

COASTAL RIVERINE SQUADRON FOUR RENOVATIONS AND REPAIRS BUILDING 2009

JOINT EXPEDITIONARY BASE LITTLE CREEK - FORT STORY
VIRGINIA BEACH, VIRGINIA

NAVFAC MID-ATLANTIC, FEAD LITTLE CREEK: LITTLE CREEK SITE



PROJECT NOTES

- PROJECT DESCRIPTION: PROVIDE NEW FINISHES, MECHANICAL SYSTEMS, AND ELECTRICAL SYSTEMS AS REQUIRED TO UPGRADE EXISTING STORAGE AND MAINTENANCE FACILITY.
- SPACES IN ADJACENT BUILDING 2015 ARE TO REMAIN IN USE THROUGHOUT THE WORK SCHEDULE. AVOID DISRUPTIONS TO BUILDING ACCESS AND PARKING. NORMAL BUSINESS HOURS ARE 7:00 AM - 4:00 PM, MONDAY THROUGH FRIDAY.
 - COORDINATE WORK SCHEDULE AND POTENTIALLY DISRUPTIVE CONSTRUCTION ACTIVITIES WITH BUILDING FACILITY MANAGER.
 - NO WORK TO EITHER THE TELEPHONE, NIPR/SIPR NETWORK SYSTEMS OR IDS SECURITY SYSTEM IS INCLUDED IN THIS PROJECT. IT IS THE RESPONSIBILITY OF THE ACTIVITY TO PROVIDE FOR THIS WORK.
 - OFFICE FURNITURE WITHIN BUILDING 2009 WILL REMAIN. THE CONTRACTOR SHALL PROTECT AND/OR RELOCATE EXISTING FURNISHINGS OVER THE COURSE OF THE WORK AND RETURN THEM TO THEIR APPROXIMATE ORIGINAL LOCATIONS.
 - THE CONSTRUCTION PERIOD IS PROJECTED TO BE 20 WEEKS, FROM JULY 1 TO DECEMBER 1. THE GOVERNMENT WILL VACATE THE BUILDING FOR THIS PERIOD.

GENERAL NOTES

- CONSTRUCTION WORK AREAS AND PATHWAYS SHALL BE CLEANED DAILY. CONTRACTOR SHALL COVER AND PROTECT EXISTING FURNITURE AND EQUIPMENT IN AND AROUND THE WORK AREAS FROM DAMAGE.
- WHERE EXISTING CONSTRUCTION OR EQUIPMENT TO REMAIN IS DAMAGED DURING CONSTRUCTION, CONTRACTOR SHALL MAKE REPAIRS USING LIKE MATERIALS TO MATCH EXISTING IN ALL WAYS.
- ALL INDICATED DIMENSIONS AND EXISTING CONDITIONS ARE CONSIDERED APPROXIMATE AND SHALL BE FIELD VERIFIED PRIOR TO ORDERING MATERIALS, FABRICATIONS OR BEGINNING CONSTRUCTION.
- CONTRACTOR SHALL INVESTIGATE ALL EXISTING ARCHITECTURAL, STRUCTURAL, MECHANICAL AND ELECTRICAL FIELD CONDITIONS PRIOR TO COMMENCING ANY DEMOLITION AND/OR NEW CONSTRUCTION. CONTRACTOR SHALL NOTIFY CONTRACTING OFFICER PRIOR TO INTERRUPTING UTILITIES.
- CONTRACTOR, ALL OF HIS STAFF, WORKERS, SUBCONTRACTORS, SUPPLIERS, ETC. ARE SUBJECT TO THE SAME CONDITIONS AS THOSE GOVERNING THE CONTRACTOR. REFER TO SPECIFICATIONS FOR SECURITY REQUIREMENTS AND OTHER WORK RESTRICTIONS.
- CONTRACTORS STORAGE AND PARKING AREA SHALL BE AS DIRECTED BY THE CONTRACTING OFFICER.
- ALL ITEMS AND WORK NOT INDICATED TO BE EXISTING SHALL BE FURNISHED AND INSTALLED AS PART OF THE REQUIREMENTS OF THIS CONTRACT.
- IT IS THE CONTRACTORS RESPONSIBILITY TO RECORD EXISTING CONDITIONS PRIOR TO STARTING WORK.

PROJECT SUMMARY

BUILDING 2009 WILL BE COMPLETELY AVAILABLE TO THE CONTRACTOR ON OR ABOUT JULY 1, 2016. ANY WORK PRIOR TO THIS DATE MUST BE COORDINATED WITH THE ACTIVITY'S ONGOING OPERATIONS. WORK MUST BE SUBSTANTIALLY COMPLETE BY DECEMBER 1, 2016.

THE WORK INCLUDES PARTIAL INTERIOR DEMOLITION AT BUILDING 2009. THE INTERIOR WILL BE RECONFIGURED TO PROVIDE A NEW FEMALE HEAD / LOCKER ROOM, A CONFERENCE / TRAINING ROOM, AND SIPRNET CAFE. AT OFFICE AREAS TO REMAIN, CARPET AND BASE WILL BE REPLACED AND ELECTRICAL SERVICE IMPROVED TO PROVIDE FOR COMPUTER WORKSTATIONS AS INDICATED ON THE FURNITURE PLAN.

IN ORDER TO CORRECT CURRENT LIFE SAFETY DEFICIENCIES, A COMPLETE WET PIPE SPRINKLER SYSTEM IN COMPLIANCE WITH REQUIREMENTS OF NFPA 13 WILL BE PROVIDED.

FURNITURE IS NOT PART OF THE CONSTRUCTION CONTRACT. FURNITURE PLAN IS INCLUDED TO ASSIST THE CONTRACTOR IN LOCATING ELECTRICAL OUTLETS AND DEVICES.

UTILITY NOTES

- EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY AND BASED ON FIELD SURVEYS, AVAILABLE RECORDS, VERBAL INFORMATION AND/OR PHYSICAL FEATURES. PRIOR TO EXCAVATION (AT LEAST 72 HOURS OR THE MORE RESTRICTIVE MINIMUM NOTIFICATION PERIOD), THE CONTRACTOR SHALL CONTACT THE PUBLIC WORKS DIVISION, FEAD AND STATION LOCATING SERVICE SUCH AS "DIGSAFE, MISS UTILITY, ETC." TO ALLOW MARKING OF EXISTING BURIED UTILITIES.
- ALL EXISTING UNDERGROUND UTILITIES IN THE WORK AREA MUST BE POSITIVELY IDENTIFIED BY A THIRD PARTY, INDEPENDENT, PRIVATE UTILITY LOCATING COMPANY, IN ADDITION TO ANY STATION LOCATING SERVICE SUCH AS "DIGSAFE, MISS UTILITY, ETC.", AND COORDINATED WITH THE PUBLIC WORKS DIVISION, AND FEAD. ANY MARKINGS MADE DURING THE UTILITY INVESTIGATION MUST BE MAINTAINED THROUGHOUT THE CONTRACT.
- WHENEVER CONTRACT WORK INVOLVES CHIPPING, SAW CUTTING, OR CORE DRILLING THROUGH CONCRETE, BITUMINOUS ASPHALT OR OTHER IMPERVIOUS SURFACES, THE THIRD PARTY, INDEPENDENT, PRIVATE LOCATING COMPANY SHALL LOCATE UTILITY DEPTH BY USE OF GROUND PENETRATING RADAR (GPR), X-RAY, BORE SCOPE, OR ULTRASOUND PRIOR TO THE START OF DEMOLITION AND CONSTRUCTION. OUTAGES TO ISOLATE UTILITY SYSTEMS MUST BE USED IN CIRCUMSTANCES WHERE UTILITIES ARE UNABLE TO BE POSITIVELY IDENTIFIED. THE USE OF HISTORICAL DRAWINGS DOES NOT ALLEVIATE THE CONTRACTOR FROM MEETING THIS REQUIREMENT.
- THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND ANY DAMAGE TO THE UTILITIES SHALL BE IMMEDIATELY REPAIRED AT THE CONTRACTORS EXPENSE. THE CONTRACTOR SHALL BE REQUIRED AND AGREES TO COMPLY WITH ALL THE PROVISIONS OF THE GOVERNMENT, STATE AND UTILITY FOR UNDERGROUND DAMAGE PREVENTION AND HEREBY AGREES TO HOLD THE GOVERNMENT HARMLESS AGAINST ANY LOSS, DAMAGES AND CLAIMS OF ANY NATURE WHATSOEVER ARISING OUT OF FAILURE TO COMPLY WITH SAID PROVISIONS.



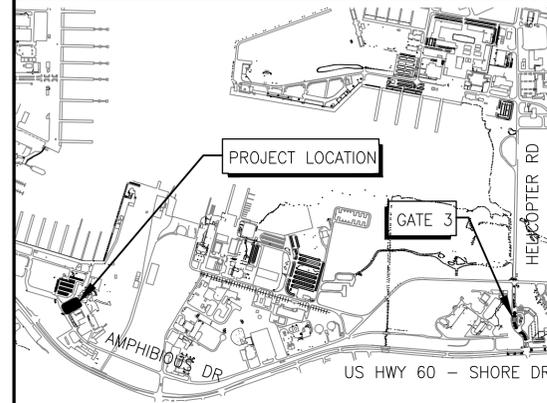
LEGEND

- CARET: DENOTES INTERIOR ELEVATION OR PHOTOGRAPH
 - ARROW DENOTES SECTION CUT OR EXTERIOR ELEVATION.
 - DETAIL, SECTION, OR ELEVATION NUMBER. NUMBER DENOTES GRID PLACEMENT ON SHEET WHICH DETAIL IS DRAWN.
 - SHEET ON WHICH DETAIL, SECTION, OR ELEVATION IS DRAWN
- TITLE**
SCALE: 1'-0" = 1'-0"
- SHEET(S) ON WHICH DETAIL, SECTION, OR ELEVATION IS CUT.

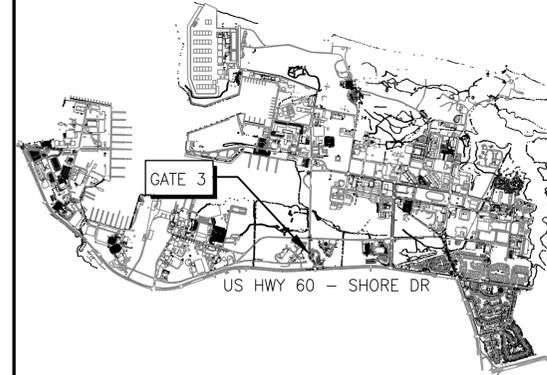
ABBREVS

AFF	ABOVE FINISH FLOOR	INSUL.	INSULATION
APPROX.	ABBREVIATIONS	ID	INSIDE DIAMETER
CLG.	APPROXIMATELY	M.O.	MASONRY OPENING
CONC.	CEILING	MECH.	MECHANICAL
CMU	CONCRETE	MTL.	METAL
CONT.	CONCRETE MASONRY UNIT	N/A	NOT APPLICABLE
DTL.	CONTINUOUS	N.I.C.	NOT IN CONTRACT
DIA.	DETAIL	O.C.	ON CENTER
DWG.	DIAMETER	PEBS	PRE-ENGINEERED METAL BUILDING SYSTEM
EA.	DRAWING	REINF.	REINFORCED
EWC	EACH	SIM.	SIMILAR
ELEC.	ELECTRIC WATER COOLER	SPEC	SPECIFICATION
EQ.	ELECTRICAL	SF	SQUARE FOOT
EX./EXISTG.	EQUAL	STRUCT.	STRUCTURAL
FD	EXISTING	TOM	TOP OF MASONRY
FIN.	FLOOR DRAIN	TOS	TOP OF STEEL
GALV.	FINISH	TYP.	TYPICAL
GWB	GALVANIZED	VCT	VINYL COMPOSITION TILE
HM	GYPSPUM WALLBOARD	VIF	VERIFY IN FIELD
HORIZ.	HOLLOW METAL	W/	WITH
HR	HORIZONTAL		
	HOUR		

LOCATION MAP



BASE MAP



BUILDING DATA

CONSTRUCTION TYPE AND AREA: IIB (ASSUMED), 15220 GSF

HEIGHT: 14 FT, 1 STOREY

OCCUPANCY CLASSIFICATION	AREA	OCCUPANTS
STORAGE	3953 GSF	13 @ 1:300
BUSINESS	5315 GSF	53 @ 1:100
ASSEMBLY	1837 GSF	262 @ 1:7
MALE LOCKER ROOM		
LOCKER AREA	1462 GSF	98 @ 1:15
FIXTURE COUNT		
TOTAL		
FEMALE LOCKER ROOM		
LOCKER AREA	248 GSF	17 @ 1:15
FIXTURE COUNT	10 EACH	10
TOTAL		27
MECH	188 GSF	1 @ 1:300

TOTAL OCCUPANCY LOAD: 504

FIRE PROTECTION: FULLY SPRINKLERED

SHEET LIST

NUMBER	NAVFAC DWG. NO.	SHEET TITLE	
01	G-100	19719106	NOTES, ABBREVIATIONS, LEGENDS, MAPS
02	AD-101	19719107	DEMOLITION FLOOR PLANS
03	A-101	19719108	NEW WORK FLOOR AND CEILING PLANS
04	A-102	19719109	ENLARGED FLOOR PLAN
05	A-201	19719110	INTERIOR ELEVATIONS
06	A-301	19719111	MISCELLANEOUS DETAILS
07	A-501	19719112	DOOR AND FINISH SCHEDULES
08	A-901	19719113	PHOTOGRAPHS
09	A-902	19719114	FURNITURE PLANS
10	F-001	19719115	FIRE PROTECTION NOTES, SYMBOLS, AND LEGEND
11	F-101	19719116	FIRE PROTECTION NEW WORK PLAN
12	F-501	19719117	FIRE ALARM / MASS NOTIFICATION DETAILS
13	F-502	19719118	FIRE SPRINKLER DETAILS
14	P-001	19719119	PLUMBING GENERAL DATA SHEET
15	PD-101	19719120	BUILDING KEYPLAN - DEMOLITION AND NEW WORK
16	PD-401	19719121	ENLARGED LOCKER ROOM DEMOLITION PLAN
17	PD-402	19719122	ENLARGED DEMOLITION PLANS
18	P-403	19719123	ENLARGED LOCKER ROOM DWV PLAN - NEW WORK
19	P-404	19719124	ENLARGED LOCKER RM. WATER PLAN - NEW WORK
20	P-405	19719125	ENLARGED NEW WORK PLANS
21	P-701	19719126	WASTE RISERS
22	P-702	19719127	WATER RISERS
23	M-001	19719128	MECHANICAL GENERAL DATA SHEET
24	MD-101	19719129	BUILDING KEYPLAN - DEMOLITION AND NEW WORK
25	MD-401	19719130	WEST END PLAN VIEW - DEMOLITION
26	MD-402	19719131	MIDDLE OF BUILDING PLAN VIEW - DEMOLITION
27	MD-403	19719132	EAST END PLAN VIEW - DEMOLITION
28	M-404	19719133	WEST END PLAN VIEW - NEW WORK
29	M-405	19719134	MIDDLE OF BUILDING PLAN VIEW - NEW WORK
30	M-406	19719135	EAST END PLAN VIEW - NEW WORK
31	M-501	19719136	DETAILS AND RISER
32	M-601	19719137	MECHANICAL SCHEDULES
33	M-801	19719138	CONTROLS AND SCHEDULE
34	E-001	19719139	ELECTRICAL LEGEND, ABBREVIATIONS, & NOTES
35	ED-101	19719140	ELECTRICAL DEMOLITION PLAN
36	EL-101	19719141	LIGHTING PLAN
37	EL-501	19719142	LIGHTING DETAILS AND FIXTURE SCHEDULE
38	EP-101	19719143	POWER PLAN
39	EP-601	19719144	PANELBOARD SCHEDULES AND RISER DIAGRAM

APPROVED: _____

FOR COMMANDER NAVFAC

ACTIVITY

SAISFACTORY TO DATE

DES: WRS | DW: KAF | CHK: GEB

BRANCH MANAGER: G.E. BAILEY, P.E.

CHIEF ENGR/ARCH: S.M. LANTZ, P.E.

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
FEAD LITTLE CREEK
RENOVATIONS AND REPAIRS TO BUILDING 2009

NAVAL FACILITIES ENGINEERING COMMAND
JEBCLS - VIRGINIA BEACH, VA
VIRGINIA BEACH, VA

NOTES, ABBREVIATIONS, LEGENDS, MAPS

SCALE: AS NOTED

PROJECT NO.: 1361870

CONSTR. CONTR. NO. N/A

NAVFAC DRAWING NO. 12719106

SHEET 01 OF 39

G-100

DRAWFORM REVISION: 10 MARCH 2009

FILE NAME: P:\VA\littcreek\MultipleBuildings\2015_1361870_DBB_Reorganize_Admin_Spaces\B_Design\BUDC_2009\Drawings\Sheet\08_Architectural\1361870_G-100.dwg LAYOUT NAME: C100 PLOTTED: Wednesday, April 13, 2016 - 1:44pm USER: hurf.leichter

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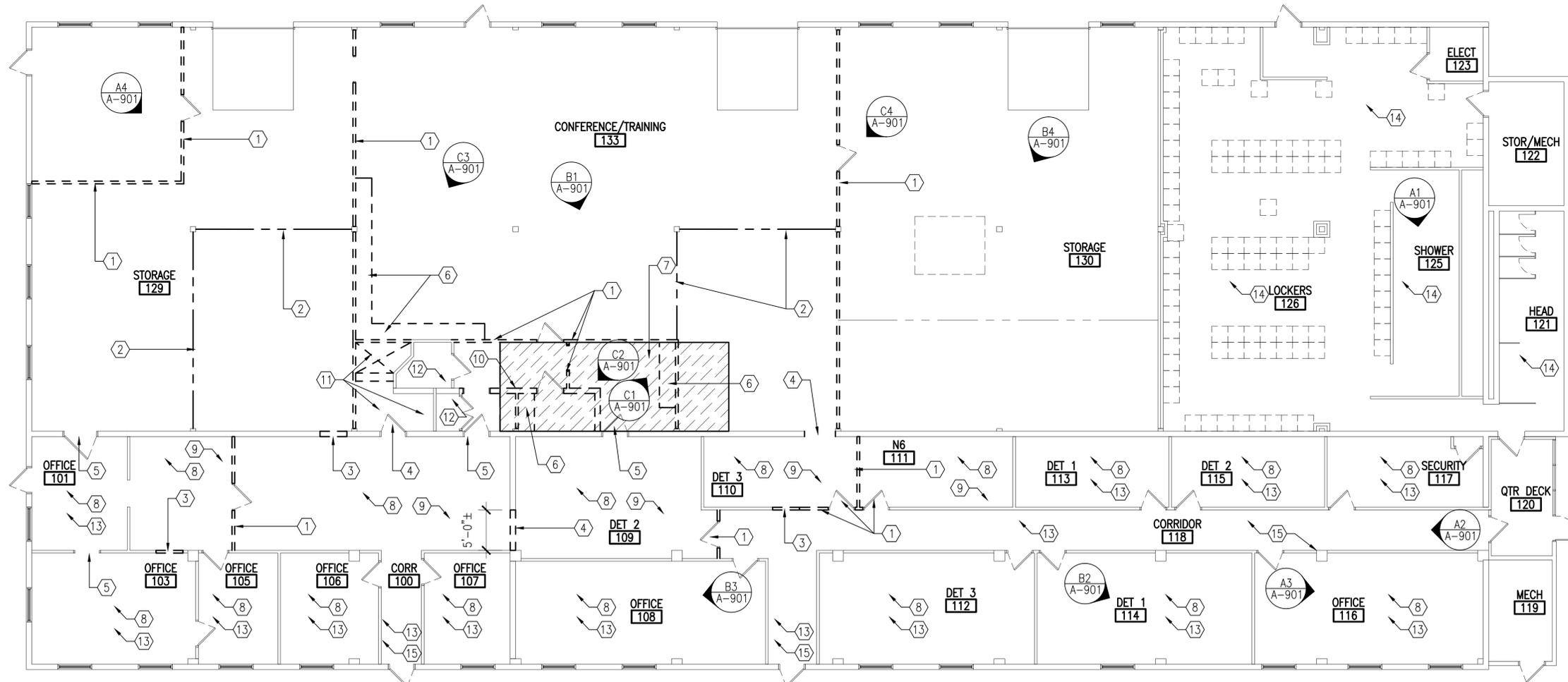
GENERAL SHEET NOTES

- ADJACENT AREAS OF BUILDING 2009 ARE TO REMAIN OCCUPIED AND OPERATIONAL THROUGHOUT THE PROJECT. COORDINATE THE WORK SCHEDULE, UTILITY OUTAGES, AND OTHER POTENTIALLY DISRUPTIVE CONSTRUCTION ACTIVITIES WITH THE BUILDING FACILITY MANAGER. NORMAL BUSINESS HOURS ARE 7:00 AM - 4:00 PM.
- IT IS THE INTENT OF THIS PROJECT TO PERFORM A COMPLETE DEMOLITION OF THE NOTED AREAS. ANY FURNISHINGS, EQUIPMENT, OR ACCESSORIES AFFIXED TO ITEMS INDICATED TO BE REMOVED SHALL BE REMOVED AS WELL.
- SEE PLUMBING, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS AND EQUIPMENT NOT SHOWN.

DEMOLITION KEYNOTES

- REMOVE GYPSUM OR PLYWOOD / STUD PARTITION IN ITS ENTIRETY INCLUDING ASSOCIATED DOORS AND FRAMES
- REMOVE WIRE CAGE PARTITION IN ITS ENTIRETY
- CUT IN ROUGH OPENING FOR NEW DOOR - SEE DOOR SCHEDULE FOR PROPER SIZE
- REMOVE DOOR AND FRAME. PREPARE OPENING FOR NEW OPENING FRAME. SEE DOOR SCHEDULE FOR PROPER SIZE
- REMOVE DOOR AND FRAME AND INFILL OPENING TO MATCH
- REMOVE CASEWORK AND TOPS
- SAWCUT AND REMOVE CONCRETE SLAB IN SHADED AREA, EXCAVATE AS REQUIRED TO EXPOSE SANITARY DRAIN LINES.
- REMOVE EXISTING CARPET AND RESILIENT BASE. PREPARE SLAB AS REQUIRED FOR INSTALLATION OF NEW FINISHES AS SCHEDULED
- REMOVE EXISTING ACOUSTIC CEILING PANELS AND GRID - PRESERVE SUSPENSION SYSTEM FOR RE-USE WITH NEW CEILING. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.
- REMOVE CMU WALL COMPLETE FROM FLOOR TO UNDERSIDE OF ROOF DECK
- COMPLETELY DEMOLISH EXISTING BATHROOM, INCLUDING FIXTURES, STALLS, SHOWER PLATFORM, AND CEILING
- EXISTING SERVER AND ELECTRICAL ROOMS ARE TO REMAIN IN PLACE. DO NOT DISTURB ASSOCIATED COMPUTER AND ELECTRICAL EQUIPMENT. SERVER ROOM 105 IS TO REMAIN UNDISTURBED. DO NOT CUT, IMPACT, OR OTHERWISE DAMAGE ROOM ENVELOPE, INCLUDING WALLS, CEILING, FLOOR SLAB, DOOR, AND DOOR HARDWARE. SHOULD ROOM ENVELOPE BECOME COMPROMISED AS A RESULT OF NEGLIGENT CONSTRUCTION ACTIVITIES, CEASE WORK AND NOTIFY THE GOVERNMENT IMMEDIATELY.
- REMOVE CEILING TILES FROM EXISTING GRID TO REMAIN AS REQUIRED FOR INSTALLATION OF NEW SPRINKLER SYSTEM. PRESERVE TILES AND REPLACE
- PARTIALLY REMOVE SUSPENDED GYPSUM CEILING AS REQUIRED FOR INSTALLATION OF HVAC EQUIPMENT AND NEW SPRINKLER SYSTEM.
- REMOVE RESILIENT BASE. EXISTING VINYL COMPOSITION TILE FLOOR TO REMAIN

GRAPHIC SCALE



FURNITURE NOTE:
 EXISTING FURNITURE IS TO REMAIN IN THE BUILDING, RELOCATED BY THE GOVERNMENT AS REQUIRED TO PERFORM CONSTRUCTION ACTIVITY. COORDINATE FURNITURE RELOCATION REQUIRED FOR ONGOING CONSTRUCTION WITH THE GOVERNMENT PERSONNEL CHARGED WITH PERFORMING SUCH RELOCATION. ANTICIPATE FURNITURE TO BE RELOCATED AND PROVIDE SUFFICIENT NOTICE TO THE GOVERNMENT TO AVOID SCHEDULE DELAYS.

DEMOLITION FLOOR PLAN

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



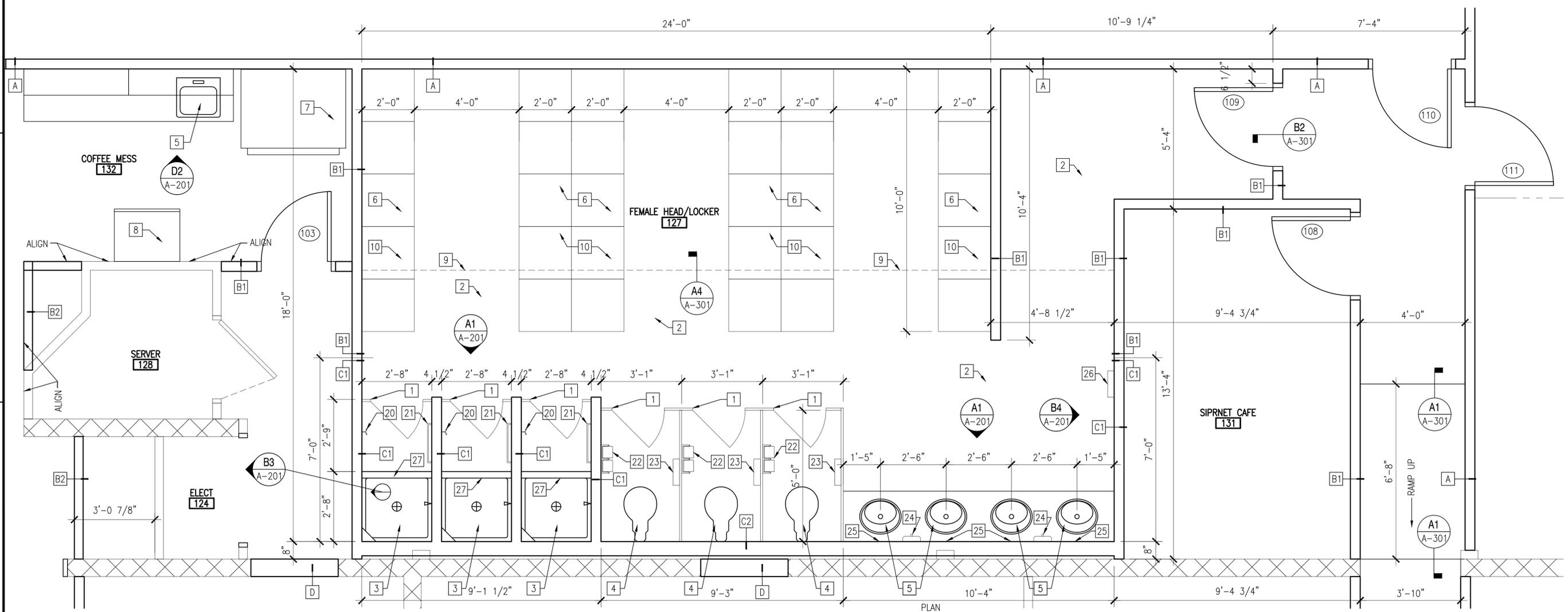
AD-101

FILE NAME: P:\A\Hitec\Navfac\Drawings\2009\Drawings\Sheet\08_Architectural\1361870-40-101.dwg LAYOUT NAME: AD-101 PLOTTED: Wednesday, April 13, 2016 3:22pm USER: huftechtner

APPROVED	DATE
FOR COMMANDER NAVFAC	
SATISFACTORY TO	DATE
DES ???	DRW ???
CHK GEB	
BRANCH MANAGER G.E. BAILEY, P.E.	
CHIEF ENGR/ARCH S.M. LANTZ, P.E.	
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND JEFCS - VIRGINIA BEACH, VA JOINT EXPEDITIONARY BASE LITTLE CREEK-FORT STORY VIRGINIA BEACH, VA RENOVATIONS AND REPAIRS TO BUILDING 2009 DEMOLITION FLOOR PLAN	
SCALE: AS NOTED	
PROJECT NO.: 1361870	
CONSTR. CONTR. NO. N/A	
NAVFAC DRAWING NO. 12719107	
SHEET 02 OF 39	
AD-101 <small>DRAWFORM REVISION: 10 MARCH 2009</small>	

FILE NAME: P:\VA\Hitec\enr\MultipleBuildings\2015_1361870_LDBB_Reorgnize_Admin_Spaces\B_Design\BUD_2009\Drawings\Sheet\08_Architectural\1361870-A-102.dwg LAYOUT NAME: A-102 PLOTTED: Wednesday, April 13, 2016 - 14:25pm USER: kuf.fletcher

