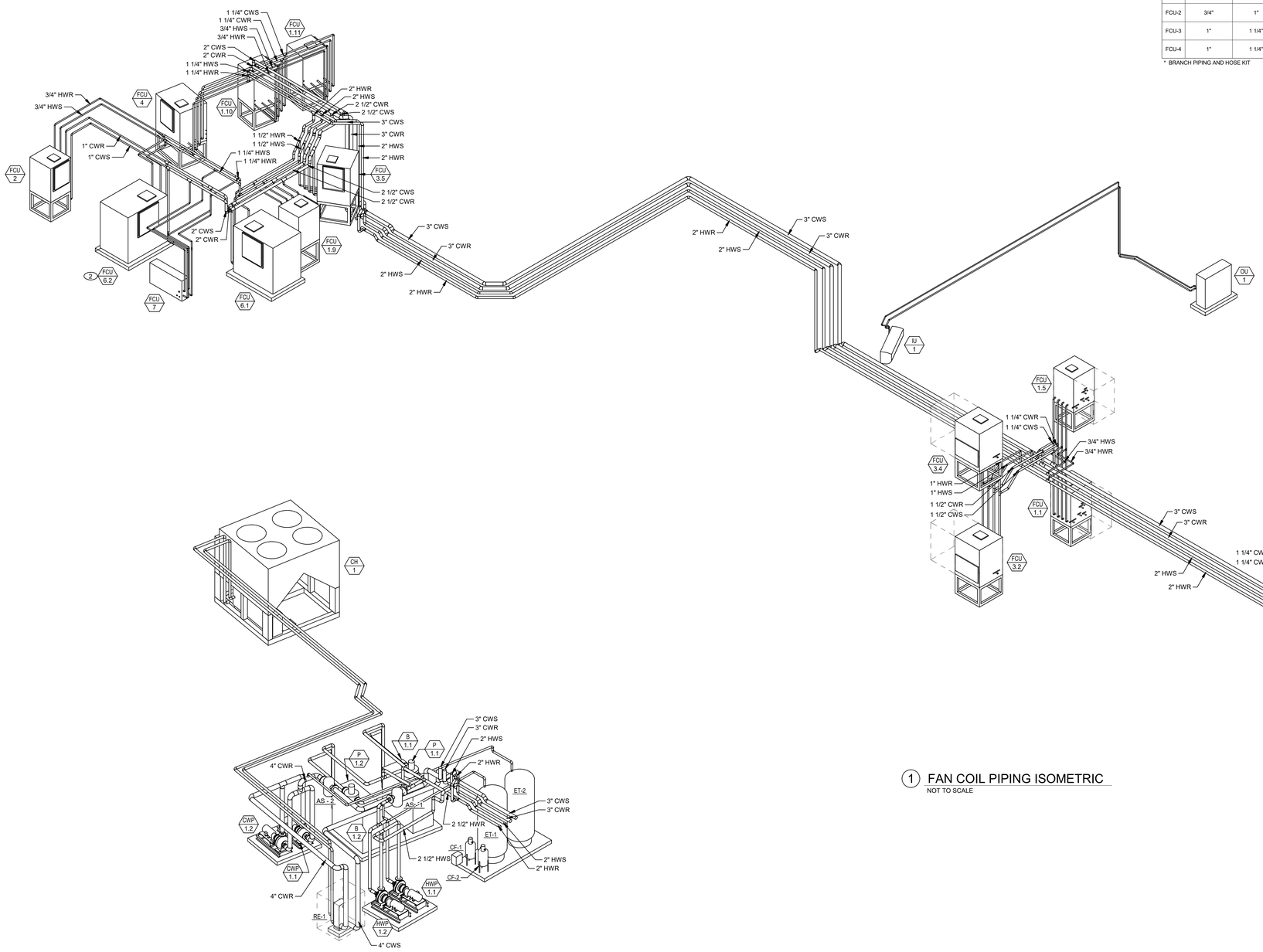
BRANCH PIPE SIZING SCHEDULE

MARK	PIPE SIZE			MARK	PIPE SIZE		
	*HWS/HWR	*CWS/CWR	CONDENSATE		*HWS/HWR	*CWS/CWR	CONDENSATE
FCU-1	3/4"	1"	3/4"	FCU-5	1"	1 1/2"	1"
FCU-2	3/4"	1"	3/4"	FCU-6	1"	1 1/2"	1 1/4"
FCU-3	1"	1 1/4"	1"	FCU-7	3/4"	3/4"	3/4"
FCU-4	1"	1 1/4"	1"				

* BRANCH PIPING AND HOSE KIT

KEYNOTES

1	REFER TO BRANCH PIPE SIZING SCHEDULE, THIS SHEET, FOR PIPE SIZES TO FAN COIL UNITS.
2	INSTALL 3-WAY BYPASS CONTROL VALVES FOR THIS UNIT IN LIEU OF 2-WAY VALVES FOR HOT WATER AND CHILLED WATER.
3	INSTALL 3-WAY BYPASS CONTROL VALVE FOR THIS UNIT IN LIEU OF 2-WAY VALVE FOR HOT WATER. CHILLED WATER CONTROL VALVE TO BE 2-WAY.



1 FAN COIL PIPING ISOMETRIC
NOT TO SCALE

2 MECHANICAL C111 PIPING ISOMETRIC
NOT TO SCALE

ADDENDUM 001 (1)	02/02/2022
Revisions:	Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-usa.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA
BENJAMIN SCHMITT
No. 62624PE
LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title	MECHANICAL PIPING ISOMETRICS
Approved: Project Director	
Project Title	APARTMENT BUILDING AND SITEWORK
Contract No.:	HHSI102201800005I
Task Order No.:	75H70119F30002
Location	BROWNING, MONTANA
Date	05/19/2020
Checked	BMS
Drawn	LMB
Project Number	H IH BLAC 19100
Building Number	
Drawing Number	M6.1

INDIAN HEALTH SERVICE · PHS · 1955 ·

SPLIT SYSTEM UNIT SCHEDULE

INDOOR UNIT MARK	OUTDOOR UNIT MARK	AMBIENT AIR DB/WB (°F)	EAT DB/WB (°F)	CFM	COOLING DATA (MBH)		MANUFACTURER	INDOOR UNIT MODEL NO.	OUTDOOR UNIT MODEL NO.	REMARKS
					TOTAL	SENSIBLE				
IU-1	OU-1	96/63	79/62	695	16.2	15.6	CARRIER	40MKCB18B--3	24AHA418A003	1, 2, 3, 4, 5

REMARKS:
1. SEE MECHANICAL/ELECTRICAL COORDINATION SCHEDULE FOR ELECTRICAL DATA.
2. PROVIDE HARD-WIRED PROGRAMMABLE THERMOSTAT.
3. PROVIDE LOW AMBIENT KIT, WINTER START CONTROL, CRANKCASE HEATER, AND WIND BAFFLES.
4. PROVIDE CONDENSATE PUMP BY SPLIT SYSTEM MANUFACTURER. PUMP TO BE MOUNTED ADJACENT TO INDOOR UNIT.
5. PROVIDE 4" THICK CONCRETE HOUSEKEEPING PAD AND VIBRATION ISOLATION FOR OUTDOOR UNIT.

DUCTWORK INSULATION SCHEDULE

DUCTWORK SYSTEM	ACOUSTICAL LINER	FLEXIBLE FIBERGLASS	RIGID FIBERGLASS	THICKNESS (INCHES)	REMARKS
ROUND CONCEALED SUPPLY AIR DUCTWORK	-	X	-	2"	1
RECTANGULAR SUPPLY AIR DUCTWORK DOWNSTREAM OF FAN COIL UNITS	X	-	-	2"	1
RECTANGULAR RETURN AIR DUCTWORK UPSTREAM OF FAN COIL UNITS	X	-	-	1"	1
OUTSIDE AIR DUCTWORK	-	X	-	2"	1
VENTILATION AIR DUCTWORK	-	X	-	2"	1
EXHAUST AIR DUCTWORK	-	X	-	2"	1

REMARKS:
1. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

REGISTER - GRILLE - DIFFUSER SCHEDULE

MARK	FUNCTION	TYPE	CFM RANGE	MAX N.C.	SIZE (INCHES)	BORDER OR FRAME	MATERIAL		FINISH	ACCESS.	MANUFACTURER & MODEL NO.	REMARKS
							ALUM.	STEEL				
S-1	SUPPLY	OPPOSED BLADE DAMPER 4 WAY	0-175	25	6" x 6" NECK	12 x 12 SURFACE MOUNT	X	-	STND. WHITE	-	KRUEGER 56200	1, 2, 3
S-2	SUPPLY	OPPOSED BLADE DAMPER 4 WAY	0-150	25	6" x 6" NECK	16 x 16 SURFACE MOUNT	X	-	STND. WHITE	-	KRUEGER 56200	1, 2, 3
S-3	SUPPLY	OPPOSED BLADE DAMPER 4 WAY	150-250	25	8" x 8" NECK	16 x 16 SURFACE MOUNT	X	-	STND. WHITE	-	KRUEGER 56200	1, 2, 3
S-4	SUPPLY	OPPOSED BLADE DAMPER 4 WAY	250-345	25	10" x 10" NECK	16 x 16 SURFACE MOUNT	X	-	STND. WHITE	-	KRUEGER 56200	1, 2, 3
S-5	SUPPLY	ROUND CONE	0-350	25	10" Ø	SURFACE MOUNT	X	-	STND. WHITE	-	KRUEGER SERIES SRM	1, 2, 3
S-6	SUPPLY	LINEAR SLOT HORIZ. THROW	225-350	25	36" LONG	SURFACE MOUNT	X	-	STND. WHITE	-	KRUEGER 1910-4	1, 2, 3, 4
S-7	SUPPLY	DOUBLE DEFLECTION	150-300	25	10" x 6"	SURFACE MOUNT	X	-	STND. WHITE	-	KRUEGER SERIES 5880	1, 2, 3
R-1	RETURN/ EXHAUST	PERF. PANEL 12 x 12 FACE	0-175	25	6" x 6" NECK	SURFACE MOUNT	X	-	STND. WHITE	-	KRUEGER SERIES 56490	1, 2, 3
R-2	RETURN	PERF. PANEL 16 x 16 FACE	0-175	25	6" x 6" NECK	SURFACE MOUNT	X	-	STND. WHITE	-	KRUEGER SERIES 56490	1, 2, 3
R-3	RETURN	PERF. PANEL 16 x 16 FACE	175-300	25	8" x 8" NECK	SURFACE MOUNT	X	-	STND. WHITE	-	KRUEGER SERIES 56490	1, 2, 3
R-4	RETURN	PERF. PANEL 16 x 16 FACE	300-480	25	10" x 10" NECK	SURFACE MOUNT	X	-	STND. WHITE	-	KRUEGER SERIES 56490	1, 2, 3
R-5	RETURN	PERF. PANEL 16 x 16 FACE	480-950	25	14" x 14" NECK	SURFACE MOUNT	X	-	STND. WHITE	-	KRUEGER SERIES 56490	1, 2, 3
R-6	RETURN	PERF. PANEL 24 x 24 FACE	0-1350	25	18" x 18" NECK	SURFACE MOUNT	X	-	STND. WHITE	-	KRUEGER SERIES 56490	1, 2, 3
R-7	RETURN	PERF. PANEL 24 x 24 FACE	0-1700	25	22" x 22" NECK	SURFACE MOUNT	X	-	STND. WHITE	-	KRUEGER SERIES 56490	1, 2, 3
R-8	RETURN	PERF. PANEL 24 x 48 FACE	0-3000	25	22" x 46" NECK	SURFACE MOUNT	X	-	STND. WHITE	-	KRUEGER SERIES 56490	1, 2, 3
R-9	EXHAUST	SINGLE DEFL. 0° BLADE	0-200	25	10" x 6"	SURFACE MOUNT	X	-	STND. WHITE	-	KRUEGER S580H	1, 2, 3
R-10	RETURN	SINGLE DEFL. 35° BLADE	0-600	25	20" x 10"	SURFACE MOUNT	X	-	STND. WHITE	O.B.D.	KRUEGER S580H	1, 2, 3

REMARKS:
1. PROVIDE SPECIFIC NOISE CRITERIA (NC) DATA FOR EACH LINE ITEM WITH SHOP DRAWINGS.
2. COORDINATE BORDER OR FRAME TYPE WITH CEILING TYPE.
3. COORDINATE FINISH/COLOR WITH ARCHITECT.
4. PROVIDE WITH CONCEALED FASTENING.

LOUVER SCHEDULE

MARK	FUNCTION	CFM	AIR P.D.	SIZE (INCHES)			FINISH	SCREEN		MANUFACTURER & MODEL NO.	REMARKS
				WIDTH	HEIGHT	DEPTH		BIRD	INSECT		
LV-1	EXHAUST AIR	1,120	0.05	36"	18"	6"	REMARK 1	X		RUSKIN ELF6375DX	1
LV-2	OUTSIDE AIR	1,120	0.05	36"	18"	6"	REMARK 1	X		RUSKIN ELF6375DX	1

REMARKS:
1. COLOR TO BE SELECTED BY ARCHITECT.

VARIABLE FREQUENCY DRIVE SCHEDULE

MARK	SERVES	TYPE	CONTROL SIGNAL	MANUFACTURER & MODEL NO.	REMARKS
VFD-HWP	HWP-1	PULSE WIDTH MODULATION	4 - 20 MA	SPECIFICATION SECTION 23 09 33	1, 2, 3
VFD-CWP	CWP-1	PULSE WIDTH MODULATION	4 - 20 MA	SPECIFICATION SECTION 23 09 33	1, 2, 3

REMARKS:
1. SEE MECHANICAL/ELECTRICAL COORDINATION SCHEDULE FOR ELECTRICAL DATA.
2. UNIT SHALL HAVE INTEGRAL LOCKABLE DISCONNECT.
3. ALL MOTORS WITH VFD'S SHALL BE INVERTER RATED, PREMIUM EFFICIENCY AND PROVIDED WITH SHAFT GROUNDING KITS.

FAN COIL UNIT SCHEDULE

MARK	TYPE	CFM	EXT. S.P.	COOLING CAPACITY				HEATING CAPACITY			MANUFACTURER & MODEL NO.	REMARKS
				SENSIBLE (MBH)	TOTAL (MBH)	GPM	WPD (FT WC)	TOTAL (MBH)	GPM	WPD (FT WC)		
FCU-1	VERTICAL	600	0.50"	15.9	22.4	4.8	2.8	22.6	1.7	0.3	DAIKIN LAH002A	1, 2, 3, 4, 5
FCU-2	VERTICAL	800	0.50"	20.7	29.0	6.4	4.7	29.1	2.3	0.6	DAIKIN LAH002A	1, 2, 3, 4, 5
FCU-3	VERTICAL	1,200	0.50"	31.9	45.7	9.6	8.8	45.4	3.5	1.1	DAIKIN LAH003A	1, 2, 3, 4, 5
FCU-4	VERTICAL	1,600	0.50"	48.5	72.2	12.8	8.3	54.3	4.7	0.4	DAIKIN LAH004A	1, 2, 3, 4, 5
FCU-5	VERTICAL	2,000	0.50"	54.4	79.2	16.0	13.7	68.4	5.8	0.5	DAIKIN LAH005A	1, 2, 3, 4, 5
FCU-6	VERTICAL	2,400	0.50"	64.0	91.1	19.2	4.2	91.1	7.0	0.4	DAIKIN LAH007A	1, 2, 3, 4, 5
FCU-7	CONSOLE	400	0.00"	11.3	16.2	3.2	4.4	15.1	1.0	0.9	DAIKIN FCVC104	1, 2, 3, 5

REMARKS:
1. SEE MECHANICAL/ELECTRICAL COORDINATION SCHEDULE FOR ELECTRICAL DATA.
2. COOLING CAPACITY BASED ON 44°F EWT.
3. HEATING CAPACITY BASED ON 140°F EWT.
4. PROVIDE DOUBLE WALL CONSTRUCTION WITH 1" THICK INTERSTITIAL FOAM INJECTED INSULATION.
5. PROVIDE FILTER RACK AT RETURN CONNECTION FOR MERV-8 FILTERS.

AIR-COOLED CHILLER WITH REMOTE EVAPORATOR SCHEDULE

MARK	CAPACITY TONS @ 95°F AMBIENT	REFRIGERANT	SOUND POWER (DBA)	COMPRESSORS			CONDENSER FANS			MANUFACTURER & MODEL NO.	REMARKS
				TYPE	NO.	RLA (EA)	NO.	LRA (EA)	FLA (EA)		
CH-1	60	R-410A	87	SCROLL	4	26.9	4.00"	13.0	2.8	DAIKIN AGZ060E	1 THRU 11

REMARKS:
1. SEE MECHANICAL/ELECTRICAL COORDINATION SCHEDULES FOR ELECTRICAL DATA.
2. PROVIDE SINGLE POINT ELECTRICAL CONNECTION WITH DISCONNECT SWITCH.
3. PROVIDE FACTORY WIRED AND INSTALLED GFI RECEPTACLE.
4. PROVIDE FACTORY PACKAGED CONTROLS WITH BUILDING MANAGEMENT SYSTEM INTEGRATION. COORDINATE WITH TEMPERATURE CONTROLS CONTRACTOR.
5. SIZE AND INSTALL INSULATED REFRIGERANT PIPING (2 CIRCUITS) PER MANUFACTURER'S RECOMMENDATIONS AND REQUIREMENTS.
6. EXTERIOR INSULATED REFRIGERANT PIPING TO HAVE WEATHERPROOF JACKETING.
7. PROVIDE 4" THICK CONCRETE HOUSEKEEPING PAD WITH VIBRATION ISOLATION.
8. PROVIDE COMPRESSOR SOUND BLANKETS AND ACOUSTICAL SOUND PACKAGE.
9. PROVIDE HAIL GUARDS FOR CONDENSER COILS.
10. PROVIDE LOUVER KIT TO CONCEAL.
11. PROVIDE LOW AMBIENT OPERATION KIT.

REMOTE EVAPORATOR SCHEDULE

MARK	SERVES	TYPE	WATER SIDE					REFRIGERANT	MANUFACTURER & MODEL NO.	REMARKS
			DESIGN GPM	MINIMUM GPM	EWT	LWT	WPD (FT WC)			
RE-1	CHILLED WATER	BRAZED PLATE-TO-PLATE	140	60	54° F	44° F	14.3	R-410A	DAIKIN AGZ060E	1

REMARKS:
1. PROVIDE 4" CONCRETE HOUSEKEEPING PAD.

BOILER SCHEDULE

MARK	TYPE	HEAT EXCHANGER TYPE	FUEL	INPUT MBH	OUTPUT MBH	MINIMUM TURNDOWN	DESIGN dT (°F)	DESIGN FLOW (GPM)	MINIMUM FLOW (GPM)	PRESSURE DROP @ DESIGN FLOW (FT. WC)	MANUFACTURER & MODEL NO.	REMARKS
B-1	HIGH EFFICIENCY CONDENSING	STAINLESS STEEL	NATURAL GAS	1000	923	7:1	30	62	30	14	PATTERSON-KELLEY SONIC SC-1000	1, 2, 3, 4

REMARKS:
1. SEE MECHANICAL/ELECTRICAL COORDINATION SCHEDULE FOR ELECTRICAL DATA.
2. PROVIDE CONDENSATE NEUTRALIZER FOR EACH BOILER AND FLUE DRAIN.
3. PROVIDE 6" PVC COMBUSTION AIR INTAKE.
4. PROVIDE 6" DOUBLE WALL AL29-4C EXHAUST FLUE WITH 1" AIR GAP.

HYDRONIC SYSTEM SPECIALTIES SCHEDULE

MARK	SERVES	TYPE	GPM	HEAD (FT)	GAL.	CONNECTION (IN)	MANUFACTURER & MODEL NO.	REMARKS
ET-1	HOT WATER LOOP	EXPANSION TANK	-	-	79	1	TACO CA300	1, 3
ET-2	CHILLED WATER LOOP	EXPANSION TANK	-	-	79	1	TACO CA300	1, 3
AS-1	HOT PUMP WATER LOOP	AIR/DIRT SEPARATOR	75	-	-	3	TACO 4903	2, 3
AS-2	CHILLED WATER LOOP	AIR/DIRT SEPARATOR	140	-	-	4	TACO 4904	2, 3
CF-1	HOT WATER LOOP	MANUAL POT FEEDER	-	-	5	3/4	J.L. WINGERT DB-5HD	3
CF-2	CHILLED WATER LOOP	MANUAL POT FEEDER	-	-	5	3/4	J.L. WINGERT DB-5HD	3

REMARKS:
1. FULL ACCEPTANCE VOLUME INDICATED. ASME CERTIFIED TANK.
2. PROVIDE STRAINER.
3. PROVIDE 4" THICK CONCRETE HOUSEKEEPING PAD.

PUMP SCHEDULE

MARK	SERVES	TYPE	GPM	HEAD FT.	EFF.	RPM	MANUFACTURER & MODEL NO.	REMARKS
HWP-1	HOT WATER LOOP	BASED MOUNTED, END SUCTION	75	40	68%	1,750	TACO FI1207D	1, 2, 3, 4
CWP-1	CHILLED WATER LOOP	BASED MOUNTED, END SUCTION	140	75	71%	1,750	TACO FI2009D	1, 2, 3, 4
P-1	BOILER CIRCULATION	IN-LINE	62	20	60%	1,750	TACO 1935	1, 3

REMARKS:
1. SEE MECHANICAL/ELECTRICAL COORDINATION SCHEDULE FOR ELECTRICAL DATA.
2. PROVIDE WITH PREMIUM EFFICIENCY INVERTER-DUTY MOTOR.
3. WORKING FLUID IS 100% WATER.
4. PROVIDE FACTORY INSTALLED MOTOR WITH SHAFT GROUNDING KIT.

MECHANICAL / ELECTRICAL COORDINATION SCHEDULE

ABBREVIATION:

E	ELECTRICAL CONTRACTOR	HP	HORSEPOWER	4X	NEMA 4X	V	VOLTAGE
M	MECHANICAL CONTRACTOR	KW	KILOWATTS	PH	PHASE	VFD	VARIABLE FREQUENCY
I	INTEGRAL WITH EQUIPMENT	MR	PER MANUFACTURER'S	RE	REVERSING		DRIVE
C	COMBINATION STARTER AND		RECOMMENDATION	RV	REDUCED VOLTAGE	2S	TWO SPEED
	SAFETY SWITCH	NF	NON-FUSED	SF	FUSE HOLDER WITH SWITCH	3S	THREE SPEED
CB	CIRCUIT BREAKER	NR	NON-REVERSING	SS	SAFETY SWITCH		
FV	FULL VOLTAGE	N1	NEMA 1	SH	HP RATED SWITCH		
FLA	FULL LOAD AMPS	3R	NEMA 3R	ST	THERMAL ELEM. SWITCH		

REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS

MARK	DESCRIPTION	RATING			DISCONNECT			MOTOR STARTER			NAMEPLATE	REMARKS
		LOAD	V	PH	FURNISH/ INSTALL BY	TYPE	RATING (AMPS)	FUSE SIZE	ENCL.	FURNISH/ INSTALL BY	TYPE/ NEMA SIZE	ENCL.	MINIMUM SCCR (AMPS)	
FCU-1	FAN COIL UNIT	2.8 FLA	208	3	E/E	SS	30	MR	N1	M/I	-	-	5,000	-
FCU-2	FAN COIL UNIT	2.8 FLA	208	3	E/E	SS	30	MR	N1	M/I	-	-	5,000	-
FCU-3	FAN COIL UNIT	4.4 FLA	208	3	E/E	SS	30	MR	N1	M/I	-	-	5,000	-
FCU-4	FAN COIL UNIT	4.4 FLA	208	3	E/E	SS	30	MR	N1	M/I	-	-	5,000	-
FCU-5	FAN COIL UNIT	5.9 FLA	208	3	E/E	SS	30	MR	N1	M/I	-	-	5,000	-
FCU-6	FAN COIL UNIT	5.9 FLA	208	3	E/E	SS	30	MR	N1	M/I	-	-	5,000	-
FCU-7	FAN COIL UNIT	2.6 FLA	208	1	E/E	SS	30	MR	N1	M/I	-	-	5,000	-
ERV-1	ENERGY RECOVERY VENTILATOR	0.4 FLA	120	1	E/E	SS	30	MR	N1	M/I	-	-	-	-
ERV-2	ENERGY RECOVERY VENTILATOR	3.3 FLA	120	1	E/E	SS	30	MR	N1	M/I	-	-	-	-
HWP-1	HOT WATER PUMP	2 HP	208	3	M/E	VFD	-	-	-	-	VFD	-	5,000	1
CWP-1	CHILLED WATER PUMP	7.5 HP	208	3	M/E	VFD	-	-	-	-	VFD	-	5,000	1
P-1	BOILER CIRC PUMP	3/4 HP	120	1	E/E	C	30	MR	N1	E/E	FVNR 00	N1	-	-
B-1	BOILER	10 FLA	120	1	E/E	SS	30	MR	N1	-	-	-	-	-
CH-1	AIR-COOLED CHILLER	260.4 MCA	208	3	M/I	-	-	-	-	M/I	-	-	12,000	-
IU-1	SPLIT SYSTEM INDOOR UNIT	1 MCA	208	1	E/E	SS	20	MR	N1	-	-	-	5,000	-
OU-1	SPLIT SYSTEM OUTDOOR UNIT	11.8 MCA	208	1	E/E	SS	30	MR	3R	-	-	-	5,000	-
ECUH-1	ELECTRIC CABINET HEATER	5 KW	208	3	M/I	-	-	-	-	-	-	-	5,000	-
WH-1	WATER HEATER	5 FLA	120	1	E/E	SH	20	MR	N1	-	-	-	-	-
WS-1	WATER SOFTENER	5 FLA	120	1	-	-	-	-	-	-	-	-	-	2
HWCP-1	HOT WATER CIRCULATION PUMP	1/25 HP	120	1	E/E	SH	20	MR	N1	-	-	-	-	-
DWBP-1	BOOSTER PUMP	10 HP	208	3	M/I	-	-	-	-	VFD	-	-	5,000	-
SP-1	SUMP PUMP	1 HP	208	1	-	-	-	-	-	-	-	-	-	2
EWC-1	ELECTRIC WATER COOLER	<10 FLA	120	1	-	-	-	-	-	-	-	-	-	2

GENERAL NOTES:
A. VERIFY/COORDINATE ALL RATINGS FOR EQUIPMENT. WHERE SUCH RATINGS ARE OTHER THAN THAT INDICATED ON MECHANICAL/ELECTRICAL COORDINATION SCHEDULE, PROVIDE DISCONNECTS, MOTOR STARTERS, OVERCURRENT DEVICES AND RELATED REVISIONS ACCORDINGLY. WHERE EQUIPMENT IS PROVIDED WITH RATINGS OTHER THAN THAT INDICATED, CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION AND ASSOCIATED COSTS FOR REVISIONS.

B. PROVIDE FRACTIONAL HORSEPOWER MOTORS WITH INTEGRAL OVERLOAD PROTECTION.

C. EQUIPMENT LISTED IN SCHEDULE MAY APPEAR IN NUMEROUS LOCATIONS. EQUIPMENT MARKS ARE DESIGNATED BY UNIQUE IDENTIFIERS ON THE PLANS; I.E., HP-1.1, HP-1.2. IN THESE INSTANCES, THE ELECTRICAL REQUIREMENTS DO NOT CHANGE FROM ONE MARK TO THE NEXT, ONLY THE UNIQUE IDENTIFIER CHANGES.

D. HORSEPOWER RATED SWITCHES (SH): FOR 120 V MOTORS LESS THAN 1/2 HP, PROVIDE FUSEHOLDER WITH SWITCH, FUSED PER MANUFACTURER'S RECOMMENDATION AND NEC REQUIREMENTS. FOR 120 V MOTORS RATED 1/2 HP OR 3/4 HP, PROVIDE HP RATED TOGGLE SWITCH (WHERE BRANCH CIRCUIT OVERCURRENT DEVICE MEETS NEC REQUIREMENTS FOR SHORT-CIRCUIT PROTECTION) OR FUSED SAFETY SWITCH.

E. INDUSTRIAL CONTROL PANELS AS DEFINED BY NEC ARTICLE 409, MOTOR CONTROLLERS, HERMETIC REFRIGERANT MOTOR COMPRESSORS AND EQUIPMENT SHALL BE MARKED WITH INFORMATION AS REQUIRED BY THE NATIONAL ELECTRICAL CODE (NEC). MARK IN ACCORDANCE WITH NEC ARTICLE 409.110 FOR INDUSTRIAL CONTROL PANELS, NEC ARTICLE 430.8 FOR CONTROLLERS AND NEC ARTICLE 440.4(B) FOR HERMETIC REFRIGERANT MOTOR COMPRESSORS AND EQUIPMENT. THE MARKED SHORT CIRCUIT CURRENT RATING (SCCR) SHALL BE NO LESS THAN THE VALUE INDICATED ABOVE.

REMARKS:
1. PROVIDE LOCKABLE DISCONNECT INTEGRAL WITH VFD. PROVIDE FUSE SIZED PER MANUFACTURER INTEGRAL TO VFD.
2. UNIT SHALL BE PROVIDED WITH CORD AND PLUG. E. C. TO PROVIDE RECEPTACLE INSTALLED ADJACENT TO EQUIPMENT.

ENERGY RECOVERY VENTILATION UNIT SCHEDULE

MARK	SUPPLY FAN			EXHAUST FAN			SUMMER MODE	WINTER MODE	TEMP EFF.	FAN EFFICACY (CFM/WATT)	WEIGHT (LBS)	& MODEL NO.	REMARKS
	CFM	FAN QTY.	E.S.P. (IN WG)	CFM	FAN QTY.	E.S.P. (IN WG)	TOTAL EFFICIENCY	TOTAL EFFICIENCY					
ERV-1	80	1	0.35	80	1	0.35	45%	63%	75%	1.96	40	S&P TR90	1, 2, 3
ERV-2	200	1	0.90	200	1	0.90	48%	67%	76%	0.95	80	S&P TR300	1, 2, 3

REMARKS:
1. SEE MECHANICAL/ELECTRICAL COORDINATION SCHEDULE FOR ELECTRICAL DATA.
2. PROVIDE STATIC PLATE HEAT EXCHANGER.
3. ERV OPERATION TO BE INTERLOCKED WITH FAN COIL UNIT OPERATION.

ELECTRIC CABINET AND UNIT HEATER SCHEDULE

MARK	TYPE	ARRANGEMENT	HEATING CAP. (KW)	MANUFACTURER & MODEL NO.	REMARKS
ECUH-1	SEMI-RECESSED WALL MOUNTED	FRONT INLET/OUTLET	5.0	INDEECO SERIES CUI	1, 2, 3, 4

REMARKS:
1. SEE MECHANICAL/ELECTRICAL COORDINATION SCHEDULE FOR ELECTRICAL DATA.
2. COORDINATE FINISH WITH ARCHITECT.
3. PROVIDE WITH INTEGRAL DISCONNECT.
4. PROVIDE TRIM KIT FOR WALL RECESSED UNITS.

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SYDNEY
farris-uso.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA — BENJAMIN SCHMITT — No. 62524PE — LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: MECHANICAL SCHEDULES

Approved: Project Director

Project Title: APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: BROWNING, MONTANA

Date: 05/19/2020 | Checked: BMS | Drawn: LMB

Project Number: H IH BLAC 19100

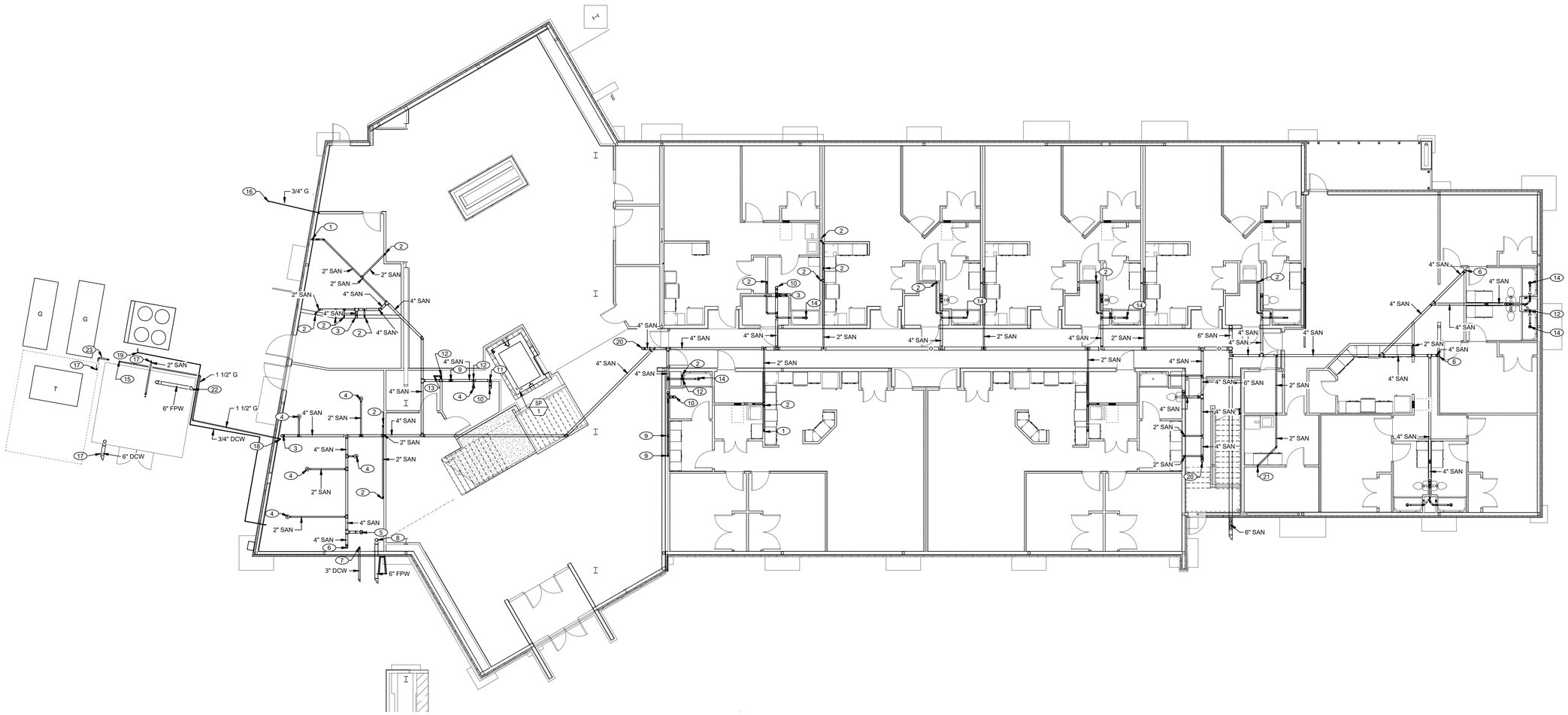
Building Number

Drawing Number: M7.1

INDIAN HEALTH SERVICE · IHS · 1955 ·

KEYNOTES

1	2" SAN UP TO SINK. SEE FIRST FLOOR PLAN FOR CONTINUATION.
2	2" SAN UP TO FIRST FLOOR. SEE FIRST FLOOR PLAN FOR CONTINUATION.
3	4" SAN UP TO FIRST FLOOR. SEE FIRST FLOOR PLAN FOR CONTINUATION.
4	2" SAN UP TO FLOOR DRAIN. SEE FIRST FLOOR PLAN FOR CONTINUATION.
5	4" SAN UP TO FLOOR DRAIN. SEE FIRST FLOOR PLAN FOR CONTINUATION.
6	4" SAN UP TO WCO. SEE FIRST FLOOR PLAN FOR CONTINUATION.
7	3" DCW UP TO FIRST FLOOR. SEE FIRST FLOOR PLAN FOR CONTINUATION.
8	6" FPW UP TO FIRE ENTRANCE. SEE FIRE PROTECTION PLANS FOR ADDITIONAL REQUIREMENTS. COORDINATE FINAL LOCATION OF RISER WITH FIRE SPRINKLER CONTRACTOR.
9	2" SAN UP TO LAVATORY. SEE FIRST FLOOR PLAN FOR CONTINUATION.
10	4" SAN UP TO WATER CLOSET. SEE FIRST FLOOR PLAN FOR CONTINUATION.
11	2" VENT UP TO FIRST FLOOR. SEE FIRST FLOOR PLAN FOR CONTINUATION.
12	1 1/2" VENT UP TO FIRST FLOOR. SEE FIRST FLOOR PLAN FOR CONTINUATION.
13	2" SAN UP TO MOP SINK. SEE FIRST FLOOR PLAN FOR CONTINUATION.
14	2" SAN UP TO SHOWER. SEE FIRST FLOOR PLAN FOR CONTINUATION.
15	2" G UP TO METER. SEE FIRST FLOOR PLAN FOR CONTINUATION.
16	ROUTE GAS PIPING TO AND CONNECT WITH FIRE PIT. COORDINATE FINAL CONNECTIONS WITH FIELD CONDITIONS. PROVIDE AND INSTALL ALL PIPING, FITTINGS, REGULATORS, VALVES AND ACCESSORIES AS REQUIRED FOR A COMPLETE AND PROPERLY OPERATING SYSTEM.
17	SEE CIVIL FOR CONTINUATION.
18	1 1/2" G UP TO MECHANICAL ROOM SEE ENLARGED PLAN FOR CONTINUATION.
19	3/4" DCW UP TO YARD HYDRANT.
20	4" SAN UP TO FCO. SEE FIRST FLOOR PLAN FOR CONTINUATION.
21	2" SAN UP TO WCO. SEE FIRST FLOOR PLAN FOR CONTINUATION.
22	TO FIRE SPRINKLER RISER IN BUILDING
23	NATURAL GAS PIPING BY UTILITY PROVIDER.



