

THE JOINT CHIROPRACTIC - HAMPTON ROADS CROSSING

1011 UNIVERSITY BOULEVARD, SUITE 185, SUFFOLK, VA

CODE COMPLIANCE INFORMATION					
ADMINISTRATION					
100	APPLICABLE CODE OR STANDARD			EDITION	
	VIRGINIA UNIFORM STATEWIDE BUILDING CODE (USBC)			2015	
	VIRGINIA CONSTRUCTION CODE (VCC)			2015	
	VIRGINIA EXISTING BUILDING CODE (VEBC)			2015	
	ADA STANDARDS FOR ACCESSIBLE DESIGN (ASAD) ANSI ICC A117.1			2009	
	VIRGINIA STATEWIDE FIRE PREVENTION CODE			2015	
	VIRGINIA MECHANICAL CODE			2015	
	VIRGINIA PLUMBING CODE			2015	
	VIRGINIA FUEL GAS CODE			2015	
	VIRGINIA ENERGY CONSERVATION CODE			2015	
NFPA 13 SPRINKLER SYSTEMS					
USE AND OCCUPANCY CALCULATION					
300	CLASSIFICATION			USE GROUP	
	BUSINESS (OFFICES) - PREVIOUSLY TOBACCO AND VAPE (CHANGE IN USE)			B	
BUILDING DATA - CONSTRUCTION CLASSIFICATION (602)					
CONSTRUCTION TYPE:			2B - FULLY SPRINKLED (NFPA13)		
MIXED OCCUPANCY:			YES		
SEPARATED MIXED USE:			YES		
PRIMARY OCCUPANCY CLASSIFICATION:			OFFICE (B)		
BUILDING OCCUPANCY CLASSIFICATION (310)					
FLOOR		USE GROUP	BUSINESS	AREA	
SUITE 160		BUSINESS	GREAT CLIPS	1,300 S.F.	
SUITE 165		BUSINESS	LAVISH NAILS	1,300 S.F.	
SUITE 170		MERCANTILE	TOBACCO + VAPE	2,700 S.F.	
SUITE 180		BUSINESS	SPRINT	1,300 S.F.	
SUITE 185 (SCOPE OF WORK)		BUSINESS (OFFICE)	THE JOINT CHIROPRACTIC	1,300 S.F.	
SUITE 190		RESTAURANT	WHICH WICH	2,100 S.F.	
TOTAL BUILDING AREA = 10,000 S.F.					
BUILDING HEIGHT AND AREA CALCULATIONS (503, 504, 506)					
BASED ON USE GROUP B (BUSINESS)					
ACTUAL	ACTUAL	ACTUAL	ALLOWABLE	ALLOWABLE	ALLOWABLE
BUILDING HEIGHT	BUILDING STORIES	BUILDING AREA	BUILDING HEIGHT	BUILDING STORIES	BUILDING AREA
APPROX. 24'	1	10,000	75'	4	92,000 S.F.
DESIGN OCCUPANT LOAD (1004.1.2)					
USE GROUP: BUSINESS		AREA (+/-)	UNIT	UNIT AREA/OCCUPANT	ALLOWABLE OCCUPANT LOAD
SUITE 185 (SCOPE OF WORK)		1,300 S.F.	GROSS	100 /GROSS	13
PROPOSED OCCUPANCY LOAD					13

MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURE (TABLE 2902.1)			
SUITE 185	PLUMBING FIXTURE COUNT	REQUIRED	PROVIDED
	WATERCLOSETS	1	1
	LAVATORIES	1	1
VCC 2015			
SECTION 2902.2 MINIMUM PLUMBING FACILITIES			
• EXCEPTION 2: SEPARATE FACILITIES SHALL NOT BE REQUIRED IN STUCTURES AND TENANT SPACES WITH A TOTAL OCCUPANT LOAD, INCLUDING BOTH EMPLOYEES AND CUSTOMERS, OF 15 OR FEWER.			
SECTION 20902.6 SMALL OCCUPANCIES.			
• FOR AN OCCUPANT LOAD OF 15 OR FEWER DRINKING FOUNTAINS SHALL NOT BE REQUIRED			

FIRE RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (601)		
BUILDING ELEMENT	REQUIRED RATING	CODE REFERENCE
PRIMARY STRUCTURAL FRAME (INCLUDING COLUMNS, GIRDERS TRUSSES)	0 HOUR	TABLE 601
BEARING WALLS - EXTERIOR - FIRE SEPARATION DISTANCE < 10'	0 HOUR	(TABLE 601,) TABLE 602, 704.10
BEARING WALLS - INTERIOR	0 HOUR	TABLE 601
NONBEARING WALLS AND PARTITIONS - EXTERIOR	0 HOUR	TABLE 601
NONBEARING WALLS AND PARTITIONS - INTERIOR	0 HOUR	TABLE 601
FLOOR CONSTRUCTION AND SECONDARY MEMBERS	0 HOUR	TABLE 601, TABLE 508.4
ROOF CONSTRUCTION (CLASS C - TABLE 1505.1) AND SECONDARY MEMBERS	0 HOUR	TABLE 601
SHAFT ENCLOSURES (LESS THAN 4 STORIES)	N/A	708.4
SHAFT ENCLOSURES (4 OR MORE STORIES)	N/A	708.4
EXIT ENCLOSURES (LESS THAN 4 STORIES)	N/A	1023.1
EXIT ENCLOSURES (4 OR MORE STORIES)	N/A	1023.1
CORRIDORS	N/A	TABLE 1020.1
HORIZONTAL ASSEMBLIES	N/A	420.3
FIRE WALLS	N/A	TABLE 706.4
FIRE BARRIERS	1 HOUR	707
FIRE PARTITIONS	N/A	708 (420)
SMOKE BARRIERS	N/A	709

SCOPE OF WORK

THE PROJECT CONSISTS OF AN APPROXIMATE 1,300 SF INTERIOR TENANT IMPROVEMENT FOR A CHIROPRACTIC SERVICE CLINIC. PROJECT INCLUDES BUT NOT LIMITED TO NEW INTERIOR WALLS. INTERIOR FINISHES, MINOR MODIFICATIONS TO THE EXISTING HVAC DISTRIBUTION, POWER DATA RECEPTACLES AND ADA RESTROOM RENOVATIONS.

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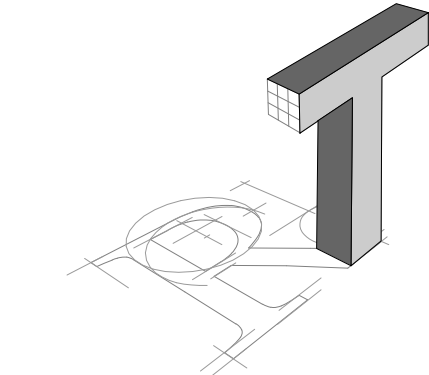
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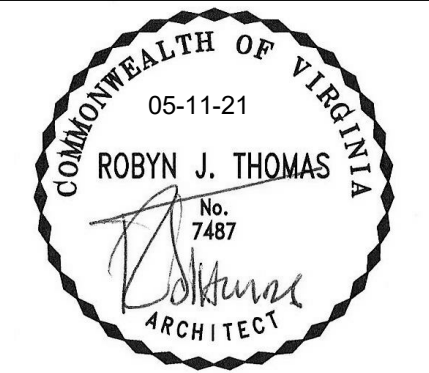
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PERMIT SET

THE JOINT CHIROPRACTIC
1011 UNIVERSITY BOULEVARD, SUITE 185
SUFFOLK, VIRGINIA

REVISIONS

No.	Date	Comments

COVER SHEET

Project number 21-012
Date 05-11-2021
Drawn by NL

A-0.1

Scale 12" = 1'-0"

VIRGINIA EXISTING BUILDING CODE 2015

CHAPTER 3 - GENERAL PROVISIONS
AND DETAILED REQUIREMENTS

SECTION 301 - GENERAL
301.1 APPLICABILITY -THE APPLICABLE PROVISIONS OF THIS CHAPTER SHALL BE USED IN CONJUNCTION WITH THE REQUIREMENTS IN THIS CODE, AND SHALL APPLY TO ALL CONSTRUCTION AND REHABILITATION.
COMMENTS- WILL COMPLY

301.2 OCCUPANCY AND USE - WHEN DETERMINING THE APPROPRIATE APPLICATION OF THE REFERENCED SECTIONS OF THIS CODE, THE OCCUPANCY AND USE OF A BUILDING SHALL BE DETERMINED IN ACCORDANCE WITH CHAPTER 3 OF THE VCC.
COMMENTS- WILLY COMPLY

SECTION 302 - BUILDING MATERIALS AND SYSTEMS
302.1 EXISTING MATERIALS - MATERIALS ALREADY IN USE IN A BUILDING IN COMPLIANCE WITH REQUIREMENTS OR APPROVALS IN EFFECT AT THE TIME OF THEIR ERECTION OR INSTALLATION SHALL BE PERMITTED TO REMAIN IN USE UNLESS THE VCC WOULD NOT PERMIT THEIR USE IN BUILDINGS OR STRUCTURES OF SIMILAR OCCUPANCY, PURPOSE AND LOCATION.
COMMENTS- WILL COMPLY

302.2 NEW AND REPLACEMENT MATERIALS - EXCEPT AS OTHERWISE REQUIRED OR PERMITTED BY THIS CODE, MATERIALS PERMITTED BY THE APPLICABLE CODE FOR NEW CONSTRUCTION SHALL BE USED. LIKE MATERIALS SHALL BE PERMITTED FOR REPAIRS AND ALTERATIONS, PROVIDED NO HAZARD TO LIFE, HEALTH OR PROPERTY IS CREATED. HAZARDOUS MATERIALS SHALL NOT BE USED WHERE THE VCC WOULD NOT PERMIT THEIR USE IN BUILDINGS OR STRUCTURES OF SIMILAR OCCUPANCY, PURPOSE AND LOCATION.
COMMENTS- WILL COMPLY

302.3 EXISTING SEISMIC FORCE-RESISTING SYSTEMS - N/A

SECTION 303 - FIRE ESCAPES - N/A

SECTION 304 - GLASS REPLACEMENT AND REPLACEMENT WINDOWS - N/A

SECTION 305 - SEISMIC FORCE-RESISTING SYSTEMS - N/A

SECTION 306 - GROUP B TEACHING AND RESEARCH LABORATORIES - N/A

SECTION 307 - REROOFING AND ROOF REPAIR - N/A

CHAPTER 4 - ACCESSIBILITY

SECTION 401 - GENERAL
401.1 SCOPE - THE APPLICABLE PROVISIONS OF THIS CHAPTER SHALL APPLY TO ALL CONSTRUCTION AND REHABILITATION.
COMMENTS- WILL COMPLY

SECTION 402 - CHANGE OF OCCUPANCY
402.1 CHANGE OF OCCUPANCY - EXISTING BUILDINGS OR STRUCTURES THAT UNDERGO A CHANGE OF OCCUPANCY SHALL COMPLY WITH THIS SECTION.
COMMENTS- CHANGE OF USE FROM "M" TO "B"

402.2 PARTIAL CHANGE IN OCCUPANCY - N/A

402.3 COMPLETE CHANGE OF OCCUPANCY - WHERE AN ENTIRE BUILDING UNDERGOES A CHANGE OF OCCUPANCY CLASSIFICATION, IT SHALL HAVE ALL OF THE FOLLOWING ACCESSIBLE FEATURES:
1. AT LEAST ONE ACCESSIBLE BUILDING ENTRANCE.
2. AT LEAST ONE ACCESSIBLE ROUTE FROM AN ACCESSIBLE BUILDING ENTRANCE TO PRIMARY FUNCTION AREAS.
3. SIGNAGE COMPLYING WITH SECTION 111.1 OF THE VCC.
4. ACCESSIBLE PARKING, WHERE PARKING IS BEING PROVIDED.
5. AT LEAST ONE ACCESSIBLE PASSENGER LOADING ZONE, WHEN LOADING ZONES ARE PROVIDED.
6. AT LEAST ONE ACCESSIBLE ROUTE CONNECTING ACCESSIBLE PARKING AND ACCESSIBLE PASSENGER LOADING ZONES TO AN ACCESSIBLE ENTRANCE.
WHERE IT IS TECHNICALLY INFEASIBLE TO COMPLY WITH THE NEW CONSTRUCTION STANDARDS FOR ANY OF THESE REQUIREMENTS OF A CHANGE OF OCCUPANCY, THE ABOVE ITEMS SHALL CONFORM TO THE REQUIREMENTS TO THE MAXIMUM EXTENT TECHNICALLY FEASIBLE.
COMMENTS- THE EXISTING SPACE SITE MEETS THE ABOVE ACCESSIBILITY REQUIREMENT

SECTION 403 - ADDITIONS - N/A

SECTION 404 - ALTERATIONS
404.1 GENERAL - AN ALTERATION OF AN EXISTING FACILITY SHALL NOT IMPOSE A REQUIREMENT FOR GREATER ACCESSIBILITY THAN THAT WHICH WOULD BE REQUIRED FOR NEW CONSTRUCTION. ALTERATIONS SHALL NOT REDUCE OR HAVE THE EFFECT OF REDUCING ACCESSIBILITY OF A FACILITY OR PORTION OF A FACILITY.
COMMENTS- WILL COMPLY

404.2 ALTERATIONS - A FACILITY THAT IS ALTERED SHALL COMPLY WITH THE APPLICABLE PROVISIONS IN THIS SECTION AND CHAPTER 11 OF THE VCC, EXCEPT AS MODIFIED BY SECTIONS 404.3 AND 404.4, UNLESS TECHNICALLY INFEASIBLE. WHERE COMPLIANCE WITH THIS SECTION IS TECHNICALLY INFEASIBLE, THE ALTERATION SHALL PROVIDE ACCESS TO THE MAXIMUM EXTENT TECHNICALLY FEASIBLE.
COMMENTS- WILL COMPLY

404.3 ALTERATIONS AFFECTING AN AREA CONTAINING A PRIMARY FUNCTION - WHERE AN ALTERATION AFFECTS THE ACCESSIBILITY TO, OR CONTAINS AN AREA OF PRIMARY FUNCTION, THE ROUTE TO THE PRIMARY FUNCTION AREA SHALL BE ACCESSIBLE. THE ACCESSIBLE ROUTE TO THE PRIMARY FUNCTION AREA SHALL INCLUDE TOILET FACILITIES AND DRINKING FOUNTAINS THAT SHALL ALSO BE ACCESSIBLE TO AND USEABLE BY INDIVIDUALS WITH DISABILITIES, SERVING THE AREA OF PRIMARY FUNCTION.
COMMENTS- THE ALTERATION WILL NOT EFFECT THE ACCESSIBILITY OF THE SPACE

404.4 SCOPING FOR ALTERATIONS - THE PROVISIONS OF SECTIONS 404.4.1 THROUGH 404.4.14 SHALL APPLY TO ALTERATIONS TO EXISTING BUILDINGS AND FACILITIES.

404.4.1 ENTRANCES - N/A

404.4.2 ELEVATORS - N/A

404.4.3 PLATFORM LIFTS - N/A

404.4.4 STAIRWAYS AND ESCALATORS - N/A

404.4.5 RAMPS - N/A

404.4.6 ACCESSIBLE DWELLING OR SLEEPING UNITS - N/A

404.4.7 TYPE A DWELLING OR SLEEPING UNITS - N/A

404.4.8 TYPE B DWELLING OR SLEEPING UNITS - N/A

404.4.9 JURY BOXES AND WITNESS STANDS - N/A

404.4.10 TOILET ROOMS - WHERE IT IS TECHNICALLY INFEASIBLE TO ALTER EXISTING TOILET AND BATHING ROOMS TO BE ACCESSIBLE, AN ACCESSIBLE FAMILY OR ASSISTED-USE TOILET OR BATHING ROOM CONSTRUCTED IN ACCORDANCE WITH SECTION 1109.2.1 OF THE VCC IS PERMITTED. THE FAMILY OR ASSISTED-USE TOILET OR BATHING ROOM SHALL BE LOCATED ON THE SAME FLOOR AND IN THE SAME AREA AS THE EXISTING TOILET OR BATHING ROOMS. AT THE INACCESSIBLE TOILET AND BATHING ROOMS, PROVIDE DIRECTIONAL SIGNS INDICATING THE LOCATION OF THE NEAREST FAMILY OR ASSISTED-USE TOILET ROOM OR BATHING ROOM. THESE DIRECTIONAL SIGNS SHALL INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY AND SIGN CHARACTERS SHALL MEET THE VISUAL CHARACTER REQUIREMENTS IN ACCORDANCE WITH ICC A117.1.
COMMENTS- EXISTING RESTROOM IS ADA ACCESSIBLE

404.4.11 DRESSING, FITTING AND LOCKER ROOMS - N/A

404.4.12 FUEL DISPENSERS - N/A

404.4.13 THRESHOLDS - THE MAXIMUM HEIGHT OF THRESHOLDS AT DOORWAYS SHALL BE 3/4 INCH (19.1 MM). SUCH THRESHOLDS SHALL HAVE BEVELED EDGES ON EACH SIDE.
COMMENTS- WILL COMPLY

404.4.14 AMUSEMENT RIDES - N/A

404.4.15 DINING AREAS - N/A

SECTION 404 - HISTORIC BUILDINGS - N/A

CHAPTER 5 - REPAIRS - N/A

CHAPTER 6 - ALTERATIONS

SECTION 601 - GENERAL
601.1 GENERAL - EXCEPT AS PROVIDED BY SECTION 905.1 OR THIS CHAPTER, ALTERATIONS TO ANY BUILDING OR STRUCTURE SHALL COMPLY WITH THE REQUIREMENTS OF THE VCC FOR NEW CONSTRUCTION. ALTERATIONS SHALL BE SUCH THAT THE EXISTING BUILDING OR STRUCTURE IS NO LESS CONFORMING TO THE PROVISIONS OF THE VCC THAN THE EXISTING BUILDING OR STRUCTURE WAS PRIOR TO THE ALTERATION.
COMMENTS- WILL COMPLY

601.2 LEVELS OF ALTERATIONS - ALTERATIONS TO ANY BUILDING OR STRUCTURE SHALL BE CLASSIFIED AS THE FOLLOWING:

601.2.1 LEVEL 1 - LEVEL 1 ALTERATIONS INCLUDE THE REMOVAL AND REPLACEMENT OR THE COVERING OF EXISTING MATERIALS, ELEMENTS, EQUIPMENT, OR FIXTURES USING NEW MATERIALS, ELEMENTS, EQUIPMENT, OR FIXTURES THAT SERVE THE SAME PURPOSE. LEVEL 1 ALTERATIONS SHALL COMPLY WITH THE APPLICABLE PROVISIONS OF SECTION 602.
COMMENTS- WILL COMPLY

601.2.2 LEVEL 2 - LEVEL 2 ALTERATIONS INCLUDE THE ADDITION OR ELIMINATION OF ANY DOOR OR WINDOW, THE RECONFIGURATION OR EXTENSION OF ANY SYSTEM, OR THE INSTALLATION OF ANY ADDITIONAL EQUIPMENT; AND SHALL APPLY WHERE THE WORK AREA IS LESS THAN 50 PERCENT OF THE BUILDING AREA. LEVEL 2 ALTERATIONS SHALL COMPLY WITH THE APPLICABLE PROVISIONS OF SECTIONS 602 AND 603.
COMMENTS- WILL COMPLY

601.2.3 LEVEL 3 - LEVEL 3 ALTERATIONS APPLY WHERE THE WORK AREA EXCEEDS 50 PERCENT OF THE BUILDING AREA. LEVEL 3 ALTERATIONS SHALL COMPLY WITH THE APPLICABLE PROVISIONS OF SECTIONS 602, 603 AND 604.
COMMENTS- WILL COMPLY

601.2.3.1 SPECIAL PROVISIONS - N/A

601.3 FLOOD HAZARD AREAS - N/A

601.4 ENERGY CONSERVATION - LEVEL 1, 2, AND 3 ALTERATIONS TO EXISTING BUILDINGS OR STRUCTURES ARE PERMITTED WITHOUT REQUIRING THE ENTIRE BUILDING OR STRUCTURE TO COMPLY WITH THE ENERGY REQUIREMENTS OF THE INTERNATIONAL ENERGY CONSERVATION CODE OR INTERNATIONAL RESIDENTIAL CODE. THE ALTERATIONS SHALL CONFORM TO THE ENERGY REQUIREMENTS OF THE INTERNATIONAL ENERGY CONSERVATION CODE OR INTERNATIONAL RESIDENTIAL CODE AS THEY RELATE TO NEW CONSTRUCTION ONLY.
COMMENTS- WILL COMPLY

601.5 ACCESSIBILITY - ACCESSIBILITY SHALL BE PROVIDED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF SECTION 404.
COMMENTS- WILL COMPLY

SECTION 602 - LEVEL 1 ALTERATIONS
602.1 SCOPE - LEVEL 1 ALTERATIONS AS DESCRIBED IN SECTION 601.2.1 SHALL COMPLY WITH THE REQUIREMENTS OF THIS SECTION. LEVEL 1 ALTERATIONS TO HISTORIC BUILDINGS SHALL COMPLY WITH THIS CHAPTER, EXCEPT AS MODIFIED IN CHAPTER 9.
COMMENTS- WILL COMPLY

602.2 CONFORMANCE - ALTERATIONS SHALL BE DONE IN A MANNER THAT MAINTAINS THE FOLLOWING:
1. LEVEL OF FIRE PROTECTION THAT IS EXISTING.
2. LEVEL OF PROTECTION THAT IS EXISTING FOR THE MEANS OF EGRESS.
COMMENTS- WILL COMPLY

602.3 BUILDING ELEMENTS AND MATERIALS - BUILDING ELEMENTS AND MATERIALS SHALL COMPLY WITH THE APPLICABLE PROVISIONS OF SECTIONS 302 AND 602.3.1 THROUGH 602.3.5.
COMMENTS- WILL COMPLY

602.3.1 INTERIOR FINISHES - ALL NEWLY INSTALLED INTERIOR WALL AND CEILING FINISHES SHALL COMPLY WITH CHAPTER 8 OF THE VCC.
COMMENTS- WILL COMPLY

602.3.2 INTERIOR FLOOR FINISH - NEW INTERIOR FLOOR FINISH, INCLUDING NEW CARPETING USED AS AN INTERIOR FLOOR FINISH MATERIAL, SHALL COMPLY WITH SECTION 804 OF THE VCC.
COMMENTS- WILL COMPLY

602.3.3 INTERIOR TRIM - ALL NEWLY INSTALLED INTERIOR TRIM MATERIALS SHALL COMPLY WITH SECTION 806 OF THE VCC.
COMMENTS- WILL COMPLY

602.3.4 MATERIALS AND METHODS - ALL NEW WORK SHALL COMPLY WITH THE MATERIALS AND METHODS REQUIREMENTS IN THE VCC, INTERNATIONAL ENERGY CONSERVATION CODE, INTERNATIONAL MECHANICAL CODE, AND INTERNATIONAL PLUMBING CODE, AS APPLICABLE, THAT SPECIFY MATERIAL STANDARDS, DETAIL OF INSTALLATION AND CONNECTION, JOINTS, PENETRATIONS, AND CONTINUITY OF ANY ELEMENT, COMPONENT, OR SYSTEM IN THE BUILDING.
COMMENTS- WILL COMPLY

602.3.5 INTERNATIONAL FUEL GAS CODE - N/A

SECTION 603 - LEVEL 2 ALTERATIONS
603.1 SCOPE - LEVEL 2 ALTERATIONS AS DESCRIBED IN SECTION 601.2.2 SHALL COMPLY WITH THE REQUIREMENTS OF THIS SECTION.
COMMENTS- WILL COMPLY

603.2 LEVEL 1 ALTERATION COMPLIANCE - IN ADDITION TO THE REQUIREMENTS OF THIS SECTION, ALL WORK SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF SECTION 602.
COMMENTS- WILL COMPLY

603.3 COMPLIANCE - ALL NEW CONSTRUCTION ELEMENTS, COMPONENTS, SYSTEMS, AND SPACES SHALL COMPLY WITH THE REQUIREMENTS OF THE VCC.
COMMENTS- WILL COMPLY

603.4 BUILDING ELEMENTS AND MATERIALS - THE REQUIREMENTS OF SECTION 603.4 ARE LIMITED TO WORK AREAS IN WHICH LEVEL 2 ALTERATIONS ARE BEING PERFORMED AND SHALL APPLY BEYOND THE WORK AREA WHERE SPECIFIED.
COMMENTS- WILL COMPLY

603.4.1 VERTICAL OPENINGS - N/A

603.4.1.1 EXISTING VERTICAL OPENINGS - N/A

603.4.1.2 SUPPLEMENTAL SHAFT AND FLOOR OPENING ENCLOSURE REQUIREMENTS- N/A

603.4.1.3 SUPPLEMENTAL STAIRWAY ENCLOSURE REQUIREMENTS - N/A

603.4.2 SMOKING COMPARTMENTS - N/A

603.4.3 INTERIOR FINISH - THE INTERIOR FINISH OF WALLS AND CEILINGS IN EXITS AND CORRIDORS IN ANY WORK AREA SHALL COMPLY WITH THE REQUIREMENTS OF THE VCC.
COMMENTS- WILL COMPLY

603.4.3.1 SUPPLEMENTAL INTERIOR FINISH REQUIREMENTS - N/A

603.4.4 GUARDS - N/A

603.4.5 FIRE-RESISTANCE RATINGS - WHERE APPROVED BY THE CODE OFFICIAL, BUILDINGS WHERE AN AUTOMATIC SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH SECTION 903.3.1.1 OR 903.3.1.2 OF THE VCC HAS BEEN ADDED, AND THE BUILDING IS NOW SPRINKLERED THROUGHOUT, THE REQUIRED FIRE-RESISTANCE RATINGS OF BUILDING ELEMENTS AND MATERIALS SHALL BE PERMITTED TO MEET THE REQUIREMENTS OF THE CURRENT BUILDING CODE.
COMMENTS- WILL COMPLY

603.5 FIRE PROTECTION - THE REQUIREMENTS OF SECTION 603.5 SHALL BE LIMITED TO WORK AREAS IN WHICH LEVEL 2 ALTERATIONS ARE BEING PERFORMED, AND WHERE SPECIFIED THEY SHALL APPLY THROUGHOUT THE FLOOR ON WHICH THE WORK AREAS ARE LOCATED OR OTHERWISE BEYOND THE WORK AREA.
COMMENTS- WILL COMPLY

603.5.1 CORRIDOR RATINGS - N/A

603.5.2 AUTOMATIC SPRINKLER SYSTEM - AUTOMATIC SPRINKLER SYSTEMS SHALL BE PROVIDED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS 603.5.2.1 THROUGH 603.5.2.5. INSTALLATION REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE VCC.
COMMENTS- WILL COMPLY

603.5.2.1 HIGH-RISE BUILDINGS - N/A

603.5.2.2 GROUPS A, B, E, F-1, H, I, M, R-1, R-2, R-4, S-1, AND S-2 - N/A NO SHARED EXITS OR CORRIDORS

603.5.2.2.1 MIXED USES - N/A

603.5.2.3 WINDOWLESS STORIES - N/A

603.5.2.4 OTHER REQUIRED AUTOMATIC SPRINKLER SYSTEMS - N/A

603.5.2.5 SUPERVISION - N/A

603.5.3 STANDPIPES - N/A

603.5.4 FIRE ALARM DETECTION - AN APPROVED FIRE ALARM SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH SECTIONS 603.5.4.1 THROUGH 603.5.4.3, WHERE AUTOMATIC SPRINKLER PROTECTION IS PROVIDED IN ACCORDANCE WITH SECTION 603.5.2 AND IS CONNECTED TO THE BUILDING FIRE ALARM SYSTEM, AUTOMATIC HEAT DETECTION SHALL NOT BE REQUIRED.
COMMENTS- AN EXISTING FIRE ALARM SYSTEM SERVES THE EXISTING SPRINKLER SYSTEM

603.5.4.2 SUPPLEMENTAL FIRE ALARM SYSTEM REQUIREMENTS - WHERE THE WORK AREA ON ANY FLOOR EXCEEDS 50 PERCENT OF THAT FLOOR AREA, SECTION 603.5.4.1 SHALL APPLY THROUGHOUT THE FLOOR.
EXCEPTION: ALARM-INITIATING AND NOTIFICATION APPLIANCES SHALL NOT BE REQUIRED TO BE INSTALLED IN TENANT SPACES OUTSIDE OF THE WORK AREA.
COMMENTS- WILL COMPLY

603.5.4.3 SMOKE ALARMS - N/A

603.6 MEANS OF EGRESS - THE MEANS OF EGRESS SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 603.6.
COMMENTS - WILL COMPLY

603.6.1 GENERAL - N/A

603.6.2 NUMBER OF EXITS - THE NUMBER OF EXITS SHALL BE IN ACCORDANCE WITH SECTIONS 603.6.2.1 THROUGH 603.6.2.3.
COMMENTS - WILL COMPLY

603.6.2.1 MINIMUM NUMBER - N/A

603.6.2.1.1 SINGLE-EXIT BUILDINGS - N/A

603.6.2.2 MEZZANINES - N/A

603.6.3 EGRESS DOORWAYS - EGRESS DOORWAYS IN ANY WORK AREA SHALL COMPLY WITH SECTIONS 603.6.3.1 THROUGH 603.6.3.5.
COMMENTS- WILL COMPLY

603.6.3.1 TWO EGRESS DOORWAYS REQUIRED - WORK AREAS SHALL BE PROVIDED WITH TWO EGRESS DOORWAYS IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS 603.6.3.1.1 AND 603.6.3.1.2.
COMMENTS- WILL COMPLY

603.6.3.1.1 OCCUPANT LOAD AND TRAVEL DISTANCE - N/A

603.6.3.1.2 GROUP I-2 - N/A

603.6.3.2 DOOR SWING - IN THE WORK AREA AND IN THE EGRESS PATH FROM ANY WORK AREA TO THE EXIT DISCHARGE, ALL EGRESS DOORS SERVING AN OCCUPANT LOAD GREATER THAN 50 SHALL SWING IN THE DIRECTION OF EXIT TRAVEL.
COMMENTS- WILL COMPLY

603.6.3.2.1 SUPPLEMENTAL REQUIREMENTS FOR DOOR SWING - WHERE THE WORK AREA EXCEEDS 50 PERCENT OF THE FLOOR AREA, DOOR SWING SHALL COMPLY WITH SECTION 603.6.3.2 THROUGHOUT THE FLOOR.
COMMENTS- WILL COMPLY

603.6.3.3 DOOR CLOSING - N/A

603.6.3.3.1 SUPPLEMENTAL REQUIREMENTS FOR DOOR CLOSING - N/A

603.6.3.4 PANIC HARDWARE - IN ANY WORK AREA, AND IN THE EGRESS PATH FROM ANY WORK AREA TO THE EXIT DISCHARGE, IN BUILDINGS OF GROUP A ASSEMBLY OCCUPANCIES WITH AN OCCUPANT LOAD GREATER THAN 100, ALL REQUIRED EXIT DOORS EQUIPPED WITH LATCHING DEVICES SHALL BE EQUIPPED WITH APPROVED PANIC HARDWARE.
COMMENTS- PANIC HARDWARE NOT REQUIRED

603.6.3.4.1 SUPPLEMENTAL REQUIREMENTS FOR PANIC HARDWARE - N/A

603.6.3.5 EMERGENCY POWER SOURCE IN GROUP I-3 - N/A

603.6.5 DEAD-END CORRIDORS - N/A

603.6.6 MEANS-OF-EGRESS LIGHTING - MEANS-OF-EGRESS LIGHTING SHALL BE IN ACCORDANCE WITH THIS SECTION, AS APPLICABLE.
COMMENTS- WILL COMPLY

603.6.6.1 ARTIFICIAL LIGHTING REQUIRED - MEANS OF EGRESS IN ALL WORK AREAS SHALL BE PROVIDED WITH ARTIFICIAL LIGHTING IN ACCORDANCE WITH THE REQUIREMENTS OF THE VCC.
COMMENTS- WILL COMPLY

603.6.6.2 SUPPLEMENTAL REQUIREMENTS FOR MEANS-OF-EGRESS LIGHTING - WHERE THE WORK AREA ON ANY FLOOR EXCEEDS 50 PERCENT OF THAT FLOOR AREA, MEANS OF EGRESS THROUGHOUT THE FLOOR SHALL COMPLY WITH SECTION 603.6.6.1.
COMMENTS- WILL COMPLY

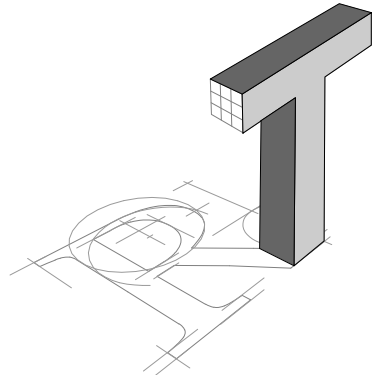
603.6.7 EXIT SIGNS - EXIT SIGNS SHALL BE IN ACCORDANCE WITH THIS SECTION, AS APPLICABLE.
COMMENTS- WILL COMPLY

603.6.7.1 WORK AREAS - MEANS OF EGRESS IN ALL WORK AREAS SHALL BE PROVIDED WITH EXIT SIGNS IN ACCORDANCE WITH THE REQUIREMENTS OF THE VCC.
COMMENTS- WILL COMPLY

603.6.7.2 SUPPLEMENTAL REQUIREMENTS FOR EXIT SIGNS - WHERE THE WORK AREA ON ANY FLOOR EXCEEDS 50 PERCENT OF THAT FLOOR AREA, MEANS OF EGRESS THROUGHOUT THE FLOOR SHALL COMPLY WITH SECTION 603.6.7.1.
COMMENTS- WILL COMPLY

603.6.8 HANDRAILS - N/A

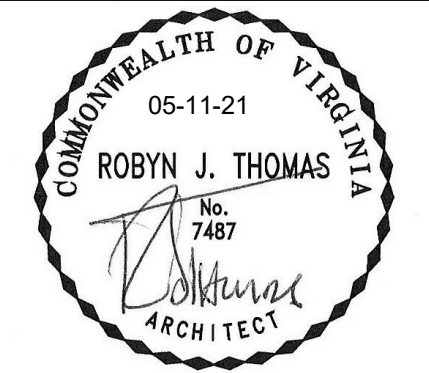
603.7 STRUCTURAL - STRUCTURAL ELEMENTS AND SYSTEMS WITHIN BUILDINGS UNDERGOING LEVEL 2 ALTERATIONS SHALL COMPLY WITH SECTIONS 603.7.1 THROUGH 603.7.5.
COMMENTS- WILL COMPLY



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Project number	21-012
Date	05-11-2021
Drawn by	Author

A-0.2

Scale	3" = 1'-0"
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603.8 ELECTRICAL - ELECTRICAL ELEMENTS AND SYSTEMS WITHIN BUILDINGS UNDERGOING LEVEL 2 ALTERATIONS SHALL COMPLY WITH SECTIONS 603.8.1 THROUGH 603.8.3.
COMMENTS- WILL COMPLY

603.8.1 NEW INSTALLATIONS - ALL NEWLY INSTALLED ELECTRICAL EQUIPMENT AND WIRING RELATING TO WORK DONE IN ANY WORK AREA SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF NFPA 70 EXCEPT AS PROVIDED FOR IN SECTION 603.8.3.
COMMENTS- WILL COMPLY

603.8.2 EXISTING INSTALLATIONS - N/A

603.8.3 RESIDENTIAL OCCUPANCIES - N/A

603.9 MECHANICAL - SEE MECHANICAL PLANS PREPARED BY PERMITZIP

603.9.2 LOCAL EXHAUST - SEE MECHANICAL PLANS PREPARED BY PERMITZIP

603.10 PLUMBING - SEE PLUMBING PLANS PREPARED BY PERMITZIP

SECTION 604 - LEVEL 3 ALTERATIONS - N/A

CHAPTER 7 - CHANGE OF OCCUPANCY

SECTION 701 - GENERAL
701.1 SCOPE - THE PROVISIONS OF THIS CHAPTER SHALL APPLY WHERE A CHANGE OF OCCUPANCY OCCURS, EXCEPT AS MODIFIED BY SECTION 906 FOR HISTORIC BUILDINGS. COMPLIANCE WITH THE CURRENT VCC FOR THE CHANGE OF OCCUPANCY SHALL ONLY BE REQUIRED AS PRESCRIBED IN THIS CHAPTER. COMPLIANCE SHALL BE ONLY AS NECESSARY TO MEET THE SPECIFIC PROVISIONS OF THE APPLICABLE INTERNATIONAL CODES AND IS NOT INTENDED TO REQUIRE THE ENTIRE BUILDING TO BE BROUGHT INTO COMPLIANCE.
~~EXCEPTION:~~ COMPLIANCE WITH THE PROVISIONS OF CHAPTER 14 SHALL BE PERMITTED IN LIEU OF COMPLYING WITH THIS CHAPTER FOR A CHANGE OF OCCUPANCY.
COMMENTS- CHANGE OF USE FROM "M" TO "B"

701.2 WORK UNDERTAKEN IN CONNECTION WITH A CHANGE OF OCCUPANCY - ANY REPAIRS, ALTERATIONS, OR ADDITIONS UNDERTAKEN IN CONNECTION WITH A CHANGE OF OCCUPANCY SHALL CONFORM TO THE APPLICABLE REQUIREMENTS FOR THE WORK AS CLASSIFIED IN THIS CODE AND AS MODIFIED BY THIS CHAPTER.

SECTION 702 - SPECIAL USE AND OCCUPANCY - N/A

SECTION 703 - BUILDING ELEMENTS AND MATERIALS

703.1 INTERIOR FINISH - IN AREAS OF THE BUILDING UNDERGOING A CHANGE OF OCCUPANCY CLASSIFICATION, THE INTERIOR FINISH OF WALLS AND CEILINGS SHALL COMPLY WITH THE REQUIREMENTS OF THE VCC FOR THE NEW OCCUPANCY CLASSIFICATION.

703.2 ENCLOSURE OF VERTICAL OPENINGS - N/A

SECTION 704 - FIRE PROTECTION

704.1 FIRE PROTECTION SYSTEMS - FIRE PROTECTION SYSTEMS SHALL BE PROVIDED IN ACCORDANCE WITH SECTIONS 704.2 AND 704.3.
COMMENTS- WILL COMPLY

704.2 FIRE SPRINKLER SYSTEM - WHERE A BUILDING UNDERGOES A CHANGE OF OCCUPANCY THAT REQUIRES AN AUTOMATIC FIRE SPRINKLER SYSTEM TO BE PROVIDED BASED ON THE NEW OCCUPANCY IN ACCORDANCE WITH CHAPTER 9 OF THE VCC, SUCH SYSTEM SHALL BE PROVIDED THROUGHOUT THE ARE WHERE THE CHANGE OF OCCUPANCY OCCURS.
COMMENTS- THE BUILDING HAS AN EXISTING SPRINKLER SYSTEM

704.3 FIRE ALARM AND DETECTION SYSTEM - WHERE A BUILDING UNDERGOES A CHANGE OF OCCUPANCY THAT REQUIRES A FIRE ALARM AND DETECTION SYSTEM TO BE PROVIDED BASED ON THE NEW OCCUPANCY IN ACCORDANCE WITH CHAPTER 9 OF THE VCC, SUCH SYSTEMS SHALL BE PROVIDED THROUGHOUT THE AREA WHERE THE CHANGE OF OCCUPANCY OCCURS. EXISTING ALARM NOTIFICATION APPLIANCES SHALL BE AUTOMATICALLY ACTIVATED THROUGHOUT THE BUILDING. WHERE THE BUILDING IS NOT EQUIPPED WITH A FIRE ALARM SYSTEM, ALARM NOTIFICATION APPLIANCES SHALL BE PROVIDED THROUGHOUT THE AREA WHERE THE CHANGE OF OCCUPANCY OCCURS IN ACCORDANCE WITH SECTION 907 OF THE VCC AS REQUIRED FOR NEW CONSTRUCTION
COMMENTS- THE BUILDING HAS A FIRE ALARM SYSTEM TO SERVE SPRINKLER SYSTEM

SECTION 705 - MEANS OF EGRESS

705.1 GENERAL - MEANS OF EGRESS IN BUILDINGS UNDERGOING A CHANGE OF OCCUPANCY SHALL COMPLY WITH THIS SECTION
COMMENTS- WILL COMPLY

705.2 MEANS OF EGRESS, HAZARDS - HAZARD CATEGORIES IN REGARD TO LIFE SAFETY AND MEANS OF EGRESS SHALL BE IN ACCORDANCE WITH TABLE 705.2

COMMENTS- NEW USE IS LOWER HAZARD

705.3 MEANS OF EGRESS FOR CHANGE TO HIGHER HAZARD CATEGORY - N/A

705.4 MEANS OF EGRESS FOR CHANGE OF OCCUPANCY TO EQUAL OR LOWER HAZARD CATEGORY OR WITHOUT A CHANGE IN CLASSIFICATION - WHEN A CHANGE OF OCCUPANCY CLASSIFICATION IS MADE TO AN EQUAL OR LESSER HAZARD CATEGORY (HIGHER NUMBER) AS SHOWN IN TABLE 705.2 OR A CHANGE OF OCCUPANCY WITHOUT A CHANGE IN CLASSIFICATION IS MADE, THE MEANS OF EGRESS SHALL BE DEEMED ACCEPTABLE PROVIDED THE MEANS OF EGRESS SERVING THE AREA OF THE CHANGE OR OCCUPANCY MEETS THE EGRESS CAPACITY AND OCCUPANT LOAD-BASED MEANS OF EGRESS PROVISIONS IN CHAPTER 10 OF THE VCC FOR THE NEW OCCUPANCY
COMMENTS- WILL COMPLY

SECTION 706 - HEIGHTS AND AREAS

706.1 GENERAL - HEIGHTS AND AREAS OF BUILDINGS AND STRUCTURES UNDERGOING A CHANGE OF OCCUPANCY CLASSIFICATION SHALL COMPLY WITH THIS SECTION.

706.2 HEIGHT AND AREAS, HAZARDS - HAZARD CATEGORIES IN REGARD TO HEIGHT AND AREA SHALL BE IN ACCORDANCE WITH TABLE 706.2.

COMMENTS- NEW "B" USE IS LOWER HAZARD

706.3 HEIGHT AND AREA FOR CHANGE TO A HIGHER HAZARD - N/A

706.3.1 FIRE WALL ALTERNATIVE - N/A

706.4 HEIGHT AND AREA FOR CHANGE TO EQUAL OR LESSER HAZARD CATEGORY - WHEN A CHANGE OF OCCUPANCY CLASSIFICATION IS MADE TO AN EQUAL OR LESSER HAZARD CATEGORY AS SHOWN IN TABLE 706.2, THE HEIGHT AND AREA OF THE EXISTING BUILDING SHALL BE DEEMED ACCEPTABLE.
COMMENTS- NEW "B" USE IS LOWER HAZARD

706.5 FIRE BARRIERS - N/A

SECTION 707 - EXTERIOR WALL FIRE-RESISTANCE RATINGS

707.1 EXTERIOR WALL FIRE-RESISTANCE RATINGS, HAZARDS - HAZARD CATEGORIES IN REGARD TO FIRE-RESISTANCE RATINGS OF EXTERIOR WALLS SHALL BE IN ACCORDANCE WITH TABLE 707.1.

COMMENTS- WILL COMPLY

707.2 EXTERIOR WALL RATING FOR CHANGE OF OCCUPANCY CLASSIFICATION TO A HIGHER HAZARD CATEGORY - N/A

707.3 EXTERIOR WALL RATING FOR CHANGE OF OCCUPANCY CLASSIFICATION TO AN EQUAL OR LESSER HAZARD CATEGORY - WHEN A CHANGE OF OCCUPANCY CLASSIFICATION IS MADE TO AN EQUAL OR LESSER HAZARD CATEGORY AS SHOWN IN TABLE 707.1, EXISTING EXTERIOR WALLS, INCLUDING OPENINGS, SHALL BE ACCEPTED.