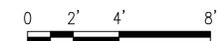
1 GENERAL SHEET NOTES	2 NEW WORK KEYNOTES: 1--10	3 ACCESSORY KEYNOTES: 20-27	4 SHOWER RECEPTOR REQUIREMENTS	5 PARTITION TYPES														
<ol style="list-style-type: none"> NEW DOORS ARE DESIGNATED WITH NUMBERS: (102) SEE DOOR SCHEDULE SHEET A-501 FOR DOOR AND FRAME REQUIREMENTS, DETAIL REFERENCES, AND HARDWARE SETS WHERE NEW PARTITIONS FORM CONTINUATION OF EXISTING PARTITIONS TO REMAIN, IT IS INTENDED THAT FINISHES BE ALIGNED. PATCH EXISTING FINISHES TO REMAIN AS REQUIRED TO ACHIEVE A SMOOTH TRANSITION TO NEW WORK WHERE EXISTING OPENINGS ARE TO BE INFILLED, MATCH THE CONSTRUCTION OF THE EXISTING WALL AND PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING AND NEW WORK SEE PLUMBING, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS AND EQUIPMENT NOT SHOWN. SERVER ROOM 105 IS TO REMAIN UNDISTURBED. DO NOT CUT, IMPACT, OR OTHERWISE DAMAGE ROOM ENVELOPE, INCLUDING WALLS, CEILING, FLOOR SLAB, DOOR, AND DOOR HARDWARE. SHOULD ROOM ENVELOPE BECOME COMPROMISED AS A RESULT OF NEGLIGENCE CONSTRUCTION ACTIVITIES, CEASE WORK AND NOTIFY THE GOVERNMENT IMMEDIATELY. 	<ol style="list-style-type: none"> PROVIDE HIGH DENSITY POLYMER PRIVACY PARTITIONS AT SHOWERS AND TOILETS CERAMIC TILE FINISH ON CONCRETE FLOOR 32" X 32" CENTER DRAIN TERRAZZO SHOWER RECEPTOR - SEE ADDITIONAL REQUIREMENTS, THIS SHEET FLOOR MOUNTED FLUSH VALVE TOILET - SEE PLUMBING DRAWINGS FOR ADDITIONAL REQUIREMENTS DROP IN SINK - SEE PLUMBING DRAWINGS FOR ADDITIONAL REQUIREMENTS GEAR LOCKERS - NOT IN CONTRACT VENDING MACHINE - NOT IN CONTRACT REFRIGERATOR - NOT IN CONTRACT DASHED LINE INDICATES GENERAL LIMITS OF NEW SLAB IN LOCKER AREA - COORDINATE EXACT LIMITS WITH UNDERSLAB PLUMBING REQUIREMENTS PROVIDE 4" HIGH CONCRETE CURB UNDER GEAR LOCKERS - CAST CURB INTEGRAL WITH FLOOR SLAB AND PROVIDE COVE TILE BASE 	<ol style="list-style-type: none"> DOUBLE TOWEL/GARMENT HOOK - 54" AFF 24" TOWEL BAR - 54" AFF DOUBLE ROLL TOILET TISSUE HOLDER - SPINDLE AT 24" AFF SANITARY NAPKIN DISPOSAL - TOP AT 32" AFF SOAP DISPENSER - BOTTOM AT 41" AFF 18"x30" MIRROR WITH SHELF - BOTTOM AT 36" AFF PAPER TOWEL DISPENSER - MECHANISM AT 54" AFF SHOWER CURTAIN ROD WITH CURTAIN AND HOOKS - NOT SHOWN 	<ul style="list-style-type: none"> RECEPTOR TO BE MANUFACTURED OF TAN AND WHITE MARBLE CHIPS CAST IN WHITE PORTLAND CEMENT, COMPRESSIVE STRENGTH 3000 PSI AT SEVEN DAYS. SURFACE TO BE GROUND, POLISHED, AND THE ENTIRE UNIT SEALED TO RESIST STAINS AND MOISTURE AFTER GROUTING ANY AIR HOLES OR PITS. REINFORCE RECEPTOR WITH 16 GAUGE WIRE. PROVIDE CAST INTEGRAL GALVANIZED-BONDERIZED FLANGE EXTENDING NOT LESS THAN 1" ABOVE SHOULDER ON THREE SIDES. PROVIDE BRASS CAST INTEGRAL DRAIN BODY WITH A NON-CAULKED CONNECTION NOT LESS THAN ONE INCH DEEP TO A TWO INCH PIPE PROVIDE REMOVABLE STAINLESS STEEL STRAINER PLATE. COMPLY WITH MANUFACTURER'S PRODUCT-SPECIFIC INSTRUCTIONS SETTING BED AND WATER RESISTANT CAULKING. PROVIDE MANUFACTURER'S STANDARD THREE YEAR LIMITED WARRANTY. 	<table border="1"> <thead> <tr> <th>KEYNOTE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>A1</td> <td>3 1/2" STEEL STUDS AT 16" ON CENTER 1/2" TYPE X GYPSUM WALLBOARD BOTH SIDES 1 HOUR FIRE RATING, EXTEND TO UNDERSIDE OF DECK</td> </tr> <tr> <td>B1</td> <td>3 1/2" STEEL STUDS AT 16" ON CENTER 1/2" GYPSUM WALLBOARD BOTH SIDES ACOUSTIC BATT INSULATION EXTEND TO 8" ABOVE CEILING AND BRACE DIAGONALLY AT 48" O.C.</td> </tr> <tr> <td>B2</td> <td>3 1/2" STEEL STUDS AT 16" ON CENTER 1/2" GYPSUM WALLBOARD ONE SIDE EXTEND TO 4" ABOVE CEILING AND BRACE DIAGONALLY AT 48" O.C.</td> </tr> <tr> <td>C1</td> <td>3 1/2" STEEL STUDS AT 16" ON CENTER 1/2" CEMENT BOARD UNDER TILE AND SOLID SURFACE FINISHES 1/2" GYPSUM WALLBOARD ON OFFICE/TRAINING/CORRIDOR SIDE ACOUSTIC SOUND BATT INSULATION EXTEND TO 4" ABOVE CEILING AND BRACE DIAGONALLY AT 48" O.C. 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C1	3 1/2" STEEL STUDS AT 16" ON CENTER 1/2" CEMENT BOARD UNDER TILE AND SOLID SURFACE FINISHES 1/2" GYPSUM WALLBOARD ON OFFICE/TRAINING/CORRIDOR SIDE ACOUSTIC SOUND BATT INSULATION EXTEND TO 4" ABOVE CEILING AND BRACE DIAGONALLY AT 48" O.C. SEE INTERIOR ELEVATIONS FOR LOCATIONS OF CERAMIC TILE AND SOLID SURFACE FINISHES																	
C2	6" STEEL STUDS AT 16" ON CENTER 5/8" CEMENT BOARD UNDER TILE AND SOLID SURFACE FINISHES NO FINISH ON CHASE SIDE EXTEND TO 4" ABOVE CEILING AND BRACE DIAGONALLY AT 48" O.C.																	
D	8" CONCRETE BLOCK INFILL HORIZONTAL JOINT REINFORCING EVERY OTHER COURSE TIE TO EXISTING MASONRY WITH (3) MASONRY ANCHORS EACH SIDE																	



A1 ENLARGED PLAN
SCALE: 1/2"=1'-0"



1/4" = 1'-0"



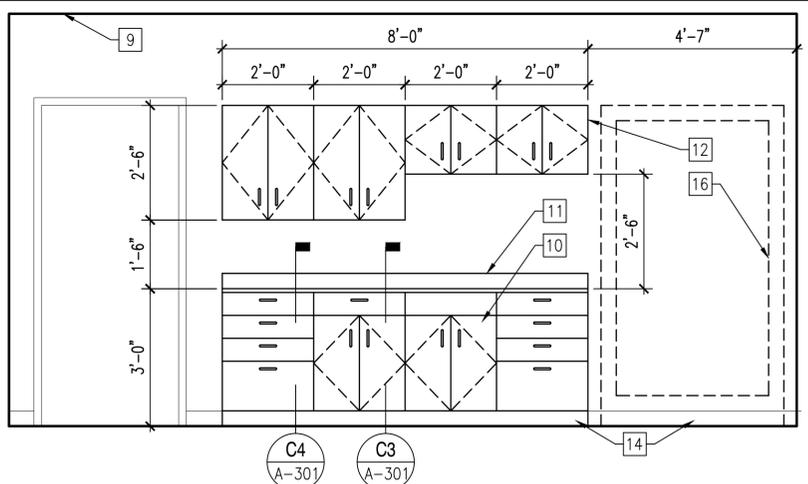
DATE	DESCRIPTION	BY	CHKD

APPROVED	A/E INFO
FOR COMMANDER NAVFAC	
ACTIVITY	
SATISFACTORY TO DATE	
DES: KAF	DRAW: KAF
CHK: GEB	
BRANCH MANAGER: G.E. BAILEY, P.E.	
CHIEF ENGINEER/ARCH: S.M. LANTZ, P.E.	

DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND	NAVAL FACILITIES ENGINEERING COMMAND
HEAD LITTLE CREEK	HEAD LITTLE CREEK
JOINT EXPEDITIONARY BASE LITTLE CREEK-FORT STORY	JOINT EXPEDITIONARY BASE LITTLE CREEK-FORT STORY
VIRGINIA BEACH, VA	VIRGINIA BEACH, VA
RENOVATIONS AND REPAIRS TO BUILDING 2009	
ENLARGED FLOOR PLAN	

SCALE:	AS NOTED
PROJECT NO.:	1361870
CONSTR. CONTR. NO.:	N/A
NAVFAC DRAWING NO.:	12719109
SHEET:	04 OF 39
A-102	
DRAWFORM REVISION: 10 MARCH 2009	

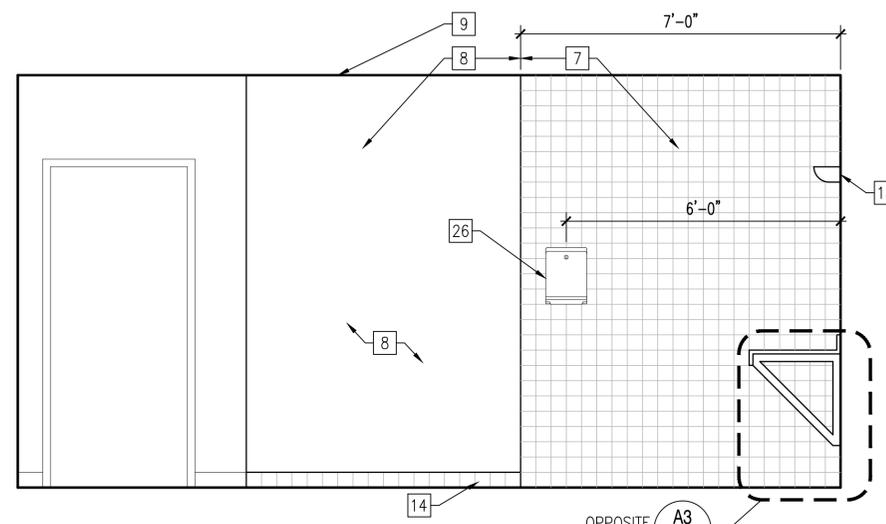
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INTERIOR ELEVATION

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

A-102 **D2**

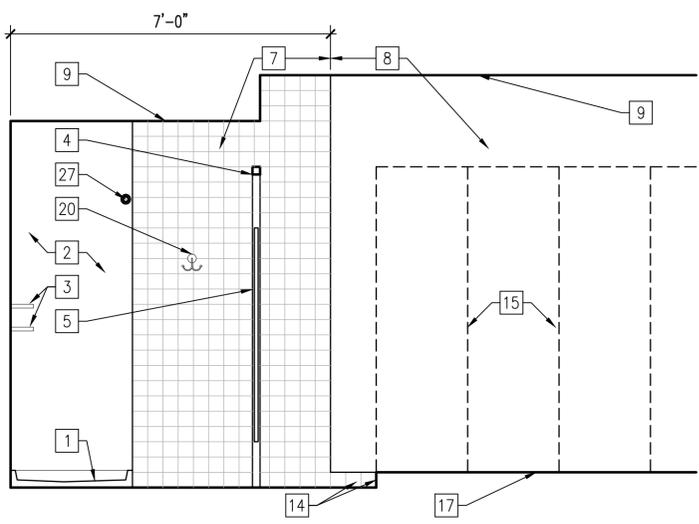


INTERIOR ELEVATION

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

OPPOSITE HAND **A3**
A-301

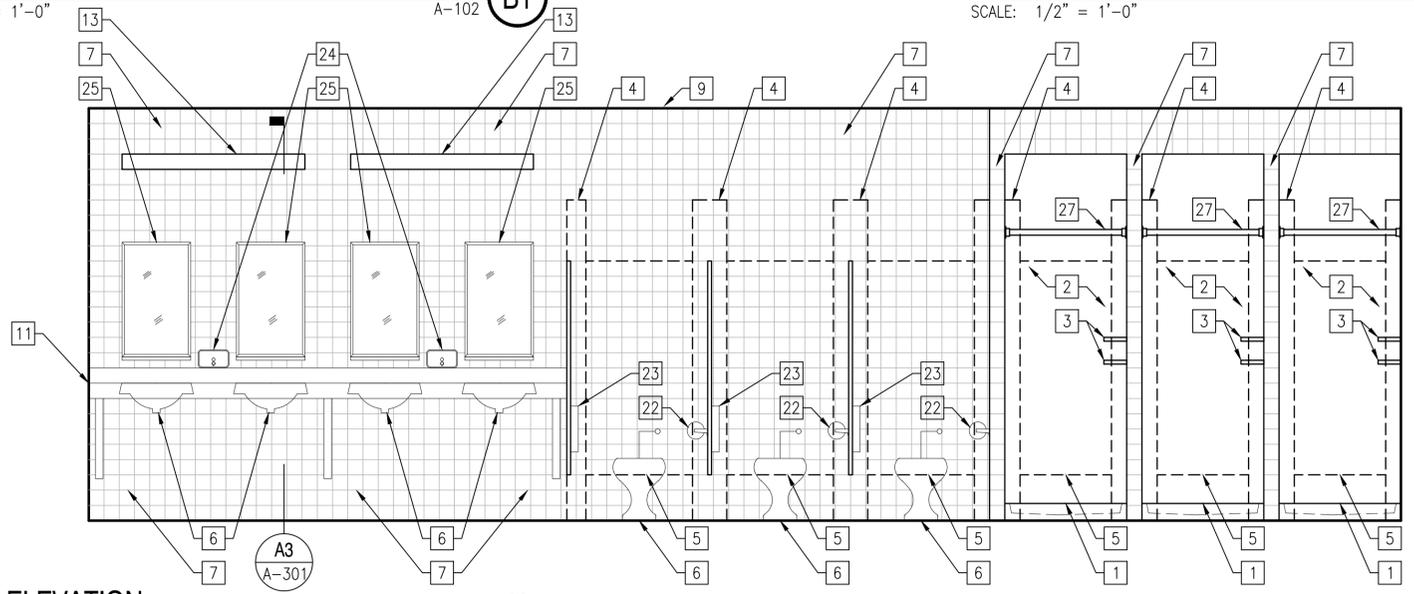
A-102 **B1**



INTERIOR ELEVATION

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

A-102 **B3**



INTERIOR ELEVATION

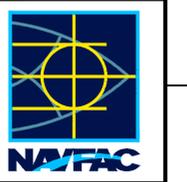
SCALE: 1/2" = 1'-0"

A-102 **A1**

- ACCESSORY KEYNOTES: 20-27**
- NOTE: SEE SPECIFICATIONS AND ENLARGED FLOOR PLAN FOR ADDITIONAL REQUIREMENTS
20. DOUBLE TOWEL/GARMENT HOOK - 54" AFF
 21. 24" TOWEL BAR - 54" AFF. NOT SHOWN, PROVIDE (1) IN EACH SHOWER AREA OPPOSITE ROBE HOOK AS INDICATED ON SHEET A102
 22. DOUBLE ROLL TOILET TISSUE HOLDER - SPINDLE AT 24" AFF
 23. SANITARY NAPKIN DISPOSAL - TOP AT 32" AFF
 24. SOAP DISPENSER - BOTTOM AT 41" AFF
 25. 18"x30" MIRROR WITH SHELF - BOTTOM AT 36" AFF
 26. PAPER TOWEL DISPENSER - MECHANISM AT 54" AFF
 27. SHOWER CURTAIN ROD WITH CURTAIN AND HOOKS

- GENERAL SHEET NOTES**
1. COORDINATE WORK SCHEDULE, UTILITY OUTAGES, SERVICE INTERRUPTIONS, AND OTHER POTENTIALLY DISRUPTIVE CONSTRUCTION ACTIVITIES WITH THE BUILDING FACILITY MANAGER.
 2. SEE PLUMBING, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS AND EQUIPMENT / FIXTURES NOT SHOWN.

- FLOOR NEW WORK KEYNOTES: 1-17**
1. 32"x32" SOLID CAST STONE SHOWER RECEPTOR - COORDINATE INSTALLATION WITH PLUMBING FIXTURES AND CONNECTIONS DESCRIBED ELSEWHERE.
 2. 1/4" SOLID SURFACE WALL FINISH ADHERED TO CEMENT BOARD SUBSTRATE WITH MANUFACTURER'S STANDARD ADHESIVE SYSTEM. SEAL ALL VERTICAL AND HORIZONTAL JOINTS WITH TRANSPARENT SILICONE SEALER AS RECOMMENDED BY MANUFACTURER
 3. PROVIDE (2) SOLID SURFACE SOAP SHELVES AT EACH STALL, AFFIXED TO SOLID SURFACE WALL FINISH WITH MANUFACTURER'S STANDARD ADHESIVE SYSTEM.
 4. SOLID HIGH DENSITY POLYETHYLENE FLOOR MOUNTED OVERHEAD BRACED TOILET / SHOWER PRIVACY PARTITION SYSTEM
 5. SOLID HIGH DENSITY POLYETHYLENE DOOR WITH MANUFACTURER'S STANDARD LOCKING MECHANISM AND ROBE HOOK (NOT SHOW FOR CLARITY).
 6. PLUMBING FIXTURE - SEE PLUMBING DRAWINGS FOR FIXTURE TYPE AND INSTALLATION REQUIREMENTS.
 7. THINSET CERAMIC TILE ON CEMENT BOARD SUBSTRATE - PROVIDE 4" CERAMIC COVE BASE AND BULLNOSE END TRIM
 8. PAINTED MOISTURE RESISTANT GYPSUM BOARD
 9. CEILING AS SCHEDULED
 10. BASE CABINETS - PROVIDE CUSTOM GRADE FLUSH OVERLAY CONSTRUCTION WITH WIRE PULLS. PROVIDE SOLID SURFACE COUNTERTOP AND PLASTIC LAMINATE FINISH ON ALL EXPOSED AND SEMI-EXPOSED SURFACES.
 11. PROVIDE SOLID SURFACE TOPS AND SPLASHES
 12. WALL CABINETS TO BE CUSTOM GRADE FLUSH OVERLAY CONSTRUCTION TO MATCH BASE CABINETS
 13. WALL MOUNTED LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS
 14. BASE AS SCHEDULED
 15. GEAR LOCKERS - NOT IN CONTRACT
 16. VENDING MACHINE - NOT IN CONTRACT
 17. 4" CONCRETE CURB UNDER GEAR LOCKERS - CONTINUE BASE AROUND PERIMETER OF CURB, TYPICAL



APPROVED: _____
FOR COMMANDER NAVFAC

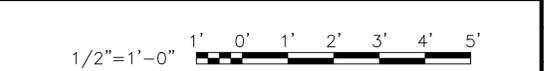
ACTIVITY: _____
SATISFACTORY TO: _____ DATE: _____
DES: KAF | DRW: KAF | CHK: GEB

BRANCH MANAGER: G.E. BAILEY, P.E.
CHIEF ENGINEER/ARCH: S.M. LANTZ, P.E.

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND
JEDCS - VIRGINIA BEACH, VA

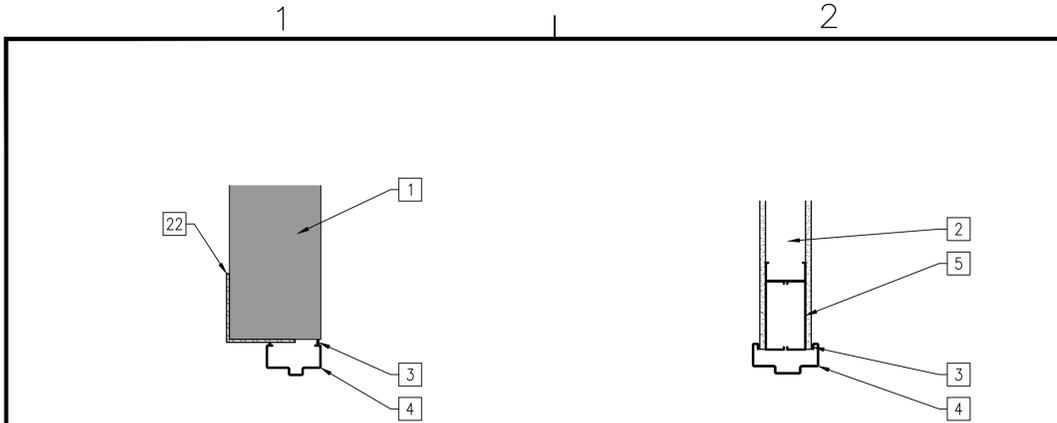
JOINT EXPEDITIONARY BASE LITTLE CREEK-FORT STORY
VIRGINIA BEACH, VA
**RENOVATIONS AND REPAIRS
TO BUILDING 2009**
INTERIOR ELEVATIONS

GRAPHIC SCALE



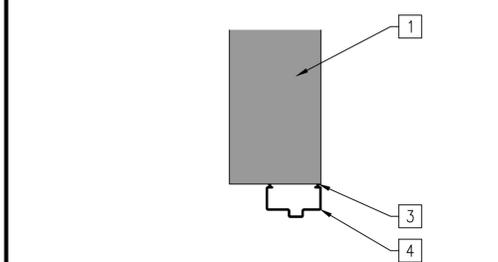
SCALE: AS NOTED
PROJECT NO.: 1361870
CONSTR. CONTR. NO.: N/A
NAVFAC DRAWING NO.: 12719110
SHEET 05 OF 39
A-201
DRAWFORM REVISION: 10 MARCH 2009

FILE NAME: P:\VA\LittleCreek\MultipleBuildings\2015_1361870\DBB_Reorganize_Admin_Spaces\B_Design\BUD_2009\Drawings\Sheet\08_Architectural\1361870-A-301.dwg LAYOUT NAME: A301 PLOTTED: Wednesday, April 13, 2016 - 1:53 pm USER: jurd.leichter

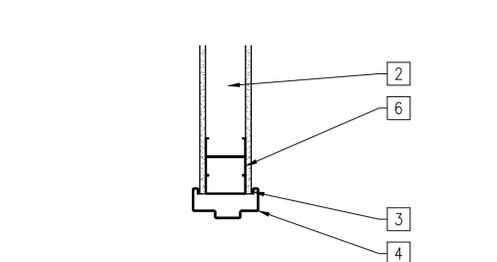


HEAD
SCALE: 1 1/2" = 1'-0"
A-501 **D1**

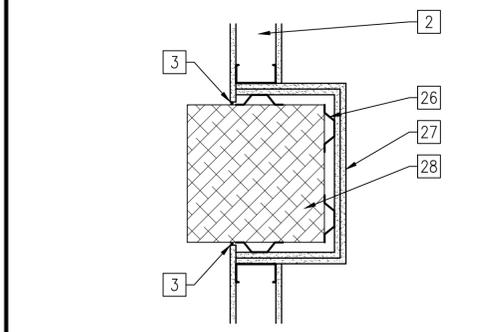
HEAD
SCALE: 1 1/2" = 1'-0"
A-501 **D2**



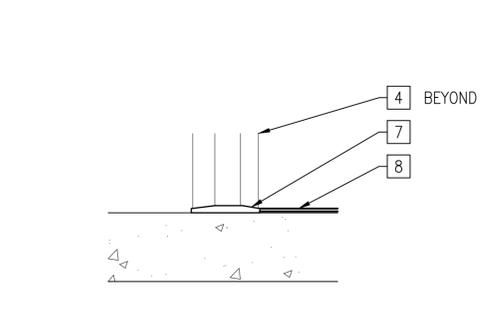
JAMB
SCALE: 1 1/2" = 1'-0"
A-501 **C1**



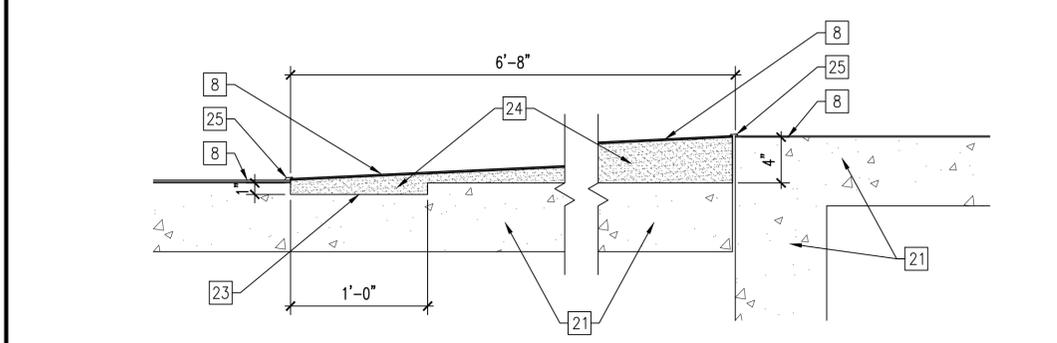
JAMB
SCALE: 1 1/2" = 1'-0"
A-501 **C2**



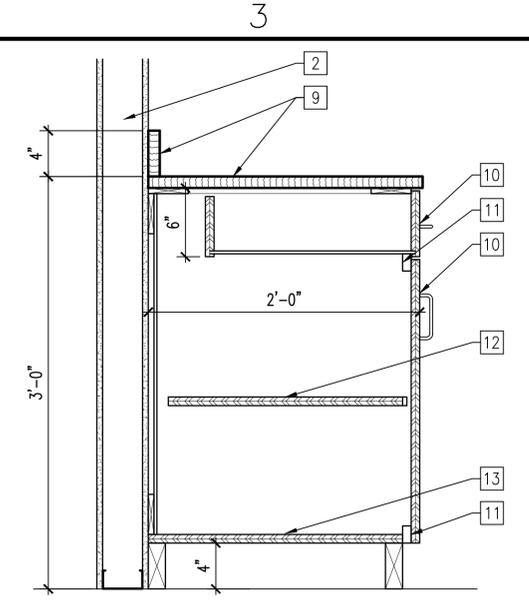
COLUMN
SCALE: 1 1/2" = 1'-0"
A-101 **B1**



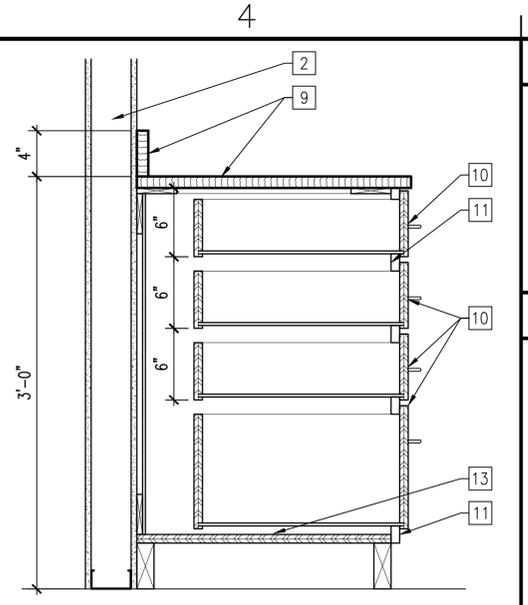
SILL
SCALE: 1 1/2" = 1'-0"
A-501 **B2**



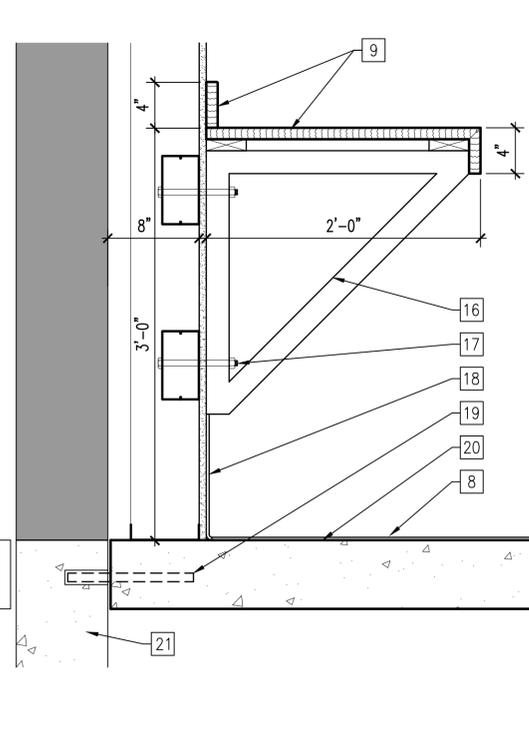
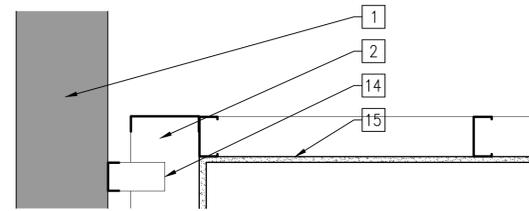
RAMP
SCALE: 1 1/2" = 1'-0"
A-101, A-102 **A1**



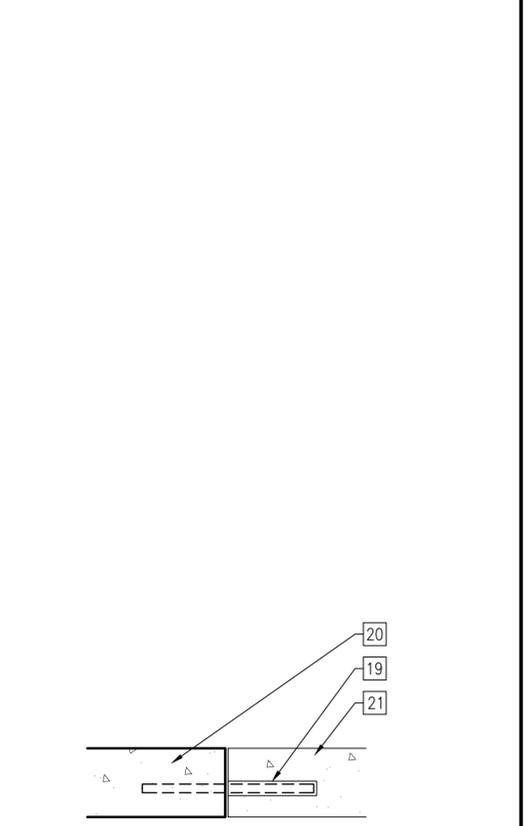
BASE CABINET
SCALE: 1 1/2" = 1'-0"
A-201 **C3**



BASE CABINET WITH DRAWERS
SCALE: 1 1/2" = 1'-0"
A-201 **C4**



VANITY / FLOOR SLAB
SCALE: 1 1/2" = 1'-0"
A-201 **A3**



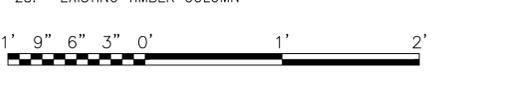
FLOOR SLAB
SCALE: 1 1/2" = 1'-0"
A-102 **A4**

GENERAL SHEET NOTES

- COORDINATE WORK SCHEDULE, UTILITY OUTAGES, SERVICE INTERRUPTIONS, AND OTHER POTENTIALLY DISRUPTIVE CONSTRUCTION ACTIVITIES WITH THE BUILDING FACILITY MANAGER.
- SEE PLUMBING, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS AND EQUIPMENT / FIXTURES NOT SHOWN.

