

UNDERSTANDING FLOOR PLANS
LEARNING DAY 2024

Agenda:

- What are Plans?
- Visualization & Interpretation
- Visualization of Buildings to Plans Examples
- Types of Plans
- Understanding a Cover Sheet
- Understanding a Title Block
- Primary Elements of a Floor Plan
- Primary Elements of a Furniture Plan
- Primary Elements of a Finish Plan
- Other types of Architectural Plans
- Example of Architectural Legends & Plans
- Interpretation of Building to Plans Examples
- Structural Plans & Legends
- Mechanical Plans & Legends
- Electrical Plans & Legends
- Plumbing Plans & Legends
- Assignments

What Are Plans?

- 2 Dimensional Representation of a 4 Dimensional Building
- Graphic and technical representations that indicate how to construct a building including:
 - Building Design
 - Materials Needed
 - Equipment to be Installed
 - Installation Methods
 - Building Code Requirements
- Part of the contract documents between Owner, architect, contractors and others to identify scope of work and responsibilities





Sets of plans can also be called:

- Construction Drawings
- Blueprints
- Plans
- Drawings



Blueprint reading is defined as the gathering of information from a print or plan and involves two principal elements: Visualization & Interpretation



Visualization is the ability to "see" or envision the size and shape of the structure from a set of plans



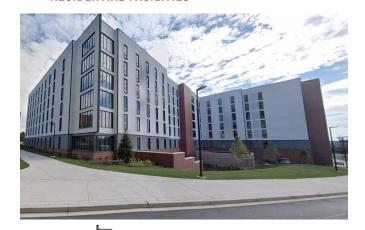
Interpretation is the ability to read lines, symbols, dimensions, notes and other information on the plan



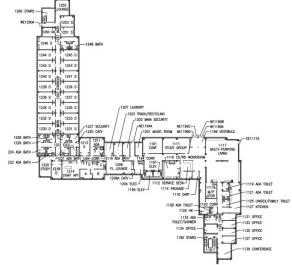
Visualization of Buildings Examples

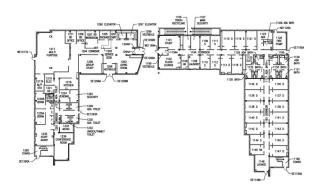


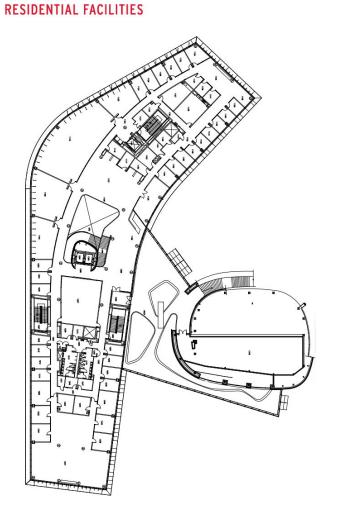
















Types of Plans:

- General Drawings (G or Cover)
- Architectural Drawings (A)
- Civil Drawings (C)
- Structural Drawings (S)
- Mechanical Drawings (M)
- Plumbing Drawings (P)
- Electrical Drawings (E)



In addition, for large projects there may additional plans, including, but not limited to: Fire Protection, Audio/Visual, IT, and Security Plans.

Cover Sheets

Identify the Project on the Cover Sheet

- Name of the Project
- Name of the Owner
- Name of the Firm(s) that designed the project

Additional Information may include:

- Table of Contents
- Schedule of Notations & Symbols
- General Notes about the project
- List of Abbreviations

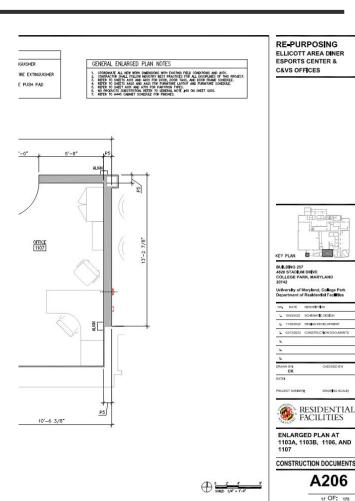




The Title Block

The Title Block is found on every sheet of a set of blueprints and includes:

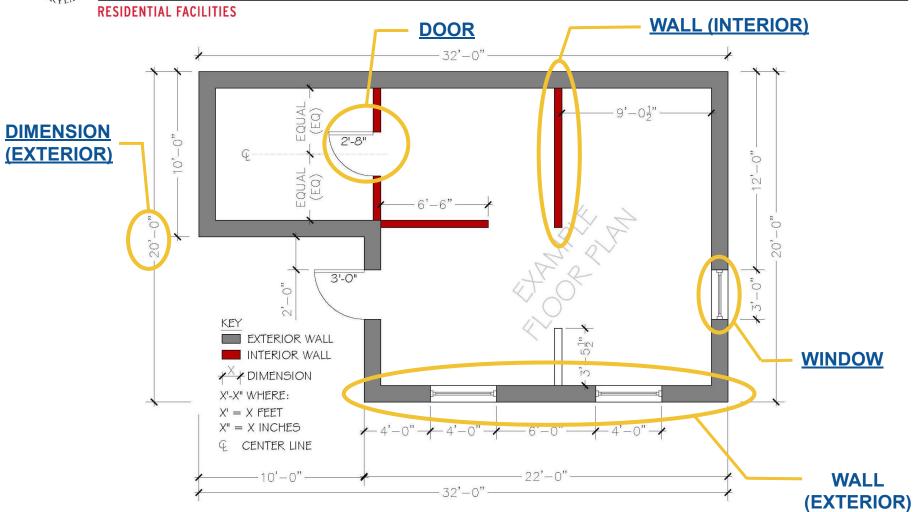
- Job title and location
- Key Plan
- Project Number
- Name of the architectural/engineering firm
- Sheet number and title
- Names or initials of those who did the drawing, checking, or approving of the drawings
- Date of completion of drawings
- Scale of the drawing

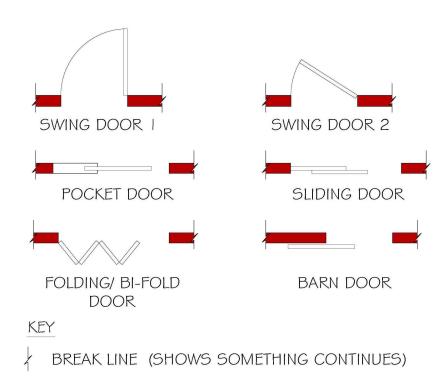


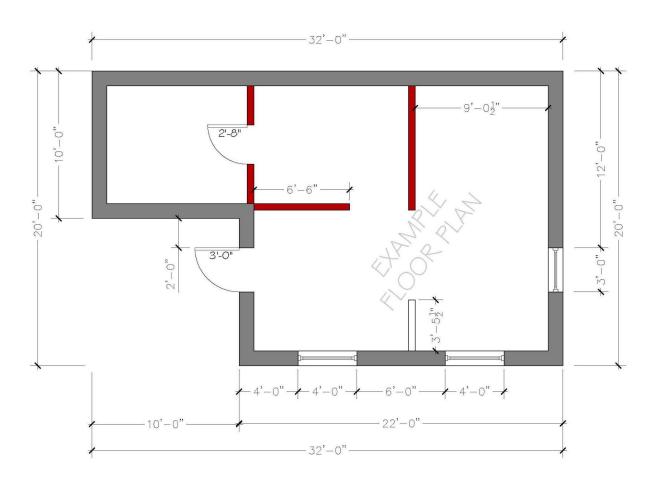


PRIMARY ELEMENTS OF A FLOOR PLAN

- WALLS:
 - EXTERIOR
 - INTERIOR
- WINDOWS
- DOORS
- DIMENSIONS







EXTERIOR WALLINTERIOR WALL

*X DIMENSION

X'-X" WHERE:

X' = X FEET

X'' = X INCHES

Q CENTER LINE

FEET = (')
(SINGLE
QUOTATION MARK)
INCHES = (")
(DOUBLE

QUOTATION MARK)

6' - 6" = ?

