RENOVATIONS FOR NEW MOLLIE WOODS 16 BED

PSYCHIATRIC HOSPITAL

HEATHERWOOD - ONE STORY BUILDING

WOODS SERVICES

LANGHORNE, PA 19047

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GENERAL NOTES

1. BEFORE BEGINNING WORK AT THE SITE, WHERE POSSIBLE, AND THROUGHOUT THE COURSE OF THE WORK, INSPECT AND VERIFY THE LOCATION AND CONDITION OF EVERY ITEM AFFECTED BY THE WORK UNDER THIS CONTRACT.rEPORT DISCREPANCIES TO ARCHITECT BEFORE DOING WORK RELATED TO THAT BEING INSPECTED.

2. BEFORE BEGINNING WORK AT THE SITE, INSPECT THE EXISTING BUILDING AND DETERMINE THE EXTENT OF EXISTING FINISHES SPECIALTIES, CASEWORK, EQUIPMENT, AND OTHER ITEMS WHICH MUST BE MOVED UNDER THIS CONTRACT.

3. THE ARCHITECTURAL DRAWINGS SHOW PRINCIPAL AREAS WHERE WORK MUST BE ACCOMPLISHED UNDER THIS CONTRACT. INCIDENTAL WORK MAY ALSO BE NECESSARY IN AREAS NOT SHOWN ON THE ARCHITECTURAL DRAWINGS DUE TO CHANGES AFFECTING EXISTING MECHANICAL, ELECTRICAL, PLUMBING, OR OTHER SYSTEMS. SUCH INCIDENTAL WORK IS ALSO PART OF THIS CONTRACT. INSPECT THOSE AREAS, ASCERTAIN WORK NEEDED, AND DO THAT WORK IN ACCORD WITH THE CONTRACT REQUIREMENTS, AT NO ADDITIONAL COST.

4. TRADE, PRODUCT, OR MANUFACTURER'S NAMES OR CATALOG NUMBERS SHOWN ON THE DRAWINGS FOR NEW WORK, ARE TO ESTABLISH QUALITY REQUIRED. IN EACH CASE, ADD BY INFERENCE, AFTER TRADE, PRODUCT, OR MANUFACTURER'S NAME, THE PHRASE "OR APPROVED EQUAL".

5. TRADE, PRODUCT, OR MANUFACTURER'S NAMES OR CATALOG NUMBERS, AND INDICATIONS OF PRODUCT TYPES, SUCH AS GLASS FIBER INSULATION" SHOWN ON THE DRAWINGS FOR EXISTING PRODUCTS ARE BELIEVED TO BE ACCURATE. IF THEY ARE DISCOVERED TO BE INACCURATE, NOTIFY ARCHITECT IMMEDIATELY AND DO NOT PROCEED WITHOUT INSTRUCTIONS.

6. DETERMINE LOCATIONS OF PARTITIONS NOT DIMENSIONED BY THEIR RELATION TO COLUMN FACE OR CENTER, WINDOW JAMB, MULLION, OR SIMILAR FIXED ITEM.

7. DIMENSIONS TO EXISTING SURFACES ARE TO BE FINISHED FACE. DIMENSIONS TO NEW MASONRY ARE TO BE ROUGH FACE OF UNITS. MASONRY DIMENSIONS ARE NOMINAL. DIMENSIONS TO NEW STUD PARTITIONS ARE TO FINISH FACE. CLEAR FINISH DIMENSIONS ARE NOTED AS REQUIRED.

8. EXISTING MASONRY BLOCK COURSING IS BASED ON TWO COURSES EQUAL TO 16". nEW BLOCK COURSING (WHERE REQUIRED) SHALL MATCH EXISTING.

9. DO NOT CUT DRILL OR DAMAGE EXISTING FLOOR JOISTS, BEAMS, COLUMNS OR OTHER STRUCTURAL ELEMENTS, UNLESS SPECIFICALLY INDICATED. DRILL SLABS ONLY WHERE APPROVED. CORE DRILL CIRCULAR OPENINGS THROUGH SLABS. LINE DRILL FOR RECTANGULAR OPENINGS. MAKE OPENINGS OF PROPER SIZE FOR CONDUIT, DUCTS, PIPE AND OTHER ITEMS PASSING THROUGH OPENINGS.

10. PREPARE, SUBMIT, AND RECEIVE APPROVAL FOR SLEEVE AND OPENING DRAWINGS BEFORE LOCATING SLEEVES AND OPENINGS IN NEW CONSTRUCTION AND BEFORE DRILLING EXISTING STRUCTURE. SHOW EACH OPENING AND SLEEVE IN THE ENTIRE PROJECT.

11. PROTECT EXISTING WORK TO REMAIN FROM DAMAGE.

12. REPAIR, PATCH AND FINISH OR REFINISH AS APPLICABLE THOSE EXISTING SURFACES DAMAGED OR NEWLY EXPOSED DURING PERFORMANCE OF THE WORK UNDER THIS CONTRACT.

13. WHERE PERMANENT REMOVAL OF EXISTING MILLWORK, CASEWORK, CABINETWORK, ACCESSORIES, EQUIPMENT, OR OTHER FURNISHINGS IS REQUIRED, ADD PREVIOUSLY CONCEALED SURFACES ARE TO REMAIN EXPOSED, PATCH PREVIOUSLY CONCEALED SURFACES TO RECEIVE NEW FINISHES, PREPARE THE SURFACES TO RECEIVE THE NEW FINISHES.

14. WHERE CUTTING OF EXISTING SURFACES OR REMOVAL OF EXISTING IS REQUIRED TO PERFORM THE WORK UNDER THIS CONTRACT, AND A NEW FINISH IS NOT INDICATED, FILL RESULTING OPENINGS AND PATCH THE SURFACES AFTER DOING THE WORK, AND FINISH TO MATCH ADJACENT EXISTING FINISHES TO REMAIN.

15. ENCLOSE EXISTING AND NEW CONDUITS, DUCTS, PIPES AND SIMILAR ITEMS IN FURRING WHERE SUCH ITEMS PASS THROUGH FINISHED SPACES WHETHER OR NOT FURRING IS INDICATED.

16. WHERE CONDUITS, DUCTS, PIPE AND SIMILAR ITEMS ARE SHOWN TO BE INSTALLED TO EXISTING WALLS OR PARTITIONS, NEATLY CHASE WALLS OR PARTITIONS, INSTALL THE ITEMS, AND PATCH THE WALLS OR PARTITIONS, TO MAKE THE INSTALLATION NOT DISCERNABLE IN THE FINISHED WORK.

17. SEAL TIGHT AND PROTECT WITH FIRE SAFE MATERIAL EXISTING AND NEW SLEEVES AND OPENINGS THROUGH FLOORS.

18. USE SAW CUTS TO REMOVE MASONRY WHERE REMAINING MASONRY IS TO BE EXPOSED.

19. WHERE 'EX' OR 'EXIST' PRECEDES A REFERENCE TO A MATERIAL OR PRODUCT (EX. DOOR OR EXIST. DOOR) THE EX INDICATES THAT THE INDICATED MATERIAL OR PRODUCT IS EXISTING TO THE BEST KNOWLEDGE OF THE ARCHITECT.

20. ALL WORK SHALL BE DONE IN STRICT CONFORMANCE WITH ALL FEDERAL, STATE, AND LOCAL ORDINANCES AND ANY OTHER AUTHORITY HAVING JURISDICTION. IN ADDITION, ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE NATIONAL BOARD OF FIRE UNDERWRITERS.

21. DO ALL DEMOLITION (REMOVAL OF WALLS, CEILINGS, DOORS, PLUMBING FIXTURES, ETC.) AS INDICATED ON THE DRAWINGS BY DASHED LINES AND VERIFIED IN THE FIELD BY THE CONTRACTOR. REMOVE ALL FINISHES (INCLUDING WALL, FLOOR AND CEILING FINISHES) AS REQUIRED IN ALL AFFECTED AREAS AS REQUIRED TO RECEIVE THE SCHEDULED NEW FINISH OR TO ACCOMMODATE THE NEW WORK.

22. PROVIDE FLUSH COVER PLATES AT ALL EXISTING SERVICES (ELECTRICAL, TELEPHONE, GASES, ETC.) WHERE NOT USED IN THE NEW WORK, EXCEPT AS NOTED TO BE REMOVED.

CODE ANALYSIS

APPLICABLE CODES
(Including all Adopted Amendments – Verify with Local Municipality)
- Code PA-UCC, Act-45, IBC 2009 Chapter-34 and its referenced codes and standards as amended by Tredyffrin Township – The new work consists of non-structural alterations
- NFPA 101 Life Safety Code (2012 Edition, Chapters 18 & 19)
- Guidelines for Construction of Hospitals and Health Care Facilities (2014 Edition)
- ICC/ANSI A 117.1 – 1998 American National Standard
- Infection Control Risk Assessment Requirements

REVIEWING AGENCIES
Pennsylvania Department of Health
Life Safety Division
Construction Division
Division of Hospitals
Tredyffrin Township, Chester County, Pennsylvania 19087
Health Center's Insurance Carrier

FIRE RESISTANCE REQUIREMENTS

ELEMENT	RATING	TEST REFERENCE
Exterior Walls (Non-Bearing)		
0–5 Feet Separation	2 Hours	N/A
5–10 Feet Separation	1 Hour	N/A
Greater than 10 Feet	0 Hours	N/A
Fire Walls / Party Walls	3 Hours	N/A
Fire Separation Walls, Stairways, Shafts	2 Hours	UL U438
Fire Partitions / Corridors (Exit Access)	1 Hour	UL U465
Occupancy Separation	2 Hours	N/A
Smoke Barriers	1 Hour	UL U465
Other Non-Bearing Partitions	0 Hours	N/A
Columns, Interior Bearing Walls	SPRAY FIREPROOFING	
Supporting More Than One Floor	2 Hours	UL X772
Supporting One Floor	2 Hours	UL X772
Supporting Roof Only	2 Hours	UL X772
Lintels and Hangers	2 Hours	UL X772
Floor Construction, Beams, Girders	2 Hours	UL D840
Roof Construction	1 Hours	UL P801
Mechanical, Electrical, Elevator		
Machine Rooms	2 Hours	UL U411
Hazardous Areas (NFPA Table 12-3.2.1, IBOCA 302.1.1)	1 Hour	UL U411

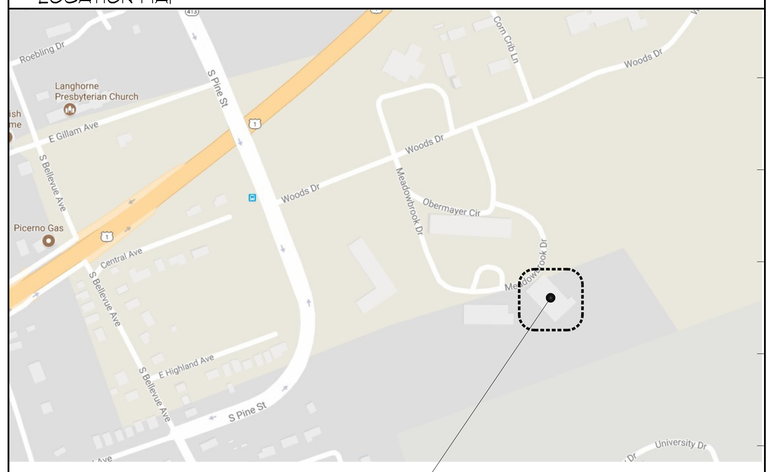
INTERIOR FINISH FLAME SPREAD/SMOKE DEVELOPED REQS.

Stairs / Exits	Class 1 / Class A or B
Corridors	Class 1 / Class A or B (C on Lower 4' Max.)
Patient Rooms (4 Persons Max.)	Class 1 / Class A or B or C
Other Rooms	Class 1 / Class A or B (C in Small Rooms)

1HR 1HR	1-HOUR FIRE BARRIER
1HR SB 1HR SB	1-HOUR SMOKE BARRIER
2HR 2HR	2-HOUR FIRE BARRIER
2HR SB 2HR SB	2-HOUR SMOKE BARRIER
2HR OCC	2-HOUR OCCUPANCY SEPARATOR
S	AREAS TO BE SPRINKLERED
	EXIT ACCESS

	UCC IBC–2009, IFC–2009, IEBC–2009, IECC–2009, ICEC–2009, IMC–2009, ICPC–2009, IFGC–2009	NFPA
OCCUPANCY CLASSIFICATION	Use Group B, A2 – UNSEPARATED MIXED USE Section 308.3	Existing Health Care Section 19
CONSTRUCTION CLASSIFICATION	Type 2B – SPRINKLERED Table 503	Type III (211) Fully Sprinklered NFPA 220 Table 3
Existing Building Construction Classification	Alteration– Level 2 Section 304	
BUILDING REQUIREMENTS Building Height and Area Limitations	Stories Above Grade: UL Area Limitations: UL Table 503	Stories Above Grade: Two Stories (Fully Sprinklered) Table 19.1.6.1
Sprinkler Increase	1 Story/ 20 Feet Bonus Section 504.2	
FIRE SUPPRESSION REQUIREMENTS Fully Sprinklered Building	Required for All New Buildings with a Use Group I Fire Area Section 903.2.5	Portable Fire Extinguishers Required Section 19.3.5 1/ 3000 GSF (75' Maximum)
Fire Extinguishers (Type ABC–Typ)	Portable Fire Extinguishers Required Section 906.1	
OCCUPANCY LIMITATIONS Occupant Load	300 GSF/ Person Max (Accessory Storage Areas)	120 GSF / Person Max. (Health Care: Sleeping)
7,400 GSF/ Floor 59,200 GSF Building	2248 GSF / 300 SF= 8 Occupants Max Table 1004.1.2	16,478 GSF / 120 SF = 137 Occupants Max Table 7.3.1.2
EXIT WIDTH (Fully Sprinklered) Exit Width Calculation	0.3 Inches/ Person– Stairway 0.2 Inches/ Person– Doors, Ramps, Corr. Table 1005.1 (w/ Sprinkler System)	0.3 Inches / Person – Stairway 0.2 Inches / Person – Doors, Ramps, Corr. Table 7.3.3.1
Exit Width Required	8 Occupants X 0.3"= 3" Stair 8 Occ. X 0.2"= 2" Min. Doors, Ramps, Corr.	137 Occupants X 0.3"= 41" Stair 137 Occ. X 0.2"= 27" Min. Doors, Ramps, Corr.
Exit Width Actual	2 Stairs @ 56" Wide Each= 102" Stair 2 Exit Doors @ 44" Each= 88" Doors, Ramps, Corr.	
LENGTH OF EXIT ACCESS TRAVEL (Fully Sprinklered) Exit Access Travel	200 Feet Maximum Table 1015.1	200 Feet Maximum (Health Care Occupancy) Section 19.2.6.2.2
Exit Access Travel For Non– Sleeping Suites	100 Feet Maximum (1 intervening Room) 50 Feet Maximum (2 intervening Rooms) Section 1013.2.2.4	100 Feet Maximum Section 19.2.5.7.3.4
Exit Access Travel For Sleeping Rooms	Exit Access Corridor Required Section 1013.2.2	100 Feet Maximum Section 19.2.5.7.2.4
Exit Access Travel For Spaces with One Exit		75 Feet Maximum Travel
Maximum Spaces with One Exit	2,500 S.F. Max (1,000 for Sleeping Suite)	2,500 S.F. Max (1,000 for Sleeping Suite)
Dead End Limitation	20 Feet Maximum Section 1016.3	30 Feet Maximum Section 19.2.5
Suite Size Limitations	5,000 S.F. (Sleeping Suite) 10,000 S.F. Max (Non–Sleeping Suite) Section 1013.2.2	7,500 S.F. (Sleeping Suite) (Fully Sprinklered) 10,000 S.F. (Non–Sleeping Suite) Section 19.2.5.7.2.3 / 19.2.5.7.3.3
SMOKE COMPARTMENTS Smoke Compartment Requirement	2 Min. on Sleeping and Treatment Area Floors Section 407.4	2 Min. on Sleeping and Treatment Area Floors Section 21.3.7.2
Maximum Occupancy (Req. 2 Smoke Comp.)	50 or More Patients	50 or More Patients
Maximum Area	22,500 S.F. Maximum	22,500 S.F. Maximum
Travel Distance to a Smoke Barrier	200 Feet Maximum	200 Feet Maximum
Refuge Area	30 NSF/ Patient	30 NSF / Patient
Independent Egress	Required for each Smoke Compartment	Required for each Smoke Compartment
CORRIDORS Corridor Wall Fire Rating	Smoke Tight Construction (Exc. Inc. Uses 302.1.1) Section 407.3	Smoke Tight Construction Section 19.3.6.2.3
Corridor Doors	Smoke Tight, Positive Latching (Exc. Inc. Uses 302.1.1)	Smoke Tight, Positive Latching Section 19.3.6.3

LOCATION MAP



NOT TO SCALE

ABBREVIATIONS

ABV.	ABOVE	EX/EXIST.	EXISTING	M.O.	MASONRY OPENING	SECT.	SECTION
A.F.F.	ABOVE FINISH FLOOR	EXP.	EXPANSION	MACH.	MACHINE	SHT.	SHEET
ACOUS.	ACOUSTIC	EXT.	EXTERIOR	MANUF.	MANUFACTURER	SIM.	SIMILAR
ADJ.	ADJUSTABLE			MAX	MAXIMUM	SPEC.	SPECIFICATION
ALUM.	ALUMINUM	FD.	FLOOR DRAIN	MECH.	MECHANICAL	SQ.	SQUARE
APPROX.	APPROXIMATE	FIN.	FINISH	MET.	METAL	STD.	STANDARD
		FLR.	FLOOR	MIN.	MINIMUM	STL.	STEEL
BD.	BOARD	FLUOR.	FLUORESCENT			STRUCT.	STRUCTURAL
BLDG.	BUILDING	FT.	FOOT	NOM.	NOMINAL	SUSP.	SUSPENDED
BLK.	BLOCK	FTG.	FOOTING	N.I.C.	NOT IN CONTRACT		
B.O.	BY OTHERS					T.O.	TOP OF
		GA.	GAUGE	O.C.	ON CENTER	TEL.	TELEPHONE
C.B.	CATCH BASIN	GALV.	GALVANIZED	O.D.	OUTSIDE DIAMETER	THRU	THROUGH
C.G.	CORNER GUARD	GEN.	GENERAL	OPG.	OPENING	T/S	TOILET/SHOWER
CER./C.T.	CERAMIC TILE	GL.	GLASS			TYP.	TYPICAL
℄	CENTER LINE	GYP.	GYPSUM	PARTN.	PARTITION		
C.M.U.	CONCRETE MASONRY UNIT	GWB	GYPSUM WALL BOARD	PL.	PLATE	UCL	UNDER CABINET LIGHT
CONC.	CONCRETE			P.LAM	PLASTIC LAMINATE	VCT	VINYL COMPOSITION TILE
CLG.	CEILING	H.M.	HOLLOW METAL	PLAS.	PLASTER	VCB	VINYL COVE BASE
CONT.	CONTINUOUS	HD.	HEAD	PLWD.	PLYWOOD	VERT.	VERTICAL
		HDWD.	HARDWOOD			V.I.F.	VERIFY IN FIELD
DIA.	DIAMETER	HORIZ.	HORIZONTAL	Q.T.	QUARRY TILE		
DIM.	DIMENSION	HT.	HEIGHT			W/	WITH
DN.	DOWN			RD.	ROOF DRAIN	W.C.	WATER CLOSET
DS	DOWNSPOUT & BOOT	IN.	INCH	REC.	RECESSED	W.P.	WATER PROOF
DWG.	DRAWING	INSUL.	INSULATION	REINF.	REINFORCED	W.W.F.	WELDED WIRE FABRIC
		INT.	INTERIOR	REQ'D.	REQUIRED	W.R.	WATER RESISTANT
E.J.	EXPANSION JOINT			RES.	RESISTANT	WD.	WOOD
EA.	EACH	J.B.	JUNCTION BOX	RWC	RAIN WATER CONDUCTOR		
EQ.	EQUAL	JT.	JOINT	RM.	ROOM		
ELEC.	ELECTRIC						
EQUIP.	EQUIPMENT	LAM.	LAMINATE	S.S.	STAINLESS STEEL		
E.W.C.	ELECTRIC WATER COOLER	LAV.	LAVATORY	SCHED.	SCHEDULE		

APPROVALS

DRAWING LIST

ARCHITECTURAL DRAWINGS

CS COVER SHEET
LS–G GROUND FLOOR LIFE SAFETY PLAN
A1.0 GROUND FLOOR PLAN– EXISTING
A1.1 GROUND FLOOR PLAN – NEW WORK
A2.1 GROUND FLOOR PLAN – DEMOLITION
A2.2 GROUND FLOOR PLAN – DEMOLITION
A3.1 ENLARGED GROUND FLOOR PLAN – NEW WORK
A3.2 ENLARGED GROUND FLOOR PLAN – NEW WORK
A4.1 GROUND FLOOR REFLECTED CEILING PLAN – NEW WORK
A4.2 GROUND FLOOR REFLECTED CEILING PLAN – NEW WORK
A5.1 PARTITION TYPES
A6.1 CASEWORK ELEVATIONS
A6.2 CASEWORK ELEVATIONS AND SECTIONS
A6.3 EXTERIOR ELEVATIONS AND WINDOW TYPES
A7.1 DOOR SCHEDULE NOTES AND DETAILS
A7.2 FINISH SCHEDULE NOTES AND DETAILS

STRUCTURAL DRAWINGS

S0.1 COVER SHEET
S0.2 GENERAL NOTES
S0.3 GENERAL NOTES
S0.4 SCHEDULE OF SPECIAL INSPECTIONS
S1.1 FOUNDATION & ROOF FRAMING PLANS
S4.1 FOUNDATION DETAILS & SECTIONS
S5.1 FRAMING DETAILS & SECTIONS
S5.2 FRAMING DETAILS & SECTIONS

MECHANICAL / ELECTRICAL / PLUMBING / FIRE PROTECTION DRAWINGS

MD–1 OVERALL DEMOLITION FLOOR PLAN – MECHANICAL
MD–2 OVERALL DEMOLITION FLOOR PLAN – MECHANICAL
M–1 OVERALL NEW WORK FLOOR PLAN – MECHANICAL
M–2 DETAILS & SCHEDULES – MECHANICAL
PD–1 OVERALL DEMOLITION FLOOR PLAN – PLUMBING
P–1 OVERALL NEW WORK FLOOR PLAN – PLUMBING
P–2 OVERALL NEW WORK FLOOR PLAN – PLUMBING
P–3 LEGENDS & SCHEDULES – PLUMBING
P–4 DETAILS – PLUMBING
FPD–1 OVERALL DEMOLITION FLOOR PLAN – FIRE PROTECTION
FP–1 OVERALL NEW WORK FLOOR PLAN – FIRE PROTECTION
FP–2 DETAILS & SCHEDULES – FIRE PROTECTION
ED–1 OVERALL DEMOLITION FLOOR PLAN – LIGHTING
ED–2 OVERALL DEMOLITION FLOOR PLAN – POWER
E–1 OVERALL NEW WORK FLOOR PLAN – LIGHTING
E–2 OVERALL NEW WORK PLAN – POWER
E–3 OVERALL NEW WORK FLOOR PLAN – SPECIAL SYSTEMS
E–4 DETAILS & SCHEDULES – ELECTRICAL
E–5 SCHEDULES – ELECTRICAL

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12/9/25	DOH FINAL
12/1/25	BID ISSUE
11/20/25	CMS REVIEW
11/14/25	DOH FINAL

REVISIONS

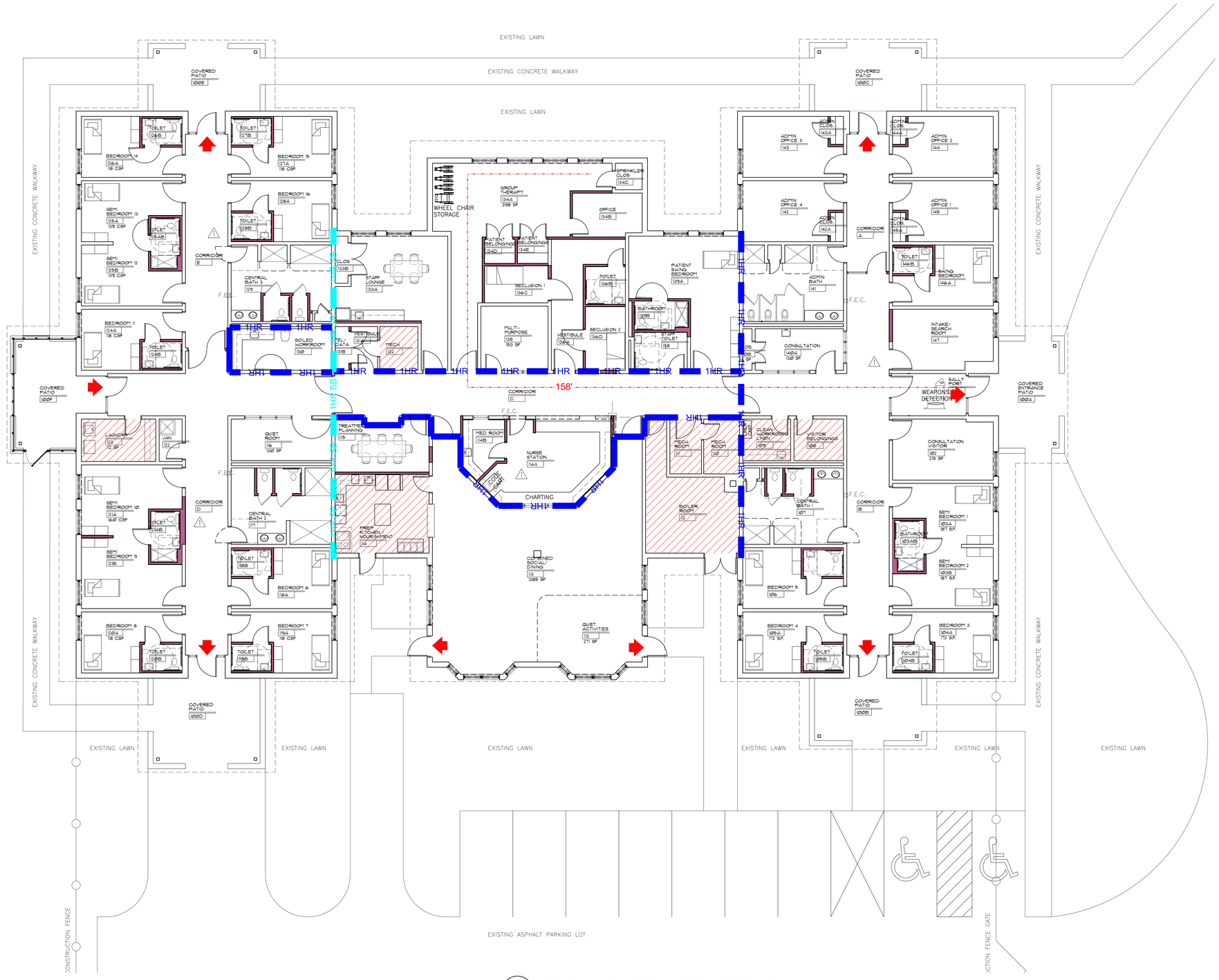
DRAWN BY:	REVIEWED BY:
JPC	CHC III
PLOT SCALE:	DATE:
N/A	4/30/24

PROJECT FILE LOCATION:
N:\

DRAWING NAME:
COVER SHEET

DRAWING NO:
CS

E1(30x42)



LEGEND

- 1HR — 1-Hour Fire Barrier
- 1HR SB — 1-Hour Fire / Smoke Barrier
- Fire Exit
- 00' — Travel Distance to Exit
- Hazardous Areas

1 LS-G **GROUND FLOOR LIFE SAFETY PLAN**
SCALE: 1/8"=1'-0"

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	2/2/24	BID ISSUE
	2/5/25	DOH FINAL
	2/1/25	BID ISSUE
1	11/25/25	REVISION
	11/20/25	CMS REVIEW

REVISIONS

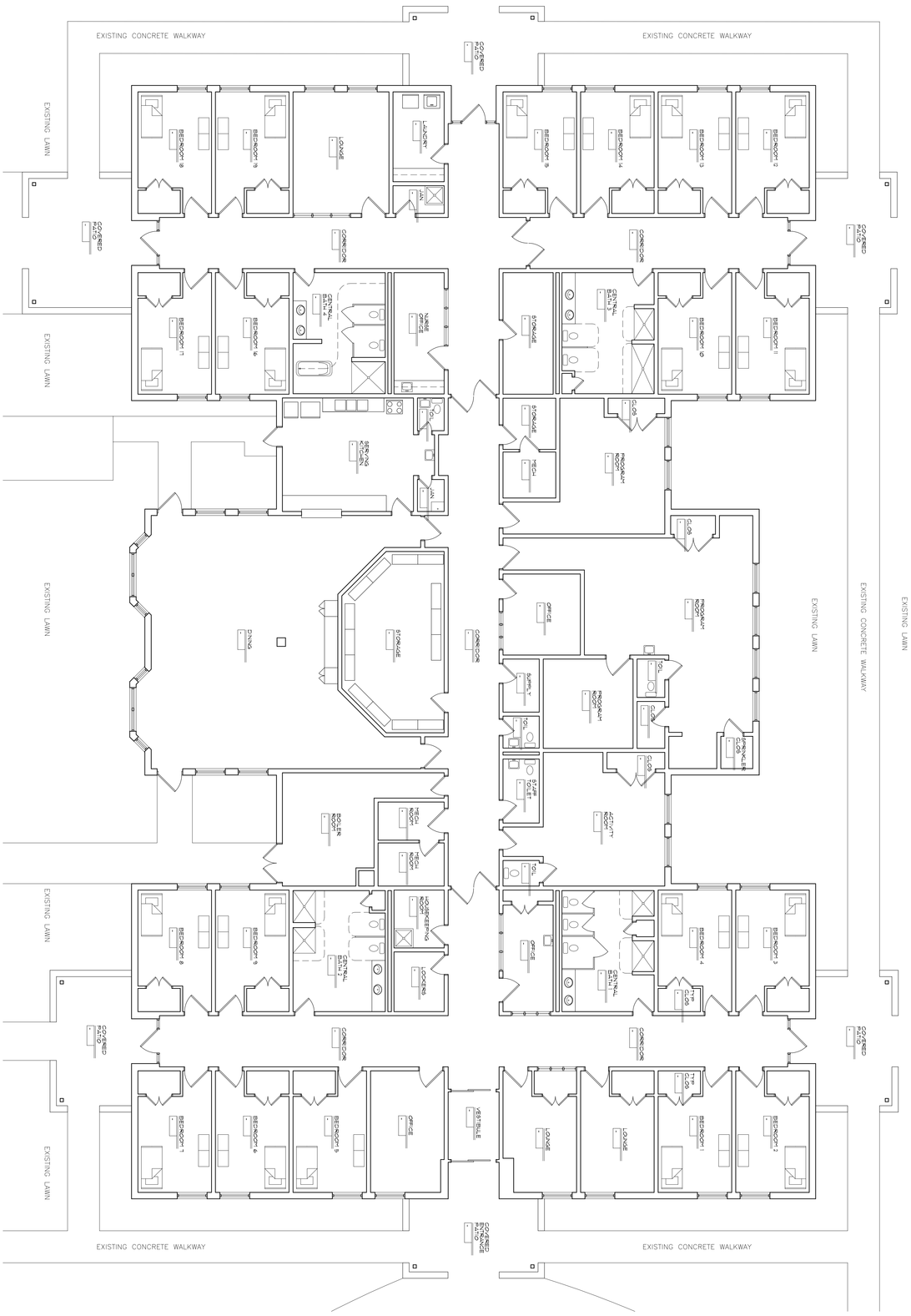
DRAWN BY:	REVIEWED BY:
JFC	CHC III
PLOT SCALE:	DATE:
1/8"=1'-0"	4/30/24

PROJECT FILE LOCATION:
N:\

DRAWING TITLE:
GROUND FLOOR LIFE SAFETY PLAN

DRAWING NO:
LS-G

E1(30x42)



1 / A1.0 GROUND FLOOR PLAN EXISTING
SCALE: 1/8"=1'-0"

E1(30x42)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U

A1.0 GROUND FLOOR PLAN - EXISTING

Drawing No.

Project No.

Drawn By: JPC

Plot Scale: 1/8" = 1'-0"

Checked By: CHC III

Date: 4/30/24

REVISIONS

No.	Description	Date
-	-	-
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-	-	-
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1	DOH RESUBMISSION	12/2/24
2	DOH RESUBMISSION	1/7/25
3	DOH RESUBMISSION	2/10/25
4	DOH RESUBMISSION	3/10/25
5	DOH RESUBMISSION	7/18/25
6	DOH RESUBMISSION	8/18/25

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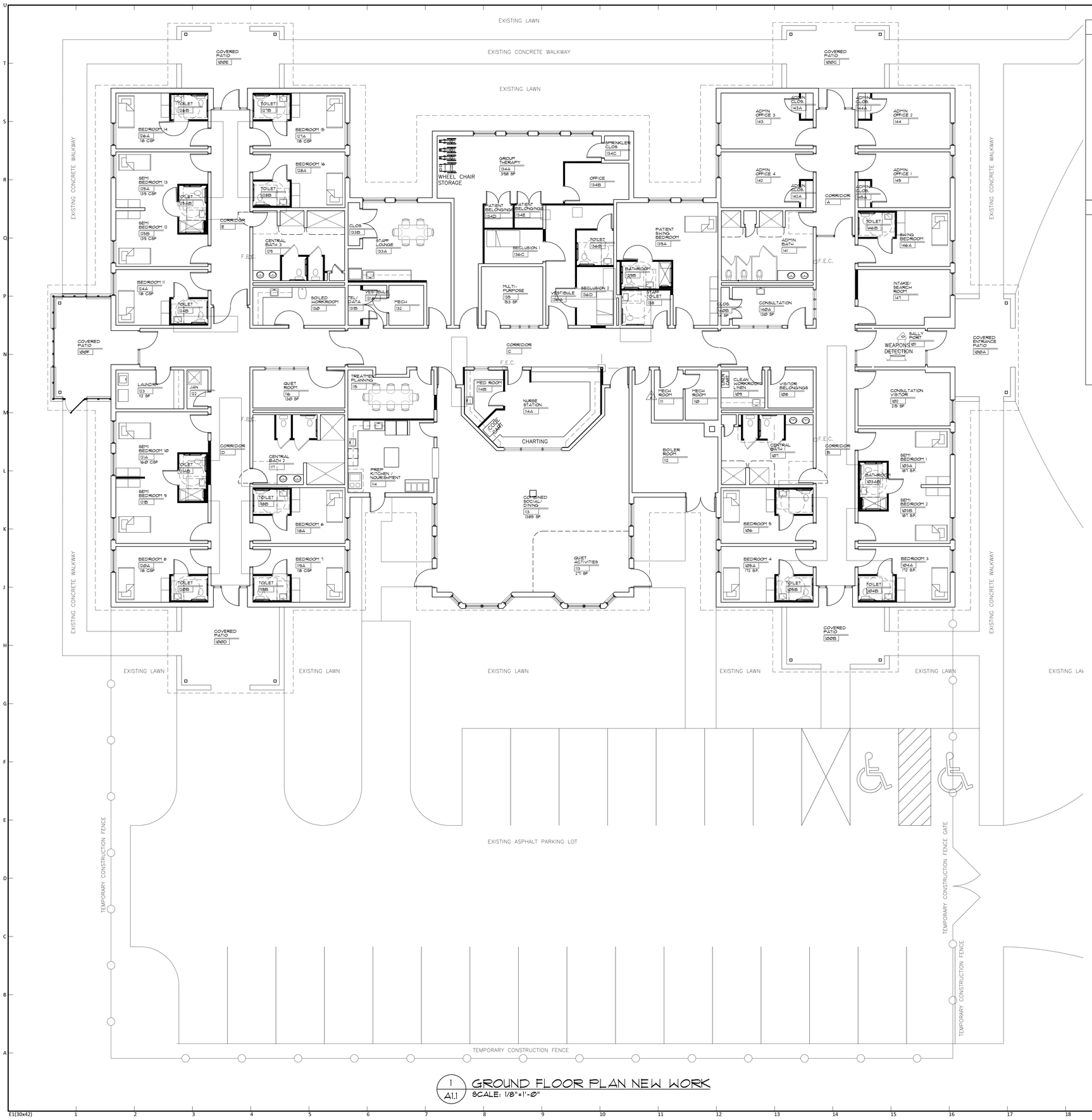

1 / A1.1 GROUND FLOOR PLAN NEW WORK
SCALE: 1/8"=1'-0"

GENERAL CONDITIONS

GENERAL CONDITIONS OF THE CONTRACT – COMPLY W/ AIA A201

1. THE INTENT OF THE CONTRACT DOCUMENTS IS TO COMMUNICATE THE DESIGN INTENT NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK BY THE CONTRACTOR. THE CONTRACT DOCUMENTS ARE COMPLEMENTARY, AND WHAT IS REQUIRED BY ONE SHALL BE AS BINDING AS IF REQUIRED BY ALL. PERFORMANCE BY THE CONTRACTOR SHALL BY REQUIRED TO THE EXTENT CONSISTENT WITH THE CONTRACT DOCUMENTS, AND AS REASONABLY INFERABLE FROM THEM AS BEING NECESSARY TO PRODUCE THE INTENDED RESULTS. IN THE CASE OF INCONSISTENCIES IN THE CONTRACT DOCUMENTS, THE BETTER QUALITY OR QUANTITY OF WORK SHALL BE INCLUDED, AND THE ARCHITECT'S INTERPRETATION SHALL GOVERN.

2. EVERY ATTEMPT HAS BEEN MADE TO PROVIDE COMPLETE AND ACCURATE REPRESENTATIONS OF EXISTING CONDITIONS. THIS INTERPRETATION HAS BEEN TAKEN FROM DRAWINGS SUPPLIED BY OWNER AND HAS BEEN FURTHER SUPPLEMENTED WITH FIELD-MEASUREMENTS AND OBSERVATIONS AS POSSIBLE DUE TO EXISTING CONDITIONS. NO SUBSURFACE INVESTIGATION IS PROVIDED FOR EXISTING CONDITIONS HIDDEN OR OBFUSCATED, AND THE CONTRACTOR IS TO INCLUDE REASONABLE ALLOWANCES FOR THIS WORK.

3. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO FIELD VERIFY AND DOCUMENT ALL EXISTING DIMENSIONS, ELEVATIONS AND BENCHMARKS, MATERIALS AND METHODS OF CONSTRUCTION THAT MAY AFFECT OR BE AFFECTED BY NEW WORK AND TO COORDINATE SUCH FIELD VERIFICATION WITH THE CONTRACT DOCUMENTS AND THE EXECUTION OF THE WORK. NOTE ANY DISCREPANCIES AND/OR CONFLICTS INVOLVING EXISTING CONDITIONS BROUGHT TO LIGHT DURING CONSTRUCTION ACTIVITIES SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION IMMEDIATELY.

4. FIELD-VERIFICATION OF EXISTING CONDITIONS RELATED TO SPECIFIC PORTIONS OF THE WORK SHALL BE UNDERTAKEN IN ADVANCE TO ALLOW FOR THE TIMELY IDENTIFICATION OF EXISTING CONDITIONS THAT MAY AFFECT THE SCHEDULED INSTALLATION OF NEW WORK AS DESIGNED AND DETAILED, AND TO AVOID UNDUE AND UNREASONABLE DELAYS TO THE PROJECT SHOULD SUCH CONDITIONS BE DISCOVERED. TIMELY IDENTIFICATIONS OF SUCH CONDITIONS SHALL PROVIDE FAR A MINIMUM PERIOD OF TEN (10) WORKING DAYS DURING WHICH TIME THE ARCHITECT WILL EVALUATE THE CONDITIONS AND MAKE RECOMMENDATIONS FOR ACCOMMODATING NEW WORK.

5. THE GENERAL CONTRACTOR AND AFFECTED SUBCONTRACTORS SHALL VISIT THE PROJECT SITE PRIOR TO SUBMITTING A PROPOSAL. THE CONTRACTOR SHALL BECOME GENERALLY FAMILIAR WITH THE PROJECT, AND WITH THE IMPACT OF THE NEW WORK ON THE EXISTING CONDITIONS. THE INFORMATION CONTAINED ON THESE DRAWINGS WITH REGARD TO EXISTING CONDITIONS OF CONSTRUCTION IN NO WAY RELEASES THE GENERAL CONTRACTOR FROM THE RESPONSIBILITY FOR VERIFYING COMPLETELY ALL FIELD CONDITIONS RELATING TO AND AFFECTING THE EXECUTION OF THE WORK, AS DESCRIBED IN THESE CONTRACT DOCUMENTS. THE INFORMATION PROVIDED IN NO WAY INTENDS TO MEAN THAT DEMOLITION IS LIMITED TO ONLY WHAT IS SPECIFICALLY DESIGNATED. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO USE SPECIFICALLY DESIGNATED AS WELL AS ADDITIONAL DEMOLITION OF NEW WORK. ANY AREAS OF CONCERN SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO SUBMITTING A PROPOSAL. NO ADDITIONAL CHARGE TO THE OWNER WILL BE APPROVED WHICH IS ATTRIBUTABLE TO THE CONTRACTOR'S FAILURE TO DO THIS.

6. THE PROJECT IS CURRENTLY OCCUPIED 24-HOURS, AND MUST REMAIN COMPLETELY OPERATIONAL. CONTRACTOR'S ACTIVITIES RESTRICTED DURING NORMAL BUSINESS HOURS (7:00 A.M. TO 6:00 P.M. WEEKDAYS). COORDINATE WITH THE OWNER ANY CONSTRUCTION ACTIVITIES WHICH MAY IMPEDE NORMAL OPERATIONS, INCLUDING ANY ACTIVITY WHICH OPERATES EXCESSIVE NOISE, AIRBORNE DIRT, OR WHICH DISRUPTS THE NORMAL FUNCTIONALITY OF THE SPACE. PROTECT ANY ADJACENT SPACE WITH DUST PARTITIONS OR CURTAINS FROM ACTIVITES WHICH WILL CREATE DUST. NOTIFY ANY OCCUPANTS OF THE BUILDING OF ANY CONSTRUCTION ACTIVITIES WHICH MAY AFFECT THEIR ABILITY TO OPERATE NORMALLY. THE OWNER RESERVES THE RIGHT TO CONTRACT WORK ON-SITE TO OTHER CONTRACTORS DURING THE COURSE OF THE CONSTRUCTION.

7. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO IDENTIFY POINTS OF ACCESS TO THE BUILDING AND TO VERIFY MINIMUM CLEARANCES AVAILABLE FOR USE IN TRANSPORTING NECESSARY CONSTRUCTION MACHINERY, EQUIPMENT, MATERIALS, AND COMPONENTS INTO THE BUILDING. USE OF SUCH POINTS OF ACCESS SHALL BE APPROVED BY THE OWNER.

8. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO IDENTIFY EXISTING COMPONENTS AND ASSEMBLIES WITHIN THE BUILDING THAT ARE CONSTRUCTED AS FIRE-RATED ASSEMBLIES AND TO DETERMINE THEIR HOURLY FIRE RATING. NOTE ANY DISCREPANCIES AND/OR CONFLICTS INVOLVING ANTICIPATED EXISTING CONDITIONS SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION IMMEDIATELY.

GENERAL NOTES–CONSTRUCTION

1. BEFORE BEGINNING WORK AT THE SITE, WHERE POSSIBLE, AND THROUGHOUT THE COURSE OF THE WORK, INSPECT AND VERIFY THE LOCATION AND CONDITION OF EVERY ITEM AFFECTED BY THE WORK UNDER THIS CONTRACT. REPORT DISCREPANCIES TO THE ARCHITECT BEFORE DOING WORK RELATED TO THAT BEING INSPECTED.

2. BEFORE BEGINNING WORK AT THE SITE, INSPECT THE EXISTING BUILDING AND DETERMINE THE EXTENT OF EXISTING FINISHES, SPECIALTIES, CASEWORK, EQUIPMENT AND OTHER ITEMS WHICH MUST BE MOVED UNDER THIS CONTRACT.

3. THE ARCHITECTURAL DRAWINGS SHOW PRINCIPAL AREAS WHERE WORK MUST BE ACCOMPLISHED UNDER THIS CONTRACT. INCIDENTAL WORK MAY ALSO BE NECESSARY IN AREAS SHOWN OR NOT SHOWN ON THE ARCHITECTURAL DRAWINGS DUE TO CHANGES AFFECTING EXISTING MECHANICAL, ELECTRICAL, PLUMBING, OR OTHER SYSTEMS. SUCH INCIDENTAL WORK IS ALSO PART OF THIS CONTRACT. INSPECT THOSE AREAS, ASCERTAIN WORK NEEDED, AND DO THAT WORK IN ACCORD WITH THE CONTRACT REQUIREMENTS, AT NO ADDITIONAL COST.

4. TRADE, PRODUCT OR MANUFACTURER'S NAMES OR CATALOG NUMBERS SHOWN ON THE DRAWING FOR NEW WORK ARE TO ESTABLISH QUALITY REQUIRED. IN EACH CASE, ADD BY INFERENCE, AFTER TRADE, PRODUCT OR MANUFACTURER'S NAME, THE PHRASE "OR APPROVED EQUAL."

5. TRADE, PRODUCT, OR MANUFACTURER'S NAMES OR CATALOG NUMBERS AND INDICATIONS OF PRODUCT TYPES, SUCH AS "GLASS FIBER INSULATION" SHOWN ON THE DRAWINGS FOR EXISTING PRODUCTS (INDICATED "EX") IS BELIEVED TO BE ACCURATE. IF THEY ARE DISCOVERED TO BE INACCURATE, NOTIFY ARCHITECT IMMEDIATELY AND DO NOT PROCEED WITHOUT INSTRUCTION.

6. DETERMINE LOCATIONS OF PARTITIONS NOT DIMENSIONED BY THEIR RELATION TO COLUMN FACE OR CENTER, WINDOW JAMB, MULLION, OR SIMILAR FIXED ITEM. INFORM ARCHITECT OF DISCREPANCIES WITH THE INTENDED LAYOUT. ALLOW CLEARANCES FOR ITEMS INDICATED WHERE REQUIRED.

7. DIMENSIONS TO EXISTING SURFACES ARE TO BE TO FINISHED FACE. DIMENSIONS TO NEW MASONRY ARE TO BE ROUGH FACE OF UNITS; MASONRY DIMENSIONS ARE NOMINAL. DIMENSIONS TO NEW STUD PARTITIONS ARE TO FINISH FACE. CLEAR FINISH DIMENSIONS ARE NOTED AS REQUIRED.

8. EXISTING MASONRY BLOCK COURSING (IF APPLIC.) IS BASED ON 2 COURSES EQUAL TO 16" NOMINAL (TYPICAL–UNLESS NOTED OTHERWISE). NEW BLOCK COURSING (WHERE REQUIRED) SHALL MATCH EXISTING.

9. PROTECT EXISTING WORK TO REMAIN FROM DAMAGE.

10. PROVIDE FLUSH COVER PLATES AT ALL EXISTING SERVICES (ELECTRICAL, TELEPHONE, GASES, ETC.) WHERE NOT USED IN THE NEW WORK, EXCEPT AS NOTED TO BE REMOVED.

11. WHERE CONDUITS, DUCTS, PIPES, AND SIMILAR ITEMS ARE SHOWN TO BE INSTALLED TO EXISTING WALLS OR PARTITIONS, NEATLY CHASE WALLS OR PARTITIONS, INSTALL THE ITEMS, AND PATCH THE WALLS OR PARTITIONS TO MAKE THE INSTALLATION NOT DISCERNIBLE IN THE FINISHED WORK, WHETHER OR NOT FURRING IS INDICATED.

12. SEAL TIGHT AND PROTECT WITH FIRE SAFING NEW SLEEVES AND OPENINGS THROUGH FLOORS AND RATED ENCLOSURES –TYPICAL. EXISTING PENETRATIONS WITHIN THE SCOPE OF WORK DISCOVERED DURING THE WORK ARE TO BE FIRE SAFED TO MATCH THE REQUIRED FIRE RATINGS.

13. ALL WORK SHALL BE DONE IN STRICT CONFORMANCE WITH ALL FEDERAL, STATE, AND LOCAL ORDINANCES, AND ANY OTHER AUTHORITY HAVING JURISDICTION. IN ADDITION, ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE NATIONAL BOARD OF FIRE UNDERWRITERS.

14. VERIFY ALL DIMENSIONS LOCATING WALLS AROUND SHOWER RECEPTORS JANITORS SINK RECEPTORS, AND BUILT-IN EQUIPMENT AND CASEWORK.

15. IN-WALL FIRE RETARDANT BLOCKING OR BACKER PLATES SHALL BE INSTALLED AT ALL CASEWORK, EQUIPMENT AND ACCESSORY LOCATIONS.

16. USE MOISTURE RESISTANT GYPSUM BOARD IN ALL TOILET ROOMS, JANITORS CLOSETS, AND OTHER HIGH MOISTURE AREAS. USE MARINE GRADE PLYWOOD AT ALL PLASTIC LAMINATE COUNTERS AND BACKSPLASHES AT SINKS AND WET AREAS. SEAL AT WALL AND ADJ. SURFACES.

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RENOVATIONS FOR NEW MOLLIE WOODS 16 BED
PSYCHIATRIC HOSPITAL
HEATHERWOOD - ONE STORY BUILDING
WOODS SERVICES
LANGHORNE, PA 19047

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	2/2/26	BID ISSUE
	12/5/25	DOH FINAL
	12/1/25	BID ISSUE
	11/25/25	REVISION
	11/20/25	CMS REVIEW
	11/14/25	DOH FINAL
	10/1/25	OWNRE REVIEW
1	7/8/25	ADDENDUM 1
	11/8/24	DOH PRELIM

REVISIONS

DRAWN BY:	REVIEWED BY:
JFC	CHC III
PLOT SCALE: 1/8"=1'-0"	DATE: 4/30/24

PROJECT FILE LOCATION: N:\

DRAWING NAME:
GROUND FLOOR PLAN NEW WORK

DRAWING NO:
A1.1

DEMOLITION KEYNOTES

SITEWORK
- 7 REMOVE FENCE/RAILING
- 12 REMOVE CURB
- 13 REMOVE PAVING
- 14 REMOVE CONCRETE SIDEWALK
- 19 EXCAVATE AS REQUIRED TO ACCOMMODATE NEW CONSTRUCTION

CONCRETE
- 30 REMOVE CONCRETE SLAB
- 32 REMOVE CONCRETE WALL
- 33 CORE OPENING IN EX. CONCRETE SLAB
- 34 SAWCUT OPENING IN EX. CONCRETE WALL
- 35 SAWCUT OPENING IN EX. CONCRETE FLOOR
- 36 REMOVE CONCRETE BASE
- 37 CORE OPENING IN EX. CONCRETE FOUNDATION WALL

MASONRY
- 40 REMOVE MASONRY WALL & BACKUP
- 41 REMOVE VENEER (BACKUP TO REMAIN)
- 43 CUT OPENING IN EX. MASONRY WALL

STEEL
- 46 REMOVE STRUCTURAL STEEL
- 50 REMOVE MISCELLANEOUS STEEL
- 52 REMOVE STEEL STAIR/RAILINGS
- 54 REMOVE MTL. EQUIPMENT CAGE

WOOD & PLASTER
- 60 REMOVE EX. BACKUP WALL
- 62 REMOVE DRYWALL PARTITION
- 63 REMOVE LOW PARTITION
- 64 REMOVE DRYWALL FASCIA/SOFFIT
- 65 CUT OPENING IN EX. WALL
- 66 REMOVE EX. CABINETS AND COUNTERS
- 67 MODIFY EXISTING WOOD TRUSSES AS REQUIRED TO ACCOMMODATE 9'-0" CEILING HEIGHT. COORDINATE WITH STRUCTURAL DRAWINGS.
- 68 REMOVE MISC. WOOD TRIM/PANELLING
- 69 REMOVE WINDOW SILL

DOORS & WINDOWS
- 80 REMOVE DOOR (FRAME TO REMAIN)
- 81 REMOVE DOOR & FRAME
- 82 REMV. & SALVAGE EX. DOOR & FRAME
- 83 REMOVE WINDOW/ SIDELITE
- 84 REMOVE LOUVER
- 85 REMOVE EXTERIOR WINDOW & FRAME

FINISHES
- 90 REMOVE EX. FLOOR COVERING
- 91 REMOVE EX. WALL COVERING
- 92 REMOVE EX. CEILING/SOFFIT
- 94 REMOVE MISC. FINISHES
- 95 REMOVE EX. CLG. TILE—GRID TO REMAIN
- 96 REMOVE EX. CLG. TILE FOR NEW WORK—SALVAGE FOR REINSTALLATION
- 97 REMOVE EX. INTEGRAL BASE
- 98 REMOVE EX. BASE

ACCESSORIES
- 100 REMOVE TOILET COMPARTMENTS
- 101 REMOVE CUBICLE CURTAINS/TRACKS
- 102 REMOVE LOUVERS/VENTS
- 103 REMOVE HANDRAILS/C.G.S./BUMPERS
- 104 REMOVE BULLETIN BOARDS, ETC.
- 105 CUT OPENING IN WALL FOR FEC
- 106 REMOVE LOCKERS (RETURN TO OWNER)
- 108 REMOVE ACCESSORIES

EQUIPMENT
- 111 REMOVE EX. EQPM. (REM. BY OWNER)
- 112 REMOVE & SALVAGE EX. EQUIPMENT
- 113 REMOVE EXISTING KITCHEN EQUIPMENT.
- 123 REM. & SALV. EX. CLNG. MTD. EQPM.

MECHANICAL / PLUMBING
(SEE MPE DWGS. FOR ADDITIONAL ITEMS)
- 127 REMOVE EXISTING MECHANICAL EQPM.
- 128 REMOVE EX. RADIATOR/INDUCTION UNIT
- 132 REMOVE EX. PLUMBING FIXTURE
- 133 REMOVE & SALVAGE PLUMBING FXT.
- 134 REMOVE MED GAS FIXTURE
- 135 REMOVE & SALV. MECHANICAL EQPM.

ELECTRIC
(SEE MPE DWGS. FOR ADDITIONAL ITEMS)
- 136 REMOVE EX. LIGHT FIXTURE
- 137 REMOVE EX. ELECTRICAL PANEL
- 138 REMOVE & SALVAGE EX. LIGHT FIXTURE
- 139 REMOVE & SALVAGE EX. NURSE CALL

NOTE: COORDINATE FINISH REMOVAL W/ NEW FINISHES/NEW WORK PLAN

1 A2.1 GROUND FLOOR PLAN DEMOLITION
SCALE: 1/4"=1'-0"

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RENOVATIONS FOR NEW MOLLIE WOODS 16 BED
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	12/5/25	DOH FINAL
	10/1/25	BID ISSUE
	9/22/25	CMS REVIEW
	11/14/25	DOH FINAL
1	1/8/25	ADDENDUM 1
	11/8/24	PRICING SET
	11/8/24	DOH PRELIM

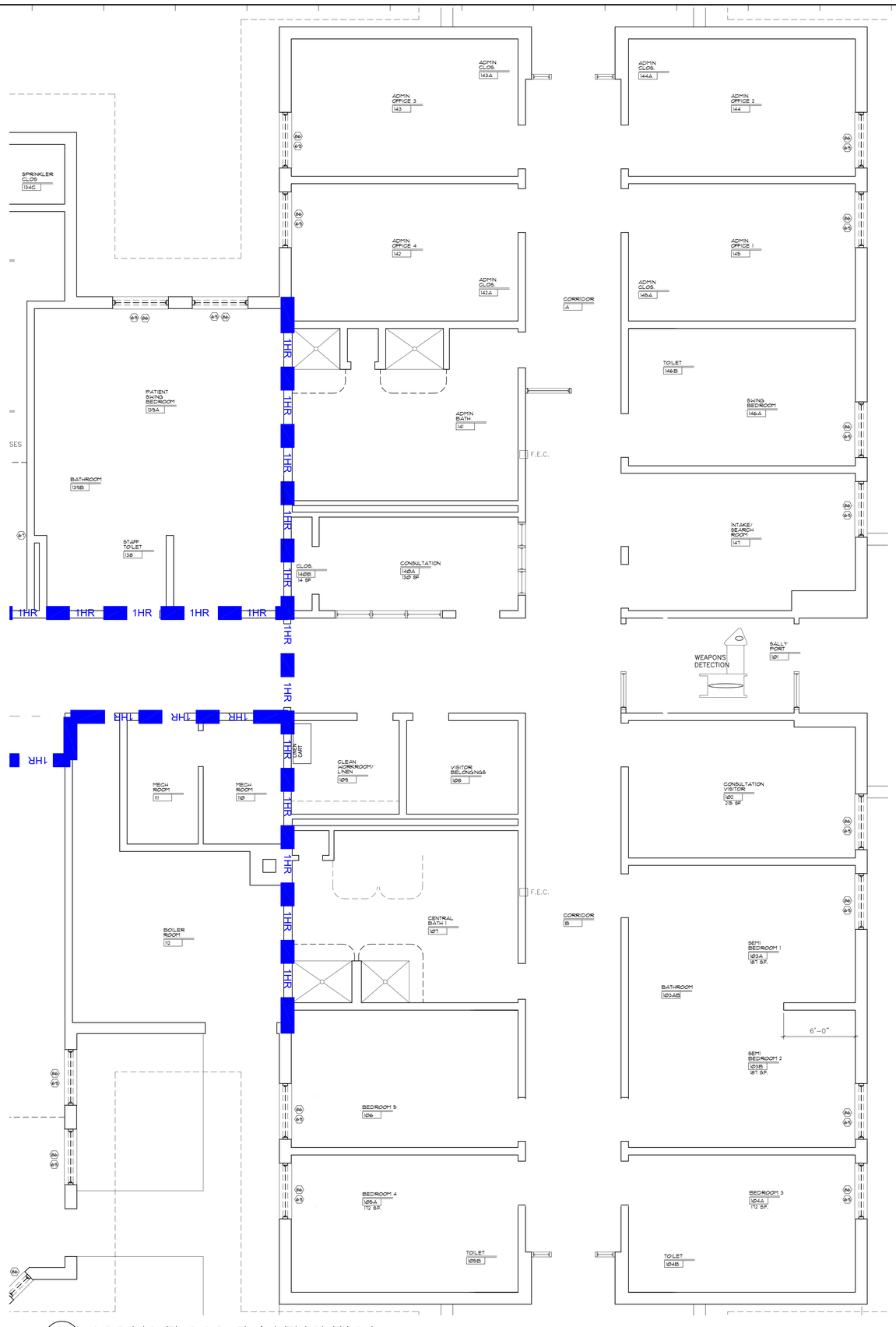
REVISIONS

DRAWN BY: JRC	REVIEWED BY: CHC III
PLOT SCALE: 1/4"=1'-0"	DATE: 4/30/24

PROJECT FILE LOCATION: N:\

DRAWING NAME:
GROUND FLOOR PLAN DEMOLITION

DRAWING NO:
A2.1



1 A2.2 GROUND FLOOR PLAN EMOLITION
SCALE: 1/4"=1'-0"

LEGEND—DEMOLITION PLANS

- (10) DEMOLITION KEYNOTE: SEE SCHEDULE
- EXISTING PARTITION -OR- MATERIAL TO REMAIN
- REMOVE PARTITION -OR- MATERIAL INDICATED (SHOWN DOTTED TYPICAL)
- REMOVE DOOR/ FRAME/ HARDWARE SALVAGE FOR RE-USE WHERE NOTED
- (FCI) REMOVE CASEWORK -OR- EQUIPMENT SALVAGE EQUIPMENT & RETURN TO OWNER
- REMOVE SHOWER STALL, CURB, CER. TILE WALLS (IF REQ'D.) (FLOOR DRAIN & PLUMBING CAPPED & REMOVED BY PLUMBING CONTRACTOR)
- REMOVE AND SALVAGE SINK OR PLUMBING FIXTURE (PLUMBING CAPPED AND REMOVED BY PLUMBING CONTRACTOR)
- REMOVE AND SALVAGE TOILET (PLUMBING CAPPED AND REMOVED BY PLUMBING CONTRACTOR)

NOTE: REMOVE ALL WALL, FLOOR, CEILING FINISHES, ETC. AS REQUIRED TO RECEIVE NEW WORK OR SPECIFIED FINISH- COORD W/ NEW WORK

GENERAL NOTES—DEMOLITION

1. SOLID LINES INDICATE WALLS AND ITEMS TO BE REMAIN. DASHED LINES INDICATE WALLS AND ITEMS TO BE REMOVED.

2. BEFORE BEGINNING WORK AT THE SITE, WHERE POSSIBLE, AND THROUGHOUT THE COURSE OF THE WORK, INSPECT AND VERIFY THE LOCATION AND CONDITION OF EVERY ITEM AFFECTED BY THE WORK UNDER THIS CONTRACT. REPORT DISCREPANCIES TO THE ARCHITECT BEFORE DOING WORK RELATED TO THAT BEING INSPECTED.

3. BEFORE BEGINNING WORK AT THE SITE, INSPECT THE EXISTING BUILDING AND DETERMINE THE EXTENT OF EXISTING FINISHES, SPECIALTIES, CASEWORK, EQUIPMENT AND OTHER ITEMS TO BE REMOVED AND SALVAGED. CONSULT MECHANICAL AND ELECTRICAL DRAWINGS FOR PRINCIPAL AREAS WHERE WORK MUST BE ACCOMPLISHED UNDER THIS CONTRACT. INCIDENTAL WORK MAY ALSO BE NECESSARY IN AREAS SHOWN OR NOT SHOWN ON THE ARCHITECTURAL DRAWINGS DUE TO CHANGES AFFECTING EXISTING MECHANICAL, ELECTRICAL, PLUMBING, OR OTHER SYSTEMS. SUCH INCIDENTAL WORK IS ALSO PART OF THIS CONTRACT. INSPECT THOSE AREAS, ASCERTAIN WORK NEEDED, AND DO THAT WORK IN ACCORD WITH THE CONTRACT REQUIREMENTS, AT NO ADDITIONAL COST.

4. PROTECT EXISTING WORK TO REMAIN FROM DAMAGE. CONTRACTOR SHALL MAINTAIN, AT ALL TIMES, BUILDING IN A WEATHER-TIGHT CONDITION. TEMPORARY 1-HR. RATED BARRICADES AND EXHAUST AIRFLOW SHALL BE INSTALLED TO MAINTAIN NEGATIVE AIR PRESSURE AND PREVENT INJURY TO PERSONS IN ADJACENT GROUND CONSTRUCTION AREAS AND IN THE PATIENT CARE AREAS. BARRICADES AND EXHAUST AIRFLOW SYSTEMS MUST BE INSTALLED IN ACCORDANCE WITH FIRE PROTECTION AND EGRESS REQUIREMENTS. TEMPORARY WALLS ARE NOT TO BE REMOVED UNTIL ALL WORK IS COMPLETED OR APPROVAL IS GRANTED BY THE OWNER UPON REMOVAL OF ALL TEMPORARY BARRICADES, CONTRACTOR IS RESPONSIBLE FOR PATCHING TO MATCH EXISTING ADJACENT CONSTRUCTION.

5. ALL DEMOLITION AND CONSTRUCTION ACTIVITIES SHALL BE COORDINATED WITH THE OWNER TO MINIMIZE DISRUPTION OF THE NORMAL DAILY FUNCTION WITH THE OWNER'S OCCUPIED AREAS. NOISE DURING DEMOLITION AND CONSTRUCTION SHALL BE KEPT TO A MINIMUM.

6. THE OWNER WILL RETAIN ALL SALVAGE THAT IS OF VALUE AS DESIGNATED BY THE OWNER'S REPRESENTATIVE. THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL FROM THE BUILDING AND CONSTRUCTION SITE AND OWNER'S PREMISES ALL CONSTRUCTION DEBRIS AND/OR ITEMS NOT RETAINED BY THE OWNER FOR PROPER DISPOSAL.

7. REPAIR, PATCH, AND FINISH OR REFINISH AS APPLICABLE THOSE EXISTING SURFACES DAMAGED OR NEWLY EXPOSED DURING PERFORMANCE OF THE WORK UNDER THIS CONTRACT. WHERE PERMANENT REMOVAL OF EXISTING DOORS, FRAMES, PARTITIONS, MILLWORK, CASEWORK, CABINETWORK, ACCESSORIES, EQUIPMENT, OR OTHER FURNISHINGS IS REQUIRED, AND PREVIOUSLY CONCEALED SURFACES ARE TO REMAIN EXPOSED, PATCH PREVIOUSLY CONCEALED SURFACES TO RECEIVE NEW FINISHES AND FINISH ENTIRE WALL TO MATCH ADJACENT SURFACES.

8. DO NOT CUT, DRILL, OR DAMAGE EXISTING FLOOR JOISTS, BEAMS, COLUMNS, OR OTHER STRUCTURAL ELEMENTS, UNLESS SPECIFICALLY INDICATED. DRILL SLABS ONLY WHERE APPROVED FOR SMALL REGULAR OPENINGS THROUGH SLABS. LINE, DRILL, AND PATCH IRREGULAR OPENINGS. MAKE OPENINGS OF PROPER SIZE TO ACCOMMODATE DUCTS, PIPE AND OTHER ITEMS PASSING THROUGH OPENINGS. SAW CUT MASONRY TO BE REMOVED WHERE MASONRY IS TO BE EXPOSED.

9. PREPARE, SUBMIT, AND RECEIVE APPROVAL FOR SLEEVE AND OPENING DRAWINGS BEFORE LOCATING SLEEVES AND OPENINGS IN NEW CONSTRUCTION AND BEFORE DRILLING EXISTING STRUCTURE. SHOW EACH OPENING AND SLEEVE IN THE ENTIRE PROJECT.

10. PROVIDE FLUSH COVER PLATES AT ALL EXISTING SERVICES (ELECTRICAL, TELEPHONE, GASES, ETC.) WHERE NOT USED IN THE NEW WORK, EXCEPT AS NOTED TO BE REMOVED.

11. REMOVE ALL EXISTING ACCESSORIES, EQUIPMENT, MECHANICAL OR ELECTRICAL DEVICES, LIGHTS, ETC. AS REQUIRED IN AREAS RECEIVING NEW FLOOR, WALL OR CEILING FINISHES, AND REINSTALL AS PART OF THIS CONTRACT.

12. WHERE REMOVAL OF FINISHED CEILING IS REQUIRED, A MINIMUM QUANTITY OF LIGHT FIXTURES AND ALL OTHER CEILING EQUIPMENT ARE TO BE REMOVED ONLY WHERE ABSOLUTELY NECESSARY TO COMPLETE DEMOLITION.

13. WHERE REMOVAL OF FLOOR COVERINGS AND VINYL WALL BASE ARE REQUIRED, REMOVE ONLY WHAT IS NECESSARY TO COMPLETE DEMOLITION. DEMOLITION INCLUDES REMOVAL OF ADHESIVES, GROUTING BEDS, ETC., AND REQUIRES REMAINING SURFACES TO BE PREPARED FOR NEW CONSTRUCTION, INCLUDING FLASH PATCHING ALL FLOORS (MAXIMUM OF 1/8" PER 10' SLOPE)

14. ALL ACOUSTIC CEILINGS AND RELATED SUPPORT SYSTEMS TO BE REMOVED INCLUDE CEILING TILES, LIGHT FIXTURES, GRILLES, DIFFUSERS, EXIT SIGNS, ELECTRICAL COMMUNICATION, ETC.

15. WALLS TO BE REMOVED SHALL BE FROM FLOOR TO STRUCTURE ABOVE AND TO INCLUDE ALL MECHANICAL, ELECTRICAL, EQUIPMENT, ETC. PREPARE ALL DISTURBED AREAS FOR NEW CONSTRUCTION. REMOVE ALL MISCELLANEOUS EQUIPMENT ATTACHED TO FLOORS, WALLS OR CEILINGS.

16. REMOVAL OF EXISTING PLUMBING FIXTURES TO INCLUDE PIPING, WASTE LINES, ETC. LINES TO BE CAPPED AS REQUIRED. SEE PLUMBING DRAWINGS FOR INFORMATION.

17. REMOVAL OF EXISTING HVAC TO INCLUDE DUCT WORK HANGERS, GRILLES, DIFFUSERS, THERMOSTATS, ETC. AS REQUIRED. SEE HVAC DRAWINGS FOR FURTHER INFORMATION.

18. REMOVAL OF ELECTRICAL WORK SHALL INCLUDE CONDUIT, BOXES, WIRE, CABLE, SUPPORTS, WIRING DEVICES, SAFETY SWITCHES, FIRE ALARM EQUIPMENT, SPEAKERS, TELEPHONE OUTLETS, AND LIGHTING FIXTURES. TURN ALL LIGHTING FIXTURES OVER TO OWNER (REASSEMBLE BEFORE DELIVERY). BRANCH CONDUIT REMOVAL SHALL BE BACK TO PANELBOARD OR FIRST REMAINING ACTIVE JUNCTIONS BOX. SEE ELECTRICAL DRAWINGS FOR FURTHER INFORMATION.

19. ALL EXISTING WIRING, CONDUIT, ETC. OR PORTIONS THEREOF, REMOVED DURING DEMOLITION, UNLESS SHOWN OTHERWISE, SHALL NOT BE REUSED.

20. COORDINATE REMOVAL OF TELEPHONES, P.A. SYSTEMS, INTERCOMS, ETC. WITH OWNER.

21. ALL EXISTING SERVICES AND UTILITIES SHALL BE MAINTAINED TO ADJACENT AREAS THAT ARE IN OPERATION AND SERVED BY THESE UTILITIES AND SERVICES. COORDINATE ALL DISRUPTIONS OF DISCONTINUATIONS OF UTILITIES AND SERVICES WITH THE OWNER.

22. WHERE CONDUITS, DUCTS, PIPES, AND SIMILAR ITEMS ARE SHOWN TO BE INSTALLED TO EXISTING WALLS OR PARTITIONS, NEATLY CHASE WALLS OR PARTITIONS, INSTALL THE ITEMS, AND PATCH THE WALLS OR PARTITIONS TO MAKE THE INSTALLATION NOT DISCERNIBLE IN THE FINISHED WORK, WHETHER OR NOT FURRING IS INDICATED.

23. SEAL TIGHT AND PROTECT WITH FIRE SAFING NEW SLEEVES AND OPENINGS THROUGH FLOORS AND RATED ENCLOSURES— TYPICAL, WHERE A RATING HAS BEEN GIVEN TO AN EXISTING WALL, ALL PENETRATIONS (EXISTING OR NEW) MUST BE SEALED PER THAT RATING REQUIREMENT AND BROUGHT TO THE ARCHITECT'S ATTENTION.

24. ALL WORK SHALL BE DONE IN STRICT CONFORMANCE WITH ALL FEDERAL, STATE, AND LOCAL ORDINANCES, AND ANY OTHER AUTHORITY HAVING JURISDICTION. IN ADDITION, ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE NATIONAL BOARD OF FIRE UNDERWRITERS.

DEMOLITION KEYNOTES

(1) SITEWORK
- (1) REMOVE FENCE/RAILING
- (2) REMOVE CURB
- (3) REMOVE PAVING
- (4) REMOVE CONCRETE SIDEWALK
- (11) EXCAVATE AS REQUIRED TO ACCOMMODATE NEW CONSTRUCTION

(2) CONCRETE
- (2) REMOVE CONCRETE SLAB
- (3) REMOVE CONCRETE WALL
- (33) CORE OPENING IN EX. CONCRETE SLAB
- (34) SAWCUT OPENING IN EX. CONCRETE WALL
- (35) SAWCUT OPENING IN EX. CONCRETE FLOOR
- (36) REMOVE CONCRETE BASE
- (37) CORE OPENING IN EX. CONCRETE FOUNDATION WALL

(4) MASONRY
- (4) REMOVE MASONRY WALL & BACKUP
- (42) REMOVE VENEER (BACKUP TO REMAIN)
- (43) CUT OPENING IN EX. MASONRY WALL

(5) STEEL
- (51) REMOVE STRUCTURAL STEEL
- (52) REMOVE MISCELLANEOUS STEEL
- (53) REMOVE STEEL STAIR/RAILINGS
- (54) REMOVE MTL. EQUIPMENT CAGE

(6) WOOD & PLASTER
- (61) REMOVE EX. BACKUP WALL
- (62) REMOVE DRYWALL PARTITION
- (63) REMOVE LOW PARTITION
- (64) REMOVE DRYWALL FASCIA/SOFFIT
- (65) CUT OPENING IN EX. WALL
- (66) REMOVE EX. CABINETS AND COUNTERS
- (67) MODIFY EXISTING WOOD TRUSSES AS REQUIRED TO ACCOMMODATE 9'-0" CEILING HEIGHT. COORDINATE WITH STRUCTURAL DRAWINGS.
- (68) REMOVE MISC. WOOD TRIM/PANELLING
- (69) REMOVE WINDOW SILL

(8) DOORS & WINDOWS
- (81) REMOVE DOOR (FRAME TO REMAIN)
- (82) REMOVE DOOR & FRAME
- (83) REMV. & SALVAGE EX. DOOR & FRAME
- (84) REMOVE WINDOW/ SIDELITE
- (85) REMOVE LOUVER
- (86) REMOVE EXTERIOR WINDOW & FRAME

(9) FINISHES
- (91) REMOVE EX. FLOOR COVERING
- (92) REMOVE EX. WALL COVERING
- (93) REMOVE EX. CEILING/SOFFIT
- (94) REMOVE MISC. FINISHES
- (95) REMOVE EX. CLG. TILE—GRID TO REMAIN
- (96) REMOVE EX. CLG. TILE FOR NEW WORK—SALVAGE FOR REINSTALLATION
- (97) REMOVE EX. INTEGRAL BASE
- (98) REMOVE EX. BASE

(10) ACCESSORIES
- (101) REMOVE TOILET COMPARTMENTS
- (103) REMOVE CUBICLE CURTAINS/TRACKS
- (104) REMOVE LOUVERS/VENTS
- (105) REMOVE HANDRAILS/C.G.S./BUMPERS
- (106) REMOVE BULLETIN BOARDS, ETC.
- (107) CUT OPENING IN WALL FOR FEC
- (108) REMOVE LOCKERS (RETURN TO OWNER)
- (109) REMOVE ACCESSORIES

(11) EQUIPMENT
- (111) REMOVE EX. EQPM. (REM. BY OWNER)
- (112) REMOVE & SALVAGE EX. EQUIPMENT
- (113) REMOVE EXISTING KITCHEN EQUIPMENT.
- (117) REM. & SALV. EX. CLNG. MTD. EQPM.

(15) MECHANICAL / PLUMBING
(SEE MPE DWGS. FOR ADDITIONAL ITEMS)
- (151) REMOVE EXISTING MECHANICAL EQPM.
- (152) REMOVE EX. RADIATOR/INDUCTION UNIT
- (153) REMOVE EX. PLUMBING FIXTURE
- (154) REMOVE & SALVAGE PLUMBING FXT.
- (155) REMOVE MED GAS FIXTURE
- (156) REMOVE & SALV. MECHANICAL EQPM.