707.4 OPENING PROTECTIVE -N/A

SECTION 708 - ELECTRICAL AND LIGHTING

708.1 SPECIAL OCCUPANCIES - N/A

708.2 SERVICE UPGRADE - N/A

708.3 NUMBER OF ELECTRICAL OUTLETS - WHERE A BUILDING UNDERGOES A CHANGE OF OCCUPANCY, THE NUMBER OF ELECTRICAL OUTLETS SHALL COMPLY WITH NFPA 70 FOR THE NEW OCCUPANCY
COMMENTS- SEE PLANS PREPARED BY PERMITZIP

708.4 LIGHTING - LIGHTING SHALL COMPLY WITH THE REQUIREMENTS OF THE VCC FOR THE NEW OCCUPANCY
COMMENTS- SEE PLANS PREPARED BY PERMITZIP

SECTION 709 - MECHANICAL AND VENTILATION - SEE PLANS PREPARED BY PERMITZIP

SECTION 710 - PLUMBING - SEE PLANS PREPARED BY PERMITZIP

SECTION 711 - STRUCTURAL - N/A

SECTION 712 - ACCESSIBILITY

712.1 GENERAL - EXISTING BUILDINGS THE UNDERGO A CHANGE OF OCCUPANCY CLASSIFICATION SHALL COMPLY WITH SECTION 402.
COMMENTS- THE BUILDING IS ACCESSIBLE

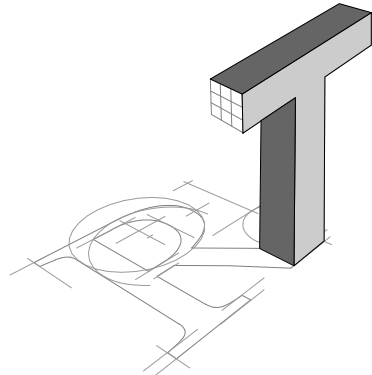
CHAPTER 8 - ADDITIONS - N/A

CHAPTER 9 - HISTORIC BUILDINGS - N/A

CHAPTER 10 - MOVED BUILDINGS AND STRUCTURES - N/A

CHAPTER 11 - RETROFIT REQUIREMENTS - N/A

CHAPTER 12 - CONSTRUCTION SAFEGAURDS - N/A



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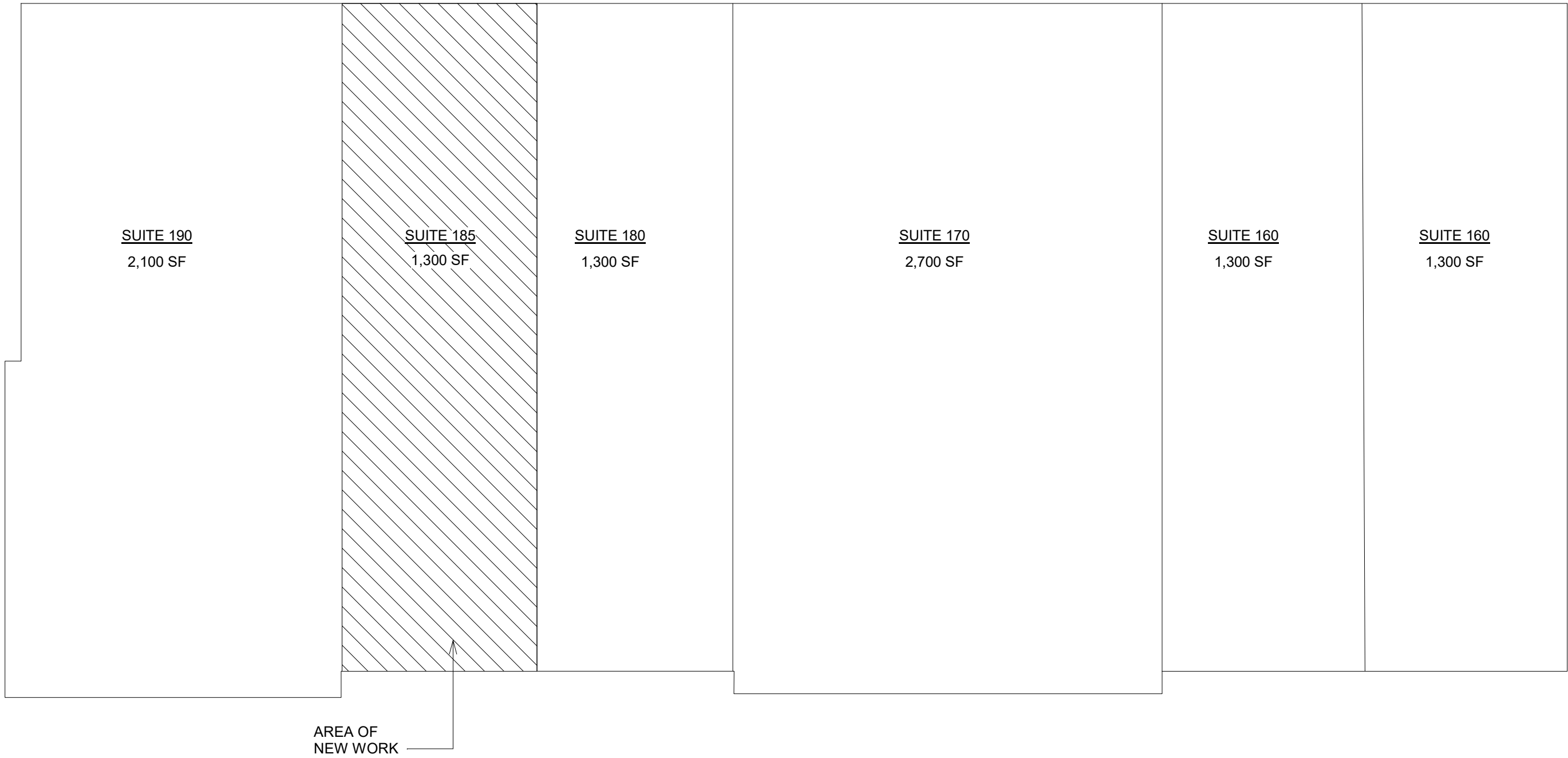
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Drawn by	Author

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Scale	3" = 1'-0"
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Key Plan
3/32" = 1'-0"

DEMOLITION PLAN LEGEND

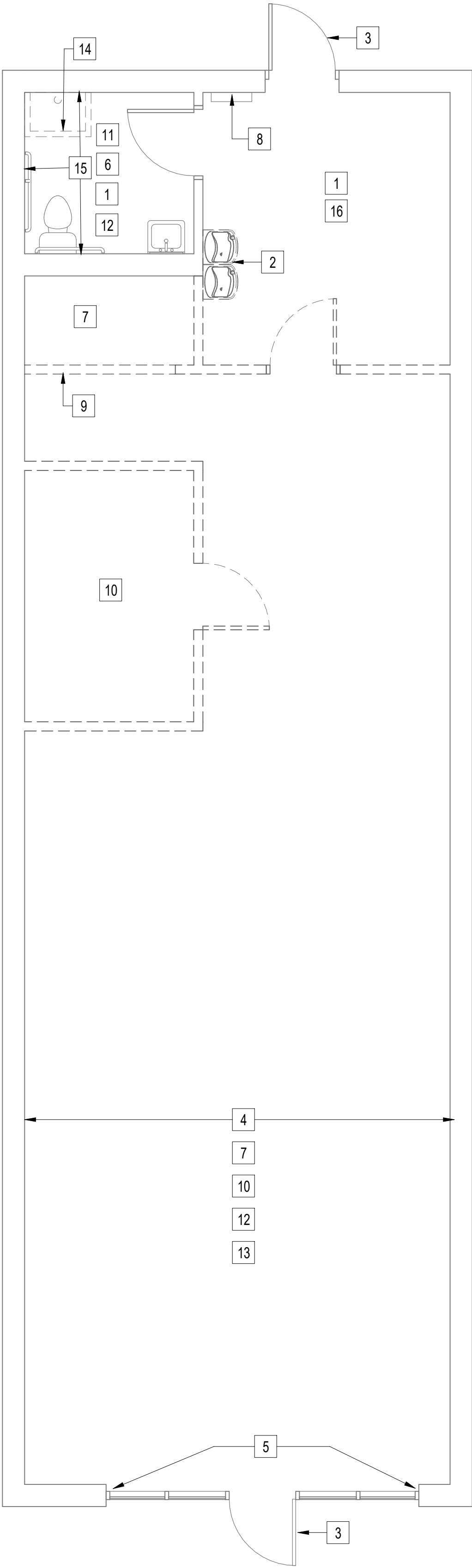
- EXISTING WALLS
- ITEM TO BE DEMOLISHED
- DEMOLITION NOTE

GENERAL NOTES

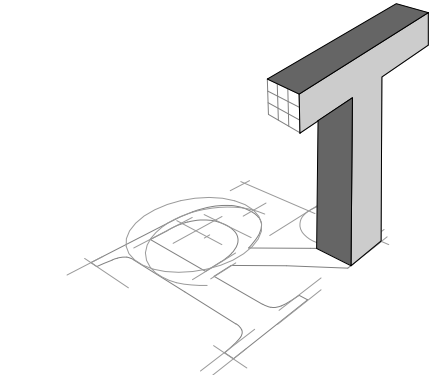
- THE DEMOLITION SCOPE SHALL INCLUDE THE DEMOLITION, REMOVAL AND DISPOSAL OF PARTITIONS, DOORS, FRAMES, CEILINGS, PME ITEMS, FLOORING MATERIALS, BUILT-INS, FURNISHINGS AND ACCESSORIES COMPLETE TO THE EXTENT INDICATED BY THE DEMOLITION PLAN OR AS REQUIRED TO INSTALL NEW WORK. THOROUGH COORDINATION BETWEEN ALL ARCHITECTURAL, PM&E, DEMOLITION AND NEW WORK.
- CONTRACTOR SHALL EXERCISE CARE IN REMOVAL OF DEMOLITION ITEMS. CONTRACTOR SHALL REPAIR, AT HIS COST, ANY DAMAGE CAUSED TO EXISTING CONSTRUCTION AND/OR EQUIPMENT THAT IS NOT IN THE SCOPE OF WORK.
- WHERE DEMOLITION IS INDICATED, PROTECT SURROUNDING OR ADJACENT EXISTING CONSTRUCTION TO REMAIN.
- CONTRACTOR SHALL REPAIR SURFACES TO REMAIN WHERE DEMOLITION HAS OCCURRED. CONTRACTOR SHALL DETERMINE THE EXACT SCOPE OF THE DEMOLITION WORK AS IT RELATES TO THE NEW WORK AND REMOVE AND REBUILD PORTIONS OF CONSTRUCTION INDICATED TO REMAIN WHERE REQUIRED.
- THE EXTENT AND LOCATION OF THE PARTIAL DEMOLITION OF ITEMS OR SYSTEMS, SUCH AS WALLS, FLOOR SYSTEMS, CEILINGS OR SIMILAR SHALL BE DETERMINED BY COORDINATION WITH THE NEW WORK DRAWINGS.
- FIELD VERIFY EXISTING DIMENSIONS AND ELEVATIONS INDICATED THUS "+/-". REPORT SIGNIFICANT DISCREPANCIES TO THE ARCHITECT OR TENANT PRIOR TO PROCEEDING WITH NEW WORK.
- PRIOR TO REMOVAL OF ANY STUD PARTITIONS, INSPECT EXISTING ELECTRICAL/PLUMBING CONDITIONS. NOTIFY ARCHITECT OF ANY CONDITIONS WHICH NEED TO BE ADDRESSED PRIOR TO COMMENCEMENT OF DEMOLITION.
- CONTRACTOR WILL REPORT ANY FOUND HAZARDOUS MATERIALS OR SUBSTANCES WITH THE TENANT AND COORDINATE THE ABATEMENT PRIOR TO NEW WORK.
- CAP PLUMBING AT FLOOR LEVEL WHERE APPLICABLE.
- ALL EXISTING ELECTRICAL RECEPTACLES AND DATA TO BE RELOCATED PER ELECTRICAL DRAWINGS U.N.O.
- ALL EXISTING MECHANICAL GRILLES TO BE RELOCATED PER MECHANICAL DRAWINGS U.N.O.
- FIRE SPRINKLER SYSTEM TO BE MODIFIED TO MATCH NEW REFLECTED CEILING PLAN. FIRE SPRINKLER DRAWINGS BY OTHERS.
- SMOKE DETECTION DEVICES, LIGHT SENSORS AND MOTION DETECTORS TO BE COORDINATED WITH NEW REFLECTED CEILING PLAN.
- EMERGENCY LIGHT FIXTURES TO BE COORDINATED WITH NEW REFLECTED CEILING PLAN.

DEMOLITION PLAN LEGEND

- CLEAN AND LEVEL EXISTING FLOOR PRIOR TO ACCEPT NEW FINISHES
- REMOVE EXISTING DRINKING FOUNTAINS.
- EXISTING DOOR, FRAME AND HARDWARE TO REMAIN IN LOCATION, TYP. U.N.O. REFER TO DOOR SCHEDULE FOR MORE INFORMATION.
- EXISTING DEMISING WALL TO REMAIN IN PLACE. PROTECT IN PLACE DURING CONSTRUCTION. REFER TO FINISH SCHEDULE FOR RE-FINISH INFORMATION.
- EXISTING STOREFRONT GLAZING SYSTEM TO REMAIN. PROTECT IN PLACE DURING CONSTRUCTION.
- REMOVE FRP AT UTILITY SINK. PREPARE WALL FOR NEW SURFACE
- REMOVE WOOD WALL PANELING. PREPARE SURFACE FOR NEW FINISH.
- EXISTING ELECTRICAL PANEL TO REMAIN; SEE ELECTRICAL DRAWINGS.
- REMOVE EXISTING SOFFIT
- REMOVE EXISTING FLOOR FINISH, AND BASE COMPLETE. PREPARE SURFACES FOR NEW FINISH.
- REMOVE EXISTING RESTROOM ACCESSORIES
- REMOVE CEILING INCLUDING TILES, GRID, HANGERS, CLIPS, SUPPLY, AND RETURN GRILLS, AND ALL ASSOCIATED ITEMS COMPLETE TO ACCOMMODATE NEW WORK.
- G.C. TO REMOVE EXISTING FIXTURES & EQUIPMENT FROM THE PREVIOUS TENANT
- REMOVE EXISTING UTILITY SINK
- REMOVE FRP



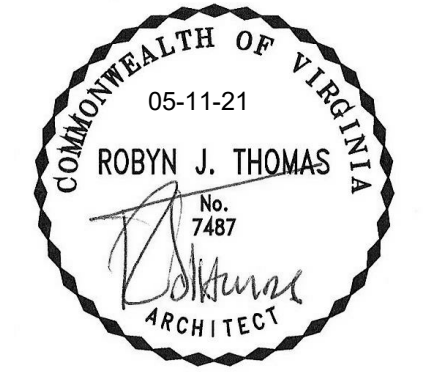
DEMOLITION PLAN
1/4" = 1'-0"



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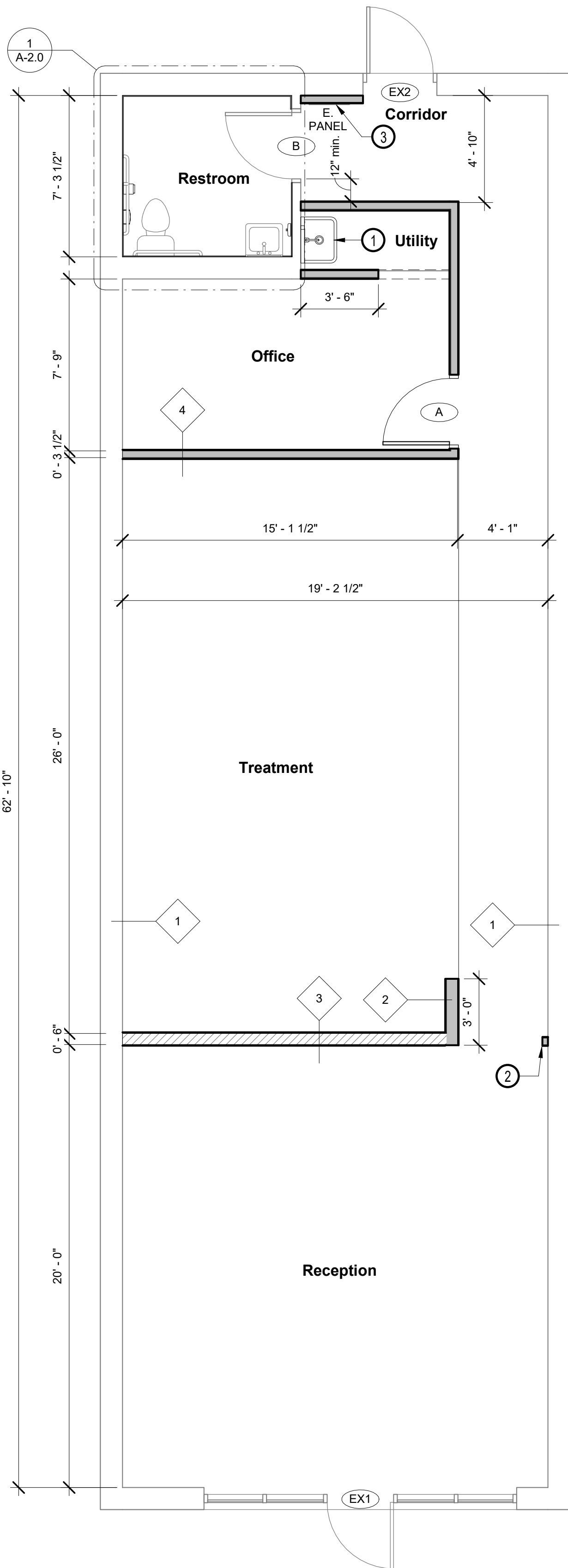
No.	Date	Comments

DEMOLITION

Project number 21-012
Date 05-11-2021
Drawn by Author

A-1.0

Scale As indicated



NEW WORK PLAN

1/4" = 1'-0"

GENERAL NOTES

- U.O.N. DIMENSIONS ARE TO FACE OF STUDS FOR NEW CONSTRUCTION TO FACE OF FINISH AT EXISTING CONSTRUCTION
- VERIFY EXISTING CONDITIONS WITH THE SCOPE OF WORK AND NOTIFY THE DESIGN TEAM OF ANY CONDITIONS: EQUIPMENT, FINISHES, ETCETERA THAT AREA IN CONFLICT WITH THESE CONSTRUCTION
- FLOOR SHALL BE SMOOTH AND LEVEL AS REQUIRED FOR INSTALLATION OF NEW FLOOR FINISH. PREPARE AND PATCH FLOOR COMPLETE
- TYPICAL DOOR OFFSET TO BE 4" U.O.N.

PLAN LEGEND

- EXISTING WALLS
- NEW NON LOAD BEARING WALL - SEE SHEET AXX FOR DETAILS
- RECEPTION WALL BUILT TO 9'-0"

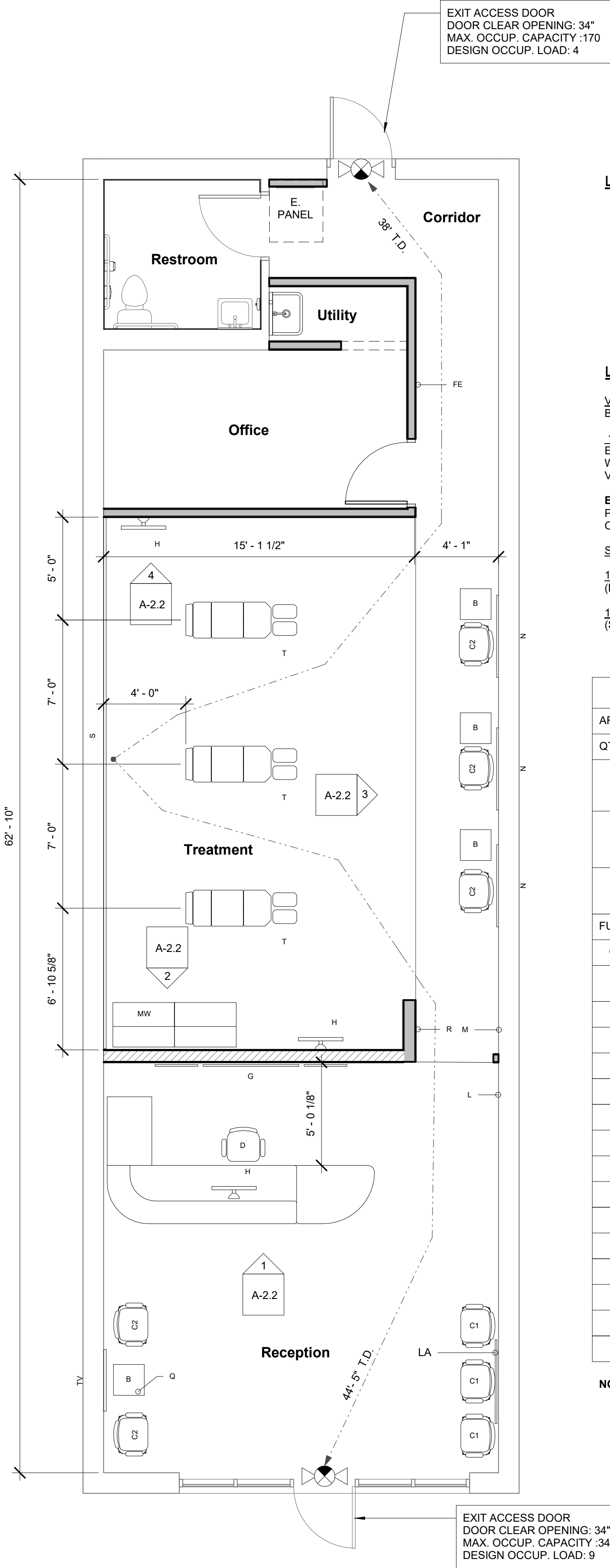
- DOOR TYPE
- NEW WORK NOTE
- INTERIOR ELEVATION

NEW WORK PLAN NOTES

- NEW UTILITY SINK
- NEW 4" x 2" KNOCKOUT
- FURR OUT WALL TO HIDE ELECTRICAL PANEL WIRES

DOOR SCHEDULE

- A** OFFICE
DOOR DIMENSION: 3'-0" x 7'-0" x 1 3/4"
DOOR TYPE: SOLID CORE, COMMERCIAL FINISH
COMPLETE WITH METAL BUCK FRAME (PAINT: SW7004 SNOWBOUND)
HARDWARE: OFFICE SET WITH LEVER HANDLES, WALL STOP, 1 1/2" PAIR BUTT HINGES (BRUSHED NICKEL ADA COMPLIANT)
- B** RESTROOM
DOOR DIMENSION: 3'-0" x 7'-0" x 1 3/4"
DOOR TYPE: SOLID CORE, COMMERCIAL DOOR (PAINT GRADE BIRCH VENEER)
COMPLETE WITH METAL BUCK FRAME (PAINT: SW7004 SNOWBOUND)
HARDWARE: PRIVACY SET WITH LEVER HANDLES, DOOR CLOSER, ADA SIGNAGE, WALL STOP, 1 1/2" PAIR BUTT HINGES (BRUSHED NICKEL ADA COMPLIANT)
- EX1** EXISTING 36" WIDE DOUBLE DOOR TO REMAIN
DOOR TYPE: ALUMINUM STOREFRONT DOOR
- EX2** EXISTING 36" WIDE DOOR TO REMAIN
DOOR TYPE: GALVANIZED STEEL DOOR & FRAME
NOTE: DOOR & FRAME (PAINT: SW7004 SNOWBOUND)



LIFE SAFETY & FURNITURE PLAN

1/4" = 1'-0"

LIFE SAFETY LEGEND

- EXIT / EBU
- TRAVEL DISTANCE TO EXIT
- DISTANCE IN FEET

LIFE SAFETY PLAN NOTES

VCC TABLE 1017.2 - EXIT ACCESS TRAVEL DISTANCE
BUSINESS (B) USE WITH NON-SPRINKLER SYSTEM : 200' MAX

1017.3 MEASUREMENT -
EXIT ACCESS TRAVEL DISTANCE SHALL BE MEASURED FROM THE MOST REMOTE POINT WITHIN A STORY ALONG THE NATURAL AND UNOBSTRUCTED PATH OF HORIZONTAL AND VERTICAL EGRESS TRAVEL TO THE ENTRANCE TO AN EXIT.

EXCEPTION: IN OPEN PARKING GARAGES, EXIT ACCESS TRAVEL DISTANCE IS PERMITTED TO BE MEASURED TO THE CLOSEST RISER OF AN EXIT ACCESS STAIRWAY OR THE CLOSEST SLOPE OF AN EXIT ACCESS RAMP.

SECTION 1005 - MINIMUM REQUIRED EGRESS WIDTH

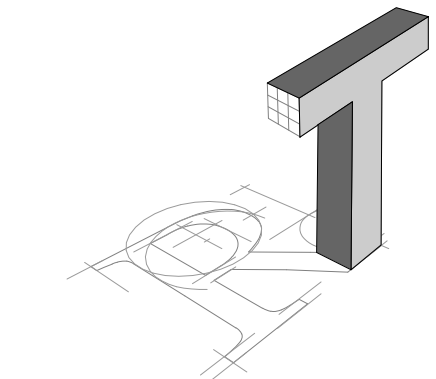
1005.3.2 - DOORWAYS
(DOOR CLEAR WIDTH) / (0.2) = MAX. OCCUPANCY CAPACITY FOR DOOR

1005.3.1 - STAIRWAYS
(STAIR WIDTH) / (0.3) = MAX. OCCUPANCY CAPACITY FOR STAIR

FURNISHING AND FIXTURE SCHEDULE

ART / BRANDING						
QTY	LABEL	DESCRIPTION	REMARKS			RESPONSABILITY
1	LA	Front local scene piece - roughly 48" wide	Find piece that fits with local scenery and demographic, seek corp approval. Art to be mounted 44" from finish floor to bottom of piece			NOTE 01
3	N	Treatment area imagery - roughly 36x36"	Images available through Prisma -Dokshop, choose from library of images. Art to be mounted 44" from finish floor to bottom of piece			NOTE 01
1	S	Treatment wall vinyl wrap	By Prisma/Dokshop. Custom wall mural - see Prisma / Dokshop for more information			NOTE 01
FURNITURE / FIXTURES						
QTY	LABEL	DESCRIPTION	BRAND	MODEL	REMARKS	RESPONSABILITY
1	G	3 Piece Bamboo Set	3-Form	Varia Ecoresin	2" gap between bamboo and panels	NOTE 01
4	B	End tables	Winsome Wood	Jared End Table		NOTE 01
3	C1	Tall reception area waiting chairs	SitOnIt	Focus Counter Stool		NOTE 01
5	C2	Treatment & Reception area waiting chairs	SitOnIt	Focus Side Chair		NOTE 01
1	D	Front Desk Draft Chair	Office Star	DC 2990-231n Work Smart		NOTE 01
2	MW	Millwork				NOTE 01
3	H	Computer Station				NOTE 01
4	T	Treatment Tables	Elite	Model E2		NOTE 01
1	E	Berber Mat				NOTE 01
1	L	Diplomas				NOTE 01
1	M	Coat Hooks				NOTE 01
1	Q	Brochure Rack				NOTE 01
1	R	Height Measure				NOTE 01
1	TV	50"- 60" Smart TV (Wifi capable)				NOTE 01
1	FE	Fire Extinguisher			must be 75'-0" within space	G.C. TO PROVIDE

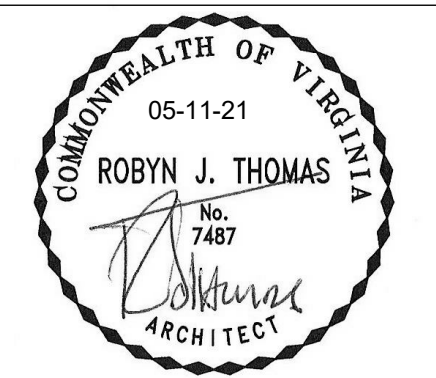
NOTE 01 = OWNER PROVIDED. GENERAL CONTRACTOR TO INSTALL.



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No.	Date	Comments

NEW WORK
PLAN, LIFE
SAFETY &
FURNITURE
PLAN

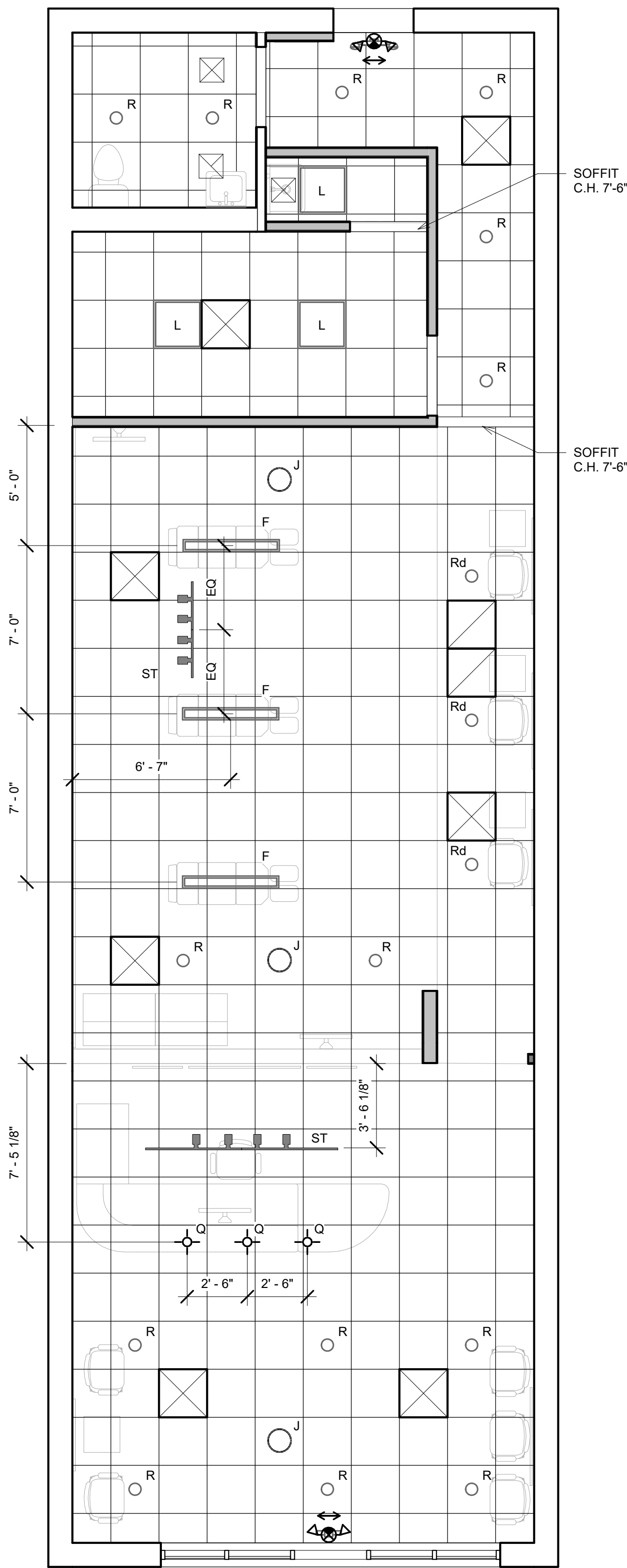
Project number 21-012

Date 05-11-2021

Drawn by NL

A-1.1

Scale As indicated



REFLECTED CEILING PLAN
1/4" = 1'-0"

GENERAL CEILING PLAN NOTES

- 1- REPOSITION OF HVAC DIFFUSERS, DUCTWORK, OR SPRINKLER HEADS AS REQUIRED TO ACCOMPLISH NEW LIGHTING AND WALL LAYOUT. CONTRACTOR TO VERIFY EXISTING LOCATION IN FILED.
- 2- MECHANICAL SUPPLY AND DIFFUSER GRILLS TO BE THE SAME COLOR AS THE NEAREST ADJACENT CEILING FINISH. REFER TO Ceiling PLAN FOR TYPES AND LOCATIONS

LEGEND

ST SUSPENDED TRACK LIGHT

R DOWNLIGHT

Rd DOWNLIGHT DIRECTIONAL

Q FRONT DESK PENDANT

F TREATMENT LIGHTING

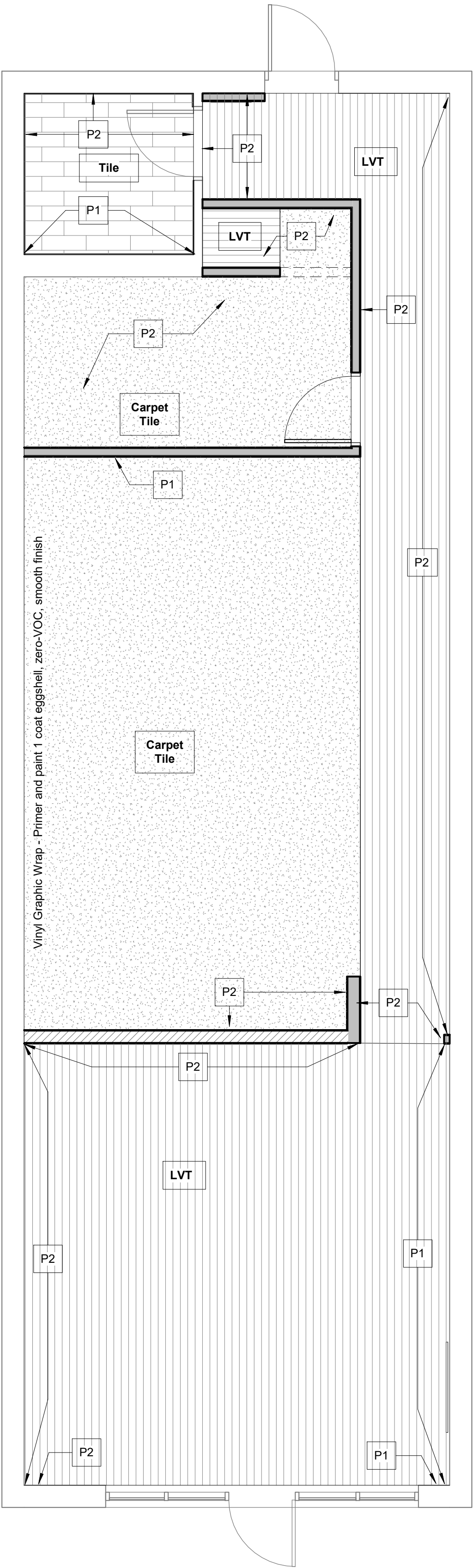
L 2'x2' RECESSED FIXTURE

J SPEAKERS

SUPPLY AIR CEILING GRILLE

RETURN AIR CEILING GRILLE

2'x2' ACT - SUSPENDED GRID SYSTEM.
CEILING HEIGHT = +/-1'-10" U.O.N.



FINISH PLAN
1/4" = 1'-0"

FINISH AND MATERIAL SCHEDULE

WALL	BRAND/ MATERIAL	ITEM NO.	CODE	COLOR	REMARKS
RESTROOM WAINSCOT TILE	SHAW	CT90D	TILE	GRIGIO - 00500	48" HIGH
RESTROOM WAINSCOT GROUT					
RESTROOM ABOVE TILE	SHERWIN WILLIAMS		P1/ P2	WELLNESS BLUE/ACCESSIBLE BEIGE	LATEX EGG-SHELL
RECEPTION AREA WALK-AROUND SIDE	SHERWIN WILLIAMS		P1	WELLNESS BLUE	LATEX EGG-SHELL
BACK TREATMENT AREA WALL	SHERWIN WILLIAMS		P1	WELLNESS BLUE	LATEX EGG-SHELL
RECEPTION WALL, TREATMENT AREA, OFFICE	SHERWIN WILLIAMS	SW7036	P2	ACCESSIBLE BEIGE	LATEX EGG-SHELL
DOORS AND DOOR FRAME	SHERWIN WILLIAMS	SW7004	P4	SNOWBOUND	LATEX EGG-SHELL

FLOOR

LUXURY VINYL TILE (LVT)	KARNDÉAN	LLP310	LVT	CHAMPAGNE OAK	7" WIDE PLANKS
CARPET TILE	SHAW FLOORING	PLANK	CARPET	UNDERTONE 5T157 VINTAGE 57595	LAY INLINE
RESTROOM TILE	SHAW	CT90D	TILE	GRIGIO - 00500	12"X24" TILES
RESTROOM GROUT					
TRANSITIONS	SCHLUTER	DECO		ALUMINUM	CARPET/LVT/TILE

BASE

COVE BASE	JOHNSONITE	4" BLACK		BLACK RUBBER BASE	4" TALL
-----------	------------	----------	--	-------------------	---------

CEILING

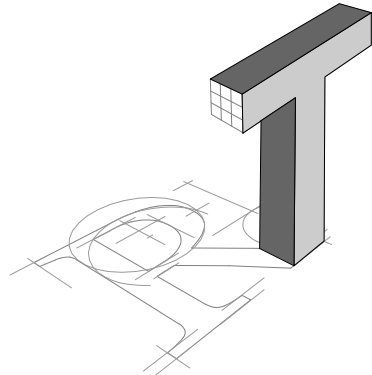
2'x2' ACT	ARMSTRONG	FINE FISSURE		TECH BLACK	
GRID CEILING	ARMSTRONG		P3	BLACK MAGIC	

NOTES

- Carpet Pattern and vinyl plank flooring shall run parallel to length of clinic.
- The Doctor's Credentials and Business License will be hung on the wall according to The Joint Construction Manual Planogram.
- Ensure the entire treatment area wall closest the treatment tables is level 5 smooth finish primer-ed, with 1 coat of zero-VOC eggshell paint to accept large vinyl graphic wrap.
- Art - Local Area Scene piece to be hung in front of reception area as indicated on the plan.
- Art - Health & Wellness 3 pieces to be hung in treatment area, directly across each treatment table and over each treatment area waiting chair.
- Art to be mounted 44" from finished floor to bottom of piece.
- Bamboo Panels to be mounted off ground so that there is equal space between ground and bottom of panel, and top of reception wall to top of panel.
- General Contractor to paint the existing electrical panel color P2.

PAINT COLORS

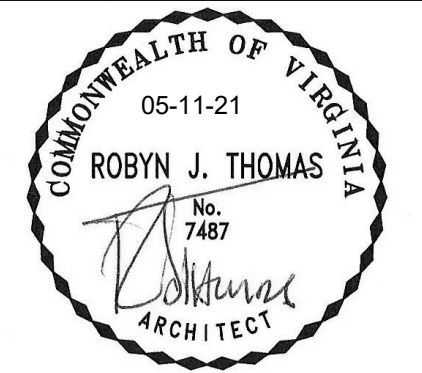
Wellness Blue		Accessible Beige	
Material	Paint (P1)	Material	Paint (P2)
Manufacturer	Sherwin Williams	Manufacturer	Sherwin Williams
Item	N/A	Item	SW7036
Placement	Treatment, Restroom Accent Wall	Placement	Throughout, UNO
NOTE: Paint Type to be Pro Mar 200 Zero VOC in an eggshell finish.		NOTE: Paint Type to be Pro Mar 200 Zero VOC in an eggshell finish.	
Black Magic		Snowbound	
Material	Paint (P3)	Material	Paint (P4)
Manufacturer	Sherwin Williams	Manufacturer	Sherwin Williams
Item	SW6991	Item	SW7004
Placement	Ceiling grid	Placement	Door, Door Frame
NOTE: Paint Type to be Pro Mar 200 Zero VOC in an eggshell finish.		NOTE: Paint Type to be Pro Mar 200 Zero VOC in an eggshell finish.	