NEW WORK KEYNOTES: 1-28

- EXISTING MASONRY BEARING WALL TO REMAIN
- PARTITION AS SCHEDULED - SEE FLOOR PLANS, SHEETS A-101 AND A-102
- PROVIDE CONTINUOUS SEALANT - TYPICAL BOTH SIDES, ENTIRE PERIMETER OF FRAME
- PROVIDE DOOR FRAME AS SCHEDULED - PROVIDE (3) ANCHORS AT EACH JAMB
- PROVIDE 6" STEEL STUD LINTEL
- PROVIDE DOUBLE STEEL JACK STUDS AT EACH JAMB
- PROVIDE 6" MARBLE THRESHOLD
- FLOOR FINISH AS SCHEDULED
- PROVIDE SOLID POLYMER SURFACE COUNTERTOP AND SPLASH
- PROVIDE DRAWERS AND DOORS WITH 4" WIRE PULLS - SEE INTERIOR ELEVATIONS, SHEET A201 FOR CABINET CONFIGURATIONS
- CABINET FACE FRAME
- PROVIDE ADJUSTABLE SHELF AT OPEN CABINET - OMIT SHELF AND DRAWER AT BASE CABINET WITH SINK
- PROVIDE BASE CABINET WITH 3/4" BOTTOM AND SIDES AND 1/4" BACK
- BRACE TOP OF STEEL STUD FRAMING TO EXISTING WALL AT 48" ON CENTER
- CEILING AS SCHEDULED
- PROVIDE 2"x2"x1/4" TUBE STEEL BRACKETS, PAINT TO MATCH WALLS - SEE INTERIOR ELEVATIONS SHEET A-201 FOR LOCATIONS
- ATTACH BRACKET TO WALL WITH 1/2" DIAMETER THROUGH BOLTS - PROVIDE BLOCKING BETWEEN WALL FRAMING MEMBERS AS REQUIRED
- WALL FINISH AS SCHEDULED
- 3/4" DIAMETER STEEL DOWELS AT 12" ON CENTER, TYPICAL ENTIRE PERIMETER OF NEW SLAB
- PROVIDE NEW CONCRETE SLAB ON GRADE OVER VAPOR BARRIER - MATCH THICKNESS OF EXISTING SLAB TO REMAIN AND REINFORCE WITH WELDED WIRE FABRIC 4X4-W2.0XW2.0
- EXISTING STRUCTURE TO REMAIN
- PROVIDE NEW PAINTED STEEL LINTEL - 6"x6"x1/4" BENT PLATE, BEAR 4" MINIMUM ON MASONRY JAMBS AT NEW OPENING
- CUT NOTCH IN EXISTING SLAB 1" DEEP X 12" WIDE X FULL WIDTH OF RAMP
- FORM RAMP WITH NON-SHRINK NON-METALLIC GROUT
- PROVIDE ALUMINUM TRANSITION STRIP, TYPICAL FULL WIDTH OF RAMP
- STEEL FURRING FROM FLOOR TO UNDERSIDE OF ROOF DECK
- (2) 2" GYPSUM WALLBOARD ON FURRING, CONTINUOUS TO UNDERSIDE OF ROOF DECK. SEAL VOIDS BETWEEN WALLBOARD AND ROOF DECK WITH FIRE RATED SEALANT
- EXISTING TIMBER COLUMN



APPROVED	DATE	APP'R
FOR COMMANDER NAVFAC		
ACTIVITY		
SATISFACTORY TO	DATE	
DES: KAF	DRW: KAF	CHK: GEB
BRANCH MANAGER G.E. BAILEY, P.E.		
CHIEF ENG/ARCH S.M. LANTZ, P.E.		
NAVAL FACILITIES ENGINEERING COMMAND	VIRGINIA BEACH, VA	
NAVAL FACILITIES ENGINEERING COMMAND	VIRGINIA BEACH, VA	
FEAD LITTLE CREEK	LITTLE CREEK-FORT STORY	
RENOVATIONS AND REPAIRS TO BUILDING 2009		
MISCELLANEOUS DETAILS		
SCALE: AS NOTED		
PROJECT NO.: 1361870		
CONSTR. CONTR. NO. N/A		
NAVFAC DRAWING NO. 12719111		
SHEET 06 OF 39		
A-301		
DRAWFORM REVISION: 10 MARCH 2009		

FILE NAME: P:\VA\littlecreek\multiplebuildings\2015_1361870_LDBB_Reorganize_Admin_Spaces\B_Design\BDDC_2009\Drawings\Sheet\08_Architectural\1361870-A-501.dwg LAYOUT NAME: A-501 PLOTTED: Wednesday, April 13, 2016 - 1:50pm USER: kurt.fleischer

HARDWARE SETS
SET 1 - DOORS 100, 104, 105, 106, 107, 113
 (3) 4 1/2 x 4 1/2 NRP FULL-MORTISE HINGES BHMA A5111
 (1) HEAVY DUTY 5-BUTTON KEYLESS CIPHER LOCK
 (1) OVERHEAD HOLDER BHMA C12511
 (3) DOOR SILENCERS BHMA L03011

SET 2 - DOOR 103
 (3) 4 1/2 x 4 1/2 NRP FULL-MORTISE HINGES BHMA A5111
 (1) BORED PASSAGE LATCH S4000 BHMA F75 GRADE 1
 (1) OVERHEAD CLOSER BHMA C02011
 (3) DOOR SILENCERS BHMA L03011

SET 3 - DOORS 101, 102, 110, 111
 (3) 4 1/2 x 4 1/2 NRP FULL-MORTISE HINGES BHMA A5111
 (1) LKM 10K HIGH SECURITY EXIT DEVICE
 (1) OVERHEAD CLOSER BHMA
 (3) DOOR SILENCERS BHMA L03011

SET 4 - DOOR 108
 (3) 4 1/2 x 4 1/2 NRP FULL-MORTISE HINGES BHMA A5111
 (1) CDX-10 ACCESS CONTROL DEVICE
 (1) OVERHEAD CLOSER BHMA C02011
 (1) SOUNDPROOF GASKET

SET 5 - DOOR 109
 (3) 4 1/2 x 4 1/2 NRP FULL-MORTISE HINGES BHMA A5111
 (1) PULL BHMA J407
 (1) PUSH BHMA J408
 (1) OVERHEAD CLOSER BHMA C02011
 (3) DOOR SILENCERS BHMA L03011

DOOR SCHEDULE

MARK	TYPE	RATING	HARDWARE	DOOR NOTES
100	A	NONE	1	1, 6
101	B	45 MIN	3	1, 2, 5
102	A	45 MIN	3	2, 5
103	A	NONE	2	2, 6
104	A	NONE	1	1, 6
105	A	NONE	1	1, 6
106	A	NONE	1	1, 6
107	A	NONE	1	1, 6
108	A	NONE	4	1, 7
109	A	NONE	5	3, 6
110	A	45 MIN	3	2, 5
111	A	45 MIN	3	2, 6
112	B	NONE	N/A	1, 4
113	A	NONE	1	1, 6

- DOOR NOTES:**
- PROTECT EXISTING FINISHES SCHEDULED TO REMAIN. PATCH, REPAIR, AND REFINISH AS REQUIRED TO REPAIR DAMAGE RESULTING FROM CONSTRUCTION OPERATIONS
 - PROVIDE METAL TRANSITION STRIP FOR CHANGE OF FLOOR FINISH AT SILL
 - PROVIDE MARBLE THRESHOLD AT SILL - SEE DETAIL B2/A-301
 - PROVIDE STEEL FRAMED OPENING ONLY - NO DOOR AT THIS LOCATION
 - PROVIDE FLUSH STEEL DOOR - SEE NEW WORK KEYNOTE 2
 - PROVIDE FLUSH WOOD DOOR - SEE NEW WORK KEYNOTE 3
 - PROVIDE FLUSH STEEL STC 50 DOOR - SEE NEW WORK KEYNOTE 2

FINISH SCHEDULE

MARK	ROOM NAME	FLOOR		BASE		WALL		CEILING			GENERAL NOTES
		FINISH	COLOR	FINISH	COLOR	FINISH	COLOR	FINISH	COLOR	HEIGHT	
100	CORRIDOR	EXISTING	N/A	VINYL	F	PAINT	H	EXISTING	N/A	N/A	1, 2, 5
101	OFFICE	CARPET	E	VINYL	F	PAINT	H	EXISTING	N/A	N/A	1, 2, 9
102	OFFICE	CARPET	E	VINYL	F	PAINT	H	APC	J	MATCH	1, 2
103	OFFICE	CARPET	E	VINYL	F	PAINT	H	EXISTING	N/A	N/A	1, 2, 9
104	GROUP	CARPET	E	VINYL	F	PAINT	H	APC	J		1, 2, 3
105	OFFICE	CARPET	E	VINYL	F	PAINT	H	APC	J	8'-0"	1, 2
106	OFFICE	CARPET	E	VINYL	F	PAINT	H	APC	J	8'-0"	1, 2
107	OFFICE	CARPET	E	VINYL	F	PAINT	H	APC	J	8'-0"	1, 2
108	OFFICE	CARPET	E	VINYL	F	PAINT	H	EXISTING	N/A	N/A	1, 2, 9
109	DET 2	CARPET	E	VINYL	F	PAINT	H	APC	J	8'-0"	1, 2
110	DET 3	CARPET	E	VINYL	F	PAINT	H	APC	J	8'-0"	1, 2
111	N6	CARPET	E	VINYL	F	PAINT	H	APC	J	8'-0"	1, 2
112	DET 3	CARPET	E	VINYL	F	PAINT	H	EXISTING	N/A	N/A	1, 2, 9
113	DET 1	CARPET	E	VINYL	F	PAINT	H	EXISTING	N/A	N/A	1, 2, 9
114	DET 1	CARPET	E	VINYL	F	PAINT	H	EXISTING	N/A	N/A	1, 2, 9
115	DET 2	CARPET	E	VINYL	F	PAINT	H	EXISTING	N/A	N/A	1, 2, 9
116	OFFICE	CARPET	E	VINYL	F	PAINT	H	EXISTING	N/A	N/A	1, 2, 9
117	SECURITY	CARPET	E	VINYL	F	PAINT	H	EXISTING	N/A	N/A	1, 2, 9
118	CORRIDOR	EXISTING	N/A	VINYL	F	PAINT	H	EXISTING	N/A	N/A	1, 2, 5, 9
119	MECHANICAL	EXISTING	N/A	EXISTING	N/A	EXISTING	N/A	EXISTING	N/A	N/A	1, 4
120	QUARTERDECK	EXISTING	N/A	VINYL	F	PAINT	H	EXISTING	N/A	N/A	1, 2, 9
121	HEAD	EXISTING	N/A	EXISTING	N/A	EXISTING	N/A	EXISTING	N/A	N/A	1, 4, 10
122	STORAGE/MECH	EXISTING	N/A	EXISTING	N/A	EXISTING	N/A	EXISTING	N/A	N/A	1, 4
123	ELECT	EXISTING	N/A	EXISTING	N/A	EXISTING	N/A	EXISTING	N/A	N/A	1, 4
124	ELECT	EXISTING	N/A	EXISTING	N/A	EXISTING	N/A	EXISTING	N/A	N/A	1, 4
125	SHOWER	EXISTING	N/A	EXISTING	N/A	EXISTING	N/A	EXISTING	N/A	N/A	1, 4, 10
126	LOCKERS	EXISTING	N/A	EXISTING	N/A	EXISTING	N/A	EXISTING	N/A	N/A	1, 4, 10
127	FEMALE HEAD	CER TILE	B	CER TILE	C	CER TILE	A	PAINT GWB	H	9'-0"	6, 7
						PAINT	H			8'-0"	
						SHOWERS	D			@ SHOWER	
128	SERVER	EXISTING	N/A	EXISTING	N/A	EXISTING	N/A	EXISTING	N/A	N/A	1, 4
129	STORAGE	EXISTING	N/A	EXISTING	N/A	EXISTING	N/A	EXISTING	N/A	N/A	1, 4
130	STORAGE	EXISTING	N/A	EXISTING	N/A	EXISTING	N/A	EXISTING	N/A	N/A	1, 4
130A	ALPHA STORAGE	EXISTING	N/A	EXISTING	N/A	EXISTING	N/A	EXISTING	N/A	N/A	1, 4
130B	BRAVO STORAGE	EXISTING	N/A	EXISTING	N/A	EXISTING	N/A	EXISTING	N/A	N/A	1, 4
131	SIPRNET CAFE	CARPET	E	VINYL	F	PAINT	H	PAINT GWB	H	8'-0"	8
132	COFFEE MESS	VCT	G	VINYL	F	PAINT	H	APC	J	8'-0"	NONE
133	CONF / TRAIN	EXISTING	N/A	VINYL	F	PAINT	H	EXISTING	N/A	N/A	NONE
134	CORRIDOR	VCT	G	VINYL	F	PAINT	H	APC	J	8'-0"	NONE

FINISH COLOR NOTES:

- CERAMIC WALL TILE: DAL TILE "NATURAL HUES".
- CERAMIC FLOOR TILE: DAL TILE 4X4 PEBBLE, QH18
- CERAMIC BASE TILE: DAL TILE 4X4 COVE BASE ROUND TOP, Q3665.
- SHOWER SURROUND WALLS: 1/2" THICK CORIAN "PLATINUM"
- CARPET: LEES FACULTY IV DK162 MODULAR 18X18. COLOR TO BE 4018 CLOUD SHADOW.
- VINYL BASE: JOHNSONITE 32 PEBBLE WG.
- VINYL COMPOSITION TILE (VCT): MARMOLEUM MCT-621 DOVE GREY.
- WALL / CEILING PAINT TO BE BENJAMIN MOORE CASCADE WHITE 2127-70, EGGSHELL FINISH.
- NOT USED
- ACOUSTIC PANEL CEILING (APC): ARMSTRONG "SCHOOL ZONE GEORGIAN" LAY-IN PANEL #795, WHITE

FINISH SCHEDULE GENERAL NOTES:

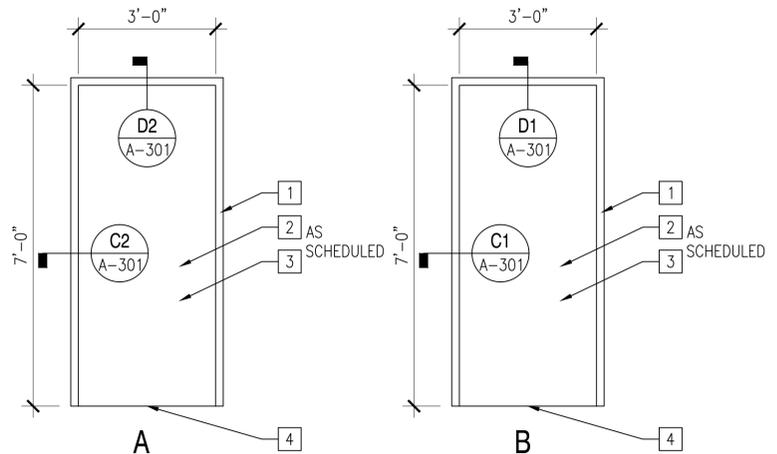
- PROTECT EXISTING FINISHES SCHEDULED TO REMAIN. PATCH, REPAIR, AND REFINISH DAMAGE RESULTING FROM CONSTRUCTION OPERATIONS
- MATCH EXISTING COLOR OF WALL PAINT FOR TOUCH-UPS AROUND AREAS OF NEW CONSTRUCTION.
- CEILING HEIGHT TO BE A CONTINUATION OF EXISTING CORRIDOR 118
- NO FINISH WORK THIS AREA
- MATCH VINYL BASE COLOR AND HEIGHT TO EXISTING TO REMAIN.
- SEE INTERIOR ELEVATIONS FOR WALL FINISH LOCATIONS
- PROVIDE CEMENT BOARD SUBSTRATE AT CERAMIC TILE AND SOLID SURFACE FINISH APPLICATIONS
- CEILING AND WALLS TO BE FINISHED AND PAINTED COMPLETE ON BOTH SIDES TO PROVIDE CONTINUOUS FINISHED ENVELOPE
- REMOVE EXISTING CEILING TILES AS REQUIRED FOR INSTALLATION OF SPRINKLER SYSTEM. SALVAGE TILES AND REPLACE
- PARTIALLY DEMOLISH AND REMOVE GYPSUM CEILING AS REQUIRED FOR INSTALLATION OF HVAC EQUIPMENT AND SPRINKLER SYSTEM. REPLACE AND REFINISH TO MATCH EXISTING SURROUNDING FINISH.

GENERAL SHEET NOTES

- WALL FINISHES VARY AT FEMALE LOCKER ROOM. COORDINATE INTERIOR FINISHES AND REQUIRED SUBSTRATE WITH INTERIOR ELEVATIONS ON SHEET A-201 - PROVIDE CEMENT BOARD SUBSTRATE UNDER CERAMIC WALL TILE AND SOLID SURFACE FINISHES.

NEW WORK KEYNOTES

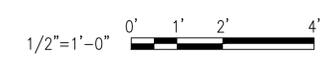
- PROVIDE PAINTED STEEL DOOR FRAME - SEMI-GLOSS, COLOR TO MATCH SURROUNDING WALLS
- PROVIDE PAINTED STEEL FLUSH DOOR, 1 1/2" THICK - SEMI-GLOSS, COLOR TO MATCH SURROUNDING WALLS
- PROVIDE TRANSPARENT FINISH FLUSH WOOD DOOR - FINISH TO MATCH EXISTING DOORS TO REMAIN
- SILL CONDITIONS VARY - SEE DOOR SCHEDULE NOTES



DOOR TYPES

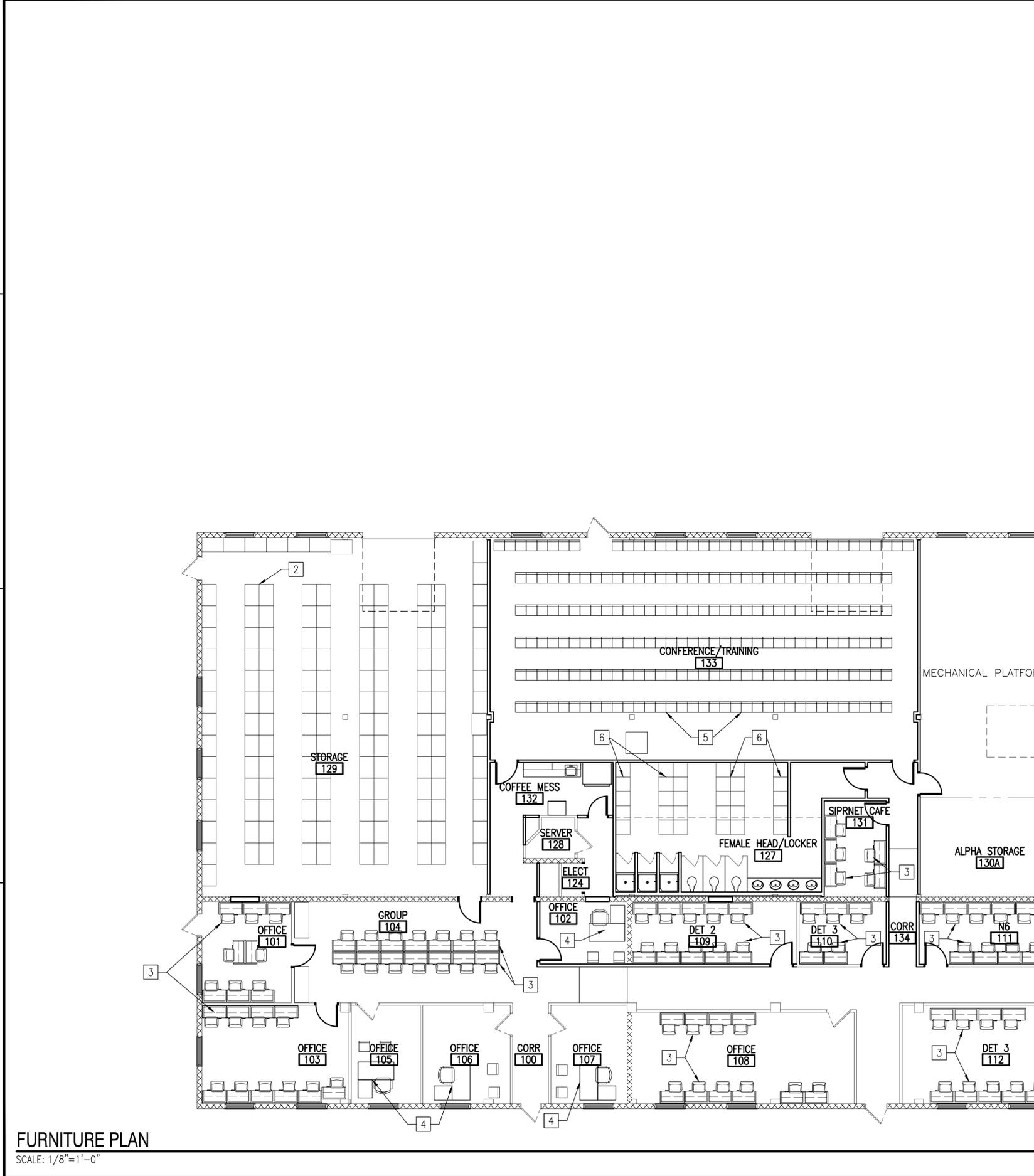
SCALE: 1/2" = 1'-0"

GRAPHIC SCALE



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FILE NAME: P:\A\littles\NavalFacilities\Drawings\2015_1361870\DBB_Resp\Specs\Admin_Specs\B_Design\BDOC_2009\Drawings\Spec\08_Architecture\1361870-A-902.dwg LAYOUT NAME: A-902 PLOTTED: Wednesday, April 13, 2016 - 1:54pm USER: kuf.fletcher



GENERAL SHEET NOTES

- FURNITURE IS NOT INCLUDED IN THE CONSTRUCTION CONTRACT UNLESS NOTED OTHERWISE. FURNITURE TYPES AND LOCATIONS ARE PROVIDED TO ASSIST THE CONTRACTOR IN LOCATING ELECTRICAL AND COMMUNICATIONS CONNECTIONS
- COORDINATE ELECTRICAL OUTLETS INDICATED ON ELECTRICAL DRAWINGS WITH FURNITURE LOCATIONS INDICATED.

NEW WORK KEYNOTES

- EXISTING CAGE LOCKERS TO REMAIN - TYPICAL AT LOCKERS 126
- NEW CAGE LOCKERS - TYPICAL AT STORAGE 129 (NOT IN CONTRACT)
- 3'-4" X 1'-8" WORKSTATION WITH CHAIR (NOT IN CONTRACT)
- 5'-0" X 2'-6" DESK AND ARMCHAIR (NOT IN CONTRACT)
- FOLDING OR NESTING CHAIRS (NOT IN CONTRACT)
- LOCKERS IN FEMALE HEAD/LOCKER ROOM 127 ARE INCLUDED IN THE CONSTRUCTION CONTRACT

DATE	DESCRIPTION	BY	APPR



APPROVED: _____
 FOR COMMANDER NAVFAC

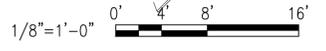
SATISFACTORY TO: _____ DATE: _____
 DES: WRS | DRW: KAF | CHK: GEB

BRANCH MANAGER: G.E. BAILEY, P.E.
 CHIEF ENGINEER/ARCH: S.M. LANTZ, P.E.

DEPARTMENT OF THE NAVY
 NAVAL FACILITIES ENGINEERING COMMAND
 NAVAL FACILITIES ENGINEERING COMMAND
 JEBLCS - VIRGINIA BEACH, VA
 FEAD LITTLE CREEK
 JOINT EXPEDITIONARY BASE LITTLE CREEK - FORT STORY
 VIRGINIA BEACH, VA
**RENOVATIONS AND REPAIRS
 TO BUILDING 2009**
 PROPOSED FURNITURE PLAN

SCALE: AS NOTED
 PROJECT NO.: 1361870
 CONSTR. CONTR. NO.: N/A
 NAVFAC DRAWING NO.: 12719114
 SHEET 09 OF 39
A-902
 DRAWFORM REVISION: 10 MARCH 2009

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



FIRE ALARM/MASS NOTIFICATION GENERAL NOTES

- CONTRACTOR SHALL PROVIDE A COMPLETE, COMBINED ADDRESSABLE FIRE ALARM AND MASS NOTIFICATION SYSTEM THROUGHOUT THE BUILDING. SYSTEM SHALL INCLUDE SPRINKLER SYSTEM SUPERVISION, MANUAL PULL STATIONS, SPEAKERS, STROBES, EVACUATE/ANNOUNCEMENT DISPLAYS, WIRING, CONDUIT AND ALL OTHER ASSOCIATED EQUIPMENT. ALL WORK AND INSTALLATION SHALL CONFORM WITH, BUT IS NOT LIMITED TO THE APPLICABLE PROVISIONS OF THE CODES AND STANDARDS ON THIS SHEET AND THE CONTRACT DOCUMENTS.
- CONTRACTOR SHALL PROVIDE ADDRESSABLE CLASS B SIGNALING LINE CIRCUITS, CLASS B NOTIFICATION APPLIANCE CIRCUITS AND CLASS B INITIATING DEVICE CIRCUITS. PROVIDE ALL EQUIPMENT, SOFTWARE, PROGRAMMING, ACCESSORIES WHETHER MENTIONED OR NOT, INCLUDING SMOKE SENSORS, ADDRESSABLE INTERFACE AND RELAY DEVICES, TERMINAL CABINETS, CONDUIT, WIRE, JUNCTION BOXES, FASTENERS, HANGERS, ETC.
- FIRE ALARM/MASS NOTIFICATION SYSTEM PANELS, LOCAL OPERATORS CONSOLES, ANNUNCIATORS AND CABINETS SHALL BE RECESSED-MOUNTED IN FINISHED AREAS WITH THE TOP OF THE PANEL AT 72 INCHES ABOVE FINISHED FLOOR OR CENTER OF PANEL AT 60 INCHES ABOVE FINISH FLOOR, WHICHEVER IS LOWER. NOTIFICATION APPLIANCE CIRCUIT PANELS MAY BE SURFACE-MOUNTED IN ELECTRICAL ROOMS.
- ALL FIRE ALARM WIRING SHALL BE INSTALLED CONDUIT. MINIMUM CONDUIT SIZE SHALL BE 3/4". CONDUIT SHALL BE RUN CONCEALED WHERE POSSIBLE.
- PAINT ALL FIRE ALARM JUNCTION BOXES AND COVERS RED IN UNFINISHED AREAS. IN FINISHED AREAS WHERE CONDUIT CANNOT BE CONCEALED, CONDUIT AND JUNCTION BOXES CAN BE PAINTED TO MATCH THE ROOM FINISH, THE INSIDE COVER OF THE JUNCTION BOX MUST BE IDENTIFIED AS "FIRE ALARM" AND THE CONDUIT MUST HAVE PAINTED RED BANDS 3/4" INCH WIDE AT 20 FOOT INTERVALS AND ON BOTH SIDES OF A FLOOR, WALL OR CEILING PENETRATION.
- INSTALL ALL NEW WALL MOUNTED STROBES AND SPEAKER/STROBES 6-INCHES BELOW CEILINGS OR 80-INCHES AFF, WHICHEVER IS LOWER, TO THE CENTERLINE OF LIGHT APPARATUS.
- PULL STATIONS SHALL BE DOUBLE-ACTION TYPE. THE TOP OF THE PULL STATION SHALL BE INSTALLED AT 48-INCHES AFF.
- SPRINKLER CONTRACTOR IS TO PROVIDE ALL WATER FLOW SWITCHES, AND TAMPER SWITCHES. THE ELECTRICAL CONTRACTOR SHALL MAKE ALL ELECTRICAL CONNECTIONS AND PROVIDE POWER TO THESE DEVICES.
- ALL EQUIPMENT AND DEVICES SHALL BE UL LISTED FOR USE IN FIRE ALARM/MASS NOTIFICATION SYSTEMS.
- FIRE ALARM MASS NOTIFICATION SYSTEM MUST UNDERGO INTELLIGIBILITY TESTING IN ACCORDANCE WITH UFC 3-600-01 AND UFC 4-021-01. COMMERCIALY AVAILABLE TEST INSTRUMENTATION SHALL BE USED TO MEASURE THE INTELLIGIBILITY. ENSURE THAT A CIS SCORE OF AT LEAST 0.7 IS ACHIEVED IN EACH AREA WHERE BUILDING OCCUPANTS MAY TYPICALLY BE FOUND. AREAS OF THE BUILDING PROVIDED WITH HARD WALL AND CEILING SURFACES (SUCH AS METAL OR CONCRETE) THAT ARE FOUND TO CAUSE EXCESSIVE SOUND REFLECTIONS MAY BE PERMITTED TO HAVE A CIS SCORE LESS THAN THE MINIMUM REQUIRED VALUE IF APPROVED BY THE NAVFAC MIDLANT FIRE PROTECTION ENGINEER.