(16) ELECTRIC
(SEE MPE DWGS. FOR ADDITIONAL ITEMS)
- (161) REMOVE EX. LIGHT FIXTURE
- (162) REMOVE EX. ELECTRICAL PANEL
- (163) REMOVE & SALVAGE EX. LIGHT FIXTURE
- (164) REMOVE & SALVAGE EX. NURSE CALL

NOTE: COORDINATE FINISH REMOVAL W/

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RENOVATIONS FOR NEW MOLLIE WOODS 16 BED
PSYCHIATRIC HOSPITAL
HEATHERWOOD - ONE STORY BUILDING
WOODS SERVICES
LANGHORNE, PA 19047

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	3/2/26	BID ISSUE
	12/5/25	DOH FINAL
	12/1/25	BID ISSUE
	11/20/25	CMS REVIEW
	11/14/25	DOH FINAL
1	1/8/25	ADDENDUM 1
	11/18/24	PRICING SET

REVISIONS

DRAWN BY: JFC	REVIEWED BY: CHC III
PLOT SCALE: 1/4"=1'-0"	DATE: 4/30/24

PROJECT FILE LOCATION: N:\

DRAWING NAME:
GROUND FLOOR PLAN DEMOLITION

DRAWING NO:
A2.2

1 A3.1 ENLARGED GROUND FLOOR PLAN NEW WORK
SCALE: 1/4"=1'-0"

LEGEND–NEW WORK PLAN

- CORRIDOR 402 — ROOM NAME AND NUMBER
- A2.1 — ELEVATION: ELEVATION NUMBER, SHEET NUMBER
- A4.1 — SECTION: SECTION NUMBER, SHEET NUMBER
- A2.1 — MULTIPLE ELEVATIONS: ELEVATION NUMBER, SHEET NUMBER
- A4.1 — DETAIL: DETAIL NUMBER, SHEET NUMBER
- EXISTING PARTITION OR CONSTRUCTION TO REMAIN
- 3HR — NEW PARTITION AND PARTITION TYPE: TYPE 30 U.N.O. SEE PARTITION TYPES
- NEW FURRING ON EXISTING PARTITION
- EXISTING PARTITION OR CONSTRUCTION TO BE REMOVED– SEE DEMO PLAN
- 421 (45) — DOOR AND DOOR NUMBER–SEE DOOR SCHEDULE: #EX- INDICATES EXISTING DOOR & FRAME TO REMAIN (NO WORK); #EX-P: INDICATES EXISTING DOOR & FRAME TO BE REFINISHED; #EX-R: INDICATES EXISTING DOOR & FRAME TO BE RELOC. & REFIN.
- 5'-2 1/2" — DIMENSION TO FACE OR COLUMN CENTERLINE
- LIMIT OF CONSTRUCTION OR ALTERNATE
- CONSTRUCTION ABOVE
- HANDRAIL
- CORNER GUARD (C.G.)
- 0'-0" — DATUM ELEVATION
- EQ — EQUIPMENT ID NO.: SEE EQUIP. SCHEDULE
- A/B/C/H — WALL PROTECTION: SEE FIN. SCHEDULE & DETAILS; A: RIGID VINYL WAINSCOT 48" H; C: CRASH RAIL 8" H; H: HANDRAIL T: WOOD TRIM
- NC — NURSE CALL: NCD – NURSE CALL DUTY
- OUTLETS: ELEC., TEL., DATA, CABLE
- V/A/O — MEDICAL GAS: VACUUM, AIR, OXYGEN
- REVISION NUMBER
- F.E. FIRE EXT.: F.E.C. FIRE EXT. CABINET
- NEW CASEWORK: SEE ELEVATIONS & DETAILS
- 3 — KEYNOTE: SEE SCHEDULE

GENERAL NOTES–NEW WORK PLAN

1) FLASH PATCH & SAND EX. SLAB TYPICAL WITHIN LIMIT OF WORK. INCLUDE CONCRETE FLOOR LEVELING & FLASH PATCH TO PREPARE SLAB FOR NEW FLOOR FINISH.

2) FIRESAFE NEW & EXISTING SLAB CORES & OPENINGS W/ 2–HOUR RATED CONCRETE OR FIRESAFING MATERIALS.

3) FIRESAFE EXISTING WALLS TO DECK & SLABS TYPICAL WITHIN LIMIT OF WORK. SEE LIFE SAFETY PLAN FOR RATINGS REQUIRED. VERIFY EXISTING RATED WALLS.

4) PROVIDE NEW SPRAY FIREPROOFING ON ALL EXPOSED EXISTING STEEL COLUMNS & BEAMS TYPICAL WITHIN LIMIT OF WORK. SEE LIFE SAFETY PLAN FOR RATINGS REQUIRED.

5) AT EXISTING PARTITIONS TO REMAIN, REMV. OUTLETS & UTILITIES AND ADD NEW UTILITIES REQ'D, PER MEP DWGS. PATCH WALLS TO ALIGN & MATCH EXISTING. PATCH EXISTING PENETRATIONS & OLD MOUNTING HOLES, ETC. TO MEET FIRE RATING REQ'MTS. PREPARE WALLS FOR NEW WALL FINISHES.

6) COORDINATE CLG. REMOVAL AND WALL/SLAB PENETRATIONS REQ'D. FOR MEP WORK. CLOSE UP CEILINGS AND FIRESAFE PENETRATIONS UPON COMPLETION.

KEYNOTES–NEW WORK PLAN

1. AT EXISTING TO REMAIN & NEW WORK TO ALIGN WITH EXISTING– DEMO AREA PER DEMO PLAN & MEP REQUIREMENTS. SKIMCOAT WALLS TO ALIGN AND PROTECT EXISTING TO REMAIN. PATCH IN NEW WORK AS SPECIFIED OR AS REQUIRED TO MATCH EXISTING (TYPICAL FOR FLOOR, BASE, WALL AND CEILING FINISHES).
2. FLASH PATCH FLOORS TO ALIGN TYPICAL AT SEAMLESS FLOOR LOCATIONS & AT DEMO'D CONSTRUCTION.
3. CONTRACTOR TO INSTALL NEW BATT. INSULATION AND ½" GWB ON EXISTING MTL. STUDS.
4. REMOVE TOP BLOCK CORSE AND EXTEND TO UNDERSIDE OF 1 HR. SHAFT WALL CEILING WITH GWB.
5. PROVIDE ANTI LIGATURE SECURITY FENCE
6. PROVIDE ANTI LIGATURE SECURITY GATE
7. PROVIDE ANTI LIGATURE EXTERIOR WINDOW SYSTEM.

1–HOUR RATED WALL:

INSTALL PER: UL Design U465
1 LAYER EA. SIDE: 1 HOUR RATING (NON–BEARING)

1. Floor and Ceiling Runners – Channel shaped runners, 3–5/8 in. deep (min), 1–1/4 in. legs, formed from min No. 25 MSG galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.
2. Steel Studs – Channel shaped, 3–5/8 in. deep (min), formed from min No. 25 MSG galv steel spaced 24 in. OC max. Studs to be cut 3/4 in. less than assembly height.
3. Batts and Blankets* – (Optional) – Mineral wool or glass fiber batts partially or completely filling stud cavity.
4. Gypsum Board* – 5/8 in. thick, 4 ft wide, attached to steel studs and floor and ceiling track with 1 in. long, Type S steel screws spaced 8 in. OC along edges of board and 12 in. OC in the field of the board. Joints oriented vertically and staggered on opposite sides of the assembly. When attached to item 6 (resilient channels) or 6A (furring channels), gypsum board is screw attached to furring channels with 1 in. long, Type S steel screws spaced 12 in. OC.
5. Joint Tape and Compound – Vinyl, dry or premixed joint compound, applied in two coats to joints and screw heads; paper tape, 2 in. wide, embedded in first layer of compound over all joints. As an alternate, nominal 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer basecoard. Joints reinforced. Paper tape and joint compound may be omitted when gypsum boards are supplied with square edges.

*Bearing the UL Classification Mark

RATED WALL SUMMARY:

PARTITION TYPE 21 (ONE–HOUR SHAFTWALL)
DESIGN NO. UL U469
NON BEARING SHAFTWALL– 1 HOUR

PARTITION TYPE 22 (TWO–HOUR SHAFTWALL)
DESIGN NO. UL U438
NON BEARING SHAFTWALL– 2 HOUR

PARTITION TYPE 31 (ONE–HOUR RATED)
DESIGN NO. UL U465
NON BEARING WALL– 1 HOUR

PARTITION TYPE 32 (TWO–HOUR RATED)
DESIGN NO. UL U411
NON BEARING WALL– 2 HOUR

AUTOMATIC DOOR OPERATION:

- P — PUSHPAD: PROVIDE DEVICE & BACKBOX; PROXIMITY SENSORS WHERE INDICATED
- S — SECURITY DEVICE: PROVIDE BACKBOX & CONDUIT
- CR — SECURITY DEVICE– CARD READER: PROVIDE BACKBOX & CONDUIT
- M — MAG LOCK DEVICE: PROVIDE DEVICE & BACKBOX– CONNECT TO F.A. & SECURITY
- H.O — HOLD OPEN: PROVIDE DEVICE & BACKBOX– CONNECT TO FIRE ALARM
- W — WAVE TO OPEN – TOUCHLESS: PROVIDE DEVICE & BACKBOX

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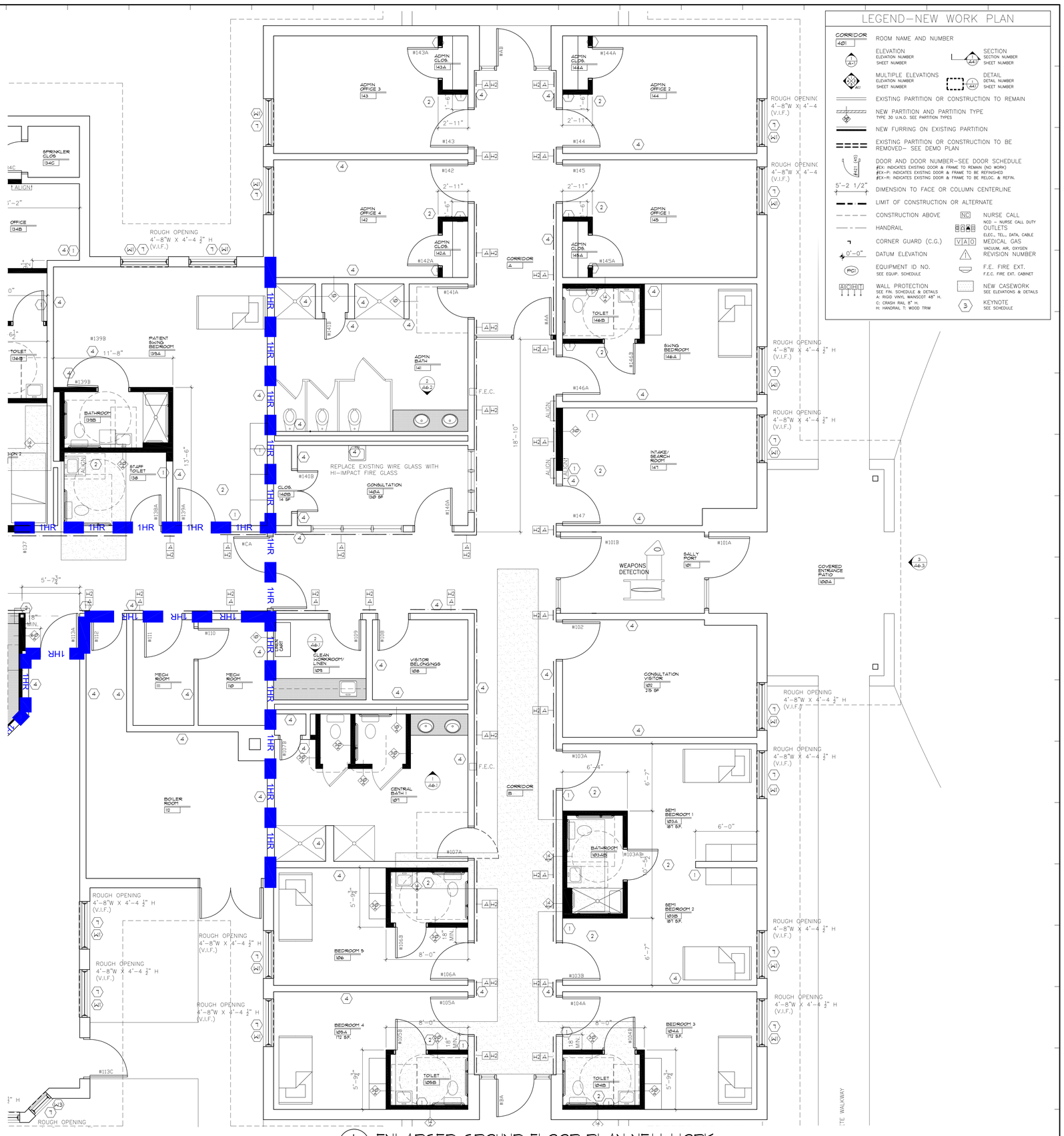
12/5/25	DOH FINAL
12/1/25	BID ISSUE
11/21/25	REVISION 2
11/20/25	CMS REVIEW
11/14/25	DOH FINAL
10/25	REVISION 1
11/8/24	PRICING SET
11/8/24	DOH PRELIM

REVISIONS

DRAWN BY: JFC	REVIEWED BY: CHC III
PLOT SCALE: 1/4"=1'-0"	DATE: 4/30/24
PROJECT FILE LOCATION: N\	

DRAWING NAME: ENLARGED GROUND FLOOR PLAN NEW WORK

DRAWING NO.: A3.1



1 / A3.2 ENLARGED GROUND FLOOR PLAN NEW WORK

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

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REVISIONS

DRAWN BY: JFC	REVIEWED BY: CHC III
PLOT SCALE: 1/4"=1'-0"	DATE: 4/30/24

PROJECT FILE LOCATION: N:\

DRAWING NAME: ENLARGED GROUND FLOOR PLAN - NEW WORK

DRAWING NO: A3.2

1 A4.1 GROUND FLOOR REFLECTED CEILING PLAN
SCALE: 1/4"=1'-Ø"

LEGEND–CEILING PLAN

- 2x4 ACOUSTICAL TILE CEILING (SEE CLG. TYPES)
- 2X4 A.C.T. CEILING SCORED TO 2X2 TILE
- 2X4 FLUORESCENT LT.
- 2X2 FLUORESCENT LT.
- DOWNLIGHT
- BEDLIGHT –OR – WALL FIXTURE
- UNDERCABINET LT. (NOTED UCL)
- WALL SCONCE LT.
- PENDANT LIGHT
- SUPPLY AIR DIFFUSER
- RETURN AIR DIFFUSER
- ACCESS PANEL (A.P.) CLEAN ROOM ACCESS PANEL W/GASKET (AP–G.)
- REPLACE ACT IN EXISTING GRID (CLEAN GRID)
- 2X2 A.C.T. CEILING
- GWB CEILING –OR– SOFFIT–PTD.
- SPEAKER
- SMOKE DETECTOR
- CUBICLE TRACK (CURTAIN BY OWNER)
- SPRINKLER
- EXIT LIGHT
- EMERGENCY LIGHT
- CLG. TYPE– SEE SCHED. CLG. HEIGHT (GWB 9'-6")

CEILING TYPES

(GWB 9'-6") CEILING TYPE / CEILING HEIGHT

TYPE	Ceiling Description/Grid–For Pricing Only–Match Hospital Std.
AT–1	2X2 ANGLED TEGULAR ACT–ARMSTRONG ULTIMA HIGH NRC: 1942
	9/16" WHITE SUPRAFINE XL GRID
AT–1M	2X2 ANGLED TEGULAR ACT–ARMSTRONG CIRRUS: 584
	15/16" WHITE PRELUDE PLUS XL ALUMINUM GRID
AT–2	2X2 BEVELED TEGULAR ACT–ARMSTRONG ULTIMA HIGH NRC: 1942
	9/16" WHITE SUPRAFINE XL GRID
AT–3	2X2 BEVELED TEGULAR ACT–ARMSTRONG ULTIMA HIGH NRC: 1942
	9/16" WHITE SILHOUETTE XL GRID (MATCH EX. LOBBY)
AT–W	2X4 LAY–IN MOIST. RES. ACT–ARMSTRONG HUMIGUARD: 1811
	15/16" WHITE LAY–IN GRID–ALUMINUM
AT–C	2X2 CLEAN ROOM: ARMSTRONG LAY–IN CLEAN ROOM VL: 868
	GASKETED CO–EXTRUDED ALUM. 15/16" LAY–IN GRID
	ARMSTRONG CLEAN ROOM CEILING SYSTEM
EX–O	EXISTING ACT CEILING & GRID TO REMAIN
EX–M	EXISTING GRID/NEW MYLAR ACT (V.I.F.)
	2X4 MYLAR TILE–ARMSTRONG LAY–IN MYLAR TILE: 1716
EX–P	EXISTING GWB CEILING–PTD.
EX–R	EXISTING ACT–REMOVE/REINSTALL & PATCH AS REQ'D. TO MATCH
	EXISTING & ACCOMMODATE LAYOUT & MEP
	CLEAN GRID & REPLACE DAMAGED TILES
EX–T	EXISTING GRID/NEW ACT (V.I.F.)
	2X4 TILE–ARMSTRONG ULTIMA LAY–IN HEALTH ZONE HIGH NRC: 1445
EX–W	EXISTING GRID/NEW ACT (V.I.F.)
	2X4 LAY–IN MOIST. RES. ACT–ARMSTRONG HUMIGUARD: 1811
GWB	SHAFT WALL CEILING UL# U415 –PTD.

GENERAL NOTES–REFL. CLG. PLAN

1. SEE ELECTRICAL, MECHANICAL AND PLUMBING DRAWINGS FOR ALL SIZES, TYPES AND SPECS OF ALL EQUIPMENT AND FIXTURES SHOWN ON THESE DRAWINGS.
2. SEE ELECTRICAL, MECHANICAL, AND PLUMBING DRAWINGS FOR ADDITIONAL REQUIREMENTS AND AREAS NOT SHOWN ON THE ARCHITECTURAL REFLECTED CEILING PLANS. REMOVE & REINSTALL EXIST. CEILING, TILE AND GRID TO ACCOMMODATE THIS WORK AS REQ'D.
3. THE REFLECTED CEILING PLANS ARE INTENDED TO COORDINATE THE GENERAL MECHANICAL, PLUMBING AND ELECTRICAL CONTRACTS. THE ARCHITECT SHALL BE INFORMED OF ANY CONFLICTS DURING THE COORDINATION PROCESS AND DEVIATIONS FROM THESE CONSTRUCTION DOCUMENTS.
4. CEILINGS FOR ALL ROOMS WITH WINDOWS TO BE LOCATED AT WINDOW HEAD HEIGHT MINIMUM UNLESS NOTED OTHERWISE OR WHERE EXISTING CONDITIONS PROHIBIT. WHERE REQUIRED, PROVIDE A GWB SOFFIT (PTD.)– 5/8" GWB ON 3–5/8" METAL STUDS, WITH WALL ANGLE TO MATCH CEILING SYSTEM TO RECEIVE CEILING AT WINDOW SOFFIT.
5. ALL CORRIDOR CEILING HEIGHTS TO BE 8'–6" TYPICAL U.N.O.
6. ALL INTERIOR ROOM CEILING HEIGHTS TO BE 8'–0" TYPICAL U.N.O.
7. CENTER ALL DIFFUSERS, SPRINKLER HEADS, DOWNLIGHTS, ETC. IN CEILING TILE.
8. SUSPEND ALL ACOUSTICAL TILE CEILINGS WITH 1/4" DIA. GALV. STEEL HANGER RODS @ 48" O.C. ALL CEILINGS TO BE SUPPORTED FOR 1/360 MAX. DEFLECTION, INCLUDING WEIGHT OF CEILING AND ALL FIXTURES AND EQUIPMENT. ANCHOR TO STRUCTURE ABOVE. MAXIMUM VARIATION– 1/8" IN 10' SPAN.
9. CENTER CEILING TILES IN ROOM TYPICAL LEAVING NO LESS THAN 6" AT THE PERIMETER U.N.O.
10. INSTALL WATER RESISTANT ACT IN WET AREAS, WITH ALUMINUM GRID AND ACCESSORIES.
11. INSTALL HOLD–DOWN CLIPS IN VESTIBULE AREAS.
12. INSTALL CLEAN ROOM CEILINGS WHERE NOTED TO MEET CLASS 100 STANDARDS.
13. PROVIDE EXTRA STOCK TO OWNER.
14. CEILING LIGHTING & UTILITIES SHOWN FOR COORDINATION ONLY–SEE MEP DWGS. FOR DIFFUSERS, LIGHTING, SPRINKLERS AND OTHER CLG. UTILITY LOCATIONS TYPICAL. COORDINATE LOCATIONS W/ TRADES.

KEYNOTES–REFL. CLG. PLAN

1. AT NEW WALLS AT EXISTING CEILINGS TO REMAIN–REMOVE TILES & CUT BACK GRID TO ACCOMMODATE NEW WALL. RE–TIE GRID & PROVIDE MATCHING WALL ANGLE–TRIM BACK TILE & REINSTALL TILE TO MATCH EXISTING
2. NEW P.LAM SOFFIT – SEE ELEVATIONS
3. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION

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REVISIONS

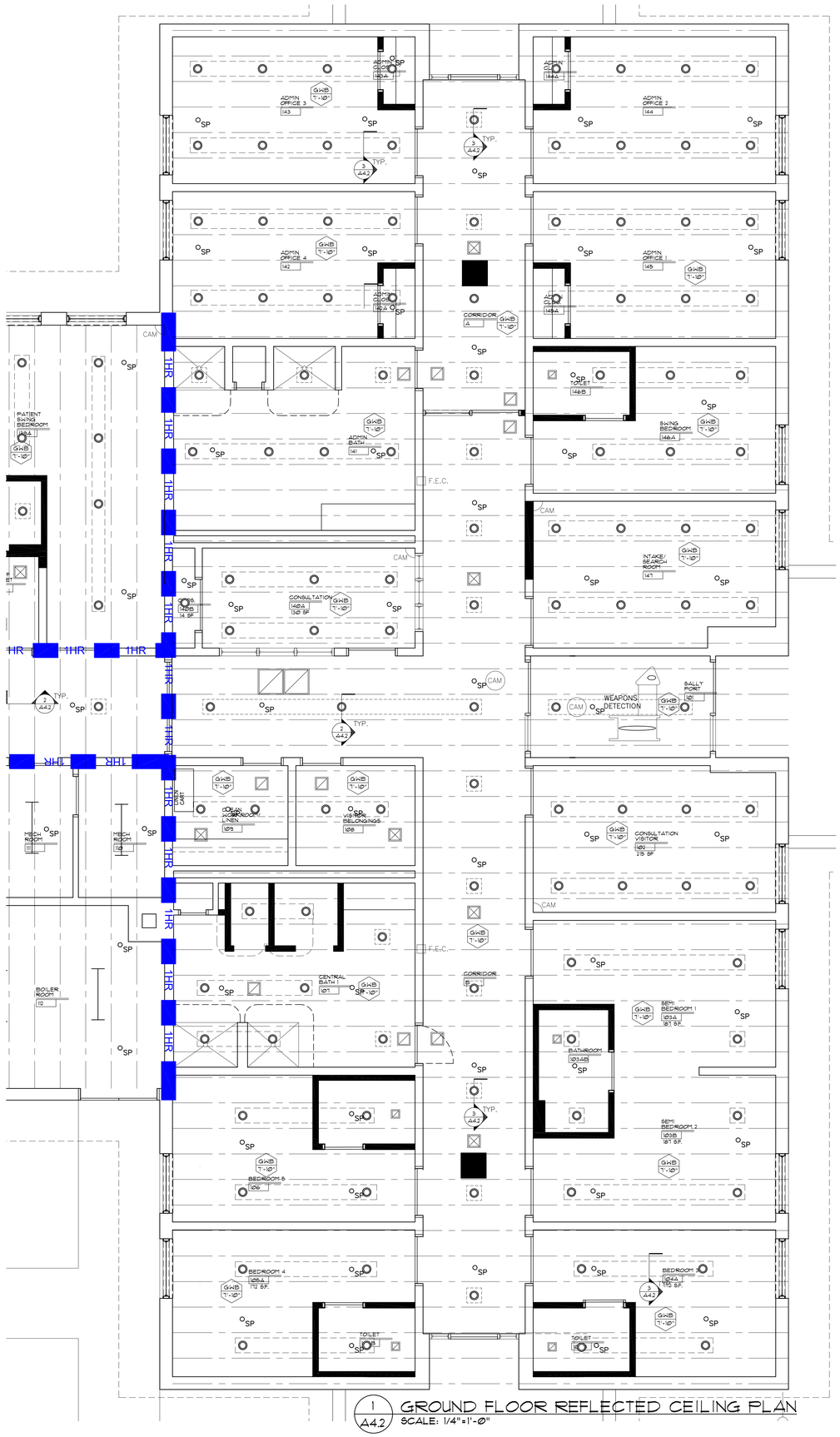
DRAWN BY: JFC	REVIEWED BY: CHC III
PLOT SCALE: 1/4"=1'-0"	DATE: 4/30/24

PROJECT FILE LOCATION: N:\

DRAWING NAME:
GROUND FLOOR REFLECTED CEILING PLAN NEW WORK

DRAWING NO:
A4.1

E1(30x42)



1 A4.2 GROUND FLOOR REFLECTED CEILING PLAN
SCALE: 1/4"=1'-0"

LEGEND–CEILING PLAN

- 2x4 ACOUSTICAL TILE CEILING (SEE CLG. TYPES)
- 2X4 A.C.T. CEILING SCORED TO 2X2 TILE
- 2X4 FLUORESCENT LT.
- 2X2 FLUORESCENT LT.
- DOWNLIGHT
- BEDLIGHT –OR – WALL FIXTURE
- UNDERCABINET LT. (NOTED UCL)
- WALL SCONCE LT.
- PENDANT LIGHT
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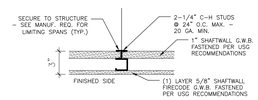
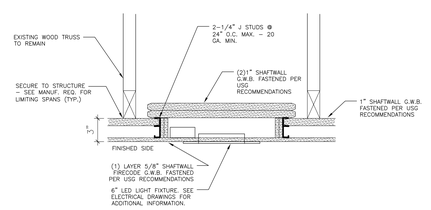
- REPLACE ACT IN EXISTING GRID (CLEAN GRID)
- 2X2 A.C.T. CEILING
- GWB CEILING –OR– SOFFIT–PTD.
- SPEAKER
- SMOKE DETECTOR
- CUBICLE TRACK (CURTAIN BY OWNER)
- SPRINKLER
- EXIT LIGHT
- EMERGENCY LIGHT
- CLG. TYPE– SEE SCHED. CLG. HEIGHT

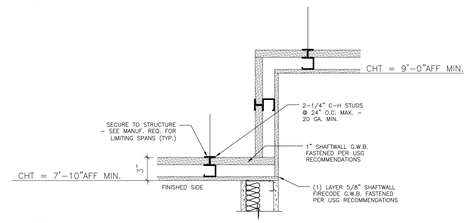


1-HOUR CEILING
SCALE: 1-1/2"=1'-0"
1 HOUR RATING- UBC & NFR 25B TEST REFERENCE- COMPLY WITH UL U419 SYSTEM A / STC RATING 47
NOTE: COMPLY W/ LIMITING HEIGHTS AND SPANS PER MANUF. RECOMMENDATIONS

2 A4.2 SHAFTWALL CEILING DETAIL
SCALE: 1-1/2"=1'-0"



3 A4.2 SHAFTWALL CEILING DETAIL
SCALE: 1-1/2"=1'-0"



3 A4.2 SHAFTWALL CEILING DETAIL
SCALE: 1-1/2"=1'-0"

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12/5/25	DOH FINAL
12/1/25	BID ISSUE
11/20/25	CHS REVIEW
11/14/25	DOH FINAL
11/8/24	PRICING SET
11/8/24	DOH PRELIM

REVISIONS

DRAWN BY: JPC	REVIEWED BY: CHC III
PLOT SCALE: 1/4"=1'-0"	DATE: 4/30/24

PROJECT FILE LOCATION:
N:\

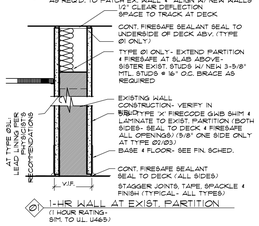
DRAWING TITLE:
GROUND FLOOR REFLECTED CEILING PLAN NEW WORK

DRAWING NO:
A4.2

E1(30x42)

02 FURRING AT EXIST. PARTITION
NON RATED PARTITION- BOTH SIDES
PARTITION TO STOP 6" ABV. CLG. HT.

03 FURRING AT EXIST. PARTITION
LAMINATE GWB ONE SIDE ONLY
AS REQ'D. TO MATCH EX. WALL + ALIGN W/ NEW WALLS

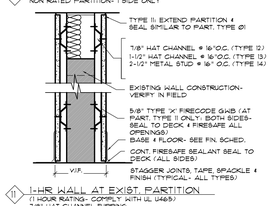


01 1-HR WALL AT EXIST. PARTITION
(1 HOUR RATING- SIM. TO UL U465)

12 7/8" FURRING AT EXIST. PARTITION
NON RATED PARTITION- 1 SIDE ONLY
PARTITION TO STOP 6" ABV. CLG. HT.

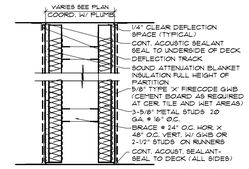
13 1-1/2" FURRING AT EXIST. PARTITION
NON RATED PARTITION- 1 SIDE ONLY

14 2-1/2"" FURRING AT EXIST. PARTITION
NON RATED PARTITION- 1 SIDE ONLY



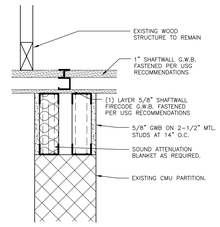
11 1-HR WALL AT EXIST. PARTITION
(1 HOUR RATING- COMPLY WITH UL U465)
7/8" HAT CHANNEL FURRING

15 1-HR WALL AT EXIST. PARTITION
(1 HOUR RATING- COMPLY WITH UL U465)
1-1/2" CHANNEL FURRING

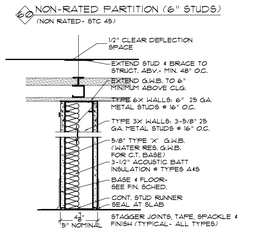


17 SHAFT SPACE
SHAFT SPACE

16 FURRED OUT PARTITION
FURR OUT FROM EXISTING VENT WHERE WALL COVERS EXISTING WINDOWS
ADD FIRE RET. BLOCKING # FIXTURES # ACCESSORIES (TYP.) PROVIDE 1-1/2" CONT. BLKG. IN STUDS VERT # 3/4" PLYWOOD AT ATTACHMENT POINTS TO SECURE AT MIN. 3 STUDS

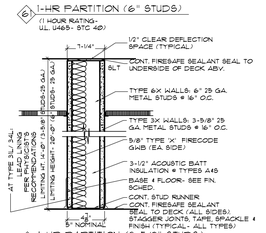


19 CMU PARTITION EXTENSION
NON RATED



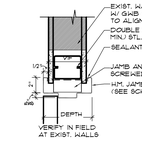
69 NON-RATED PARTITION (6" STUDS)
(NON RATED- STC 45)

60 NON-RATED PARTITION (3-5/8" STUDS)
NON RATED
TYPE 3Ø: NO INSULATION: STC 40
TYPE 3Ø-A: W/ INSULATION: STC 45
TYPE 3Ø-B: ACOUSTIC GWB # INSUL.: STC 55

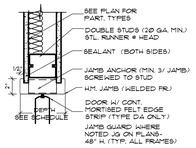


6 1-HR PARTITION (6" STUDS)
(1 HOUR RATING- UL U465- STC 40)

3 1-HR PARTITION (3-5/8" STUDS)
(1 HOUR RATING- UL U465
TYPE 3Ø: NO INSULATION: STC 40
TYPE 3Ø-A: W/ INSULATION: STC 45
TYPE 3Ø-B: ACOUSTIC GWB # INSUL.: STC 55

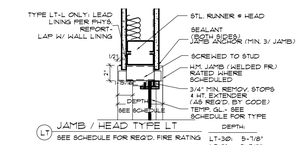


Ø1 JAMB /HEAD TYPE Ø1 DEPTH:
DOOR AT EX. WALL-SEE SCHEDULE FOR RATING V.I.F.



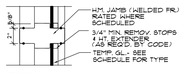
DA JAMB/ HEAD TYPE DA DEPTH:
(NON RATED) DA-34: 5-7/8"

CO JAMB/ HEAD TYPE CO DEPTH:
(NON RATED) CA-34: 5-7/8"
8IN. AT CASED OPENINGS

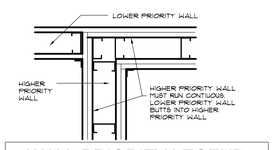


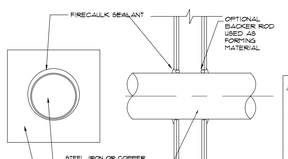
LT JAMB / HEAD TYPE LT DEPTH:
SEE SCHEDULE FOR REQ'D. FIRE RATING LT-36: 5-7/8"
LT-31: 5-7/8"

LTL TYPE LT-L: LEAD LINING PER PHYS. REPORT

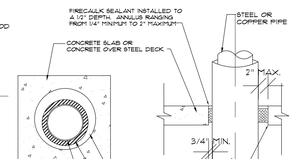


LM MULLION DETAIL LM DEPTH:
SEE SCHEDULE FOR REQUIRED FIRE RATING LM-36: 5-7/8"
LM-31: 5-7/8"





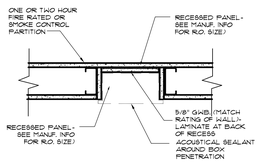
1 OR 2-HOUR RATED WALL FIRESTOP DETAIL
SYSTEM: UL SYSTEM WL-1050 OR APPROVED EQUAL



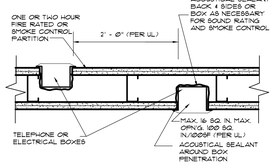
2-HOUR RATED FLOOR FIRESTOP DETAIL
SYSTEM: UL SYSTEM C-AJ-3087 OR APPROVED EQUAL

WALL PRIORITY LEGEND

TWO HOUR FIRE & SMOKE WALL	PRIORITY 1 HIGHEST
TWO HOUR FIRE WALL	PRIORITY 2
TWO HOUR SHAFTWALL	PRIORITY 3
ONE HOUR FIRE & SMOKE WALL	PRIORITY 4
ONE HOUR FIRE WALL	PRIORITY 5 LOWEST
NON-RATED WALL	



TYPICAL RECESS DETAIL AT RATED PARTITION
SEE PARTITION TYPES FOR RATING.
TYPICAL AT PENETRATIONS AT ALL RATED/ SMOKE TIGHT PARTITIONS- REQ'D. FOR PENETRATIONS EXCEEDING 16 SQUARE INCHES OR 100 S.I./ 100 SF. OF WALL AREA



ADJACENT ELEC. BOXES AT RATED PARTITION
SEE PARTITION TYPES FOR RATING.
TYPICAL AT PENETRATIONS AT ALL RATED/ SMOKE TIGHT PARTITIONS- REQ'D. FOR PENETRATIONS NOT EXCEEDING 16 SQUARE INCHES OR 100 S.I./ 100 SF. OF WALL AREA

LIMITING WALL HEIGHTS REQUIREMENTS				
		STUD SPACING		
STUD SIZE	STUD GAUGE	12" O.C.	16" O.C.	24" O.C.
1-1/4" X 3-5/8"	25 GA.	15'-4"	14'-4"	13'-5"
1-1/4" X 3-5/8"	20 GA.	17'-10"	16'-5"	14'-9"
1-1/4" X 6"	25 GA.	22'-1"	19'-9"	16'-9"
1-1/4" X 6"	20 GA.	26'-9"	24'-6"	21'-7"
PER STEEL STUD MANUF. ASSOCIATION				
COMPOSITE- 5/8' GWB REQUIRED BOTH SIDES OF WALL				

PARTITION TYPE SUFFIX KEY:	
A	PROVIDE 3-1/2" BATT ACOUSTIC INSULATION
H	HI-IMPACT GWB (NAT'L GYPSUM XP OR EQ.)
L	PROVIDE LEAD GWB - SEE PHYS. REPORT
P	SKIMCOAT WALLS W/ PLASTER (CORR. SIDE)
S	ACOUSTIC PARTITION- USE ACOUSTIC GWB # INSUL.
T	PROVIDE R-13 BATT THERMAL INSULATION
W	PROVIDE CEM. TILE BACKER BOARD (DENSGLAS)

ACOUSTICAL PARTITIONS:

PROVIDE ACOUSTICAL SEALANT AROUND ALL FIXTURES, DIFFUSERS, GRILLS, PENETRATIONS AND OUTLETS ON CONCEALED SIDES. SEAL OUTLET AND SWITCH BOX OPENING AND PERIMETER JOINTS.

PROVIDE ACOUSTICAL SEALANT EACH SIDE. TOP, BOTTOM AND AT EACH VERTICAL AND HORIZONTAL STL. STUD. ISOLATE GWB AND/OR SOUND BOARD FROM DIRECT CONTACT WITH STL STUDS AND STRUCTURE WITH 1/4" MINIMUM CAULKING BEAD (TYP).

PROVIDE SOUND ATTENUATION BLANKET INSULATION, FULL HEIGHT OF PARTITION.

STC Requirements		
	Partitions	Floors
New Construction		
Patient room to patient room	45	40
Public space to patient room	55	40
Service areas to patient room	65	45
Exam room to exam room	45	45
Exam room to public space	45	
Toilet room to public space	45	
Consultation rooms/ conference rooms to public space	45	
Consultation rooms/ conference rooms to patient rooms	45	
Staff lounges to patient rooms	45	
Existing Construction		
Patient room to patient room	35	40
Public space to patient room	40	40
Service areas to patient room	45	45

DOOR SCHEDULE & PARTITION LEGEND

DOOR/ FRAME TYPES:
SEE DOOR/ FRAME ELEVATIONS
SEE SCHEDULE FOR SIZE & RATING

MATERIAL:
SC.WD. SOLID CORE WOOD DOOR
H.M. HOLLOW METAL
ALUM. ALUMINUM
W.G. WIRE GLASS
TEMP. TEMPERED GLASS

FINISH:
CLR. CLEAR SATIN FINISH
STN. STAINED FINISH
ANOD. CLEAR ANODIZED FINISH
PTD. PAINTED FINISH
R-PTD. PTD. FINISH- ZINC PRIMER
LAM. LAMINATE FINISH

HARDWARE-LOCKS:
PAS PASSAGE SET
OFC OFFICE LOCK
ENT ENTRANCE LOCK
STOR STOREROOM LOCK
CLRM CLASSROOM LOCK
CLOS CLOSET LOCK
KEY DEADBOLT LOCK
KPD KEYPAD LOCK
AUTO ELECTRIC LOCKSET
PRIV PRIVACY LOCKSET
PUSH PUSH/PULL HANDLES
EX EXISTING LOCK- REKEY
MAG OVERHAD MAG LOCKS
EXIT PANIC EXIT DEVICE
H.O. HOLD OPEN (ON ALARM)
CARD CARD READER TO MATCH FAC. STD.

HARDWARE-HINGES:
CONT CONTINUOUS HINGE
CH/EP CONTINUOUS HINGE/EDGE PROTECT
BB-SST BALL BEARING SST-4.5X4.5 MIN.
P/T POWER TRANSFER HINGE OPTION
PIVOT RECESSED HEAD/SILL PIVOT

HARDWARE-CLOSERS:
OH-S OVERHEAD CLOSER-SURFACE MTD.
OH-R OVERHEAD CLOSER-RECESSED
PIVOT RECESSED HEAD/ SILL PIVOT
AUTO AUTOMATIC OPERATOR

PARTITION TYPE SUFFIX:
5Ø SEE PART. TYPE DETAILS SUFFIX-SEE LEGEND

A 3-1/2" BATT ACOUSTIC INSULATION
H HI-IMPACT GWB (NAT'L GYPSUM XP OR EQ.)
L LEAD GWB- 1/16" MINIMUM LEAD
P SKIMCOAT WALLS W/ PLASTER (CORR. SIDE)
S ACOUSTIC PARTITION- USE ACOUSTIC GWB
T R-13 BATT THERMAL INSULATION
W MOISTURE RESISTANT BOARD (DENSGLAS)

30 JAMB/ HEAD TYPE 30 DEPTH:
(NON RATED WALL/ OPENING) 5-1/8"

60 JAMB/ HEAD TYPE 60 DEPTH:
(NON RATED WALL/ OPENING) 8-1/4"

3 JAMB/HEAD TYPE 31 DEPTH:
(1 HOUR RATED WALL/ 45 MINUTE OPENING) 5-1/8"

34 JAMB/ HEAD TYPE 34 DEPTH:
(8M. TIGHT OR 1 HR. WALL/ 20 MINUTE OPENING) 5-1/8"

61 JAMB/ HEAD TYPE 61 DEPTH:
(1 HOUR RATED WALL/ 45 MINUTE OPENING) 8-1/4"

64 JAMB/ HEAD TYPE 64 DEPTH:
(8M. TIGHT OR 1 HR. WALL/ 20 MINUTE OPENING) 8-1/4"

GENERAL NOTES-PARTITIONS

1. NEW GWB PARTITIONS- INSTALL PER UL REQUIREMENTS FOR REFERENCED PARTITION TYPE.
   A. GA-201 - GYPSUM BOARD FOR WALLS AND CEILINGS.
   B. GA-600 - FIRE RESISTANCE DESIGN MANUAL.
   C. GA-216 - RECOMMENDED SPECIFICATIONS FOR THE APPLICATION AND FINISHING OF GYPSUM BOARD.
2. STUDS AND TRACKS: GA 201 AND GA 216; GALVANIZED SHEET STEEL, 22 GAGE THICK, 'C' SHAPE, 3-5/8 AND 6 INCHES WIDE. SEE STRUCTURAL DRAWINGS AND PARTITION TYPES FOR REQUIREMENTS.
3. FURRING, FRAMING AND ACCESSORIES, INCLUDING FASTENERS AND ADHESIVE: GA 201 AND GA 216.
4. GYPSUM BOARD MATERIALS
   A. STANDARD GYPSUM BOARD: ANSI/ASTM C 36; 5/8 INCH THICK, MAXIMUM PERMISSIBLE LENGTHS; ENDS SQUARE CUT, TAPERED EDGES.
   B. FIRE RATED GYPSUM BOARD: ANSI/ASTM C 36; FIRE RESISTIVE (AND MOISTURE RESISTIVE) TYPE, UL RATED; 1/2 AND 5/8 INCH THICK, MAXIMUM PERMISSIBLE LENGTH; ENDS SQUARE CUT, TAPERED EDGES.
   C. EXTERIOR SHEATHING/ TILE BACKER BOARD: GEORGIA PACIFIC "DENS-SHIELD", 5/8 INCH THICK, FIRE RATED TYPE 'X' WHERE NOTED.
   D. ACOUSTIC GYPSUM BOARD: CERTAINTEED SILENTFX OR EQUAL TO MEET STC REQUIREMENTS- SEE PARTITION TYPES.
5. ACCESSORIES
   A. ACOUSTICAL SEALANT: NON-HARDENING, NON-SKINNING, FOR USE IN CONJUNCTION WITH GYPSUM BOARD.
   B. CORNER BEADS: ZINC.
   C. EDGE TRIM: GA 201 AND GA 216; TYPE LC BEAD.
   D. JOINT MATERIALS: GA 201 AND GA 216; REINFORCING TAPE, JOINT COMPOUND, ADHESIVE, WATER, AND FASTENERS.
   E. THERMAL AND ACOUSTICAL INSULATION: FS-HH-I-521; PREFORMED MINERAL WOOL, FRICTION FIT, 3 ½ INCHES MINIMUM THICKNESS (R-13).
6. METAL STUD INSTALLATION
   A. INSTALL IN ACCORDANCE WITH GA 201 AND GA 216.
   B. STUD SPACING: 16 INCHES ON CENTER, MAXIMUM.
   C. PARTITION HEIGHTS: FULL HEIGHT TO CONSTRUCTION ABOVE UNLESS NOTED. INSTALL HORIZONTAL BRACING AT CEILING LINE AND OTHER BRACING AS REQUIRED.
   D. FRAME OPENINGS: INSTALL DOUBLE STUDS AT JAMBS. INSTALL STUD TRACKS AT FRAME HEAD, SILL AND BETWEEN STUDS AND ADJACENT STUDS.
   E. PROVIDE 20 GAGE FLAT PLATE, 6 INCHES WIDE SUPPORTED BY AT LEAST 3 STUDS FOR ATTACHING HANDRAILS, WALL GUARDS, CASEWORK, TV SUPPORTS, LIGHT FIXTURES. USE TWO SCREWS PER STUD.
   F. COORDINATE INSTALLATION OF BUCKS, FRAMES, ANCHORS, BLOCKING.
7. WALL FURRING INSTALLATION
   A. INSTALL E.P.S. BOARD THERMAL INSULATION VERTICALLY IN THICKNESS NOTED, AND HOLD IN PLACE WITH Z-FURRING SPACED AT 24 INCHES ON CENTER, 3 INCHES AT EXTERNAL CORNERS AND 12 INCHES AT INTERNAL CORNERS.
8. CEILING FRAMING INSTALLATION
   A. INSTALL IN ACCORDANCE WITH ANSI/ASTM C754. GA 201 AND GA 216 AND MANUFACTURER'S INSTRUCTIONS.
   B. COORDINATE LOCATION OF HANGERS WITH OTHER TRADES.
   C. INSTALL CEILING FRAMING INDEPENDENT OF WALLS, COLUMNS, AND ABOVE-CEILING WORK.
   D. REINFORCE OPENINGS IN CEILING SUSPENSION SYSTEM WHICH INTERRUPT MAIN CARRYING CHANNELS OR FURRING CHANNELS, WITH LATERAL CHANNEL BRACING. EXTEND BRACING MINIMUM 24 INCHES PAST EACH END OF OPENINGS.
   E. LATERALLY BRACE ENTIRE SUSPENSION SYSTEM.
9. GYPSUM BOARD INSTALLATION
   A. INSTALL GYPSUM BOARD IN ACCORDANCE WITH GA 201 AND GA 216 AND MANUFACTURER'S INSTRUCTIONS.
   B. ERECT SINGLE LAYER OF GYPSUM BOARD IN MOST ECONOMICAL DIRECTION, WITH ENDS AND EDGES OCCURRING OVER FIRM BEARING.
   C. USE SCREWS WHEN FASTENING GYPSUM BOARD TO METAL FURRING OR FRAMING.
   D. DOUBLE LAYER APPLICATIONS: SCREW AND ADHESIVE APPLICATION, IN ACCORDANCE WITH GA 216 AND GA 253.
   E. PLACE CONTROL JOINTS CONSISTENT WITH LINES OF BUILDING SPACES AS DIRECTED, 25 TO 30 FEET ON CENTER MAXIMUM.
   F. TREAT CUT EDGES AND HOLES OF MOISTURE RESISTANT BOARD WITH SEALER.
   G. PLACE CORNER BEADS AT EXTERNAL CORNERS. USE LONGEST PRACTICAL LENGTH. PLACE EDGE TRIM WHERE GYPSUM BOARD ABUTS DISSIMILAR MATERIALS.
10. SHAFTWALLS
    INSTALL SHAFTWALL ASSEMBLIES IN STRICT COMPLIANCE WITH UL REQUIREMENTS.
11. JOINT TREATMENT / EXISTING WALLS
    A. PROVIDE THREE COAT SYSTEM. TAPE, FILL AND SAND EXPOSED JOINTS, EDGES, AND CORNERS TO PRODUCE SMOOTH SURFACE READY TO RECEIVE FINISHES.
    B. FEATHER COATS ONTO ADJOINING SURFACES SO THAT CAMBER IS MAXIMUM 1/32 INCH.
    C. GYPSUM ASSOCIATION TYPE 4. FINISH UNLESS NOTED.
       1. TYPE 3 FINISH BEHIND CERAMIC TILE AND ABOVE CEILINGS.
    D. AT EXISTING WALLS WITH WALLCOVERINGS TO BE REMOVED (PER DEMO PLAN):
       1. SKIMCOAT WALLS WITH FINISH COAT TO PREPARE WALLS FOR NEW FINISH TYPICAL.

STRUCTURAL:
DCI ENGINEERING
1205 Franklin Avenue, Suite 201
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650 Naamans Rd., Suite 211
Claymont, DE 19703
Tel: (302) 798-3515

INTERIOR DESIGN:
- - -
Tel: (xxx) xxx-xxxx Fax: (xxx) xxx-xxxx

CHARLES CROSS ARCHITECTURE, PC
655 West Valley Road Phone: 610.293.3990
Wayne, PA 19087 Fax: 610.293.3998
www.ccarch.com

RENOVATIONS FOR NEW MOLLIE WOODS 16 BED
PSYCHIATRIC HOSPITAL
HEATHERWOOD - ONE STORY BUILDING
WOODS SERVICES
LANGHORNE, PA 19047

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	2/2/26	BID ISSUE
	12/5/25	DOP FINAL
	11/1/25	BID ISSUE
	11/20/25	CPS REVISION
	11/14/25	DOH FINAL
1	1/22/25	PRICING REVISION
	11/18/24	PRICING SET

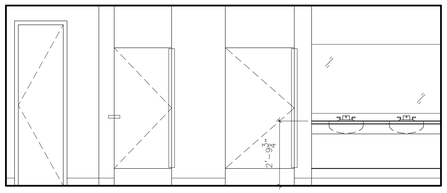
REVISIONS

DRAWN BY: JPC	REVIEWED BY: CHC III
PLOT SCALE: AS NOTED	DATE: 4/30/24
PROJECT FILE LOCATION: N\	

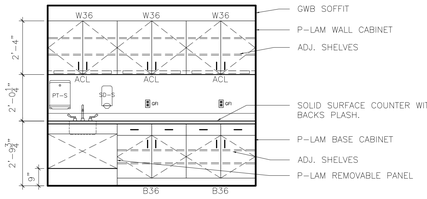
DRAWING NAME:
PARTITION TYPES

DRAWING NO:
A5.1

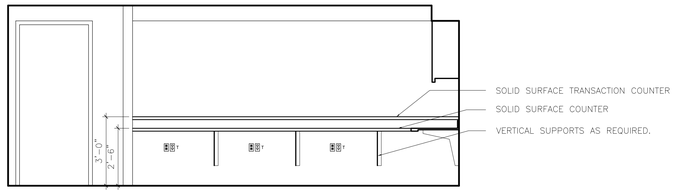
E1(30x42)



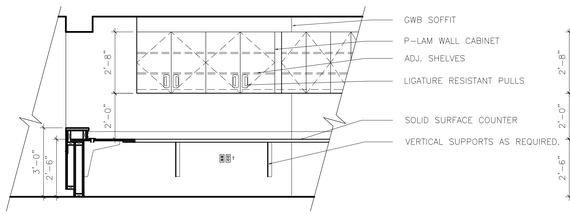
1 A6.1 CASEWORK ELEVATION
SCALE: 3/8"=1'-0"



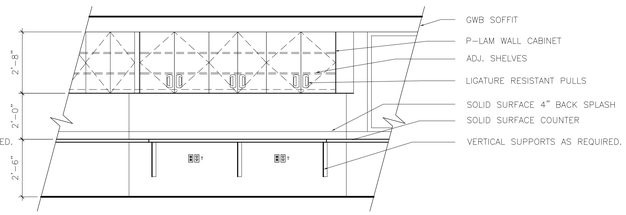
2 A6.1 CASEWORK ELEVATION
SCALE: 3/8"=1'-0"



3 A6.1 CASEWORK ELEVATION
SCALE: 3/8"=1'-0"



4 A6.1 CASEWORK ELEVATION
SCALE: 3/8"=1'-0"



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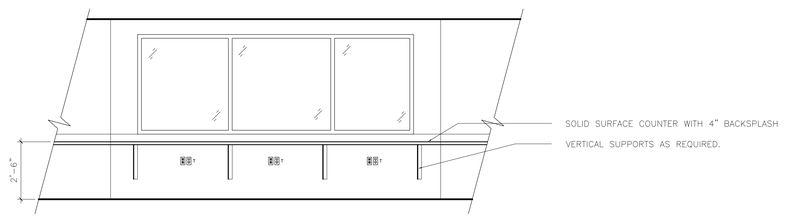

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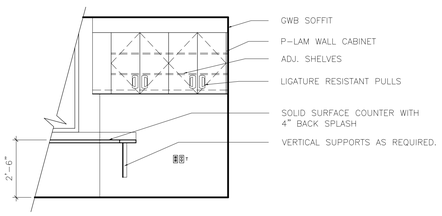

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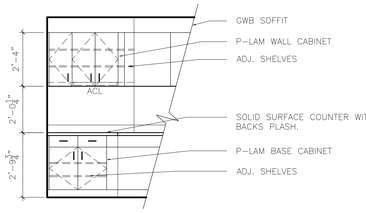

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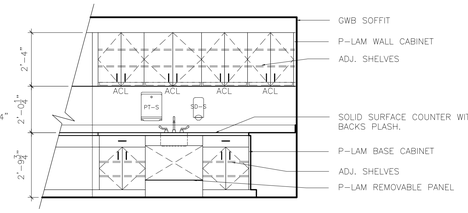

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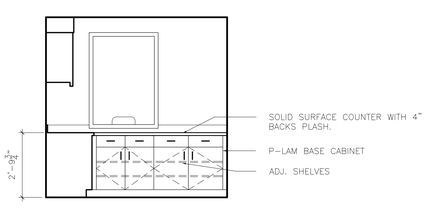

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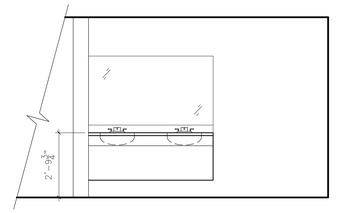

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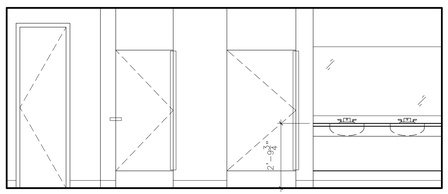

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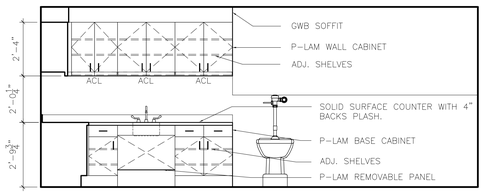

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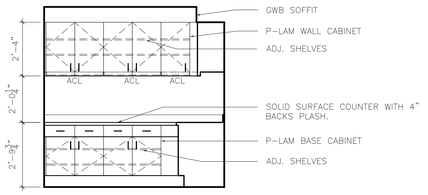

14 A6.1 CASEWORK ELEVATION
SCALE: 3/8"=1'-0"

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RENOVATIONS FOR NEW MOLLIE WOODS 16 BED
PSYCHIATRIC HOSPITAL
HEATHERWOOD - ONE STORY BUILDING
WOODS SERVICES
LANGHORNE, PA 19047

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-	-
2/2/26	BID ISSUE
12/5/25	DOH FINAL
12/1/25	BID ISSUE
11/20/25	CMS REVIEW
11/14/25	DOH FINAL

REVISIONS

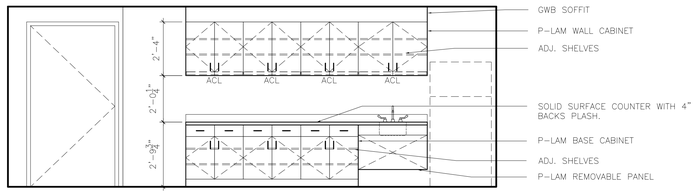
DRAWN BY:	REVIEWED BY:
JPC	CHC III
PLOT SCALE:	DATE:
3/8"=1'-0"	4/30/24

PROJECT FILE LOCATION:
N:\

DRAWING NAME:
CASEWORK ELEVATIONS

DRAWING NO:
A6.1

E1(30x42)



1 A6.2 CASEWORK ELEVATION
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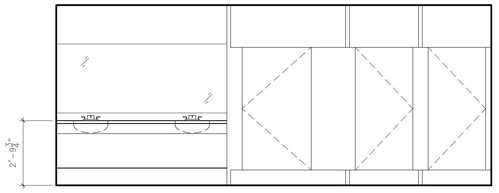


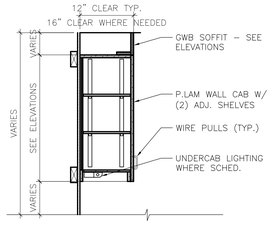
2 A6.2 CASEWORK ELEVATION
SCALE: 3/8"=1'-0"

LEGEND–CASEWORK

SB'XX'	SINK BASE–36" HIGH (34" WHERE NOTED) W/ P.LAM. COUNTER & BACKSPLASH (MARINE GRADE PLYWOOD) W/ 2 P.LAM. CABINET DOORS. 'XX' INDICATES WIDTH IN INCHES
B'XX'	BASE CABINET W/ P.LAM. COUNTER & BACKSPLASH W/ 1 ADJ. SHELF & 1 DRAWER & 2 P.LAM. CABINET DOORS. 'XX' INDICATES WIDTH IN INCHES
DB'XX'	DRAWER UNIT W/ P.LAM. COUNTER & BACKSPLASH W/ 4 DRAWERS. 'XX' INDICATES WIDTH IN INCHES
NOTE: 34" H. CABINETS TYPICAL, ACCESSIBLE CABINETS TYP. NOTE: SEE PLAN FOR ALL OTHER CASEWORK REQUIRED.	
SC'XX'	STORAGE CABINET–84" HIGH W/ 5 ADJ. SHELVES & DOUBLE DOORS, W/ P.LAM. SOFFIT TO CEILING. 'XX' INDICATES WIDTH IN INCHES
W'XX'	WALL CABINET–30" HIGH W/ 2 ADJ. SHELVES & LIGHT SHIELD 2 P.LAM. CABINET DOORS–LOCKED WHERE NOTED, W/ P.LAM. SOFFIT TO CEILING. 'XX' INDICATES WIDTH IN INCHES
FILE	FILE UNIT–30" HIGH W/ P.LAM. COUNTER & BACKSPLASH W/ 1 LEGAL SIZE DRAWER W/ PANAFLEX EDGES & 2 DRAWERS 15" WIDE TYPICAL (NOTED F15)
KD	KEYBOARD DRAWER (BY OWNER)– PROV. BLOCKING
PD	PENCIL DRAWER
S	SLOTS–P.LAM. 1" O.C. X 12" W. REMOVABLE

LEGEND–OUTLETS

DX	ELECTRIC OUTLET	V	VACUUM OUTLET
GFI	GFI OUTLET	S	VACUUM SLIDE
EM	EMERGENCY OUTLET	O	OXYGEN OUTLET
QX	QUAD OUTLET	A	MED AIR OUTLET
T	TELEPHONE OUTLET	N2	NITROUS OXIDE OUTLET
D	DATA OUTLET	NC	NURSE CALL STATION
C	CABLE OUTLET	NCD	NURSE CALL DUTY STATION
S	SWITCH		FOR COORDINATION ONLY– SEE MEP DWGS.



3 A6.2 CASEWORK SECTION
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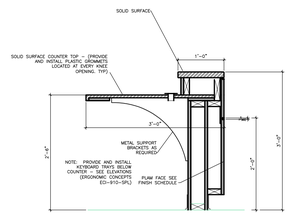

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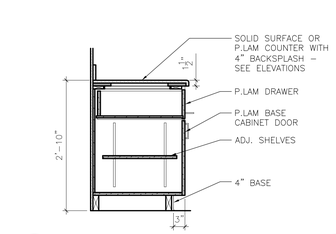

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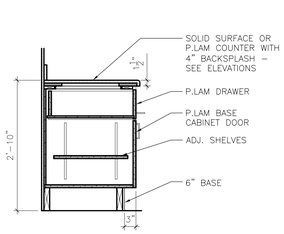

6 A6.2 CASEWORK SECTION
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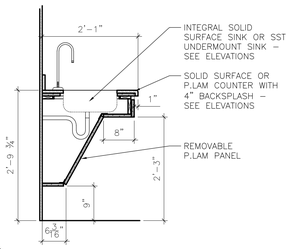

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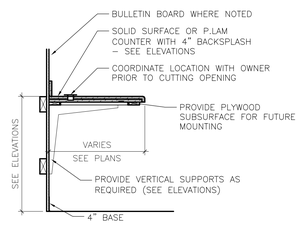


8 A6.2 CASEWORK SECTION
SCALE: 3/4"=1'-0"

GENERAL NOTES–CASEWORK

GENERAL:

1) FABRICATE TO AWI "CUSTOM GRADE".

2) VERIFY ALL DIMENSIONS AT THE SITE PRIOR TO FABRICATION. FURNISH ALL DIMENSIONS REQUIRED FOR MECHANICAL AND ELECTRICAL ROUGH-IN AS REQUIRED BY CONSTRUCTION SCHEDULE.

3) ALL COUNTERTOPS AND BACKSPLASHES AT SINK LOCATIONS AND WET AREAS TO BE MARINE-GRADE PLYWOOD MIN. BACKSPLASHES TO BE INSTALLED IN A BED OF SEALANT AND SEALED TO THE COUNTER AND WALL TYPICAL. SOLID SURFACE OR POST-FORM COUNTERS WHERE NOTED.

4) PROVIDE FIRE-TREATED WOOD BLOCKING OR SHEET METAL STUD TRACK BLOCKING AT ALL CASEWORK LOCATIONS. ALLOW 100 LB. PER FOOT OF CABINET PLUS WEIGHT OF CABINET. FOR COUNTERTOPS ALLOW 55 LB. PER FOOT OF COUNTER PLUS WEIGHT OF CABINETS. ALL WEIGHTS ARE MINIMUM UNLESS GREATER LOADS KNOWN.

FINISHES:

5) ALL CASEWORK TO BE PLASTIC LAMINATE U.N.O.

6) ALL EXPOSED SIDES OF CASEWORK TO BE FINISHED. PROVIDE FINISHED END PANELS WHERE REQUIRED AT EXPOSED END PANELS OF ALL BASE AND WALL CABINETS.

7) ALL CABINETS TO HAVE COUNTERTOPS WITH 4" BACKSPLASHES U.N.O. RETURN & SEAL BACKSPLASH AT SIDE WALLS AND ADJACENT CABINETS.

8) CABINET BASES ARE TO BE COVERED WITH BASE MATCHING ROOM FINISH BY FLOORING CONTRACTOR.

9) PROVIDE A SCRIBE PIECE FILLER PANEL AT FACE AND RETURN ENDS OF ALL CASEWORK. PROVIDE BOTTOM FILLER AT ALL INTERSECTING WALL-HUNG CABINETS.

10) PROVIDE FILLER STRIPS TO MATCH CABINETS AT BOTH SIDES OF CABINETS. SCRIBE EQUALLY TO WALL AND SEAL.

SIZES:

11) WALL CABINETS 1'-0" DEEP. PROVIDE 1'-3 1/2" DEEP CABINETS WHERE NOTED.

12) BASE CABINETS AND UTILITY CABINETS 24" DEEP U.N.O. BASE CABINETS 34" HIGH U.N.O. BASE CABINETS AND FILES AT DESK AREAS TO BE 24" DEEP X 30" HIGH U.N.O.

13) MAXIMUM DOOR WIDTH IN ALL BASE AND WALL CABINETS TO BE 24". MAXIMUM DRAWER WIDTH TO BE 30".

SHELVES:

15) ALL SHELVES IN CABINETS TO BE SAME MATERIAL AS CABINETS.

16) ALL SHELVES IN WALL AND BASE CABINETS TO BE ADJUSTABLE. SHELVES OVER 36" LONG TO BE 1" THICK. PROVIDE (1) SHELF IN 24" HIGH CABINETS, (2) SHELVES IN 30" HIGH CABINETS, (3) SHELVES IN 36" HIGH CABINETS, (5) SHELVES IN UTILITY CABINETS.

HARDWARE:

17) ALL CASEWORK TO HAVE CONCEALED HINGED DOORS U.N.O. PROVIDE (2) HINGES TYPICAL PER DOOR. PROVIDE (3) HINGES ON DOORS 36" OR HIGHER. PROVIDE (4) HINGES ON DOORS 60" OR HIGHER. HINGES TO BE GRASS 3903, 1650 OPEN OR EQUAL, SELF CLOSING.

18) ALL CABINET DOORS TO HAVE WIRE PULLS U.N.O.– 4" CTC SST FINISH. ADA PULL AT CABINETS NOTED TO BE ADA ACCESSIBLE. US-26D FIN. U.N.O.

19) DRAWERS SLIDES– ACCURIDE 3832 OR EQ. (75 lb. CAPACITY) TYPICAL ACCURIDE 3832 OR EQ. (100 lb. CAPACITY) AT DRAWERS OVER 6" FRONT DEPTH.

20) PROVIDE LOCKS IN DOORS/ DRAWERS WHERE TYPICAL. CAM LOCKS W/2 KEYS.

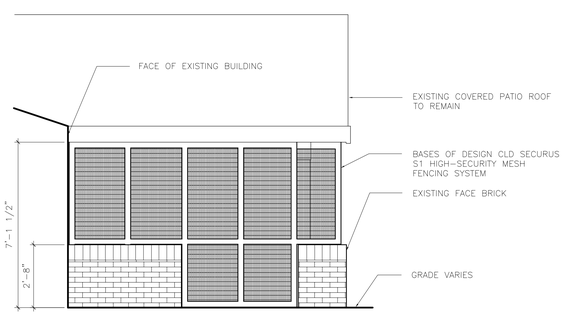
21) PROVIDE 2" I.D. GROMMET W/ COVER AT EACH ELECTRIC, DATA OR TELEPHONE LOCATION. PROVIDE 3" I.D. GROMMET W/ COVER AT PRINTER LOCATIONS. PROVIDE 1" X 10" PAPER SLOT GROMMET WHERE NOTED. LOCATE IN FIELD WITH OWNER.

22) ALL SLOT DIVIDERS TO BE PLASTIC LAMINATE OR WHITE PLEXIGLAS.

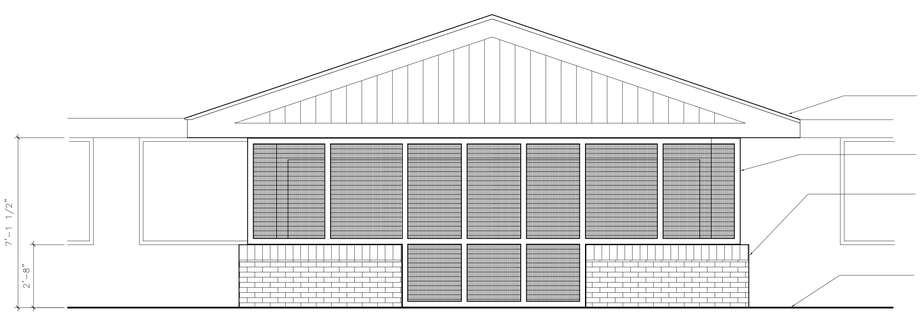
23) TYPICAL CASEWORK SINKS (BY PLUMBING CONTRACTOR) ARE STAINLESS STEEL 16 X 19 X 7 SELF RIMMING EXCEPT AS NOTED AND INTEGRAL AT STAINLESS STEEL COUNTERS. INTERGRAL SOLID SURFACE SINKS WHERE NOTED ON PLANS.

24) ALL CASEWORK SINKS TO HAVE RIGID GOOSENECK FAUCETS WITH AERATORS AND WRISTBLADE HANDLES U.N.O. ALL SINKS TO BE PROVIDED WITH PERFORATED GRID STRAINERS AND 1" TAILPIECES U.N.O.. SEE PLUMBING DRAWINGS.