N

1 FOUNDATION PLUMBING PLAN

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

0' 4' 8' 16'

1/8" = 1'-0"

ADDENDUM 001 (1)	02/02/2022
Revisions:	Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-usa.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA
BENJAMIN SCHMITT
No. 62524PE
LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **FOUNDATION PLUMBING PLAN**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **05/19/2020** | Checked: **BMS** | Drawn: **CJB**

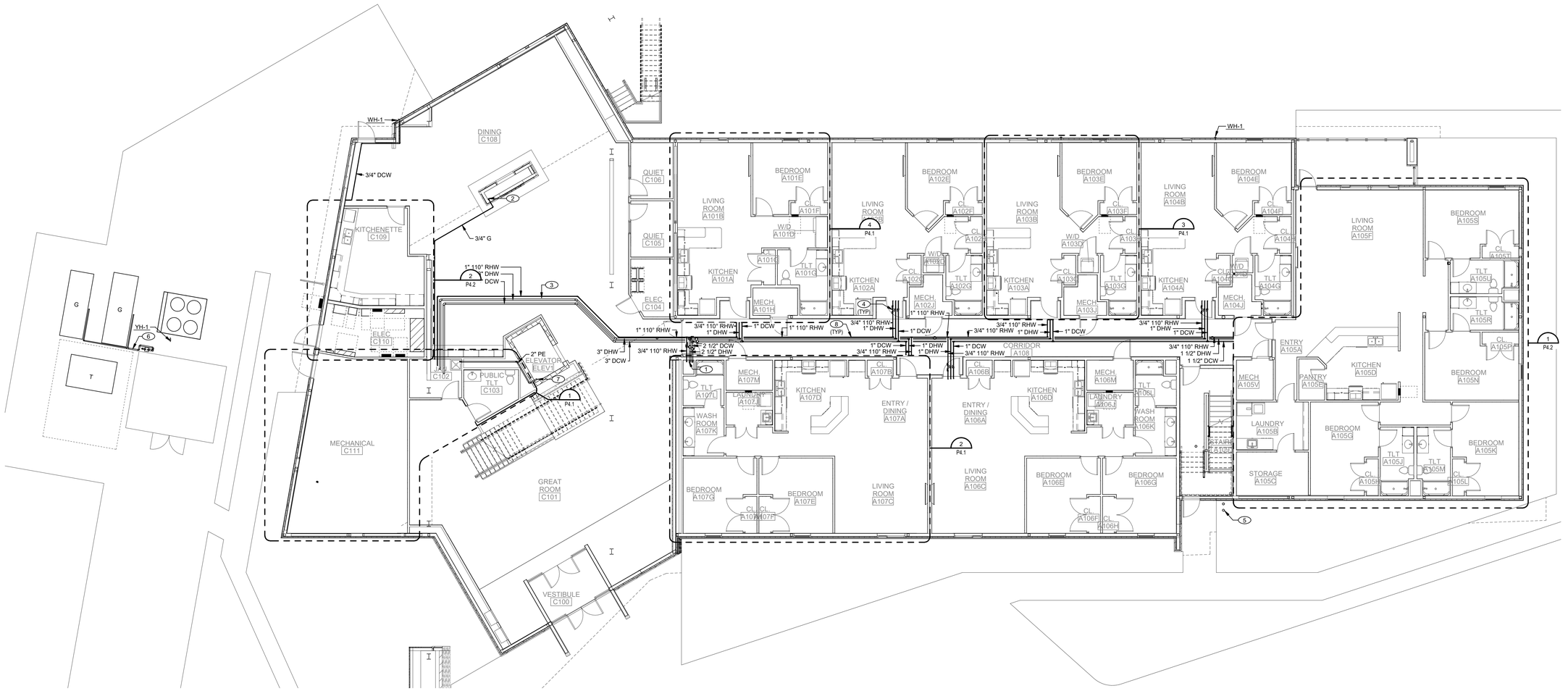
Project Number: **H IH BLAC 19100**

Building Number

Drawing Number: ***PL1.0***

INDIAN HEALTH SERVICE · PHS · 1955 ·

KEYNOTES	
1	2 1/2" DCW 2 1/2" DHW AND 3/4" RHW UP TO SECOND FLOOR. SEE PL1.2 FOR CONTINUATION.
2	3/4" G DOWN TO FIREPLACE. COORDINATE FINAL CONNECTIONS WITH FIREPLACE. PROVIDE AND INSTALL ALL VALVES, PIPING AND ACCESSORIES AS REQUIRED FOR A COMPLETE AND PROPERLY INSTALLED SYSTEM.
3	SHALLOW INTERSTITIAL SPACE ABOVE CEILING. COORDINATE EXACT ROUTING WITH OTHER TRADES.
4	AUTOFLOW BALANCE VALVE SET TO 0.5 GPM. REFER TO DETAIL 1/P5.1.
5	DOUBLE GRADE CLEANOUT. REFER TO DETAIL 3/P5.1
6	ROUTE GAS PIPING AT GRADE. PROVIDE PIPE SUPPORTS AS REQUIRED TO SECURE PIPE FROM MOVING.
7	TO SUMP PUMP. REFER TO DETAIL 10/P5.1.
8	REFER TO DETAIL 13/P5.1 FOR PIPE SUPPORT INSULATION REQUIREMENTS.



SEE ENLARGED PLANS AND RISERS DIAGRAMS FOR ADDITIONAL PIPE SIZES AND ROUTING.

1 FIRST FLOOR PLUMBING PLAN

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

0' 4' 8' 16'
1/8" = 1'-0"

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-usa.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA
BENJAMIN SCHMITT
No. 62524PE
LICENSED PROFESSIONAL ENGINEER
05/19/2020

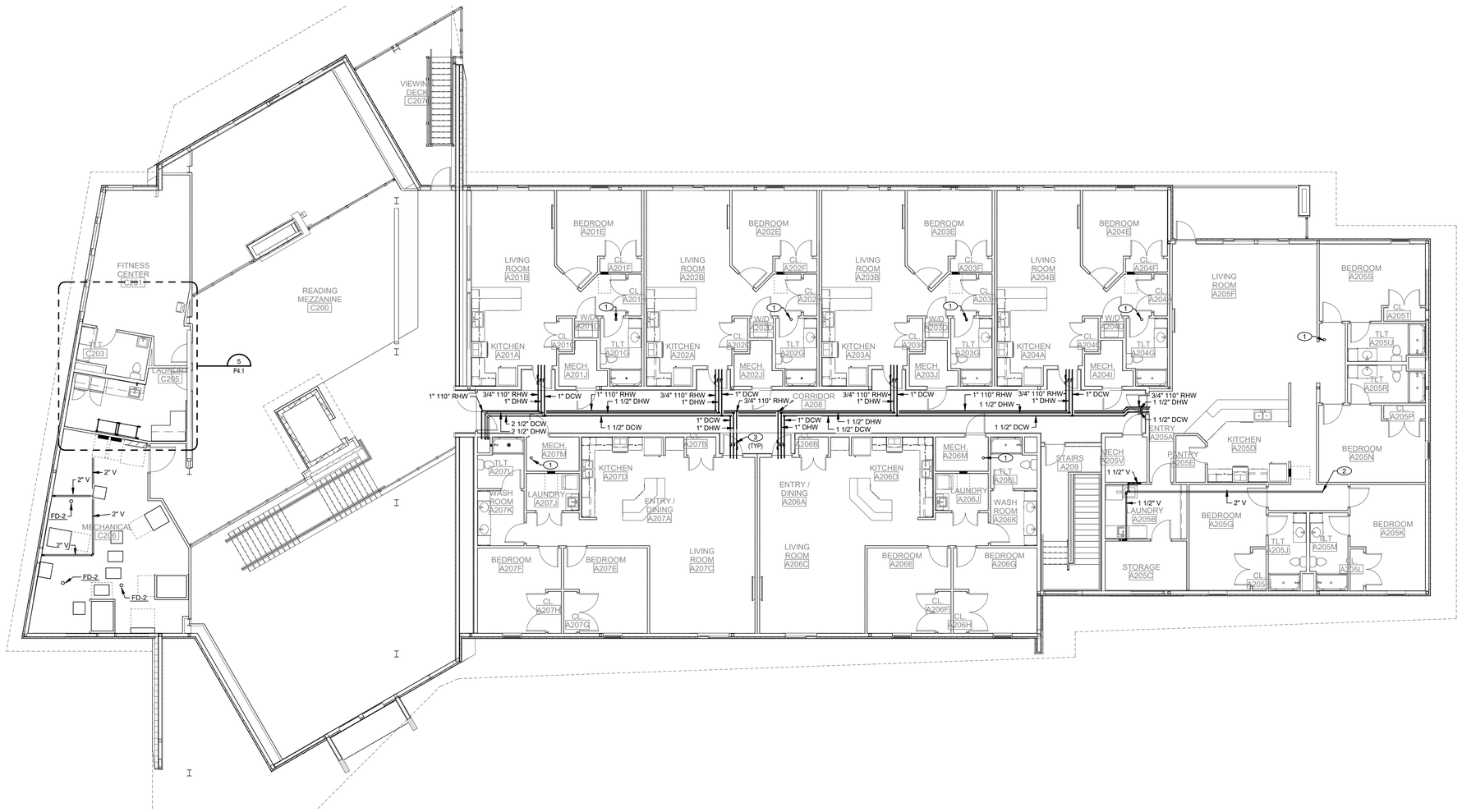
ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title	FIRST FLOOR PLUMBING PLAN
Approved: Project Director	
Project Title	APARTMENT BUILDING AND SITEWORK
Contract No.:	HHSI1022018000051
Task Order No.:	75H70119F30002
Location	BROWNING, MONTANA
Date	05/19/2020
Checked	BMS
Drawn	CJB
Project Number	H IH BLAC 19100
Building Number	
Drawing Number	PL1.1

INDIAN HEALTH SERVICE · PHS · 1955 ·

KEYNOTES	
1	VTR. REFER TO DETAIL 7/P5.1.
2	SEE RISER DIAGRAMS FOR CONTINUATION.
3	AUTO FLOW VALVE SET TO 0.5 GPM. REFER TO DETAIL 1/P5.1 FOR ADDITIONAL REQUIREMENTS.



SEE ENLARGED PLANS AND RISERS DIAGRAMS FOR ADDITIONAL PIPE SIZES AND ROUTING.

1 SECOND FLOOR PLUMBING PLAN

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

0' 4' 8' 16'
1/8" = 1'-0"

ADDENDUM 001 1	02/02/2022
Revisions:	Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-usa.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA
BENJAMIN SCHMITT
No. 62524PE
LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title	SECOND FLOOR PLUMBING PLAN
Approved: Project Director	
Project Title	APARTMENT BUILDING AND SITEWORK
Contract No.:	HHSI102201800005I
Task Order No.:	75H70119F30002
Location	BROWNING, MONTANA
Date	05/19/2020
Checked	BMS
Drawn	CJB
Project Number	H IH BLAC 19100
Building Number	
Drawing Number	PL1.2

INDIAN HEALTH SERVICE · PHS · 1955 ·

YARD HYDRANT: YH-1

FIXTURE
3/4" FREEZELESS YARD HYDRANT WITH DUAL CHECK BACKFLOW PREVENTOR, 3/4" HOSE THREAD OUTLET, AUTOMATIC DRAIN, LOCKING FLOW CAM.
WOODFORD #Y2.

ELECTRIC WATER COOLER: EWC-1

COMPLIES WITH A.D.A. HANDICAPPED REQUIREMENTS WHEN INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

FIXTURE
NO LEAD, BARRIER-FREE ACCESS (ADA COMPLIANT) WATER COOLER. HOODED STREAM PROJECTOR, "EASY TOUCH" FRONT PUSH BUTTON ACTIVATION, GALVANIZED STEEL CHASSIS SUPPORTS FOUNTAIN TOP AND ALL WORKING MECHANISMS, FOUNTAIN TOP IS SINGLE PIECE STAINLESS STEEL, INTEGRAL DRAIN GRID, PRODUCES UP TO 8.0 GPH OF 50° F WATER BASED ON 80° F INLET WATER AND 90° F AMBIENT, BOTTLE FILLER SHALL PROVIDE 1.1 GPM WITH LAMINAR FLOW, ELECTRICAL: 260 WATTS, 3.8 FLA.
STAINLESS STEEL.
ELKAY EZS8WSLK

ACCESSORY
CANE APRON - **ELKAY LKAPREZL**

FLOOR DRAIN: FD-3

FIXTURE
DUCO CAST IRON FLOOR DRAIN, TWO-PIECE BODY WITH DOUBLE DRAINAGE FLANGE, INVERTABLE NON-PUNCTURING FLASHING COLLAR, SEEPAGE OPENINGS, BOTTOM OUTLET AND ADJUSTABLE NICKEL BRONZE ROUND STRAINER.
J.R. SMITH 2005-A-NB.

FLOOR CLEANOUT: FCO

FIXTURE
DUCO CAST IRON CLEANOUT WITH ADJUSTABLE SCORIATED SECURED NICKEL BRONZE TOP, NO-HUB OUTLET, AND INTERNAL TAPER THREAD BRONZE PLUG.

FINISHED FLOOR CLEANOUT WITH ROUND NICKEL BRONZE TOP
J.R. SMITH 4020-U.

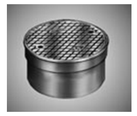
NOTES:
1. VERIFY FLOOR FINISH.

2. PROVIDE AN INCONSPICUOUS LOCATOR FOR ANY FLOOR TYPE CLEANOUT. IF ACCESS TO THE DRAINAGE LINE SHOULD BE DESIRED, CLEANOUT CAN BE READILY FOUND AND CARPET CAN BE CUT, ALLOWING ACCESS. THIS MARKER TAKES PLACE OF LARGE BRONZE COVERS BEING PLACED IN CARPETED AREAS.
J.R. SMITH OPTION (-Y) CARPET CLEANOUT MARKER.

WALL CLEANOUT: WCO

FIXTURE
CAST BRONZE TAPER THREAD PLUG FOR WALL CLEANOUT WITH STAINLESS STEEL ROUND ACCESS COVER AND VANDAL PROOF RETAINING CENTER SCREW.
J.R. SMITH 4472T-U.

DUCO CAST IRON CLEANOUT TEE AND COUNTERSUNK PLUG.
J.R. SMITH 4512S. (HUB AND SPIGOT CONNECTION)
J.R. SMITH 4512Y. (NO HUB CONNECTION)



GRADE CLEANOUT: GCO

FIXTURE
DUCO CAST IRON DOUBLE FLANGED BODY WITH HEAVY DUTY SECURED SCORIATED CAST IRON COVER WITH LIFTING DEVICE. PROVIDE VANDAL PROOF SCREWS.
J.R. SMITH 4880-U.

WASHING MACHINE BOX: WMB-1

FIXTURE
BOTTOM SUPPLIED, METAL RECESSED CABINET, COMPLETE WITH CORROSION RESISTANT DIPPED GALVINIZED STEEL FINISH, 2" DRAIN CONNECTION, 1/2" HOT AND COLD HOSE VALVES.
GUY GRAY B200.

TRIM
FURNISH LAUNDRY TYPE WATER HAMMER ARRESTOR.
PRECISION PLUMBING PRODUCTS INC.

WALL HYDRANT: WH-1

CONTRACTOR IS TO VERIFY WALL THICKNESS PRIOR TO ORDERING WALL HYDRANT(S).

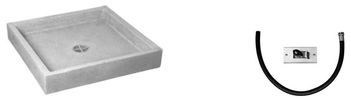
FIXTURE
3/4" LOOSE KEY FREEZELESS WALL HYDRANT WITH INTEGRAL ANTI-SIPHON VACUUM BREAKER-BACKFLOW PREVENTOR, 3/4" HOSE THREAD OUTLET, CHROME FINISH ON BRASS CASTING AND WALL CLAMP. HYDRANT ENCLOSED IN FLUSH-MOUNTED WALL BOX. LOOSE TEE KEY TO BE FURNISHED WITH EACH HYDRANT.
WOODFORD #B65.

SINK: S-4

FIXTURE
MOLDED QUARTZ, SINGLE COMPARTMENT COUNTERTOP SELF RIMMING, RADIUS COVED CORNERS, 1 FAUCET HOLE AND 3-1/2" DRAIN OPENING. SINK SHALL BE COMPOSED WITH UP TO 80% QUARTZ AND HIGH PERFORMANCE ACRYLIC RESIN.
OVERALL DIMENSIONS: 25" LONG X 22" WIDE
BOWL DIMENSIONS: 22-5/16" LONG X 16-7/16" WIDE X 5-1/2" DEEP
COLOR SELECTED BY ARCHITECT.
ELKAY ELG2522PD1.

TRIM
SINGLE-LEVER, METAL CONSTRUCTION WITH DARK BRONZE FINISH, WASHERLESS, DECK-MOUNTED SINK FAUCET, TUBULAR SWING SPOUT 8" OUTLET HEIGHT, 1.5 GPM FLOW RESTRICTOR, AERATOR AND 1-HOLE INSTALLATION WITH ESCUTCHEON PLATE. INCLUDE SIDE SPRAY WITH MATCHING COLOR
MOEN 87230.

COMPLETE WITH SOLID BRASS STOPS WITH ALL BRASS STEMS AND CHLORAMINE-CHLORINE RESISTANT WASHERS, CHLORAMINE-CHLORINE RESISTANT BRAIDED STAINLESS STEEL FLEXIBLE CONNECTORS (SUPPLY TUBES), STAINLESS STEEL BASKET STRAINER WITH STAINLESS STEEL BASKET, CAST BRASS LOCK AND COUPLING NUTS, BRASS 4" 17 GAUGE TAILPIECE, HEAVY CAST BRASS ADJUSTABLE P-TRAP WITH 17 GAUGE TUBULAR WALL BEND AND BRASS ESCUTCHEONS. (ALL BRASS MATERIALS SHALL BE CHROME PLATED)



MOP SERVICE BASIN: MSB-1

FIXTURE
24" X 24" X 10" HIGH, MOLDED STONE MOP SERVICE BASIN WITH FACTORY INSTALLED DRAIN WITH STRAINER FOR 3" CAULK JOINT. CAULK ALL EDGES WHERE BASIN MEETS WALL WITH WHITE SILICONE SEALANT.
FIAT MSB-2424.

VINYL BUMPER GUARD FOR STONE MOLDED MOP SINK BASIN.
FIAT #E-77-AA.

TRIM
POLISHED, CHROME PLATED, CAST BRASS SERVICE SINK FITTING WITH 1/4 TURN CERAMIC CARTRIDGES, INTEGRAL STOPS, CAST BRASS NOZZLE WITH 3/4" HOSE THREAD AND PAIL HOOK, BRASS VACUUM BREAKER, BRASS TOP BRACE ASSEMBLY WITH WALL FLANGE AND MOUNTING SCREWS. PROVIDE WITH VANDAL RESISTANT FOUR ARM HANDLES WITH COLOR CODED INDEXES.

SPEAKMAN SEF-9000.

COMPLETE WITH: 24" LONG x 3" WIDE 18 GAUGE MOP HANGER.
FIAT #889-CC.

30" LONG FLEXIBLE HEAVY DUTY 5/8" RUBBER HOSE WITH 3/4" BRASS COUPLING AT ONE END AND RUBBER GRIP HOSE BRACKET.
FIAT #832-AA.

12" HIGH HEAVY GAUGE STAINLESS STEEL WALL GUARDS.
FIAT #MSG 2424.

VALVE BOX: VB-1

FIXTURE
TOP SUPPLIED, METAL RECESSED CABINET, SINGLE VALVE OUTLET BOX. CORROSION RESISTANT DIPPED GALVANIZED STEEL FINISH, 20 GAUGE BOX, 18 GAUGE FACEPLATE. ICE MAKER BOX COMPLETE WITH STOP VALVE.
GUY GRAY BIM875 OR APPROVED EQUAL.

MOUNT AT 48" A.F.F. OR AS RECOMMENDED BY REFRIGERATOR MANUFACTURER.

DRAIN BOX: DB-1

FIXTURE
8 5/8""x8 5/8""x3 ½"" DRAIN BOX FABRICATED OF 18 GAGE TYPE 304 STAINLESS STEEL WITH ALL SEAMS CONTINUOUS WELDED. EXPOSED EXTERIOR SURFACES WITH SATIN FINISH. DOOR INCLUDES CAM AND CYLINDER LOCK, AND CONCEALED HINGES. 1" WALL FLANGE IS INTEGRAL WITH BOX. DOOR AND FLANGE FABRICATED OF 16 GAUGE TYPE 304 STAINLESS STEEL. HOLE PUNCHINGS IN THE BOX ARE BY OTHERS UNLESS SPECIFIED. FACTORY SHALL PROVIDE 2"⌀ HOLE IN TOP OF BOX FOR CONDENSATE DRAIN AND PROVIDE A HOLE WITH A 2 3/8" OD x 2" LONG STEEL TAILPIECE IN BOTTOM OF BOX FOR SANITARY PIPE CONNECTION. CENTER TOP HOLE ABOVE LOWER DRAIN HOLE.
ACORN 8200-1 STAILESS STEEL RECESSED BOX

FLOOR DRAIN: FD-1

FIXTURE
ABS FLOOR DRAIN, TWO-PIECE BODY WITH DRAINAGE FLANGE, NON-PUNCTURING FLASHING COLLAR, SEEPAGE OPENINGS, BOTTOM OUTLET AND ADJUSTABLE OIL RUBBED BRONZE ROUND STRAINER.
SIOUX CHIEF 5821200PRBQ.

FLOOR DRAIN: FD-2

FIXTURE
MEDIUM DUTY CAST IRON FLOOR DRAIN, TWO-PIECE BODY WITH DOUBLE DRAINAGE FLANGE, NON-PUNCTURING FLASHING COLLAR, SEEPAGE OPENINGS, BOTTOM OUTLET, 12"⌀ ROUND CAST IRON TOP AND REMOVABLE SEDIMENT BUCKET.
J.R. SMITH 2131-B.

SHOWER : SH-1

FIXTURE
CONCEALED, ANTI-SCALD BALANCED PRESSURE SHOWER WITH INTEGRAL VOLUME CONTROL, DARK BRONZE FINISHED BRASS WALL PLATE WITH METAL INDEX LEVER, BRASS WITH DARK BRONZE FINISH LEVER HANDLE, ADJUSTABLE TEMPERATURE LIMIT STOP, BRASS BODY, PRESSURE BALANCING MODULE, CERAMIC TEMPERATURE REGULATING MODULE, SHOWERHEAD WITH 1.75 GPM FLOW CONTROL DEVICE, SHOWER ARM AND WALL FLANGE, FOUR PORT VALVE WITH 1/2" NPTF INLETS AND OUTLETS AND SPRING CHECK STOPS.
MOEN "BANBURY" 82912BRB.

SHOWER : SH-2

FIXTURE
CONCEALED, ANTI-SCALD BALANCED PRESSURE SHOWER WITH INTEGRAL VOLUME CONTROL, DARK BRONZE FINISHED BRASS WALL PLATE WITH METAL INDEX LEVER, BRASS WITH DARK BRONZE FINISH LEVER HANDLE, ADJUSTABLE TEMPERATURE LIMIT STOP, BRASS BODY, PRESSURE BALANCING MODULE, CERAMIC TEMPERATURE REGULATING MODULE, HANDHELD SHOWERHEAD WITH 1.75 GPM FLOW CONTROL DEVICE, SHOWER ARM AND WALL FLANGE, FOUR PORT VALVE WITH 1/2" NPTF INLETS AND OUTLETS AND SPRING CHECK STOPS.
MOEN "BANBURY" 82912BRB (LESS SHOWER HEAD).
MOEN "PROPEL" 26040BRB.

SINK: S-1

FIXTURE
MOLDED QUARTZ, SINGLE COMPARTMENT COUNTERTOP SELF RIMMING, RADIUS COVED CORNERS, 1 FAUCET HOLE AND 3-1/2" DRAIN OPENING. SINK SHALL BE COMPOSED WITH UP TO 80% QUARTZ AND HIGH PERFORMANCE ACRYLIC RESIN.
OVERALL DIMENSIONS: 25" LONG X 22" WIDE
BOWL DIMENSIONS: 22-5/16" LONG X 16-7/16" WIDE X 9-1/2" DEEP
COLOR SELECTED BY ARCHITECT.
ELKAY ELG25221.

TRIM
SINGLE-LEVER, METAL CONSTRUCTION WITH DARK BRONZE FINISH, WASHERLESS, DECK-MOUNTED SINK FAUCET, TUBULAR SWING SPOUT 8" OUTLET HEIGHT, 1.5 GPM FLOW RESTRICTOR, AERATOR AND 1-HOLE INSTALLATION WITH ESCUTCHEON PLATE. INCLUDE SIDE SPRAY WITH MATCHING COLOR
MOEN 87230.

COMPLETE WITH SOLID BRASS STOPS WITH ALL BRASS STEMS AND CHLORAMINE-CHLORINE RESISTANT WASHERS, CHLORAMINE-CHLORINE RESISTANT BRAIDED STAINLESS STEEL FLEXIBLE CONNECTORS (SUPPLY TUBES), STAINLESS STEEL BASKET STRAINER WITH STAINLESS STEEL BASKET, CAST BRASS LOCK AND COUPLING NUTS, BRASS 4" 17 GAUGE TAILPIECE, HEAVY CAST BRASS ADJUSTABLE P-TRAP WITH 17 GAUGE TUBULAR WALL BEND AND BRASS ESCUTCHEONS. (ALL BRASS MATERIALS SHALL BE CHROME PLATED)

SINK: S-2

FIXTURE
MOLDED QUARTZ, DUAL COMPARTMENT COUNTERTOP SELF RIMMING, RADIUS COVED CORNERS, 1 FAUCET HOLE AND 3-1/2" DRAIN OPENING. SINK SHALL BE COMPOSED WITH UP TO 80% QUARTZ AND HIGH PERFORMANCE ACRYLIC RESIN.
OVERALL DIMENSIONS: 33" LONG X 22" WIDE
BOWL DIMENSIONS: 14-1/4" LONG X 16-7/16" WIDE X 5-1/2" DEEP
COLOR SELECTED BY ARCHITECT.
ELKAY ELGAD3322PD.

TRIM
SINGLE-LEVER, METAL CONSTRUCTION WITH DARK BRONZE FINISH, WASHERLESS, DECK-MOUNTED SINK FAUCET, TUBULAR SWING SPOUT 8" OUTLET HEIGHT, 1.5 GPM FLOW RESTRICTOR, AERATOR AND 1-HOLE INSTALLATION WITH ESCUTCHEON PLATE. INCLUDE SIDE SPRAY WITH MATCHING COLOR
MOEN 87230.

COMPLETE WITH SOLID BRASS STOPS WITH ALL BRASS STEMS AND CHLORAMINE-CHLORINE RESISTANT WASHERS, CHLORAMINE-CHLORINE RESISTANT BRAIDED STAINLESS STEEL FLEXIBLE CONNECTORS (SUPPLY TUBES), STAINLESS STEEL BASKET STRAINER WITH STAINLESS STEEL BASKET, CAST BRASS LOCK AND COUPLING NUTS, BRASS 4" 17 GAUGE TAILPIECE, HEAVY CAST BRASS ADJUSTABLE P-TRAP WITH 17 GAUGE TUBULAR WALL BEND AND BRASS ESCUTCHEONS. (ALL BRASS MATERIALS SHALL BE CHROME PLATED)

SINK: S-3

FIXTURE
18 GAUGE, TYPE 304 STAINLESS STEEL SINK, SINGLE COMPARTMENT COUNTERTOP SELF RIMMING, 1-3/4" RADIUS COVED CORNERS AND UNDERSIDE FULLY UNDERCOATED. COMPARTMENT AND FAUCET DECK ARE RECESSED 3/16" BELOW OUTSIDE EDGE OF SINK, 3 FAUCET HOLES AND 3-1/2" DRAIN OPENING.
OVERALL DIMENSIONS: 25" LONG X 22" WIDE
BOWL DIMENSIONS: 18" LONG X 14" WIDE X 12-1/4" DEEP
ELKAY DCR-252212.

TRIM
CHROME FINISHED, COMBINATION FITTING WITH 6" WRIST BLADE HANDLES, 8" GOOSENECK RIGID/SWING SPOUT, 6-1/2" OUTLET HEIGHT, 1.5 GPM FLOW RESTRICTOR, AERATOR AND 3-HOLE INSTALLATION.
ELKAY LK406HA08T6.

COMPLETE WITH SOLID BRASS STOPS WITH ALL BRASS STEMS AND CHLORAMINE-CHLORINE RESISTANT WASHERS, CHLORAMINE-CHLORINE RESISTANT BRAIDED STAINLESS STEEL FLEXIBLE CONNECTORS (SUPPLY TUBES), STAINLESS STEEL BASKET STRAINER WITH STAINLESS STEEL BASKET, CAST BRASS LOCK AND COUPLING NUTS, BRASS 4" 17 GAUGE TAILPIECE, HEAVY CAST BRASS ADJUSTABLE P-TRAP WITH 17 GAUGE TUBULAR WALL BEND AND BRASS ESCUTCHEONS. (ALL BRASS MATERIALS SHALL BE CHROME PLATED)

WATER CLOSET: WC-1

FIXTURE
ADA ELONGATED FLOOR MOUNT VITREOUS CHINA SIPHON JET WATER CLOSET, LOW CONSUMPTION (6.0 LPF/1.6 GPF) FULLY GLAZED 2" BALLPASS TRAPWAY, 11" x 9" WATER SURFACE, CLOSE COUPLED TANK. COLOR MATCHED TRIP LEVER.
AMERICAN-STANDARD "CADET 16 1/2" H EL" 2849.128.
KOHLER "HIGHLINE" K-3611.

TRIM
COMMERCIAL WEIGHT SOLID PLASTIC OPEN FRONT LESS COVER FOR ELONGATED BOWL. LARGE INTEGRAL BUMPER SHALL BE COLOR-MATCHED MOLDED PLASTIC. HINGES TO FEATURE EXTERNAL CHECK AND INTERNAL SELF-SUSTAINING MECHANISMS IN BOTH HINGES. COLOR TO BE WHITE.
CHURCH MODEL #295SSC.

COMPLETE WITH: CHROME PLATED SOLID BRASS STOP WITH BRASS STEM, BRAIDED STAINLESS STEEL OR POLYMER FLEXIBLE CONNECTOR, ALL CHLORAMINE-CHLORINE RESISTANT. CHROME PLATED BRASS ESCUTCHEON. SOLID BRASS BOLTS AND WASHERS SHALL BE USED AT BOWL CONNECTION TO CLOSET FLANGE.

LAVATORY: L-1

FIXTURE
14-7/8" X 18-1/4", SOLID SURFACE, UNDERMOUNT INSTALLATION WITH OVERFLOW. ADA COMPLIANT WHEN INSTALLED IN A 21" MINIMUM DEPTH COUNTERTOP.
CORIAN "ACCESSIBLE" 810P

TRIM
METAL CONSTRUCTION WITH DARK BRONZE FINISH, 4" CENTERSET LAVATORY FAUCET WITH VANDAL RESISTANT 1.2 GPM AERATOR, INDEXED LEVER HANDLE, POP-UP WASTE ASSEMBLY, HOT LIMIT SAFETY STOP, 1/2" MALE THREADED CONNECTORS AND SUPPLY NUTS.
MOEN BANBURY WS84924BRB.

COMPLETE WITH SOLID BRASS STOPS WITH ALL BRASS STEMS AND CHLORAMINE-CHLORINE RESISTANT WASHERS. CHLORAMINE-CHLORINE RESISTANT BRAIDED STAINLESS STEEL OR POLYMER FLEXIBLE CONNECTORS. HEAVY CAST BRASS ADJUSTABLE P-TRAP WITH 17 GA TUBULAR WALL BEND AND BRASS SLIP NUTS. (ALL BRASS MATERIALS SHALL BE CHROME PLATED)

LAVATORY: L-2

(MOUNT @ A.D.A. HEIGHT)

FIXTURE
20" x 18" SIZE, VITREOUS CHINA, WALL HUNG LAVATORY (COMPLIES WITH ADA) WITH BACK, PUNCHED FOR CONCEALED ARM CARRIER, ANTI-SPLASH RIM AND FRONT OVERFLOW.
KOHLER "KINGSTON" K-2005.

TRIM
METAL CONSTRUCTION WITH DARK BRONZE FINISH, 4" CENTERSET LAVATORY FAUCET WITH VANDAL RESISTANT 1.2 GPM AERATOR, INDEXED LEVER HANDLE, POP-UP WASTE ASSEMBLY, HOT LIMIT SAFETY STOP, 1/2" MALE THREADED CONNECTORS AND SUPPLY NUTS.
MOEN BANBURY WS84924BRB.

COMPLETE WITH SOLID BRASS STOPS WITH ALL BRASS STEMS AND CHLORAMINE-CHLORINE RESISTANT WASHERS. CHLORAMINE-CHLORINE RESISTANT BRAIDED STAINLESS STEEL OR POLYMER FLEXIBLE CONNECTORS. CAST BRASS SOLID TOP OPEN GRID P.O. PLUG WITH 6" 17 GAUGE TAILPIECE WITH CAST BRASS LOCKNUT. HEAVY CAST BRASS ADJUSTABLE P-TRAP WITH 17 GA TUBULAR WALL BEND AND BRASS SLIP NUTS. (ALL BRASS MATERIALS SHALL BE CHROME PLATED)

PROVIDE TRUEBRO "LAV-SHIELD" MODEL #2018.

CARRIER
FOR STUD WALL CONSTRUCTION:
FLOOR-MOUNT, SINGLE LAVATORY CARRIER WITH CONCEALED ARMS, LEVELING AND SECURING SCREWS, STRUCTURAL UPRIGHTS AND BLOCK BASES.
SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS.
VERIFY WALL THICKNESS PRIOR TO ORDERING CARRIER(S).

URINAL: UR-1

FIXTURE
WALL HUNG, VITREOUS CHINA, FLUSHING RIM, LOW CONSUMPTION (3.8 LPF/1.0 GPF) SIPHON JET FLUSH ACTION, EXTENDED SIDES FOR PRIVACY, 3/4" TOP SPUD, 2" THREADED OUTLET CONNECTION AND TWO WALL HANGERS.
AMERICAN STANDARD "TRIMBROOK" 6561.017.
KOHLER "DEXTER" MODEL #K-5016-ET.

TRIM
EXPOSED, QUIET, DIAPHRAGM TYPE, CHROME PLATED URINAL FLUSHOMETER. DUAL FILTERED BY-PASS DIAPHRAGM, STOP SEAT AND VACUUM BREAKER SHALL BE CHLORAMINE RESISTANT MATERIALS. ADA COMPLIANT METAL NON-HOLD-OPEN HANDLE, 3/4" I.P.S. SCREWDRIVER BAK-CHEK ANGLE STOP, FREE SPINNING VANDAL RESISTANT STOP CAP, ADJUSTABLE TAILPIECE, SPUD COUPLING AND FLANGE, SWEAT SOLDER ADAPTER WITH COVER TUBE AND CAST SET SCREW WALL FLANGE.
SLOAN ROYAL MODEL 186-1.

CARRIER
FOR STUD WALL/PLUMBING CHASE CONSTRUCTION:
FLOOR-MOUNTED SINGLE URINAL CARRIER WITH HANGER PLATE, BEARING PLATE, ADJUSTABLE SUPPORTING RODS, STRUCTURAL UPRIGHTS, WELDED FEET AND SUPPLY PIPE SUPPORT. ALL PORTIONS OF CARRIER SHALL BE CONCEALED WITHIN WALL/PIPE CHASE CONSTRUCTION.
SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS.
VERIFY WALL/CHASE THICKNESS PRIOR TO ORDERING CARRIER(S).

PLUMBING FIXTURE GENERAL NOTES

A. PLUMBING FIXTURES SHALL BE OF ONE OF THE MANUFACTURER'S INDICATED AND IN ACCORDANCE WITH THE INFORMATION AND MANUFACTURER'S CATALOG NUMBERS INDICATED. WHERE MANUFACTURER'S CATALOG NUMBERS HAVE BEEN UPDATED OR DELETED, FIXTURES SHALL BE OF SIMILAR CONFIGURATION AND OF SIMILAR OR BETTER QUALITY THAN THAT INDICATED.
B. VERIFY ALL MOUNTING HEIGHTS OF PLUMBING FIXTURES PRIOR TO ORDERING EQUIPMENT. MOUNTING HEIGHTS SHALL BE AS INDICATED ON ARCHITECTURAL DRAWINGS AND COMPLY WITH ADA REQUIREMENTS.
C. VERIFY FIXTURE COLORS WITH ARCHITECT PRIOR TO ORDERING EQUIPMENT.
D. FOR ALL COUNTERTOP SINKS, CONTRACTOR SHALL COORDINATE WITH CABINET WORK TO INSURE THAT THE SINK WILL FIT IN CABINET PRIOR TO ORDERING FIXTURE.
E. FIXTURE DRAWINGS DEPICTED MAY NOT NECESSARILY BE AN ACCURATE DEPICTION OF ACTUAL MODELS DUE TO RECENT PRODUCT UPDATES.
F. ALL FIXTURE STOPS SHALL BE LOOSE KEY.

ADDENDUM 001 (1)	02/02/2022
Revisions:	Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SYDNEY
farris-uso.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA
BENJAMIN SCHMITT
No. 62524PE
LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
PLUMBING FIXTURES

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

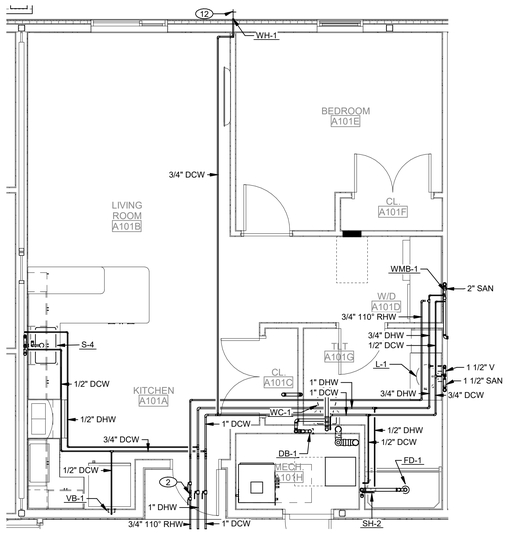
Date	Checked	Drawn
05/19/2020	BMS	CJB

Project Number
H IH BLAC 19100

Building Number

Drawing Number
P3.1

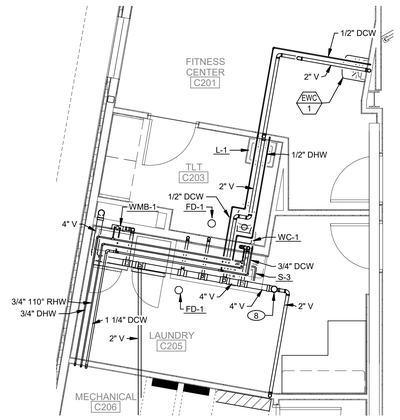
INDIAN HEALTH SERVICE · PHS · 1955 ·



4 ONE BEDROOM ADA COMPLIANT APARTMENT PLUMBING PLAN

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

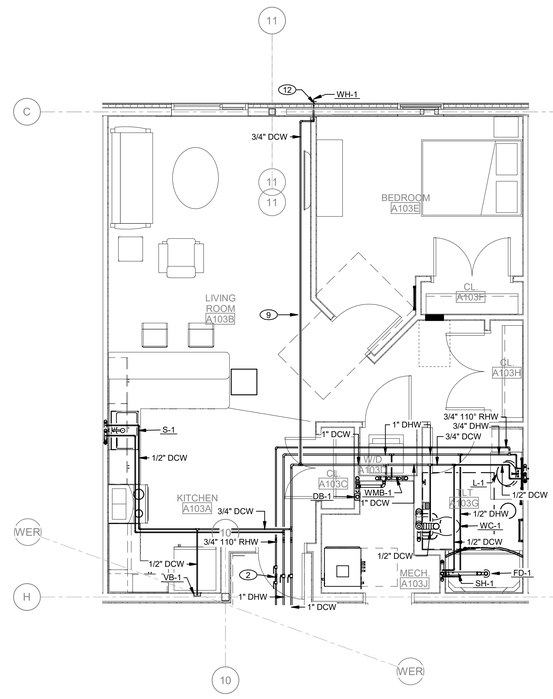
SEE RISER DIAGRAMS FOR ADDITIONAL PIPE SIZES AND ROUTING. MODIFY PIPE ROUTING AS REQUIRED TO CONNECT TO FIXTURE LOCATIONS SHOWN IN THIS PLAN



5 LARGE SCALE SECOND FLOOR PLUMBING PLAN - FITNESS CENTER/LAUNDRY AREA

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

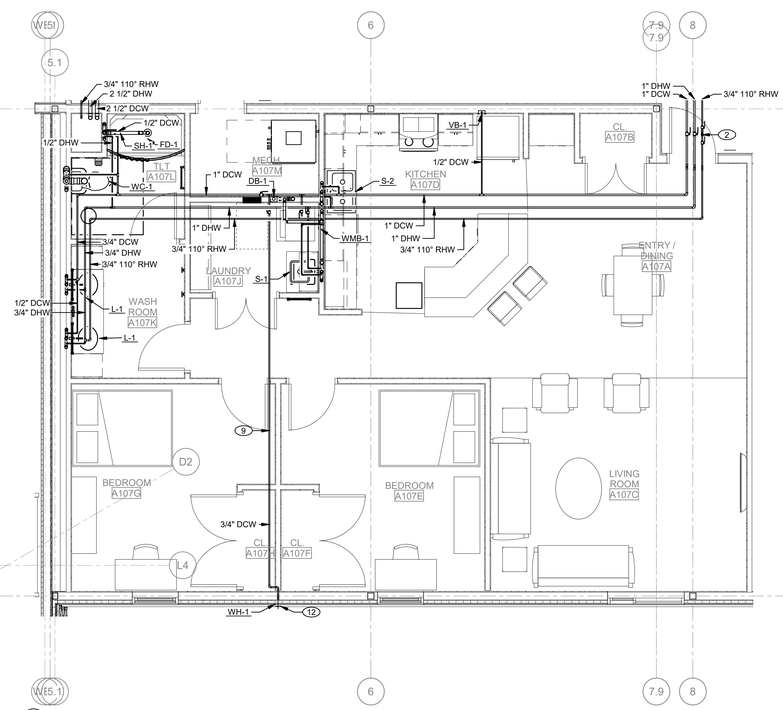
KEYNOTES	
1	ROUTE 3/4" SCW TO BOILER WATER CHEMICAL FEED TANK. COORDINATE FINAL LOCATION FOR CONNECTION WITH MECHANICAL CONTRACTOR.
2	AUTO FLOW VALVE SET TO 0.5 GPM. REFER TO DETAIL 1/P5.1 FOR ADDITIONAL REQUIREMENTS.
3	REFER TO DETAIL 11/P5.1 FOR DOMESTIC WATER HEATER PIPING SCHEMATIC.
4	REFER TO DETAIL 13/P5.1.
5	WATER ENTRANCE. REFER TO DETAIL 8/P5.1.
6	FIRE WATER ROUGH-IN. COORDINATE WITH FIRE SPRINKLER CONTRACTOR. REFER TO FIRE SUPPRESSION DRAWINGS FOR ADDITIONAL REQUIREMENTS.
7	ROUTE GAS PIPING TO AND CONNECT WITH BOILER. COORDINATE FINAL CONNECTIONS WITH FIELD CONDITIONS. PROVIDE AND INSTALL ALL PIPING, FITTINGS, REGULATORS, VALVES AND ACCESSORIES AS REQUIRED FOR A COMPLETE AND PROPERLY OPERATING SYSTEM.
8	VTR. REFER TO DETAIL 7/P5.1.
9	INSTALL DCW PIPING AND WALL HYDRANT ON FIRST FLOOR ONLY.
10	ROUTE 3/4" SCW TO CHILLED WATER CHEMICAL FEED TANK. COORDINATE FINAL LOCATION FOR CONNECTION WITH MECHANICAL CONTRACTOR.
11	1 1/2" G DOWN TO BELOW SLAB AND OUT TO GAS METER. SEE FOUNDATION PLUMBING PLAN FOR CONTINUATION.
12	PROVIDE ON FIRST FLOOR ONLY.