SPRINKLER GENERAL NOTES

- CONTRACTOR SHALL PROVIDE A COMPLETE HYDRAULICALLY-CALCULATED AUTOMATIC WET-PIPE SPRINKLER SYSTEM THROUGHOUT THE ENTIRE BUILDING. SYSTEM SHALL INCLUDE WATER FLOW ALARM SWITCHES, VALVE SUPERVISORY TAMPER SWITCHES, CHECK VALVES, CONTROL VALVES, PIPING, HANGERS, SPRINKLERS, PIPING CONCEALMENT, AND ALL ASSOCIATED EQUIPMENT. ALL WORK AND INSTALLATION SHALL CONFORM WITH, BUT ARE NOT LIMITED TO THE APPLICABLE PROVISIONS OF THE CODES AND STANDARDS LISTED ON THIS SHEET AND THE CONTRACT DOCUMENTS.
- SPRINKLER CONTRACTOR TO PROVIDE ALL CONTROL VALVES, WATER FLOW SWITCHES, AND SUPERVISORY SWITCHES. ELECTRICAL CONTRACTOR SHALL MAKE ALL ELECTRICAL CONNECTIONS AND PROVIDE POWER TO THESE DEVICES.
- ALL SPRINKLER SYSTEMS SHALL USE BLACK STEEL PIPE SCHEDULE 40 THROUGHOUT.
- ALL SPRINKLER PIPE SHALL BE PAINTED RED. PAINT ALL PIPE AND FITTINGS.
- CONTRACTOR SHALL COORDINATE SPRINKLER SYSTEM PIPING WITH STRUCTURAL MEMBERS AND OTHER TRADES THROUGHOUT THE BUILDING. CONTRACTOR SHALL MAINTAIN AS MUCH HEAD ROOM CLEARANCE AS PRACTICAL BETWEEN BOTTOM OF SPRINKLER PIPE, FITTINGS, VALVES, AND SPRINKLER HEADS WITH THE FINISHED FLOOR IN ALL AREAS OF EXPOSED PIPE, BUT IN NO CASE PROVIDE LESS THAN 7'-0" OF HEAD ROOM CLEARANCE.
- NEW SPRINKLER PIPING SHOWN ON THE DRAWINGS IS SHOWN FOR PURPOSES OF DESIGN INTENT. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND ADJUST WORK ACCORDINGLY.
- ALL AREAS ARE HAZARD CATEGORY 1 UNLESS OTHERWISE INDICATED.
- ALL PIPE PENETRATIONS THROUGH FIRE RATED BARRIERS SHALL BE PROVIDED WITH UL LISTED FIRESTOPPING SYSTEMS. FIRE RATED BARRIERS ARE INDICATED ON THE LIFE SAFETY DRAWINGS.

FIRE ALARM/MASS NOTIFICATION SYMBOLS LEGEND

	FIRE ALARM/MNS CONTROL PANEL
	FIRE ALARM/MNS EQUIPMENT
	EVACUATE/ANNOUNCEMENT DISPLAY
	FIRE ALARM BATTERY CABINET
	LOCAL OPERATOR'S CONSOLE
	REMOTE ANNUNCIATOR
	DIGITAL ELECTRONIC TELEGRAPHIC TRANSMITTER
	MONITOR MODULE
	CONTROL MODULE
	ADDRESSABLE RELAY DEVICE
	TRANSIENT VOLTAGE SURGE SUPPRESSER
	WATER FLOW SWITCH
	TAMPER SWITCH
	MANUAL PULL STATION
	PHOTOELECTRIC SMOKE DETECTOR
	DUCT SMOKE DETECTOR
	CEILING-MOUNTED SPEAKER/STROBE (XX INDICATES CANDELA)
	CEILING-MOUNTED STROBE (XX INDICATES CANDELA)
	WALL-MOUNTED SPEAKER/STROBE (XX INDICATES CANDELA)
	WALL-MOUNTED STROBE (XX INDICATES CANDELA)
	WALL-MOUNTED SPEAKER
	WALL-MOUNTED WEATHERPROOF SPEAKER

SPRINKLER SYSTEM SYMBOLS LEGEND

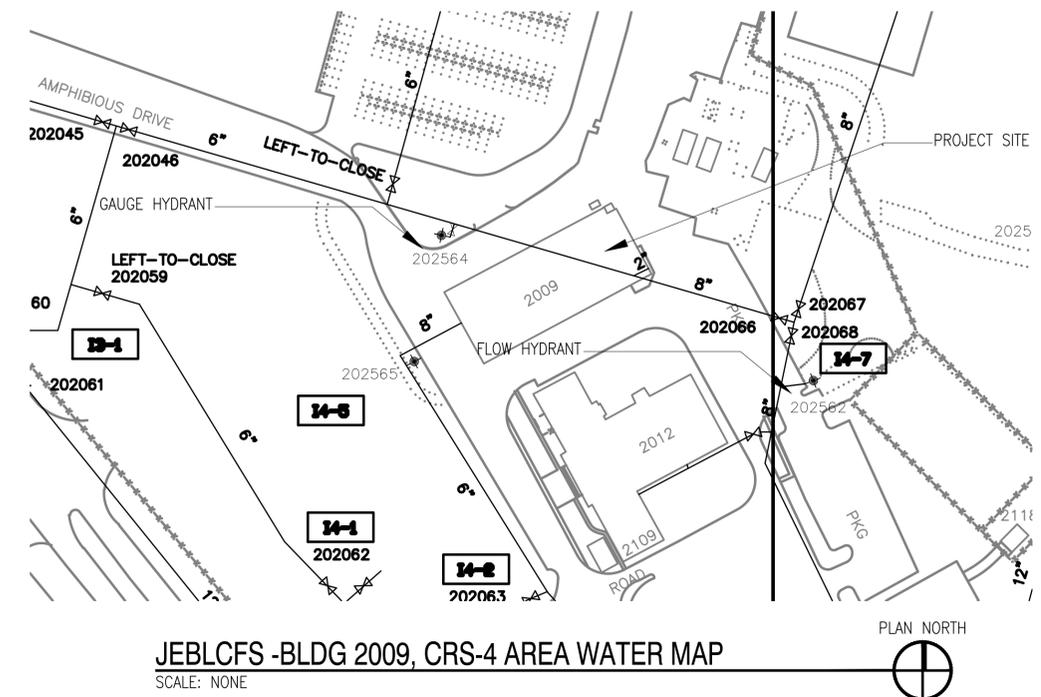
	NEW SPRINKLER PIPING
	PIPE UP
	PIPE CONTINUATION MARK
	CHECK VALVE
	INDICATING CONTROL VALVE
	SPRINKLER RISER
	POINT OF CONNECTION, NEW OR STARTING
	FIRE DEPARTMENT CONNECTION
	TEST HEADER
	HAZARD CATEGORY 2

APPLICABLE CODES AND STANDARDS

- NFPA 1, UNIFORM FIRE CODE, (2015)
- NFPA 13, STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS, (2013)
- NFPA 24, INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES, (2013)
- NFPA 1963, STANDARD FOR FIRE HOSE CONNECTIONS, (2009)
- NFPA 70, NATIONAL ELECTRIC CODE, (2014)
- NFPA 72, NATIONAL FIRE ALARM AND SIGNALING CODE, (2016)
- NFPA 90A, INSTALLATION OF AIR-CONDITIONING AND VENTILATING SYSTEMS, (2015)
- NFPA 101, LIFE SAFETY CODE, (2015)
- UFC 1-200-01, DESIGN: GENERAL BUILDING REQUIREMENTS, (CHANGE 1, 2013)
- UFC 3-600-01, FIRE PROTECTION ENGINEERING FOR FACILITIES, (CHANGE 3, 2013)
- UFC 3-600-10N, FIRE PROTECTION ENGINEERING, (2007)
- UFC 4-021-01, DESIGN AND O&M: MASS NOTIFICATION SYSTEMS, (CHANGE 1, 2007)
- IBC, INTERNATIONAL BUILDING CODE, (2012)

STATIC PRESSURE (PSI)	RESIDUAL PRESSURE (PSI)	FLOW RATE (GPM)	DATE TESTED
54	37	920	10/20/2015

NOTES: TEST PERFORMED BY NAVFAC MID-ATLANTIC FIRE PROTECTION ENGINEER ERIC ZDANKIEWICZ AND ANDY BENSON FEAD LC UTILITIES.



JEBLCFS - BLDG 2009, CRS-4 AREA WATER MAP
SCALE: NONE

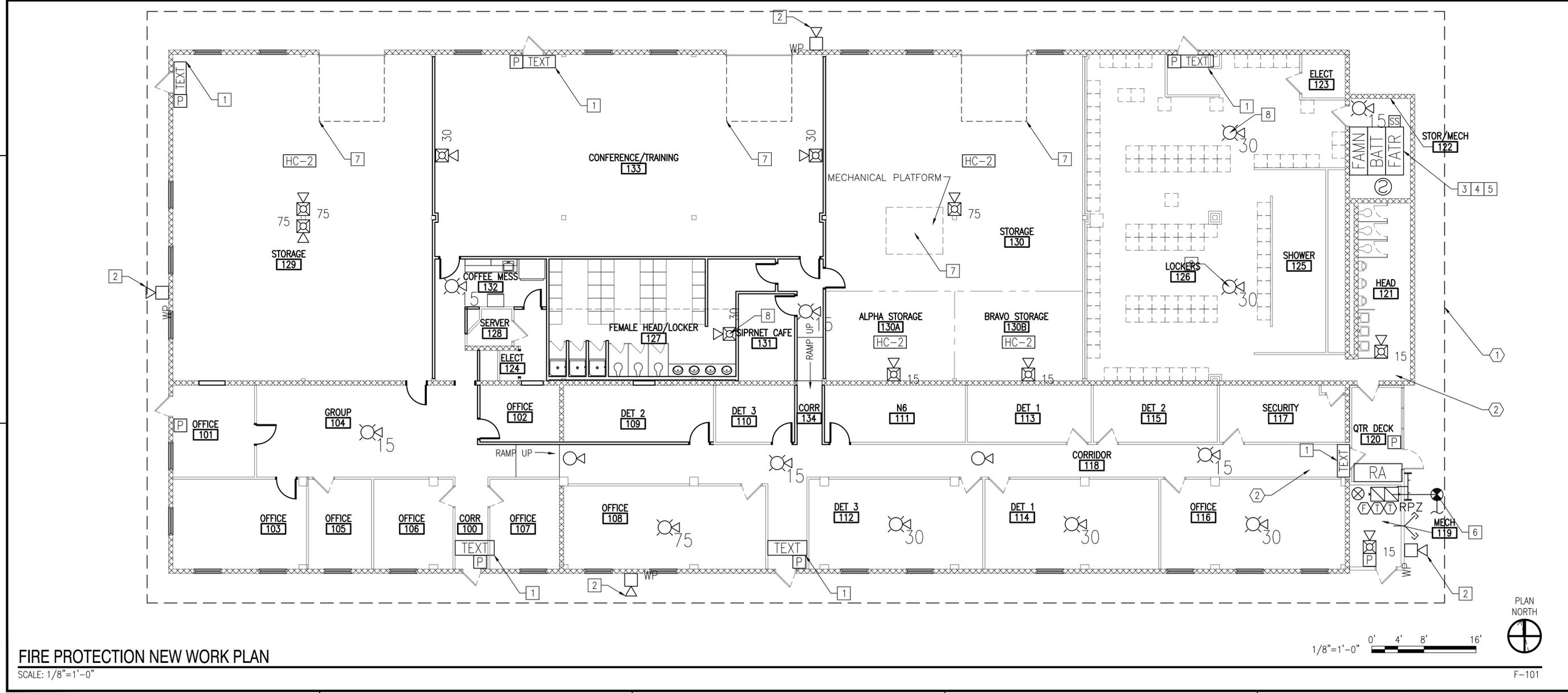
APPROVED	DATE
FOR COMMANDER NAVFAC	
ACTIVITY	
SATISFACTORY TO	DATE
DES ERZ	CHK DPS
BRANCH MANAGER G.E. BAILEY, P.E.	
CHIEF ENGR/ARCH S.M. LANTZ, P.E.	
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND NAVAL FACILITIES ENGINEERING COMMAND JEBLCFS - VIRGINIA BEACH, VA JEBLCFS - VIRGINIA BEACH, VA	
RENOVATIONS AND REPAIRS TO BUILDING 2009	
FIRE PROTECTION NOTES, SYMBOLS, AND LEGEND	
SCALE: AS SHOWN	
PROJECT NO.: 1361870	
CONSTR. CONTR. NO. N/A	
NAVFAC DRAWING NO. 12719115	
SHEET 10 OF 39	
F-001	
DRAWING REVISION: 10 MARCH 2009	

FILE NAME: P:\VA\littles\creek\multiple\buildings\2015_1361870_DBB_Response\Admin_Spaces\B_Design\BDDC_2009\Drawings\Sheet\1_FireProtection\1361870-F-001.dwg LAYOUT NAME: F-001 FIRE PROTECTION NOTES SYMBOLS AND LEGEND PLOTTED: Wednesday, March 30, 2016 8:35am USER: kurt.lechner

FILE NAME: P:\A\1161870\Drawings\1161870-F-101.dwg LAYOUT NAME: F-101 FIRE PROTECTION NEW WORK PLAN PLOTTED: Wednesday, March 30, 2016 - 8:39am USER: kurt.flechner

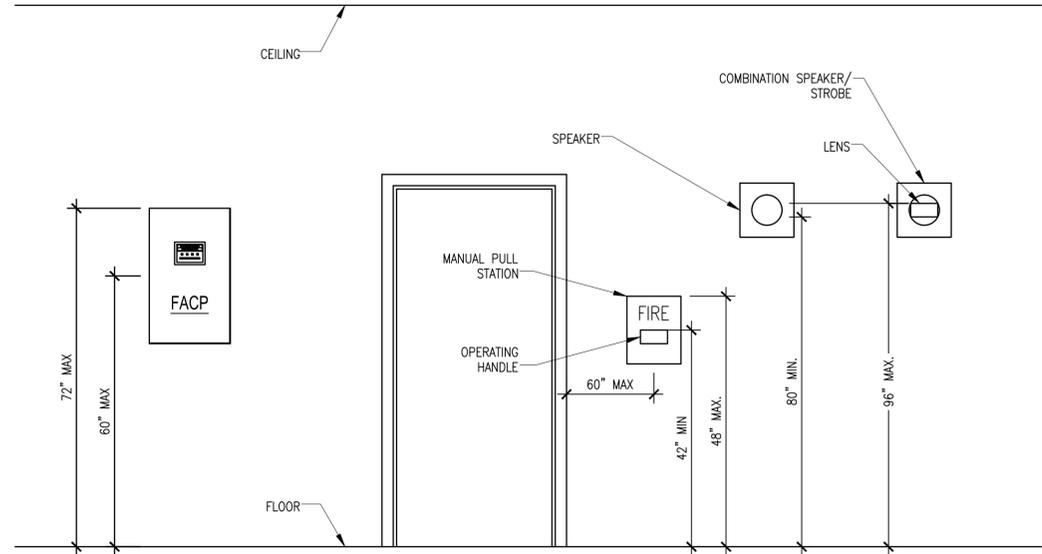
GENERAL SHEET NOTES	NEW WORK KEYNOTES	DEMOLITION KEYNOTES	SPRINKLER SYSTEM DESIGN DATA				
<ol style="list-style-type: none"> ADJACENT AREAS OF BUILDING 2009 ARE TO REMAIN OCCUPIED AND OPERATIONAL THROUGHOUT THE PROJECT. COORDINATE THE WORK SCHEDULE, UTILITY OUTAGES, AND OTHER POTENTIALLY DISRUPTIVE CONSTRUCTION ACTIVITIES WITH THE BUILDING FACILITY MANAGER. NORMAL BUSINESS HOURS ARE 7:00 AM - 4:00 PM. SEE F-001 FOR GENERAL NOTES, SYMBOLS, LEGEND, AND APPLICABLE CODES AND STANDARDS. THE EXISTING FIRE ALARM SYSTEM IS A GAMEWELL-FCI 7200 SERIES PANEL LOCATED INSIDE THE NORTH ENTRANCE. THE EXISTING FIRE ALARM SYSTEM SHALL REMAIN OPERATIONAL THROUGHOUT CONSTRUCTION. 	<ol style="list-style-type: none"> PROVIDE 24V EVACUATE/ANNOUNCEMENT DISPLAYS POWERED FROM THE FARN PANEL. PROVIDE WEATHERPROOF SPEAKERS RATED FOR EXTERIOR APPLICATIONS MOUNTED AT NO LESS THAN 80-INCHES. DEDICATED BATTERY CABINETS SHALL BE MOUNTED NO MORE THAN 36-INCHES ABOVE THE FINISHED FLOOR. THE NEW FIRE ALARM SYSTEM SHALL UTILIZE THE EXISTING 100MA BASE LOOP WIRING TO TRANSMIT SIGNALS. PROVIDE A NEW DIGITAL ELECTRONIC TELEGRAPHIC TRANSMITTER (DETT 16) TO REPLACE THE EXISTING GAMEWELL MASTERBOX. PROVIDE SEALED LEAD CALCIUM BATTERIES AS THE SECONDARY POWER SUPPLY CAPABLE OF OPERATING THE FIRE ALARM/MASS NOTIFICATION SYSTEM ON STANDBY FOR 48 HOURS FOLLOWED BY 15 MINUTES OF ALARM. CHARGE THE BATTERIES VIA THE FARN PANEL. PROVIDE A 6-INCH DEDICATED FIRE PROTECTION WATER SUPPLY FOR THE SPRINKLER SYSTEM. PROVIDE SPRINKLER COVERAGE BELOW OVERHEAD OBSTRUCTIONS EXCEEDING 48-INCHES (LARGE DUCTWORK & MECHANICAL MEZZANINES) TO PROVIDE COMPLETE COVERAGE THROUGHOUT THE BUILDING. PROVIDE WEATHERPROOF APPLIANCES FOR AREAS NEAR SHOWERS. 	<ol style="list-style-type: none"> FOLLOWING THE COMPLETION AND ACCEPTANCE OF THE NEW FIRE ALARM/MASS NOTIFICATION SYSTEM, THE EXISTING FIRE ALARM SYSTEM SHALL BE DEMOLISHED COMPLETELY. DEMOLISH THE EXISTING GAMEWELL-FCI PANEL AND GAMEWELL MASTERBOX AND TURN OVER TO THE GOVERNMENT. 	HAZARD CATEGORY	DESIGN DENSITY (GPM/SQFT)	DESIGN AREA (SQFT)	MAXIMUM AREA PER SPRINKLER	HOSE STREAM (GPM)
HC-1	0.10	1500	225	250			
HC-2	0.20	2500	130	500			

DATE	DESCRIPTION	BY	APPR



APPROVED	A/E INFO
FIR COMMANDER NAFAC	
ACTIVITY	
SATISFACTORY TO	DATE
DES ERZ	DRW ERZ
CHK	DPS
BRANCH MANAGER G.E. BAILEY, P.E.	
CHIEF ENGR/ARCH S.M. LANTZ, P.E.	
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND NAVAL FACILITIES ENGINEERING COMMAND JEBLS - VIRGINIA BEACH, VA JOINT EXPEDITIONARY BASE LITTLE CREEK-FORT STORY VIRGINIA BEACH, VA RENOVATIONS AND REPAIRS TO BUILDING 2009 FIRE PROTECTION NEW WORK PLAN	
SCALE: AS NOTED	PROJECT NO.: 1361870
CONSTR. CONTR. NO. N/A	NAFAC DRAWING NO. 12719116
SHEET 11 OF 39	F-101
DRAWN/REVISION: 10 MARCH 2009	

FILE NAME: P:\VA\Hitec\en\MultipleBuildings\2015_1361870\DBB_Reorganize_Admin_Spaces\B_Design\BDDC_2009\Drawings\Sheet\11_FireProtection\11_FireProtection\1361870-F-501.dwg LAYOUT NAME: F-501 FIRE ALARM-MASS NOTIFICATION DETAILS PLOTTED: Wednesday, March 30, 2016 - 8:37am USER: huffelrichter

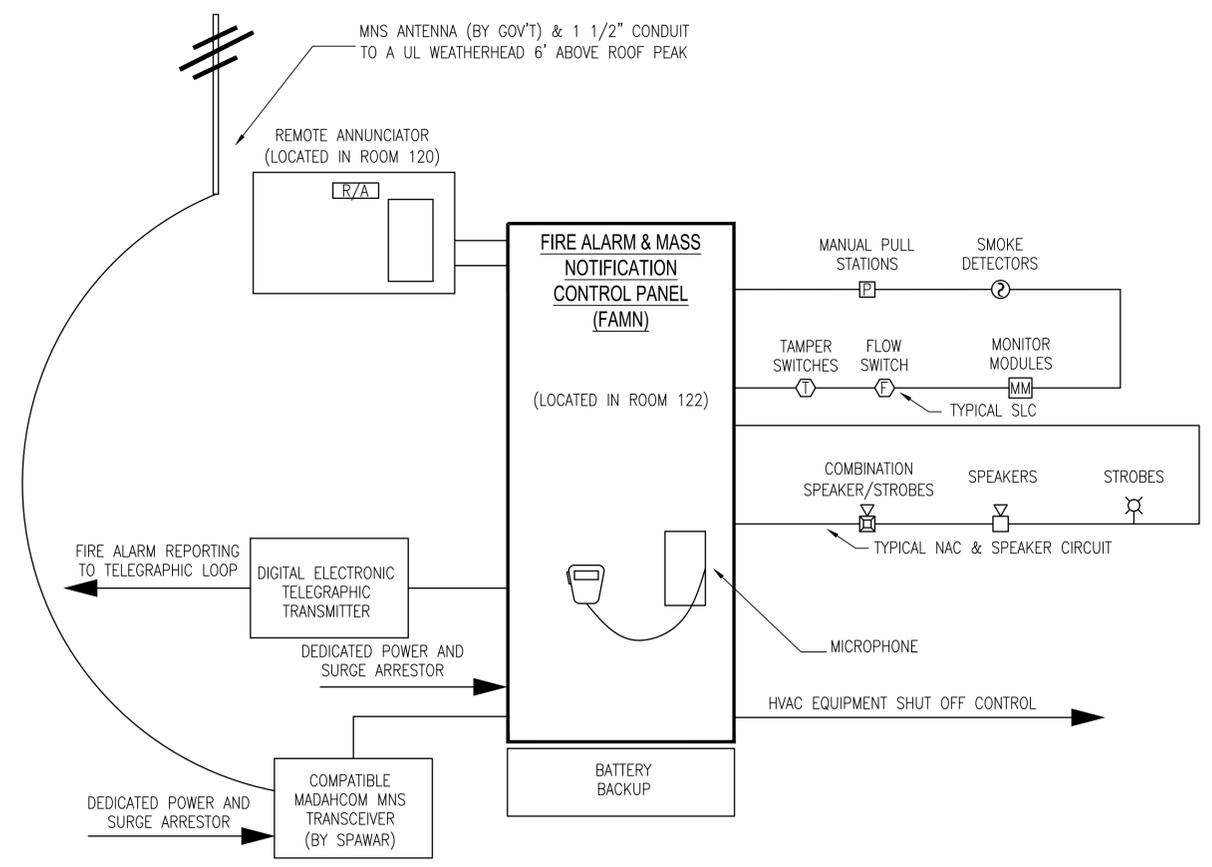


C1 DEVICE & APPLIANCE MOUNTING HEIGHTS
SCALE: NONE

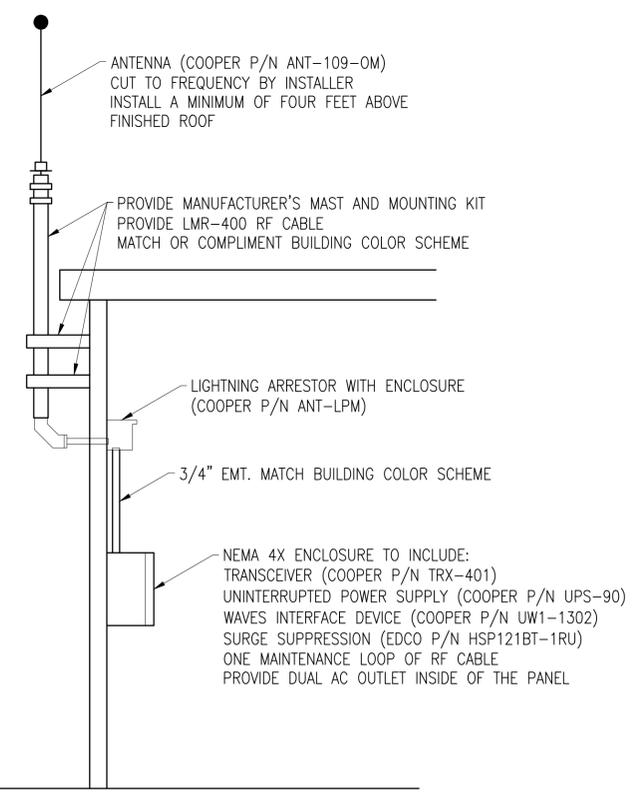
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
MANUAL PULL STATION	1	X	X				X			X	X							X	
SPRINKLER WATER FLOW SWITCH	2	X	X				X			X	X			X	X			X	
SPRINKLER VALVE TAMPER SWITCH	3			X	X					X		X							
ROOM 122 SMOKE DETECTOR	4	X	X				X			X	X			X	X			X	
IN-DUCT SMOKE DETECTOR	5									X		X					X		
FIRE ALARM LOW BATTERY	6					X	X		X	X			X						
CIRCUIT FAULT (OPEN, GROUND, SHORT)	7					X	X		X	X			X						
FIRE ALARM AC POWER FAILURE	8					X	X		X	X			X						
AMPLIFIER AC FAILURE	9					X	X		X	X			X						
LOSS OF AMPLIFIER	10					X	X		X	X			X						
LIVE VOICE ANNOUNCEMENT FROM MNS MICROPHONE	11			X	X			X				X			X	X			X
RECEIPT OF MNS MESSAGE OVER BASE WIDE MASS NOTIFICATION SYSTEM	12			X	X			X				X			F1	F1			F1

NOTES:
X = REQUIRED FUNCTION
F1 = FEATURE ASSOCIATED WITH FUTURE BASE WIDE MASS NOTIFICATION SYSTEM.

B1 FIRE ALARM MASS NOTIFICATION OPERATIONAL MATRIX
SCALE: NONE



A1 FIRE ALARM MASS NOTIFICATION RISER DIAGRAM
SCALE: NONE



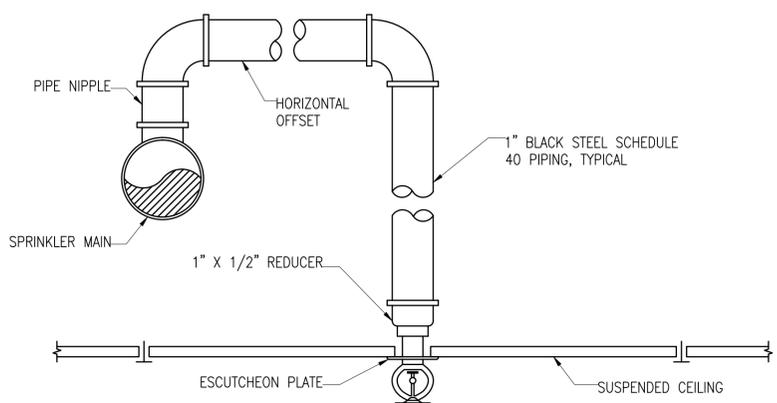
NOTE: CONNECT UWI AND TRX LINE LEVEL AUDIO CIRCUIT SO ALERT FROM WAVES WILL PROPERLY ACTIVATE THE BUILDING'S AUDIO AND VISUAL NOTIFICATION APPLIANCES. TRANSCIEVER PROVIDED BY SPAWAR.