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THE JOINT CHIROPRACTIC
1011 UNIVERSITY BOULEVARD, SUITE 185
SUFFOLK, VIRGINIA

REVISIONS

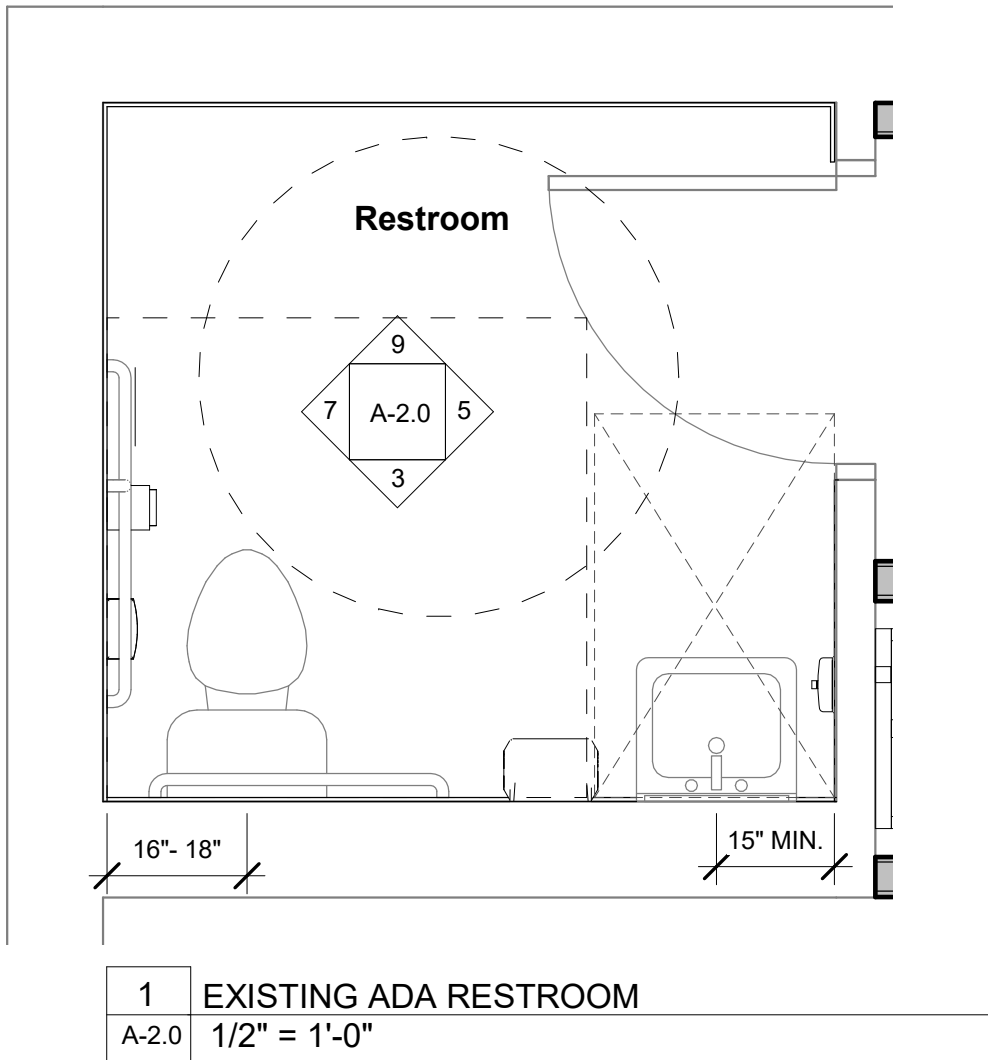
No.	Date	Comments

RCP & FINISH
PLAN

Project number 21-012
Date 05-11-2021
Drawn by NL

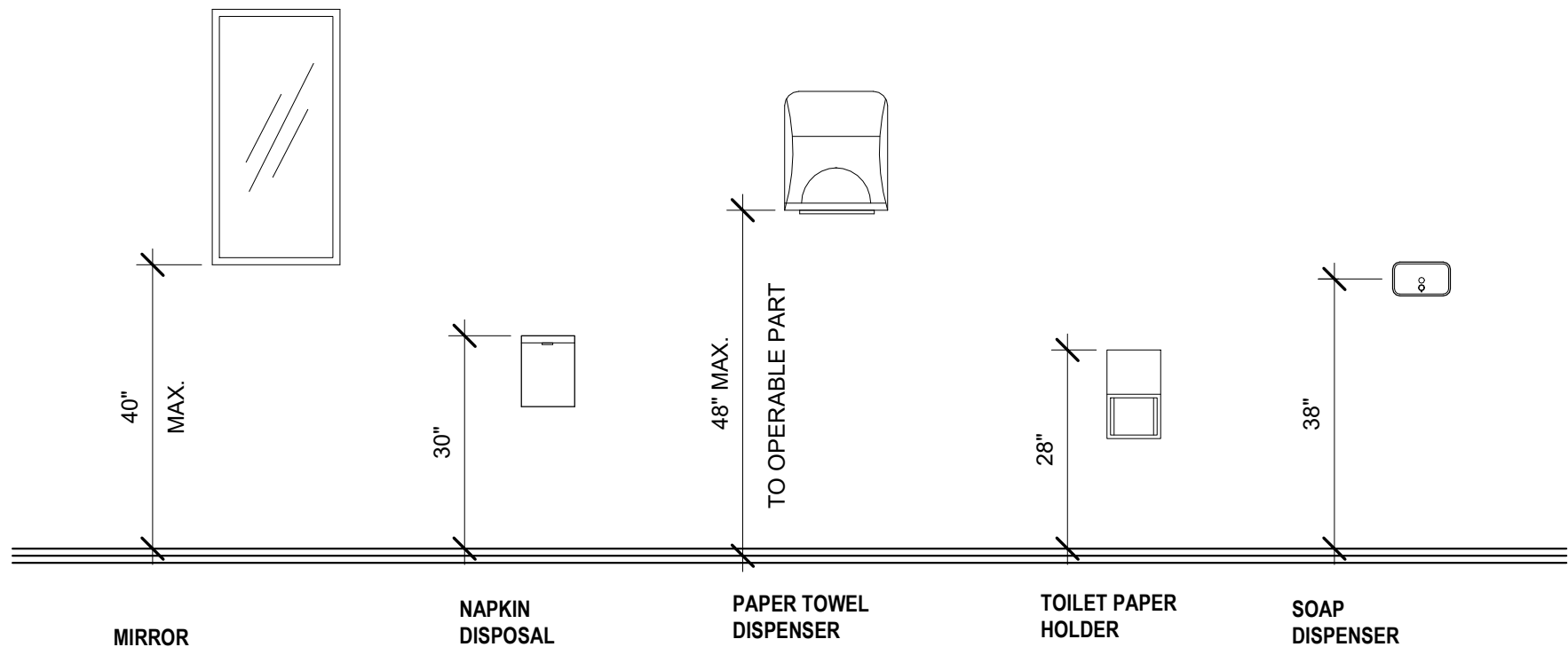
A-1.2

Scale As indicated

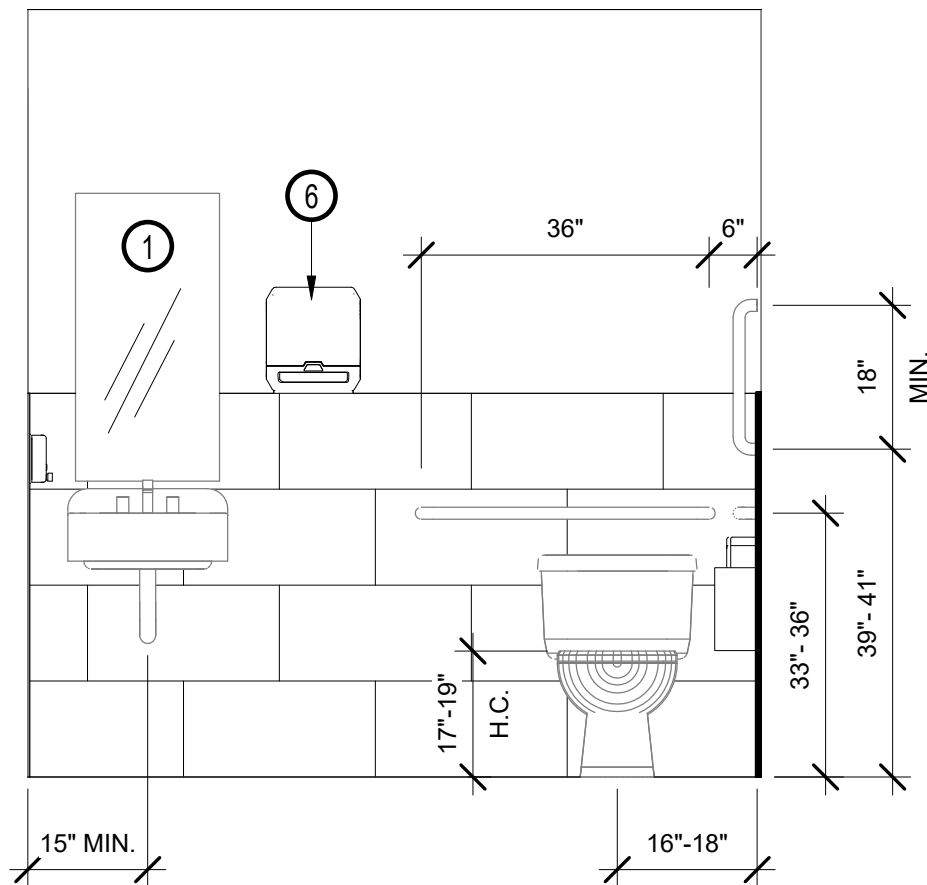


1 EXISTING ADA RESTROOM
A-2.0 1/2" = 1'-0"

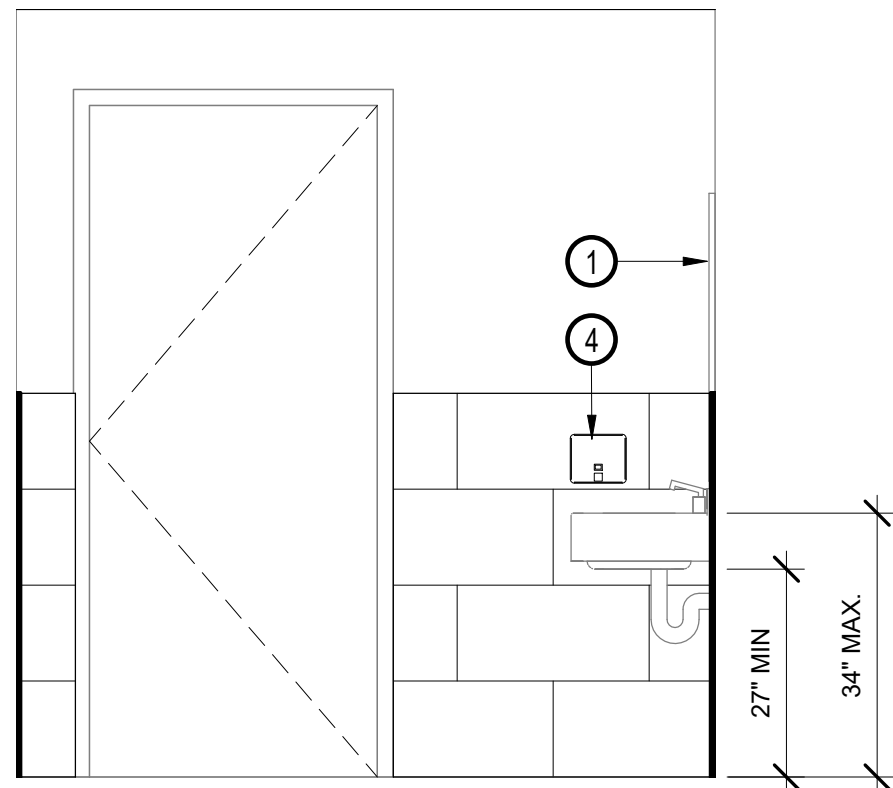
RESTROOM ACCESSORY SCHEDULE			
MARK	DESCRIPTION	MANUFACTURER	MODEL
①	18 "x 36" MIRROR	BOBRICK	
②	18" GRAB BAR 36" GRAB BAR 42" GRAB BAR	EXISTING GRAB BARS TO BE REINSTALLED	
③	TOILET TISSUE DISPENSER	BOBRICK	B-4288 SERIES
④	SOAP DISPENSER	BOBRICK	
⑤	SANITARY NAPKIN DISPOSAL	BOBRICK	B-270 SERIES
⑥	AUTOMATIC TOUCHLESS PAPER TOWEL DISPENSER (EnMOTION)	GEORGIA PACIFIC	
NOTES:			
1- ALL ACCESSORIES SHALL COMPLY WITH ANSI REQUIREMENTS AS PER MOUNTING HEIGHTS AND ALLOWABLE SIZES/ SPACING - SEE ELEVATIONS			
2- PROVIDE BLOCKING AS REQUIRED TO SUPPORT ACCESSORIES			
3- WRAP SINK PIPES IN ACCORDANCE WITH ADA REGULATIONS			



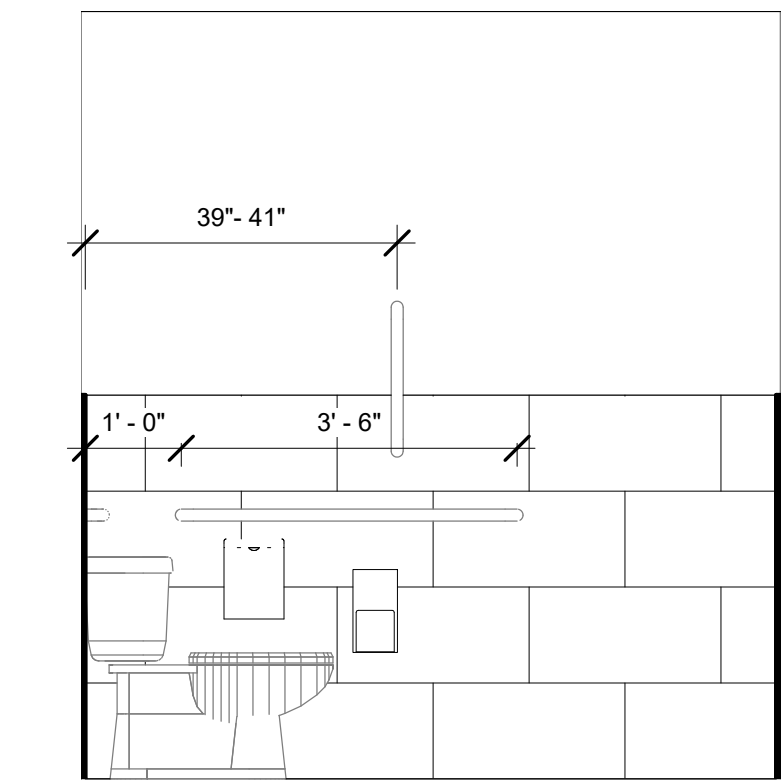
TYPICAL ACCESSORIES MOUNTING HEIGHTS
1/2" = 1'-0"



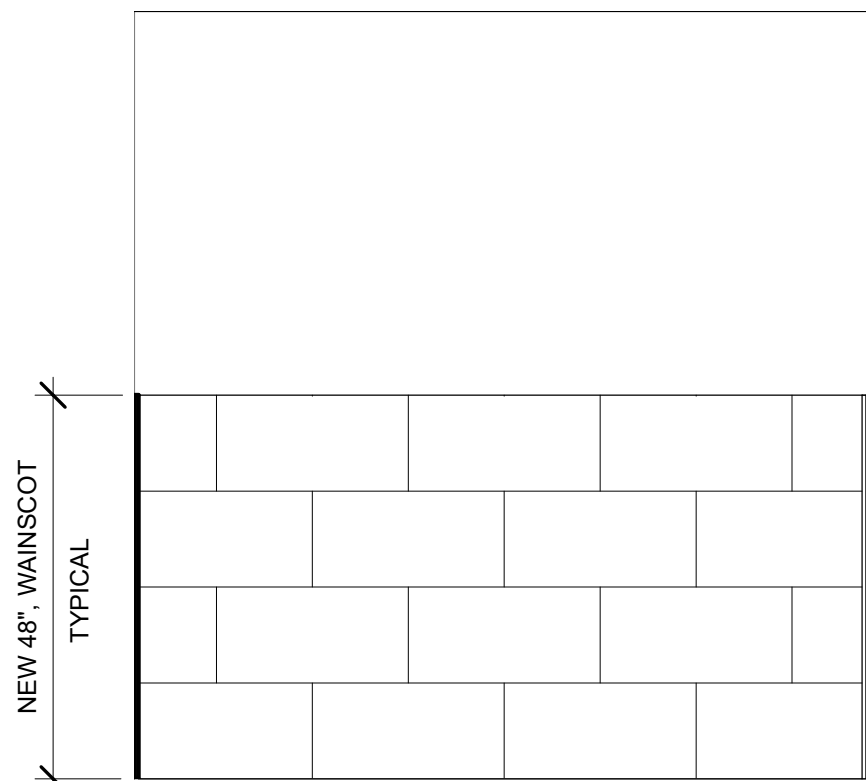
3 INTERIOR ELEVATION
A-2.0 1/2" = 1'-0"



5 INTERIOR ELEVATION
A-2.0 1/2" = 1'-0"



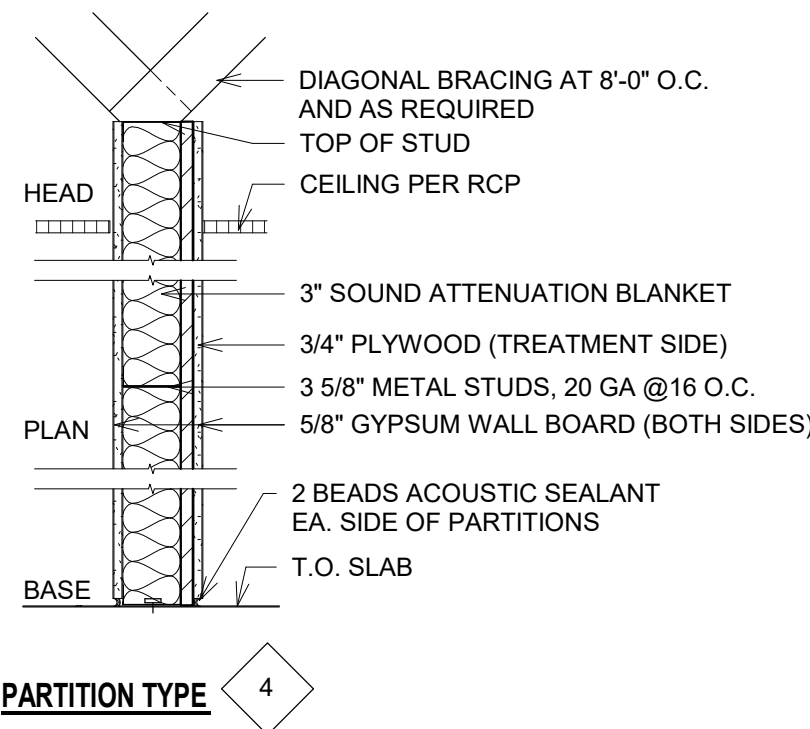
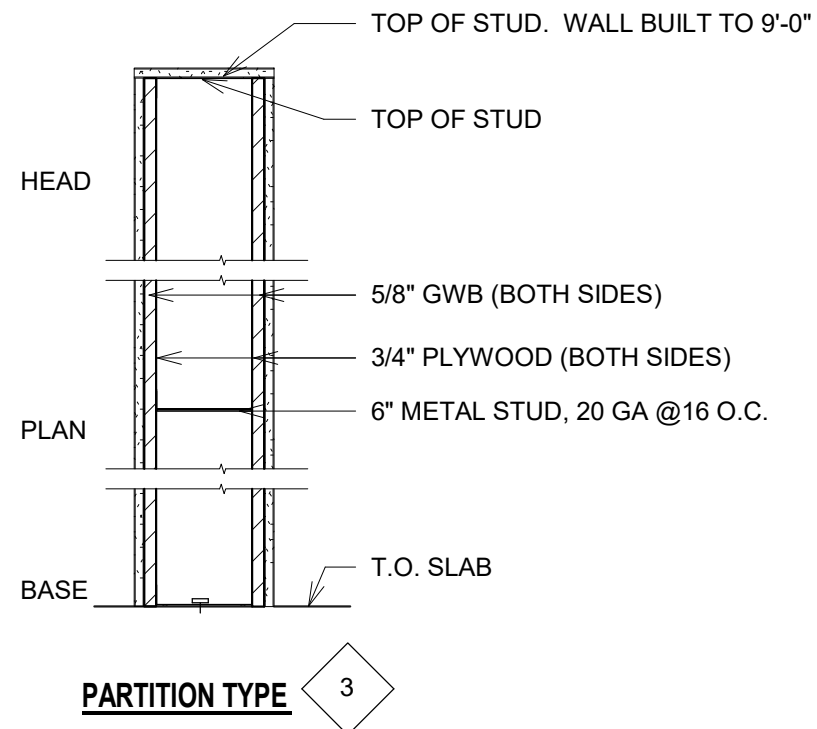
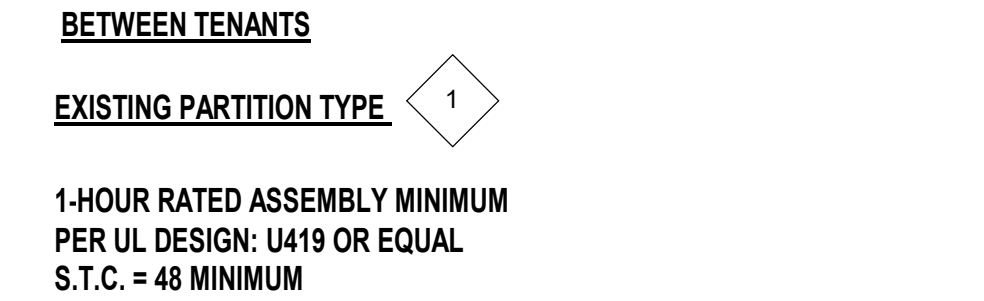
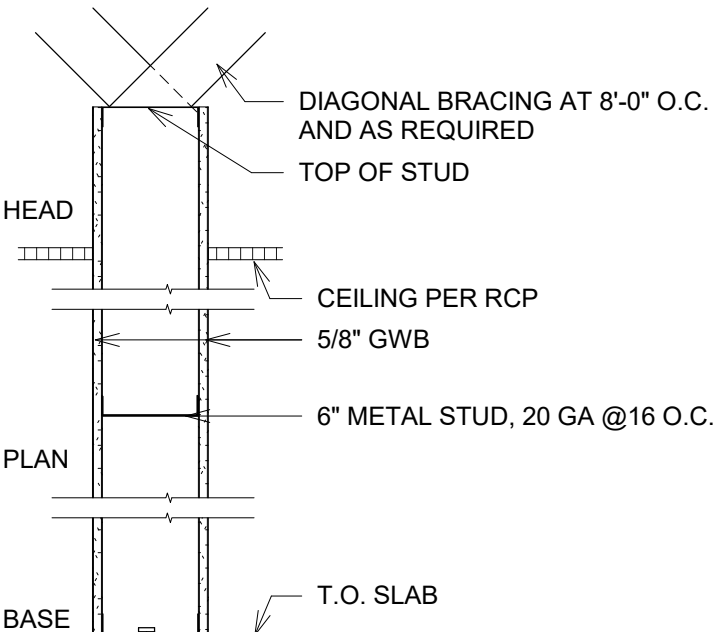
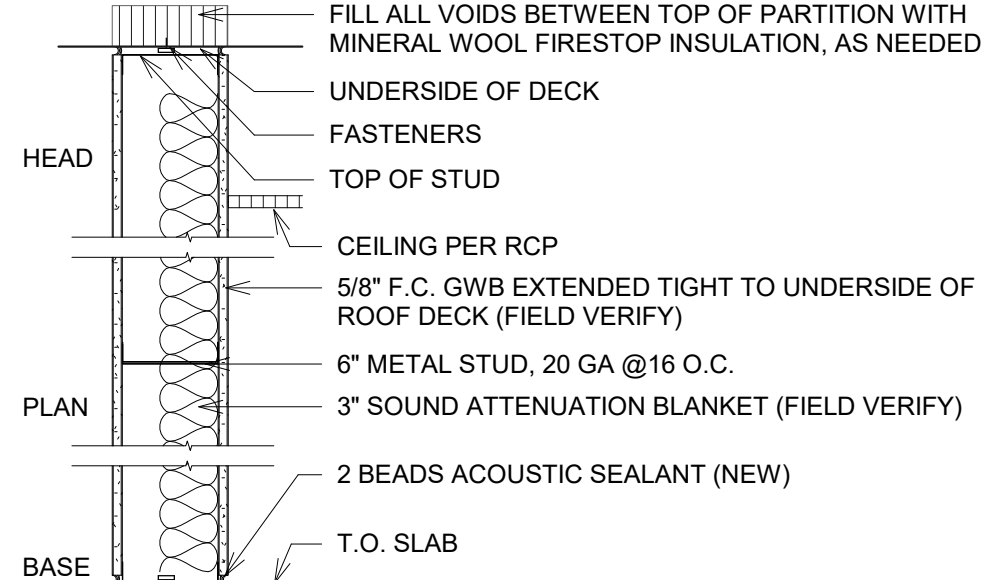
7 INTERIOR ELEVATION
A-2.0 1/2" = 1'-0"



9 INTERIOR ELEVATION
A-2.0 1/2" = 1'-0"

ADA RESTROOM SIGNAGE

- A. WHERE A SIGN CONTAIN RAISED CHARACTERS AND BRAILLE IS PROVIDED AT A DOOR, THE SIGN SHALL BE ALONGSIDE THE DOOR AT THE LATCH SIDE. WHERE A SIGN CONTAINING RAISED CHARACTERS AND BRAILLE IS PROVIDED AT DOUBLE DOORS WITH ONE ACTIVE LEAF, THE SIGN SHALL BE LOCATED ON THE INACTIVE LEAF. WHERE A SIGN CONTAINING RAISED CHARACTERS AND BRAILLE IS PROVIDED AT DOUBLE DOORS WITH TWO ACTIVE LEAVES, THE SIGN SHALL BE TO THE RIGHT OF THE RIGHT-HAND DOOR. WHERE THERE IS NO WALL SPACE ON THE LATCH SIDE OF A SINGLE DOOR, OR TO THE RIGHT SIDE OF DOUBLE DOORS, SIGNS SHALL BE ON THE NEAREST ADJACENT WALL.
- B. RAISED CHARACTERS SHALL BE SANS SERIF AND IN UPPERCASE. CHARACTERS SHALL BE RAISED 1/32" MIN. ABOVE THEIR BACKGROUND AND SHALL BE 5/8" MIN. TO 2" MAX. IN HEIGHT.
- C. PICTOGRAMS SHALL HAVE A FIELD 6" MIN. IN HEIGHT. CHARACTERS OR BRAILLE SHALL NOT BE LOCATED IN THE PICTOGRAM FIELD. TEXT DESCRIPTORS SHALL BE LOCATED DIRECTLY BELOW THE PICTOGRAM FIELD.
- D. CHARACTERS AND THEIR BACKGROUND SHALL HAVE A NON-GLARE FINISH. CHARACTERS SHALL CONTRAST WITH THEIR BACKGROUND WITH EITHER LIGHT CHARACTERS ON A DARK BACKGROUND, OR DARK CHARACTERS ON A LIGHT BACKGROUND.
- E. LOCATIONS: 4'-8" ABOVE FLOOR



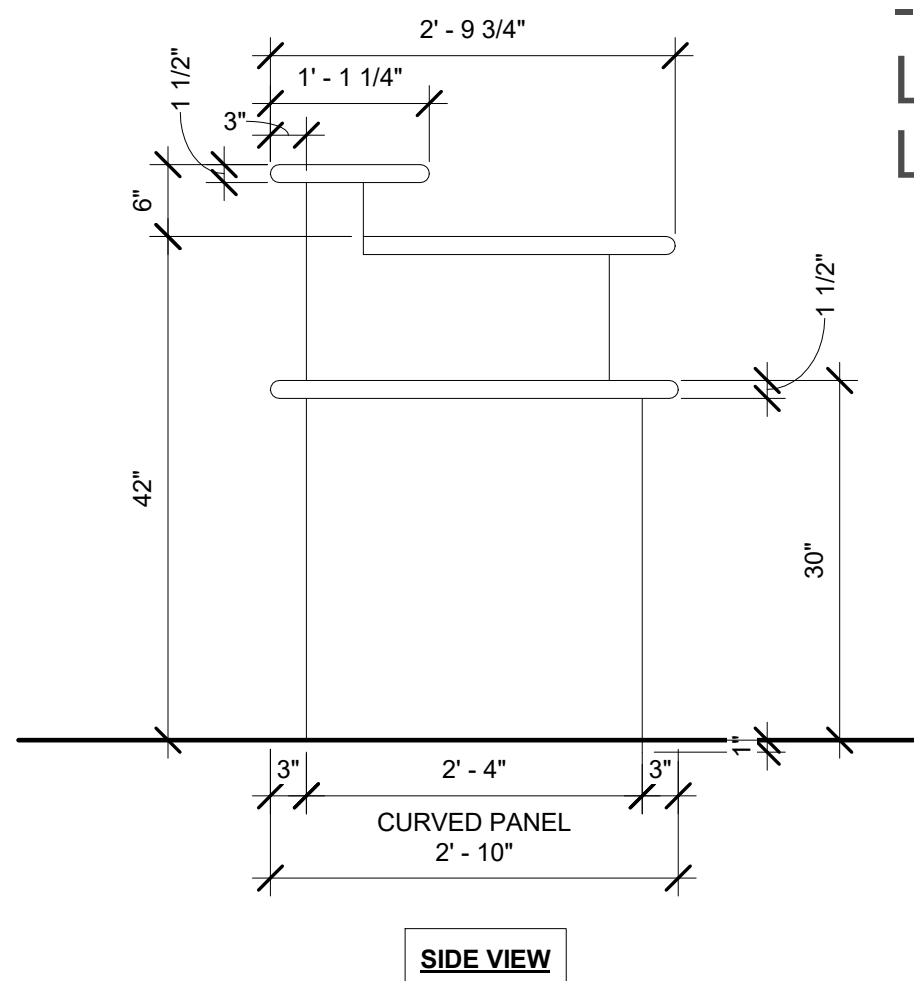
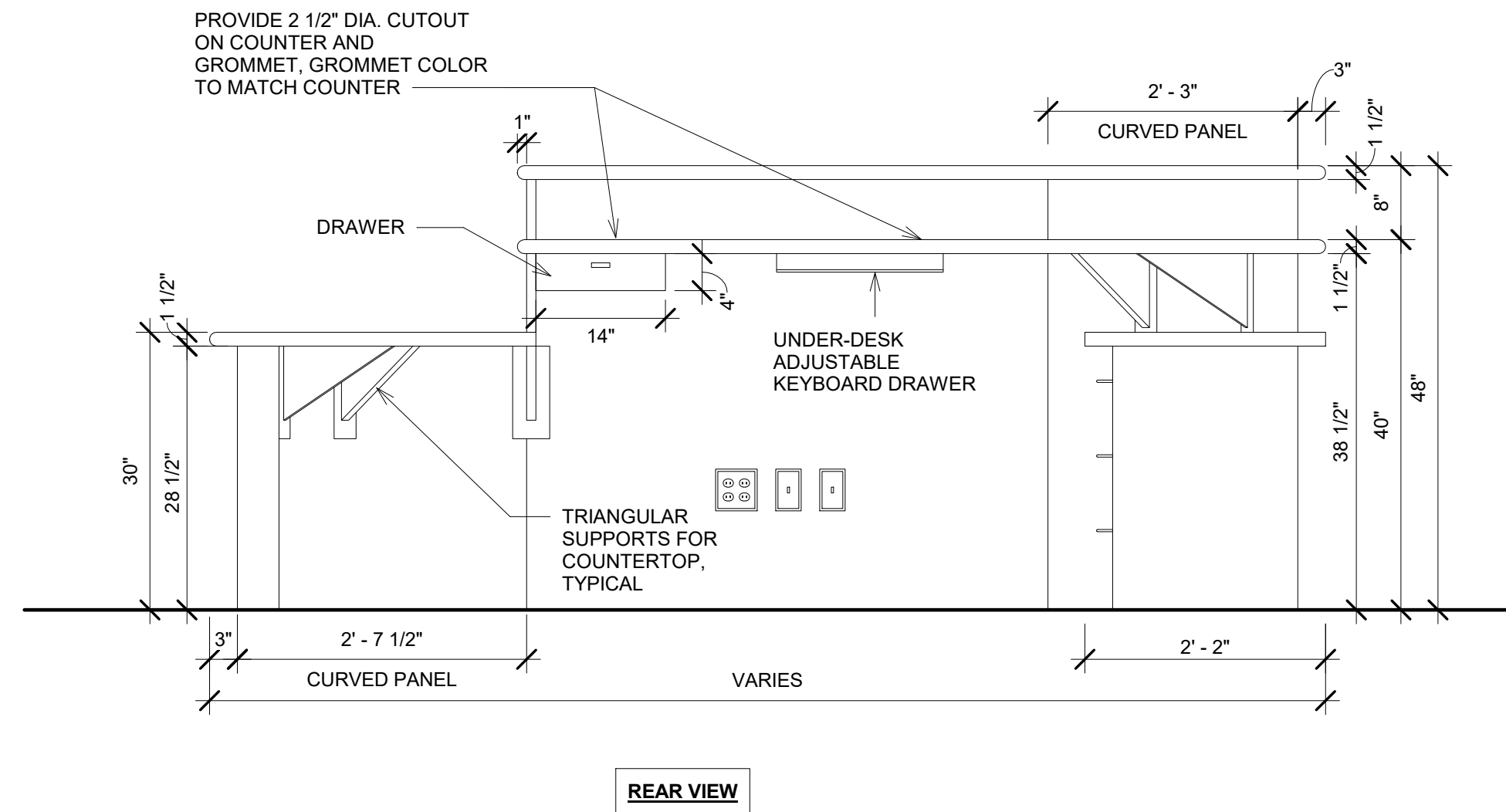
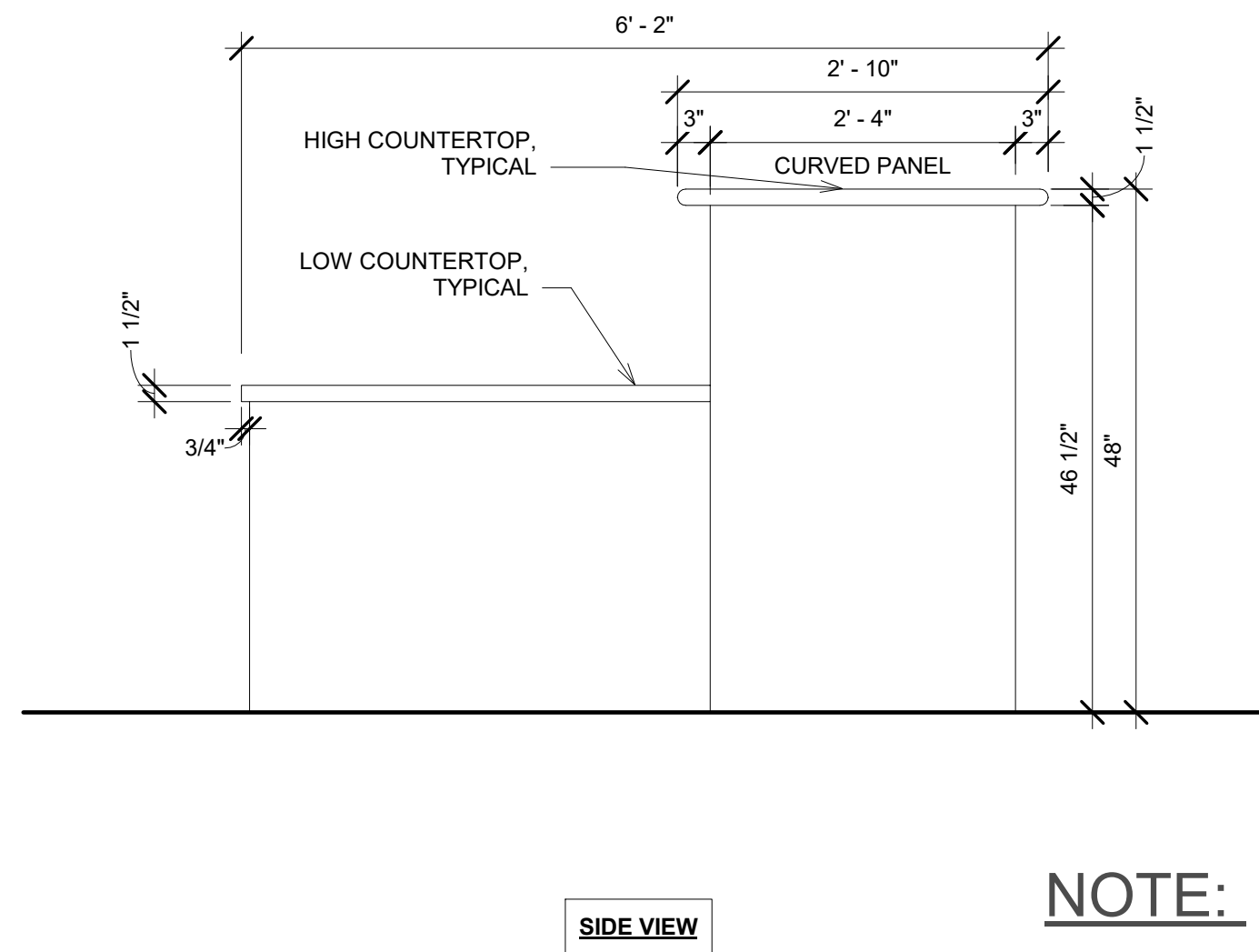
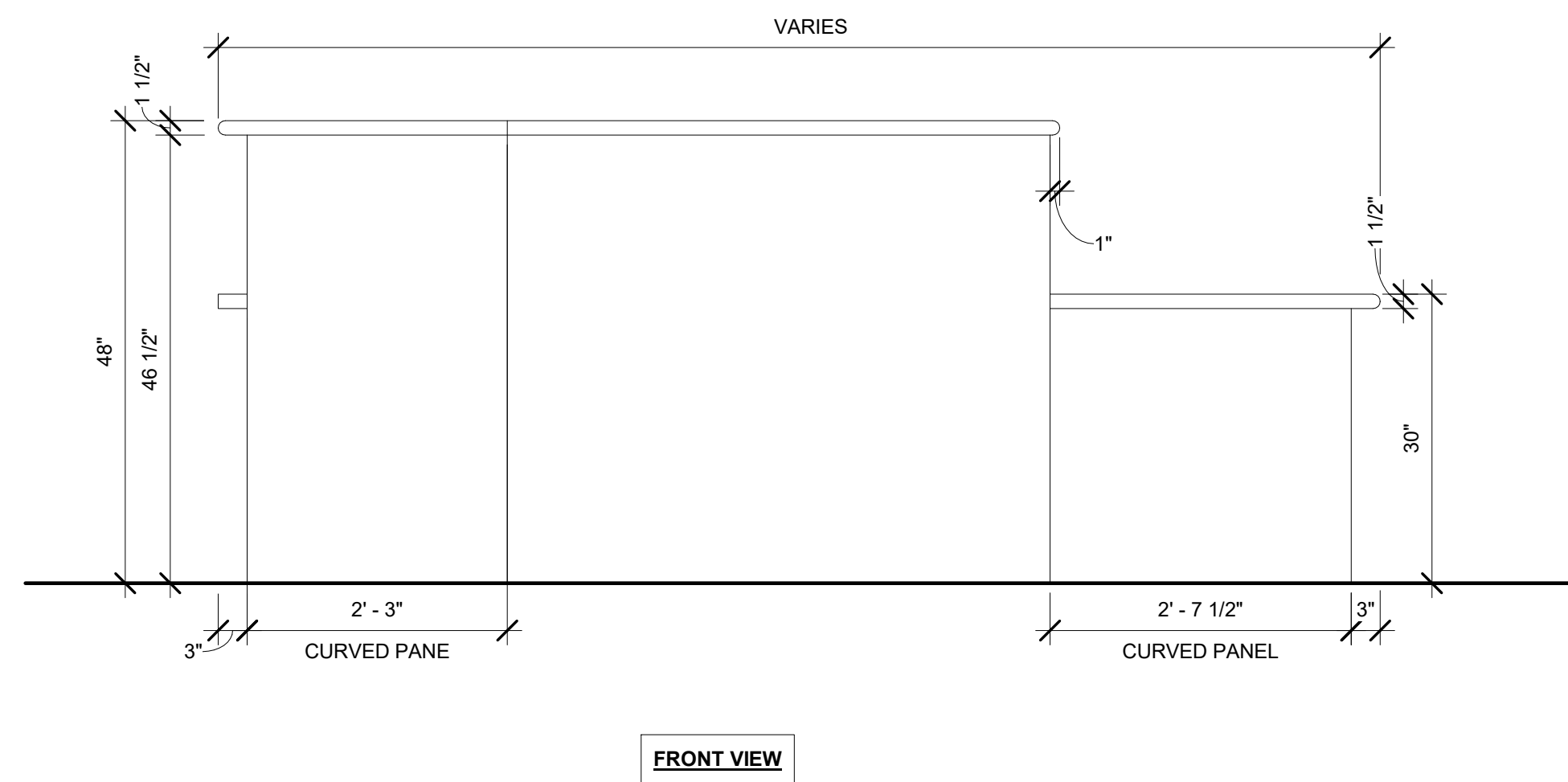
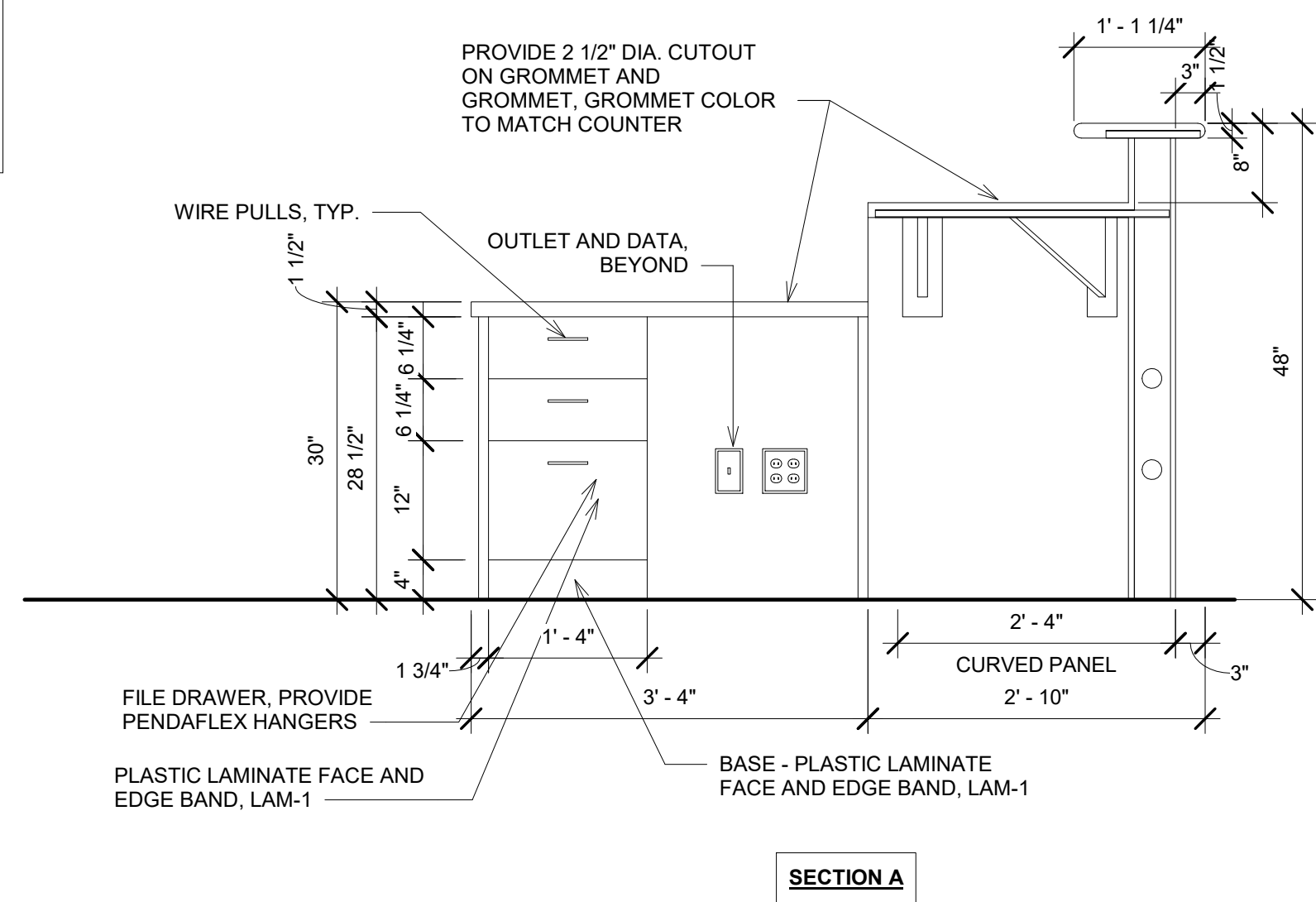
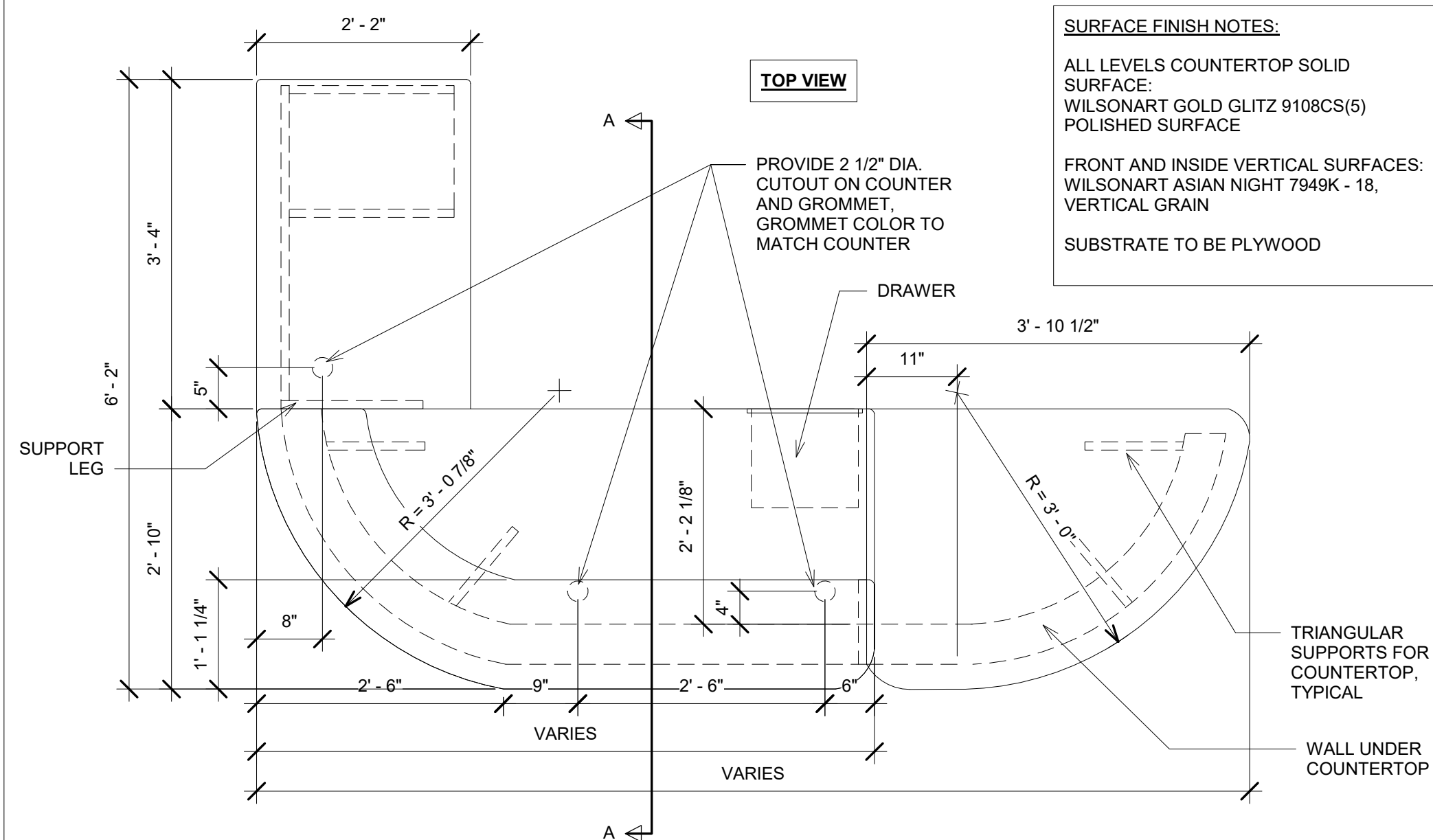
WALL TYPES
1" = 1'-0"