3 TYP. ONE BEDROOM APARTMENT PLUMBING PLAN

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

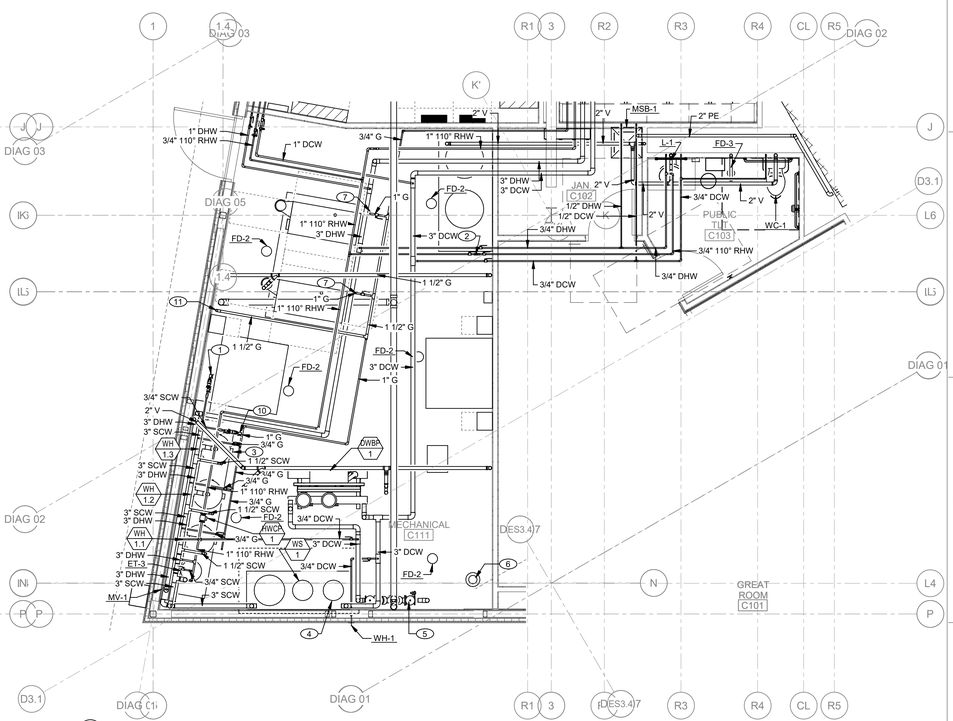
SEE RISER DIAGRAMS FOR ADDITIONAL PIPE SIZES AND ROUTING. OVERHEAD PIPING LAYOUT SHALL BE SIMILAR FOR ALL ONE BEDROOM APARTMENTS ON BOTH FIRST AND SECOND FLOORS.



2 TYP. TWO BEDROOM APARTMENT PLUMBING PLAN

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

SEE RISER DIAGRAMS FOR ADDITIONAL PIPE SIZES AND ROUTING. OVERHEAD PIPING LAYOUT SHALL BE SIMILAR FOR ALL ONE BEDROOM APARTMENTS ON BOTH FIRST AND SECOND FLOORS.



1 MECHANICAL C111/JAN C102/PUBLIC TLT C103 PLUMBING PLAN

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

SEE RISER DIAGRAMS FOR ADDITIONAL PIPE SIZES AND ROUTING.

ADDENDUM 001	1	02/02/2022
Revisions:		Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-usa.com

COPYRIGHT FE#:191017

This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA
BENJAMIN SCHMITT
No. 22524PE
LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **PLUMBING LARGE-SCALE PLANS**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **05/19/2020** | Checked: **BMS** | Drawn: **CJB**

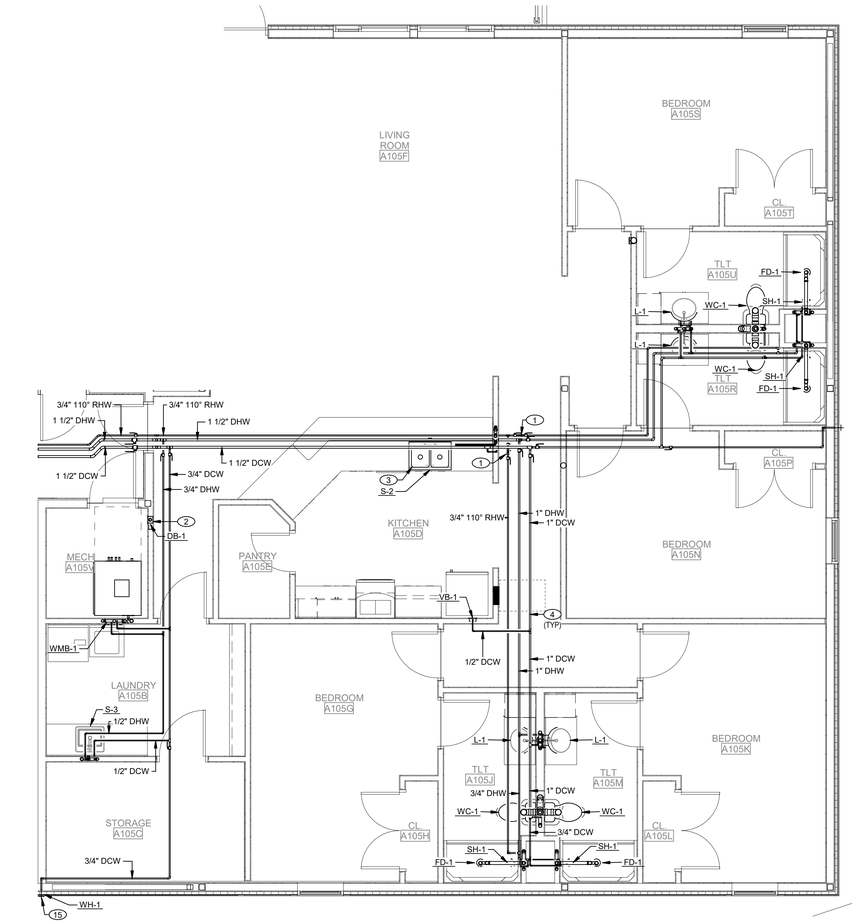
Project Number: **H IH BLAC 19100**

Building Number

Drawing Number: **P4.1**

INDIAN HEALTH SERVICE · PHS · 1955 ·

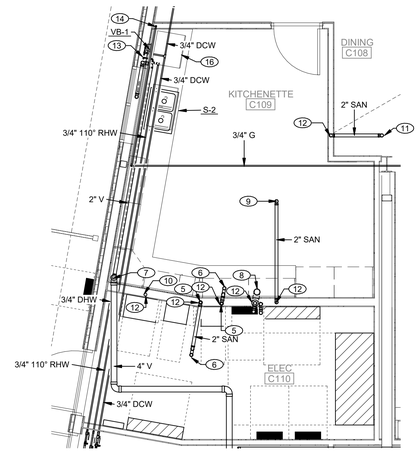
KEYNOTES	
1	AUTO FLOW VALVE SET TO 0.5 GPM. REFER TO DETAIL 1/P5.1 FOR ADDITIONAL REQUIREMENTS.
2	REFER TO DETAIL 2/P5.1.
3	REFER TO DETAIL 6/P5.1 FOR DISHWASHER CONNECTIONS.
4	REFER TO DETAIL 13/P5.1 FOR PIPE SUPPORT INSULATION REQUIREMENTS.
5	1 1/2" V UP TO SECOND FLOOR. SEE SECOND FLOOR PLAN FOR CONTINUATION.
6	2" SAN UP TO FLOOR DRAIN. SEE SECOND FLOOR PLAN FOR CONTINUATION.
7	4" VENT UP TO SECOND FLOOR. ROUTE PIPING IN CHASE. COORDINATE EXACT ROUTING IN CHASE WITH OTHER TRADES. SEE FIRST FLOOR PLAN FOR CONTINUATION.
8	4" SAN UP TO WATER CLOSET. SEE SECOND FLOOR PLAN FOR CONTINUATION.
9	2" SAN UP TO LAVATORY. SEE FIRST FLOOR PLAN FOR CONTINUATION.
10	2" SAN UP TO SECOND FLOOR. SEE SECOND FLOOR PLAN FOR CONTINUATION.
11	2" SAN UP TO ELECTRIC WATER COOLER. SEE SECOND FLOOR PLAN FOR CONTINUATION.
12	ROUTE SANITARY PIPING DOWN IN WALL. SEE FOUNDATION PLUMBING PLAN FOR CONTINUATION.
13	OFFSET PIPING IN WALL AS REQUIRED AND CONTINUE TO SINK. ROUTE ALL PIPING ON WARM SIDE OF INSULATION.
14	ROUTE GAS PIPING DOWN IN WALL AND CONTINUE BELOW SLAB TO EXTERIOR FIRE PIT. SEE FOUNDATION PLUMBING PLAN FOR CONTINUATION. COORDINATE ROUTING WITH ARCHITECTURAL DRAWINGS FOR FINAL LOCATION OF FIRE PIT.
15	PROVIDE ON FIRST FLOOR ONLY.
16	ROUTE DRAIN FROM ICEMAKER TO SINK PER MANUFACTURERS INSTRUCTIONS.



1 TYP. FOUR BEDROOM APARTMENT PLUMBING PLAN

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

SEE RISER DIAGRAMS FOR ADDITIONAL PIPE SIZES AND ROUTING. PIPE LAYOUT SHALL BE SIMILAR FOR FOUR BEDROOM APARTMENT ON SECOND FLOOR.



2 LARGE SCALE PLUMBING PLAN - KITCHENETTE

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

SEE RISER DIAGRAMS FOR ADDITIONAL PIPE SIZES AND ROUTING.

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-usa.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

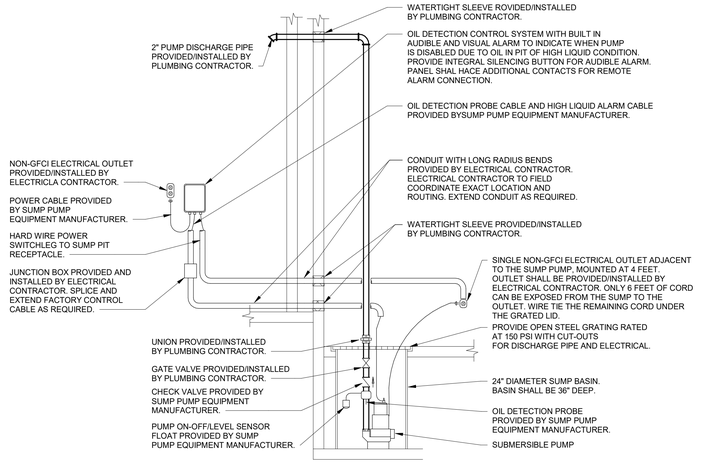
MONTANA BENJAMIN SCHMITT No. 22524PE LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

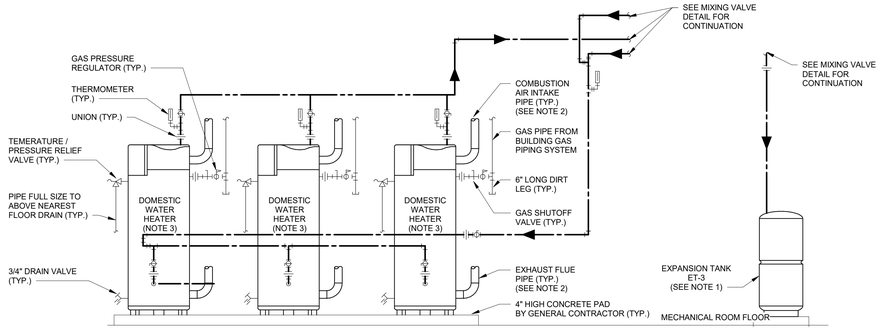
HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title	PLUMBING LARGE-SCALE PLANS
Approved: Project Director	
Project Title	APARTMENT BUILDING AND SITEWORK
Contract No.:	HHSI102201800005I
Task Order No.:	75H70119F30002
Location	BROWNING, MONTANA
Date	05/19/2020
Checked	BMS
Drawn	CJB
Project Number	H IH BLAC 19100
Building Number	
Drawing Number	P4.2

INDIAN HEALTH SERVICE · PHS · 1955 ·

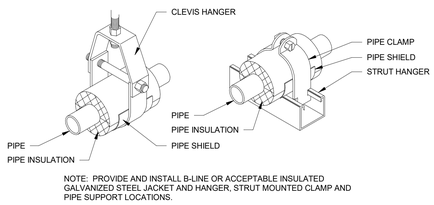


10 OIL DETECTION ELEVATOR SUMP PUMP PIPING DETAIL
NOT TO SCALE



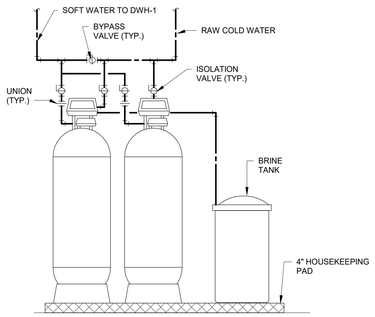
1. EXPANSION TANK (ET-3): AMTROL MODEL NO: ST-30VC OR APPROVED EQUAL 15"Ø X 24" HIGH, TANK VOLUME: 14 GALS. (MIN.). EXPANSION TANK MUST BE PRESSURE RATED FOR THE SAME PRESSURE AS THE DOMESTIC WATER HEATER.
2. SEE HVAC DRAWINGS FOR SIZE AND ROUTING OF EXHAUST AND INTAKE PIPING.
3. INSTALL PIPING TO ALLOW REMOVAL OF DOMESTIC WATER HEATER.

11 GAS WATER HEATER PIPING SCHEMATIC
NOT TO SCALE

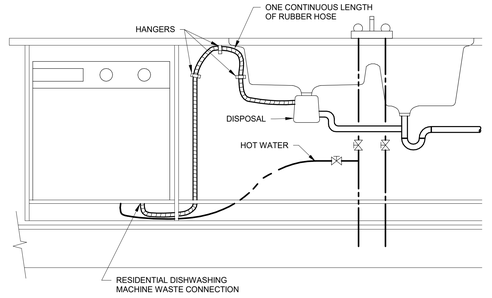


NOTE: PROVIDE AND INSTALL B-LINE OR ACCEPTABLE INSULATED GALVANIZED STEEL JACKET AND HANGER, STRUT MOUNTED CLAMP AND PIPE SUPPORT LOCATIONS.

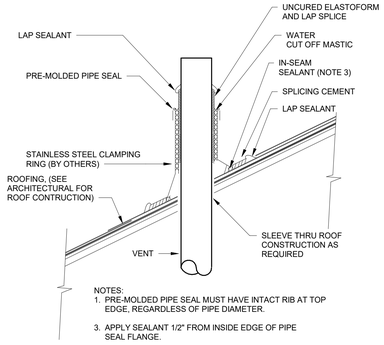
13 PIPE SUPPORT INSULATION DETAIL
SCALE: 12" = 1'-0"



12 DUPLEX WATER SOFTENER DETAIL
NOT TO SCALE

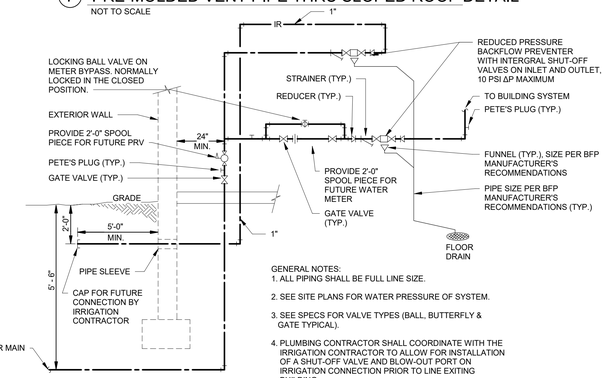


6 TYPICAL DISHWASHER DETAIL
NOT TO SCALE



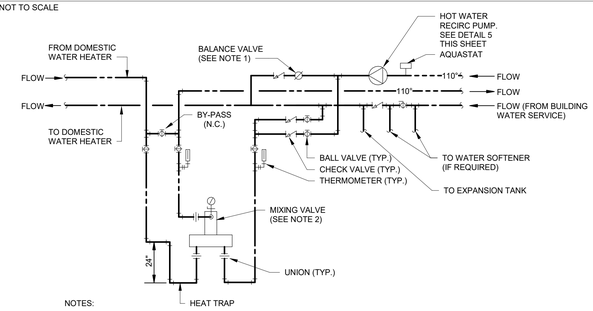
NOTES:
1. PRE-MOLDED PIPE SEAL MUST HAVE INTACT RIB AT TOP EDGE, REGARDLESS OF PIPE DIAMETER.
3. APPLY SEALANT 1/2" FROM INSIDE EDGE OF PIPE SEAL FLANGE.
4. DECK FLANGES OF THE PRE-MOLDED PIPE FLASHING SHALL NOT BE OVERLAPPED.

7 PRE-MOLDED VENT PIPE THRU SLOPED ROOF DETAIL
NOT TO SCALE



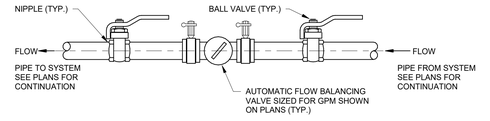
GENERAL NOTES:
1. ALL PIPING SHALL BE FULL LINE SIZE.
2. SEE SITE PLANS FOR WATER PRESSURE OF SYSTEM.
3. SEE SPECS FOR VALVE TYPES (BALL, BUTTERFLY & GATE TYPICAL).
4. PLUMBING CONTRACTOR SHALL COORDINATE WITH THE IRRIGATION CONTRACTOR TO ALLOW FOR INSTALLATION OF A SHUT-OFF VALVE AND BLOW-OUT PORT ON IRRIGATION CONNECTION PRIOR TO LINE EXITING BUILDING.

8 WATER SERVICE ENTRY DETAIL
NOT TO SCALE

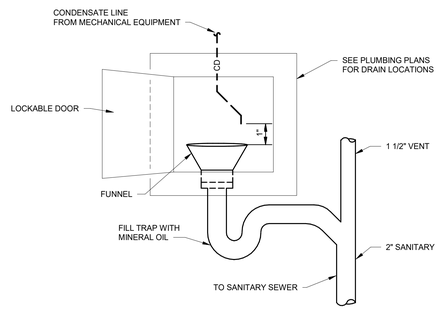


NOTES:
1. SET BALANCE VALVE PER MANUFATURER'S RECOMMENDATIONS.
2. INSTALL MIXING VALVE PER MANUFACTURER'S RECOMMENDED INSTALLATION OF THE MIXING VALVE SUBMITTED. SET TEMPERATURE AT 115° ADJUSTABLE.

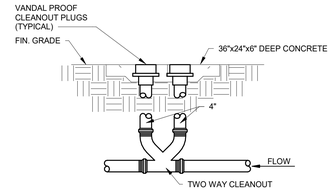
9 SINGLE TEMPERATURE DOMESTIC THERMOSTATIC MIXING VALVE SCHEMATIC
NOT TO SCALE



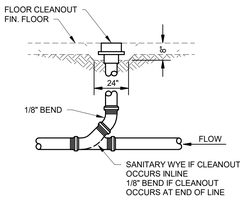
1 BALANCE VALVE DETAIL
NOT TO SCALE



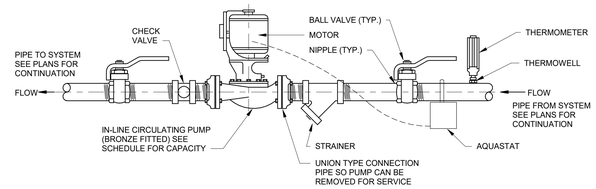
2 CONDENSATE DRAIN DETAIL
NOT TO SCALE



3 DOUBLE GRADE CLEANOUT (DCO)
NOT TO SCALE



4 FLOOR CLEANOUT DETAIL
NOT TO SCALE



5 RECIRCULATING PUMP DETAIL
NOT TO SCALE

ADDENDUM 001 ⚠1	02/02/2022
Revisions:	Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-usa.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA
BENJAMIN SCHMITT
No. 62524PE
LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
FARRIS ENGINEERING
BLUE STAR INTEGRATIVE STUDIO
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **PLUMBING DETAILS**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

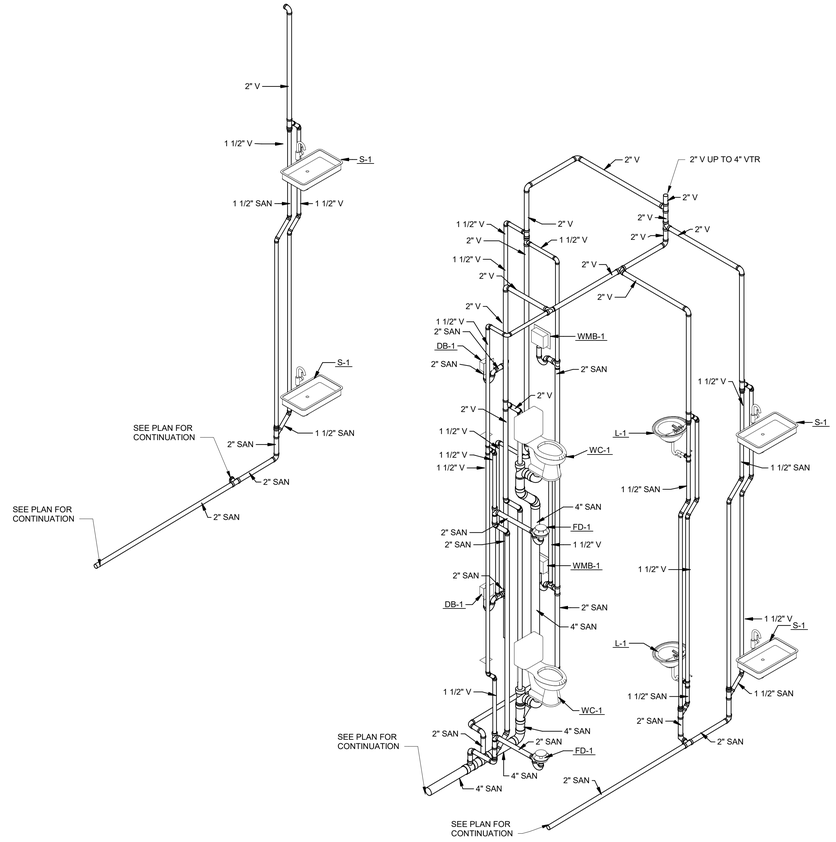
Date: **05/19/2020** | Checked: **BMS** | Drawn: **CJB**

Project Number: **H IH BLAC 19100**

Building Number

Drawing Number: **P5.1**

INDIAN HEALTH SERVICE · PHS · 1955 ·



2 SANITARY PIPING RISER DIAGRAM - TYPICAL ONE BEDROOM APARTMENT
NOT TO SCALE

1 DOMESTIC WATER PIPING RISER DIAGRAM - TYPICAL ONE BEDROOM APARTMENT
NOT TO SCALE

ADDENDUM 001 1	02/02/2022
Revisions:	Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-usa.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA
BENJAMIN SCHMITT
No. 62524PE
LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
FARRIS ENGINEERING
BLUE STAR INTEGRATIVE STUDIO
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
PLUMBING DIAGRAMS - ONE BEDROOM APARTMENT

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

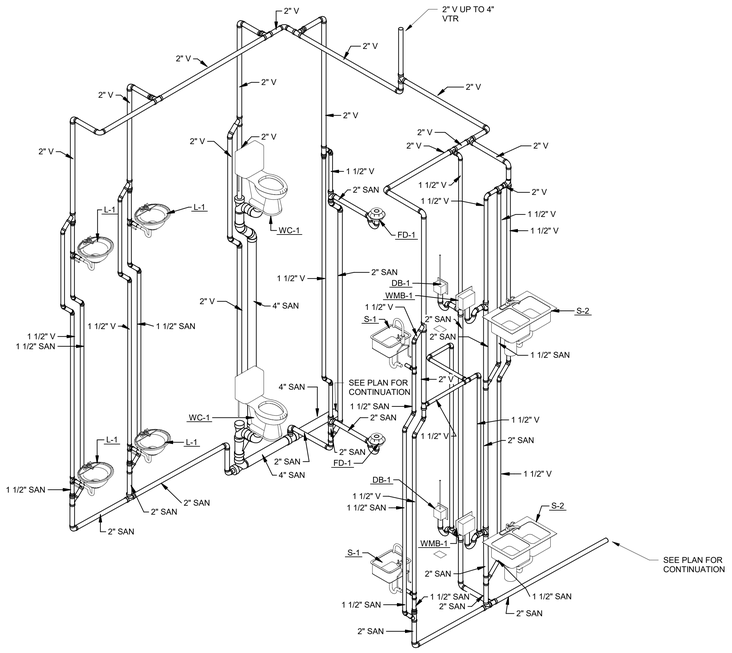
Date **05/19/2020** | Checked **BMS** | Drawn **CJB**

Project Number
H IH BLAC 19100

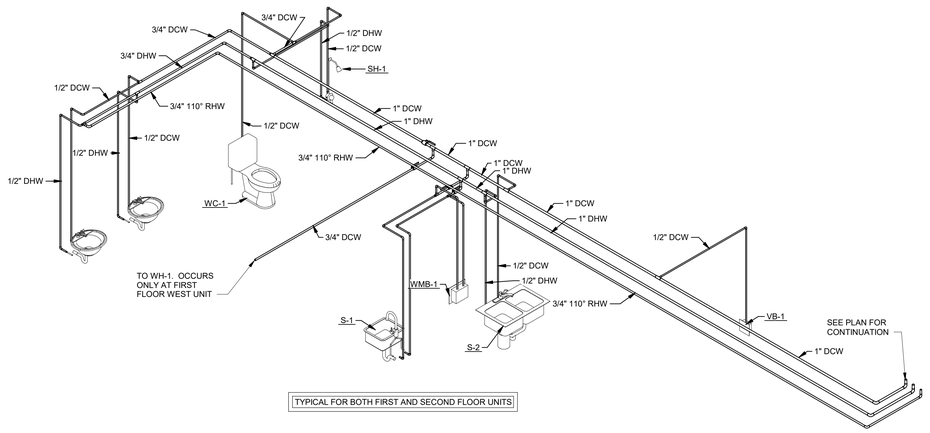
Building Number

Drawing Number
P6.1

INDIAN HEALTH SERVICE · PHS · 1955 ·



2 SANITARY PIPING RISER DIAGRAM - TYPICAL TWO BEDROOM APARTMENT
NOT TO SCALE



1 DOMESTIC WATER PIPING RISER DIAGRAM - TYPICAL TWO BEDROOM APARTMENT
NOT TO SCALE

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-usa.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA
BENJAMIN SCHMITT
No. 62524PE
LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
FARRIS ENGINEERING
BLUE STAR INTEGRATIVE STUDIO
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
PLUMBING RISER DIAGRAMS -TWO BEDROOM APARTMENT

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

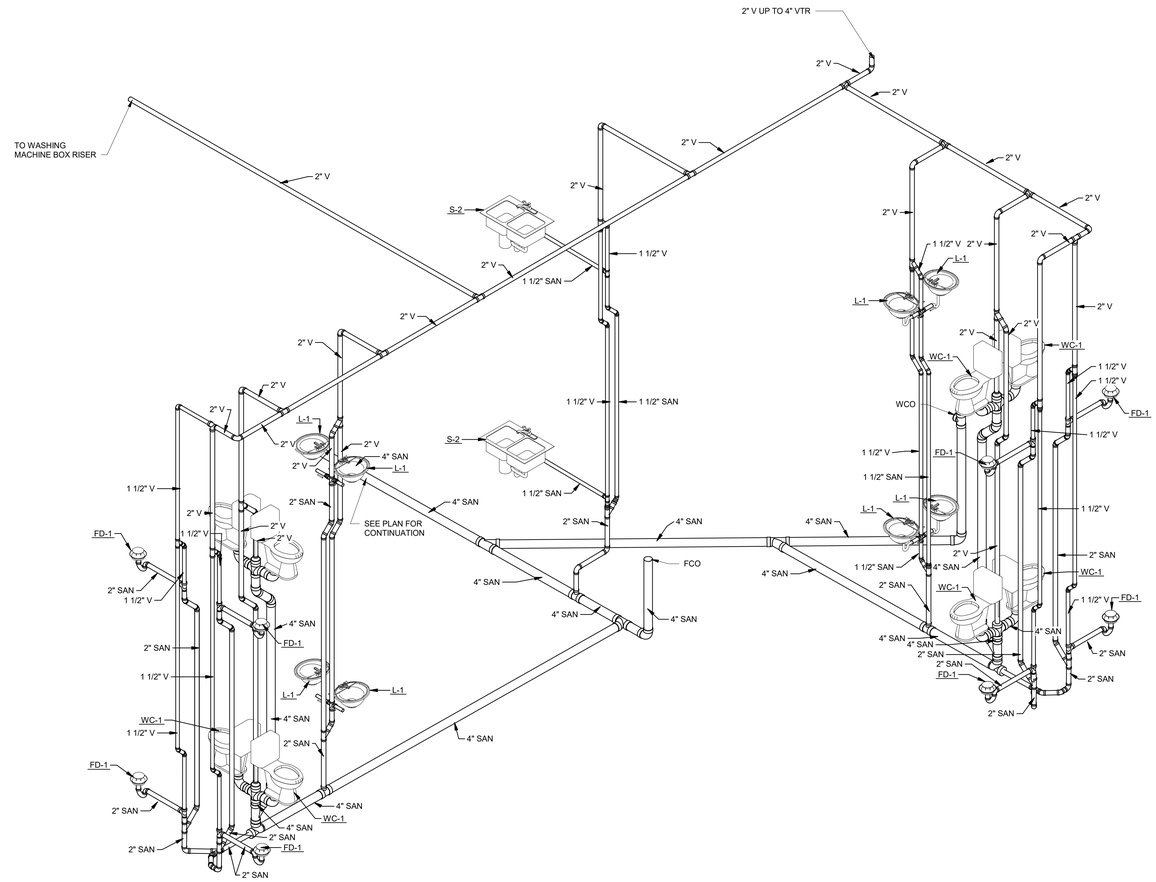
Date **05/19/2020** | Checked **BMS** | Drawn **CJB**

Project Number
H IH BLAC 19100

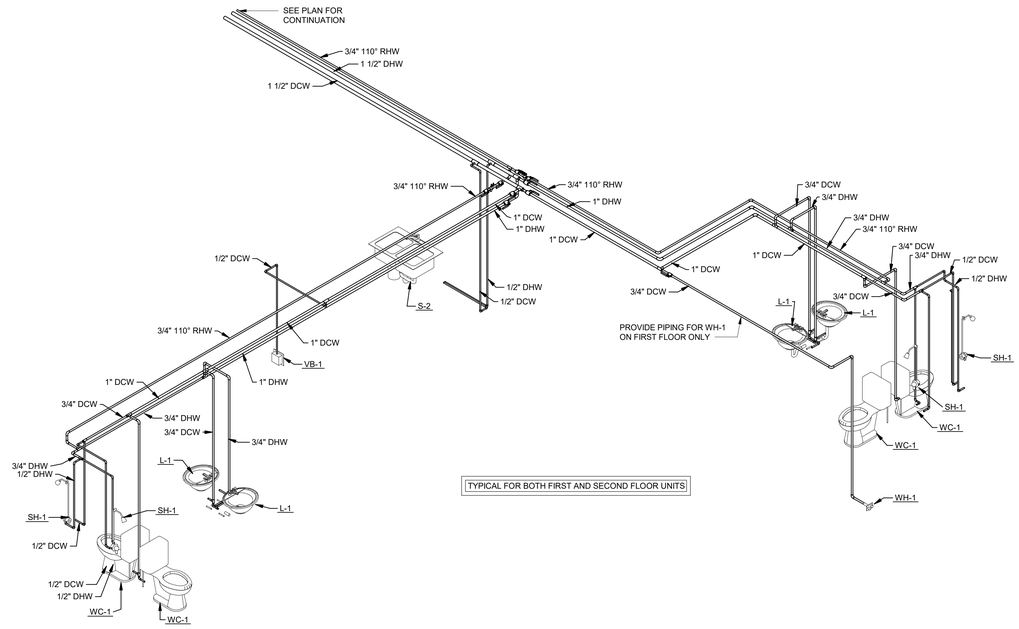
Building Number

Drawing Number
P6.2

INDIAN HEALTH SERVICE · PHS · 1955 ·



2 SANITARY PIPING RISER DIAGRAM - TYPICAL FOUR BEDROOM APARTMENT
NOT TO SCALE



TYPICAL FOR BOTH FIRST AND SECOND FLOOR UNITS

1 DOMESTIC WATER PIPING RISER DIAGRAM - TYPICAL FOUR BEDROOM APARTMENT
NOT TO SCALE

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-usa.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA
BENJAMIN SCHMITT
No. 62524PE
LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
PLUMBING RISER DIAGRAMS - FOUR BEDROOM APARTMENT

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

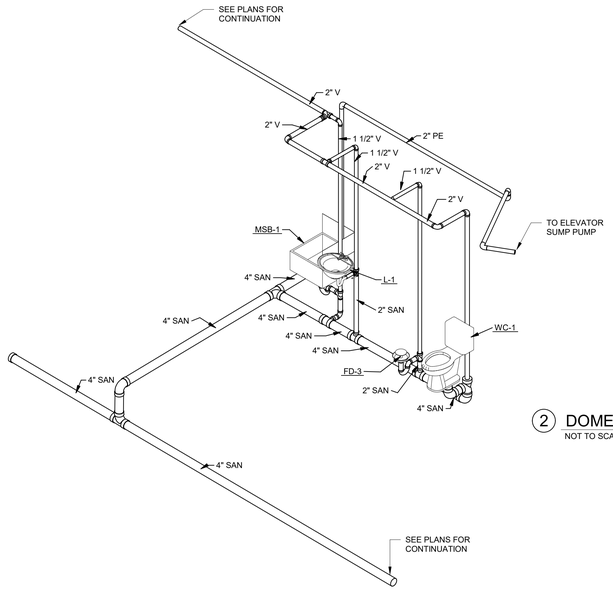
Date **05/19/2020** | Checked **BMS** | Drawn **CJB**