• 10' - 0" = ?

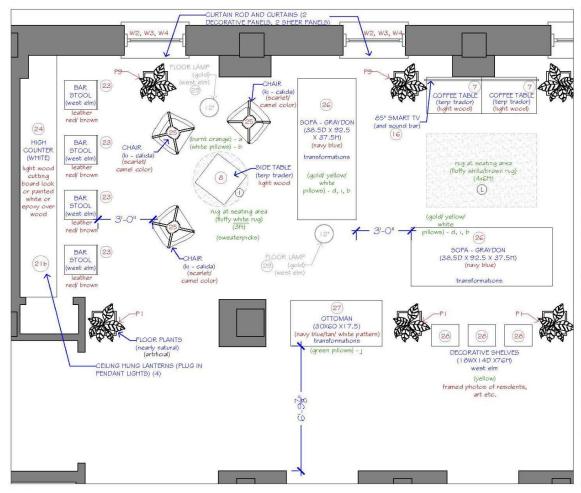
• 3' - 5 ½" = ?

9' - 0 1/2" = ?

PRIMARY ELEMENTS OF A FURNITURE PLAN

- **FURNITURE**
 - BEDS, DESKS, CHAIRS, TABLES ...
- <u>DIMENSIONS</u>
 - BETWEEN THE FURNITURE AND FLOOR PLAN ELEMENTS (WALLS, DOORS, WALK-WAYS ...)
- DETAILS ABOUT THE FURNITURE (SPECIFICATIONS)
 - PRODUCT NAME, BRAND/ MANUFACTURER, MATERIAL, FABRIC, COLOR, SPECIAL INSTRUCTIONS, PRICE, PRODUCT DIMENSIONS ...





FURN	ITURE	TOTAL PER PRICE ITEM
7	COFFEE TABLE2	\$40\$20
8	SIDE TABLE2	\$30\$15
(16)	85" 9MART TV	\$3000\$3000
23	STOOLS	\$3592\$449
24	COUNTERTOP2 (WITH BRACKETS)	\$1980\$990
25)	CALIDA (WOOD LEG)6 LOUNGE CHAIRS	\$12060\$2010
26)	GRAYDON LOUNGE SOFA3 (STRAIGHT ARMS)	\$XXX\$XXX
27)	BENCHMARK LOUNGE2 OTTOMAN	\$XXX\$XXX
28	DECORATIVE BOOKCASE3 (PROFILE BOOKCASE)	\$1497\$499
LIGHTI	ING	
216	CEILING HUNG LANTERN	3 \$1112\$139
29)	LOUNGE FLOOR LAMP	\$996\$249
TEXTI	LES (RUGS)	
1	PLUSH/ FLUFFY ROUND RUG2 (FAUX FUR SHEEPSKIN RUG)	\$198\$99
L	PLUGH RECTANGULAR RUG (PREMIUM FAUX FUR GHEEPGKIN RUG)	1\$137\$137
WIND	OW TREATMENT	
W2	4	\$xxx\$xxx
		\$XXX\$XXX
W4	8	\$XXX\$XXX
PLAN	TS/ PLANTERS	
PI	4	\$420\$105
		\$897\$219

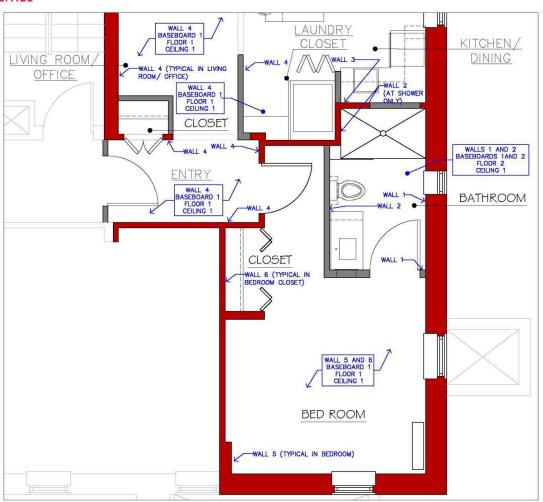
ESTIMATED TOTAL:\$XXX\$XXX



	FURNITURE SCI	HEDULE	20		9	
	ITEM/ PRODUCT NAME	MATERIAL	COLOR	DIMENSIONS	MANUFACTURER	QUANTITY (PER FLOOR)
7	COFFEE TABLE	WOOD	LIGHT WOOD	(24"w x 36"d)	TERP TRADER	NUMBER VARIES PER FLOOR (WHERE APPLICABLE)
3	SIDE TABLE	WOOD	LIGHT WOOD	(24'w x 24'd)	TERP TRADER	NUMBER VARIES PER FLOOR (WHERE APPLICABLE)
©	85" 9MART TV	SAMSUNG	BLACK	(74.5w X 12.9d X 45.1h) - WITH STAND	BESTBUY https://www.bestbuy.com/	I TV (PER FLOOR)
23)	STOOLS (BAR COUNTER)	IRON - FRAME LEATHER - SEAT	CHARCOAL - FRAME NUT SADDLE LEATHER - SEAT	19"w x 22"d x 39.8"h (30" SEAT HEIGHT)	WEST ELM (https://www.westelm.com/)	NUMBER VARIES PER FLOOR (WHERE APPLICABLE)
	LIGHTING SCHE	DULE				
	ITEM/ PRODUCT NAME		COLOR	DIMENSIONS	MANUFACTURER	QUANTITY (PER FLOOR)
219	CEILING HUNG LANTERN LIGHTING (PLUG IN) - Retro Rattan Bamboo Pendant Lights Hand Woven Spherical Stairwell Lighting	NATURAL BAMBOO FIBERS	NATURAL COLOR	30 CM (3), 35CM (3), 40 CM (3), 45 CM (3), 50 CM (3),55 CM (3) - FOURTH FLOOR 30CM (8) - FIRST FLOOR	LIGHTING-FOREST https://www.lighting-forest.com/	NUMBER VARIES PER FLOOR (WHERE APPLICABLE)
29	LOUNGE FLOOR LAMP (SCULPTURAL FLOOR LAMP)	METAL - BODY AND BASE GLASS - SHADE	CLEAR GLASS MEDIUM SIZED GLOBE - SHADE ANTIQUE BRASS - FINISH	12"diameter X 58" h	WEST ELM (https://www.westelm.com/)	NUMBER VARIES PER FLOOR (WHERE APPLICABLE)
	TEXTILES (RUG)	SCHEDULE		2		
	ITEM/ PRODUCT NAME	MATERIAL	COLOR	DIMENSIONS	MANUFACTURER	QUANTITY (PER FLOOR)
0	PLUSH/ FLUFFY ROUND RUG (FAUX FUR SHEEPSKIN RUG)	FAUX FUR SHEEPSKIN	WHITE	3 FT DIAMETER	SWEATERPICKS https://sweaterpicks.com/	NUMBER VARIES PER FLOOR (WHERE APPLICABLE)
0	PLUSH RECTANGULAR RUG (PREMIUM FAUX FUR SHEEPSKIN RUG)	PREMIUM FAUX FUR SHEEPSKIN	WHITE/BROWN	4 FT X 6 FT	SWEATERPICKS https://sweaterpicks.com/	NUMBER VARIES PER FLOOR (WHERE APPLICABLE)
	TEXTILES (PILLO	WS) SCHEDULE				
	ITEM/ PRODUCT NAME		COLOR	DIMENSIONS	MANUFACTURER	QUANTITY (PER FLOOR)
(3)	BURNT ORANGE PILLOW		BURNT ORANGE			
(b)	WHITE PILLOW		WHITE			
	PLANT/ PLANTEI	R SCHEDULE				-
	ITEM/ PRODUCT NAME		COLOR	DIMENSIONS	MANUFACTURER	QUANTITY (PER FLOOR)
PI	ARTIFICIAL RIVER FERN PLANT IN METAL PLANTER STAND	FAUX PLANT METAL - PLANTER	GOLD METAL PLANTER	27"w x 34"h x 20"d - OVERALL "w x 27"h x "d - PLANTER SIZE	nearlyNATURAL https://www.nearlynatural.com/	NUMBER VARIES PER FLOOR (WHERE APPLICABLE)
P9	CORN STALK DRACAENA ARTIFICIAL PLANT IN WHITE PLANTER WITH STAND (REAL TOUCH)	FAUX PLANT SANDING PLANTER	WHITE PLANTER		nearlyNATURAL https://www.nearlynatural.com/	NUMBER VARIES PER FLOOR (WHERE APPLICABLE)