D1 MASS NOTIFICATION ANNTENA DETAIL
SCALE: NONE

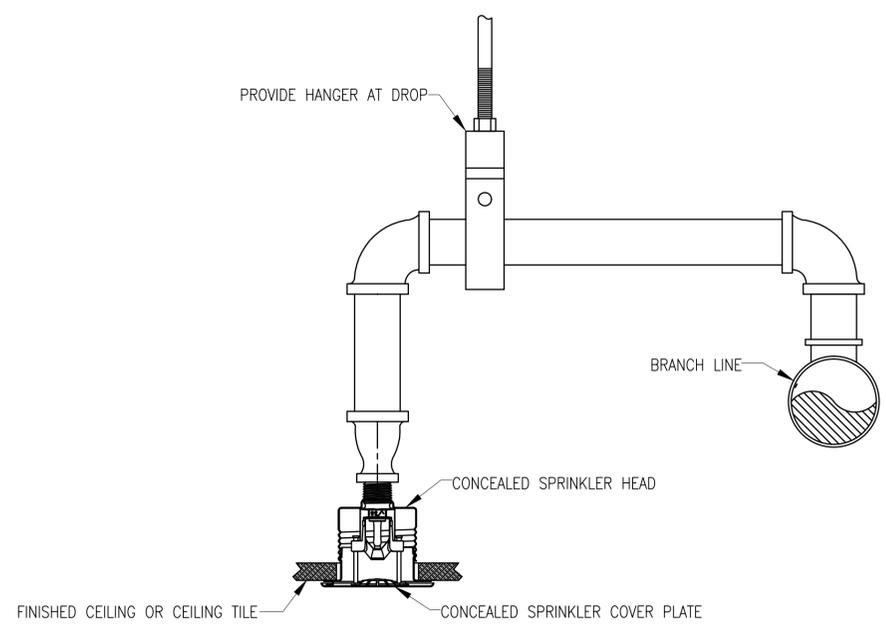


<p>APPROVED: _____</p> <p>FIR COMMANDER NAVFAC</p> <p>ACTIVITY</p> <p>SATISFACTORY TO: _____ DATE: _____</p> <p>DES: ERZ DRW: ERZ CHK: DPS</p> <p>BRANCH MANAGER: G.E. BAILEY, P.E.</p> <p>CHIEF ENGR/ARCH: S.M. LANTZ, P.E.</p>	<p>DEPARTMENT OF THE NAVY</p> <p>NAVAL FACILITIES ENGINEERING COMMAND</p> <p>NAVAL FACILITIES ENGINEERING COMMAND</p> <p>4600 S - VIRGINIA BEACH, VA</p> <p>RENOVATIONS AND REPAIRS</p> <p>TO BUILDING 2009</p> <p>FIRE ALARM/MASS NOTIFICATION DETAILS</p>
<p>SCALE: AS SHOWN</p> <p>PROJECT NO.: 1361870</p> <p>CONSTR. CONTR. NO. N/A</p> <p>NAVFAC DRAWING NO. 12719117</p> <p>SHEET 12 OF 39</p> <p>F-501</p> <p>DRAWFORM REVISION: 10 MARCH 2009</p>	

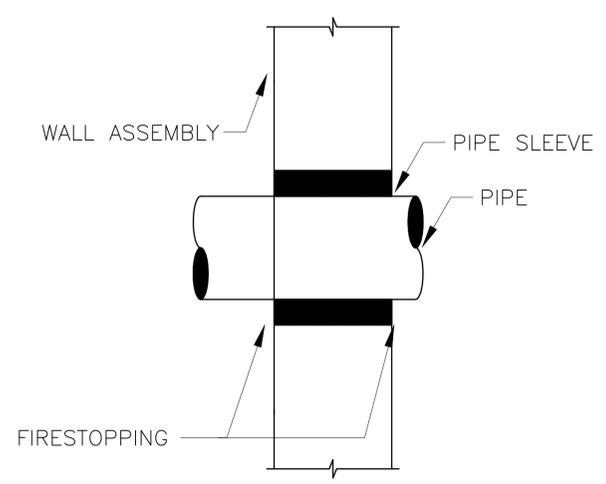
FILE NAME: P:\VA\LittleCreek\MultipleBuildings\2015_1361870\DBB_Response\Admin_Spaces\B_Design\BLOC_2009\Drawings\Sheet\11_FireProtection\1361870-F-502.dwg LAYOUT NAME: F-502 FIRE SPRINKLER DETAILS PLOTTED: Wednesday, March 30, 2016 - 8:41am USER: kurt.flechner



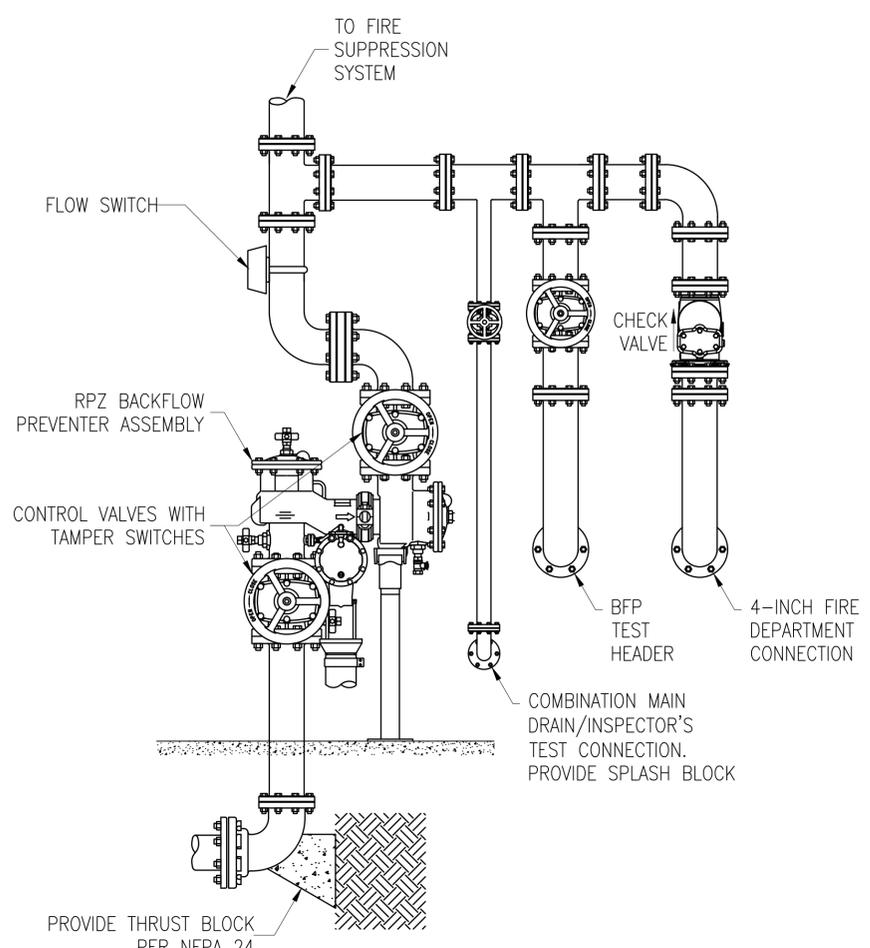
C1 ARMORER PIPE DETAIL
SCALE: NONE



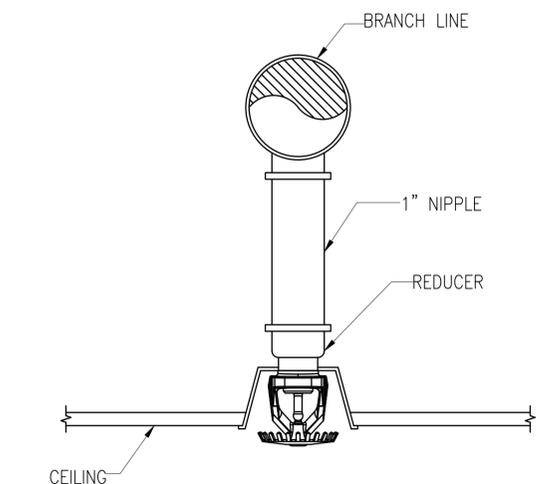
A1 CONCEALED SPRINKLER DETAIL
SCALE: NONE



A2 PIPE PENETRATION DETAIL
SCALE: NONE



B4 SPRINKLER RISER DETAIL
SCALE: NONE



C2 DROP NIPPLE PIPE DETAIL
SCALE: NONE

APPROVED	DATE	APP'R
FOR COMMANDER NAVFAC		
ACTIVITY		
SATISFACTORY TO	DATE	
DES ERZ	DRW ERZ	CHK DPS
BRANCH MANAGER G.E. BAILEY, P.E.		
CHIEF ENG/ARCH S.M. LANTZ, P.E.		
DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND	NAVAL FACILITIES ENGINEERING COMMAND
HEAD LITTLE CREEK	HEAD LITTLE CREEK	HEAD LITTLE CREEK
	RENOVATIONS AND REPAIRS	RENOVATIONS AND REPAIRS
	TO BUILDING 2009	TO BUILDING 2009
	FIRE SPRINKLER DETAILS	FIRE SPRINKLER DETAILS
SCALE:	AS SHOWN	
PROJECT NO.:	1361870	
CONSTR. CONTR. NO.	N/A	
NAVFAC DRAWING NO.	12719118	
SHEET 13	OF 39	
F-502		
DRAWFORM REVISION: 10 MARCH 2009		

FILE NAME: P:\VA\1161870_Creek\1161870_001.DWG PLOTTER: Redwood, March 30, 2016 8:49am USER: huftechtner

PLUMBING ABBREVIATIONS

AAV	AIR ADMITTANCE VALVE	HW	DOMESTIC HOT WATER
AC	ABOVE CEILING	HWR	DOMESTIC HOT WATER RECIRCULATION
ADA	AMERICANS WITH DISABILITIES ACT	HZ	HERTZ
AFF	ABOVE FINISHED FLOOR	ICE	ICE MAKER
AP	ACCESS PANEL	INV	INVERT ELEVATION
BF	BELOW FLOOR	IWC	INCHES OF WATER COLUMN
BG	BELOW GRADE	KS	KITCHEN SINK
BFP	BACKFLOW PREVENTER	LAV	LAVATORY
BTUH	BRITISH THERMAL UNIT PER HOUR	MAX	MAXIMUM
CO	CLEANOUT	MIN	MINIMUM
CONC	CONCRETE	NIC	NOT IN CONTRACT
CW	DOMESTIC COLD WATER	PH	PHASE
DN	DOWN	PRS	PRESSURE REDUCING STATION
DWG	DRAWING	PSI	POUNDS PER SQUARE INCH
DWV	DRAIN, WASTE, VENT	RL	ROOF LEADER
EA	EACH	RD	ROOF DRAIN
EL	ELEVATION	REF	REFRIGERATOR
EQUIP	EQUIPMENT	RPM	REVOLUTIONS PER MINUTE
ETR	EXISTING TO REMAIN	SAN	SANITARY
EWG	ELECTRIC WATER COOLER	SH	SHOWER
F	FAHRENHEIT	SIM	SIMILAR
FCO	FLOOR CLEANOUT	SS	SERVICE SINK
FD	FLOOR DRAIN	TYP	TYPICAL
FLA	FULL LOAD AMPS	UON	UNLESS OTHERWISE NOTED
FT	FEET	UR	URINAL
G	NATURAL GAS	V	VENT
GAL	GALLON	VS	VENT STACK
GFCI	GOVERNMENT FURNISHED, CONTRACTOR INSTALLED	VTR	VENT THRU ROOF
GPH	GALLONS PER HOUR	W	WASTE
GPM	GALLONS PER MINUTE	WC	WATER CLOSET
HB	HOSE BIBB	WCO	WALL CLEANOUT
HC	HANDICAP ACCESSIBLE	WHA	WATER HAMMER ARRESTOR
HP	HORSEPOWER	WS	WASTE STACK
		WSHR	WASHING MACHINE
			DEGREE

PLUMBING LEGEND

	DOMESTIC COLD WATER PIPING (CW)
	DOMESTIC HOT WATER PIPING (HW)
	DOMESTIC HOT WATER RETURN PIPING (HWR)
	SOIL, WASTE, OR SANITARY SEWER PIPING (W)
	VENT PIPING (V)
	DOWNWARD SLOPE
	GATE VALVE (HORIZONTAL & VERTICAL)
	CHECK VALVE
	TEMPERATURE AND PRESSURE RELIEF VALVE
	UNION
	HOSE BIBB (HB)
	FLOOR DRAIN (FD)
	FLOOR CLEANOUT (FCO)
	WALL CLEANOUT (WCO)
	WATER HAMMER ARRESTOR (PDI SIZE FIXTURE UNIT RATING 1-11)
	VENT THRU ROOF (VTR)
	PLUMBING FIXTURE MARK
	PIPE TURNING DOWN
	PIPE TURNING UP
	THIN LINE WEIGHT INDICATES EXISTING ITEM TO REMAIN
	HEAVY LINE WEIGHT INDICATES NEW WORK TO BE PROVIDED
	HEAVY DASHED LINE WEIGHT INDICATES EXISTING ITEM TO REMOVE, OR NEW VENT POINT OF DISCONNECTION, LIMIT OF WORK
	POINT OF CONNECTION, LIMIT OF WORK
	DEMOLITION NOTE
	NEW WORK NOTE

- ### GENERAL PLUMBING NOTES
- THESE GENERAL PLUMBING NOTES APPLY TO THE ALL PLUMBING DRAWINGS IN THIS SET. SHEET SPECIFIC NOTES ARE INDICATED ON EACH SHEET UNDER GENERAL SHEET NOTES.
 - INSTALL ALL EQUIPMENT PER MANUFACTURER'S INSTRUCTIONS.
 - PATCH ALL HOLES FROM REMOVAL OF PIPING OR EQUIPMENT TO MATCH ADJACENT CONSTRUCTION.
 - PROVIDE ALL MATERIALS AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERABLE PLUMBING SYSTEMS AS INDICATED ON THE DRAWINGS, SPECIFIED AND AS REQUIRED BY CODE.
 - PROVIDE ALL PLUMBING FIXTURES AND EQUIPMENT WITH ACCESSIBLE STOPS.
 - FIELD VERIFY ALL DIMENSIONS.
 - UNLESS INDICATED OTHERWISE, PIPING TO BE REMOVED SHALL INCLUDE ASSOCIATED HANGERS, INSULATION, AND OTHER APPURTENANCES.
 - ALL CLEANOUTS SHALL BE FULL SIZE OF PIPE.
 - ALL PIPING WORK SHALL BE COORDINATED WITH ALL TRADES INVOLVED. PROVIDE OFFSETS IN PIPING AROUND OBSTRUCTIONS AT NO ADDITIONAL COST TO THE GOVERNMENT.
 - ALL PLUMBING VENTS WITHIN A 10'-0" RADIUS OF EXHAUST VENTS SHALL BE EXTENDED TO A HEIGHT OF 2'-0" ABOVE EXHAUST VENT CROWN.
 - ALL PLUMBING VENTS WITHIN A 10'-0" RADIUS OF ANY ROOF TOP UNIT SHALL BE EXTENDED TO A HEIGHT OF 3'-0" ABOVE THE FRESH AIR INTAKE.
 - ALL HOSE BIBBS SHALL BE MOUNTED 18" ABOVE FINISHED FLOOR UON.
 - ALL WALL HYDRANTS SHALL BE MOUNTED 24" ABOVE FINISHED GRADE UON.
 - SLOPES AND INVERT ELEVATIONS OF ALL INTERIOR PIPING SHALL BE ESTABLISHED BEFORE ANY PIPING IS INSTALLED, IN ORDER THAT PROPER SLOPES WILL BE MAINTAINED. ALL PIPING SHALL BE RUN TO AVOID CONFLICT WITH OTHER TRADES.
 - COORDINATE WITH ARCHITECTURAL WORKING DRAWINGS PRIOR TO ROUGHING-IN PLUMBING FIXTURES.
 - MAKE PROPER HOT AND COLD WATER, HOT WATER RECIRCULATING, WASTE, VENT, AND GAS, ETC PIPING CONNECTIONS TO ALL FIXTURES AND EQUIPMENT EVEN THOUGH ALL BRANCHES, FITTINGS AND CONNECTIONS ARE NOT SHOWN.
 - PROVIDE DEEP SEAL TRAPS FOR ALL FLOOR DRAINS.
 - IT IS THE INTENTION OF THE DRAWINGS TO COVER ALL WORK AND MATERIAL FOR A COMPLETE FIRST CLASS INSTALLATION. ANY EQUIPMENT, PLUMBING FIXTURE, TRIM HARDWARE AND/OR DEVICES USUALLY UTILIZED IN THE CLASS OF WORK, THOUGH NOT SPECIFICALLY MENTIONED OR SHOWN ON THE DRAWINGS, BUT WHICH MAY BE NECESSARY FOR THE SATISFACTORY COMPLETION OF THE WORK (AS DETERMINED BY THE CONTRACTING OFFICER), SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR AS PART OF HIS TOTAL WORK.
 - ENTIRE INSTALLATION, INCLUDING MATERIALS, EQUIPMENT, AND WORKMANSHIP, SHALL CONFORM WITH ALL APPLICABLE LAWS, CODES, AND REGULATIONS OF MUNICIPAL, STATE, AND FEDERAL AUTHORITIES, ALSO THE LATEST EDITION OF THE STATE BUILDING CODES, APPLICABLE ASPE STANDARDS AND OTHER REGULATORY BODIES HAVING JURISDICTION OVER THE CLASS OF WORK. WHERE APPLICABLE, MATERIALS AND EQUIPMENT SHALL HAVE STAMPS OR SEALS OF ARI, ASME, UL, NSF OR ASTM. THE CONTRACTOR SHALL MAKE TESTS FOR ACCEPTANCE AND APPROVAL BY CODE AND THE REQUIREMENTS OF APPLICABLE REGULATORY AGENCIES. REQUIRED TESTS SHALL BE PERFORMED IN THE PRESENCE OF THE GOVERNMENT UNLESS OTHERWISE WAIVED IN WRITING.
 - THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, LICENSES, DOCUMENTS, AND SERVICES RELATED TO INSTALLATION OF THE WORK.
 - THE CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER TRADES IN ORDER TO RESOLVE ANY CONFLICTS THAT MIGHT ARISE DUE TO THE LOCATION OF EQUIPMENT OR THE USE OF THE SPACE.
 - THE CONTRACTOR SHALL GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR FROM DATE OF GOVERNMENT ACCEPTANCE.
 - RUN ALL PIPING CONCEALED ABOVE CEILING OR IN WALLS OR CHASES UNLESS OTHERWISE NOTED.
 - EXISTING PIPE, AND EQUIPMENT SIZES NOTED ARE FOR THE CONVENIENCE OF THE CONTRACTOR ONLY AND ARE NOT GUARANTEED TO BE CORRECT. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING DUCT, PIPE, AND EQUIPMENT SIZES AND THEIR RESPECTIVE LOCATIONS BEFORE PROCEEDING WITH ANY ASSOCIATED WORK.
 - CUT OPENINGS, AS REQUIRED, IN THE EXISTING CONSTRUCTION FOR THE INSTALLATION OF PIPING AND EQUIPMENT. PATCH AND REPAIR TO MATCH THE EXISTING ADJACENT CONSTRUCTION. OPENINGS IN EXISTING CONCRETE MASONRY CONSTRUCTION SHALL BE SAW CUT.
 - LAYOUT OF PIPING IS DIAGRAMMATIC. RUN ALL EXPOSED PIPING AS HIGH AS POSSIBLE UNLESS OTHERWISE NOTED. ALLOW FOR RISES, DROPS, AND OFFSETS AS REQUIRED.
 - AFTER THE PIPING IS INSULATED, PROVIDE SETON BRAND OR EQUAL FACTORY-FABRICATED PIPE LABELS, WITH DIRECTION OF FLOW ARROWS, ON THE FOLLOWING PIPING CW, HW, HWR, AT 10 FOOT ON CENTER ON THE PIPING MAINS AND 5 FOOT ON CENTER ON THE BRANCH RUNOUTS FROM MAINS.

PLUMBING FIXTURE SCHEDULE

MARK	DESCRIPTION	CW SIZE	HW SIZE	WASTE SIZE	VENT SIZE	MOUNTING	BASIS OF DESIGN	REMARKS
P-1	WATER CLOSET, FLUSH VALVE MANUAL, BRASS, POLISHED CHROME FINISH	1"	-	3"	1 1/2"	FLOOR	SLOAN ST-2000-1.28, ROYAL FLUSHOMETER 111-1.28	BRASS MOUNTING BOLTS, NOTE 1
P-2	LAVATORY, DROP IN, VITREOUS CHINA, WITH OVERFLOW, POP UP AND STOPPER	1/2"	1/2"	1 1/2"	1 1/2"	COUNTER	KOHLER RADIANT K-2907-4	NOTE 1
	FAUCET SET, CHROME, 2 HANDLE DECK MOUNT, 4" CENTERSET, GREATER THAN OR EQUAL 5" LONG SPOUT						DELTA 2530-MPU, POP UP METAL DRAIN	
P-3	SHOWER RECEPTOR, TAN AND WHITE MARBLE CHIPS IN WHITE PORTLAND CEMENT	-	-	2"	1 1/2"	FLOOR	FLORESTONE TERRAZZO MODEL 200 RECESS SHOWER RECEPTOR	PROVIDE DEEP SEAL TRAP
P-4	KITCHEN SINK, 31"x22"x10" DEPTH, SINGLE COMPARTMENT, TOP MOUNT, 4 HOLES	1/2"	1/2"	1 1/2"	1 1/2"	COUNTER	ELKAY GOURMET DLR312210, GARBAGE DISPOSAL, HOSE SPRAYER	STAINLESS STEEL, NOTE 3
	FAUCET SET, CHROME, SINGLE HANDLE DECK MOUNT, 4" CENTERSET, 7 1/4" TALL, 10" REACH SPOUT, SIDESPRAY						KOHLER CORALAIS K-15172-FL-CP	
P-5	SUPPLY FOR COFFEE MACHINE	3/8"	-	-	-	WALL	PROVIDE BALL VALVE SHUT OFF, IN-LINE WATTS BACKFLOW PREVENTOR, MODEL # 3/8 #7, NSF 61, WATER FILTER, NSF 61	COFFEE MACHINE NIC
P-6	SHOWER FAUCET TRIM, HOT AND COLD MIXING VALVE, SCALD GUARD, PRESSURE BALANCE, TEMPERATURE AND VOLUME CONTROL, MULTICHOICE UNIVERSAL VALVE BODY, 2 GPM SHOWER HEAD, FULL SPRAY	1/2"	1/2"	-	-	WALL	DELTA 1728-MC, MATTE CHROME, TRIM, SCREWDRIVER STOPS	SHOWER HEADS AT 6 FT HIGH, NOTE 2
							SHOWER HEAD DELTA RP28599, DELTA R10000	1/2" SHOWER PIPING MOUNTED IN WALL
FCO-1	FLOOR CLEAN OUT	-	-	4"	-			COVER SHALL BE FLUSH WITH FLOOR
FD-1	FLOOR DRAIN, THREADED STRAINER BARREL, ADJUSTABLE STAINLESS STEEL STRAINER	-	-	2"	-	FLOOR		6" DIA, PROVIDE DEEP SEAL TRAP
BFP-1	BACKFLOW PREVENTER WITH INLET STRAINER AND SHUT OFF VALVES	2"	-	3/4"	-	FLOOR	WATTS SERIES 909	PROVIDE FUNNEL DRAIN TO FLOOR DRAIN
TMV-1	THERMOSTATIC MIXING VALVE, LEAD FREE, ASSE 1017, IAPMO cUPC	-	3/4"	-	-	WALL	LEONARD TM-520B-LF-DT-TC, 140 DEG F IN, 110 DEG F OUT	1" OUTLET, 32 GAL MAX

NOTES:

- COLORS FOR FIXTURES SHALL BE WHITE. TOILET SEAT SHALL BE WHITE. PIPING, HANDLES AND FLUSH VALVES SHALL BE POLISHED CHROME. WALL CLEAN OUTS SHALL BE STAINLESS STEEL COVERS.
- PROVIDE A THERMOSTATIC MIXING VALVE, TMV OPTION. PROVIDE ROUGH IN VALVE WITH COPPER CONNECTIONS WITH STOPS. BASIS OF DESIGN IS DELTA MULTICHOICE UNIVERSAL ROUGH VALVE BODY R10000-UNWS. PLUMBER RESPONSIBLE FOR CORRECTLY MATCHING ROUGH IN VALVE.
- PROVIDE 1/2 HP GARBAGE DISPOSAL IN RIGHT COMPARTMENT.

PUMP SCHEDULE

MARK	TYPE	SERVICE	GPM	TOTAL DEVELOPED HEAD IN FT.	PUMP MOTOR					REMARKS	NOTES
					HP	RPM	VOLTS	PHASE	Hz		
PUMP-1	INLINE RECIRCULATOR	HWR	7	17.1	1/6	3300	120	1	60	BASIS OF DESIGN B&G PL-45, 2.75" IMPELLER	1 - 3

NOTES:

- PROVIDE CALIBRATED, MANUAL BALANCING VALVE FOR THESE PUMPS.
- PROVIDE SUPPORT FROM ABOVE. DO NOT SOLELY SUPPORT PUMP FROM PIPE.
- TRIPLE DUTY VALVE IS NOT ALLOWED.

	DATE
	DESCRIPTION
	SCALE

RENOVATIONS AND REPAIRS TO BUILDING 2009

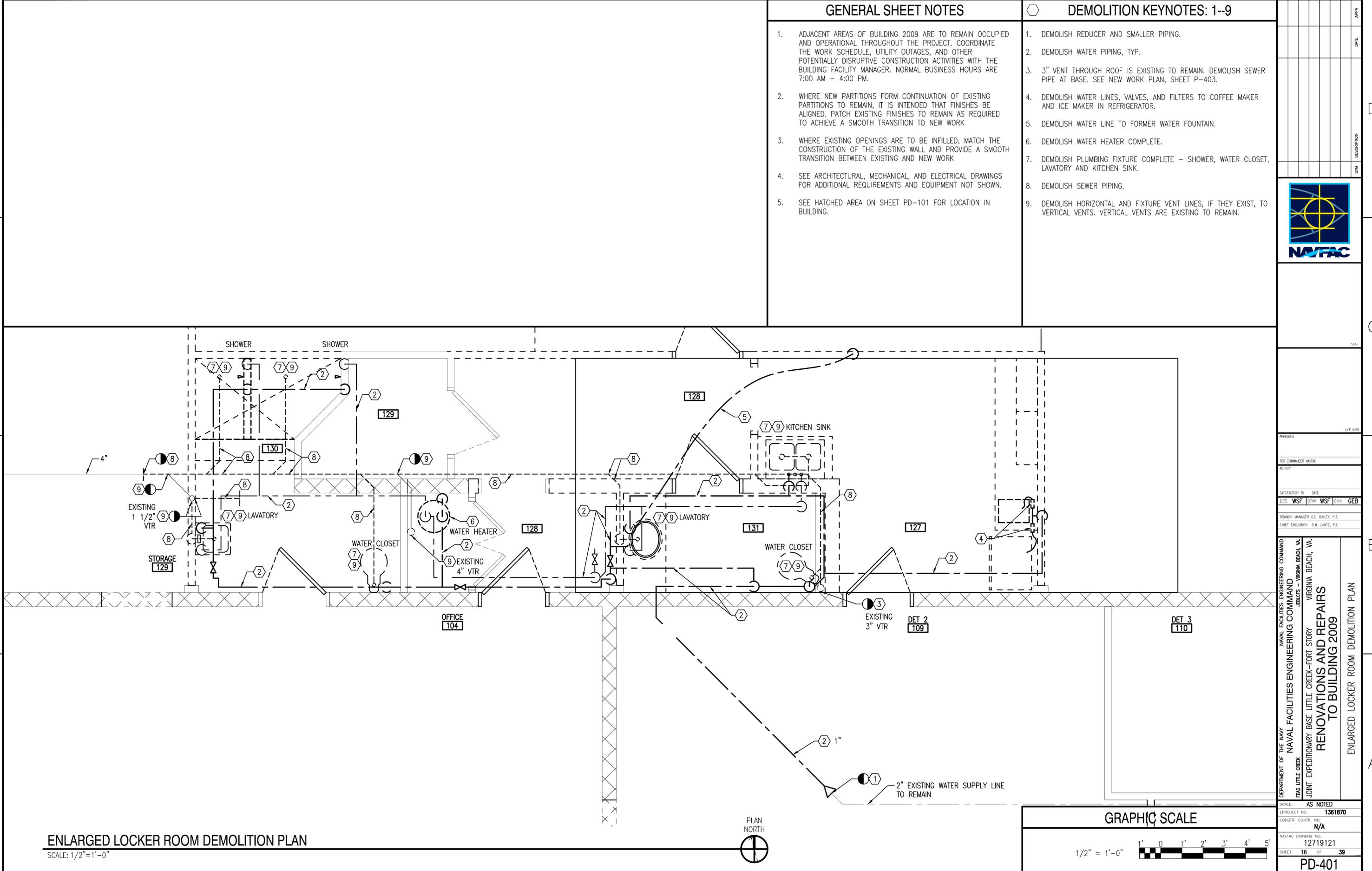
PLUMBING GENERAL DATA SHEET

APPROVED	
FOR COMMANDER NAFAC	
ACTIVITY	
SATISFACTORY TO DATE	
DES	WSF
CDW	WSF
CHK	GEB
BRANCH MANAGER G.E. BAILEY, P.E.	
CHIEF ENGINEER/ARCH. S.M. LANTZ, P.E.	