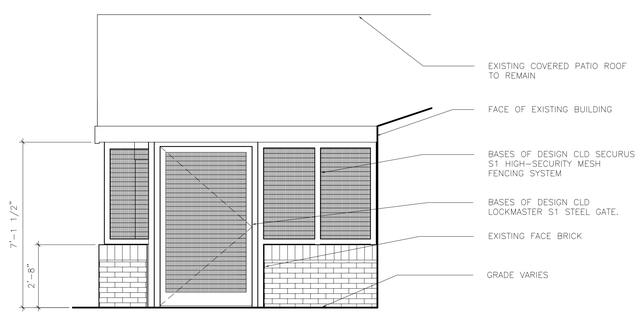
NOTE: ALL DOORS LOCATED IN SMOKE BARRIERS MOST MEET the 2009 SECTION 715.4.3.1 SMOKE AND DRAFT CONTROL. FIRE DOOR ASSEMBLIES SHALL ALSO MEET THE REQUIREMENTS FOR A SMOKE AND DRAFTCONTROL DOOR ASSEMBLY TESTED IN ACCORDANCE WITH UL 1784. THE AIR LEAKAGE RATE OF THE DOOR ASSEMBLY SHELL NOT EXCEED 3.0 CUBIC FEET PER MINUTE PER SQUARE FOOT (0.01524 M 3/S.M2) OF DOOR OPENING AT 0.10 INCH (24.9PA) OF WATER FOR BOTH THE AMBIENT TEMPERATURE AND ELEVATED TEMPERATURES TESTS. LOUVERS SHELL BE PROHIBITED. INSTALLATION OF SMOKE DOORS SHELL BE IN ACCORDANCE WITH NFPA 105



9 A6.2 EXTERIOR ELEVATION
SCALE: 3/8"=1'-0"



10 A6.2 EXTERIOR ELEVATION
SCALE: 3/8"=1'-0"



11 A6.2 EXTERIOR ELEVATION
SCALE: 3/8"=1'-0"

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RENOVATIONS FOR NEW MOLLIE WOODS 16 BED
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HEATHERWOOD - ONE STORY BUILDING
WOODS SERVICES
LANGHORNE, PA 19047

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2/2/24	BID ISSUE
2/5/25	DOH FINAL
7/1/25	BID ISSUE
11/20/25	CMS REVIEW
11/14/25	DOH FINAL

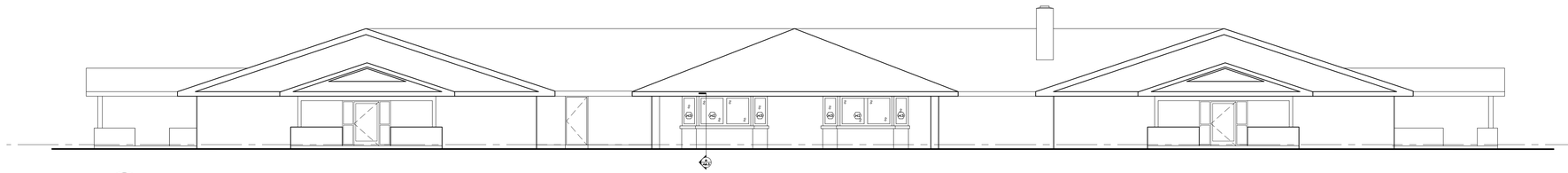
REVISIONS

DRAWN BY: JPC	REVIEWED BY: CHC III
PLOT SCALE: 3/8"=1'-0"	DATE: 4/30/24

PROJECT FILE LOCATION: N:\

DRAWING NAME:
CASEWORK ELEVATIONS AND SECTIONS

DRAWING NO:
A6.2



1 A6.3 EXTERIOR ELEVATION (NORTH)
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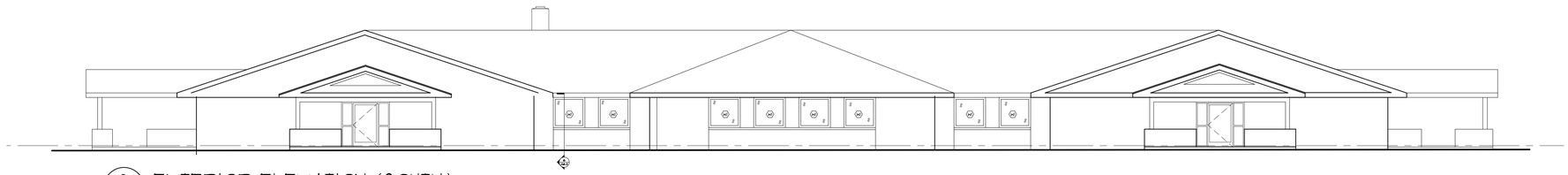

2 A6.3 EXTERIOR ELEVATION (SOUTH)
SCALE: 1/8"=1'-0"

3 A6.3 EXTERIOR ELEVATION (WEST)
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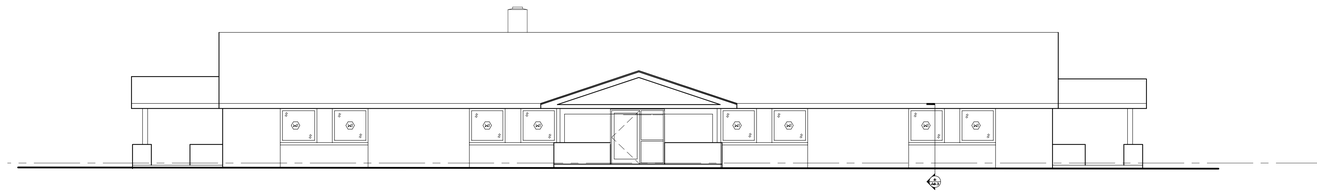

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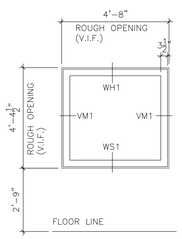

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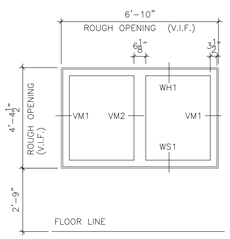
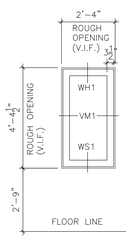
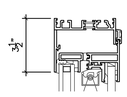


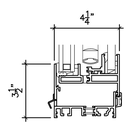
W2

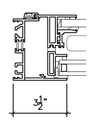


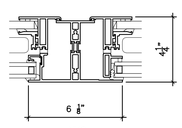
W3

TYPICAL WINDOW ELEVATIONS

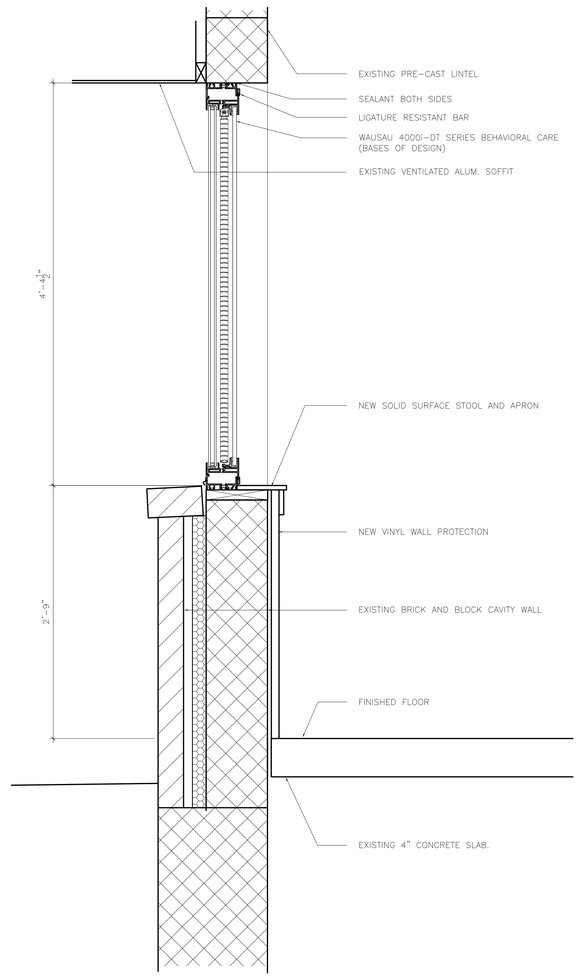








5 A6.3 WINDOW FRAME DETAILS
SCALE: 3"=1'-0"



6 A6.3 TYP. WALL SECTION @ WINDOW
SCALE: 3"=1'-0"

E1(30x42) 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

STRUCTURAL:
DCI ENGINEERING
1205 Pennsylvania Ave, Suite 201
Wyncote, PA 19095
Tel: (484) 475-2180

CIVIL:
-
-
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MEP:
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650 Naamans Road, Suite 211
Claymont, DE 19703
Tel: (302) 798-3515

INTERIOR DESIGN:
-
-
Tel: (xxx) xxx-xxxx Fax: (xxx) xxx-xxxx

CHARLES CROSS ARCHITECTURE, PC
655 West Valley Road
Wayne, PA 19087
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RENOVATIONS FOR NEW MOLLIE WOODS 16 BED
PSYCHIATRIC HOSPITAL
HEATHERWOOD - ONE STORY BUILDING
WOODS SERVICES
LANGHORNE, PA 19047

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	2/2/26	BID ISSUE

REVISIONS

DRAWN BY:	REVIEWED BY:
JFC	CHC III
PLOT SCALE:	DATE:
AS NOTED	4/30/24

PROJECT FILE LOCATION:
N:\

DRAWING TITLE:
EXTERIOR ELEVATIONS AND WINDOW TYPES

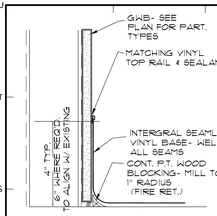
DRAWING NO:
A6.3

DOOR / FRAME / HARDWARE SCHEDULE

LOCATION		DOOR / WINDOW							FRAME						HARDWARE						
DOOR NO.	ROOM NAME	SIZE	TYPE	GLAZ.	RT'NG	MAT'L	FINISH	THICK	TYPE	MAT'L	FINISH	JAMB	HEAD	DEPTH	LOCK	CLSR.	HINGE	OTHER	KICK	REMARKS
101A	SALLY PORT	2@ 3'-6"X7'-0"	FH2	¼" LEXAN	-	H.M.	PTD.	1-3/4"	A2	H.M.	PTD.	32	32	5-7/8"	EXIT.	AUTO	CONT.	KPD	-	MAGNETIC LOCK TIED INTO FIRE ALARM (15 SEC. DELAY.) KEYPAD INTERCOM WITH CAMERA
101B	SALLY PORT	2@ 3'-6"X7'-0"	FH2	¼" LEXAN	-	H.M.	PTD.	1-3/4"	A2	H.M.	PTD.	30	30	5-7/8"	EXIT.	AUTO	CONT.	CAMERA	-	MAGNETIC LOCK TIED INTO FIRE ALARM (15 SEC. DELAY.) CAMERA
102	CONSULTATION	3'-8"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8XIST.	OFFICE	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
103A	SEMI BEDROOM 1	3'-8"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	PAS.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
103B	SEMI BEDROOM 2	3'-8"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	PAS.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
103AB	BATHROOM	3'-0"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	A	H.M.	PTD.	30	30	5-7/8"	PRIV.	-	CONT. 180°	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
104A	BEDROOM 3	3'-8"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	PAS.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
104B	TOILET	3'-0"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	A	H.M.	PTD.	30	30	5-7/8"	PRIV.	-	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
105A	BEDROOM 4	3'-8"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	PAS.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
105B	TOILET	3'-0"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	A	H.M.	PTD.	30	30	5-7/8"	PRIV.	-	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
106A	BEDROOM 5	3'-8"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	PAS.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
106B	TOILET	3'-0"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	A	H.M.	PTD.	30	30	5-7/8"	PRIV.	-	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
107A	CENTRAL BATH 1	3'-8"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	DA	EXIST.	PTD.	DA	DA	8"	PAS.	OH-C	PIVOT	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
107B	CENTRAL BATH 1	2'-0"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	CLOS.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
108	VISITOR BELONGINGS	3'-0"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	STOR.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
109	CLEAN WORKROOM	3'-0"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	STOR.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
110	MECH. ROOM	3'-0"X7'-0"	F	-	-	H.M.	PTD.	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	STOR.	OH-S	BB-SST	-	-	-
111	MECH. ROOM	3'-8"X7'-0"	F	-	45 MIN.	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	STOR.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
112	BOILER ROOM	3'-8"X7'-0"	F	-	EXIST. 45 MIN.	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	STOR.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT CERTIFY RATING OF EXISTING FRAME
113A	DINING	3'-8"X7'-0"	F	-	EXIST. 45 MIN	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	PAS.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT CERTIFY RATING OF EXISTING FRAME
113B	DINING	3'-8"X7'-0"	F	-	45 MIN	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	PAS.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT CERTIFY RATING OF EXISTING FRAME
113C	DINING	3'-8"X7'-0"	F	-	-	H.M.	PTD.	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	EXIT	OH-C	CONT.	-	-	MAGNETIC LOCK TIED INTO FIRE ALARM (15 SEC. DELAY.) TAMPER PROOF HARDWARE / LIGATURE RESISTANT. EXTERIOR WETHER STRIPPING AND THRESHOLD
113D	DINING	3'-8"X7'-0"	F	-	-	H.M.	PTD.	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	EXIT	OH-C	CONT.	-	-	MAGNETIC LOCK TIED INTO FIRE ALARM (15 SEC. DELAY.) TAMPER PROOF HARDWARE / LIGATURE RESISTANT. EXTERIOR WETHER STRIPPING AND THRESHOLD
113AA	PREP KITCHEN	3'-0"X7'-0"	NV	FIRE GLASS	45 MIN	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	A	H.M.	PTD.	31	31	5-7/8"	CLAS.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
113AB	PREP KITCHEN	3'-0"X7'-0"	F	-	-	H.M.	PTD.	1-3/4"	M	H.M.	PTD.	30	30	8"	EXIT	OH-S	CONT.	-	10"	EXTERIOR WETHER STRIPPING AND THRESHOLD
114A	NURSE STATION	3'-0"X7'-0"	FH	FIRE GLASS	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	CLAS.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
114B	MED ROOM	3'-0"X7'-0"	FH	FIRE GLASS	45 MIN	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	A	H.M.	PTD.	31	31	5-7/8"	STOR.	OH-S	BB-SST	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
115	TREATMENT PLANING	3'-0"X7'-0"	F	-	45 MIN	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	CLAS.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
116	QUIET ROOM	3'-8"X7'-0"	NV	FIRE GLASS	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	CLAS.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
117	CENTRAL BATH 2	3'-8"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	DA	EXIST.	PTD.	DA	DA	8"	PAS.	OH-C	PIVOT	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
118A	BEDROOM 6	3'-0"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	PAS.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
118B	TOILET.	3'-0"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	A	H.M.	PTD.	30	30	5-7/8"	PRIV.	-	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
119A	BEDROOM 7	3'-8"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	PAS.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
119B	TOILET	3'-0"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	A	H.M.	PTD.	30	30	5-7/8"	PRIV.	-	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
120A	BEDROOM 8	3'-8"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	PAS.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
120B	TOILET	3'-0"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	A	H.M.	PTD.	30	30	5-7/8"	PRIV.	-	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
121A	BEDROOM 10	3'-8"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	PAS.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
121B	BEDROOM 9	3'-8"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	PAS.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
121AB	TOILET	3'-0"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	A	H.M.	PTD.	30	30	5-7/8"	PRIV.	-	CONT. 180°	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
122	JAN.	3'-0"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	STOR.	-	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
123	LANDRY	3'-0"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	CLAS.	-	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
124A	BEDROOM 11	3'-8"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	PAS.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
124B	TOILET	3'-0"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	A	H.M.	PTD.	30	30	5-7/8"	PRIV.	-	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
125A	BEDROOM 13	3'-8"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	PAS.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
125B	BEDROOM 12	3'-8"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	PAS.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
125AB	TOILET	3'-0"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	A	H.M.	PTD.	30	30	5-7/8"	PRIV.	-	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
126A	BEDROOM 14	3'-8"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	PAS.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
126B	TOILET	3'-0"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	A	H.M.	PTD.	30	30	5-7/8"	PRIV.	-	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
127A	BEDROOM 15	3'-8"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	PAS.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
127B	TOILET	3'-0"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	A	H.M.	PTD.	30	30	5-7/8"	PRIV.	-	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
128A	BEDROOM 16	3'-8"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	PAS.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
128B	TOILET	3'-0"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	A	H.M.	PTD.	30	30	5-7/8"	PRIV.	-	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
129	CENTRAL BATH 3	3'-0"X7'-0"	F	-	45 MIN.	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	DA	EXIST.	PTD.	DA	AD	8"	PAS.	OH-C	PIVOT	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
129B	CENTRAL BATH 3	2'-0"X7'-0"	F	-	45 MIN.	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	STOR.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT CERTIFY RATING OF EXISTING FRAME
130	SOILED WORKROOM	3'-0"X7'-0"	F	-	45 MIN.	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST	8"	STOR.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT CERTIFY RATING OF EXISTING FRAME
131A	VESTIBULE	3'-0"X7'-0"	F	-	EXIST. 45 MIN.	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	STOR.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT CERTIFY RATING OF EXISTING FRAME
131B	TELA/DATA	2@ 3'-0"X7'-0"	F2	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	A2	H.M.	PTD.	30	30	1-7/8"	CLOS	-	BB-SST	-	10"	-
132	MECH.	3'-0"X7'-0"	F	-	-	H.M.	PTD.	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	STOR.	OH-S	BB-SST	-	-	-
133A	STAFF LOUNGE	3'-8"X7'-0"	F	-	EXIST 45 MIN.	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	CLAS.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT CERTIFY RATING OF EXISTING FRAME
133B	CLOS.	2@ 3'-0"X7'-0"	F2	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	A2	H.M.	PTD.	30	30	8"	CLOS.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
134A	GROUP THERAPY	3'-8"X7'-0"	F	-	EXIST. 45 MIN.	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	CLAS.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT CERTIFY RATING OF EXISTING FRAME
134B	OFFICE	3'-0"X7'-0"	FH	¼" LEXAN	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	A	H.M.	PTD.	30	30	5-7/8"	OFC	-	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
134C	SPRINKLER CLOS.	3'-0"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	STOR.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
134D	PATIENT BELONGINGS	2@ 2'-6"X7'-0"	A2	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	A2	H.M.	PTD.	30	30	5-7/8"	STOR.	-	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
134E	PATIENT BELONGINGS	2@ 2'-6"X7'-0"	A2	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	A2	H.M.	PTD.	30	30	5-7/8"	STOR.	-	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
135	MULTI-PURPOSE	3'-0"X7'-0"	F	-	EXIST. 45 MIN.	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8"	CLAS.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT CERTIFY RATING OF EXISTING FRAME
136A	SECLUSION VESTIBULE	4'-0"X7'-0"	FN	FIRE GLASS	EXIST. 45 MIN.	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD.	EXIST.	EXIST.	8	STOR.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT CERTIFY RATING OF EXISTING FRAME
136B	SECLUSION TOILET	3'-0"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	DA	H.M.	PTD.	DA	DA	5-7/8"	PRIV.	-	PIVOT	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
136C	SECLUSION ROOM 1	4'-0"X7'-0"	FN	¼" LEXAN	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	H.M.	PTD	31	31	8"	ASY	-	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
136D	SECLUSION ROOM 2	4'-0"X7'-0"	FN	¼" LEXAN	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	A	H.M.	PTD	31	31	5-7/8"	ASY	-	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
137	CLOSET	3'-0"X7'-0"	F	-	45 MIN.	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	M	H.M.	PTD	31	31	8"	STOR.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
138A	STAFF TOILET	3'-0"X7'-0"	F	-	45 MIN.	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD	EXIST.	EXIST.	8"	PRIV	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
139A	PATIENT SWING BEDROOM	3'-8"X7'-0"	F	-	45 MIN.	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	A	H.M.	PTD	31	31	8"	OFS	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
139B	BATHROOM	3'-0"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	A	H.M.	PTD	30	30	5-7/8"	PRIV	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
140A	CONSULTATION/VISTOR	3'-8"X7'-0"	FH	FIRE GLASS	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD	EXIST.	EXIST.	5-7/8"	CLAS	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
140B	CLOS.	2@ 2'-0"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD	EXIST.	EXIST.	8"	CLOS	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
141A	ADMIN TOILET	3'-0"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD	EXIST.	EXIST.	8"	PAS.	OH-S	BB-SST	-	10"	-
141B	ADMIN TOILET	2'-0"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD	EXIST.	EXIST.	8"	CLOS.	OH-S	BB-SST	-	10"	-
142	ADMIN OFFICE 4	3'-8"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD	EXIST.	EXIST.	8"	OFS	OH-S	BB-SST	-	10"	-
142A	ADMIN. CLOS.	3'-0"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	A	H.M.	PTD	30	30	5-7/8"	CLOS	-	BB-SST	-	10"	
143	ADMIN OFFICE 3	3'-8"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD	EXIST.	EXIST.	8"	OFS	OH-S	BB-SST	-	10"	-
143A	ADMIN. CLOS.	3'-0"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	A	H.M.	PTD	30	30	5-7/8"	CLOS	-	BB-SST	-	10"	-
144	ADMIN OFFICE 2	3'-8"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD	EXIST.	EXIST.	8	OFS	OH-S	BB-SST	-	10"	-
144A	ADMIN. CLOS.	3'-0"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	A	H.M.	PTD	30	30	5-7/8"	CLOS	-	BB-SST	-	10"	-
145	ADMIN OFFICE 1	3'-8"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD	EXIST.	EXIST.	8	OFS	OH-S	BB-SST	-	M	-
145A	ADMIN. CLOS.	3'-0"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	A	H.M.	PTD	30	30	8	CLOS	-	BB-SST	-	10"	-
146A	SWING BEDROOM	3'-8"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD	EXIST.	EXIST	8	OFS	OH-S	BB-SST	-	10"	-
146B	TOILET	3'-0"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	A	H.M.	PTD	30	30	5-7/8"	PRIV	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
147	INTAKE - SEARCH ROOM	3'-8"X7'-0"	F	-	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	EXIST.	EXIST.	PTD	EXIST.	EXIST	8	CLAS	OH-C	CONT.	-	10"	-
AA	CORRIDOR	3'-8"X7'-0"	FH	¼" LEXAN	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	SL.1	H.M.	PTD.	30	30	5-7/8"	STOR.	-	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
N	CORRIDOR	3'-8"X7'-0"	FH	¼" LEXAN	-	H.M.	PTD.	1-3/4"	SL.2	H.M.	PTD.	30	30	5-7/8"	EXIT	OH-C	CONT.	KPD	-	MAGNETIC LOCK TIED INTO FIRE ALARM (15 SEC. DELAY.) TAMPER PROOF HARDWARE / LIGATURE RESISTANT. EXTERIOR WETHER STRIPPING AND THRESHOLD
BA	CORRIDOR	3'-8"X7'-0"	FH	¼" LEXAN	-	H.M.	PTD.	1-3/4"	SL.2	H.M.	PTD.	30	30	5-7/8"	EXIT	OH-C	CONT.	KPD.	-	MAGNETIC LOCK TIED INTO FIRE ALARM (15 SEC. DELAY.) TAMPER PROOF HARDWARE / LIGATURE RESISTANT. EXTERIOR WETHER STRIPPING AND THRESHOLD
CA	CORRIDOR	2@ 3'-6"X7'-0"	DE	FIRE GLASS	45 MIN.	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	DE	H.M.	PTD.	DE	DE	5-7/8"	EXIT	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
DA	CORRIDOR	2@ 3'-6"X7'-0"	DE	FIRE GLASS	45 MIN.	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	DE	H.M.	PTD.	DE	DE	5-7/8"	EXIT	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
DB	CORRIDOR	3'-8"X7'-0"	FH	¼" LEXAN	-	H.M.	PTD.	1-3/4"	SL.2	H.M.	PTD.	30	30	5-7/8"	EXIT.	OH-C	CONT.	KPD.	-	MAGNETIC LOCK TIED INTO FIRE ALARM (15 SEC. DELAY.) TAMPER PROOF HARDWARE / LIGATURE RESISTANT. EXTERIOR WETHER STRIPPING AND THRESHOLD
DC	CORRIDOR	3'-8"X7'-0"	FH	¼" LEXAN	-	H.M.	PTD.	1-3/4"	SL.2	H.M.	PTD.	30	30	5-7/8"	EXIT.	OH-C	CONT.	KPD.	-	MAGNETIC LOCK TIED INTO FIRE ALARM (15 SEC. DELAY.) TAMPER PROOF HARDWARE / LIGATURE RESISTANT. EXTERIOR WETHER STRIPPING AND THRESHOLD
EA	CORRIDOR	2@ 3'-6"X7'-0"	DE	¼" LEXAN	-	ROTARY NATURAL BIRCH	COCOA BEAN STAIN	1-3/4"	DE	H.M.	PTD.	DE	DE	5-7/8"	EXIT.	OH-C	CONT.	-	10"	TAMPER PROOF HARDWARE / LIGATURE RESISTANT
EB	CORRIDOR	3'-8"X7'-0"	FH	¼" LEXAN	-	H.M.	PTD.	1-3/4"	SL.2	H.M.	PTD.	30	30	5-7/8"	EXIT.	OH-C	CONT.	KPD.	-	MAGNETIC LOCK TIED INTO FIRE ALARM (15 SEC. DELAY.) TAMPER PROOF HARDWARE / LIGATURE RESISTANT. EXTERIOR WETHER STRIPPING AND THRESHOLD

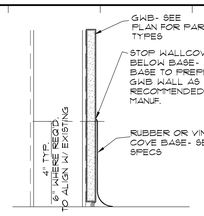
GENERAL NOTES—DOORS/FRAMES/HARDWARE

1. TYPICAL INTERIOR DOORS TO BE SOLID CORE (PC-7) WOOD DOORS TO MATCH EXISTING FACILITY STANDARD, EXCEPT AS NOTED. SUPPLIED AND INSTALLED PER ANSI/WDMA 1.S-1.A, AND AWI SECTION 1300- CUSTOM GRADE. FIRE RATED MINERAL CORE AT ALL RATED DOORS TO MEET FIRE RATING INDICATED. TYPICAL HOLLOW METAL DOORS TO BE 20 GA. (18 GA. ON EXTERIOR DOORS) WITH 16 GA STL. CHANNEL FRAME (14 GA. AT EXTERIOR DOORS). SUPPLY AND INSTALL ALL DOORS PER ANSI/WDMA 1.S-1A, AWI SECTION 1300, ASTM E-152, NFPA 252, NFPA 80, UL10B. MEET ALL POSITIVE PRESSURE REQUIREMEN



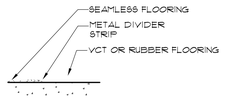
INTEGRAL SEAMLESS BASE

3" = 1'-0" NOTE: UL CLASSIFIED/ CLASS A FIRE RATING



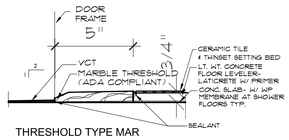
RUBBER/ VINYL COVE BASE

3" = 1'-0" NOTE: UL CLASSIFIED/ CLASS A FIRE RATING



THRESHOLD TYPE VVCT

3" = 1'-0" TYP. AT TRANSITION BETWEEN VCT & SEAMLESS



THRESHOLD TYPE MAR

3" = 1'-0" TRANSITION BETWEEN VCT AND CERAMIC TILE

NOTE: FLOORING / THRESHOLDS:

1) AT EXISTING FLOORS- REMOVE EXISTING FLOORING & ADHESIVE DOWN TO CONCRETE SLAB. SAND./ FLASH PATCH SLAB AND PROVIDE CEMENTITIOUS FLOOR LEVELLING UNDERLAYMENT & FLASH PATCH.

2) SEAMLESS FLOORING AT EXISTING FLOORS-REMOVE EXISTING FLOORING & ADHESIVE DOWN TO CONCRETE SLAB. SAND./ FLASH PATCH SLAB AND PROVIDE CEMENTITIOUS FLOOR LEVELLING UNDERLAYMENT & FLASH PATCH ENTIRE FLOOR. WELD SEAM AT SEAMLESS FLOORS TYP.

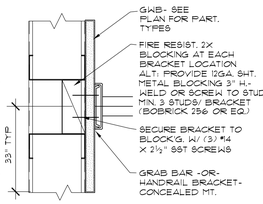
3) AT ALL NEW FLOORS TO ALIGN WITH EXISTING- REMOVE EXISTING FLOORING APPROXIMATELY 6-FEET BACK & CHIP./ SAND AND LEVELL SLAB TO ALIGN WITH NEW FLOORING AS REQUIRED. REINSTALL FLOORING TO MATCH EXISTING.

4) WATERPROOF MEMBRANE REQUIRED AT TUB & SHOWER ROOMS TYP.

5) EPOXY ADHESIVE REQUIRED UNDER HOSPITAL BEDS, SURGICAL TABLES AND MOVEABLE RADIOLOGY EQUIPMENT- COORDINATE LAYOUT W/ EQUIPMENT PLAN.

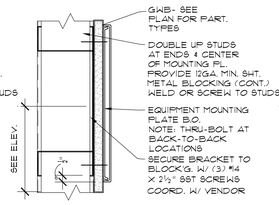
6) MOISTURE TEST SLABS TYPICAL & INSTALL FLOORING MATERIALS PER MANUFACTURER'S RECOMMENDATIONS FOR BEST PRACTICES.

7) PROVIDE SOLID VINYL TRANSITION STRIPPING WHEREVER CHANGE OF FLOORING OCCURS. EDGES OF FLOORING ARE TO BE SECURED AND CONCEALED BELOW STRIP. TRANSITION STRIP COLOR IS TO MATCH COVE BASE COLOR. IF TRANSITION OCCURS AT A DOOR LOCATION, THE TRANSITION SHALL BE CENTERED ON THE DOOR. IF COLOR IS LIGHT AND WILL SHOW DIRT AND TRAFFIC, A SUBSTITUTE DARKER COLOR IS TO BE REVIEWED AND APPROVED BY THE ARCHITECT.



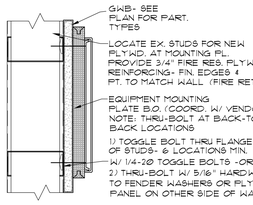
MOUNTING PLATE

3" = 1'-0" TYP. AT HANDRAILS & GRAB BARS



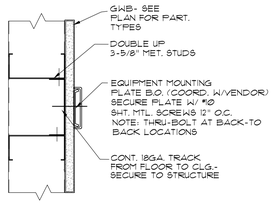
MOUNTING PLATE

3" = 1'-0" TYP. AT WALL MT. EQUIPMENT



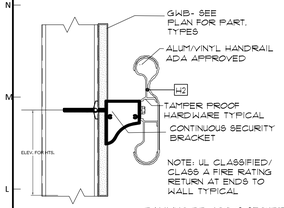
MOUNTING PLATE

3" = 1'-0" TYP. AT WALL MT. EQUIPMENT AT EXIST. WALLS REVIEW W/ ARCHITECT



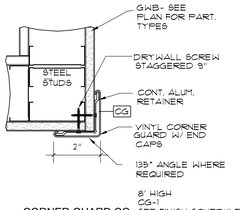
MOUNTING PLATE (PLAN VIEW)

3" = 1'-0" TYP. AT WALL MT. MONITOR BRACKETS



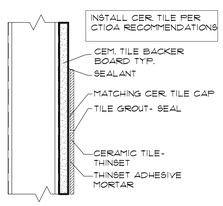
HANDRAIL 'H2' PAINLING BR-4000VS SECURITY HANDRAIL OR APPROVED EQUAL

3" = 1'-0" TYP. AT SECURITY WALL MT. CORRIDOR HANDRAILS



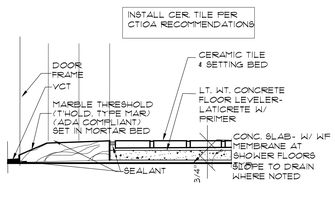
CORNER GUARD CG SEE FINISH SCHEDULE

3" = 1'-0" TYP. AT WALL MT. CORNER GUARDS (TYPE CG)



CERAMIC WALL TILE

3" = 1'-0" TYP. AT WALL/ WAINSCOT NOTED CT



CERAMIC TILE FLOOR

3" = 1'-0" TYP. AT FLOOR NOTED CT

GENERAL NOTES-FINISHES

FOR BIDDING ONLY- INTERIOR FINISH SELECTIONS TO BE PROVIDED BY OWNER

CONTRACTOR TO REVIEW ALL SPECIFICATIONS AND DRAWINGS PRIOR TO ORDERING MATERIALS OR COMMENCING CONSTRUCTION. LOCATION DESCRIPTIONS FOR REFERENCE ONLY. SEE DRAWINGS FOR EXACT LOCATIONS. ORDER ALL MATERIALS PROMPTLY UPON REWARD OF CONTRACT & COORDINATE SCHEDULE OF LONG LEAD TIME ITEMS. RETURN EXTRA STOCK TO OWNER. ALL FINISHES TO BE SUPPLIED STORED AND INSTALLED PER MANUFACTURER'S BEST PRACTICE RECOMMENDATIONS & TO MEET ALL APPLICABLE CODES.

FLOOR

VCT VINYL COMPOSITION TILE

ALL VCT TO BE AS MANUFACTURED BY ARMSTRONG 12"X12"X1/8" GAUGE. GRAIN TO RUN IN ONE DIRECTION. FS SS-T-312, TYPE IV, COMPOSITION 1. FLASH PATCH FLOOR & INSTALL PER MANUF. RECOMMENDATIONS. MOISTURE TEST SLABS.

VCT-1 ARMSTRONG PREMIUM EXCELON- ALLOW 4 COLORS COLORS AND PATTERNS TO BE SELECTED

SML SEAMLESS VINYL FLOOR

ALL SEAMLESS FLOORING TO BE AS MANUFACTURED BY ARMSTRONG .080" GAUGE, MEDINTECH, WITH CAMOUFLAGE WELDING RODS FS L-F-475A, TYPE II, GRADE A. FIRE TEST: ASTM E648, ASTM E662 FLASH PATCH FLOOR & INSTALL PER MANUF. RECOMMENDATIONS. EPOXY ADHESIVE REQ'D. BELOW HOSPITAL BEDS & MOVEABLE EQUIP. MOISTURE TEST SLABS FOR ALL FLOORING MATERIALS.

SML-1 ARMSTRONG MEDINTONE HOMOG. VINYL FLOORING FIELD COLOR TO BE SELECTED

SML-2 ARMSTRONG MEDINTONE HOMOG. VINYL FLOORING BORDER COLOR TO BE SELECTED

CTF CERAMIC TILE FLOOR

ALL CERAMIC FLOOR TILE TO BE DALTILE OR EQUAL ON MORTAR BED AND LATICRETE WATEPROOF MEMBRANE 2X2X1/4 NOMINAL, UNGLAZED, SLIP RESISTANT FINISH-CONFORM TO ANSI/TCA A137.1, A118.6 INSTALL PER TCA HANDBOOK RECOMMENDATIONS

CTF-1 AMERICAN OLEON OR EQUAL-ALLOW 3 COLORS COLORS AND PATTERNS TO BE SELECTED

BASE

RCB RUBBER COVE BASE

ALL COVE BASE TO BE AS MANUFACTURED BY ROPPE, OR EQ. 4" HIGH X 120X 1/8" GAUGE U.N.O. WITH PREMOLDED CORNERS

RCB-1 STYLE: ROPPE 4" & 6" COVE BASE SIZES 6" TYP. WHERE REQ'D. TO MATCH EXISTING

COLOR: COLOR TO BE SELECTED

SML INTEGRAL SEAMLESS BASE

SML-1 ARMSTRONG MEDINTONE HOMOG. VINYL FLOORING- WELDED INTEGRAL BASE W/ PREMOLDED CORNERS- COLOR TO MATCH ADJACENT FLOOR COLOR PROVIDE 2" WIDE VINYL REDUCER STRIP AT ALL CHANGES OF FLOOR MATERIALS. COLOR TO MATCH RCB-1

CTB CERAMIC TILE FLOOR BASE

ALL CERAMIC FLOOR TILE TO BE DALTILE OR EQUAL ON MORTAR BED AND LATICRETE WATEPROOF MEMBRANE 2X2X1/4 NOMINAL, UNGLAZED, SLIP RESISTANT FINISH-CONFORM TO ANSI/TCA A137.1, A118.6 INSTALL PER TCA HANDBOOK RECOMMENDATIONS

CTF-1 AMERICAN OLEON OR EQUAL-ALLOW 3 COLORS COLORS AND PATTERNS TO BE SELECTED

WALL

PT PAINT (GWP/ GWS/ CMS)

ALL PAINT TO BE AS MANUFACTURED BY M.A.B, BENJAMIN MOORE, SHERWIN WILLIAMS OR EQUAL. LOW VOC

WALLS: SATIN LATEX EGGSHELL FINISH
METAL/FRAMES: SEMI-GLOSS ALKYD ENAMEL
SOFFITS/CEILINGS: FLAT FINISH LATEX

ALL PAINT TO BE 2 FINISH COATS OVER PRIMER. NEW PAINT FINISH TO EXTEND TO BALANCE OF ROOM OR BREAKING POINT (CORNER OR OPENING) AS DIRECTED BY ARCH. EPOXY PT. WHERE NOTED. VENTILATE AREA & INSTALL SIGNAGE.

GWP: COLORS TO BE SELECTED (ALLOW 4 COLORS)
EPX: EPOXY COAT PAINT-COLORS TO BE SELECTED (ALLOW 4 COLORS)
CMU: PAINTED W/ EPOXY COAT PAINT-COLORS TO BE SELECTED (ALLOW 2 COLORS)

VWC VINYL WALL COVERING

ALL VWC TO BE AS MANUFACTURED AS INDICATED. VWC TO CONFORM TO CODE FOR FLAME/FUEL/SMOKE RATING OF 25/35/50 WHEN TESTED PER ANSI/ASTM 384. FILL CRACKS & SMOOTH WALL SURFACE-APPLY SURFACE SEALER TO GWB & INSTALL AS RECOMMENDED BY MANUF. DO NOT INSTALL VWC MORE THAN 1/4" BELOW VCB

VWC-1 20 OZ. COMMERCIAL GRADE. PATTERNS & COLORS TO BE SELECTED (ALLOW 4 COLORS)

CTW CERAMIC TILE WALL

ALL CERAMIC WALL TILE TO BE DALTILE OR EQUAL THINSET APPLICATION ON CEMENTITIOUS TILE BACKER BOARD 4-1/4" SQ.X1/4 NOMINAL, CUSHIONED EDGE, GLAZED FINISH CONFORM TO ANSI/TCA A137.1, A108.4/5 INSTALL PER TCA HANDBOOK RECOMMENDATIONS.

CTW-1 AMERICAN OLEON OR EQUAL-ALLOW 3 COLORS COLORS AND PATTERNS TO BE SELECTED

WALL PROTECTION
A RIGID VINYL WAINSCOT-SEE DETAIL
C CRASH RAIL-SEE DETAIL
CG CORNER GUARD-SEE DETAIL
H HANDRAIL-SEE DETAIL
T WOOD CHAIR RAIL-SEE DETAIL. COLORS TO BE SELECTED (ALLOW 4 COLORS)

PLASTIC LAMINATE/SOLID SURFACE

PLAM. PLASTIC LAMINATE

ALL CASEWORK TO BE AWI CUSTOM GRADE. INCLUDE MARINE GRADE PLYWOOD SUBSTRATE AT ALL WET LOCATIONS.

P.LAM-1 AS MANUFACTURED BY NEVAMAR OR WILSONART- COLOR: TBD (ALLOW 4 COLORS)

SOL SOLID SURFACE (SOL. SURF) ACRYLIC SOLID SURFACE MATERIAL AS MANUFACTURED BY CORIAN OR MEGANITE. EPOXY LAB TOP WHERE NOTED.

SOL-1 AS MANUFACTURED BY MEGANITE-COLOR: TBD (ALLOW 2 COLORS)

SOL-2 EPOXY RESIN LAB COUNTERTOP (NOT USED)

CEILING

SEE REFLECTED CEILING PLAN

AT NEW WORK TO BE PATCHED INTO EXISTING-MATCH EXISTING FINISHES AND EXTEND NEW FINISH TO BALANCE OF ROOM OR BREAKING POINT (CORNER OR OPENING)

ACCESSORIES SCHEDULE

TYPICAL TOILET ROOM

LEGEND	ITEM	MOUNTING	CAT. NO.	NOTE	SUPPLIED	INSTALLED
TD-S1	TOILET TISSUE DISPENSER	SURFACE	HOSP. STAND.	1/ TOILET- HOSPITAL STANDARD	OWNER	G.C.
TD-S2	LIGATURE RESISTANT TOILET PAPER DISPENSER	SURFACE	EVANS & PAUL	ANTI LIGATURE	OWNER	G.C.
SD-S1	SOAP DISPENSER	SURFACE	HOSP. STAND.	1/ SINK- HOSPITAL STANDARD	OWNER	G.C.
SD-S2	SUICIDE PREVENTION SOAP DISPENSER	SURFACE	NORVA PLASTICS	ANTI LIGATURE	OWNER	G.C.
PT-T	PAPER TOWEL W/ TRASH	SURFACE	B-3942	PUBLIC TOILET ROOMS	G.C.	G.C.
PT-R	RECESSED PAPER TOWEL DISPENSER	RECESSED	ASI	ANTI LIGATURE	G.C.	G.C.
MIR-1	MIRROR	SURFACE	B-290 SERIES	18" X 36" TYPICAL	G.C.	G.C.
MIR-2	MIRROR	SURFACE	ASI-600 SS	18" X 36" ANTI LIGATURE	G.C.	G.C.
GB-18	GRAB BAR	CONCEALED	B-5806-18	1/ TOILET	G.C.	G.C.
GB-36	GRAB BAR	CONCEALED	B-5806-36	1/ TOILET	G.C.	G.C.
GB-42	GRAB BAR	CONCEALED	B-5806-42	1/ TOILET	G.C.	G.C.
GB-18AL	SP3 GRAB BAR HORIZONTAL/SP3V VERTICAL	CONCEALED	ODD BALL INDUSTRIES	ANTI LIGATURE	G.C.	G.C.
GB-24AL	SP3 GRAB BAR HORIZONTAL	CONCEALED	ODD BALL INDUSTRIES	ANTI LIGATURE	G.C.	G.C.
GB-36AL	SP3 GRAB BAR HORIZONTAL	CONCEALED	ODD BALL INDUSTRIES	ANTI LIGATURE	G.C.	G.C.
GB-42AL	SP3 GRAB BAR HORIZONTAL	CONCEALED	ODD BALL INDUSTRIES	ANTI LIGATURE	G.C.	G.C.
GB-48AL	SP3 GRAB BAR HORIZONTAL	CONCEALED	ODD BALL INDUSTRIES	ANTI LIGATURE	G.C.	G.C.
TR-R	TRASH CAN	RECESSED		ANTI LIGATURE	G.C.	G.C.
HK-1	COAT HOOK (ROCKWOOD OR EQ.)	SURFACE	RM-802	1/ TOILET RM, EXAM RM, OFFICE DOOR	G.C.	G.C.
SHSAL	SHOWER SEAT	SURFACE		ANTI LIGATURE	G.C.	G.C.

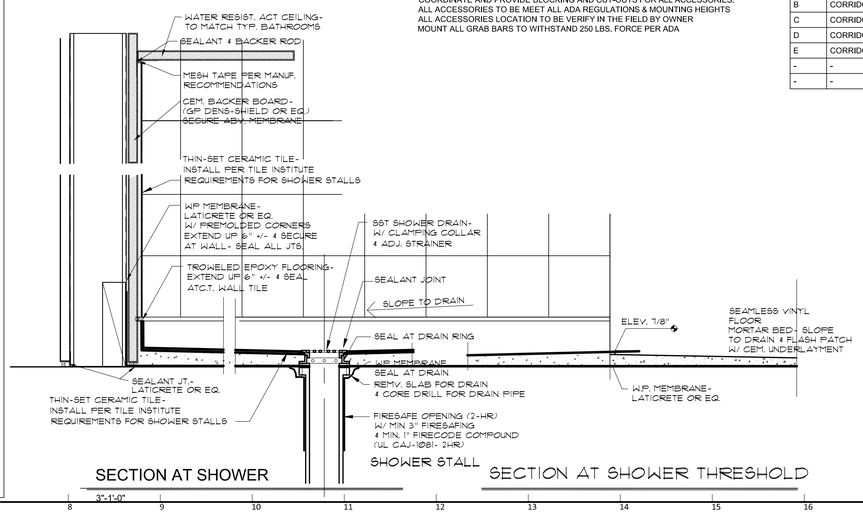
TYPICAL SINK INSTALLATION

LEGEND	ITEM	MOUNTING	CAT. NO.	NOTE		
SD-R	SOAP DISPENSER	SURFACE	HOSP. STAND.	1/ SINK- HOSPITAL STANDARD	OWNER	G.C.
PT-S	PAPER TOWEL DISPENSER	SURFACE	HOSP. STAND.	1/ SINK- HOSPITAL STANDARD	OWNER	G.C.
PPR	PLUMBING PROTECTION	SURFACE	TRUEBRO	1/ SINK- LAV GARD 2 OR EQUAL	G.C.	G.C.

JANITORS CLOSET

LEGEND	ITEM	MOUNTING	CAT. NO.	NOTE		
MOP	MOP SHELF/ HOLDER	SURFACE	B-239-34	1/ JAN. CL.	G.C.	G.C.

COORDINATE AND PROVIDE BLOCKING AND CUT-OUTS FOR ALL ACCESSORIES.
ALL ACCESSORIES TO BE MEET ALL ADA REGULATIONS & MOUNTING HEIGHTS
ALL ACCESSORIES LOCATION TO BE VERIFY IN THE FIELD BY OWNER
MOUNT ALL GRAB BARS TO WITHSTAND 250 LBS. FORCE PER ADA



SECTION AT SHOWER

3"-1'-0"

SHOWER STALL

SECTION AT SHOWER THRESHOLD

FINISH SCHEDULE												
ROOM		FLOOR / BASE			WALLS				CEILING			
NO.	NAME	FLOOR	BASE	WSCT.	N	E	S	W	MAT'L	HT.	FINISH NOTES	FINISH REMARKS
101	SALLY PORT	SML-1	SML-1 (4")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
102	CONSULTATION	SML-1	SML-1 (4")	-	CMU	CMU	CMU	CMU	GWB,	7'-10"	-	-
103A	BEDROOM 1	EPOXY	EPOXY(4")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
103B	BEDROOM 2	EPOXY	EPOXY(4")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
103AB	TOILET	EPOXY	EPOXY(4")	CTW	GWP	GWP	GWP	GWP	GWB	7'-10"	-	-
104A	BEDROOM 3	EPOXY	EPOXY(4")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
104B	TOILET	EPOXY	EPOXY(4")	CTW	CMU	CMU	GWP	GWP	GWB	7'-10"	-	-
105A	BEDROOM 4	EPOXY	EPOXY(4")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
105B	TOILET	EPOXY	EPOXY(4")	CTW	GWP	CMU	CMU	GWP	BWB	7'-10"	-	-
106A	BEDROOM 5	EPOXY	EPOXY(4")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
106B	TOILET	EPOXY	EPOXY(4")	CTW	CMU	CMU	GWP	GWP	GWB	7'-10"	-	-
107	CENTRAL BATH 1	EPOXY	EPOXY(4")	-	CTW	CTW	CTW	CTW	GWB	7'-10"	-	-
108	VISITOR BELONGINGS	SML-1	SML-1(4")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
109	CLEAN WORKROOM	SML-1	SML-1 (4")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
110	MECH ROOM	EXIST.	EXIST.	-	EXIST.	EXIST.	EXIST.	EXIST.	GWB	7'-10"	-	-
111	MECH ROOM	EXIST.	EXIST.	-	EXIST.	EXIST.	EXIST.	EXIST.	GWB	7'-10"	-	-
112	BOILER ROOM	EXIST.	EXIST.	-	EXIST.	EXIST.	EXIST.	EXIST.	GWB	7'-10"	-	-
113	COMBINED SOCIAL/DINING	SML-1	SML-1 (4")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
114	PREP KITCHEN	EPOXY	EPOXY(6")	-	GWP	CMU	CMU	CMU	GWB	7'-10"		
114A	NURSE STATION	SML-1	SML-1 (4")	-	GWP	GWP	GWP	GWP,	GWB	7'-10"	-	-
114B	MED ROOM	SML-1	SML-1 (4")	-	GWP	GWP	GWP	GWP	GWB	7'-10"	-	-
115	TREATMENT PLANNING	SML-1	SML-1	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
116	QUIET ROOM	EPOXY	EPOXY(4")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
117	CENTRAL BATH 2	EPOXY	EPOXY(4")	-	CTW	CTW	CTW	CTW	GWB	7'-10"	-	-
118A	BEDROOM 6	EPOXY	EPOXY(4")	-	CMU	CMU	CMU	GWB	GWB	7'-10"	-	-
118B	TOILET	EPOXY	EPOXY(4")	CTW	CMU	GWP	GWP	CMU	GWB	7'-10"	-	-
119A	BEDROOM 7	EPOXY	EPOXY(4")	-	CMU	CMU	CMU	GWB	GWB	7'-10"	-	-
119B	TOILET	EPOXY	EPOXY(4")	CTW	GWP	GWP	CMU	CMU	GWB	7'-10"	-	-
120A	BEDROOM 8	EPOXY	EPOXY(4")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
120B	TOILET	EPOXY	EPOXY(4")	CTW	GWP	CMU	CMU	GWP	GWB	7'-10"	-	-
121A	BEDROOM 10	EPOXY	EPOXY(4")	-	CMU	CMU	GWP	CMU	GWB	7'-10"	-	-
121B	BEDROOM 9	EPOXY	EPOXY(4")	-	GWP	CMU	CMU	CMU	GWB	7'-10"	-	-
121AB	TOILET	EPOXY	EPOXY(4")	CTW	GWP	GWP	GWP	GWP	GWB	7'-10"	-	-
122	JAN.	EPOXY	EPOXY(6")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
123	LAUNDRY	EPOXY	EPOXY(6")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
124A	BEDROOM 11	EPOXY	EPOXY(4")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
124B	TOILET	EPOXY	EPOXY(4")	CTW	GWP	CMU	CMU	GWP	GWB	7'-10"	-	-
125A	BEDROOM 13	EPOXY	EPOXY(4")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
125B	BEDROOM 12	EPOXY	EPOXY(4")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
125AB	TOILET	EPOXY	EPOXY(4")	CTW	GWP	GWP	GWP	GWP	GWB	7'-10"	-	-
126A	BEDROOM 14	EPOXY	EPOXY(4")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
126B	TOILET	EPOXY	EPOXY(4")	CTW	CMU	CMU	GWP	GWP	GWB	7'-10"	-	-
127A	BEDROOM 15	EPOXY	EPOXY(4")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
127B	TOILET	EPOXY	EPOXY(4")	CTW	CMU	GWP	GWP	CMU	GWB	7'-10"	-	-
128A	BEDROOM 16	EPOXY	EPOXY(4")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
128B	TOILET	EPOXY	EPOXY(4")	CTW	GWP	GWP	CMU	CMU	BWB	7'-10"	-	-
129	CENTRAL BATH 3	EPOXY	EPOXY(4")	-	CTW	CTW	CTW	CTW	GWB	7'-10"	-	-
130	SOILED WORKROOM	EPOXY	EPOXY(6")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
131A	VESTIBULE	SML-1	SML-1 (4")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
131B	TEL / DATA	SML-1	SML-1 (4")	-	CMU	GWP	CMU	CMU	GWB	7'-10"		
132	MECH	EXIST.	EXIST.	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
133A	STAFF LOUNGE	SML-1	SML-1 (4")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
133B	CLOS.	SML-1	SML-1 (4")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
134A	GROUP THERAPY	SML-1	SML-1 (4")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
134B	OFFICE	SML-1	SML-1 (4")	-	CMU	CMU	CMU	CMU	GWP	7'-10"	-	-
134C	SPRINKLER	EXIST	EXIST	-	CMU	CMU	CMU	CMU	GWP	7'-10"	-	-
134D	PATIENT BELONGINGS	SML-1	SML-1 (4")	-	GWP	GWP	GWP	GWP	GWB	7'-10"	-	-
134E	PATIENT BELONGINGS	SML-1	SML-1 (4")	-	GWP	GWP	GWP	GWP	GWB	7'-10"	-	-
135	MULTI-PURPOSE	SML-1	SML-1 (4")	-	CMU	CMU	CMU	GWB	GWB	7'-10"	-	-
136A	SECLUSION VESTIBULE	EPOXY	EPOXY(4")	-	GWP	GWP	CMU	CMU	GWB	7'-10"	-	-
136B	SECLUSION TOILET	EPOXY	EPOXY(4")	CTW	GWP	GWP	GWP	GWP	GWB	7'-10"	-	-
136C	SECLUSION ROOM 1	EPOXY	EPOXY(4")	-	GWP	CMU	CMU	GWP	GWB	9'-0"	-	-
136D	SECLUSION ROOM 2	EPOXY	EPOXY(4")	-	GWP	CMU	GWP	GWP	GWB	9'-0"	-	-
138	STAFF TOILET	EPOXY	EPOXY(4")	CTW	GWP	CMU	CMU	CMU	GWB	7'-10"	-	-
139A	PATIENT HOLDING ROOM	EPOXY	EPOXY(4")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
139B	BATHROOM	EPOXY	EPOXY(4")	CTW	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
140A	CONSULTATION / VISITOR	SML-1	EPOXY(4")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
140B	CLOS	SML-1	SML-1 (4")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
141	ADMIN BATH	EPOXY	EPOXY(4")	CTW	CTW	CTW	CTW	CTW	GWB	7'-10"	-	-
142	ADMIN OFFICE 4	SML-1	SML-1 (4")	-	CMU	CMU	CMU	GWB	GWB	7'-10"	-	-
143	ADMIN OFFICE 3	SML-1	SML-1 (4")	-	CMU	CMU	CMU	GWB	GWB	7'-10"	-	-
144	ADMIN OFFICE 2	SML-1	SML-1 (4")	-	CMU	CMU	CMU	GWB	GWB	7'-10"	-	-
145	ADMIN OFFICE 1	SML-1	SML-1 (4")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
146A	SWING BEDROOM	EPOXY	EPOXY (4")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
146B	TOILET	EPOXY	EPOXY (4")	CTW	CMU	CMU	CMU	CMU	GWB	7'-10"		
147	INTAKE / SEARCH ROOM	SML-1	SML-1 (4")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
A	CORRIDOR	SML-1	SML-1 (4")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
B	CORRIDOR	SML-1	SML-1 (4")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
C	CORRIDOR	SML-1	SML-1 (4")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
D	CORRIDOR	SML-1	SML-1 (4")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
E	CORRIDOR	SML-1	SML-1 (4")	-	CMU	CMU	CMU	CMU	GWB	7'-10"	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-

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RENOVATIONS FOR NEW MOLLIE WOODS 16 BED

DRAWING LEGEND

MARK	DESCRIPTION	MARK	DESCRIPTION
F2.0	FOOTING SYMBOL (REFER TO SPREAD FOOTING SCHEDULE)		INDICATES WIDE FLANGE COLUMN
P1	PILE CAP SYMBOL (REFER TO PILE CAP SCHEDULE)		INDICATES HOLLOW STRUCTURAL SECTION (HSS) COLUMN OR TUBE STEEL (TS) COLUMN
1	TILT-UP/PRECAST CONCRETE WALL CONNECTION SYMBOL (REFER TO CONNECTION DETAIL)		INDICATES HOLLOW STRUCTURAL SECTION (HSS) COLUMN OR STEEL PIPE COLUMN
2W4	SHEAR WALL SYMBOL (REFER TO SHEAR WALL SCHEDULE)		INDICATES WOOD POST
0 RFI 00	REVISION TRIANGLE		INDICATES BUNDLED STUDS
1	TILT-UP/PRECAST CONCRETE WALL PANEL NUMBER (REFER TO TILT-UP/ PRECAST CONCRETE WALL ELEVATIONS)		INDICATES CONCRETE COLUMN
1	CMU WALL REINFORCING SYMBOL (REFER TO CMU WALL REINFORCING SCHEDULE)		INDICATES PRECAST CONCRETE COLUMN
8"	CONTINUITY PLATE LENGTH (REFER TO TYPICAL DETAIL)		INDICATES MOMENT FRAME CONNECTION
DS	INDICATES DOUBLE SHEAR CONNECTION (REFER TO THE DOUBLE SHEAR PLATE CONNECTIONS DETAIL)		INDICATES PARTIALLY RESTRAINED MOMENT FRAME CONNECTION
00TB	INDICATES REINFORCING TYPE (REFER TO THE REINFORCING SCHEDULE)		INDICATES CANTILEVER CONNECTION
SR__	INDICATES NUMBER OF STUD RAIL REQUIRED AT COLUMN (REFER TO STUD RAIL DETAILS)		INDICATES DRAG CONNECTION
1	ROOF/FLOOR DIAPHRAGM NAILING SYMBOL (REFER TO DIAPHRAGM NAILING SCHEDULE)		INDICATES A LEDGER
	INDICATES DIRECTION OF DECK SPAN		INDICATES WOOD OR STEEL STUD BEARING WALL LINE PER KEY ON SHEET
T/FTG = X'-X"	ELEVATION SYMBOL (T/ REFERS TO COMPONENT THAT THE ELEVATION REFERENCES)	OR	INDICATES WOOD OR STEEL STUD SHEAR WALL LINE AND HOLD-DOWNS PER KEY ON SHEET
3	STUD BUBBLE (INDICATES NUMBER OF STUDS REQUIRED IF EXCEEDS NUMBER SPECIFIED IN PLAN NOTE)		INDICATES MASONRY/CMU WALL
	INDICATES STEP IN FOOTING (REFER TO TYPICAL STEP IN FOOTING DETAIL)		INDICATES CONCRETE/TILT-UP CONCRETE WALL
XX S1XX	DETAILS OR SECTION CUT (DETAIL NUMBER/SHEET NUMBER)		INDICATES BEARING WALL ABOVE
00 S0.0	DETAILS OR SECTION CUT IN PLAN VIEW (DETAIL NUMBER/SHEET NUMBER)		INDICATES EXISTING WALL OR NEW CONSTRUCTION BY OTHERS
XX/SXX.XX	INDICATES LOCATION OF CONCRETE WALLS, SHEAR WALLS OR BRACED FRAME ELEVATIONS		POST-TENSION DEAD END (PLAN)
	STRUCTURAL EXTENT SYMBOL SINGLE ARROW - END OF EXTENT DOUBLE ARROW - CONTINUOUS EXTENT ALONG THE ELEMENT LINE UNTIL THE ELEMENT IS INTERRUPTED		POST-TENSION STRESSING END (PLAN)
		3	POST-TENSION PROFILE (PLAN) (IN INCHES)
	INDICATES APPROXIMATE LOCATION OF PENETRATION THROUGH FRAMING MEMBER		INTERMEDIATE STRESSING (PLAN)
	INDICATES BOTTOM CHORD EXTENSIONS TO BE PROVIDED AT OWSJ'S ON COLUMN CENTER LINES		INDICATES REQUIRED SHORING (PLAN)
	INDICATES THE CRIPPLE POINT IN STEEL MEMBER, REFER TO TYP DETAIL FOR ADDL INFORMATION		

ABBREVIATIONS

L	Angle	EXCAV	Excavation	PLF	Pounds Per Linear Foot
AB	Anchor Bolt	FB	Factory-Built	PLWD	Plywood
ADDL	Additional	FD	Floor Drain	PREFAB	Prefabricated
ADH	Adhesive	FDN	Foundation	PSF	Pounds per Square Foot
ALT	Alternate	FIN	Finish	PSI	Pounds Per Square Inch
ARCH	Architectural	FLR	Floor	PSL	Parallel Strand Lumber
B or BOT	Bottom	FRP	Fiberglass Reinforced Plastic	PT	Pressure Treated
B/	Bottom Of	FRT	Fire Retardant Treated	P-T	Post-Tensioned
BF	Braced Frame	FTG	Footing	R	Radius
BLDG	Building	F/	Face of	RD	Roof Drain
BLKG	Blocking	GA	Gage	REF	Refer/Reference
BMU	Brick Masonry Unit	GALV	Galvanized	REINF	Reinforcing
BP	Baseplate	GEOTECH	Geotechnical	REQD	Required
BRBF	Buckling Restrained Braced Frame	GL	Glue Laminated Timber	RET	Retaining
		GWB	Gypsum Wall Board	SB	Site-Built
BTWN	Between	HD	Hold-down	SCBF	Special Concentric Braced Frame
BRG	Bearing	HDR	Header	SCHED	Schedule
C	Camber	HEF	Horizontal Each Face	SER	Structural Engineer of Record
CANT	Cantilever	HF	Hem-Fir	SF	Square Foot
CB	Castellated Beam	HGR	Hanger	SFRS	Seismic Force-Resisting System
C'BORE	Counterbore	HORIZ	Horizontal	SHTHG	Sheathing
CL or ℄	Centerline	HP	High Point	SIM	Similar
CLT	Cross-Laminated Timber	HSS = TS	(Hollow Structural Section)	SLBB	Short Leg Back-to-Back
CIP	Cast in Place	IBC	International Building Code	SMF	Special Moment Frame
CFMF	Cold Formed Metal Framing	ID	Inside Diameter	SOG	Slab on Grade
CFS	Cold Formed Steel	IE	Invert Elevation	SP	Southern Pine
CJ	Construction or Control Joint	IF	Inside Face	SPEC	Specification
CJP	Complete Joint Penetration	INT	Interior	SR	Studrail
CLR	Clear	k	Kips	SST	Stainless Steel
CLG	Ceiling	KSF	Kips Per Square Foot	STAGG	Stagger/Staggered
CMU	Concrete Masonry Unit	LF	Lineal Foot	STD	Standard
COL	Column	LL	Live Load	STIFF	Stiffener
CONC	Concrete	LLBB	Long Leg Back-to-Back	STL	Steel
CONN	Connection	LLH	Long Leg Horizontal	STRUCT	Structural
CONST	Construction	LLV	Long Leg Vertical	SQ	Square
CONT	Continuous	LONGIT	Longitudinal	SWWJ	Solid Web Wood Joist
C'SINK	Countersink	LP	Low Point	SYM	Symmetrical
C'TRD	Centered	LSL	Laminated Strand Lumber	T	Top
DIA or Ø	Diameter	LVL	Laminated Veneer Lumber	T&B	Top & Bottom
DIAG	Diagonal	LW	Light Weight	TC AX LD	Top Chord Axial Load
DB	Drop Beam	MAS	Masonry	TCX	Top Chord Extension
DBA	Deformed Bar Anchor	MAX	Maximum	TDS	Tie Down System
DBL	Double	MECH	Mechanical	TDSE	Turned Down Slab Edge
DEMO	Demolish	MEP	Mechanical, Electrical, Plumbing	THKND	Thickened
DEV	Development	MEZZ	Mezzanine	THRD	Threaded
DF	Douglas Fir	MF	Moment Frame	THRU	Through
DIST	Distributed	MFR	Manufacturer	TRANSV	Transverse
DL	Dead Load	MIN	Minimum	TS	Thickened Slab
DN	Down	MISC	Miscellaneous	TYP	Typical
DO	Ditto	NIC	Not In Contract	T&G	Tongue & Groove
DP	Depth/Deep	NLT	Nail-Laminated Timber	T/	Top Of
DWG	Drawing	NTS	Not To Scale	UNO	Unless Noted Otherwise
(E)	Existing	NW	Normal Weight	URM	Unreinforced Masonry Unit
EA	Each	OC	On Center	VEF	Vertical Each Face
EF	Each Face	OCBF	Ordinary Concentric Braced Frame	VERT	Vertical
EL	Elevation	OD	Outside Diameter	W	Wide
ELEC	Electrical	OF	Outside Face	WHS	Welded Headed Stud
ELEV	Elevator	OPNG	Opening	WP	Working Point
EMBED	Embedment	OPP	Opposite	WWF	Welded Wire Fabric
EQ	Equal	OWSJ	Open Web Steel Joist	W/	With
EQUIP	Equipment	OWWJ	Open Web Wood Joist	W/O	Without
EW	Each Way	PAF	Powder Actuated Fastener	±	Plus or Minus
EXP	Expansion	PC	Precast		
EXP JT	Expansion Joint	PERP	Perpendicular		
EXT	Exterior	PJP	Partial Joint Penetration		
		PL	Plate		

STRUCTURAL SHEET LIST

SHEET NUMBER	SHEET TITLE
S0.1	COVER SHEET
S0.2	GENERAL NOTES
S0.3	GENERAL NOTES
S0.4	SCHEDULE OF SPECIAL INSPECTIONS
S1.1	FOUNDATION & ROOF FRAMING PLANS
S4.1	FOUNDATION DETAILS & SECTIONS
S5.1	FRAMING DETAILS & SECTIONS
S5.2	FRAMING DETAILS & SECTIONS
Sheet Total: 8	

DCI PROJECT: 25191.ACDS
CONTACT: S. KRUMENACKER

PRICING NOTE: THESE DOCUMENTS REPRESENT THE CURRENT STATE OF A DEVELOPING DESIGN AND AS SUCH, NOT ALL CONDITIONS ARE CURRENTLY SHOWN. ALL STRUCTURAL DETAILS AND CONNECTIONS SHOULD BE ACCOUNTED FOR IN THE GENERAL CONTRACTOR PRICE AND CLOSE OF SERVICES. WHERE THESE SPECIFICS OF SITE CONDITIONS ARE ENCOUNTERED DURING CONSTRUCTION, THESE DOCUMENTS

DCI ENGINEERS
1255 Drummers Lane, Suite 201
Wayne, Pennsylvania 19087
(610) 975-2515 www.dciengineers.com
CIVIL / STRUCTURAL

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RENOVATION FOR NEW MOLLIE WOODS 16 BED

PSYCHIATRIC HOSPITAL

HEATHERWOOD - ONE STORY BUILDING
WOODS SERVICES
LANGHORNE, PA 19047

	2/2/26	BID SET
	12/01/25	BID SET
	11/20/25	CHS REVSN
	11/14/25	DCH FINAL

REVISIONS

DRAWN BY:	REVIEWED BY:
CAD	STK
PLOT SCALE:	DATE:
1/8" = 1'-0"	12/01/25

PROJECT FILE LOCATION:

DRAWING NAME:
COVER SHEET

DRAWING NO:
S0.1

E1(30x42)

DCI PROJECT: 25191.04/25
CONTACT: S. KRUMENACKER

01.00.00 GENERAL REQUIREMENTS

1. **GOVERNING CODE:** THE DESIGN AND CONSTRUCTION OF THIS PROJECT IS GOVERNED BY THE "INTERNATIONAL BUILDING CODE (IBC)," 2018 EDITION, HEREAFTER REFERRED TO AS THE IBC, AS ADOPTED AND MODIFIED BY THE CITY OF LANGHORNE, PA UNDERSTOOD TO BE THE AUTHORITY HAVING JURISDICTION (AHJ).

2. **REFERENCE STANDARDS:** REFER TO CHAPTER 35 OF THE 2018 IBC. WHERE OTHER STANDARDS ARE NOTED IN THE DRAWINGS, USE THE LATEST EDITION OF THE STANDARD UNLESS A SPECIFIC DATE IS INDICATED. REFERENCE TO A SPECIFIC SECTION IN A CODE DOES NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH THE ENTIRE STANDARD.

3. **DEFINITIONS:** THE FOLLOWING DEFINITIONS COVER THE MEANINGS OF CERTAIN TERMS USED IN THESE NOTES:
   - 3.1. "ARCHITECT/ENGINEER" - THE ARCHITECT OF RECORD AND THE STRUCTURAL ENGINEER OF RECORD.
   - 3.2. "STRUCTURAL ENGINEER OF RECORD" (SER) - THE STRUCTURAL ENGINEER WHO IS LICENSED TO STAMP AND SIGN THE STRUCTURAL DOCUMENTS FOR THE PROJECT. THE SER IS RESPONSIBLE FOR THE DESIGN OF THE PRIMARY STRUCTURAL SYSTEM.
   - 3.3. "SUBMIT FOR REVIEW" - SUBMIT TO THE ARCHITECT/SER FOR REVIEW PRIOR TO FABRICATION OR CONSTRUCTION.
   - 3.4. "PER PLAN" - INDICATES REFERENCES TO THE STRUCTURAL PLANS, ELEVATIONS, AND STRUCTURAL GENERAL NOTES.
   - 3.5. "SEISMIC FORCE RESISTING SYSTEM" (SFRS) - A RECOGNIZED STRUCTURAL SYSTEM OF COMPONENTS (BEAMS, BRACES, DRAGS, STRUTS, COLLECTORS, DIAPHRAGMS, COLUMNS, WALLS, ETC.) OF THE PRIMARY STRUCTURE THAT ARE SPECIALLY DESIGNED AND PROPORTIONED TO RESIST EARTHQUAKE-INDUCED GROUND MOTIONS AND MAINTAIN STABILITY OF THE STRUCTURE. FABRICATION AND INSTALLATION OF COMPONENTS DESIGNATED AS PART OF THE SFRS REQUIRE THE GENERAL CONTRACTOR, SUBCONTRACTOR, OR SUPPLIER WHO IS RESPONSIBLE FOR ANY PORTION OF SFRS FABRICATION OR INSTALLATION TO COMPLY WITH SPECIAL REQUIREMENTS (INCLUDING, BUT NOT LIMITED TO, MATERIAL CONTROL, COMPLIANCE CERTIFICATIONS, PERSONNEL QUALIFICATIONS, DOCUMENTATION, REPORTING REQUIREMENTS, ETC.) AND TO PROVIDE THE REQUIRED QUALITY CONTROL INCLUDING THE REQUIRED COORDINATION OF SPECIAL INSPECTIONS (QUALITY ASSURANCE - QA). SPECIAL PROVISIONS APPLY TO ANY MEMBER DESIGNATED AS PART OF THE SFRS. REFER TO PLANS, ELEVATIONS, DETAILS, DESIGN CRITERIA, AND SYMBOLS AND LEGENDS FOR APPLICABLE MEMBERS AND CONNECTIONS.

4. **SPECIFICATIONS:** REFER TO THE PROJECT SPECIFICATIONS ISSUED AS PART OF THE CONTRACT DOCUMENTS FOR INFORMATION SUPPLEMENTAL TO THESE DRAWINGS.

5. **OTHER DRAWINGS:** REFER TO THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, CIVIL AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION INCLUDING, BUT NOT LIMITED TO, DIMENSIONS, ELEVATIONS, SLOPES, DOOR AND WINDOW OPENINGS, NON-BEARING WALLS, STAIRS, FINISHES, DRAINS, WATERPROOFING, RAILINGS, DEPRESSIONS, MECHANICAL UNIT LOCATIONS, AND OTHER NON-STRUCTURAL ITEMS.

6. **STRUCTURAL DETAILS:** THE STRUCTURAL DRAWINGS ARE INTENDED TO SHOW THE GENERAL CHARACTER AND EXTENT OF THE PROJECT AND ARE NOT INTENDED TO SHOW ALL DETAILS OF THE WORK. USE ENTIRE DETAIL SHEETS AND SPECIFIC DETAILS REFERENCED IN THE PLANS AS "TYPICAL," WHEREVER THEY APPLY. SIMILARLY, USE DETAILS ON ENTIRE SHEETS WITH "TYPICAL" IN THE NAME WHEREVER THEY APPLY.

7. **STRUCTURAL RESPONSIBILITIES:** THE SER IS RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE PRIMARY STRUCTURE IN ITS COMPLETED FORM.

8. **COORDINATION:** THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING DETAILS AND ACCURACY OF THE WORK, CONFIRMING AND CORRELATING ALL QUANTITIES AND DIMENSIONS, SELECTING FABRICATION PROCESSES, TECHNIQUES OF ASSEMBLY, AND PERFORMING WORK IN A SAFE AND SECURE MANNER. ALL DIMENSIONS IN STRUCTURAL DRAWINGS WERE DEVELOPED BY OTHER DISCIPLINES. SCALING OF STRUCTURAL DRAWINGS TO DETERMINE ELEMENTS IS NOT PERMITTED.

9. **EXISTING CONDITIONS:** INFORMATION SHOWN ON THE DRAWINGS RELATED TO EXISTING CONDITIONS REPRESENT THE PRESENT KNOWLEDGE BUT WITHOUT GUARANTEE OF ACCURACY. REPORT CONDITIONS THAT CONFLICT WITH CONTRACT DOCUMENTS TO THE ARCHITECT OR SER. DO NOT DEVIATE FROM THE CONTRACT DOCUMENTS WITHOUT WRITTEN DIRECTION FROM THE ARCHITECT AND/OR SER. ALL EXISTING DIMENSIONS AND INFORMATION SHALL BE FIELD VERIFIED PRIOR TO FABRICATION AS REQUIRED TO COORDINATE WITH NEW CONSTRUCTION.

10. **NEW CONSTRUCTION:** THE CONTRACTOR SHALL REMOVE ALL INTERFERING ITEMS FOR NEW CONSTRUCTION AND SHALL REPAIR OR REPLACE ALL REMOVED ITEMS TO MATCH THE EXISTING CONDITIONS IN ACCORDANCE WITH THE ARCHITECTURAL DRAWINGS. NEW CONSTRUCTION ELEMENTS SHALL BE DESIGNED AND INSTALLED PER THE CURRENT IBC AS ALLOWED BY THE IBC.

11. **MEANS, METHODS, AND SAFETY REQUIREMENTS:** THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND ALL JOB-RELATED SAFETY STANDARDS SUCH AS OSHA AND DOSH (DEPARTMENT OF OCCUPATIONAL SAFETY AND HEALTH). THE CONTRACTOR IS RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION RELATED TO THE INTERMEDIATE STRUCTURAL CONDITIONS (I.E., MOVEMENT OF THE STRUCTURE DUE TO MOISTURE AND THERMAL EFFECTS, CONSTRUCTION SEQUENCE, TEMPORARY BRACING, ETC.).

12. **BRACING/SHORING DESIGN ENGINEER:** THE CONTRACTOR SHALL, AT THEIR DISCRETION, EMPLOY AN SSE FOR THE DESIGN OF ANY TEMPORARY BRACING AND SHORING. SUBMIT CONSTRUCTION SEQUENCE TO ARCHITECT/ENGINEER FOR REVIEW.

13. **TEMPORARY SHORING, BRACING:** THE CONTRACTOR IS RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE STRUCTURE DURING CONSTRUCTION AND SHALL PROVIDE TEMPORARY SHORING, BRACING, AND OTHER ELEMENTS REQUIRED TO MAINTAIN STABILITY UNTIL THE STRUCTURE IS COMPLETE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BE FAMILIAR WITH THE WORK REQUIRED IN THE CONSTRUCTION DOCUMENTS AND THE REQUIREMENTS FOR EXECUTING IT PROPERLY.

14. **CONSTRUCTION LOADS:** LOADS ON THE STRUCTURE DURING CONSTRUCTION SHALL NOT EXCEED THE DESIGN LOADS AS NOTED IN DESIGN CRITERIA AND LOADS SECTION OF THESE GENERAL NOTES OR THE CAPACITY OF PARTIALLY COMPLETED CONSTRUCTION AS DETERMINED BY THE CONTRACTOR'S SSE FOR BRACING/SHORING.

15. **NOTE PRIORITIES:** PLAN AND DETAIL NOTES AND SPECIFIC LOADING DATA PROVIDED ON INDIVIDUAL PLANS AND DETAIL DRAWINGS SUPPLEMENTS INFORMATION IN THESE GENERAL NOTES.

16. **DISCREPANCIES:** IN CASE OF DISCREPANCIES BETWEEN THE GENERAL NOTES, SPECIFICATIONS, PLANS/DETAILS, OR REFERENCE STANDARDS, THE ARCHITECT/ENGINEER SHALL DETERMINE WHICH SHALL GOVERN. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK. SHOULD ANY DISCREPANCY BE FOUND IN THE CONTRACT DOCUMENTS, THE CONTRACTOR WILL BE DEEMED TO HAVE INCLUDED IN THE PRICE THE MOST EXPENSIVE WAY OF COMPLETING THE WORK UNLESS PRIOR TO THE SUBMISSION OF THE PRICE, THE CONTRACTOR ASKS FOR A DECISION FROM THE ARCHITECT AS TO WHICH SHALL GOVERN. ACCORDINGLY, ANY CONFLICT IN OR BETWEEN THE CONTRACT DOCUMENTS SHALL NOT BE A BASIS FOR ADJUSTMENT IN THE CONTRACT PRICE.

17. **SITE VERIFICATION:** THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE. CONFLICTS BETWEEN THE DRAWINGS AND ACTUAL SITE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK.

18. **ADJACENT UTILITIES:** THE CONTRACTOR SHALL DETERMINE THE LOCATION OF ALL ADJACENT UNDERGROUND UTILITIES PRIOR TO EARTHWORK, FOUNDATION WORK, SHORING AND EXCAVATION. ANY UTILITY INFORMATION SHOWN ON THE DRAWINGS AND DETAILS IS APPROXIMATE AND NOT NECESSARILY COMPLETE.

19. **ALTERNATES:** ALTERNATE PRODUCTS OF SIMILAR STRENGTH, NATURE, AND FORM FOR SPECIFIED ITEMS MAY BE SUBMITTED WITH ADEQUATE TECHNICAL DOCUMENTATION (PROPER TEST REPORT, ETC.) TO THE ARCHITECT/ENGINEER FOR REVIEW. ALTERNATE MATERIALS THAT ARE SUBMITTED WITHOUT ADEQUATE TECHNICAL DOCUMENTATION OR THAT SIGNIFICANTLY DEVIATE FROM THE DESIGN INTENT OF MATERIALS SPECIFIED MAY BE RETURNED WITHOUT REVIEW. ALTERNATES THAT REQUIRE SUBSTANTIAL EFFORT TO REVIEW WILL NOT BE REVIEWED UNLESS AUTHORIZED BY THE OWNER.

20. **ADDITIONS/ALTERATIONS/REPAIRS:**
   - 20.1. ADDITIONS, ALTERATIONS, AND/OR REPAIRS TO THE EXISTING STRUCTURE HAVE BEEN ANALYZED FOR ADDITIONAL LOADING AND/OR MODIFICATION DUE TO THE ADDITION, ALTERATION, OR REPAIR.
   - 20.2. ALL AFFECTED EXISTING MEMBERS HAVE BEEN ANALYZED OR REINFORCED AS REQUIRED PER THE IEBC.
   - 20.3. ALL DEMOLITION OR REMOVAL OF ARCHITECTURAL, MECHANICAL, OR STRUCTURAL ELEMENTS SHALL NOT DAMAGE STRUCTURAL ITEMS TO REMAIN.

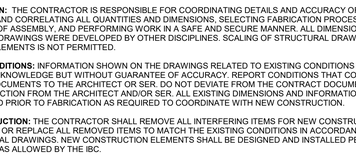
01.10.00 DESIGN CRITERIA AND LOADS

1. **OCCUPANCY:**
   RISK CATEGORY OF BUILDING PER IBC TABLE 1604.5 — III

2. **WIND DESIGN: MAIN WIND FORCE RESISTING SYSTEM:**

ULTIMATE DESIGN WIND SPEED, V_{ULT}	125 MPH
EXPOSURE CATEGORY	B
INTERNAL PRESSURE COEFFICIENT, G_{Pi}	±0.18
TOPOGRAPHIC FACTOR, K_{zt}	1.0
WIND ANALYSIS PROCEDURE USED	DIRECTIONAL

3. **WIND DESIGN: COMPONENTS AND CLADDING (C&C) PRESSURES FOR DESIGN (PSF, ULTIMATE):**



EFFECTIVE WIND AREA (FT²)

a = 5'-2"	10	20	50	100	500
ZONE 1	-37 / +16	-36 / +NAN	-36 / +16	-35 / +16	-23 / +16
ZONE 1'	-37 / +16	-36 / +NAN	-36 / +16	-35 / +16	-23 / +16
ZONE 2	-49 / +16	-44 / +16	-39 / +16	-35 / +16	-25 / +16
ZONE 3	-66 / +16	-59 / +16	-49 / +16	-42 / +16	-25 / +16
ZONE 4	-23 / +21	-22 / +21	-21 / +19	-20 / +18	-18 / +16
ZONE 5	-28 / +21	-27 / +21	-24 / +19	-22 / +18	-18 / +16

   - 3.1. COMPONENTS AND CLADDING WIND PRESSURES ARE BASED ON ASCE 7 CHAPTER 30 PART 1 "LOW-RISE BUILDINGS."
   - 3.2. COMPONENTS AND CLADDING ZONE LOCATIONS ARE BASED ON ASCE 7 FIGURE 30.3-2A FOR FLAT ROOFS.
   - 3.3. FOR PARAPETS AROUND THE PERIMETER OF THE ROOF EQUAL TO OR TALLER THAN 3', PRESSURES FROM ZONE 3 ARE TREATED AS ZONE 2.
   - 3.4. COMPONENTS AND CLADDING ZONE LOCATIONS ARE BASED ON ASCE 7 FIGURE 30.3-1 FOR WALLS.
   - 3.5. ALL PARAPET COMPONENTS AND CLADDING WIND PRESSURES SHALL BE DETERMINED THROUGH ASCE 7 FIGURE 30.6-1.

4. **SEISMIC DESIGN:**

SEISMIC DESIGN CATEGORY, SDC	B
SITE CLASS PER IBC SECTION 1613.3.2 AND ASCE 7 CHAPTER 20	D
SEISMIC IMPORTANCE FACTOR PER ASCE 7 TABLE 1.5-2, I_e	1.25
SPECTRAL RESPONSE ACCELERATION (SHORT PERIOD), S_S	0.197 g
SPECTRAL RESPONSE ACCELERATION (1-SECOND PERIOD), S_1	0.049 g
DESIGN RESPONSE ACCELERATION (SHORT PERIOD), S_{DS}	0.210 g
DESIGN RESPONSE ACCELERATION (SHORT PERIOD), S_{D1}	0.079 g
SEISMIC ANALYSIS PROCEDURE USED	EQUIVALENT LATERAL FORCE
BASIC STRUCTURAL SYSTEM	BEARING WALL SYSTEMS

5. **SNOW LOAD:**

FLAT ROOF SNOW LOAD, P_f	30 PSF [NOTE 5.1]
SNOW LOAD IMPORTANCE FACTOR, I_s	1.10 [NOTE 5.3]
GROUND SNOW LOAD, P_g	25 PSF
SNOW EXPOSURE FACTOR, C_e	0.9
THERMAL FACTOR, C_t	1.0

   - 5.1. SNOW LOAD IS UN-REDUCIBLE.
   - 5.2. SNOW LOAD BASED ON ASCE FIGURE 7-1.
   - 5.3. SNOW LOAD IMPORTANCE FACTOR PER ASCE 7 TABLE 1.5-2.

6. **DESIGN LIVE LOADS:** SEE DESIGN LOAD SCHEDULE AT THE END OF THE GENERAL NOTES FOR ALL LIVE LOAD AREA LOAD REQUIREMENTS. LOADS LISTED BELOW ARE FOR MISCELLANEOUS ITEMS.

AREA	LIVE LOADS
FAÇADE ACCESS EQUIPMENT / LIFELINE SUPPORTS	2.5 * RATED HOIST LOAD (PER IBC SECTIONS 1607.9.3 AND 1607.9.4) AND 3,100 LB IN ANY DIRECTION (LIFELINE)
INTERIOR WALLS AND PARTITIONS	5 (APPLIED HORIZONTALLY)
ROOFS	SEE SECTION 1 FOR SNOW LOAD
ROOFS - POINT LOADS TO JOIST AND GIRDER MEMBERS OPEN TO FLOOR BELOW IN OCCUPANCY CLASSES A, B, E, I, M, R, AND U	500 LB (AT ANY PANEL POINT OF TRUSS-TYPE MEMBERS OR AT ANY POINT ALONG PRIMARY STRUCTURAL MEMBERS)

7. **DESIGN DEAD LOADS:** 15 PSF

8. **DEFLECTION LIMITS FOR SSE / BIDDER-DESIGNED ELEMENTS:**

VERTICAL [NOTE 8.1]	LIMIT
ROOF MEMBERS, DEAD + LIVE/SNOW/WIND, TOTAL LOAD (TL)	L / 240
ROOF, LIVE/SNOW/WIND LOAD (RLL)	L / 360
MEMBERS SUPPORTING MASONRY	L / 1200 OR 1/4" MAX MASONRY DL ONLY
OPERABLE PARTITION SUPPORT MEMBERS	L / 600 OR 1/4" MAXIMUM

HORIZONTAL [NOTE: 8.2]	
MEMBERS SUPPORTING BRITTLE FINISHES	L / 240
MEMBERS SUPPORTING FLEXIBLE FINISHES	L / 180
MEMBERS SUPPORTING MASONRY	L / 600 AT 0.7E OR 0.7 * C&C WIND LOAD
INTERSTORY DRIFT	0.020 * STORY HEIGHT

   - 8.1. MAXIMUM VERTICAL DEFLECTION IS WHICHEVER CRITERIA YIELDS LESS DEFLECTION. L IS THE CLEAR SPAN LENGTH IN INCHES.
   - 8.2. WIND LOAD IS REDUCIBLE TO 0.42 * THE COMPONENT AND CLADDING (C&C) LOADS PER TABLE 1604.3 FOOTNOTE F.

01.20.00 SUBMITTALS

1. **SUBMIT FOR REVIEW:** SUBMITTALS OF SHOP DRAWINGS, PRODUCT DATA, AND MILL TESTS ARE REQUIRED FOR ITEMS NOTED IN THE INDIVIDUAL MATERIALS SECTIONS OF THESE GENERAL NOTES AND FOR BIDDER-DESIGNED ELEMENTS. STRUCTURAL DRAWINGS SHALL NOT BE REPRODUCED TO CREATE SHOP DRAWINGS OR SHORING DOCUMENTATION WITHOUT THE EXPRESS WRITTEN CONSENT OF DCI ENGINEERS.

2. **SUBMITTAL REVIEW PERIOD:** SUBMITTALS SHALL BE MADE IN TIME TO PROVIDE A MINIMUM OF TWO WEEKS OR TEN WORKING DAYS FOR REVIEW BY THE ARCHITECT/ENGINEER PRIOR TO THE ONSET OF FABRICATION.

3. **GENERAL CONTRACTOR'S PRIOR REVIEW:** PRIOR TO SUBMISSION TO THE ARCHITECT/ENGINEER, THE CONTRACTOR SHALL REVIEW THE SUBMITTAL FOR COMPLETENESS. DIMENSIONS AND QUANTITIES ARE NOT REVIEWED BY THE SER; THEREFORE, THEY MUST BE VERIFIED BY THE GENERAL CONTRACTOR. THE CONTRACTOR SHALL PROVIDE ANY NECESSARY DIMENSIONAL DETAILS NOT REQUESTED BY THE DETAILER AND PROVIDE THE CONTRACTOR'S REVIEW STAMP AND SIGNATURE BEFORE FORWARDING TO THE ARCHITECT/ENGINEER.