PRIMARY ELEMENTS OF A FINISH PLAN

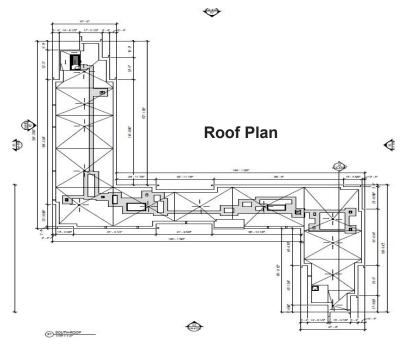
- FLOOR SURFACE MATERIALS
 - CARPET, WOOD STONE ...
- WALL SURFACE MATERIALS
 - PAINT, WALL PAPER, BRICK, WOOD, GLASS...
- COUNTERTOP SURFACE MATERIALS
 - STONE, WOOD, PLASTIC, METAL ...
- A KEY REPRESENTING THE DIFFERENT TYPES OF SURFACE MATERIAL, AND A CHART, GIVING DETAILED INFORMATION ON EACH ITEM

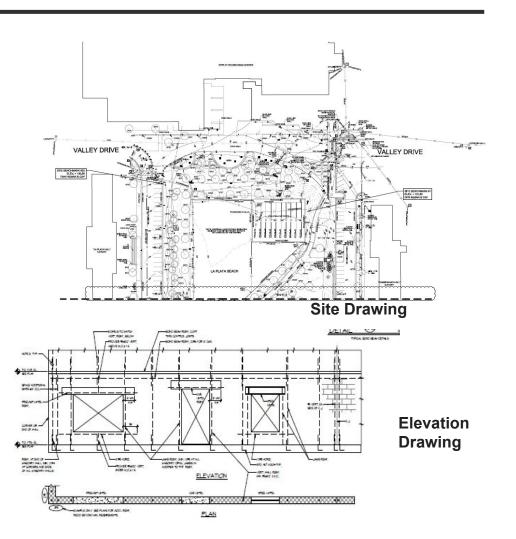


			WALL FINISH SCHEDULE							
WALL TYPE	WALL MATERIAL	FINISH TYP	E	COL	OR.	NOTE:	9			
WALL 1	MOISTURE RESISTANT GYPSUM BOARD	PAINT (EGGSHELL SHEEN)		WHI	TE	PAINT OVER GYPSUM BOARD			RD	
WALL 2	CEMENTITIOUS BOARD	CERAMIC	TILE (SEMI-GLOSS SHE	EN) WHI	TE	CERAMIC TILE OVER CEMENTITIOUS BOARD			NTITIOUS BOARD	
WALL 3	GYPSUM BOARD	SHIP-LAP		WHI	TE	SHIP	-LAP OVER	GYPSUM	BOARD	
WALL 4	GYPSUM BOARD	PAINT (E	GSHELL SHEEN)	WHI	TE	PAIN	PAINT OVER GYPSUM BOARD			
WALL 5	GYPSUM BOARD	PAINT (EC	GSHELL SHEEN)	REA	LIST BEIGE	PAIN	T OVER GYPS	SUM BOA	RD	
WALL 6	PLYWOOD SHEATHING & GYPSUM BOARD	PAINT (E	GSHELL SHEEN)	REA	LIST BEIGE	PAIN	T OVER GYPS	SUM BOA	RD, OVER PLYWOOD	(
						SHEA	THING			
		BA	ASEBOARD FINISH SCHEDL	LE						
BASEBOARD TYPE	BASEBOARD MATERIAL AND HEIGHT	BASEBOAR	D MANUFACTURER	COL	OR	PROFI	ILE			
BASEBOARD 1	PAINTED MDF - 5¼"	LL FLOOR	NG - WM163	WH	ITE	5 1/4"	BASE WITH	INTEGRA	OG MOULDING	
BASEBOARD 2	CERAMIC TILE - 6"	DALTILE		WHI	TE	BULLNOSE				
		FL	OOR FINISH SCHEDULE							
FLOOR TYPE	FLOOR MATERIAL FLOOR MANUFACTURER AND MODEL SIZE			COLOR						
FLOOR 1	LAMINATED VENEER TILE	ARMSTRON	G -VIVERO GALLERY (0AK 6"X	48"	CORN HUSK U1030				
FLOOR 2	CERAMIC TILE	DALTILE -	- VINTAGE HEX VH06	1 1/2	26274220	WISDOM WHITE				
				1 72						
		CI	EILING FINISH SCHEDULE							
CELLING TYPE	CEILING MATERIAL	FINISH TYP	=	COL	OP	NOTE	9			
OLDINO TITE	OCILINO WINILANE	THIOTHE		000		IIO IL				
CEILING 1	GYPSUM BOARD	PAINT (CE	ILING WHITE - EGGSHE	III WHI	TE	PAINT OVER GYPSUM BOARD			BU.	
OCILITO I	OTT DOM DOMES	TAIRT (OL	ILINO WITTE LOOSILE			2.7.003	T OTEN OIL	JOIN 15071		
		D	OOR SCHEDULE (SEE PLANS	5)						
DOOR NUMBER	DOOR TYPE, MATERIAL AND WIDTH		FINISH TYPE	WIDTH	THICKNE	GG	HEIGHT	COLOR	LOCKSET	NOTE
DOOK NOWIDER	DOOR THE MATERIAL AND WIDTH		TINDITTIL	WIDIII	THICKNE	.55	TILIGITI	COLOR	LOCKSLI	NOTE
DOOR(1)	ENTRY DOOR - SWNG (SINGLE) - FLUS	Н	SOLID CORE - WOOD	SEE A-OC	2 SEE A	-002	SEE A-002	WHITE	ENTRY LOCKSET	
DOOR (2)	CLOSET DOOR - BI-FOLD (2 PANELS) -	- FLUSH	SOLID CORE - WOOD	SEE A-OC	2 SEE A	-002	SEE A-002	WHITE	PASSAGE LOCKSET	1
DOOR (3)	CLOSET DOOR - BI-FOLD (4 PANELS) -		SOLID CORE - WOOD		C		SEE A-002	25 TATOMAC - 10	PASSAGE LOCKSET	
DOOR (4)	BATHROOM DOOR - SWING (SINGLE) - I		SOLID CORE - WOOD	SFF A-00	2 SEE A	-002	SEE A-002		PRIVACY LOCKSET	1
DOOR (5)	SPACE DIVIDER - SLIDING (4 PANELS) - GLASS	- AFRICA CALIFFER	SOLID CORE - WOOD	10-21-21-21-21-22-22-22-22-22-22-22-22-22-		0.0000	SEE A-002	320.00.00	PRIVACY LOCKSET	