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THE JOINT CHIROPRACTIC
1011 UNIVERSITY BOULEVARD, SUITE 185
SUFFOLK, VIRGINIA

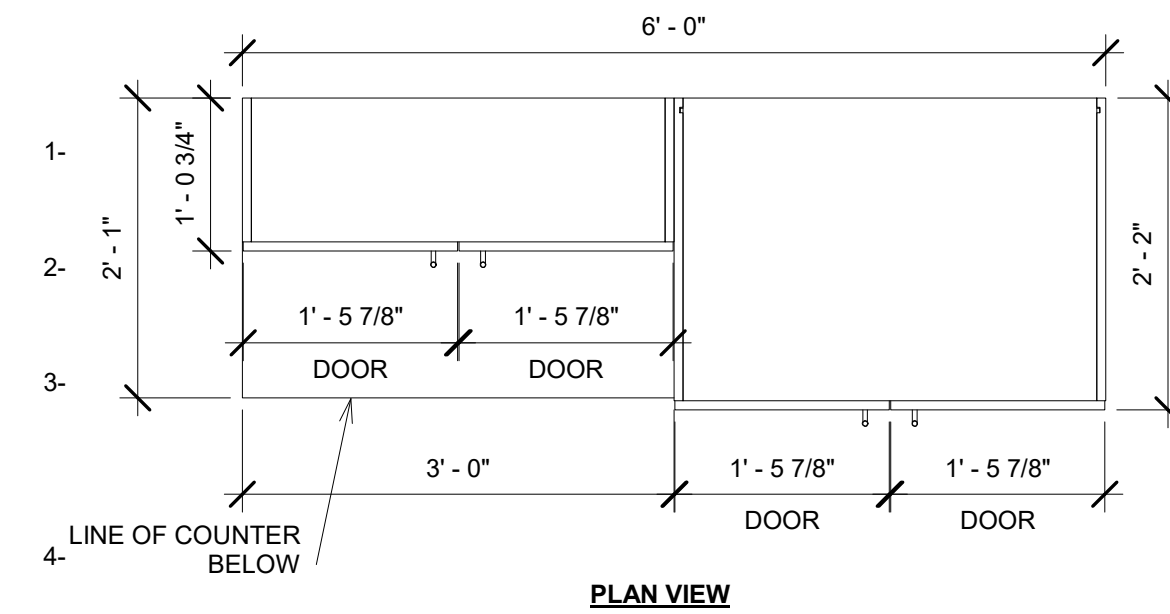
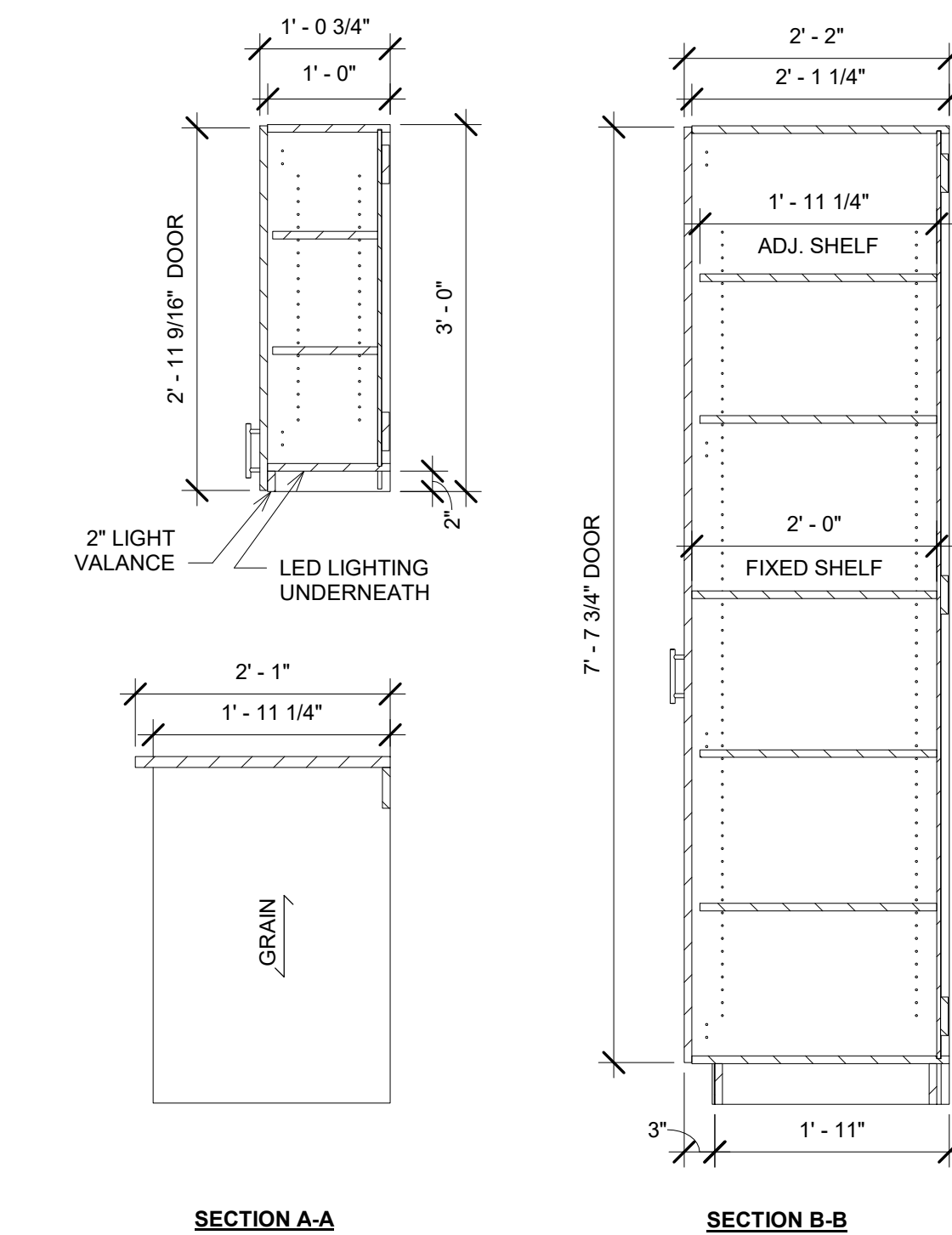
REVISIONS		
No.	Date	Comments

RESTROOM INTERIOR ELEV. & PARTITION TYPES	
Project number	21-012
Date	05-11-2021
Drawn by	Author
A-2.0	
Scale	As indicated



NOTE:

CABINETRY PROVIDED BY OWNER AND INSTALLED BY G.C. - SEE SPECIFIC LAYOUT FOR THIS LOCATION SHEET A-1.1



NOTES:

ALL LEVELS COUNTERTOP SURFACE:
FORMICA MINERAL JET -
RADIANCE FINISH 3450-RD

FRONT AND INSIDE VERTICAL SURFACES:
WILSONART ASIAN NIGHT 7949K-18,
VERTICAL GRAIN

CABINETS CONSTRUCTED USING 3/4" PARTICLEBOARD MATERIAL AND 8MM DOWEL CONSTRUCTION. EXPOSED FACES TO BE WILSONART ASIAN NIGHT. EXPOSED EDGES TO HAVE 0.5MM MATCHING EDGE BAND.

COUNTERTOP CONSTRUCTION USING 1" PARTICLEBOARD MATERIAL AND FINISHED WITH FORMICA MINERAL JET RADIANCE LAMINATE WITH MATCHING LAMINATE EDGE BAND.

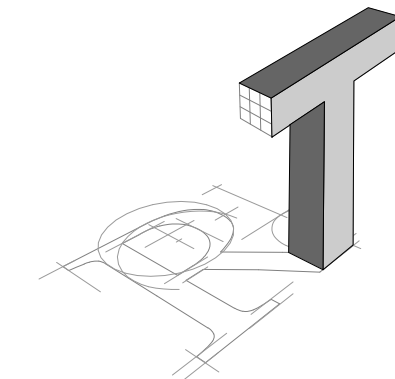
3C TO PROVIDE LED LIGHTING AND 2" LIGHT VALANCE AT UPPER CABINETS.

DOOR/ DRWS TO RECEIVE 96MM O.C. WIRE HANDLES HAFELE#155.00780 STAINLESS STEEL LOOK FINISH

EXPOSED VERTICAL SURFACES TO BE WILSONART ASIAN NIGHT WITH 0.5MM ASIAN NIGHT EDGE BAND

CABINET INTERIOR TO BE WHITE MELAMINE

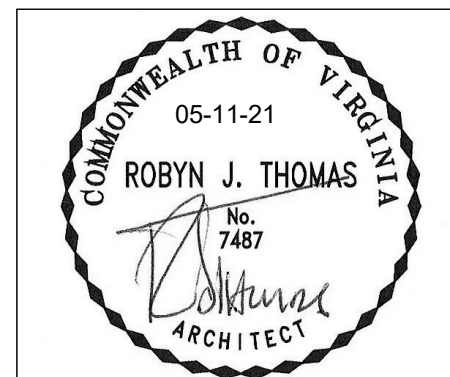
ALL DOORS TO HAVE CONCEALED HINGES



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REVISIONS

No.	Date	Comments

CASEWORK
ELEVATIONS
AND SECTIONS

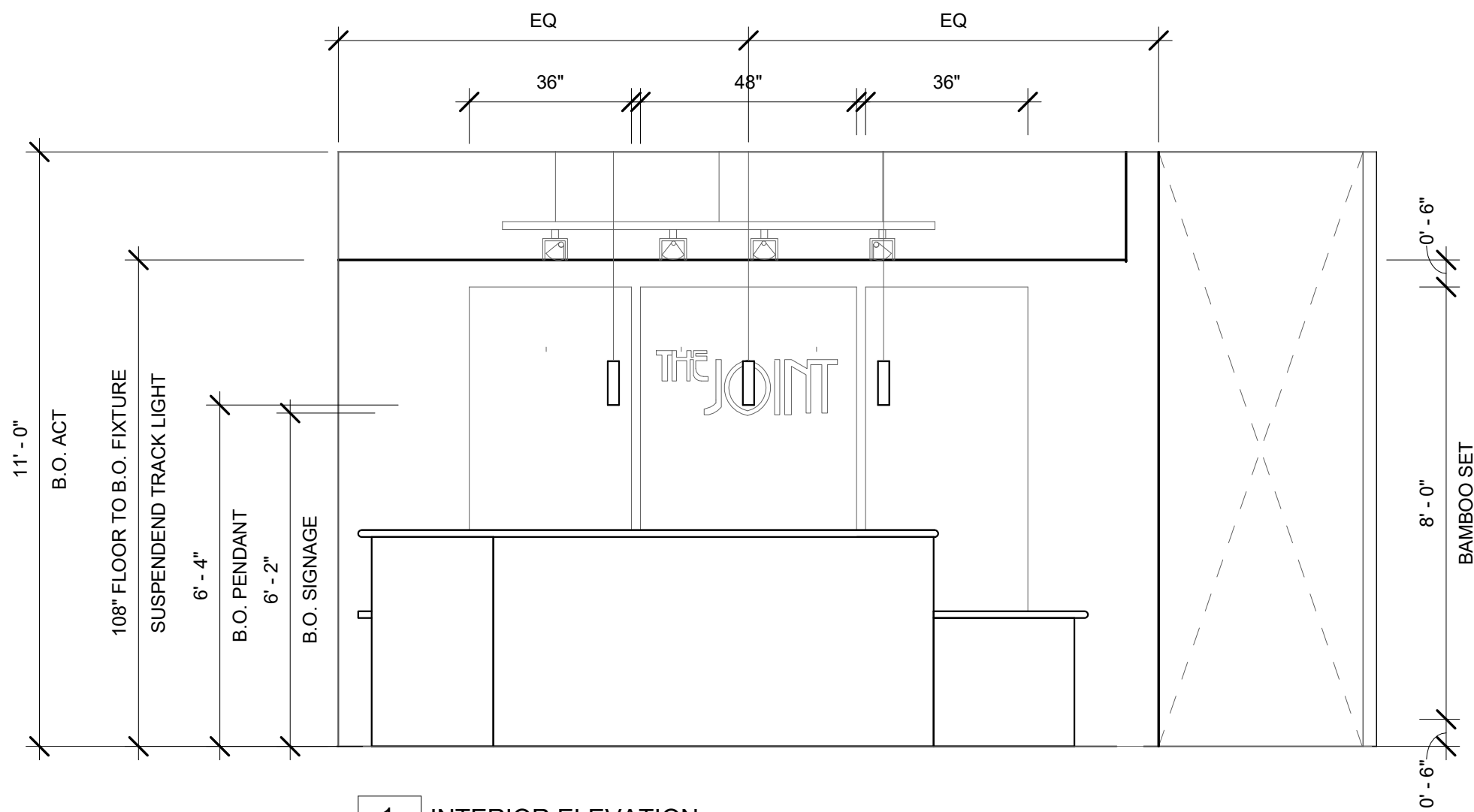
Project number 21-012

Date 05-11-2021

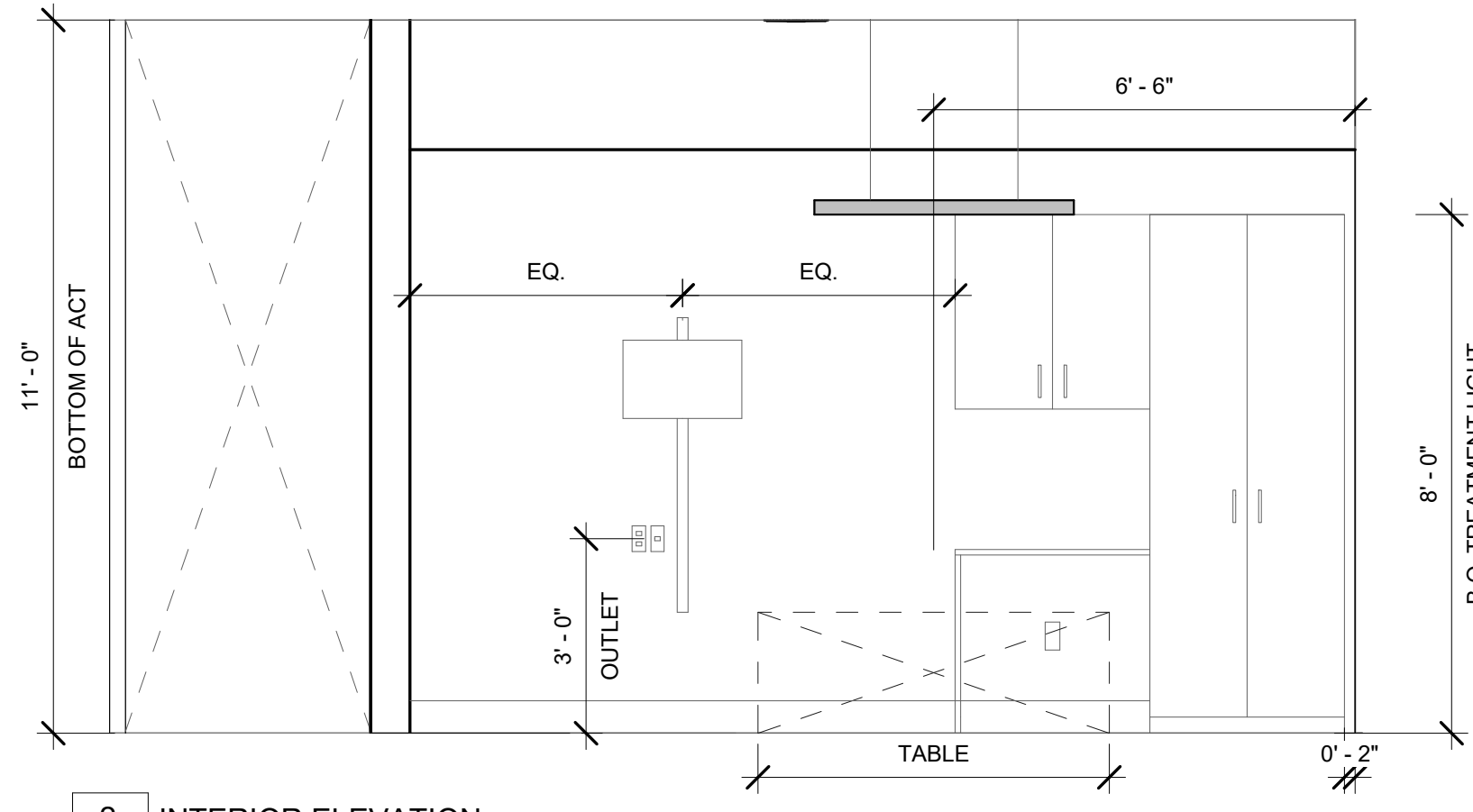
Drawn by Author

A-2.1

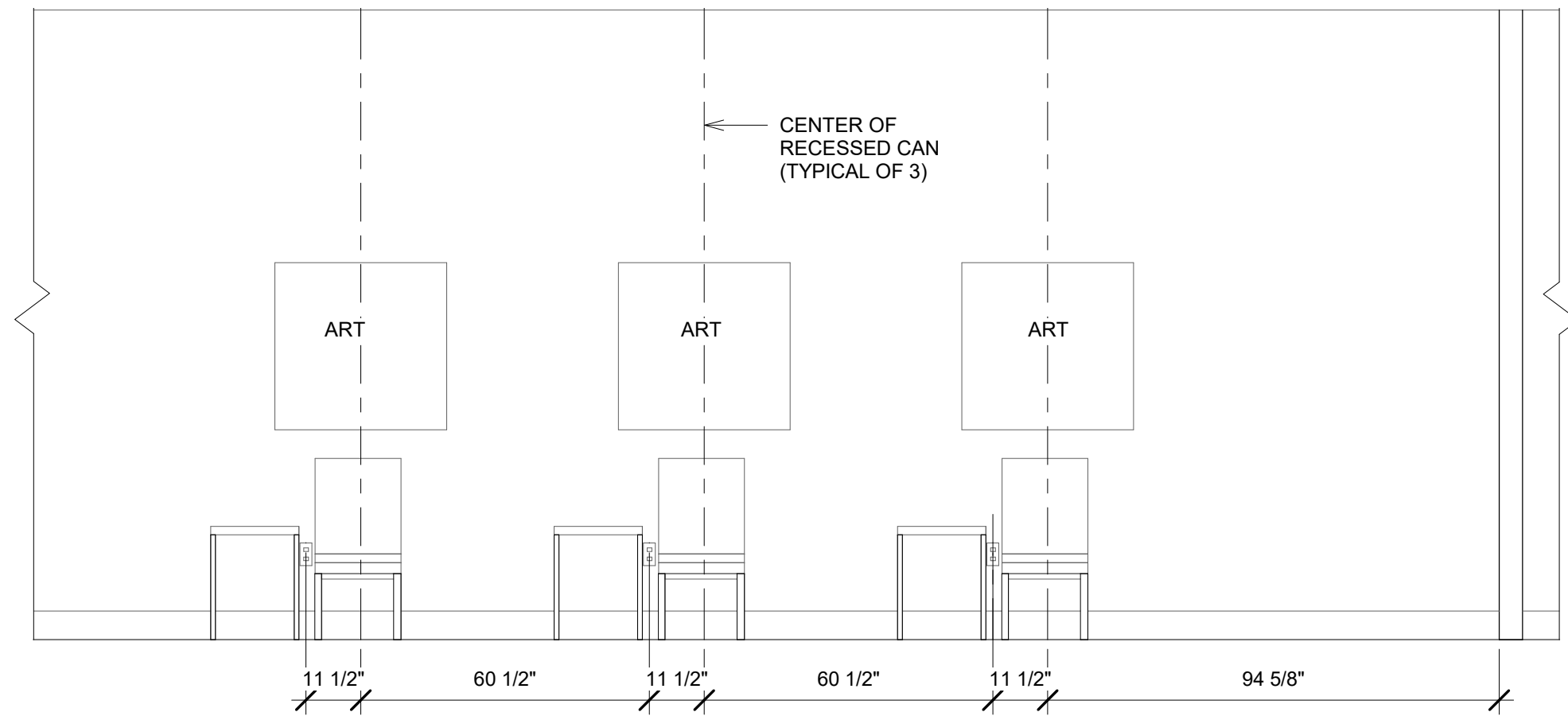
Scale 3/4" = 1'-0"



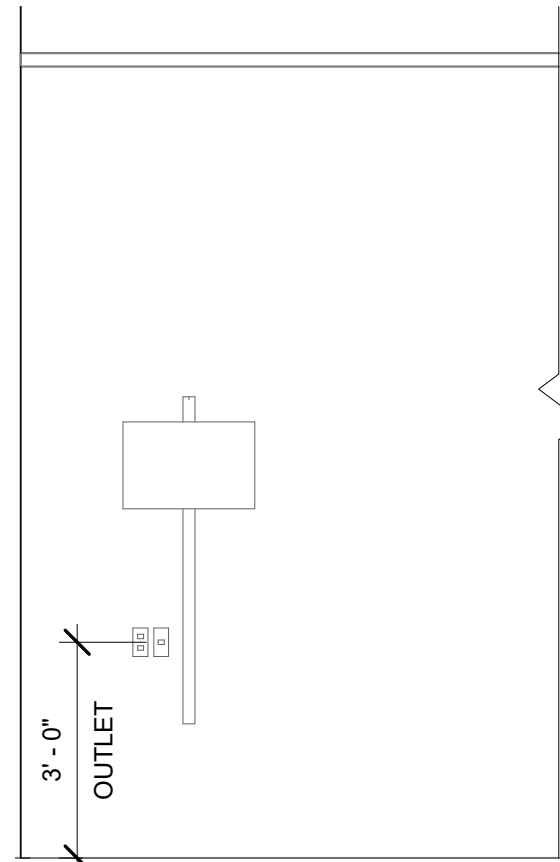
1 INTERIOR ELEVATION
A-2.2 3/8" = 1'-0"



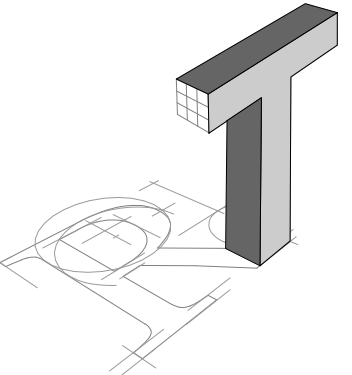
2 INTERIOR ELEVATION
A-2.2 3/8" = 1'-0"



3 INTERIOR ELEVATION
A-2.2 3/8" = 1'-0"



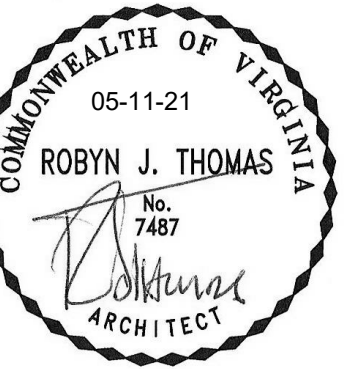
4 INTERIOR ELEVATION
A-2.2 3/8" = 1'-0"



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SUFFOLK, VIRGINIA

REVISIONS

No.	Date	Comments

INTERIOR ELEVATIONS

Project number 21-012

Date 05-11-2021

Drawn by Author

A-2.2

Scale 3/8" = 1'-0"

GENERAL NOTES

INTENT OF THE DRAWINGS

1. THE DRAWINGS ARE DIAGRAMMATIC IN NATURE, AND SHOW THE GENERAL LOCATION OF PIPING, AND EQUIPMENT. THE DRAWINGS DO NOT SHOW ALL NECESSARY OFFSETS, TRANSITIONS, AND ADJUSTMENTS NECESSITATED BY COORDINATION WITH OTHER TRADES. THE COST OF ALL OFFSETS, TRANSITIONS, AND ADJUSTMENTS NECESSITATED BY COORDINATION WITH OTHER TRADES SHALL BE INCLUDED IN THE CONTRACTOR'S BID.

COORDINATION WITH OTHER TRADES

1. EXAMINE AND REVIEW THE CONTRACT DOCUMENTS OF ALL DIVISIONS OF THE SPECIFICATIONS IN ORDER TO COORDINATE THE INSTALLATION OF WORK.
2. USE DIMENSIONED ARCHITECTURAL AND STRUCTURAL CONTRACT DRAWINGS TO VERIFY THE SPACE NECESSARY FOR LOCATING PIPING, DUCTWORK, AND EQUIPMENT. USE FIELD MEASUREMENTS TO VERIFY DIMENSIONS WHERE AREAS ARE CONGESTED, AND EXACT LOCATION IS CRITICAL TO ASSURE PROPER INSTALLATION.
3. COORDINATION SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO, VERIFYING THE LOCATION AND SIZE OF OPENINGS IN FLOORS, WALLS, PARTITIONS, CEILINGS, AND ROOFS WITH THE INSTALLING TRADES; ALLOCATION OF SPACE WITH OTHER TRADES INSTALLING WORK IN CHASES, SHAFTS, CEILING INTERSTITIAL SPACES, AND EQUIPMENT SPACES; AND THE PHASING OF INSTALLATION WORK WITH THAT OF OTHER TRADES.

WORKMANSHIP

1. ALL WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER THAT PROVIDES A PROFESSIONAL, COMPLETE INSTALLATION.

EQUIPMENT

1. CONTRACTOR SHALL INSTALL ALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS, THE SPECIFICATIONS, AND APPROVED SHOP DRAWINGS FOR EACH PIECE OF EQUIPMENT.
2. PROVIDE SERVICE AND OPERATING CLEARANCES AROUND ALL SIDES OF EACH PIECE OF EQUIPMENT IN ACCORDANCE WITH CODE AND THE MANUFACTURER'S PRINTED REQUIREMENTS AND RECOMMENDATIONS.

FIXTURES

1. ALL OPEN SITE DRAINS, FLOOR DRAINS AND FLOOR SINKS SHALL BE PROVIDED WITH AN APPROVED AND LISTED TRAP SEAL.

PIPING

1. PROVIDE ALL PIPING IN ACCORDANCE WITH THE SPECIFICATIONS; THE PIPING PLANS AND DETAILS; AND THE PIPE INSULATION SCHEDULE.
2. PIPING SCHEMATICS AND DIAGRAMS SHOW ONLY THE BASIC FLOW PATTERN AND EQUIPMENT ARRANGEMENT, AND DO NOT SHOW ALL TERMINAL EQUIPMENT CONNECTED TO THE SYSTEM. REFER TO THE PLANS AND SECTIONS FOR DETAILED SYSTEM LAYOUT.
3. PROVIDE MANUAL AIR VENTS AT ALL HIGH POINTS IN THE PIPING SYSTEM. PROVIDE 3/4" (20mm) HOSE BIBB TYPE DRAIN VALVES AT ALL LOW POINTS IN THE PIPING SYSTEM TO ASSURE COMPLETE DRAINABILITY OF THE SYSTEM. TERMINATE DRAIN VALVES AND AIR VENTS IN ACCESSIBLE LOCATIONS.

SLEEVES

1. DIMENSIONED AND COORDINATED SHOP DRAWINGS INDICATING THE LOCATION AND SIZE OF ALL SLEEVES AND CAST IN PLACE ITEMS NECESSARY FOR ALL WORK REQUIRED SHALL BE FURNISHED TO THE PRE-CAST CONCRETE FABRICATOR BEFORE THE FABRICATION OF THE PRE-CAST CONCRETE WORK.

PRODUCT SUBMITTALS

1. WHERE A PRODUCT IS SUBMITTED THAT IS NOT THE BASIS OF DESIGN (WHETHER STATED IN THE DOCUMENTS OR NOT), COORDINATE THE DIFFERENCES IN THE PRODUCT THAT IMPACT OTHER TRADES WITH THE AFFECTED TRADES. THE COST IMPACT ON OTHER TRADES RESULTING FROM A PRODUCT SUBMITTAL THAT IS NOT THE BASIS OF DESIGN SHALL BE INCLUDED IN THE CONTRACTOR'S PRICE AND SHALL NOT BE PASSED ON TO THE OWNER.

CORE DRILL

1. GROUND PENETRATING RADAR SHALL BE PERFORMED PRIOR TO ALL CORE DRILLING TO CONFIRM LOCATIONS OF ALL UNDERGROUND DRAINAGE/PIPING.

HVAC

1. THE PLUMBING CONTRACTOR SHALL NOT BE RESPONSIBLE FOR THE INSTALLATION OF CONDENSATE PIPING FOR HVAC EQUIPMENT.
2. THE PLUMBING CONTRACTOR SHALL INSTALL DRAINS AS SPECIFIED IN THIS DRAWING SET FOR THE DISPOSAL OF CONDENSATE.
3. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONDENSATE PIPING ATTACHED TO HVAC EQUIPMENT.

FIRE SPRINKLER

1. CONTRACTOR SHALL INCLUDE BASE BID PROVISIONS FOR A SPRINKLER DRAIN CONNECTION WITH 40" PVC (INCLUDING SAW CUTTING AND BACK FILLING AS REQUIRED) EXTENDING AND CONNECTING INTO THE BUILDING DRAIN SYSTEM. FINAL DRAIN LOCATION WILL BE PROVIDED ONCE FIRE SPRINKLER SHOP DRAWINGS HAVE BEEN SUBMITTED.

CODE DATA

BUILDING CODES AND STANDARDS

ICC/ANSI 117.1-2009
2015 EXISTING BUILDING CODE (VEBC)

MEP SPECIFIC CODES AND STANDARDS

2015 VIRGINIA PLUMBING CODE (VPC)
2015 VIRGINIA UNIFORM STATEWIDE BUILDING CODE (VA USBC)

LEGEND

	DOMESTIC COLD WATER PIPING
	DOMESTIC HOT WATER PIPING
	DOMESTIC HOT WATER RETURN PIPING
	SOIL OR WASTE PIPING
	VENT PIPING
	GAS PIPING
	BRANCH, SIDE CONNECTION
	CAP
	PIPING TURNING DOWN
	PIPING TURNING UP THROUGH FLOOR OR ROOF ABOVE
	POINT OF DEMOLITION
	POINT OF CONNECTION
	EGRESS PATHWAY (FOR REFERENCE ONLY)
	1 HR RATED FIRE WALL (WHEN DRAWN OVER WALLS)
	PLAN NOTE: SEE PLAN NOTE SCHEDULE.
	WATER BRANCH TAG INDICATING WATER SUPPLY FIXTURE UNIT & FLOW PER SECOND
	SANITARY STACK TAG: TAG NUMBER PIPE SIZE IN INCHES / DRAINAGE FIXTURE UNITS
	VENT STACK TAG: TAG NUMBER PIPE SIZE IN INCHES / DRAINAGE FIXTURE UNITS
	DOMESTIC COLD WATER RISER TAG: TAG NUMBER PIPE SIZE IN INCHES / WATER SUPPLY FIXTURE UNITS
	DOMESTIC HOT WATER RISER TAG: TAG NUMBER PIPE SIZE IN INCHES / WATER SUPPLY FIXTURE UNITS
	DOMESTIC HOT WATER RETURN RISER TAG: TAG NUMBER PIPE SIZE IN INCHES / WATER SUPPLY FIXTURE UNITS

PLUMBING ABBREVIATIONS

ABBREVIATION	DESCRIPTION
AAV	AIR ADMITTANCE VALVE
AD	AREA DRAIN
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
ANT	ACID NEUTRALIZATION TANK
AP	ACCESS PANEL
APPROX	APPROXIMATE OR APPROXIMATELY
ARCH	ARCHITECT OR ARCHITECTURAL
ASJ	ALL SERVICE JACKET
AUTO	AUTOMATIC
AV	ACID VENT
AW	ACID WASTE
BFF	BELOW FINISHED FLOOR
BFG	BELOW FINISHED GRADE
BFP	BACKFLOW PREVENTER
BLDG	BUILDING
C OR °C	DEGREES CELSIUS
C.I.	CAST-IRON
CA	COMPRESSED AIR
CBV	CALIBRATED BALANCING VALVE
CL	CENTERLINE
CLG	CEILING
CMU	CONCRETE MASONRY UNIT
CO	CLEANOUT
COMB	COMBINATION
COMP	COMPRESSOR
COND	CONDENSATE
CONN	CONNECT OR CONNECTION
Cv	COEFFICIENT, VALVE FLOW
CW	COLD WATER
DEG	DEGREE
DELTA P	PRESSURE DROP
DIA	DIAMETER
DN	DOWN
DWG	DRAWING
EA	EACH
EFD	EMERGENCY FLOOR DRAIN

PLUMBING ABBREVIATIONS

ABBREVIATION	DESCRIPTION
ELEV	ELEVATION
EQUIP	EQUIPMENT
EXIST OR (E)	EXISTING
FCO	FLOOR CLEAN OUT
FD	FLOOR DRAIN
FLEX	FLEXIBLE
FLEX CONN	FLEXIBLE CONNECTION
FOV	FULL OPEN VALVE
FW	FILTERED WATER
GPM	GALLONS PER MINUTE
GW	GREY WATER
H2O	WATER
HB	HOSE BIBB
HW	HOT WATER
HWR	HOT WATER RETURN
Hz	HERTZ
INSUL	INSULATION
MAX	MAXIMUM
MIN	MINIMUM
OSD	OPEN SITE DRAIN
PRESS	PRESSURE
PVC	POLYVINYL CHLORIDE
QTY	QUANTITY
RAD	RADIUS
REQD	REQUIRED
SOV	SHUT OFF VALVE
TEMP	TEMPERATURE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
V	VENT
VERT	VERTICAL
VTR	VENT THRU ROOF
W/	WITH
W/O	WITHOUT
WC	WATER CLOSET
WCO	WALL CLEANOUT
WH	WATER HEATER

PLUMBING DRAWING INDEX

SHEET NUMBER	SHEET NAME
P1.01	LEVEL 1 - PLUMBING PLANS
P0.01	LEGEND, NOTES, & ABBREVIATIONS
P0.02	LOADS

TAKE NOTE BEFORE ANY WORK IS STARTED OR EQUIPMENT IS PURCHASED:

SCHEDULE OF REQUIRED SUBMITTALS

NOTE: DESIGN IS CONTINGENT ON HAVING THE FOLLOWING INFORMATION. IT IS THE RESPONSIBILITY OF THE CLIENT TO ENSURE THAT THIS INFORMATION IS GATHERED AND SUBMITTED TO THE ENGINEER IN A TIMELY MANNER.

FINISHED FLOOR ELEVATIONS

- A. A SKETCH SHALL BE SUBMITTED SHOWING THE FINISHED FLOOR ELEVATIONS.

PRODUCT DATA

- A. THE ENGINEER SHALL BE PROVIDED WITH CUT SHEETS OF THE FOLLOWING ITEMS FOR REVIEW:
- ALL POINT OF USE BACKFLOW PREVENTERS
 - ALL FIXTURES OR EQUIPMENT THAT IS REQUIRED TO HAVE A BACKFLOW PREVENTION METHOD ACCORDING TO THE FIXTURE SCHEDULE.
 - THERMOSTATIC MIXING VALVES
 - WATER HAMMER ARRESTERS
 - FLOOR DRAINS AND TRAP PRIMERS
 - WATER HEATERS
 - PUMPS OF ANY KIND

SHOP DRAWINGS

- A. CONTRACTOR SHALL FIELD VERIFY WITH SCOPE AND SUBMIT FINDINGS TO ENGINEER FOR REVIEW PRIOR TO CORE DRILLING OR TRENCHING. IF THE LOCATION DIFFERS FROM THE ASSUMPTION IN THIS DRAWING SET, THE DESIGN WILL BE IMPACTED.
- B. THE FOLLOWING INFORMATION SHALL BE REQUIRED IN A REPORT OF FINDINGS:
- SEWER INVERT ELEVATION
 - EXACT LOCATION OF EXISTING CONNECTION TO CITY SEWER.
 - LOCATION OF BUILDING DRAIN EXITING THE BUILDING.
 - CONDITION OF SEWER LATERAL ALL THE WAY TO CITY SEWER.
 - LOCATIONS AND SIZES OF EXISTING ROOF PENETRATIONS TO BE REUSED FOR VENT PIPING.

PLUMBING MINIMUM FIXTURES

USE GROUP - B			
OCCUPANCY - 13			
TYPE OF FIXTURE	REQUIRED RATIO	TOTAL REQUIRED	PROVIDED
DRINKING FOUNTAIN	1 PER 100	NOT REQUIRED FOR AN OCCUPANT LOAD OF 15 OR FEWER. EXCEPTION 410.2.	0
LAVATORIES	1 PER 40 FOR THE FIRST 80	1	1
SERVICE SINK	1 TOTAL	NOT REQUIRED FOR OCCUPANT LOAD OF 15 OR FEWER	1
WATER CLOSET	1 PER 25 FOR THE FIRST 50	1	1



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ENGINEER: Benjamin Rickey, PE.

LICENSE: #0402059426

EMAIL: brickey@permitzip.com.



NO.	DESCRIPTION	DATE
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BUILDING DATA

BUILDING CONSTRUCTION: II-B
USE GROUP: B
NOT IN FLOOD PLAIN.
TOTAL AREA OF PROJECT: 1,300 SF
TOTAL AREA OF BUILDING: 10,000 SF
OCCUPANCY LOAD: 13
CHANGE OF USE? NO
LEVEL OF RENOVATION: GREATER THAN 50%
ALTERATION LEVEL: III

THE JOINT CHIRAPRACTIC

1011 UNIVERSITY BLVD,
SUITE 185, SUFFOLK,
VA

PROJECT NO: 21.4257
04 MAY 2021

LEGEND, NOTES, &
ABBREVIATIONS

P0.01

As indicated

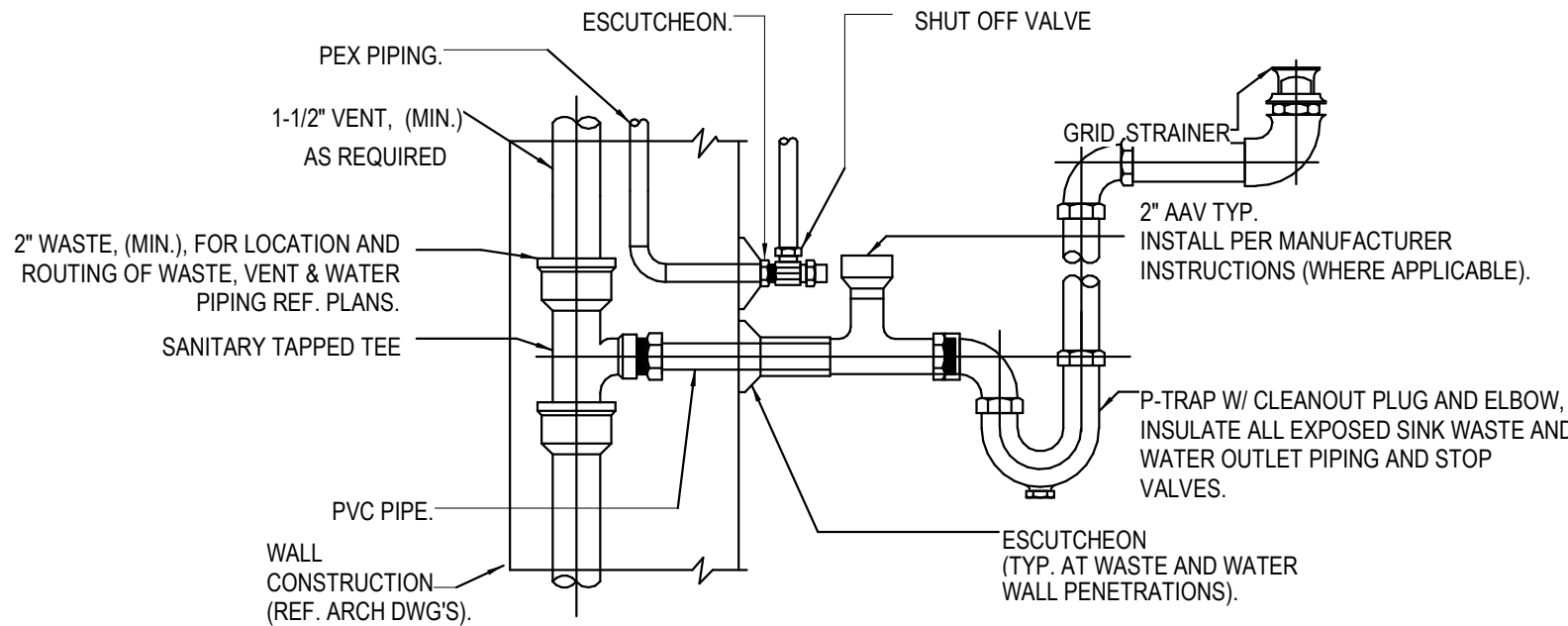
PLUMBING FIXTURE SCHEDULE								
NOTE: SHUT OFF VALVES SHALL BE PROVIDED FOR ALL DOMESTIC COLD WATER AND DOMESTIC HOT WATER SUPPLY LINES FOR EACH FIXTURE. SHUT OFF VALVES SHALL BE ACCESSIBLE.								
FIXTURE ID	FIXTURE	PLUMBING CONNECTIONS			TEMPERED WATER METHOD	BACKFLOW PREVENTION METHOD	WATER HAMMER METHOD	REMARKS
		WATER CONNECTION		P-TRAP SIZE				
		CW	HW	W				
NEW WORK								
SS-1	SERVICE SINK	1/2"	1/2"	1 1/2"				SERVICE SINK.

PLUMBING PIPING SYSTEM SCHEDULE				
SYSTEM	ABOVE GROUND	BELOW GROUND	JOINT METHOD	STANDARDS AND REMARKS
DOMESTIC WATER	CPVC	CPVC	JOINTS SHALL BE MADE IN ACCORDANCE WITH THE PIPE MANUFACTURER'S INSTALLATION INSTRUCTIONS.	PIPING SHALL COMPLY WITH ASTM 2846, ASTM F 441, AND ASTM F 442. ANY PIPING INSTALLED IN UNCONDITIONED SPACES SHALL BE PROVIDED WITH 1.5" FIBERGLASS INSULATION.
DOMESTIC WATER	PEX	PEX	SECTIONS SHALL BE JOINED WITH FLARED JOINTS OR MECHANICAL JOINTS. MECHANICAL JOINTS SHALL BE INSTALLED ACCORDING TO MANUFACTURER INSTRUCTIONS.	PIPING SHALL CONFORM WITH ASTM F 876, ASTM F 877, CSA B137.5. ANY PIPING INSTALLED IN UNCONDITIONED SPACES SHALL BE PROVIDED WITH 1.5" FIBERGLASS INSULATION.
SANITARY/VENT	PVC	PVC	PURPLE COLORED PRIMER CONFORMING TO ASTM F 656 SHALL BE APPLIED TO CLEAN, DRY JOINTS. SOLVENT CEMENT SHALL NOT BE PURPLE AND SHALL CONFORM WITH ASTM D 2564,CSA B137.3, CSA B181.2, OR CSA B182.1. JOINT SHALL CONFORM WITH ASTM D 2855.	PIPING SHALL CONFORM WITH ASTM D 2665, ASTM F 891, ASTM F 1488.