4. **SHOP DRAWING REVIEW:** ONCE THE CONTRACTOR HAS COMPLETED THEIR REVIEW, THE SER WILL REVIEW THE SUBMITTAL FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT AND THE CONTRACT DOCUMENTS OF THE BUILDING AND WILL STAMP THE SUBMITTAL ACCORDINGLY. MARKINGS OR COMMENTS SHALL NOT BE CONSTRUED AS RELIEVING THE CONTRACTOR FROM COMPLIANCE WITH THE PROJECT PLANS AND SPECIFICATIONS NOR DEPARTURES THERE FROM. THE SER WILL RETURN SUBMITTALS IN THE FORM IN WHICH THEY ARE SUBMITTED (EITHER HARD COPY OR ELECTRONIC). FOR HARD COPY SUBMITTALS, THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING THE REQUIRED NUMBER OF COPIES TO THE SER FOR REVIEW. PRIOR TO THE FIRST SUBMITTAL, CONTRACTOR SHALL PROVIDE DESIGN TEAM WITH A SHOP DRAWING SUBMITTAL SCHEDULE TO ALLOW THE SER APPROPRIATE NOTICE OF SUBMITTALS, DUE DATES AND ALLOW FOR THE APPROPRIATE STAFFING. REVIEW OF "MAKE CORRECTIONS NOTED" SHOP DRAWINGS BEYOND ONE RE-SUBMITTAL WILL REQUIRE ADDITIONAL FEE.

5. **SHOP DRAWING DEVIATIONS:** WHEN SHOP DRAWINGS (COMPONENT DESIGN DRAWINGS) DIFFER FROM OR ADD TO THE REQUIREMENTS OF THE STRUCTURAL DRAWINGS, THEY SHALL BE DESIGNED AND STAMPED BY THE RESPONSIBLE SSE.

01.30.00 DEFERRED SUBMITTALS

1. **BIDDER-DESIGNED ELEMENTS:** SUBMIT "BIDDER-DESIGNED" DEFERRED SUBMITTALS TO THE ARCHITECT AND SER FOR REVIEW. THE DEFERRED SUBMITTALS SHALL ALSO BE SUBMITTED TO THE CITY FOR APPROVAL IF REQUIRED BY THE CITY. DESIGN OF PREFABRICATED, "BIDDER-DESIGNED," MANUFACTURED, PRE-ENGINEERED, OR OTHER FABRICATED PRODUCTS SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS:
   - 1.1. DESIGN CONSIDERS TRIBUTARY DEAD, LIVE, WIND, AND EARTHQUAKE LOADS IN COMBINATIONS REQUIRED BY THE IBC.
   - 1.2. DESIGN WITHIN THE DEFLECTION LIMITS NOTED IN THESE GENERAL NOTES AND AS SPECIFIED OR REFERENCED IN THE IBC.
   - 1.3. DESIGN SHALL CONFORM TO THE SPECIFICATIONS AND REFERENCE STANDARDS OF THE GOVERNING CODE.
   - 1.4. SUBMITTAL SHALL INCLUDE:
     - 1.4.1. CALCULATIONS PREPARED, STAMPED, AND SIGNED BY THE SSE DEMONSTRATING CODE CONFORMANCE.
     - 1.4.2. ENGINEERED COMPONENT DESIGN DRAWINGS ARE PREPARED, STAMPED, AND SIGNED BY THE SSE.
     - 1.4.3. PRODUCT DATA, TECHNICAL INFORMATION AND MANUFACTURER'S WRITTEN REQUIREMENTS, AND AGENCY APPROVALS AS APPLICABLE.
     - 1.4.4. THE SSE MAY SUBMIT TO THE ARCHITECT/ENGINEER A REQUEST TO UTILIZE RELEVANT ALTERNATE DESIGN CRITERIA OF SIMILAR NATURE AND GENERAL EQUIVALENCY WHICH IS RECOGNIZED BY THE CODE AND ACCEPTABLE TO THE AHJ. SUBMIT ADEQUATE DOCUMENTATION OF DESIGN.

2. **GENERAL CONTRACTOR'S PRIOR REVIEW:**
   - 2.1. ONCE THE CONTRACTOR HAS COMPLETED THEIR REVIEW OF THE SSE COMPONENT DRAWINGS, THE SER WILL REVIEW THE SUBMITTAL FOR GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING AND WILL STAMP THE SUBMITTAL ACCORDINGLY.
   - 2.2. REVIEW OF THE SSE'S SHOP DRAWINGS (COMPONENT DESIGN DRAWINGS) IS FOR COMPLIANCE WITH DESIGN CRITERIA AND COMPATIBILITY WITH THE DESIGN OF THE PRIMARY STRUCTURE AND DOES NOT RELIEVE THE SSE OF RESPONSIBILITY FOR THAT DESIGN.
   - 2.3. ALL NECESSARY BRACING, TIES, ANCHORAGE, AND PROPRIETARY PRODUCTS SHALL BE FURNISHED AND INSTALLED PER MANUFACTURER'S INSTRUCTIONS OR THE SSE'S DESIGN DRAWINGS AND CALCULATIONS.
   - 2.4. BIDDER-DESIGNED ELEMENTS INCLUDE BUT ARE NOT LIMITED TO:
     - 2.4.1. MECHANICAL, ELECTRICAL, PLUMBING, AND SPRINKLER HANGER PLANS
     - 2.4.2. TEMPORARY SHORING SYSTEMS
     - 2.4.3. SELECT STRUCTURAL STEEL CONNECTIONS AS SPECIFIED UNDER STRUCTURAL STEEL SECTION OF THESE GENERAL NOTES
     - 2.4.4. FAÇADE ACCESS EQUIPMENT / LIFELINE SUPPORTS

01.40.00 INSPECTIONS, QUALITY ASSURANCE, AND TEST REQUIREMENTS

1. **INSPECTIONS:** FOUNDATIONS, FOOTINGS, AND UNDER SLAB SYSTEMS AND FRAMING ARE SUBJECT TO INSPECTION BY THE BUILDING OFFICIAL IN ACCORDANCE WITH IBC SECTION 110.3. THE CONTRACTOR SHALL COORDINATE ALL REQUIRED INSPECTIONS WITH THE BUILDING OFFICIAL.

2. **SPECIAL INSPECTIONS, VERIFICATIONS, AND TESTS:** SPECIAL INSPECTIONS, VERIFICATIONS, AND TESTING SHALL BE DONE IN ACCORDANCE WITH IBC CHAPTER 17, THE STATEMENT AND SCHEDULES OF SPECIAL INSPECTIONS LISTED IN THESE DRAWINGS, AND THE AHJ STATEMENT OF SPECIAL INSPECTION AND/OR STATEMENT OF STRUCTURAL OBSERVATIONS.

3. **CONTRACTOR RESPONSIBILITY:** PRIOR TO ISSUANCE OF THE BUILDING PERMIT, THE CONTRACTOR IS REQUIRED TO PROVIDE THE AHJ A SIGNED, WRITTEN ACKNOWLEDGEMENT OF THE CONTRACTOR'S RESPONSIBILITIES ASSOCIATED WITH THE STATEMENT OF SPECIAL INSPECTIONS, PREVIOUSLY REFERENCED, ADDRESSING THE REQUIREMENTS LISTED IN IBC SECTION 1704.4. THE CONTRACTOR IS REFERRED TO IBC SECTIONS 1705.13.5 AND 1705.13.6 FOR ARCHITECTURAL AND MEP BUILDING SYSTEMS THAT MAY BE SUBJECT TO ADDITIONAL INSPECTIONS (BASED ON THE BUILDING'S DESIGNATED SEISMIC DESIGN CATEGORY LISTED IN THE DESIGN CRITERIA AND LOADS SECTION OF THESE GENERAL NOTES), INCLUDING ANCHORAGE OF HVAC DUCTWORK CONTAINING HAZARDOUS MATERIALS, PIPING SYSTEMS AND MECHANICAL UNITS CONTAINING FLAMMABLE, COMBUSTIBLE, OR HIGHLY TOXIC MATERIALS, ELECTRICAL EQUIPMENT USED FOR EMERGENCY OR STANDBY POWER, EXTERIOR WALL PANELS, AND SUSPENDED CEILING SYSTEMS.

02.00.00 SOILS AND FOUNDATION

1. **REFERENCE STANDARDS:** CONFORM TO IBC CHAPTER 18 "SOILS AND FOUNDATIONS"

2. **CONTRACTOR'S RESPONSIBILITIES:** CONTRACTOR SHALL BE RESPONSIBLE FOR SUBGRADE PREPARATIONS, PILE INSTALLATION PROCEDURES, GROUND WATER MANAGEMENT AND STEEP SLOPE 'BEST MANAGEMENT PRACTICES'.

3. **GEOTECHNICAL SUBGRADE INSPECTION:** THE GEOTECHNICAL ENGINEER SHALL INSPECT ALL SUBGRADES AND PREPARED SOIL BEARING SURFACES PRIOR TO THE PLACEMENT OF FOUNDATION REINFORCING STEEL AND CONCRETE. GEOTECHNICAL ENGINEERS SHALL PROVIDE A LETTER TO THE OWNER STATING THAT SOILS ARE ADEQUATE TO SUPPORT THE "ALLOWABLE FOUNDATION BEARING PRESSURE(S)" SHOWN BELOW. ASSUMED VALUES SHALL BE FIELD VERIFIED BY THE BUILDING OFFICIAL OR THE GEOTECHNICAL ENGINEER PRIOR TO PLACING CONCRETE.

4. **DESIGN SOIL VALUES:**

SAFETY FACTOR PER SOILS REPORT	1.5
ALLOWABLE FOUNDATION BEARING PRESSURE	3,000 PSF - NATIVE
PASSIVE LATERAL PRESSURE	360 PSF/FT
ACTIVE LATERAL PRESSURE (UNRESTRAINED)	40 PSF/FT
AT-REST LATERAL PRESSURE (RESTRAINED)	60 PSF/FT
COEFFICIENT OF SLIDING FRICTION	0.35

5. **FOUNDATIONS AND FOOTINGS:** FOUNDATIONS SHALL BEAR ON EITHER COMPETENT NATIVE SOIL OR COMPACTED STRUCTURAL FILL AS PER THE GEOTECHNICAL REPORT. EXTERIOR PERIMETER FOOTINGS SHALL BEAR NOT LESS THAN 30" BELOW FINISH GRADE UNLESS OTHERWISE SPECIFIED BY THE GEOTECHNICAL ENGINEER AND/OR THE BUILDING OFFICIAL.

6. **FOUNDATION WALLS:** ALL WALL RETAINING EARTH SHALL NOT BE BACKFILLED UNTIL A MINIMUM 70% COMPRESSIVE STRENGTH IS ACHIEVED. BASEMENT WALLS SHALL NOT BE BACKFILLED, UNLESS ADEQUATELY BRACED OR UNTIL FLOOR SLAB IS IN PLACE.

7. **FOOTING DEPTH:** TOPS OF FOOTINGS SHALL BE AS SHOWN ON PLANS WITH VERTICAL CHANGES AS INDICATED WITH STEPS IN THE FOOTINGS. LOCATIONS OF STEPS SHOWN ARE APPROXIMATE AND SHALL BE COORDINATED WITH THE CIVIL GRADING PLANS.

8. **SLABS-ON-GRADE:** ALL SLABS-ON-GRADE SHALL BEAR ON COMPACTED STRUCTURAL FILL OR COMPETENT NATIVE SOIL PER THE GEOTECHNICAL REPORT. ALL MOISTURE SENSITIVE SLABS-ON-GRADE OR THOSE SUBJECT TO RECEIVE MOISTURE SENSITIVE COATINGS/COVERING SHALL BE PROVIDED WITH AN APPROPRIATE CAPILLARY BREAK AND VAPOR BARRIER/RETARDANT OVER THE SUBGRADE PREPARED AND INSTALLED AS NOTED IN THE GEOTECHNICAL REPORT AND BARRIER MANUFACTURER'S WRITTEN RECOMMENDATIONS AND COORDINATED WITH THE FINISHES SPECIFIED BY THE ARCHITECT.

03.20.00 CONCRETE REINFORCEMENT

1. **REFERENCE STANDARDS:** CONFORM TO:
   - 1.1. ACI 301 "STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE," SECTION 3 "REINFORCEMENT AND REINFORCEMENT SUPPORTS"
   - 1.2. ACI SP-66 "ACI DETAILING MANUAL"
   - 1.3. CRSI MSP "MANUAL OF STANDARD PRACTICE"
   - 1.4. ANSI/AWS D1.4 "STRUCTURAL WELDING CODE - REINFORCING STEEL"
   - 1.5. IBC CHAPTER 19 "CONCRETE"
   - 1.6. ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE"
   - 1.7. ACI 117 "SPECIFICATIONS FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS"

2. **SUBMITTALS:**
   - 2.1. CONFORM TO ACI 301 SECTION 3.1.2. SUBMIT PLACING DRAWINGS SHOWING FABRICATION DIMENSIONS AND PLACEMENT LOCATIONS OF REINFORCEMENT AND REINFORCEMENT SUPPORTS.
   - 2.2.

3. **MATERIALS:**

REINFORCING BARS [NOTE 3.1]	ASTM A615, GRADE 60, DEFORMED BARS
SMOOTH WELDED WIRE FABRIC	ASTM A1064
DEFORMED WELDED WIRE FABRIC	ASTM A1064
BAR SUPPORTS	CRSI MSP CHAPTER 3
TIE WIRE	16 GAUGE OR HEAVIER. BLACK ANNEALED

   - 3.1. ASSUME GRADE 60 REINFORCEMENT UNLESS NOTED OTHERWISE ON PLAN. REFERENCE PLANS FOR HIGH STRENGTH REINFORCING LOCATIONS, INDICATED BY (GR 80) OR (GR 100).

4. **FABRICATION:** CONFORM TO ACI 301 SECTION 3.2.2 AND ACI SP-66.

5. **WELDING:** BARS SHALL NOT BE WELDED UNLESS AUTHORIZED. WHEN AUTHORIZED, CONFORM TO ACI 301 SECTION 3.2.2.2 AND AWS D1.4, AND PROVIDE ASTM A706, GRADE 60 REINFORCEMENT.

6. **PLACING:** CONFORM TO ACI 301 SECTION 3.3.2. PLACING TOLERANCES SHALL CONFORM TO ACI 117.

7. **CONCRETE COVER:** CONFORM TO THE FOLLOWING COVER REQUIREMENTS UNLESS NOTED OTHERWISE ON PLAN:

CONCRETE CAST AGAINST EARTH	3"
CONCRETE EXPOSED TO EARTH OR WEATHER	2"
TIES IN COLUMNS AND BEAMS	1-1/2"
BARS IN SLABS	3/4"
BARS IN WALLS	3/4"
EXTERIOR BARS IN TILT-UP PANELS	1"

8. **SPLICES:** CONFORM TO ACI 301 SECTION 3.3.2.7. REFER TO TYPICAL LAP SPLICE AND DEVELOPMENT LENGTH SCHEDULE IN THESE DRAWINGS FOR TYPICAL REINFORCEMENT SPLICES. SPLICES INDICATED ON INDIVIDUAL SHEETS SHALL CONTROL OVER THE SCHEDULE. MECHANICAL CONNECTIONS MAY BE USED WHEN APPROVED BY THE SER. FOR REINFORCING WITHIN THE LATERAL SYSTEM AND REINFORCING CONNECTING THE DIAPHRAGM SLAB TO THE LATERAL SYSTEM, MECHANICAL SPLICE STRENGTH IS INCREASED TO DEVELOP 125% OF THE SPECIFIED TENSILE STRENGTH OF THE SPLICES

12. CONSTRUCTION: MASONRY SHALL BE CONSTRUCTED IN ACCORDANCE WITH IBC SECTION 2104 AND TMS 602 PART 3.

13. COLD AND HOT WEATHER CONSTRUCTION: COLD AND HOT WEATHER CONSTRUCTION SHALL BE IN ACCORDANCE WITH TMS 602 ARTICLES 1.8C AND 1.8D.

14. BLOCK PATTERN: USE RUNNING BOND UNLESS NOTED OTHERWISE. FOR STACK BOND, FOLLOW CRITERIA IN TMS 402 SECTION 4.5.

15. GROUTED CELLS: FILL ALL CELLS THOSE CELLS WHICH CONTAIN REINFORCING STEEL WITH GROUT UNLESS NOTED OTHERWISE ON PLAN. FILL ALL CELLS AT STAIR TOWERS AND ELEVATOR SHAFTS WITH GROUT UNLESS NOTED OTHERWISE ON PLAN. MINIMUM GROUTING SPACES AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH TMS 402 SECTIONS 3.2 AND 3.5.

16. GROUT POUR HEIGHT: GROUT POUR HEIGHT SHALL NOT EXCEED HEIGHT SPECIFIED IN TMS 602 ARTICLE 3.5C.

16.1. MASONRY BLOCKS SHALL BE ADEQUATELY BRACED TO WITHSTAND FLUID PRESSURES OF GROUT POUR, SEE TEMPORARY BRACING SECTION THESE GENERAL NOTES.

17. GROUT LIFTS: UNLESS NOTED OTHERWISE, GROUT LIFTS AND POUR HEIGHT SHALL NOT EXCEED 5'-4". GROUT LIFTS SHALL NOT EXCEED SPACING OF INTERMEDIATE REINFORCED BOND BEAMS. GROUT LIFTS EXCEEDING 5'-4" SHALL BE APPROVED BY THE SER.

18. **REINFORCING COVER AND CLEARANCE REQUIREMENTS:** UNLESS NOTED OTHERWISE:

18.1. CLEAR DISTANCE BETWEEN PARALLEL BARS (AND BETWEEN ADJACENT PAIRS OF LAP SPLICED BARS) SHALL BE EQUAL TO THE ADJACENT BAR DIAMETER (FOR BARS GREATER THAN #8), AND NOT LESS THAN:

18.1.1. 1" AT 8" AND SMALLER BLOCK

18.1.2. 2" AT 10" BLOCK

18.1.3. 3" AT 12" BLOCK

18.2. CLEARANCE (CLEAR SPACE) BETWEEN THE BLOCK AND THE REINFORCING SHALL BE:

18.2.1. 1/4" AT FINE GROUT

18.2.2. 1/2" AT COURSE GROUT

18.3. MASONRY COVER (INCLUDING GROUT AND BLOCK WALL) AT MASONRY FACE EXPOSED TO EARTH OR WEATHER SHALL BE:

18.3.1. 1-1/2" MINIMUM

18.3.2. 2" FOR BARS #6 AND LARGER

19. CONTROL AND EXPANSION JOINTS: REFERENCE DRAWINGS FOR TYPICAL DETAILS OF MASONRY CONTROL AND EXPANSION JOINTS. LOCATION OF CONTROL AND EXPANSION JOINTS SHALL BE APPROVED BY THE SER. UNLESS NOTED OTHERWISE ON PLAN, INSTALL CONTROL AND EXPANSION JOINTS AT THE FOLLOWING:

19.1. CONTINUOUS WALLS: VERTICAL JOINTS AT THE LESSER OF 1.5 * THE WALL HEIGHT OR 25' OC MAXIMUM.

19.2. CORNERS AND INTERSECTING WALLS: FIRST VERTICAL JOINT FROM THE CORNER AT LESSER OF 1.25 * THE WALL HEIGHT OR 16' OC MAXIMUM.

19.3. ABRUPT CHANGES IN WALL HEIGHT AND WALL THICKNESS SUCH AS ADJACENT TO COLUMNS OR PILASTERS.

20. TEMPORARY BRACING: CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY BRACING OF MASONRY DURING CONSTRUCTION. REFERENCE CONTRACTOR RESPONSIBILITIES SECTION OF THESE GENERAL NOTES FOR FURTHER INFORMATION AND REQUIREMENTS.

05.05.19 POST-INSTALLED ANCHORS (INTO CONCRETE AND MASONRY)

1. **REFERENCE STANDARDS:** CONFORM TO:
   - 1.1. IBC CHAPTER 19 "CONCRETE"
   - 1.2. ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE"
   - 1.3. IBC CHAPTER 21 "MASONRY"
   - 1.4. TMS 402 "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES"
2. **POST-INSTALLED ANCHORS:** INSTALL ONLY WHERE SPECIFICALLY SHOWN IN THE DETAILS OR ALLOWED BY THE SER. ALL POST-INSTALLED ANCHOR TYPES AND LOCATIONS SHALL BE APPROVED BY THE SER AND SHALL HAVE A CURRENT ICC-ESR THAT PROVIDES RELEVANT DESIGN VALUES NECESSARY TO VALIDATE THE AVAILABLE STRENGTH EXCEEDS THE REQUIRED STRENGTH. SUBMIT CURRENT MANUFACTURER'S DATA AND ICC-ESR TO THE SER FOR APPROVAL REGARDLESS OF WHETHER OR NOT IT IS A PRE-APPROVED ANCHOR. ANCHORS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ICC-ESR AND THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII) IN CONJUNCTION WITH EDGE DISTANCE, SPACING, AND EMBEDMENT DEPTH AS INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL ARRANGE FOR A MANUFACTURER'S FIELD REPRESENTATIVE TO PROVIDE INSTALLATION TRAINING FOR ALL PRODUCTS TO BE USED PRIOR TO THE COMMENCEMENT OF WORK. ONLY TRAINED INSTALLERS SHALL PERFORM POST-INSTALLED ANCHOR INSTALLATION. A RECORD OF TRAINING SHALL BE KEPT ON SITE AND BE MADE AVAILABLE TO THE SER AS REQUESTED. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS SHALL BE PERFORMED BY A CERTIFIED ADHESIVE ANCHOR INSTALLER (AAI) AS CERTIFIED THROUGH ACI/CRSI OR AN APPROVED EQUIVALENT. PROOF OF CURRENT CERTIFICATION SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO COMMENCEMENT OF INSTALLATION. NO REINFORCING BARS SHALL BE DAMAGED DURING INSTALLATION OF POST-INSTALLED ANCHORS. SPECIAL INSPECTION SHALL BE PER THE TESTS AND INSPECTIONS SECTION OF THESE GENERAL NOTES. ANCHOR TYPE, DIAMETER, AND EMBEDMENT SHALL BE AS INDICATED ON DRAWINGS.
   - 2.1. ADHESIVE ANCHORS: THE FOLLOWING ADHESIVE-TYPE ANCHORING SYSTEMS HAVE BEEN USED IN THE DESIGN AND SHALL BE USED FOR ANCHORAGE TO CONCRETE OR MASONRY AS APPLICABLE AND IN ACCORDANCE WITH THE CORRESPONDING CURRENT ICC ESR REPORT. REFERENCE THE CORRESPONDING ICC-ESR FOR REQUIRED MINIMUM AGE OF CONCRETE, CONCRETE TEMPERATURE RANGE, MOISTURE CONDITION, LIGHT WEIGHT CONCRETE, AND HOLE DRILLING AND PREPARATION REQUIREMENTS. DRILLED-IN ANCHOR EMBEDMENT LENGTHS SHALL BE AS SHOWN ON DRAWINGS OR NOT LESS THAN SEVEN TIMES THE ANCHOR NOMINAL DIAMETER (7D). ADHESIVE ANCHORS ARE TO BE INSTALLED IN CONCRETE AGED A MINIMUM OF 21 DAYS UNLESS OTHERWISE SPECIFIED IN THE ICC-ESR.
     - HILTI "HIT-HY 200-R V3" - ICC-ESR 4868 FOR ANCHORAGE TO CONCRETE
     - HILTI "HIT-HY 270" - ICC-ESR 4143 FOR ANCHORAGE TO MASONRY ONLY, ICC-ESR 4144 FOR ANCHORAGE TO MULTI-WYTHE BRICK
   - 2.2. EXPANSION ANCHORS: THE FOLLOWING EXPANSION TYPE ANCHORS ARE PRE-APPROVED FOR ANCHORAGE TO CONCRETE OR MASONRY IN ACCORDANCE WITH CORRESPONDING CURRENT ICC-ESR:
     - HILTI "KB TZ2" - ICC-ESR 4266 FOR ANCHORAGE TO CONCRETE, ICC-ESR 4561 FOR ANCHORAGE TO MASONRY
   - 2.3. SCREW ANCHORS: THE FOLLOWING SCREW TYPE ANCHOR IS PRE-APPROVED FOR ANCHORAGE TO CONCRETE OR MASONRY IN ACCORDANCE WITH CORRESPONDING CURRENT ICC-ESR:
     - HILTI "KH-EZ" - ICC-ESR 3027 FOR ANCHORAGE TO CONCRETE

05.12.00 STRUCTURAL STEEL

1. **REFERENCE STANDARDS:** CONFORM TO:
   - 1.1. IBC CHAPTER 22 "STEEL"
   - 1.2. ANSI/AISC 303 "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES"
   - 1.3. AISC "MANUAL OF STEEL CONSTRUCTION"
   - 1.4. ANSI/AISC 360 "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS"
   - 1.5. AWS D1.1 "STRUCTURAL WELDING CODE - STEEL"
   - 1.6. RCSC "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS"
2. SELECTED STEEL ELEMENTS OF THIS PROJECT ARE PART OF THE "SEISMIC FORCE RESISTING SYSTEM" (SFRS) AND THUS ARE SUBJECT TO SPECIAL REQUIREMENTS DETAILED IN THE AISC SEISMIC PROVISIONS. ELEMENTS OF THE SFRS ARE DESIGNATED ON PLAN. REFER TO THE DRAWING LEGEND FOR SYMBOLS USED TO DESIGNATE ELEMENTS ON THE PLANS AND STRUCTURAL STEEL SEISMIC PROVISIONS SECTION OF THESE GENERAL NOTES FOR SUPPLEMENTAL REQUIREMENTS.
3. **SUBMITTALS:** SUBMIT THE FOLLOWING DOCUMENTS TO THE SER FOR REVIEW:
   - 3.1. SHOP DRAWINGS COMPLYING WITH AISC 360 SECTIONS M1 AND N3 AND AISC 303 SECTION 4.
   - 3.2. ERECTION DRAWINGS COMPLYING AISC 360 SECTIONS M1 AND N3 AND AISC 303 SECTION 4.
   - 3.3. WELD PROCEDURE SPECIFICATIONS (WPS'S) FOR SHOP AND FIELD WELDING.
   - 3.4. MANUFACTURER'S CERTIFICATES OF CONFORMANCE FOR ELECTRODES, FLUXES, AND GASES (WELDING CONSUMABLES).
4. **COPIES:** MAKE COPIES OF THE FOLLOWING DOCUMENTS AVAILABLE UPON REQUEST TO THE SER OR OWNER'S INSPECTION AGENCY IN ELECTRONIC OR PRINTED FORM PRIOR TO FABRICATION PER AISC 360 SECTION N3.2 REQUIREMENTS:
   - 4.1. FABRICATOR'S WRITTEN QUALITY CONTROL MANUAL THAT INCLUDES, AS A MINIMUM:
     - 4.1.1. MATERIAL CONTROL PROCEDURES
     - 4.1.2. INSPECTION PROCEDURES
     - 4.1.3. NON-CONFORMANCE PROCEDURES
   - 4.2. STEEL AND ANCHOR ROD SUPPLIERS' MATERIAL TEST REPORTS (MTRS) INDICATING COMPLIANCE WITH SPECIFICATIONS.
   - 4.3. FASTENER MANUFACTURER'S CERTIFICATION DOCUMENTING CONFORMANCE WITH THE SPECIFICATION.
   - 4.4. FILLER METAL MANUFACTURER'S PRODUCT DATA FOR SMAW, FCAW, AND GMAW INDICATING:
     - 4.4.1. PRODUCT SPECIFICATION COMPLIANCE
     - 4.4.2. RECOMMENDED WELDING PARAMETERS
     - 4.4.3. RECOMMENDED STORAGE AND EXPOSURE REQUIREMENTS INCLUDING BAKING
     - 4.4.4. LIMITATIONS OF USE
   - 4.5. WELDED HEADED (SHEAR) STUD ANCHORS MANUFACTURER'S CERTIFICATION INDICATING THEY MEET SPECIFICATIONS.
   - 4.6. WPS'S FOR SHOP AND FIELD WELDING.
   - 4.7. MANUFACTURER'S CERTIFICATES OF CONFORMANCE FOR ELECTRODES, FLUXES, AND GASES (WELDING CONSUMABLES).
   - 4.8. PROCEDURE QUALIFICATION RECORDS (PQRS) FOR WPS'S THAT ARE NOT PREQUALIFIED IN ACCORDANCE WITH AWS.
   - 4.9. WELDING PERSONNEL PERFORMANCE QUALIFICATION RECORDS (WPQRS) AND CONTINUITY RECORDS CONFORMING TO AWS STANDARDS

DCI PROJECT: 25191.AA35
CONTACT: S. KRUMENACKER

1. **DEFERRED SUBMITTALS:** ALL STRUCTURAL STEEL CONNECTIONS, NOT COMPLETELY DESIGNED IN THE DRAWINGS, SHALL BE DESIGNED BY AN EXPERIENCED STEEL DETAILER WORKING FOR THE FABRICATOR IN ACCORDANCE WITH ANSI/AISC 303-16 SECTIONS 3.1.1 AND 3.1.2 OPTION 2 (ANSI/AISC 303-22 SECTIONS 3.2.3 AND 3.2.4, OPTION 2) SCOPE: UNLESS OTHERWISE NOTED, DETAILS ON DRAWINGS INDICATE GENERAL CRITERIA FOR DESIGN AND DETAILING OF CONNECTIONS. UNLESS NOTED AS 'FULLY DESIGNED', DETAILS INDICATED ON DRAWINGS ARE NOT INTENDED TO CONVEY COMPLETELY DESIGNED CONNECTOR SIZES, WELD SIZES, NUMBER OF BOLTS, OR ANY OTHER SPECIFIC INFORMATION THAT IS NOT OBTAINED THROUGH THE SSE CONNECTION DESIGN. UNLESS NOTED OTHERWISE ON THE DRAWINGS, ITEMS TO BE DESIGNED BY THE FABRICATOR INCLUDE:
   - 1.1. BEAM-TO-GIRDER AND BEAM-TO-COLUMN SHEAR CONNECTIONS
   - 1.2. BEAM-TO-GIRDER AND BEAM-TO-COLUMN GRAVITY MOMENT CONNECTIONS
2. LOADS: CONNECTIONS AND MEMBER REINFORCEMENT AND THE CONNECTIONS SHALL BE DESIGNED TO SUPPORT THE ULTIMATE OR SERVICE LEVEL SHEAR REACTIONS, MOMENTS, AND AXIAL FORCES INDICATED ON THE DRAWINGS.
   - 2.1. IF ULTIMATE OR SERVICE LEVEL SHEAR REACTIONS ARE NOT LISTED ON THE DRAWINGS, DESIGN LOAD CAPACITY SHALL BE THE LARGEST REACTION VALUE OF THE FOLLOWING: HALF THE TOTAL UNIFORM LOAD CAPACITY OF THE BEAM SHAPE FOR THE SPAN, WITH EFFECTS OF CONCENTRATED LOADS OR LOAD EQUAL TO (2) 3/4" DIAMETER BOLTS.
   - 2.2. IF ULTIMATE MOMENTS ARE NOT LISTED ON THE DRAWINGS, DESIGN LOAD CRITERIA SHALL BE 75% OF THE FULL PLASTIC MOMENT STRENGTH OF THE BEAM SHAPE FOR THE SPAN.
4. **MATERIALS:** STRUCTURAL STEEL MATERIALS SHALL CONFORM TO MATERIALS AND REQUIREMENTS LISTED IN AISC 360 SECTION A3 INCLUDING, BUT NOT LIMITED TO:

SHAPE	TYPE
CHANNEL (C) AND ANGLE (L) SHAPES	ASTM A36, F_y = 36 KSI
PLATE (PL)	ASTM A36, F_y = 36 KSI
SQUARE/RECT HSS	ASTM A500, GRADE C, F_y = 50 KSI
HIGH-STRENGTH, HEAVY HEX BOLTS	ASTM F3125 GRADE A325/F1852, TYPE 1 OR 3, PLAIN
HEAVY HEX NUTS	ASTM A563, GRADE AND FINISH PER RCSC TABLE 2.1
WASHERS (HARDENED FLAT OR BEVELED)	ASTM F436, GRADE AND FINISH PER RCSC TABLE 2.1
MILD THREADED RODS	ASTM A36, F_y = 36 KSI
DEFORMED BAR ANCHORS (DBA)	ASTM A496 - NELSON/TRW D2L, F_y = 70 KSI

5. **STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS:**
   - 5.1. ASTM F3125 GRADE A325-N BOLTS - "THREADS NOT EXCLUDED IN THE SHEAR PLANE."
   - 5.2. HIGH-STRENGTH BOLTED JOINTS HAVE BEEN DESIGNED AS "BEARING" CONNECTIONS.
   - 5.3. PROVIDE ASTM BOLT GRADE AND TYPE AS SPECIFIED IN THE MATERIALS SECTION OF THESE GENERAL NOTES.
   - 5.4. PROVIDE WASHERS OVER OUTER PLY OF SLOTTED HOLES AND OVERSIZE HOLES PER RCSC TABLE 6.1.
   - 5.5. PROVIDE NUT AND WASHER GRADES, TYPES, AND FINISHES CONFORMING TO RCSC TABLE 2.1.
   - 5.6. PROVIDE FASTENER ASSEMBLIES FROM A SINGLE SUPPLIER.
   - 5.7. JOINT TYPES SHALL BE:
     - 5.7.1. ST - "SNUG TIGHT," FOR TYPICAL BEAM END "SHEAR" CONNECTIONS UNLESS NOTED OTHERWISE.
     - 5.7.2. SC - "SLIP CRITICAL," WHERE SPECIFICALLY INDICATED. PROVIDE WITH CLASS A | B FAYING SURFACE.
   - 5.8. INSTALL BOLTS IN JOINTS IN ACCORDANCE WITH RCSC SECTION 8 AND TABLE 4.1.
   - 5.9. INSPECTION IS PER RCSC SECTION 9.
6. **ANCHORAGE TO CONCRETE:**
   - 6.1. SHEAR STUDS ON STEEL BEAMS FOR COMPOSITE CONSTRUCTION: HEADED SHEAR STUDS WELDED (WHS) TO TOPS OF WIDE FLANGE BEAMS SHALL BE 3/4" DIAMETER WITH NOMINAL STUD LENGTHS AS INDICATED. UNLESS NOTED OTHERWISE, PROVIDE MINIMUM SHEAR STUD HEIGHT EQUAL TO THE METAL DECK DEPTH + 1-1/2" AND A MAXIMUM SHEAR STUD HEIGHT THAT ALLOWS FOR 1/2" OF CONCRETE COVER OVER THE STUD.
   - 6.2. COLUMN ANCHOR RODS AND BASE PLATES: ALL COLUMNS (VERTICAL MEMBER ASSEMBLIES WEIGHING OVER 300 LB) SHALL BE PROVIDED WITH A MINIMUM OF FOUR 3/4" DIAMETER ANCHOR RODS. COLUMN BASE PLATES SHALL BE AT LEAST 3/4" THICK UNLESS NOTED OTHERWISE. CAST-IN-PLACE ANCHOR RODS SHALL BE PROVIDED UNLESS OTHERWISE APPROVED BY THE ENGINEER. UNLESS NOTED OTHERWISE, EMBEDMENT OF CAST-IN-PLACE ANCHOR RODS SHALL BE 24 TIMES THE ANCHOR DIAMETER (24D), UNLESS NOTED OTHERWISE ON PLAN.
   - 6.3. EMBEDDED STEEL PLATES FOR ANCHORAGE TO CONCRETE: PL EMBEDDED IN CONCRETE WITH WHS OR DOWEL BAR ANCHORS (DBA) SHALL BE OF THE SIZES AND LENGTHS AS INDICATED ON THE PLANS WITH MINIMUM 1/2" DIA x 6" LONG WHS, BUT PROVIDE NOT LESS THAN 3/4" INTERIOR COVER OR 1-1/2" EXTERIOR COVER TO THE OPPOSITE FACE OF CONCRETE UNLESS NOTED OTHERWISE.
7. **FABRICATION:**
   - 7.1. CONFORM TO AISC 360 SECTION M2 AND AISC 303 SECTION 6.
   - 7.2. QUALITY CONTROL (QC) SHALL CONFORM TO:
     - 7.2.1. AISC 360 CHAPTER N
     - 7.2.2. AISC 303 SECTION 8
     - 7.2.3. FABRICATOR AND ERECTOR SHALL ESTABLISH AND MAINTAIN WRITTEN QC PROCEDURES PER AISC 360 SECTION N3.
     - 7.2.4. FABRICATOR SHALL PERFORM SELF-INSPECTIONS PER AISC 360 SECTION N5 TO ENSURE THAT THEIR WORK IS PERFORMED IN ACCORDANCE WITH CODE OF STANDARD PRACTICE, THE AISC SPECIFICATION, CONTRACT DOCUMENTS, AND THE APPLICABLE BUILDING CODE.
     - 7.2.5. QC INSPECTIONS MAY BE COORDINATED WITH QUALITY ASSURANCE (QA) INSPECTIONS PER AISC 360 SECTION N5.3 WHERE FABRICATORS QA PROCEDURES PROVIDE THE NECESSARY BASIS FOR MATERIAL CONTROL, INSPECTION, AND CONTROL OF THE WORKMANSHIP EXPECTED BY THE SPECIAL INSPECTOR.
8. **WELDING:**
   - 8.1. WELDING SHALL CONFORM TO AWS D1.1 WITH PREQUALIFIED WELDING PROCESSES EXCEPT AS MODIFIED BY AISC 360 SECTION J2 WELDERS SHALL BE QUALIFIED IN ACCORDANCE WITH AWS D1.1 REQUIREMENTS.
   - 8.2. USE 70 KSI STRENGTH, LOW-HYDROGEN TYPE ELECTRODES (E7018) OR E71T AS APPROPRIATE FOR THE PROCESS SELECTED.
   - 8.3. WELDING OF HIGH-STRENGTH ANCHOR RODS IS PROHIBITED UNLESS APPROVED BY ENGINEER.
   - 8.4. WELDING OF HEADED STUD ANCHORS SHALL BE IN ACCORDANCE WITH AWS D1.1 CHAPTER 7.
9. **ERECTION:**
   - 9.1. CONFORM TO AISC 360 SECTION M4 AND AISC 303 SECTION 7.
   - 9.2. CONFORM TO AISC 360 CHAPTER N AND AISC 303 SECTION 8.
     - 9.2.1. THE ERECTOR SHALL MAINTAIN DETAILED ERECTION QC PROCEDURES THAT ENSURE THAT THE WORK IS PERFORMED IN ACCORDANCE WITH THESE REQUIREMENTS AND THE CONTRACT DOCUMENTS.
   - 9.3. STEEL WORK SHALL BE CARRIED UP TRUE AND PLUMB WITHIN THE LIMITS DEFINED IN AISC 303 SECTION 7.13.
   - 9.4. HIGH-STRENGTH BOLTING SHALL COMPLY WITH THE RCSC REQUIREMENTS INCLUDING RCSC SECTION 7.2, AS APPLICABLE AND AISC 360 CHAPTER J AND SECTIONS M2.5 AND N5.6.
   - 9.5. WELDING OF HEADED STUD ANCHORS SHALL BE IN ACCORDANCE WITH AWS D1.1 CHAPTER 7.
   - 9.6. PROVIDE HEADED (SHEAR) STUD ANCHORS WELDED THROUGH THE METAL DECK TO TOPS OF BEAMS DENOTED IN PLANS.
   - 9.7. THE CONTRACTOR SHALL PROVIDE TEMPORARY BRACING AND SAFETY PROTECTION REQUIRED BY AISC 360 SECTION M4.2 AND AISC 303 SECTIONS 7.10 AND 7.11.
10. **PROTECTIVE COATING REQUIREMENTS:**
    - 10.1. SHOP PAINTING: CONFORM TO AISC 360 SECTION M3 AND AISC 303 SECTION 6.5 UNLESS OTHERWISE SPECIFIED BY THE PROJECT SPECIFICATIONS.
    - 10.2. INTERIOR STEEL:
      - 10.2.1. UNLESS NOTED OTHERWISE, DO NOT PAINT ANY OF THE STEEL SURFACES MEETING THE FOLLOWING CONDITIONS:
        - 10.2.1.1. CONCEALED BY THE INTERIOR BUILDING FINISHES
        - 10.2.1.2. FIREPROOFED
        - 10.2.1.3. EMBEDDED IN CONCRETE
        - 10.2.1.4. SPECIALLY PREPARED AS A "FAYING SURFACE" FOR TYPE-SC "SLIP-CRITICAL" CONNECTIONS. INCLUDING BOLTED CONNECTIONS THAT FORM A PART OF THE SFRS GOVERNED BY AISC 341 UNLESS THE COATING CONFORMS TO REQUIREMENTS OF THE RCSC AND IS APPROVED BY THE ENGINEER.
        - 10.2.1.5. WELDED; IF AREA REQUIRES PAINTING, DO NOT PAINT UNTIL AFTER WELD INSPECTIONS AND NON-DESTRUCTIVE TESTING REQUIREMENT, IF ANY, ARE SATISFIED.
      - 10.2.2. INTERIOR STEEL EXPOSED TO VIEW SHALL BE PAINTED WITH ONE COAT OF SHOP PRIMER UNLESS OTHERWISE INDICATED IN THE PROJECT SPECIFICATIONS. FIELD TOUCH-UPS TO MATCH THE FINISH COAT OR AS OTHERWISE INDICATED IN THE PROJECT SPECIFICATIONS.
    - 10.3. EXTERIOR STEEL: EXPOSED EXTERIOR STEEL SHALL BE PROTECTED BY EITHER:
      - 10.3.1. PAINT WITH AN EXTERIOR MULTI-COAT SYSTEM AS PER THE PROJECT SPECIFICATIONS. FIELD TOUCH-UP PAINTING SHALL BE TO MATCH TOPCOAT. BE AS PER THE PROJECT SPECIFICATIONS.
      - 10.3.2. GALVANIZING: UNLESS PROTECTED WITH A PAINT SYSTEM, EXPOSED STEEL (OUTSIDE THE BUILDING ENVELOPE) SHALL BE HOT-DIPPED GALVANIZED WHERE NOTED ON THE PLANS OR OTHERWISE INDICATED BY THE FINISHES SPECIFIED BY THE ARCHITECT. APPLY FIELD TOUCH-UPS PER PROJECT SPECIFICATIONS.
    - 10.4. STEEL NEED NOT BE PRIMED OR PAINTED UNLESS NOTED OTHERWISE ON PLAN OR IN THE PROJECT SPECIFICATIONS. CONFORM TO AISC 360 SECTION M3 AND AISC 303 SECTION 6.5 UNLESS A MULTI-COAT SYSTEM IS REQUIRED PER THE PROJECT SPECIFICATIONS.
11. **ARCHITECTURALLY EXPOSED STRUCTURAL STEEL:** STEEL IDENTIFIED BY THE ARCHITECT ON THE ARCHITECTURAL DRAWINGS AS ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (AESS) SHALL CONFORM TO AISC 303 SECTION 10.

PRICING NOTE: THESE DOCUMENTS REPRESENT THE CURRENT STATE OF A DEVELOPING DESIGN AND AS SUCH, NOT ALL CONDITIONS ARE CURRENTLY SHOWN. ALL STRUCTURAL DETAILS AND CONNECTIONS SHOULD BE ACCOUNTED FOR IN THE GENERAL CONTRACTOR PRICE AND SCOPE OF SERVICES. WHERE THIS EXCEEDS THE CONDITIONS DESCRIBED IN THE CONTRACT DOCUMENTS, NOTIFY DCI IMMEDIATELY.

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RENOVATION FOR NEW MOLLIE WOODS 16 BED
PSYCHIATRIC HOSPITAL
HEATHERWOOD - ONE STORY BUILDING
WOODS SERVICES
LANGHORNE, PA 19047

	2/2/26	BID SET
	12/01/25	BID SET
	11/20/25	CMS REVIEW
	11/14/25	DOH FINAL

REVISIONS

DRAWN BY:	REVIEWED BY:
CAD	STK
PLOT SCALE:	DATE: 12/01/25

PROJECT FILE LOCATION:

DRAWING NAME: GENERAL NOTES

DRAWING NO: S0.3

E1(30x42)

50.00.00 SPECIAL INSPECTIONS

1. THE FOLLOWING STATEMENT AND SCHEDULES OF INSPECTIONS ARE THOSE SPECIAL INSPECTIONS AND TESTS THAT SHALL BE PERFORMED FOR THIS PROJECT. SPECIAL INSPECTORS SHALL REFERENCE THESE PLANS AND IBC CHAPTER 17 FOR ALL SPECIAL INSPECTION REQUIREMENTS. THE OWNER SHALL RETAIN AN "APPROVED AGENCY" PER IBC SECTION 1703 TO PROVIDE SPECIAL INSPECTIONS FOR THIS PROJECT. SPECIAL INSPECTORS SHALL BE QUALIFIED PERSONS PER IBC SECTION 1704.2.4. SPECIAL INSPECTION REPORTS SHALL BE PROVIDED ON A WEEKLY BASIS. SUBMIT COPIES OF ALL INSPECTION REPORTS TO THE ARCHITECT/ENGINEER AND THE AUTHORITY HAVING JURISDICTION FOR REVIEW. IN ADDITION TO SPECIAL INSPECTION REPORTS AND TESTS, SUBMIT REPORTS AND CERTIFICATES NOTED IN IBC SECTION 1704.5 TO THE AUTHORITY HAVING JURISDICTION. FINAL SPECIAL INSPECTION REPORTS WILL BE REQUIRED BY EACH SPECIAL INSPECTION FIRM PER IBC SECTION 1704.2.4.

2. STATEMENT OF SPECIAL INSPECTIONS:

2.1. THIS STATEMENT OF SPECIAL INSPECTIONS HAS BEEN WRITTEN WITH THE UNDERSTANDING THAT THE BUILDING OFFICIAL WILL:

2.1.1. REVIEW AND APPROVE THE QUALIFICATIONS OF THE SPECIAL INSPECTOR.

2.1.2. MONITOR THE SPECIAL INSPECTION ACTIVITY ON THE PROJECT SITE TO ENSURE THAT SPECIAL INSPECTORS ARE QUALIFIED AND PERFORMING THEIR DUTY AS STATED WITHIN THIS STATEMENT.

2.1.3. REVIEW ALL SPECIAL INSPECTION REPORTS SUBMITTED TO THEM BY THE SPECIAL INSPECTOR.

2.1.4. PERFORM INSPECTIONS AS REQUIRED BY IBC SECTION 110.3.

2.2. THE FOLLOWING SPECIAL INSPECTIONS ARE APPLICABLE TO THIS PROJECT:
SPECIAL INSPECTIONS FOR STANDARD BUILDINGS (PER IBC SECTION 1705.1) REQUIRED

3. SPECIAL INSPECTION OF SHOP FABRICATED, GRAVITY LOAD-BEARING MEMBERS AND ASSEMBLIES:

3.1. SPECIAL INSPECTION OF SHOP FABRICATED, GRAVITY LOAD-BEARING MEMBERS AND ASSEMBLIES SHALL BE VERIFIED BY THE SPECIAL INSPECTOR AS STATED IN SECTION 1704.2.5.

3.2. INCLUDE THE FOLLOWING:

3.2.1. PRIOR TO THE START OF FABRICATION: SPECIAL INSPECTOR(S), REPRESENTING THE OWNER, SHALL VISIT THE FABRICATOR'S SHOP(S) WHERE THE WORK IS TO BE PERFORMED, AND VERIFY THAT THE FABRICATOR MAINTAINS DETAILED FABRICATION AND QUALITY CONTROL PROCEDURES THAT PROVIDE A BASIS FOR INSPECTION, CONTROL OF WORKMANSHIP, MATERIAL CONTROL, AND FABRICATOR'S ABILITY TO CONFORM TO APPROVED CONSTRUCTION DOCUMENTS AND REFERENCED STANDARDS.

3.2.2. FABRICATOR SHALL HAVE AVAILABLE FOR INSPECTOR'S REVIEW DETAILED PROCEDURES FOR MATERIAL CONTROL THAT DEMONSTRATE THE FABRICATOR'S ABILITY TO MAINTAIN SUITABLE RECORDS AND PROCEDURES SUCH THAT, AT ANY TIME DURING THE FABRICATION PROCESS, THE MATERIAL SPECIFICATION, GRADE, AND APPLICABLE TEST REPORTS FOR PRIMARY LOAD-CARRYING MEMBERS ARE CAPABLE OF BEING DETERMINED.

4. STRUCTURAL STEEL: PER IBC SECTION 1705.2.1

4.1. A QUALIFIED SPECIAL INSPECTOR OF AN "APPROVED AGENCY" PROVIDING QUALITY ASSURANCE (QA) SPECIAL INSPECTIONS FOR THE PROJECT SHALL REVIEW AND CONFIRM THE FABRICATOR AND ERECTOR'S QUALITY CONTROL (QC) PROCEDURES FOR COMPLETENESS AND ADEQUACY RELATIVE TO AISC 360 CHAPTER N, AISC 303, AWS D1.1, AND 2018 IBC CODE REQUIREMENTS FOR THE FABRICATOR'S SCOPE OF WORK.

4.2. REQUIREMENTS:

4.2.1. QA AGENCY PROVIDING SPECIAL INSPECTIONS SHALL PROVIDE PERSONNEL MEETING THE MINIMUM QUALIFICATION REQUIREMENTS FOR INSPECTION AND NONDESTRUCTIVE TESTING (NDT) PER AISC 360 SECTION N4.

4.2.1.1. QC AGENCY SHALL SUBMIT QUALIFICATION DOCUMENTS PER AISC 341 SECTION J2 ON PROJECTS SUBJECT TO SPECIAL INSPECTIONS ON SEISMIC FORCE RESISTING SYSTEMS WITH R > 3.

4.2.1.2. NDT PERSONNEL SHALL BE QUALIFIED PER AISC 341 SECTION J4.

4.2.1.3. PROVIDE QC AND QA INSPECTIONS PER AISC 341 SECTION J5 THROUGH J10 AS APPLICABLE.

4.2.2. VERIFY FABRICATOR AND ERECTOR QC PROGRAM PER AISC 360 SECTION N2.

4.2.3. INSPECTION OF WELDS AND BOLTS BY BOTH QC AND QA PERSONNEL SHALL BE PER THE SCHEDULE OF SPECIAL INSPECTIONS IN THESE DRAWINGS. ALL PROVISIONS OF AWS D1.1 FOR STATICALLY LOADED STRUCTURES SHALL APPLY.

4.2.4. NONDESTRUCTIVE TESTING (NDT) OF WELDS:

4.2.4.1. NDT OF WELDED JOINTS PER AISC 360 SECTION N5

4.2.4.2. RISK CATEGORY FOR DETERMINATION OF EXTENT OF NDT PER AISC 360 N5.5B IS NOTED IN THE DESIGN CRITERIA AND LOADS SECTION OF THESE GENERAL REQUIREMENTS.

4.2.4.3. NDT PERFORMED SHALL BE DOCUMENTED AND REPORTS SHALL IDENTIFY THE TESTED WELD BY PIECE MARK AND LOCATION OF THE PIECE.

4.2.4.4. FOR FIELD WORK, THE NDT REPORT SHALL IDENTIFY THE TESTED WELD BY LOCATION IN THE STRUCTURE, PIECE MARK AND LOCATION OF THE PIECE.

4.2.5. ADDITIONAL INSPECTION TASKS PER AISC 360 SECTION N5.8.

4.2.6. INSPECTION FOR COMPOSITE CONSTRUCTION SHALL BE DONE PER AISC 360 SECTION N6.

4.3. POST-INSTALLED ANCHORS TO CONCRETE AND MASONRY: SHALL COMPLY WITH IBC SECTION 1703. INSPECTIONS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH IN THE APPROVED ICC EVALUATION SERVICE REPORT (ICC-ESR) AND AS INDICATED BY THE DESIGN REQUIREMENTS SPECIFIED ON THE DRAWINGS. REFER TO THE POST-INSTALLED ANCHORS SECTION OF THE GENERAL NOTES FOR ANCHORS THAT ARE THE BASIS OF THE DESIGN. SPECIAL INSPECTOR SHALL VERIFY ANCHORS ARE AS SPECIFIED IN THE POST-INSTALLED ANCHORS SECTION OF THE GENERAL NOTES OR AS OTHERWISE SPECIFIED ON THE DRAWINGS. SUBSTITUTIONS REQUIRE APPROVAL BY THE SER AND REQUIRE SUBSTANTIATING CALCULATIONS AND A CURRENT 2018 IBC RECOGNIZED ICC-ESR. SPECIAL INSPECTOR SHALL DOCUMENT IN THEIR SPECIAL INSPECTION REPORT COMPLIANCE WITH EACH OF THE ELEMENTS REQUIRED WITHIN THE APPLICABLE ICC-ESR.

4.4. PREFABRICATED CONSTRUCTION: ALL PREFABRICATED CONSTRUCTION SHALL CONFORM TO IBC SECTION 1703.

5. SCHEDULES OF SPECIAL INSPECTIONS:

5.1. TABLE 1705.6 - REQUIRED SPECIAL INSPECTIONS AND TESTS OF SOILS

NO.	SPECIAL INSPECTION	CONTINUOUS	PERIODIC
1	VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY	-	X
2	VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL	-	X
3	PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS	-	X
4	DURING FILL PLACEMENT, VERIFY USE OF PROPER MATERIALS AND PROCEDURES IN ACCORDANCE WITH THE PROVISIONS OF THE APPROVED GEOTECHNICAL REPORT. VERIFY DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL	X	-
5	PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY	-	X

5.2. TABLE 1705.3 - REQUIRED SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION

NO.	SPECIAL INSPECTION	CONTINUOUS	PERIODIC	REFERENCE STANDARD
1	INSPECT REINFORCEMENT, INCLUDING PRE-STRESSING TENDONS, AND VERIFY PLACEMENT	-	X	ACI 318 CHAPTER 20 ACI 318 SECTIONS 25.2, 25.3, & 26.6.1-26.6.3
2	REINFORCING BAR WELDING:	-	-	-
2a	VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706	-	X	AWS D1.4 ACI 318 SECTION 26.6.4
2b	INSPECT SINGLE PASS FILLET WELD MAXIMUM 5/16"	-	X	-
2c	INSPECT ALL OTHER WELDS	X	-	-
3	INSPECT ANCHORS CAST IN CONCRETE	-	X	ACI 318 SECTION 17.8.2
4	INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS:	-	-	-
4a	ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS	X	-	ACI 318 SECTION 17.8.2.4
4b	MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4a	-	X	ACI 318 SECTION 17.8.2
5	VERIFY USE OF REQUIRED DESIGN MIX	-	X	ACI 318 CHAPTER 19 ACI SECTIONS 26.4.3 & 26.4.4 IBC SECTION 1904.1, 1904.2
6	PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE	X	-	ASTM C172 & C31 ACI 318 SECTIONS 26.5 & 26.12
7	INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES	X	-	ACI 318 SECTION 26.5
8	VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES	-	X	ACI 318 SECTIONS 26.5.3-26.5.5
14	INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED	-	X	ACI 318 SECTION 26.11.1.2(B)

5.3. MINIMUM REQUIREMENTS FOR INSPECTIONS OF STRUCTURAL STEEL CONSTRUCTION

NO.	SPECIAL INSPECTION	QC	QA	REFERENCE STANDARD
	INSPECTION TASKS PRIOR TO WELDING			
1	WELDER QUALIFICATION RECORDS AND CONTINUITY RECORDS	P	O	AISC 360 TABLE N5.4-1
2	WELDING PROCEDURE SPECIFICATIONS (WPS'S) AVAILABLE	P	P	AISC 360 TABLE N5.4-1
3	MANUFACTURING CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE	P	P	AISC 360 TABLE N5.4-1
4	MATERIAL IDENTIFICATION (TYPE/GRADE)	O	O	AISC 360 TABLE N5.4-1
5	WELDER IDENTIFICATION SYSTEM	O	O	AISC 360 TABLE N5.4-1
6	FIT-UP OF GROOVE WELDS (INCLUDING JOINT GEOMETRY) JOINT PREPARATION DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL) CLEANLINESS (CONDITION OF STEEL SURFACES) TACKING (TACK WELDING QUALITY AND LOCATION) BACKING TYPE AND FIT (IF APPLICABLE)	O	O	AISC 360 TABLE N5.4-1
7	FIT-UP OF CJP GROOVE WELDS OF HSS T-, Y-, AND K-JOINTS WITHOUT BACKING (INCLUDING JOINT GEOMETRY) JOINT PREPARATION DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL) CLEANLINESS (CONDITION OF STEEL SURFACES) TACKING (TACK WELDING QUALITY AND LOCATION)	P	O	AISC 360 TABLE N5.4-1
8	CONFIGURATION AND FINISH OF ACCESS HOLES	O	O	AISC 360 TABLE N5.4-1
9	FIT-UP OF FILLET WELDS DIMENSIONS (ALIGNMENT, GAPS AT ROOT) CLEANLINESS (CONDITION OF STEEL SURFACES) TACKING (TACK WELDING QUALITY AND LOCATION)	O	O	AISC 360 TABLE N5.4-1
10	CHECK WELDING EQUIPMENT	O	-	AISC 360 TABLE N5.4-1
	INSPECTION TASKS DURING WELDING			
1	USE OF QUALIFIED WELDERS	O	O	AISC 360 TABLE N5.4-2
2	CONTROL AND HANDLING OF WELDING CONSUMABLES PACKAGING EXPOSURE CONTROL	O	O	AISC 360 TABLE N5.4-2
3	NO WELDING OVER CRACKED TACK WELDS	O	O	AISC 360 TABLE N5.4-2
4	ENVIRONMENTAL CONDITIONS WIND SPEED WITHIN LIMITS PRECIPITATION AND TEMPERATURE	O	O	AISC 360 TABLE N5.4-2
5	WPS FOLLOWED SETTINGS ON WELDING EQUIPMENT TRAVEL SPEED SELECTED WELDING MATERIALS SHIELDING GAS TYPE/ FLOWRATE PREHEAT APPLIED INTERPASS TEMPERATURE MAINTAINED (MIN/MAX) PROPER POSITION (F, V, H, OH)	O	O	AISC 360 TABLE N5.4-2
6	WELDING TECHNIQUES INTERPASS AND FINAL CLEANING EACH PASS WITHIN PROFILE EACH PASS MEETS QUALITY REQUIREMENTS	O	O	AISC 360 TABLE N5.4-2
	INSPECTION TASKS AFTER WELDING			
1	WELDS CLEANED	O	O	AISC 360 TABLE N5.4-3
2	SIZE, LENGTH, AND LOCATIONS OF WELDS	P	P	AISC 360 TABLE N5.4-3
3	WELDS MEET VISUAL ACCEPTANCE CRITERIA CRACK PROHIBITION WELD/BASE-METAL FUSION CRATER CROSS SECTION WELD PROFILES WELD SIZE UNDERCUT POROSITY	P	P	AISC 360 TABLE N5.4-3
4	ARC STRIKES	P	P	AISC 360 TABLE N5.4-3
5	K-AREA	P	P	AISC 360 TABLE N5.4-3
6	WELD ACCESS HOLES IN ROLLED HEAVY SHAPES AND BUILT-UP HEAVY SHAPES	P	P	AISC 360 TABLE N5.4-3
7	BACKING REMOVED AND WELD TABS REMOVED (IF REQUIRED)	P	P	AISC 360 TABLE N5.4-3
8	REPAIR ACTIVITIES	P	P	AISC 360 TABLE N5.4-3
9	DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER	P	P	AISC 360 TABLE N5.4-3
10	NO PROHIBITED WELDS HAVE BEEN ADDED WITHOUT THE APPROVAL OF THE EOR	P	P	AISC 360 TABLE N5.4-3
	INSPECTION TASKS PRIOR TO BOLTING			
1	MANUFACTURER'S CERTIFICATIONS AVAILABLE FOR FASTENER MATERIALS	O	P	AISC 360 TABLE N5.6-1
2	FASTENERS MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS	O	O	AISC 360 TABLE N5.6-1
3	CORRECT FASTENERS SELECTED FOR THE JOINT DETAIL (GRADE, TYPE, BOLT LENGTH IF THREADS ARE TO BE EXCLUDED FROM SHEAR PLANE)	O	O	AISC 360 TABLE N5.6-1
4	CORRECT BOLTING PROCEDURE SELECTED FOR JOINT DETAIL	O	O	AISC 360 TABLE N5.6-1
5	CONNECTING ELEMENTS, INCLUDING THE APPROPRIATE FAYING SURFACE CONDITION AND HOLE PREPARATION, IF SPECIFIED, MEET APPLICABLE REQUIREMENTS	O	O	AISC 360 TABLE N5.6-1
6	PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL OBSERVED AND DOCUMENTED FOR FASTENER ASSEMBLIES AND METHODS USED	P	O	AISC 360 TABLE N5.6-1
7	PROPER STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS, AND OTHER FASTENERS COMPONENTS	O	O	AISC 360 TABLE N5.6-1
	INSPECTION TASKS DURING BOLTING			
1	FASTENER ASSEMBLIES, OF SUITABLE CONDITION, PLACED IN ALL HOLES AND WASHERS ARE POSITIONED AS REQUIRED	O	O	AISC 360 TABLE N5.6-2
2	JOINT BROUGHT TO THE SNUG-TIGHT CONDITION PRIOR TO THE PRE-TENSIONING OPERATION	O	O	AISC 360 TABLE N5.6-2
3	FASTENER COMPONENT NOT TURNED BY THE WRENCH PREVENTED FROM ROTATING	O	O	AISC 360 TABLE N5.6-2
4	FASTENERS ARE PRE-TENSIONED IN ACCORDANCE WITH THE RCSC SPECIFICATION, PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARD THE FREE EDGES	O	O	AISC 360 TABLE N5.6-2
	INSPECTION TASKS AFTER BOLTING			
1	NO PROHIBITED WELDS HAVE BEEN ADDED WITHOUT THE APPROVAL OF THE EOR	P	P	AISC 360 TABLE N5.6-3
	INSPECTION OF STEEL ELEMENTS OF COMPOSITE CONSTRUCTION PRIOR TO CONCRETE PLACEMENT			
1	PLACEMENT AND INSTALLATION OF STEEL DECK	P	P	AISC 360 TABLE N6.1
2	PLACEMENT AND INSTALLATION OF STEEL HEADED STUD ANCHORS	P	P	AISC 360 TABLE N6.1
3	DOCUMENT ACCEPTANCE OR REJECTION OF STEEL ELEMENTS	P	P	AISC 360 TABLE N6.1

5.3.1. (O) - OBSERVE THESE ITEMS ON A RANDOM BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS

5.3.2. (P) - PERFORM THESE TASKS FOR EACH WELDED JOINT OR MEMBER, EACH BOLTED CONNECTION, OR EACH STEEL ELEMENT

5.4. REQUIRED SPECIAL INSPECTIONS AND TESTS OF MASONRY CONSTRUCTION: REQUIREMENTS IN THE TABLES "MINIMUM VERIFICATION REQUIREMENTS" AND "MINIMUM SPECIAL INSPECTION REQUIREMENTS" BELOW ARE BASED ON A "LEVEL" AS DEFINED BY THE CODE. FOR THIS STRUCTURE, USE THE REQUIREMENTS FOR LEVEL 2.

5.4.1. MINIMUM VERIFICATION REQUIREMENTS

	QUALITY ASSURANCE [NOTE 5.4.1.1]				REFERENCE STANDARD
NO.	SPECIAL INSPECTION	LEVEL 1	LEVEL 2	LEVEL 3	
1	PRIOR TO CONSTRUCTION, VERIFICATION OF COMPLIANCE OF SUBMITTALS	R	R	R	TMS 602 ARTICLE 1.5
2	PRIOR TO CONSTRUCTION, VERIFICATION OF f'_m AND f'_{MC} EXCEPT WHERE SPECIFICALLY EXEMPTED BY THE CODE	NR	R	R	TMS 602 ARTICLE 1.4 B
3	DURING CONSTRUCTION, VERIFICATION OF SLUMP FLOW AND VISUAL STABILITY INDEX (VSI) WHEN SELF-CONSOLIDATING GROUT IS DELIVERED TO THE PROJECT SITE	NR	R	R	TMS 602 ARTICLES 1.5 & 1.6.3
4	DURING CONSTRUCTION, VERIFICATION OF f'_m AND f'_{MC} FOR EVERY 5,000 SQ FT	NR	NR	R	TMS 602 ARTICLE 1.4 B
5	DURING CONSTRUCTION, VERIFICATION OF PROPORTIONS OF MATERIALS AS DELIVERED TO THE PROJECT SITE FOR PREMIXED OR PREBLENDED MORTAR, PRESTRESSED GROUT, AND GROUT OTHER THAN SELF-CONSOLIDATING GROUT	NR	NR	R	TMS 602 ARTICLE 1.4 B

5.4.1.1. (R) - REQUIRED

5.4.1.2. (NR) - NOT REQUIRED

DC PROJECT: 25191.04DS
CONTACT: S. KRUMENACKER

PRICING NOTE: THESE DOCUMENTS REPRESENT THE CURRENT STATE OF A DEVELOPING DESIGN AND AS SUCH, NOT ALL CONDITIONS ARE CURRENTLY SHOWN. ALL STRUCTURAL DETAILS AND CONNECTIONS SHOULD BE ASSUMED TO BE IN THE GENERAL CONTRACTOR PRICE AND SCOPE OF SERVICES WHERE THE SCHEDULE OF THIS CONDITIONS REQUIRED FOR PROPER BID DOCUMENTS.

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	2/2/26	BID SET
	12/01/25	BID SET
	11/20/25	GMS REVIEW
	11/14/25	DOH FINAL

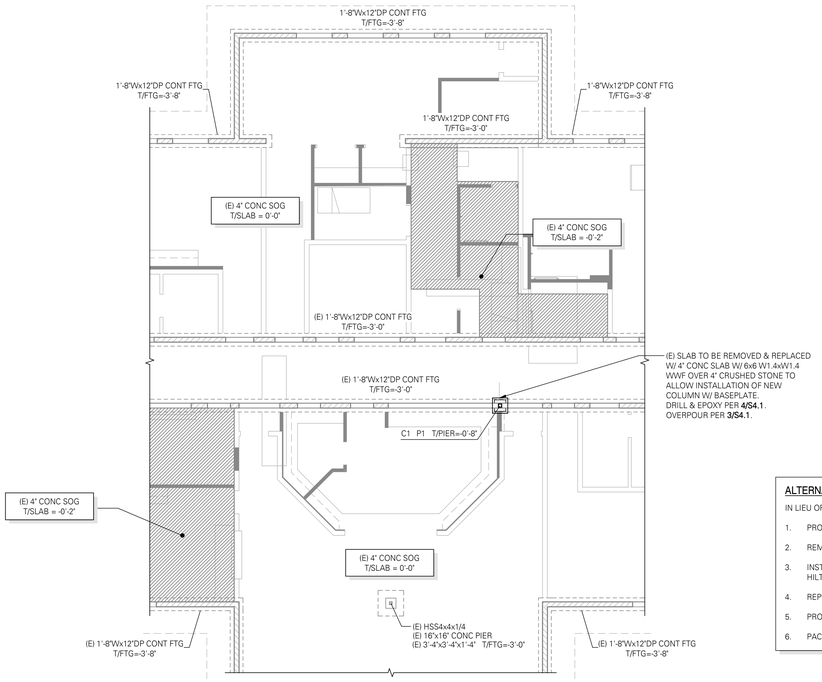
REVISIONS

DRAWN BY:	REVIEWED BY:
CAD	STK
PLOT SCALE:	DATE: 12/01/25

PROJECT FILE LOCATION:

(DRAWING NAME)
SCHEDULE OF SPECIAL INSPECTIONS

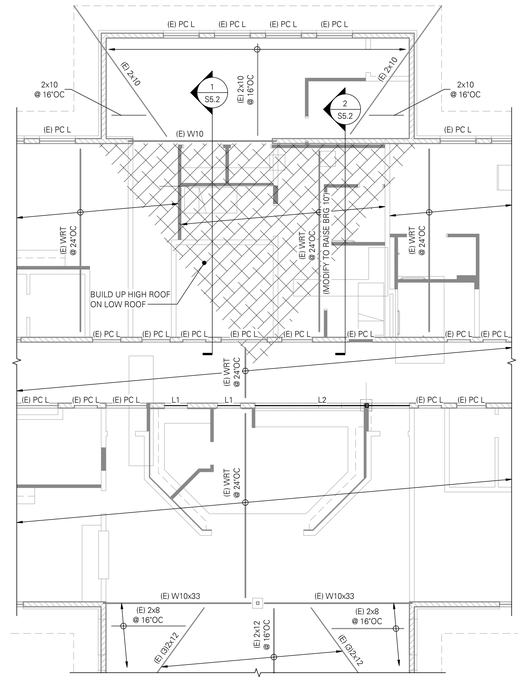
(DRAWING NO.)
S0.4



ALTERNATIVE

IN LIEU OF INSTALLING C1, P1 AND L2:

1. PROVIDE TEMPORARY SHORING FOR (E) WOOD ROOF TRUSSES.
2. REMOVE 16" (E) CMU AT EA END.
3. INSTALL NEW 16" CMU (GROUT SOLID W/ (2) #4 VERT BARS DRILLED & EPOXIED 6" INTO (E) FTG USING HILTI HIT-HY200 AND PROVIDE HORIZ JOINT REINF @ 16"OC).
4. REPLACE L2 W/ W8x35 (PROVIDE CONT 2X TOP PLATE W/ 1/2"Ø THRU-BOLTS @ 48"OC MAX, STAGGERED.
5. PROVIDE 'BP1' PER DETAIL 1/S5.1 AT EA END.
6. PACK NEW WF BEAM SOLID AT GC/ ARCH'S OPTION.



FOUNDATION PLAN NOTES:

1. STRUCTURAL GENERAL NOTES, DESIGN CRITERIA, ABBREVIATIONS AND LEGEND PERS0.0 SERIES.
2. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH THE ARCHITECTURAL DRAWINGS. ALL EXISTING DIMENSIONS SHALL BE FIELD VERIFIED.
3. CONTRACTOR SHALL LOCATE AND VERIFY THE FOLLOWING WITH OTHERS PRIOR TO POURING CONCRETE: ALL DOOR OPENINGS IN FOUNDATION WALLS; DRAINS AND SLOPES; BLOCKOUTS FOR PLUMBING, SPRINKLERS AND HVAC. ALL DUCTS, CHASES AND PIPES PER MECHANICAL, PLUMBING, ELECTRICAL AND SPRINKLER DRAWINGS. STAIR DETAILS AND GUARDRAILS PER ARCHITECTURAL DRAWINGS.
4. TOP OF SLAB (T/SLAB) ELEVATION ASSUMED 0'-0" = DATUM ELEVATION (211.00'), UNO. FOR ACTUAL T/SLAB ELEVATION REFER TO CIVIL AND ARCHITECTURAL DRAWINGS. PROVIDE FREE-DRAINING GRANULAR FILL PER GEOTECH REPORT.
5. TOP OF PIER (T/PIER) ELEVATION = -0'-8" BELOW DATUM, UNO. WHERE DIFFERS, THE ELEVATION SHALL BE NOTED THUS X'-X".
6. TOP OF FOOTING (T/FTG) ELEVATION BELOW DATUM ELEVATION PER PLAN.
7. ALL FOOTINGS AND SLABS TO BEAR ON COMPETENT NATIVE SOIL AND/OR STRUCTURAL FILL. SUBGRADE PREPARATION, STRUCTURAL FILL, DRAINAGE SYSTEM, AND OTHER REQUIREMENTS PER GEOTECH REPORT AS NOTED IN THE STRUCTURAL GENERAL NOTES.
8. BOTTOM OF NEW FOOTING TO MATCH TOP OF EXISTING FOOTING UNLESS NOTED OTHERWISE.
9. MOISTURE AND WATERPROOFING PER ARCHITECTURAL DRAWINGS.
10. TYPICAL FOUNDATION DETAILS PER SHEET S4.1.

ROOF FRAMING PLAN NOTES:

1. STRUCTURAL GENERAL NOTES, DESIGN CRITERIA, ABBREVIATIONS AND LEGEND PER S0.0 SERIES.
2. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH THE ARCHITECTURAL DRAWINGS. ALL EXISTING DIMENSIONS SHALL BE FIELD VERIFIED.
3. ALL DUCTS, CHASES AND PIPES SHALL BE PER MECHANICAL, PLUMBING, ELECTRICAL AND SPRINKLER DRAWINGS. STAIR DETAILS AND GUARDRAILS PER ARCHITECTURAL DRAWINGS.
4. 'L_' INDICATES LINTEL PER SCHEDULE ON THIS SHEET.
5. CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SHORING.
6. TYPICAL FRAMING DETAILS AND ADDITIONAL SCHEDULES PER S5.1.

STEEL COLUMN SCHEDULE

MARK	SIZE	BASE PLATE	ANCHOR BOLTS	BOLT GRADE	REMARKS
C1	HSS6x6x5/16	13"x13"x5/8"	(4) 5/8"Ø	F1554 GR36	8 1/2"x8 1/2"x3/8" CAP PLATE

CONCRETE PIER SCHEDULE

MARK	TYPE	DIMENSIONS		REINFORCEMENT		REMARKS
		LENGTH	WIDTH	TIES	VERTICAL REINF	
P1	18"x18" PIER	1'-6"	1'-6"	#3 @ 9"OC	(6) #6	DRILL & EPOXY 9" INTO EXISTING FOOTING

STEEL LINTEL SCHEDULE

MARK	LINTEL DESCRIPTION	COMMENTS
L1	(2) L6x3 1/2x5/16 LLV	SEE DETAIL 3/S5.1
L2	(2) C8x18.75	SEE DETAIL 4/S5.1

NOTES:
1. ALL STEEL SHALL BE ASTM A36.
2. FILL CMU VOIDS SOLID BELOW LINTEL BEARING.
3. ALL LINTELS SHALL HAVE 8" MINIMUM BEARING, UNO.

PARTIAL FOUNDATION PLAN

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

PARTIAL ROOF FRAMING PLAN

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

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CONTACT: S. KRUMENACKER

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RENOVATION FOR NEW MOLLIE WOODS 16 BED
PSYCHIATRIC HOSPITAL
HEATHERWOOD - ONE STORY BUILDING
WOODS SERVICES
LANGHORNE, PA 19047

	2/2/26	BID SET
	12/01/25	BID SET
	11/20/25	CHS REVSN
	11/14/25	DOH FINAL

REVISIONS

DRAWN BY:	REVIEWED BY:
CAD	STK
PLOT SCALE:	DATE:
As Indicated	12/01/25

PROJECT FILE LOCATION:

DRAWING NAME:
FOUNDATION & ROOF FRAMING PLANS

DRAWING NO:
S1.1

E1(30x42)

DCI PROJECT: 25191.04.05
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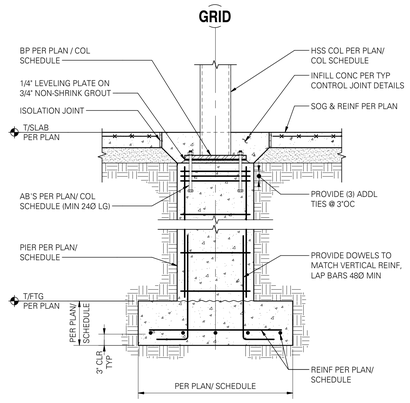
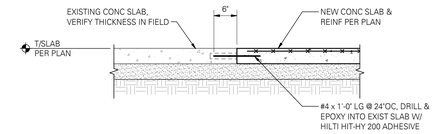


3 TYPICAL COLUMN FOOTING WITH PIER DETAIL

SCALE: 3/4" = 1'-0" (03005P-MID-M)



4 TYPICAL SLAB ON GRADE INFILL DETAIL

SCALE: 3/4" = 1'-0" (03370-MID)

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RENOVATION FOR NEW MOLLIE WOODS 16 BED

PSYCHIATRIC HOSPITAL

HEATHERWOOD - ONE STORY BUILDING
WOODS SERVICES
LANGHORNE, PA 19047

	2/2/26	BID SET
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	11/20/25	CMS REVSN
	11/14/25	DOH FINAL

REVISIONS

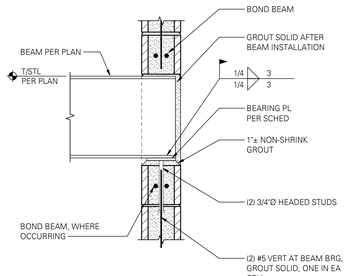
DRAWN BY:	REVIEWED BY:
CAD	STK
PLOT SCALE: 3/4" = 1'-0"	DATE: 12/01/25

PROJECT FILE LOCATION:

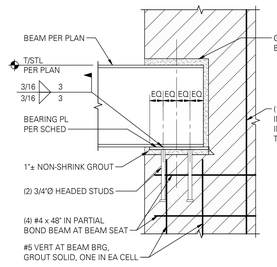
DRAWING NAME:
FOUNDATION DETAILS & SECTIONS

DRAWING NO:
S4.1

E1(30x42)



BEAM PERPENDICULAR TO WALL



BEAM PARALLEL TO WALL

BEARING PLATE SCHEDULE	
MARK	BEARING PLATE SIZE
BP1	PL3/8"x8"x7 1/2"
BP2	---
BP3	---
BP4	---
BP5	---
BP_	---

NOTES:

1. LENGTH OF PLATE TO BE PARALLEL TO WALL.

2. CENTER BEAM AND PLATE ON WALL WHEN BEAM IS PARALLEL TO WALL.

3.PLATE DIMENSIONS: THICKNESS x WIDTH x LENGTH.