Other types of plans/ drawings:

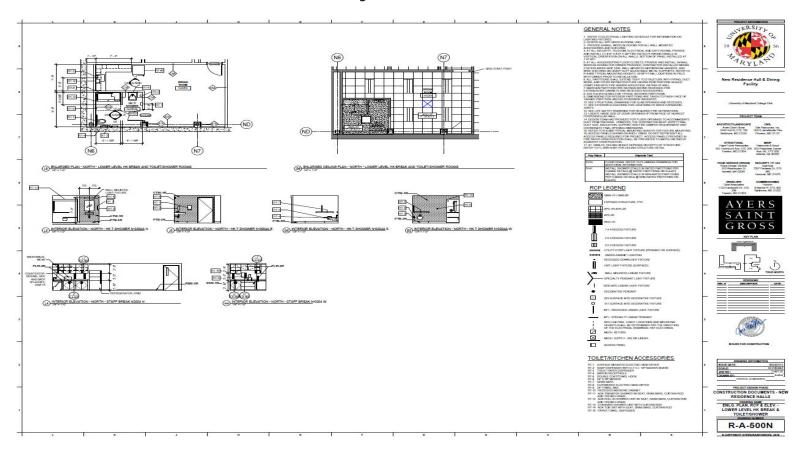
Site Roof Elevations Sections





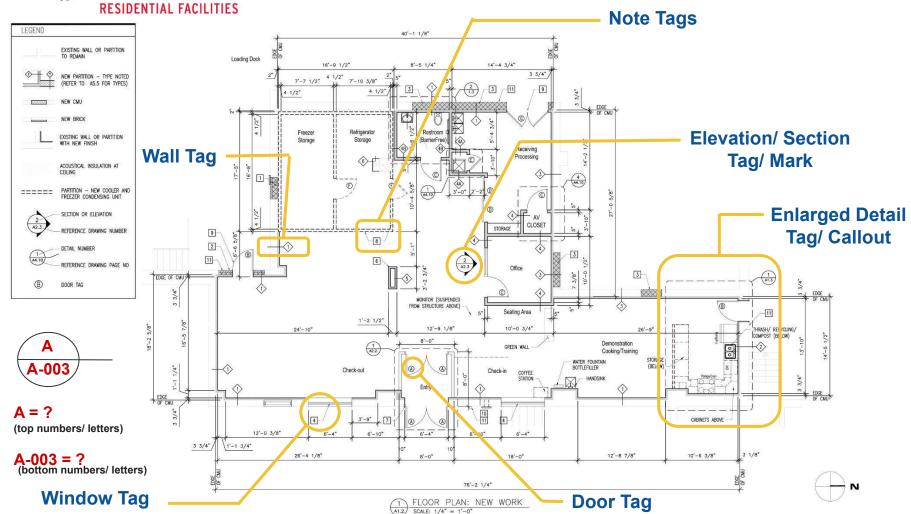


Architectural Layout



FLOOR PLAN TAGS AND MARKS

- DOOR TAGS
- WINDOW TAGS
- WALL TAGS
- BUILDING AND DETAIL SECTION TAGS AND MARKS
- EXTERIOR AND INTERIOR ELEVATION TAGS
- ENLARGED DETAIL TAGS OR CALL-OUTS
- NOTE TAGS ... whew!