SCALE: AS NOTED
PROJECT NO.: 1361870
CONSTR. CONTR. NO. N/A
NAFAC DRAWING NO. 12719119
SHEET 14 OF 39
P-001

DRAWFORM REVISION: 10 MARCH 2009

FILE NAME: P:\VA\liter\ceah\multiple\buildings\2015_1361870_DBB_Response_Admin_Spaces\B_Design\BDDC_2009\Drawings\Sheet\1361870-PD-401.dwg LAYOUT NAME: PD-401 PLOTTED: Wednesday, March 30, 2016 - 8:52am USER: kurt.flechner



GENERAL SHEET NOTES

1. ADJACENT AREAS OF BUILDING 2009 ARE TO REMAIN OCCUPIED AND OPERATIONAL THROUGHOUT THE PROJECT. COORDINATE THE WORK SCHEDULE, UTILITY OUTAGES, AND OTHER POTENTIALLY DISRUPTIVE CONSTRUCTION ACTIVITIES WITH THE BUILDING FACILITY MANAGER. NORMAL BUSINESS HOURS ARE 7:00 AM - 4:00 PM.
2. WHERE NEW PARTITIONS FORM CONTINUATION OF EXISTING PARTITIONS TO REMAIN, IT IS INTENDED THAT FINISHES BE ALIGNED. PATCH EXISTING FINISHES TO REMAIN AS REQUIRED TO ACHIEVE A SMOOTH TRANSITION TO NEW WORK
3. WHERE EXISTING OPENINGS ARE TO BE INFILLED, MATCH THE CONSTRUCTION OF THE EXISTING WALL AND PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING AND NEW WORK
4. SEE ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS AND EQUIPMENT NOT SHOWN.
5. SEE HATCHED AREA ON SHEET PD-101 FOR LOCATION IN BUILDING.

DEMOLITION KEYNOTES: 1--9

1. DEMOLISH REDUCER AND SMALLER PIPING.
2. DEMOLISH WATER PIPING, TYP.
3. 3" VENT THROUGH ROOF IS EXISTING TO REMAIN. DEMOLISH SEWER PIPE AT BASE. SEE NEW WORK PLAN, SHEET P-403.
4. DEMOLISH WATER LINES, VALVES, AND FILTERS TO COFFEE MAKER AND ICE MAKER IN REFRIGERATOR.
5. DEMOLISH WATER LINE TO FORMER WATER FOUNTAIN.
6. DEMOLISH WATER HEATER COMPLETE.
7. DEMOLISH PLUMBING FIXTURE COMPLETE - SHOWER, WATER CLOSET, LAVATORY AND KITCHEN SINK.
8. DEMOLISH SEWER PIPING.
9. DEMOLISH HORIZONTAL AND FIXTURE VENT LINES, IF THEY EXIST, TO REMAIN. VERTICAL VENTS ARE EXISTING TO REMAIN.



APPROVED	DATE
FOR COMMANDER NAVFAC	
ACTIVITY	
SATISFACTORY TO	DATE
DES: WSF	DRW: WSF
CHK: GEB	
BRANCH MANAGER G.E. BAILEY, P.E.	
CHIEF ENG/ARCH S.M. LANTZ, P.E.	
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND NAVAL FACILITIES ENGINEERING COMMAND JEDCS - VIRGINIA BEACH, VA	
FEAD LITTLE CREEK JOINT EXPEDITIONARY BASE LITTLE CREEK-FORT STORY VIRGINIA BEACH, VA	
RENOVATIONS AND REPAIRS TO BUILDING 2009	
ENLARGED LOCKER ROOM DEMOLITION PLAN	
SCALE: AS NOTED	
EPROJECT NO.: 1361870	
CONSTR. CONTR. NO. N/A	
NAVFAC DRAWING NO. 12719121	
SHEET 16 OF 39	
PD-401	
DRAWFORM REVISION: 10 MARCH 2009	

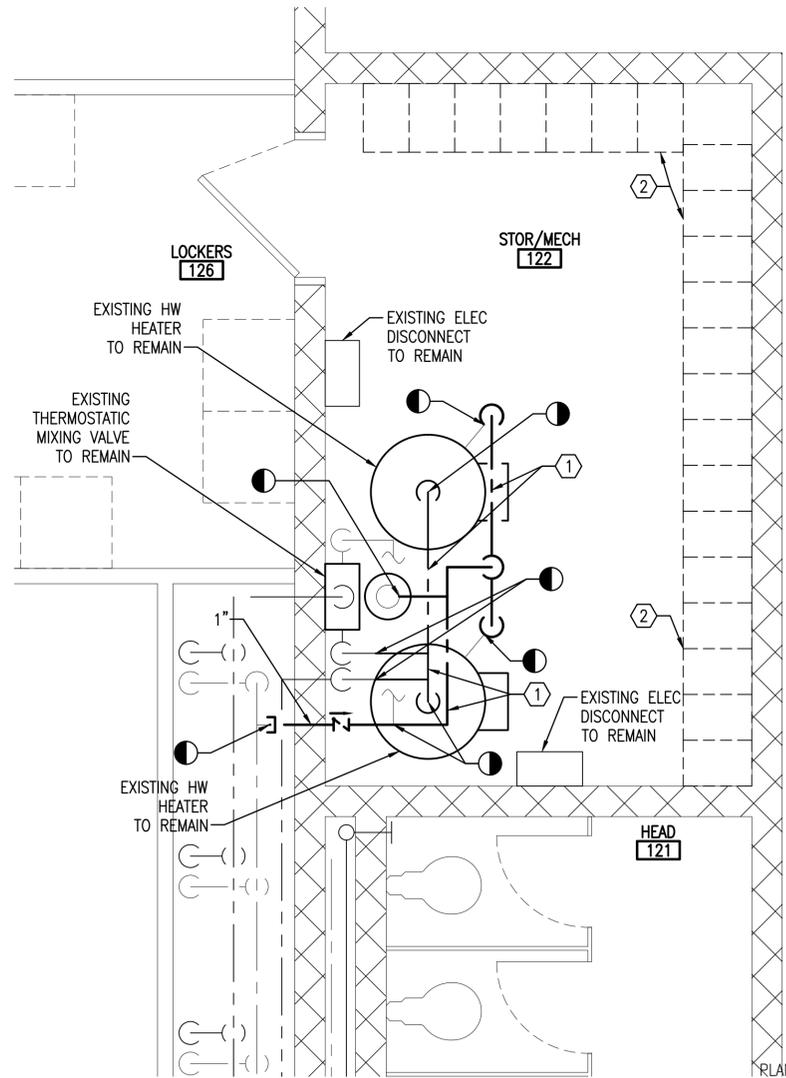
ENLARGED LOCKER ROOM DEMOLITION PLAN

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

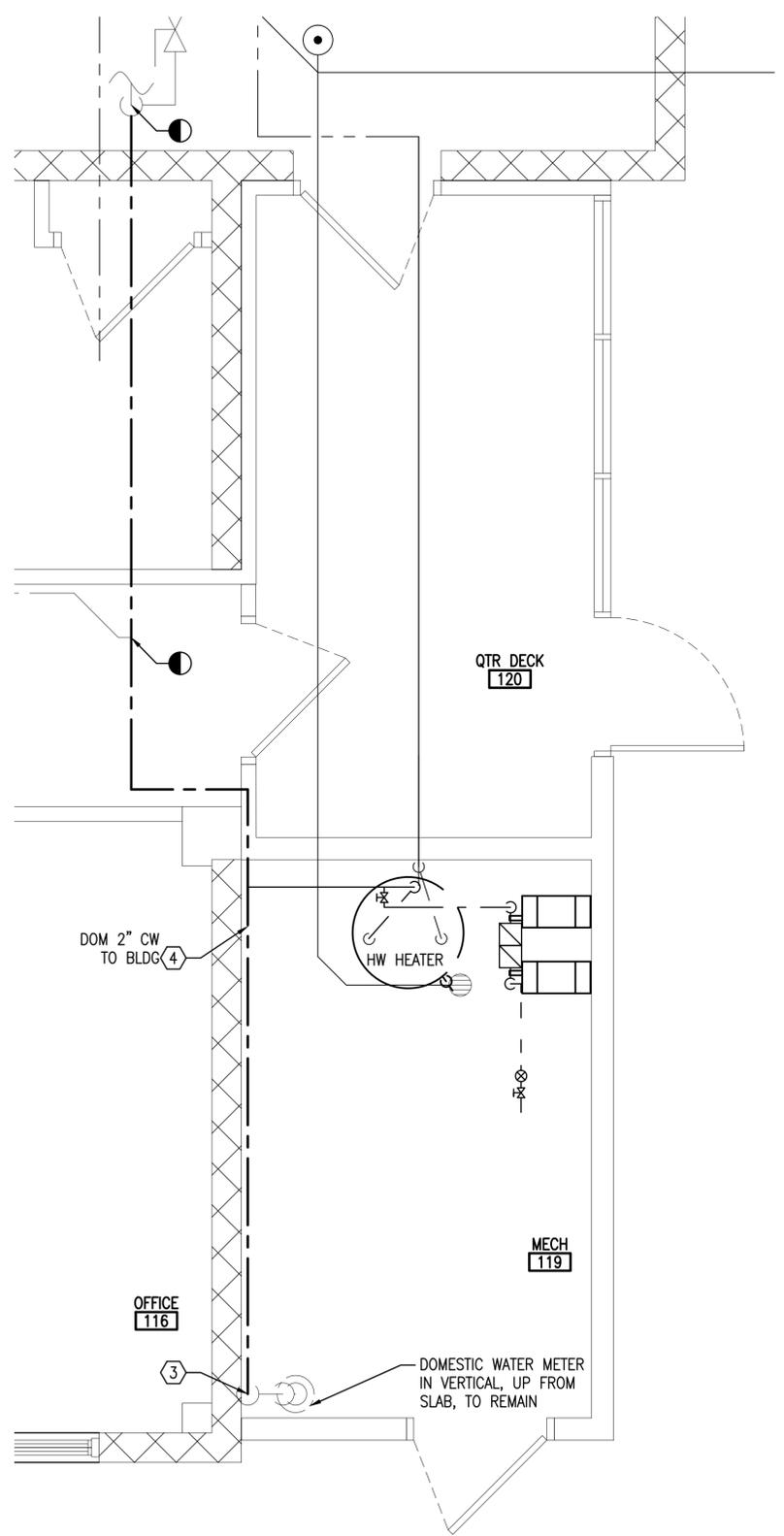
GRAPHIC SCALE



FILE NAME: P:\VA\Herc\en\MultipleBuildings\2015_1361870\DBB_Responses\Admin_Spaces\B_Design\BDDC_2009\Drawings\Sheet\1361870-PD-402.dwg LAYOUT NAME: PD-402 PLOTTED: Wednesday, March 30, 2016 - 8:50am USER: kurt.flechner



A1 ENLARGED PLAN MECHANICAL ROOM 122
SCALE: 1/2"=1'-0"
A-101



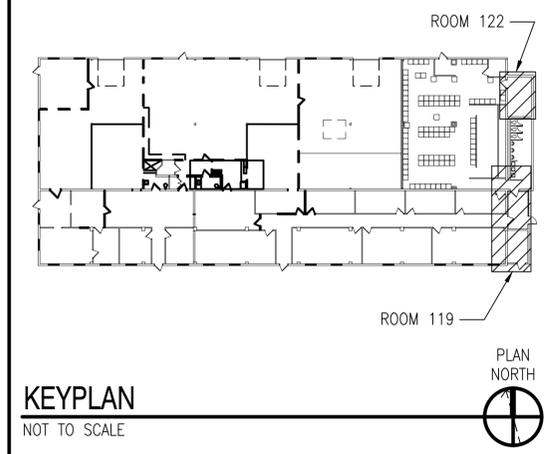
A1 ENLARGED PLAN MECHANICAL ROOM 119
SCALE: 1/2"=1'-0"
A-101

GENERAL SHEET NOTES

1. ADJACENT AREAS OF BUILDING 2009 ARE TO REMAIN OCCUPIED AND OPERATIONAL THROUGHOUT THE PROJECT. COORDINATE THE WORK SCHEDULE, UTILITY OUTAGES, AND OTHER POTENTIALLY DISRUPTIVE CONSTRUCTION ACTIVITIES WITH THE BUILDING FACILITY MANAGER. NORMAL BUSINESS HOURS ARE 7:00 AM - 4:00 PM.
2. WHERE NEW PARTITIONS FORM CONTINUATION OF EXISTING PARTITIONS TO REMAIN, IT IS INTENDED THAT FINISHES BE ALIGNED. PATCH EXISTING FINISHES AS REQUIRED TO ACHIEVE A SMOOTH TRANSITION TO NEW WORK
3. WHERE EXISTING OPENINGS ARE TO BE INFILLED, MATCH THE CONSTRUCTION OF THE EXISTING WALL AND PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING AND NEW WORK
4. SEE ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS AND EQUIPMENT NOT SHOWN.

DEMOLITION KEYNOTES

1. DEMOLISH CW AND HW PIPES AS SHOWN. SEE SHEET P-702 FOR RISER DIAGRAM C3.
2. DEMOLISH LOCKERS TO MAKE ROOM FOR NEW STORAGE TANK, PIPING AND PUMP.
3. DEMOLISH 2" LINE ON DISCHARGE OF METER.
4. DEMOLISH 2" CW LINE TO BUILDING. SEE NEW WORK SHEET P-405, A3 ENLARGED PLAN MECHANICAL ROOM 119.

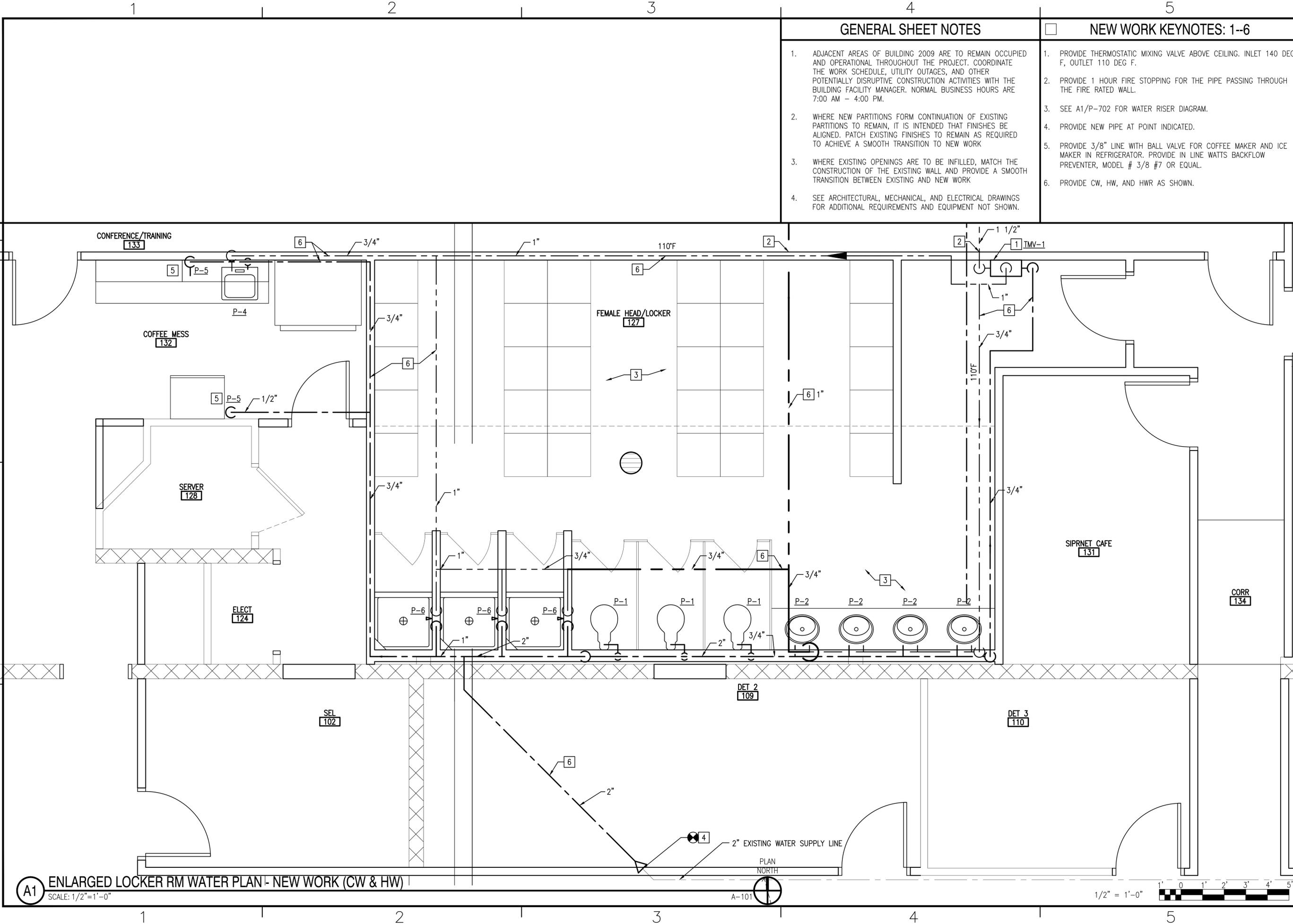


GRAPHIC SCALE



DATE	APPROVED				
DESCRIPTION	FOR COMMANDER NAVFAC				
DATE	ACTIVITY				
DATE	SATISFACTORY TO				
DES	WSF	DRW	WSF	CHK	GEB
BRANCH MANAGER G.E. BAILEY, P.E.					
CHIEF ENGR/ARCH S.M. LANTZ, P.E.					
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND 4800 S. VIRGINIA BEACH, VA JOINT EXPEDITIONARY BASE LITTLE CREEK-FORT STORY VIRGINIA BEACH, VA RENOVATIONS AND REPAIRS TO BUILDING 2009 ENLARGED DEMOLITION PLANS					
SCALE: AS NOTED					
PROJECT NO.: 1361870					
CONSTR. CONTR. NO. N/A					
NAVFAC DRAWING NO. 12719122					
SHEET 17 OF 39					
PD-402					
DRAWING REVISION: 10 MARCH 2009					

FILE NAME: P:\A1\Herc\en\Water\Bldg\2009\Drawings\Sheet\2_Plumbing\1361870-P-404.dwg LAYOUT NAME: P-404 PLOTTED: Wednesday, March 30, 2016 - 9:00am USER: hertf.electr



- ### GENERAL SHEET NOTES
- ADJACENT AREAS OF BUILDING 2009 ARE TO REMAIN OCCUPIED AND OPERATIONAL THROUGHOUT THE PROJECT. COORDINATE THE WORK SCHEDULE, UTILITY OUTAGES, AND OTHER POTENTIALLY DISRUPTIVE CONSTRUCTION ACTIVITIES WITH THE BUILDING FACILITY MANAGER. NORMAL BUSINESS HOURS ARE 7:00 AM - 4:00 PM.
 - WHERE NEW PARTITIONS FORM CONTINUATION OF EXISTING PARTITIONS TO REMAIN, IT IS INTENDED THAT FINISHES BE ALIGNED. PATCH EXISTING FINISHES TO REMAIN AS REQUIRED TO ACHIEVE A SMOOTH TRANSITION TO NEW WORK
 - WHERE EXISTING OPENINGS ARE TO BE INFILLED, MATCH THE CONSTRUCTION OF THE EXISTING WALL AND PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING AND NEW WORK
 - SEE ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS AND EQUIPMENT NOT SHOWN.

- ### NEW WORK KEYNOTES: 1-6
- PROVIDE THERMOSTATIC MIXING VALVE ABOVE CEILING. INLET 140 DEG F, OUTLET 110 DEG F.
 - PROVIDE 1 HOUR FIRE STOPPING FOR THE PIPE PASSING THROUGH THE FIRE RATED WALL.
 - SEE A1/P-702 FOR WATER RISER DIAGRAM.
 - PROVIDE NEW PIPE AT POINT INDICATED.
 - PROVIDE 3/8" LINE WITH BALL VALVE FOR COFFEE MAKER AND ICE MAKER IN REFRIGERATOR. PROVIDE IN LINE WATTS BACKFLOW PREVENTER, MODEL # 3/8 #7 OR EQUAL.
 - PROVIDE CW, HW, AND HWR AS SHOWN.

NO.	DATE	DESCRIPTION



APPROVED	A/E INFO
FIR COMMANDER NAVFAC	
ACTIVITY	
SATISFACTORY TO	DATE
DES WSF	DRW WSF
CHK GEB	
BRANCH MANAGER G.E. BAILEY, P.E.	
CHIEF ENGR/ARCH S.M. LANTZ, P.E.	

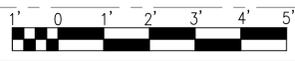
DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND	WELLS - VIRGINIA BEACH, VA
HEAD LITTLE CREEK	VIRGINIA BEACH, VA
JOINT EXPEDITIONARY BASE LITTLE CREEK-FORT STORY	RENOVATIONS AND REPAIRS TO BUILDING 2009
ENLARGED LOCKER RM WATER PLAN - NEW WORK (CW & HW)	

SCALE:	AS NOTED
PROJECT NO.:	1361870
CONSTR. CONTR. NO.:	N/A
NAVFAC DRAWING NO.:	12719124
SHEET 19 OF 39	
P-404	
DRAWFORM REVISION: 10 MARCH 2009	

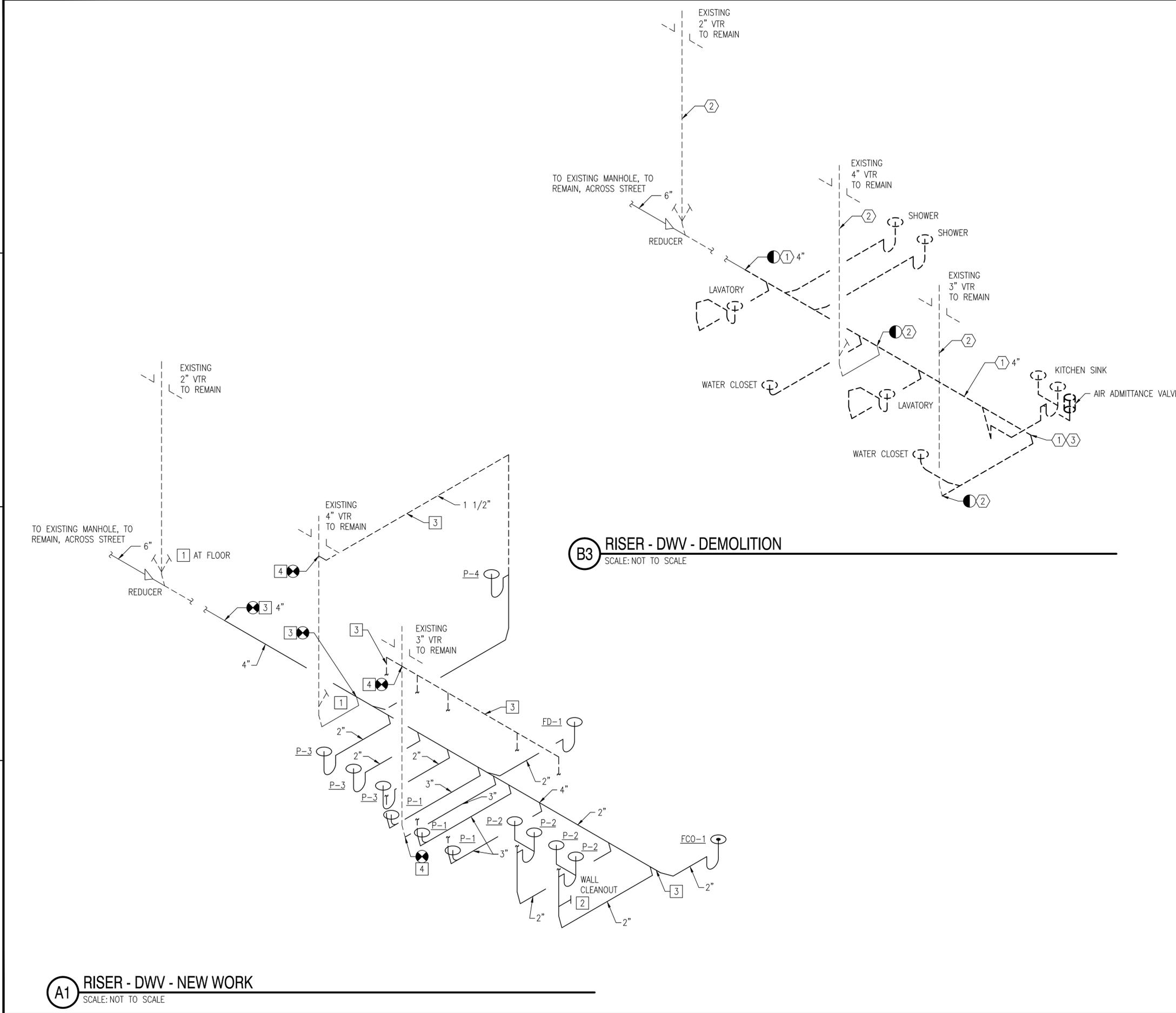
A1 ENLARGED LOCKER RM WATER PLAN - NEW WORK (CW & HW)
SCALE: 1/2" = 1'-0"

A-101

1/2" = 1'-0"



FILE NAME: P:\VA\HRC\ceah\multiple\buildings\2015_1361870\DBB_Responses\Admin_Spaces\B_Design\BDDC_2009\Drawings\Sheet\1361870-P-701.dwg LAYOUT NAME: P-701 PLOTTED: Wednesday, March 30, 2016 - 9:00am USER: hrc\lechner



A1 RISER - DWV - NEW WORK
SCALE: NOT TO SCALE

B3 RISER - DWV - DEMOLITION
SCALE: NOT TO SCALE

GENERAL SHEET NOTES

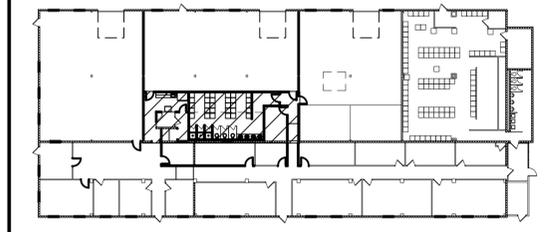
1. ADJACENT AREAS OF BUILDING 2009 ARE TO REMAIN OCCUPIED AND OPERATIONAL THROUGHOUT THE PROJECT. COORDINATE THE WORK SCHEDULE, UTILITY OUTAGES, AND OTHER POTENTIALLY DISRUPTIVE CONSTRUCTION ACTIVITIES WITH THE BUILDING FACILITY MANAGER. NORMAL BUSINESS HOURS ARE 7:00 AM - 4:00 PM.
2. WHERE NEW PARTITIONS FORM CONTINUATION OF EXISTING PARTITIONS TO REMAIN, IT IS INTENDED THAT FINISHES BE ALIGNED. PATCH EXISTING FINISHES TO REMAIN AS REQUIRED TO ACHIEVE A SMOOTH TRANSITION TO NEW WORK
3. WHERE EXISTING OPENINGS ARE TO BE INFILLED, MATCH THE CONSTRUCTION OF THE EXISTING WALL AND PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING AND NEW WORK
4. SEE ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS AND EQUIPMENT NOT SHOWN.

DEMOLITION KEYNOTES

1. DEMOLISH SEWER UNDER SLAB.
2. EXISTING VENT TO REMAIN.
3. CONTRACTOR SHALL VERIFY ROUTING OF PIPE. CONTACT CONTRACTING OFFICER IF NOT AS SHOWN.

NEW WORK KEYNOTES

1. EXISTING CLEAN OUT IN VERTICAL VENT PIPE TO REMAIN.
2. PROVIDE WALL CLEANOUT UNDER LAVATORY.
3. PROVIDE NEW SANITARY PIPE AND VENT PIPE. CONNECT TO POINTS SHOWN.
4. CONNECT TO EXISTING VENT.



KEYPLAN

NOT TO SCALE

GRAPHIC SCALE



NO.	DATE	DESCRIPTION	BY	CHK



APPROVED	DATE	ACTIVITY

SATISFACTORY TO	DATE
DES WSF	DES WSF
CHK GEB	CHK GEB

BRANCH MANAGER G.E. BAILEY, P.E.
CHIEF ENGR/ARCH S.M. LANTZ, P.E.