Project Number
H IH BLAC 19100

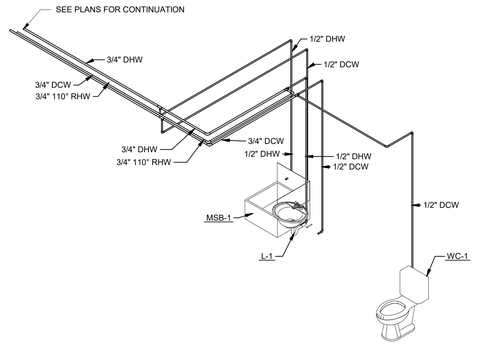
Building Number

Drawing Number
P6.3

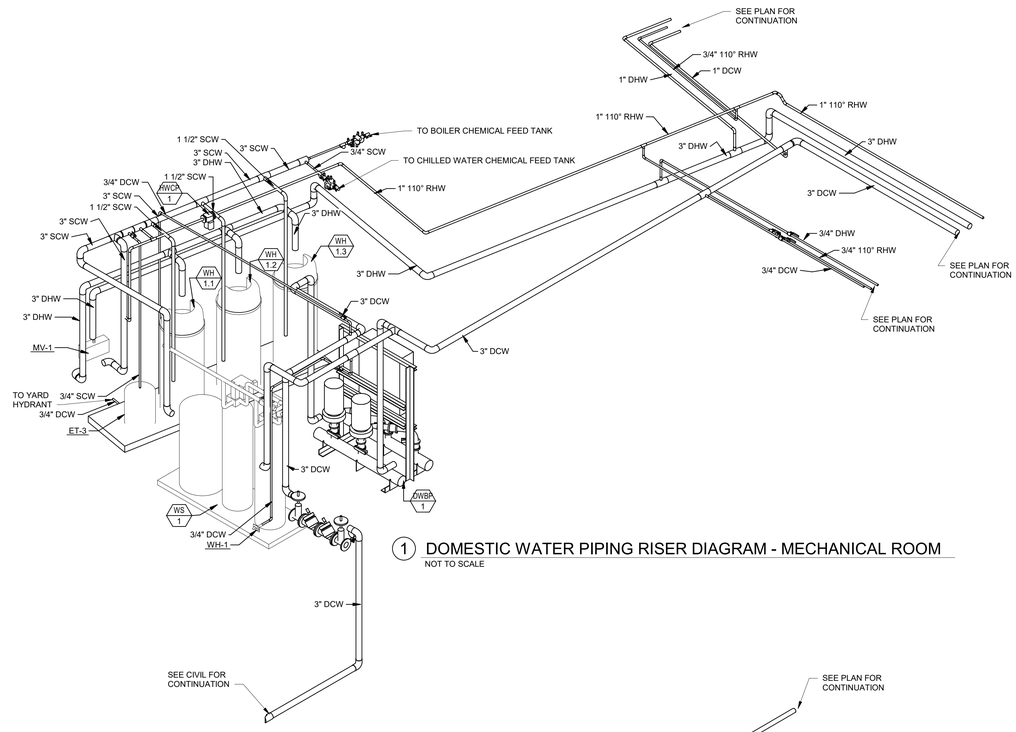
INDIAN HEALTH SERVICE · PHS · 1955 ·



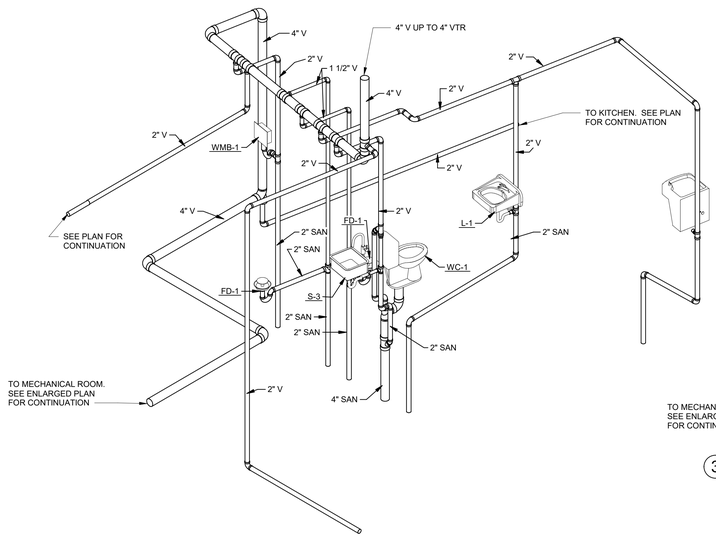
5 SANITARY PIPING RISER DIAGRAM - RESTROOM / JANITORS
NOT TO SCALE



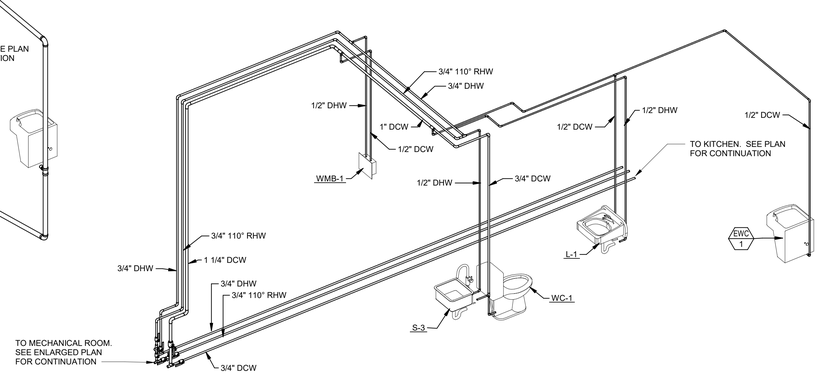
2 DOMESTIC WATER PIPING RISER DIAGRAM - RESTROOM / JANITORS
NOT TO SCALE



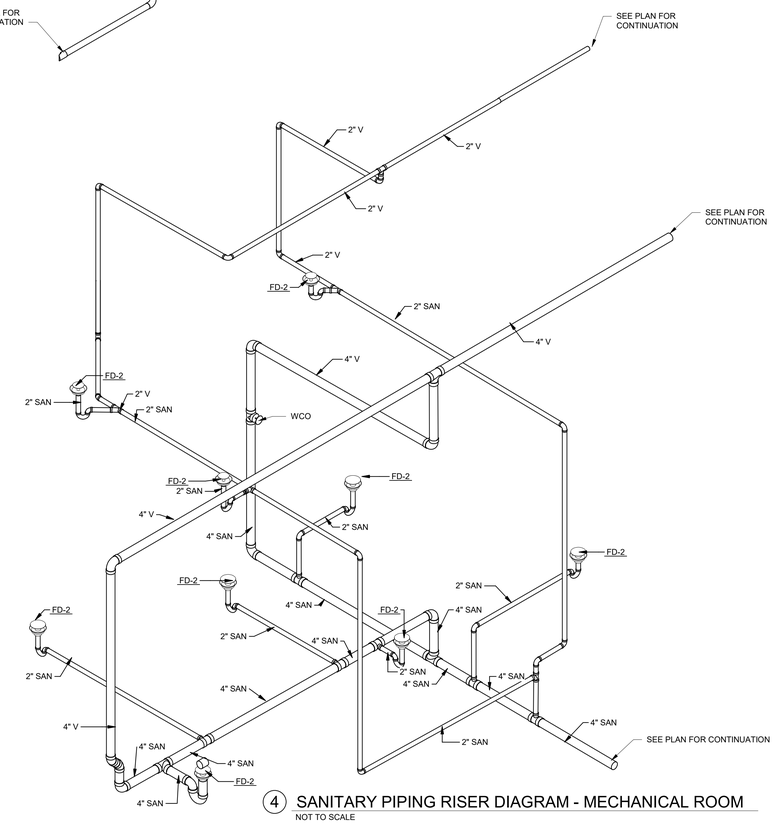
1 DOMESTIC WATER PIPING RISER DIAGRAM - MECHANICAL ROOM
NOT TO SCALE



6 SANITARY PIPING RISER DIAGRAM - RESTROOM / LAUNDRY
NOT TO SCALE



3 DOMESTIC WATER PIPING RISER DIAGRAM - RESTROOM / LAUNDRY
NOT TO SCALE



4 SANITARY PIPING RISER DIAGRAM - MECHANICAL ROOM
NOT TO SCALE

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-use.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA
BENJAMIN SCHMITT
No. 22522PE
LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG | HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
PLUMBING RISER DIAGRAMS - MECHANICAL ROOM, RESTROOMS, LAUNDRY ROOM

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI1022018000051
Task Order No.: 75H70119F30002

Project Number
H IH BLAC 19100

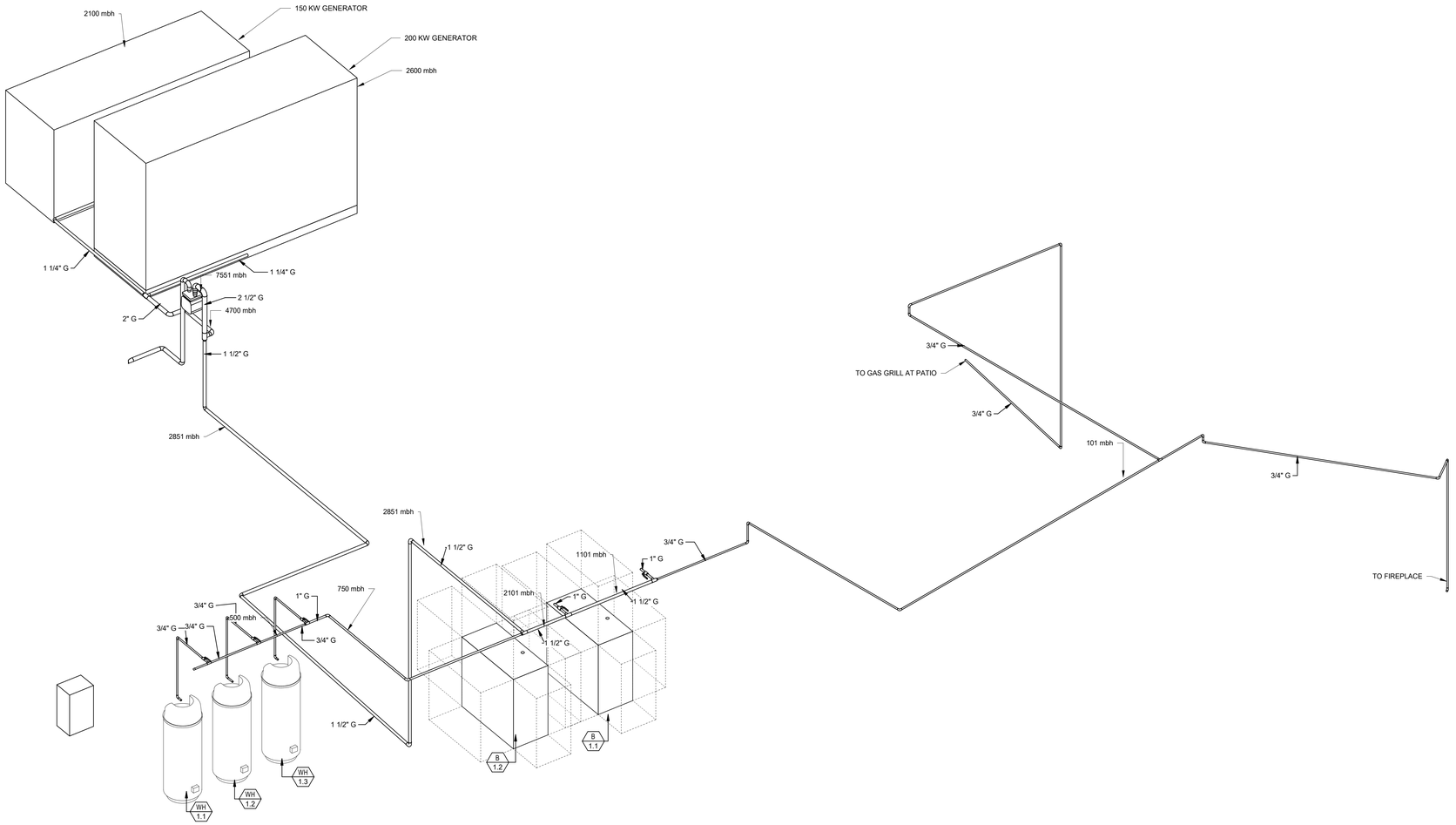
Building Number

Location
BROWNING, MONTANA

Drawing Number
P6.4

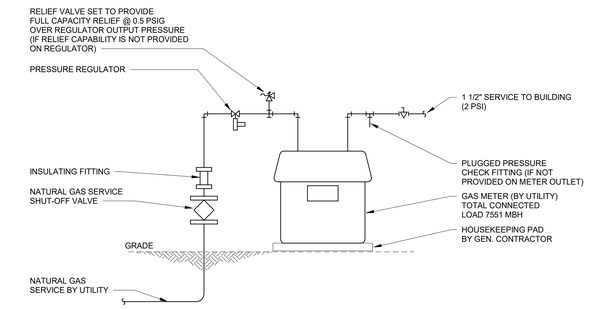
Date **05/19/2020** | Checked **BMS** | Drawn **CJB**

INDIAN HEALTH SERVICE · PHS · 1955 ·



2 NATURAL GAS PIPING RISER DIAGRAM

NOT TO SCALE



1 GAS SERVICE ENTRANCE DETAIL

SCALE: 12" = 1'-0"

GAS EQUIPMENT CONNECTION SCHEDULE

MARK	DESCRIPTION	GAS CONN.	GAS MBTUH	W.C.	LOCATION	REMARKS
WH-1.1	GAS WATER HEATER	3/4"	250	7"	MECHANICAL ROOM	1, 2
WH-1.2	GAS WATER HEATER	3/4"	250	7"	MECHANICAL ROOM	1, 2
WH-1.3	GAS WATER HEATER	3/4"	250	7"	MECHANICAL ROOM	1, 2
B-1.1	BOILER	1"	1000	7"	MECHANICAL ROOM	1, 2
B-1.2	BOILER	1"	1000	7"	MECHANICAL ROOM	1, 2
FIRE PIT	GAS FIRE PIT	3/4"	125	7"	EXTERIOR PATIO	1, 2
GENERATOR	GAS GENERATOR	1 1/4"	2100	7"	EXTERIOR	1, 2
GENERATOR	GAS GENERATOR	1 1/4"	2600	7"	EXTERIOR	1, 2
FIREPLACE	GAS FIREPLACE	3/4"	40	7"	COMMON SPACE	1, 2

REMARKS:

1. CONTRACTOR SHALL COORDINATE GAS LOADS BEING ADDED TO THE BUILDING AS SCHEDULED ABOVE WITH UTILITY.
2. PROVIDE AND INSTALL PRESSURE REDUCING VALVES AND REGULATORS AS REQUIRED.

GAS PIPE SIZES BASED ON 2PSI PRESSURE AT 1PSI PRESSURE DROP. CONTRACTOR SHALL RESIZE PIPE AS REQUIRED IF DIFFERENT SUPPLY PRESSURE AND PRESSURE DROP ARE USED.

ADDENDUM 001 (1)	02/02/2022
Revisions:	Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-uso.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA
BENJAMIN SCHMITT
No. 62524PE
LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
FARRIS ENGINEERING
BLUE STAR INTEGRATIVE STUDIO
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **NATURAL GAS PIPING RISER DIAGRAM**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **05/19/2020** | Checked: **BMS** | Drawn: **CJB**

Project Number: **H IH BLAC 19100**

Building Number:

Drawing Number: ***P6.5***

INDIAN HEALTH SERVICE · PHS · 1955 ·

PLUMBING FIXTURE/EQUIPMENT CONNECTION SCHEDULE

MARK	FIXTURE	TYPE	MINIMUM CONNECTION SIZE				REMARKS
			WASTE	VENT	HOT WATER	COLD WATER	
WC-1	ADA WATER CLOSET	FLOOR MOUNT	4"	2"	-	1/2"	1
L-1	LAVATORY	COUNTER MOUNT	1 1/4"	1 1/4"	1/2"	1/2"	1
L-2	ADA LAVATORY	WALL MOUNT	1 1/4"	1 1/4"	1/2"	1/2"	1
S-1	SINK	COUNTER MOUNT	1 1/2"	1 1/4"	1/2"	1/2"	1
S-2	SINK	COUNTER MOUNT	1 1/2"	1 1/4"	1/2"	1/2"	1
S-3	SINK	COUNTER MOUNT	1 1/2"	1 1/4"	1/2"	1/2"	1
S-4	SINK	COUNTER MOUNT	1 1/2"	1 1/4"	1/2"	1/2"	1
UR-1	ADA URINAL	WALL MOUNT	2"	1 1/2"	-	3/4"	1
SH-1	SHOWER VALVE	WALL MOUNT	-	-	1/2"	1/2"	1
SH-2	SHOWER VALVE	WALL MOUNT	-	-	1/2"	1/2"	1
DB-1	DRAIN BOX	RECESSED DRAIN BOX	2"	2"	-	-	1
VB-1	VALVE BOX	RECESSED VALVE BOX	-	-	-	1/2"	1
WMB-1	WASHING MACHINE BOX	WALL MOUNTED	2"	1 1/2"	1/2"	1/2"	1
MSB-1	MOP SINK BASIN	FLOOR MOUNT	2"	1 1/2"	1/2"	1/2"	1
YH-1	YARD HYDRANT	GRADE INSTALLED	-	-	-	1"	1
FD-1	FLOOR DRAIN	FLOOR MOUNT SHOWER	SEE PLANS	SEE PLANS	-	-	1
FD-2	FLOOR DRAIN	FLOOR MOUNT	SEE PLANS	SEE PLANS	-	-	1
FD-3	FLOOR DRAIN	FLOOR MOUNT	SEE PLANS	SEE PLANS	-	-	1
FCO	FLOOR CLEANOUT	FLUSH WITH FLOOR	SEE PLANS	-	-	-	1
WCO	WALL CLEANOUT	WALL MOUNTED	SEE PLANS	-	-	-	1
GCO	GRADE CLEANOUT	FLUSH WITH GRADE	SEE PLANS	-	-	-	1

REMARKS:
1. SIZE LISTED ON SCHEDULES APPLY TO ALL FIXTURES ON PROJECT UNLESS OTHERWISE NOTED.

WATER SOFTENER SCHEDULE

MARK	RESIN VOLUME (CU. FT.)	CONNECTION SIZE	FLOW RATE GPM		SALT CAP. LBS.	MANUFACTURER & MODEL NO.	REMARKS
			CONT.	PEAK			
WS-1	3	1-1/2"	57	75	650	CULLIGAN CTM-90-DF	1, 2, 3, 4

REMARKS:
1. SEE MECHANICAL/ELECTRICAL COORDINATION SCHEDULE FOR ELECTRICAL DATA.
2. PROVIDE DUPLEX INSTALLATION.
3. PROVIDE AND INSTALL ALL ACCESSORIES AND VALVES AS REQUIRED FOR A COMPLETE AND PROPERLY OPERATING SYSTEM.
4. SEE DETAILS FOR ADDITIONAL REQUIREMENTS.

PLUMBING PUMP SCHEDULE

MARK	SERVES	TYPE	GPM	HEAD FT.	RPM	MOTOR HP	MANUFACTURER & MODEL NO.	REMARKS
DWBP-1	BUILDING WATER PRESSURE	DUPLEX BOOSTER	160.0	122	3,600	10	TIGERFLOW SERIES 3U, MODEL 40-160-1-10HP	1, 3
HWCP-1	DOMESTIC HOT WATER RECIRC	WET ROTOR INLINE	5	9	3,250	1/25	TACO 007-SF5	1, 2

REMARKS:
1. SEE MECHANICAL/ELECTRICAL COORDINATION SCHEDULE FOR ELECTRICAL DATA.
2. PUMP SHALL BE STAINLESS STEEL CONSTRUCTION AND NSF COMPLIANT.
3. PROVIDE WITH DUPLEX CONSTANT PRESSURE VARIABLE SPEED CONTROL SYSTEM, WAFER NON-SLAM CHECK VALVES, ISOLATION BUTTERFLY VALVES, 304 SCHEDULE 40 STAINLESS STEEL SUCTION AND DISCHARGE HEADERS, STEEL SYSTEM SKID, AND RUN TESTED PRIOR TO SHIPMENT.

THERMOSTATIC MIXING VALVES

MARK	ROOM LOCATION	SERVES	APPLICATION	CW INLET (IN)	HW INLET (IN)	HWC INLET (IN)	HW OUTLET (IN)	FLOW CAPACITY (GAL)	OUTLET TEMP (°F)	MOUNTING	PUMP MARK	BASIS OF DESIGN	MECH NOTES
MV-1	MECHANICAL ROOM	WATER HEATERS	DOM HOT WTR	1	1	3/4	1 1/4	48 GPM AT 15 PSID	110	UNISTRUT	HWCP-1	LEONARD MEGATRON MODEL 3NB-LF	1, 2, 3

MECHANICAL NOTES:
1. PROVIDE MANUFACTURER'S PIPING METHOD #2 FOR CIRCULATED FLOW OF LESS THAN 8 GPM.
2. INSTALL ASSEMBLY WITH VALVE AT 48" AFF.
3. PROVIDE VALVE WITH ROUGH BRONZE FINISH.

SUMP PUMP SCHEDULE

MARK	SERVES	TYPE	GPM	HEAD FT.	MANUFACTURER & MODEL NO.	REMARKS
SP-1	ELEVATOR	SIMPLEX SUBMERSIBLE	50	30	ZOELLER MODEL 185	1, 2, 3, 4

REMARKS:
1. SEE MECHANICAL/ELECTRICAL COORDINATION SCHEDULE FOR ELECTRICAL DATA.
2. PROVIDE WITH 24" DIAMETER x 36" DEEP FIBERGLASS BASIN, FLOAT SWITCH, PUMP STAND, AND PLUG AND CORD.
3. PROVIDE WITH OIL DETECTION CONTROL PANEL, SENSORS AND ACCESSORIES.
4. SEE DETAIL FOR ADDITIONAL REQUIREMENTS.

DOMESTIC WATER HEATER SCHEDULE

MARK	STORAGE CAP. (GAL)	RECOVERY (GPH)	TEMPERATURE RISE	GAS INPUT (BTU/HR)	DESIGN PRESSURE	SHIPPING WEIGHT (LBS)	MANUFACTURER & MODEL NO.	REMARKS
WH-1	100	291	90° F	250,000	150 PSI	225	AO SMITH BTX-250	1, 2, 3, 4, 5, 6

REMARKS:
1. SEE MECHANICAL/ELECTRICAL COORDINATION SCHEDULE FOR ELECTRICAL DATA.
2. PROVIDE THERMAL EXPANSION TANK WITH WATER HEATER SYSTEM. SEE WATER HEATER DETAIL FOR REQUIREMENTS.
3. PROVIDE SEALED COMBUSTION DIRECT VENT 3" DIAMETER PIPE, 3" DIAMETER EXHAUST PIPE AND TERMINATE PER MANUFACTURERS RECOMMENDATIONS.
4. UNIT SHALL BE 94% EFFICIENT.
5. PROVIDE CONDENSATE NEUTRALIZATION TANK.
6. UNIT SHALL BE MODULATING TYPE.

Revisions:	Date
ADDENDUM 001 (1)	02/02/2022

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-usa.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA BENJAMIN SCHMIDT No. 62524PE LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **PLUMBING SCHEDULES**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **05/19/2020** | Checked: **BMS** | Drawn: **CJB**

Project Number: **H IH BLAC 19100**

Building Number

Drawing Number: ***P7.1***

INDIAN HEALTH SERVICE · PHS · 1955 ·

ELECTRICAL SYMBOLS LEGEND

(AS APPLICABLE)

SWITCHING

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
Sa	SINGLE POLE SWITCH - LETTER INDICATES SWITCH LEG	SM	MOMENTARY CONTACT SWITCH
S2	DOUBLE POLE SWITCH	SK	KEY OPERATED SWITCH
S3	THREE-WAY SWITCH	SP	PILOT LIGHT SWITCH
S4	FOUR-WAY SWITCH	ST	TIMER SWITCH
SD	DIMMER SWITCH	SS	SENSOR SWITCH - WALL MOUNTED: SEE LIGHTING CONTROL SCHEME NARRATIVE FOR TYPE
SH	HORSEPOWER RATED SWITCH	S,#	SENSOR - CEILING MOUNTED: SEE LIGHTING CONTROL SCHEME NARRATIVE FOR TYPE
SF	FUSED SWITCH	S,#	SENSOR - WALL MOUNTED: SEE LIGHTING CONTROL SCHEME NARRATIVE FOR TYPE
STE	THERMAL ELEMENT	DS,#	DAYLIGHTING SENSOR - CEILING MOUNTED
H(A)	LIGHTING CONTROL STATION - LETTER INDICATES TYPE		

NUMBER INDICATES ZONE OF LUMINAIRES TO BE CONTROLLED BY SENSOR(S). NO NUMBER INDICATES ALL ROOM LUMINAIRES TO BE CONTROLLED BY SENSOR(S).

LIGHTING

LABEL INFORMATION (A, #) — LETTER INDICATES LUMINAIRE MARK, NUMBER INDICATES ZONE IDENTIFIER, NO NUMBER INDICATES SINGLE ZONE

	LUMINAIRE		WALL MOUNTED LUMINAIRE
	LUMINAIRE - LAMPS SWITCHED SEPARATE		WALL MOUNTED LUMINAIRE - NIGHT LIGHT
	LUMINAIRE WITH AUXILIARY LIGHT		WALL MOUNTED LUMINAIRE - EMERGENCY
	LUMINAIRE - EMERGENCY		EXIT SIGN - WALL/CEILING MOUNTED
	LUMINAIRE - NIGHT LIGHT		EXIT SIGN/EMERGENCY LUMINAIRE COMBINATION WALL/CEILING MOUNTED
	WALL MOUNTED LUMINAIRE		PHOTOCELL, DAYLIGHT SENSOR
	WALL MOUNTED LUMINAIRE - EMERGENCY		EXTERIOR LUMINAIRE - POLE MOUNTED
	WALL MOUNTED LUMINAIRE - NIGHT LIGHT		EXTERIOR LUMINAIRE - POLE MOUNTED
	STRIP LUMINAIRE		EXTERIOR LUMINAIRE - POLE MOUNTED
	STRIP LUMINAIRE - EMERGENCY		EXTERIOR LUMINAIRE - POLE MOUNTED
	STRIP LUMINAIRE - NIGHT LIGHT		FLOOD LIGHT LUMINAIRE
	LUMINAIRE		EMERGENCY BATTERY PACK
	LUMINAIRE - NIGHT LIGHT		EMERGENCY LUMINAIRE REMOTE HEADS
	LUMINAIRE - EMERGENCY		TRACK LUMINAIRE

POWER DEVICES

	SINGLE RECEPTACLE - TAMPER RESISTANT		LIGHTING & APPLIANCE PANELBOARD
	DUPLEX RECEPTACLE - TAMPER RESISTANT		POWER DISTRIBUTION EQUIPMENT
	FOUR-PLEX RECEPTACLE - TWO DUPLEX RECEPTACLES - TAMPER RESISTANT	T	TRANSFORMER
	RANGE RECEPTACLE		ENCLOSED CIRCUIT BREAKER
	SPECIAL RECEPTACLE		CABINET (TYPE INDICATED)
G	DUPLEX RECEPTACLE - GROUND-FAULT CIRCUIT-INTERRUPTER - TAMPER RESISTANT		MOTOR STARTER, LIGHTING CONTACTOR
IG	DUPLEX RECEPTACLE - ISOLATED GROUND		SAFETY SWITCH
WR	DUPLEX RECEPTACLE - WEATHER-RESISTANT GROUND-FAULT CIRCUIT-INTERRUPTER - TAMPER RESISTANT		COMBINATION MOTOR STARTER & SAFETY SWITCH
			MOTOR
A	DUPLEX RECEPTACLE - ON APPLIANCE CIRCUIT - TAMPER RESISTANT	J	CORD DROP (J-BOX AT CEILING)
E	DUPLEX RECEPTACLE - EMERGENCY RED - TAMPER RESISTANT		CORD DROP (SPECIAL RECEPTACLE AT CEILING)
F	DUPLEX RECEPTACLE - ARC-FAULT RATED - TAMPER RESISTANT		MULTI-OUTLET ASSEMBLY
M	DUPLEX RECEPTACLE - MOUNTED IN MILLWORK - TAMPER RESISTANT		FLUSH FLOOR BOX
B	DUPLEX RECEPTACLE - MOUNTED BELOW COUNTER - TAMPER RESISTANT		FLUSH POKE-THRU
	DUPLEX RECEPTACLE - CEILING MOUNTED		DAMPER
	DUPLEX RECEPTACLE - BOTTOM HALF SWITCHED - TAMPER RESISTANT	S	SOLENOID
	SPLIT-WIRE RECEPTACLE - TAMPER RESISTANT		
J	JUNCTION BOX		

RACEWAYS

	HOME RUN TO PANEL	T	TELEPHONE CONDUIT
N	UNSWITCHED LIGHTING CIRCUIT		CONDUIT UP
N	MASTER SATELLITE FIXTURE CONNECTION		CONDUIT DOWN
E	EMERGENCY CIRCUIT		CONDUIT SEAL
NL	NIGHT LIGHTING CIRCUIT		CABLE TRAY
S	SOUND SYSTEM RACEWAY	#"	CONDUIT SLEEVE (NUMBER INDICATES SIZE)

MISCELLANEOUS

XX/X	EQUIPMENT IDENTIFICATION TAG	WP	WEATHER-PROOF
X/XXX	DETAIL REFERENCE / SHEET REFERENCE	WG	WIRE GUARD
FACP	FIRE ALARM CONTROL PANEL	XP	EXPLOSION PROOF
FAAP	FIRE ALARM ANNUNCIATOR PANEL	30/3/10/3R	RATED AMPACITY/NO. POLES/FUSING REQ'D/NEMA ENCL. NO.
HOA	HAND-OFF-AUTO	PX	PROJECTOR INPUT STATION - LETTER INDICATES TYPE
CCT.	CIRCUIT		PROJECTOR CONTROL STATION
PART. CCT.	PARTIAL CIRCUIT		LIGHT LINEWORK = EXISTING
NF	NON-FUSED		DARK/DASHED LINEWORK = DEMOLITION
			DARK LINEWORK = NEW

COMMUNICATIONS

W	TELEPHONE OUTLET - WALL MOUNTED		TELEPHONE CABINET
#	TELEPHONE OUTLET BOX	C	CLOCK HANGER OUTLET
#	DATA OUTLET BOX	C	CLOCK - WALL MOUNTED
#	PHONE OUTLET BOX - CEILING MOUNTED	C2	CLOCK - CEILING MOUNTED (DOUBLE FACE)
#	DATA OUTLET BOX - CEILING MOUNTED	CS	CLASSROOM CLOCK & SPEAKER
WAP	WIRELESS ACCESS POINT - CEILING MOUNTED	P	PROGRAM BELL
	COMBINATION TELEPHONE/DATA OUTLET BOX - ONE JACK EACH		INTERCOM CALL SWITCH
	DATA OUTLET BOX - BLANK PLATE, 1" CONDUIT	X	INTERCOM ADMINISTRATION STATION (LETTER INDICATES TYPE)
M #	MICROPHONE OUTLET (NUMBER INDICATES QUANTITY)	DX	INTERCOM CLASSROOM/STAFF STATION (LETTER INDICATES TYPE)
M #	MICROPHONE OUTLET - WALL MOUNTED (NUMBER INDICATES QUANTITY)	X	AUDIO/VISUAL AUXILIARY OUTLET (LETTER INDICATES TYPE)
L #	LINE INPUT OUTLET (NUMBER INDICATES QUANTITY)	A	T.V. ANTENNA OUTLET
L #	LINE INPUT OUTLET - WALL MOUNTED (NUMBER INDICATES QUANTITY)	V	INTERCOM/PAGING VOLUME CONTROL
S	INTERCOM/PAGING SPEAKER - CEILING MOUNTED	V	SOUND SYSTEM VOLUME CONTROL
S	INTERCOM/PAGING SPEAKER - WALL MOUNTED		GROUND BAR
S	INTERCOM/PAGING SPEAKER HORN - WALL MOUNTED		
S	SOUND SYSTEM SPEAKER - CEILING MOUNTED		
S	SOUND SYSTEM SPEAKER - WALL MOUNTED		

NUMBER BY SYMBOL INDICATES QUANTITY OF JACKS. ZERO INDICATES EMPTY OUTLET BOX , BLANK PLATE AND CONDUIT.

NOTE: SYMBOLS SHOWN "STACKED" ON THE FLOOR PLANS INDICATE THAT THE DEVICES ARE TO BE LOCATED IN THE SAME OUTLET BOX AND FACEPLATE. (I.E. 1 / 2)

ELECTRICAL SYMBOLS LEGEND

(AS APPLICABLE)

FIRE ALARM

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
HD R/T	HEAT DETECTOR - COMBINATION	F	FIRE ALARM HORN - CEILING MOUNTED
HD F	HEAT DETECTOR - FIXED TEMPERATURE	F	FIRE ALARM VISUAL SIGNAL - CEILING MOUNTED
HD EV	HEAT DETECTOR - FIXED TEMPERATURE (CONNECTED TO ELEVATOR RECALL)	F	FIRE ALARM COMBINATION HORN/VISUAL - CEILING MOUNTED
SD	SMOKE DETECTOR	F	FIRE ALARM SPEAKER - CEILING MOUNTED
SD DM	SMOKE DETECTOR - DUCT MOUNTED	F	FIRE ALARM COMBINATION SPEAKER/VISUAL - CEILING MOUNTED
SD EV	SMOKE DETECTOR (CONNECTED TO ELEVATOR RECALL)		FLOW SWITCH
CO	CARBON MONOXIDE DETECTOR		TAMPER SWITCH
F	FIRE ALARM MANUAL STATION		DUCT DETECTOR REMOTE ALARM INDICATOR
F	FIRE ALARM HORN - WALL MOUNTED	R	FAN SHUT-DOWN RELAY
F	FIRE ALARM VISUAL SIGNAL - WALL MOUNTED		MAGNETIC DOOR HOLDER
F	FIRE ALARM COMBINATION HORN/VISUAL - WALL MOUNTED	SBD	SMOKE BEAM DETECTOR
F	FIRE ALARM SPEAKER - WALL MOUNTED	R	SMOKE BEAM REFLECTOR
F	FIRE ALARM COMBINATION SPEAKER/VISUAL - WALL MOUNTED		
F	FIRE ALARM BELL - WALL MOUNTED		

SECURITY

	PUSHBUTTON STATION		MOTION DETECTOR
	PUSHBUTTON STATION, 'P' INDICATES PILOT	KP	KEYPAD
	DOOR MONITOR SWITCH	ES	ELECTRIC STRIKE
	DOOR SWITCH	CR	CARD READER
	DOOR BELL CHIME/BUZZER	PS	POWER SUPPLY
	DOOR CONTACT		SECURITY CAMERA

GENERAL ELECTRICAL NOTES

APPLY TO ALL ELECTRICAL SHEETS

A. MOUNTING HEIGHTS INDICATED ARE TO CENTER OF ROUGH-IN ABOVE FINISHED FLOOR (AFF).
B. INSTALL ALL CONDUCTORS IN CONTINUOUS RACEWAY. PROVIDE INSULATED EQUIPMENT GROUNDING CONDUCTOR.
C. PROVIDE DEDICATED NEUTRAL CONDUCTOR FOR EACH BRANCH CIRCUIT PHASE CONDUCTOR. EXCEPTION: WHERE AN EQUIPMENT MANUFACTURER REQUIRES A MULTIWIRE BRANCH CIRCUIT FOR ONLY ONE UTILIZATION EQUIPMENT AND WHERE ALL UNGROUNDED CONDUCTORS OF THAT CIRCUIT ARE OPENED SIMULTANEOUSLY BY THE BRANCH CIRCUIT OVERCURRENT DEVICE.
D. CONCEAL ALL CONDUITS IN NEW WALLS, EXISTING STUD WALLS, OR ABOVE SUSPENDED CEILINGS.
E. WHERE CONDUIT CANNOT BE CONCEALED IN EXISTING WALL OR CEILING CAVITIES, INSTALL CONDUCTORS IN SURFACE METAL RACEWAYS; SURFACE CONDUIT OR METAL SURFACE RACEWAY AT ENGINEER'S DISCRETION.
F. PAINT SURFACE CONDUIT IN FINISHED AREAS, WHEN ALLOWED, TO MATCH SURROUNDING SURFACES. COORDINATE FINISHES WITH ARCHITECT.
G. INSTALL EXPOSED OR CONCEALED RACEWAY NEAR METAL CORRUGATED SHEET ROOF DECKING SO NEAREST OUTER RACEWAY SURFACE IS NOT LESS THAN 6 INCHES FROM THE NEAREST SURFACE OF THE ROOF DECKING. EXCEPTION: RIGID METAL CONDUIT AND INTERMEDIATE METAL CONDUIT SHALL NOT BE REQUIRED TO MAINTAIN THIS CLEARANCE.
H. PATCH, PAINT, REPAIR OR REPLACE ALL WALLS, CEILINGS, OR OTHER BUILDING ELEMENTS DISTURBED DURING INSTALLATION OF ELECTRICAL WORK.
I. USE ROOM NUMBERS ASSIGNED BY OWNER AND NOT ROOM NUMBERS LISTED ON DRAWINGS FOR LABELING OF PANELBOARD DIRECTORIES, FIRE ALARM PANEL PROGRAMMING, ETC. INCLUDE A DESCRIPTION OF LOAD SUCH AS LIGHTS, RECEPTACLES, MECHANICAL UNIT LOCATIONS, ETC. ON TYPED PANELBOARD DIRECTORIES.
J. LOCATIONS AND QUANTITIES OF OCCUPANCY SENSORS ON THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE ONLY THE ROOM/AREA CONTROLLED BY THE SENSORS. PROVIDE ADDITIONAL SENSORS AND RELATED EQUIPMENT FOR COMPLETE COVERAGE AND SWITCHING ARRANGEMENTS INDICATED.
K. REFER TO MECHANICAL/ELECTRICAL COORDINATION SCHEDULE SHEET **M7.1** FOR ADDITIONAL REQUIREMENTS ON DISCONNECTS, MOTOR STARTERS, ETC.
L. CONNECT SMOKE AND FIRE/SMOKE DAMPERS TO 120V POWER AND CONTROL WITH FIRE ALARM SYSTEM. VERIFY EXACT QUANTITY AND LOCATION OF DAMPERS WITH MECHANICAL DRAWINGS.
M. CONNECT ALL FIRE SPRINKLER SYSTEM FLOW, TAMPER, AND SITE PIV SWITCHES TO THE FIRE ALARM SYSTEM. COORDINATE EXACT LOCATION AND QUANTITY OF DEVICES WITH FIRE PROTECTION DRAWINGS AND FIRE SPRINKLER INSTALLER.
N. COORDINATE LOCATION OF RECESSED LUMINAIRES, SPEAKERS, ETC. WITH FIRE RATED CEILINGS. PROVIDE ENCLOSURES TO MAINTAIN THE FIRE INTEGRITY RATING OF THE CEILING. COORDINATE EXACT LOCATIONS OF FIRE RATED CEILINGS WITH ARCHITECTURAL DRAWINGS.
O. PROVIDE MULTIPLE WIRING CONNECTIONS AT EMERGENCY LUMINAIRES WITH EMERGENCY DEVICE AS NECESSARY SUCH AS: NORMAL POWER UNSWITCHED FOR SENSING, NORMAL POWER SWITCHED, AND EMERGENCY POWER UNSWITCHED. UPON NORMAL POWER FAILURE, FORCE THE EMERGENCY LUMINAIRE TO FULL ILLUMINATION VIA THE EMERGENCY DEVICE UNSWITCHED EMERGENCY POWER CIRCUIT.
P. IN AREAS WITH PRECAST PANELS, COORDINATE INSTALLATION OF FLUSH MOUNTED DEVICE BOXES AND CONCEALED CONDUITS WITH PRECAST PANEL SUPPLIER SO ALL CONDUIT, BOXES, ETC. ARE CAST WITHIN EACH WALL SECTION. FURNISH CONDUIT AND BOXES TO PRECAST SUPPLIER FOR EMBEDMENT INTO WALLS.
Q. ELECTRICAL CONTRACTOR SHALL PROVIDE COMPLETE AND FUNCTIONAL SYSTEMS FOR THE FOLLOWING LOW VOLTAGE SYSTEMS:
   a. COMMUNICATIONS, PHONE, DATA, AND CABLE OR SATELLITE TV SYSTEMS
   b. AUDIO VISUAL SYSTEMS
   c. SECURITY SYSTEMS
   d. DOOR ACCESS

COORDINATE ALL REQUIREMENTS AND LOCATIONS WITH OWNER. REFER TO INDIVIDUAL SPECIFICAITON SECTIONS AND ARCHITECTURAL PROJECT INFORMATION FOR ADDITIONAL REQUIREMENS AND INFORMATION.

NOTICE:
DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS AND CLEARANCES FROM ARCHITECTURAL, STRUCTURAL, SHOP AND OTHER APPROPRIATE DRAWINGS OR AT SITE. LAY OUT AND COORDINATE ALL WORK PRIOR TO INSTALLATION TO PROVIDE CLEARANCES REQUIRED FOR OPERATION, MAINTENANCE, AND CODES. VERIFY NON-INTERFERENCE WITH OTHER WORK. DO NOT FABRICATE PRIOR TO VERIFICATION OF CLEARANCES FOR ALL TRADES. THIS NOTICE APPLIES TO ALL ELECTRICAL PLANS.