NOTES TO ENGINEER:
1. NOT FOR USE AS A SEISMIC DRAG CONNECTION FOR ZONES C, D, E & F.

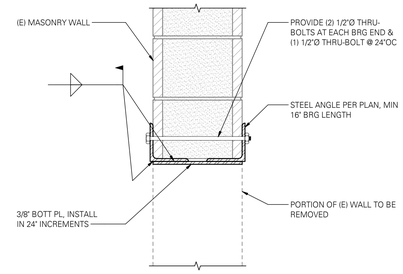
2. SLOTS TO ACCOUNT FOR TEMPERATE CHANGES IN COLD CLIMATES.

3. VERIFY CAPACITY OF CMU WALL TO SUPPORT LOAD FROM BEAM FOR OUT-OF-PLANE AND BEARING CAPACITY FOR PLATE IS 8"x 1'-0" = 20.0k FOR f'm = 1500psi.

4. DIMENSIONS PROVIDED IN SCHEDULE ARE THE MINIMUM REQUIREMENTS. UPDATE AS REQUIRED FOR DESIGN FORCES AND WALL/ BEAM GEOMETRY ON SPECIFIC PROJECT.

1 TYPICAL STEEL BEAM BEARING ON CMU WALL

SCALE: 1" = 1'-0" (04040A-MID)

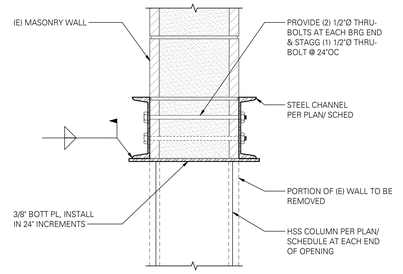


ERECTION SEQUENCE:

1. SAWCUT 4" SLOT ON ONE SIDE OF OPENING
2. INSTALL ANGLE ON PREPARED SIDE
3. REPEAT STEPS 1 & 2 FOR OPPOSITE SIDE OF OPENING
4. INSTALL THRU-BOLTS
5. INSTALL AND WELD PLATE TO UNDERSIDE OF ANGLES IN 24" INCREMENTS AS WALL IS REMOVED

3 INSTALLATION OF NEW LINTEL IN EXISTING CMU WALL DETAIL

SCALE: 1 1/2" = 1'-0" (05000-01-MID)

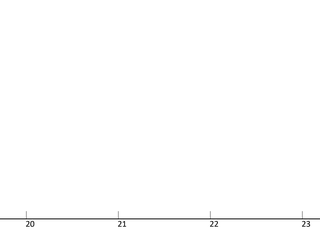


ERECTION SEQUENCE:

1. INSTALL HSS COLUMN AND SEATS AT EACH END OF OPENING
2. INSTALL CHANNEL ON BOTH SIDES
3. INSTALL THRU-BOLTS
4. INSTALL AND WELD PLATE TO UNDERSIDE OF CHANNELS IN 24" INCREMENTS AS WALL IS REMOVED

4 INSTALLATION OF NEW LINTEL IN EXISTING CMU WALL DETAIL

SCALE: 1 1/2" = 1'-0" (05000-01A-MID)



8 TYPICAL LINTEL BEARING DETAIL

SCALE: 1" = 1'-0" (05000-03-MID)

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RENOVATION FOR NEW MOLLIE WOODS 16 BED

PSYCHIATRIC HOSPITAL

HEATHERWOOD - ONE STORY BUILDING
WOODS SERVICES
LANGHORNE, PA 19047

	2/2/26	BID SET
	12/01/25	BID SET
	11/20/25	CMS REVSN
	11/14/25	DOH FINAL

REVISIONS

DRAWN BY:	REVIEWED BY:
CAD	STK
PLOT SCALE:	DATE:
As Indicated	12/01/25

PROJECT FILE LOCATION:

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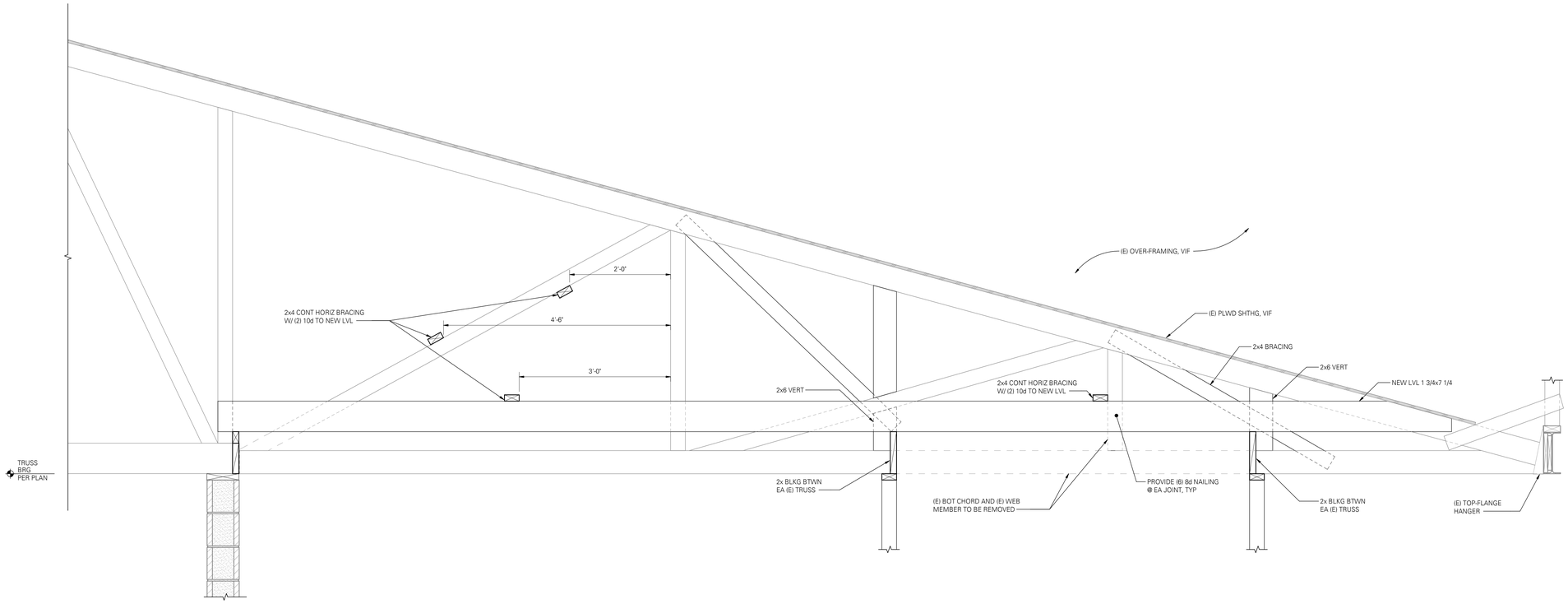
FRAMING DETAILS & SECTIONS

DRAWING NO:

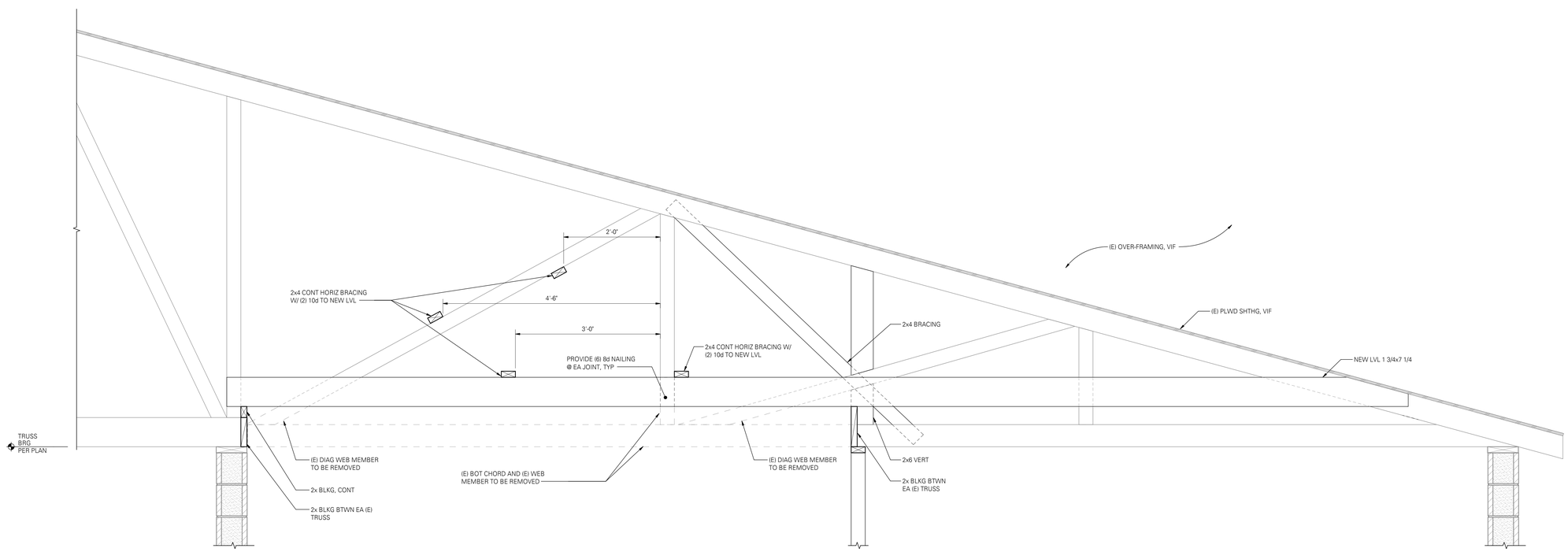
S5.1

E1(30x42)



1 TRUSS REINFORCEMENT - ROOM 1

SCALE: 1" = 1'-0"



2 TRUSS REINFORCEMENT - ROOM 2

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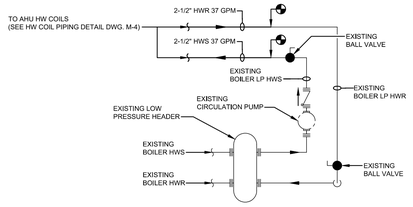
PLOT SCALE: 1" = 1'-0"	DATE: 12/01/25

PROJECT FILE LOCATION:

DRAWING NAME:
FRAMING DETAILS & SECTIONS

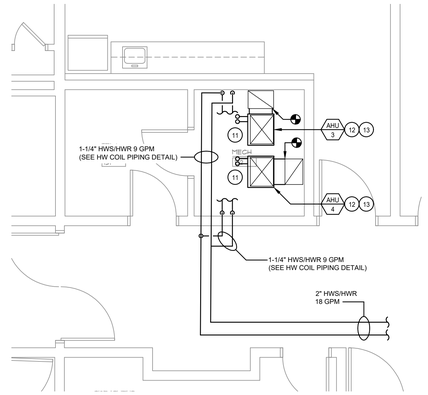
DRAWING NO:
S5.2

E1(30x42)



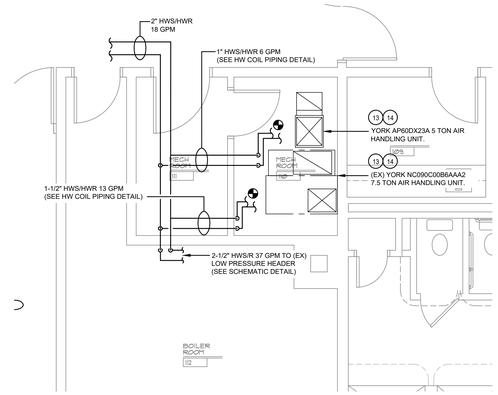
BOILER ROOM HWS/HWR PIPING DETAIL

NOT TO SCALE



2 / M-1 HEATHERWOOD FLOOR PLAN - MECH ROOM

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

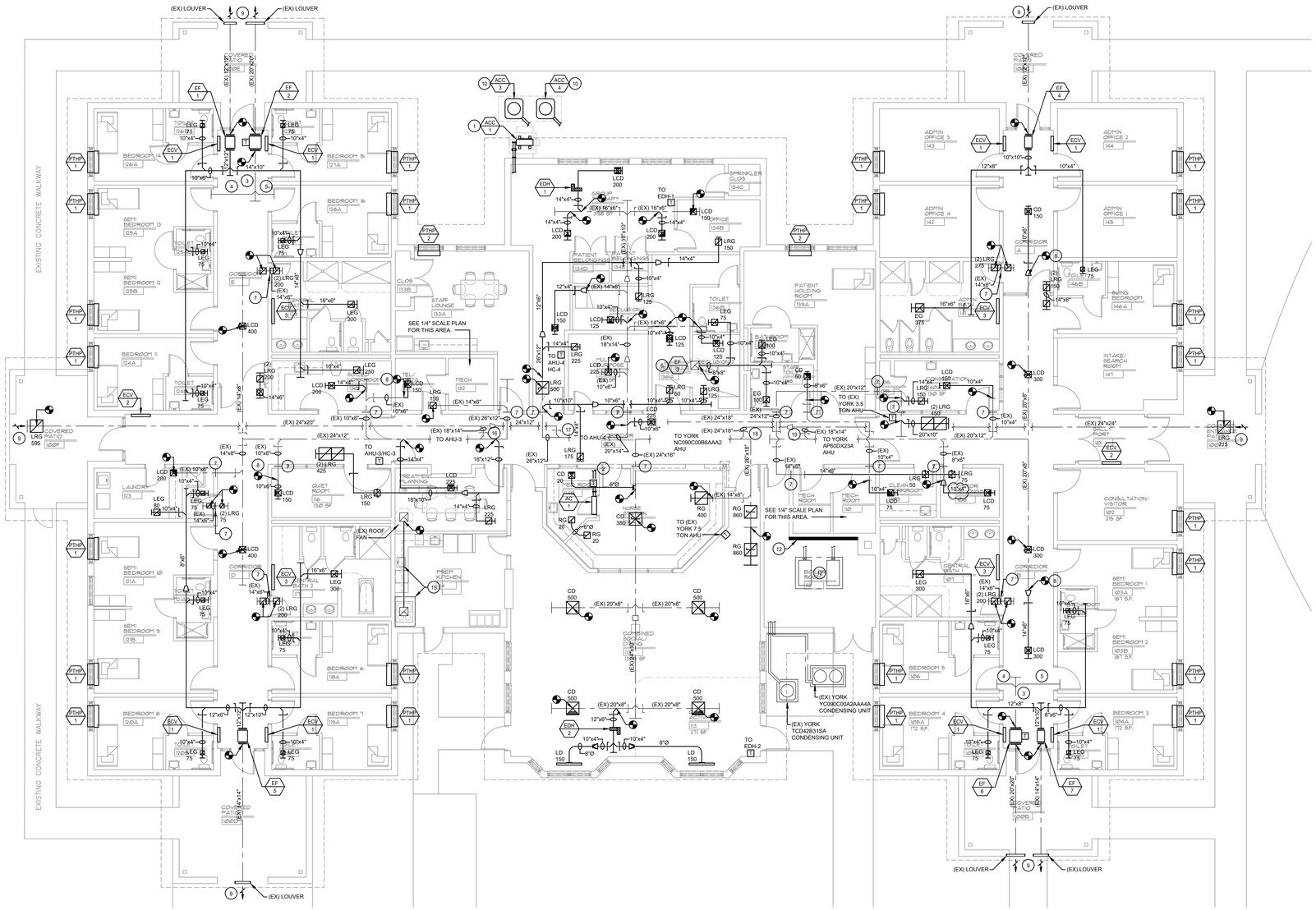


3 / M-1 HEATHERWOOD FLOOR PLAN - MECH ROOM

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

MECHANICAL NOTES

1	REFRIGERANT LINES TO AC-1. SEE MANUFACTURER FOR LINE SIZES & INSTALLATION INSTRUCTIONS. PROVIDE 4" DEEP CONCRETE PAD, CONCRETE PAD SHALL EXTEND 6" BEYOND EQUIPMENT AND SUPPORT RAILS. PROVIDE EQUIPMENT SUPPORT RAILS AND PIPE SUPPORTS.(SEE DETAILS). PROVIDE PVC ENCLOSURE TO CONCEAL ALL EXPOSED REFRIGERANT PIPING.
2	REFRIGERANT LINES TO ACC-1. SEE MANUFACTURER FOR LINE SIZES & INSTALLATION INSTRUCTIONS. SEE PLUMBING DRAWINGS FOR CONDENSATE PIPING.
3	EXISTING 20"x20" EXHAUST DUCTWORK.
4	EXISTING 18"x12" EXHAUST DUCTWORK WITH OPEN END.
5	EXISTING 18"x10" EXHAUST DUCTWORK WITH OPEN END.
6	CONNECT TO EXISTING ROOF CURB USING CURB CAP ADAPTER (FIELD VERIFY SIZE PRIOR TO PURCHASE).
7	REMOVE EXISTING FIRE DAMPER AND REPAIR DUCTWORK AS REQUIRED.
8	EXTEND EXISTING DUCTWORK AS REQUIRED TO INSTALL NEW DIFFUSER/GRILLE.
9	MAINTAIN 25'-0" CLEARANCE FROM OUTDOOR AIR INTAKES AND EXHAUST AIR OUTLETS.
10	REFRIGERANT LINES TO AHU-3 & AHU-4. SEE MANUFACTURER FOR LINE SIZES & INSTALLATION INSTRUCTIONS. NEW ACC-3 & ACC-4 SHALL BE PLACED ON (EX) CONCRETE PAD. PROVIDE PIPE SUPPORTS AS REQUIRED. PROVIDE PVC ENCLOSURE TO CONCEAL ALL EXPOSED REFRIGERANT PIPING.
11	REFRIGERANT LINES TO ACC-3 & ACC-4, SEE MANUFACTURER FOR LINE SIZES & INSTALLATION INSTRUCTIONS. SEE PLUMBING DRAWINGS FOR CONDENSATE PIPING.
12	NEW AHU-3 & AHU-4, SHALL BE MOUNTED ON STANDS TO ALLOW FOR RETURN DUCTWORK TO BE 6" A.F.F. (FIELD VERIFY). NEW HOT WATER COILS SHALL BE FED FROM (EX) LOCHINVAR HIGH EFFICIENCY BOILERS LOCATED IN BOILER ROOM (FIELD VERIFY). BOILER ROOM PIPING SHALL BE RECONFIGURED AS REQUIRED FOR NEW WORK. SEE MANUFACTURER FOR INSTALLATION INSTRUCTIONS. PROVIDE CONDENSATE NEUTRALIZER.
13	FIELD VERIFY ROUTING OF EXISTING SUPPLY AND RETURN DUCTWORK LEAVING MECHANICAL ROOMS.
14	(EX) HOT WATER COILS SHALL BE FED FROM (EX) LOCHINVAR HIGH EFFICIENCY BOILERS LOCATED IN BOILER ROOM (FIELD VERIFY). BOILER ROOM PIPING SHALL BE RECONFIGURED AS REQUIRED FOR NEW WORK. SEE MANUFACTURER FOR INSTALLATION INSTRUCTIONS. PROVIDE CONDENSATE NEUTRALIZER.
15	EXISTING KITCHEN HOOD AND ASSOCIATED ITEMS SHALL BE RELOCATED BY OTHERS. EXTEND (EX) BLACK IRON EXHAUST DUCTWORK AS REQUIRED. ALL DUCT MODIFICATIONS WILL BE ON RENOVATION PLANS BY OTHERS.
16	BALANCE EXISTING OA DAMPER TO 270 CFM.
17	BALANCE EXISTING OA DAMPER TO 325 CFM.
18	BALANCE EXISTING OA DAMPER TO 505 CFM.
19	BALANCE EXISTING OA DAMPER TO 210 CFM.



1 / M-1 HEATHERWOOD FLOOR PLAN - NEW WORK

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

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DEMOLITION PACKAGE FOR NEW WOODS SERVICES

BEHAVIORAL HEALTH HOSPITAL

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2/2/26	BID ISSUE
12/03/25	DOH ISSUE
11/20/25	CHS REVIEW

REVISIONS

DRAWN BY: BBB	REVIEWED BY: HRM
PLOT SCALE: AS NOTED	DATE: 01/01/26

PROJECT FILE LOCATION:

DRAWING NAME:
OVERALL NEW WORK FLOOR PLAN MECHANICAL

DRAWING NO.

M-1

ABBREVIATIONS

AC	AIR CONDITIONING UNIT
ACC	AIR COOLED CONDENSING UNIT
AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
AP	ACCESS PANEL
ATC	AUTOMATIC TEMPERATURE CONTROL
BDD	BACKDRAFT DAMPER
CD	CEILING DIFFUSER
CFM	CUBIC FEET PER MINUTE
CUH	CABINET UNIT HEATER
D	DRAIN
Db	DRY BULB TEMPERATURE, °F
DDC	DIRECT DIGITAL CONTROL
DN	DOWN
DSD	DUCT SMOKE DETECTOR
DWG	DRAWING
DX	DIRECT EXPANSION
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
ECH	ELECTRIC CABINET HEATER
EF	EXHAUST FAN
EG	EXHAUST GRILLE
ER	EXHAUST REGISTER
ERP	ELECTRIC RADIANT CEILING PANEL
ESP	EXTERNAL STATIC PRESSURE
EUH	ELECTRIC UNIT HEATER
EWF	ELECTRIC WALL FIN
EWH	ELECTRIC WALL HEATER
(EX)	EXISTING
EXH	EXHAUST
FC	FLEXIBLE CONNECTION
FD	FIRE DAMPER
FLA	FULL LOAD AMPS
FPM	FEET PER MINUTE
FT	FEET
GUH	GAS UNIT HEATER
HP	HORSEPOWER/HEAT PUMP
HWR	HEATING HOT WATER RETURN
HWS	HEATING HOT WATER SUPPLY
IN	INCHES
KW	KILOWATT
LAT	LEAVING AIR TEMPERATURE
LBS	POUNDS
MAX	MAXIMUM
MBH	THOUSAND BTU PER HOUR
MCA	MINIMUM CIRCUIT AMPS
MOD	MOTOR OPERATED DAMPER
MOCP	MAXIMUM OVERCURRENT PROTECTION
MIN	MINIMUM
NC	NOISE CRITERIA
NIC	NOT IN CONTRACT
NOM	NOMINAL
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OBD	OPPOSED BLADE DAMPER
OED	OPEN END DUCT
PD	PRESSURE DROP (FEET OF WATER)
PSIG	POUNDS/SQUARE INCH
PTAC	PACKAGE TERMINAL AC UNIT
PVC	POLYVINYL CHLORIDE
(R)	REMOVE
RA	RETURN AIR
RG	RETURN GRILLE
RHG	REFRIGERANT HOT GAS
RL	REFRIGERANT LIQUID
RLA	RATED LOAD AMPS
RPM	REVOLUTIONS PER MINUTE
RR	RETURN REGISTER
RS	REFRIGERANT SUCTION
SA	SUPPLY AIR
SG	SUPPLY GRILLE
SL	STORM LOUVER
SP	STATIC PRESSURE
SPP	SINGLE POINT POWER
SR	SUPPLY REGISTER
TG	TRANSFER GRILLE
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UH	UNIT HEATER
Wb	WET BULB TEMPERATURE, °F
WH	WALL HEATER
W	WIDE
W/	WITH
WMS	WIRE MESH SCREEN

DUCTWORK SYMBOLS

- DEMOLITION OF DUCTWORK/EQUIPMENT
- EXISTING DUCTWORK/EQUIPMENT TO REMAIN
- NEW DUCTWORK/EQUIPMENT
- SUPPLY DUCT (UP & DOWN)
- RETURN OR RELIEF (UP & DOWN)
- EXHAUST (UP & DOWN)
- SUPPLY DIFFUSER
- RETURN GRILLE
- EXHAUST GRILLE
- ROUND DUCT
- FLEXIBLE CONNECTOR
- VANED ELBOW (PROVIDE ALL SQUARE OR RECTANGULAR ELBOWS WITH VANES)
- VANED ELBOW (SINGLE LINE DUCT)
- STANDARD RADIUS ELBOWS
- DIRECTION OF FLOW #CFM
- ACOUSTIC - THERMAL LINING
- TRANSITION SQUARE TO ROUND
- DUCT ACCESS DOOR
- MANUAL VOLUME DAMPER
- FOR TYPICAL 24"x24" SUPPLIES AND RETURNS
- EXHAUST GRILLE
- SUPPLY GRILLE
- RETURN GRILLE
- 3-WAY BLOW
- 2-WAY CORNER BLOW
- 2-WAY BLOW
- 1-WAY BLOW

CONTROLS

- T — ROOM SENSOR: TEMPERATURE (MOUNTING HEIGHT 48" AFF)
- H — ROOM SENSOR: HUMIDITY (MOUNTING HEIGHT 48" AFF)
- T — DUCT OR PIPE TEMP. SENSOR (12" MIN LENGTH IN DUCT WHEN SPACE PERMITS)
- H — DUCT HUMIDITY SENSOR (12" MIN LENGTH IN DUCT WHEN SPACE PERMITS)
- Dp — DUCT DEWPOINT SENSOR (12" MIN LENGTH IN DUCT WHEN SPACE PERMITS)
- Sp — DUCT STATIC PRESSURE SENSOR (12" MIN LENGTH IN DUCT WHEN SPACE PERMITS)
- T G — GUARD ON THERMOSTAT/SENSOR (MOUNTING HEIGHT 48" AFF)
- DSD — DUCT SMOKE DETECTOR
- CO2/TH — ROOM SENSOR: CO2/TEMPERATURE/HUMIDITY. (MOUNTING HEIGHT 48" AFF)
- DCO — DUCT MOUNTED CARBON MONOXIDE DETECTOR
- MOD — MOTOR OPERATED DAMPER

VALVES

- GATE VALVE
- GLOBE VALVE
- CHECK VALVE
- BALL VALVE
- BUTTERFLY VALVE
- CV — CONTROL VALVE
- BALANCING VALVE
- TD — TRIPLE DUTY VALVE
- TWO WAY CONTROL VALVE (ELECTRONIC ACTUATOR)
- THREE WAY CONTROL VALVE (ELECTRONIC ACTUATOR)
- PRESSURE REDUCING VALVE
- SAFETY RELIEF VALVE

GENERAL

- DIRECTION OF FLOW
- ANCHOR
- REDUCER OR INCREASER
- TOP CONNECTION
- BOTTOM CONNECTION
- CAP OR PLUG
- BLANK FLANGE
- ELBOW DOWN
- UNION OR FLANGE
- ELBOW UP
- POINT OF CONNECTION BETWEEN NEW AND EXISTING WORK
- POINT BETWEEN EXISTING REMOVAL WORK AND EXISTING TO REMAIN
- EXISTING WORK TO REMAIN
- EXISTING WORK TO BE REMOVED

AIR CONDITIONING

- RL — REFRIGERANT LIQUID
- RS — REFRIGERANT SUCTION

HEATING

- HWS — HOT WATER SUPPLY
- HWR — HOT WATER RETURN

GENERAL NOTES

1. CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR, FEES AND PERMITS FOR A COMPLETE INSTALLATION. ALL WORK SHALL COMPLY WITH APPLICABLE CODES AND STANDARDS.
2. ALL COMPONENTS REQUIRED FOR A COMPLETE INSTALLATION ARE NOT SHOWN ON THE DRAWINGS. REFER TO EQUIPMENT INSTALLATION INSTRUCTIONS FOR ADDITIONAL REQUIREMENTS, INCLUDING REQUIRED CONNECTION LOCATIONS, TYPES, & SIZES.
3. UNLESS SPECIFICALLY DIMENSIONED, THE WORK SHOWN ON THE DRAWINGS IS DIAGRAMMATIC ONLY TO SHOW GENERAL ARRANGEMENTS. THE DRAWINGS ARE NOT TO BE SCALED. PIPE AND DUCT ROUTING AND EQUIPMENT CONNECTION LOCATIONS SHOWN ON DRAWINGS ARE APPROXIMATE. FIELD VERIFY CLEARANCES, DIMENSIONS, MATERIALS, AND EQUIPMENT REQUIREMENTS PRIOR TO CONSTRUCTION. RELOCATE CONDUITS, PIPING HANGERS, ETC. AS REQUIRED.
4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL WORK NECESSARY TO PREPARE STRUCTURES FOR THE INSTALLATION OF MECHANICAL SYSTEMS. ALL HOLES, OPENINGS, AND DAMAGED MATERIALS CREATED DURING CONSTRUCTION SHALL BE PATCHED AND FINISHED.
5. THE CONTRACTOR SHALL PROVIDE ALL CUTTING, PATCHING, FINISHING, AND PENETRATIONS REQUIRED BY THE INSTALLATIONS. ALL PENETRATIONS SHALL BE PATCHED AND SEALED. CUTTING OF BUILDING CONSTRUCTION MATERIALS SHALL CONFORM TO THE CHARACTERISTICS OF THE PARTICULAR MATERIAL INVOLVED AND SHALL NOT CREATE ANY STRUCTURAL WEAKNESS OR UNSIGHTLY APPEARANCE. ALL CUTTING SHALL MEET THE APPROVAL OF THE ARCHITECT AND/OR OWNER'S REPRESENTATIVE. COORDINATE WITH THIS PARTY BEFORE COMMENCING.
6. WHENEVER CONNECTIONS TO EXISTING FACILITIES ARE REQUIRED, THE CONTRACTOR SHALL COORDINATE WITH THE OWNER'S REPRESENTATIVE AND SCHEDULE THE WORK TO MINIMIZE INTERRUPTION OF SERVICE AND AVOID INTERFERENCE WITH NORMAL FUNCTION OF THE BUILDING AND/OR SURROUNDING WORK AREA. RELOCATED ITEMS SHALL BE INSTALLED IN COMPLIANCE WITH APPLICABLE CODES AND REGULATIONS.
7. ALL WORK, EQUIPMENT AND MATERIALS SHALL BE PROTECTED AT ALL TIMES. ALL DUCT AND PIPE OPENINGS SHALL BE PROPERLY CAPPED OR PLUGGED DURING INSTALLATION.
8. WHERE REQUIRED FOR CLEARANCE, TO AVOID INTERFERENCE OR EQUIPMENT CONNECTIONS, THE CONTRACTOR SHALL OFFSET PIPES, DUCTS OR CONDUITS. NECESSARY SPECIAL FITTINGS OR ADAPTERS SHALL BE PROVIDED TO MAINTAIN GOOD FLOW CHARACTERISTICS. PROPERLY DRAIN AND DRIP WHERE NECESSARY.
9. THE CONTRACTOR SHALL MOUNT ALL THERMOSTATS AND ADJUSTABLE SENSORS IN FINISHED OCCUPIED ROOMS AT ADA HEIGHT OF 48 INCHES.
10. ALL VALVES SHALL HAVE EXTENDED STEMS TO PLACE THE HANDLE OUTSIDE OF THE PIPE INSULATION.
11. VALVE STEM AND HANDLE SHALL BE LOCATED ON THE TOP OR SIDES OF A PIPE, NOT THE BOTTOM.
12. FOR ANY MATERIALS AND EQUIPMENT REMOVED DURING THE DEMOLITION PHASE OF THE PROJECT, THE OWNER'S REPRESENTATIVE SHALL APPROVE FINAL DISPOSITION OF ALL SUCH MATERIAL FOR RETENTION AND STORAGE, OR REMOVAL FROM THE SITE BY THE CONTRACTOR.
13. FOR EXISTING SYSTEMS, PROVIDE ALL HEAT TRAPS AND OR WET TAPS AS REQUIRED.
14. FOR EXISTING SYSTEMS, FIELD VERIFY CONDITIONS AND PLAN DIMENSIONS PRIOR TO SUBMITTING BID AND PRIOR TO COMMENCEMENT OF WORK.
15. COORDINATE ALL EQUIPMENT DUCT AND PIPE CONNECTIONS WITH APPROVED MANUFACTURER'S SUBMITTALS.
16. INSTALL ALL MECHANICAL EQUIPMENT AS PER MANUFACTURER'S RECOMMENDATIONS, CONTRACT DOCUMENTS, AND APPLICABLE CODES.
17. PROVIDE MANUAL VOLUME DAMPERS AT ALL BRANCH DUCT TAKEOFFS, EACH TERMINAL RUN OUT, AND WHERE SHOWN ON PLANS.

LINEAR SLOT DIFFUSER/RETURN SCHEDULE

EQUIPMENT NUMBER	TYPE	CFM	S.P.	MANUFACTURER	MODEL	LENGTH	SLOTS			NECK SIZE	NOTES
							QTY	SIZE	DEFLECTION		
LD	LINEAR SLOT - SUPPLY	0-220	0.15"	PRICE	SDS100	4'-0"	2	1.0"	ADJUSTABLE	PLENUM w/ 7" Ø INLET	ALL

NOTES:
1. PROVIDE SDBI-100 INSULATED PLENUM w/ INSULATED END CAPS.
2. CONTRACTOR SHALL COORDINATE DIFFUSER BORDER TYPE WITH CEILING TYPE IN EACH SPACE.
3. FINISH AS SELECTED BY ARCHITECT.
4. PROVIDE CONCEALED MOUNTING.
5. INSTALL PER MANUFACTURER'S INSTRUCTIONS.

ELECTRIC CONVECTOR SCHEDULE

ECV/N — PLAN SYMBOL

EQUIPMENT NUMBER	DESCRIPTION	MBH	KW	VOLT/ PHASE	AMPS	CABINET			MAKE & MODEL	NOTES
						L	W	H		
ECV-1	WALL MOUNTED	2560	.75	208/1	3.6	28"	5"	16"	TPI "F8802075"	-
ECV-2	WALL MOUNTED	3413	1	208/1	4.8	36"	5"	16"	TPI "F8803100"	-
ECV-3	WALL MOUNTED	4266	1.25	208/1	6.1	48"	5"	16"	TPI "F8804125"	-

CEILING DIFFUSER SCHEDULE

SYMBOL	MODULE SIZE (IN.)	NOMINAL SIZE (IN.)	NECK SIZE (IN. Ø)	CFM RANGE	SP (IN. WC.)	N.C.	BASIS OF DESIGN MAKE & MODEL
CD	24x24	12x12	6	0-100	0.05	-	PRICE MODEL 'SMD'
CD		12x12	6	101-140	0.03	-	
CD		12x12	8	141-225	0.05	-	
CD		12x12	10	226-330	0.04	-	
CD		12x12	12	331-400	0.05	18	
CD		15x15	14	401-550	0.04	-	
CD		18x18	16	551-700	0.03	-	
CD	12x12	6x6	6	0-100	0.05	-	
CD		9x9	6	101-140	0.03	-	
CD		9x9	8	141-200	0.05	-	

NOTES:
1. CONTRACTOR SHALL COORDINATE DIFFUSER BORDER TYPE WITH CEILING TYPE IN EACH SPACE. (-) = N.C.<15
2. NOT ALL SIZES MAY BE USED; VERIFY TYPES AND QUANTITIES WITH PLANS.
3. VERIFY EACH APPLICATION WITH PLANS FOR DIRECTION OF THROW.
4. PROVIDE PLASTER FRAME FOR DRYWALL CEILINGS.

RETURN/EXHAUST GRILLE SCHEDULE

SYMBOL	MODULE SIZE (IN.)	NOMINAL SIZE (IN.)	NECK SIZE	CFM RANGE	SP (IN. WC.)	N.C.	BASIS OF DESIGN MAKE & MODEL
RG/EG	12x12	10x10	6"Ø	0-140	0.01	15	PRICE MODEL '535'
RG/EG	12x12	10x10	8"Ø	141-225	0.03	18	
RG/EG	12x12	10x10	10"Ø	226-275	0.05	23	
RG/EG	16x16	14x14	10"Ø	276-400	0.02	17	
RG/EG	24x24	22x22	12"Ø	401-600	0.01	15	
RG/EG	24x24	20x20	-	425-1200	0.01	15	

NOTES:
1. CONTRACTOR SHALL COORDINATE GRILLE BORDER TYPE WITH CEILING TYPE IN EACH SPACE. USE SURFACE MOUNT, 'NO-SCREW HOLE' FRAME FOR LAY-IN CLGS.
2. NOT ALL SIZES MAY BE USED; VERIFY TYPES AND QUANTITIES WITH PLANS.
3. PROVIDE A 6" HIGH INTERNALLY LINED PLENUM BOX WITH ROUND NECK CONNECTION. LINING SHALL BE 1" BLACK CLOSED CELL ANTI-MICROBIAL ACOUSTIC LINING.
4. PROVIDE PLASTER FRAME FOR DRYWALL CEILINGS.

LIGATURE RESISTANT CEILING DIFFUSER SCHEDULE

SYMBOL	FACE SIZE (IN.)	NECK SIZE (IN.)	CFM RANGE	SP (IN. WC.)	N.C.	BASIS OF DESIGN MAKE & MODEL
LCD	12.25x12.25	9x9	0-225	0.01	24	PRICE MODEL 'MSRRCD'
LCD	15.25x15.25	12x12	226-400	0.01	27	
LCD	18.25x18.25	15x15	401-625	0.01	29	
LCD	21.25x21.25	18x18	401-625	0.01	29	

NOTES:
1. CONTRACTOR SHALL COORDINATE DIFFUSER BORDER TYPE WITH CEILING TYPE IN EACH SPACE.
2. NOT ALL SIZES MAY BE USED; VERIFY TYPES AND QUANTITIES WITH PLANS.
3. VERIFY EACH APPLICATION WITH PLANS FOR DIRECTION OF THROW.

PACKAGED TERMINAL HEAT PUMP SCHEDULE

PTHP/N — PLAN SYMBOL

EQUIPMENT NUMBER	FAN DATA		COOLING (R-32)	HEATING	BACKUP HEATING	ELECTRICAL DATA				MAKE & MODEL	NOTES
	SA CFM	OA CFM	MAX. CAPACITY MBH	MAX. CAPACITY MBH	CAPACITY KW	VOLT/ PHASE	MCA	FACTORY DISCONNECT	SPP		
PTHP-1	MIN.-535 MAX.-700	MIN.-25 MAX.-52	12	10.8	3.5	208/1	19.9	YES	YES	FRIEDRICH PVH09K3FC	1
PTHP-2	MIN.-560 MAX.-750	MIN.-25 MAX.-52	15.5	14	5	208/1	27.5	YES	YES	FRIEDRICH PVH12K3FC	1,2

NOTES:
1. ALL UNITS SHALL BE PROVIDED WITH ARCHITECTURAL GRILLE, SUB-BASE KIT, POWER DOOR KIT, WALL SLEEVE, MERV 8 FILTRATION, LIGATURE RESISTANT PTHP COVER (BEHAVIORAL SAFETY PRODUCTS #TA640, CONTACT #706.705.1500), AND CONDENSATE DRAIN KIT.
2. PROVIDE OPTIONAL POWER CORD PXPCFA23030 FOR 5 KW BACKUP HEAT.
3. PROVIDE (1) SPARE PTHP-1, AND (1) SPARE PTHP-2 (AS SCHEDULED ABOVE), BOTH SHALL HAVE A LIGATURE RESISTANT PTHP COVER, TURN OVER TO OWNER.

EXHAUST FAN SCHEDULE

EF/N — PLAN SYMBOL

EQUIPMENT NUMBER	LOCATION	DESCRIPTION	ELECTRICAL DATA - FAN MOTOR				CFM	ESP (IN. WC.)	POWER	RPM	DRIVE	MAKE & MODEL	WEIGHT LBS.	NOTES
			VOLT/ PHASE	RLA	FACTORY DISCONNECT	SPP								
EF-1	ATTIC SPACE	INLINE	115/1	4.1	YES	YES	925	0.5	1/3	1709	DIRECT	COOK 120SQN17DO91VF	72	1,3,5
EF-2	ATTIC SPACE	INLINE	115/1	6.4	YES	YES	2100	0.25	1/2	1191	DIRECT	COOK 150SQN17D (VF)	107	1,5,6
EF-3	ROOF	CENTRIFUGAL DOWNBLAST	115/1	2.4	YES	YES	275	0.5	1/6	1373	DIRECT	COOK 120C17DOR60VF	30	2,3,5
EF-4	ATTIC SPACE	INLINE	115/1	1.9	YES	YES	450	0.5	1/8	1645	DIRECT	COOK 100SQN17DL(VF)	58	1,3,5
EF-5	ATTIC SPACE	INLINE	115/1	3.2	YES	YES	755	0.5	1/4	1622	DIRECT	COOK 120SQN17DO91VF	69	1,3,5
EF-6	ATTIC SPACE	INLINE	115/1	6.4	YES	YES	2100	0.25	1/2	1191	DIRECT	COOK 150SQN17D (VF)	107	1,5,6
EF-7	ATTIC SPACE	INLINE	115/1	2.4	YES	YES	600	0.5	1/6	1587	DIRECT	COOK 100SQN17D (VF)	58	1,3,5

NOTES:
1. PROVIDE FAN WITH UNIT MOUNTED SPEED CONTROLLER, INSULATED HOUSING, VIBRATION ISOLATORS, INLET/OUTLET DUCT COLLARS, FACTORY DISCONNECT, EC MOTOR/DRIVE PACKAGE, AIR BALANCE KIT, MOTOR OPERATED DAMPER, AND THERMAL OVERLOAD PROTECTION.
2. PROVIDE FACTORY DISCONNECT, FAN SPEED CONTROLLER, CURB CAP ADAPTER, MOTOR OPERATED DAMPER, AND ALUMINUM BIRDSCREEN.
3. RUN CONTINUOUS.
4. NOT USED.
5. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
6. PROVIDE THERMOSTAT.

DUCTLESS SPLIT SYSTEM COOLING ONLY SCHEDULE

AC/N, ACC/N — PLAN SYMBOL

EQUIPMENT NUMBER	LOCATION	DESCRIPTION	SA CFM	OA CFM	COOLING CAPACITY @ 95°F	REFRIGERANT TYPE	ELECTRICAL DATA					MAKE & MODEL	WEIGHT LBS.
							VOLT/ PHASE	MCA	MOCP	FACTORY DISCONNECT	SPP		
AC-1	MED ROOM	INDOOR COOLING UNIT	L=265 H=455	-	12 MBH	R-410A	208/1	1.0	-	YES	-	TRANE/MITSUBISHI TPKA0A0121LA00A	28
ACC-1	GRADE	OUTDOOR CONDENSING UNIT	-	-				11.0	28	YES	YES	TRANE/MITSUBISHI TRUYA0121KA70NA	92

NOTES:
1. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY/ALL ADDITIONAL REFRIGERANT AS REQUIRED FOR A PROPER CHARGE AS DEFINED BY MANUFACTURER.
2. PROVIDE HANGER FOR INDOOR UNIT & EQUIPMENT SUPPORT RAILS FOR OUTDOOR UNIT.
3. PROVIDE WIRED REMOTE CONTROLLER.
4. COORDINATE MOUNTING LOCATION OF AC-1 WITH OWNERS REP.
5. INSTALL PER MANUFACTURERS INSTRUCTIONS.
6. PROVIDE LOW AMBIENT CONTROL (WIND BAFFLES).
7. PROVIDE CONDENSATE PUMP.

ELECTRIC DUCT HEATER SCHEDULE

EDH/N — PLAN SYMBOL

EQUIPMENT NUMBER	DESCRIPTION	KW	VOLT/ PHASE	DUCT SIZE (IN) W x H	CFM	EAT (°F)	LAT (°F)	MIN. MBH	ELECTRICAL DATA				MAKE & MODEL	NOTES
									AMPS	FACTORY STARTER	FACTORY DISCONNECT	SPP		
EDH-1	HORIZONTAL SLIP IN	3	208/1	14"x4"	200	55	95	10.2	14.4	NO	YES	YES	WARREN MODEL 'CBK'	1,3
EDH-2	HORIZONTAL SLIP IN	4	208/1	12"x6"	300	55	95	13.6	19.2	NO	YES	YES	WARREN MODEL 'CBK'	2,3

NOTES:
1. INTERLOCK WITH THE OPERATION OF AC-1.
2. INTERLOCK WITH THE OPERATION OF AC-2.
3. PROVIDE WITH FAN CONTROL RELAY, AIR PRESSURE SWITCH, DOOR-INTERLOCK DISCONNECT SWITCH (NON-FUSED),0-10V INTERFACE, DISCONNECT CONTACTORS, TRANSFORMER CLASS II, STEP CONTROLLER, AND HINGED LID.

LIGATURE RESISTANT RETURN/EXHAUST GRILLE SCHEDULE

SYMBOL	FACE SIZE (IN.)	NECK SIZE (IN.)	CFM RANGE	SP (IN. WC.)	N.C.	BASIS OF DESIGN MAKE & MODEL
LRG/LEG	10x10	8x8	0-125	0.006	31	PRICE MODEL 'MSRRG'
LRG/LEG	14x14	12x12	126-300	0.006	33	
LRG/LEG	18x18	16x16	301-525	0.006	34	
LRG/LEG	22x22	20x20	526-825	0.006	35	
LRG/LEG	26x26	24x24	826-1200	0.006	36	

NOTES:
1. CONTRACTOR SHALL COORDINATE GRILLE BORDER TYPE WITH CEILING TYPE IN EACH SPACE. USE SURFACE MOUNT, 'NO-SCREW HOLE' FRAME FOR LAY-IN CLGS.
2. NOT ALL SIZES MAY BE USED; VERIFY TYPES AND QUANTITIES WITH PLANS.
3. PROVIDE A 6" HIGH INTERNALLY LINED PLENUM BOX WITH ROUND NECK CONNECTION. LINING SHALL BE 1" BLACK CLOSED CELL ANTI-MICROBIAL ACOUSTIC LINING.

SPLIT SYSTEM AIR HANDLING UNIT SCHEDULE

AHU/N, ACC/N — PLAN SYMBOL

EQUIPMENT NUMBER	SA CFM	OA CFM	ESP (IN. W.C.)	DISCHARGE	MOTOR & DRIVE	FAN MOTOR	COOLING @ 95° COND.						HOT WATER HEATING COIL (BINDUS AQUECOIL HHU-YE-3)							ELECTRICAL DATA						MAKE & MODEL	NOTES
						HP	TOTAL MBH	SENS MBH	EAT (°F)		LAT (°F)		REFRIGERANT	TOTAL MBH	GPM	EWT (°F)	LWT (°F)	EAT (°F)	LAT (°F)	APD (IN. W.C.)	WPD (FT. HD)	VOLT/ PHASE	MCA	MOCP	FACTORY STARTER	FACTORY DISCONNECT	SPP	
									Db	Wb	Db	Wb																
AHU-3	1725	270	0.25	TOP	ECM DIRECT	0.75	-	-	80	67	59	-	-	103.5	9	180	156	68	116	0.31	5.1	230-1	8.5	15	NO	NO	YES	YORK JHE60D5CH2SS1	1, 3
ACC-3	-	-	-	-	-	-	56.7	39.6	-	-	-	-	R-454B	-	-	-	-	-	-	-	-	230-3	24	40	NO	NO	YES	YORK XC360E3S11	2, 3
AHU-4	1725	325	0.25	TOP	ECM DIRECT	0.75	-	-	80	67	59	-	-	103.5	9	180	156	68	116	0.31	5.1	230-1	8.5	15	NO	NO	YES	YORK JHE60D5CH2SS1	1, 3
ACC-4	-	-	-	-	-	-	56.7	39.6	-	-	-	-	R-454B	-	-	-	-	-	-	-	-	230-3	24	40	NO	NO	YES	YORK XC360E3S11	2, 3

NOTES:
1. PROVIDE UNIT WITH VERTICAL DRAW THRU FAN, DRAIN PAN, ACCESS DOORS, PROGRAMMABLE THERMOSTAT AND MERV 8 FILTERS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY/ALL ADDITIONAL REFRIGERANT AS REQUIRED FOR A PROPER CHARGE AS DEFINED BY MANUFACTURER.

VENTILATION SCHEDULE

ROOM NAME	AREA (SF)	CEILING HEIGHT FT.	NUMBER OF PEOPLE	ASHRAE STANDARD 62.1-2019 REQUIREMENTS				ASHRAE STANDARD 170-2021 REQUIREMENTS				ACTUAL VENTILATION AIRFLOW TO MEET OR EXCEED CODE REQUIRED AIRFLOW			
				OUTDOOR AIR RATE REQUIRED CFM PER PERSON	OUTDOOR AIR RATE REQUIRED CFM PER SQUARE FT.	AIR DISTRIBUTION EFFECTIVENESS	CODE REQUIRED OUTSIDE AIR (CFM)	CODE REQUIRED EXHAUST AIR (CFM)	MINIMUM OUTSIDE AIR (ACH)	MINIMUM TOTAL AIR (ACH)	OUTSIDE AIR CFM REQUIRED PER (ACH)	TOTAL AIR CFM REQUIRED PER (ACH)	OUTSIDE AIR CFM USED	TOTAL SUPPLY AIR CFM USED	EXHAUST AIR CFM	PRESSURIZATION
SOILED WORKROOM	150	7.67	2	-	-	-	-	-	2	10	38	192	40	200	250	NEG
QUIET ROOM	150	7.67	1	-	-	-	-	-	2	2	38	38	40	125	-	NR
SECLUSION ROOM_1	96	9	1	-	-	-	-	-	4	2	58	29	60	100	-	NR
SECLUSION ROOM_2	96	9	1	-	-	-	-	-	4	2	58	29	60	100	-	NR
GROUP THERAPY	398	7.67	4	-	-	-	-	-	2	3	102	153	105	600	-	NR
NURSE STATION	316	7.67	6	5	0.06	0.8	49	-	-	-	-	-	50	400	-	NR
MED ROOM	75	7.67	1	-	-	-	-	-	2	4	19	38	20	265	-	POS
DINING	1386	7.67	14	7.5	0.18	0.8	355	-	-	-	-	-	360	2300	-	NR
CLEAN WORKROOM	71	7.67	1	-	-	-	-	-	2	NR	18	NR	20	75	-	POS
CONSULTATION	219	7.67	2	-	-	-	-	-	2	3	56	84	60	125	-	NR
TYPICAL PATIENT/BEDROOM	177	7.67	1	-	-	-	-	-	2	4	45	90	50	535	-	NR
ADMIN OFFICE 1-5	219	7.67	1	5	0.06	0.8	18	-	-	-	-	-	50	535	-	NR
LAUNDRY	113	7.67	1	5	0.12	0.8	19	-	-	-	-	-	20	200	-	NR

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2/2/26	BID ISSUE
1/23/25	DOH ISSUE
11/20/25	CMS REVIEW

REVISIONS

DRAWN BY: BBB	REVISED BY: HRM
PLOT SCALE: AS NOTED	DATE: 01/02/26

PROJECT FILE LOCATION:

DRAWING NAME:
DETAILS & SCHEDULES MECHANICAL

DRAWING NO.
M-2

E1(30x42)

SPECIAL CONDITIONS FOR MECHANICAL WORK

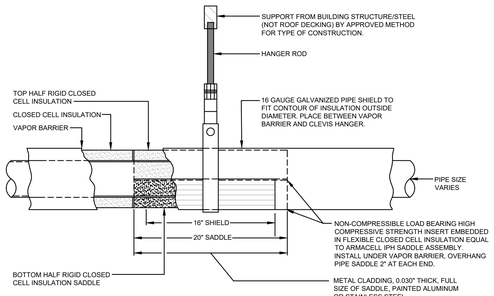
1. THESE SPECIAL CONDITIONS SHALL APPLY TO HEATING, VENTILATING AND AIR CONDITIONING.
2. SECURE AND PAY FOR ANY PERMITS AND INSPECTIONS REQUIRED FOR THE WORK.
3. THE INTERPRETATION OF THE ENGINEER SHALL BE FINAL IN THE EVENT THERE IS A LACK OF UNDERSTANDING OF THE FULL SCOPE OR REQUIREMENTS OF THE SYSTEMS UNDER THIS CONTRACT.
4. PROTECT ALL WORK, EQUIPMENT AND MATERIALS FROM DAMAGE.
5. ALL CUTTING AND PATCHING REQUIRED SHALL BE THE RESPONSIBILITY OF THE INDIVIDUAL CONTRACTOR.
6. FASTENING OF EQUIPMENT, ETC., TO THE BUILDING CONSTRUCTION SHALL BE BY USE OF APPROVED SHEATHED EXPANSION BOLTS FOR MASONRY CONSTRUCTION OR A J-HOOK, LOCK WASHER AND NUT FOR NON-MASONRY CONSTRUCTION.
7. PROVIDE ALL REQUIRED SUPPORTS AND HANGERS FOR EQUIPMENT. PIPING AND CONDUITS SHALL BE PROPERLY SUPPORTED TO PREVENT SAG OR STRAIN. WIRE/CABLE HANGERS ARE NOT ACCEPTABLE.
8. PROVIDE NECESSARY SLEEVES FOR ALL OPENINGS IN FLOORS, WALLS, PARTITIONS AND ROOF.
9. THE WORK OF ALL TRADES SHALL BE COORDINATED. NECESSARY OFFSETS TO ALLOW CLEARANCE, HEADROOM OR AVOID INTERFERENCE SHALL BE PROVIDED.
10. PROVIDE ALL MOTORS REQUIRED. COORDINATE ALL MOTORS AND REQUIREMENTS FOR ALL NECESSARY CONTROLLERS, PUSHBUTTONS AND STARTERS, WHICH SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR.
11. CONTRACTOR SHALL NOT INTERRUPT ANY OF THE BUILDING'S EXISTING SERVICES WITHOUT PRIOR OWNER APPROVAL.
12. SUBMIT ELECTRONICALLY FOR REVIEW A COMPLETE SET OF OPERATING AND MAINTENANCE INSTRUCTIONS FOR EACH PIECE OF EQUIPMENT WHICH SHALL INCLUDE WIRING AND CONTROL DIAGRAMS WITH DESCRIPTION OF OPERATION, OPERATION AND MAINTENANCE INSTRUCTIONS, BULLETINS, CUTS AND DESCRIPTIVE DATA AND PARTS LISTS, ETC.
13. SUBMIT ELECTRONICALLY FOR REVIEW SHOP DRAWINGS ON EACH PIECE OF EQUIPMENT AND DUCTWORK LAYOUT FOR APPROVAL. CONTRACTOR SHALL KEEP ONE (1) COPY OF APPROVED SHOP DRAWINGS AT THE JOB SITE.
14. SUBMIT ELECTRONICALLY FOR REVIEW, A ¼" SCALE LAYOUT OF ALL MECHANICAL PIPING, INDICATE PIPE SIZE, ALL VALVING, ELEVATION CHANGE, EXPANSION DEVICES, AND FLUID TYPE. THE DRAWING SHALL BE FULLY COORDINATED WITH ALL THE TRADES PRIOR TO SUBMISSION.
15. SUBSTITUTION OF AN EQUAL OR BETTER PRODUCT THAN THAT SPECIFIED SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND THEIR DECISION TO ACCEPT OR REJECT SHALL BE FINAL.
16. WORK INCLUDED: PROVIDE LABOR, MATERIALS, EQUIPMENT, AND SUPERVISION NECESSARY TO INSTALL COMPLETE OPERATING SYSTEMS AS INDICATED ON THE DRAWINGS AND AS SPECIFIED HEREIN, INCLUDING ALL WORK AT THE SITE AND WITHIN THE PROPOSED CONSTRUCTION AREAS TO ACCOMPLISH THE REQUIRED WORK.
17. WORKMANSHIP: INSTALL ALL WORK NEAT, TRIM AND PLUMB WITH BUILDING LINES. CUTTING AND PATCHING SHALL BE PERFORMED BY SKILLED TRADESMEN NORMALLY EMPLOYED FOR THE WORK INVOLVED.
18. PROVIDE ALL HOT TAPS AND/OR WET TAPS AS REQUIRED.
19. SPACE CONDITIONS: SPACE SETPOINT TEMPERATURE SHALL BE 68-75 DEG. F. SPACE TEMPERATURE SHALL NOT VARY MORE THAN 2.7 DEGREES PER HOUR. SPACE RELATIVE HUMIDITY SHALL BE MAINTAINED BETWEEN 35-70% (NON-CONDENSING).
20. ALL FIELD CONDITIONS & DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE VERIFIED PRIOR TO SUBMITTING BIDS AND PRIOR TO COMMENCEMENT OF WORK.
21. ALL ATC WIRING SHALL BE PROPERLY SUPPORTED AND RUN IN A NEAT AND WORKMANLIKE MANNER. ALL WIRING EXPOSED AND IN EQUIPMENT ROOMS SHALL RUN PARALLEL TO OR AT RIGHT ANGLES TO THE BUILDING STRUCTURE. ALL WIRING WITHIN ENCLOSURES SHALL BE NEATLY BUNDLED AND ANCHORED TO PREVENT OBSTRUCTION. LOW VOLTAGE WIRING ABOVE ACCESSIBLE CEILINGS IN FINISHED SPACES MAY BE PLENUM RATED CABLE. WIRING IN ALL OTHER LOCATIONS SHALL BE INSTALLED IN EMT CONDUIT.

SCOPE OF WORK

1. PROVIDE COMPLETE DEMOLITION AS INDICATED ON THE DRAWINGS. ALL DEMO'D WORK (INCLUDING SUPPORTS AND HANGERS) SHALL BE REMOVED COMPLETELY.
2. PROVIDE LABOR, MATERIAL, EQUIPMENT AND SUPERVISION NECESSARY TO INSTALL A COMPLETE AND OPERATING SYSTEM AS DESCRIBED AND SPECIFIED HEREIN AND AS SHOWN ON CONTRACT DRAWINGS.
3. PROVIDE COMPLETE AIR DISTRIBUTION SYSTEMS INCLUDING DUCTWORK, DUCT SPECIALTIES, INSULATION, DIFFUSERS, SUPPLY, RETURN AND EXHAUST GRILLES/REGISTERS AS INDICATED ON DRAWINGS.
4. PROVIDE REFRIGERANT PIPING AND INSULATION.
5. PROVIDE HOT WATER SUPPLY & RETURN PIPING AND INSULATION.
6. PROVIDE TESTING, ADJUSTING, AND BALANCING. BALANCE WATER AND AIR SYSTEMS OF EACH UNIT ASSOCIATED WITH THIS PROJECT.
7. PROVIDE ALL HANGERS, SUPPORTS AND SUB-FRAMING FOR HVAC DUCTWORK, PIPING, AND EQUIPMENT. WIRE/CABLE HANGERS ARE NOT ACCEPTABLE.
8. PROVIDE STARTUP INSTRUCTION SESSION FOR OWNER'S PERSONNEL.
9. PROVIDE ALL CONTROLS REQUIRED FOR COMPLETE AND OPERATIONAL SYSTEM(S).

MECHANICAL SPECIFICATIONS

1. EQUIPMENT START-UP:
   A. VERIFY PROPER INSTALLATION BY MANUFACTURER OR HIS REPRESENTATIVE.
   B. ADVISE GENERAL CONTRACTOR OR OWNER'S REPRESENTATIVE 2 DAYS PRIOR TO ACTUAL START-UP.
2. DAMPERS:
   A. PROVIDE WHERE INDICATED OR REQUIRED TO CONTROL FLOW OF AIR AND BALANCE SYSTEM.
   B. ROUND DAMPERS SHALL BE SINGLE-BLADE, MOLDED SYNTHETIC BEARINGS AT EACH END, 20-GAUGE GALVANIZED STEEL, ADJUSTING QUADRANT AND LOCKING DEVICE. ROUND DAMPERS SHALL BE RUSKIN MODEL MDRS25.
   C. RECTANGULAR AND SQUARE DAMPERS SHALL BE OPPOSED BLADE WITH 16-GAUGE GALVANIZED STEEL CHANNEL FRAME WITH CORNER BRACE, 16-GAUGE GALVANIZED STEEL BLADES; MOLDED SYNTHETIC BEARINGS AND HEX STEEL SHAFTS, EXPOSED OR CONCEALED LINKAGE, ADJUSTABLE QUADRANT AND LOCKING DEVICE. DAMPER 10" AND BELOW SHALL BE SINGLE-BLADE. DAMPERS SHALL BE RUSKIN MODEL MD35.
   D. MANUFACTURERS: RUSKIN, ARROW, NAILOR-HART, POTTORFF, LLOYD INDUSTRIES, INC., CESCO PRODUCTS, LOUVERS & DAMPERS, UNITED ENERTECH.
3. FLEXIBLE AIR DUCT:
   A. INSULATED FLEXIBLE AIR DUCT SHALL BE NON-METALLIC. AIR DUCT SHALL COMPLY WITH THE LATEST NFPA BULLETIN NO. 90A AND BE LABELED AS CLASS 1 AIR DUCT, UL STANDARD NO. 181.
   B. AIR DUCTS SHALL BE SUITABLE FOR WORKING PRESSURE OR NOT LESS THAN PLUS 10.0 AND MINUS 0.5 INCHES OF W.G.
   C. NON-METALLIC AIR DUCT SHALL BE TWO ELEMENT SPIRAL CONSTRUCTION COMPOSED OF A CORROSION RESISTING METAL SUPPORTING SPIRAL AND A VINYL COATED FIBERGLASS BASE FABRIC AND SHALL BE MECHANICALLY INTERLOCKED TOGETHER.
   D. INSULATION SHALL BE 1-1/2" THICK FIBERGLASS FLEXIBLE BLANKET WITH VAPOR BARRIER OUTER JACKET OR POLYETHYLENE OR REINFORCED MYLAR. MAXIMUM THERMAL CONDUCTANCE OF 0.23 BTU/HR/SF/INCH AT 75°F.
   E. FLEXIBLE DUCT SHALL BE NO LONGER THAN 5'-0".
   F. APPROVED MANUFACTURERS SHALL INCLUDE THE WIREMOLD COMPANY, FLEXMASTER USA, OWENS-CORNING, THERMAFLEX FLEX VENT.
4. DUCTWORK:
   A. PROVIDE IN ACCORDANCE WITH LATEST SMACNA STANDARDS BUT NOT LESS THAN 2" STATIC PRESSURE.
   B. ALL GENERAL PURPOSE SUPPLY, RETURN, EXHAUST AND OUTSIDE AIR DUCTWORK SHALL BE FORMED FROM GALVANIZED STEEL SHEETS, CONFORMING TO ASTM COATING STANDARDS A-525 OR A-527 WITH COATING DESIGNATION G-60.
   C. ALL AIR DUCTS SHALL BE ASSEMBLED WITH SLIP AND DRIVE JOINTS AND SEALED WITH HARDCAST SEALANT SYSTEM.
   D. PROVIDE TRANSITIONS AS SHOWN/REQUIRED. DO NOT EXCEED 22-1/2 DEGREE SLOPE ON SIDE OF TRANSITION.
   E. DUCTWORK SHALL BE SUPPORTED PER SMACNA STANDARDS, INCLUDING THE FOLLOWING:
      1. RIVET OR SCREW TO SIDE AND BOTTOM OF DUCT WHEN USING FLAT STRAP HANGERS. RIVET OR SCREW TO BOTTOM OF DUCT WHEN USING TRAPEZE HANGERS.
      2. WIRE/CABLE HANGERS ARE NOT ACCEPTABLE.
      3. SUPPORT DUCTWORK FROM BUILDING.
      4. DRILLING/DRIVING NAILS INTO THE ROOF DECK IS NOT PERMITTED.
   F. KITCHEN EXHAUST DUCTS SHALL HAVE ALL JOINTS, SEAMS, PENETRATIONS, AND DUCT TO HOOD COLLAR CONNECTIONS MADE WITH CONTINUOUS, EXTERNAL LIQUID-TIGHT WELDS.
      1. CARBON STEEL: FABRICATE FROM 16 GAUGE, ASTM A-569 HOT ROLLED OR ASTM A-366.
5. DUCT INSULATION:
   A. CONCEALED SUPPLY, RETURN, AND OUTSIDE AIR DUCTWORK: FIBERGLASS DUCT WRAP BONDED WITH RESINS, 3/4-POUND DENSITY, ALUMINUM FOIL FACING REINFORCED WITH FIBERGLASS SCRIM, LAMINATED TO KRAFT, 2" THICK.
      1. THERMAL CONDUCTIVITY: 0.27 BTU/HR-/SF/INCH AT 75 DEGREES F. MIN. INSTALLED "R" VALUE w/ 25% COMPRESSION SHALL BE 5.6.
      2. DUCT WRAP SHALL BE CUT TO STRETCH-OUT DIMENSIONS AS PROVIDED IN MANUFACTURER'S INSTRUCTIONS.
      - REMOVE A 2" PIECE OF INSULATION FROM THE FACING AT THE END OF THE PIECE OF INSULATION TO FORM AN OVERLAPPING STAPLE AND TAPE FLAP. INSTALL WITH FACING OUTSIDE SO TAPE FLAP OVERLAPS INSULATION AND FACING AT OTHEREND. INSULATION SHALL BE TIGHTLY BUTTED AND NOT COMPRESSED EXCESSIVELY AT DUCT CORNERS. SEAMS SHALL BE STAPLED 6" ON CENTER WITH OUTWARD CLINCHING STAPLES. ALL SEAMS, TEARS, PUNCTURES AND OTHER PENETRATIONS OF THE INSULATION FACING SHALL BE SEALED WITH FOIL TAPE OR VAPOR PROOF MASTIC. WHERE RECTANGULAR DUCTS ARE 24" IN WIDTH OR GREATER, DUCT WRAP SHALL BE SECURED TO THE BOTTOM OF THE DUCT WITH MECHANICAL FASTENERS; I.E., STICK PINS SPACED 18" ON CENTER.
      3. MANUFACTURERS: JOHNS MANVILLE CORP., CERTAIN-TEED, OWEN-CORNING, KNAUF.
   B. KITCHEN HOOD DUCT INSULATION SHALL BE NON-MINERAL WOOL, PASSIVE LOW BIOPERSISTANT FIBER, CERAMIC BLANKET INSULATION TOTALLY ENCAPSULATED ON ALL SIDES WITH ALUMINUM FOIL SCRIM.
      1. INSTALLATION SHALL BE 2 LAYER, 1-1/2" THICK TO PROVIDE 2-HOUR PROTECTION ON EXHAUST DUCTS FOR TYPE I AND TYPE II HOODS IN THE KITCHEN. APPLY DIRECTLY TO THE DUCT WITH ZERO CLEARANCE TO COMBUSTIBLES THROUGH THE LENGTH OF ASSEMBLY.
      2. SECURE WITH METAL BANDS PER MANUFACTURER'S WRITTEN RECOMMENDATIONS ON TYPE AND SPACING. FOR DUCTS SPACING OF 24" OR GREATER, SECURE WITH INSULATION PINS ON THE BOTTOM OF HORIZONTAL RUNS AND ON VERTICAL RUNS TO PREVENT SAGGING.
      3. MANUFACTURERS: THERMAL CERAMICS - FIREMASTER DUCT WRAP PLUS, OR PYROSCAT. OPTION: CONTRACTOR MAY PROVIDE AN AGENCY APPROVED, SINGLE LAYER SYSTEMS OF 6 PCF DENSITY, 1.5 INCH THICK, PASSIVE FIRE PROTECTION BLANKET INSTALLED AS A TWO-HOUR RATED ENCLOSURE SYSTEM, TYPE FSB ULTRA, AS MADE BY ETS SCHAEFER, OR UNIFRAX FYRE WRAP ® ELITE 1.5.
6. FLEXIBLE CONNECTIONS:
   A. REQUIRED BETWEEN DUCTWORK AND SUCTION AND DISCHARGE CONNECTION OF ALL FANS AND AIR HANDLERS.
   B. MATERIAL: WOVEN FIBERGLASS WITH MOUNTING HARDWARE TESTED IN ACCORDANCE WITH UL STANDARD 181, LISTED AND LABELED AS CLASS 0 OR 1.
   C. MANUFACTURER: VENTFABRICS, INC., DURODYNE, DYNAIR, DUCTMATE PRO FLEX.
7. AIR DIFFUSERS, GRILLES AND REGISTERS:
   A. AIR TERMINALS SHALL BE PROVIDED IN DUCT RUNS AS INDICATED ON DRAWINGS. AIR DIFFUSERS SHALL PROPERLY AND UNIFORMLY DISTRIBUTE THE DESIGN AIR QUANTITY WITH NO OBJECTIONABLE DRAFTS.
   B. MANUFACTURERS: PRICE, TITUS.
   C. REFER TO EQUIPMENT SCHEDULES ON DRAWINGS.
8. DUCTLESS SPLIT SYSTEM (COOLING ONLY):
   A. AIR CONDITIONING SYSTEM SHALL BE A MINI SPLIT SYSTEM. THE SYSTEM SHALL CONSIST OF A COMPACT WALL-MOUNTED PACKAGED EVAPORATOR SECTION AND MATCHING OUTDOOR AIR-COOLED CONDENSING UNIT. THE UNITS SHALL BE LISTED BY AND BEAR THE ETL LABEL. ALL WIRING IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC). THE UNITS SHALL BE RATED IN ACCORDANCE WITH ATI STANDARD 240 AND BEAR THE ARI LABEL. A FULL CHARGE OF R-410A REFRIGERANT FOR 100 FEET OF REFRIGERANT TUBING SHALL BE PROVIDED IN THE CONDENSING UNIT. A DRY NITROGEN HOLDING CHARGE SHALL BE PROVIDED IN THE EVAPORATOR. SYSTEM EFFICIENCY SHALL MEET OR EXCEED 2021 IECC STANDARDS.
   B. THE UNITS SHALL HAVE A MANUFACTURER'S WARRANTY FOR A PERIOD OF FIVE (5) YEARS FROM DATE OF INSTALLATION. THE COMPRESSOR SHALL HAVE A WARRANTY OF SEVEN (7) YEARS FROM DATE OF INSTALLATION.
   C. THE INDOOR UNIT SHALL BE FACTORY ASSEMBLED AND WIRED. THE CASING SHALL HAVE A WHITE FINISH. THE EVAPORATOR FAN SHALL BE AN ASSEMBLY WITH LINE FLOW FANS DIRECT DRIVEN BY A SINGLE MOTOR. THE FAN SHALL BE STATICALLY AND DYNAMICALLY BALANCED AND RUN ON PERMANENTLY LUBRICATED BEARINGS. THE EVAPORATOR COIL SHALL BE NONFERROUS CONSTRUCTION WITH SMOOTH PLATE FINS BONDED TO COPPER TUBING. THE TUBING SHALL HAVE INNER GROOVES FOR HIGH EFFICIENCY HEAT EXCHANGE. ALL TUBE JOINTS SHALL BE BRAZED WITH PHOSCOPPER OR SILVER ALLOY. THE COILS SHALL BE PRESSURE TESTED AT THE FACTORY. A CONDENSATE PAN AND DRAIN SHALL BE PROVIDED UNDER THE COIL.
   D. THE CONTROL SYSTEM SHALL CONSIST OF TWO (2) MICROPROCESSORS INTERCONNECTED BY A SINGLE NON-POLAR TWO-WIRE CABLE AS SUPPLIED. WIRING SHALL RUN FROM INDOOR UNIT TO CONTROLLER DIRECT. ONE MICROPROCESSOR SHALL BE FACTORY WIRED AND LOCATED WITHIN THE INDOOR UNIT. THE OTHER MICROPROCESSOR WITHIN THE WALL-MOUNTED REMOTE CONTROLLER THE SYSTEM SHALL BE CAPABLE OF AUTOMATIC RESTART WHEN POWER IS RESTORED AFTER POWER INTERRUPTION. SYSTEM SHALL INCLUDE TWENTY FUNCTION SELF-DIAGNOSTICS INCLUDING TOTAL HOURS OF COMPRESSOR RUN TIME.
   D. THE OUTDOOR UNIT SHALL BE COMPLETELY FACTORY ASSEMBLED, PIPED AND WIRED. THE CASING SHALL BE FABRICATED OF GALVANIZED STEEL, BONDERIZED AND FINISHED WITH BAKED ENAMEL. THE UNIT SHALL BE FURNISHED WITH ONE (1) DIRECT DRIVE, PROPELLER TYPE FAN ARRANGED FOR HORIZONTAL DISCHARGE. THE MOTORS SHALL HAVE INHERENT PROTECTION, BE OF THE PERMANENTLY LUBRICATED TYPE AND RESILIENTLY MOUNTED FOR QUIET OPERATION. THE FANS SHALL BE PROVIDED WITH A RAISED GUARD TO PREVENT CONTACT WITH MOVING PARTS. THE COMPRESSOR SHALL BE OF THE HIGH-PERFORMANCE ROTARY TYPE WITH CRANKCASE HEATER, ACCUMULATOR AND INTERNAL THERMAL OVERLOADS. THE COMPRESSOR SHALL BE MOUNTED SO AS TO AVOID THE TRANSMISSION OF VIBRATION. REFRIGERANT FLOW FROM THE CONDENSER SHALL BE CONTROLLED BY MEANS OF A CAPILLARY TUBE. THE CONDENSER COIL SHALL BE OF NON-FERROUS CONSTRUCTION WITH SMOOTH PLATE FINS BONDED TO COPPER TUBING. THE COIL WITH SMOOTH PLATE FINS BONDED TO COPPER TUBING. THE COIL SHALL BE PROTECTED WITH AN INTEGRAL METAL GUARD. THE UNIT SHALL BE CONTROLLED BY THE MICROPROCESSOR LOCATED IN THE INDOOR MATCHING UNIT. THE OUTDOOR UNIT SHALL PROVIDE POWER TO THE INDOOR UNIT. THE UNIT ELECTRICAL POWER SHALL BE 208 VOLTS, 1 PHASE, 60 HERTZ.
   E. MANUFACTURERS: TRANE/MITSUBISHI, SAMSUNG.
9. CENTRIFUGAL INLINE CABINET FAN:
   A. FAN SHALL BE CENTRIFUGAL, DIRECT DRIVEN IN-LINE TYPE. THE FAN HOUSING SHALL BE OF THE SQUARE DESIGN, CONSTRUCTED OF HEAVY GAUGE GALVANIZED STEEL AND SHALL INCLUDE SQUARE DUCT MOUNTING COLLARS. ONE SIDE OF THE HOUSING SHALL BE EQUIPPED WITH A HINGEABLE SERVICE DOOR ASSEMBLY SUPPORTING THE MOTOR, WHEEL AND INLET CONE. THE DOOR ASSEMBLY MUST SWING OUT FOR CLEANING, INSPECTION, OR SERVICE WITHOUT DISMANTLING THE FAN IN ANY WAY.
   B. FAN WHEEL SHALL BE OF THE ALUMINUM BACKWARD INCLINED CENTRIFUGAL TYPE. WHEELS SHALL BE DYNAMICALLY AND STATICALLY BALANCED. FAN MOTORS SHALL BE PERMANENTLY LUBRICATED, HEAVY DUTY TYPE CAREFULLY MATCHED TO THE FAN LOADS.
   C. FLEXIBLE WIRING LEADS SHALL BE PROVIDED FROM THE FAN MOTOR TO AN EXTERNAL MOUNTED JUNCTION BOX AND DISCONNECT SWITCH PERMITTING THE SERVICE DOOR TO BE HINGED WITHOUT DISCONNECTING THE FIELD WIRING.
   D. ALL FANS SHALL BEAR THE AMCA CERTIFIED RATING PERFORMANCE SEAL FOR BOTH AIR AND SOUND PERFORMANCE.
   E. MANUFACTURERS: LOREN-COOK, GREENHECK.
10. ROOF MOUNTED EXHAUST FAN:
   A. ALUMINUM CASING SHALL BE HEAVY GAUGE, MILL FINISH OF SPUN CONSTRUCTION, WEATHERPROOF, REMOVABLE WITH ALUMINUM BIRDSCREEN.
   B. FANS SHALL BE QUIET OPERATING, SELECTED FOR SOUND LEVEL BELOW THAT OF THE SPACE VENTILATED.
   C. UNIT SHALL BE AMCA CERTIFIED AND SHALL BE MANUFACTURED BY LOREN COOK, GREENHECK OR CARNES.
11. ELECTRIC DUCT HEATING COIL:
   A. UL LISTED FOR ZERO CLEARANCE AND SHALL MEET ALL APPLICABLE REQUIREMENTS OF THE LATEST NATIONAL ELECTRICAL CODE.
   B. GALVANIZED STEEL SLIP-IN CASING, TERMINAL BOX, HEATING ELEMENT ASSEMBLY, SAFETY CONTROLS AND OPERATING CONTROLS.
   C. HEATING ELEMENTS SHALL BE 80% NICKEL, 20% CHROME ELECTRIC RESISTANCE WIRE COILS, INSULATED BY FLOATING CERAMIC BUSHINGS. ALL TERMINALS AND NUTS SHALL BE STAINLESS STEEL. THE BRACKET SUPPORTS FOR THE WIRE ELEMENTS SHALL NOT EXCEED 4" ON CENTER.
   D. PROVIDE SAFETY CONTROLS WITH PRIMARY THERMAL CUT-OUT AND AUTOMATIC RESET FOR OVER-TEMPERATURE. SECONDARY HIGH TEMPERATURE CUT-OUT EQUIPPED WITH MANUAL RESET OF REPLACEABLE FUSIBLE PROTECTIVE DEVICES AND A DIFFERENTIAL PRESSURE AIR FLOW SWITCH TO DEENERGIZE HEATER WHEN THERE IS NO AIR FLOW.
   E. MANUFACTURERS: WARREN, INDEECO, REDD-I HEAT.
12. ELECTRIC CONVECTOR:
   A. CABINET:
      1. INSTITUTIONAL ENCLOSURE 11 GAUGE PERFORATED STEEL WITH SLOPED TOP DESIGN. HEAVY DUTY END CAPS WELDED TO THE ENCLOSURE. CONTROL COMPARTMENT FOR HOUSING THERMOSTAT AND DISCONNECT SWITCH IS ACCESSIBLE BY USE OF SECURITY TYPE FASTENER. THE ENTIRE ENCLOSURE IS PROTECTED BY EPOXY POWDER COATED PAINT FINISH.
   B. ELEMENT:
      1. ALL STEEL HIGH MASS ELEMENT CONSTRUCTION WITH NICKEL-CHROMIUM RESISTANCE WIRE EMBEDDED IN COMPACTED EFFICIENT DIELECTRIC TO ENSURE PROPER HEAT TRANSFER. ALUMINUM FINS MECHANICALLY BONDED TO STEEL TUBE ALLOWS FOR INCREASED SURFACE AREA AND EVEN HEAT TRANSFER.
   C. LIMIT CONTROLS:
      1. AUTOMATIC RESET HYDRAULIC THERMAL OVERLOAD COVERS FULL LENGTH OF HEATING ELEMENT AND SHUTS DOWN HEATER WHEN SAFE OPERATING TEMPERATURES ARE EXCEEDED.
   D. WIRING:
      1. WIRING CONNECTIONS SHALL BE MADE IN LEFT END OF CABINET ENCLOSURE. WIRING MUST ENTER INTO CONTROL ENCLOSURE BEHIND PERFORATED STEEL GRILL.
   E. CONTROLS:
      1. ALL CONTROLS ARE ACCESSIBLE ONLY THROUGH CONTROL ENCLOSURE DOOR. SECURITY TYPE FASTENERS RESTRICT ACCESS TO CONTROLS. BUILT IN THERMOSTAT AND DISCONNECT SWITCH WITH MANUAL ADJUSTMENT ARE LOCATED IN CONTROL ENCLOSURE.
   F. MANUFACTURER: TPI CORP.
13. PACKAGED TERMINAL HEAT PUMP:
   A. ALL UNITS SHALL BE FACTORY ASSEMBLED, PIPED, WIRED AND FULLY CHARGED WITH R-32. ALL UNITS SHALL BE CERTIFIED IN ACCORDANCE WITH ARI STANDARD 380 FOR HEAT PUMPS. UNITS SHALL BE UL LISTED AND CARRY A UL LABEL. ALL UNITS SHALL BE FACTORY RUN-TESTED TO CHECK OPERATION.
   B. THE REFRIGERATION SYSTEM SHALL BE HERMETICALLY SEALED AND CONSIST OF A ROTARY COMPRESSOR THAT IS EXTERNALLY MOUNTED ON VIBRATION ISOLATORS; CONDENSER AND EVAPORATOR COILS CONSTRUCTED OF COPPER TUBES AND ALUMINUM PLATE FINS; AND CAPILLARIES AS EXPANSION DEVICES. UNIT SHALL HAVE A FAN SLINGER RING TO INCREASE EFFICIENCY AND CONDENSATE DISPOSAL.
   C. THE INDOOR AIR HANDLING SECTION SHALL CONSIST OF A TANGENTIAL BLOWER WHEEL DIRECT DRIVEN BY A TOTALLY ENCLOSED MOTOR. THE CHASSIS WILL HAVE THE CAPABILITY TO MEET ASHRAE 62.1 BY BRINGING IN UP TO 52 CFM OF MERV 8 FILTERED CONDITIONED FRESH AIR.
   D. THE OUTDOOR AIR SECTION SHALL CONSIST OF A SINGLE INJECTION MOLDED FAN SHROUD THAT INCORPORATES THE OUTDOOR MOTOR MOUNT INTO A SINGLE PIECE FOR EASE OF SERVICE AND ASSEMBLY. THE OUTDOOR MOTOR SHALL BE TOTALLY ENCLOSED, BALL-BEARING, PERMANENTLY LUBRICATED AND DIRECTLY DRIVE THE OUTDOOR FAN/SLINGER RING.
   E. THE WALL SLEEVE SHALL BE CONSTRUCTED OF 18-GAUGE GALVANIZED ZINC-COATED STEEL. THE UNIT SHALL FEATURE CORROSION RESISTANT MATERIALS AND FINISHES TO HELP PREVENT DETERIORATION.
   F. MANUFACTURER: FRIEDRICH.
14. LIGATURE RESISTANT PTHP OVER:
   A. LIGATURE RESISTANT DESIGN:
      1. KEYED ACCESS DOOR TO THE INTERIOR FOR STAFF INSPECTION/MANIPULATION OF HEATING/AIR CONDITIONING CONTROLS.
      2. LOCKS WITH A BARREL LOCK AND CIRCULAR KEY FOR TAMPER RESISTANCE AND EASE OF MAINTENANCE.
      3. INCLUDES MOUNTING HARDWARE TO INSTALL IN EITHER NEW OR EXISTING BUILDINGS.
      4. CUSTOM SIZED TO FIT EACH APPLICATION.
      5. CONSTRUCTED OF POWDER COATED STEEL FOR STRENGTH.
   F. MANUFACTURER: BEHAVIORAL SAFETY PRODUCTS.
15. REFRIGERANT PIPING:
   A. TYPE ACR HARD DRAWN TEMPER COPPER.
   B. REFRIGERANT PIPE COVERING (FOAMED PLASTIC TYPE).
      1. FLEXIBLE PIPE INSULATION SHALL BE A FOAMED PLASTIC CLOSED CELL STRUCTURE MATERIAL, WITH A THERMAL CONDUCTIVITY OF NOT MORE THAN 0.27 BTU/HR/SQ.FT./INCH AT MEAN TEMPERATURE OF 75 DEG. F.
      2. FITTING COVERS SHALL BE FABRICATED FROM THE FOAMED PLASTIC PIPE INSULATION OR FROM SHEET INSULATION OF THE IDENTICAL MATERIAL.
      3. MANUFACTURERS: ARMACELL, NOMACO, K-FLEX.
   C. PROVIDE INSULATION OF THICKNESS SPECIFIED ON SUCTION LINES AND HOT GAS BYPASS LINES, IF APPLICABLE. (NOTE: INSULATE LIQUID LINE IF METERING DEVICE IS MOUNTED AT THE CONDENSING UNIT).
      1. LOW PRESSURE GAS LINE:
         - ¾" FOR PIPING LESS THAN 1"
         - 1" FOR PIPING 1" TO 6"
      2. HIGH PRESSURE GAS LINE (141° F TO 200°F):
         - 1-1/2" FOR PIPING LESS THAN 1-1/2"
         - 2" FOR PIPING 1-1/2" AND OVER
         - 2-1/2" IF TEMPERATURE IS ABOVE 200°F
      3. LIQUID LINE (HOT GAS BYPASS):
         - 1" FOR PIPING LESS THAN 1-1/2"
         - 1-1/2" FOR PIPING 1-1/2" AND LARGER
   D. PROVIDE PVC PROTECTIVE COVERING FOR EXPOSED REFRIGERANT LINES.
16. COPPER TUBING & FITTINGS:
   A. WATER PIPING:
      1. TUBING: HARD-DRAWN SEAMLESS ASTM B-88 TYPE "L".
      2. JOINT MATERIAL: BRAZED JOINTS 95-5 TIN-ANTIMONY AWS 5.8.
      3. FLUX SHALL BE NON-TOXIC TYPE AND NON-CORROSIVE.
17. PIPE INSULATION & COVERING
   A. PIPE INSULATION MATERIAL
      1. FIBERGLASS:
         - MATERIAL: PREFORMED FIBERGLASS BONDED WITH RESINS TO FORM CIRCULAR PIPE SLEEVES WITH FACTORY APPLIED, WHITE ALL SERVICE JACKET BANDED TO REINFORCED FOIL VAPOR BARRIER JACKETING. THE JACKET SHALL HAVE FACTORY APPLIED DOUBLE PRESSURE-SENSITIVE ADHESIVE CLOSURE AND VAPOR SEALING OF LONGITUDINAL JOINTS. THERMAL CONDUCTIVITY: 0.24 BTU/HR./SF/INCH AT 100 DEGREES F. FLAME SPREAD OF 25 AND DEVELOPED SMOKE OF 50 OR LESS.
         - ALL VALVES AND FITTINGS: GLASS FIBER INSERT AND PREMOLDED PVC COVER, MANVILLE "ZESTON" AND "HI-LO TEMP INSERTS" FOR FITTINGS. GLASS FIBER MUST FILL THE ENTIRE SPACE WITHIN THE COVER COMPLETELY. FACTORY MOLDED FIBROUS GLASS FITTING COVERING FOR FITTINGS. COAT ENDS WITH FOSTERS 30-36 LAGFAST ADHESIVE
           MITERED SECTIONS OF PIPE COVERING FOR VALVES.
           MANUFACTURERS: MANVILLE INTERNATIONAL, INC., CERTAIN-TEED, OWENS- CORNING, KNAUF.
   B. PIPE INSULATION - TYPES & THICKNESSES
      1. HEATING HOT WATER
         - 1 1/2" FOR PIPING 2" AND BELOW
18. PIPING SYSTEM EXECUTION:
   A. PIPING SYSTEMS
      1. PIPING SHALL RUN SQUARE WITH BUILDING LINES.
      2. PIPING SHALL NOT BE INSULATED OR COVERED UNTIL TESTED.
      3. NECESSARY DRAINS, OFF-SETS, VENTS, AND DRIPS SHALL BE PROVIDED FOR COORDINATION OF THE WORK AS PART OF THE CONTRACT
      4. RUNNING OR CLOSE NIPPLES ARE NOT PERMITTED.
      5. INSTALL ISOLATING FITTINGS BETWEEN SECTIONS OF FERROUS AND NON-FERROUS PIPE OR CONNECTED EQUIPMENT.
      6. DO NOT SUPPORT PIPING FROM OTHER PIPING, CONDUITS, OR EQUIPMENT.
      7. UNIONS SHALL BE PROVIDED ADJACENT TO ALL VALVES, AT EQUIPMENT CONNECTIONS, AND WHERE NECESSARY TO FACILITATE DISMANTLING OF THE PIPING SYSTEM.
19. AIR HANDLING UNIT:
   A. GENERAL:
      1. INSTALL EACH UNIT AS SHOWN ON THE PLANS IN ACCORDANCE WITH: THE MANUFACTURER'S RECOMMENDATIONS, AND ALL APPLICABLE NATIONAL AND LOCAL CODES.
   B. UNIT ENCLOSURE:
      1. EXTERIOR PANELS OF 18-GAUGE STEEL THAT HAVE BEEN FINISHED WITH BAKED ENAMEL TO PROVIDE A LONG LASTING, QUALITY APPEARANCE. CASING SHALL BE INSULATED WITH ONE INCH (1") 1-1/2 LB. DENSITY FIBERGLASS, FIRE RESISTANT AND ODORLESS MATERIAL.
      2. REMOVABLE PANELS TO PROVIDE EASY ACCESS TO THE INTERNAL COMPONENTS FOR MAINTENANCE AND SERVICE.
      3. A FILTER RACK WITH 1" THROWAWAY, PLEATED FILTERS, MERV 8 EFFICIENCY, WITH END COVERS.
      4. FANS SHALL BE FORWARD-CURVED, CENTRIFUGAL BLOWER TYPE EQUIPPED WITH ADJUSTABLE SPEED DRIVE.
   C. EVAPORATOR COIL:
      1. SHALL CONSIST OF COPPER TUBES ARRANGED IN STAGGERED ROWS AND MECHANICALLY EXPANDED INTO ALUMINUM FINS.
      2. SHALL BE POSITIONED FOR DRAW-THRU OPERATION.
      3. INCLUDE A FACTORY MOUNTED DISTRIBUTOR AND EXPANSION VALVE.
   D. HOT WATER COIL:
      1. COILS SHALL USE ALUMINUM FINS MECHANICALLY BONDED TO SEAMLESS COPPER TUBES, FACTORY TESTED WITH 450 PSIG AIR UNDER WATER.
      2. MAXIMUM OPERATING CONDITIONS SHALL BE 300 PSIG AT 200F.
      3. INCLUDE A FACTORY MOUNTED DISTRIBUTOR AND EXPANSION VALVE.
   E. MANUFACTURERS: YORK