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND
JEBOPS - VIRGINIA BEACH, VA
JEBOPS - VIRGINIA BEACH, VA
JOINT EXPEDITIONARY BASE LITTLE CREEK-FORT STORY
VIRGINIA BEACH, VA
**RENOVATIONS AND REPAIRS
TO BUILDING 2009**
WASTE RISERS

SCALE:	AS NOTED
PROJECT NO.:	1361870
CONSTR. CONTR. NO.:	N/A
NAVFAC DRAWING NO.:	12719126
SHEET	21 OF 39
P-701	

DRAWFORM REVISION: 10 MARCH 2009

1

2

3

4

5

D

C

B

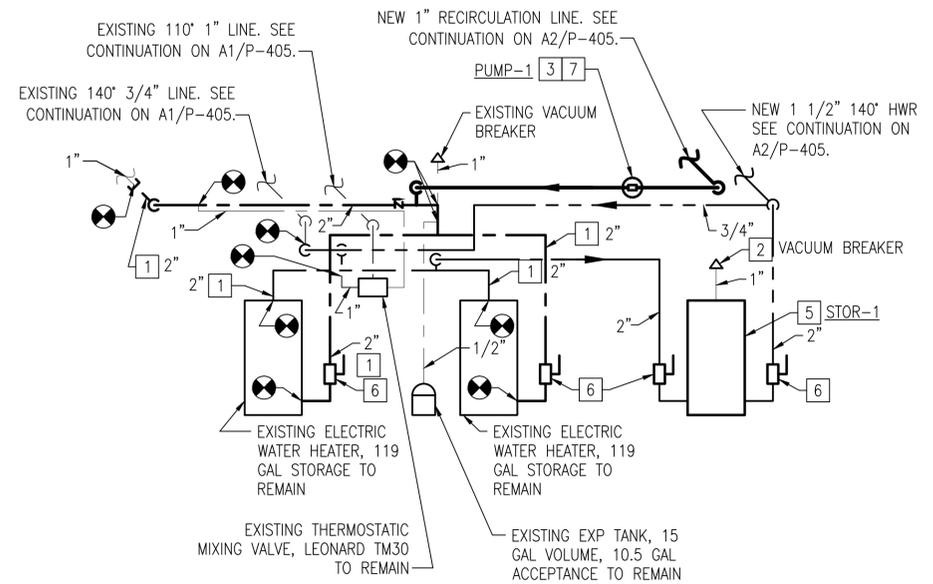
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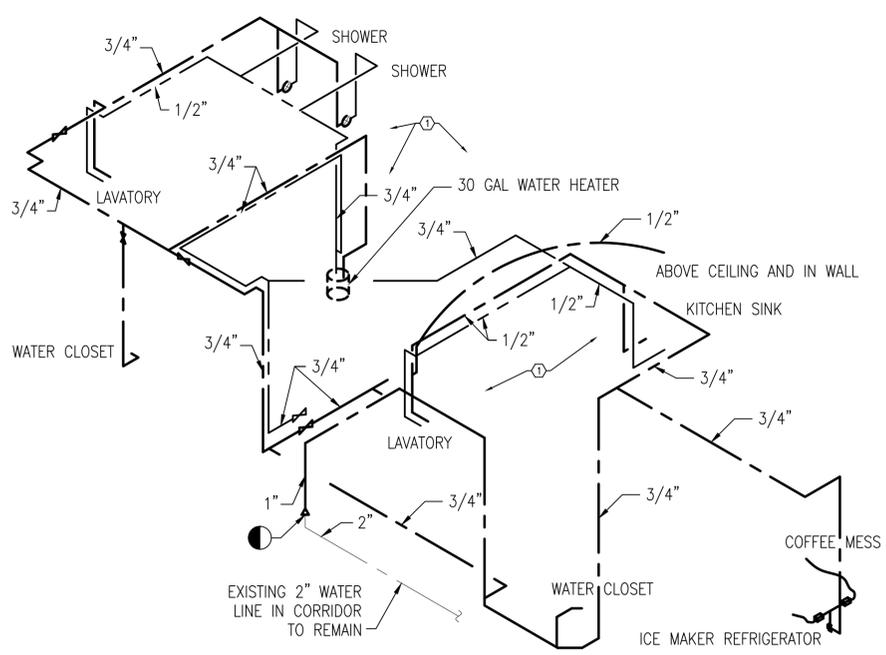
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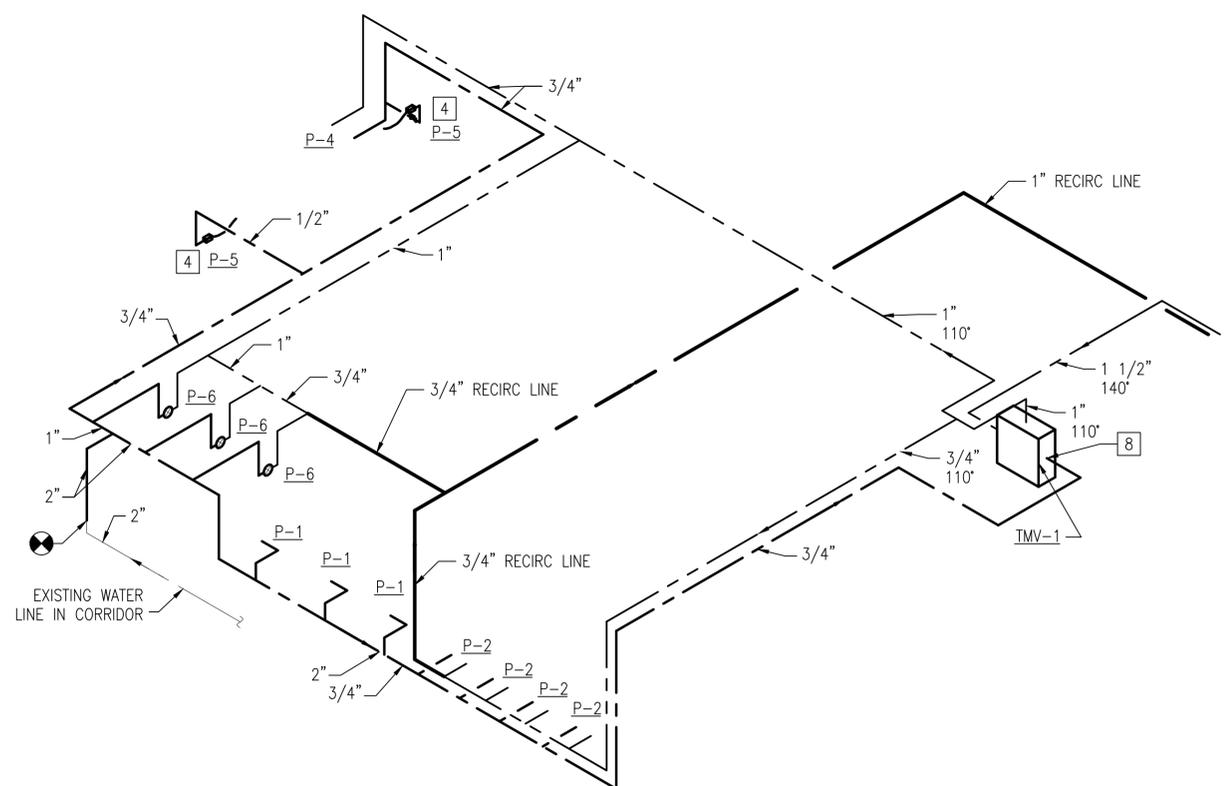
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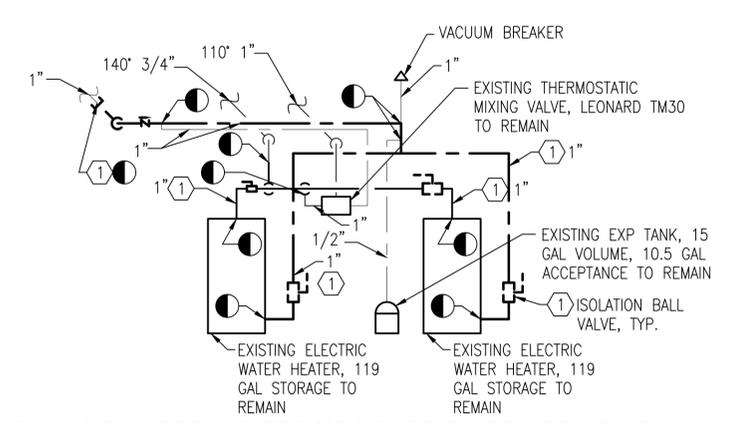
C1 HOT WATER HEATER/STORAGE RISER - NEW WORK
SCALE: NOT TO SCALE P-405



C3 RISER - WATER - DEMOLITION
SCALE: NOT TO SCALE PD-401



A1 RISER - WATER - NEW WORK
SCALE: NOT TO SCALE P-404



A3 HOT WATER HEATER/STORAGE RISER - DEMOLITION
SCALE: NOT TO SCALE PD-402

GENERAL SHEET NOTES

- ADJACENT AREAS OF BUILDING 2009 ARE TO REMAIN OCCUPIED AND OPERATIONAL THROUGHOUT THE PROJECT. COORDINATE THE WORK SCHEDULE, UTILITY OUTAGES, AND OTHER POTENTIALLY DISRUPTIVE CONSTRUCTION ACTIVITIES WITH THE BUILDING FACILITY MANAGER. NORMAL BUSINESS HOURS ARE 7:00 AM - 4:00 PM.
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DEMOLITION KEYNOTES

- DEMOLISH WATER SUPPLY LINES TO ALL FIXTURES AS SHOWN. SEE A1 RISER-WATER-NEW WORK AND C1 HOT WATER HEATER/STORAGE RISER-NEW WORK THIS PAGE.

NEW WORK KEYNOTES

- PROVIDE WATER SUPPLY LINES TO WATER HEATERS AS SHOWN.
- PROVIDE VACUUM RELIEF VALVE THAT COMPLIES WITH ANSI Z21.22.
- PROVIDE VIBRATION ISOLATION TO PUMP. SEE IN-LINE PUMP DETAIL SHEET M-501 WITH THE EXCEPTION THAT ALL COMPONENTS ARE NEW.
- PROVIDE 3/8" LINE WITH BALL VALVE. PROVIDE IN-LINE WATTS BACKFLOW PREVENTER, MODEL #3/8 #7 OR EQUAL.
- PROVIDE STORAGE TANK, STOR-1. SEE SCHEDULE ON P-403.
- PROVIDE ISOLATION BALL VALVE AS SHOWN. SIZE AS INDICATED (TYP).
- PROVIDE PUMP-1 AS SHOWN. SEE PUMP SCHEDULE ON SHEET P-001.
- PROVIDE TMV-1 AS SHOWN. SEE PLUMBING FIXTURE SCHEDULE ON SHEET P-001.

DATE	DESCRIPTION	BY	APPR



SEAL

A/E INFO

APPROVED	DATE				
FOR COMMANDER NAFAC					
ACTIVITY					
SATISFACTORY TO	DATE				
DES	WSF	DRW	WSF	CHK	GEB
BRANCH MANAGER G.E. BAILEY, P.E.					
CHIEF ENG/ARCH S.M. LANTZ, P.E.					

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND
JELCDS - VIRGINIA BEACH, VA
JELCDS - VIRGINIA BEACH, VA
JOINT EXPEDITIONARY BASE LITTLE CREEK-FORT STORY
VIRGINIA BEACH, VA
**RENOVATIONS AND REPAIRS
TO BUILDING 2009**
WATER RISERS

SCALE:	AS NOTED
PROJECT NO.:	1361870
CONSTR. CONTR. NO.	N/A
NAFAC DRAWING NO.	12719127
SHEET	22 OF 39
P-702	

FILE NAME: P:\A\1161870\Drawings\2009\Drawings\Sheet\2_Plumbing\1361870-P-702.dwg LAYOUT NAME: P-702 PLOTTED: Wednesday, March 30, 2016 - 9:14am USER: kurt.lechner

FILE NAME: P:\VA\Hitec\en\MultipleBuildings\2015_1361870\DBB_Response\Admin_Specs\B_Design\BID\2009\Drawings\Sheet\13_Mechanical\1361870-41-001.dwg LAYOUT NAME: Layout1 PLOTTED: Wednesday, March 30, 2016 - 9:26am USER: hurf.hechtler

MECHANICAL LEGEND

- THERMOSTAT
- 12x10 RECTANGULAR DUCT DIMENSIONS (INCHES)
- 12"φ ROUND DUCT DIMENSION
- FLEXIBLE ROUND DUCT
- SUPPLY DUCT, SUPPLY DUCT DOWN/UP
- RETURN DUCT, RETURN DUCT DOWN/UP
- BALL VALVE
- GATE VALVE
- MANUAL FLOW CONTROL BALANCING VALVE
- CHECK VALVE
- SQUARE HEAD BALANCING COCK
- 3-WAY CONTROL VALVE
- MANUAL AIR VENT
- AUTOMATIC AIR VENT
- WYE STRAINER
- STRAINER W/ BLOWDOWN VALVE
- UNION
- THERMOMETER IN PIPE WELL
- PRESSURE GAUGE W/ SHUTOFF COCK
- PIPE CAP
- FLANGE
- FLEXIBLE PIPE CONNECTOR
- CALIBRATED BALANCING VALVE
- BACKFLOW PREVENTER
- POINT OF DISCONNECTION, LIMIT OF WORK
- POINT OF CONNECTION, LIMIT OF WORK
- DEMOLITION NOTE
- NEW WORK NOTE
- ELBOW, 90 DEG. TURNED DOWN
- CONTINUATION OF PIPE, TILDA
- TEE TURNING DOWN
- TYPE DIFFUSER
- DIFFUSER CALL OUT
- VOLUME DAMPER
- FLEXIBLE DUCT CONNECTION
- OPPOSED BLADE VOLUME DAMPER
- DUCT TRANSITION, ROUND TO RECTANGULAR
- DUCT TRANSITION, RECTANGULAR TO ROUND
- DUCT TRANSITION, RECTANGULAR OR ROUND
- 90 DEG. ELBOW, RECTANGULAR WITH TURNING VANES

- 90 DEG. ELBOW, ROUND, SINGLE LINE
- 45 DEG. ELBOW, ROUND, SINGLE LINE
- TAP-IN BRANCH, RECTANGULAR
- 90 DEG. ELBOW TURNED UP, REC.
- 90 DEG. ELBOW TURNED DOWN, REC.
- CEILING SUPPLY DIFFUSER
- CEILING REGISTER OR GRILLE, EXHAUST OR RETURN
- SUPPLY GRILLE
- CEILING OUTSIDE AIR DIFFUSER

MECHANICAL PIPING LEGEND

	CWR	CHILLED WATER RETURN PIPING
	CWS	CHILLED WATER SUPPLY PIPING
	D	CONDENSATE DRAIN PIPING
		DOMESTIC COLD WATER PIPING
	DTR	DUAL TEMPERATURE SUPPLY PIPING
	DTS	DUAL TEMPERATURE RETURN PIPING
	HWR	HOT WATER RETURN PIPING
	HWS	HOT WATER SUPPLY PIPING
	RS/RL	REFRIGERANT SUCTION / REFRIG LIQUID PIPING
	STM	LOW PRESSURE STEAM
	COND	STEAM CONDENSATE

MECHANICAL ABBREVIATIONS

- AD ACCESS DOOR
- AFF ABOVE FINISHED FLOOR
- AP ACCESS PANEL
- APD AIR PRESSURE DROP
- AHU AIR HANDLING UNIT
- BD BALANCING DAMPER
- BR BASEBOARD RADIATOR
- BTUH BRITISH THERMAL UNIT PER HOUR
- C COMMON
- Cv LOSS COEFFICIENT
- CU CONDENSING UNIT
- CW CHILLED WATER
- CFM CUBIC FEET PER MINUTE
- CLG CEILING
- CND CONDENSER
- COP COEFFICIENT OF PERFORMANCE
- CRAHU COMPUTER ROOM AIR HANDLING UNIT
- DB DRY BULB
- DDC DIRECT DIGITAL CONTROL
- DEG DEGREE
- DX DIRECT EXPANSION
- EAT ENTERING AIR TEMPERATURE
- EER ENERGY EFFICIENCY RATIO
- EF EXHAUST FAN
- EFF EFFICIENCY
- ESP EXTERNAL STATIC PRESSURE
- EWT ENTERING WATER TEMPERATURE
- EX EXISTING
- EXR EXISTING REGISTER
- F FAHRENHEIT
- FCU FAN COIL UNIT
- FD FIRE DAMPER
- FT FEET
- FTWG FEET OF WATER GAUGE
- GPM GALLONS PER MINUTE
- HGT HEIGHT
- HP HEAT PUMP, HORSEPOWER
- HR HOUR
- HW HOT WATER
- HX HEAT EXCHANGER
- IAW INCHES OF WATER GAUGE
- IWG IN ACCORDANCE WITH
- kW KILOWATT
- LAT LEAVING AIR TEMPERATURE
- LBS POUNDS
- LV LOUVER
- LWT LEAVING WATER TEMPERATURE
- MAU MAKEUP AIR UNIT
- MAX MAXIMUM
- MIN MINIMUM
- NC NOISE CRITERIA, NORMALLY CLOSED
- NO NUMBER, NORMALLY OPEN
- OA OUTSIDE AIR
- OAU OUTSIDE AIR UNIT
- OU OUTDOOR UNIT
- PH PHASE
- PRS PRESSURE REDUCING STATION
- PSI POUNDS PER SQUARE INCH
- PTAC PACKAGED TERMINAL AIR CONDITIONER
- PTHP PACKAGED TERMINAL HEAT PUMP
- RA RETURN AIR
- RH RELATIVE HUMIDITY
- RL REFRIGERANT LIQUID
- RS REFRIGERANT SUCTION
- RTU ROOFTOP UNIT
- SA SUPPLY AIR
- SEER SEASONAL ENERGY EFFICIENCY RATIO
- SIM SIMILAR
- SP STATIC PRESSURE
- SQ SQUARE
- TYP TYPICAL
- UH UNIT HEATER
- UON UNLESS OTHERWISE NOTED
- V VOLTS
- VFD VARIABLE FREQUENCY DRIVE^{COIL}
- W WIDTH
- WB WET BULB
- WPD WATER PRESSURE DROP
- ° DEGREES
- ∅ DIAMETER

GENERAL MECHANICAL NOTES

- THESE GENERAL MECHANICAL NOTES APPLY TO ALL THE MECHANICAL DRAWINGS IN THIS SET. SHEET SPECIFIC NOTES ARE INDICATED ON EACH SHEET UNDER GENERAL SHEET NOTES.
- PATCH ALL HOLES FROM REMOVAL OF PIPING, DUCTWORK, OR EQUIPMENT TO MATCH ADJACENT CONSTRUCTION.
- PROVIDE ALL MATERIALS AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERABLE MECHANICAL SYSTEMS AS INDICATED ON THE DRAWINGS, AS SPECIFIED AND AS REQUIRED BY CODE.
- INSTALL ALL MECHANICAL EQUIPMENT AND APPURTENANCES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, THIS CONTRACT'S DOCUMENTS, AND APPLICABLE CODES AND REGULATIONS.
- PROVIDE VIBRATION ISOLATORS FOR ALL MECHANICAL EQUIPMENT TO PREVENT TRANSMISSION OF VIBRATION TO BUILDING STRUCTURE.
- PROVIDE ACCESS PANELS IN WALLS AND CEILINGS, WHERE REQUIRED, TO SERVE FIRE DAMPERS, VALVES, SMOKE DETECTORS, AND OTHER CONCEALED MECHANICAL EQUIPMENT THAT REQUIRES ROUTINE MAINTENANCE. ACCESS PANELS SHALL BE LARGE ENOUGH TO ALLOW PROPER CLEARANCE FOR ACCESS DOORS.
- ALL OPENINGS IN FIRE WALLS DUE TO DUCTWORK, PIPING, CONDUIT, ETC., SHALL BE FIRE STOPPED.
- EXISTING DUCT AND PIPING SIZES INDICATED ARE APPROXIMATE. FIELD VERIFY ALL DIMENSIONS.
- LOCATE ALL NEW HORIZONTAL DUCTWORK ABOVE THE SUSPENDED CEILINGS UNLESS OTHERWISE INDICATED. THERE IS NO CEILING IN THE NEW CONFERENCE ROOM.
- ALL 90 DEGREE RECTANGULAR MITERED DUCT ELBOWS IN THE SUPPLY AND RETURN DUCTS SHALL HAVE TURNING VANES.
- PROVIDE PIPE SLEEVES FOR ALL PIPING PENETRATIONS THROUGH WALLS AND FLOORS. EACH PIPE SHALL BE SEPARATELY SLEEVED. PROVIDE CONTINUOUS SEALANT JOINT AROUND PIPE SLEEVE, BOTH SIDES OF WALL, WATERTIGHT.
- PROVIDE P-TRAPS IN CONDENSATE DRAIN PIPING AT EACH FCU UNLESS THE EQUIPMENT IS EQUIPPED WITH AN INTERNAL TRAP.

GENERAL MECHANICAL NOTES (CONT.)

- MOUNT THERMOSTATS 54 INCHES ABOVE THE FINISHED FLOOR UNLESS OTHERWISE INDICATED. REFER TO ELECTRICAL DRAWINGS FOR LOCATION OF LIGHT SWITCHES AND COORDINATE.
- CONDENSATE DRAIN PIPING SHALL BE PVC. CLEANOUTS SHALL BE INSTALLED AT EACH CHANGE IN DIRECTION GREATER THAN 45 DEGREES. WHERE MORE THAN ONE CHANGE OF DIRECTION OCCURS IN A RUN OF PIPING, ONLY ONE CLEANOUT SHALL BE REQUIRED FOR EACH 40 FEET OF DEVELOPED LENGTH. COMBINATION WYE AND 1/8 BENDS SHALL BE USED IN LIEU OF TEES.
- AFTER THE PIPING IS INSULATED, PROVIDE SETON BRAND OR EQUAL FACTORY-FABRICATED PIPE LABELS, WITH DIRECTION OF FLOW ARROWS, ON THE FOLLOWING PIPING, AT 10 FOOT ON CENTER ON THE PIPING MAINS AND 5 FOOT ON CENTER ON THE BRANCH RUNOUTS FROM MAINS.

GENERAL SHEET NOTES

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GENERAL SHEET NOTES

APPROVED	DATE				
FOR COMMANDER NAVFAC	DATE				
SATISFACTORY TO	DATE				
DES	WSF	DRW	WSF	CHK	GEB
BRANCH MANAGER G.E. BAILEY, P.E.					
CHIEF ENG/ARCH S.M. LANTZ, P.E.					

ACTIVITY

FOR COMMANDER NAVFAC

SATISFACTORY TO DATE

DES WSF DRW WSF CHK GEB

BRANCH MANAGER G.E. BAILEY, P.E.

CHIEF ENG/ARCH S.M. LANTZ, P.E.

DEPARTMENT OF THE NAVY

NAVAL FACILITIES ENGINEERING COMMAND

NAVAL FACILITIES ENGINEERING COMMAND

HEADQUARTERS - VIRGINIA BEACH, VA

JOINT EXPEDITIONARY BASE LITTLE CREEK-FORT STORY

VIRGINIA BEACH, VA

RENOVATIONS AND REPAIRS

TO BUILDING 2009

MECHANICAL GENERAL DATA SHEET

SCALE: AS NOTED

PROJECT NO.: 1361870

CONSTR. CONTR. NO. N/A

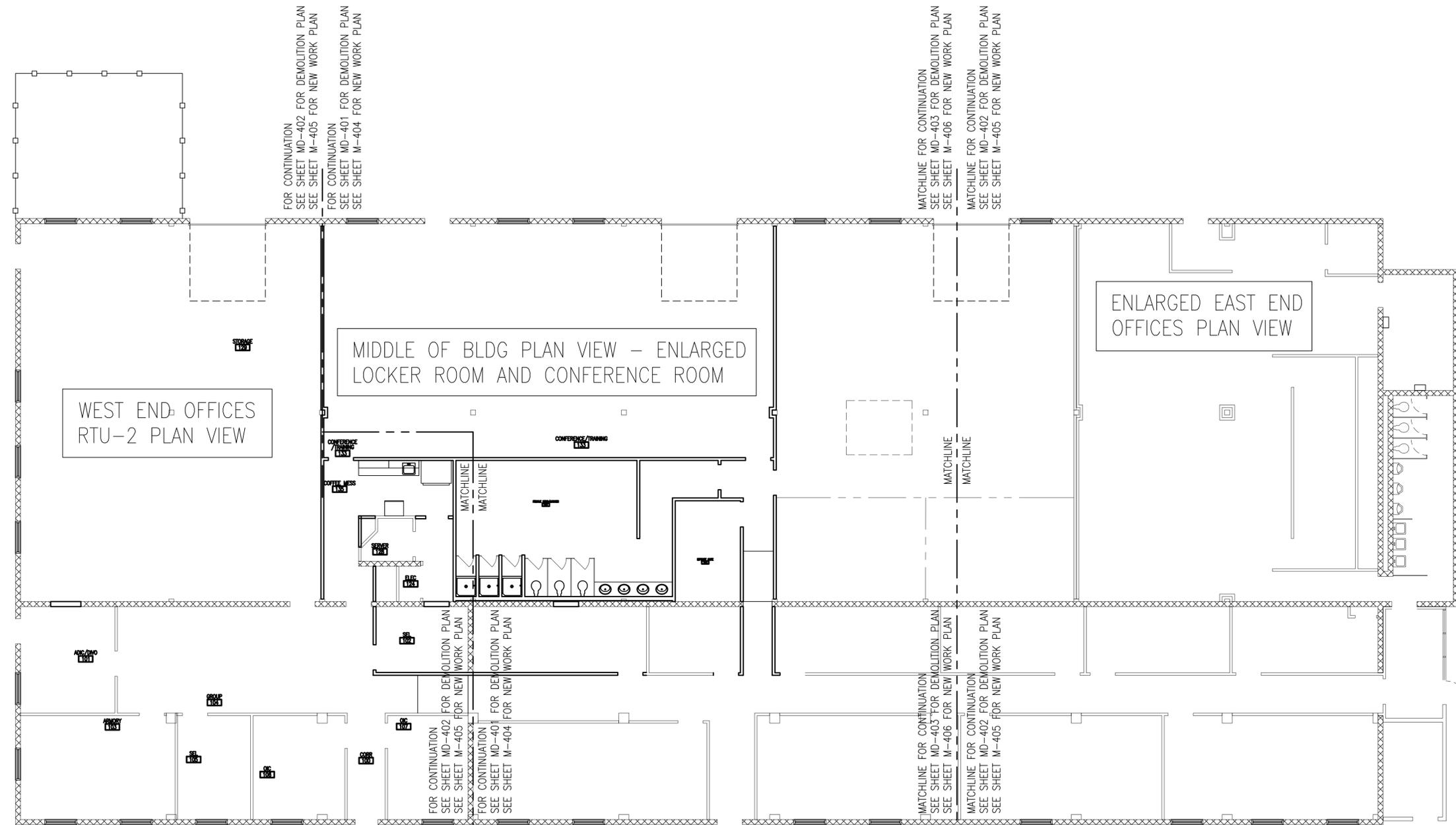
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SHEET 23 OF 39

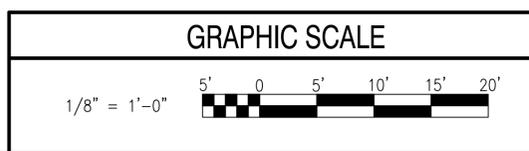
M-001

DRAWFORM REVISION: 10 MARCH 2009

FILE NAME: P:\VA\Hitec\en\MultipleBuildings\2015_1361870\DBB_Reorganize_Admin_Spaces\B_Design\B_Design\BDDC_2009\Drawings\Sheet\13_Mechanical\1361870-MD-101.dwg LAYOUT NAME: MD-101 PLOTTED: Wednesday, March 30, 2016 - 9:23am USER: kari.flechner

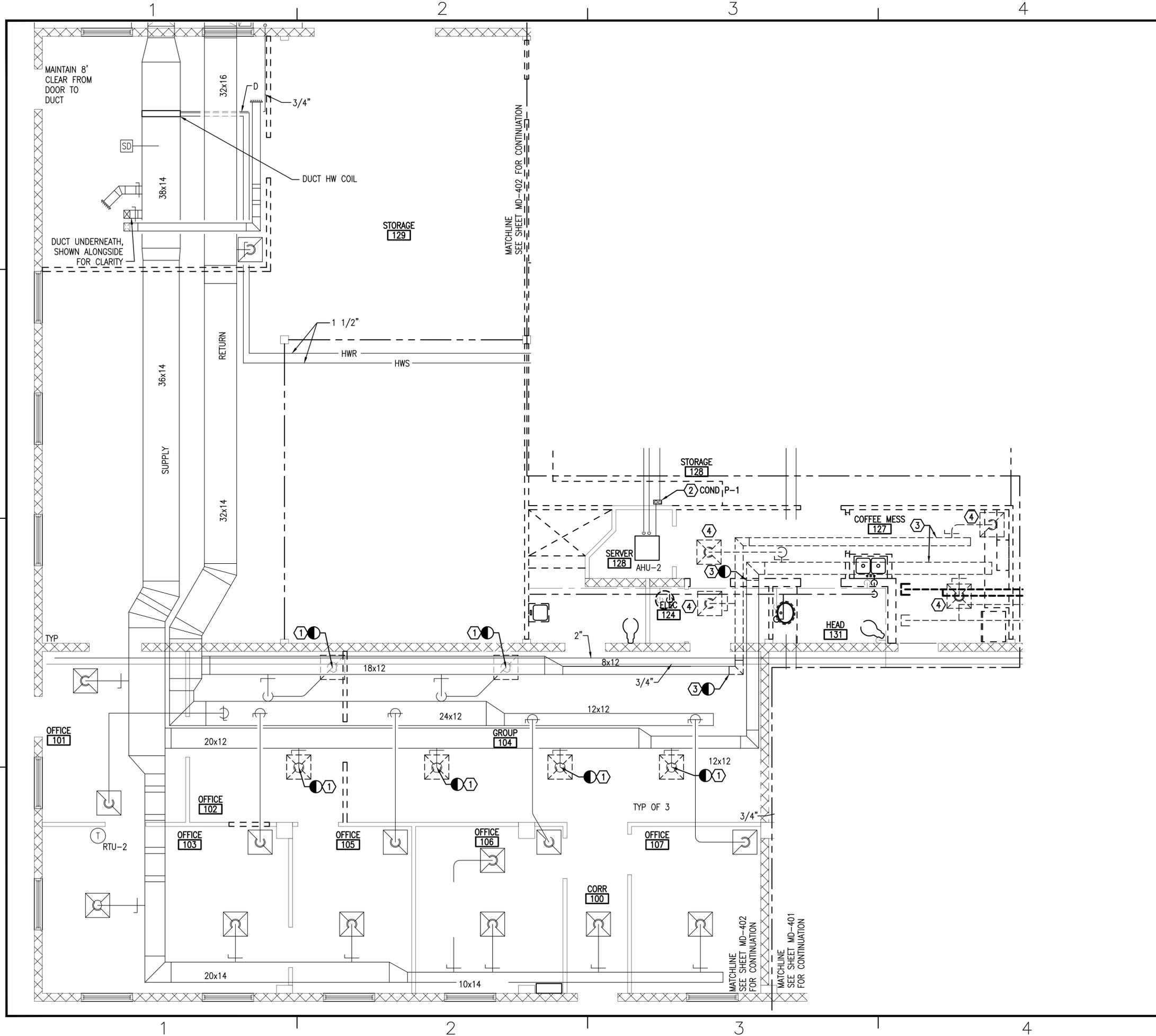


BUILDING KEYPLAN - DEMOLITION AND NEW WORK
SCALE: 1/8" = 1'-0"



	
APPROVED	DATE
FOR COMMANDER NAVFAC	DESCRIPTION
ACTIVITY	DATE
SATISFACTORY TO	DATE
DES: WSF	DRW: WSF
CHK: GEB	
BRANCH MANAGER G.E. BAILEY, P.E.	
CHIEF ENG/ARCH S.M. LANTZ, P.E.	
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND 4800 LITTLE CREEK ROAD VIRGINIA BEACH, VA 23461-5000	
JOINT EXPEDITIONARY BASE LITTLE CREEK-FORT STORY RENOVATIONS AND REPAIRS TO BUILDING 2009	
BUILDING KEYPLAN - DEMOLITION AND NEW WORK	
SCALE: AS NOTED	PROJECT NO.: 1361870
CONSTR. CONTR. NO.	N/A
NAVFAC DRAWING NO.	12719129
SHEET 24	OF 39
MD-101 <small>DRAWFORM REVISION: 10 MARCH 2009</small>	

FILE NAME: P:\A\Hitec\NavalFacilities\2009\Drawings\Sheet\13_Mechanical\1361870-MD-401.dwg LAYOUT NAME: MD-401 PLOTTED: Wednesday, March 30, 2016 - 9:20am USER: kurt.flechner



GENERAL SHEET NOTES

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DEMOLITION KEYNOTES

- REMOVE FROM CEILING GRID AND SUSPEND OR REMOVE AND STORE DIFFUSER OR GRILLE FOR RELOCATION BECAUSE OF NEW CEILING GRID. SEE SHEET M-404 FOR NEW WORK.
- DEMOLISH BROKEN CONDENSATE PUMP. SEE SHEET M-404 FOR NEW WORK.
- DEMOLISH DUCT TO POINT INDICATED. SEE SHEET M-404 FOR NEW WORK.
- DEMOLISH DIFFUSER, GRILLE OR REGISTER AND ITS BRANCH RUN OUT.