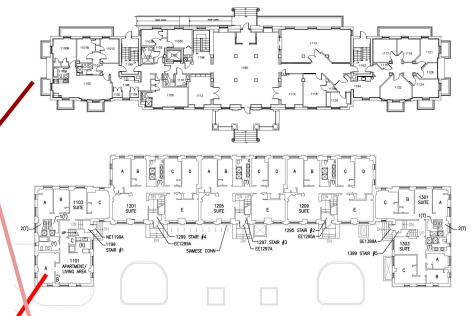










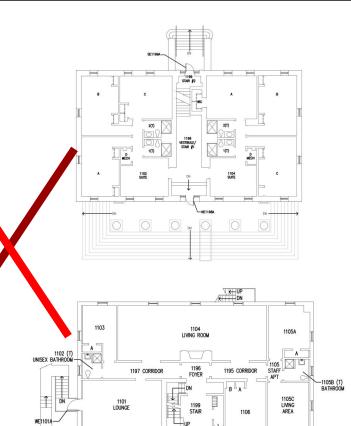




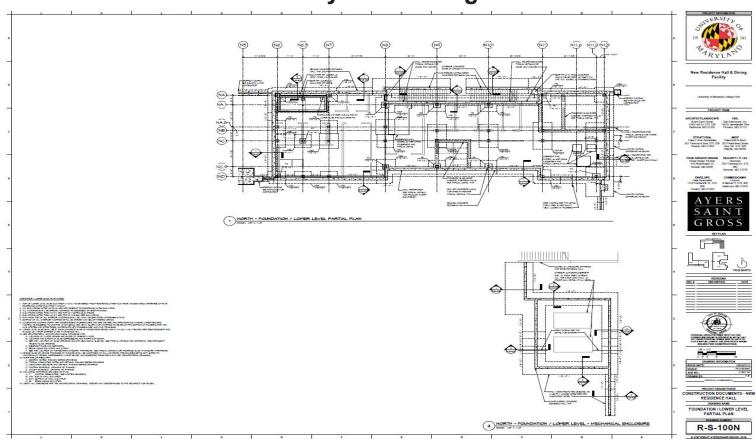


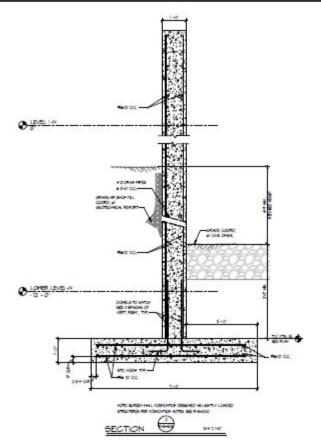






Structural Layout Drawing

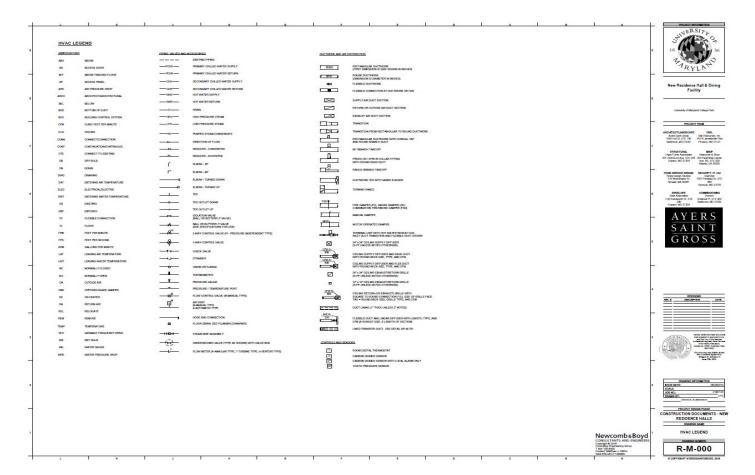




Structural Detail

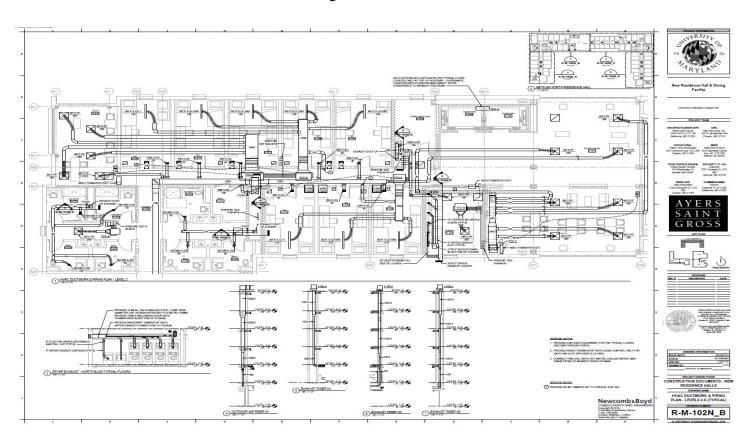


Mechanical Legend and Symbol Identification





Mechanical Layout - HVAC





PIPMS, VALVES AND ACCESSORES ____ EXISTING PIPING -POHS-PRIMARY CHILLED WATER SUPPLY PRIMARY CHILLED WATER RETURN - POHR-SECONDARY CHILLED WATER SUPPLY CHR. SECONDARY CHILLED WATER RETURN HOT WATER SUPPLY - HWS-HOT WATER PETURN HIGH PRESSURE STEAM LPS-LOW PRESSURE STEAM PUMPED STEAM CONDENSATE DIRECTION OF FLOW REDUCER - CONCENTRIC REDUCER - SCCENTRIC ELECW - 48" ELBOW - TURNED DOWN ELBOW - TURNED UP TEE TEE OUTLET DOWN TEE OUTLET UP (SOLATION VALVE) BALL OR BUTTERFLY VALVE (SEE SPECIFICATIONS FOR USE) 3-WAY CONTROL VALVE (PI - PRESSURE INDEPENDENT TYPE) 1-WAY CONTROL VALVE CHECK VALVE STRANGS UNION OR FLANGE THERMOMETER. PRESSURE GAUGE PRESSURE / TEMPERATURE PORT ____ FLOW CONTROL VALVE (M-MANUAL TYPE) Ψ HOSE END-CONNECTION FLOOR DRAIN, SEE PLUMBING DRAWINGS -115111 STEAM DRIP ASSEMBLY UNDERGROUND VALVE (TYPE AS SHOWN) WITH VALVE BOX FLOW METER (A ANNULAR TYPE; 1 TURBING TYPE; V-VENTURI TYPE)

Mechanical Symbols

Electrical Legend and Symbol Identification

YMBOL.	DESCRIPTION
	DESCRIPTION.
	RACEWAY CONCEALED IN FLOOR OR UNDERGROUND.
-	RACEWAY CONCEALED IN CEILING CAVITY OR WALL.
	RACEWAY HOMERUN TO PANEL, ONE ARROWHEAD PER CIRCUIT.
_	RACEWAY TURNED UP.
-	RACEWAY TURNED DOWN.
DR.M"	GROUNDING ELECTRODE.
r EP	GROUNDING ELECTRODE BONDED TO EQUIPOTENTIAL PLANE.
_	PANELBOARD, SURFACE HIGUNITED, 200125V.
_	PANELBOARD, FLUSH MOUNTED, 200/20V.
NAME OF THE OWNER, WHEN PERSON IN	PANELBOARD, SURFACE-HOUNTED, 469277V.

LUMINAIRES						
SYMBOL DESCRIPTION						
^	CELLING MOUNTED 7 x 4 LUMINAIRE, LETTER INDICATES FORTURE TYPE. SEE SCHEDULE.					
□^	CELING MOUNTED 2 x 2 LIMINAIRE, LETTER NOIGNTES FIXTURE TYPE. SEE SCHEDULE.					
	CEILING MOUNTED TIX # LUMINAIRE. LETTER INDICATES FORTURE TYPE. SEE SCHEDULE.					
□A	RECESSED LUMINAIRE. LETTER INDICATES LUMINAIRE TYPE. SEE SCHEDULE.					
4	PENDANT LUMINARIE. LETTER NOICATES LUMINARIE TYPE. SEE SCHEDULE.					
⊢ 0 − F	STRP LUMBARE. LENGTH TO SCALE, LETTER NOVARES LUMBARE TYPE. SEE SCHEDULE.					
	WALL MOUNTED LIMINARY. LENGTH TO SCALE. LETTER MOICATES LIMINARY. TYPE. SEE SCHEDULE.					
HOA	WALL MOUNTED LUMINARIE. LETTER NOICATES LUMINARIE TYPE. SEE SCHEDULE					
⊗ x	EXIT LIGHT, CEILING , PRINDANT-MOUNTED, REPER TO ARCHITECTURAL, REPLECTED CRELING PLANS FOR ARROW AND FACE REQUIREMENTS. BLECTRICAL DRIAWING SEPTEMBERS LOCATIONS AND INDICATED CODE REQUIRED CIRCUIT INFORMATION, LETTER INDICATES TYPE, SEE SCHEDULE.					
H⊗ X	EXIT LIGHT, WALL HOUNTED, REFER TO ARROHTECTURAL REFLECTED CELLING PLANS FOR ARROW AND FACE REQUIREMENTS. ELECTRICAL DRAWINGS REFFERENCE LOCATIONS AND INDICATED CODE REQUIRED CIRCUIT INFORMATION. LETTER INDICATES TYPE, SEE SCHEDULE.					
r	7 x 4 LUMNARE WITH PROVISIONS FOR EMERGENCY LIGHTING, LETTER NOICATES LEMINARE TYPE, SEE SCHEDULE.					
P	2 x 2 LUMINARE WITH PROVISIONS FOR EMERSENCY LIGHTING LETTER INDICATES LUMINARE TYPE. SEE SCHEDULE.					
r	1"x / LUMINARIE WITH PROVISIONS FOR EMERGENCY LIGHTING. LETTER INDICATES LUMINARIE TYPE. SEE SCHEDULE.					
=^	RECESSED LUMINAIRE WITH PROVISIONS FOR EMERGENCY LIGHTING, LETTER NOICATES LUMINAIRE TYPE. SEE SCHEDULE.					
* A	PENDANT LIBENARE WITH PROVIDING FOR EMERGENCY LIGHTING, LETTER, NO CATES LIBENARE TYPE. SEE SCHEDULE.					
	WALL HOUNTED LIMINARIE WITH PROVISION FOR EMERGENCY LIGHTING, LETTER NOICATES LIMINARIE TYPE. SEE SCHEDULE.					
P- A	SITE LUMINAIRE AND POLE, LETTER INDICATES LUMINAIRE TYPE. SEE SCHEDULE.					
COM A	SPECIALTY POLE AND LUMBARE. LETTER INDICATES LUMBARE TYPE. SEE SCHEDULE.					