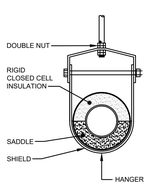


NOTE:

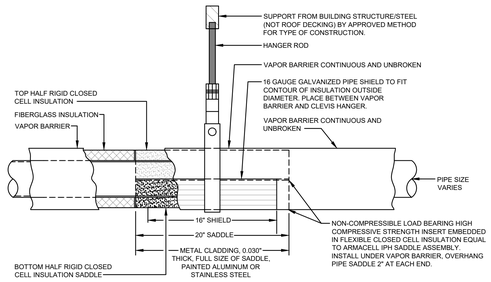
1. SEGMENTS OR BLOCKS OF HIGH DENSITY INSULATION ARE NOT ACCEPTABLE IN PLACE OF PRE-FORMED SADDLE.
2. SUPPORTS SHALL BE CONNECTED TO BUILDING STEEL/STRUCTURE BY WAY OF SUPPLEMENTAL STEEL, STRUT, AND OR CLAMPS. A BUILT-UP ROOFING SYSTEM IS NOT STRUCTURAL AND SHALL NOT BE SUPPORTED FROM UNDER NO CIRCUMSTANCES.

PIPE HANGER DETAIL

NOT TO SCALE



HANGER SECTION

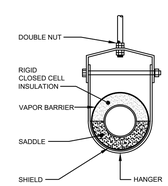


NOTE:

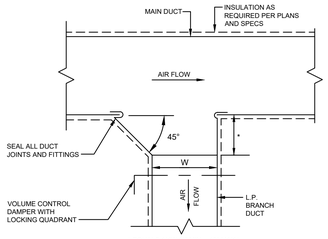
1. SEGMENTS OR BLOCKS OF HIGH DENSITY INSULATION ARE NOT ACCEPTABLE IN PLACE OF PRE-FORMED SADDLE.
2. SUPPORTS SHALL BE CONNECTED TO BUILDING STEEL/STRUCTURE BY WAY OF SUPPLEMENTAL STEEL, STRUT, AND OR CLAMPS. A BUILT-UP ROOFING SYSTEM IS NOT STRUCTURAL AND SHALL NOT BE SUPPORTED FROM UNDER NO CIRCUMSTANCES.

PIPE HANGER DETAIL

NOT TO SCALE



HANGER SECTION

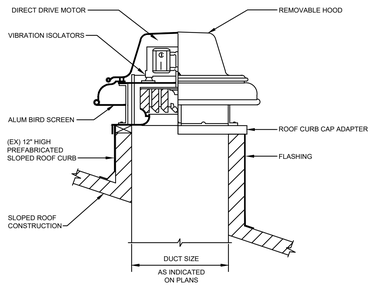


NOTES:

1. SUPPLY AIR CONNECTION SHOWN. RETURN/EXHAUST CONNECTION SIMILAR (AIR FLOW REVERSED).
2. SEE SMACNA LOW PRESSURE DUCT STANDARDS FOR CONSTRUCTION.

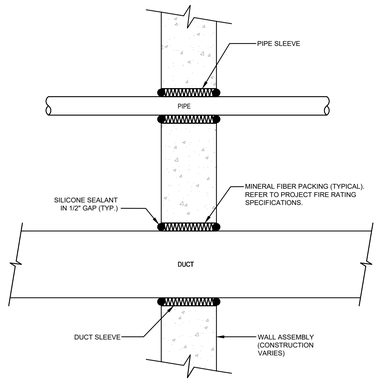
LOW PRESSURE RECTANGULAR BRANCH DUCT CONNECTION DETAIL

NOT TO SCALE



SLOPED ROOF MOUNTED EXHAUST FAN DETAIL

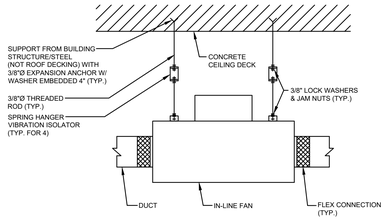
NOT TO SCALE



NOTE:
PIPES AND DUCTS SHOULD BE SUPPORTED INDEPENDENTLY OF WALL STRUCTURE. CONTACT BETWEEN PIPE OR DUCT AND WALL STRUCTURE SHOULD BE AVOIDED.

ACOUSTIC PIPE & DUCT WALL SLEEVE DETAIL

NOT TO SCALE

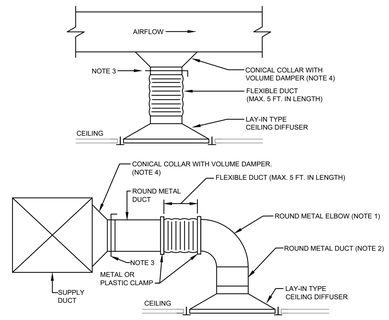


NOTE:

FAN SHALL BE SUPPORTED IN 4 LOCATIONS AND SUPPORT COMPONENTS SHALL BE RATED FOR 300 POUND LOAD.

FAN MOUNTING DETAIL

NOT TO SCALE

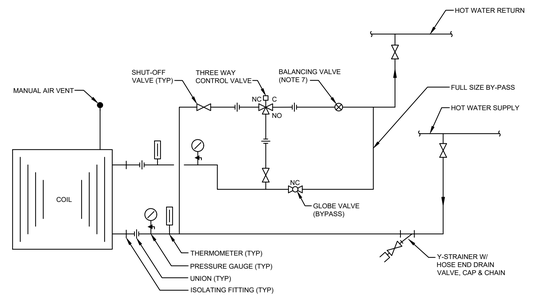


NOTES:

1. OPTION: PROVIDE FLEXIBLE DUCT TO DIFFUSER COLLAR AS LONG AS ELBOW INCLUDES THERMAFLEX FLEXFLOW ELBOW (OR APPROVED EQUAL). MAX. LENGTH OF FLEX REMAINS AS NOTED.
2. LENGTH AS REQUIRED FOR SMOOTH TRANSITION BACK TO MAIN DUCT.
3. IF IN CONCEALED SPACE; PAINT HANDLE OF VOLUME DAMPER FLUORESCENT ORANGE.
4. OPTION: IN LIEU OF A CONICAL COLLAR WITH VOLUME DAMPER, PROVIDE A HIGH EFFICIENCY TAKEOFF (SUPER HETO) WITH VOLUME DAMPER AND 2" STANDOFF.

DIFFUSER CONNECTION DETAIL

NOT TO SCALE

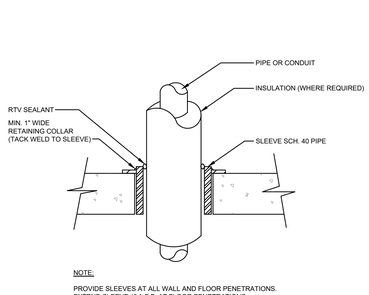


NOTES:

1. ALL BALANCING VALVES ARE TIGHT SHUT-OFF TYPE.
2. UNIONS SHALL BE ARRANGED SO PIPING WILL NOT INTERFERE WITH COIL REMOVAL.
3. INSTALL FOR COUNTER FLOW OF AIR AND WATER WHEN COILS EXCEED ONE ROW DEPTH.
4. THIS APPLICATION SHALL BE USED FOR TYPICAL AIR HANDLING UNITS.
5. VALVE FAILS "OPEN" IN HEATING.
6. NO = NORMALLY OPEN
   NC = NORMALLY CLOSED
   C = COMMON
7. UP TO 4" LINE SIZE. FOR 5" AND LARGER, PROVIDE GLOBE VALVE AND FLOW SENSOR.
8. MAINTAIN FULL LINE SIZE FOR SUPPLY AND RETURN PIPING AND ACCESSORIES FOR COIL, AS SHOWN ON THE FLOOR PLANS, REGARDLESS OF COIL HEADER AND CONTROL VALVE CONNECTION SIZES.
9. ARRANGE PIPING SO THAT ALL COMPONENTS ARE CLEAR OF UNIT ACCESS PANELS AND SERVICE ACCESS TO AIR FILTERS AND FAN MOTOR. ALL CLEARANCES SHALL BE SUFFICIENT TO ALLOW FOR REMOVAL OF ALL FILTERS, FAN ASSEMBLIES, AND COILS WITHOUT REMOVAL OF EXTERNAL PIPINGIN THE VICINITY OF THE UNIT.

HOT WATER COIL 3-WAY CONTROL VALVE PIPING DETAIL

NOT TO SCALE

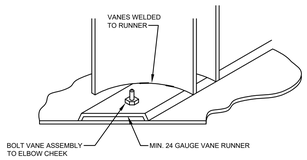


NOTE:

PROVIDE SLEEVES AT ALL WALL AND FLOOR PENETRATIONS. EXTEND SLEEVE 1" A.F.F. AT FLOOR PENETRATIONS.

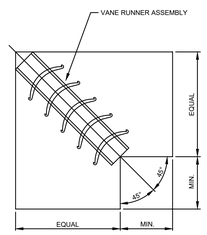
SLEEVE DETAIL

NOT TO SCALE



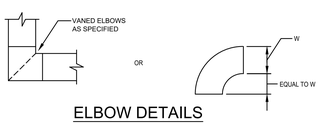
VANE RUNNER ASSEMBLY DETAIL

NOT TO SCALE



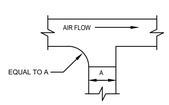
VANED ELBOW DETAIL

NOT TO SCALE



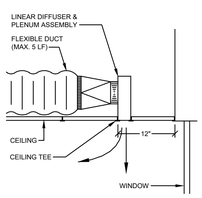
ELBOW DETAILS

NOT TO SCALE



BRANCH DUCT CONNECTION DETAILS

NOT TO SCALE



LINEAR DIFFUSER DETAIL

NOT TO SCALE

MEP:
Furlow Associates
650 Naamans Rd, Suite 211
Claymont, DE 19703
Tel: (302) 798-3515
FAX: (302) 798-3518

STRUCTURAL:
Tel: (xxx) xxx-xxxx Fax: (xxx) xxx-xxxx

CIVIL:
Tel: (xxx) xxx-xxxx Fax: (xxx) xxx-xxxx

INTERIOR DESIGN:
Tel: (xxx) xxx-xxxx Fax: (xxx) xxx-xxxx

CHARLES CROSS ARCHITECTURE, PC
655 West Valley Road Phone: 610.293.1990
Wayne, PA 19087 Fax: 610.293.1998
www.ccarch.com

DEMOLITION PACKAGE FOR NEW WOODS SERVICES
BEHAVIORAL HEALTH HOSPITAL
HEATHERWOOD - ONE STORY BUILDING
WOODS SERVICES
LANGHORNE, PA 19047

	2/2/26	BID ISSUE
	12/03/25	DOH ISSUE
	11/20/25	CMS REVIEW

REVISIONS

DRAWN BY:	RE-VISED BY:
BBB	MRH
PLOT SCALE: AS NOTED	DATE: 02/02/26

PROJECT FILE LOCATION:

DRAWING NAME:

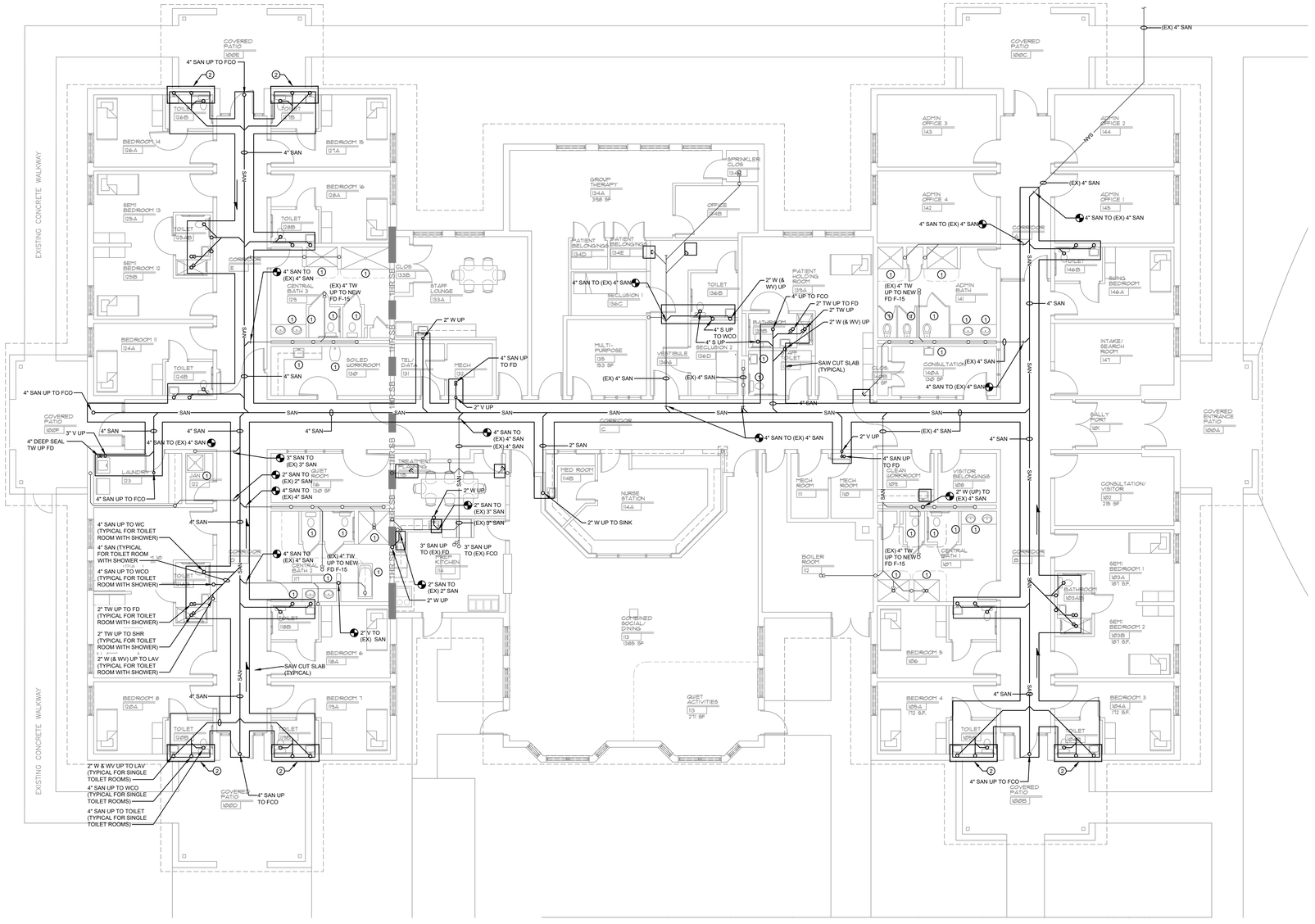
DETAILS MECHANICAL

DRAWING NO.

M-4

PLUMBING NOTES

1	RECONNECT EXISTING DRAINAGE UTILITIES TO NEW PLUMBING FIXTURE. MODIFY EXISTING DRAINAGE UTILITIES AS NECESSARY FOR THE INSTALLATION OF NEW PLUMBING FIXTURE.
2	REFER TO THE ARCHITECTURAL DRAWINGS FOR WALL PACK-OUT DETAIL FOR THE INSTALLATION OF PLUMBING UTILITY PIPING.
3	MODIFY EXISTING CHASE PLUMBING UTILITIES (DRAINAGE, VENTING AND DOMESTIC WATER) AS NECESSARY TO INSTALL NEW



1 / P-1 HEATHERWOOD FLOOR PLAN - NEW WORK - BELOW SLAB

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

STRUCTURAL:
-
-
-
Tel: (xxx) xxx-xxxx Fax: (xxx) xxx-xxxx

CIVIL:
-
-
-
Tel: (xxx) xxx-xxxx Fax: (xxx) xxx-xxxx

MEP:
Furlow Associates
650 Pleasant Valley Road, Suite 211
Chadds Ford, PA 19317
Tel: (302) 798-3515
FAX: (302) 798-3515

INTERIOR DESIGN:
-
-
-
Tel: (xxx) xxx-xxxx Fax: (xxx) xxx-xxxx

CHARLES CROSS ARCHITECTURE, PC
655 West Valley Road Phone: 610.293.1990
Wayne, PA 19087 Fax: 610.293.1998
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DEMOLITION PACKAGE FOR NEW WOODS SERVICES

BEHAVIORAL HEALTH HOSPITAL

HEATHERWOOD - ONE STORY BUILDING
WOODS SERVICES
LANGHORNE, PA 19047

2/2/26	BID ISSUE
12/03/25	DOH ISSUE
11/20/25	CHS REVIEW

REVISIONS

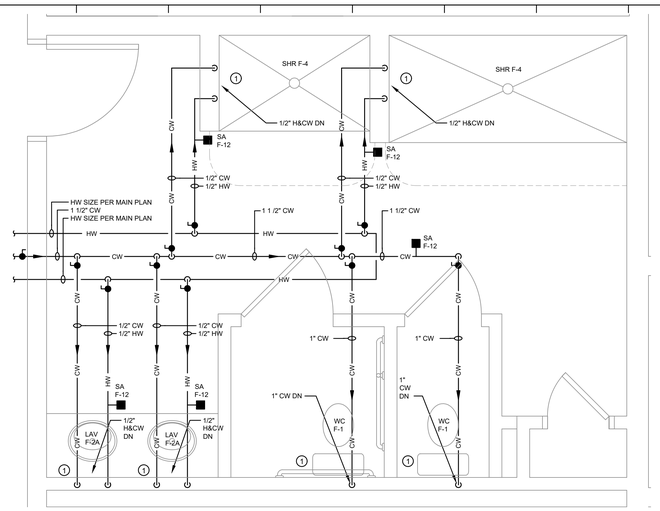
DRAWN BY: LTM	REVIEWED BY: MRM
PLOT SCALE: AS NOTED	DATE: 02/02/26

PROJECT FILE LOCATION:

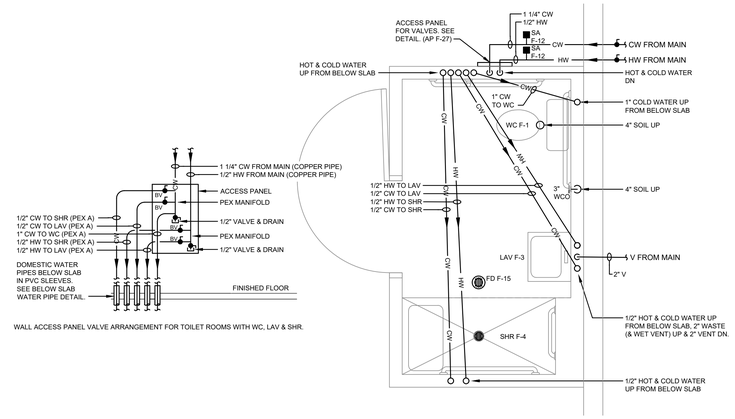
DRAWING NAME:
OVERALL NEW WORK FLOOR PLAN PLUMBING

DRAWING NO:
P-1

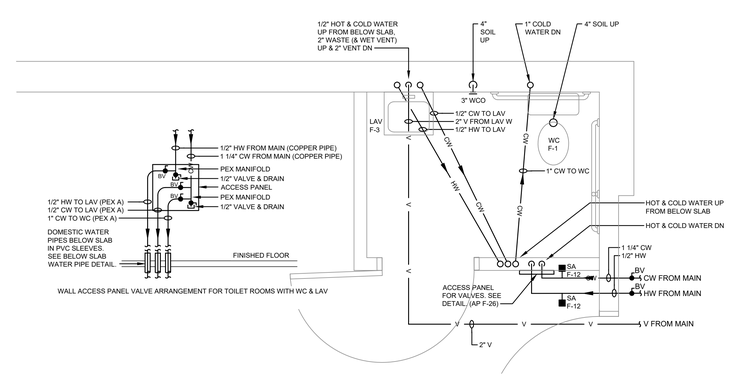
E1(30x42)



2 P-1 TYPICAL GANG BATHROOM - ENLARGED PAN
scale: 1/2" = 1'-Ø"



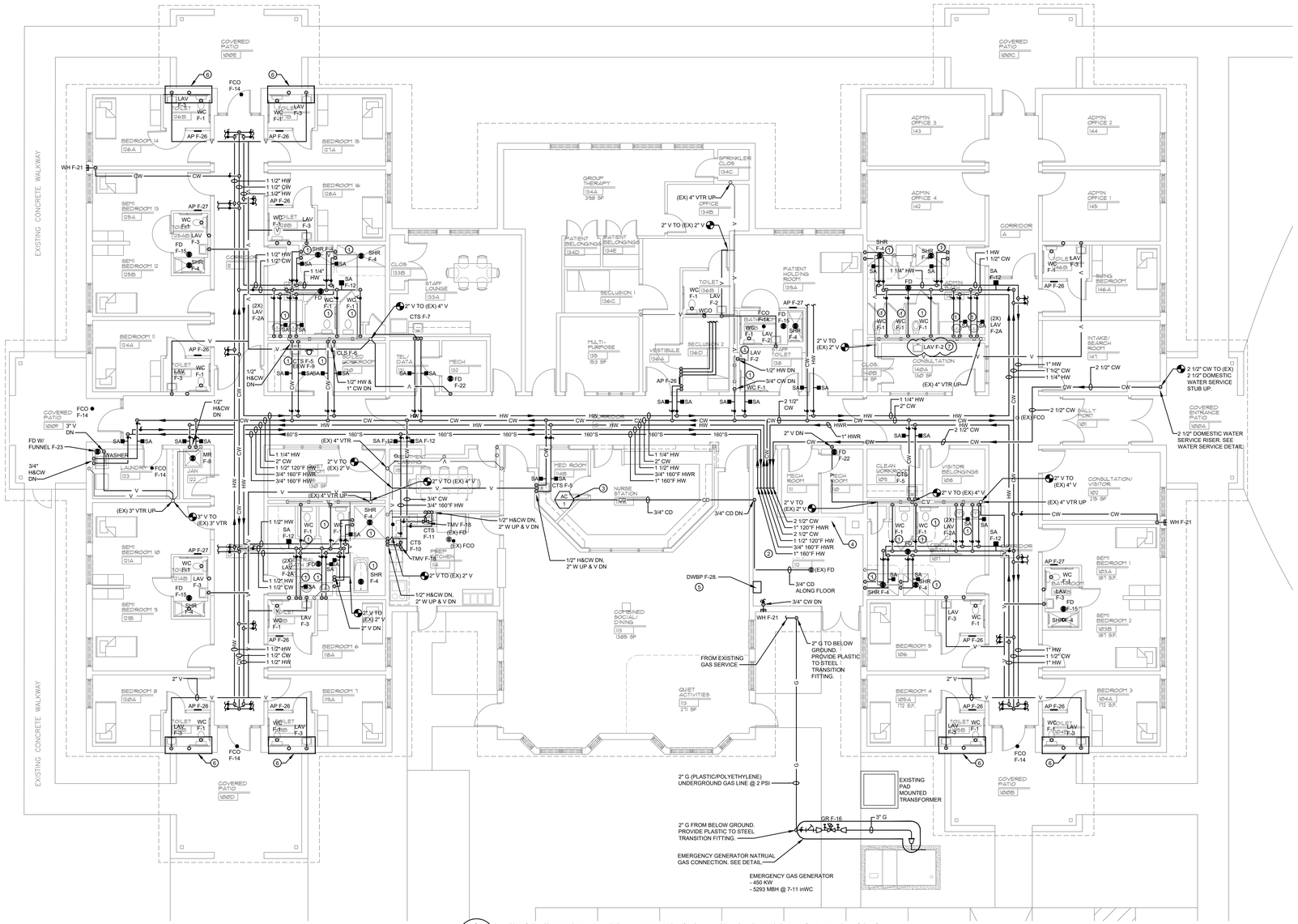
3 P-1 BED ROOM BATH WITH SHOWER - ENLARGED PAN
scale: 1/2" = 1'-Ø"



4 P-1 BED ROOM BATH W/O SHOWER - ENLARGED PAN
scale: 1/2" = 1'-Ø"

PLUMBING NOTES

1	RECONNECT EXISTING DOMESTIC WATER AND VENT UTILITIES AS NECESSARY FOR THE INSTALLATION OF NEW PLUMBING FIXTURE. MODIFY EXISTING DOMESTIC WATER AND VENT UTILITIES AS NECESSARY FOR THE INSTALLATION OF NEW PLUMBING FIXTURE.
2	CONNECT NEW DOMESTIC WATER PIPING TO EXISTING DOMESTIC WATER HEATER BOILERS. SEE DOMESTIC WATER HEATER PIPING DETAIL FOR THE ARRANGE OF COLD WATER AND HOT WATER & HOT WATER RETICULATION PIPING , VALVES AND EQUIPMENT.
3	CONNECT 3/4" CONDENSATE DRAIN TO AC-1 HVAC UNIT CONDENSATE PUMP DISCHARGE. RUN CONDENSATE DRAIN TO BOILER ROOM FLOOR DRAIN. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION
4	NEW HOT WATER/HOT WATER RETICULATION PIPING ARRANGEMENT. SEE BOILER ROOM HOT WATER PIPING SCHEMATIC DETAIL.
5	DOMESTIC WATER BOOSTER PUMP SYSTEM PACKAGE. SEE DOMESTIC WATER BOOSTER PUMP DETAIL.
6	REFER TO THE ARCHITECTURAL DRAWINGS FOR WALL PACK-OUT DETAIL FOR THE INSTALLATION OF PLUMBING UTILITY PIPING.
7	MODIFY EXISTING CHASE PLUMBING UTILITIES (DRAINAGE, VENTING AND DOMESTIC WATER) AS NECESSARY TO INSTALL NEW


EXISTING CONCRETE WALKWAY
EXISTING CONCRETE WALKWAY
COVERED PATIO 100E
COVERED PATIO 100C
COVERED PATIO 100D
COVERED PATIO 100B
COVERED ENTRANCE PATIO 100A
BEDROOM 14 126A
BEDROOM 15 127A
BEDROOM 16 128A
SEMI BEDROOM 13 129A
SEMI BEDROOM 12 129B
BEDROOM 11 124A
SEMI BEDROOM 10 121A
SEMI BEDROOM 9 119
BEDROOM 8 126A
BEDROOM 6 118A
BEDROOM 7 119A
GROUP THERAPY 134A 398 SF
PATIENT BELONGINGS 134D
PATIENT BELONGINGS 134E
SECLUSION 1 134C
SECLUSION 2 136D
MULTI-PURPOSE 135 653 SF
STAFF LOUNGE 133A
CLOS 133B
CLS F-6
TEL/DATA 132
MECH 132
PATIENT HOLDING ROOM 139A
TOILET 138
CLOS 140B 30 SF
CONSULTATION 140A 130 SF
MED ROOM 114B
NURSE STATION 114
MECH ROOM 111
MECH ROOM 110
CLEAN WORKROOM 109
VISITOR BELONGINGS 108
CONSULTATION/ VISITOR 102 215 SF
INTAKE/ SEARCH ROOM 141
SEMI BEDROOM 14 146A
SEMI BEDROOM 1 153A 181 SF
SEMI BEDROOM 2 153B 181 SF
ADMIN OFFICE 3 143
ADMIN OFFICE 2 144
ADMIN OFFICE 4 142
ADMIN OFFICE 1 145
CORRIDOR A
BEDROOM 5 106
BEDROOM 4 105A 112 SF
BEDROOM 3 104A 112 SF
COMBINED SOCIAL/ DINING 113 1385 SF
QUIET ACTIVITIES 113 217 SF
SPRINKLER FLOS 134C
(EX) 4" VTR UP
OFFICE 134B
2" V TO (EX) 2" V
2" V TO (EX) 4" V
(EX) 4" VTR UP
2" V TO (EX) 3" V
3" V TO (EX) 3" VTR
(EX) 3" VTR UP
(EX) FCO
(EX) FD
WH F-21
DWBP F-28
FROM EXISTING GAS SERVICE
2" G TO BELOW GROUND. PROVIDE PLASTIC TO STEEL TRANSITION FITTING.
2" G (PLASTIC/POLYETHYLENE) UNDERGROUND GAS LINE @ 2 PSI
EXISTING PAD MOUNTED TRANSFORMER
GR F-16
3" G
2" G FROM BELOW GROUND. PROVIDE PLASTIC TO STEEL TRANSITION FITTING.
EMERGENCY GENERATOR NATRUAL GAS CONNECTION. SEE DETAIL
EMERGENCY GAS GENERATOR
- 450 KW
- 5293 MBH @ 7-11 inWC
2 1/2" CW TO (EX) 2 1/2" DOMESTIC WATER SERVICE RISER. SEE WATER SERVICE DETAIL
2 1/2" DOMESTIC WATER SERVICE RISER. SEE WATER SERVICE DETAIL
2" V DN
1" HWR
2 1/2" CW
2 1/2" CW
1" 120°F HWR
3/4" 160°F HWR
1" 160°F HW
3/4" CW DN
3/4" CD
3/4" CD DN
2" G TO BELOW GROUND. PROVIDE PLASTIC TO STEEL TRANSITION FITTING.
1 1/2" HW
1 1/2" CW
1 1/2" 120°F HW
3/4" 160°F HWR
1" 160°F HW
1/2" H&CW DN, 2" W UP & V DN
1/2" H&CW DN 2" W UP & V DN
1/2" H&CW DN, 2" W UP & V DN
2" V TO (EX) 2" V
2" V DN
2" V
1" HW
1 1/2" CW
1" HW
1 1/4" HW
2" CW
1 1/4" HW
2" CW
1 HW
1 1/2" CW
1 1/4" HW
2" CW
1" HWR
2 1/2" CW
3/4" 160°F HWR
1" 160°F HW
3/4" CW DN
1/2" HW DN
1/2" H&CW DN
1/2" HW & 1" CW DN
3/4" H&CW DN
(2X) LAV F-2A
SHR F-4
FD F-15
FD F-22
FCO F-14
WH F-21
TMV F-38
TMV F-18
CTS F-5
CTS F-9
CTS F-10
CTS F-11
AC 1
WASHER
LAUNDRY 123
JAN 122
MR F-6
FD W/ FUNNEL F-23
3" V DN
3" V TO (EX) 3" VTR
SA F-12
SA F-12
160°S
(EX) 4" VTR
2" V TO (EX) 2" V
2" V TO (EX) 4" V
(EX) 4" VTR UP
3/4" CW
3/4" 160°F HW
1 1/2" HW
1 1/2" CW
1 1/2" 120°F HWR
3/4" 160°F HWR
1" 160°F HW
2" V TO (EX) 4" V
2" V TO (EX) 2" V
2" V DN
2" V TO (EX) 4" V
(EX) 4" VTR UP
2" V TO (EX) 2" V
2" V TO (EX) 4" V
(EX) 4" VTR UP

PLUMBING FIXTURE / EQUIPMENT SCHEDULE

ITEM	DESCRIPTION	CW	HW	SOIL WASTE	TRAP	INDIRCT WASTE	COND.	GAS	POWER	SETTING HEIGHT	SPECIFICATIONS/REMARKS
F-1	"WC" WATER CLOSET FLOOR MOUNT FLOOR OUTLET (LIGATURE RESISTANT)	1"		4"	INTEGRAL	-	-	-	-	REFER TO ARCHITECT DWGS.	WHITEHALL MODEL WH2142ADA-W-3, COLOR WHITE, TYPE 304 STAINLESS STEEL, FLOOR MOUNTED, REAR SPUD WITH BOTTOM OUTLET, 12" STANDARD ROUGH-IN, ELONGATED BOWL, 1.28 TO 1.6 GPF. PROVIDE WITH ZURN MODEL Z6152AV-WS1-L3 CONCEALED DIAPHRAGM-TYPE FLUSH VALVE WITH MANUAL PUSH BOTTOM ACTIVATION, 1.6 GPF. PROVIDE ALL NECESSARY PIPING AND FITTINGS TO MAKE CONNECTION TO WATER CLOSET. PROVIDE SHOCK ABSORBER ON CW SUPPLY. INSTALLATION SHALL COMPLY WITH ADA REGULATIONS.
F-2	"LAV" LAVATORY ADA PUBLIC TOILET (LIGATURE RESISTANT)	1/2"	1/2"	1 1/2"	1 1/2"	-	-	-	BATTERY POWERED	REFER TO ARCHITECT DWGS.	AMERICAN STANDARD 0355.012 WALL HUNG CHINA LAVATORY, 4 INCH CENTERS WITH WHITEHALL MODEL WH3378-HC-PPZ PIEZO BUTTON, BATTERY POWERED, 0.5 GPM LAMINAR FLOW NOZZLE FAUCET. PROVIDE WITH WHITEHALL MODEL WHST70-12 TEMPERATURE MIXING VALVE, ASSE 1070 COMPLIANT (FACTORY SET TO LIMIT HOT WATER TO 105°F). PROVIDE WALL SUPPLIES (INCLUDING STAINLESS STEEL FLEX HOSE EXTENSIONS & STOP VALVES), OFFSET GRID DRAIN ASSEMBLY, "P" TRAP WITH CLEANOUT AND FIXTURE CARRIER SUPPORT. PROVIDE TRUEBRO LAV SHIELD PROTECTIVE LAVATORY ENCLOSURE ITEM 82205 ("ADA" COMPLIANT) SINGLE PIECE CONSTRUCTION, HEAVY DUTY VANDAL RESISTANT PVC NOM. .093" WALL, WALL ANCHORS, CHINA WHITE COLOR. INSTALL SHOCK ABSORBER ON CW & HW SUPPLY. INSTALLATION SHALL COMPLY WITH ADA REGULATIONS.
F-2A	"LAV" COUNTERTOP ADA PUBLIC TOILET (LIGATURE RESISTANT)	1/2"	1/2"	1 1/2"	1 1/2"	-	-	-	BATTERY POWERED	REFER TO ARCHITECT DWGS.	CASEWORK AND COUNTERTOP PROVIDED BY OTHERS. PROVIDE WITH WHITEHALL MODEL WH3378-HC-PPZ PIEZO BUTTON, BATTERY POWERED, 0.5 GPM LAMINAR FLOW NOZZLE FAUCET. PROVIDE WITH WHITEHALL MODEL WHST70-12 TEMPERATURE MIXING VALVE, ASSE 1070 COMPLIANT (FACTORY SET TO LIMIT HOT WATER TO 105°F). PROVIDE WALL SUPPLIES (INCLUDING STAINLESS STEEL FLEX HOSE EXTENSIONS & STOP VALVES), OFFSET GRID DRAIN ASSEMBLY, "P" TRAP WITH CLEANOUT AND FIXTURE CARRIER SUPPORT. INSTALL SHOCK ABSORBER ON CW & HW SUPPLY. INSTALLATION SHALL COMPLY WITH ADA REGULATIONS.
F-3	"LAV" LAVATORY ADA SINGLE TOILET (LIGATURE RESISTANT)	1/2"	1/2"	1 1/2"	1 1/2"	-	-	-	BATTERY POWERED	REFER TO ARCHITECT DWGS.	AMERICAN STANDARD 0355.012 WALL HUNG CHINA LAVATORY, 4 INCH CENTERS WITH WHITEHALL MODEL WH3378-HC-PPZ PIEZO BUTTON, BATTERY POWERED, 0.5 GPM LAMINAR FLOW NOZZLE FAUCET. PROVIDE WITH WHITEHALL MODEL WHST70-12 TEMPERATURE MIXING VALVE, ASSE 1070 COMPLIANT (FACTORY SET TO LIMIT HOT WATER TO 105°F). PROVIDE WALL SUPPLIES (INCLUDING STAINLESS STEEL FLEX HOSE EXTENSIONS & STOP VALVES), OFFSET GRID DRAIN ASSEMBLY, "P" TRAP WITH CLEANOUT AND FIXTURE CARRIER SUPPORT. PROVIDE TRUEBRO LAV SHIELD PROTECTIVE LAVATORY ENCLOSURE ITEM 82205 ("ADA" COMPLIANT) SINGLE PIECE CONSTRUCTION, HEAVY DUTY VANDAL RESISTANT PVC NOM. .093" WALL, WALL ANCHORS, CHINA WHITE COLOR. INSTALL SHOCK ABSORBER ON CW & HW SUPPLY. INSTALLATION SHALL COMPLY WITH ADA REGULATIONS.
F-4	"SHR" SHOWER (LIGATURE RESISTANT)	1/2"	1/2"	2"	2"	-	-	-	-	REFER TO ARCHITECT DWGS.	SHOWER PAN AND STALL BY OWNER/ARCHITECT. CONTRACTOR TO PROVIDE AND INSTALL SHOWER DRAIN (ROUND) WITH TAILPIECE. (NOTE: DRAIN STRAINER FINISH TO BE COORDINATED WITH OWNERS REPRESENTATIVE.) CONTRACTOR TO PROVIDE AND INSTALL SHOWER VALVE ASSEMBLY: WHITEHALL MODEL WHSV16 SHOWER SYSTEM (CHROME PLATED) CONSISTING OF WHITEHALL SHOWER VALVE WITH INTEGRAL STOPS (PRESSURE AND TEMPERATURE BALANCED) WITH WHITEHALL 8290 FIXED MOUNTED SHOWERHEAD WITH ADJUSTABLE SPRAY ANGLE. PROVIDE PLUG FOR TUB OUTLET OF VALVE. PROVIDE SHOCK ABSORBERS ON BOTH H&CW SUPPLIES. COORDINATE INSTALLATION WITH GC.
F-5	"CTS" COUNTERTOP MEDS/SOILED ROOM	1/2"	1/2"	1 1/2"	1 1/2"	-	-	-	-	REFER TO ARCHITECT DWGS.	CASEWORK AND COUNTERTOP BY OTHERS. PROVIDE ELKAY "LUSTERTONE" DLR2522210 COUNTERTOP SINK, 3 HOLE CONFIGURATION, 3 1/2" CENTERED DRAIN OPENING (OVERALL DIMENSIONS: 25"(D,)X22"(W); BOWL DIMENSIONS: 21"(L)X15 3/4"(W)X10"(D), MIN. CABINET SIZE - 30"). PLUMBING CONTRACTOR TO PROVIDE ZURN MODEL Z831C4-XL-18F WIDESPREAD GOOSENECK FAUCET WITH 8" SWING SPOUT AND 4" WRIST BLADE HANDLES. PROVIDE WALL SUPPLIES WITH STOP VALVES AND STAINLESS STEEL FLEX HOSE EXTENSIONS. GRID STRAINER OFFSET DRAIN ASSEMBLY & "P" TRAP WITH CLEANOUT. PROVIDE SHOCK ABSORBERS ON BOTH HW & CW SUPPLIES.
F-6	"CLS" CLINICAL SINK SOILED ROOM	1"	1/2"	4"	INTEGRAL	-	-	-	-	WALL	ZURN MODEL Z5410.010.01.49.50.51 WALL MOUNTED, VITREOUS CHINA. CLINIC SINK WITH 8" CLINCAL SERVICE SINK FAUCET WITH INTEGRAL VACUUM BREAKER, DUAL CHECK VALVE, 3/4" HOSE THREADED OUTLET, PAIL HOOK, FORKED BOTTOM BRACE AND 6" WRIST BLAKE HANDLES. PROVIDE WITH ZURN Z877P2-LKS-HK-SH2 BEDPAN CLEANSER ASSEMBLY (HW ONLY) COMPLETE STOP VALVE ASSEMBLY, INTEGRAL VACUUM BREAKER, VINYL SPRAY HOSE ASSEMBLY AND INTEGRAL HOOK. IN PLACE OF SPRAY HANDLE ASSEMBLY, PROVIDE CHICAGO FAUCET 71-021HJKCP SELF-CLOSING SPRAY VALVE. FLUSH VALVE TO BE ZURN AQUAVANTAGE MODEL Z6011AV-H FOR CLINIC SERVICE SINK, 6.5 GPH AND HANDLE ON FRONT OF VALVE. PROVIDE HEAVY DUTY LBS. FIXTURE CARRIER TO SUIT. PROVIDE SHOCK ABSORBERS ON BOTH HW & CW SUPPLIES.
F-7	"CTS" COUNTERTOP SINK LOUNGE	1/2"	1/2"	1 1/2"	1 1/2"	-	-	-	-	REFER TO ARCHITECT DWGS.	CASEWORK AND COUNTERTOP BY OTHERS. PROVIDE ELKAY "LUSTERTONE" MODEL LRAD222265 SINGLE BOWL STAINLESS STEEL COUNTERTOP SINK WITH 4 HOLE CONFIGURATION (4" ON CENTER), OVERALL DIMENSIONS: 22" X 22" X 6-1/2", BOWL DIMENSIONS: 19" X 16" X 6-3/8" DEEP, AND 3-1/2" OFF-CENTERED REAR DRAIN OPENING (NOTE: MINIMUM CABINET SIZE 27"). PROVIDED WITH ZURN MODEL Z7872C-XL SINGLE LEVER HANDLE KITCHEN DECK MOUNTED FAUCET WITH HOSE AND SPRAY ATTACHMENT. PROVIDE WALL SUPPLIES (INCLUDING STAINLESS STEEL FLEX HOSE EXTENSIONS & BRASSCRAFT ANGLE STOP VALVES), BASKET STRAINER DRAIN ASSEMBLY & "P" TRAP WITH CLEANOUT. PROVIDE SHOCK ABSORBERS ON BOTH HW & CW SUPPLIES. INSTALLATION SHALL COMPLY WITH ADA REGULATIONS.
F-8	"MR" MOP RECEPTOR	1/2"	1/2"	3"	3"	-	-	-	-	FLOOR	FIAT MSB SERIES 2424 MOLDED STONE MOP RECEPTOR FITTED WITH 832-AA HOSE & BRACKET, 889-CC MOP HANGER, 1239-BB VINYL BUMPERGUARD, DRAIN STAIN & MSG2424 STAINLESS STEEL WALL GUARDS. PROVIDE SPEAKMAN MODEL SEF-9000-TW EYESAVER SERVICE FAUCET. PROVIDE SHOCK ABSORBERS ON BOTH HW & CW SUPPLIES.
F-9	"EEW" EMERGENCY EYE WASH (DECK MOUNTED)	1/2"	EEW 1/2" TMV 1/2"IN 3/4"OUT	-	-	-	-	-	-	DECK	HAWS MODEL 7612 (OR 7612LH) DECK MOUNTED EYE/FACE WASH, AXION MSR STAINLESS EYE/FACE WASH HEAD, 90° SWIVEL WITH CHROME PLATED BRASS STAY-OPEN BALL VALVE, PIPE AND FITTINGS AND STAINLESS STEEL PUSH HANDLE. RIGHT (LEFT) HAND SWIVEL OPERATION. PROVIDE HAWS MODEL TWBS.EWE ANION "LEAD FREE" THERMOSTATIC MIXING (1 TO 12 GPM FLOW RANGE, 120°F TO 180°F INLET TEMPERATURE RANGE, 60°F TO 90°F OUTLET TEMPERATURE RANGE) AND WALL SUPPLIES. VERIFY RIGHT OR LEFT HAND SWIVEL WITH ARCHITECT AND USER. FIELD ADJUST THERMOSTATIC MIXING VALVE FOR PROPER TEMPERATURE RANGE AND FLOW RATE PER ANSI Z358.1
F-10	"CTS" COUNTERTOP SINK KITCHEN	1/2"	1/2"	1 1/2"	1 1/2"	-	-	-	-	REFER TO ARCHITECT DWGS.	CASEWORK AND COUNTERTOP BY OTHERS. PROVIDE ELKAY "LUSTERTONE" MODEL ELUH211510 SINGLE BOWL STAINLESS STEEL UNDERMOUNT COUNTERTOP SINK, OVERALL DIMENSIONS: 23-1/2" X 18-1/2" X 10", BOWL DIMENSIONS: 21" X 15-3/4" X 10" DEEP, AND 3-1/2" REAR CENTERED DRAIN OPENING (NOTE: MINIMUM CABINET SIZE 27"). PROVIDED WITH ZURN MODEL Z7872C-XL SINGLE LEVER HANDLE KITCHEN DECK MOUNTED FAUCET WITH HOSE AND SPRAY ATTACHMENT. PROVIDE WALL SUPPLIES (INCLUDING STAINLESS STEEL FLEX HOSE EXTENSIONS & BRASSCRAFT ANGLE STOP VALVES), BASKET STRAINER DRAIN ASSEMBLY & TAIL PIECE WITH CONNECTION AND "P" TRAP WITH CLEANOUT. PROVIDE ACORN SFMV-1 [TMV F-18] FOR HOT WATER SUPPLY TO SINK, SET FOR 140°F. PROVIDE SHOCK ABSORBERS ON BOTH HW & CW SUPPLIES.
F-11	"CTS" COUNTERTOP SINK KITCHEN	1/2"	1/2"	1 1/2"	1 1/2"	-	-	-	-	REFER TO ARCHITECT DWGS.	CASEWORK AND COUNTERTOP BY OTHERS. PROVIDE ELKAY "LUSTERTONE" MODEL ELUH211510 SINGLE BOWL STAINLESS STEEL UNDERMOUNT COUNTERTOP SINK, OVERALL DIMENSIONS: 23-1/2" X 18-1/2" X 10", BOWL DIMENSIONS: 21" X 15-3/4" X 10" DEEP, AND 3-1/2" REAR CENTERED DRAIN OPENING (NOTE: MINIMUM CABINET SIZE 27"). PROVIDED WITH ZURN MODEL Z7872C-XL SINGLE LEVER HANDLE KITCHEN DECK MOUNTED FAUCET WITH HOSE AND SPRAY ATTACHMENT. PROVIDE WALL SUPPLIES (INCLUDING STAINLESS STEEL FLEX HOSE EXTENSIONS & BRASSCRAFT ANGLE STOP VALVES), BASKET STRAINER DRAIN ASSEMBLY & TAIL PIECE AND "P" TRAP WITH CLEANOUT. PROVIDE ACORN SFMV-1 [TMV F-18] FOR HOT WATER SUPPLY TO SINK, SET FOR 140°F. PROVIDE SHOCK ABSORBERS ON BOTH HW & CW SUPPLIES.
F-12	"SA" SHOCK ABSORBER	"A" 1/2" "B" 3/4" "C" 1"	"A" 1/2" "B" 3/4" "C" 1"	-	-	-	-	-	-	-	PRECISION PLUMBING PRODUCTS (PPP) "SC" SERIES BARREL FABRICATED TYPE "K" COPPER WITH WROUGHT COPPER FITTING, PISTON, "O" RING AND LUBRICATED. TEMPERATURE RANGE -40 DEG. F TO 212 DEG. F. WHEN INSTALLED WITH IN WALL OR CHASE PROVIDE ACCESS PANEL IN WALL, MINIMUM SIZE SHALL BE 12"x12" WITH ALLEN KEY LOCK.
F-13	"BLV" BALANCING VALVE	-	1" & 3/4" HWR	-	-	-	-	-	-	-	BELL & GOSSETT (ITT) A-549LFP CIRCUIT SETTER PLUS, LEAD FREE, BALANCING VALVE WITH MEMORY STOP.
F-14	"FCO" FLOOR CLEANOUT	-	-	3" & 4"	-	-	-	-	-	-	J.R. SMITH 4031 SERIES "SPEEDI-SET" CAST IRON BODY, NEOPRENE "O" RING SECONDARY TEST SEAL AND ADJUSTABLE COMBINED ACCESS COVER AND PLUG WITH GASKET SEAL, NICKEL BRONZE SCORIATED COVER. FOR EXTERIOR CLEANOUTS PROVIDE AN 18"x18"x8" THICK CONCRETE PAD AROUND CLEANOUT.
F-15	"FD" FLOOR DRAIN	-	-	2" & 4"	-	-	-	-	-	-	J.R. SMITH 2005, DUCO CAST IRON BODY, ROUND TOP, NICKEL BRONZE ADJUSTABLE STRAINER HEAD, VANDAL PROOF SCREWS. PROVIDE FLOOR DRAIN WITH RECTORSEAL SURESEAL TRAP SEAL PROTECTOR, ASSE 1072 TESTED AND CERTIFIED BARRIER-TYPE TRAP SEAL DEVICE. (NOTE: DRAIN STRAINER FINISH TO BE COORDINATED WITH OWNERS REPRESENTATIVE.)
F-16	"GR" GAS PRESSURE REGULATOR VALVE	-	-	-	-	-	-	-	2"	-	SENSUS/USG MODEL 122-12, 2" NPT, GREEN SPRING 6-14 inWC RANGE.
F-17	"CP" HOT WATER RE-CIRCULATION PUMP	-	1"	-	-	-	-	-	120 V 1 PH. 0.54 AMP 44 W MAX.	-	TACO MODEL 007e-SU, STAINLESS STEEL UNION CONNECTIONS, VARIABLE SPEED, HIGH-EFFIENCY, 120 VOLT, 1 PHASE, 0.54 AMPS, 1590-4830 PRM, 44W MAX, STAINLESS STEEL CONSTRUCTION. 7 GPM @ 10 FT. HD. PUMP RUNS CONTINUOUSLY. PROVIDE MANUAL STARTER AND AQUASTAT.
F-18	"TMV" THERMOSTATIC MIXING VALVE	1/2"	1/2" IN/ OUT	-	-	-	-	-	-	-	ACORN MODEL SFMV17-1 LEAD-FREE BRASS MIXING VALVE, 0.1 GPM MIN. FLOW (0.5 GPM CERTIFIED MIN. FLOW), FLOW RATE 12 GPM @ 45 PSI, SET FOR 140°F. ASSE 1017.
F-19	"TMV" MASTER THERMOSTATIC MIXING VALVE	1 1/4"	1 1/4"	-	-	-	-	-	-	-	PAXTON CORPORATION MODEL TVS43-32 MASTER MIXING VALVE, LEAD FREE, FULL STAINLESS STEEL CONSTRUCTION, FLOW RATE - 42 GPM @ 5 PSI PRESSURE DROP, SET TO MAINTAIN 120°F WATER TEMPERATURE, ASSE 1017 CERTIFIED.
F-20	"RZBP" REDUCE PRESSURE ZONE BACKFLOW PREVENTER	3/4"	-	-	-	-	-	-	-	-	WATTS SERIES LF009, LEAD FREE, REDUCED PRESSURE BACKFLOW PREVENTER WITH Y-STRAINER, SHUT-OFF BALL VALVES, AND SAE TEST COCKS (VERTICAL OR HORIZONTAL INSTALLATION.) RUN RELIEF VALVE TO FLOOR DRAIN.
F-21	"WH" NON-FREEZE WALL HYDRANT	3/4"	-	-	-	-	-	-	-	24" AFG	J.R. SMITH, FIG. 5517 QUARTER TURN, GUARDIAN DUAL CHECK, NON-FREEZE WALL HYDRANT WITH 3/4" HOSE CONNECTION, INTEGRAL VACUUM BRACKER, DUAL CHECK VALVE, STAINLESS STEEL RECESSED BOX WITH LOCKING COVER (HYDRANT BOX FOR 6" DIAMETER CORED HOLE IN CONCRETE EXTERIOR WALL), 3/4" MALE NPT INLET (OR 1/2" FEMALE NPT INLET). NOTE: TO CONTRACTOR: SPECIFY WALL THICHNESS WHEN ORDERING. PROVIDE TWO SPACE "T" HANDLE KEYS.
F-22	"FD" FLOOR DRAIN	-	-	4"	4"	-	-	-	-	-	J.R. SMITH 2240Y (NO-HUB) DUCO CAST IRON BODY WITH ROUND TOP, HINGED GRATE, & SLOTTED SEDIMENT BUCKET. PROVIDE FLOOR DRAIN WITH RECTORSEAL SURESEAL TRAP SEAL PROTECTOR, ASSE 1072 TESTED AND CERTIFIED BARRIER-TYPE TRAP SEAL DEVICE.
F-23	"FD" FLOOR DRAIN	-	-	4"	4" DEEP SEAL	-	-	-	-	-	J.R. SMITH 3510Y (NO-HUB) FUNNEL-CEPTOR DRAIN, DUCO CAST IRON BODY WITH 8" ROUND STRAINER, SEDIMENT BUCKET AND 6" DIAMETER FUNNEL (J.R. SMITH 3581.)
F-24	"CP" HOT WATER RE-CIRCULATION PUMP	-	1" HWR	-	-	-	-	-	120 V 1 PH. 0.54 AMP 44 W MAX.	-	TACO MODEL 0015e3-SU4, UNION CONNECTIONS, VARIABLE SPEED, HIGH-EFFIENCY, 120 VOLT, 1 PHASE, 0.54 AMPS, 1590-4830 PRM, 44W MAX, STAINLESS STEEL CONSTRUCTION. 5 GPM @ 15 FT. HD. (HIGH SPEED.) PUMP RUNS CONTINUOUSLY. PROVIDE MANUAL STARTER AND AQUASTAT.
F-25	"CP" HOT WATER RE-CIRCULATION PUMP	-	3/4" HWR	-	-	-	-	-	115 V 1 PH 0.45 AMPS 1/40 HP	-	TACO MODEL 003-SC4, UNION CONNECTIONS, CARTRIDGE 115 VOLT, 1 PHASE, 0.45 AMPS, 3250 PRM, 1/40 HP, STAINLESS STEEL CONSTRUCTION. 1 GPM @ 4 FT. HD. PUMP RUNS CONTINUOUSLY. PROVIDE MANUAL STARTER AND AQUASTAT.
F-26	"AP" VALVE ACCESS PANEL	-	-	-	-	-	-	-	-	CENTER LINE OF PANEL AT 45" AFF	BEST ACCESS DOORS SERIES BA-AL-9500 LIGATURE RESISTANT ACCESS DOOR (OR APPROVED EQUAL) WITH CONCEALED HINGE AND RADIUSED CORNERS, SIZE - 24" X 24", TORX HEAD WITH REJECT BUTTON SCREW LATCH OPTION, WHITE ALKYD ENAMEL FINISH
F-27	"AP" VALVE ACCESS PANEL	-	-	-	-	-	-	-	-	CENTER LINE OF PANEL AT 45" AFF	BEST ACCESS DOORS SERIES BA-AL-9500 LIGATURE RESISTANT ACCESS DOOR (OR APPROVED EQUAL) WITH CONCEALED HINGE AND RADIUSED CORNERS, SIZE - 24" X 36", TORX HEAD WITH REJECT BUTTON SCREW LATCH OPTION, WHITE ALKYD ENAMEL FINISH.
F-28	"DWBP" DOMESTIC WATER BOOSTER PUMP	1 1/4"	-	-	-	-	-	-	208 V 3 PH 1.5 HP 6.3 A	-	QUANTUMFLO "MIROFLO" SERIES DUPLEX VARIABLE FREQUENCY DRIVE (VFD) DOMESTIC BOOSTER PUMP SYSTEM. TWO 65 GPM (MAX.) @ 95 FT. (MAX) [60 GPM @ 27 PSI], 1.5 HP, 208 V, 3 PH, 6.3 A VERTICALLY MOUNTED END SUCTION PUMPS. 304 STAINLESS STEEL PUMPS AND FITTINGS. 1 1/4" NPT SUCTION AND DISCHARGE CONNECTIONS.

ABBREVIATIONS

A	COMPRESSED AIR
ACFM	ACTUAL CUBIC FEET/MINUTE
AD	AREA DRAIN
ADA	AMERICANS DISABILITIES ACT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
ANC	ANCHOR
AP	ACCESS PANEL
ATW	ACID TRAPPED WASTE
AV	ACID VENT
AW	ACID WASTE
BF	BELOW FLOOR
BFP	BACKFLOW PREVENTER
BFV	BUTTERFLY VALVE
BLV	BALANCING VALVE
BOP	BOTTOM OF PIPE
BS	BELOW SLAB
BTU	BRITISH THERMAL UNITS
BV	BALL VALVE
BWV	BACK WATER VALVE
CB	CATCH BASIN
CBA	COMBUSTION AIR
CD	CONDENSATE DRAIN
CFH	CUBIC FEET PER HOUR
CI	CAST IRON
CKV	CHECK VALVE
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
CO_2	CARBON DIOXIDE
CPVC	CHLORINATED POLYVINYL CHLORIDE
CTS	COUNTER TOP SINK
CW	DOMESTIC COLD WATER
CWV	COMBINATION WASTE AND VENT
D	DRAIN
DE	DEIONIZED WATER
DFU	DRAINAGE FIXTURE UNIT
DI	DUCTILE IRON
DN	DOWN
DWBP	DOMESTIC WATER BOOSTER PUMP
DWH	DOMESTIC WATER HEATER
DWV	DRAINAGE WASTE VENT
(EX)	EXISTING
EC	ELECTRICAL CONTRACTOR
EJ	EXPANSION JOINT
ECO	EXTERIOR CLEANOUT
ES	EMERGENCY SHOWER
EWC	ELECTRIC WATER COOLER
EXH	EXHAUST
F	FIRE WATER SERVICE
F-#	FIXTURE IDENTIFICATION NUMBER
FCO	FLOOR CLEAN OUT
FD	FLOOR DRAIN
FF	FINISHED FLOOR
FND	FUNNEL DRAIN
FS	FLOOR SINK
FSW	FLOW SWITCH
FSC	FOOD SERVICE CONTRACTOR
FXV	FLUE EXHAUST VENT
G	GAS
GC	GENERAL CONTRACTOR
GLV	GLOBE VALVE
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GR	GAS PRESSURE REGULATOR VALVE
GV	GAS VENT
GW	GREY WATER
HB	HOSE BIBB
HC	HANDICAPPED
HVAC-C	HVAC CONTRACTOR
HW	DOMESTIC HOT WATER
HWC	HANDICAP WATER CLOSET
HWR	HOT WATER RETURN
ID	INDIRECT DRAIN
IE	INVERT ELEVATION
IW	INDIRECT WASTE
KD	KITCHEN DRAINAGE
KEC	KITCHEN EQUIPMENT CONTRACTOR
KES	KITCHEN EQUIPMENT SUPPLIER
LAV	LAVATORY
LEC	LAUNDRY EQUIPMENT CONTRACTOR
LES	LAUNDRY EQUIPMENT SUPPLIER
LPG	PROPANE GAS
MA	MEDICAL COMPRESSED AIR
MBH	1000 BTU/HOUR
MH	MANHOLE
MR	MOP RECEPTOR
MS	MOP SINK
MV	MEDICAL VACUUM
N2	NITROGEN
NC	NORMALLY CLOSED
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NFWH	NON FREEZE WALL HYDRANT
NO	NORMALLY OPEN
N20	NITROUS OXIDE
O2	OXYGEN
OD	OVERFLOW DRAIN
OS&Y	OUTSIDE SCREW & YOKE
PAG	PIPE ALIGNMENT GUIDE
PC	PLUMBING CONTRACTOR
PD	PUMP DISCHARGE
PG	PRESSURE GAUGE
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
RO/DE	REVERSE OSMOSIS/DEIONIZED WATER
RZBP	REDUCED PRESSURE ZONE BACKFLOW PREVENTER
RWC	RAIN WATER CONDUCTOR
S	SOIL/SANITARY
SA	SHOCK ABSORBER
SAN	SANITARY
SCFM	STANDARD CUBIC FEET/MINUTE
SD	STORM DRAIN
SHR	SHOWER
SP	SEWAGE PUMP
SS	SANITARY/SOIL STACK
SS/S	STAINLESS STEEL SINK
SLV	SOLENOID VALVE
SV	STACK VENT
TH	THRUST BLOCK
TP	TRAP PRIMER
T&PV	TEMPERATURE & PRESSURE RELIEF VALVE
TS	TAMPER SWITCH
TPW	TEMPERED WATER
TW	TRAPPED WASTE
TMV	THERMOSTATIC MIXING VALVE
URI	URINAL
US	UTILITY SINK
V	VENT
VL	VACUUM LINE
VLV	VALVE
VS	VENT STACK
VTR	VENT THRU ROOF
W	WASTE
WC	WATER CLOSET
inWC	WATER COLUMN (INCHES)
WCO	WALL CLEANOUT
WFS	WATER FLOW SWITCH
WH	WALL HYDRANT
WS	WASTE STACK
WSFU	WATER SUPPLY FIXTURE UNITS
WSY	WATER SUPPLY
WV	WET VENT

LINETYPES

CW	COLD WATER
CD	CONDENSATE DRAIN
	DEMOLITION
	EQUIPMENT
140°R	HOT WATER RETURN (140°)
140°S	HOT WATER (140°)
HW	HOT WATER
HWR	HOT WATER RETURN
SAN	SANITARY
SSD	SECONDARY STORM DRAINAGE
SD	STORM DRAIN
V	VENT

DEMOLITION SYMBOLS

- EXISTING
- REMOVE TO THIS POINT
- EXISTING TO BE REMOVED
- SAW CUT SLAB

CONTRACTOR IS RESPONSIBLE FOR ALL SLAB CUTTING AND SLAB REPAIR WITH RESPECTS TO NEW SANITARY AND/OR STORM DRAINAGE INSTALLATION AND EXIST SANITARY AND/OR STORM DRAINAGE MODIFICATION. PRIOR TO ANY SAW CUTTING AND OPENING OF EXISTING FLOOR SLAB, THE CONTRACTOR SHALL FIELD VERIFY, EITHER BY CAMERA OR OTHER MEANS, THE EXISTING BELOW SLAB SANITARY AND/OR STORM DRAIN SYSTEM TO ACCURATELY LOCATE PIPING, DETERMINE EXISTING PIPING CONDITIONS, DETERMINE THE CORRECT DRAINAGE (SANITARY OR STORM) AND DETERMINE EXISTING INVERT ELEVATIONS & PIPE SIZES. THE CONTRACTOR SHALL SUBMIT A REPORT OF FINDINGS FOR REVIEW BY THE OWNER, ARCHITECT AND/OR ENGINEER NOTING ANY ADVERSE EXISTING PIPING CONDITIONS, AND INDICATING EXISTING PIPE SIZE, RUNS AND INVERTS, ONLY AFTER DRAINAGE PIPE VERIFICATION SHALL THE CONTRACTOR FIELD MARK THE SLAB FOR SAW CUTTING TO REMOVE, MODIFY OR EXTEND THE BELOW SLAB DRAIN SYSTEM. AFTER INSPECTION AND TESTING OF NEW AND MODIFIED SANITARY AND/OR STORM DRAINAGE, REPAIR CONCRETE SLAB TO ORIGINAL FINISH.