ADDENDUM 001 (1)	02/02/2022
Revisions:	Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-usa.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA — ERICKA M. NEMETH — 19476 PROFESSIONAL ENGINEER — LICENSED — 05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title	**ELECTRICAL SYMBOLS LEGEND AND GENERAL NOTES**
Approved: Project Director	

Project Title	**APARTMENT BUILDING AND SITEWORK** **Contract No.:** HHSI102201800005I **Task Order No.:** 75H70119F30002
Location	**BROWNING, MONTANA**
Date / Checked / Drawn	**05/19/2020** / **EMN** / **DLB**
Project Number	**H IH BLAC 19100**
Building Number	
Drawing Number	**EG0.1**

INDIAN HEALTH SERVICE · PHS · 1955 ·

KEYNOTES	
1	SEE 'ONE-LINE POWER RISER DIAGRAM' ON SHEET E6.1 FOR ADDITIONAL INFORMATION. COORDINATE EXACT ROUTING WITH RESPECTIVE UTILITY AND OTHER DISCIPLINES.
2	PROVIDE TWO (2) 2 INCH SCHEDULE 40 PVC CONDUIT WITH PULL WIRE FROM ELECTRICAL ROOM C104 FOR INTERNET SERVICE. COORDINATE LOCATION AND TERMINATION DETAILS AT PROPERTY LINE WITH RESPECTIVE UTILITY COMPANY 3 RIVERS COMMUNICATION.
3	REFER TO 'ENGINE HEATER RECEPTACLE PEDESTAL DETAIL' ON SHEET E5.2 FOR ADDITIONAL INFORMATION. EACH PEDESTAL SHALL HAVE TWO (2) DUPLEX RECEPTACLES.
4	MOUNT LUMINAIRE SO THAT BOTTOM IS 0'-3" ABOVE SIGNAGE TO ILLUMINATE LETTERING BELOW. COORDINATE EXACT LOCATION WITH ARCHITECT, ADJUST LUMINAIRE TO EVENLY ILLUMINATE SIGNAGE.
5	PROVIDE MINIMUM WIRE SIZE INDICATED.
6	POST INDICATOR VALVE (PIV), PROVIDE CONNECTION TO FIRE ALARM SYSTEM AS REQUIRED, COORDINATE EXACT LOCATION WITH CIVIL PLANS.
7	SEE 'ONE-LINE POWER RISER DIAGRAM' ON SHEET E6.1 FOR ADDITIONAL INFORMATION.

1 ELECTRICAL SITE PLAN

SCALE: 1" = 20'-0"

0' 10' 20' 40'

1" = 20'

Revisions:	Date
ADDENDUM 001 (1)	02/02/2022

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-uso.com

COPYRIGHT
FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA
ERICKA MENNENGA
No. FEL-PE-LIC-63283
LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
ELECTRICAL SITE PLAN

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

Date **05/19/2020** | Checked **EMN** | Drawn **DLB**

Project Number
H IH BLAC 19100

Building Number

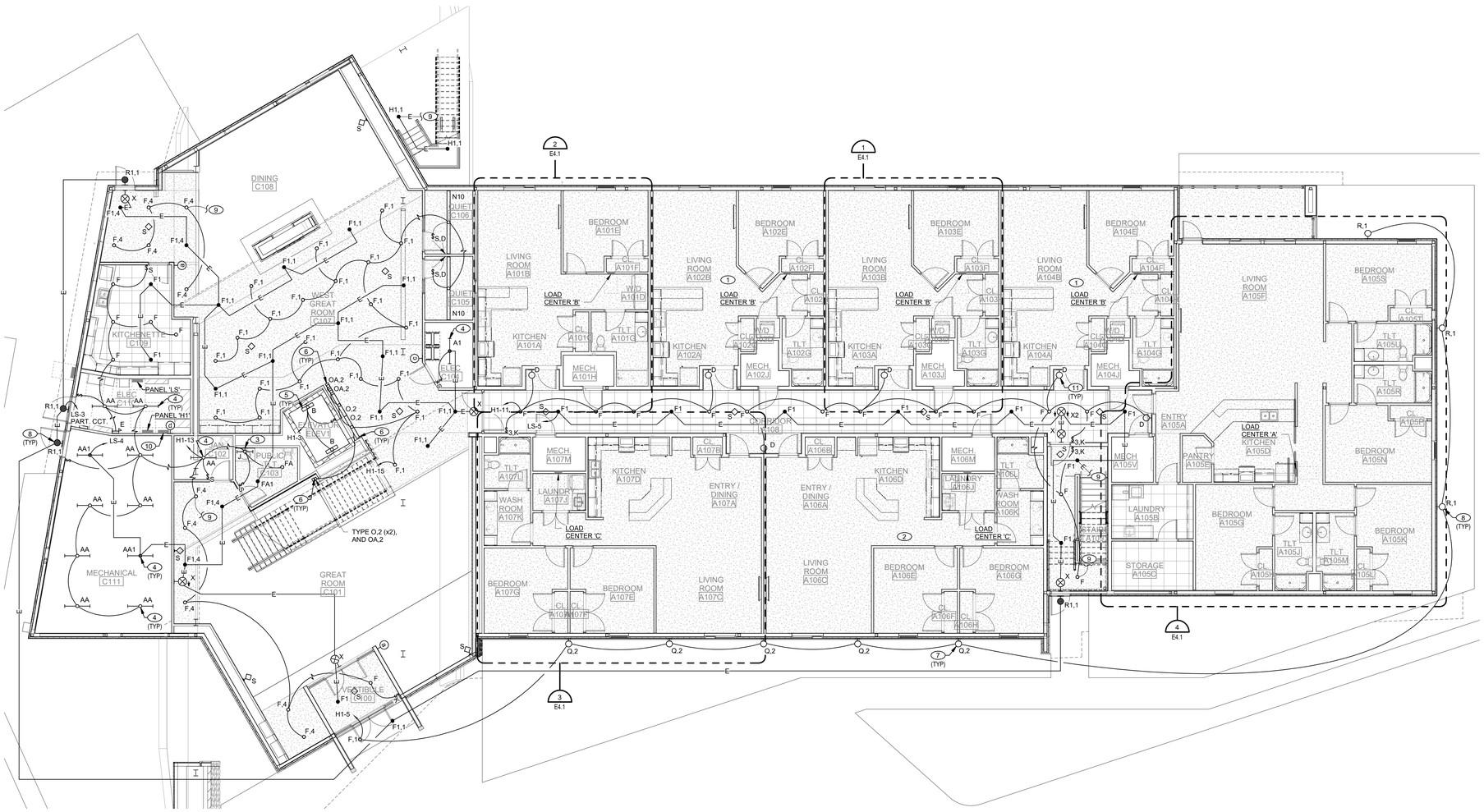
Drawing Number
ES1.1

INDIAN HEALTH SERVICE · PHS · 1955 ·

GENERAL LIGHTING NOTES (APPLIES TO ES1.1, EL1.1, EL1.2, AND E4.1 SHEETS)

A. REFER TO SHEET E5.1 FOR LUMINAIRE REQUIREMENTS.
B. REFER TO SHEET E5.1 FOR LIGHTING CONTROL REQUIREMENTS.
C. LIGHTING CONTROL WIRING IS NOT SHOWN. PROVIDE ALL LIGHTING CONTROL WIRING FOR FUNCTIONAL SYSTEM BASED ON SUPPLIED CONTROL SYSTEM.
D. PROVIDE LIGHTING CONTROLS FOR ALL EXTERIOR LUMINAIRES AS PART OF LIGHTING CONTROL SCHEME 'EX'.
E. REFER TO ELECTRICAL LARGE-SCALE LIGHTING PLANS ON SHEET E4.1 FOR ADDITIONAL INFORMATION ON TYPICAL APARTMENT LIGHTING REQUIREMENTS.
F. REFER TO LOAD CENTER SCHEDULES ON SHEET E7.1 FOR ADDITIONAL REQUIREMENTS.

KEYNOTES	
1	REFER TO 'TYPICAL ONE BEDROOM APARTMENT ELECTRICAL PLAN', SHEET E4.1 FOR WORK THIS AREA.
2	REFER TO 'TYPICAL TWO BEDROOM APARTMENT ELECTRICAL PLAN', SHEET E4.1 FOR WORK THIS AREA.
3	MOUNT LUMINAIRE ABOVE MIRROR. COORDINATE WITH ARCHITECT FOR EXACT LOCATION.
4	SUSPEND LUMINAIRE SO THAT BOTTOM OF LUMINAIRE IS +8'-0" AFF. FIELD COORDINATE EXACT LOCATION TO AVOID MECHANICAL DUCTWORK, PIPING, ETC.
5	COORDINATE MOUNTING HEIGHT WITHIN ELEVATOR PIT WITH ELEVATOR EQUIPMENT INSTALLER.
6	COORDINATE MOUNTING LOCATION WITHIN ARCHITECTURAL COVE, REFER TO ARCHITECTURAL DETAILS FOR ADDITIONAL INFORMATION.
7	MOUNT LUMINAIRE SO THAT CENTERLINE OF LUMINAIRE IS +12'-0" AFF.
8	MOUNT LUMINAIRE SO THAT BOTTOM OF LUMINAIRE IS +8'-0" AFF.
9	TO LUMINAIRES ABOVE, SEE SHEET EL1.2 FOR CONTINUATION.
10	LOCATION FOR LIGHTING CONTROLS HEAD END EQUIPMENT AS NECESSARY.
11	COORDINATE LUMINAIRE MOUNTING HEIGHT WITH ARCHITECT PRIOR TO INSTALLATION.



N

1 FIRST FLOOR LIGHTING PLAN

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

0' 4' 8' 16'
1/8" = 1'-0"

ADDENDUM 001 1	02/02/2022
Revisions:	Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-uso.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA
ERICKA MENNENGA
PLACE LICENSE SEAL HERE
No. PEL-PE-LIC-63283
LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **FIRST FLOOR LIGHTING PLAN**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **05/19/2020** | Checked: **EMN** | Drawn: **DLB**

Project Number: **H IH BLAC 19100**

Building Number

Drawing Number: **EL1.1**

INDIAN HEALTH SERVICE · PHS · 1955 ·

KEYNOTES	
1	REFER TO 'TYPICAL ONE BEDROOM APARTMENT ELECTRICAL PLAN', SHEET E4.1 FOR WORK THIS AREA.
2	REFER TO 'TYPICAL FOUR BEDROOM APARTMENT ELECTRICAL PLAN', SHEET E4.1 FOR WORK THIS AREA.
3	REFER TO 'TYPICAL TWO BEDROOM APARTMENT ELECTRICAL PLAN', SHEET E4.1 FOR WORK THIS AREA.
4	COORDINATE MOUNTING HEIGHT AT TOP OF ELEVATOR HOISTWAY WITH ELEVATOR EQUIPMENT INSTALL ER.
5	SUSPEND LUMINAIRE SO THAT BOTTOM OF LUMINAIRE IS +9'-0" AFF.
6	SUSPEND LUMINAIRE SO THAT BOTTOM OF LUMINAIRE IS +14'-0" AFF.
7	TO LUMINAIRE BELOW, SEE SHEET EL1.1 FOR CONTINUATION.
8	MOUNT LUMINAIRE ABOVE MIRROR, COORDINATE WITH ARCHITECT FOR EXACT LOCATION.
9	MOUNT LUMINAIRE SO THAT BOTTOM OF LUMINAIRE IS +8'-9" AFF.
10	SUSPEND LUMINAIRE SO THAT BOTTOM OF LUMINAIRE IS +26-0" AFF.
11	SUSPEND LUMINAIRE SO THAT BOTTOM OF LUMINAIRE IS +12-0" ABOVE STAIR LANDING.
12	COORDINATE LUMINAIRE MOUNTING HEIGHT WITH ARCHITECT PRIOR TO INSTALLATION.
13	SUSPEND LUMINAIRE SO THAT BOTTOM OF LUMINAIRE IS +8'-0" AFF. FIELD COORDINATE EXACT LOCATION TO AVOID MECHANICAL DUCTWORK, PIPING, ETC.
14	COORDINATE MOUNTING LOCATION WITHIN ARCHITECTURAL COVE, REFER TO ARCHITECTURAL DETAILS FOR ADDITIONAL INFORMATION.

N

1 SECOND FLOOR LIGHTING PLAN

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

0' 4' 8' 16'

1/8" = 1'-0"

ADDENDUM 001	1	02/02/2022
Revisions:		Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-usa.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA ERICKA MENENDEZ NICOLE No. PEL-PE-LIC-63283 LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
FARRIS ENGINEERING
BLUE STAR INTEGRATIVE STUDIO
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **SECOND FLOOR LIGHTING PLAN**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI1022018000051
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **05/19/2020** | Checked: **EMN** | Drawn: **DLB**

Project Number: **H IH BLAC 19100**

Building Number

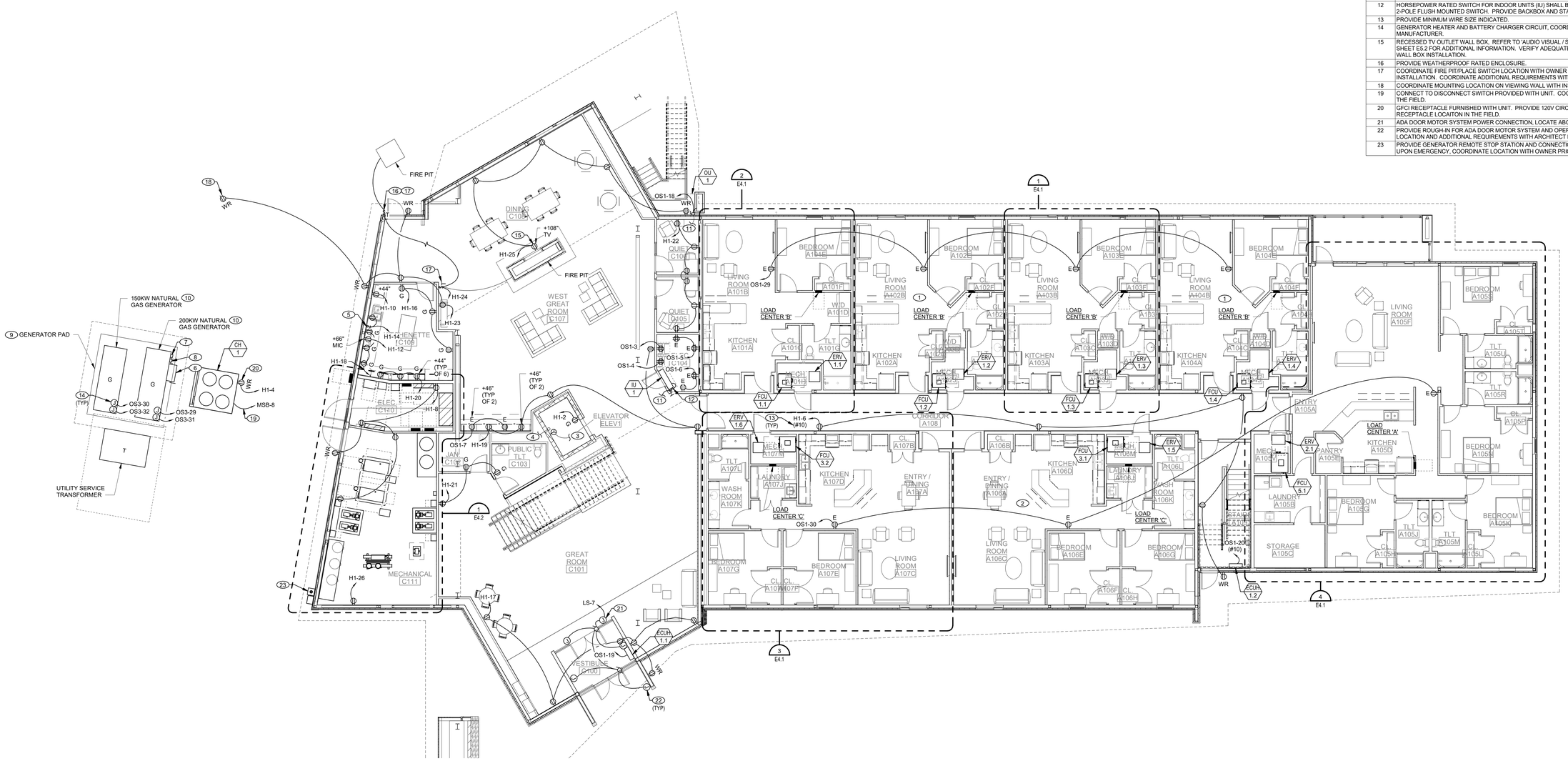
Drawing Number: **EL1.2**

INDIAN HEALTH SERVICE · PHS · 1955 ·

GENERAL ELECTRICAL NOTES (APPLIES TO ES1.1, EP1.1, EP1.2, E4.1 AND E4.2 SHEETS)

A. REFER TO ELECTRICAL LARGE-SCALE POWER & SPECIAL SYSTEMS PLANS ON SHEET E4.2 FOR ADDITIONAL INFORMATION ON TYPICAL APARTMENT REQUIREMENTS AND TYPICAL MECHANICAL EQUIPMENT CONNECTIONS SERVING APARTMENT AREAS. PROVIDE BRANCH CIRCUITING AND EQUIPMENT DISCONNECT FOR EACH EQUIPMENT INDICATED ON PLANS, REFER TO PANEL SCHEDULES ON SHEET E7.1 FOR BRANCH CIRCUIT ROUTING.
B. REFER TO LOAD CENTER SCHEDULES ON SHEET E7.1 FOR ADDITIONAL REQUIREMENTS.

KEYNOTES	
1	REFER TO 'TYPICAL ONE BEDROOM APARTMENT ELECTRICAL PLAN', SHEET E4.1 FOR WORK THIS AREA.
2	REFER TO 'TYPICAL TWO BEDROOM APARTMENT ELECTRICAL PLAN', SHEET E4.1 FOR WORK THIS AREA.
3	208 VOLT SUMP PUMP POWER CIRCUIT FROM OIL DETECTION SYSTEM CONTROLLER. REMOVE 208 VOLT FEMALE CORD SUMP PUMP SWITCHLEG ON OIL DETECTION CONTROLLER AND HARD CONNECT CONDUIT AND WIRE FROM PIT SUMP PUMP RECEPTACLE FOR CONTROL BY OIL DETECTION SYSTEM.
4	PROVIDE 2" EMPTY CONDUIT FROM OIL DETECTION CONTROLLER TO SUMP PUMP IN ELEVATOR SHAFT PIT FOR CONTROL CABLE. SPLICE AND EXTEND FACTORY CONTROL CABLE FOR LAYOUT INDICATED. COORDINATE DETECTION CONTROLLER LOCATION WITH MECHANICAL CONTRACTOR. SEE 'OIL DETECTION ELEVATOR SUMP PUMP PIPING DETAIL' ON SHEET P5.1.
5	PROVIDE SWITCHED RECEPTACLE BELOW COUNTER FOR DISPOSAL. MOUNT UNDER CABINET TOP +24" AFF. MOUNT SWITCH ABOVE COUNTERTOP BACKSPLASH OR AT EQUIVALENT HEIGHT AT LOCATION SHOWN ON PLANS. PROVIDE MATCHING CORD/PLUG AS REQUIRED.
6	DISCONNECT SWITCH FOR AUTOMATIC TRANSFER SWITCH 'ATS-OS'. SEE 'ONE-LINE POWER RISER DIAGRAM' ON SHEET E6.1 FOR ADDITIONAL INFORMATION.
7	DISCONNECT SWITCH FOR MANUAL TRANSFER SWITCH 'MTS-LS' GENERATOR LINE SIDE. SEE 'ONE-LINE POWER RISER DIAGRAM' ON SHEET E6.1 FOR ADDITIONAL INFORMATION.
8	DISCONNECT SWITCH FOR MANUAL TRANSFER SWITCH 'MTS-LS' TEMPORARY GENERATOR CONNECTION CABINET LINE SIDE. SEE 'ONE-LINE POWER RISER DIAGRAM' ON SHEET E6.1 FOR ADDITIONAL INFORMATION.
9	COMBINED GENERATOR PAD. PROVIDE REINFORCED CONCRETE PAD PER GENERATOR MANUFACTURER'S RECOMMENDATIONS. CONCRETE PAD SHALL HAVE CONTINUOUS FOOTINGS ALONG THE SIDE OF GENERATOR TO A DEPTH BELOW FROST LEVEL.
10	SEE 'ONE-LINE POWER RISER DIAGRAM' ON SHEET E6.1 FOR ADDITIONAL INFORMATION.
11	CONDUIT AND CONDUCTORS SHALL FOLLOW CONDENSATE LINE ROUTING TO CORRESPONDING SPLIT SYSTEM UNIT. COORDINATE WITH MECHANICAL CONTRACTOR.
12	HORSEPOWER RATED SWITCH FOR INDOOR UNITS (IU) SHALL BE SIEMENS OR EQUAL MMSKS1, 2-POLE FLUSH MOUNTED SWITCH. PROVIDE BACKBOX AND STAINLESS STEEL PLATE.
13	PROVIDE MINIMUM WIRE SIZE INDICATED.
14	GENERATOR HEATER AND BATTERY CHARGER CIRCUIT, COORDINATE CONNECTIONS WITH MANUFACTURER.
15	RECESSED TV OUTLET WALL BOX. REFER TO 'AUDIO VISUAL / SOUND SYSTEM ONE-LINE' DETAIL ON SHEET E5.2 FOR ADDITIONAL INFORMATION. VERIFY ADEQUATE WALL DEPTH IS AVAILABLE FOR WALL BOX INSTALLATION.
16	PROVIDE WEATHERPROOF RATED ENCLOSURE.
17	COORDINATE FIRE PIT/PLACE SWITCH LOCATION WITH OWNER AND ARCHITECT PRIOR TO INSTALLATION. COORDINATE ADDITIONAL REQUIREMENTS WITH EQUIPMENT MANUFACTURER.
18	COORDINATE MOUNTING LOCATION ON VIEWING WALL WITH INSTALLER.
19	CONNECT TO DISCONNECT SWITCH PROVIDED WITH UNIT. COORDINATE DISCONNECT LOCATION IN THE FIELD.
20	GFCI RECEPTACLE FURNISHED WITH UNIT. PROVIDE 120V CIRCUIT AS SHOWN. COORDINATE RECEPTACLE LOCAITON IN THE FIELD.
21	ADA DOOR MOTOR SYSTEM POWER CONNECTION. LOCATE ABOVE ACCESSIBLE CEILING.
22	PROVIDE ROUGH-IN FOR ADA DOOR MOTOR SYSTEM AND OPERATORS. COORDINATE EXACT LOCATION AND ADDITIONAL REQUIREMENTS WITH ARCHITECT PRIOR TO INSTALLATION.
23	PROVIDE GENERATOR REMOTE STOP STATION AND CONNECTION TO SHUT DOWN GENERATOR UPON EMERGENCY; COORDINATE LOCATION WITH OWNER PRIOR TO INSTALLATION.



1 FIRST FLOOR POWER PLAN
SCALE: 1/8" = 1'-0"

0' 4' 8' 16'
1/8" = 1'-0"

ADDENDUM 001 (1)	02/02/2022
Revisions:	Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-usa.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA LICENSED PROFESSIONAL ENGINEER
ERICKA MENNENGA
No. PEL-PE-LIC-65283
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
FIRST FLOOR POWER PLAN

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

Date **05/19/2020** | Checked **EMN** | Drawn **DLB**

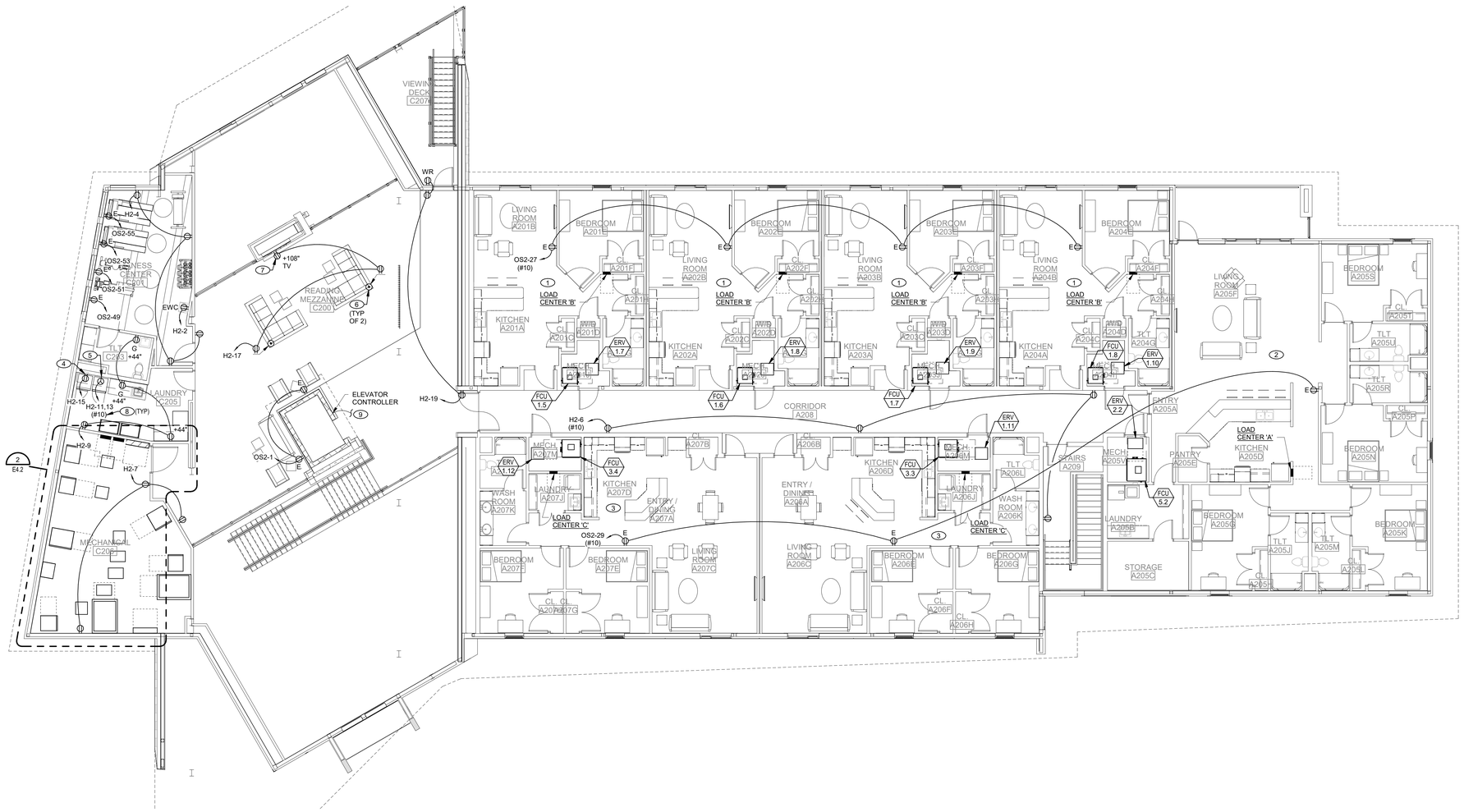
Project Number
H IH BLAC 19100

Building Number

Drawing Number
EP1.1

INDIAN HEALTH SERVICE · PHS · 1955 ·

KEYNOTES	
1	REFER TO 'TYPICAL ONE BEDROOM APARTMENT ELECTRICAL PLAN', SHEET E4.1 FOR WORK THIS AREA.
2	REFER TO 'TYPICAL FOUR BEDROOM APARTMENT ELECTRICAL PLAN', SHEET E4.1 FOR WORK THIS AREA.
3	REFER TO 'TYPICAL TWO BEDROOM APARTMENT ELECTRICAL PLAN', SHEET E4.1 FOR WORK THIS AREA.
4	WASHING MACHINE RECEPTACLE. SEE ARCHITECTURAL ELEVATIONS FOR DEVICE LOCATIONS IN UTILITY ROOM.
5	PROVIDE DRYER OUTLET 30 AMP, 120/208 VOLT, 1 PHASE, 4 WIRE. PROVIDE MATCHING CORD/PLUG AS REQUIRED.
6	PROVIDE HUBBELL #PT7FSDXXX SERIES POKE-THRU DEVICE WITH DEVICES SHOWN. COORDINATE COLOR OF COVER AND EXACT LOCATION WITH ARCHITECT AND OWNER PRIOR TO INSTALLATION.
7	RECESSED TV OUTLET WALL BOX. REFER TO 'AUDIO VISUAL / SOUND SYSTEM ONE-LINE' DETAIL ON SHEET E5.2 FOR ADDITIONAL INFORMATION. VERIFY ADEQUATE WALL DEPTH IS AVAILABLE FOR WALL BOX INSTALLATION.
8	PROVIDE MINIMUM WIRE SIZE INDICATED.
9	PROVIDE CONNECTION TO ELEVATOR CONTROLLER PER MANUFACTURER'S RECOMMENDATIONS.



1 SECOND FLOOR POWER PLAN
SCALE: 1/8" = 1'-0"

0' 4' 8' 16'
1/8" = 1'-0"

ADDENDUM 001 (1)	02/02/2022
Revisions:	Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-uso.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA
ERICKA MENNENGA
No. PEL-PE-LIC-63283
LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
SECOND FLOOR POWER PLAN

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

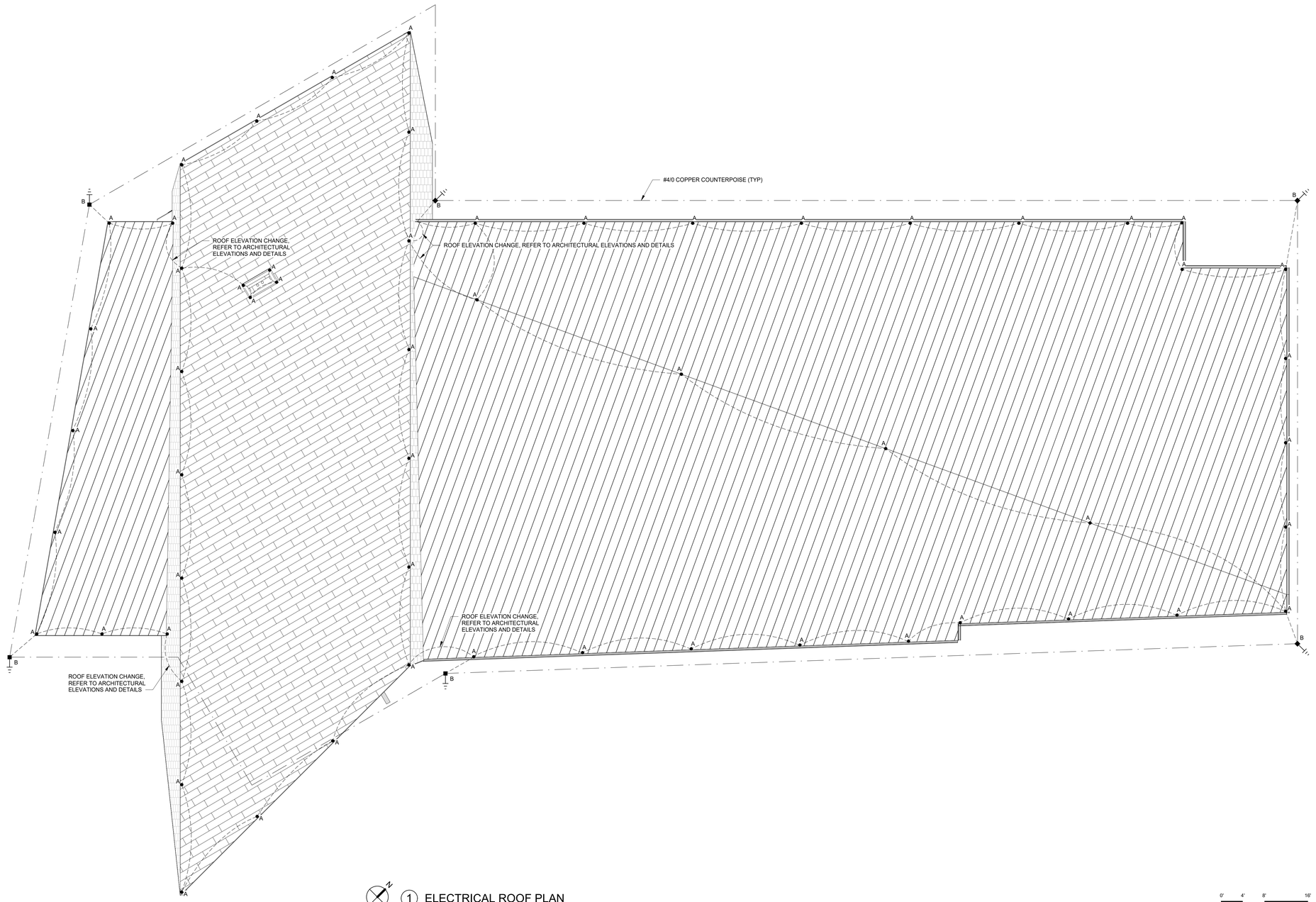
Date **05/19/2020** | Checked **EMN** | Drawn **DLB**

Project Number
H IH BLAC 19100

Building Number

Drawing Number
EP1.2

INDIAN HEALTH SERVICE · PHS · 1955 ·



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

0' 4' 8' 16'
1/8" = 1'-0"

LIGHTNING PROTECTION SYMBOL LEGEND

- AIR TERMINAL: LETER DENOTES DETAIL TYPE
- MAIN CONDUCTOR
- COUNTERPOISE/GROUND CABLE
- FULL DOWNLEAD TO GROUND: LETTER DENOTES DETAIL TYPE

LIGHTNING PROTECTION INSTALLATION NOTES

1. LIGHTNING PROTECTION POINT LAYOUT REPRESENTS DESIGN INTENT AND MINIMUM STANDARDS. PROVIDE ACTUAL DESIGN AND LAYOUT BY LPI CERTIFIED MANUFACTURER AND OBTAIN LPI CERTIFICATE FOR COMPLETE LIGHTNING PROTECTION SYSTEM, SEE SPECIFICATION 26 41 13.
2. LOCATE AIR TERMINALS AS SHOWN. TAKE CARE TO ENSURE THAT ALL POINTS ARE WITHIN 2'-0" OF OUTSIDE BUILDING EDGE, OUTSIDE CORNERS, AND RIDGE ENDS, AND THAT MAXIMUM SPACING DOES NOT EXEED 20'-0" AND THAT MINIMUM PROJECTION ABOVE OBJECT PROTECTED IS 10". (POINTS PROJECTING 24" MAY BE SPACED AT 25'-0" MAXIMUM).
3. MAINTAIN HORIZONTAL OR DOWNWARD COURSING OF MAIN CONDUCTOR AND ENSURE THAT ALL BENDS HAVE AT LEAST AN 8" RADIUS AND NO NOT EXCEED 90 DEGREES.
4. ATTACH ALL EXPOSED ROOF, DOWN LEAD AND BONDING CABLES AT 3'-0" ON CENTER MAXIMUM. VERIFY COMPATIBILITY OF ADHESIVE ON ROOF APPLICATION PRIOR TO INSTALLATION.
5. LOCATE GROUND ELECTRODES AS SHOWN, BUT IN NO INSTANCE SHALL THEY BE LESS THAN 3'-0" BELOW GRADE AND 2'-0" FROM FOUNDATION WALL. DRIVEN RODS SHALL PENETRATE EARTH AT LEAST 10'-0". COORDINATE WITH CIVIL PLANS AND GENERALLY CONTRACTOR FOR EXACT ROD PLACEMENT.
6. BOND TO OTHER PIPING SYSTEMS AS REQUIRED BY CODES.
7. INTERCONNECT LIGHTNING PROTECTION GROUND TO ELECTRIC, TELEPHONE, AND OTHER BUILDING GROUND SYSTEMS AS SHOWN OR AS REQUIRED BY CODE.
8. "AS-BUILT" DRAWINGS SHALL BE SUBMITTED IN ACCORDANCE WITH CERTIFICATION PROCEDURES.
9. ALL MATERIALS ARE UNDERWRITERS LABRATORIES APPROVED WITH LABELS ON CONDUCTORS AT 10'-0" INTERVALS AND LAVELS ON ALL AIR TERMINALS.
10. SEE DETAILS ON SHEET E5.3 FOR ADDITIONAL INFORMATION.

ADDENDUM 001 (1)	02/02/2022
Revisions:	Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-use.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA
ERICKA M. NEWMAN-HOFFMAN
No. PEL-PE-LIC-63281
LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **ELECTRICAL ROOF PLAN**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI1022018000051
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **05/19/2020** | Checked: **EMN** | Drawn: **DLB**

Project Number: **H IH BLAC 19100**

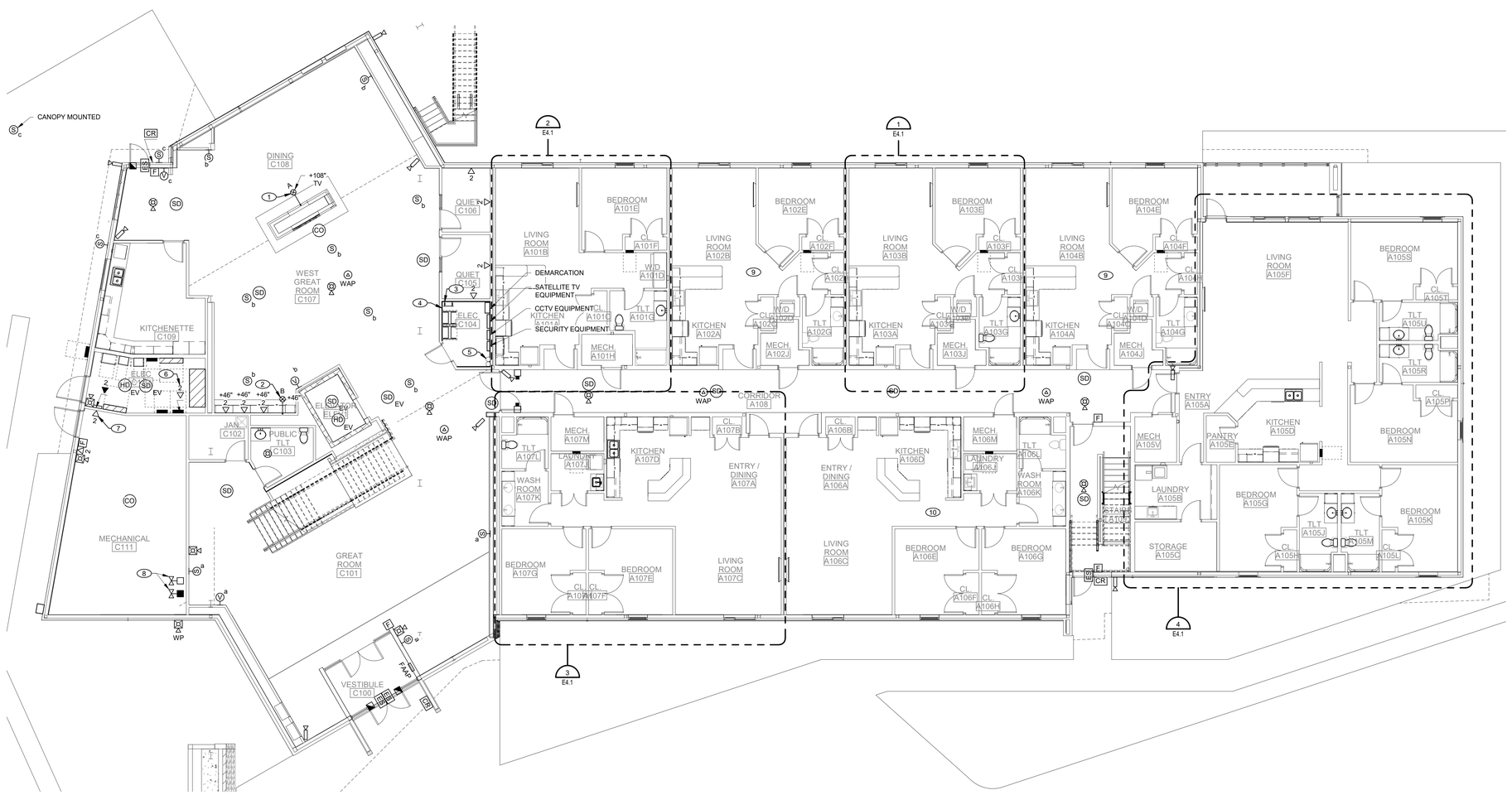
Building Number:

Drawing Number: **EP2.1**

(1) SHEET REISSUED IN ITS ENTIRETY

INDIAN HEALTH SERVICE · PHS · 1955 ·

KEYNOTES	
1	RECESSED TV OUTLET WALL BOX. REFER TO 'AUDIO VISUAL / SOUND SYSTEM ONE-LINE' DETAIL ON SHEET E5.2 FOR ADDITIONAL INFORMATION. VERIFY ADEQUATE WALL DEPTH IS AVAILABLE FOR WALL BOX INSTALLATION.
2	AUDIO VISUAL / SOUND SYSTEM INPUT WALL PLATE. COORDINATE EXACT MOUNTING LOCATION WITH ARCHITECT AND OWNER PRIOR TO INSTALLATION. REFER TO 'AUDIO VISUAL / SOUND SYSTEM ONE-LINE' DETAIL ON SHEET E5.2 FOR ADDITIONAL INFORMATION.
3	TELECOMMUNICATIONS MAIN GROUND BAR.
4	PROVIDE WALL MOUNTED 3/4" THICK BY 4'-0" WIDE PLYWOOD BACKBOARD ALONG ROOM PERIMETER. MOUNT BOTTOM OF BACKBOARD +2'-0" AFF. PAINT PLYWOOD WITH GRAY FIRE RESISTANT PAINT.
5	PROVIDE TWO (2) 4" CONDUIT WITHIN FROM FIRST FLOOR TO ABOVE ACCESSIBLE CEILING SPACE ON SECOND FLOOR FOR TELECOMMUNICATIONS AND SECURITY CABLING.
6	DATA CONNECTION FOR LIGHTING CONTROLS HEAD END EQUIPMENT AS NECESSARY.
7	COORDINATE LOCATION AND EXACT REQUIREMENTS OF TEMPERATURE CONTROL PANEL WITH MECHANICAL CONTRACTOR.
8	REFER TO FIRE SUPPRESSION PLANS FOR ADDITIONAL REQUIREMENTS FOR CONNECTIONS TO FIRE ALARM SYSTEM.
9	REFER TO 'TYPICAL ONE BEDROOM APARTMENT ELECTRICAL PLAN', SHEET E4.1 FOR WORK THIS AREA.
10	REFER TO 'TYPICAL TWO BEDROOM APARTMENT ELECTRICAL PLAN', SHEET E4.1 FOR WORK THIS AREA.