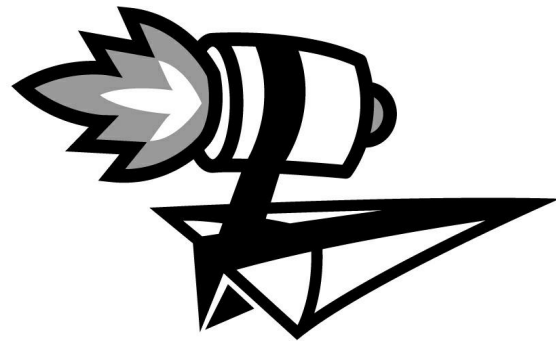
NOTE

1. PIPING SHALL ADHERE TO THIS SPECIFICATION UNLESS OTHERWISE NOTED IN THE PLANS. CONTRACTOR SHALL PROVIDE SUBMITTALS FOR ANY PIPING WHICH DOES NOT MATCH THIS SPECIFICATION.
2. PIPING IN UNCONDITIONED AREA SHALL BE INSULATED WITH 1" FIBERGLASS INSULATION.
3. HOT WATER AND HOT WATER RE-CIRCULATION PIPING SHALL BE PROVIDED WITH 1" FIBERGLASS INSULATION WHEN RE-CIRCULATION PUMP IS USED.
4. HOT WATER AND HOT WATER RETURN SHALL BE PROVIDED WITH 1" FIBERGLASS INSULATION WITH NO BREAKS.

PLUMBING LOAD CALCULATIONS											
FIXTURE ID	QTY	FIXTURE	DEMAND CALCULATIONS								HOT WATER DEMAND
			WATER						DRAINAGE		
			COLD	TOTAL COLD	HOT	TOTAL HOT	TOTAL	TOTAL WSFU	DFU	TOTAL DFU	
EXISTING											
LV-A(E)	1	LAVATORY- ADA	1.5	1.5	1.5	1.5	2	2	1	1	6 gal/h
WC-A(E)	1	WATER CLOSET- ADA	5	5	0	0	5	5	5	5	0 gal/h
EXISTING: 2	2			6.5		1.5		7		6	6 gal/h
NEW WORK											
SS-1	1	SERVICE SINK	2.25	2.25	2.25	2.25	3	3	2	2	20 gal/h
NEW WORK: 1	1			2.25		2.25		3		2	20 gal/h
	3			8.75		3.75		10		8	26 gal/h



5.02 TYPICAL LAVATORY & SINK CONNECTION DETAIL



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VA

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04 MAY 2021

LOADS

P0.02

As indicated

WATER SUPPLY DRAFTING LEGEND

EXISTING WATER PIPE:	DCW	
WATER PIPES UNDER SLAB:	DCW	
	DHW	
DISTRIBUTION WITHIN UNITS (DOWNSTREAM OF SOV):	DCW	
	DHW	
MAIN DISTRIBUTION PIPE :	DCW	
	DHW	

PLUMBING PLAN NOTES - WATER

#	NOTE
1	TIE NEW 1/2" DCW PIPE TO EXISTING DCW PIPE.
2	TIE NEW 1/2" DHW PIPE TO EXISTING DHW MAIN.
3	SOV SHALL BE INSTALLED AT THE FIXTURE.
1	TIE NEW 1/2" DCW PIPE TO EXISTING DCW PIPE.
2	TIE NEW 1/2" DHW PIPE TO EXISTING DHW MAIN.

DEMOLITION NOTES

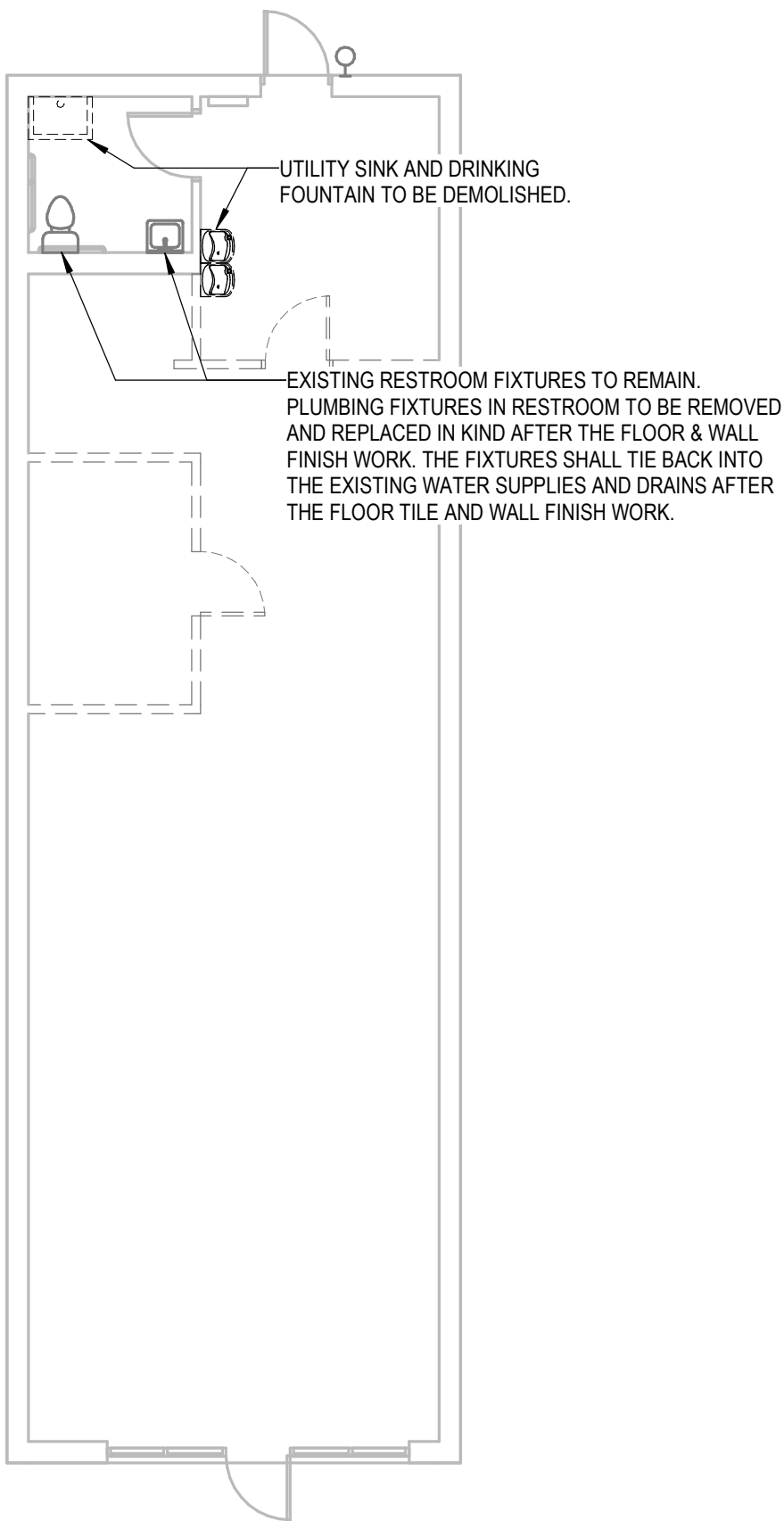
- EXISTING DRINKING FOUNTAIN AND UTILITY SINK WATER PIPES SHALL BE DEMOED BACK TO THE MAIN AND CAPPED WITH WALL.
- EXISTING DRINKING FOUNTAIN DRAIN PIPE SHALL BE CUT AND CAPPED WITHIN WALL.
- EXISTING UTILITY SINK DRAIN PIPE SHALL BE DEMOED BACK TO MAIN SANITARY PIPE.

SANITARY DRAFTING LEGEND

SANITARY WASTE PIPE:	
VENT PIPE:	
EXISTING SANITARY PIPE:	

PLUMBING PLAN NOTES - SANITARY

#	NOTE
1	TIE 2" SAN PIPE INTO EXISTING DRAIN PIPE FOR DRINKING FOUNTAIN.
2	TIE INTO EXISTING VENT SYSTEM.
3	EXISTING WATER HEATER PAN DRAIN SHALL DISCHARGE TO SS-1, SERVICE SINK.
1	TIE 2" SAN PIPE INTO EXISTING DRAIN PIPE FOR DRINKING FOUNTAIN.
2	TIE INTO EXISTING VENT SYSTEM.
3	EXISTING WATER HEATER PAN DRAIN SHALL DISCHARGE TO SS-1, SERVICE SINK.

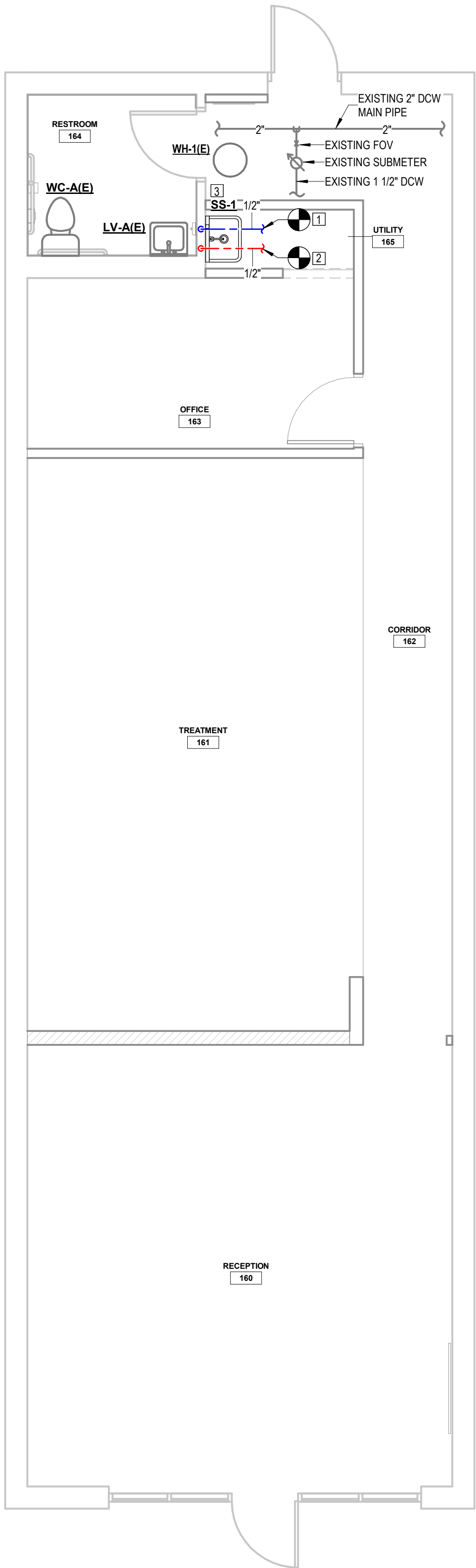


3 LEVEL 1 - DEMO - PLUMBING PLAN
1/8" = 1'-0"

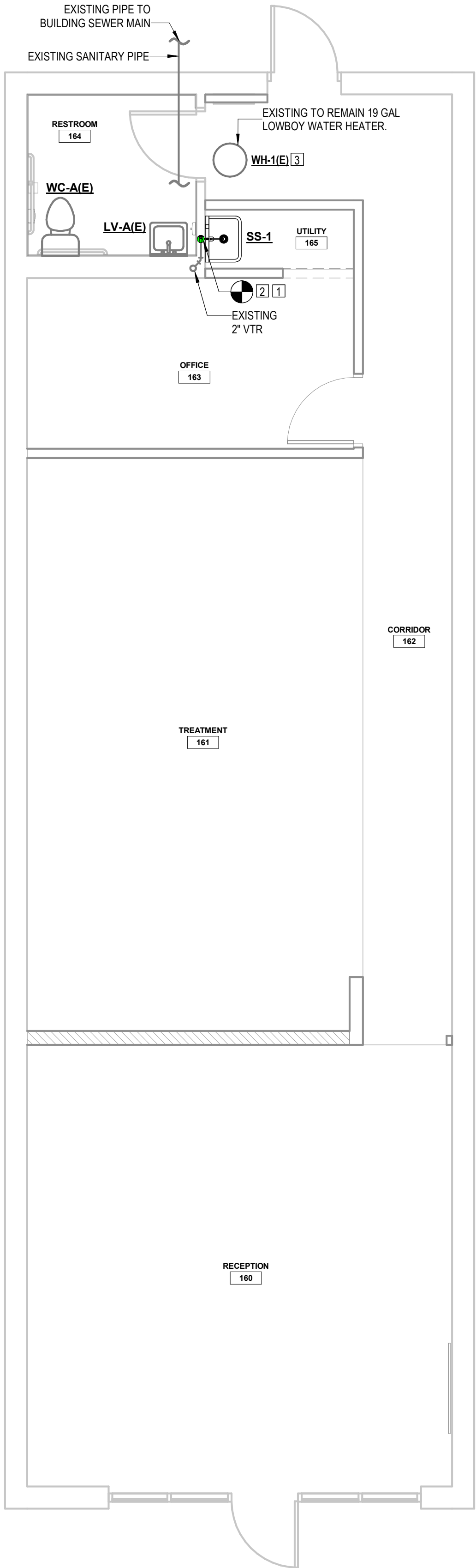
EXISTING RESTROOM FIXTURES TO REMAIN. PLUMBING FIXTURES IN RESTROOM TO BE REMOVED AND REPLACED IN KIND AFTER THE FLOOR FINISH & WALL WORK. THE FIXTURES SHALL TIE BACK INTO THE EXISTING WATER SUPPLIES AND DRAINS AFTER THE FLOOR TILE & WALL FINISH WORK.



4 WATER SUPPLY & SANITARY RISER DIAGRAM
NONE

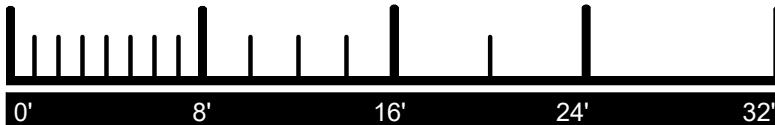


2 LEVEL 1 - NEW WORK - DOMESTIC WATER PLAN
1/4" = 1'-0"

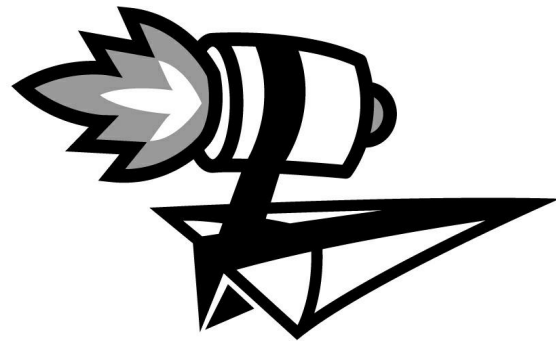
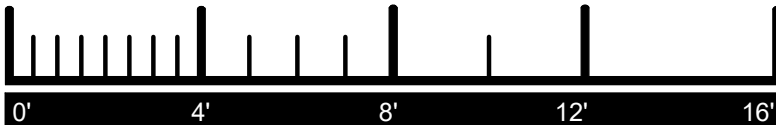


1 LEVEL 1 - NEW WORK - SANITARY PLAN
1/4" = 1'-0"

GRAPHIC SCALE: 1 INCH = 8 FEET



GRAPHIC SCALE: 1 INCH = 4 FEET



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PROJECT NO: 21.4257
04 MAY 2021

LEVEL 1 - PLUMBING PLANS

P1.01

As Indicated

CODE DATA

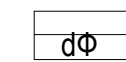
MEP SPECIFIC CODES AND STANDARDS

2015 VIRGINIA MECHANICAL CODE (2015 IMC WITH AMENDMENTS)
2015 VIRGINIA ENERGY CONSERVATION CODE (2015 IECC WITH AMENDMENTS)
2015 VIRGINIA PLUMBING CODE (2015 IPC WITH AMENDMENTS)
2015 VIRGINIA UNIFORM STATEWIDE BUILDING CODE (VA USBC)
2015 VIRGINIA EXISTING BUILDING CODE (2015 IBCB WITH AMENDMENTS)

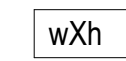
MECHANICAL DRAWING INDEX	
SHEET NUMBER	SHEET NAME
M0.01	LEGEND, NOTES, & ABBREVIATIONS
M0.03	MECHANICAL LOADS, EQUIPMENT AND ZONING
M1.01	LEVEL 1 - HVAC PLAN
M7.01	SHEET SPECIFICATION

GENERAL MECHANICAL NOTES

- DUCT DIMENSIONS SHOWN ARE INSIDE CLEAR.
- LOCATIONS OF DUCTWORK AND FITTINGS MAY BE EXAGGERATED FOR CLARITY. COORDINATE EXACT LOCATION OF MECHANICAL WORK WITH STRUCTURE, LIGHTS AND OTHER OBSTRUCTIONS. ADJUST LOCATIONS AS REQUIRED.
- MECHANICAL LAYOUTS ARE DIAGRAMATIC. PROVIDE DROPS, RISERS AND OFFSETS WHERE REQUIRED.
- ALL DUCTWORK AND EQUIPMENT SHALL BE COVERED AND SEALED WITH MASTIC.
- ALL MECHANICAL WORK SHALL BE CONCEALED WITHIN WALLS, BELOW FLOORS OR ABOVE CEILINGS, UNLESS OTHERWISE NOTED.
- ALL CUTTING AND PATCHING OF BUILDING CONSTRUCTION SHALL BE DONE BY THE MECHANICAL CONTRACTOR.
- INSTALL FIRE DAMPERS AND ACCESS DOORS OR FLANGED DUCTS AT EVERY FIRE WALL PENETRATION.
- CONTRACTOR SHALL SIZE REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS, UNLESS OTHERWISE NOTED.
- UNDER NO CIRCUMSTANCES SHALL ANY STRUCTURAL MEMBER BE CUT OR PENETRATED WITHOUT THE WRITTEN PERMISSION OF THE ARCHITECT.
- THE EQUIPMENT, DUCTWORK AND PIPING INSTALLED SHALL BE BLOWN OUT UNDER PRESSURE AND CLEANED OF FOREIGN MATTER, THROUGH TEMPORARY CONNECTIONS WHEN NECESSARY BEFORE THE SYSTEM IS PLACED IN SERVICE. THE SURFACES OF ALL NEW EQUIPMENT AND PIPING SHALL BE CLEAN UPON COMPLETION OF THE WORK. AIR FILTERS SHALL BE REPLACED IMMEDIATELY BEFORE BEING TURNED OVER TO THE OWNER FOR ACCEPTANCE.
- PREPLAN ALL WORK PRIOR TO PURCHASING, ORDERING, OR FABRICATING ANY PART OF THE WORK DESCRIBED IN THESE DRAWINGS.
- IMMEDIATELY NOTIFY THE ENGINEER OF ANY CONFLICTS WITH EXISTING FIELD CONDITIONS OR THE WORK OF OTHER TRADES.
- RESOLVE ALL CONFLICT PRIOR TO INCURRING ANY MATERIAL OR LABOR EXPENSES.
- COMPLY WITH THE MANUFACTURER'S TECHNICAL INSTRUCTION WHEN INSTALLING MECHANICAL EQUIPMENT, DEVICES, DUCTWORK, GRILLES, REGISTERS, DIFFUSERS, AND OTHER MATERIALS.
- PROVIDE ALL APPURTENANCES NECESSARY TO PROPERLY INSTALL EQUIPMENT, DEVICES, DUCTWORK, GRILLES, REGISTERS, DIFFUSERS, AND OTHER MATERIALS.
- VERIFY EACH GRILLE, REGISTER, AND DIFFUSER TO BE INSTALLED AGAINST THE ARCHITECT'S ROOM FINISHES AND RESOLVE ALL CONFLICTS BEFORE ORDERING.
- LOCATE MECHANICAL EQUIPMENT, DEVICES, DUCTWORK, GRILLES, REGISTERS, DIFFUSERS, AND OTHER MATERIAL GENERALLY AS SHOWN ON THE PLANS; HOWEVER, COORDINATE LOCATIONS WITH ACTUAL FIELD CONDITIONS TO PRESERVE ALL CODE-REQUIRED AND MANUFACTURER-REQUESTED SERVICE CLEARANCE.
- COORDINATE THE ROUTING OF ALL DUCTWORK AND PIPING WITH THE BUILDING STRUCTURE AND WITH THE WORK OF OTHER TRADES.
- BUILDING FRAMING CAVITIES SHALL NOT BE USED AS SUPPLY AIR DUCTS.
- PROVIDE FLEXIBLE DUCTWORK OR FLEXIBLE CONNECTORS ON SUPPLY DUCTWORK AS SHOWN ON THE PLAN. FLEXIBLE DUCTWORK SHALL BE CLASS 0 OR 1 OF UNLIMITED LENGTH SIZED FOR AIRFLOW AND FRICTION LOSS. FLEXIBLE DUCTWORK IS LIMITED TO 6' MAXIMUM LENGTH.
- ALL DUCTWORK NOT LOCATED WITHIN A CONDITIONED SPACE SHALL BE INSULATED. FOR DUCTWORK LOCATED OUTSIDE OF THE BUILDING ENVELOPE, PROVIDE AT LEAST R-8 INSULATION IN ADDITION TO WEATHERPROOFING. FOR DUCTWORK LOCATED IN ATTICS, CRAWLSPACES, AND OTHER UNCONDITIONED SPACES, PROVIDE AT LEAST R-6 INSULATION. FOR EXPOSED SPIRAL DUCT LOCATED IN CONDITIONED SPACE, PROVIDE AT LEAST R-6 INSULATION FOR CONDENSATION PROOFING.
- PROVIDE AIR TURNING DEVICES AT EACH SUPPLY DUCT ELBOW AND BRANCH TAKE OFF. PROVIDE BALANCING AND SPLITTER DAMPERS AS SHOWN ON THE PLANS AND WHERE NECESSARY FOR SYSTEM BALANCING. ALL TURNING VANES SHALL BE DOUBLE-THICKNESS.
- PROVIDE ALL LOW VOLTAGE (24V AND BELOW) MOTOR-OPERABLE DAMPERS, CONTROLS DEVICES, RELAYS, AND SENSORS NECESSARY FOR THE PROPER, EFFECTIVE, AND SAFE OPERATION OF EQUIPMENT AND SYSTEMS. LOW VOLTAGE (24V AND BELOW) CONTROLS WIRING SHALL INCLUDE, BUT NOT BE LIMITED TO, TRANSFORMERS, CABLING, WIRING, AND DISCONNECTING MEANS. COMPONENTS, WIRING, SIZING, OVERCURRENT PROTECTION, AND GROUNDING SHALL CONFORM TO THE NATIONAL ELECTRIC CODE.
- COORDINATE GAS-FIRED EQUIPMENT CAPACITIES AND BURNER PRESSURE REQUIREMENTS WITH GAS UTILITY. PROVIDE VENT-LESS GAS REGULATORS AS NEEDED TO LIMIT PRESSURE TO THE APPLIANCE REQUIREMENT. VENT 5 PSI AND GREATER REGULATORS TO THE EXTERIOR WITH APPROVED PIPING AND WATERTIGHT PENETRATIONS.
- ALL OUTSIDE AIR INTAKES AND EXHAUST AIR DISCHARGES SHALL HAVE AUTOMATIC OR GRAVITY DAMPERS THAT CLOSE WHEN THE VENTILATION SYSTEM IS NOT OPERATING.
- ALL OUTSIDE AIR INTAKE OR EXHAUST AIR DISCHARGE HOODS, CAPS, ETC. SHALL BE FULLY COMPATIBLE WITH THE WALL OR ROOF INSTALLATION. PROVIDE WATERTIGHT FLASHING AND SEALING AS NECESSARY TO SEAL TIGHT THE PENETRATIONS.
- BALANCE THE HVAC SYSTEM TO THE CFM QUANTITIES SHOWN ON THESE DRAWINGS.
- UPON COMPLETION OF THE PROJECT AND ONCE THE BUILDING IS OCCUPIED, REBALANCE THE DIFFUSERS AS NECESSARY AND REPLACE HVAC UNIT FILTERS.
- WHEN DIFFUSERS ARE LOCATED IN FIRE RATED CEILINGS, PROVIDE DIFFUSERS WITH INTEGRAL FIRE DAMPERS, LISTED AND IN ACCORDANCE WITH UL.
- VIBRATION ISOLATION SHALL BE INSTALLED FOR EVERY PIECE OF MECHANICAL EQUIPMENT THAT INCLUDES A FAN OR MOTOR. ISOLATION SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS.



ROUND DUCT, 'd' IS THE DIAMETER (IN INCHES)



RECTANGULAR DUCT, 'w' IS THE WIDTH & 'h' IS THE HEIGHT (IN INCHES)



FLEX ROUND DUCT



FLEX RECTANGULAR DUCT



TRANSITION



DUCT ELBOW WITH TURNING VANES - RECTANGULAR



DUCT ELBOW



STANDARD BEVELED BRANCH - RECTANGULAR



STANDARD BEVELED BRANCH - ROUND



BALANCING DAMPER



BACKDRAFT DAMPER



FIRE DAMPER



COMBINED FIRE AND SMOKE DAMPER



VARIABLE AIR VOLUME TERMINAL BOX



MECHANICAL EQUIPMENT



UNIT HEATER/TRANSFER FAN, ARROW INDICATES THE DIRECTION OF AIR FLOW



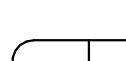
THERMOSTAT



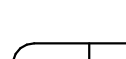
AVERAGING THERMOSTAT



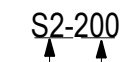
GOOSENECK - EXHAUST VENT



GOOSENECK - INTAKE VENT



ACTUAL CFM AT DIFFUSER / GRILLE



DIFFUSER SERVICE TYPE (S-SUPPLY,R-RETURN,T-TRANSFER,E-EXHAUST)



SQUARE ONE - WAY SUPPLY AIR DIFFUSER



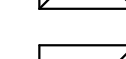
SQUARE TWO-WAY SUPPLY AIR DIFFUSER



SQUARE THREE-WAY SUPPLY AIR DIFFUSER



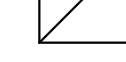
SQUARE FOUR-WAY SUPPLY AIR DIFFUSER OR DUCT RISER



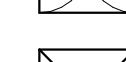
SQUARE RETURN AIR GRILLE OR DUCT RISER



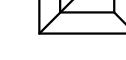
SQUARE EXHAUST AIR GRILLE OR DUCT RISER



SQUARE OUTDOOR / MAKE-UP AIR DUCT RISER



CONCENTRIC DIFFUSER-SUPPLY & RETURN TERMINAL



CIRCULAR SUPPLY DIFFUSER OR ROUND DUCT RISER



ROUND RETURN DUCT RISER



ROUND EXHAUST DUCT RISER



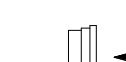
ROUND OUTDOOR / MAKE-UP AIR DUCT RISER



SIDEWALL SUPPLY DIFFUSER



SIDEWALL RETURN GRILLE



LINEAR SLOT SUPPLY DIFFUSER



POINT OF DEMOLITION



POINT OF CONNECTION



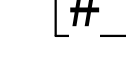
EGRESS PATHWAY (FOR REFERENCE ONLY)



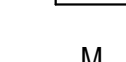
PLAN NOTE. SEE PLAN NOTE SCHEDULE.



SMOKE DETECTOR



MOTORIZED AIR DAMPER



CO₂ SENSOR

TAKE NOTE BEFORE ANY WORK IS STARTED OR EQUIPMENT IS PURCHASED:

SCHEDULE OF REQUIRED SUBMITTALS

NOTE: DESIGN IS CONTINGENT ON HAVING THE FOLLOWING INFORMATION. NO EQUIPMENT OR CONSTRUCTION SHALL BE PERMITTED TO BEGIN PRIOR TO SUBMITTING THE INFORMATION LISTED BELOW FOR ENGINEERING APPROVAL. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT THIS INFORMATION IS GATHERED AND SUBMITTED TO THE ENGINEER IN A TIMELY MANNER.

PRODUCT DATA

A. THE ENGINEER SHALL BE PROVIDED WITH CUT SHEETS OF THE FOLLOWING ITEMS FOR REVIEW:

- MECHANICAL EQUIPMENT
- AIR DISTRIBUTION DEVICES
- FIRE AND FIRE/SMOKE DAMPERS. DAMPERS SHALL BE UL LISTED FOR PROPOSED USE, LABELED IN A MANNER TO CLARIFY THEIR USE BASED ON SHOP DRAWING REQUIREMENT.
- DUCTWORK WITH INSULATION

SHOP DRAWINGS

- MECHANICAL CHASE - SHOW ALL DUCT LENGTHS AND FITTINGS, REFRIGERANT LINE SETS, AND ELECTRICAL FEEDERS.
- FIRE PENETRATIONS - SHOW ALL FIRE RATED ASSEMBLIES (FLOOR AND CEILING) AND INDICATE THEIR RATINGS AND UL ASSEMBLY TYPE (EVEN IF NOT BEING PENETRATED). INDICATE THE LOCATION OF ALL FIRE AND/OR FIRE/SMOKE DAMPERS TO BE USED.

DESIGN CONDITION

LOCATION: CITY/STATE	SUFFOLK, VA
LATITUDE: DEG. N, LAT	36.7°
ELEVATION: FT. ABOVE SEA LEVEL	72
ASHRAE SUMMER DESIGN CONDITIONS: 1.0% DB MWB	92.5°/77.8°
ASHRAE WINTER DESIGN CONDITIONS: 99% DB	24.7°
BUILDING SPACE DESIGN TEMPERATURES: SUMMER DB WINTER DB	75° 70°

ENVELOPE SUMMARY

ASSEMBLY	U-VALUE
CEILING/ROOF: FLAT CEILING, METAL DECK, R-20 DECK INSULATION.	0.035
WALLS: 12" THICK BRICK WALL	0.35
WINDOWS: FIXED FENESTRATION	0.38
DOORS: OPAQUE FENESTRATION	0.60
FLOORS: MASS, ABOVE GRADE	0.08
CLIMATE ZONE 4A	
CODE REFERENCE: IECC 2015 (VECC 2015) CHAPTER 4, SECTION C402.	

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M0.01

As indicated

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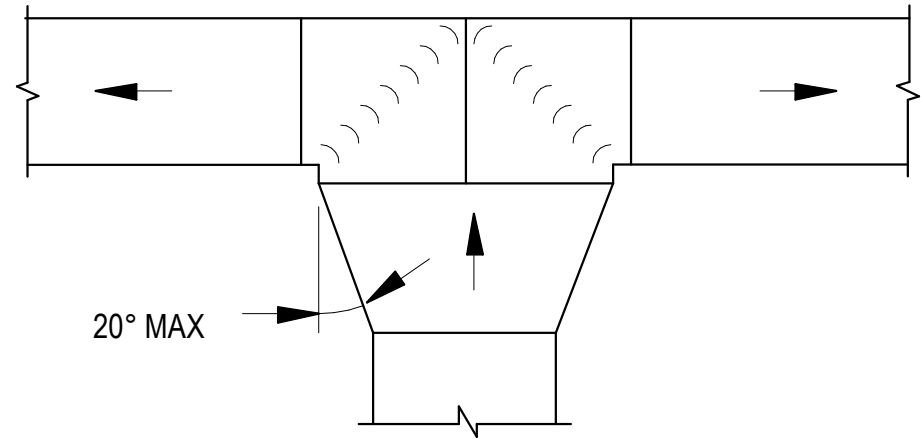


MECHANICAL VENTILATION SCHEDULE																					
ROOM NUMBER	ROOM NAME	IMC SPACE CLASSIFICATION	MINIMUM ZONE AIRFLOW	DCV CK	AREA (Az)	SF PER PERSON	# OF OCCUPANTS	CFM PER SF (Ra)	OUTDOOR AIR PER PERSON (Rp)	BREATHING ZONE OA (Vbz)	ZONE AIR DISTRIBUTION EFFECTIVENESS (Ez)	ZONE OUTDOOR AIRFLOW (Voz)	DISCHARGE OUTDOOR AIR FRACTION (Zd)	AVERAGE OUTDOOR AIR FRACTION (Xs)	ZONE VENTILATION EFFICIENCY (Evz)	EXHAUST AIR CFM	SYSTEM LEVEL VARIABLES				
																	UNCORRECTED OUTDOOR AIR INTAKE (Vou)	SYSTEM PRIMARY AIRFLOW (Vps)	AVERAGE OUTDOOR AIR FRACTION (Xs)	SYSTEM VENTILATION EFFICIENCY (Ev)	OUTDOOR AIR INTAKE FLOW (Vot)
160	RECEPTION	OFFICES - RECEPTION AREAS	920 CFM	No	383	33	12	0.06	5 CFM	83 CFM	0.8	104 CFM	0.11	0.12	1.01	0	233 CFM	2000 CFM	0.12	0.9	259 CFM
161	TREATMENT	HOSPITALS/NURSING - PHYSICAL THERAPY	703 CFM	No	377	50	8	0	15 CFM	120 CFM	0.8	150 CFM	0.21	0.12	0.91	0					
162	CORRIDOR	PUBLIC SPACES - CORRIDORS	100 CFM	No	206	0	0	0.06	0 CFM	12 CFM	0.8	15 CFM	0.15	0.12	0.97	0					
163	OFFICE	OFFICES - OFFICE SPACES	141 CFM	No	114	200	1	0.06	5 CFM	12 CFM	0.8	15 CFM	0.10	0.12	1.02	0					
164	RESTROOM	PUBLIC SPACES - TOILET ROOMS - PUBLIC	76 CFM	No	56	0	0	0	0 CFM	0 CFM	0.8	0 CFM	0.00	0.12	1.12	0					
165	UTILITY	UNOCCUPIED	60 CFM	No	18	0	0	0	0 CFM	0 CFM	0.8	0 CFM	0.00	0.12	1.12	0					
RTU 1			2000 CFM				21			227 CFM					6.13	0					
GRAND TOTAL			2000 CFM				21			227 CFM					6.13	0					

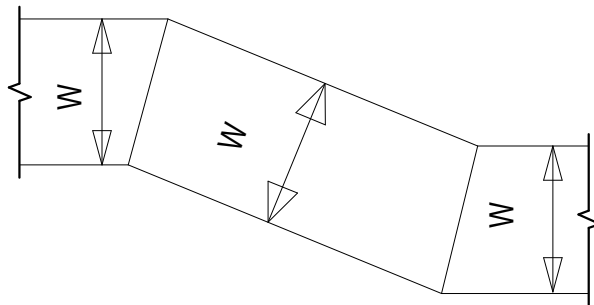
MECHANICAL EQUIPMENT TYPE SCHEDULE - A																					
ID	DESCRIPTION	COOLING CAPACITIES				HEATING CAPACITIES				RATED FAN CFM	OUTSIDE AIR CFM	ESP	RA SMOKE	ECONO	ELECTRICAL				DESIGN BASED ON		COMMENTS
		NOMINAL CLG (TONS)	RATED PERFORMANCE AT DESIGN CONDITIONS			GAS INPUT (BTU/H)	RATED PERFORMANCE AT DESIGN CONDITIONS		FLA						MCA	MOCP	VOLTS	PHASE	MAKE	MODEL	
			SENSIBLE (BTU/H)	LATENT (BTU/H)	TOTAL (BTU/H)		HEATING (BTU/H)	STRIP HEAT (BTU/H)													
RTU-1(E)	PACKAGED GAS HEAT/ELECTRIC COOLING ROOFTOP	5	45,300	14,500	59,800	125,000	100,000		2,000	250	1.10 in-wg	No	Yes	25.04 A	31.3 A	40 A	208 V	3	YORK	ZF060N10A2AAA4	ALL
EXISTING: 1																					

NOTES

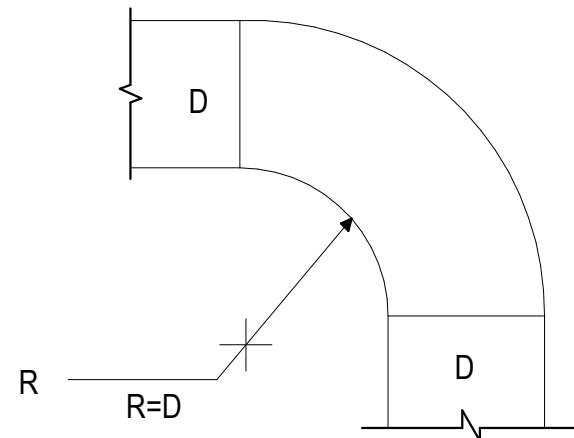
- CONTRACTOR TO VERIFY THE EXISTING PACKAGED ROOFTOP UNIT OPERATION WITH MAXIMUM 5% DEFICIENCIES. REPLACE ANY DAMAGED RIGID CONDUIT/DISCONNECT WITH NEW WORK.
- BALANCE THE OUTDOOR AIR INTAKE PER SCHEDULE INDICATES.
- EXISTING THERMOSTAT TO BE REPLACED WITH PROGRAMMABLE THERMOSTAT 33CS2PPRH-03 OR EQUAL.



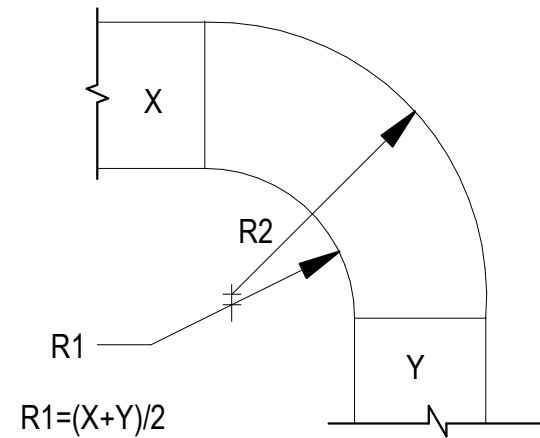
90° TEES



OFFSETS

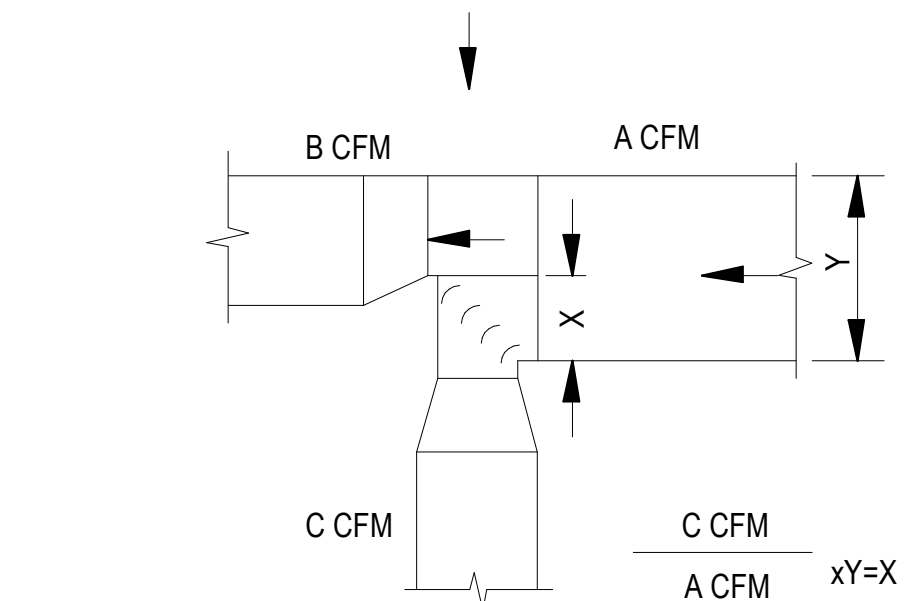


D LESS THAN 12" USE RADIUS;
FOE D OF 12" OR MORE USE
RECTANGULAR VANED ELBOW

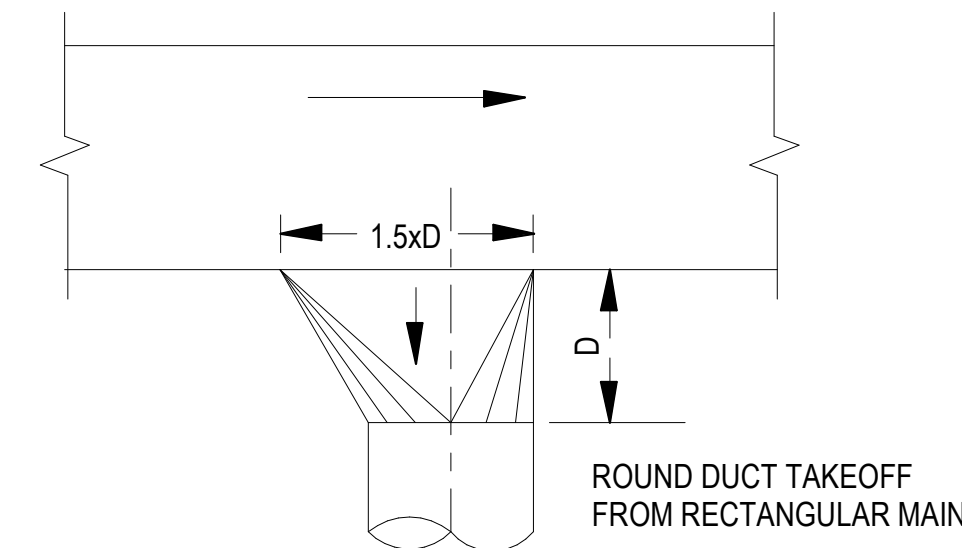


X OR Y LESS THAN 12"

90° RADIUS ELBOW

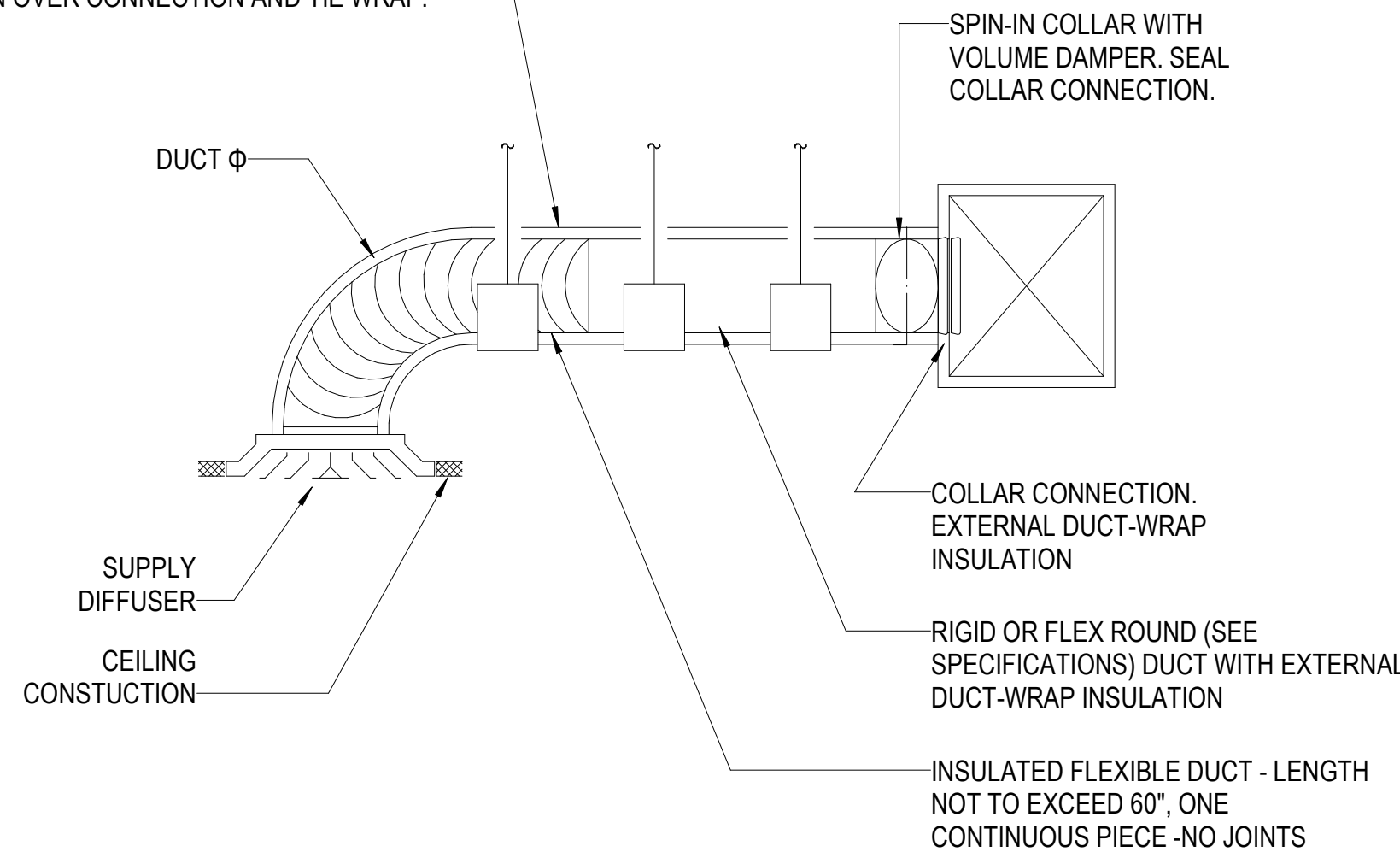


X MORE THAN 12"



BRANCH TAKEOFFS

CONNECT EACH END OF FLEXIBLE DUCT USING SEALER. SECURE WITH MACHINE SCREWS CAPTURING ATLEAST ONE HELICAL SUPPORT WIRE. TIE WRAP OVER CONNECTION. PULL INSULATION OVER CONNECTION AND TIE WRAP.