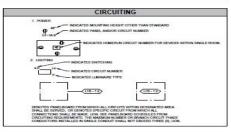
SYMBOL.	DESCRIPTION			
•	DUPLEX RECEPTACLE OUTLET, WALL-MOUNTED.	15"		
•	DOUBLE DUPLEX RECEPTAGLE OUTLET, WALL MOUNTED.	10"		
=	DUPLEX RECEPTACLE OUTLET, HORIZONTALLY MOUNTED, ABOVE COUNTER.	15"		
	SWITCHED DUPLEX RECEPTACLE OUTLET, WALL MOUNTED.			
TV C	DUPLEX RECEPTACLE DUTLET, FOR AV MONITOR, MOUNTED WITHIN AV BACKBOK, COORDINATE MOUNTING WITH AV CONTRACTOR, UNLESS OTHERWISE NOTED.			
₽-	GFCI DUPLEX RECEPTACLE OUTLET, WALL MOUNTED.	15"		
-	GFCI DUPLEX RECEPTAGLE OUTLET, WALL MOUNTED, ABOVE COUNTER.			
	DUPLEX RECEIPTACLE OUTLET WITH WEATHERPROOF FACEPLATE, WALL-MOUNTED.			
Φ-	JUNCTION BOX, HIALL HIOLINTED.			
0	JUNCTION BOX, ABOVE CEILING.			
P P	SPECIAL RECEPTACLE, THREAS NOTED SHARED REGION NORTHES PROVISION FOR OPTIONAL STANDER POWER SEE SCHEDULE, THIS SPEET.			
(2)	MOTOR, NUMERIAL INDICATES HP.			
	MOTOR CONTROLLER.	45"		
400	COMMINATION MOTOR CONTROLLER/DISCONNECT.	46"		
ча жасааа	DISCONNECT SWITCH, SIZE/FOLES/FUSE/ENGLOSURE TYPE IF OTHER THAN NEMA 1.	45"		
□ 30/3	NOMBUAL GROUT BREAKER, TREMPOLES.	45		

SYMBOL	DESCRIPTION	
⁶ 06.m	WHITCH HALL ACCIONTED, LOWERCASE LETTERNA BROCKEES CONTROLLES DON: THE DESIGNATED BLAW. 3 SHOULD FOLL DATE BLAW. 3 SHOULD FOLL DATE BLAW. 4 SHOULD FOLL DATE A SHOULD FOLL DATE COUNTY FOLL FOLL DATE WHAT THE SHOULD FOLL DATE WHAT THE SHOULD FOLL DATE WE WAS THE SHOULD FOLL DATE WE WANT THE SHOULD FOLL DATE WE WAS THE SHOULD FOLL DATE WE WANT THE SHOULD FOLL DATE WE WAS THE SHOULD FOLL	ALT.
STC	DIGITAL, 1-DAY, 4-CHANNEL, PROGRAMMABLE FOR MASTER CONTROL OF LIMINARIES IN DORMITORY CORREDORS.	AE"
D	WALL BOR DIMMER, 500 W. PROVIDE EXACT TYPE TO MATCH CONTROLLED LUMINARIES), MOUNT 45" APF, UON.	487
III	EMERGENCY LIGHTING CONTROL RELAY.	
	TIME SWITCH.	
H⊗	PHOTOCELL.	
-0-	CONTACTS, NORMALLY OPEN.	
-44-	CONTACTS, NORMALLY CLOSED.	
0	COL (C LIGHTING CONTACTOR; R-CONTROL RELAY, M-MOTOR, CONTACTOR).	
9/9/9	LIGHTING CONTORS SENSOR DEVICE, COCUPANCY SENSOR, PHOTOGENICOR, OR VACANCY SENSOR, WHERE NO LISTERS IS SHOWN, SENCORS) SHALL CONTROL ALL LIMANAISES IN CORRESPONDED SOOM S - UNAFFESSITIANT, P. PENDANT-MOUNT PER MANUFACTURISTS SECOMBENICATIONS)	
\triangleleft	WALL-MOUNTED BUIL- TECHNOLOGY OCCUPANCY SENSOR, 2000 SQUARE FEET OF COVERAGE AND MODERCHEE OF SENSOR, AM AS REQUIRED PER NONDEAL ROOM REQUIREMENTS, BUILTPUE SENSORS IN A SINGLE AREA SHALL PROVIDE PARALLEL CONTROL.	86"
•	ULED EMERGENCY LIGHTING CONTROL EQUIPMENT LOCATED ABOVE ACCESSIBLE CIRLING. SEE DITAL #1 ON SHEET R-E-712 FOR TYPICAL WINNER DAGGARE.	

	PROJECT GENERAL NOTES
MOUNTING HEIGHT. AIT, UON	 PROVIDE AND FAULT CIRCUIT: INTERRUPTE RAPCI) PROTECTION FOR CIRCUITS SERVING DOWNTOWY UNITS. LOUNCES, AND HALLWAYS. PROVIDE <u>APCI CIRCUIT INFLACERS</u> FOR LISTED SPACES AGOVE.
15"	THESE DIAWINGS INDICATE THE ELECTRICAL REQUIREMENTS OF OTHER DIVISIONS. VEHICLE PLACE COLONIOS AND ROUTING RECORDS OF ELECTRICAL DIVISIOS (NOT SHOWN ON THE ELECTRICAL DIAWINGS) ON OTHER TRADET SHAWINGS.
15"	3. THE LOCATIONS AND GUARTITIES OF COCUPINACY SERVICES INDICATED ON THE EMPIRICAS AND GUARTIME AND GUARTIME AND THE REPORT
15"	 EMERGENCY LUMINARIES SHALL NOT BE SWITCHED, UNLESS OTHERWISE NOTED IN SPECIFIC INSTANCES. SEE PLOOR PLANS.
	 CONDUITS IN UNFINISHED ELECTRICAL AND MECHANICAL SPACES SHALL BE INSTALLED EXPOSED TO VIEW.
	 CELING-MOUNTED ELECTRICAL DEVICES (OCCUPANCY SENSORS, PHOTOGELLS, ETC.). SHALL BE CENTERED IN ASSOCIATED CELING TILE.
	 PROVIDE CIRCUIT DIRECTORIES FOR PANELBOARDS. SPARE CIRCUITS SHALL BE LABELED IN PENCIL.
9	 PROVIDE NEW NAMEPLATES PER ELECTRICAL DETAILS AND SPECIFICATION SECTION 20010. EURPMENT DESIGNATIONS SHALL SE PER ONE-LINE DIAGRAM AND NEW WORK. PLANS
	 IN ADDITION TO CONDUCTORS REQUIRED FOR NORMAL POWER CONNECTIONS TO BIBITIZED LIMINARIES. PROVIDE A BUT SHETCHED PHASE CONDUCTOR TO A REMOTE BASIC WITH CONDUCTOR DESCRIPTION TO THE BIBITIZED OF SYSTEM AND SHALL BE SHAPED.
45"	WITH RACEWAYS SERVING NORMAL POWER LIBERAIRES, LUMINAIRE OPERATION SHALL BE CONSISTENT WITH OTHER ASSOCIATED POTUMES, AND SHALL BE POWERED BY THE GENERATOR DURING LOSS OF NORMAL POWER, NON-SWITCHED COMPUTED SHALL
46"	ORGINATE FROM THE SAME BRANCH CIRCUIT WHICH SERVES ASSOCIATED LIGHTING, FOR PUBLIC SPACES WITH CELLINGS EXPOSED TO STRUCTURE, LOCATE RELAYIS ABOVE.
45	NEARIST ACCESSIBLE CEILING AND ROUTE CONDUCTIONS IN COMBUIT RECESS IN SLAB. EXIT SIGNS SHALL NOT BE SWITCHED, BUT SHALL SHARE CIRCUITS WITH SWITCHED EMERICANCY LUMINARIES, AS INDICATED ON THE PLANS.
*	TO PROVIDE SHIP AND HIS G. IN 6.PC. FOR 20A 1-POLE CRIDIET BREAKING INDICATED ON PARKLEGAND SCHEDULES, INJURES OF INSTRUMENT BOTH ON PLOOR PLANS. FREIDRICH INDICATED BY SCHEDULES ON A RESERVED THAN 20 A ARE INDICATED BY SCHEDULES ON ON PLOOR PLANS.