1 FIRST FLOOR SPECIAL SYSTEMS PLAN
SCALE: 1/8" = 1'-0"

0' 4' 8' 16'
1/8" = 1'-0"

ADDENDUM 001 1	02/02/2022
Revisions:	Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-uso.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA ERICKA MENNENGA No. PEL-PE-LIC-63283 LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **FIRST FLOOR SPECIAL SYSTEMS PLAN**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **05/19/2020** | Checked: **EMN** | Drawn: **DLB**

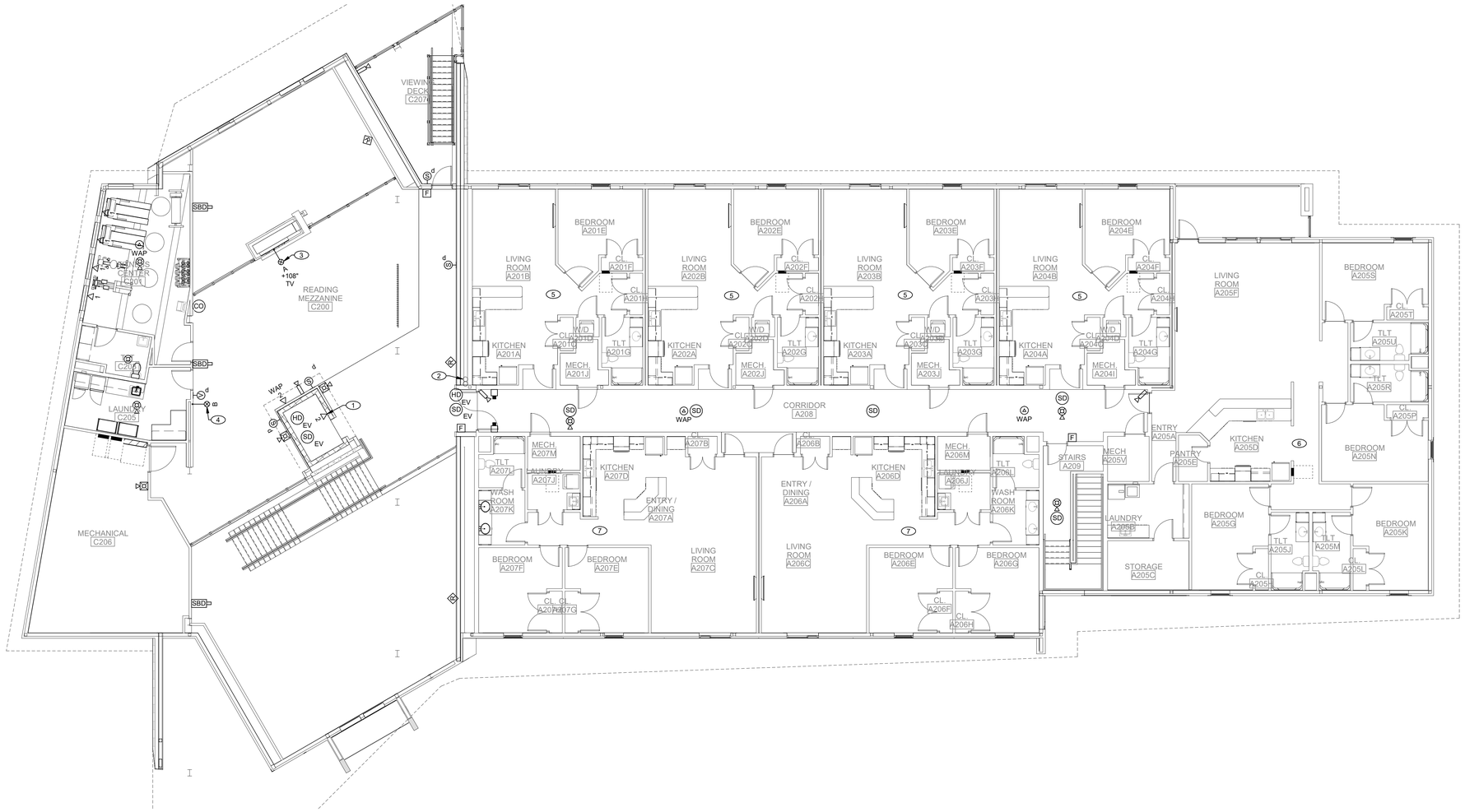
Project Number: **H IH BLAC 19100**

Building Number

Drawing Number: **EY1.1**

INDIAN HEALTH SERVICE · PHS · 1955 ·

KEYNOTES	
1	PROVIDE TELEPHONE CONNECTION TO ELEVATOR CONTROLLER.
2	PROVIDE TWO (2) 4" CONDUIT WITHIN FROM FIRST FLOOR TO ABOVE ACCESSIBLE CEILING SPACE ON SECOND FLOOR FOR TELECOMMUNICATIONS AND SECURITY CABLING.
3	RECESSED TV OUTLET WALL BOX. REFER TO 'AUDIO VISUAL / SOUND SYSTEM ONE-LINE' DETAIL ON SHEET E5.2 FOR ADDITIONAL INFORMATION. VERIFY ADEQUATE WALL DEPTH IS AVAILABLE FOR WALL BOX INSTALLATION.
4	AUDIO VISUAL / SOUND SYSTEM INPUT WALL PLATE. COORDINATE EXACT MOUNTING LOCATION WITH ARCHITECT AND OWNER PRIOR TO INSTALLATION. REFER TO 'AUDIO VISUAL / SOUND SYSTEM ONE-LINE' DETAIL ON SHEET E5.2 FOR ADDITIONAL INFORMATION.
5	REFER TO 'TYPICAL ONE BEDROOM APARTMENT ELECTRICAL PLAN', SHEET E4.1 FOR WORK THIS AREA.
6	REFER TO 'TYPICAL FOUR BEDROOM APARTMENT ELECTRICAL PLAN', SHEET E4.1 FOR WORK THIS AREA.
7	REFER TO 'TYPICAL TWO BEDROOM APARTMENT ELECTRICAL PLAN', SHEET E4.1 FOR WORK THIS AREA.



1 SECOND FLOOR SPECIAL SYSTEMS PLAN

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

0' 4' 8' 16'

1/8" = 1'-0"

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SYDNEY
farris-usa.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA
ERICKA M. HENRICKSON
LIC. NO. PEL-PEC-LIC-63283
LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: SECOND FLOOR SPECIAL SYSTEMS PLAN

Approved: Project Director

Project Title: APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: BROWNING, MONTANA

Date: 05/19/2020 | Checked: EMN | Drawn: DLB

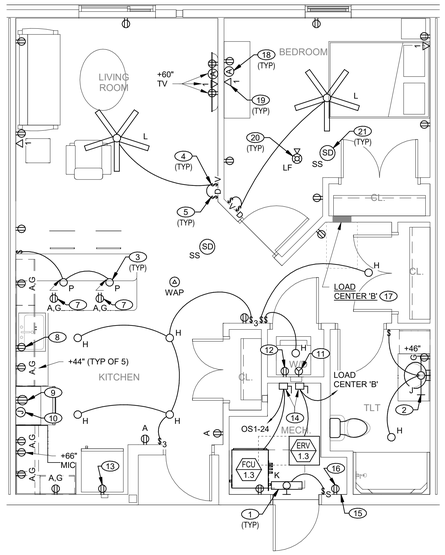
Project Number: H IH BLAC 19100

Building Number:

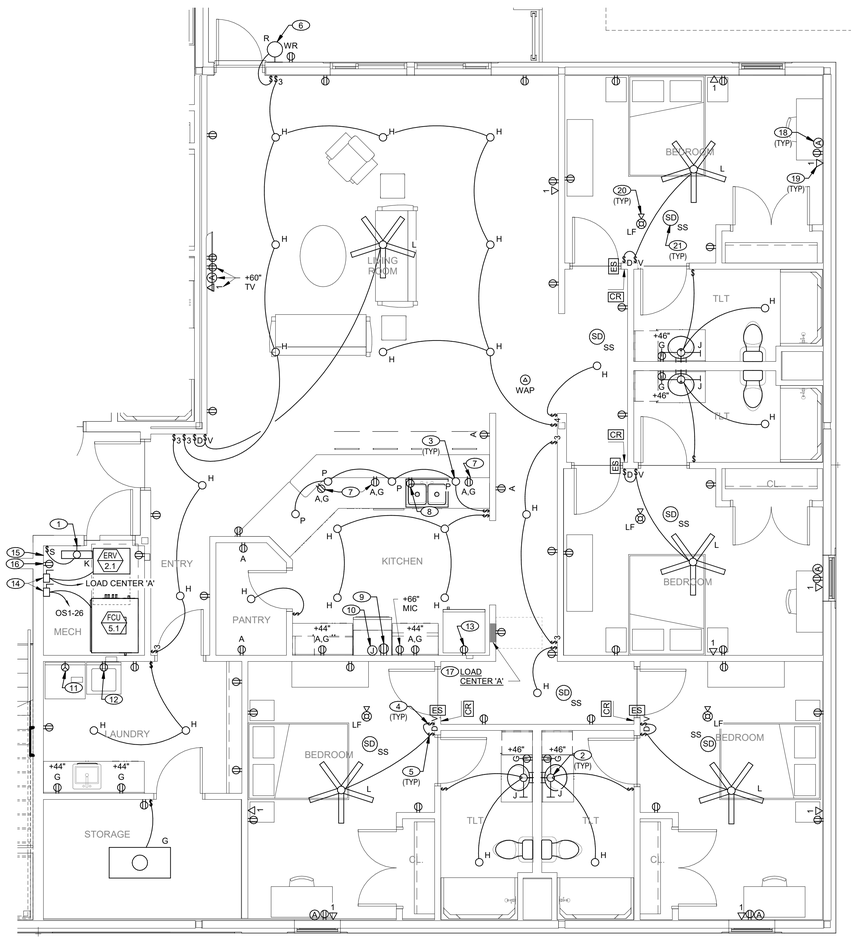
Drawing Number: EY1.2

INDIAN HEALTH SERVICE · PHS · 1955 ·

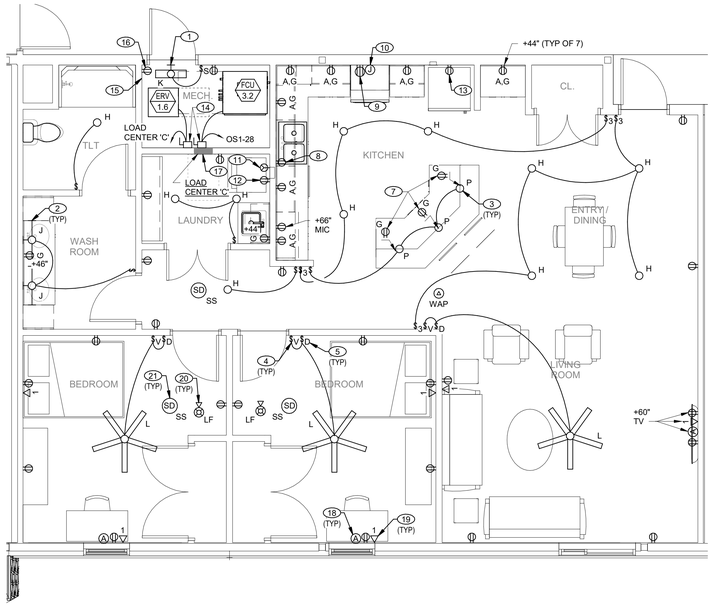
KEYNOTES	
1	MOUNT LUMINAIRE SO THAT BOTTOM OF LUMINAIRE IS +7'-4" AFF. COORDINATE MOUNTING LOCATION WITH MECHANICAL CONTRACTOR.
2	MOUNT LUMINAIRE ABOVE MIRROR, COORDINATE WITH ARCHITECT FOR EXACT LOCATION.
3	COORDINATE LUMINAIRE SUSPENSION HEIGHT WITH ARCHITECT PRIOR TO INSTALLATION.
4	PROVIDE VARIABLE SPEED SWITCH FOR CEILING FAN MOTOR ONLY. SWITCH SHALL BE HUNTER 27180, OR EQUAL, THREE-SPEED STEPPED WALL CONTROL.
5	DIMMER SWITCH SHALL BE LUTRON AYCL-153P-WH, OR EQUAL, RATED FOR USE WITH LED LAMPS SPECIFIED. AT CEILING FAN LOCATIONS CONNECT DIMMER TO CEILING FAN LIGHT ONLY.
6	MOUNT LUMINAIRE SO THAT BOTTOM OF LUMINAIRE IS +8'-0" AFF.
7	HORIZONTALLY MOUNT RECEPTACLE ABOVE COUNTER TOP, COORDINATE MOUNTING LOCATION WITH CASEWORK.
8	PROVIDE RECEPTACLE IN ACCESSIBLE LOCATION UNDER CABINET IN THE SPACE ADJACENT TO THE DISHWASHER. RECEPTACLE SHALL BE LOCATED TO AVOID DAMAGE TO THE FLEXIBLE CORD.
9	PROVIDE 50 AMP, 3 POLE, 4 WIRE, 120/208 VOLT NEMA 14-50R RANGE OUTLET WITH MATCHING CORD AND PLUG, FLUSH MOUNTED WITH COVER PLATE. (VERIFY EXACT LOCATION).
10	PROVIDE POWER CONNECTION FOR RANGE HOOD. COORDINATE REQUIREMENTS AND EXACT LOCATION WITH EQUIPMENT SUPPLIER.
11	PROVIDE DRYER OUTLET 30 AMP, 120/208 VOLT, 1 PHASE, 4 WIRE. PROVIDE MATCHING CORD/PLUG AS REQUIRED.
12	WASHING MACHINE RECEPTACLE. SEE ARCHITECTURAL ELEVATIONS FOR DEVICE LOCATIONS IN UTILITY ROOM.
13	MOUNT DEVICE AT +54" AFF FOR REFRIGERATOR.
14	MECHANICAL EQUIPMENT DISCONNECT, COORDINATE MOUNTING LOCATION WITH MECHANICAL CONTRACTOR. MAINTAIN NEC REQUIRED CLEARANCES, AND MAXIMUM HEIGHT OF 6'-7". PROVIDE UNISTRUT AS NECESSARY FOR MOUNTING TO PUMP STAND.
15	LOCATION FOR DATA AND SATELLITE TV. ALL DATA AND TV CABLING SHALL BE TERMINATED TO THIS LOCATION FOR THIS UNIT. PROVIDE PATHWAY AND CABLING TO MAIN TERMINAL BOARD. PROVIDE A PLYWOOD TERMINAL BOARD OR MEDIA BOX AS NEEDED. COORDINATE ALL REQUIREMENTS WITH THE OWNER AND PROVIDER.
16	LOCATE RECEPTACLE ADJACENT TO DATA/SATELLITE TERMINATION PANEL AT +54" AFF.
17	APARTMENT LOAD CENTER - SEE SCHEDULES AND RISER DIAGRAM FOR SIZE AND CIRCUIT BREAKERS.
18	PROVIDE A COAXIAL CABLE FROM EACH TV OUTLET TO UNIT BOARD.
19	PROVIDE A SINGLE GANG BOX WITH ONE DATA JACK AND CABLING. SEE SPECIFICATIONS FOR MATERIAL TYPES AND REQUIREMENTS.
20	BUILDING FIRE ALARM SYSTEM DEVICE CONNECTED TO MAIN FIRE ALARM PANEL. DO NOT INTERCONNECT WITH SINGLE STATION DEVICES.
21	SINGLE STATION DETECTOR ALARMS AND REMOTE STROBE DEVICES WHERE INSTALLED SHALL BE INTERCONNECTED TO ALARM SIMULTANEOUSLY. NO CONNECTION TO BUILDING FIRE ALARM SYSTEM FOR THESE UNITS.
22	PROVIDE DOOR BELL VISUAL SIGNAL SYSTEM FOR HEARING IMPAIRED UNIT. SYSTEM SHALL CONSIST OF POWER SUPPLY, CHIME SIGNAL/STROBE AND LABELED PUSH BUTTON MOUNTED AT +48" AFF TO TOP OF BOX AT APARTMENT DOOR. SYSTEM SHALL BE GLOBAL FIRE CONTROL INC. MODEL GFC-ADA-ADB-KIT. SOUNDER SHALL BE SET FOR CHIME TONE.
23	LOAD CENTER SHALL BE MOUNTED SUCH THAT THE HIGHEST HANDLE OF BRANCH OR MAIN CIRCUIT BREAKER IS NO MORE THAN 48 INCHES AFF.
24	APARTMENT LOAD CENTER - SEE SCHEDULES FOR SIZE CIRCUIT BREAKERS, CIRCUITS, AND ADDITIONAL REQUIREMENTS.



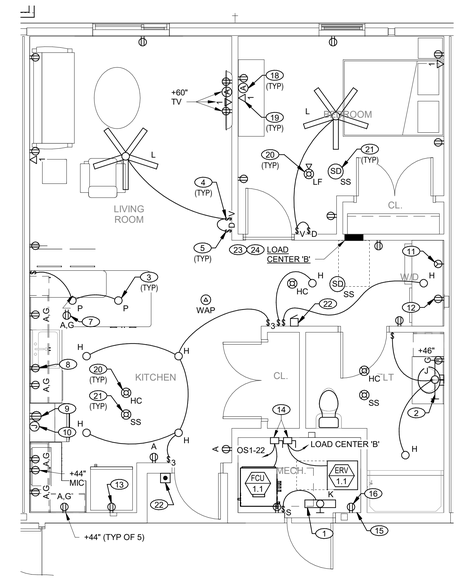
1 TYPICAL ONE BEDROOM APARTMENT ELECTRICAL PLAN
SCALE: 1/4" = 1'-0"



4 TYPICAL FOUR BEDROOM APARTMENT ELECTRICAL PLAN
SCALE: 1/4" = 1'-0"



3 TYPICAL TWO BEDROOM APARTMENT ELECTRICAL PLAN
SCALE: 1/4" = 1'-0"



2 ONE BEDROOM HANDICAP APARTMENT ELECTRICAL PLAN
SCALE: 1/4" = 1'-0"

ADDENDUM 001	02/02/2022
Revisions:	Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-use.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA
ERICKA M. NEMETH-NORMAN
No. PEL-PE-LIC-67285
LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **ELECTRICAL LARGE-SCALE PLANS**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **05/19/2020** | Checked: **EMN** | Drawn: **DLB**

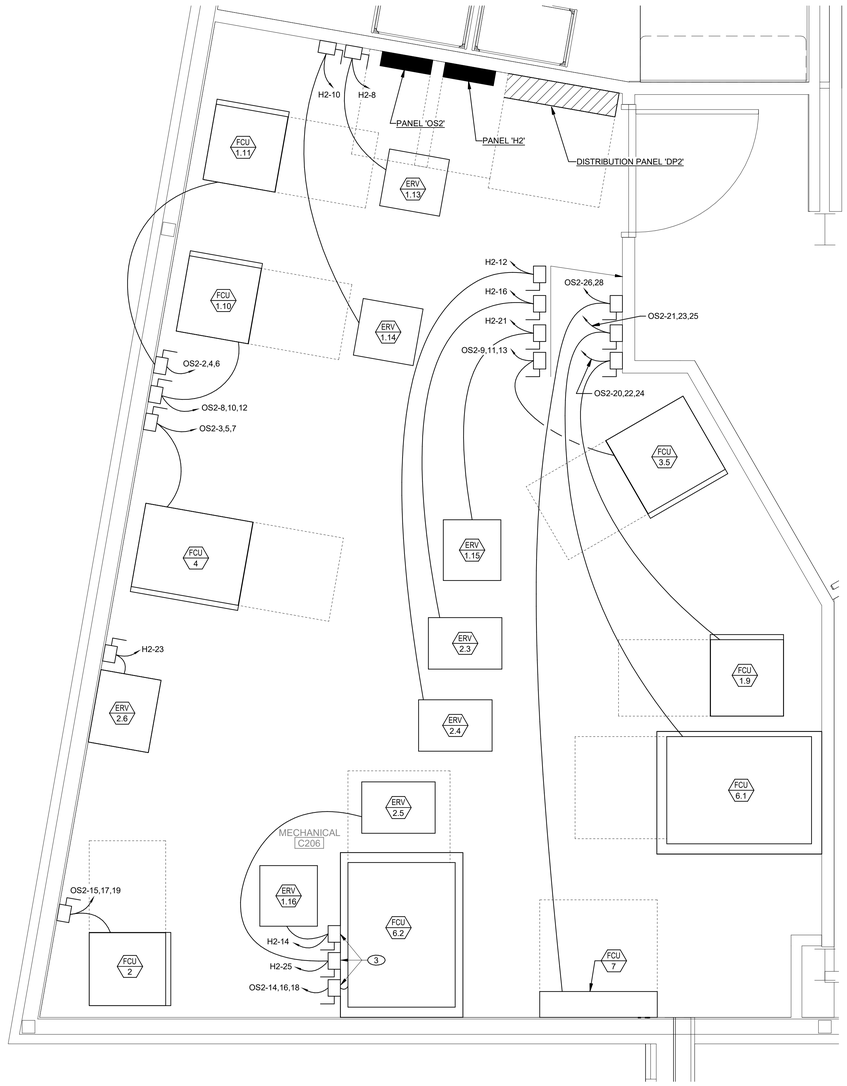
Project Number: **H IH BLAC 19100**

Building Number:

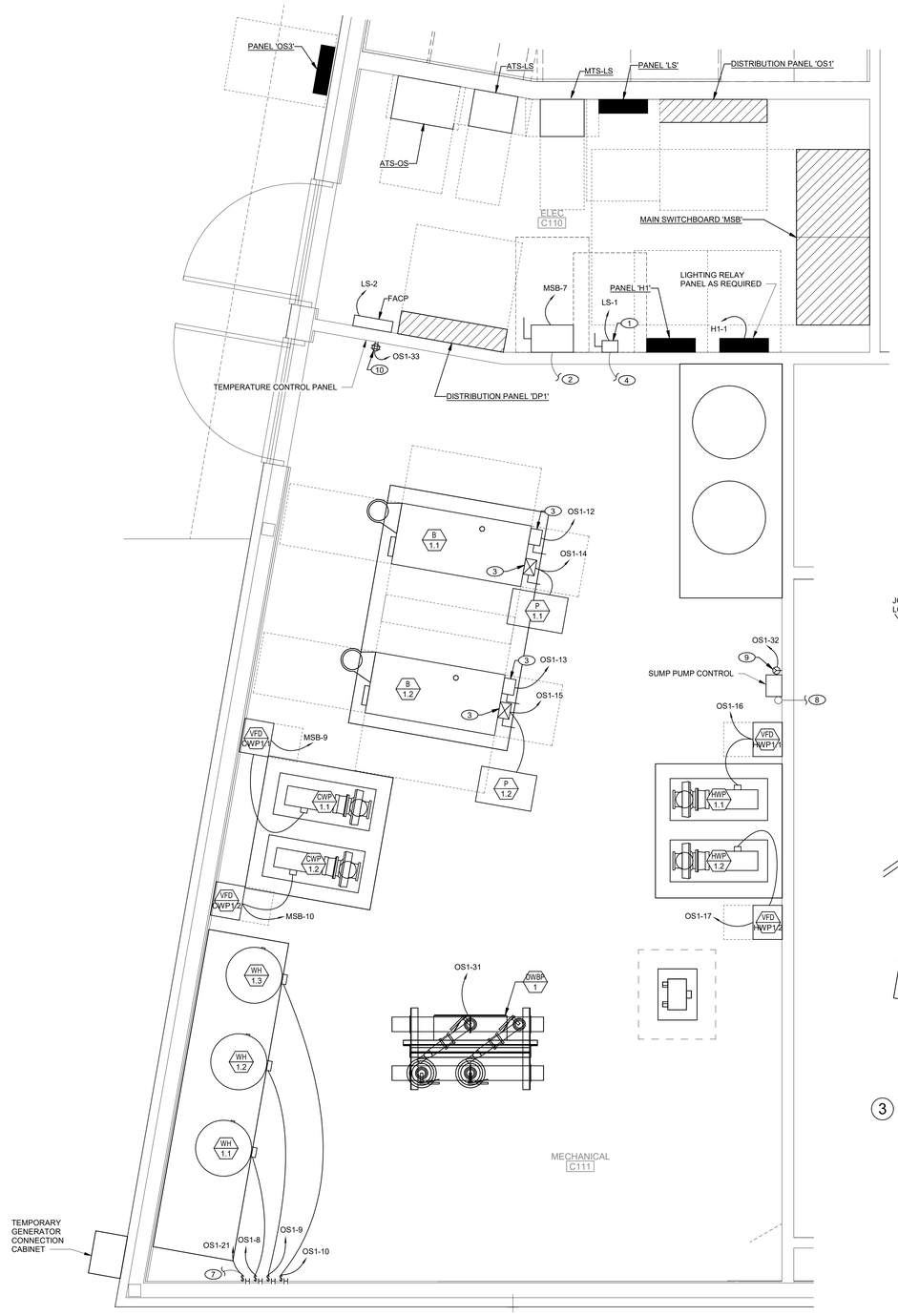
Drawing Number: **E4.1**

INDIAN HEALTH SERVICE · PHS · 1955 ·

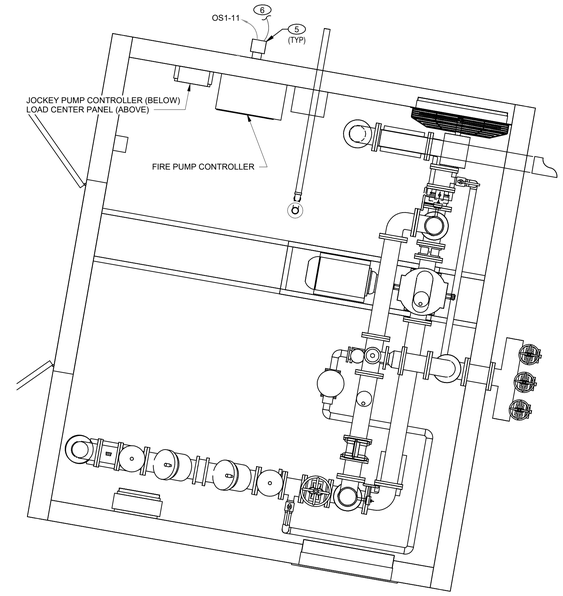
KEYNOTES	
1	30/2/20/N1 LOCKABLE SAFETY SWITCH FOR ELEVATOR CAB LIGHTS. COORDINATE LOCATION OF DISCONNECT WITH ELEVATOR EQUIPMENT INSTALLER.
2	PROVIDE CONNECTION TO ELEVATOR CONTROLLER DISCONNECT PER MANUFACTURER'S RECOMMENDATIONS.
3	COORDINATE LOCATION OF DISCONNECT WITH MECHANICAL CONTRACTOR, PROVIDE UNISTRUT AS REQUIRED.
4	PROVIDE CONNECTION TO ELEVATOR CAB LIGHTS PER ELEVATOR MANUFACTURER'S RECOMMENDATIONS.
5	POWER CONNECTIONS. PROVIDE POWER TO BUILDING PER PUMP HOUSE MANUFACTURER'S REQUIREMENTS. COORDINATE FINAL POWER LOCATION, QUANTITY, AND CONNECTION REQUIREMENTS WITH PUMP HOUSE INSTALLING CONTRACTOR. REFER TO SHEET F4.1 FOR ADDITIONAL INFORMATION.
6	PROVIDE POWER CONNECTION FROM PUMP CONTROLLER TO UTILITY TRANSFORMER AND GENERATOR. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH PUMP HOUSE INSTALLING CONTRACTOR. REFER TO SHEET ES1.1 AND E6.1 FOR ADDITIONAL INFORMATION. PROVIDE ONE (1) 2" PVC CONDUIT WITH PULL WIRE BELOW GRADE TO FIRE ALARM CONTROL PANEL IN ELEC C110 FOR FIRE ALARM CONNECTIONS. COORDINATE TAMPER AND FLOW SWITCHES REQUIREMENTS WITH FIRE SPRINKLER CONTRACTOR.
7	CONNECT TO 'HWCP-1'. SEE PLUMBING PLAN FOR PUMP LOCATION.
8	PROVIDE 2" EMPTY CONDUIT FROM OIL DETECTION CONTROLLER TO SUMP PUMP IN ELEVATOR SHAFT PIT FOR CONTROL CABLE. SPLICE AND EXTEND FACTORY CONTROL CABLE FOR LAYOUT INDICATED. COORDINATE DETECTION CONTROLLER LOCATION WITH MECHANICAL CONTRACTOR. SEE 'OIL DETECTION ELEVATOR SUMP PUMP PIPING DETAIL' ON SHEET P5.1.
9	COORDINATE EXACT LOCATION REQUIRED WITH EQUIPMENT INSTALLER.
10	COORDINATE LOCATION AND EXACT REQUIREMENTS OF TEMPERATURE CONTROL PANEL WITH MECHANICAL CONTRACTOR.



2 MECHANICAL C206 POWER PLAN
SCALE: 1/2" = 1'-0"



1 MECHANICAL C111 POWER PLAN
SCALE: 1/2" = 1'-0"



3 FIRST FLOOR POWER PLAN - FIRE PUMP/ENCLOSURE
SCALE: 1/2" = 1'-0"

Revisions:	Date
ADDENDUM 001 1	02/02/2022

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-use.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA — ERICKA M. NEWMAN — No. PEL-PE-LIC-67283 — LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **ELECTRICAL LARGE-SCALE PLANS**
Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002
Location: **BROWNING, MONTANA**
Date: **05/19/2020** Checked: **EMN** Drawn: **DLB**

Project Number: **H IH BLAC 19100**
Building Number:
Drawing Number: **E4.2**

INDIAN HEALTH SERVICE · PHS · 1955

LUMINAIRE SCHEDULE

MARK	DESCRIPTION	MANUFACTURER/SERIES	CATALOG NO.	LIGHT SOURCE QTY	LIGHT SOURCE TYPE	FINISH	MOUNTING	INPUT WATTS	VOLTS	ACCEPTABLE MANUFACTURERS	REMARKS
A1	4' LENSED LED STRIPLIGHT - 5000 LUMEN - EMERGENCY GEN	LITHONIA	ZL1N-L48-5000LM-FST-MVOLT-40K-80CRI-WH-ZACVH	-	5000 LUMEN / 4000K / LED	WHITE	SUSPENDED	34 VA	120	REMARK 1	8
AA	4' LENSED LED STRIPLIGHT	LITHONIA	ZL1N-L48-3000LM-FST-MVOLT-40K-80CRI-WH-ZACVH	-	3000 LUMEN / 4000K / LED	WHITE	SUSPENDED	25 VA	120	REMARK 1	-
AA1	4' LENSED LED STRIPLIGHT - EMERGENCY GEN	LITHONIA	ZL1N-L48-3000LM-FST-MVOLT-40K-80CRI-WH-ZACVH	-	3000 LUMEN / 4000K / LED	WHITE	SUSPENDED	25 VA	120	REMARK 1	8
B	2' LINEAR LENSED LED - WET LOCATION	LITHONIA	DMW2-L24-3000LM-AFL-MD-MVOLT-GZ10-40K-80CRI	-	3000 LUMEN / 4000K / LED	WHITE	WALL	27 VA	120	REMARK 1	-
C	25" SPHERE CHANDELIER - 6 LAMP	SEA GULL	3190406-715	4	LED A-LAMP	AUTUMN BRONZE	SUSPENDED	600 VA	120	REMARK 6	11
D	SMALL DECORATIVE LED WALL SCONCE - ADA COMPLIANT	HUDSON VALLEY	HUD607550	1	LED A-LAMP	OLD BRONZE	WALL	5 VA	120	REMARK 6	-
E	EMERGENCY LED BATTERY PACK	DUAL-LITE	LZ-30-I-03L	-	LED FURNISHED IN UNIT	WHITE	WALL	6 VA	120	REMARK 3	5
F	4" ROUND LED DOWNLIGHT - IC RATED - 1500 LUMEN	PORTFOLIO	LD4B-15-D010-EU4B-1015IC-80-40-4LB-M-1-H	-	1500 LUMEN / 4000K / LED	MATTE-DIFFUSE	RECESSED	15 VA	120	REMARK 2	-
F1	4" ROUND LED DOWNLIGHT - IC RATED - 1500 LUMEN - EMERGENCY GEN	PORTFOLIO	LD4B-15-D010-EU4B-1015IC-80-40-4LB-M-1-H	-	1500 LUMEN / 4000K / LED	MATTE-DIFFUSE	RECESSED	15 VA	120	REMARK 2	8
FA	4" ROUND LED DOWNLIGHT - IC RATED - 1000 LUMEN	PORTFOLIO	LD4B-10-D010-EU4B-1015IC-80-40-4LB-M-1-H	-	1000 LUMEN / 4000K / LED	MATTE-DIFFUSE	RECESSED	11 VA	120	REMARK 2	-
FA1	4" ROUND LED DOWNLIGHT - IC RATED - 1000 LUMEN - EMERGENCY GEN	PORTFOLIO	LD4B-10-D010-EU4B-1015IC-80-40-4LB-M-1-H	-	1000 LUMEN / 4000K / LED	MATTE-DIFFUSE	RECESSED	11 VA	120	REMARK 2	8
G	2X4 PRISMATIC LED TROFFER	LITHONIA	2GTL-4-30L-GZ10-LP830-PAF	-	3000 LUMEN / 3000K / LED	WHITE	RECESSED	23 VA	120	REMARK 1	-
H	6" SURFACE LED DOWNLIGHT	HALO	SLD612-9-30-WH-UNV-JB	-	1200 LUMEN / 3000K / LED	WHITE	SURFACE	15 VA	120	REMARK 1	-
H1	6" SURFACE LED DOWNLIGHT	HALO	SLD612-9-30-WH-UNV-JB	-	1200 LUMEN / 3000K / LED	WHITE	SURFACE	15 VA	120	REMARK 1	8
J	VANITY LED LIGHT	KICHLER	KHR20373	1	3000K LED MODULE	BRONZE	WALL	30 VA	120	REMARK 6	-
K	2' LINEAR LENSED LED STRIP	LITHONIA	WL2-22L-GZ10-LP840	-	2200 LUMEN / 4000K / LED	WHITE	WALL	21 VA	120	REMARK 1	-
L	54" CEILING FAN - 1 LAMP	MINKA AIRE	LUN-AIRE F534L-ORB	1	LED A-LAMP	OIL RUBBED BRONZE	SURFACE	17 VA	120	REMARK 6	-
M	6" ROUND LED CYLINDER - 950 LM UP - 3000 LM DOWN	ALW	C4LT-N-V-2-D-10-83-40-41-30-83-40-25-XX-CS	-	3950 LUMEN / 4000K / LED	BY ARCHITECT	PENDANT	37 VA	120	REMARK 2	-
M1	6" ROUND LED CYLINDER - 950 LM UP - 3000 LM DOWN - EMERGENCY GEN	ALW	C4LT-N-V-2-D-10-83-40-41-30-83-40-25-XX-CS	-	3950 LUMEN / 4000K / LED	BY ARCHITECT	PENDANT	37 VA	120	REMARK 2	8
MA	6" ROUND LED CYLINDER - 950 LM UP - 2000 LM DOWN	ALW	C4LT-N-V-2-D-10-83-40-41-20-83-40-25-XX-CS	-	2950 LUMEN / 4000K / LED	BY ARCHITECT	PENDANT	27 VA	120	REMARK 2	-
MA1	6" ROUND LED CYLINDER - 950 LM UP - 2000 LM DOWN - EMERGENCY GEN	ALW	C4LT-N-V-2-D-10-83-40-41-20-83-40-25-XX-CS	-	2950 LUMEN / 4000K / LED	BY ARCHITECT	PENDANT	27 VA	120	REMARK 2	8
N10	10'-0" - 2" LENSED LED LINEAR - 375 LM/FT	FOCAL POINT	FSM2L-FL-375LF-40K-1C-UNV-LD1-TF-WH-10FT	-	3750 LUMEN / 4000K / LED	WHITE	RECESSED	45 VA	120	REMARK 9	-
O	4' LINEAR LED COVE	ECOSENSE	L50-I-48"-04-40-80-MULT-40X60	-	1208 LUMEN / 4000K / LED	WHITE	RECESSED	16 VA	120	REMARK 6	-
OA	1' LINEAR LED COVE	ECOSENSE	L50-I-12"-04-40-80-MULT-40X60	-	302 LUMEN / 4000K / LED	WHITE	RECESSED	4 VA	120	REMARK 6	-
P	SMALL CYLINDER LENS PENDANT - 1 LAMP	MINKA LAVERY	ELYTON 4650-579	1	LED T10-LAMP	DOWNTOWN BRONZE	PENDANT	60 VA	120	REMARK 6	-
Q	OUTDOOR DIRECT/INDIRECT LED WALL PACK	OXYGEN	3-703-3022	-	718 LUMEN / 3000K / LED	OILED BRONZE	WALL	29 VA	120	REMARK 6	-
R	OUTDOOR LED TRAPEZOID WALL PACK	TECH LIGHTING	700WSPIT-S-Z-LED830	-	822 LUMEN / 3000K / LED	BRONZE	WALL	26 VA	120	REMARK 6	-
R1	OUTDOOR LED TRAPEZOID WALL PACK - EMERGENCY GEN	TECH LIGHTING	700WSPIT-S-Z-LED830	-	822 LUMEN / 3000K / LED	BRONZE	WALL	26 VA	120	REMARK 6	8
S	OUTDOOR LED BOLLARD	TECH LIGHTING	700OBSTR-830-42-C-Z-UNV-2	-	1312 LUMEN / 3000K / LED	BRONZE	BOLLARD	19 VA	120	REMARK 6	-
T	9' LINEAR LED SIGNAGE LIGHT	COLE LIGHTING	SL-9'-LED-ARM/10"-CC	-	4527 LUMEN / 3000K / LED	BRONZE	WALL	54 VA	120	REMARK 6	-
U13	13'-4" - 4" LENSED LED LINEAR - 375 LM/FT	FOCAL POINT	FSM4LS-FL-375LF-40K-1C-UNV-LD1-C48-WH-13FT-6IN	-	5250 LUMEN / 4000K / LED	WHITE	SUSPENDED	63 VA	120	REMARK 9	-
U14	14'-6" - 4" LENSED LED LINEAR - 375 LM/FT	FOCAL POINT	FSM4LS-FL-375LF-40K-1C-UNV-LD1-C48-WH-14FT-6IN	-	5625 LUMEN / 4000K / LED	WHITE	SUSPENDED	67 VA	120	REMARK 9	-
U15E	15'-6" - 4" LENSED LED LINEAR - 375 LM/FT - EMERGENCY GEN	FOCAL POINT	FSM4LS-FL-375LF-40K-1C-UNV-LD1-C48-WH-15FT-6IN	-	6000 LUMEN / 4000K / LED	WHITE	SUSPENDED	71 VA	120	REMARK 9	8
U16	16'-9" - 4" LENSED LED LINEAR - 375 LM/FT	FOCAL POINT	FSM4LS-FL-375LF-40K-1C-UNV-LD1-C48-WH-16FT-6IN	-	6375 LUMEN / 4000K / LED	WHITE	SUSPENDED	76 VA	120	REMARK 9	-
X	EDGE-LIT LED EXIT SIGN - SINGLE FACE	LITHONIA	LES-X-S-R-X-W-A-M	-	LED FURNISHED IN UNIT	WHITE	REMARK 4	3 VA	120	REMARK 3	-
X2	EDGE-LIT LED EXIT SIGN - DOUBLE FACE	LITHONIA	LES-X-D-R-X-W-A-M	-	LED FURNISHED IN UNIT	WHITE	REMARK 4	3 VA	120	REMARK 3	-
Z	EXTERIOR LED AREA LUMINAIRE - SINGLE HEAD - TYPE 1 SHORT	LITHONIA	DSX1-LED-P1-30K-T1S-MVOLT-RPA-DDBXD	-	6457 LUMEN / 3000K / LED	DARK BRONZE	POLE	54 VA	120	REMARK 10	7
ZA	EXTERIOIR LED AREA LUMINAIRE - DOUBLE HEAD - FORWARD THROW MEDIUM (PARKING LOT) - TYPE 1 SHORT (DRIVEWAY)	LITHONIA	DSX1-LED-P3-30K-TFTM-MVOLT-RPA-DDBXD DSX1-LED-P1-30K-T1S-MVOLT-RPA-DDBXD	-	11661 LUMEN / 6996 LUMEN / 3000K / LED	DARK BRONZE	POLE	156 VA	120	REMARK 10	7