3.02 TYPICAL CEILING SUPPLY DIFFUSER CONNECTION

SCALE:NONE

MECHANICAL EQUIPMENT - FAN SCHEDULE													
ID	DESCRIPTION	COUNT	EXHAUST CFM	ESP	FAN RPM	FLA	MCA	MOCP	VOLTS	PHASE	MAKE	MODEL	COMMENTS
EF-2	CEILING-MOUNTED EXHAUST FAN	1	50 CFM	0.20 in-wg	935	0.1 A	0.1 A		120 V	1	GREENHECK	SP-80-VG	ALL
NEW WORK: 1													

NOTES

- EXHAUST FAN SHALL BE FURN. AND INSTALLED BY MECHANICAL CONTRACTOR, AND WIRED BY ELECTRICAL CONTRACTOR.
- EXHAUST FAN SHALL BE CONTROLLED BY LIGHT SWITCH.

MECHANICAL GRILLES,REGISTERS AND DIFFUSERS SCHEDULE															
ID	COUNT	SERVICE	NECK SIZE(IN.)	FACE SIZE(IN.)	MOUNT				MATERIAL	FACE OPERATED DAMPER	MAX CFM	MAX NC	MAKE	MODEL	NOTES
					CEILING LAY-IN	GYP.	WALL	FLOOR							
R1	2	RETURN	12X12	24X24	X				STEEL	No	1,000	30	PRICE	PDDR	[1]
S1	7	SUPPLY	10	24X24	X				STEEL	No	491	30	PRICE	SPD	[1]
T1	1	TRANSFER	20X16	22X18			X		STEEL	No	320	30	PRICE	STG	[1]

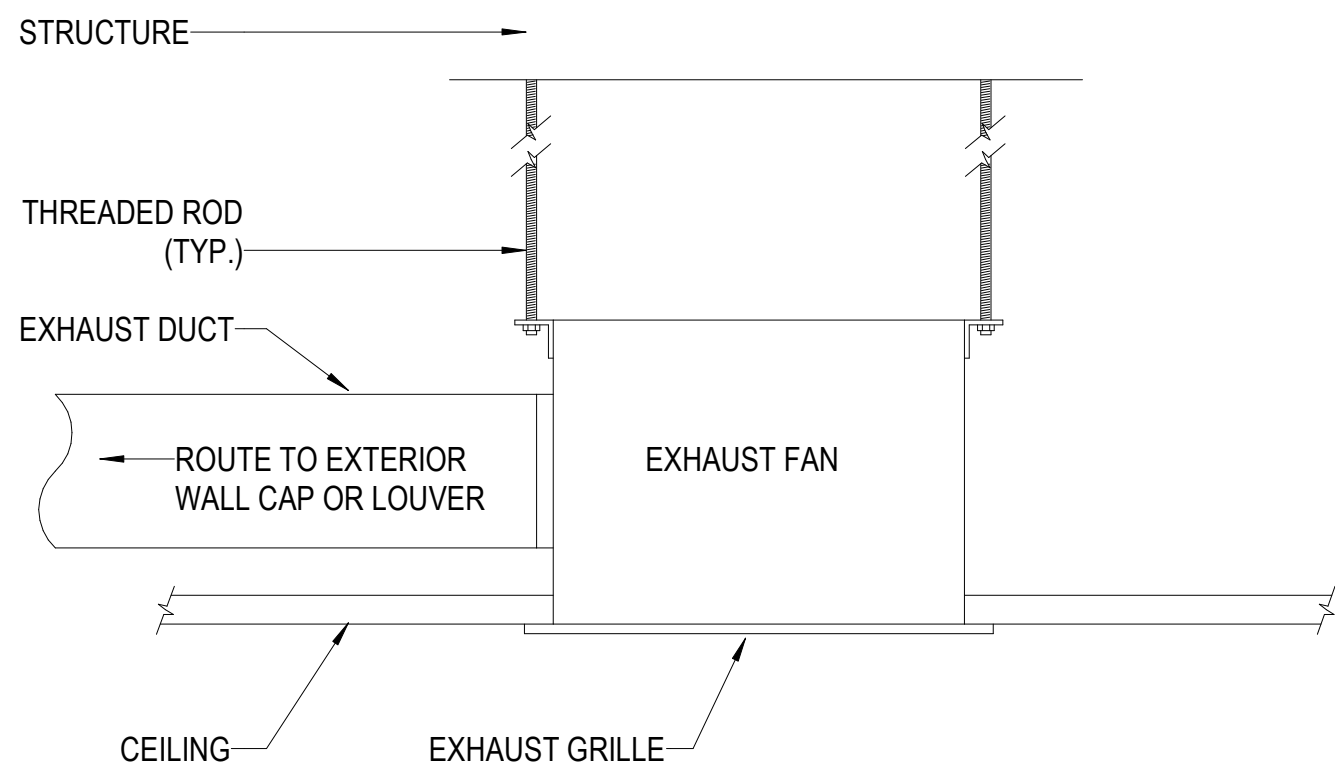
NOTES

- ALL SUPPLY AND RTURN CEILING GRILLES AND DIFFUSERS SHALL BE PAINTABLE. FINAL FINISH/COLOR SHALL COMPLY WITH THE FRANCHISE'S CONSTRUCTION MANUAL'S SPECIFICATIONS.

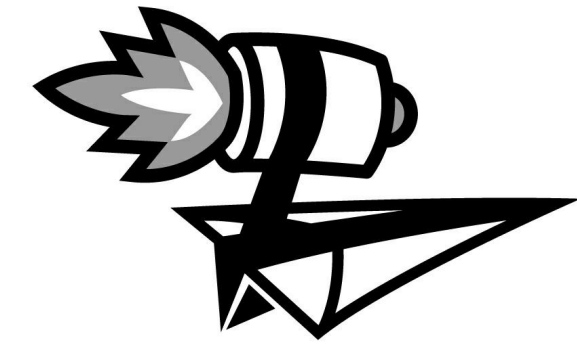
HVAC THERMAL LOAD

Outside db	(°F)	Htg	Clg	Inside db	(°F)	Htg	Clg
Outside RH	(%)	25	93	Inside RH	(%)	70	75
Outside wb	(°F)	-	51	Inside wb	(°F)	-	50
Daily range	(°F)	-	78	Inside wb	(°F)	-	63
Moisture diff.	(gr/lb)	-	19	Design TD	(°F)	45	18
		-	55				

NAME	Area ft²	Heat Loss	Sensible Gain	Latent Gain	Htg cfm	Clg cfm	Time
RESTROOM 107	60	1600	948	0	146	43	Jul 1600 LDT
OFFICE 105	114	1119	1984	1048	48	80	Jul 1600 LDT
TREATMENT 104	395	10766	10395	8891	165	314	Jul 1600 LDT
RECEIPT 102	384	9133	12826	6838	489	525	Jul 1600 LDT
CORRIDOR 103	177	3241	3346	1096	255	144	Jul 1600 LDT
CL	24	478	767	55	37	34	Jul 1600 LDT
Entire House	1154	26338	30267	17927	1140	1140	Jul 1600 LDT



4.06 CEILING EXHAUST FAN



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EMAIL: brickey@permitzip.com.



NO.	DESCRIPTION	DATE
-----	-------------	------

BUILDING DATA

BUILDING CONSTRUCTION: II-B
USE GROUP: B
NOT IN FLOOD PLAIN.
TOTAL AREA OF PROJECT: 1,300 SF
TOTAL AREA OF BUILDING: 10,000 SF
OCCUPANCY LOAD: 13
CHANGE OF USE? NO
LEVEL OF RENOVATION: GREATER THAN 50%
ALTERATION LEVEL: III

THE JOINT
CHIRAPRACTIC

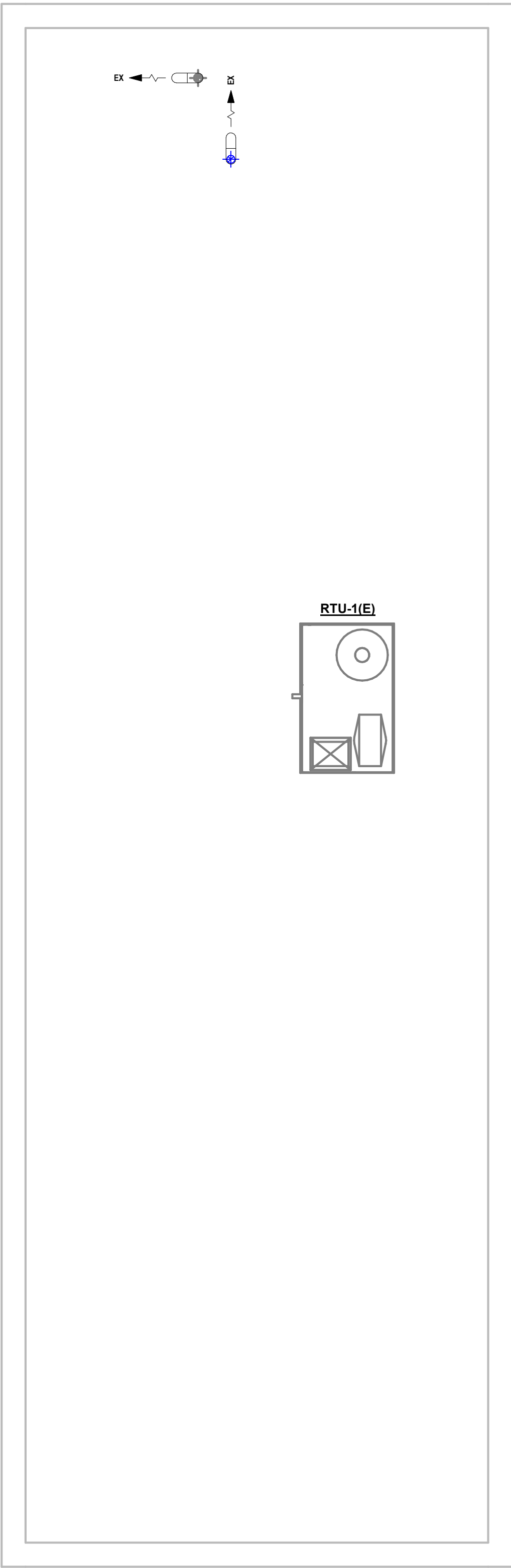
1011 UNIVERSITY BLVD,
SUITE 185, SUFFOLK,
VA

PROJECT NO: 21.4257
04 MAY 2021

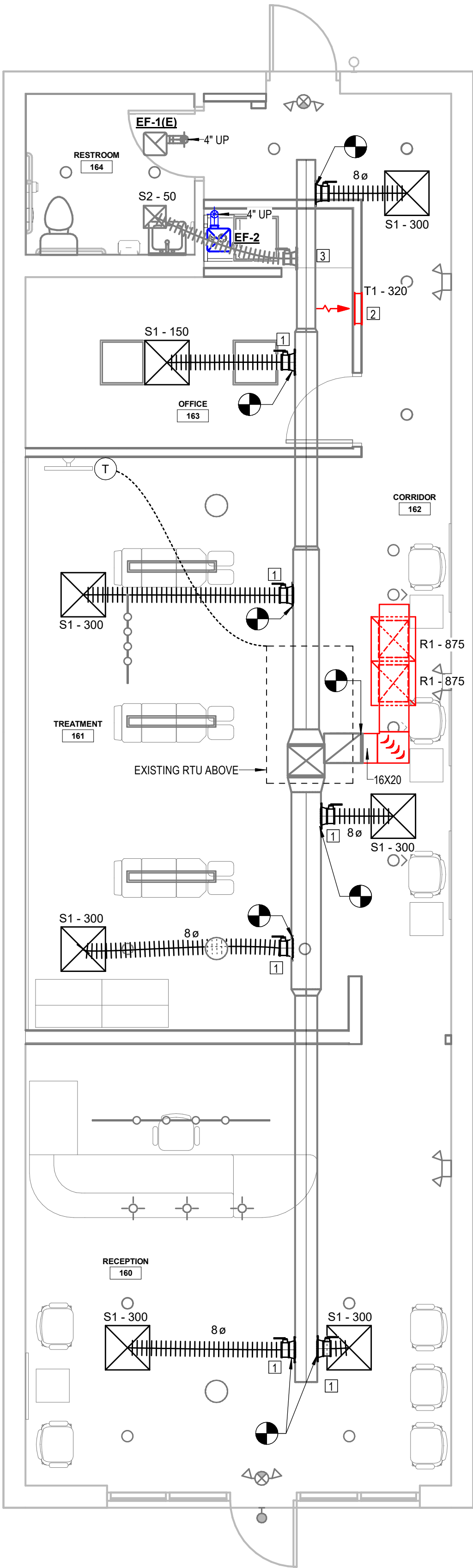
MECHANICAL LOADS, EQUIPMENT
AND ZONING

M0.02

As Indicated



2 ROOF - HVAC FLOOR PLAN
1/4" = 1'-0"



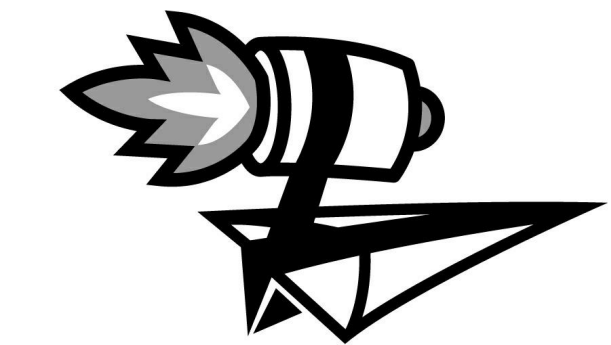
1 LEVEL 1 - HVAC FLOOR PLAN
1/4" = 1'-0"

GENERAL NOTES:

1. EXISTING MAIN SUPPLY/RETURN AIR TRUNK LINE TO REMAIN. CONTRACTOR TO FIELD VERIFY THE DUCT WORK'S SIZE.
2. REMOVE EXISTING HVAC DIFFUSER AND BRANCH DUCT BACK TO THE MAIN TRUNK LINE. REFER TO MECHANICAL DRAWING FOR THE NEW WORK'S POINTS OF CONNECTION.
3. ALL EXISTING CEILING DIFFUSERS AND GRILLES SHALL BE REPLACED WITH NEW PAINTABLE DIFFUSERS, AS INDICATED ON FLOOR PLAN.
4. ALL EXHAUST DISCHARGE TO THE OUTSIDE SHALL TERMINATE AT LEAST 10' AWAY FROM OUTDOOR AIR INTAKE.
5. EXISTING BATHROOM CEILING EXHAUST FAN TO BE REMAIN. CONTRACTOR SHALL FIELD VERIFY THE PERFORMANCE AND SPECIFICATION OF EXHAUST FAN PRIOR TO WORK.
6. FINAL FINISH/COLOR OF CEILING DIFFUSER SHALL COMPLY WITH THE FRANCHIES'S CONSTRUCTION MANUAL'S SPECIFICATION.

MECHANICAL PLAN NOTES

PLAN NOTE NUMBER	NOTE
1	SPIN-IN COLLAR WITH INTEGRAL VOLUME DAMPER.
2	MOUNT THE TRANSFER GRILLE TIGHT UNDER THE TILE CEILING.
3	PROVIDE DOOR WITH UNDER CUT FOR BALANCING THE EXHAUST AIR WITH FRESH AIR SUPPLY.



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BUILDING DATA

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THE JOINT
CHIRAPRACTIC

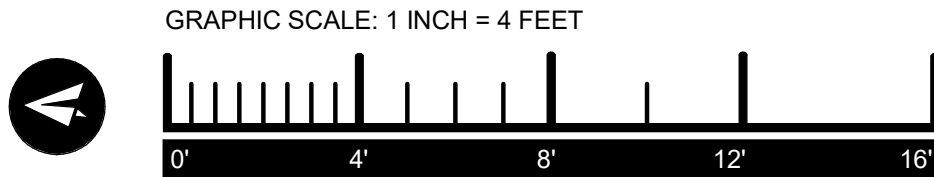
1011 UNIVERSITY BLVD,
SUITE 185, SUFFOLK,
VA

PROJECT NO: 21.4257
04 MAY 2021

LEVEL 1 - HVAC PLAN

M1.01

1/4" = 1'-0"



23 05 93 - TESTING, ADJUSTING, AND BALANCING FOR HVAC

- PERFORM TESTING AND BALANCING PROCEDURES ON EACH SYSTEM ACCORDING TO THE PROCEDURES CONTAINED IN SMACNA'S "HVAC SYSTEMS - TESTING, ADJUSTING, AND BALANCING" AND IN THIS SECTION.
 - CUT INSULATION, DUCTS, PIPES, AND EQUIPMENT CABINETS FOR INSTALLATION OF TEST PROBES TO THE MINIMUM EXTENT NECESSARY FOR TAB PROCEDURES.
 - AFTER TESTING AND BALANCING, PATCH PROBE HOLES IN DUCTS WITH SAME MATERIAL AND THICKNESS AS USED TO CONSTRUCT DUCTS.
 - INSTALL AND JOIN NEW INSULATION THAT MATCHES REMOVED MATERIALS. RESTORE INSULATION, COVERINGS, VAPOR BARRIER, AND FINISH TO ORIGINAL CONDITION.
 - MARK EQUIPMENT AND BALANCING DEVICES, INCLUDING DAMPER-CONTROL POSITIONS, VALVE POSITION INDICATORS, FAN-SPEED-CONTROL LEVERS, AND SIMILAR CONTROLS AND DEVICES, WITH PAINT OR OTHER SUITABLE, PERMANENT IDENTIFICATION MATERIAL TO SHOW FINAL SETTINGS.
 - TAKE AND REPORT TESTING AND BALANCING MEASUREMENTS IN INCH-POUND (IP) UNITS.
 - GENERAL PROCEDURES FOR TESTING AND INSPECTION
 - PREPARE TEST REPORTS FOR BOTH FANS AND OUTLETS. OBTAIN MANUFACTURER'S OUTLET FACTORS AND RECOMMENDED TESTING PROCEDURES. CROSS-CHECK THE SUMMATION OF REQUIRED OUTLET VOLUMES WITH REQUIRED FAN VOLUMES.
 - PREPARE SCHEMATIC DIAGRAMS OF SYSTEMS "AS-BUILT" DUCT LAYOUTS.
 - FOR VARIABLE-AIR-VOLUME SYSTEMS, DEVELOP A PLAN TO SIMULATE DIVERSITY.
 - DETERMINE THE BEST LOCATIONS IN MAIN AND BRANCH DUCTS FOR ACCURATE DUCT-AIRFLOW MEASUREMENTS.
 - CHECK AIRFLOW PATTERNS FROM THE OUTDOOR-AIR LOUVERS AND DAMPERS AND THE RETURN- AND EXHAUST-AIR DAMPERS THROUGH THE SUPPLY-FAN DISCHARGE AND MIXING DAMPERS.
 - LOCATE START-STOP AND DISCONNECT SWITCHES, ELECTRICAL INTERLOCKS, AND MOTOR STARTERS.
 - VERIFY THAT MOTOR STARTERS ARE EQUIPPED WITH PROPERLY SIZED THERMAL PROTECTION.
 - CHECK DAMPERS FOR PROPER POSITION TO ACHIEVE DESIRED AIRFLOW PATH.
 - CHECK FOR AIRFLOW BLOCKAGES.
 - CHECK CONDENSATE DRAINS FOR PROPER CONNECTIONS AND FUNCTIONING.
 - CHECK FOR PROPER SEALING OF AIR-HANDLING-UNIT COMPONENTS.
 - VERIFY THAT AIR DUCT SYSTEM IS SEALED.
- GENERAL PROCEDURES FOR AIR BALANCING
 - ADJUST FANS TO DELIVER TOTAL INDICATED AIRFLOWS WITHIN THE MAXIMUM ALLOWABLE FAN SPEED LISTED BY FAN MANUFACTURER.
 - MEASURE TOTAL AIRFLOW.
 - SET OUTSIDE-AIR, RETURN-AIR, AND RELIEF-AIR DAMPERS FOR PROPER POSITION THAT SIMULATES MINIMUM OUTDOOR-AIR CONDITIONS.
 - WHERE DUCT CONDITIONS ALLOW, MEASURE AIRFLOW BY PITOT-TUBE TRAVERSE. IF NECESSARY, PERFORM MULTIPLE PITOT-TUBE TRAVERSES TO OBTAIN TOTAL AIRFLOW.
 - WHERE DUCT CONDITIONS ARE NOT SUITABLE FOR PITOT-TUBE TRAVERSE MEASUREMENTS, A COIL TRAVERSE MAY BE ACCEPTABLE.
 - IF A RELIABLE PITOT-TUBE TRAVERSE OR COIL TRAVERSE IS NOT POSSIBLE, MEASURE AIRFLOW AT TERMINALS AND CALCULATE THE TOTAL AIRFLOW.
 - MEASURE FAN STATIC PRESSURES AS FOLLOWS:
 - MEASURE STATIC PRESSURE DIRECTLY AT THE FAN OUTLET OR THROUGH THE FLEXIBLE CONNECTION.
 - MEASURE STATIC PRESSURE DIRECTLY AT THE FAN INLET OR THROUGH THE FLEXIBLE CONNECTION.
 - MEASURE STATIC PRESSURE ACROSS EACH COMPONENT THAT MAKES UP THE AIR-HANDLING SYSTEM.
 - REPORT ARTIFICIAL LOADING OF FILTERS AT THE TIME STATIC PRESSURES ARE MEASURED.
 - DO NOT MAKE FAN-SPEED ADJUSTMENTS THAT RESULT IN MOTOR OVERLOAD. CONSULT EQUIPMENT MANUFACTURERS ABOUT FAN-SPEED SAFETY FACTORS. MODULATE DAMPERS AND MEASURE FAN-MOTOR AMPERAGE TO ENSURE THAT NO OVERLOAD OCCURS. MEASURE AMPERAGE IN FULL-COOLING, FULL-HEATING, ECONOMIZER, AND ANY OTHER OPERATING MODE TO DETERMINE THE MAXIMUM REQUIRED BRAKE HORSEPOWER.
 - ADJUST VOLUME DAMPERS FOR MAIN DUCT, SUBMAIN DUCTS, AND MAJOR BRANCH DUCTS TO INDICATED AIRFLOWS.
 - MEASURE AIRFLOW OF SUBMAIN AND BRANCH DUCTS.
 - ADJUST SUBMAIN AND BRANCH DUCT VOLUME DAMPERS FOR SPECIFIED AIRFLOW.
 - RE-MEASURE EACH SUBMAIN AND BRANCH DUCT AFTER ALL HAVE BEEN ADJUSTED.
 - ADJUST AIR INLETS AND OUTLETS FOR EACH SPACE TO INDICATED AIRFLOWS.
 - SET AIRFLOW PATTERNS OF ADJUSTABLE OUTLETS FOR PROPER DISTRIBUTION WITHOUT DRAFTS.
 - MEASURE INLETS AND OUTLETS AIRFLOW.
 - ADJUST EACH INLET AND OUTLET FOR SPECIFIED AIRFLOW.
 - RE-MEASURE EACH INLET AND OUTLET AFTER THEY HAVE BEEN ADJUSTED.
 - PREPARE A WRITTEN REPORT WITH RESULTS OF TESTING AS IDENTIFIED IN THIS SECTION AND CERTIFYING THE VALIDITY AND ACCURACY OF THE FIELD DATA.

23 05 48 . 13 - VIBRATION CONTROLS FOR HVAC

- PROVIDE VIBRATION CONTROLS FOR ALL MECHANICAL EQUIPMENT. INSTALL PER MANUFACTURER RECOMMENDATIONS.
- COORDINATE THE LOCATION OF EMBEDDED CONNECTION HARDWARE WITH SUPPORTED EQUIPMENT ATTACHMENT AND MOUNTING POINTS AND WITH CONCRETE REINFORCEMENT AND FORMWORK.
- INSTALLATION OF VIBRATION ISOLATORS MUST NOT CAUSE ANY CHANGE OF POSITION OF EQUIPMENT, PIPING, OR DUCTWORK RESULTING IN STRESSES OR MISALIGNMENT.

CONTROLS

- AUTOMATIC TEMPERATURE CONTROL: ALL CONTROLS, CONTROL WIRING, INTERLOCKS, PROGRAMMABLE DEVICES SHALL BE IN CONFORMANCE WITH N.E.C., LOW AND LINE VOLTAGE AS APPLICABLE.
- PROVIDE PROGRAMMABLE THERMOSTAT CONTROLS FOR PROPER AND SATISFACTORY SYSTEM OPERATION. ALL PORTIONS OF WALL-MOUNTED THERMOSTATS SHALL BE NO HIGHER THAN 48" AFF. HEAT PUMPS HAVING A SUPPLEMENTAL ELECTRIC-RESISTANCE HEAT SHALL HAVE CONTROLS THAT, EXCEPT DURING DEFROST CYCLES, PREVENT SUPPLEMENTAL HEAT OPERATION WHEN THE HEAT PUMP COMPRESSOR CAN MEET THE HEATING LOAD.

23 31 13 - METAL DUCTS

- DUCT CONSTRUCTION, INCLUDING SHEET METAL THICKNESSES, SEAM AND JOINT CONSTRUCTION, REINFORCEMENTS, AND HANGERS AND SUPPORTS, SHALL COMPLY WITH SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE" AND PERFORMANCE REQUIREMENTS AND DESIGN CRITERIA INDICATED IN "DUCT SCHEDULE" ARTICLE.
- STRUCTURAL PERFORMANCE: DUCT HANGERS AND SUPPORTS SHALL WITHSTAND THE EFFECTS OF GRAVITY LOADS AND STRESSES WITHIN LIMITS AND UNDER CONDITIONS DESCRIBED IN SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE."
- AIRSTREAM SURFACES: SURFACES IN CONTACT WITH THE AIRSTREAM SHALL COMPLY WITH REQUIREMENTS IN ASHRAE 62.1.
- RECTANGULAR DUCTS AND FITTINGS
 - GENERAL FABRICATION REQUIREMENTS: COMPLY WITH SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE" BASED ON INDICATED STATIC-PRESSURE CLASS UNLESS OTHERWISE INDICATED.
 - TRANSVERSE JOINTS: SELECT JOINT TYPES AND FABRICATE ACCORDING TO SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE," FIGURE 2-1, "RECTANGULAR DUCT/TRANSVERSE JOINTS," FOR STATIC-PRESSURE CLASS, APPLICABLE SEALING REQUIREMENTS, MATERIALS INVOLVED, DUCT-SUPPORT INTERVALS, AND OTHER PROVISIONS IN SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE."
 - LONGITUDINAL SEAMS: SELECT SEAM TYPES AND FABRICATE ACCORDING TO SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE," FIGURE 2-2, "RECTANGULAR DUCT/LONGITUDINAL SEAMS," FOR STATIC-PRESSURE CLASS, APPLICABLE SEALING REQUIREMENTS, MATERIALS INVOLVED, DUCT-SUPPORT INTERVALS, AND OTHER PROVISIONS IN SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE."
 - ELBOWS, TRANSITIONS, OFFSETS, BRANCH CONNECTIONS, AND OTHER DUCT CONSTRUCTION: SELECT TYPES AND FABRICATE ACCORDING TO SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE," CHAPTER 4, "FITTINGS AND OTHER CONSTRUCTION," FOR STATIC-PRESSURE CLASS, APPLICABLE SEALING REQUIREMENTS, MATERIALS INVOLVED, DUCT-SUPPORT INTERVALS, AND OTHER PROVISIONS IN SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE."
- ROUND DUCTS AND FITTINGS
 - GENERAL FABRICATION REQUIREMENTS: COMPLY WITH SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE," CHAPTER 3, "ROUND, OVAL, AND FLEXIBLE DUCT," BASED ON INDICATED STATIC-PRESSURE CLASS UNLESS OTHERWISE INDICATED.
 - TRANSVERSE JOINTS: SELECT JOINT TYPES AND FABRICATE ACCORDING TO SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE," FIGURE 3-1, "ROUND DUCT TRANSVERSE JOINTS," FOR STATIC-PRESSURE CLASS, APPLICABLE SEALING REQUIREMENTS, MATERIALS INVOLVED, DUCT-SUPPORT INTERVALS, AND OTHER PROVISIONS IN SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE."
 - LONGITUDINAL SEAMS: SELECT SEAM TYPES AND FABRICATE ACCORDING TO SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE," FIGURE 3-2, "ROUND DUCT LONGITUDINAL SEAMS," FOR STATIC-PRESSURE CLASS, APPLICABLE SEALING REQUIREMENTS, MATERIALS INVOLVED, DUCT-SUPPORT INTERVALS, AND OTHER PROVISIONS IN SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE."
 - TEES AND LATERALS: SELECT TYPES AND FABRICATE ACCORDING TO SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE," FIGURE 3-5, "90 DEGREE TEES AND LATERALS," AND FIGURE 3-6, "CONICAL TEES," FOR STATIC-PRESSURE CLASS, APPLICABLE SEALING REQUIREMENTS, MATERIALS INVOLVED, DUCT-SUPPORT INTERVALS, AND OTHER PROVISIONS IN SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE."
- SHEET METAL MATERIALS
 - GENERAL MATERIAL REQUIREMENTS: COMPLY WITH SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE" FOR ACCEPTABLE MATERIALS, MATERIAL THICKNESSES, AND DUCT CONSTRUCTION METHODS UNLESS OTHERWISE INDICATED. SHEET METAL MATERIALS SHALL BE FREE OF PITTING, SEAM MARKS, ROLLER MARKS, STAINS, DISCOLORATIONS, AND OTHER IMPERFECTIONS.
 - GALVANIZED SHEET STEEL: COMPLY WITH ASTM A 653/A 653M.
 - GALVANIZED COATING DESIGNATION: G90.
 - FINISHES FOR SURFACES EXPOSED TO VIEW: MILL PHOSPHATIZED.
- LOW PRESSURE DUCTWORK
 - DUCTS SHALL BE SEALED IN ACCORDANCE WITH 2015 IECC.
 - ALL CONCEALED RETURN DUCTWORK SHALL BE LINED WITH 2" THICK BLANKET WRAP.
 - EXHAUST DUCTWORK SHALL NOT BE INSULATED.
- INSTALLATION
 - INSTALL DUCT SYSTEMS AS INDICATED UNLESS DEVIATIONS TO LAYOUT ARE APPROVED ON SHOP DRAWINGS AND COORDINATION DRAWINGS.
 - INSTALL DUCTS ACCORDING TO SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE" UNLESS OTHERWISE INDICATED.
 - INSTALL ROUND DUCTS IN MAXIMUM PRACTICAL LENGTHS.
 - INSTALL DUCTS WITH FEWEST POSSIBLE JOINTS.
 - INSTALL FACTORY- OR SHOP-FABRICATED FITTINGS FOR CHANGES IN DIRECTION, SIZE, AND SHAPE AND FOR BRANCH CONNECTIONS.
 - UNLESS OTHERWISE INDICATED, INSTALL DUCTS VERTICALLY AND HORIZONTALLY, AND PARALLEL AND PERPENDICULAR TO BUILDING LINES.
 - INSTALL DUCTS CLOSE TO WALLS, OVERHEAD CONSTRUCTION, COLUMNS, AND OTHER STRUCTURAL AND PERMANENT ENCLOSURE ELEMENTS OF BUILDING.
 - INSTALL DUCTS WITH A CLEARANCE OF 1 INCH (25 MM), PLUS ALLOWANCE FOR INSULATION THICKNESS.
 - ROUTE DUCTS TO AVOID PASSING THROUGH TRANSFORMER VAULTS AND ELECTRICAL EQUIPMENT ROOMS AND ENCLOSURES.
 - WHERE DUCTS PASS THROUGH NON-FIRE-RATED INTERIOR PARTITIONS AND EXTERIOR WALLS AND ARE EXPOSED TO VIEW, COVER THE OPENING BETWEEN THE PARTITION AND DUCT OR DUCT INSULATION WITH SHEET METAL FLANGES OF SAME METAL THICKNESS AS THE DUCT. OVERLAP OPENINGS ON FOUR SIDES BY AT LEAST 1-1/2 INCHES (38 MM).
 - WHERE DUCTS PASS THROUGH FIRE-RATED INTERIOR PARTITIONS AND EXTERIOR WALLS, INSTALL FIRE DAMPERS.
 - PROTECT DUCT INTERIORS FROM MOISTURE, CONSTRUCTION DEBRIS AND DUST, AND OTHER FOREIGN MATERIALS.
 - INSTALLATION OF EXPOSED DUCTWORK: PROTECT DUCTS EXPOSED IN FINISHED SPACES FROM BEING DENTED, SCRATCHED, OR DAMAGED. TRIM DUCT SEALANTS FLUSH WITH METAL. CREATE A SMOOTH AND UNIFORM EXPOSED BEAD. DO NOT USE TWO-PART TAPE SEALING SYSTEM. REPAIR OR REPLACE DAMAGED SECTIONS AND FINISHED WORK THAT DOES NOT COMPLY WITH THESE REQUIREMENTS.

23 33 00 - AIR DUCT ACCESSORIES

- INSTALL DUCT ACCESSORIES ACCORDING TO APPLICABLE DETAILS IN SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE".
- INSTALL DUCT ACCESSORIES OF MATERIALS SUITED TO DUCT MATERIALS.
- INSTALL VOLUME DAMPERS AT POINTS ON SUPPLY, RETURN, AND EXHAUST SYSTEMS WHERE BRANCHES EXTEND FROM LARGER DUCTS. WHERE DAMPERS ARE INSTALLED IN DUCTS HAVING DUCT LINER, INSTALL DAMPERS WITH HAT CHANNELS OF SAME DEPTH AS LINER, AND TERMINATE LINER WITH NOSING AT HAT CHANNEL.
- INSTALL FIRE AND SMOKE DAMPERS ACCORDING TO UL LISTING.
- INSTALL TEST HOLES AT FAN INLETS AND OUTLETS AND ELSEWHERE AS INDICATED.
- INSTALL DUCT ACCESS DOORS ON SIDES OF DUCTS TO ALLOW FOR INSPECTING, ADJUSTING, AND MAINTAINING ACCESSORIES AND EQUIPMENT AT THE FOLLOWING LOCATIONS:
 - ON BOTH SIDES OF DUCT COILS.
 - UPSTREAM AND DOWNSTREAM FROM DUCT FILTERS.
 - AT OUTDOOR-AIR INTAKES AND MIXED-AIR PLENUMS.
 - AT DRAIN PANS AND SEALS.
 - DOWNSTREAM FROM MANUAL VOLUME DAMPERS, CONTROL DAMPERS, BACKDRAFT DAMPERS, AND EQUIPMENT.
 - ADJACENT TO AND CLOSE ENOUGH TO FIRE OR SMOKE DAMPERS, TO RESET OR REINSTALL FUSIBLE LINKS. ACCESS DOORS FOR ACCESS TO FIRE OR SMOKE DAMPERS HAVING FUSIBLE LINKS SHALL BE PRESSURE RELIEF ACCESS DOORS AND SHALL BE OUTWARD OPERATION FOR ACCESS DOORS INSTALLED UPSTREAM FROM DAMPERS AND INWARD OPERATION FOR ACCESS DOORS INSTALLED DOWNSTREAM FROM DAMPERS.
 - ELSEWHERE AS INDICATED.
- INSTALL ACCESS DOORS WITH SWING AGAINST DUCT STATIC PRESSURE.
- ACCESS DOOR SIZES:
 - ONE-HAND OR INSPECTION ACCESS: 8 BY 5 INCHES.
 - TWO-HAND ACCESS: 12 BY 6 INCHES.
 - HEAD AND HAND ACCESS: 18 BY 10 INCHES.
 - HEAD AND SHOULDERS ACCESS: 21 BY 14 INCHES.
 - BODY ACCESS: 25 BY 14 INCHES.
 - BODY PLUS LADDER ACCESS: 25 BY 17 INCHES.
- LABEL ACCESS DOORS ACCORDING TO "IDENTIFICATION FOR HVAC PIPING AND EQUIPMENT" TO INDICATE THE PURPOSE OF ACCESS DOOR.
- INSTALL FLEXIBLE CONNECTORS TO CONNECT DUCTS TO EQUIPMENT.
- CONNECT TERMINAL UNITS TO SUPPLY DUCTS WITH MAXIMUM 12" LENGTHS OF FLEXIBLE DUCT. DO NOT USE FLEXIBLE DUCTS TO CHANGE DIRECTIONS OR IN EXPOSED AREAS.
- CONNECT DIFFUSERS OR LIGHT TROFFER BOOTHS TO DUCTS WITH MAXIMUM 6' LENGTHS OF FLEXIBLE DUCT CLAMPED OR STRAPPED IN PLACE. DO NOT USE FLEXIBLE DUCTS IN EXPOSED AREAS.
- INSTALL DUCT TEST HOLES WHERE REQUIRED FOR TESTING AND BALANCING PURPOSES.
- TESTS AND INSPECTIONS:
 - OPERATE DAMPERS TO VERIFY FULL RANGE OF MOVEMENT.
 - INSPECT LOCATIONS OF ACCESS DOORS AND VERIFY THAT PURPOSE OF ACCESS DOOR CAN BE PERFORMED.
 - OPERATE FIRE AND SMOKE DAMPERS TO VERIFY FULL RANGE OF MOVEMENT AND VERIFY THAT PROPER HEAT-RESPONSE DEVICE IS INSTALLED.
 - INSPECT TURNING VANES FOR PROPER AND SECURE INSTALLATION.

23 05 53 - IDENTIFICATION FOR HVAC PIPING AND EQUIPMENT

- EQUIPMENT LABELS
 - MATERIAL AND THICKNESS: MULTILAYER, MULTICOLOR, PLASTIC LABELS FOR MECHANICAL ENGRAVING 1/8" THICK, AND HAVING PREDRILLED HOLES FOR ATTACHMENT HARDWARE.
 - COLOR: WHITE LETTERS WITH BLACK BACKGROUND.
 - ABLE TO WITHSTAND 160 DEG F. MINIMUM LETTER SIZE 1/2", PROVIDE WITH CONTACT-TYPE PERMANENT ADHESIVE, COMPATIBLE WITH LABEL AND WITH SUBSTRATE.
 - EQUIPMENT LABEL CONTENT: INCLUDE EQUIPMENT'S DRAWING DESIGNATION OR UNIQUE EQUIPMENT NUMBER, DRAWING NUMBERS WHERE EQUIPMENT IS INDICATED (PLANS, DETAILS, AND SCHEDULES).
- DUCT LABELS
 - MULTILAYER, MULTICOLOR, PLASTIC LABELS FOR MECHANICAL ENGRAVING, 1/8" THICK, AND HAVING PREDRILLED HOLES FOR ATTACHMENT HARDWARE.
 - ABLE TO WITHSTAND 160 DEG F. MINIMUM LETTER SIZE 1/2", PROVIDE WITH CONTACT-TYPE PERMANENT ADHESIVE, COMPATIBLE WITH LABEL AND WITH SUBSTRATE.
 - DUCT LABEL CONTENTS: INCLUDE IDENTIFICATION OF DUCT SERVICE; ALSO INCLUDE DUCT SIZE AND AN ARROW INDICATING FLOW DIRECTION.
 - LOCATE LABELS NEAR POINTS WHERE DUCTS ENTER INTO AND EXIT FROM CONCEALED SPACES AND AT MAXIMUM INTERVALS OF 50 FEET IN EACH SPACE WHERE DUCTS ARE EXPOSED OR CONCEALED BY REMOVABLE CEILING SYSTEM.
 - LOCATE DUCT LABEL AT EACH DUCT ACCESS DOOR AS REQUIRED BY "AIR DUCT ACCESSORIES".
 - WHEN DUCT IS IN EXPOSED AND ARCHITECTURAL AREAS, LABELING SHALL BE LOCATED IN SUCH A WAY AS TO NOT BE EASILY RECOGNIZABLE FROM THE GENERAL PUBLIC.