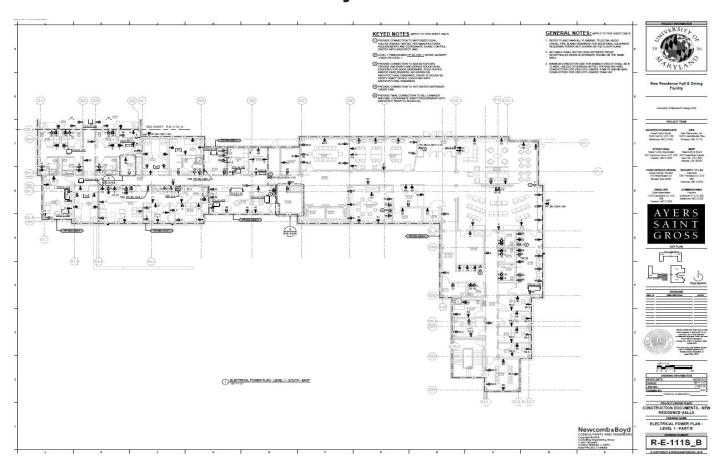
	SPECIAL CONNECTION SCHEDULE
MARK	DESCRIPTION
Dt	(205V/IPH - 4.4 kW) APARTMENT DWELLING UNIT DRYER, PROVIDE WITH 2910 AND #10G, IN 0.75°C.
D2	(208V/IPH - 6 WW) COMMERCIAL STACKED WASHER / DRYER PROVIDE WITH 286 AND #10G, IN 1°C.
D3	(450V/3PH - 30 kW) COMMERCIAL GRADE DRYER, PROVIDE WITH 395 AND 46G, IN 1.25°C.
D4	(480V3PH - 3.7 kW) COMMERCIAL GRADE WASHER, PROVIDE WITH 3912 AND #12G, IN 0.75°C.
DS	(200W1PH - 4.75 WW) COMMERCIAL DRIVER: PROVIDE WITH 2910 AND 9100 IN 0.75°C.
H	(126V/1PH) ELECTRIC HAND DRYER, PROVIDE WITH 2#12 AND #12G, IN 0.5°C.
R	(205V/IPH - 7.9 kW) ELECTRIC OVEN RANGE, PROVIDE WITH 380 AND \$10G, IN 17C.
TI	L6-30 TWIST LOCK RECEPTAGLE, PROVIDE WITH 2#10 AND #10G. IN 0.75°C.

	ABBREVIATIONS					
Atty	ARMS	komil	THOUSAND CIRCULAR MILLS			
	ABOVE FINISHED FLOOR/GRAD/RAISED FLOOR	LMNIT	LUMINAIRE			
ARCH		LTG	LIGHTING			
AW	ALDIOVISUAL.	MOC	MOTOR CONTROL CENTER			
DCL	BELOW	MCB	MAIN CIRCUIT BREAKER			
DF -	BELOW FLOOR	METCH	MECHANICAL.			
ESH	DEAMM	MISC	MISCELLANEOUS			
C	CONDUIT	MLO:	MAIN LUG ONLY			
CB	CIRCUIT BREAKER	MONTH	MANUFACTURER			
CKT	CIRCUIT	METTE	MOTOR.			
CLG	CEILING	NEC	NATIONAL ELECTRIC CODE			
COL	COLUMN	NC	NORMALLY CLOSED			
CONN	CONNECTICONNECTION	NE	NONFUSIBLE			
CONT	CONTINUATION/CONTINUOUS	NO	NORMALLY OPEN			
CTE	CONNECT TO EXISTING	OC .	ON CENTER			
DAU	DIGITAL ADDRESSABLE LIGHTING INTERFACE.	OCP	OVERCURRENT PROTECTION			
DN	DOWN	OCPO	OVERCLIBRENT PROTECTION DEVI			
EC .	EEMPTY CONDUIT	PC	PHOTOCELL			
ELEV	ELECTRICAL METALLIC TURING	P94	PHACE			
EDST	ELECTRICAL METALLIC TURING	PINE	PANEL			
ENT	ELECTRICAL NONHETALLIC TUBING	PWC	POLYVINYL CHILDRIDE CONDUIT			
ETR:	EXISTING TO REMAIN	PT	PORE-THRU			
EX	EXISTING	BC	REMOTE CONTROL			
EDG?	EXPOSED FUSED	RECP	RECEPTACLE			
P. C.	FUSED	PLET.	RELOCATE			
FA	FIRE ALARM	REM	REMOVE			
FEL	FLOOR BOX	REIQ	REQUIRED/REQUIREMENTS			
PUR	FICTURE	RS	RAPID START			
FL.	FLOOR	sc.	SPLIT CIRCUIT			
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	SCOR	SHORT CIRCUIT CURRENT RATING			
G	GROUND	SPEC	SPECIFICATION			
GFP	GROUND FAULT PROTECTION SYSTEM FOR EQUIPMENT PROTECTION	SPOT	SURGE PROTECTIVE DEVICE SINGLE POLE DOUBLE-THROW			
GR	GRADE	DIT	SHINTTRIP			
HOA.	HANC-OFT-AUTOMATIC	SW	SWITCH			
HPS	HIGH PRESSURE SCOUM	SWEE	DWITCHBOARD			
167	HORSE POWER	TYP	TYPICAL			
HTG	HEATING	UG	UNDERGROUND			
100	BOLATED GROUND	DOM	LINLESS CONFERWESE NOTED			
IMC	INTERMEDIATE METAL CONDUIT	MID	VARIABLE FREQUENCY DRIVE			
JBCK	AINCTION BOX	MP	WEATHERPROOF			





Electrical Layout Plan



DISTRIBUTION PANELBOARD "DP-2N-1219-1" SCHEDULE

VOLTS: 120/208 Wye PHASES: 3 WIRE: 4 BUS: 1000 A MAIN: MCB SCCR: 22,000 MOUNTING: SURFACE LOCATION: ELEC N-1219

NOTES:

	CO. C.		00.00000			
СКТ	CIRCUIT DESCRIPTION	POLES	FRAME	TRIP	LOAD (kVA)	REMARKS
- 1	PP-2N-1219-1	3	225 A	225 A	56.5 kVA	
2	PP-2N-2212-1	3	225 A	225 A	44.9 kVA	
3	PP-2N-3212-1	3	225 A	225 A	35.0 kVA	
4	PP-2N-4212-1	3	225 A	225 A	39.0 kVA	
5	PP-2N-5212-1	3	225 A	225 A	52.8 kVA	
6	PP-2N-6212-1	3	225 A	225 A	40.5 kVA	
7					10 10	
8						
9					8	
10	N .			S	- 8	
11						
12			1		8 8	

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED LOAD
Lighting	502 VA	100.00%	502 VA
Lighting - Dwelling Unit	2956 VA	100.00%	2956 VA
Motor	5900 VA	100.00%	5900 VA
Power	4800 VA	100.00%	4800 VA
Receptacle	254440 VA	51.97%	132220 VA
6	24		
	100		5

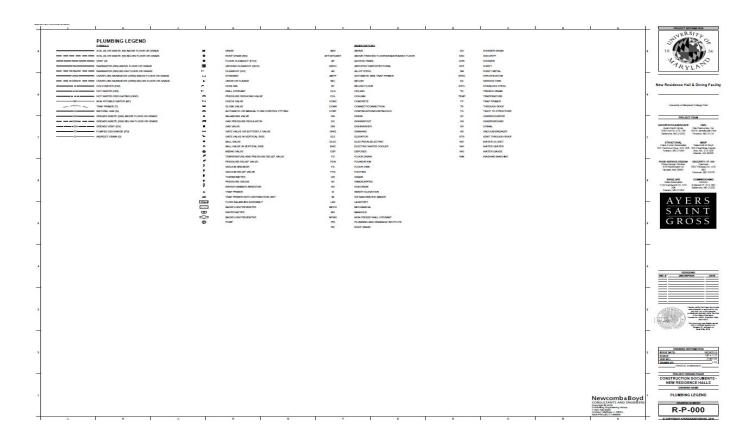
CONNECTED LOAD: 268598 VA CALCULATED LOAD: 146378 VA

CONNECTED AMPERES: 745 A CALCULATED AMPERES: 405 A

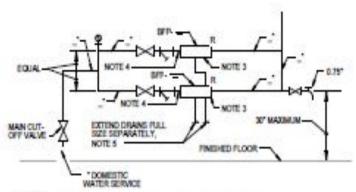
Electrical Panel Schedule



Plumbing Legend



Plumbing Layout



MOTES

- 1. SEE SCHEDULES FOR PRI-1 ASSEMBLY, AND BACKILOW PREVENTERS.
- 2. PROVIDE BLOWDOWN BALL VALVE AND CAP ON EACH STRAINER.
- BYP ASSEMBLY INCLUDES INLET AND OUTLET ISOLATION VALVES. PROVIDE INTEGRAL BODY UNIONS OR FLANGED END ADAPTERS.
- PROVIDE AUXILIARY CHECK VALVE WITH RESILIENT SEAT ON INLET TO RP TYPE BACKFLOW PREVENTERS.
- EXTEND RELEF VALVE DRAINS FULL SIZE THRU EXTERSOR WALL AND TERMINATE. WITH DOWN-TURNED ELBOW. SEAL WALL PENETRATION WATER TIGHT.
- BACKFLOW PREVENTER AND PRESSURE REDUCING VALVE ASSEMBLY
 NO SCALE



Assignment #1: Reading Furniture Plans



Determine Quantities of:

Love Seats



5

- Beds



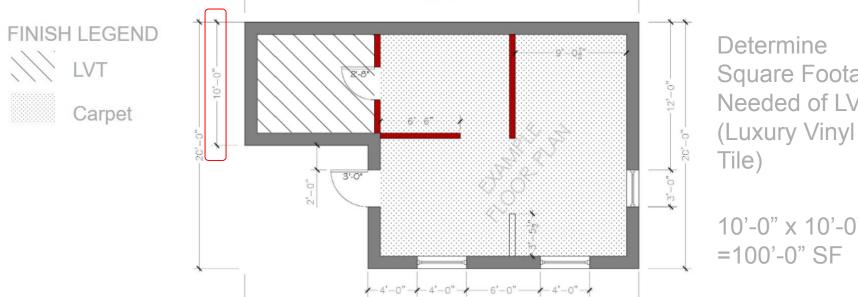
21

- Study Tables



2

Assignment #2: Finish Take-Off



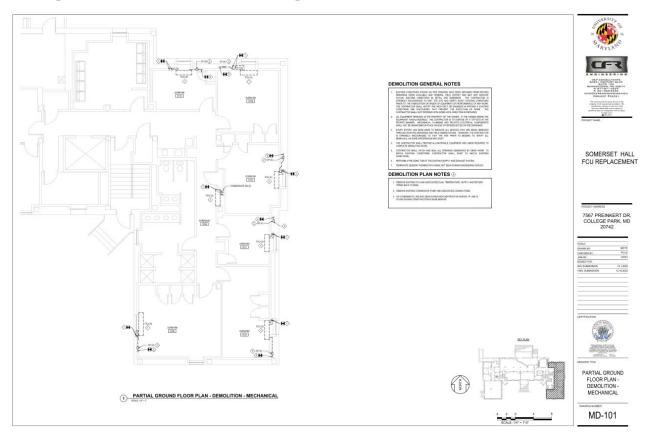
-10'-0"-

Square Footage Needed of LVT

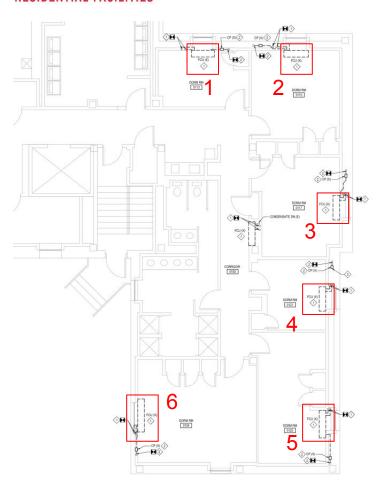
10'-0" x 10'-0"



Assignment #3: Assessing number of FCUs to be demoed







DEMOLITION PLAN NOTES ③

- REMOVE EXISTING FCU AND ASSOCIATED DUAL TEMPERATURE SUPPLY AND RETURN PIPING BACK TO MAIN.
- 2. REMOVE EXISTING CONDENSATE PUMP AND ASSOCIATED CONNECTIONS.
- NO CONDENSATE LINE WAS SEEN DURING NON DESTRUCTIVE SURVEY. IF LINE IS FOUND DURING CONSTRUCTION PLEASE REMOVE.



Assignment #4: Draw a plan of this room

When we are asked to start a project we first visit the room to be renovated and document the existing conditions. You are now an honorary PDC employee and have been sent to document this room for potential renovations.

Some tricks and tips:

- Start with the overall shape of the room
- Start in one corner work your way around the room
- Ensure you include main elements:
 - Walls
 - Doors
 - Windows
- Other elements that may be added as well:
 - Furniture
 - Finishes
 - Switches, Thermostats, etc.
 - Be as detailed or as simple as you wish