SYMBOLS

	ANGLE VALVE
	AQUASTAT
	AREA DRAIN/FLOOR DRAIN
	BALANCING VALVE
	BALL VALVE
	BRANCH-BOTTOM CONNECTION
	BRANCH-TOP CONNECTION
	BUTTERFLY VALVE
	CAPPED PIPE/OUTLET
	CHECK VALVE
	CIRCULATING PUMP
	CLEANOUT PLUG
	CONCENTRIC REDUCER
	CONNECT NEW TO EXISTING
	DIRECTION OF FLOW
	REMOVE TO THIS POINT
	DOUBLE CLEANOUT TO GRADE
	EXPANSION DEVICE
	EXPANSION JOINT
	FLOOR CLEANOUT
	FLOOR SINK
	FLOW CONTROL VALVE (GPM)
	FUNNEL DRAIN OPEN
	GATE VALVE
	GLOBE VALVE
	HOSE BIBB
	MIXING VALVE (THERMOSTATIC)
	NON FREEZE WALL HYDRANT
	OUTSIDE SCREW AND YOKE
	PIPE ANCHOR
	PIPE BREAK
	PIPE GUIDE
	PIPE RISING UP
	PIPE TURNING DOWN
	PRESSURE GAUGE
	PRESSURE GAUGE & COCK
	PRESSURE REDUCING VALVE
	PRESSURE/TEMPERATURE RELIEF VALVE
	REDUCER (CONCENTRIC)
	REDUCER (ECCENTRIC)
	RISER
	RISE OR DROP
	ROOF DRAIN
	RUNNING TRAP
	SAFETY SHOWER/EYEWASH STATION
	SHOCK ABSORBER
	SLOPE ARROW
SLOPE @ .01	SLOPE @ 1/8"/FT
SLOPE @ .02	SLOPE @ 1/4"/FT
	SOLENOID OPERATED VALVE (ELECTRIC)
	STRAINER
	TEMPERATURE GUAGE
	THERMOMETER
	TRAP
	TRENCH DRAIN
	UNION
	WALL CLEANOUT
#	PLUMBING DEMOLITION NOTE
#	PLUMBING NOTE
	GAS REGULATOR
	STRAINER
	GAS SHUT-OFF VALVE

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DEMOLITION PACKAGE FOR NEW WOODS SERVICES

BEHAVIORAL HEALTH HOSPITAL

HEATHERWOOD - ONE STORY BUILDING
WOODS SERVICES
LANGHORNE, PA 19047

2/2/26	BID ISSUE
12/03/25	DOH ISSUE
11/20/25	CMS REVIEW

REVISIONS

DRAWN BY: LTM	RE-VISED BY: MRM
PLOT SCALE: AS NOTED	DATE: 02/02/26

PROJECT FILE LOCATION:

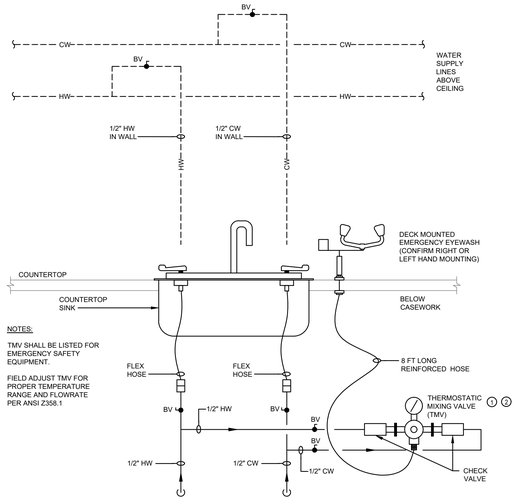
DRAWING NAME:

LEGENDS & SCHEDULES PLUMBING

DRAWING NO.

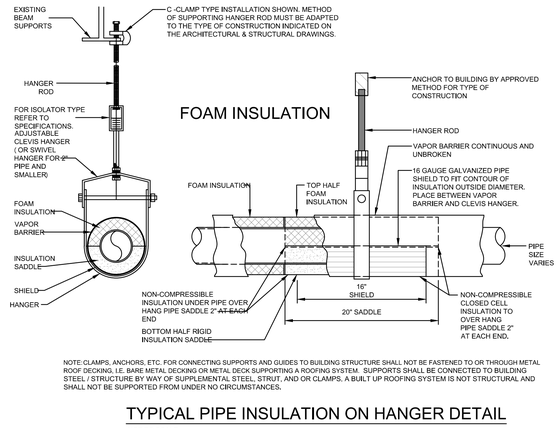
P-3

E1(30x42) 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24



DECK MOUNTED EMERGENCY EYEWASH DETAIL

NOT TO SCALE

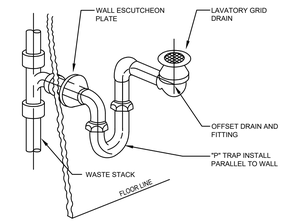


FOAM INSULATION

NOTE: CLAMPS, ANCHORS, ETC. FOR CONNECTING SUPPORTS AND GUIDES TO BUILDING STRUCTURE SHALL NOT BE FASTENED TO OR THROUGH METAL ROOF DECKING, I.E. BARE METAL DECKING OR METAL DECK SUPPORTING A ROOFING SYSTEM. SUPPORTS SHALL BE CONNECTED TO BUILDING STEEL / STRUCTURE BY WAY OF SUPPLEMENTAL STEEL, STRUT, AND OR CLAMPS. A BUILT UP ROOFING SYSTEM IS NOT STRUCTURAL AND SHALL NOT BE SUPPORTED FROM UNDER NO CIRCUMSTANCES.

TYPICAL PIPE INSULATION ON HANGER DETAIL

NOT TO SCALE

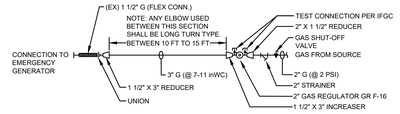


NOTE:

1. WASTE PIPING, TRAP AND WATER SUPPLIES SHALL BE INSULATED WITH A PROTECTIVE WRAP AS PER TRUEBRO.
2. NO INSULATION IS REQUIRED WHEN LAVATORY IS FURNISHED WITH A RIGID ENCLOSURE BELOW LAVATORY.

HANDICAP LAVATORY OFF-SET DRAIN DETAIL

NOT TO SCALE

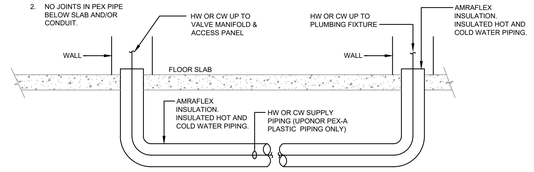


EMERGENCY GENERATOR NATURAL GAS PIPING CONNECTION DETAIL

NOT TO SCALE

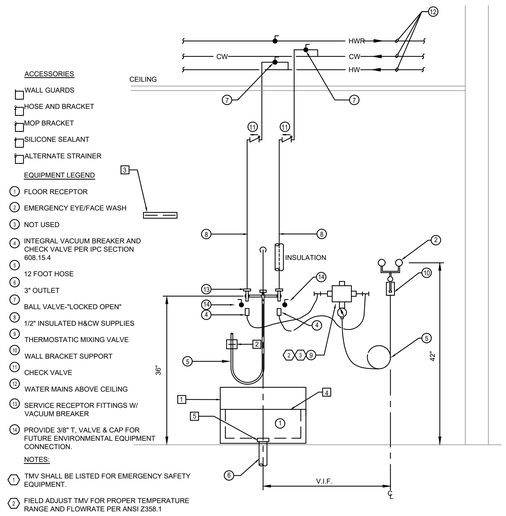
NOTE:

1. LOCATIONS OF WATER SUPPLY RISERS TO BE AS ACCURATE AS POSSIBLE.
2. NO JOINTS IN PEX PIPE BELOW SLAB AND/OR CONDUIT.



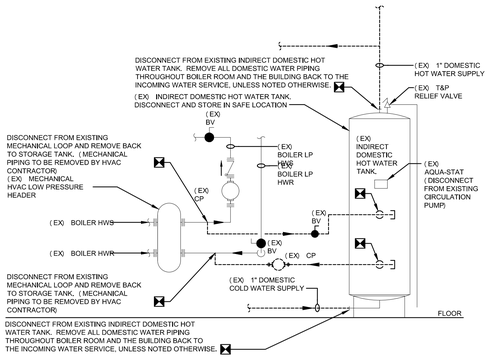
BELOW SLAB WATER SUPPLY PIPING DETAIL

NOT TO SCALE



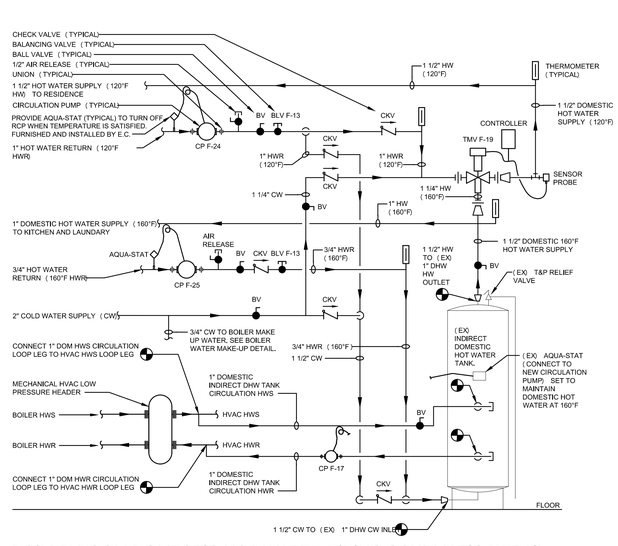
FLOOR MOP RECEPTOR & EYEWASH DETAIL

NOT TO SCALE



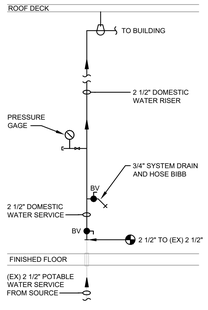
BOILER ROOM DOMESTIC HOT WATER PIPING DEMOLITION DETAIL

NOT TO SCALE



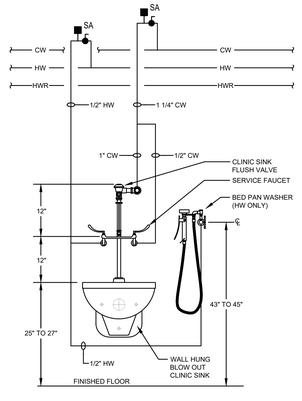
BOILER ROOM DOMESTIC HOT WATER PIPING SCHEMATIC DETAIL

NOT TO SCALE



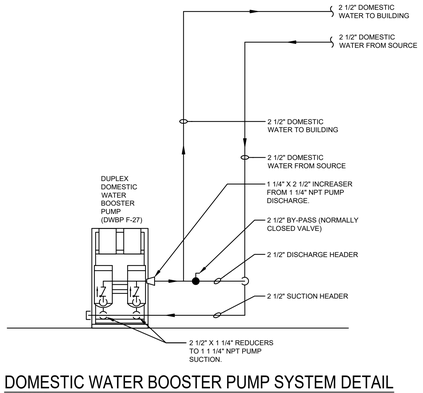
DOMESTIC WATER SERVICE (DWS) DETAIL

NOT TO SCALE



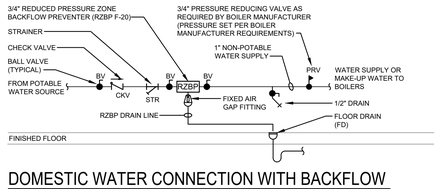
CLINIC SINK DETAIL

NOT TO SCALE



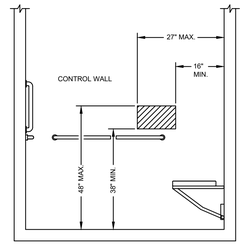
DOMESTIC WATER BOOSTER PUMP SYSTEM DETAIL

NOT TO SCALE



DOMESTIC WATER CONNECTION WITH BACKFLOW PREVENTION FOR TO BOILER WATER MAKE-UP - DETAIL

NOT TO SCALE



NOTE:
SEE ARCHITECTURAL DRAWINGS AND ICC A117.1 FOR ADDITIONAL INFORMATION.

STANDARD ROLL-IN-TYPE SHOWER CONTROLS AND HAND SHOWER LOCATION DETAIL

NOT TO SCALE

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2/2/26	BID ISSUE
12/03/25	DOH ISSUE
11/20/25	CPIS REVIEW

REVISIONS

DRAWN BY: LTM	REVIEWED BY: MRM
PLOT SCALE: AS NOTED	DATE: 02/02/26

PROJECT FILE LOCATION:

DRAWING NAME:

DETAILS PLUMBING

DRAWING NO:

P-4

GENERAL SPECIFICATIONS - PLUMBING

1. GENERAL:

1.1. THE CONTRACTOR SHALL INFORM THEMSELVES OF THE SPECIFICATIONS AND DRAWINGS CONSTITUTING THE ENTIRETY OF THE PROJECT AND SHALL ADHERE TO ALL REQUIREMENTS AFFECTING ITS WORK. IN THE EVENT OF A CONFLICT BETWEEN THESE CONDITIONS AND OTHER CONTRACT DOCUMENTS, THE MORE RESTRICTIVE STANDARDS SHALL GOVERN.

1.2. INFECTIOUS HAZARD CONTROL PROGRAM: THE CONTRACTOR SHALL BE AWARE OF, AND EXECUTE ALL THE REQUIREMENTS OF THE "INFECTIOUS HAZARD CONTROL PROGRAM" AS ADOPTED BY THE OWNER.

1.3. ORDINANCE: ALL WORK SHALL COMPLY WITH ALL APPLICABLE CODES, ORDINANCES, RULES, REGULATIONS AND LAWS IN EFFECT. REQUIRED OF THE FOLLOWING SHALL BE MINIMUM: TOWNSHIP DEPARTMENT OF LICENSES AND INSPECTIONS, TOWNSHIP PLUMBING CODE (INTERNATIONAL PLUMBING CODE WITH TOWNSHIP AMENDMENTS, TOWNSHIP FIRE MARSHAL'S OFFICE (DELAWARE STATE FIRE PROTECTION REGULATIONS (DSFPR)/FIRE CODE), NFPA AND OSHA, AND OWNER'S STANDARDS. THE CONTRACTOR SHALL ARRANGE AND PAY FOR ALL TESTS AND INSPECTIONS IF SO REQUIRED BY THE ABOVE AGENCIES AND FURNISH CERTIFICATES OF INSPECTION TO THE OWNER.

1.4. WORK INCLUDED: PROVIDE LABOR, MATERIALS, EQUIPMENT AND SUPERVISION NECESSARY TO INSTALL COMPLETE OPERATING PLUMBING SYSTEMS AS INDICATED ON THE DRAWINGS AND SPECIFIED HEREIN.

1.5. SITE INSPECTION: VISIT SITE, INSPECT AND BECOME AWARE OF ALL EXISTING SITE CONDITIONS WHICH MAY AFFECT THE WORK. THIS INCLUDES INSPECTION OF ALL PIPING RELATED AREAS SUCH AS MECHANICAL ROOMS, INTERSTITIAL FLOOR LEVELS, BELOW SLAB, BELOW FLOOR, ABOVE CEILINGS, ABOVE FLOOR AND ROOF. SUBMISSION OF A BID WILL BE DEEMED EVIDENCE OF HAVING COMPLIED WITH THIS REQUIREMENT.

1.6. WORKMANSHIP: INSTALL ALL WORK NEAT, TRIM AND PLUMB WITH BUILDING LINES. INSTALL WORK IN SPACES ALLOCATED. CUTTING AND PATCHING SHALL BE PERFORMED BY SKILLED TRADESMEN NORMALLY EMPLOYED FOR THE WORK INVOLVED. PROPERLY HANG AND SUPPORT PIPING IN ACCORDANCE WITH MANUFACTURERS WRITTEN INSTRUCTIONS AND ALL APPLICABLE CODES AND STANDARDS.

1.7. GUARANTEE: ALL WORK SHALL BE GUARANTEED TO BE FREE FROM DEFECTS FOR A PERIOD OF ONE YEAR OF OPERATION FROM DATE OF ACCEPTANCE BY THE OWNER UNLESS OTHERWISE SPECIFIED. GUARANTEE SHALL BE EXTENDED ON AN EQUAL TIME BASIS FOR ALL NON-OPERATIONAL PERIODS DUE TO FAILURE WITHIN THE GUARANTEE PERIOD.

2. SPECIAL CONDITIONS FOR PLUMBING WORK:

2.1. THESE SPECIAL CONDITIONS SHALL APPLY TO ALL NEW PLUMBING WORK.

2.2. SECURE AND PAY FOR ANY PERMITS AND INSPECTIONS REQUIRED FOR THE WORK.

2.3. THE INTERPRETATION OF THE ARCHITECT/ENGINEER WILL BE FINAL IN THE EVENT THERE IS A LACK OF UNDERSTANDING OF THE FULL SCOPE OR REQUIREMENTS OF THE SYSTEMS UNDER THIS CONTRACT.

2.4. PROTECT ALL WORK, EQUIPMENT AND MATERIALS FROM DAMAGE.

2.5. ALL CORING, CUTTING AND PATCHING REQUIRED SHALL BE THE RESPONSIBILITY OF THE INDIVIDUAL CONTRACTOR.

2.6. FASTENING OF EQUIPMENT, ETC., TO THE BUILDING CONSTRUCTION SHALL BE BY USE OF APPROVED LEAD SHEATHED EXPANSION BOLTS FOR MASONRY CONSTRUCTION OR APPROVED FASTENERS SUCH AS J-HOOK, LOCK WASHER AND NUT OR LISTED BEAM CLAMPS FOR NON-MASONRY CONSTRUCTION.

2.7. FURNISH AND INSTALL ALL REQUIRED SUPPORTS AND HANGERS FOR EQUIPMENT. PIPING SHALL BE PROPERLY SUPPORTED TO PREVENT SAG OR STRAIN.

2.8. ALL OPENINGS IN MASONRY WALLS, PIPE TUNNEL, AND FLOOR DECKS INCLUDING THE ROOF DECK SHALL BE CORE BORED.

2.9. PROVIDE NECESSARY SLEEVES FOR MASONRY AND DECK OPENINGS. ANY PIPING THAT PENETRATES FIRE-RATED DECKS, WALLS OR PARTITIONS SHALL BE SEALED WITH LISTED (HILTI) FIRE-RATED SYSTEMS AND SEALANTS.

2.10. ALL NON FIRE-RATED WALL AND FLOOR DECK OPENINGS SHALL BE SEALED WITH AN APPROVED SEALANT.

2.11. THE WORK OF ALL TRADES SHALL BE COORDINATED. NECESSARY OFFSETS TO ALLOW CLEARANCE, HEADROOM OR AVOID INTERFERENCE SHALL BE PROVIDED.

2.12. FURNISH A COMPLETE ELECTRONIC SET OF OPERATING AND MAINTENANCE INSTRUCTIONS FOR EACH FIXTURE OR ITEM OF EQUIPMENT WHICH SHALL INCLUDE DESCRIPTION OF OPERATION, OPERATION AND MAINTENANCE INSTRUCTIONS, BULLETINS, CUTS AND DESCRIPTIVE DATA AND PARTS LISTS, ETC. PROVIDE ONE COMPLETE BOUND HARD COPY SET OF THE AFORE MENTIONED DOCUMENTS.

2.13. SUBMIT AN ELECTRONIC COPY OF SHOP DRAWINGS ON EACH FIXTURE OF EQUIPMENT AND MATERIALS FOR APPROVAL. CONTRACTOR SHALL KEEP ONE (1) HARD COPY OF APPROVED SHOP DRAWINGS AT THE JOB SITE.

2.14. ALL PIPING INSTALLED SHALL BE LABELED AND IDENTIFIED WITH SNAP-ON PLASTIC LABELS BY SETON.

2.15. COORDINATE WITH THE OWNERS STANDARDS OF MATERIAL LIST FOR MANUFACTURER AND MATERIAL PRODUCTS. NO DEVIATIONS SHALL BE PERMITTED WITHOUT THE OWNERS PRIOR APPROVAL.

2.16. ALL PRODUCTS AND EQUIPMENT DESIGNED FOR THE DISPENSING OF POTABLE WATER SHALL BE ANSI/NFS 61 AND ANSI/NSF 372 CERTIFIED AS "LEAD FREE." LEAD FREE REFERS TO THE WETTED SURFACE OF PIPE, FITTINGS AND FIXTURES IN POTABLE WATER SYSTEMS THAT HAVE A WEIGHTED AVERAGE LEAD CONTENT <=0.25% PER THE FEDERAL LAW OF THE SAFE DRINKING WATER ACT (SEC. 1417) AMENDED 1-4-2011 AND OTHER EQUIVALENT STATE REGULATIONS. THE FEDERAL LAW DOES NOT APPLY TO PIPES, PIPE FITTINGS, PLUMBING FITTINGS OR FIXTURES THAT ARE USED EXCLUSIVELY FOR NON-POTABLE SERVICES SUCH AS MANUFACTURING, INDUSTRIAL PROCESSING, IRRIGATION, OUTDOOR WATERING, OR ANY OTHER USES WHERE WATER IS NOT ANTICIPATED TO BE USED FOR HUMAN CONSUMPTION. THE LAW SPECIFICALLY EXCLUDES TOILETS, BIDETS, URINALS, FILL VALVES, FLUSHOMETER VALVES, TUB FILLERS, SHOWER VALVES, SERVICE SADDLES, OR WATER DISTRIBUTION MAIN GATE VALVES THAT ARE 2 INCHES IN DIAMETER OR LARGER.

3. FIXTURES AND EQUIPMENT:

3.1. INSTALL ALL FIXTURES AND EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.

3.2. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, MANUFACTURERS OFFERING FIXTURES AND EQUIPMENT AS LISTED ON THE DRAWING SCHEDULE, WHICH MAY BE INCORPORATED IN THE WORK SHALL BE LIMITED TO THE FOLLOWING: PER DRAWING SCHEDULE OR APPROVED EQUAL..

3.3. ALL NEW PLUMBING FIXTURES AND ASSOCIATED TRIM SHALL MEET THE REQUIREMENTS AND STANDARD SET FORTH BY THE RECOGNIZED AND ADOPTED TOWNSHIP PLUMBING CODE AND/OR THE AUTHORITY HAVING JURISDICTION. ALL NEW PLUMBING FIXTURE MIXING VALVES FURNISHED AND INSTALLED SHALL MEET THE REQUIREMENTS AND STANDARD SET FORTH BY THE RECOGNIZED AND ADOPTED TOWNSHIP PLUMBING CODE FOR MIXED WATER TEMPERATURE CONTROL.

4. SCOPE OF WORK - THE PLUMBING WORK SHALL INCLUDE, BUT IS NOT NECESSARILY LIMITED TO:

4.1. PROVIDE ALL DEMOLITION WORK AS NOTED AND SO INDICATED IN THE DEMOLITION DRAWINGS.

4.2. PROVIDE ALL SAW CUTTING AND OPENING OF EXISTING FLOOR SLAB TO MODIFY EXISTING AND INSTALL NEW SANITARY PIPING SYSTEM AND RELATED EQUIPMENT WORK. THE WORK TO INCLUDE PATCH AND REPAIR OF ALL TRENCH AND SLAB OPENINGS.

4.3. THE CONTRACTOR IS RESPONSIBLE FOR ALL SLAB CUTTING AND SLAB REPAIR WITH RESPECTS TO NEW SANITARY AND/OR STORM DRAINAGE INSTALLATION AND EXIST SANITARY AND/OR STORM DRAINAGE MODIFICATION. PRIOR TO ANY SAW CUTTING AND OPENING OF EXISTING FLOOR SLAB, THE CONTRACTOR SHALL FIELD VERIFY, EITHER BY CAMERA OR OTHER MEANS, THE EXISTING BELOW SLAB SANITARY AND/OR STORM DRAIN SYSTEM TO ACCURATELY LOCATE PIPING, DETERMINE EXISTING PIPING CONDITIONS, DETERMINE THE CORRECT DRAINAGE (SANITARY OR STORM) AND DETERMINE EXISTING INVERT ELEVATIONS & PIPE SIZES. THE CONTRACTOR SHALL SUBMIT A REPORT OF FINDINGS FOR REVIEW BY THE OWNER, ARCHITECT AND/OR ENGINEER NOTING ANY ADVERSE EXISTING PIPING CONDITIONS, AND INDICATING EXISTING PIPE SIZE, RUNS AND INVERTS. ONLY AFTER DRAINAGE PIPE VERIFICATION SHALL THE CONTRACTOR FIELD MARK THE SLAB FOR SAW CUTTING TO REMOVE, MODIFY OR EXTEND THE BELOW SLAB DRAIN SYSTEM. AFTER INSPECTION AND TESTING OF NEW AND MODIFIED SANITARY AND/OR STORM DRAINAGE, REPAIR CONCRETE SLAB TO ORIGINAL FINISH.

4.4. ALL WORK REQUIRED TO INSTALL A COMPLETE AND OPERATING SANITARY, WASTE, AND VENT PIPING SYSTEM WITH CONNECTIONS TO ALL PLUMBING FIXTURES AND RELATED EQUIPMENT INSTALLED.

4.5. ALL WORK REQUIRED TO INSTALL A COMPLETE AND OPERATING DOMESTIC WATER PIPING SYSTEM INCLUDING CONNECTIONS TO NEW PLUMBING FIXTURES AND RELATED EQUIPMENT INSTALLED.

4.6. ALL WORK REQUIRED TO INSTALL A COMPLETE AND OPERATING CONDENSATE PIPING SYSTEM WITH ALL CONNECTIONS TO ALL RELATED PLUMBING AND/OR MECHANICAL EQUIPMENT.

4.7. ALL WORK REQUIRED TO INSTALL A COMPLETE AND OPERATING NATURAL GAS PIPING SYSTEM INCLUDING CONNECTIONS TO NEW GAS EQUIPMENT INSTALLED.

4.8. KEEP ALL PIPING AS HIGH AS POSSIBLE, CONSISTENT WITH PROPER PITCH, TO MAINTAIN MAXIMUM HEADROOM. CUT PIPING ACCURATELY TO MEASUREMENTS ESTABLISHED AT THE BUILDING, WORK INTO PLACE WITHOUT SPRINGING, FORCING OR CUTTING OF THE BUILDING STRUCTURE, AND INSTALL AS DIRECTLY AS POSSIBLE BETWEEN CONNECTING POINTS PARALLEL WITH OR AT RIGHT ANGLES TO BUILDING CONSTRUCTION, EXCEPT AS REQUIRED TO OBTAIN PITCH.

4.9. TO AVOID CROSS CONNECTION OF UTILITIES AND SERVICES AND/OR DISCONNECTION OF INCORRECT UTILITIES AND SERVICES, CONFIRM, VERIFY AND FIELD NOTE/LABEL ALL EXISTING UTILITIES THAT ARE BEING CONNECTED TO AND/OR DISCONNECTED PRIOR TO DISCONNECTION AND/OR CONNECTION NEW UTILITIES.

4.10. ALL WORK REQUIRED TO INSTALL PLUMBING FIXTURES AND EQUIPMENT AND INDICATED AND SO NOTED ON THE DRAWINGS AND SO LISTED ON THE PLUMBING FIXTURE/ EQUIPMENT SCHEDULE.

4.11. INSTALLATION OF FIRE PROOF SYSTEMS AND SEALANTS WHEREVER PENETRATIONS OF THE FIRE RATED WALLS AND DECK ARE DONE.

4.12. ALL TESTING AND ADJUSTING OF ALL INDIVIDUAL SYSTEMS INSTALLATIONS.

4.13. ALL WORK TO PROVIDE AND INSTALL INSULATION ON ALL NEW DOMESTIC WATER PIPING INSTALLED.

4.14. ALL WORK TO LABEL AND IDENTIFY EACH PIPING SYSTEM.

4.15. ALL WORK TO TAG, LABEL AND IDENTIFY EACH NEW VALVE INSTALLED IN THE PIPING SYSTEM.

4.16. ALL WORK TO COMPLETELY FLUSH AND STERILIZE ALL NEW WATER-PIPING INSTALLED.

4.17. ALL CLEAN-UP OF AREAS OF PROJECT WORK.

5. DEMOLITION WORK:

5.1. PROVIDE ALL SYSTEM DEMOLITION WORK AS NOTED AND SO INDICATED IN THE DEMOLITION DRAWINGS.

5.2. DISCONNECT AND REMOVE DOMESTIC WATER PIPING SYSTEM AND BRANCH LATERALS WHERE SO INDICATED OR NOTED ON THE DRAWINGS.

5.3. AVOID CREATING DEAD END LEGS IN DOMESTIC WATER PIPING. WHERE DEAD END LEGS ARE INDICATED OR UNAVOIDABLE, THEY SHALL BE MAKE AS SHORT AS POSSIBLE, BUT IN NO CASE LONGER THAN (6") SIX INCHES.

5.4. ALL PIPING SCHEDULED FOR DEMOLITION SHALL BE COMPLETELY DRAINED AND REMOVED. THERE SHALL BE NO PIPING (OR ASSOCIATED PIPE HANGERS) ABANDONED IN PLACE. (NOTE: ANY FINAL DECISION TO ABANDON ANY PLUMBING PIPING IN PLACE SHALL MADE BY THE OWNER, ANY PLUMBING PIPING THAT WILL BE ABANDON IN PLACE SHALL BE COMPLETELY DRAINED, CAPPED OFF AT EACH END, TAG, LABELED AND IDENTIFIED; EXAMPLE - "DOMESTIC WATER - ABANDONED").

5.5. PORTIONS OF THE EXISTING BUILDING IRON PIPING LATERALS SHALL REMAIN WHERE INDICATED AND NOTED ON THE DRAWINGS AND SHALL BE MADE READY FOR NEW COPPER TO IRON PIPE CONNECTION USING DIELECTRIC UNIONS.

5.6. PRIOR TO ANY SAW CUTTING AND OPENING OF EXISTING FLOOR SLAB, THE CONTRACTOR SHALL FIELD VERIFY, EITHER BY CAMERA OR OTHER MEANS, THE EXISTING BELOW SLAB SANITARY AND/OR STORM DRAINAGE SYSTEM TO ACCURATELY LOCATE PIPING, DETERMINE EXISTING PIPING CONDITIONS, DETERMINE THE DRAINAGE TYPE (SANITARY OR STORM) AND DETERMINE EXISTING INVERT ELEVATIONS & PIPE SIZES. THE CONTRACTOR SHALL SUBMIT A REPORT OF FINDINGS FOR REVIEW BY THE OWNER, ARCHITECT AND/OR ENGINEER NOTING ANY ADVERSE EXISTING PIPING CONDITIONS, AND INDICATING EXISTING PIPE SIZE, RUNS AND INVERTS. ONLY AFTER DRAINAGE PIPE VERIFICATION SHALL THE CONTRACTOR FIELD MARK THE SLAB FOR SAW CUTTING TO REMOVE, MODIFY OR EXTEND THE BELOW SLAB DRAINAGE PIPE SYSTEM. AFTER INSPECTION AND TESTING OF NEW AND MODIFIED BELOW SLAB DRAINAGE PIPING, REPAIR CONCRETE SLAB TO ORIGINAL FINISH.

5.7. ALL PIPING REMOVED, UNLESS OTHERWISE NOTED, SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE.

5.8. PIPING AND VALVES DISMANTLED AND REMOVED SHALL NOT BE REUSED FOR ANY NEW SYSTEMS INSTALLATION.

5.9. ANY INSULATION REMOVED FROM PIPING THAT IS TO REMAIN FOR THE PURPOSES OF MODIFICATION OR DEMOLITION SHALL BE RE-INSTALLED.

6. INTENT OF THE WORK:

6.1. IT IS THE INTENT AND PURPOSE OF THESE SPECIFICATIONS AND THE ACCOMPANYING DRAWINGS TO COVER AND INCLUDE UNDER EACH ITEM, ALL MATERIALS, MACHINERY, APPARATUS AND LABOR NECESSARY TO PROPERLY INSTALL, EQUIP, ADJUST, AND PUT INTO PERFECT OPERATION, THE RESPECTIVE PORTIONS OF THE INSTALLATION SPECIFIED, AND TO SO INTERCONNECT THE VARIOUS ITEMS OR SECTIONS OF THE WORK SO AS TO FORM A COMPLETE AND PROPER OPERATING WHOLE.

6.2. ANY EQUIPMENT, APPARATUS, MACHINERY, MATERIAL, SMALL ITEMS NOT MENTIONED IN DETAIL, AND LABOR NOT HEREINAFTER SPECIFICALLY MENTIONED, WHICH MAY BE FOUND NECESSARY TO COMPLETE OR PERFECT ANY PORTION OF THE INSTALLATION IN A SUBSTANTIAL MANNER, AND IN COMPLIANCE WITH THE REQUIREMENTS STATED, IMPLIED, OR INTENDED IN THESE SPECIFICATIONS, SHALL BE FURNISHED WITHOUT EXTRA COST TO THE OWNER. THIS SHALL INCLUDE ALL MATERIALS, DEVICES, OR METHODS PECULIAR TO THE MACHINERY, EQUIPMENT, APPARATUS, OR SYSTEM FURNISHED AND INSTALLED BY THE PLUMBING CONTRACTOR.

7. DRAWINGS:

7.1. DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND REQUIREMENTS OF WORK.

7.2. WHEN INDICATED ON THE DRAWINGS, DIAGRAMS ARE COMPLETELY DIAGRAMMATIC AND INDICATE THE INTENT OF THE WORK FOR BOTH THE CONTRACTOR, L&I REVIEW AGENCIES AND/OR AUTHORITIES HAVING JURISDICTION. WHERE VALVES, INCIDENTAL DEVICES, ETC., INCLUDING EXECUTION NOTES ARE INDICATED ON THE DIAGRAMS, THEY SHALL BE SO REQUIRED AND INSTALLED AS PART OF THE SYSTEM WORK.

7.3. RECORD DRAWINGS: AS-BUILT RECORD DRAWINGS, SHOWING DIMENSIONS, LOCATIONS AND CONCEALED PIPING, PLUGGED OUTLETS AND EQUIPMENT SHALL BE KEPT UP TO DATE. MASTER COPY SHALL BE KEPT ON THE JOB. NO PERMANENT CONCEALING OF THE WORK SHALL BE PERMITTED UNTIL AS-BUILT DRAWINGS ARE APPROVED AS UP-TO-DATE BY THE OWNER/REPRESENTATIVE. NO PLUMBING OR FIRE PROTECTION PROGRESS PAYMENTS SHALL BE APPROVED UNLESS AS-BUILT DRAWINGS ARE UP-TO-DATE. RECORD DRAWINGS SHALL BE REDLINED, AFFIXED WITH A STAMP STATING "PROJECT RECORD DRAWINGS" AND THEN SCANNED

8. CLEANING AND FINISHING:

8.1. PROVIDE FOR THE SAFETY AND GOOD CONDITION OF ALL PIPING AND RELATED MATERIALS UNTIL FINAL ACCEPTANCE OF THE OWNER. PROTECT ALL MATERIALS FROM DAMAGE. PROVIDE ADEQUATE AND PROPER STORAGE FACILITIES DURING THE PROGRESS OF THE WORK.

8.2. ALL NEW PIPING INSTALLED SHALL HAVE ALL GREASE, ADHESIVE LABELS AND FOREIGN MATERIALS REMOVED.

8.3. ALL NEW PIPING INSTALLED SHALL BE DRAINED AND FLUSHED TO REMOVE GREASE AND FOREIGN MATTER.

8.4. BLOW-OUT ALL EXISTING PIPING TO REMOVE AS MUCH DEBRIS AS POSSIBLE THE CONTRACTOR SHALL DO ALL PIPE AND THREAD CLEANING OF THE EXISTING PIPING TO MAKE FINAL CONNECTIONS TIGHT AND LEAK-FREE.

8.5. CLEAN-UP: REMOVE FROM THE PREMISES, ALL UNUSED MATERIALS AND DEBRIS RESULTING FROM THE PERFORMANCE OF THE WORK. ALL CLEAN-UP SHALL MEET THE SATISFACTION OF THE OWNER.

9. PIPING SYSTEM INSTALLATION REQUIREMENTS:

9.1. ALL FLOOR PLAN DRAWINGS ARE GENERALLY DIAGRAMMATIC AND DUE TO SMALL SCALE, IT IS IMPOSSIBLE TO INDICATE ALL FITTINGS, VALVES, AND SPECIALTIES REQUIRED. PROVIDE A COMPLETE OPERATING SYSTEM INCLUDING ALL NECESSARY FITTINGS, VALVES, ETC., AS REQUIRED.

9.2. INSTALL ALL PIPING IN ACCORDANCE WITH THE BEST PRACTICES OF THE TRADE AND LATEST CODE REQUIREMENTS. USE UNIFORM SYSTEM MATERIALS THROUGHOUT THE BUILDING.

9.3. PIPE AND FITTINGS SHALL BE CLEAN FROM CUTTING BURRS, FOREIGN MATERIALS AND DEFECTS IN STRUCTURE AND THREADING. MAKE ALL CUTS SQUARE. REAM AFTER CUTTING. CLEAN OFF SCALE AND DIRT INSIDE AND OUTSIDE, BEFORE ASSEMBLY.

9.4. CUT PIPING ACCURATELY TO MEASUREMENTS ESTABLISHED AT THE BUILDING, WORK INTO PLACE WITHOUT SPRINGING, FORCING OR CUTTING OF THE BUILDING STRUCTURE, AND INSTALL AS DIRECTLY AS POSSIBLE BETWEEN CONNECTING POINTS PARALLEL WITH OR AT RIGHT ANGLES TO BUILDING CONSTRUCTION, EXCEPT AS REQUIRED TO OBTAIN PITCH.

9.5. ALL PIPING TO DRAIN TO LOW POINTS. LOW POINTS WILL BE PROVIDED WITH DRAIN VALVES WITH HOSE THREAD.

9.6. PIPING SHALL RUN SQUARE WITH BUILDING LINES.

9.7. PIPING SHALL NOT BE INSULATED OR COVERED UNTIL TESTED.

9.8. ALL NECESSARY DRAINS, OFFSETS, AND DRIPS SHALL BE PROVIDED FOR COORDINATION OF THE WORK AS PART OF THE CONTRACT.

9.9. ALLOW CLEARANCE FOR EXPANSION AND CONTRACTION.

9.10. INSTALL ISOLATING FITTINGS (DIELECTRIC UNIONS) BETWEEN SECTIONS OF FERROUS AND NON-FERROUS PIPE OR CONNECTED EQUIPMENT. DIELECTRIC UNIONS SHALL BE PROVIDED AT ALL NEW TO EXISTING CONNECTIONS AS NECESSARY TO FACILITATE DISMANTLING OF THE PIPING SYSTEM FOR THE NEXT PHASE OF PIPING REPLACEMENT WORK.

9.11. VALVES SHALL BE INSTALLED SO THAT THEY ARE ACCESSIBLE FOR EMERGENCY AND MAINTENANCE USE.

9.12. DO NOT SUPPORT PIPING FROM OTHER PIPING, CONDUITS OR EQUIPMENT.

9.13. REMOVE ALL TRAPPED AIR FROM THE PIPING SYSTEM.

9.14. UNLESS NOTED OTHERWISE, ALL PIPING MAINS, BRANCH LINES, ETC., SHALL BE RUN AS HIGH AS POSSIBLE TO THE DECK TO ALLOW FOR EASE OF INSTALLATION OF OTHER TRADES AND NEW CEILINGS.

9.15. COORDINATE WITH THE OWNER FOR SHUT-DOWN OF THE DOMESTIC WATER SYSTEM(S) FOR NEW SYSTEM PIPING CONNECTIONS. VERIFY ALL TIME SCHEDULES AND SYSTEM DOWNTIME.

9.16. AVOID CREATING DEAD END LEGS IN DOMESTIC WATER PIPING. WHERE DEAD END LEGS ARE INDICATED OR UNAVOIDABLE, THEY SHALL BE MAKE AS SHORT AS POSSIBLE, BUT IN NO CASE LONGER THAN (6") SIX INCHES.

10. TAGS, CHARTS, AND IDENTIFICATION:

10.1. IDENTIFY EACH NEW VALVE INSTALLED IN ALL SYSTEMS WITH BLACK, NUMBERED AND STAMPED 1-1/2" BRASS OR ALUMINUM TAGS FASTENED TO VALVE BY BRASS CHAIN AND S-HOOK.

10.2. PIPING IDENTIFICATION: IDENTIFY PIPING WITH SETON "SETMARK" OR APPROVED SUBSTITUTE, SEMI-RIGID PLASTIC, WRAPAROUND PIPE MARKERS WITH FLOW ARROWS AND CONFORMING TO ASME/ANSI A13.1. FOR GENERAL PIPING AND NFPA 99 FOR MEDICAL GAS PIPING. LOCATE MARKER AT EACH VALVE, CHANGES IN DIRECTION, WHERE PIPES PASS THRU BARRIERS AND EVERY 25' OF HORIZONTAL RUNS. BACKGROUND (B) AND LETTERING (L) SHALL BE IN ACCORDANCE WITH THE FOLLOWING COLORS:

10.2.1. DOMESTIC COLD WATER (DCW)- (B) GREEN, (L) WHITE
10.2.2. DOMESTIC HOT WATER (DHW) - (B) GREEN, (L) WHITE
10.2.3. DOMESTIC HOT WATER RETURN (DHWR) - (B) GREEN, (L) WHITE
10.2.4. NON POTABLE WATER (NONPOT. W) - (B) GREEN, (L) WHITE
10.2.5. SANITARY DRAINAGE (SANITARY) - (B) GREEN, (L) WHITE
10.2.6. SANITARY VENTING (S. VENT) - (B) GREEN, (L) WHITE
10.2.7. CONDENSATE DRAINAGE (COND.) - (B) GREEN, (L) WHITE
10.2.8. NATURAL GAS (NG) - (B) YELLOW (L) BLACK

10.3. PROVIDE 1/8" SCALE DIAGRAMS SHOWING LOCATION, NUMBER AND SERVICE OR FUNCTION OF EACH TAGGED ITEM. PROVIDE MINIMUM OF TWO SEPARATE COPIES WITHIN BINDER PERMANENTLY COVERED AND BOUND. TURN OVER TO OWNERS MAINTENANCE ENGINEER.

11. FASTENERS, HANGERS AND SUPPORTS:

11.1. FURNISH AND INSTALL ALL NEW HANGERS AND SUPPORTS REQUIRED TO SUSPEND, MOUNT OR HANG THE WORK.

11.2. FURNISH AND INSTALL ALL MISCELLANEOUS STEEL ANGLES, CHANNELS, BEAMS, CLIPS, BRACKETS AND ANCHORS NECESSARY TO HANG OR SUPPORT THE WORK.

11.3. DRILLED INSERTS SHALL NOT BE LOADED MORE THAN RATED CAPACITY OR 200 POUNDS.

11.4. ALL HANGERS, MISCELLANEOUS STEEL, BRACES AND SUPPORTS FOR SANITARY AND VENT PIPING SHALL BE GALVANIZED, CADMIUM PLATED, OR PRIMED STEEL. COPPER TUBING SHALL BE SUPPORTED WITH COPPER HANGERS.

11.5. PIPING SHALL BE SUPPORTED FROM ADJUSTABLE CLEVIS TYPE HANGERS OR TRAPEZE TYPE SUPPORT RACK WITH INSULATION PIPE SADDLES AT NOT MORE THAN 8 FOOT CENTERS UP TO 1-1/4 INCH DIAMETER AND 10 FOOT CENTERS ABOVE 1-1/4 INCH DIAMETER. WHERE HANGERS ARE 18 OR LONGER, PROVIDE LATERAL BRACING AT EVERY FOURTH HANGER.

11.6. WHERE THE REMOVAL OR INSTALLATION OF HANGERS, SUPPORTS OR BRACING EFFECTS THE EXISTING DECKING OR STRUCTURAL STEEL FIRE PROOFING, THE FIRE PROOFING SHALL BE PATCHED AND/OR REPAIRED.

11.7. ALL NEW PIPING SHALL BE SUPPORTED IN ACCORDANCE WITH THE RECOGNIZED AND ADOPTED PLUMBING AND BUILDING CODES, AND THEIR AMENDMENTS FOR THE TOWNSHIP AND/OR AUTHORITY HAVING JURISDICTION. ALL NEW PIPING HANGERS AND SUPPORTS FURNISHED AND INSTALLED SHALL MEET THE SEISMIC REQUIREMENTS OF THE RECOGNIZED AND ADOPTED PLUMBING AND BUILDING CODES FOR THE TOWNSHIP AND/OR AUTHORITY HAVING JURISDICTION.

11.8. WHERE EARTHQUAKE LOADS ARE APPLICABLE IN ACCORDANCE WITH THE LOCALLY ADOPTED BUILDING CODE, PLUMBING HANGERS AND SUPPORTS SHALL BE DESIGNED AND INSTALLED FOR THE SEISMIC FORCES IN ACCORDANCE WITH THE LOCALLY ADOPTED BUILDING CODE.

11.9. ALL HANGERS, ANCHORS, SUPPORT AND GUIDES FOR PIPING AND EQUIPMENT SHALL BE SECURELY FASTENED TO THE BUILDING STRUCTURE AND/OR FLOORS WITH CONCRETE DECKING WITH THE FOLLOWING EXCEPTION. HANGERS, ANCHORS, SUPPORT AND GUIDES SHALL NOT BE FASTENED TO OR THROUGH METAL ROOF DECKING (I.E., BARE METAL DECKING OR METAL DECK SUPPORTING A ROOFING SYSTEM. SUPPORTS SHALL BE CONNECTED TO BUILDING STEEL / STRUCTURE BY WAY OF SUPPLEMENTAL STEEL, STRUT, AND OR CLAMPS. A BUILT UP ROOFING SYSTEM IS NOT STRUCTURAL AND SHALL NOT BE USED TO SUPPORT PLUMBING SYSTEM UNDER ANY CIRCUMSTANCE.)

12. TEST:

12.1. PERFORM TEST ON ALL PLUMBING SYSTEMS INSTALLED IN THE PRESENCE OF THE AUTHORITIES HAVING JURISDICTION. WHEN TESTING IS APPROVED ON THE DOMESTIC WATER SYSTEM, PROPERLY FLUSH AND STERILIZE THE PIPING SYSTEM AS REQUIRED BY THE DEPARTMENT OF LICENSE AND INSPECTIONS.

12.2. ALL NEW DOMESTIC WATER PIPING INSTALLED SHALL BE TESTED AT 100 PSIG MAINTAINING THE PRESSURE FOR FOUR HOURS WITH NOT MORE THAN 1% DROP IN PRESSURE. THE SYSTEM SHALL BE FILLED WITH WATER WHICH SHALL REMAIN IN THE SYSTEM UNTIL THE WATER AND THE PIPING ARE THE SAME TEMPERATURE. IF WATER PIPE TESTING IS UNDER THE JURISDICTION OF THE LOCAL INSPECTOR, HIS REQUIREMENTS SHALL BE USED; HOWEVER, THEY SHALL BE NOT LESS THAN SPECIFIED HEREIN. THE TESTS SHALL BE PERFORMED IN THE PRESENCE OF THE REPRESENTATIVE OF THE OWNER AND TO HIS SATISFACTION.

13. STERILIZATION:

13.1. BEFORE PLACING THE NEW DOMESTIC WATER PIPING SYSTEM IN SERVICE, A STATE LICENSED QUALIFIED SERVICE ORGANIZATION SHALL BE HIRED TO STERILIZE THE NEW PIPING SYSTEM IN ACCORDANCE WITH THE HEALTH AUTHORITY, WATER PURVEYOR HAVING JURISDICTION OR IN THE ABSENCE OF A PRESCRIBED METHOD, THE PROCEDURES DESCRIBED IN EITHER AWWA C651, AWWA C662 OR THE PLUMBING CODE AND ANY OTHER CLIENT PROCEDURES AND REQUIREMENTS.

13.2. PROVIDE ALL NECESSARY VALVES AND CONNECTIONS TO ALL FOR THE SANITIZING AND STERILIZATION OF ALL NEW DOMESTIC WATER PIPING. COORDINATE THE NEEDED VALVES AND CONNECTIONS WITH STERILIZATION SERVICE PROVIDER.

13.3. DOMESTIC WATER SYSTEMS MUST BE DISINFECTED NO MORE THAN 3 WEEKS PRIOR TO WHOLE OR PARTIAL BENEFICIAL OCCUPANCY (I.E. OCCUPIED FOR THE PURPOSE FOR WHICH THE BUILDING WAS CONSTRUCTED.) DISINFECTING 7 TO 10 DAYS PRIOR TO BENEFICIAL OCCUPANCY MAY BE IDEAL. COORDINATE WITH STERILIZATION CONSULTANT.

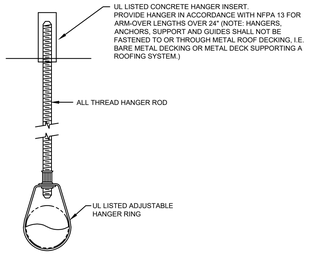
14. SYSTEM MATERIALS:

14.1. DOMESTIC WATER: (HW, HWR & CW)

14.1.1. PIPE: HARD-DRAWN, SEAMLESS ASTM B-88, TYPE "L" COPPER TUBE
14.1.2. FITTINGS: SOLDER JOINT WROUGHT COPPER ANSI B-16.22 FITTINGS
14.1.3. SOLDER/JOINT: LEAD-FREE SOLDER 410°F, ASTM B-32, ASTM B-828.
14.1.4. FLUX: NON-TOXIC & NON-CORROSIVE FLUX, ASTM B-813.
14.1.5. VALVES: BALL VALVES - TWO PIECE, FULL PORT, BRONZE BODY, SOLDER ENDS, 600 PSI WOG RATED, COLD NON-SHOCK WITH REINFORCED TFE SEALS, 316 STAINLESS STEEL BALL, NON-BLOWOUT STEM DESIGN, NFS 61
14.1.6. ALTERNATIVE VALVES AND FITTINGS: PRESS FIT TYPE VALVES AND FITTINGS - VIEGA "PRO-PRESS", NIBCO "PRESSFIT", APOLLO "XPRESS"

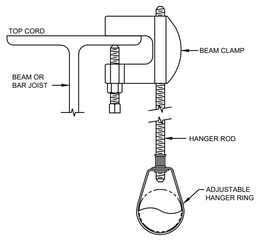
14.2. PEX (WHERE NOTED) FOR DOMESTIC WATER (HW, HWR & CW)

14.2.1. PIPE/TUBING: EXPANSION CROSS-LINKED POLYETHYLENE (TYPE: PEX-A) , ASTM F1960, ASTM F876, CSA 137.5 (COLORS: BLUE - CW, RED - HW, WHITE - HWR)
14.2.2. FITTINGS: POLYMER FITTINGS FOR EXPANSION CROSS-LINKED POLYETHYLENE (TYPE: PEX-A) , ASTM F1960, NFF-61
14.2.3. JOINTS: EXPANSION CROSS-LINKED POLYETHYLENE RING TYPE, ASTM F1960
14.2.4. BALL VALVES: BRASS, LEAD FREE, TWO PIECE, FULL PORT, FOR EXPANSION CROSS-LINKED POLYETHYLENE (PEX-A) P



TYP. CONCRETE HANGER SUPPORT DETAIL (ALL HANGERS SHALL BE IN ACCORDANCE WITH NFPA 13)

NOT TO SCALE



TYP. HANGER SUPPORT DETAIL (ALL HANGERS SHALL BE IN ACCORDANCE WITH NFPA 13)

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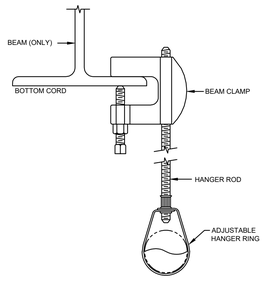

TYP. HANGER SUPPORT DETAIL (ALL HANGERS SHALL BE IN ACCORDANCE WITH NFPA 13)

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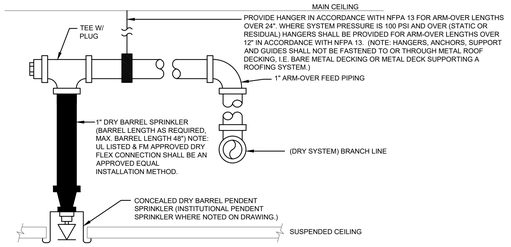
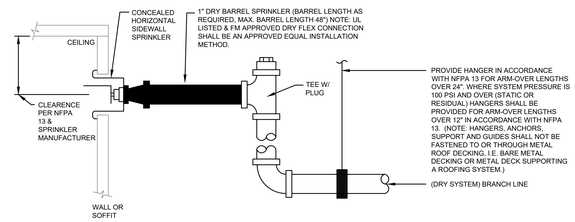


DRY BARREL PENDENT SPRINKLER INSTALLATION DETAIL

NOT TO SCALE

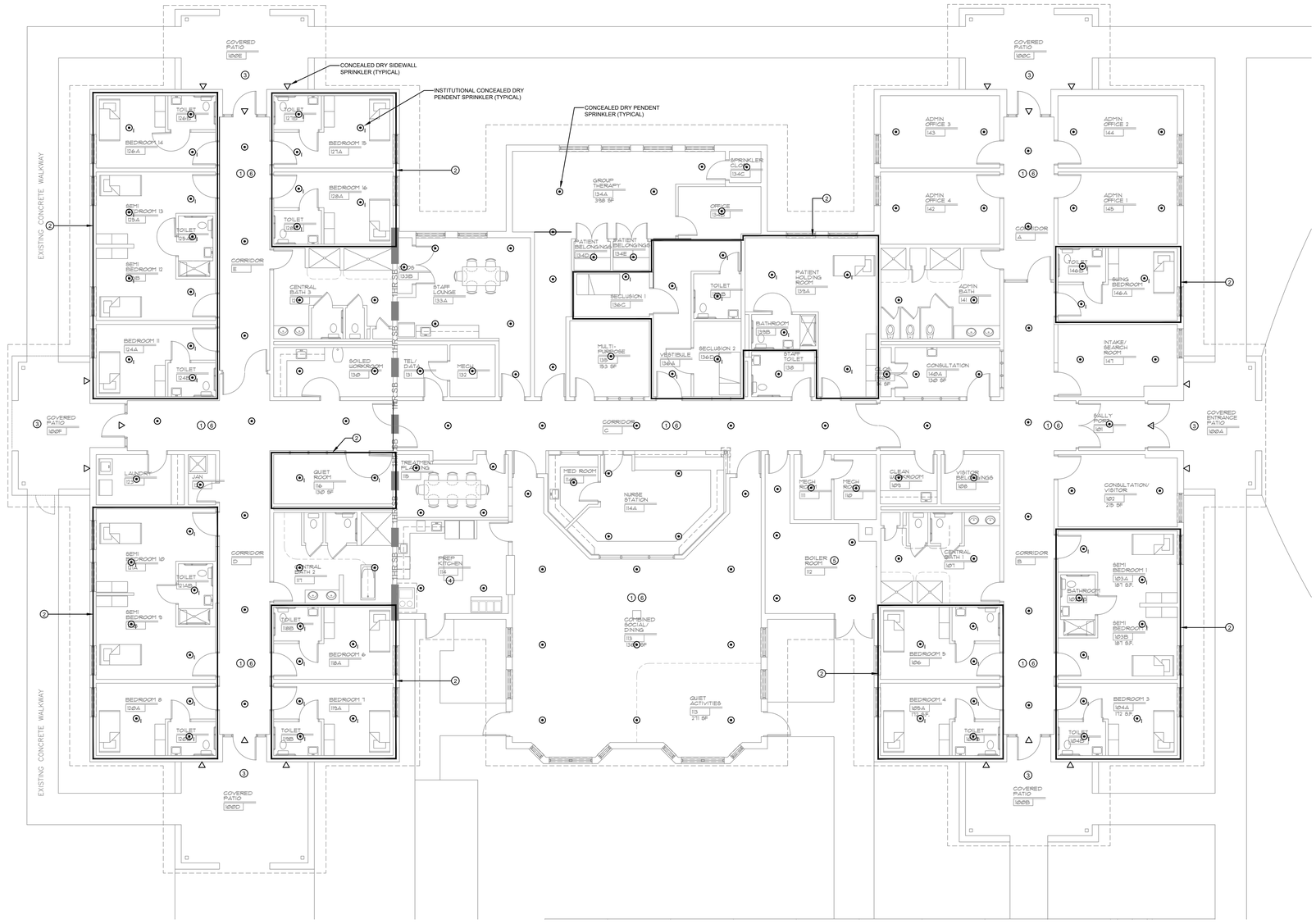


DRY HORIZONTAL SIDEWALL SPRINKLER ARRANGEMENT INSTALLATION DETAIL

NOT TO SCALE

FIRE PROTECTION NOTES

1	PROVIDE AUTOMATIC FIRE SPRINKLER PROTECTION THROUGHOUT THE ENTIRE BUILDING FOR LIGHT HAZARD OCCUPANCY PROTECTION IN ACCORDANCE WITH NFPA 13, UNLESS NOTED OTHERWISE. SPRINKLERS SHALL BE CONCEALED DRY PENDENT TYPE THROUGHOUT THE ENTIRE BUILDING UNLESS NOTED OTHERWISE. NOTE: THE EXISTING SPRINKLER SYSTEM IS A DRY PIPE SYSTEM DUE TO THE UNCONDITIONED ATTIC SPACE THAT THE EXISTING SPRINKLER MAINS AND BRANCH LINES ARE RUN THROUGH.
2	PROVIDE INSTITUTIONAL (BEHAVIORAL HEALTH TYPE) CONCEALED DRY PENDENT SPRINKLERS IN PATIENT BED ROOMS, PATIENT HOLDING ROOMS AND PATIENT SECLUSION ROOMS (ANYWHERE A PATIENT WOULD BE LEFT ALONE.)
3	PROVIDE CONCEALED DRY SIDEWALL SPRINKLERS
4	PROVIDE AUTOMATIC FIRE SPRINKLER PROTECTION THROUGHOUT KITCHEN FOR ORDINARY HAZARD GROUP I OCCUPANCY PROTECTION IN ACCORDANCE WITH NFPA 13. PROVIDE INTERMEDIATE TEMPERATURE RATED SPRINKLERS.
5	PROVIDE AUTOMATIC FIRE SPRINKLER PROTECTION THROUGHOUT BOILER ROOM FOR ORDINARY HAZARD GROUP I OCCUPANCY PROTECTION IN ACCORDANCE WITH NFPA 13. PROVIDE INTERMEDIATE TEMPERATURE RATED SPRINKLERS.
6	**PRIOR TO ANY MODIFICATIONS TO THE EXISTING DRY PIPE SPRINKLER SYSTEM, THE CONTRACTOR SHALL PERFORM A COMPLETE SYSTEM TRIP TEST, COMPLETE SYSTEM FLOODING (SOAK) & FLUSHING, SYSTEM PRESSURE TESTING (AIR AND HYDROSTATIC), AND PERFORM AN INTERNAL VISUAL INSPECTION OF THE SPRINKLER PIPING THAT IS OPENED UP AS PART OF THE RENOVATION WORK IN ACCORDANCE WITH NFPA 13, 14 & 25. THE CONTRACTOR SHALL PROVIDE REPORTS, RECORDS AND DOCUMENTATION ON ALL TEST RESULTS AND INVESTIGATION FINDINGS TO THE OWNER AND ENGINEER.**



1 / FP-1 HEATHERWOOD FLOOR PLAN - NEW WORK

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

STRUCTURAL:
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DEMOLITION PACKAGE FOR NEW WOODS SERVICES

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2/2/26	BID ISSUE
12/03/25	DOH ISSUE
11/20/25	CMS REVIEW

REVISIONS

DRAWN BY: LTM	REVIEWED BY: HRM
PLOT SCALE: AS NOTED	DATE: 02/02/26

PROJECT FILE LOCATION:

DRAWING NAME:

OVERALL NEW WORK FLOOR PLAN FIRE PROTECTION

DRAWING NO.

FP-1

GENERAL SPECIFICATIONS - FIRE PROTECTION

1. THE CONTRACTOR SHALL INFORM THEMSELVES OF THE SPECIFICATIONS AND DRAWINGS CONSTITUTING THE ENTIRETY OF THE PROJECT AND SHALL ADHERE TO ALL REQUIREMENTS AFFECTING ITS WORK. IN THE EVENT OF A CONFLICT BETWEEN THESE CONDITIONS AND OTHER CONTRACT DOCUMENTS, THE MORE RESTRICTIVE STANDARDS SHALL GOVERN.

2. INFECTIOUS HAZARD CONTROL PROGRAM: THE CONTRACTOR SHALL BE AWARE OF, AND EXECUTE ALL THE REQUIREMENTS OF THE "INFECTIOUS HAZARD CONTROL PROGRAM" AS ADOPTED BY THE HOSPITAL.

3. ORDINANCES: ALL WORK SHALL COMPLY WITH ALL APPLICABLE CODES, ORDINANCES, RULES, REGULATIONS AND LAWS IN EFFECT. REQUIRED OF THE FOLLOWING SHALL BE MINIMUM: TOWNSHIP DEPARTMENT OF LICENSES AND INSPECTIONS, TOWNSHIP PLUMBING CODE (IPC), TOWNSHIP FIRE MARSHAL'S OFFICE (FIRE CODE), NFPA AND OSHA, AND OWNER'S STANDARDS. THE CONTRACTOR SHALL ARRANGE AND PAY FOR ALL TESTS AND INSPECTIONS IF SO REQUIRED BY THE ABOVE AGENCIES AND FURNISH CERTIFICATES OF INSPECTION TO THE OWNER.

4. WORK INCLUDED: PROVIDE LABOR, MATERIALS, EQUIPMENT AND SUPERVISION NECESSARY TO INSTALL COMPLETE OPERATING FIRE SPRINKLER SYSTEMS AS INDICATED ON THE DRAWINGS AND SPECIFIED HEREIN.

5. SITE INSPECTION: VISIT SITE, INSPECT AND BECOME AWARE OF ALL EXISTING SITE CONDITIONS WHICH MAY AFFECT THE WORK. THIS INCLUDES INSPECTION OF ALL PIPING RELATED AREAS SUCH AS MECHANICAL ROOMS, INTERSTITIAL FLOOR LEVELS, BELOW SLAB, BELOW FLOOR, ABOVE CEILINGS, ABOVE FLOOR AND ROOF. SUBMISSION OF A BID WILL BE DEEMED EVIDENCE OF HAVING COMPLIED WITH THIS REQUIREMENT.

6. WORKMANSHIP: INSTALL ALL WORK NEAT, TRIM AND PLUMB WITH BUILDING LINES. INSTALL WORK IN SPACES ALLOCATED. CUTTING AND PATCHING SHALL BE PERFORMED BY SKILLED TRADESMEN NORMALLY EMPLOYED FOR THE WORK INVOLVED. PROPERLY HANG AND SUPPORT PIPING IN ACCORDANCE WITH MANUFACTURERS WRITTEN INSTRUCTIONS AND ALL APPLICABLE CODES AND STANDARDS.

7. GUARANTEE: ALL WORK SHALL BE GUARANTEED TO BE FREE FROM DEFECTS FOR A PERIOD OF ONE YEAR OF OPERATION FROM DATE OF ACCEPTANCE BY THE OWNER UNLESS OTHERWISE SPECIFIED. GUARANTEE SHALL BE EXTENDED ON AN EQUAL TIME BASIS FOR ALL NON-OPERATIONAL PERIODS DUE TO FAILURE WITHIN THE GUARANTEE PERIOD.

8. SPECIAL CONDITIONS FOR FIRE PROTECTION WORK:

8.1. THESE SPECIAL CONDITIONS SHALL APPLY TO ALL NEW FIRE PROTECTION WORK.

8.2. SECURE AND PAY FOR ANY PERMITS AND INSPECTIONS REQUIRED FOR THE WORK.

8.3. THE INTERPRETATION OF THE ARCHITECT/ENGINEER WILL BE FINAL IN THE EVENT THERE IS A LACK OF UNDERSTANDING OF THE FULL SCOPE OR REQUIREMENTS OF THE SYSTEMS UNDER THIS CONTRACT.

8.4. PROTECT ALL WORK, EQUIPMENT AND MATERIALS FROM DAMAGE.

8.5. ALL CORING, CUTTING AND PATCHING REQUIRED SHALL BE THE RESPONSIBILITY OF THE INDIVIDUAL CONTRACTOR.

8.6. FASTENING OF EQUIPMENT, ETC., TO THE BUILDING CONSTRUCTION SHALL BE BY USE OF APPROVED LEAD SHEATHED EXPANSION BOLTS FOR MASONRY CONSTRUCTION OR APPROVED FASTENERS SUCH AS J-HOOK, LOCK WASHER AND NUT OR LISTED BEAM CLAMPS FOR NON-MASONRY CONSTRUCTION.

8.7. FURNISH AND INSTALL ALL REQUIRED SUPPORTS AND HANGERS FOR EQUIPMENT. ALL PIPING SHALL BE PROPERLY SUPPORTED IN ACCORDANCE WITH NFPA 13.

8.8. ALL OPENINGS IN MASONRY WALLS, PIPE TUNNEL, AND FLOOR DECKS INCLUDING THE ROOF DECK SHALL BE CORE BORED.

8.9. PROVIDE NECESSARY SLEEVES FOR MASONRY AND DECK OPENINGS. ANY PIPING THAT PENETRATES FIRE-RATED DECKS, WALLS OR PARTITIONS SHALL BE SEALED WITH LISTED (HILTI) FIRE-RATED SYSTEMS AND SEALANTS.

8.10. ALL NON FIRE-RATED WALL AND FLOOR DECK OPENINGS SHALL BE SEALED WITH AN APPROVED SEALANT.

8.11. THE WORK OF ALL TRADES SHALL BE COORDINATED. NECESSARY OFFSETS TO ALLOW CLEARANCE, HEADROOM OR AVOID INTERFERENCE SHALL BE PROVIDED.

8.12. FURNISH A COMPLETE ELECTRONIC SET OF OPERATING AND MAINTENANCE INSTRUCTIONS FOR EACH FIXTURE OR ITEM OF EQUIPMENT WHICH SHALL INCLUDE DESCRIPTION OF OPERATION, OPERATION AND MAINTENANCE INSTRUCTIONS, BULLETINS, CUTS AND DESCRIPTIVE DATA AND PARTS LISTS, ETC.

8.13. SUBMIT AN ELECTRONIC COPY OF SHOP DRAWINGS ON EACH FIXTURE OF EQUIPMENT AND MATERIALS FOR APPROVAL. CONTRACTOR SHALL KEEP ONE (1)HARD COPY OF APPROVED SHOP DRAWINGS AT THE JOB SITE.

8.14. ALL PIPING INSTALLED SHALL BE LABELED AND IDENTIFIED.

8.15. COORDINATE WITH THE OWNERS STANDARDS OF MATERIAL LIST FOR MANUFACTURER AND MATERIAL PRODUCTS. NO DEVIATIONS SHALL BE PERMITTED WITHOUT THE OWNERS PRIOR APPROVAL.

9. FIXTURES AND EQUIPMENT:

9.1. INSTALL ALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.

9.2. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, MANUFACTURERS OFFERING EQUIPMENT AS LISTED ON THE DRAWING SCHEDULE, WHICH MAY BE INCORPORATED IN THE WORK SHALL BE LIMITED TO THE FOLLOWING:

9.2.1. AUTOMATIC SPRINKLERS - VIKING GROUP, TYCO, RASCO, VICTUALLIC , OR APPROVED EQUAL.

10. SCOPE OF WORK: THE FIRE PROTECTION WORK SHALL INCLUDE, BUT IS NOT NECESSARILY LIMITED TO:

10.1. PROVIDE ALL FIRE PROTECTION SYSTEM DEMOLITION WORK AS NOTED AND SO INDICATED IN THE DEMOLITION DRAWINGS.

10.2. ALL WORK REQUIRED TO INSTALL A COMPLETE AND OPERATING FIRE PROTECTION SYSTEM.

10.3. ALL WORK REQUIRED TO INSTALL EQUIPMENT INDICATED AND SO NOTED ON THE DRAWINGS AND SO LISTED ON THE EQUIPMENT SCHEDULE.

10.4. INSTALLATION OF FIRE PROOF SYSTEMS AND SEALANTS WHEREVER PENETRATIONS OF THE FIRE RATED WALLS AND DECK ARE DONE.

10.5. ALL CUTTING, PATCHING AND REPAIR OF WALLS, CEILING AND FLOORING REQUIRED TO DEMOLITION EXISTING WHERE NECESSARY AND INSTALL NEW SPRINKLERS AND PIPING.

10.6. ALL TESTING AND ADJUSTING OF ALL INDIVIDUAL SYSTEMS INSTALLATIONS.

10.7. ALL WORK TO LABEL AND IDENTIFY EACH PIPING SYSTEM.

10.8. ALL WORK TO TAG, LABEL AND IDENTIFY EACH NEW VALVE INSTALLED IN THE PIPING SYSTEM.

10.9. ALL CLEAN-UP OF AREAS OF PROJECT WORK.

11. DEMOLITION WORK:

11.1. PROVIDE ALL FIRE PROTECTION SYSTEM DEMOLITION WORK AS NOTED AND SO INDICATED IN THE DEMOLITION DRAWINGS.

11.2. DISCONNECT AND REMOVE SPRINKLERS AND SPRINKLER SYSTEM PIPING, INCLUDING ASSOCIATED HANGERS, WHERE SO INDICATED OR NOTED ON THE DRAWINGS.

11.3. MODIFY EXISTING SPRINKLER SYSTEM PIPING AND/OR EQUIPMENT WHERE SO INDICATED OR NOTED ON THE DRAWINGS.

11.4. ALL PIPING SCHEDULED FOR DEMOLITION SHALL BE COMPLETELY DRAINED AND REMOVED. THERE SHALL NO PIPING (OR ASSOCIATED PIPE HANGERS) ABANDONED IN PLACE.

11.5. ALL PIPING AND EQUIPMENT REMOVED, UNLESS OTHERWISE NOTED, SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE.

11.6. SPRINKLERS DISMANTLED AND REMOVED SHALL NOT BE REUSED FOR ANY NEW SYSTEMS INSTALLATION. PIPING, VALVES AND EQUIPMENT DISMANTLED AND REMOVED SHALL NOT BE REUSED FOR ANY NEW SYSTEMS INSTALLATION, UNLESS NOTED OTHERWISE.

11.7. AS PART OF THE BUILDING DEMOLITION AND RENOVATION ALL ELECTRICAL IS TO BE REMOVED, INCLUDING ELECTRICAL POWER PANELS. CONTRACTION SHALL COORDINATE WITH THE GENERAL CONTRACTOR, OWNER AND ELECTRICAL CONTRACTOR OF TEMPORARY POWER FOR THE DRY PIPE VALVE SPRINKLER SYSTEM AIR COMPRESSOR.

12. INTENT OF THE WORK:

12.1. IT IS THE INTENT AND PURPOSE OF THESE SPECIFICATIONS AND THE ACCOMPANYING DRAWINGS TO COVER AND INCLUDE UNDER EACH ITEM, ALL MATERIALS, MACHINERY, APPARATUS AND LABOR NECESSARY TO PROPERLY INSTALL, EQUIP, ADJUST, AND PUT INTO PERFECT OPERATION, THE RESPECTIVE PORTIONS OF THE INSTALLATION SPECIFIED, AND TO SO INTERCONNECT THE VARIOUS ITEMS OR SECTIONS OF THE WORK SO AS TO FORM A COMPLETE AND PROPER OPERATING WHOLE.

12.2. ANY EQUIPMENT, APPARATUS, MACHINERY, MATERIAL, SMALL ITEMS NOT MENTIONED IN DETAIL, AND LABOR NOT HEREINAFTER SPECIFICALLY MENTIONED, WHICH MAY BE FOUND NECESSARY TO COMPLETE OR PERFECT ANY PORTION OF THE INSTALLATION IN A SUBSTANTIAL MANNER, AND IN COMPLIANCE WITH THE REQUIREMENTS STATED, IMPLIED, OR INTENDED IN THESE SPECIFICATIONS, SHALL BE FURNISHED WITHOUT EXTRA COST TO THE OWNER. THIS SHALL INCLUDE ALL MATERIALS, DEVICES, OR METHODS PECULIAR TO THE MACHINERY, EQUIPMENT, APPARATUS, OR SYSTEM FURNISHED AND INSTALLED BY THE SPRINKLER CONTRACTOR.

13. DRAWINGS:

13.1. DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND REQUIREMENTS OF WORK.

13.2. WHEN INDICATED ON THE DRAWINGS, DIAGRAMS ARE COMPLETELY DIAGRAMMATIC AND INDICATE THE INTENT OF THE WORK FOR BOTH THE CONTRACTOR, L&I REVIEW AGENCIES AND/OR AUTHORITIES HAVING JURISDICTION. WHERE VALVES, INCIDENTAL DEVICES, ETC., INCLUDING EXECUTION NOTES ARE INDICATED ON THE DIAGRAMS, THEY SHALL BE SO REQUIRED AND INSTALLED AS PART OF THE SYSTEM WORK.

14. RECORD DRAWINGS: AS-BUILT RECORD DRAWINGS, SHOWING DIMENSIONS, LOCATIONS AND CONCEALED PIPING, PLUGGED OUTLETS AND EQUIPMENT SHALL BE KEPT UP TO DATE. MASTER COPY SHALL BE KEPT ON THE JOB. NO PERMANENT CONCEALING OF THE WORK SHALL BE PERMITTED UNTIL AS-BUILT DRAWINGS ARE APPROVED AS UP-TO-DATE BY THE OWNER/REPRESENTATIVE. NO PROGRESS PAYMENTS SHALL BE APPROVED UNLESS AS-BUILT DRAWINGS ARE UP-TO-DATE. RECORD DRAWINGS SHALL BE REDLINED, AFFIXED WITH A STAMP STATING "PROJECT RECORD DRAWINGS" AND THEN SCANNED.

15. CLEANING AND FINISHING:

15.1. PROVIDE FOR THE SAFETY AND GOOD CONDITION OF ALL PIPING AND RELATED MATERIALS UNTIL FINAL ACCEPTANCE OF THE OWNER. PROTECT ALL MATERIALS FROM DAMAGE. PROVIDE ADEQUATE AND PROPER STORAGE FACILITIES DURING THE PROGRESS OF THE WORK.

15.2. ALL NEW PIPING INSTALLED SHALL HAVE ALL GREASE, ADHESIVE LABELS AND FOREIGN MATERIALS REMOVED.

15.3. ALL NEW PIPING INSTALLED SHALL BE DRAINED AND FLUSHED TO REMOVE GREASE AND FOREIGN MATTER.

15.4. BLOW-OUT ALL EXISTING PIPING TO REMOVE AS MUCH DEBRIS AS POSSIBLE THE CONTRACTOR SHALL DO ALL PIPE AND THREAD CLEANING OF THE EXISTING PIPING TO MAKE FINAL CONNECTIONS TIGHT AND LEAK-FREE.

15.5. CLEAN-UP: REMOVE FROM THE PREMISES, ALL UNUSED MATERIALS AND DEBRIS RESULTING FROM THE PERFORMANCE OF THE WORK. ALL CLEAN-UP SHALL MEET THE SATISFACTION OF THE OWNER.

16. PIPING SYSTEM INSTALLATION REQUIREMENTS:

16.1. ALL FLOOR PLAN DRAWINGS ARE GENERALLY DIAGRAMMATIC AND DUE TO SMALL SCALE, IT IS IMPOSSIBLE TO INDICATE ALL FITTINGS, VALVES, AND SPECIALTIES REQUIRED. PROVIDE A COMPLETE OPERATING SYSTEM INCLUDING ALL NECESSARY FITTINGS, VALVES, ETC., AS REQUIRED.

16.2. INSTALL ALL PIPING IN ACCORDANCE WITH THE BEST PRACTICES OF THE TRADE AND LATEST CODE REQUIREMENTS. USE UNIFORM SYSTEM MATERIALS THROUGHOUT THE BUILDING.

16.3. PIPE AND FITTINGS SHALL BE CLEAN FROM CUTTING BURRS, FOREIGN MATERIALS AND DEFECTS IN STRUCTURE AND THREADING. MAKE ALL CUTS SQUARE. REAM AFTER CUTTING. CLEAN OFF SCALE AND DIRT INSIDE AND OUTSIDE, BEFORE ASSEMBLY.

16.4. CUT PIPING ACCURATELY TO MEASUREMENTS ESTABLISHED AT THE BUILDING, WORK INTO PLACE WITHOUT SPRINGING, FORCING OR CUTTING OF THE BUILDING STRUCTURE, AND INSTALL AS DIRECTLY AS POSSIBLE BETWEEN CONNECTING POINTS PARALLEL WITH OR AT RIGHT ANGLES TO BUILDING CONSTRUCTION, EXCEPT AS REQUIRED TO OBTAIN PITCH.

16.5. ALL PIPING TO DRAIN TO LOW POINTS. LOW POINT DRAINS SHALL BE PROVIDED IN ACCORDANCE WITH NFPA 13.

16.6. PIPING SHALL RUN SQUARE WITH BUILDING LINES.

16.7. NECESSARY DRAINS, OFFSETS, AND DRIPS SHALL BE PROVIDED FOR COORDINATION OF THE WORK AS PART OF THE CONTRACT.

16.8. ALLOW CLEARANCE FOR EXPANSION AND CONTRACTION.

16.9. INSTALL ISOLATING FITTINGS (DIELECTRIC UNIONS) BETWEEN SECTIONS OF FERROUS AND NON-FERROUS PIPE OR CONNECTED EQUIPMENT. DIELECTRIC UNIONS SHALL BE PROVIDED AT ALL NEW TO EXISTING CONNECTIONS AS NECESSARY TO FACILITATE DISMANTLING OF THE PIPING SYSTEM FOR THE NEXT PHASE OF PIPING REPLACEMENT WORK.