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NO.	DESCRIPTION	DATE
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BUILDING DATA

BUILDING CONSTRUCTION: II-B
USE GROUP: B
NOT IN FLOOD PLAIN.
TOTAL AREA OF PROJECT: 1,300 SF
TOTAL AREA OF BUILDING: 10,000 SF
OCCUPANCY LOAD: 13
CHANGE OF USE? NO
LEVEL OF RENOVATION: GREATER THAN 50%
ALTERATION LEVEL: III

THE JOINT
CHIRAPRACTIC

1011 UNIVERSITY BLVD,
SUITE 185, SUFFOLK,
VA

PROJECT NO: 21.4257
04 MAY 2021

SHEET SPECIFICATION

M7.01

12" = 1'-0"

ELEC - DRAWING INDEX

SHEET NUMBER	SHEET NAME
E0.01	LEGEND, NOTES, & ABBREVIATIONS
E1.01	POWER & LIGHTING PLAN
E5.11	DETAILS & DIAGRAMS
E6.11	SHEET SPECIFICATION

GENERAL NOTES

- THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF THE ELECTRICAL EQUIPMENT. EXAMINE THE ARCHITECTURAL, STRUCTURAL, MECHANICAL, AND PLUMBING DRAWINGS AND SPECIFICATIONS, AND BECOME FAMILIAR WITH, AND COORDINATE WITH, ALL CONDITIONS AFFECTING ELECTRICAL WORK.
- THE DRAWINGS INDICATE THE GENERAL ARRANGEMENT OF CIRCUITS AND OUTLETS, LOCATIONS OF SWITCHES, PANELBOARDS, CONDUIT AND OTHER WORK. ALL ITEMS NOT SPECIFICALLY NOTED, BUT NECESSARY TO A COMPLETE WORKING INSTALLATION SHALL BE INCLUDED AT NO EXTRA COST.
- ALL WORK SHALL BE SUBJECT TO THE APPROVAL OF THE BUILDING OWNER, OR THE OWNER, OR THEIR AUTHORIZED REPRESENTATIVES.
- COORDINATE ELECTRICAL EQUIPMENT LOCATION AND INSTALLATION WITH EQUIPMENT BEING SERVED.
- GANG ALL MULTIPLE SWITCHES UNDER ONE COMMON COVERPLATE, AND MOUNT IN A MULTI-GANGED OUTLET BOX OF ADEQUATE SIZE. PROVIDE BARRIERS WHERE REQUIRED.
- CONTRACTOR SHALL COORDINATE AND ADJUST RECEPTACLES AND/OR CIRCUITS WITH ACTUAL EQUIPMENT PURCHASED WHEN APPROVED EQUIPMENT DIFFERS FROM ORIGINAL CONTRACT DRAWINGS.
- COORDINATE EXACT LOCATIONS OF MODULAR PARTITION CONNECTIONS WITH FURNITURE BEING PROVIDED.
- OUTLETS ABOVE COUNTERTOPS SHALL BE 2" ABOVE BACKSPASH TO BOTTOM OF WALLPLATE UNLESS NOTED OTHERWISE. COORDINATE WITH CASEWORK INSTALLER.
- A NYLON PULL CORD SHALL BE INSTALLED IN ALL CONDUITS IN WHICH CONDUCTORS ARE NOT INSTALLED. A 10 INCH LENGTH OF THE CORD SHALL EXTEND PAST EACH END OF THE BOX/CONDUIT.
- WHERE NEW CIRCUITS ARE SHOWN TO BE CONNECTED TO EXISTING PANELS, PROVIDE NEW CIRCUIT BREAKERS IN PANELS. NEW BREAKERS BE SHALL BE COMPATIBLE WITH, SAME MAKE AS, AND SHALL MEET OR EXCEED INTERRUPTING RATING OF EXISTING EQUIPMENT. MEASURE PANEL LOADS BEFORE AND AFTER MODIFYING PANEL. CORRECT ANY OVERLOADS. BRING ANY OVERLOADED CONDITIONS THAT CANNOT BE RESOLVED TO THE ATTENTION OF THE ENGINEER.
- WHERE NEW LOADS ARE SHOWN TO BE CONNECTED TO EXISTING CIRCUITS, MEASURE CIRCUIT'S LOAD BEFORE AND AFTER MODIFICATION. CORRECT ANY OVERLOADS. BRING ANY OVERLOADED CIRCUITS THAT CANNOT BE RESOLVED TO THE ATTENTION OF THE ENGINEER.
- THE ELECTRICAL CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCING WORK AND SHALL NOTIFY THE ARCHITECT AND/OR ENGINEER IF A CONDITION EXISTS WHICH PREVENTS THE CONTRACTOR FROM ACCOMPLISHING THE INTENT OF THESE PLANS.
- EQUIPMENT FOUND TO BE DEFECTIVE SHALL BE DOCUMENTED BY ELECTRICAL CONTRACTOR. EQUIPMENT DAMAGED IN THE COURSE OF INSTALLATION OR TEST SHALL BE REPLACED OR REPAIRED IN A MANNER MEETING THE APPROVAL OF THE ARCHITECT AND ENGINEER. WHERE APPLICABLE, ALL EQUIPMENT SHALL BE IN ACCORDANCE WITH NEMA STANDARDS.
- MAINTAIN THE CONTINUITY OF ALL CIRCUITS TO REMAIN.
- COORDINATE ALL WORK REQUIRING INTERRUPTION OF ELECTRICAL POWER WITH THE BUILDING OWNER AND OBTAIN WRITTEN PERMISSION FROM THE BUILDING OWNER PRIOR TO SHUTTING DOWN POWER TO ANY PANELBOARD OR SWITCHBOARD. ADDITIONALLY, PROVIDE NOTICE TO ALL OTHER TRADES OF ALL SCHEDULED INTERRUPTIONS.
- WHERE CORE DRILLS OCCUR, THE CONTRACTOR SHALL BE REQUIRED TO LOCATE BY MEANS OF X-RAY OR RADIATION, EXISTING REBAR AND CONDUITS IN THE SLAB AND MARK THE EXACT PROPOSED LOCATION OF CORE DRILLS. THE ELECTRICAL CONTRACTOR MUST RECEIVE WRITTEN PERMISSION FROM THE ARCHITECT AND THE STRUCTURAL ENGINEER PRIOR TO ACCOMPLISHING SAID CORE DRILLS.
- PRIOR TO SUBMITTING BIDS ON THE PROJECT, VISIT THE SITE OF THE WORK TO BECOME AWARE OF THE EXISTING CONDITIONS WHICH MAY AFFECT THE COST OF THE WORK. REVIEW THE SCOPE OF DEMOLITION AND NEW CONSTRUCTION. NO ADDITIONAL COSTS SHALL BE BROUGHT UPON THE OWNER FOR LACK OF THIS REVIEW.
- WHERE WORK UNDER THIS PROJECT REQUIRES EXTENSION, RELOCATION, RECONNECTION OR MODIFICATIONS TO THE EXISTING EQUIPMENT OR WIRING SYSTEMS, THE EXISTING SYSTEMS OR EQUIPMENT SHALL BE RESTORED TO THEIR ORIGINAL AND FULLY OPERABLE CONDITION. EXTEND HOMERUNS OR CIRCUIT EXTENSIONS WHERE REQUIRED. DISCONNECT AND REMOVE ALL EQUIPMENT INDICATED TO BE DEMOLISHED, INCLUDING OUTLETS, DEVICES, RACEWAY, SUPPORTS AND CONDUCTORS BACK TO THE BRANCH CIRCUIT BREAKER.
- CARE SHALL BE EXERCISED IN THE REMOVAL AND STORAGE OF DEVICES AND EQUIPMENT TO BE RELOCATED OR REMOVED AND REUSED. PRIOR TO REINSTALLATION, EQUIPMENT SHALL BE CLEANED, RELAMPED (AS APPLICABLE), AND MARRED OR CHIPPED FINISHES AND ACCESSORIES SHALL BE RESTORED. PROVIDE NEW REPLACEMENT EQUIPMENT FOR ANY ITEM DEEMED UNSALVAGEABLE BY THE OWNER DUE TO MISHANDLING OR ABUSE DURING STORAGE PERIOD, AT NO ADDITIONAL COSTS TO THE OWNER.
- UPON COMPLETION OF PROJECT, MEASURE AND BALANCE EACH PANEL'S BRANCH CIRCUIT LOAD TO WITHIN 10% BETWEEN PHASES. THIS INCLUDES EXISTING PANELS AFFECTED BY THE CONTRACT.
- ALL SPECIAL EQUIPMENT AND MECHANICAL CONNECTIONS SHALL BE VERIFIED WITH ACTUAL EQUIPMENT PURCHASED PRIOR TO ROUGH-IN. ALL UNVERIFIED ROUGH-INS FOR SPECIAL EQUIPMENT AND MECHANICAL CONNECTIONS SHALL BE CORRECTED AT NO ADDITIONAL COST.
- FOR ALL ELECTRICAL HEAT SOURCES BELOW KITCHEN HOODS, A SHUNT TRIP BREAKER SHALL BE INSTALLED TO AUTOMATICALLY DISCONNECT THE COOKING EQUIPMENT WHEN THE FIRE SUPPRESSION SYSTEM IS ACTIVATED.
- ALL FIXTURES INSTALLED IN FIRE RATED CEILINGS OR OTHER FIRE MEMBRANES SHALL BE INSTALLED SUCH THAT THE REQUIRED FIRE RESISTANCE WILL NOT BE REDUCED.

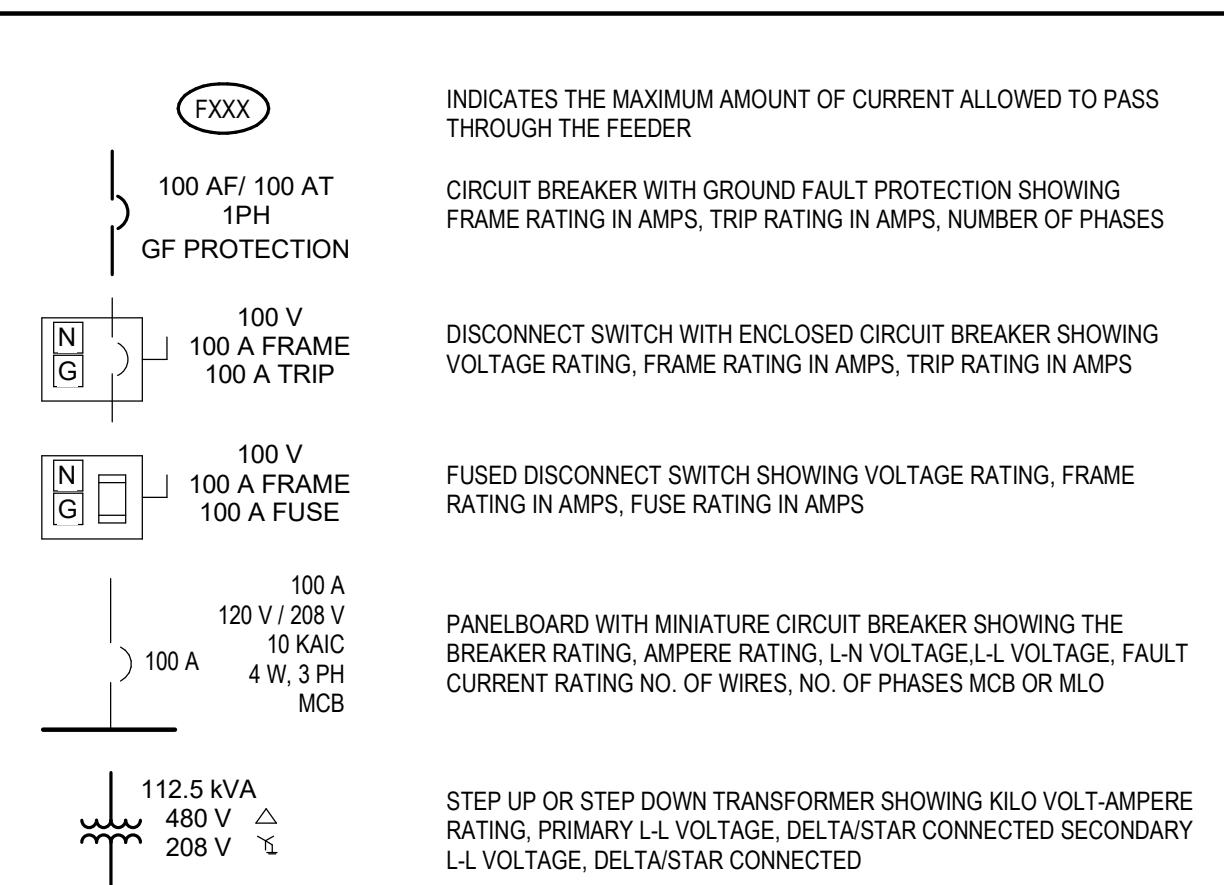
FIRE AND EGRESS

- 1 HOUR FIRE RATED WALL - ALL PENETRATIONS THROUGH THIS WALL TYPE SHALL COMPLY WITH PENETRATION DETAIL.
- PATH OF EGRESS
- RECEPTACLES AND BOXES IN FIREWALLS:
- WHERE WALLS OR PARTITIONS ARE REQUIRED TO HAVE A FIRE RESISTANCE RATING, RECESSED FIXTURES / OUTLETS SHALL BE INSTALLED SUCH THAT THE REQUIRED FIRE RESISTANCE WILL NOT BE REDUCED.
 - STEEL BOXES THAT DO NOT EXCEED 16 SQUARE INCHES (4"x4") MAY BE INSTALLED PROVIDED THE TOTAL AREA OF OPENINGS DOES NOT EXCEED 100 SQUARE INCHES FOR ANY 100 SQUARE FEET OF WALL AREA.
 - BOXES ON OPPOSITE SIDES OF WALLS SHALL BE SEPARATED AS FOLLOWS:
 - BY A HORIZONTAL DISTANCE OF NOT LESS THAN 24".
 - BY A HORIZONTAL DISTANCE NOT LESS THAN THE DEPTH OF THE WALL. CAVITY WHERE THE CALL CAVITY IS FILLED WITH CELLULOSE LOOSE-FILL OR MINERAL FIBER INSULATION (NOT STANDARD FIBERGLASS INSULATION).
 - BY SOLID FIRE-BLOCKING COMPLYING WITH IBC SECTION 716.2.1.
 - BY OTHER LISTED MATERIALS AND METHODS.

GENERAL NOTES

- EXECUTION:
- COORDINATION
 - BEFORE ANY CABLING, BOXES, CONDUIT, OUTLETS, EQUIPMENT, LIGHTING FIXTURES, ETC. ARE LOCATED IN ANY AREA, COORDINATE THE SPACE REQUIREMENTS OF ALL TRADES. SUCH SHALL BE ARRANGED SO THAT SPACE CONDITIONS WILL ALLOW ALL TRADES TO INSTALL THEIR WORK, AND WILL ALSO PERMIT ACCESS FOR FUTURE MAINTENANCE AND REPAIR.
 - COORDINATION OF SPACE REQUIREMENTS WITH ALL TRADES SHALL BE PERFORMED SO THAT NO PIPING, DUCTWORK, ETC. IS WITHIN DEDICATED EQUIPMENT OR WORKING SPACES. VERIFY CLEARANCES PER ARTICLE 110-26 OF THE NEC.
 - LIGHTING SHALL NOT BE INSTALLED ABOVE PIPING, DUCTS, OR OTHER OBSTRUCTIONS.
 - PROTECTION OF MATERIAL
 - ALL CONDUIT AND OTHER OPENINGS SHALL BE KEPT PROTECTED TO PREVENT ENTRY OF FOREIGN MATTER. FIXTURES, EQUIPMENT AND APPARATUS SHALL BE KEPT COVERED FOR PROTECTION AGAINST DIRT, WATER, CHEMICAL, AND MECHANICAL DAMAGE BEFORE AND DURING CONSTRUCTION.
 - THE ORIGINAL FINISH, INCLUDING SHOP COAT OF PAINT OF FIXTURE, APPARATUS OR EQUIPMENT THAT HAS BEEN DAMAGED, SHALL BE RESTORED.
 - FIRESTOPPING
 - CONFORM TO ASTM E814, UL 1479 AND UL FIRE RESISTANCE DIRECTORY.
 - ALL CORE DRILLS IN SLAB OR CUTTING OF FIRE RATED WALLS SHALL BE RESTORED TO THEIR ORIGINAL FIRE RATING.
 - FIRESTOP ALL PENETRATIONS THROUGH FIRE WALLS PER IBC 712 AND ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.
 - PROVIDE FIRE-PROOFING MATERIAL APPROPRIATE FOR THE APPLICATION AND AS SHOWN IN THE LATEST EDITION OF THE UL FIRE RESISTANCE DIRECTORY.
 - DO NOT REDUCE THE FIRE RATING OF FIRE WALLS WITH RECESSED BOXES OR FIXTURES. WHERE SMALL, RECESSED, STEEL, 1 & 2 GANG DEVICE BOXES ARE LOCATED BACK-TO-BACK ON FIRE RATED WALLS, THEY SHALL BE A MINIMUM OF 24" APART HORIZONTALLY, OR PROVIDE PUTTY PADS OF ADEQUATE FIRE RATING.

SINGLE LINE DIAGRAM SYMBOLS



LIGHTING DEVICES

- SINGLE POLE LIGHT SWITCH
- THREE WAY LIGHT SWITCH
- MOTOR RATED SWITCH
- MASTER SWITCH FOR ALL LIGHTING ZONES. WIRE TO AN INPUT OF LIGHTING CONTACTOR OR LIGHTING CONTROL SYSTEM TO TURN ALL LIGHT FIXTURES IN THE BUILDING OFF.
- MANUAL OVERRIDE SWITCH TO BUILDING TIME CLOCK(S). WIRE TO AN INPUT OF THE TIMECLOCK SYSTEM TO ALLOW FOR A MAXIMUM OF 2 HR MANUAL OVERRIDE TO ALL TEMPORARY LIGHTING FOR AFTER HOURS BUILDING USE.
- SWITCHBANK INDICATED. SEE DETAIL ON PLAN WHEN APPLICABLE FOR SWITCHES WITHIN THE SWITCH BANK.
- WALL MOUNTED DUAL TECHNOLOGY MOTION SENSOR
- CEILING MOUNTED DUAL TECHNOLOGY MOTION SENSOR

ELECTRICAL FIXTURES

- STANDARD SYMBOLS:
- NOTE: ALL WALL MOUNTED RECEPTACLES MOUNTED 18" AFF UNO. WHEN INDICATED ABOVE A COUNTER, MOUNT AT 8" AFC UNO. ALL DUPLEX AND QUADPLEX RECEPTACLES TO BE NEMA 5-20R UNO.
- DUPLEX RECEPTACLE, WALL MOUNTED
- QUADPLEX RECEPTACLE, WALL MOUNTED
- GROUND FAULT PROTECT DEVICE (REFER TO DIVISION 26 27 26 NOTE 2), WALL MOUNTED. WHEN LOCATED OUTDOORS, PROVIDE IN A WEATHERPROOF ENCLOSURE.
- DUPLEX RECEPTACLE FLOOR BOX
- QUADPLEX RECEPTACLE FLOOR BOX
- DATA OUTLET (SEE DETAIL SHEET)
- DISCONNECT SWITCH
- SMOKE ALARM. SMOKE ALARMS IN EACH DWELLING UNIT SHALL BE INTERCONNECTED.
- SURFACE MOUNTED PANELBOARD WITH WORKING CLEARANCE.
- GENERAL MOUNTING TYPE SYMBOLS:
- NOTE: LABELS WITHIN THE SHAPES LISTED BELOW INDICATE A SPECIAL SPECIFICATION. REFER TO THE ELECTRICAL CONNECTION SCHEDULE AND DETAIL SHEET FOR MORE INFORMATION.
- CEILING MOUNTED
- FLOOR BOX OR POKE THRU
- WALL-MOUNTED
- REFERENCE SYMBOLS
- MECHANICAL AIR DEVICES (TYP), SHOWN HALF TONE FOR REFERENCE ONLY. REFER TO MECHANICAL FOR ADDITIONAL INFORMATION.
- AV DEVICE. WHEN 'AV' INDICATOR IS USED, IT MEANS

LIGHTING FIXTURES

- RECESSED DOWN LIGHT
- PENDANT LIGHT FIXTURE
- WALL MOUNTED LIGHT FIXTURE
- 2X4 LED LIGHT FIXTURE
- 2X2 LED LIGHT FIXTURE
- 2X4 EMERGENCY LED LIGHT FIXTURE
- 2X2 EMERGENCY LED LIGHT FIXTURE
- REMOTE FIXTURE POWERED BY ADJACENT EMERGENCY EGRESS FIXTURE
- EXIT LIGHT, DUAL FACE, ARROWS INDICATE DIRECTION OF EMERGENCY EGRESS.
- EXIT LIGHT, SINGLE FACE, ARROWS INDICATE DIRECTION OF EMERGENCY EGRESS.
- WALL MOUNTED EMERGENCY LIGHT FIXTURE WITH BATTERY PACK - FIXTURE SHALL BE LISTED FOR EMERGENCY EGRESS USE.
- CEILING MOUNTED EMERGENCY LIGHT FIXTURE WITH BATTERY PACK - FIXTURE SHALL BE LISTED FOR EMERGENCY EGRESS USE.
- COMBO EXIT SIGN / EMERGENCY LIGHT FIXTURE WITH BATTERY PACK - FIXTURE SHALL BE LISTED FOR EMERGENCY EGRESS USE. ARROWS INDICATE DIRECTION OF EMERGENCY EGRESS.

LIGHTING WIRING

- LIGHT FIXTURE DESIGNATOR. FIRST LETTER(S) INDICATE FIXTURE ID, SECOND LETTERS (AFTER SLASH) INDICATE SWITCHING ZONE WHEN APPLICABLE, TEXT BELOW INDICATES THE DIMMING TYPE FOR FIXTURE REQUIRING DIMMING.
- UNSWITCHED LIGHTING CIRCUIT
- SWITCHED LIGHTING CIRCUIT
- PANEL NAME AND CIRCUIT NUMBER

ABBREVIATIONS

- 1PH OR 3PH SINGLE PHASE OR THREE PHASE
- 3W OR 4W THREE WIRE OR FOUR WIRE
- A AMPS
- AF AMPERE FRAME
- AFF ABOVE FINISHED FLOOR
- AFC ABOVE FINISHED COUNTER
- AHU AIR HANDLER UNIT
- AL ALUMINUM
- AT AMPERE TRIP
- AWG AMERICAN WIRE GAUGE
- BKR BREAKER
- BFC BELOW FINISHED COUNTER
- BOD BASIS OF DESIGN
- CKT CIRCUIT
- CONN. CONNECTED
- CPT CURRENT TRANSFORMER
- CJ COPPER
- DISC DISCONNECT
- EC ELECTRICAL CONTRACTOR
- EGG EQUIPMENT GROUNDING CONDUCTOR
- ELV ELECTRONIC LOW VOLTAGE
- EMT ELECTRIC METALLIC TUBE
- EST. ESTIMATED
- FC FOOT CANDLE
- GC GENERAL CONTRACTOR
- GEC GROUNDING ELECTRODE CONDUCTOR
- GF GROUND FAULT
- GFI GROUND FAULT INTERRUPTER
- GFCI GROUND FAULT CIRCUIT INTERRUPTER
- HACR HEATING, AIR CONDITION & REFRIGERATION
- HOA HAND-OFF-AUTO
- HVAC HEAT VENTILATION & AIR CONDITIONING
- IDU INDOOR UNIT
- IMC INTERMEDIATE METAL CONDUIT
- KAC KILO-AMPERES INTERRUPTING CAPACITY
- KVA KILOVOLT AMPS
- L-L LINE TO LINE
- LM LUMEN
- L-N LINE TO NEUTRAL
- MBJ MAIN BONDING JUMPER
- MC METAL CLAD
- MCB MAIN CIRCUIT BREAKER
- MLO MAIN LUGS ONLY
- NEC NATIONAL ELECTRICAL CODE
- NM NON METALLIC
- NO NUMBER
- ODU OUTDOOR UNIT
- P POLES
- PH PHASE
- PIR PERIODIC INSPECTION REPORT
- QTY QUANTITY
- RMC RIGID METALLIC CONDUIT
- RTU ROOF TOP UNIT
- SE SERVICE ENTRANCE
- SLD SINGLE LINE DIAGRAM
- SBJ SYSTEM BONDING JUMPER
- SSBJ SUPPLY-SIDE BONDING JUMPER
- SWD SWITCH-DUTY
- THHN THERMOPLASTIC, HIGH HEAT, NYLON
- THHW THERMOPLASTIC, HIGH HEAT, WATER RESISTANT
- TYP TYPICAL
- UNO UNLESS NOTED OTHERWISE
- V VOLTS
- VA VOLT AMPS
- W WATTS
- WP WEATHERPROOF

ENGINEER'S INFORMATION

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804.280.0700

CODE DATA

- 2015 VIRGINIA ENERGY CONSERVATION CODE (2015 IECC WITH AMENDMENTS)
- 2015 VIRGINIA BUILDING CODE (2015 IBC WITH AMENDMENTS)
- 2014 VIRGINIA ELECTRICAL CODE (2014 NFPA 70 CODE WITH AMENDMENTS)
- 2015 VIRGINIA UNIFORM STATEWIDE BUILDING CODE (VA USBC)
- 2015 NFPA 72

SITE PLAN

1/16" = 1'-0"

SINGLE LINE DIAGRAM - EXISTING
EQUIPMENT SHOWN FOR
REFERENCE ONLY

GRAPHIC SCALE: 1 INCH = 16 FEET



BUILDING DATA

BUILDING CONSTRUCTION: II-B
USE GROUP: B
NOT IN FLOOD PLAIN.
TOTAL AREA OF PROJECT: 1,300 SF
TOTAL AREA OF BUILDING: 10,000 SF
OCCUPANCY LOAD: 13
CHANGE OF USE? NO
LEVEL OF RENOVATION: GREATER THAN 50%
ALTERATION LEVEL: III

THE JOINT
CHIRAPRACTIC

1011 UNIVERSITY BLVD,
SUITE 185, SUFFOLK,
VA

PROJECT NO: 21.4257
13 MAY 2021

LEGEND, NOTES, &
ABBREVIATIONS

E0.01

As indicated

ELECTRICAL LIGHTING FIXTURE SCHEDULE																
TYPE	COUNT (FOR REFERENCE ONLY)	FIXTURE SPECIFICATIONS	MANUFACTURER	MODEL	FIXTURE SPECIFICATIONS	LAMP SPECIFICATIONS					MINIMUM EFFICACY	COLOR TEMPERATURE	ELECTRICAL			REMARKS
		DESCRIPTION			DIMMING	LAMP TYPE	LAMP COUNT	LAMP LUMENS	TOTAL LUMENS	LAMP WATTS			TOTAL MAX INPUT WATTS	VOLTS	ELECTRICAL SUMMARY	
EXISTING																
W1	1	EXTERIOR WALL PACK	EXISTING	EXISTING		LED / DRIVER	1	1376 lm	1376 lm	11.00 W	125 lm/W	4000 K	11 VA	120 V	120 V/1-11 VA	
NEW WORK																
EE	3	WALL MOUNTED EMERGENCY BATTERY PACK FIXTURE	COMPASS	CU2RC		LED W/ BATTERY BACKUP	2			0.92 W			1 VA	120 V	120 V/1-1 VA	
EX	2	COMBINATION EGRESS FIXTURE AND EXIT SIGN	COMPASS	CWC2RW		LED W/ BATTERY BACKUP	2			5.20 W			5 VA	120 V	120 V/1-5 VA	
F	3	TREATMENT LIGHTING - CEILING, SUSPENDED	PHILIPS	SONA SUSPENDED LED (1LC UP)	0-10V	LED / DRIVER	1	4600 lm	4600 lm	63.50 W	72 lm/W	3500 K	64 VA	120 V	120 V/1-64 VA	
L	3	2X2 RECESSED FIXTURE	PHILIPS	DAY-BRITE FLUXGRID 2X2	0-10V	LED / DRIVER	1	3000 lm	3000 lm	27.10 W	111 lm/W	3500 K	27 VA	120 V	120 V/1-27 VA	
Q	3	FRONT DESK PENDANT	PHILIPS	TC RD PS E26	ELV	LED / DRIVER	1	600 lm	600 lm	10.00 W	60 lm/W	3500 K	10 VA	120 V	120 V/1-10 VA	
R	14	CEILING RECESSED DOWNLIGHT	PHILIPS	LYTECASTER L6RAE1VA / L6R15830WVA	ELV	LED / DRIVER	1	1500 lm	1500 lm	16.00 W	94 lm/W	3500 K	16 VA	120 V	120 V/1-16 VA	
RD	3	CEILING RECESSED DIRECTIONAL DOWNLIGHT	PHILIPS	LYTECASTER L6RAE1VA / L6RA15830WVA	ELV	LED / DRIVER	1	1500 lm	1500 lm	16.00 W	94 lm/W	3500 K	16 VA	120 V	120 V/1-16 VA	
ST4	1	4' SUSPENDED TRACK WITH TRACK LIGHTS	PHILIPS	LIGHTOLIER TH10930NF1B	ELV	LED / DRIVER	4	1100 lm	7700 lm	13.60 W	81 lm/W	3500 K	98 VA	120 V	120 V/1-98 VA	[1][2]
ST8	1	8' SUSPENDED TRACK WITH TRACK LIGHTS	PHILIPS	LIGHTOLIER TH10930NF1B	ELV	LED / DRIVER	4	1100 lm	7700 lm	13.60 W	81 lm/W	3500 K	98 VA	120 V	120 V/1-98 VA	[1][2]
W	1	EXTERIOR WALL PACK	TBD	TBD		LED / DRIVER	1	2000 lm	2000 lm	17.00 W	118 lm/W	4000 K	17 VA	120 V	120 V/1-17 VA	[3]

NOTE:
[1] PROVIDE FIXTURE WITH 125W CURRENT LIMITING DEVICE.
[2] PROVIDE WITH PLAIN TRACK 6103NBK TRACK OR EQUAL. TRACK HEADS IN BLACK. COORDINATE WITH ARCHITECT PRIOR TO PURCHASE.
PROVIDE TRACK HEAD QUANTITIES AS INDICATED UNDER "LAMP COUNT" IN THIS SCHEDULE.
[3] PROVIDE WITH BATTERY BACKUP FOR EMERGENCY EGRESS LIGHTING.

ELECTRICAL PLAN NOTES	
#	NOTE
1	CEILING MOUNTED J-BOX FOR SPEAKER CONNECTION. COORDINATE LOCATION WITH EQUIPMENT MANUFACTURER'S SPECIFICATIONS PRIOR TO ROUGH-IN.
2	ALL DATA AND SPEAKER WIRE SHALL BE RUN TO PATCH PANEL.
3	COORDINATE LOCATION AND MOUNTING HEIGHT WITH ARCHITECTURAL PLAN PRIOR TO ROUGH-IN.
4	BRING MC CABLE DOWN THE TENANT DEMISING WALL AND RUN CABLING ALONG THE EXTENDED DESK RETURN ALONG THE SURFACE OF (OR INSIDE) THE CASEWORK TO SURFACE MOUNTED (OR FLUSH MOUNTED) RECEPTACLES.
5	VERIFY EXISTING LANDLORD WALL MOUNTED FIXTURES HAVE BATTERY BACKUP FOR EMERGENCY LIGHTING AS PER VCC 1008.2.-IF NOT, TIE THE NEW REMOTE FIXTURE INTO EXIT SIGN. CONCEAL ALL EXPOSED CONDUITS AS MUCH AS POSSIBLE.
6	NEW TIME CLOCK. SEE DETAIL.
7	VERIFY SIGN CIRCUIT IS EXISTING IN THE FIELD. IF IT IS NOT EXISTING, COORDINATE THE EXACT LOCATION FOR NEW SIGN CIRCUIT. PRICE AS AN ADD-ALTERNATE.
8	DEDICATED RECEPTACLE FOR AMPLIFIER AT 60" AFF, COORDINATE LOCATION WITH ARCHITECT OR OWNER PRIOR TO ROUGH-IN.

NOTE:
ARCHITECT'S FULL SCOPE DRAWINGS ARE TO BE USED FOR CONSTRUCTION. COORDINATE LOCATIONS AND MOUNTING HEIGHTS OF ALL ELECTRICAL CONNECTIONS WITH ARCHITECTURAL PLANS PRIOR TO ROUGH-IN.

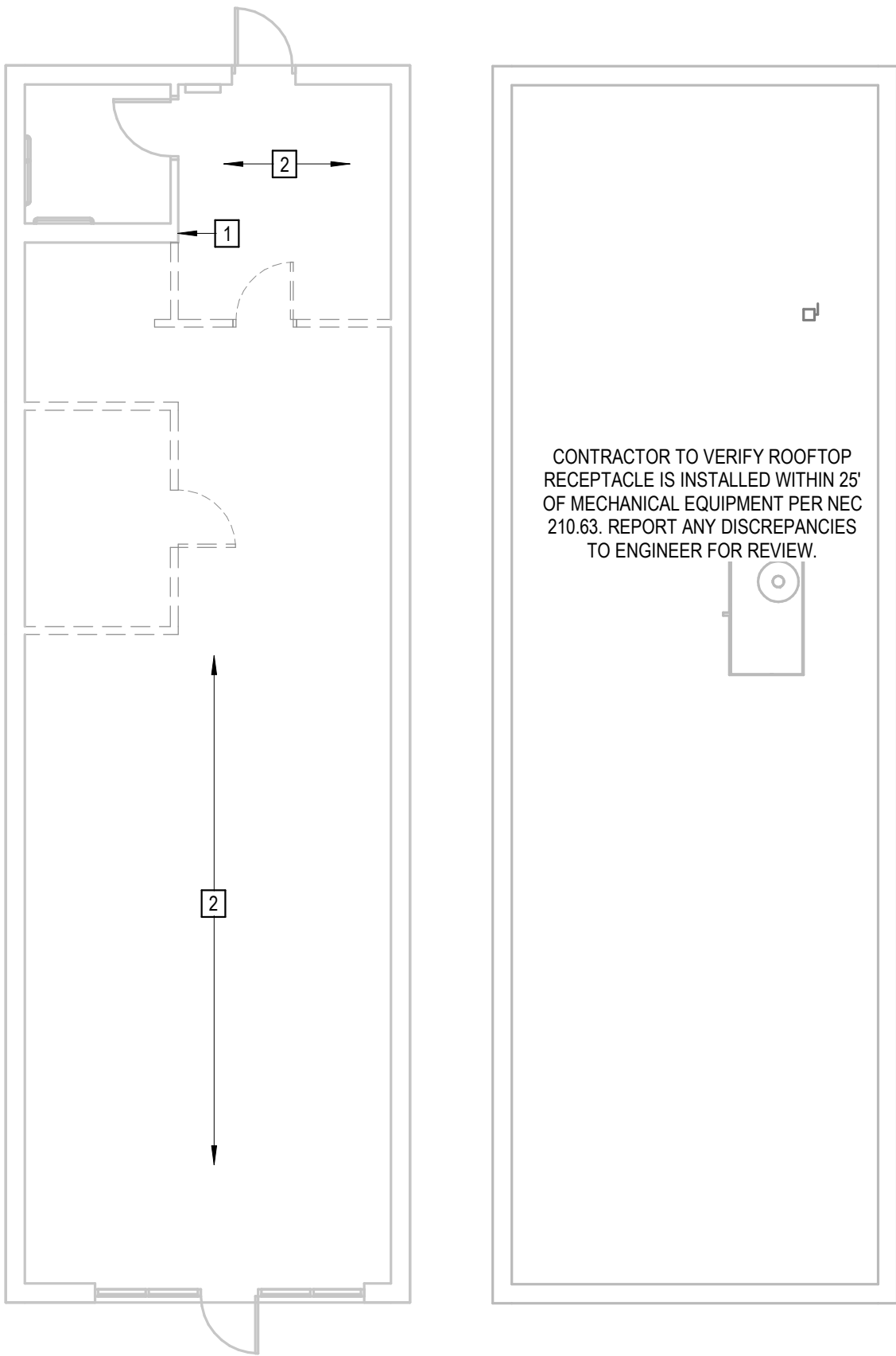
ELECTRICAL CONNECTION TYPE SCHEDULE								
SYMBOL DESIGNATOR	DESCRIPTION	CONNECTION TYPE	LOAD	VOLTAGE	NUMBER OF POLES	ELECTRICAL SUMMARY	LOAD CLASSIFICATION	COMMENTS
EXISTING								
RTU-1(E)	ROOF TOP UNIT-1	30A/250V/FUSED/NEMA3R	9010 W	208 V	3	208 V/3-9010 VA	HVAC	
SIGN	SIGN CIRCUIT	WP,NEMA 5-20R	1200 W	120 V	1	120 V/1-1200 VA	Other	
WH-1	WATER HEATER	HARDWIRED	1920 W	120 V	1	120 V/1-1920 VA	Other	
NEW WORK								
	DUPLEX CONVENIENCE FLOOR RECEPTACLE	NEMA 5-20R	180 W	120 V	1	120 V/1-180 VA	Receptacle	
	DUPLEX CONVENIENCE RECEPTACLE	GFI,NEMA 5-20R	180 W	120 V	1	120 V/1-180 VA	Receptacle	
	QUADPLEX CONVENIENCE RECEPTACLE	NEMA 5-20R	360 W	120 V	1	120 V/1-360 VA	Receptacle	
AM	AMPLIFIER	NEMA 5-20R	800 W	120 V	1	120 V/1-800 VA	Receptacle	
EF-1	EXHAUST FAN	HARDWIRED	24 W	120 V	1	120 V/1-24 VA	Other	[1]
EF-2	EXHAUST FAN	HARDWIRED	24 W	120 V	1	120 V/1-24 VA	Other	[1]
JS	J-BOX FOR SPEAKER	HARDWIRED	0 W	120 V	1	120 V/1-0 VA	Other	
OP	J-BOX FOR SIGN	HARDWIRED	1200 W	120 V	1	120 V/1-1200 VA	Other	
R	DUPLEX CONVENIENCE RECEPTACLE	NEMA 5-20R	180 W	120 V	1	120 V/1-180 VA	Receptacle	
TV	TELEVISION	NEMA 5-20R	350 W	120 V	1	120 V/1-350 VA	Other	
WS	WORK STATION - QUAD RECEPTACLE	(2) NEMA 5-20R	450 W	120 V	1	120 V/1-450 VA	Other	

NOTE:
[1] EXHAUST FAN SHALL BE FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR, AND WIRED BY ELECTRICAL CONTRACTOR.

DEMO PLAN NOTES:

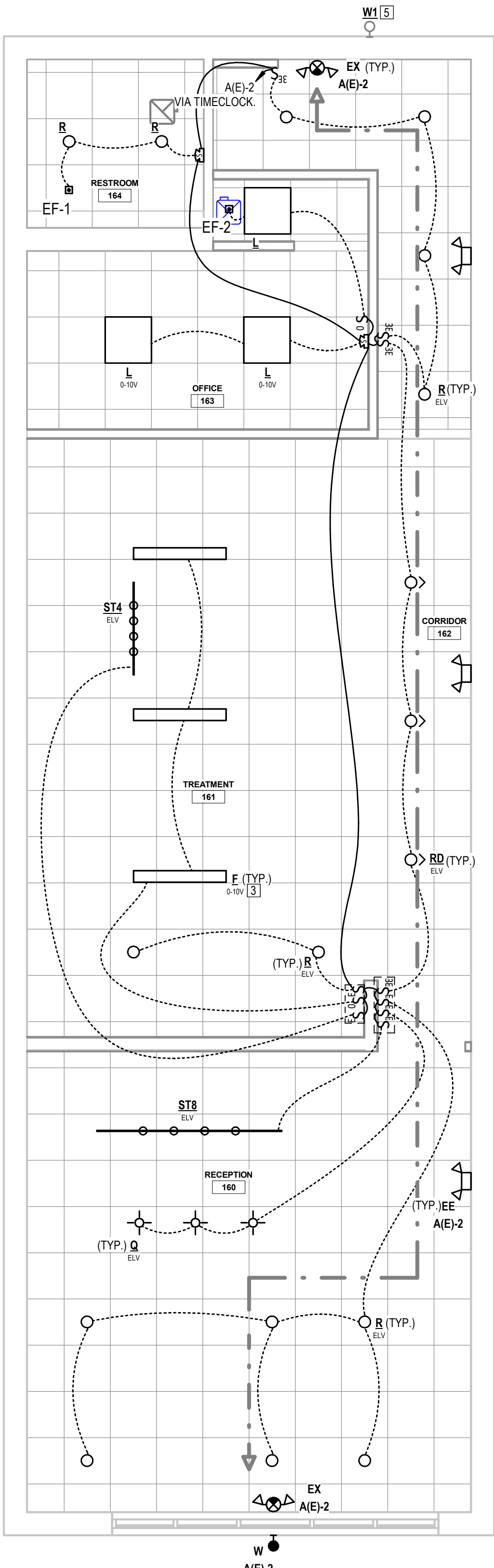
- DEMOLISH EXISTING DRINKING FOUNTAIN RECEPTACLE BACK TO NEAREST ACCESSIBLE J-BOX.
- REMOVE EXISTING FIXTURES & EQUIPMENT FROM THE PREVIOUS TENANT.

- ALL CONDUITS FROM WALLS AND LIGHTING FIXTURE ON THE CEILING THAT ARE BEING DEMOLISHED SHALL BE REMOVED. CONDUITS PENETRATING THE CEILING/FLOOR SHALL BE CUT FLUSH WITH THE SURFACE AND FIRE STOPPED WITH APPROVED MATERIALS.
- CONTRACTOR SHALL PROVIDE TEMPORARY POWER RECEPTACLES IN COMPLIANCE WITH OSHA STANDARDS THROUGHOUT THE LIMITS OF CONSTRUCTION.
- ALL WIRING TO EXISTING BRANCH CIRCUITS IN WALLS BEING DEMOLISHED SHALL BE RE-CONFIGURED AS REQUIRED USING IN - KIND WIRING METHODS AND SIZING AND MATERIALS.
- ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING MAKE - SAFE CONDITIONS.

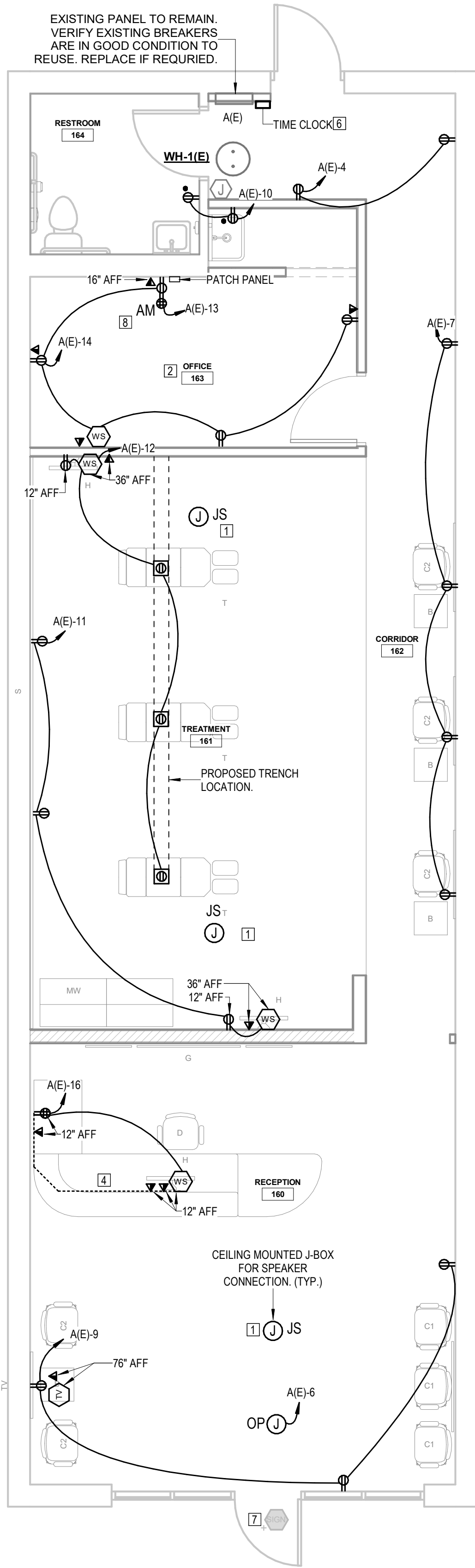


4 DEMO PLAN
1/8" = 1'-0"

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

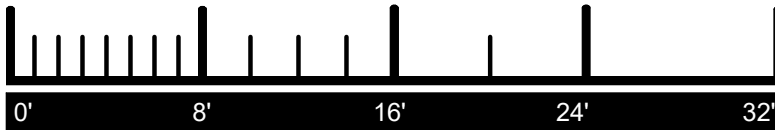


2 LIGHTING PLAN
1/4" = 1'-0"



1 POWER PLAN
1/4" = 1'-0"

GRAPHIC SCALE: 1 INCH = 8 FEET



GRAPHIC SCALE: 1 INCH = 4 FEET



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ENGINEER: Kenneth Shultz, PE.
LICENSE: #0402053673.
EMAIL:kshultz@permitzip.com.