LUMINAIRE SCHEDULE REQUIREMENTS

A. SUBMIT SHOP DRAWINGS FOR EACH LUMINAIRE, BALLAST, AND LAMP TYPE USED ON PROJECT.
B. ACCEPTABLE MANUFACTURERS LISTED ARE CAPABLE OF PROVIDING EQUIVALENT LUMINAIRES. SUBMIT PRODUCT AND ACCESSORIES EQUIVALENT OR SUPERIOR TO THE SPECIFIED LUMINAIRE IN PHOTOMETRIC PERFORMANCE, CONSTRUCTION QUALITY, INCLUDED ACCESSORIES, AND AESTHETICS. ADDITIONAL MANUFACTURERS NOT LISTED MAY ALSO BE SUBMITTED FOR APPROVAL PRIOR TO BID. APPROVAL WILL BE BASED ON AN ASSESSMENT OF THE PRODUCT'S QUALITY, PHOTOMETRIC PERFORMANCE, INCLUDED ACCESSORIES, AND AESTHETICS.
C. ALL LUMINAIRES SHALL HAVE A U.L. LABEL. ALL LUMINAIRES USED IN EXTERIOR APPLICATIONS SHALL HAVE A U.L. WET LABEL.
D. VERIFY MOUNTING COMPATIBILITY OF LUMINAIRES WITH CEILING SYSTEMSMATERIALS PRIOR TO ORDERING LUMINAIRES. NOTIFY ENGINEER OF ANY CONFLICTS WITH THE PROPOSED INSTALLATION.
E. FOR ALL SUSPENDED LUMINAIRES PROVIDE MOUNTING TYPE INDICATED IN LUMINAIRE SCHEDULE. REFER TO PLANS FOR SUSPENSION LENGTH(S) REQUIRED.
F. ALL LUMINAIRES SHALL BE PAINTED AFTER FABRICATION AND HAVE HOUSINGS WITH A MINIMUM DEPTH OF 4". PROVIDE EXTRUDED ALUMINUM TYPE DOOR FRAMES WHERE LUMINAIRES ARE SPECIFIED WITH ALUMINUM DOOR FRAMES.
G. RECESSED DOWNLIGHTS SHALL HAVE ALZAK FINISH SELF-TRIMMING REFLECTORS. DOWNLIGHTS SHALL HAVE HARDWARE MOUNTING FOR REFLECTOR, SPRING CLIPS ARE NOT ACCEPTABLE.
H. PHILIPS, OSRAM SYLVANIA, G.E., CREE, NICHIA, XICATO, AND SAMSUNG ARE ACCEPTABLE LED MANUFACTURERS.
I. PROVIDE LED LUMINAIRES WITH MINIMUM 5-YEAR WARRANTY AND INTEGRAL SURGE PROTECTION. LED MODULES, DRIVERS, AND POWER SUPPLIES SHALL BE FIELD-REPLACEABLE.
J. PROVIDE FACTORY-INSTALLED VIBRATION DAMPENERS IN ALL POLES 20 FEET AND TALLER.
K. AIM ALL ADJUSTABLE INTERIOR AND EXTERIOR LUMINAIRES UNDER DIRECTION OF THE ENGINEER.

LUMINAIRE SCHEDULE REMARKS

1. LITHONIA, COLUMBIA, DAY-BRITE, H.E. WILLIAMS, AND METALUX ARE ACCEPTABLE MANUFACTURERS FOR LUMINAIRE TYPE INDICATED.
2. GOTHAM, PRESCOLITE, LIGHTOLIER, H.E. WILLIAMS, PORTFOLIO, AND PATHWAY COVENTRY ARE ACCEPTABLE MANUFACTURERS FOR LUMINAIRE TYPE INDICATED.
3. LITHONIA, DUAL-LITE, CHLORIDE, EMERGI-LITE, HUBBELL, AND SURE-LITES ARE ACCEPTABLE MANUFACTURERS FOR LUMINAIRE TYPE INDICATED.
4. REFER TO DRAWINGS FOR MOUNTING REQUIREMENTS SUCH AS WALL MOUNT, END MOUNT, CEILING MOUNT AND PROVIDE LUMINAIRES ACCORDINGLY. PROVIDE DIRECTIONAL CHEVRON ARROWS AS INDICATED ON PLANS.
5. PROVIDE WITH SELF-DIAGNOSTIC MAINTENANCE ELECTRONICS.
6. ACCEPTABLE MANUFACTURER FOR LUMINAIRE WILL BE CONSIDERED VIA PRIOR APPROVAL.
7. PROVIDE LUMINAIRE WITH METAL BASE COVER AND ROUND, NON-TAPERED, 22'-0" STEEL POLE. PROVIDE FACTORY-INSTALLED VIBRATION DAMPENERS IN POLE. BASE COVER AND POLE SHALL HAVE PRIME COAT BASE AND FACTORY POWDER-COATED FINISH TO MATCH LUMINAIRE. PROVIDE MINIMUM 3-YEAR WARRANTY ON POLE FINISH.
8. PROVIDE LUMINAIRE WITH EMERGENCY DEVICE ALLOWING THE LUMINAIRE TO BE FED BY EMERGENCY POWER AND TO BE CONTROLLED WITH NORMAL POWER LUMINAIRES IN THE SAME ZONE. IF NORMAL POWER IS LOST, DEVICE SHALL REVERT THE LUMINAIRE TO 100% LIGHT OUTPUT. IF NORMAL POWER LUMINAIRES ARE NOT PRESENT IN ROOM, PROVIDE LUMINAIRE WITH EMERGENCY DEVICE ALLOWING THE LUMINAIRE TO BE FED BY EMERGENCY POWER AND TO BE CONTROLLED WITH LOCAL SWITCH; NORMAL SENSE WIRES SHALL BE CONNECTED TO NORMAL LIGHTING CIRCUIT IMMEDIATELY OUTSIDE OF ROOM. IF NORMAL POWER IS LOST, DEVICE SHALL REVERT THE LUMINAIRE TO 100% LIGHT OUTPUT.
9. AXIS, SELUX, PINNACLE, LUMENWERX, AND NULITE ARE ACCEPTABLE MANUFACTURERS FOR LUMINAIRE TYPE INDICATED.
10. CREE, MCGRAW-EDISON, HUBBELL, AND KIM ARE ACCEPTABLE MANUFACTURERS FOR LUMINAIRE TYPE INDICATED.
11. PROVIDE ADDITIONAL LEAD WIRE AND SUPPORT CHAIN LENGTH OR SUSPENSION SYSTEM FOR LUMINAIRE MOUNTING IN HIGH CEILING SPACE.

Lighting Controls Room Schedule

Number	Name	Lighting Control Scheme
A108	CORRIDOR	CS1A
A109	STAIRS	CS1A
A208	CORRIDOR	CS1A
A209	STAIRS	CS1A
C100	VESTIBULE	121A
C101	GREAT ROOM	GR4A
C102	JAN.	211A
C103	PUBLIC TLT	111A
C104	ELEC	111A
C105	QUIET	241A
C106	QUIET	241A
C107	WEST GREAT ROOM	WG2A
C108	DINING	DN4A
C109	KITCHENETTE	211A
C110	ELEC	011A
C111	MECHANICAL	011A
C200	READING MEZZANINE	RM3A
C201	FITNESS CENTER	121A
C203	TLT	111A
C205	LAUNDRY	211A
C206	MECHANICAL	011A
ELEV1	ELEVATOR	011A
ELEV2	ELEVATOR	011A

LIGHTING CONTROL SYSTEM BASIS OF DESIGN:

NLIGHT (REFER TO GENERAL NOTES BELOW)

LIGHTING CONROL SCHEME NARRATIVE

CS1A - CORRIDOR/STAIRWAY (ONE ZONE)
- ZONES: ROOM LIGHTING
- LIGHTING CONTROL STATIONS: LOCAL LOW VOLTAGE THREE-WAY / FOUR-WAY KEYED SWITCHES
- CONTROLLERS: OCCUPANCY SENSORS, TIME CLOCK
- OPERATION: ALL LUMINAIRES SHALL BE CONTROLLED BY OCCUPANCY SENSORS AND TIME SCHEDULE. OCCUPANCY SENSORS SHALL BE PROGRAMMED FOR AUTOMATIC 'ON' OPERATION. COORDINATE TIME SCHEDULE WITH OWNER. LOCAL SWITCHES TO PROVIDE MANUAL 'ON' OPERATION.
- NOTES: NONE.

DN4A - DINING (FOUR ZONES)
- ZONES: ROOM LIGHTING
- LIGHTING CONTROL STATIONS: a
- CONTROLLERS: OCCUPANCY SENSORS, TIME CLOCK
- OPERATION: ALL LUMINAIRES SHALL BE CONTROLLED BY OCCUPANCY SENSORS AND TIME SCHEDULE. OCCUPANCY SENSORS SHALL BE PROGRAMMED FOR AUTOMATIC 'ON' OPERATION. COORDINATE TIME SCHEDULE WITH OWNER. REFER TO LIGHTING CONTROL STATION DETAILS FOR MANUAL 'ON' OPERATION.
- NOTES: LUMINAIRE TYPES 'M' AND 'M1' SHALL HAVE DOWNLIGHT (ZONE 2) AND UPLIGHT (ZONE 3) DISTRIBUTIONS ON SEPARATE LIGHTING ZONES.

EX - EXTERIOR
- ZONES: REFER TO PLANS FOR EACH EXTERIOR ZONE
- LIGHTING CONTROL STATIONS: d (LOCATED IN ELEC C110)
- CONTROLLERS: EXTERIOR PHOTOCELL, TIME CLOCK
- OPERATION: ALL EXTERIOR LUMINAIRES SHALL BE CONTROLLED BY EXTERIOR PHOTOCELL. COORDINATE TIME SCHEDULE WITH OWNER. MANUAL ON/OFF CONTROL SHALL BE PROVIDED VIA CONTROL STATIONS 'd'.
- NOTES: SCHEME 'EX' SHALL INCLUDE ALL EXTERIOR BUILDING-MOUNTED LIGHTING, EXTERIOR WALL PACKS, EXTERIOR CANOPY LIGHTING, SIGNAGE LIGHTING, PARKING LIGHTING, ETC. LOCATE CONTROL DEVICE/RELAY IN THE INTERIOR OF THE BUILDING ABOVE NEAREST ACCESSIBLE CEILING.

GR4A - GREAT ROOM (FOUR ZONES)
- ZONES: ROOM LIGHTING
- LIGHTING CONTROL STATIONS: a
- CONTROLLERS: OCCUPANCY SENSORS, TIME CLOCK
- OPERATION: ALL LUMINAIRES SHALL BE CONTROLLED BY OCCUPANCY SENSORS AND TIME SCHEDULE. OCCUPANCY SENSORS SHALL BE PROGRAMMED FOR AUTOMATIC 'ON' OPERATION. COORDINATE TIME SCHEDULE WITH OWNER. LOCAL SWITCHES TO PROVIDE MANUAL 'ON' OPERATION.
- NOTES: LUMINAIRE TYPES 'M' AND 'M1' SHALL HAVE DOWNLIGHT (ZONE 2) AND UPLIGHT (ZONE 3) DISTRIBUTIONS ON SEPARATE LIGHTING ZONES.

RM3A - READING MEZZANINE (THREE ZONES)
- ZONES: ROOM LIGHTING
- LIGHTING CONTROL STATIONS: b
- CONTROLLERS: OCCUPANCY SENSORS, TIME CLOCK
- OPERATION: ALL LUMINAIRES SHALL BE CONTROLLED BY OCCUPANCY SENSORS AND TIME SCHEDULE. OCCUPANCY SENSORS SHALL BE PROGRAMMED FOR AUTOMATIC 'ON' OPERATION. COORDINATE TIME SCHEDULE WITH OWNER. REFER TO LIGHTING CONTROL STATION DETAILS FOR MANUAL 'ON' OPERATION.
- NOTES: LUMINAIRE TYPES 'M' AND 'M1' SHALL HAVE DOWNLIGHT (ZONE 1) AND UPLIGHT (ZONE 2) DISTRIBUTIONS ON SEPARATE LIGHTING ZONES.

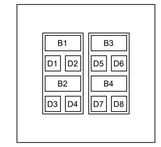
WG2A - WEST GREAT ROOM (TWO ZONES)
- ZONES: ROOM LIGHTING
- LIGHTING CONTROL STATIONS: c
- CONTROLLERS: OCCUPANCY SENSORS, TIME CLOCK
- OPERATION: ALL LUMINAIRES SHALL BE CONTROLLED BY OCCUPANCY SENSORS AND TIME SCHEDULE. OCCUPANCY SENSORS SHALL BE PROGRAMMED FOR AUTOMATIC 'ON' OPERATION. COORDINATE TIME SCHEDULE WITH OWNER. LOCAL SWITCHES TO PROVIDE MANUAL 'ON' OPERATION.
- NOTES: NONE.

CONVENTIONAL LIGHTING CONTROL SYSTEMS

011A – SINGLE POLE SWITCH (LINE VOLTAGE SWITCHING)
111A – OCCUPANCY SENSOR WALL SWITCH (LINE VOLTAGE SWITCHING)
121A – CEILING OCCUPANCY SENSOR WITH WALL SWITCH (LINE VOLTAGE SWITCHING)
211A – VACANCY SENSOR WALL SWITCH (LINE VOLTAGE SWITCHING)
241A – VACANCY SENSOR WALL DIMMER SWITCH (LINE VOLTAGE SWITCHING AND 0-10V DIMMING)

LIGHTING CONTROL REQUIREMENTS:

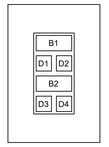
1. PROVIDE SYSTEM FOR LIGHTING CONTROLS AS SHOWN ON PLANS, SCHEDULES, AND NOTES. SUBMIT SHOP DRAWING OF COMPLETE SYSTEM. COOPER GREEN GATE, HUBBELL BUILDING AUTOMATION, WATTSTOPPER, NLIGHT, LC&D, LUTRON, LEVITON, AND INTELLIGENT LIGHTING CONTROLS (ILC) SHALL BE CONSIDERED ACCEPTABLE MANUFACTURERS SUBJECT TO COMPLIANCE WITH REQUIREMENTS.
2. PROVIDE PROGRAMMING AS REQUIRED FOR LIGHTING CONTROL, ON/OFF, DIMMING, DAYLIGHT HARVESTING, OCCUPANCY/VACANCY SENSOR, AND TIME SCHEDULE CONTROL) AS INDICATED. PROVIDE INTERFACE BETWEEN LIGHTING CONTROL SYSTEM AND NETWORK TO ALLOW PROGRAMMING AND CALIBRATION OF SYSTEM THROUGH SOFTWARE.
3. REFER TO SPECIFICATIONS FOR OCCUPANCY/VACANCY SENSOR REQUIREMENTS AND LOCATIONS. CONNECT ALL SENSORS IN CORRESPONDING AREA TOGETHER TO FEED INPUT OF OCCUPANCY/VACANCY TO CONTROL DEVICE. REFER TO DRAWINGS FOR QUANTITY OF SENSORS.
4. PROVIDE WHITE BUTTON COLOR AND PERMANENT BLACK FILLED LABELING AS INDICATED FOR ALL CONTROL STATIONS. PROVIDE PROGRAMMING AS REQUIRED FOR CONTROL OF ZONES AS INDICATED.
5. PROVIDE CAT_5 PATCH CABLE WITH RJ45 CONNECTORS TO CONNECT ALL CONTROL DEVICES AND CONTROL STATIONS TOGETHER. COORDINATE REQUIREMENTS WITH EQUIPMENT SUPPLIER.
6. TIMECLOCK SHALL BE 365-DAY ASTRONOMICAL OR SOFTWARE-BASED TIMECLOCK. PROVIDE PROGRAMMING AS REQUIRED FOR CONTROL OF ZONES INDICATED.
7. PROVIDE GLOBAL PHOTOCELL, INTERFACEPROGRAMMING, AND WIRING CONNECTIONS AS REQUIRED TO AUTOMATICALLY CONTROL INDICATED ZONES BASED ON DAYLIGHT CONDITIONS. FIELD COORDINATE SETTINGS PER MANUFACTURER RECOMMENDATIONS AND FOR OPERATION AS DIRECTED BY OWNER. INSTALL SENSOR ON ROOF FACING NORTH. PROVIDE WEATHERPROOF BOX AND ROOF PENETRATION AS REQUIRED.
8. INITIAL START-UP, COMMISSIONING, AND PROGRAMMING MUST BE COMPLETED BY A QUALIFIED FACTORY REPRESENTATIVE. PROVIDE 2 HOURS OF TRAINING FOR THE OWNER. COORDINATE TIME WITH ARCHITECT, LIGHTING DESIGNER, AND OWNER. COORDINATE FINAL CONTROL SEQUENCING WITH OWNER AND LIGHTING DESIGNER.
9. ALL LOW VOLTAGE CAT 5 CABLING TERMINATIONS SHALL BE FACTORY MOLDED FOR RUNS LESS THAN 30', WHERE CABLES ARE GREATER THAN 30', A LOW VOLTAGE LICENSED TECHNICIAN AND/OR QUALIFIED CONTRACTOR SHALL PERFORM THE TERMINATIONS. POOR TERMINATIONS WILL RESULT IN A NON-OPERATING SYSTEM. INSTALLER SHALL USE ANY SPECIFIC TERMINATION TOOLS PROVIDED BY THE FACTORY - SEE INSTALLATION REQUIREMENTS. CABLE SHALL BE COLORED DIFFERENTLY THAN TELEPHONE, DATA, AND OTHER SYSTEMS CABLING. PROVIDE CABLE COLOR WITHIN SUBMITTAL. PREFERRED OWNER COLOR: PURPLE
10. LIGHTING CONTROL WIRING AND CABLES ARE NOT SHOWN ON PLAN LAYOUTS. CONTRACTOR SHALL PROVIDE ALL CONTROL WIRING AND CABLING AS REQUIRED TO PROVIDE LIGHTING CONTROLS AS INDICATED.
11. OCCUPANCY/VACANCY SENSOR TIME DELAYS: 15 MIN (WORKROOMS, TOILETS, HALLWAYS/CORRIDORS), 5 MIN (STORAGE). COORDINATE FINAL TIME DELAYS WITH OWNER.
12. ALL CONTROL RELAYS AND INTERFACE DEVICES SHALL BE INSTALLED INSIDE IN INSULATED, ACCESSIBLE AREAS UNLESS RATED FOR OUTDOOR USE. LIGHTING CONTROL DEVICES SHALL NOT BE INSTALLED EXPOSED IN OPEN CEILING AREAS. LOCATE ABOVE ACCESSIBLE ACOUSTICAL GRID CEILINGS IN ADJACENT ROOMS.
13. ALL DIMMER SWITCHES SHALL BE COMPATIBLE WITH LUMINAIRES CONTROLLED BY THE SWITCHES. COORDINATE DIMMER SWITCH COMPATIBILITY WITH LUMINAIRES.
14. PROVIDE EMERGENCY LIGHTING CONTROL IN ALL AREAS WHERE EMERGENCY LIGHTING IS SHOWN ON THE DRAWINGS. SOME AREAS THAT HAVE EMERGENCY LIGHTING AND NORMAL POWER LIGHTING ARE SHOWN TO BE CONTROLLED BY TOGGLE SWITCHES. THOSE AREAS MAY NEED SINGLE PUSH BUTTON SWITCHES INSTEAD TO ALLOW THE NORMAL POWER AND THE EMERGENCY POWER LUMINAIRES TO BE CONTROLLED TOGETHER. PROVIDE PUSH BUTTON SWITCHES IF NECESSARY.
15. ELECTRONIC LIGHTING SWITCHES AND SENSOR SWITCHES SHALL USE A NEUTRAL FOR THE RETURN CURRENT, NOT THE EQUIPMENT GROUNDING CONDUCTOR.



CONTROL STATION 'a' (a)

CONTROL ELEMENTS:
- B1: ON/OFF ZONE ONE LIGHTING; ON TO 100%, FULL OUTPUT
- D1: DIMMER TO PROVIDE MANUAL RAISE FOR ZONE ONE LIGHTING
- D2: DIMMER TO PROVIDE MANUAL LOWER FOR ZONE ONE LIGHTING
- B2: ON/OFF ZONE TWO LIGHTING; ON TO 100%, FULL OUTPUT
- D3: DIMMER TO PROVIDE MANUAL RAISE FOR ZONE TWO LIGHTING
- D4: DIMMER TO PROVIDE MANUAL LOWER FOR ZONE TWO LIGHTING
- B3: ON/OFF ZONE THREE LIGHTING; ON TO 100%, FULL OUTPUT
- D5: DIMMER TO PROVIDE MANUAL RAISE FOR ZONE THREE LIGHTING
- D6: DIMMER TO PROVIDE MANUAL LOWER FOR ZONE THREE LIGHTING
- B4: ON/OFF ZONE FOUR LIGHTING; ON TO 100%, FULL OUTPUT
- D7: DIMMER TO PROVIDE MANUAL RAISE FOR ZONE FOUR LIGHTING
- D8: DIMMER TO PROVIDE MANUAL LOWER FOR ZONE FOUR LIGHTING

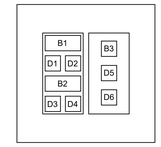
APPLICATION: DINING, GREAT ROOM



CONTROL STATION 'c' (c)

CONTROL ELEMENTS:
- B1: ON/OFF ZONE ONE LIGHTING; ON TO 100%, FULL OUTPUT
- D1: DIMMER TO PROVIDE MANUAL RAISE FOR ZONE ONE LIGHTING
- D2: DIMMER TO PROVIDE MANUAL LOWER FOR ZONE ONE LIGHTING
- B2: ON/OFF ZONE TWO LIGHTING; ON TO 100%, FULL OUTPUT
- D3: DIMMER TO PROVIDE MANUAL RAISE FOR ZONE TWO LIGHTING
- D4: DIMMER TO PROVIDE MANUAL LOWER FOR ZONE TWO LIGHTING

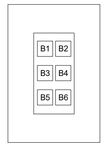
APPLICATION: WEST GREAT ROOM



CONTROL STATION 'b' (b)

CONTROL ELEMENTS:
- B1: ON/OFF ZONE ONE LIGHTING; ON TO 100%, FULL OUTPUT
- D1: DIMMER TO PROVIDE MANUAL RAISE FOR ZONE ONE LIGHTING
- D2: DIMMER TO PROVIDE MANUAL LOWER FOR ZONE ONE LIGHTING
- B2: ON/OFF ZONE TWO LIGHTING; ON TO 100%, FULL OUTPUT
- D3: DIMMER TO PROVIDE MANUAL RAISE FOR ZONE TWO LIGHTING
- D4: DIMMER TO PROVIDE MANUAL LOWER FOR ZONE TWO LIGHTING
- B3: ON/OFF ZONE THREE LIGHTING; ON TO 100%, FULL OUTPUT
- D5: DIMMER TO PROVIDE MANUAL RAISE FOR ZONE THREE LIGHTING
- D6: DIMMER TO PROVIDE MANUAL LOWER FOR ZONE THREE LIGHTING

APPLICATION: READING MEZZANINE



CONTROL STATION 'd' (d)

CONTROL ELEMENTS:
- B1: ON/OFF ZONES ONE THROUGH FIVE LIGHTING; ON TO 100%, FULL OUTPUT
- B2: ON/OFF ZONE ONE LIGHTING; ON TO 100%, FULL OUTPUT
- B3: ON/OFF ZONE TWO LIGHTING; ON TO 100%, FULL OUTPUT
- B4: ON/OFF ZONE THREE LIGHTING; ON TO 100%, FULL OUTPUT
- B5: ON/OFF ZONE FOUR LIGHTING; ON TO 100%, FULL OUTPUT
- B6: ON/OFF ZONE FIVE LIGHTING; ON TO 100%, FULL OUTPUT

APPLICATION: EXTERIOR

1 LIGHTING CONTROL STATIONS

NOT TO SCALE

ADDENDUM 001 (1)	02/02/2022
Revisions:	Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-uso.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA — ERICKA MENENDEZ — No. PEL-PE-LIC-61283 — LICENSED PROFESSIONAL ENGINEER
05/19/2020

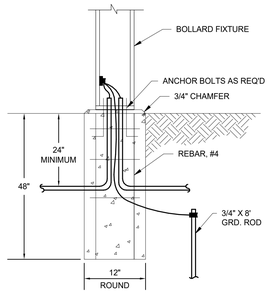
ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

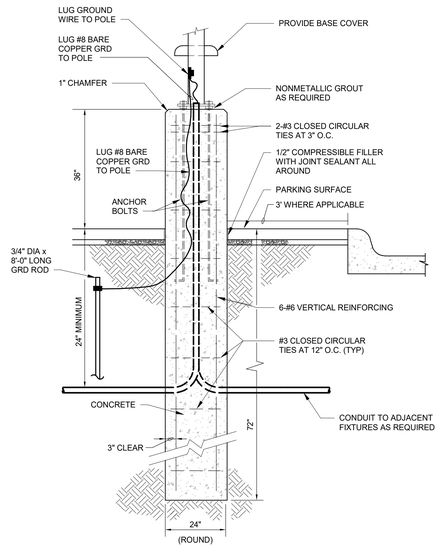
Drawing Title	**ELECTRICAL DETAILS**
Approved: Project Director	

Project Title	**APARTMENT BUILDING AND SITEWORK** **Contract No.:** HHSI102201800005I **Task Order No.:** 75H70119F30002
Location	**BROWNING, MONTANA**
Date / Checked / Drawn	**05/19/2020** / **EMN** / **DLB**
Project Number	**H IH BLAC 19100**
Building Number	
Drawing Number	**E5.1**

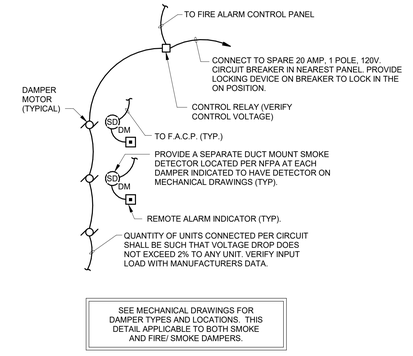
INDIAN HEALTH SERVICE · PHS · 1955 ·



7 LUMINAIRE TYPE 'S' BOLLARD MOUNTING DETAIL
NOT TO SCALE

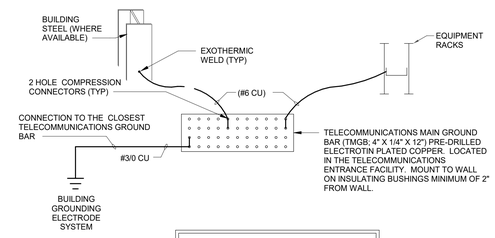


3 LUMINAIRE TYPE 'Z' AND 'ZA' POLE BASE DETAIL
NOT TO SCALE



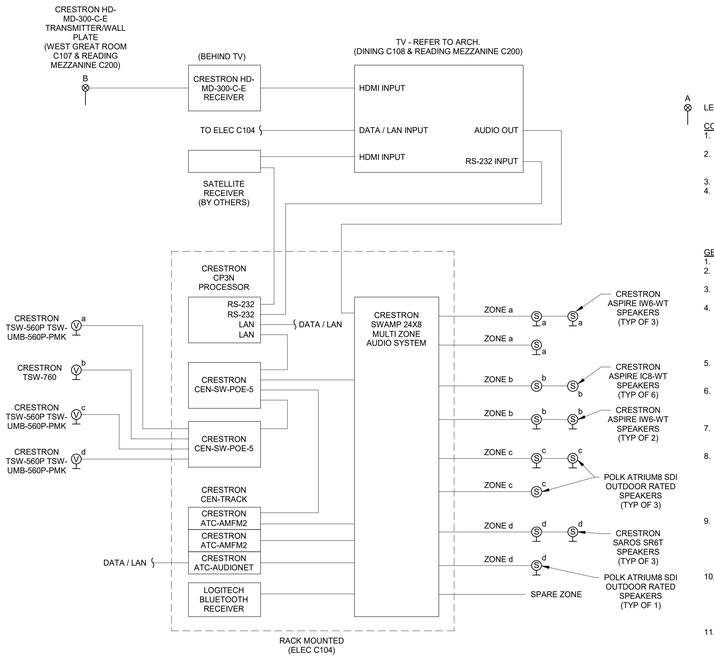
SEE MECHANICAL DRAWINGS FOR DAMPER TYPES AND LOCATIONS. THIS DETAIL APPLICABLE TO BOTH SMOKE AND FIRE/ SMOKE DAMPERS.

2 SMOKE DAMPER CONNECTION DETAIL
NOT TO SCALE



THIS DETAIL IS PROVIDED AS SUPPLEMENTARY INFORMATION AND DOES NOT EXCLUDE ANY REQUIREMENTS OF EIA/TIA OR APPLICABLE CODES.

1 TELECOMMUNICATIONS GROUNDING DETAIL
NOT TO SCALE



A LEGRAND EFSB4, 4 GANG WALL BOX OR APPROVED EQUAL.

CONTENTS:
1. DUPLEX RECEPTACLE - 3/4" CONDUIT TO PANEL AS INDICATED ON PLANS.
2. HDMI OUT - ONE (1) 2" CONDUIT TO SATELLITE RECEIVER LOCATION. ONE (1) 2" CONDUIT TO CRESTRON HD-300 TRANSMITTER/RECEIVER.
3. 1 PORT DATA OUTLET - 3/4" CONDUIT TO STOR. C107.
4. RS-232 / AUDIO - 1 1/4" CONDUIT TO STOR. C107.

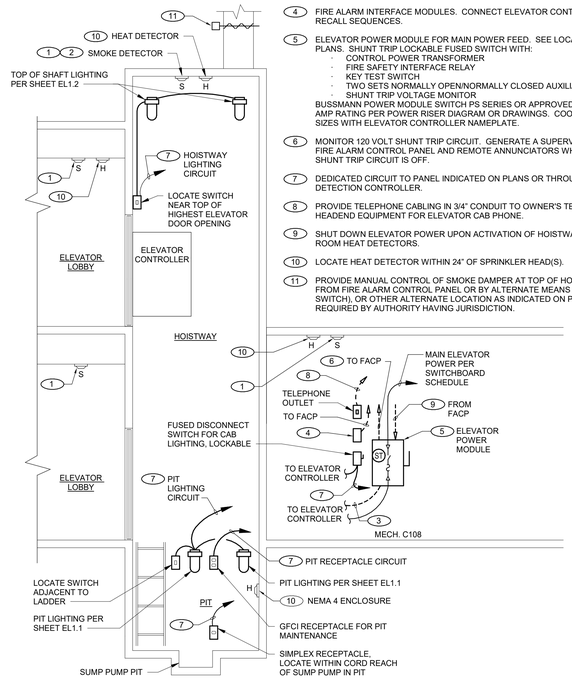
GENERAL NOTES:
1. PROVIDE WIRING PER MANUFACTURER'S RECOMMENDATIONS.
2. COORDINATE FINAL SELECTION OF DEVICE FINISHES AS REQUIRED WITH ARCHITECT/OWNER PRIOR TO ORDERING.
3. COORDINATE CABLING, LOCATION, AND ADDITIONAL REQUIREMENTS WITH SATELLITE TV PROVIDER.
4. PROVIDE SYSTEM FOR AUDIO VISUAL/SOUND SYSTEM AS SHOWN ON PLANS AND NOTES. SUBMIT SHOP DRAWING OF COMPLETE SYSTEM. ACCEPTABLE MANUFACTURER'S SHALL BE CONSIDERED VIA PRIOR APPROVAL SUBJECT TO COMPLIANCE WITH REQUIREMENTS. SYSTEM PROVIDED SHALL BE A COMPLETE OPERABLE AND FUNCTIONAL SYSTEM.
5. PROVIDE AUTOMATIC ON/OFF FUNCTION OF SYSTEM WITH MANUAL OVERRIDE. COORDINATE TIME SCHEDULE WITH OWNER.
6. COORDINATE WITH OWNER FOR QUANTITY AND LOCATION OF BLUETOOTH RECEIVERS. PROVIDE PROGRAM TO CONVERT UNBALANCED BLUETOOTH AUDIO SOURCE TO BALANCED TO SUPPORT LONG CABLE RUNS AS REQUIRED.
7. PROVIDE PROGRAMMING AS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM. PROVIDE INTERFACE AS REQUIRED BETWEEN SYSTEM AND NETWORK TO ALLOW PROGRAMMING.
8. AV CONTRACTOR SHALL BE LICENSED TO PERFORM WORK OF THIS TYPE IN THE PROJECT JURISDICATION AND HAVE AT LEAST 5 YEARS OF VERIFIABLE DIRECT EXPERIENCE WITH DEVICES, EQUIPMENT, AND SYSTEMS OF THIS TYPE. INITIAL START-UP, COMMISSIONING, AND PROGRAMMING MUST BE COMPLETED BY A QUALIFIED FACTORY REPRESENTATIVE. PROVIDE 4 HOURS OF TRAINING FOR THE OWNER WITH THE SYSTEM.
9. CONTRACTOR SHALL PROVIDE A 1 YEAR WARRANTY GUARANTEE OF THE INSTALLED SYSTEM AGAINST DEFECTS IN MATERIAL AND WORKMANSHIP. ALL LABOR AND MATERIALS SHALL BE PROVIDED AT NO EXPENSE TO THE OWNER. GUARANTEE PERIOD SHALL BEGIN ON THE DATE OF ACCEPTANCE BY THE OWNER.
10. CONTRACTOR SHALL FURNISH MANUFACTURER'S MANUAL OF THE COMPLETED SYSTEM, INCLUDING INDIVIDUAL SPECIFICATION SHEETS, SCHEMATICS, AND WIRING DIAGRAMS. IN ADDITION, ALL INFORMATION NECESSARY FOR THE PROPER MAINTENANCE AND OPERATION OF THE SYSTEM MUST BE INCLUDED.
11. AS-BUILT DRAWINGS THAT INCLUDE ANY CHANGES TO WIRING, WIRING DESIGNATIONS, JUNCTION BOX LABELING AND ANY OTHER PERTINENT INFORMATION SHALL BE SUPPLIED UPON COMPLETION OF PROJECT.

6 AUDIO VISUAL / SOUND SYSTEM ONE-LINE DIAGRAM
NOT TO SCALE

ELEVATOR KEYNOTES

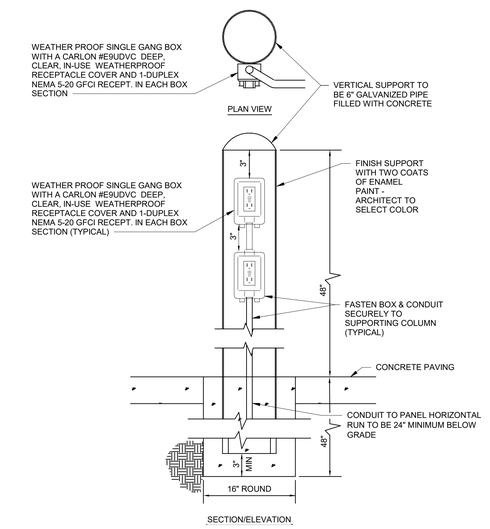
1. RECALL ELEVATOR UPON ACTIVATION OF HOISTWAY, LOBBY OR MACHINE ROOM SMOKE DETECTORS.
2. PROGRAM FIRE ALARM SYSTEM TO SUPPORT ELEVATOR RECALL DESIGNATED AND ALTERNATE FLOORS. COORDINATE DESIGNATED AND ALTERNATE FLOORS WITH ELEVATOR INSPECTOR AND FIRE MARSHAL.
3. INTERLOCK AUXILIARY CONTACTS ON ELEVATOR POWER MODULE WITH ELEVATOR CONTROLLER BATTERY LOWERING AS APPLICABLE. CAB SHALL REMAIN STATIONARY WHEN POWER IS DISCONNECTED FOR MAINTENANCE.
4. FIRE ALARM INTERFACE MODULES. CONNECT ELEVATOR CONTROLLER FOR RECALL SEQUENCES.
5. ELEVATOR POWER MODULE FOR MAIN POWER FEED. SEE LOCATION(S) ON PLANS. SHUNT TRIP LOCKABLE FUSED SWITCH WITH:
   - CONTROL POWER TRANSFORMER
   - FIRE SAFETY INTERFACE RELAY
   - KEY TEST SWITCH
   - TWO SETS NORMALLY OPEN/NORMALLY CLOSED AUXILIARY CONTACTS
   - SHUNT TRIP VOLTAGE MONITOR

   BUSSMANN POWER MODULE SWITCH PS SERIES OR APPROVED EQUIVALENT; AMP RATING PER POWER RISER DIAGRAM OR DRAWINGS. COORDINATE FUSE SIZES WITH ELEVATOR CONTROLLER NAMEPLATE.
6. MONITOR 120 VOLT SHUNT TRIP CIRCUIT. GENERATE A SUPERVISORY SIGNAL AT FIRE ALARM CONTROL PANEL AND REMOTE ANNUNCIATORS WHEN 120 VOLT SHUNT TRIP CIRCUIT IS OFF.
7. DEDICATED CIRCUIT TO PANEL INDICATED ON PLANS OR THROUGH OIL DETECTION CONTROLLER.
8. PROVIDE TELEPHONE CABLING IN 3/4" CONDUIT TO OWNER'S TELEPHONE HEADEND EQUIPMENT FOR ELEVATOR CAB PHONE.
9. SHUT DOWN ELEVATOR POWER UPON ACTIVATION OF HOISTWAY OR MACHINE ROOM HEAT DETECTORS.
10. LOCATE HEAT DETECTOR WITHIN 24" OF SPRINKLER HEAD(S).
11. PROVIDE MANUAL CONTROL OF SMOKE DAMPER AT TOP OF HOISTWAY SHAFT FROM FIRE ALARM CONTROL PANEL OR BY ALTERNATE MEANS (E.G. KEY SWITCH), OR OTHER ALTERNATE LOCATION AS INDICATED ON PLANS OR AS REQUIRED BY AUTHORITY HAVING JURISDICTION.