16.10. VALVES SHALL BE INSTALLED SO THAT THEY ARE ACCESSIBLE FOR EMERGENCY AND MAINTENANCE USE.

16.11. DO NOT SUPPORT PIPING FROM OTHER PIPING, CONDUITS, DUCTWORK OR EQUIPMENT.

16.12. UNLESS NOTED OTHERWISE, ALL PIPING MAINS, BRANCH LINES, ETC., SHALL BE RUN AS HIGH AS POSSIBLE TO THE DECK TO ALLOW FOR EASE OF INSTALLATION OF OTHER TRADES AND NEW CEILINGS.

16.13. COORDINATE WITH THE OWNER FOR SHUT-DOWN OF THE FIRE PROTECTION SYSTEMS FOR NEW SYSTEM PIPING CONNECTIONS. VERIFY ALL TIME SCHEDULES AND SYSTEM DOWNTIME.

17. TAGS, CHARTS, AND IDENTIFICATION:

17.1. IDENTIFY EACH NEW VALVE INSTALLED IN ALL SYSTEMS WITH BLACK, NUMBERED AND STAMPED 1-1/2" BRASS OR ALUMINUM TAGS FASTENED TO VALVE BY BRASS CHAIN AND S-HOOK.

17.2. PIPING IDENTIFICATION: IDENTIFY PIPING WITH SETON "SETMARK" OR APPROVED SUBSTITUTE, SEMI-RIGID PLASTIC, WRAPAROUND PIPE MARKERS WITH FLOW ARROWS AND CONFORMING TO ASMEIANSI A13.1. LOCATE MARKER AT EACH VALVE, CHANGES IN DIRECTION, WHERE PIPES PASS THRU BARRIERS AND EVERY 25' OF HORIZONTAL RUNS. BACKGROUND (B) AND LETTERING (L) SHALL BE IN ACCORDANCE WITH THE FOLLOWING COLORS: FIRE SUPPRESSION WATER (FIRE) - (B) RED (L) WHITE

17.3. PROVIDE 1/8" SCALE DIAGRAMS SHOWING LOCATION, NUMBER AND SERVICE OR FUNCTION OF EACH TAGGED ITEM. PROVIDE MINIMUM OF TWO SEPARATE COPIES WITHIN BINDER PERMANENTLY COVERED AND BOUND. TURN OVER TO OWNERS MAINTENANCE ENGINEER.

18. FASTENERS, HANGERS AND SUPPORTS:

18.1. FURNISH AND INSTALL ALL NEW HANGERS AND SUPPORTS REQUIRED TO SUSPEND, MOUNT OR HANG THE WORK.

18.2. FURNISH AND INSTALL ALL MISCELLANEOUS STEEL ANGLES, CHANNELS, BEAMS, CLIPS, BRACKETS AND ANCHORS NECESSARY TO HANG OR SUPPORT THE WORK.

18.3. DRILLED INSERTS SHALL NOT BE LOADED MORE THAN RATED CAPACITY OR 200 POUNDS.

18.4. COPPER TUBING SHALL BE SUPPORTED WITH COPPER HANGERS.

18.5. PIPING SHALL BE SUPPORTED FROM ADJUSTABLE CLEVIS OR SPLIT RING TYPE HANGERS OR TRAPEZE TYPE SUPPORT RACK AT LOCATIONS AND SPACING REQUIRED BY NFPA 13. WHERE HANGERS ARE 48" OR LONGER, PROVIDE LATERAL BRACING IN ACCORDANCE WITH NFPA 13.

18.6. ALL NEW PIPING SHALL BE SUPPORTED IN ACCORDANCE WITH THE RECOGNIZED AND ADOPTED BUILDING CODES, AND THEIR AMENDMENTS FOR THE TOWNSHIP AND/OR AUTHORITY HAVING JURISDICTION. ALL NEW PIPING HANGERS AND SUPPORTS FURNISHED AND INSTALLED SHALL MEET THE SEISMIC REQUIREMENTS OF THE RECOGNIZED AND ADOPTED BUILDING CODES FOR THE THE TOWNSHIP AND/OR AUTHORITY HAVING JURISDICTION.

18.7. WHERE EARTHQUAKE LOADS ARE APPLICABLE IN ACCORDANCE WITH THE LOCALLY ADOPTED BUILDING CODE, HANGERS AND SUPPORTS SHALL BE DESIGNED AND INSTALLED FOR THE SEISMIC FORCES IN ACCORDANCE WITH NFPA 13 AND THE LOCALLY ADOPTED BUILDING CODE.

18.8. ALL HANGERS, ANCHORS, SUPPORT AND GUIDES FOR PIPING AND EQUIPMENT SHALL BE SECURELY FASTENED TO THE BUILDING STRUCTURE AND/OR FLOORS WITH CONCRETE DECKING WITH THE FOLLOWING EXCEPTION. HANGERS, ANCHORS, SUPPORT AND GUIDES SHALL NOT BE FASTENED TO OR THROUGH METAL ROOF DECKING (I.E., BARE METAL DECKING OR METAL DECK SUPPORTING A ROOFING SYSTEM. SUPPORTS SHALL BE CONNECTED TO BUILDING STEEL / STRUCTURE BY WAY OF SUPPLEMENTAL STEEL, STRUT, AND OR CLAMPS. A BUILT UP ROOFING SYSTEM IS NOT STRUCTURAL AND SHALL NOT BE SUPPORTED FROM UNDER NO CIRCUMSTANCES.)

19. FIRE PROTECTION SPRINKLER SYSTEMS):

19.1. THIS PROJECT SHALL REQUIRE ALTERATIONS AND MODIFICATIONS TO THE EXISTING OPERATIONAL AUTOMATIC DRY PIPE SPRINKLER SYSTEM FOR THE ENTIRE PROJECT BUILDING TO SUIT THE NEW FIT-OUT OF THE AREA OF RENOVATION. INSTALLATION SHALL CONFORM TO NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) STANDARD NO. 13, TOWNSHIP FIRE CODE, AL OTHER LOCAL CODES AND ORDINANCES, AND OWNER'S STANDARDS.

19.2. DRAWINGS ARE DIAGRAMMATIC BASED ON LIMITED FIELD SURVEY. IF SHOWN, ALL NEW AND EXISTING PIPING IS SHOWN SCHEMATIC ONLY FOR TYPICAL INTENT TO SHOW PIPING RUN AND SPRINKLER PLACEMENT. THE SPRINKLER CONTRACTOR SHALL FIELD VERIFY PIPE ROUTING WITH RESPECT TO ALL EXISTING AND NEW BUILDING CONDITIONS, PARTICULARLY OVERHEAD BEAMS, HVAC DUCT LOCATIONS, ELECTRICAL CONDUITS, ALL ELECTRIC LIGHTING AND OTHER UTILITIES. FIELD MODIFY PIPE TO SUIT EXISTING CONDITIONS AND NEW AREA FIT-OUT. THE SPRINKLER CONTRACTOR SHALL COORDINATE THE INSTALLATION OF NEW FIRE PROTECTION PIPING AND THE NEW SPRINKLERS AND THEIR LOCATION WITH ALL EXISTING BUILDING SYSTEMS AND CONSTRUCTION CONDITIONS INCLUDING NEW PLUMBING, NEW HVAC AND NEW ELECTRICAL SYSTEMS WORK. COORDINATE ALL NEW FIRE PROTECTION SYSTEM WORK WITH ALL OTHER TRADES. AVOID ROUTING ANY NEW PIPING AND LOCATING NEW SPRINKLERS OVER ANY HIGH VALUE EQUIPMENT AND MAJOR ELECTRICAL EQUIPMENT.

19.3. FIRE SPRINKLER PROTECTION SYSTEMS SHALL REMAIN IN OPERATION DURING ALL PHASES OF THE DEMOLITION AND CONSTRUCTION WORK. THE EXISTING SPRINKLER PROTECTION THAT IS TO BE DEMOLISHED SHALL REMAIN IN SERVICE UNTIL THE SEQUENCE OF DEMOLITION AND INSTALLATION PLAN HAS BEEN REVIEWED WITH AND APPROVED BY THE OWNERS REPRESENTATIVE (THE HOSPITAL'S DEPARTMENT OF FIRE & SAFETY REPRESENTATIVE). ALL MEANS SHALL BE TAKEN TO LIMIT SYSTEM IMPAIRMENTS AND SYSTEM IMPAIRMENT TIME. COORDINATE ALL NEW FIRE SPRINKLER WORK AND INSTALLATION SCHEDULES WITH THE GENERAL CONTRACTOR AND/OR THE OWNERS REPRESENTATIVE (THE HOSPITAL'S DEPARTMENT OF FIRE & SAFETY REPRESENTATIVE)COORDINATE ALL SHUT-DOWNS OF THE FIRE PROTECTION SYSTEMS GENERAL CONTRACTOR AND OWNER. ALL FIRE SPRINKLER PROTECTION SHALL BE RESTORED TO SERVICE AT THE END OF EACH PERIOD (END OF WORK DAY OR SHIFT THAT WORK IS PERFORMED ON THE SYSTEM.) VERIFY ALL TIME SCHEDULES AND SYSTEM DOWNTIME . WHERE IMPAIRMENT OF AUTOMATIC SPRINKLER PROTECTION IS NECESSARY, COORDINATE WITH GENERAL CONTRACTOR AND OWNER FOR THE PROVISION OF A FIRE WATCH DURING FIRE PROTECTION SYSTEM IMPAIRMENTS AND IN ALL AREAS WHERE FIRE PROTECTION SYSTEMS ARE IMPAIRED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A FIRE WATCH FOR THE DURATION OF AND IN THE AREAS OF SPRINKLER SYSTEM IMPAIRMENT. COORDINATE ALL FIRE WATCH ACTIVITIES AND PROCEDURES WITH THE GENERAL CONTRACTOR AND THE OWNER. THE SPRINKLER CONTRACTOR SHALL BE RESPONSIBLE FOR TO PAY ALL FEES REQUIRED BY THE FIRE MARSHAL'S OFFICE FOR EACH SPRINKLER SYSTEM SHUTDOWN.

19.4. PROVIDE ALL FIRE PROTECTION DEMOLITION WORK AS NOTED ON THE DRAWINGS AND AS REQUIRED TO ACCOMMODATE THE FIT-OUT OF THE AREAS OF RENOVATION. PROVIDE ALL WORK REQUIRED TO DRAIN DOWN THE EXISTING FIRE PROTECTION SYSTEM(S) AS RELATED TO THE NEW CONSTRUCTION PROJECT AREAS. COORDINATE THE SHUT DOWN OF SYSTEM(S) WITH THE GENERAL CONTRACTOR AND OWNER.

19.5. PROVIDE AUTOMATIC SPRINKLER PROTECTION THROUGHOUT THE AREA OF RENOVATION IN ACCORDANCE WITH NFPA 13 FOR LIGHT HAZARD OCCUPANCY UNLESS NOTED OTHERWISE.

19.6. ALL NEW SPRINKLER HEAD LOCATIONS INDICATED ON THE DRAWING PLAN ARE SHOWN TO INDICATE THE INTENT OF THE SPRINKLER WORK REQUIRED FOR COVERAGE AND PROTECTION OF THE ROOM OR AREA. THE CONTRACTOR MAY LOCATE THE NEW HEADS IN ANOTHER ARRANGEMENT AS LONG AS IT COMPLIES WITH THE REQUIREMENT OF THE FIRE CODE REGULATION.

19.7. UNLESS NOTED OTHERWISE, ALL SPRINKLERS AREAS WITH CEILINGS SHALL BE CONCEALED DRY PENDENT, QUICK RESPONSE TYPE, ALL WHITE FINISH. INCLUDING ESCUTCHEON, CONCEALED COVER PLATE, ETC. WITH PROPER TEMPERATURE RATING FOR EACH AREA AS REQUIRED BY NFPA 13. ALL SPRINKLERS IN PATIENT AREAS (BED ROOMS, HOLDING ROOMS, SECLUSION ROOMS) SHALL BE INSTITUTIONAL CONCEALED DRY PENDENT TYPE, QUICK RESPONSE TYPE. ALL WHITE FINISH, INCLUDING ESCUTCHEON, CONCEALED COVER PLATE, ETC. WITH PROPER TEMPERATURE RATING FOR EACH AREA AS REQUIRED BY NFPA 13. UNLESS NOTED OTHERWISE, ALL SPRINKLERS IN ROOMS OR AREAS WITHOUT CEILINGS SHALL BE UPRIGHT SPRINKLER, QUICK RESPONSE TYPE, BRASS FINISH WITH PROPER TEMPERATURE FOR EACH AREA AS REQUIRED BY NFPA 13. SPRINKLERS SHALL BE SPACED IN ACCORDANCE WITH NFPA 13 AS DICTATED BY THE OCCUPANCY HAZARD, OBSTRUCTIONS AND CONSTRUCTION.

19.8. ALL SPRINKLER HEADS WITHIN THE PROJECT AREA SHALL BE NEW, UNLESS NOTED OTHERWISE. ALL NEW SPRINKLERS SHALL BE QUICK RESPONSE TYPE AND SHALL HAVE BEEN MANUFACTURED IN THE CURRENT YEAR. REMOVAL OF SPRINKLER HEADS AND DROPS SHALL BE EXECUTED AND MADE READY FOR CONNECTION OF NEW SUPPLY PIPING AND EXTENSIONS TO NEW HEADS ON LOCATIONS.

19.9. PROVIDE ALL NECESSARY STEEL SHAPES, HANGERS/ROD STRAPS, ETC. REQUIRED FOR FIRE PROTECTION SYSTEM INSTALLATION. ALL HANGER AND SUPPORTS SHALL BE DESIGNED AND/OR INSTALL IN ACCORDANCE WITH AND SHALL CONFORM TO WITH NFPA 13. WHERE SYSTEM PRESSURES (STATIC AND/OR FLOWING) EXCEED 100 PSI AT SPRINKLERS, PROVIDE HANGER ASSEMBLIES AT END HEAD PENDENT SPRINKLERS AND ON ARM-OVER PIPING FEEDING PENDENT SPRINKLER HEADS TO PREVENT UPWARD MOVEMENT OF PIPE IN ACCORDANCE WITH NFPA 13. WHERE EARTHQUAKE LOADS ARE APPLICABLE IN ACCORDANCE WITH THE LOCALLY ADOPTED BUILDING CODE, HANGERS AND SUPPORTS SHALL BE DESIGNED AND INSTALLED FOR THE SEISMIC FORCES IN ACCORDANCE WITH THE LOCALLY ADOPTED BUILDING CODE.

19.10. THE INDICATED SPRINKLER SYSTEM COMPONENTS INCLUDING ZONE VALVES, ALARM AND MONITORING SWITCHES ARE THE MINIMUM REQUIREMENT BASED ON DESIGN AND PROJECT REQUIREMENTS. IF THE BIDDING FIRE PROTECTION CONTRACTOR ELECTS TO FURNISH AND INSTALL A DIFFERENT ARRANGEMENT TO ACHIEVE THE SAME END RESULT AND FIRE MARSHAL APPROVED SYSTEM. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL ADDED COSTS. THIS SHALL INCLUDE BUT NOT BE LIMITED TO THE PREVIOUS ITEMS MENTIONED AS WELL AS THE ADDITIONAL SUPPORT AND MONITORING REQUIREMENTS OF THE PROJECT FIRE ALARM SYSTEM. THERE SHALL BE NO ADDITIONAL COST TO THE OWNER OR PROJECT.

19.11. SUBMIT SHOP DRAWINGS IF SO REQUIRED TO THE TOWNSHIP FIRE MARSHAL'S OFFICE FOR ALL REVIEW AND APPROVALS REQUIRED. A SHOP DRAWING SUBMISSION WILL BE REQUIRED BY THE ENGINEER. THESE DRAWINGS WILL BE TURNED OVER TO THE OWNER FOR THEIR RECORD FILES.

19.12. PAY ALL FEES FOR INSPECTION AND REVIEW SERVICES AS REQUIRED BY THE FIRE MARSHAL'S OFFICE. PROVIDE AND SUBMIT SPRINKLER SHOP DRAWINGS. SUBMIT DRAWING WITH ALL REQUIRED INSTALLATION DATA TO THE FIRE MARSHAL'S OFFICE FOR REVIEW AND APPROVAL.

19.13. ALL MATERIAL SHALL BE MINIMUM SCHEDULE 40 HOT-DIPPED GALVANIZED BLACK STEEL PIPE AND CONFORM TO NFPA STANDARDS UNLESS NOTED OTHERWISE. "PLASTIC PIPING SHALL NOT BE INSTALLED ON THIS PROJECT. ALL PIPE 2" AND SMALLER SHALL BE JOINED USING THREADED CAST IRON OR MALLEABLE IRON FITTING, UNLESS NOTED OTHERWISE. PIPE 2 1/2" AND LARGER MAY BE JOINED USING GROOVED MECHANICAL TYPE FITTINGS, UNLESS NOTED OTHERWISE.

19.14. SPRINKLER MAINS AND BRANCH LINE PIPE SHALL BE RUN AS HIGH TO THE DECK AS POSSIBLE . COORDINATE SPRINKLER PIPING ROUTING AND INSTALLATION WITH ALL OTHER TRADES . NEW DUCT WORK AND HVAC EQUIPMENT SHALL TAKE THE HIERARCHY OF INSTALLATION OVER ALL OTHER TRADES.

19.15. ALL OPENINGS IN MASONRY WALLS, PIPE TUNNEL, AND FLOOR DECKS INCLUDING THE ROOF DECK SHALL BE CORE BORED. PROVIDE ALL NECESSARY SLEEVES FOR MASONRY AND DECK OPENINGS. ANY PIPING THAT PENETRATES FIRE-RATED DECKS, WALLS OR PARTITIONS SHALL BE SEALED WITH U.L. LISTED (HILTI) FIRE-RATED SYSTEMS AND SEALANTS. ALL NON FIRE-RATED WALL AND FLOOR DECK OPENINGS SHALL BE SEALED WITH AN APPROVED SEALANT.

19.16. THE INDICATED SPRINKLER SYSTEM COMPONENTS INCLUDING ZONE VALVES, ALARM AND MONITORING SWITCHES ARE THE MINIMUM REQUIREMENT BASED ON DESIGN AND PROJECT REQUIREMENTS. IF THE BIDDING FIRE PROTECTION CONTRACTOR ELECTS TO FURNISH AND INSTALL A DIFFERENT ARRANGEMENT TO ACHIEVE THE SAME END RESULT AND FIRE MARSHAL APPROVED SYSTEM. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL ADDED COSTS. THIS SHALL INCLUDE BUT NOT BE LIMITED TO THE PREVIOUS ITEMS MENTIONED AS WELL AS THE ADDITIONAL SUPPORT AND MONITORING REQUIREMENTS OF THE PROJECT FIRE ALARM SYSTEM. THERE SHALL BE NO ADDITIONAL COST TO THE OWNER OR PROJECT.

19.17. PROVIDE A COMPLETE SUBMISSION OF SPRINKLER AND STANDPIPE SYSTEM SHOP DRAWINGS TO THE OFFICE OF THE ENGINEER FOR THEIR REVIEW, COMMENTS AND APPROVAL. A COPY OF THESE DRAWINGS WILL BE TURNED OVER TO THE OWNER FOR THEIR RECORD FILES.

19.18. CONTRACTOR SHALL PERFORM ALL REQUIRED SYSTEM TESTING ON THE NEW SYSTEM INSTALLATION IN ACCORDANCE WITH NFPA 13 & 25, THE DELAWARE STATE FIRE CODES, AUTHORITIES HAVING JURISDICTIONS (AHJ) REQUIREMENTS AND ALL OTHER LOCAL CODES AND ORDINANCES. PERFORM HYDROSTATIC PRESSURE TEST ON ALL NEW PIPING IN ACCORDANCE WITH NFPA 13 & 25. PERFORM HYDROSTATIC PRESSURE TEST ON NEW SYSTEM OF 50 PSI OVER NORMAL SYSTEM WORKING PRESSURE (MINIMUM 200 PSI) FOR 2 HOURS WITHOUT LEAKS. PERFORM TEST

LIGHTING PLAN NOTES

1. MULTIPLE LIGHT SWITCHES SHALL BE MOUNTED IN COMMON MULTI-GANG BOX WITH SINGLE COVER.
2. PROVIDE FIRE PROOF BONNETS ON ALL DOWNLIGHTS THAT PENETRATE THE FIRE RATED CEILING. TYPICAL FOR ALL DOWNLIGHTS.
3. ALL LIGHT FIXTURES INDICATED WITH NL AND EXIT SIGNS TO BE CONNECTED EMERGENCY BATTERY INVERTER.

BUTTON PHOTOCELL TYPICAL FOR 6.

NL FIXTURES AND EXIT SIGNS ON THIS SIDE OF THE BUILDING TO BE CONNECTED TO INVERTER (B)

NL FIXTURES AND EXIT SIGNS ON THIS SIDE OF THE BUILDING TO BE CONNECTED TO INVERTER (A)

EXISTING CONCRETE WALKWAY

EXISTING CONCRETE WALKWAY

1 / E-1 HEATHERWOOD FLOOR PLAN - NEW WORK

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

E1(30x42)

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DEMOLITION PACKAGE FOR NEW WOODS SERVICES

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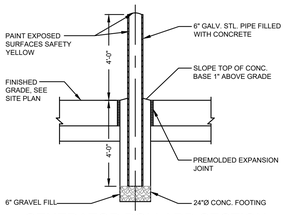
2/1/26	BID ISSUE
12/03/25	DOH ISSUE
11/20/25	CMS REVIEW

REVISIONS

DRAWN BY: THU	RE-VIEWED BY: MRH
PLOT SCALE: AS NOTED	DATE: 02/02/26
PROJECT FILE LOCATION:	

DRAWING NAME:
OVERALL NEW WORK FLOOR PLAN LIGHTING

DRAWING NO.
E-1



GENERATOR BOLLARD SECTION

NOT TO SCALE

NOTES FOR GENERATOR PAD:

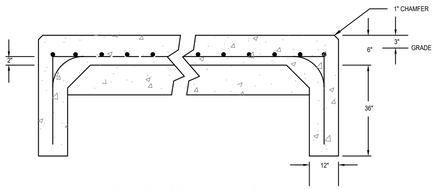
1. CONCRETE SHALL HAVE A MIN. 28 DAY COMPRESSIVE STRENGTH OR 4500 PSI, SHALL CONTAIN 6% ENTRAINED AIR BY VOLUME AND 0.45% WATER/CEMENT RATIO.

2. RODS SHALL BE No. 4 BAR AND CONFORM TO THE LATEST REVISION OF ASTM A-615, GR. 50. BARS TO FORM 6" x 6" MAT.

3. PAD SHALL BE SET ON A 6" THK. CRUSHED STONE (MAX STONE SIZE SHALL BE 1") AND THE TOP OF THE PAD SHOULD BE 3" ABOVE GROUND LEVEL.

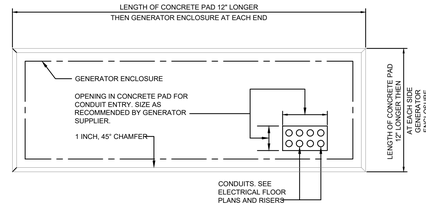
4. THE SOIL BELOW THE CRUSHED STONE SHALL BE WELL COMPACTED.

5. OPENING IN CONCRETE PAD FOR CONDUIT ENTRY SHALL BE COORDINATED WITH EQUIPMENT MANUFACTURER.



GENERATOR PAD DETAIL

NOT TO SCALE

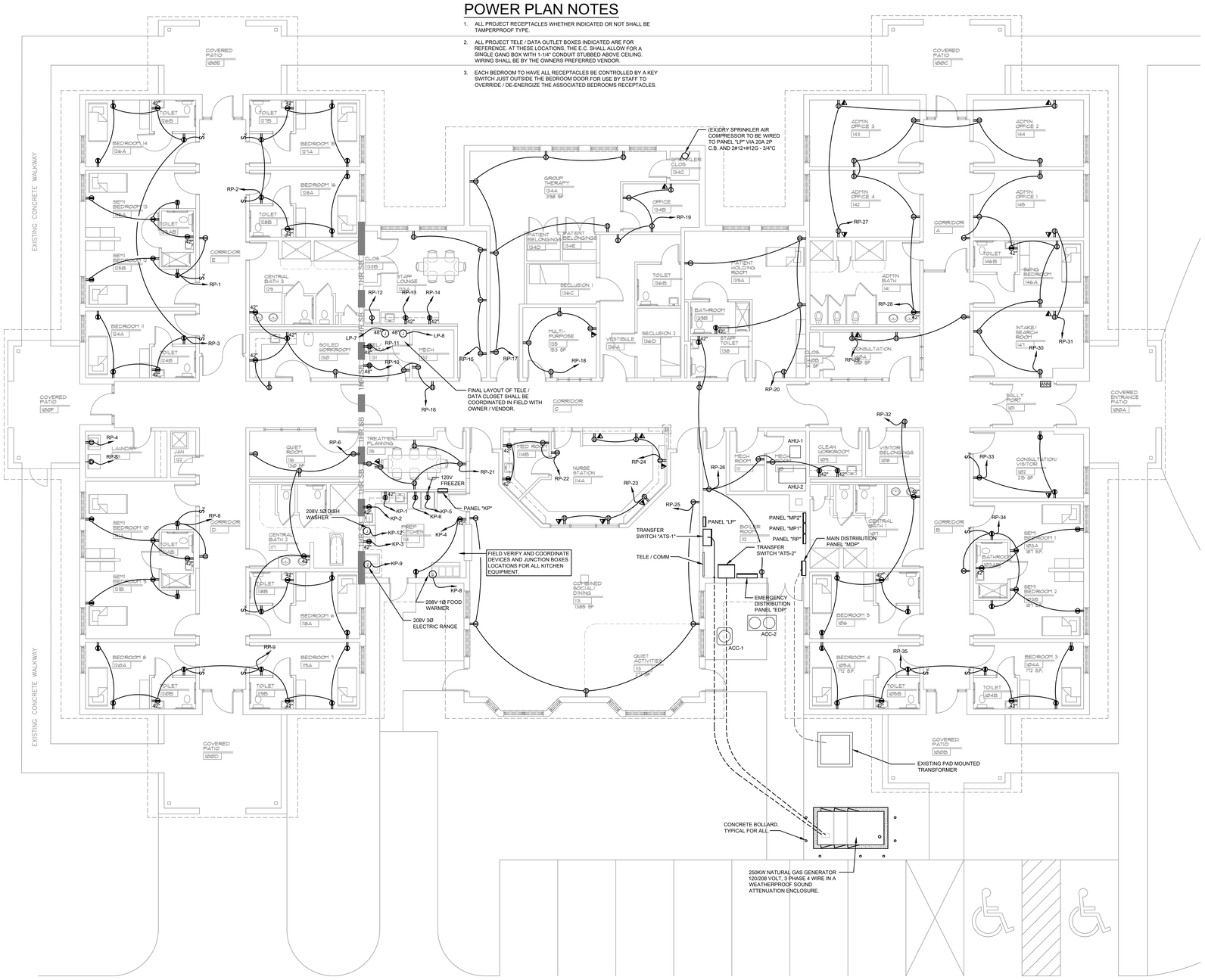


CONCRETE GENERATOR PAD - PLAN

NOT TO SCALE

POWER PLAN NOTES

1. ALL PROJECT RECEPTACLES WHETHER INDICATED OR NOT SHALL BE TAMPERPROOF TYPE.
2. ALL PROJECT TELE / DATA OUTLET BOXES INDICATED ARE FOR REFERENCE. AT THESE LOCATIONS, THE E.C. SHALL ALLOW FOR A SINGLE GANG BOX WITH 1-1/4" CONDUIT STUBBED ABOVE CEILING. WIRING SHALL BE BY THE OWNERS PREFERRED VENDOR.
3. EACH BEDROOM TO HAVE ALL RECEPTACLES BE CONTROLLED BY A KEY SWITCH JUST OUTSIDE THE BEDROOM DOOR FOR USE BY STAFF TO OVERRIDE / DE-ENERGIZE THE ASSOCIATED BEDROOMS RECEPTACLES.



1 / E-2 HEATHERWOOD FLOOR PLAN - NEW WORK

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

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REVISIONS

DRAWN BY: THU	REVIEWED BY: HRM
PLOT SCALE: AS NOTED	DATE: 02/02/26

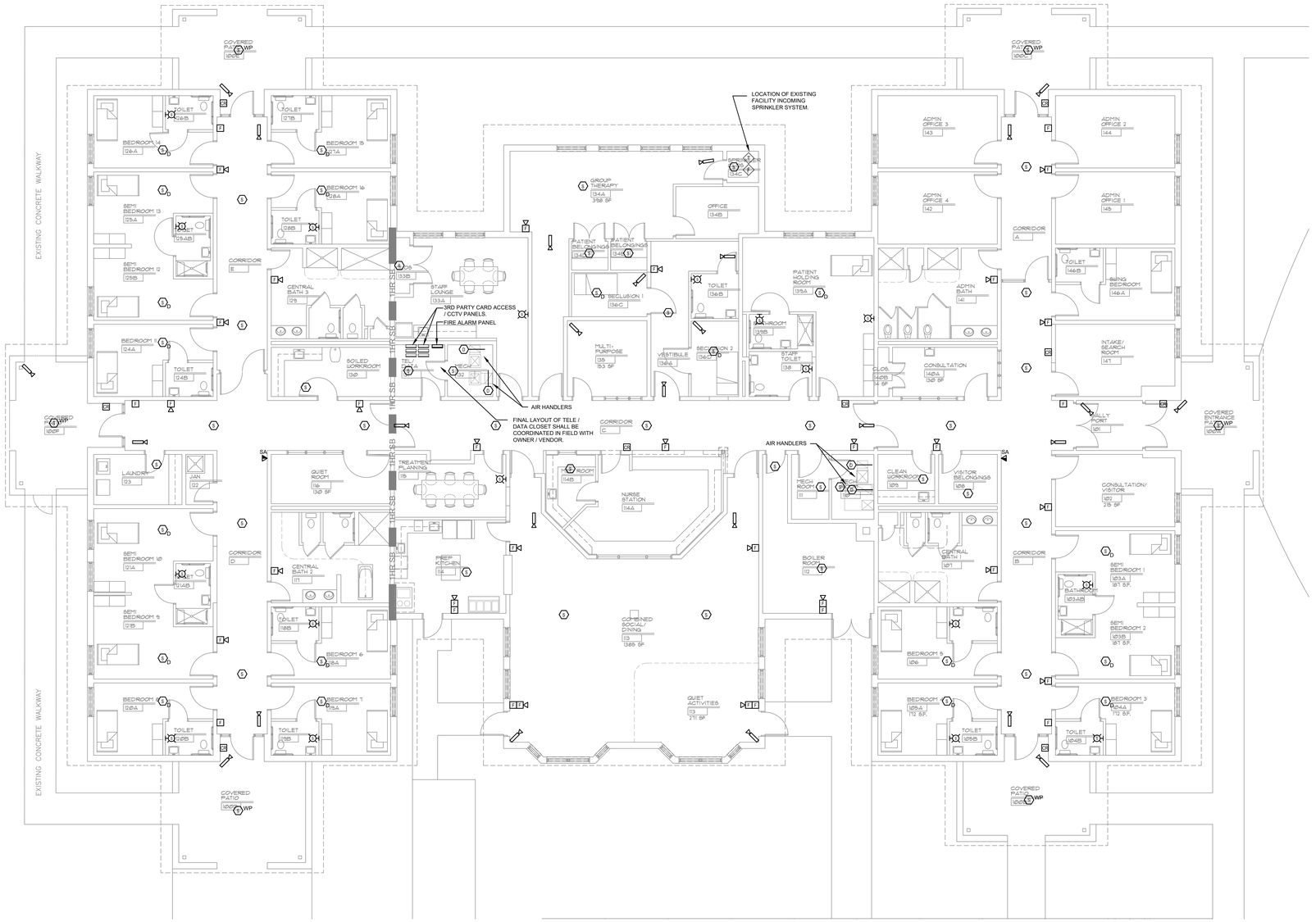
PROJECT FILE LOCATION:

DRAWING NAME:
OVERALL NEW WORK FLOOR PLAN POWER

DRAWING NO.:
E-2

SPECIAL SYSTEMS PLAN NOTES

1. ALL DOORS WITH CARD READERS TO BE WIRED VIA FAIL SAFE OPEN. CARD READER CONTROLLERS SHALL BE PROVIDED WITH A FIRE ALARM RELAY TO DROP POWER CIRCUIT UPON FIRE ALARM ACTIVATION. TYPICAL FOR ALL DOORS HAVING CARD READERS / DELAYED EGRESS.
2. ALL PROJECT FIRE ALARM PULL STATIONS TO BE PROVIDED WITH SURFACE POLY-CARBONATE COVERS WITH BATTERY POWERED HORN AS MFGR BY STI, CAT. NO. STI-1130.
3. ALLOW FOR REWIRING OF EXISTING SPRINKLER SYSTEM TAMPER AND FLOW SWITCHES TO THE NEW FIRE ALARM PANEL.
4. FINAL LAYOUT OF TELE / DATA CLOSET AND SPECIAL SYSTEM COMPONENTS TO BE FIELD COORDINATED WITH OWNER.
5. ALLOW FOR THE FURNISHING AD INSTALLATION OF DUCT MOUNTED SMOKE DETECTORS IN THE RETURN DUCT OF EACH OF THE PROJECT AIR HANDLERS. TOTAL OF 4.
6. THE STAFF ASSISTANCE SECURITY GRADE SPEAKER PHONE LOCATIONS INDICATED SHALL BE FURNISHED AND INSTALLED BY THE E.C. IT SHALL BE AS MFGR. G-TEL, INMATE SPEAKERPHONE MODEL NUMBER SP-3500.
7. FOR BIDDING PURPOSES, THE ELECTRICAL CONTRACTOR TO ALLOW FOR FURNISHING AND INSTALLATION OF ALL WIRING BETWEEN CARD READER AND CCTV DEVICES AND HEAD SYSTEMS LOCATED IN TELE / DATA CLOSET. THE WIRING SPECIFICATIONS AND CONFIGURATION REQUIRED SHALL BE AS DICTATED BY THE THE VENDOR DURING CONSTRUCTION. THE ACTUAL SUPPLY, INSTALLATION AND TERMINATION OF THE HARDWARE SHALL BE BY THE 3RD PARTY VENDOR.



1 / E-1 HEATHERWOOD FLOOR PLAN - NEW WORK
scale: 1/8" = 1'-0"

E1(30x42) 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

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2/1/26	BID ISSUE
12/03/25	DOH ISSUE
11/20/25	CMS REVIEW

REVISIONS

DRAWN BY:	RE-VIEWED BY:
THU	MRM
PLOT SCALE: AS NOTED	DATE: 02/02/26

PROJECT FILE LOCATION:

DRAWING NAME:
OVERALL NEW WORK FLOOR PLAN SPECIAL SYSTEMS

DRAWING NO.:
E-3

LIGHT FIXTURE SCHEDULE

NOTES:

1. EQUIVALENT FIXTURE PACKAGES MAY BE SUBMITTED FROM THESE LIGHTING REPRESENTATIVES: DIGITAL FILAMENTS, DIVERSIFIED LIGHTING, ILLUMINATIONS, LIGHTING SOLUTIONS, AND PENN LIGHTING. FIXTURES SUBMITTED AS EQUIVALENTS SHALL BE OF THE SAME TYPE, DIMENSION, ACCESS TO BALLASTS, DRIVERS, AND LAMPS, PERFORMANCE AND QUALITY OF THOSE SPECIFIED. EQUIVALENT MANUFACTURERS MUST MEET ALL CRITERIA OF THE BASE FIXTURE SPECIFIED. ANY DEVIATIONS WHICH DO NOT REFLECT THE BASE FIXTURE WILL RESULT IN A REJECTED SHOP DRAWING DURING SUBMITTAL PERIOD.

2. ALL FIXTURE COLORS, FINISHES, AND MOUNTING HEIGHTS SHALL BE VERIFIED WITH THE ARCHITECT PRIOR TO APPROVAL OF SHOP DRAWINGS.

3. ALL LED DRIVERS SHALL BE INTEGRAL HIGH EFFICIENCY UNIVERSAL INPUT VOLTAGE DRIVERS, RATED FOR 50,000 HOURS AT 70% LUMEN MAINTENANCE, UNLESS NOTED OTHERWISE.

TYPE	MANUFACTURER	CATALOG NUMBER	LAMPS	MOUNTING	OPERATING VOLTAGE	REMARKS
A	BEACON	QSP1-24L-15-5K7-4W-UNV-DBT-PC	15W LED, 1797 LUMENS, 5000°K	SURFACE, WALL	120V	7"H X 8"D X 13"W EXTERIOR WALL PACK, ALUMINUM HOUSING, TYPE IV DISTRIBUTION, INTEGRAL PHOTOCELL, DARK BRONZE MATTE FINISH.
B	PRESCOLITE	LBSE-8SQD-30K8-WH	20W LED, 1750 LUMENS, 3000°K	SURFACE, CEILING	120V	0.5"H X 8"W SURFACE SQUARE DOWNLIGHT, ALUMINUM TRIM, POLYCARBONATE LENS, WHITE FINISH. WET LOCATION RATED UNDER COVERED CEILING.
C	COLUMBIA	MPS4-35HL-CW-EDU	42W LED, 5658 LUMENS, 3500°K	CHAIN HUNG, CEILING	120V	3"W X 4'L INDUSTRIAL, STEEL CONSTRUCTION, CURVE FROSTED ACRYLIC LENS, WIDE DISTRIBUTION, 0-10V DIMMING.
D1	KENALL	BHDL4-FF-2FW-23L-35K8-CSS-G-RIG4-120-DIM1	23W LED, 2419 LUMENS, 4000°K, 83 CRI	RECESSED, CEILING	120V	4" APERTURE X 6" DEEP LED DOWNLIGHT, CLEAR POLYCARBONATE FLUSH LENS WITH FASTENERS, CLEAR SEMI-SPECULAR REFLECTOR, 0-10V 1% DIMMING, IP65 RATED, WHITE TRIM FINISH.
D2	WESTINGHOUSE	5107200	12W LED, 900 LUMENS, 3000°K, 90 CRI	RECESSED, CEILING	120V	6" APERTURE SLIM LED DOWNLIGHT, ALUMINUM CONSTRUCTION, DIMMABLE, WET LOCATION RATED, WHITE FINISH.
D3	NOT USED	-	-	-	-	-
F	KENALL	RFW-A-0/0-1-WLL-120-2/G-1	1W LED, 4000°K	RECESSED, WALL	120V	6"H X 9"W X 3.5"D NIGHT LIGHT, STEEL CONSTRUCTION, PRISMATIC POLYCARBONATE INNER LENS, CLEAR POLYCARBONATE OUTER LENS, HARDENED SECURITY SCREWS, WHITE FINISH.
X	EMERGI-LITE	WW--SVXN-1-R-D-4X (690.0454-E TAMPERPROOF BIT) - 199.0133-E(TEST MAGNETS)	3.7W UNIT	UNIVERSAL WALL / CEILING / END	120V	SINGLE FACE EXIT SIGN, NEMA 4X HOUSING , VANDAL RESISTANT, WHITE FACE, RED LETTERING, BATTERY BACK-UP WSELF TEST DIAGNOSTICS FOR 90 MINUTES, TAMPER-PROOF SCREWS, TEST MAGNETS,
	DUAL LITE	LG250-SI	250W	SURFACE, WALL	120V	16.75"W X 6.3"D X 11.75"H EMERGENCY BATTERY INVERTER, SELF TESTING/DIAGNOSTICS.

ELECTRICAL PANEL SCHEDULE

PANEL DESIGNATION	PANEL MOUNTING	SOURCE	LOCATION	VOLTAGE	MAIN LUGS ONLY	MAIN CIRCUIT BREAKER	AIC	NUMBER OF POLES	QUANTITY AND SIZE OF BREAKERS	REMARKS
MDP	SURFACE	NORMAL	BOILER ROOM	120/208V 3Ø	600A BUS	600A 3P	14,000	42	SEE RISER/PANEL SCHEDULE	
EDP	SURFACE	EMERGENCY	BOILER ROOM	120/208V 3Ø	600A	-	14,000	42	SEE RISER/PANEL SCHEDULE	
LP	SURFACE	EMERGENCY	BOILER ROOM	120/208V 3Ø	100A	-	10,000	18	SEE PANEL SCHEDULE	
RP	SURFACE	EMERGENCY	BOILER ROOM	120/208V 3Ø	225A	-	10,000	42	SEE PANEL SCHEDULE	
KP	RECESSED	EMERGENCY	PREP KITCHEN	120/208V 3Ø	100A	-	10,000	30	SEE PANEL SCHEDULE	
MP1	SURFACE	EMERGENCY	BOILER ROOM	120/208V 3Ø	225A	-	10,000	54	SEE PANEL SCHEDULE	
MP2	SURFACE	EMERGENCY	BOILER ROOM	120/208V 3Ø	225A	-	10,000	54	SEE PANEL SCHEDULE	

GENERAL ELECTRICAL NOTES

1. THE CONTRACTOR SHALL VISIT THE JOB SITE TO DETERMINE WHAT EXISTING CONDITIONS WILL BE ENCOUNTERED. SUBMITTAL OF A BID SHALL INDICATE THAT THE CONTRACTOR IS AWARE OF ALL EXISTING CONDITIONS.
2. ALL ELECTRICAL WORK TO BE DONE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND LOCAL CODES WHERE APPLICABLE.
3. REFER TO THE PROJECT SPECIFICATIONS WHICH ACCOMPANY THESE DRAWINGS AND ARE PART OF THE CONTRACT.
4. WHERE THE SCOPE OF THE PROJECT REQUIRES COORDINATION WITH THE LOCAL UTILITY COMPANY, ALL COSTS INCURRED BY THAT UTILITY SHALL BE REFLECTED IN THE CONTRACTOR'S BID. THIS SHALL INCLUDE ANY AND ALL COSTS ABOVE THOSE INDICATED ON THESE PLANS.
5. CONTRACTOR TO BE RESPONSIBLE FOR ALL CUTTING AND PATCHING IN FLOORS AND WALLS FOR INSTALLATION OF ELECTRICAL DEVICES.
6. CONTRACTOR SHALL SEAL ALL WALL / FLOOR PENETRATIONS AND COMPARTMENTALIZATION WALLS WITH A UL APPROVED FIRE STOP. REFER TO ARCHITECTURAL DRAWINGS FOR ALL LOCATIONS.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FINAL CONNECTIONS TO ALL ELECTRICALLY OPERATED EQUIPMENT.
8. THE WORK OF ALL TRADES SHALL BE COORDINATED. NECESSARY OFFSETS TO ALLOW CLEARANCES, HEADROOM OR AVOID INTERFERENCES SHALL BE PROVIDED BY ALL CONTRACTORS.
9. COORDINATE WITH THE MECHANICAL EQUIPMENT INSTALLING CONTRACTOR AND APPROVED DUCT AND PIPE SHOP DRAWINGS IN THE PLACEMENT OF DUCTWORK WITH RESPECT TO THE ELECTRICAL PANELS.
10. PROVIDE PULL BOXES WHEREVER NECESSARY TO FACILITATE THE PULLING OF CONDUCTORS. LOCATIONS SHALL BE COORDINATED WITH OTHER TRADES IN ORDER TO MAINTAIN ACCESS AS WELL AS CLEARANCE FROM OTHER TRADES SYSTEMS.
11. ALL DRAWINGS ARE DIAGRAMMATIC. ALL LOCATIONS TO BE SET IN FIELD. FOR EXACT LOCATION OF OUTLETS, CONTRACTOR SHALL COORDINATE WITH APPROVED ARCHITECTURAL PLANS FOR COUNTERTOP, CABINET, AND EQUIPMENT LOCATIONS.

DEMOLITION LEGEND

- LIGHT FIXTURE
- LIGHT FIXTURE
- LIGHT FIXTURE
- LIGHT FIXTURE
- SINGLE OR DOUBLE FACE EXIT SIGN
- S — WALL SWITCH CONTROL
- CEILING MOUNTED OCCUPANCY SENSOR
- DUPLEX RECEPTACLE
- HEAVY DUTY RECEPTACLE
- JUNCTION BOX
- MOTOR OUTLET
- DISCONNECT SWITCH
- COMMUNICATIONS OUTLET
- ELECTRIC PANELBOARD SURFACE/FLUSH MOUNTED
- F — FIRE ALARM PULL STATION
- FIRE ALARM COMBINATION HORN/SPEAKER AND STROBE
- FIRE ALARM WALL MOUNTED STROBE
- S — FIRE ALARM SMOKE DETECTOR
- FACP — FIRE ALARM CONTROL PANEL
- ANN — FIRE ALARM ANNUNCIATOR
- CEILING SPEAKERS
- PB — PUSH BUTTON DOOR OPERATOR

LEGEND

- $S — SINGLE POLE WALL SWITCH CONTROL, 48" A.F.F.
- $S^3 — 3-WAY WALL SWITCH CONTROL, 48" A.F.F.
- $S^4 — 4-WAY WALL SWITCH CONTROL, 48" A.F.F.
- $S_D — DIMMER SWITCH CONTROL, 48" A.F.F.
- $S^{OS} — WALL MOUNTED OCCUPANCY SENSOR
- OS — CEILING MOUNTED OCCUPANCY SENSOR
- DUPLEX RECEPTACLE, 18" A.F.F. UNLESS NOTED OTHERWISE
- DUPLEX RECEPTACLE WITH GROUND FAULT PROTECTION, 18" A.F.F. UNLESS NOTED OTHERWISE
- DOUBLE DUPLEX RECEPTACLE, 18" A.F.F. UNLESS NOTED OTHERWISE
- HEAVY DUTY RECEPTACLE, 18" A.F.F. UNLESS NOTED OTHERWISE
- JUNCTION BOX
- BI — BATTERY INVERTER
- VOICE / DATA OUTLETS CONSISTING OF A 1-GANG BOX, 1-1/4" CONDUIT STUBBED ABOVE ACCESSIBLE CEILING FOR WIRING BY OWNER'S PREFERRED VENDOR.
- WALL MOUNTED STAFF ASSISTANCE SECURITY GRADE SPEAKER PHONE, 48" A.F.F.
- SA
- ELECTRIC PANELBOARD SURFACE/FLUSH MOUNTED
- BRANCH WIRING LOCATED BELOW THE SLAB
- CIRCUIT HOMERUN LOCATED BELOW THE SLAB
- BRANCH WIRING CONCEALED WITHIN BUILDING
- CIRCUIT HOMERUNS CONCEALED WITHIN THE BUILDING
- MOTOR OUTLET
- NON-FUSED DISCONNECT SWITCH
- FUSED DISCONNECT SWITCH
- $S_{EM} — EMERGENCY SHUT-OFF SWITCH CONTROL
- $S_M — MANUAL MOTOR STARTER
- $S_T — MANUAL MOTOR STARTER W/THERMAL OVERLOAD
- F — FIRE ALARM PULL STATION WITH AUDIBLE STOPPER COVER, 48" A.F.F.
- FIRE ALARM COMBINATION HORN/SPEAKER AND STROBE WITH LEXAN ANTI-LIGATURE COVER. 80" A.F.F. TO THE CENTER OF LENS
- FIRE ALARM WALL MOUNTED STROBE WITH LEXAN ANTI-LIGATURE COVER. 80" A.F.F. TO THE CENTER OF LENS
- FIRE ALARM CEILING MOUNTED SPEAKER AND STROBE
- FIRE ALARM CEILING MOUNTED STROBE
- S — FIRE ALARM SMOKE DETECTOR
- S_D — FIRE ALARM SMOKE DETECTOR WITH SOUNDER BASE FOR SLEEPING QUARTERS
- D — FIRE ALARM DUCT DETECTORS
- T — SPRINKLER SYSTEM TAMPER SWITCH
- F — SPRINKLER SYSTEM FLOW SWITCH
- FACP — FIRE ALARM CONTROL PANEL
- ANN — FIRE ALARM ANNUNCIATOR
- A.F.F. — ABOVE FINISHED FLOOR
- C.B. — CIRCUIT BREAKER
- GFI — GROUND FAULT CIRCUIT INTERRUPTER
- TP — TAMPER PROOF
- EWC — ELECTRIC WATER COOLER
- WP/WR — WEATHERPROOF/WEATHER RESISTANT
- NL — INDICATES FIXTURE ON UN-SWITCHED NIGHT LIGHT AND LIFE SAFETY LIGHTING CIRCUIT

ELECTRICAL SPECIFICATIONS

1. ALL WORK SHALL COMPLY WITH ALL APPLICABLE CODES, ORDINANCES, AND RULES AND REGULATIONS IN EFFECT. THE NATIONAL ELECTRICAL CODE SHALL REPRESENT THE MINIMUM REQUIREMENTS. THE CONTRACTOR SHALL ARRANGE AND PAY FOR ALL PERMITS, TESTS AND INSPECTIONS REQUIRED. FURNISH CERTIFICATE OF INSPECTION TO THE OWNER AT TIME OF COMPLETION.
2. PROVIDE ALL LABOR, MATERIALS, EQUIPMENT AND SUPERVISION NECESSARY TO INSTALL A COMPLETE AND OPERATING ELECTRICAL SYSTEM AS INDICATED ON THE DRAWINGS AND AS SPECIFIED HEREIN.
3. INSTALL ALL WORK IN A NEAT AND WORKMANLIKE MANNER. CUTTING AND PATCHING SHALL BE PERFORMED BY SKILLED TRADESMEN NORMALLY EMPLOYED FOR THE WORK INVOLVED.
4. PROVIDE ALL REQUIRED TESTS TO ASSURE THAT ALL SYSTEMS ARE FREE OF GROUNDS, OPENS AND SHORTS.
5. ALL LABOR AND MATERIALS SHALL BE GUARANTEED TO BE FREE FROM DEFECTS FOR A PERIOD OF ONE YEAR OF OPERATION FROM DATE OF ACCEPTANCE BY THE OWNER.
6. THE INTERPRETATION OF THE OWNER'S REPRESENTATIVE WILL BE FINAL IN THE EVENT THERE IS A LACK OF UNDERSTANDING OF THE FULL SCOPE OR REQUIREMENTS OF THE SYSTEMS UNDER THIS CONTRACT.
7. ALL SERVICE INTERRUPTIONS TO THE ELECTRIC OR RELATED SYSTEMS, WHETHER DURING REGULAR WORKING HOURS OR AT ANY OTHER TIME, MUST BE COORDINATED WITH THE OWNER'S REPRESENTATIVE IN WRITING AHEAD OF TIME. ALL SUCH INTERRUPTIONS SHALL BE SO SCHEDULED AND PLANNED AS TO REQUIRE A MINIMUM OF TIME AND SHALL ONLY OCCUR ONLY DURING A MUTUALLY SATISFACTORY PERIOD.
8. FASTENING OF EQUIPMENT, ETC. TO THE BUILDING CONSTRUCTION SHALL BE BY USE OF APPROVED LEAD SHEATHED EXPANSION BOLTS FOR MASONRY CONSTRUCTION OR A J-HOOK, LOCK WASHER AND NUT FOR NON-MASONRY CONSTRUCTION. THE STANDARD ROOF ASSEMBLY IS NOT CONSIDERED STRUCTURAL AND THERE SHOULD BE NOTHING SUPPORTED FROM IT. INDICATED SUPPORTS IN DETAILS SHALL BE CONNECTED TO BUILDING STEEL / STRUCTURE BY WAY OF SUPPLEMENTAL STEEL, STRUT, OR CLAMPS. A BUILT UP ROOFING SYSTEM IS NOT STRUCTURAL AND SHALL NOT BE SUPPORTED FROM UNDER ANY CIRCUMSTANCES.
9. FURNISH AND INSTALL ALL REQUIRED SUPPORTS AND HANGERS FOR EQUIPMENT. CONDUITS, DUCTS AND WIREWAYS SHALL BE PROPERLY SUPPORTED TO PREVENT SAG OR STRAIN. ALL CLASS 2 WIRING SPLICES, JUNCTIONS AND TERMINATIONS SHALL BE INSTALLED IN METALLIC BOXES.
10. THE WORK OF ALL TRADES SHALL BE COORDINATED. NECESSARY OFFSETS TO ALLOW CLEARANCE, HEADROOM OR AVOID INTERFERENCE SHALL BE PROVIDED.
11. SUBSTITUTION OF AN EQUAL OR BETTER PRODUCT OTHER THAN THAT SPECIFIED SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW. THE ENGINEER'S DECISION TO ACCEPT OR REJECT SHALL BE FINAL.
12. CONTRACTOR SHALL VISIT THE JOB SITE TO DETERMINE WHAT EXISTING CONDITIONS WILL BE ENCOUNTERED. SUBMITTAL OF A PROPOSAL SHALL INDICATE THAT THE CONTRACTOR IS AWARE OF ALL EXISTING CONDITIONS.
13. EXCAVATION SHALL BE OF THE OPEN-TRENCH METHOD AND TO THE DEPTHS AND WIDTHS AS MAY BE NECESSARY. THE CONTRACTOR SHALL DO ALL EXCAVATION REQUIRED IN CONNECTION WITH HIS WORK. BOTTOMS OF TRENCHES SHALL BE EXCAVATED TO A UNIFORM GRADE. ALL MATERIALS EXCAVATED SHALL BE DEPOSITED ON THE SIDE OF THE TRENCHES AND BEYOND THE REACH OF THE SLIDES. EXCAVATED MATERIAL SHALL NOT BE PILED WHERE IT WILL INTERFERE WITH TRAFFIC.
14. AFTER WORK IN TRENCHES HAS BEEN COMPLETED, THEY SHALL BE FILLED WITH GOOD, CLEAN, FINE EARTH IN 8" LAYERS AND SHALL BE PNEUMATICALLY TAMPED BEFORE THE NEXT LAYER OF MATERIAL HAS BEEN FILLED IN. THE BACKFILL SHALL BE FREE OF EXCAVATED ROCK, CINDERS, STONES, BRICKBATS OR OTHER DEBRIS. RETURN GRASS AREA TO ORIGINAL CONDITION.
15. PROVIDE PERMANENT IDENTIFICATION LABELS ON ALL NEW ELECTRICAL EQUIPMENT.
16. THE DRAWINGS AND NOTES INDICATE THE MAJOR ITEMS OR WORK TO BE INCLUDED IN THIS CONTRACT, BUT THIS CONTRACT SHALL INCLUDE THE REMOVAL, RELOCATION, RENEWAL AND REINSTALLATION OF ANY CONDUIT, WIRE, BOXES, FIXTURES, ETC., EXPOSED OR CONCEALED IN THE EXISTING BUILDING WHICH WILL INTERFERE WITH THE WORK OF THIS CONTRACT.
17. DEMOLITION WORK AT ALL TIMES SHALL BE SUBJECT TO THE DIRECTION AND APPROVAL OF THE OWNER'S REPRESENTATIVE AND IT SHALL BE CARRIED ON IN SUCH A MANNER AS NOT TO INTERFERE WITH THE OPERATION OF THE SYSTEMS. THE CONTRACTOR SHALL COOPERATE WITH THE OWNER'S REPRESENTATIVE DURING DEMOLITION SO THAT MATERIALS ARE PROMPTLY REMOVED AS THEY ARE UNCOVERED.
18. PROVIDE NEW FIRE ALARM SYSTEM. SYSTEM SHALL BE FULLY ADDRESSABLE WITH ALL PERIPHERAL DEVICES, INCLUDING SMOKE DETECTORS, DUCT DETECTORS, HORNS, STROBES, SPEAKERS, AND ALL CONDUIT, WIRING, AND POWER REQUIRED FOR A COMPLETE SYSTEM. PROVIDE CONTROL PANEL, REMOTE ANNUNCIATOR, AND VOICE EVACUATION IN LARGE OCCUPANCY AREAS. SYSTEM SHALL BE BY ONE OF THE FOLLOWING MANUFACTURERS: NOTIFIER, SIMPLEX, SIEMENS, SILENT KNIGHT, EDWARDS, OR APPROVED EQUAL.
19. BRANCH WIRING CONNECTIONS TO ALL LIGHTING FIXTURES, SWITCH AND RECEPTACLE DEVICES AND POWER WIRING CONNECTIONS TO ALL MOTORS AND ELECTRICALLY OPERATED EQUIPMENT SHALL BE INSTALLED IN ELECTRICAL METALLIC TUBING (EMT).
20. RACEWAYS SHALL BE RIGID STEEL CONDUIT, INTERMEDIATE METAL CONDUIT, ELECTRICAL METALLIC TUBING, PVC CONDUIT FOR UNDERGROUND AND FLEXIBLE GALVANIZED STEEL FOR LIGHTING FIXTURE CONNECTION. MINIMUM SIZE CONDUIT SHALL BE 3/4".
21. JUNCTION BOXES SHALL BE GALVANIZED SHEET STEEL AND PRESS STEEL BOXES WITH AMPLE SIZE AS REQUIRED BY N.E.C. WITH SCREW COVERS.
22. OUTLET BOXES SHALL BE 4" SQUARE GALVANIZED, PRESSED STEEL BOX WITH EXTENSION RING TO MATCH THE NUMBER OF DEVICES BEING INSTALLED.
23. WEATHERPROOF OUTLET BOXES SHALL HAVE SPRING-HINGED WATERPROOF COVER SUITABLY CONFIGURED FOR EACH APPLICATION, INCLUDING FACE PLATE GASKETS AND CORROSION-RESISTANT FASTENERS. BOXES AND DEVICES SHALL BE RECESSED, WEATHERPROOF WITH SMOKE OPAQUE IN-USE COVERS. INTERMATIC CAT. #WP1000RSGRC OR APPROVED EQUAL.
24. BRANCH CIRCUITING: PROVIDE FACTORY FABRICATED WIRE OF SIZES, RATINGS, MATERIALS AND TYPES INDICATED FOR EACH SERVICE. ALL BRANCH CIRCUIT WIRING SHALL BE ACTHH OR HCF (HEALTH CARE FACILITY CABLE). THESE CABLES SHALL BE FACTORY COLOR CODED AS INDICATED IN THE CONDUIT AND WIRE SECTION. FIELD COLOR CODING OF CONNECTIONS POINTS AND SPLICES IS NOT ACCEPTABLE FOR THIS PROJECT. MC CABLE IS NOT APPROVED AS A WIRING METHOD WITHIN THE FACILITY. REFER TO CONDUIT AND WIRE SECTION FOR CIRCUITS ON EMERGENCY. ALL EXTERIOR WIRE SHALL BE COPPER CONDUCTORS. WITH 600 VOLT THERMOPLASTIC MOISTURE-RESISTANT INSULATION, TYPE XHHW.
25. DEVICE PLATES SHALL BE 0.04 INCH THICK, STAINLESS STEEL SATIN FINISH FOR UNFINISHED AREAS, HIGH IMPACT NYLON FOR FINISHED AREAS, COLOR TO BE WHITE.
26. RECEPTACLES: HEAVY DUTY DUPLEX, 20 AMP, 120 VOLT, 3 WIRE, TAMPERPROOF / CHILDPROOF, HOSPITAL GRADE GROUNDING TYPE AS MFGR. BY HUBBELL, ARROW-HART, PASS AND SEYMOUR. NOTE TO ELECTRICAL CONTRACTOR: "ALL RECEPTACLE COVER PLATES TO BE PERMANENTLY MARKED WITH THE PANEL DESIGNATION AND CIRCUIT NUMBER".
26. SWITCHES SHALL BE EXTRA HEAVY DUTY, SILENT TOGGLE TYPE, 1 POLE, 2 POLE, 3-WAY, OR 4-WAY, RATED 20 AMPERES AT 120/277 VOLT, WITH GREEN HEXAGONAL EQUIPMENT GROUND SCREW, METAL PLASTER EARS, AND SIDE WIRED TERMINALS, HUBBELL CAT. #HBL122 SERIES OR APPROVED EQUIVALENT. DEVICES TO BE IVORY IN COLOR.
27. PANELBOARD SHALL BE A SURFACE OR RECESS MOUNTED LOAD CENTER STYLE WITH A MAIN CIRCUIT BREAKER AND COPPER BUS. PANEL TO BE RATED 100 AMP, 120/208 VOLT, 3 PHASE, 4 WIRE WITH GROUND BUS. BREAKERS TO BE BOLT-ON TYPE. PANEL AND BREAKERS SHALL HAVE AN INTERRUPTING RATING OF 10,000 AMP RMS SYM. PANEL COVERS TO BE FULLY PIANO HINGED FOR DOOR IN DOOR ACCESS. ALL RECESSED MOUNTED PANELS SHALL HAVE 6 SPARE 1" CONDUITS STUBBED OUT ABOVE ACCESSIBLE CEILINGS FOR FUTURE CIRCUITS. SQUARE D, SIEMENS, CUTLER HAMMER, OR APPROVED EQUAL. PROVIDE THE FOLLOWING CIRCUIT BREAKERS:
28. DISTRIBUTION PANELBOARD SHALL BE ASURFACE MOUNTED, I-LINE TYPE PANELBOARD WITH A 400 AMP, 3 POLE MAIN CIRCUIT BREAKER. MAIN BREAKER SHALL BE A SERVICE ENTRANCE,FULLY RATED DEVICE. PANELBOARD SHALL INCLUDE ALL INDICATED MOLDED CASE CIRCUIT BREAKERS. BREAKERS SHALL HAVE A MINIMUM INTERRUPTING RATING OF 14,000 AMP RMS SYM., SQUARE D, SIEMENS, CUTLER HAMMER, OR APPROVED EQUAL.
29. MOLDED CASE CIRCUIT BREAKERS SHALL BE FACTORY ASSEMBLED, MOLDED CASE CIRCUIT BREAKERS OF FRAME SIZE INDICATED, 120 OR 208 VOLT, 60 HZ, ONE, TWO OR THREE POLES. BREAKER TO HAVE PERMANENT THERMAL INSTANTANEOUS MAGNETIC TRIPS IN EACH POLE WITH AMPERE RATINGS AS INDICATED. PROVIDE CIRCUIT BREAKERS TO MATCH EXISTING PANEL MANUFACTURER ON SITE, AL/CU RATED, AS MANUFACTURED BY SQUARE D, SIEMENS, CUTLER HAMMER, OR APPROVED EQUAL.
30. DISCONNECT SWITCHES SHALL BE OF SIZES NOTED ON THE DRAWINGS, FUSIBLE OR NON-FUSIBLE AND CONTAINED IN A GENERAL PURPOSE ENCLOSURE. ALL SWITCHES SHALL BE TYPE HD AND HAVE QUICK-MAKE, QUICK- BREAK OPERATION. AN ARRANGEMENT SHALL BE PROVIDED FOR LOCKING THE OPERATING HANDLE IN THE "ON" OR "OFF" POSITION. SAFETY SWITCHES SHALL HAVE THE PROPER TYPE METAL ENCLOSURE, I.E., STANDARD, WEATHERPROOF, ETC., TO SUIT THEIR SPECIFIC LOCATION AS REQUIRED BY THE NATIONAL ELECTRICAL CODE, SQUARE D, SIEMENS, CUTLER HAMMER, OR APPROVED EQUAL.
31. MANUAL MOTOR STARTER SHALL BE A TOGGLE ACTION, ON-OFF CONTROL WITH THERMAL OVERLOAD PROTECTION FOR SINGLE PHASE MOTORS OF LESS THAN 1/2 HP. STARTER TO BE HOUSED IN A GENERAL PURPOSE NEMA 1 TYPE ENCLOSURE. SQUARE D, SIEMENS, CUTLER HAMMER, OR APPROVED EQUAL.
32. A PROTECTIVE DEVICE COORDINATION STUDY SHALL BE PERFORMED TO PROVIDE THE NECESSARY CALCULATIONS AND LOGIC DECISIONS REQUIRED TO ESTABLISH REQUIRED EQUIPMENT FAULT CURRENTS AND BREAKER TRIP CHARACTERISTICS AND SETTINGS.
33. AN ARC FLASH ANALYSIS WILL BE PERFORMED BASED ON EXISTING SHORT CIRCUIT VALUES PROVIDED BY THE UTILITY OR IN CONJUNCTION WITH A SHORT CIRCUIT STUDY. THE RESULTS FROM THE SHORT CIRCUIT STUDY WILL BE USED TO DETERMINE ARC ENERGY LEVELS AT EACH DEFINED LOCATION IN THE FACILITY FOR A SPECIFIED WORKING DISTANCE. BASED ON THE ARC ENERGY AT EACH DEFINED POINT, THE PROPER PPE WILL BE DETERMINED, AND IF THE ARCH ENERGY LEVEL EXCEEDS AVAILABLE PPE RATINGS, THE LOCATIONS WILL BE NOTED. LABELS ARE TO BE PROVIDED FOR EACH EVALUATED LOCATION THAT LISTS THE HAZARD LEVELS ALONG WITH THE REQUIRED PPE WHILE WORKING IN THAT AREA.
34. INSTALL PRE-MANUFACTURER, SELF-ADHESIVE LABELS. THE LABEL SHALL INDICATE THE RISK LEVEL (0 TO 4) AS DEFINED BY ARC FLASH HAZARD WARNING LABELS NFPA 70E, AND AS INDICATED BY THE ARC FLASH STUDY AND SYSTEM VOLTAGE. LABELS SHALL BE PLACED ON ALL PROJECT ELECTRICAL DISTRIBUTION COMPONENTS, INCLUDING, BUT NOT LIMITED TO PANEL BOARDS, DISTRIBUTION BOARDS, MOTOR CONTROL CENTERS AND SWITCHBOARDS.
35. PRIOR TO THE CERTIFICATE OF OCCUPANCY THE CONTRACTOR SHALL SUBMIT TO THE OWNER ALL PERTINENT OPERATION AND MAINTENANCE MANUALS AS WELL AS ANY APPLICABLE WARRANTIES TO THE ITEMS SPECIFIED ON THIS PROJECT.

FIRE ALARM PERFORMANCE SPECIFICATION

E.C. TO OBTAIN THE SERVICES OF A FIRE ALARM VENDOR IN THE STATE OF PENNSYLVANIA AND LICENSED BY THE STATE. THE DEVICES INDICATED ON THE PLANS ARE TO SHOW INTENT AND A BASELINE MINIMUM. ADDITIONAL DEVICES REQUIRED BEYOND THOSE INDICATED SHALL BE INCLUDED AND REFLECTED IN THE BID. ALL CALCULATIONS FOR SYSTEM POWER, SUPPLY REQUIRED BATTERY BACK-UP, HORN DB'S AND STROBE CANDELAS SHALL BE PERFORMED BY VENDOR WITH DEVICES SELECTED ACCORDINGLY. ALL SYSTEM WIRING SHALL BE IN FREE AIR AND SUPPORTED PROPERLY ABOVE ACCESSIBLE CEILINGS. CONDUIT SHALL BE RUN IN WALLS FROM DEVICES AND STUBBED ABOVE CEILING FOR PROTECTION. THE SYSTEM SHALL BE ADDRESSABLE AND SHALL BE COMPLETE AND OPERATIONAL MEETING ALL REQUIREMENTS OF THE STATE OF PENNSYLVANIA, NFPA AND THE ADA. THE FOLLOWING ARE SOME OTHER BASE REQUIREMENTS:

1. SYSTEM COMPONENTS TO INCLUDE BUT NOT BE LIMITED TO HORN, STROBES, PULL STATIONS, SMOKE AND DUCT DETECTORS, MAIN PANEL, ANNUNCIATOR, POWER SUPPLIES, ETC. REFER TO PLANS FOR THESE LOCATIONS.
2. IT IS THE INTENT THAT THE DRAWINGS AND SPECIFICATIONS SHALL PROVIDE A WORKING INSTALLATION. THE OMISSION OF EXPRESSED REFERENCE IN THE DRAWINGS OR SPECIFICATION TO ANY LABOR OR MATERIAL NECESSARY FOR THE PROPER EXECUTION OF THE WORK IN ACCORDANCE WITH PRESENT GOOD PRACTICE OF THE TRADE SHALL NOT RELIEVE THIS CONTRACTOR FROM PROVIDING, AT NO COST, SUCH ADDITIONAL LABOR AND MATERIAL UNDER THIS CONTRACT.
3. ALL WIRING SHALL COMPLY WITH PROJECT SPECIFICATIONS, NFPA 72, NEC ARTICLE 760, AND THE REQUIREMENTS OF THE AHJ. NO FIRE ALARM POWER-LIMITED WIRING SHALL BE PERMITTED IN THE SAME RACEWAY AS NO POWER-LIMITED UNLESS SEPARATED BY AN APPROVED BARRIER.
4. ALL IN WALL CONDUIT SHALL BE MINIMUM OF 3/4" EMT.
5. ALL CONDUITS, CONDUCTORS, RACEWAYS, EQUIPMENT, ETC., SHALL BE SUPPORTED IN AN APPROVED MANNER BY THE BUILDING STRUCTURE, INCLUDING HANGERS AND RESTRAINTS, IN ACCORDANCE WITH ALL APPLICABLE CODES AND SEISMIC RESTRAINT REQUIREMENTS.
6. ALL FIRE RATED PENETRATIONS SHALL BE MADE WITH A UL APPROVED FIRE STOP MATERIAL OR METHOD.
7. SEAL ALL PENETRATIONS THROUGH EXTERIOR WALLS, FLOORS, AND ROOFS WITH WATERTIGHT MATERIAL.
8. FURNISH AND INSTALL ACCESS PANELS WHERE REQUIRED FOR ACCESS TO CONCEALED EQUIPMENT WHERE NO OTHER MEANS IS PROVIDED.
9. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING PATCHING AND PAINTING REQUIRED FOR COMPLETE FIRE ALARM SYSTEM INSTALLATION.
10. MOUNTING FOR ALL DEVICES AND APPLIANCES SHALL COMPLY WITH STATE, LOCAL, AND ADAAG.
11. THE FIRE ALARM VENDOR MUST CALCULATE THE NOTIFICATION APPLIANCES CANDELA RATINGS AND DESIGNATE THEM ON THE SHOP DRAWINGS. ALL STROBE SETTING MUST COMPLY WITH NFPA 72 REQUIREMENTS.
12. SYSTEM MANUFACTURER SHALL COORDINATE FINAL QUANTITIES AND LOCATIONS OF ALL SYSTEM MONITORS AND CONTROL MODULES WITH THE RESPECTIVE CONTRACTORS FOR INTERFACE. FINAL LOCATIONS TO BE SHOWN ON SHOP DRAWINGS. CHECK AND VERIFY ALL CONDITIONS AT THE SITE WITHIN THE CONTRACT LIMITS. THE INSTALLATION CONTRACTOR IS RESPONSIBLE FOR ALL FIELD MEASUREMENTS AND VERIFICATION OF FIELD CONDITIONS PRIOR TO COMMENCING WORK. ANY CHANGES IN WORK NECESSITATED BY FAILURE OF THIS CONTRACTOR TO COMPLY WITH THIS PROCEDURE SHALL BE UNDERTAKEN BY THIS CONTRACTOR AT HIS/ HER OWN EXPENSE.
13. THE INSTALLATION CONTRACTOR IS RESPONSIBLE FOR REVIEWING THE FIRE ALARM SHOP DRAWING SUBMITTAL FOR COMPLETE COMPLIANCE WITH THE FULL SET OF BID DOCUMENTS PRIOR TO SUBMITTING TO THE ENGINEER FOR APPROVAL.
14. ACCEPTANCE TESTING MUST BE PERFORMED IN ACCORDANCE WITH NFPA 72 AND AHJ REQUIREMENTS.
15. UPON COMPLETION OF FINAL TESTING AND APPROVAL OF THE AHJ, THE SYSTEM VENDOR SHALL SUBMIT RECORD DRAWINGS TO THE OWNER DETAILING AS-BUILT CIRCUITING AS SHOWN ON THE INSTALLERS RED-LINE MARKUPS. THEY SHALL INCORPORATE ALL FIELD AND DESIGN DIRECTIVES GIVEN THROUGH OUT THE PROJECT.
16. ALL SYSTEMS ARE SHOWN SCHEMATICALLY. THE FLOOR PLANS ARE GENERALLY DIAGRAMMATIC AND INDICATIVE OF THE WORK TO BE PREFORMED. THE DRAWINGS ARE NOT INTENDED TO SHOW EXACT LOCATIONS OR TO SHOW EVERY CONDUCTOR, BOX, TERMINATION OR APPURTENANCE REQUIRED FOR A COMPLETE INSTALLATION. THE INSTALLATION CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH OTHER TRADES, TO ASCERTAIN THE EXACT LOCATIONS OF ALL SHOWN EQUIPMENT AND TO VERIFY REQUIRED CLEARANCES FOR INSTALLATION.
17. PROJECT TAMPER AND FLOW

MDP

PANEL SCHEDULE							120/208V, 3Ø, 4W LOCATION: MOUNTING: SURFACE		
CIRCUIT NUMBER	CIRCUIT BREAKER	LOCATION	LTG. VA	REC. VA	MTR. VA	HTG. VA	EQUIP. VA	LOCATION	CIRCUIT BREAKER	CIRCUIT NUMBER
1										2
3	50/3	ATS-1 PANEL "LP"						ATS-2 PANEL "EDP"	600/3	4
5										6
7										8
9										10
11										12
13										14
15										16
17										18
19										20
21										22
23										24
25										26
27										28
29										30
31										32
33										34
35										36
37										38
39										40
41										42
SUBTOTALS			######	######	######	######	######	MAIN BREAKER: 600A 3P		
TOTAL CONNECTED LOAD:						#########		BUS SIZE: 600A SERVICE ENTRANCE RATED		

EDP

PANEL SCHEDULE							120/208V, 3Ø, 4W LOCATION: MOUNTING: SURFACE		
CIRCUIT NUMBER	CIRCUIT BREAKER	LOCATION	LTG. VA	REC. VA	MTR. VA	HTG. VA	EQUIP. VA	LOCATION	CIRCUIT BREAKER	CIRCUIT NUMBER
1										2
3	150/3	PANEL "RP"						PANEL "KP"	75/3	4
5										6
7										8
9	200/3	PANEL "MP1"						PANEL "MP2"	200/3	10
11										12
13										14
15	100/3	GENERATOR SUPPORT PANEL								16
17										18
19										20
21										22
23										24
25										26
27										28
29										30
31										32
33										34
35										36
37										38
39										40
41										42
SUBTOTALS			######	######	######	######	######	MAIN BREAKER: M.L.O.		
TOTAL CONNECTED LOAD:						#########		BUS SIZE: 600A		

MP1

PANEL SCHEDULE								120/208V, 3Ø, 4W LOCATION: MOUNTING: SURFACE		
CIRCUIT NUMBER	CIRCUIT BREAKER	LOCATION	LTG. VA	REC. VA	MTR. VA	HTG. VA	EQUIP. VA	LOCATION	CIRCUIT BREAKER	CIRCUIT NUMBER
1					528	1500				2
3	25/2	PTAC-1			528	1500		PTAC-1	25/2	4
5					528	1500				6
7	25/2	PTAC-1			528	1500		PTAC-1	25/2	8
9					528	1500				10
11	25/2	PTAC-1			528	1500		PTAC-1	25/2	12
13					528	1500				14
15	25/2	PTAC-1			528	1500		PTAC-1	25/2	16
17					528	1500				18
19	25/2	PTAC-1			528	1500		PTAC-1	25/2	20
21					528	1500				22
23	25/2	PTAC-1			528	1500		Spare	25/2	24
25	20/1	EF-5			528			EF-6	20/1	26
27	20/1	EF-7			864					28
29					528			ECV-1	20/2	30
31	20/2	ECV-2				1500				32
33						1000				34
35	30/2	EDH-2				1500		ECV-3	20/2	36
37						1000				38
39	25/2	(EX)ACC-1 YORK TCD42B315A Condensing Unit				1250				40
41						2000				42
43	45/3	(EX)ACC-2 YORK YCS090C00A2AAA4A Condensing Unit				1250				44
45						2000		Mech Room 110 (EX)AHU-1 Fan Coil Unit 1.0HP Model #AP60D23A	15/2	46
47					458					48
49					1675					50
51					458					52
53					1675			Mech Room 110 (EX)AHU-2 Fan Coil Unit 1.5HP Model #NC090C00B6AAA2	15/3	54
SUBTOTALS			######	######	1384					
TOTAL CONNECTED LOAD:					9827			MAIN BREAKER: M.L.O.		
					1384					
					9827					
					1384					
					9827					