NO.	DESCRIPTION	DATE
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BUILDING DATA

BUILDING CONSTRUCTION: II-B
USE GROUP: B
NOT IN FLOOD PLAIN.
TOTAL AREA OF PROJECT: 1,300 SF
TOTAL AREA OF BUILDING: 10,000 SF
OCCUPANCY LOAD: 13
CHANGE OF USE? NO
LEVEL OF RENOVATION: GREATER THAN 50%
ALTERATION LEVEL: III

THE JOINT CHIRAPRACTIC

1011 UNIVERSITY BLVD,
SUITE 185, SUFFOLK,
VA

PROJECT NO: 21.4257
13 MAY 2021

POWER & LIGHTING PLAN

E1.01

As Indicated

- 26 00 00 - ELECTRICAL GENERAL PROVISIONS**
- THE WORK TO BE PERFORMED UNDER THIS DIVISION CONSISTS OF FURNISHING, INSTALLING, AND PLACING INTO OPERATION ALL ELECTRICAL WORK INDICATED ON THE DRAWINGS AND AS SPECIFIED HEREINAFTER. PROVIDE ALL LABOR AND MATERIALS FOR COMPLETE INSTALLATION.
 - INSTALLATION OF ALL ELECTRICAL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE FOLLOWING REGULATIONS, CODES, ETC.:
 - VUSBC - VIRGINIA UNIFORM STATEWIDE BUILDING CODE - 2015, INCLUDING;
 - IBC/2015 - INTERNATIONAL BUILDING CODE, WITH VIRGINIA AMENDMENTS
 - NFPA 720/2014 - NATIONAL ELECTRICAL CODE
 - NFPA 720/2015 - NATIONAL FIRE ALARM CODE
 - ADAAG - AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES
 - ANSI - AMERICAN NATIONAL STANDARDS INSTITUTE
 - ASTM - AMERICAN SOCIETY FOR TESTING AND MATERIALS
 - IEEE - INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
 - IESNA - ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA
 - NECA - NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION
 - NEMA - NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
 - NETA - INTERNATIONAL ELECTRICAL TESTING ASSOCIATION
 - NFPA - NATIONAL FIRE PROTECTION ASSOCIATION
 - OSHA - OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
 - UL - UNDERWRITERS LABORATORIES, INC.
 - 2012 IBC INTERNATIONAL ENERGY CONSERVATION CODE
 - LOCAL ELECTRICAL UTILITY COMPANY STANDARDS
 - ANSI A17.1/ASME 17.1 SAFETY CODE FOR ELEVATORS AND ESCALATORS
 - ALL LOCAL JURISDICTION CODES AND ORDINANCES
 - THE CONTRACTOR SHALL OBTAIN ALL PERMITS AND LICENSES, AND PAY ALL FEES AS REQUIRED FOR EXECUTION OF THE CONTRACT. ARRANGE FOR NECESSARY INSPECTIONS AND PRESENT CERTIFICATES OF APPROVAL TO THE OWNER.
 - DRAWINGS:
 - THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF THE ELECTRICAL EQUIPMENT. EXAMINE THE ARCHITECTURAL, STRUCTURAL, CIVIL, MECHANICAL AND PLUMBING DRAWINGS AND SPECIFICATIONS AND BECOME FAMILIAR WITH AND COORDINATE WITH ALL CONDITIONS AFFECTING ELECTRICAL WORK.
 - COORDINATE ALL WORK WITH THE WORK OF ALL OTHER TRADES.
 - STANDARDS FOR MATERIALS AND WORKMANSHIP:
 - ALL MATERIAL SHALL BE NEW (UNLESS SPECIFICALLY INDICATED TO BE REUSED).
 - THE MATERIALS OF THE SAME TYPE SHALL BE THE PRODUCT OF ONE MANUFACTURER.
 - THE PUBLISHED STANDARDS AND REQUIREMENTS OF THE NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATIONS, THE AMERICAN NATIONAL STANDARDS INSTITUTE, THE INSTITUTES OF ELECTRICAL AND ELECTRONIC ENGINEERS AND THE AMERICAN SOCIETY OF TESTING MATERIALS SHALL APPLY WHERE APPLICABLE.
 - SPECIFIED CATALOG NUMBERS AND TRADE NAMES ARE INTENDED TO DESCRIBE THE MATERIAL, DEVICES OR APPARATUS DESIRED. SIMILAR MATERIALS OF OTHER MANUFACTURERS, IF OF EQUAL QUALITY, CAPACITY, AND CHARACTER, MAY BE USED UPON OWNER'S APPROVAL. SUBSTITUTIONS FROM MANUFACTURES WITH INADEQUATE LOCAL SUPPORT OR MARKET SHARE MAY BE REJECTED.
 - UNDERWRITERS LABEL AND LISTING:
 - ALL TYPES OF MATERIALS WHICH ARE COMMONLY UL LISTED SHALL BE UL LISTED, AND SHALL BEAR THE INSPECTION LABEL OF UNDERWRITERS LABORATORIES, INC. (UL), WHERE CUSTOM BUILT EQUIPMENT IS SPECIFIED AND THE UL LABEL OR LISTING IS NOT APPLICABLE TO THE COMPLETED PRODUCT, ALL COMPONENTS USED IN THE CONSTRUCTION OF SUCH EQUIPMENT SHALL BE LABELED OR LISTED BY UL AS APPLICABLE.
 - SHOP DRAWINGS AND ENGINEERING DATA:
 - COMPLETE SHOP DRAWINGS AND ENGINEERING DATA ON ALL EQUIPMENT AND MATERIALS TO BE USED IN THE WORK OF THIS DIVISION SHALL BE SUBMITTED FOR THE ENGINEERS APPROVAL IN ACCORDANCE WITH THE CONTRACT DRAWINGS.
 - SUBMISSIONS SHALL BE STAMPED AS APPROVED BY THE CONTRACTOR AND HAVE ALL FEATURES, OPTIONS, ACCESSORIES, AND CATALOG NUMBERS CLEARLY INDICATED.
 - TESTS:
 - AT THE COMPLETION OF THE ELECTRICAL INSTALLATION AND AT SUCH TIME AS THE ARCHITECT OR OWNER MAY DIRECT, THE CONTRACTOR FOR THE DIVISION SHALL CONDUCT AN OPERATING TEST FOR APPROVAL. ALL EQUIPMENT SHALL BE DEMONSTRATED TO OPERATE IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS AS INTENDED, PROVING SYSTEM INTEGRITY.
 - FINAL INSPECTION:
 - WHEN THE WORK ON THE PROJECT HAS BEEN COMPLETED AND IS READY FOR FINAL INSPECTION, SUCH AN INSPECTION WILL BE MADE. AT THIS TIME THE CONTRACTOR SHALL DEMONSTRATE THAT THE REQUIREMENTS OF THIS DIVISION HAVE BEEN MET.
- WARRANTY**
- THE COMPONENTS OF THE ELECTRICAL SYSTEMS SHALL BE WARRANTED FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE THEREOF EITHER FOR BENEFICIAL USE OR FINAL ACCEPTANCE, WHICHEVER IS EARLIER, AGAINST DEFECTIVE MATERIALS, DESIGN, AND WORKMANSHIP.
 - K-TO-BACK OUTLET BOXES.

- 26 05 26 - GROUNDING**
- RACEWAYS, BOXES, OUTLETS, AND ENCLOSURES SHALL BE BOUND TOGETHER TO FORM A CONTINUOUS METALLIC GROUNDING CIRCUIT IN ACCORDANCE WITH NEC ART. 250.
 - THE MINIMUM SIZE OF GROUNDING CONDUCTOR SHALL BE PER NEC UNLESS NOTED TO BE LARGER ON THE DRAWINGS.
 - GROUNDING CONDUCTORS SHALL BE PROVIDED FOR ALL BRANCH CIRCUITS AND FEEDERS. NO EXCEPTIONS! EXTEND AND CONNECT TO EACH DEVICE AND EQUIPMENT.
 - EGC: PROVIDE SEPARATE BARE COPPER OR INSULATED GREEN GROUND CONDUCTOR IN ALL FEEDERS AND BRANCH CIRCUITS.
 - BONDING: PROVIDE BONDING OF ALL NON-CURRENT-CARRYING METALLIC PARTS OF ELECTRICAL EQUIPMENT, METALLIC RACEWAYS AND ENCLOSURE PER NEC ARTICLE 250. BOND ALL METAL BUILDING COMPONENTS, INCLUDING PIPING, DUCTWORK AND METAL BUILDING COMPONENTS.
 - GEC: PROVIDE GEC AND MBI AS INDICATED ON SINGLE LINE DIAGRAM. PROVIDE GROUND ELECTRODE BONDING OF METAL WATER SERVICE PIPING AND BUILDING STEEL PER NEC ARTICLE 250.

- 26 05 33 - RACEWAYS AND JUNCTION BOXES**
- RACEWAYS
 - CONDUIT SHALL BE GALVANIZED RMC, IMC, OR EMT UNLESS OTHERWISE SPECIFIED IN FEEDER SCHEDULE OR ON DRAWINGS. RIGID OR INTERMEDIATE METALLIC CONDUIT SHALL BE USED WHERE SUBJECT TO DAMAGE OR EXPOSED OUTSIDE OF BUILDING. EMT MAY BE USED ABOVE CONCEALED CEILING OR WITHIN WALLS, AND EXPOSED IN DRY, INTERIOR LOCATIONS. TYPE MC CABLE WITH GROUND MAY BE USED IN LIEU OF EMT BETWEEN WIRING DEVICES WHERE CONCEALED AND PERMITTED BY CODE. TYPE AC CABLE MAY BE USED FOR COMPUTER ROOM WIRING BELOW RAISED FLOOR.
 - RACEWAYS SHALL BE INSTALLED AS A COMPLETE SYSTEM AND SHALL BE CONTINUOUS FROM OUTLET TO OUTLET. UNLESS NOTED OTHERWISE, RACEWAYS SHALL BE MECHANICALLY AND ELECTRICALLY CONNECTED TO ALL BOXES AND FITTINGS. RACEWAYS AND BOXES SHALL BE SUPPORTED FROM STRUCTURAL STEEL AND NOT SUPPORTED FROM THE CEILING GRID OR ROOF DECKING PER NEC.
 - ALL CONDUIT SHALL BE INSTALLED CONCEALED EXCEPT IN UNFINISHED SPACES OR WHERE SHOWN OTHERWISE.
 - MINIMUM SIZE CONDUIT SHALL BE 3/4 INCH.
 - A NYLON PULL CORD SHALL BE INSTALLED IN ALL CONDUITS IN WHICH CONDUCTORS ARE NOT INSTALLED. A 10 INCH LENGTH OF THE FISH CORD SHALL EXTEND OUT OF EACH END OF THE CONDUIT.
 - FLEXIBLE LIQUID-TIGHT METAL CONDUIT SHALL BE USED FOR CONNECTIONS TO ALL MOTORS, DRY-TYPE TRANSFORMERS AND ANY EQUIPMENT WHERE REQUIRED BECAUSE OF VIBRATION OR RELATIVE MOTION.
 - SURFACE RACEWAY MAY ONLY BE USED WHERE SPECIFICALLY SHOWN ON DRAWINGS OR APPROVED BY ARCHITECT/ENGINEER. WHERE PERMITTED, RACEWAY SHALL BE METAL AND ATTACHED TO THE WALL USING METAL FASTENERS. VERTICAL RUNS SHALL BE IN CORNERS OR AGAINST VERTICAL MOLDINGS, SUCH AS DOOR TRIM. PROVIDE MULTI-CHANNEL RACEWAY WHERE COMMUNICATIONS AND POWER ARE REQUIRED. PROVIDE ALL TRIM, FACEPLATES, AND ACCESSORIES FOR A FINISHED LOOK AND COMPLETE INSTALLATION. SYSTEM SHALL BE COMPATIBLE WITH OWNER'S COMMUNICATIONS DEVICES.
 - JUNCTION BOXES
 - PULL BOXES SHALL BE INSTALLED AT ALL NECESSARY POINTS, WHETHER INDICATED ON THE DRAWINGS OR NOT. PROVIDE WHERE REQUIRED FOR A PROPER INSTALLATION AND TO PREVENT INJURY TO THE CONDUCTORS THAT MIGHT RESULT FROM PULLING. MINIMUM DIMENSIONS SHALL NOT BE LESS THAN NEC REQUIREMENTS.
 - ALL INDOOR AND DRY LOCATIONS BOXES SHALL BE NEMA 1, GALVANIZED STEEL, RIGIDLY SECURED IN POSITION TO THE STRUCTURE. OUTDOOR BOXES SHALL BE NEMA 3R. PROVIDE WEATHERPROOF BOX WITH SINGLE GASKET FOR USE IN WET OR DAMP LOCATIONS.
 - PROVIDE BOXES, COMPLETE WITH COVER OR DEVICE PLATE FOR SWITCHES, RECEPTACLES, OR OTHER DEVICES, OR WHERE REQUIRED FOR JOINING BRANCH CIRCUIT WIRING.
 - CONDUIT BODIES MAY BE USED ON EXPOSED CONDUIT, WHERE ALLOWED BY THE NEC.
 - EXTERIOR PULL BOXES/MANHOLES SHALL BE PRECAST STEEL-REINFORCED CONCRETE OR FIBERGLASS-REINFORCED POLYMER CONCRETE. COVERS SHALL BE LABELED FOR SYSTEM AND CAPABLE OF SUPPORTING VEHICLE TRAFFIC/MOVING EQUIPMENT LIKELY TO BE ENCOUNTERED. PROVIDE MINIMUM 12" GRAVEL BELOW BOX FOR DRAINAGE. PROVIDE DEPTH TO EXCEED REQUIRED CONDUIT BURIAL DEPTH.
 - EFFECTIVELY CLOSE ALL UNUSED OPENINGS IN CABINETS, BOXES, EQUIPMENT HOUSINGS, GUTTERS, ETC.
 - COORDINATE BOX LOCATIONS WITH ARCHITECT AND OWNER. PROVIDE PULL & JUNCTION BOXES LOCATED ABOVE CEILING UNON.
 - FIELD COORDINATE DOOR SWINGS AND LOCATE SWITCH BOXES 4'-6" FROM LATCH SIDE OF DOORS.
 - FIELD COORDINATE LOCATION OF ALL EQUIPMENT FOR ELECTRICAL BOX LOCATIONS. COORDINATE LOCATIONS OF BOXES IN OR ABOVE MILLWORK WITH ARCHITECT/MILLWORK CONTRACTOR.
 - VERIFY ALL FIXTURE AND OUTLET BOX LOCATIONS WITH ARCHITECT/OWNER PRIOR TO ROUGH-IN.
 - PROVIDE CEILING FAN RATED BOX FOR CEILING FAN LOCATIONS, AS INDICATED.
 - PROVIDE MINIMUM OF 6" LATERAL OR VERTICAL SEPARATION FOR BACK-TO-BACK OUTLET BOXES.

- 26 27 26 - WIRING DEVICES**
- WIRING DEVICES SHALL BE COMPLETE WITH ALL MOUNTING DEVICES AND OTHER APPURTENANCES AS REQUIRED. ALL WIRING DEVICES SHALL BE THE PRODUCT OF A SINGLE MANUFACTURER EXCEPT AS SPECIFICALLY STATED OTHERWISE.
 - CONVENIENCE RECEPTACLES SHALL BE PROVIDED NEMA 5-20, SIDE-WIRED ONLY. GFCI RECEPTACLE PER UL 943 FOR LOCATIONS WITHIN 6' OF WATER SOURCES, EXTERIOR LOCATIONS, AND OTHER LOCATIONS WHERE INDICATED. PER NEC ARTICLE 210.8 THE GROUND-FAULT CIRCUIT-INTERRUPTER SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION PER NEC 210.8 AND NEC 100. IF GFCI DEVICE ON RECEPTACLE IS NOT READILY ACCESSIBLE, PROVIDE CIRCUIT WITH GFCI BREAKER IN LIEU OF GFCI RECEPTACLE.
 - ALL LIGHT SWITCHES SHALL BE TOGGLE TYPE, SPECIFICATION GRADE, INSTALLED 48 INCHES ABOVE FINISHED FLOOR, UNLESS OTHERWISE NOTED. SWITCHES SHALL BE 20 AMPERE, 120-277 VOLT, NOMINAL SINGLE-POLE, 3-WAY, OR 4-WAY, AS INDICATED ON PLANS.
 - WALL MOUNTED DIMMERS SHALL BE 120-277V, COORDINATE WITH FIXTURE/BALLAST/DRIVER. VERIFY COMPATIBILITY OF ALL DEVICES ON THE DIMMING CIRCUIT/ZONE. WHERE DIMMERS OCCUR ADJACENT TO SWITCHES, SWITCH SHALL BE SLIDE-TYPE TO MATCH. MOTOR RATED SWITCHES OCCURRING ADJACENT TO DIMMERS SHALL BE LUTRON NT-DPDT-CO-MA OR APPROVED EQUAL.
 - WALL OCCUPANCY SENSORS SHALL BE 120-277V, MANUAL "ON" TYPE, WITH 180 DEGREE PIR, 2100 SF COVERAGE. PROVIDE SINGLE-POLE, 3-WAY, OR 4-WAY, AS INDICATED ON PLANS.
 - CEILING MOUNT OCCUPANCY SENSORS SHALL BE 120-277V, PIR/ULTRASONIC, 360 DEGREE, 2000 SF COVERAGE. PROVIDE WITH EMERGENCY SOURCE INPUT RELAY.
 - ALL RECEPTACLES SHALL BE DUPLEX OUTLETS, GROUNDING TYPE, SPECIFICATION GRADE, INSTALLED 18 INCHES ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE.
 - SPECIAL AND HEAVY-DUTY TYPE RECEPTACLES SHALL BE PROVIDED AS SUITABLE FOR THE INTENDED USE.
 - COLOR OF DEVICES AND COVER PLATES SHALL BE AS DIRECTED BY THE ARCHITECT OR OWNER.
 - PROVIDE GFCI RECEPTACLE WITH "IN-USE" COVER FOR EXTERIOR, WET OR DAMP LOCATIONS.
 - PROVIDE PLASTER RING SPACER WHERE REQUIRED TO ACCOMMODATE WALL FINISHES.

- 26 05 19 - POWER CONDUCTORS AND CABLE**
- CONFORM TO NEMA WC7, UL 83, UL 486C, UL 486E, UL 486L, UL 581.
 - ALL WIRING SHALL BE: UL 83, 600-VOLT, TYPE THHN/THW INSULATION, UON:
 - #10 AWG AND SMALLER: SOFT-DRAWN ANNEALED COPPER, STRANDED.
 - #8 AWG AND LARGER: SOFT-DRAWN ANNEALED COPPER, STRANDED.
 - 100 AMPERES AND LARGER: AL COMPACT-STRANDED CONDUCTORS OF EQUAL AMPACITY MAY BE SUBSTITUTED FOR COPPER. CONTRACTOR RESPONSIBLE FOR COORDINATING WIRE AND CONDUIT SIZE. VERIFY THAT ALL TERMINATION LUGS ARE RATED FOR SIZE AND TYPE WIRE PROVIDED.
 - WIRING METHODS:
 - FEEDERS
 - SCHEDULE 40 PVC BELOW GRADE.
 - EMT ABOVE GRADE.
 - BRANCH CIRCUITS
 - MC CABLE WHERE HIDDEN.
 - EMT WHERE EXPOSED.
 - MINI-SPLIT HEAT PUMP INTERCONNECTION WIRING: PROTECT CONDUCTORS FROM DAMAGE USING CONDUIT OR USE UL LISTED FOR INDOORS, OUTDOORS, SUNLIGHT RESISTANT AND DIRECT BURIAL.
 - ARMORED CABLE ASSEMBLIES: TYPE MC CABLE (UL 1569).
 - USE STRANDED WIRING FOR ALL CONTROL CIRCUITS.
 - TERMINATIONS, PROVIDED AS FOLLOWS:
 - BRANCH CIRCUITS: SOLDER-LESS, COMPRESSION, TWIST SPRING CONNECTORS (WIRE NUTS) OR OTHER LISTED MEANS.
 - BOLTED BUS CONNECTIONS: 2-HOLE COMPRESSION LUGS.
 - WIRING SPLICES NOT PERMITTED.
 - ROUTE POWER WIRING AND LOW-VOLTAGE CONTROL WIRING IN SEPARATE RACEWAYS. DO NOT ROUTE CIRCUITS FROM DIFFERENT SYSTEMS IN THE SAME RACEWAY.
 - PROVIDE SEPARATE IDENTIFIED NEUTRAL CONDUCTORS FOR ALL BRANCH CIRCUITS SERVING COMPUTER OR MECHANICAL EQUIPMENT.
 - WIRING SHALL BE NEATLY TRAINED AND LACED IN ENCLOSURES. TEST ALL WIRING FOR CONTINUITY AND TO BE FREE OF FAULTS AND SHORT CIRCUITS.
 - USE SUITABLE ANTI-OXIDIZING COMPOUND FOR ALL ALUMINUM WIRING TERMINATIONS.
 - LABEL CONDUCTORS WITH CIRCUIT DESIGNATION AT EACH BRANCH CIRCUIT TERMINATION.
 - IN THE ABSENCE OF A CONSISTENT EXISTING COLOR CODE, CONDUCTORS SHALL BE COLOR CODED AS FOLLOWS:
120/208V
PHASE A - BLACK
PHASE B - RED
PHASE C - BLUE
NEUTRAL - WHITE
GROUND - GREEN

26 05 53 - ELECTRICAL IDENTIFICATION

- MATERIALS:
 - EQUIPMENT NAMEPLATES: PROVIDE NAMEPLATES CONSTRUCTED OF 1/16" THICK PLASTIC LAMINATED MATERIAL. ENGRAVE THROUGH COLORED SURFACE MATERIAL TO CONTRASTING COLORED SUBLAYER.
 - LIGHT SWITCH, RECEPTACLE, AND JUNCTION BOX LABELS: PROVIDE LABELS BY ELECTRONIC LABELER BROTHER P-T-101H, MODEL PT-20025, DYMO-TAPE, OR EQUAL, LABEL WITH PANEL NAME AND CIRCUIT NUMBER.
 - CIRCUIT DIRECTORIES: PROVIDE NEATLY TYPED SCHEDULE UNDER PLASTIC JACKET OR PROTECTIVE COVER FOR PROTECTION FROM DAMAGE OR DIRT.
- FOR SERVICE EQUIPMENT, PROVIDE LABEL PER 1.A INDICATING AVAILABLE FAULT CURRENT PER NEC ARTICLE 110.24. SEE SINGLE LINE.
- PROVIDE CIRCUIT DIRECTORIES FOR EACH LOAD CENTER, PANELBOARDS, AND SWITCHBOARD BASED ON AS-BUILT CONDITIONS:
 - NUMBER EACH SINGLE POLE SPACE. ODD-NUMBERED CIRCUITS ON LEFT, EVEN ON RIGHT.
 - SECURELY MOUNT ON INSIDE FACE OF PANELBOARD DOOR.
 - WHEN THERE IS NO COVER, PROVIDE INDIVIDUAL NAMEPLATES PER 1.A FOR EACH OVERCURRENT AND OTHER DEVICE.
 - DEFINE BRIEFLY, BUT ACCURATELY, NATURE OF CONNECTED LOAD (I.E. LIGHTING OFFICE, ELEC ROOM, ETC.).
 - PROVIDE ROOM LOCATIONS FOR ALL LOADS AND INDICATE PANEL NAME ON THE SCHEDULE.
 - MULTIPLE CIRCUITS: USE FIRST POLE SPACE NUMBER AS CIRCUIT NUMBER.
 - CONFIRM ROOM NUMBERS WITH OWNER BEFORE NOTING ON SCHEDULES.
 - SPARE CIRCUIT BREAKERS AND SPACE POSITIONS SHALL BE NOTED.

26 24 16 - PANELBOARDS

- PROVIDE WITH 100% RATED NEUTRAL UNLESS SCHEDULED OTHERWISE. ALL BUS BARS SHALL BE TIN (OR COPPER) PLATED ALUMINUM. REFER TO SCHEDULES FOR RATINGS, MAIN AND BRANCH DEVICES. PANELS AND BREAKERS SHALL BE RATED FOR THE AVAILABLE INTERRUPTING CURRENT AND IN NO CASE BE LESS THAN 10,000 AMPERES RMS SYMMETRICAL INTERRUPTING CAPACITY.
- PROVIDE HANDLE LOCKING DEVICES AS REQUIRED FOR EMERGENCY LIGHTING AND FIRE ALARM LOADS.
- PROVIDE HANDLE-TIES FOR ALL MULTI-WIRE BRANCH CIRCUITS WITH SHARED NEUTRAL CONDUCTORS PER NEC 210.4.
- INSTALL PANELBOARDS WITH HIGHEST OPERATOR/HANDLE AT HIGHEST POSITION AT 79" OR LESS.
- CIRCUIT BREAKERS SHALL BE COMBINATION THERMAL AND MAGNETIC MOLDED CASE TYPE. QUICK-MAKE AND QUICK-BREAK, BOTH ON MANUAL AND ON OVERCURRENT OPERATION. BREAKERS SHALL BE OF THE OVER-THE-CENTER TOGGLE OPERATING TYPE WITH THE HANDLE GOING TO A POSITION BETWEEN "ON" AND "OFF" TO INDICATE AUTOMATIC TRIPPING. ALL MULTI-POLE BREAKERS SHALL BE INTERNAL, COMMON TRIP.
- PANELBOARDS SHALL BE SURFACE MOUNTED OR RECESSED AS INDICATED, WITH BAKED-ON ENAMEL TRIM, ADJUSTABLE TRIM CLAMPS AND DOOR WITH LOCK AND CATCH.
- PROVIDE COMPLETE TYPED WRITTEN PANELBOARD DIRECTORIES INDICATING LOAD TYPE AND LOCATION WITH FIELD CHANGES RECORDED.
- PANELBOARDS SHALL BE BY SQUARE D, SIEMENS, GENERAL ELECTRIC, OR CUTLER-HAMMER.
- LOAD CENTERS MAY ONLY BE USED WITHIN DWELLING UNITS.
- FOR ALL NEW BREAKERS INSTALLED IN EXISTING PANELS, FAULT CURRENT INTERRUPTING CAPACITY SHALL MATCH THAT OF THE PANEL RATING.

26 28 16 - DISCONNECT SWITCHES AND CIRCUIT BREAKERS

- DISCONNECT SWITCHES
 - FUSED AND UNFUSED DISCONNECT SWITCHES SHALL BE PROVIDED AS REQUIRED. SUCH SWITCHES SHALL BE OF THE PROPER SIZE AND NUMBER OF POLES FOR USE WITH THE EQUIPMENT REQUIRING THE SWITCH. WHERE THE MOTOR CONTROLLER IS NOT WITHIN SIGHT OF THE MOTOR OR OVERCURRENT PROTECTION, PROVIDE TWO SWITCHES AS REQUIRED.
 - DISCONNECT SWITCHES SHALL BE THE ENCLOSED HEAVY-DUTY TYPE WITH QUICK-MAKE, QUICK-BREAK MECHANISM AND EXTERNAL PAD-LOCKING OPERATING HANDLE.
 - ALL SWITCH ENCLOSURES SHALL BE NEMA TYPE 1, EXCEPT SWITCHES EXPOSED TO THE WEATHER SHALL HAVE NEMA TYPE 3R, RAIN TIGHT ENCLOSURES.
 - COMBINATION STARTER/DISCONNECTS AND CIRCUIT BREAKER/DISCONNECTS MAY ALSO BE USED FOR MOTOR LOADS.
 - COORDINATE DISCONNECT SWITCH POLES, NEUTRAL REQUIREMENTS, FUSE, VOLTAGE, AND AMPACITY WITH NAMEPLATE DATA OF EQUIPMENT SERVICED.
 - COORDINATE REQUIREMENTS FOR FUSE HOLDERS AND BLOCKS, AND REQUIRED.
 - LOCATE SWITCHES ACCESSIBLE AND WITHIN SIGHT OF EQUIPMENT SERVICED.
 - INSTALL DISCONNECT SWITCHES WITH HIGHEST OPERATOR/HANDLE AT HIGHEST POSITION 79" OR LESS.
 - PROVIDE DISCONNECT SWITCH FOR ALL CONDENSING UNITS.
- CIRCUIT BREAKERS
 - CONFORM TO NEMA AB 1, UL 50, UL 489, NEMA SG3.
 - CIRCUIT BREAKERS SHALL BE BY SIEMENS, CUTLER-HAMMER, GENERAL ELECTRIC, OR SQUARE-D.
 - COORDINATE CIRCUIT BREAKER POLES, NEUTRAL REQUIREMENTS, VOLTAGE, AND AMPACITY WITH NAMEPLATE OF EQUIPMENT SERVICED.
 - COORDINATE SHORT CIRCUIT CURRENT RATINGS.
 - SERIES RATINGS: PROVIDE MANUFACTURER TEST DATA FOR ALL EXISTING AND PROPOSED DEVICES UTILIZING SERIES RATINGS. SEALED BY PROFESSIONAL ENGINEER.
 - PROVIDE SUBMITTAL DATA FOR LISTED SERIES RATED DEVICES INDICATING HOW DEVICES MEET OR EXCEED AVAILABLE FAULT CURRENT.
 - PROVIDE SERIES RATINGS CALCULATIONS, WHERE REQUIRED.
 - DO NOT USE SERIES RATINGS COMBINATIONS FOR MOTOR APPLICATIONS.
 - MOLDED CASE CIRCUIT BREAKERS: TOGGLE-TYPE HANDLE WITH OVER-CURRENT TRIP PROTECTION AND QUICK-MAKE, QUICK-BREAK, NON-WELDING SILVER-ALLOY CONTACTS. UNIT SHALL INDICATE TRIP BY HANDLE POSITION OR INDICATOR VIEWING WINDOW.
 - PROVIDE MOTOR CIRCUIT PROTECTOR FOR MOTOR LOADS.
 - PROVIDE CIRCUIT BREAKER LOCK FOR ALL CIRCUIT BREAKERS FEEDING HVAC EQUIPMENT OR WATER HEATERS.
 - MOLDED CASE CIRCUIT BREAKERS SHALL BE "HACR" RATED FOR HVAC EQUIPMENT LOADS AND "SDW" RATED FOR LIGHTING LOADS.
 - CIRCUIT BREAKER ENCLOSURES
 - CONFORM TO UL 50, UL 58, NEMA AB1.
 - ENCLOSURES FOR CIRCUIT BREAKERS SHALL MATCH MANUFACTURER OF INSTALLED CIRCUIT BREAKER.
 - LOCATED ENCLOSED CIRCUIT BREAKERS ACCESSIBLE AND WITHIN SIGHT OF EQUIPMENT SERVICES.
 - INSTALL ENCLOSED CIRCUIT BREAKERS WITH HIGHEST OPERATOR/HANDLE AT HIGHEST POSITION 78" OR LESS.

ELECTRICAL SYSTEMS TESTING AND COMMISSIONING

- CONFORM TO UL 1244, UL 486, NECA 90, NEMA A84, NETA ATS.
- TIGHTEN AND VERIFY BOLTED BUS, MECHANICAL LUGS, AND WIRING TERMINATIONS TO MANUFACTURER SPECIFIED TORQUE.
- TEST INSULATION RESISTANCE (MEGGER) ALL NEW CIRCUITS TO INDICATE MINIMUM OF 250KOHM.
- TEST GROUNDING SYSTEM FOR CONTINUITY USING FALL OF POTENTIAL METHOD AND TO INDICATE MAXIMUM RESISTANCE OF 50OHM.
- VERIFY PHASE, NEUTRAL AND GROUND POLARITY FOR ALL WIRING DEVICES.
- TEST OPERATION OF ALL GROUND-FAULT CIRCUIT INTERRUPTER DEVICES.

26 31 12 - FIRE ALARM SYSTEM

- CONFORM TO NFPA 72, UL 38, UL 268, UL 521, UL 864, UL 1971.
- FIRE ALARM SYSTEM WILL BE DESIGNED UNDER SEPARATE CONTRACT AND INSTALLED UNDER SEPARATE PERMIT.
- COORDINATE WORK WITH FIRE ALARM CONTRACTOR.
- ANY FIRE ALARM DEVICES SHOWN ARE FOR REFERENCE ONLY TO INDICATE PROPOSED DEVICE AND EQUIPMENT LOCATIONS FOR COORDINATE ONLY AND ARE NOT TO BE CONSIDERED FINAL CODE-COMPLIANT DESIGN. EVEN IF NOT SHOWN IN PANEL SCHEDULE, PROVIDE A FIRE ALARM BRANCH CIRCUIT THAT IS DEDICATED, RED, LOOKABLE, PROPERLY LABELED, AND CONFORMS TO ALL OTHER REQUIREMENTS PER NFPA 72 10.6. COORDINATE AS REQUIRED.

26 52 19 - EMERGENCY EGRESS LIGHTING

- EMERGENCY EXIT SIGNS AND EGRESS LIGHTING FIXTURES SHALL BE CONNECTED TO THE SAME CIRCUIT AS NORMAL LIGHTING SERVING AREA, AHEAD OF ANY SWITCHING.**
- PROVIDE INTEGRAL BATTERY UNITS AS REQUIRED FOR EMERGENCY LIGHTING UNITS, EXIT SIGNS AND DESIGNATED FIXTURES.**
 - PROVIDE EMERGENCY EXIT AND EMERGENCY EGRESS LIGHTING TO COMPLY WITH IBC SECTION 1008 TO PROVIDE MINIMUM INITIAL 1.0FC ALONG ALL EGRESS PATHS AND MINIMUM 0.6FC AFTER 90 MINUTES.
- DELEGATED DESIGN: THE BASIS OF DESIGN EGRESS LIGHTING SYSTEM SHOWN ON THE DRAWINGS IS DIAGRAMMATIC AND FOR PERMITTING REFERENCE ONLY. A THIRD PART SHALL PERFORM/VERIFY THE EGRESS LIGHTING CALCULATIONS, EITHER USING THE BASIS OF DESIGN SYSTEM OR ANY ALTERNATE SYSTEM OR FIXTURE SELECTIONS. PROVIDE ANY ADDITIONAL MATERIALS OR MODIFICATIONS AS REQUIRED TO MEET AHJ REQUIREMENTS FOR SYSTEM PERFORMANCE.

26 28 13 - FUSES

- FUSES SHALL CONFORM TO THE LATEST EDITIONS OF NEMA, UL, AND NEC.
- FUSES SHALL BE DUAL-ELEMENT, 600-VOLT, CURRENT LIMITING, 200,000 AIC, AND SUITABLE FOR USE WITH DOWNSTREAM CIRCUIT BREAKERS, AS APPLICABLE.
- FURNISH AND INSTALL COMPLETE SETS OF FUSES FOR ALL SWITCHES REQUIRING SAME, INCLUDING THOSE REQUIRED IN SWITCHBOARDS AND MOTOR CONTROLLERS.
- FUSES SERVING ONLY MOTOR LOADS SHALL BE CLASS RK5.
- FUSES SERVING DISTRIBUTION SHALL BE CLASS RK1 OR L.
- PROVIDE 1 SPARE SET OF EACH TYPE/SIZE FUSE.

26 09 23 - LIGHTING FIXTURES AND ACCESSORIES

- LIGHTING SHALL BE INSTALLED IN ACCORDANCE WITH THE RECOMMENDED IES STANDARDS.
- ALL FIXTURES SHALL BE FURNISHED COMPLETE WITH SOCKETS, INTERNAL WIRING, LEADS, TRIM, HANGERS, SUPPORTS, FRAMES, BALLASTS, ETC., AS APPLICABLE.
- ALL FIXTURES SHALL BE SUPPORTED BY MEANS OF ADEQUATE HANGERS WITH ATTACHMENTS TO BUILDING CONSTRUCTION INDEPENDENT OF ANY CEILING SYSTEM.
- IN NEW BUILDINGS, ALL LAMPS SHALL BE 3500 DEG K IN COLOR. MATCH EXISTING LAMP COLOR IN EXISTING CONSTRUCTION.
- PER THE ENERGY CODE, ALL LIGHTING SHALL BE AUTOMATICALLY CONTROLLED, EXCEPT AS INDICATED, WITH MANUAL OVERRIDES. IT IS THE INTENTION OF THIS CONTRACT TO USE OCCUPANCY SENSORS AND LIGHTING CONTROL PANELS (INDEPENDENT FROM ONE ANOTHER) TO ACCOMPLISH THIS. LIGHTS REQUIRING AUTOMATIC CONTROL NOT CONTROLLED BY OCCUPANCY SENSORS ARE TO BE CONTROLLED BY A TIME CLOCK.
- PROVIDE FIXTURES WITH TOTAL FIXTURE WATTS NO GREATER THAN THOSE SCHEDULED.
- COORDINATE FIXTURE MOUNTING WITH ARCHITECTURAL REFLECTED CEILING PLANS, SPECIFICATIONS, AND ELEVATIONS AND PROVIDE TRIM AS REQUIRED FOR CEILING TYPES WHERE INSTALLED.
- SUPPORT FIXTURES FROM STRUCTURE ONLY.
- ALL BALLASTS SHALL BE HIGH-POWER-FACTOR (0.95 MINIMUM), LOW THD (10% MAXIMUM), ENERGY-SAVING, ELECTRONIC TYPE.
- COORDINATE DIMMING BALLAST/DRIVER REQUIREMENTS WITH DIMMERS AND DIMMING ZONES SHOWN WHEN REQUIRED FOR LED DIMMING PROVIDE 0-10V DIMMING DRIVERS AS APPROPRIATE.
- EXTERIOR LIGHTING SHALL BE CONTROLLED BY PHOTOCELLS/TIMERS FOR "DUSK-TO-DAWN" OPERATION, UNON. LOCATE PHOTOCELLS WITH SENSOR FACING GENERALLY NORTH TO NORTHEAST, WHERE POSSIBLE.
- PROVIDE FIXTURES LOCATED IN UNHEATED SPACES WITH LOW TEMPERATURE BALLAST AND LAMPS.
- ALL EXTERIOR LIGHTING LAMPS SHALL BE OF THE SAME COLOR TEMPERATURE.
- FIXTURES ARE PERMITTED TO PROVIDE LUMINOSITY UP TO 10% GREATER THAN THE SPECIFIED LUMENS IN THE LIGHT FIXTURE SCHEDULE. LUMENS ARE NOT PERMITTED TO BE RATED A LUMINOSITY LESS THAN THE SPECIFIED LUMENS IN THE LIGHT FIXTURE SCHEDULE.

TESTING

- TEST VOLTAGE AT SERVICE EQUIPMENT AND SUBMIT MEASUREMENTS TO ENGINEER OF RECORD FOR REVIEW.
- FOR SINGLE PHASE SERVICE, MEASURE VOLTAGES: A-B, B-N, AND A-N.
- FOR THREE PHASE SERVICE, MEASURE VOLTAGE: A-B, B-C, C-A, A-N, B-N, AND C-N.
- TEST VOLTAGE AT **EXISTING** SERVICE EQUIPMENT

SUBMIT THE FOLLOWING PRIOR TO PROCUREMENT OR CONSTRUCTION:

NOTE: DESIGN IS CONTINGENT ON HAVING THE FOLLOWING INFORMATION. NO EQUIPMENT OR CONSTRUCTION SHALL BE PERMITTED TO BEGIN PRIOR TO SUBMITTING THE INFORMATION LISTED BELOW FOR ENGINEERING APPROVAL. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT THIS INFORMATION IS GATHERED AND SUBMITTED TO THE ENGINEER IN A TIMELY MANNER.

- MOST RECENT 12 MONTHS OF ELECTRIC UTILITY BILLS**
 - PROVIDE MOST RECENT 12 MONTHS OF ELECTRIC UTILITY BILLS FOR ALL OTHER TENANTS ON THE SAME EXISTING METER CENTER. SUBMIT REPORT TO ENGINEER OF RECORD FOR REVIEW.
- DEMAND METERING (PRICE AS AN ADD ALTERNATE TO THE CONTRACT - ONLY REQUIRED IF 12 MONTHS OF BILLS ARE NOT AVAILABLE PER NEC 220.87)**
 - PROVIDE 30 DAY METERING OF MAXIMUM DEMAND ON THE SERVICE CONDUCTORS. SUBMIT REPORT TO ENGINEER OF RECORD FOR REVIEW.
 - MAXIMUM DEMAND SHALL BE BASED ON A MEASURE OF AVERAGE POWER DEMAND OVER A 15-MINUTE PERIOD CONTINUOUSLY RECORDED OVER A 30 DAY PERIOD AND SHALL CONFORM WITH NEC 220.87.
 - DEMAND READING SHALL BE TAKEN WHEN THE BUILDING OR SPACE IS OCCUPIED AND SHALL INCLUDE BY MEASUREMENT OR CALCULATION THE LARGER OF THE HEATING OR COOLING EQUIPMENT LOAD, AND OTHER LOADS THAT MAY BE PERIODIC IN NATURE TO SEASONAL OR SIMILAR CONDITIONS.
- CONDUCTOR SIZE AND VOLTAGE CHARACTERISTICS**
 - INVESTIGATE EXISTING CONDUCTORS AND DOCUMENT SIZE, CONDUCTOR MATERIAL, INSULATION MATERIAL, AND QUANTITY OF CONDUCTORS TO ENGINEER FOR REVIEW.
 - INVESTIGATE VOLTAGE CHARACTERISTICS. MEASURE AND DOCUMENT L-N AND L-L VOLTAGE BETWEEN ALL PHASES AT THE POINT OF SERVICE ENTRY AND SUBMIT TO ENGINEER FOR REVIEW.
- PRODUCT DATA**
 - THE ENGINEER SHALL BE PROVIDED WITH CUT SHEETS OF THE FOLLOWING ITEMS FOR REVIEW:
 - ELECTRICAL EQUIPMENT (INCLUDING SERVICE EQUIPMENT AND PANELBOARDS)
 - LIGHT FIXTURES
 - DISCONNECTS (INCLUDING FUSE SELECTIONS IF APPLICABLE)
- SHOP DRAWINGS AND EQUIPMENT LISTS**
 - SHOP DRAWINGS OF THE ELECTRICAL EQUIPMENT
 - A SCHEDULED LIST OF ALL APPROVED MECHANICAL EQUIPMENT INDICATING MAKE, MODEL, VOLTAGE, PHASE, MCA, AND MOCP.
 - A SCHEDULED LIST OF ALL SPECIAL EQUIPMENT INDICATING MAKE, MODEL, NEMA PLUG TYPE (IF APPLICABLE), VOLTAGE, PHASE, MCA, AND MOCP. THIS LIST SHALL BE SIGNED BY THE OWNER WITH THE FOLLOWING STATEMENT:
 - "I APPROVE THIS LIST OF EQUIPMENT IT REFLECTS THE FINAL INVENTORY OF EQUIPMENT AND RELEASES THE CONTRACTOR TO PURCHASE THE REQUIRED MATERIALS TO FINALIZE THE ELECTRICAL CONNECTIONS IN ACCORDANCE WITH THESE SPECIFICATIONS."
 - FIRE PENETRATIONS - SHOW ALL FIRE RATED ASSEMBLIES (FLOOR AND CEILING) WITH THEIR RATINGS AND UL ASSEMBLY TYPE, EVEN IF NOT BEING PENETRATED. INDICATE THE LOCATION AND TYPE OF FIRE RESISTANCE BEING USED.



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ENGINEER: Kenneth Shultz, PE.
LICENSE: #0402053673.
EMAIL: kshultz@permitzip.com.



NO.	DESCRIPTION	DATE
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BUILDING DATA

BUILDING CONSTRUCTION: II-B
USE GROUP: B
NOT IN FLOOD PLAIN.
TOTAL AREA OF PROJECT: 1,300 SF
TOTAL AREA OF BUILDING: 10,000 SF
OCCUPANCY LOAD: 13
CHANGE OF USE? NO
LEVEL OF RENOVATION: GREATER THAN 50%
ALTERATION LEVEL: III

THE JOINT CHIRAPRACTIC

1011 UNIVERSITY BLVD,
SUITE 185, SUFFOLK,
VA

PROJECT NO: 21.4257
13 MAY 2021

SHEET SPECIFICATION

E6.11

As indicated