NOTE: PROVIDE RECALL AND SHUNT-TRIP OPERATION IN ACCORDANCE WITH ASME 17.1 (SAFETY CODE FOR ELEVATORS AND ESCALATORS) AND NFPA REQUIREMENTS. COORDINATE EQUIPMENT AND DEVICE CONNECTIONS FOR ELEVATOR EQUIPMENT AND EQUIPMENTS SPACES WITH ELEVATOR MANUFACTURER. COORDINATE REQUIREMENTS WITH AUTHORITY(S) HAVING JURISDICTION AND OBTAIN APPROVAL PRIOR TO INSTALLATION.

5 ELEVATOR CONNECTION SCHEMATIC DETAIL
NOT TO SCALE



4 ENGINE HEATER RECEPTACLE PEDESTAL DETAIL
NOT TO SCALE

Revisions:	Date
ADDENDUM 001 ⚠1	02/02/2022

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-usa.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

STATE OF MONTANA — ERICKA M. NEMETH — No. PEL-PE-LIC-65283 — LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

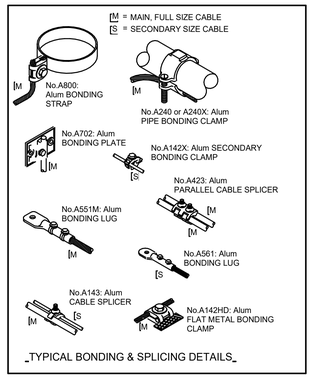
HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **ELECTRICAL DETAILS**
Approved: Project Director

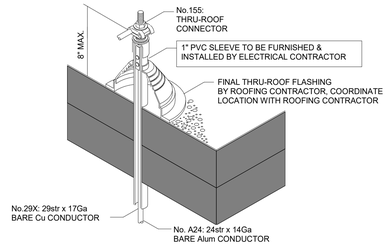
Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002
Location: **BROWNING, MONTANA**
Date: **05/19/2020** | Checked: **EMN** | Drawn: **DLB**

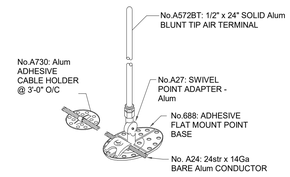
Project Number: **H IH BLAC 19100**
Building Number:
Drawing Number: **E5.2**

INDIAN HEALTH SERVICE · PHS · 1955 ·

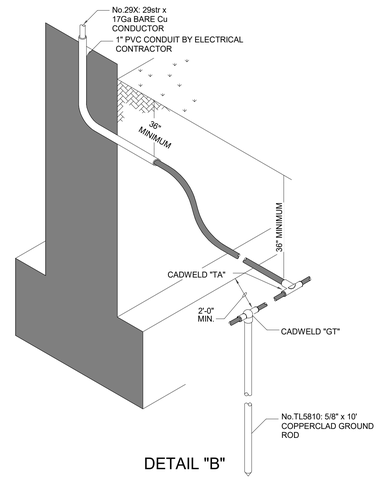


TYPICAL BONDING & SPLICING DETAILS





DETAIL "A"



DETAIL "B"

1 LIGHTNING PROTECTION DETAILS

NOT TO SCALE

ADDENDUM 001 1	02/02/2022
Revisions:	Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-vss.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA
ERICKA MIENNIE NELSON
No. PEL-PE-LIC-83283
LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **ELECTRICAL DETAILS**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **05/19/2020** | Checked: **EMN** | Drawn: **DLB**

Project Number: **H IH BLAC 19100**

Building Number:

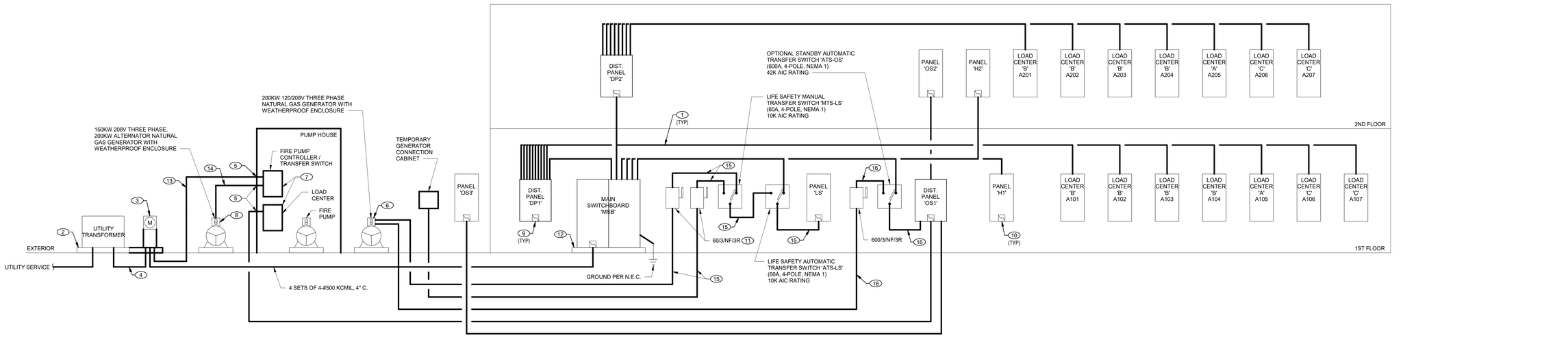
Drawing Number: **E5.3**

INDIAN HEALTH SERVICE · PHS · 1955 ·

KEYNOTES

1	SEE SCHEDULES ON THIS SHEET AND SHEET E7.1 FOR ALL PANELBOARD AND FEEDER SIZES, UNLESS NOTED OTHERWISE.
2	TRANSFORMER PAD FURNISHED BY POWER COMPANY, COORDINATE INSTALLATION REQUIREMENTS PER POWER COMPANY SPECIFICATIONS.
3	CT CABINET AND METER CABINET PROVIDED BY CONTRACTOR. COORDINATE EXACT REQUIREMENTS AND LOCATION WITH UTILITY PROVIDER.
4	COORDINATE REQUIREMENTS WITH UTILITY PROVIDER.
5	POWER TO BUILDING PER PUMP HOUSE MANUFACTURER. COORDINATE FINAL POWER LOCATION AND CONNECTION REQUIREMENTS WITH PUMP HOUSE INSTALLING CONTRACTOR.
6	PROVIDE TWO CIRCUIT BREAKERS. THE FIRST BREAKER SHOULD HAVE AN AMPERE RATING OF 60 AMPS (LIFE SAFETY). THE SECOND BREAKER SHOULD HAVE A RATING OF 600 AMPS (OPTIONAL STANDBY). BOTH BREAKER SHALL BE AN ELECTRONIC CIRCUIT BREAKER TYPE. SETTINGS SHALL INCLUDE LONG TIME, SHORT TIME, AND INSTANTANEOUS TRIP. ADJUST TRIP SETTINGS WITH GUIDANCE FROM THE CONTRACTOR SUPPLIED OVER CURRENT PROTECTION DEVICE STUDY AND OTHER STUDIES.
7	PROVIDED BY PUMP HOUSE MANUFACTURER.
8	PROVIDE ONE CIRCUIT BREAKER. BREAKER SHOULD HAVE AN AMPERE RATING OF 600 AMPS.
9	FOR DISTRIBUTION PANELS/SWITCHBOARD PROVIDE A SURGE PROTECTIVE DEVICE (SPD) INTEGRAL WITH PANELBOARDS INDICATED. SPD SHALL BE DIRECTLY CONNECTED TO THE PANELBOARD BUS. THE SPD SHALL COMPLY WITH UL-1449 FOURTH EDITION AND PROVIDE SEVEN MODE (L-N, L-G, N-G) PROTECTION. SPD SHALL INCLUDE SURGE RATED INPUT FUSES, POWER STATUS INDICATOR LIGHTS AND SHALL BE RATED FOR A SURGE CURRENT OF 80,000 AMPS PER PHASE.
10	FOR BRANCH CIRCUIT PANELS PROVIDE A SURGE PROTECTIVE DEVICE (SPD) INTEGRAL WITH PANELBOARDS INDICATED. SPD SHALL BE DIRECTLY CONNECTED TO THE PANELBOARD BUS. THE SPD SHALL COMPLY WITH UL-1449 FOURTH EDITION AND PROVIDE SEVEN MODE (L-N, L-G, N-G) PROTECTION. SPD SHALL INCLUDE SURGE RATED INPUT FUSES, POWER STATUS INDICATOR LIGHTS AND SHALL BE RATED FOR A SURGE CURRENT OF 50,000 AMPS PER PHASE.
11	LOCATE ADJACENT TO GENERATOR. SEE SHEET E4A.1 FIRST FLOOR POWER PLAN FOR LOCATION
12	PROVIDE 4" CONCRETE PAD.
13	PROVIDE 4-#3/0, 1-#3 GRD., 3" CONDUIT.
14	PROVIDE 4-#1/0, 1-#6 GRD., 2 1/2" CONDUIT.
15	PROVIDE 4-#4, 1-#10 GRD., 1 1/4" CONDUIT.
16	2 SETS OF 4-#350 KCMIL, 1-#1 GRD., 3" CONDUIT.

1 ADDENDUM 001 — 02/02/2022



1 ONE-LINE POWER RISER DIAGRAM

SCALE: 12" = 1'-0"

MAIN SWITCHBOARD MSB

MAINS: 1400 A - MCB — AIC RATING: 42,000
VOLTAGE: 208/120 Wye — BUS RATING: 1400 A
PHASE: 3
WIRES: 4
MOUNTING: FLOOR-MOUNTED

CCT	AMPS	P	LOAD DESCRIPTION	KVA	WIRE SIZE/CONDUIT SIZE
1	600 A	3	DISTRIBUTION PANEL 'DP1'	174.4	2 SETS OF: 4-#350 KCMIL, 1-#1 GRD., 3" CONDUIT
2	600 A	3	DISTRIBUTION PANEL 'DP2'	175.6	2 SETS OF: 4-#350 KCMIL, 1-#1 GRD., 3" CONDUIT
3	60 A	3	LIFE SAFETY AUTO. TRANS. SWITCH 'ATS-LS'	3.2	4-#4, 1-#10 GRD., 1 1/4" CONDUIT
4	600 A	3	OPTIONAL STANDBY AUTO. TRANS. SWITCH 'ATS-OS'	145.3	2 SETS OF: 4-#350 KCMIL, 1-#1 GRD., 3" CONDUIT
5	150 A	3	PANEL 'H1'	19.2	4-#1/0, 1-#6 GRD., 2" CONDUIT
6	150 A	3	PANEL 'H2'	15.8	4-#1/0, 1-#6 GRD., 2" CONDUIT
7	60 A	3	ELEVATOR CONTROLLER	13.7	3-#4, 1-#10 GRD., 1 1/4" CONDUIT
8	300 A	3	CH-1, EXTERIOR	75.1	3-#350 KCMIL, 1-#4 GRD., 3" CONDUIT
9	40 A	3	CWP-1.1, MECHANICAL C111	8.7	3-#8, 1-#10 GRD., 3/4" CONDUIT
10	40 A	3	CWP-1.2, MECHANICAL C111	8.7	3-#8, 1-#10 GRD., 3/4" CONDUIT
11	150 A	3	SPARE	0.0	--
12	60 A	3	SPARE	0.0	--
				639.0 kVA	

REMARKS:

DISTRIBUTION PANEL DP1

MAINS: 600 A - MCB — AIC RATING: 22,000
VOLTAGE: 208/120 Wye — BUS RATING: 600A
PHASE: 3
WIRES: 4
MOUNTING: WALL-MOUNTED

CCT	AMPS	P	LOAD DESCRIPTION	KVA	WIRE SIZE/CONDUIT SIZE
1	125 A	2	LOAD CENTER 'B' - RM A101	23.8	3-#1/0, 1-#6 GRD., 2" CONDUIT
2	125 A	2	LOAD CENTER 'B' - RM A102	24.2	3-#1/0, 1-#6 GRD., 2" CONDUIT
3	125 A	2	LOAD CENTER 'B' - RM A103	23.8	3-#1/0, 1-#6 GRD., 2" CONDUIT
4	125 A	2	LOAD CENTER 'B' - RM A104	24.2	3-#1/0, 1-#6 GRD., 2" CONDUIT
5	150 A	2	LOAD CENTER 'A' - RM A105	30.9	3-#1/0, 1-#6 GRD., 2" CONDUIT
6	125 A	2	LOAD CENTER 'C' - RM A106	24.0	3-#1/0, 1-#6 GRD., 2" CONDUIT
7	125 A	2	LOAD CENTER 'C' - RM A107	23.6	3-#1/0, 1-#6 GRD., 2" CONDUIT
8	150 A	2	SPARE	0.0	--
9	125 A	2	SPARE	0.0	--
10	--	--	SPACE ONLY	0.0	--
				174.4 kVA	

REMARKS:

DISTRIBUTION PANEL DP2

MAINS: 600 A - MCB — AIC RATING: 22,000
VOLTAGE: 208/120 Wye — BUS RATING: 600A
PHASE: 3
WIRES: 4
MOUNTING: WALL-MOUNTED

CCT	AMPS	P	LOAD DESCRIPTION	KVA	WIRE SIZE/CONDUIT SIZE
1	125 A	2	LOAD CENTER 'B' - RM A201	24.2	3-#1/0, 1-#6 GRD., 2" CONDUIT
2	125 A	2	LOAD CENTER 'B' - RM A202	24.2	3-#1/0, 1-#6 GRD., 2" CONDUIT
3	125 A	2	LOAD CENTER 'B' - RM A203	24.2	3-#1/0, 1-#6 GRD., 2" CONDUIT
4	125 A	2	LOAD CENTER 'B' - RM A204	24.2	3-#1/0, 1-#6 GRD., 2" CONDUIT
5	150 A	2	LOAD CENTER 'A' - RM A205	30.9	3-#1/0, 1-#6 GRD., 2" CONDUIT
6	125 A	2	LOAD CENTER 'C' - RM A206	24.0	3-#1/0, 1-#6 GRD., 2" CONDUIT
7	125 A	2	LOAD CENTER 'C' - RM A207	24.0	3-#1/0, 1-#6 GRD., 2" CONDUIT
8	150 A	2	SPARE	0.0	--
9	125 A	2	SPARE	0.0	--
10	--	--	SPACE ONLY	0.0	--
				175.6 kVA	

REMARKS:

Revisions:	Date
ADDENDUM 001 (1)	02/02/2022

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-uso.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

MONTANA — ERICKA MENNENGA — No. PEL-PE-LIC-63283 — LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: ELECTRCAL DIAGRAMS
Approved: Project Director

Project Title: APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002
Location: BROWNING, MONTANA
Date: 05/19/2020 — Checked: EMN — Drawn: DLB

Project Number: H IH BLAC 19100
Building Number:
Drawing Number: E6.1

INDIAN HEALTH SERVICE · PHS · 1955 ·

PANEL H1

MAINS: 150 A - MCB
VOLTAGE: 208/120 Wye
PHASE: 3
WIRES: 4
MOUNTING: Surface

AIC RATING: 22,000

CCT	AMPS	P	DESCRIPTION	REM	A		B		C		REM	DESCRIPTION	P	AMPS	CCT
1	20 A	1	LTG HEAD END		500 VA	200 VA						REC ELEV PIT	1	20 A	2
3	20 A	1	LTG ELEV PIT				54 VA	200 VA				REC EXTERIOR, CH-1	1	20 A	4
5	20 A	1	LTG EXTERIOR						238 VA	1000 VA		REC CORRIDOR A108	1	20 A	6
7	20 A	1	LTG EXTERIOR		415 VA	1000 VA						REC RM C110, C111	1	20 A	8
9	20 A	1	LTG EXTERIOR				630 VA	1200 VA			G	REC KITCHENETTE C109	1	20 A	10
11	20 A	1	LTG RM A108, A109, A208...						444 VA	1500 VA	G	REC MICROWAVE, RM...	1	20 A	12
13	20 A	1	LTG RM C101, C107, C106...		1629 VA	800 VA					G	REC KITCHENETTE C109	1	20 A	14
15	20 A	1	LTG W GREAT RM C107				496 VA	600 VA				REC KITCHENETTE C109	1	20 A	16
17	20 A	1	REC GREAT ROOM C101						1200 VA	600 VA		REC KITCHENETTE C109	1	20 A	18
19	20 A	1	REC RM C101, C107		1000 VA	600 VA						REC KITCHENETTE C109	1	20 A	20
21	20 A	1	REC RM C101, C102, C103				600 VA	1200 VA				REC QUIET C105, C106	1	20 A	22
23	20 A	1	REC DINING C108, EXT						1000 VA	500 VA		POWER FIRE PIT/PLACE	1	20 A	24
25	20 A	1	REC DINING C108		1000 VA	600 VA						REC WS-1, MECH C111	1	20 A	26
27	20 A	1	SPARE				0 VA	0 VA				SPARE	1	20 A	28
29	20 A	1	SPARE						0 VA	0 VA		SPARE	1	20 A	30
31	20 A	1	SPARE		0 VA	0 VA						SPARE	1	20 A	32
33	20 A	1	SPARE				0 VA	0 VA				SPARE	1	20 A	34
35	20 A	1	SPARE						0 VA	0 VA		SPARE	1	20 A	36
37	20 A	1	SPARE		0 VA	0 VA						SPARE	1	20 A	38
39	20 A	1	SPARE				0 VA	0 VA				SPARE	1	20 A	40
41	20 A	1	SPARE						0 VA	0 VA		SPARE	1	20 A	42

REMARKS:
G = PROVIDE GFI TYPE CIRCUIT BREAKER

PANEL H2

MAINS: 150 A - MCB
VOLTAGE: 208/120 Wye
PHASE: 3
WIRES: 4
MOUNTING: Surface

AIC RATING: 22,000

CCT	AMPS	P	DESCRIPTION	REM	A		B		C		REM	DESCRIPTION	P	AMPS	CCT
1	20 A	1	LTG ELEV HOISTWAY		54 VA	600 VA					G	REC EWC, RM C201	1	20 A	2
3	20 A	1	LTG C108, C200				2669 VA	600 VA				REC FITNESS CENTER...	1	20 A	4
5	20 A	1	LTG C201, C203, C205						457 VA	800 VA		REC CORRIDOR A208	1	20 A	6
7	20 A	1	REC RM C200, C206		600 VA	50 VA						ERV-1.13, MECHANICAL...	1	20 A	8
9	20 A	1	RECEPTACLE				800 VA	50 VA				ERV-1.14, MECHANICAL...	1	20 A	10
11	30 A	2	REC DRYER, LAUNDRY C205	G					2500 VA	400 VA		ERV-2.4, MECHANICAL...	1	20 A	12
13					2500 VA	50 VA						ERV-1.16, MECHANICAL...	1	20 A	14
15	20 A	1	REC WASHER, RM C205	G			1200 VA	400 VA				ERV-2.3, MECHANICAL...	1	20 A	16
17	20 A	1	REC READING MEZZ C200						600 VA	0 VA		SPARE	1	20 A	18
19	20 A	1	REC READING MEZZ C200		600 VA	0 VA						SPARE	1	20 A	20
21	20 A	1	ERV-1.15, MECHANICAL...				50 VA	0 VA				SPARE	1	20 A	22
23	20 A	1	ERV-2.6, MECHANICAL...						400 VA	0 VA		SPARE	1	20 A	24
25	20 A	1	ERV-2.5, MECHANICAL...		400 VA	0 VA						SPARE	1	20 A	26
27	20 A	1	SPARE				0 VA	0 VA				SPARE	1	20 A	28
29	20 A	1	SPARE						0 VA	0 VA		SPARE	1	20 A	30
31	20 A	1	SPARE		0 VA	0 VA						SPARE	1	20 A	32
33	20 A	1	SPARE				0 VA	0 VA				SPARE	1	20 A	34
35	20 A	1	SPARE						0 VA	0 VA		SPARE	1	20 A	36
37	20 A	1	SPARE		0 VA	0 VA						SPARE	1	20 A	38
39	20 A	1	SPARE				0 VA	0 VA				SPARE	1	20 A	40
41	20 A	1	SPARE						0 VA	0 VA		SPARE	1	20 A	42

REMARKS:
G = PROVIDE GFI TYPE CIRCUIT BREAKER

PANEL LS

MAINS: 60 A - MCB
VOLTAGE: 208/120 Wye
PHASE: 3
WIRES: 4
MOUNTING: Surface

AIC RATING: 10,000

CCT	AMPS	P	DESCRIPTION	REM	A		B		C		REM	DESCRIPTION	P	AMPS	CCT
1	20 A	1	ELEVATOR CAB LIGHTS		200 VA	500 VA					L	FACP, ELEC C110	1	20 A	2
3	20 A	1	LTG EMER EXTERIOR				201 VA	377 VA				LTG EMER RM C100, C10...	1	20 A	4
5	20 A	1	LTG EMER RM A108, A10...						285 VA	604 VA		LTG EMER RM C200, C20...	1	20 A	6
7	20 A	1	POWER ADA DOOR RM...		1000 VA	0 VA						SPARE	1	20 A	8
9	20 A	1	SPARE				0 VA	0 VA				SPARE	1	20 A	10
11	20 A	1	SPARE						0 VA	0 VA		SPARE	1	20 A	12
13	20 A	1	SPARE		0 VA	0 VA						SPARE	1	20 A	14
15	20 A	1	SPARE				0 VA	0 VA				SPARE	1	20 A	16
17	20 A	1	SPARE						0 VA	0 VA		SPARE	1	20 A	18

REMARKS:
L = PROVIDE LOCKING HANDLE DEVICE

THIS PANELBOARD SHALL BE FUSIBLE BRANCH CIRCUIT PANELBOARD. PROVIDE BUSSMAN QUICK SPEC PANELBOARD OR EQUAL.

DISTRIBUTION PANEL OS1

MAINS: 600 A - MCB
VOLTAGE: 208/120 Wye
PHASE: 3
WIRES: 4
MOUNTING: WALL-MOUNTED

AIC RATING: 42,000
BUS RATING: 600A

CCT	AMPS	P	LOAD DESCRIPTION	Load	WIRE SIZE/CONDUIT SIZE
1	100 A	3	PANEL 'OS2'	27.9	4-#1, 1-#8 GRD., 2" CONDUIT
2	150 A	3	PANEL 'OS3'	46.0	4-#1/0, 1-#6 GRD., 2" CONDUIT
3	20 A	1	REC DATA RACK, ELEC C104	1.5	2-#12, 1-#12 GRD., 3/4" CONDUIT
4	20 A	1	REC DATA RACK, ELEC C14	1.5	2-#12, 1-#12 GRD., 3/4" CONDUIT
5	20 A	1	REC ELEC C104	0.8	2-#12, 1-#12 GRD., 3/4" CONDUIT
6	20 A	1	REC ELEC C104	0.6	2-#12, 1-#12 GRD., 3/4" CONDUIT
7	20 A	1	REC WEST GREAT ROOM C107	0.4	2-#12, 1-#12 GRD., 3/4" CONDUIT
8	20 A	1	WH-1.1, MECHANICAL C111	0.6	2-#12, 1-#12 GRD., 3/4" CONDUIT
9	20 A	1	WH-1.2, MECHANICAL C111	0.6	2-#12, 1-#12 GRD., 3/4" CONDUIT
10	20 A	1	WH-1.3, MECHANICAL C111	0.6	2-#12, 1-#12 GRD., 3/4" CONDUIT
11	60 A	3	FIRE PUMP HOUSE LOAD CENTER	17.0	4-#4, 1-#10 GRD., 2" CONDUIT
12	20 A	1	B-1.1, MECHANICAL C111	1.2	2-#12, 1-#12 GRD., 3/4" CONDUIT
13	20 A	1	B-1.2, MECHANICAL C111	1.2	2-#12, 1-#12 GRD., 3/4" CONDUIT
14	20 A	1	P-1.1, MECHANICAL C111	1.7	2-#12, 1-#12 GRD., 3/4" CONDUIT
15	20 A	1	P-1.2, MECHANICAL C111	1.7	2-#12, 1-#12 GRD., 3/4" CONDUIT
16	20 A	3	HWP-1.1, MECHANICAL C111	2.7	3-#12, 1-#12 GRD., 3/4" CONDUIT
17	20 A	3	HWP-1.2, MECHANICAL C111	2.7	3-#12, 1-#12 GRD., 3/4" CONDUIT
18	20 A	2	IU/OU-1, ELEC C104, EXTERIOR	2.1	2-#12, 1-#12 GRD., 3/4" CONDUIT
19	20 A	3	ECUH-1.1, VESTIBULE C100	5.6	3-#12, 1-#12 GRD., 3/4" CONDUIT
20	20 A	3	ECUH-1.2, STAIRS A109	5.6	3-#12, 1-#12 GRD., 3/4" CONDUIT
21	20 A	1	HWCP-1, MECHANICAL C111	0.2	2-#12, 1-#12 GRD., 3/4" CONDUIT
22	20 A	3	FCU-1.1, MECH. A101H	1.0	3-#12, 1-#12 GRD., 3/4" CONDUIT
23	20 A	3	FCU-1.2, MECH. A102J	1.0	3-#12, 1-#12 GRD., 3/4" CONDUIT
24	20 A	3	FCU-1.3, MECH. A103J	1.0	3-#12, 1-#12 GRD., 3/4" CONDUIT
25	20 A	3	FCU-1.4, MECH. A104J	1.0	3-#12, 1-#12 GRD., 3/4" CONDUIT
26	20 A	3	FCU-5.1, MECH. A105V	2.1	3-#12, 1-#12 GRD., 3/4" CONDUIT
27	20 A	3	FCU-3.1, MECH. A106M	1.6	3-#12, 1-#12 GRD., 3/4" CONDUIT
28	20 A	3	FCU-3.2, MECH. A107M	1.6	3-#12, 1-#12 GRD., 3/4" CONDUIT
29	20 A	1	REC A101, A102, A103, A104	0.8	2-#10, 1-#10 GRD., 3/4" CONDUIT
30	20 A	1	REC A105, A106, A107	0.6	2-#10, 1-#10 GRD., 3/4" CONDUIT
31	40 A	3	DWBP-1, MECHANICAL C111	11.1	3-#8, 1-#10 GRD., 3/4" CONDUIT
32	20 A	2	SP-1, MECHANICAL C111	1.0	2-#12, 1-#12 GRD., 3/4" CONDUIT
33	20 A	1	REC TEMPERATURE CONTROL PANEL, MECHANICAL C111	0.4	2-#12, 1-#12 GRD., 3/4" CONDUIT
34	20 A	1	SPARE	0.0	--
35	20 A	1	SPARE	0.0	--
36	20 A	1	SPARE	0.0	--
37	20 A	1	SPARE	0.0	--
38	20 A	1	SPARE	0.0	--
39	20 A	1	SPARE	0.0	--
40	20 A	1	SPARE	0.0	--
41	20 A	1	SPARE	0.0	--
42	20 A	1	SPARE	0.0	--
				145.3 kVA	

REMARKS:

PANEL OS2

MAINS: 100 A - MCB
VOLTAGE: 208/120 Wye
PHASE: 3
WIRES: 4
MOUNTING: Surface

AIC RATING: 22,000

CCT	AMPS	P	DESCRIPTION	REM	A		B		C		REM	DESCRIPTION	P	AMPS	CCT
1	20 A	1	REC READING MEZZ C200		400 VA	336 VA									2
3							528 VA	336 VA				FCU-1.11, MECHANICAL C206	3	20 A	4
5	20 A	3	FCU-4, MECHANICAL C206						528 VA	336 VA					6
7					528 VA	336 VA									8
9							528 VA	336 VA				FCU-1.10, MECHANICAL C206	3	20 A	10
11	20 A	3	FCU-3.5, MECHANICAL C206						528 VA	336 VA					12
13					528 VA	709 VA									14
15							336 VA	709 VA				FCU-6.2, MECHANICAL C206	3	20 A	16
17	20 A	3	FCU-2, MECHANICAL C206						336 VA	709 VA					18
19					336 VA	336 VA									20
21							709 VA	336 VA				FCU-1.9, MECHANICAL C206	3	20 A	22
23	20 A	3	FCU-6.1, MECHANICAL C206						709 VA	336 VA					24
25					709 VA	275 VA									26
27	20 A	1	REC A201, A202, A203,...				800 VA	275 VA				FCU-7, MECHANICAL C206	2	20 A	28
29	20 A	1	REC A205, A206, A207						600 VA	336 VA					30
31					336 VA	336 VA						FCU-1.5, MECH. A201J	3	20 A	32
33	20 A	3	FCU-1.6, MECH. A202J				336 VA	336 VA							34
35									336 VA	336 VA					36
37					336 VA	336 VA						FCU-1.7, MECH. A203J	3	20 A	38
39	20 A	3	FCU-1.8, MECH. A204I				336 VA	336 VA							40
41									336 VA	528 VA					42
43					528 VA	528 VA						FCU-3.4, MECH. A207M	3	20 A	44
45	20 A	3	FCU-3.3, MECH. A206M				528 VA	528 VA							46
47									528 VA	708 VA					48
49	20 A	1	REC FITNESS CENTER...		1200 VA	708 VA						FCU-5.2, MECH. A205V	3	20 A	50
51	20 A	1	REC FITNESS CENTER...				1200 VA	708 VA							52
53	20 A	1	REC FITNESS CENTER...						1200 VA	0 VA		SPARE	1	20 A	54
55	20 A	1	REC FITNESS CENTER...		1200 VA	0 VA						SPARE	1	20 A	56
57	20 A	1	SPARE				0 VA	0 VA				SPARE	1	20 A	58
59	20 A	1	SPARE						0 VA	0 VA		SPARE	1	20 A	60

REMARKS:

APARTMENT LOAD CENTER SCHEDULE

APARTMENT TYPE 'A'
120/208 VOLT, 1 PHASE, 3 WIRE, 150 AMP MAIN BREAKER

KEY	BRANCH CCT. BKRS. (NOTE 5, 7)	LOAD DESCRIPTION
2, 5	1-15/1	LIGHTING
2, 5	5-15/1	RECEPTACLES
5, 6	1-20/1	DISHWASHER
5, 6	1-20/1	RANGE HOOD
1, 5	1-20/1	MECH. ROOM, ERV
5	2-20/1	APPLIANCE CIRCUIT RECEPTACLES
5, 6	1-20/1	REFRIGERATOR
5, 6	1-20/1	LAUNDRY (WASHER)
	1-30/2	DRYER (#10 AWG)
5, 6	1-20/1	MICROWAVE
	1-50/2	RANGE (#6 AWG)
	1-20/1	BATHROOM RECEPTACLE(S)
5	5-20/1	SPARES
	6-1 POLE	SPACE ONLY

1. PROVIDE 'HACR' TYPE CIRCUIT BREAKER.
2. MAXIMUM TOTAL CONNECTED LOAD OF 1440 WATTS PER CIRCUIT.
3. MAXIMUM TOTAL CONNECTED LOAD OF 1920 WATTS PER CIRCUIT.
4. BALANCE ALL LOADS BETWEEN PHASES.
5. PROVIDE ARC-FAULT CIRCUIT INTERRUPTER FOR ALL BRANCH CIRCUITS SERVING DWELLING UNIT AS REQUIRED PER N.E.C.
6. PROVIDE GFCI TYPE CIRCUIT BREAKER.
7. AIC RATING OF LOAD CENTER SHALL BE 22,000 AMPS. SERIES RATING WITH MAIN BREAKER OR METER CENTER BREAKER PERMITTED.

APARTMENT LOAD CENTER SCHEDULE

APARTMENT TYPES 'B','C'
120/208 VOLT, 1 PHASE, 3 WIRE, 125 AMP MAIN BREAKER

KEY	BRANCH CCT. BKRS. (NOTE 5, 7)	LOAD DESCRIPTION
2, 5	1-15/1	LIGHTING
2, 5	2-15/1	RECEPTACLES
5, 6	1-20/1	DISHWASHER
5, 6	1-20/1	RANGE HOOD
1, 5	1-20/1	MECH. ROOM, ERV
5	2-20/1	APPLIANCE CIRCUIT RECEPTACLES
5, 6	1-20/1	REFRIGERATOR
5, 6	1-20/1	LAUNDRY (WASHER)
	1-30/2	DRYER (#10 AWG)
5, 6	1-20/1	MICROWAVE
	1-50/2	RANGE (#6 AWG)
	1-20/1	BATHROOM RECEPTACLE(S)
5	4-20/1	SPARES
	4-1 POLE	SPACE ONLY

1. PROVIDE 'HACR' TYPE CIRCUIT BREAKER.
2. MAXIMUM TOTAL CONNECTED LOAD OF 1440 WATTS PER CIRCUIT.
3. MAXIMUM TOTAL CONNECTED LOAD OF 1920 WATTS PER CIRCUIT.
4. BALANCE ALL LOADS BETWEEN PHASES.
5. PROVIDE ARC-FAULT CIRCUIT INTERRUPTER FOR ALL BRANCH CIRCUITS SERVING DWELLING UNIT AS REQUIRED PER N.E.C.
6. PROVIDE GFCI TYPE CIRCUIT BREAKER.
7. AIC RATING OF LOAD CENTER SHALL BE 22,000 AMPS. SERIES RATING WITH MAIN BREAKER OR METER CENTER BREAKER PERMITTED.

ADDENDUM 001	1	02/02/2022
Revisions:		Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-usa.com

COPYRIGHT FE#:191017
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

"I" MONTANA "I"
ERICKA M. NEHRING
No. PEL-PE-LIC-83283
LICENSED PROFESSIONAL ENGINEER
05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture
BLUE STAR INTEGRATIVE STUDIO
FARRIS ENGINEERING
PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title: **ELECTRICAL SCHEDULES**

Approved: Project Director

Project Title: **APARTMENT BUILDING AND SITEWORK**
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location: **BROWNING, MONTANA**

Date: **05/19/2020** | Checked: **EMN** | Drawn: **DLB**

Project Number: **H IH BLAC 19100**

Building Number

Drawing Number: **E7.1**

INDIAN HEALTH SERVICE · PHS · 1955 ·

PANEL OS3

MAINS: 150 A - MCB
VOLTAGE: 208/120 Wye
PHASE: 3
WIRES: 4
MOUNTING: Surface

NEMA TYPE 3R ENCLOSURE

AIC RATING: 22,000

CCT	AMPS	P	DESCRIPTION	REM	A		B		C		REM	DESCRIPTION	P	AMPS	CCT
1	20 A	1	REC ENGINE HEATER		1500 VA	1500 VA						REC ENGINE HEATER	1	20 A	2
3	20 A	1	REC ENGINE HEATER				1500 VA	1500 VA				REC ENGINE HEATER	1	20 A	4
5	20 A	1	REC ENGINE HEATER						1500 VA	1500 VA		REC ENGINE HEATER	1	20 A	6
7	20 A	1	REC ENGINE HEATER		1500 VA	1500 VA						REC ENGINE HEATER	1	20 A	8
9	20 A	1	REC ENGINE HEATER				1500 VA	1500 VA				REC ENGINE HEATER	1	20 A	10
11	20 A	1	REC ENGINE HEATER						1500 VA	1500 VA		REC ENGINE HEATER	1	20 A	12
13	20 A	1	REC ENGINE HEATER		1500 VA	1500 VA						REC ENGINE HEATER	1	20 A	14
15	20 A	1	REC ENGINE HEATER				1500 VA	1500 VA				REC ENGINE HEATER	1	20 A	16
17	20 A	1	REC ENGINE HEATER						1500 VA	1500 VA		REC ENGINE HEATER	1	20 A	18
19	20 A	1	REC ENGINE HEATER		1500 VA	1500 VA						REC ENGINE HEATER	1	20 A	20
21	20 A	1	REC ENGINE HEATER				1500 VA	1500 VA				REC ENGINE HEATER	1	20 A	22
23	20 A	1	REC ENGINE HEATER						1500 VA	1500 VA		REC ENGINE HEATER	1	20 A	24
25	20 A	1	REC ENGINE HEATER		1500 VA	1500 VA						REC ENGINE HEATER	1	20 A	26
27	20 A	1	REC ENGINE HEATER				1500 VA	1500 VA				REC ENGINE HEATER	1	20 A	28
29	20 A	1	GEN HEATER						1000 VA	1000 VA		GEN HEATER	1	20 A	30
31	20 A	1	GEN BATTERY CHARGER		1000 VA	1000 VA						GEN BATTERY CHARGER	1	20 A	32
33	20 A	1	SPARE				0 VA	0 VA				SPARE	1	20 A	34
35	20 A	1	SPARE						0 VA	0 VA		SPARE	1	20 A	36
37	20 A	1	SPARE		0 VA	0 VA						SPARE	1	20 A	38
39	20 A	1	SPARE				0 VA	0 VA				SPARE	1	20 A	40
41	20 A	1	SPARE						0 VA	0 VA		SPARE	1	20 A	42

REMARKS:

ADDENDUM 001 ⚠1	02/02/2022
Revisions:	Date

CONSULTANTS:

FARRIS ENGINEERING
OMAHA | LINCOLN | COLORADO SPRINGS | SIDNEY
farris-vss.com

COPYRIGHT
This document and the information contained may not be reproduced or excerpted from without the express written permission of Farris Engineering, Inc. Unauthorized copying, disclosure or construction use are prohibited by the copyright law.

FE#:191017

MONTANA
ERICKA MIENNIE NELSON
No. PEL-PE-LIC-83283
LICENSED PROFESSIONAL ENGINEER

05/19/2020

ARCHITECT/ENGINEERS:

HFG HEALTH FACILITIES GROUP architecture

BLUE STAR INTEGRATIVE STUDIO

FARRIS ENGINEERING

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

Drawing Title
ELECTRICAL SCHEDULES

Approved: Project Director

Project Title
APARTMENT BUILDING AND SITEWORK
Contract No.: HHSI102201800005I
Task Order No.: 75H70119F30002

Location
BROWNING, MONTANA

Date **05/19/2020** | Checked **EMN** | Drawn **DLB**

Project Number
H IH BLAC 19100

Building Number

Drawing Number
E7.2

INDIAN HEALTH SERVICE · PHS · 1955 ·