**WEST END OFFICES
RTU-2 PLAN VIEW -
DEMOLITION**

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

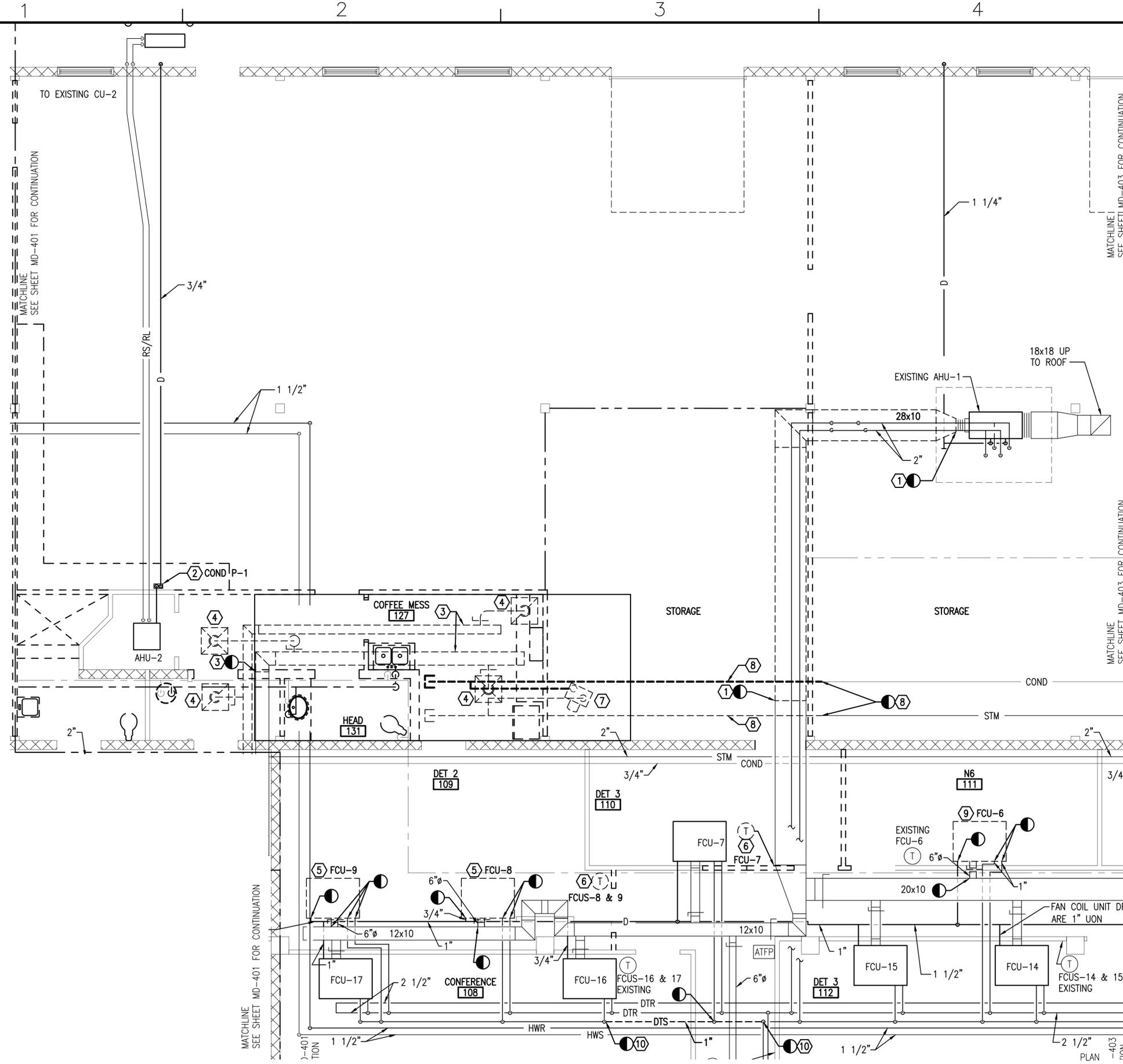


GRAPHIC SCALE



APPROVED	DATE	APP'R
FOR COMMANDER NAVFAC		
ACTIVITY		
SATISFACTORY TO	DATE	
DES: WSF	DRW: WSF	CHK: GEB
BRANCH MANAGER G.E. BAILEY, P.E.		
CHIEF ENGR/ARCH S.M. LANTZ, P.E.		
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND 4810 S.W. 15th Street - Virginia Beach, VA FEAD LITTLE CREEK JOINT EXPEDITIONARY BASE LITTLE CREEK-FORT STORY VIRGINIA BEACH, VA RENOVATIONS AND REPAIRS TO BUILDING 2009 WEST END OFFICES RTU-2 PLAN VIEW - DEMOLITION		
SCALE:	AS NOTED	
PROJECT NO.:	1361870	
CONSTR. CONTR. NO.	N/A	
NAVFAC DRAWING NO.	12719130	
SHEET	25	OF 39
MD-401		
DRAWFORM REVISION: 10 MARCH 2009		

FILE NAME: P:\A\Hatch\Drawings\2015_1361870_DBB_Reorganize_Admin_Spaces\B_Design\BDDC_2009\Drawings\Sheet\1361870-MD-402.dwg LAYOUT NAME: MD-402 PLOTTED: Wednesday, March 30, 2016 - 9:17am USER: kurt.flechner



MIDDLE OF BLDG PLAN VIEW - DEMOLITION
SCALE: 1/4"=1'-0"

GENERAL SHEET NOTES

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DEMOLITION KEYNOTES

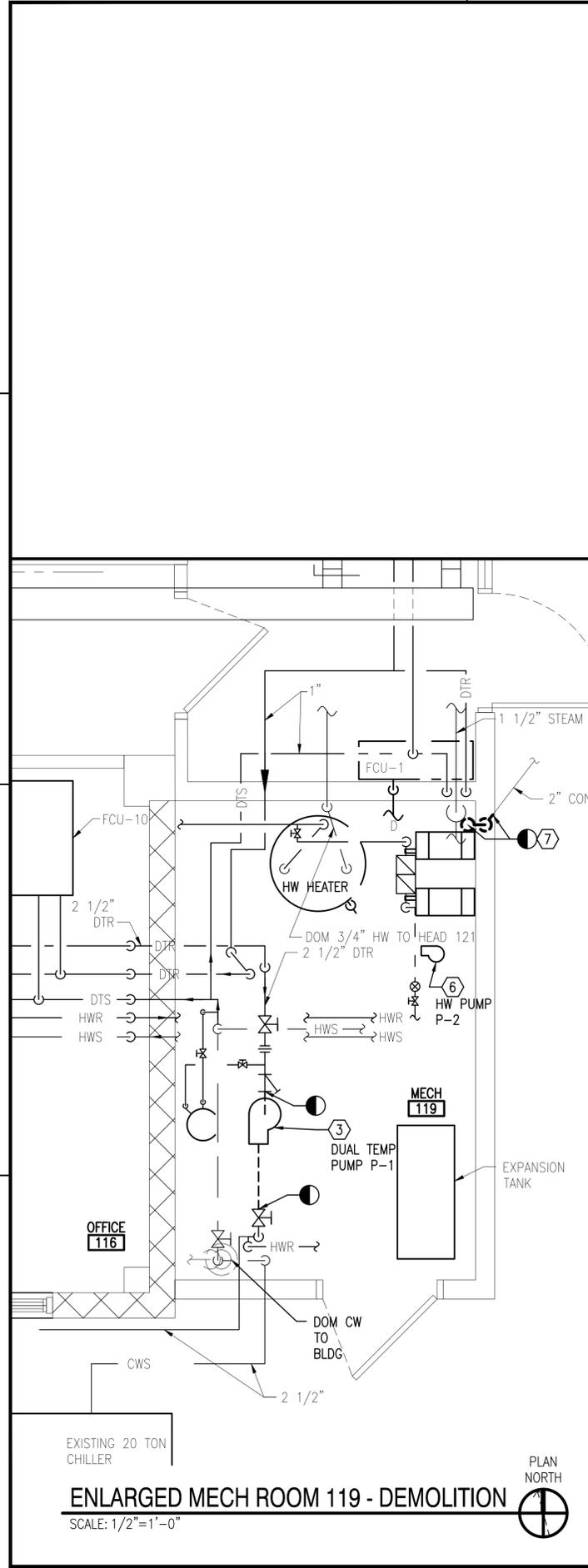
- DEMOLISH DUCTWORK BETWEEN POINTS INDICATED. SEE SHEET M-405 FOR NEW WORK.
- DEMOLISH BROKEN CONDENSATE PUMP. SEE SHEET M-404 FOR NEW WORK.
- DEMOLISH DUCT TO POINT INDICATED. SEE SHEET M-404 FOR NEW WORK.
- DEMOLISH DIFFUSER, GRILLE OR REGISTER AND ITS BRANCH RUN OUT.
- DISCONNECT FAN COIL UNIT AND STORE FOR RE-USE. SEE SHEET M-405 FOR NEW LOCATION. CAP REMAINING WATER AND AIR LINES TO PREVENT DIRT GETTING INTO SYSTEM. DISCONNECT CONTROLS.
- REMOVE EXISTING THERMOSTAT AND SAVE FOR RELOCATION. SEE SHEET M-405 FOR NEW LOCATION.
- DEMOLISH STEAM UNIT HEATER COMPLETE.
- DEMOLISH STEAM LINE AND CONDENSATE LINE TO POINT INDICATED. CAP LINES AND INSULATE.
- DEMOLISH FAN COIL UNIT. CAP REMAINING WATER AND AIR LINES TO PREVENT DIRT GETTING INTO SYSTEM. DISCONNECT CONTROLS. SEE SHEET M-405 FOR NEW FAN COIL UNIT IN THE SAME LOCATION.
- DEMOLISH 1" DTS PIPING BETWEEN LIMITS OF DEMOLITION POINTS. SEE RISER SHEET M-501 FOR NEW PIPING.

GRAPHIC SCALE

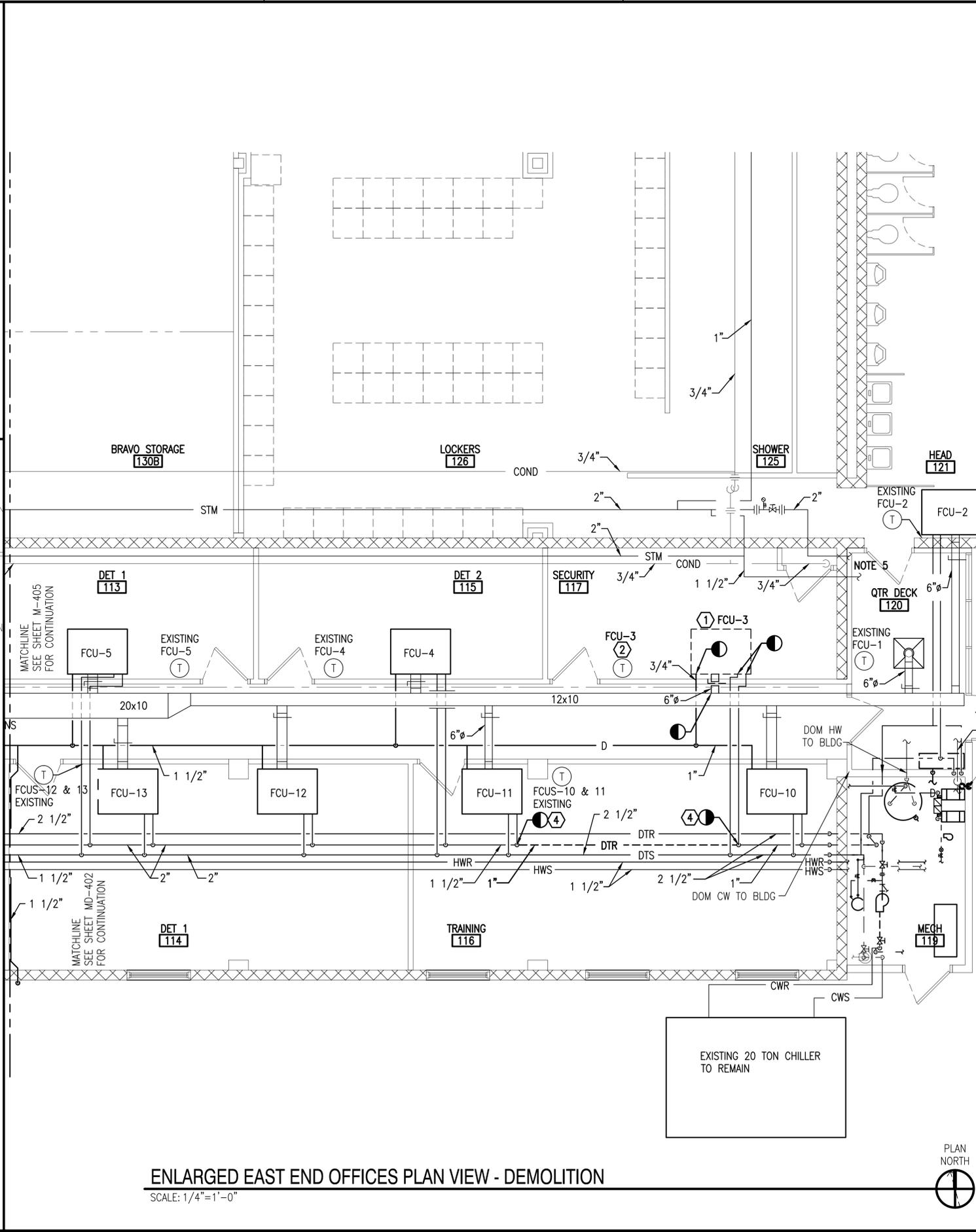


APPROVED	DATE
FOR COMMANDER NAVFAC	
ACTIVITY	
SUBFACTORY TO DATE	
DES: WSF DRW: WSF CHK: GEB	
BRANCH MANAGER G.E. BAILEY, P.E.	
CHIEF ENGR/ARCH: S.M. LANTZ, P.E.	
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND NAVAL FACILITIES ENGINEERING COMMAND JEDCS - VIRGINIA BEACH, VA	
HEAD LITTLE CREEK	
JOINT EXPEDITIONARY BASE LITTLE CREEK-FORT STORVIRGINIA BEACH, VA	
RENOVATIONS AND REPAIRS TO BUILDING 2009	
MIDDLE OF BLDG PLAN VIEW - DEMOLITION	
SCALE: AS NOTED	
PROJECT NO.: 1361870	
CONSTR. CONTR. NO. N/A	
NAVFAC DRAWING NO. 12719131	
SHEET 26 OF 39	
MD-402	
DRAWING REVISION: 10 MARCH 2009	

FILE NAME: P:\VA\HRC\enr\MultipleBuildings\2015_1361870\DBB_Responses\Admin_Spaces\B_Design\BDDC_2009\Drawings\Sheet\3_Mechanical\1361870-MD-403.dwg LAYOUT NAME: MD-403 PLOTTED: Wednesday, March 30, 2016 - 9:35am USER: kurt.fleischer



ENLARGED MECH ROOM 119 - DEMOLITION
SCALE: 1/2"=1'-0"



ENLARGED EAST END OFFICES PLAN VIEW - DEMOLITION
SCALE: 1/4"=1'-0"

- ### GENERAL SHEET NOTES
- ADJACENT AREAS OF BUILDING 2009 ARE TO REMAIN OCCUPIED AND OPERATIONAL THROUGHOUT THE PROJECT. COORDINATE THE WORK SCHEDULE, UTILITY OUTAGES, AND OTHER POTENTIALLY DISRUPTIVE CONSTRUCTION ACTIVITIES WITH THE BUILDING FACILITY MANAGER. NORMAL BUSINESS HOURS ARE 7:00 AM - 4:00 PM.
 - WHERE NEW PARTITIONS FORM CONTINUATION OF EXISTING PARTITIONS TO REMAIN, IT IS INTENDED THAT FINISHES BE ALIGNED. PATCH EXISTING FINISHES TO REMAIN AS REQUIRED TO ACHIEVE A SMOOTH TRANSITION TO NEW WORK.
 - WHERE EXISTING OPENINGS ARE TO BE INFILLED, MATCH THE CONSTRUCTION OF THE EXISTING WALL AND PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING AND NEW WORK.
 - SEE ARCHITECTURAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS AND EQUIPMENT NOT SHOWN.
 - STEAM LINE ORIGINATES FROM OVERHEAD PIPING TO BUILDING OVER LOW ROOF. ENTERS BUILDING THROUGH SIDEWALL BETWEEN DIFFERING ROOF HEIGHTS.

- ### DEMOLITION KEYNOTES
- DEMOLISH FAN COIL UNIT. CAP REMAINING WATER AND AIR LINES TO PREVENT DIRT GETTING INTO SYSTEM. DISCONNECT CONTROLS. SEE SHEET M-406 FOR NEW FAN COIL UNIT IN THE SAME LOCATION.
 - REMOVE EXISTING THERMOSTAT SENSOR AND SAVE FOR RE-USE WITH NEW FAN COIL UNIT. SEE SHEET M-406 FOR NEW WORK.
 - DEMOLISH PUMP AND AUTOMATIC BALANCING VALVE. SEE DETAILS SHEET M-501 KEEP REMAINING FOR VALVES, STRAINERS, ETC AS SHOWN.
 - DEMOLISH PIPING BETWEEN LIMITS OF DEMOLITION POINTS. SEE SHEET M-406 FOR NEW PIPING.
 - DEMOLISH FAN COIL UNIT. CAP WATER AND AIR LINES TO PREVENT DIRT GETTING INTO SYSTEM. DISCONNECT CONTROLS. SEE SHEET M-406 FOR NEW FAN COIL UNIT IN THE SAME LOCATION.
 - DEMOLISH PUMP AND AUTOMATIC BALANCING VALVE. SEE P-2 IN LINE CENTRIFUGAL PUMP DETAIL ON SHEET M-501. KEEP REMAINING VALVES, STRAINERS, ETC AS SHOWN.
 - DEMOLISH BROKEN, 2" CONDENSATE LINE WITHIN WALL AND UNDER SIDEWALK. CONNECTS TO COOLING WELL IN ROAD.

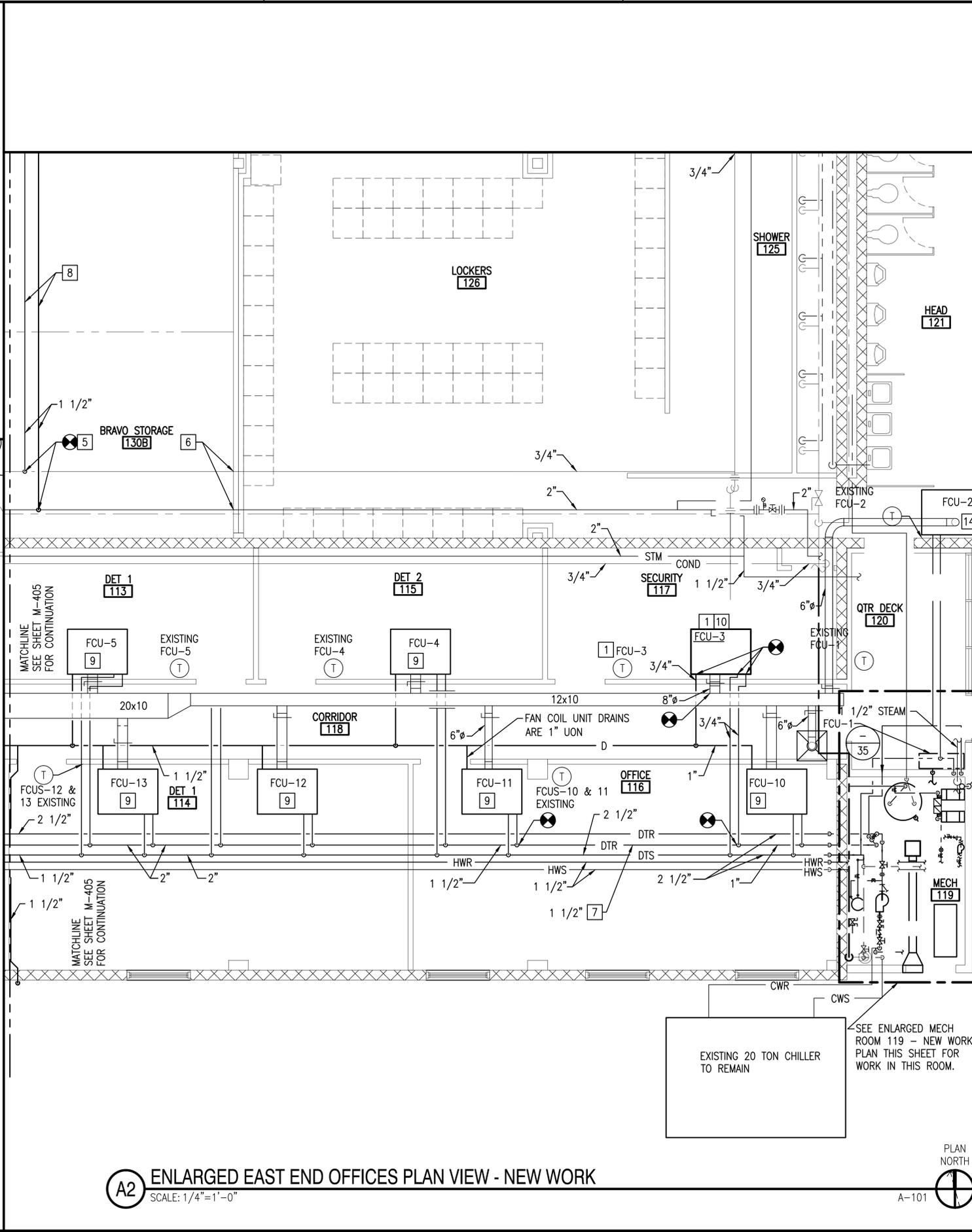
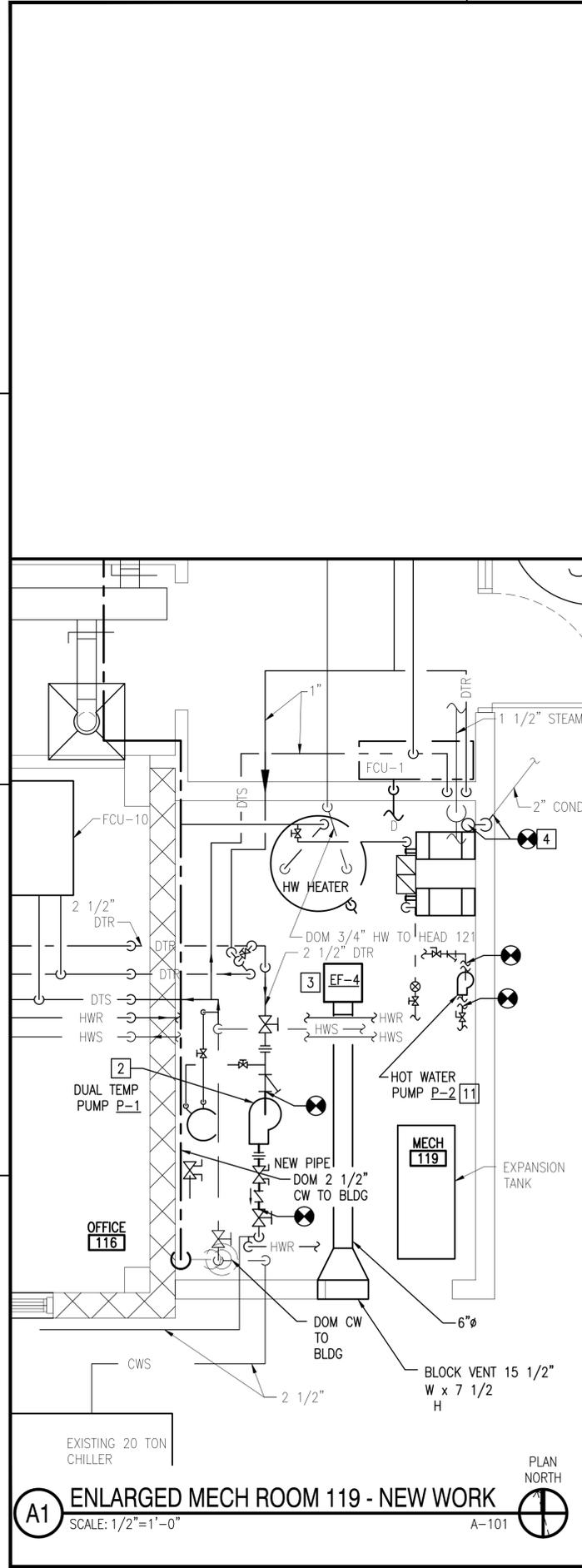
GRAPHIC SCALE

1/4" = 1'-0"

1/2" = 1'-0"

APPROVED	DATE	APP'R
FOR COMMANDER NAVFAC		
ACTIVITY		
SUBFACTORY TO DATE		
DES: WSF	CDW: WSF	CHK: GEB
BRANCH MANAGER: G.E. BAILEY, P.E.	NAVFAC VIRGINIA BEACH, VA	
CHIEF ENGR/ARCH: S.M. LANTZ, P.E.	VIRGINIA BEACH, VA	
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND NAVAL FACILITIES ENGINEERING COMMAND JEBOPS - VIRGINIA BEACH, VA LEAD LITTLE CREEK JOINT EXPEDITIONARY BASE LITTLE CREEK-FORT STORY VIRGINIA BEACH, VA RENOVATIONS AND REPAIRS TO BUILDING 2009 ENLARGED EAST END OFFICES PLAN VIEW AND MECH ROOM 119 - DEMOLITION		
SCALE: AS NOTED	PROJECT NO.: 1361870	
CONSTR. CONTR. NO. N/A	NAVFAC DRAWING NO. 12719132	
SHEET 27 OF 39	DRAWING REVISION: 10 MARCH 2009	
MD-403		

FILE NAME: P:\VA\Hitec\Mech\Drawings\2009\Drawings\Sheet\3_Mechanical\1361870-M-406.dwg LAYOUT NAME: M-406 PLOTTED: Wednesday, March 30, 2016 - 9:56am USER: kurt.flechner



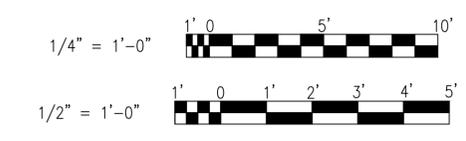
GENERAL SHEET NOTES

- ADJACENT AREAS OF BUILDING 2009 ARE TO REMAIN OCCUPIED AND OPERATIONAL THROUGHOUT THE PROJECT. COORDINATE THE WORK SCHEDULE, UTILITY OUTAGES, AND OTHER POTENTIALLY DISRUPTIVE CONSTRUCTION ACTIVITIES WITH THE BUILDING FACILITY MANAGER. NORMAL BUSINESS HOURS ARE 7:00 AM - 4:00 PM.
- WHERE NEW PARTITIONS FORM CONTINUATION OF EXISTING PARTITIONS TO REMAIN, IT IS INTENDED THAT FINISHES BE ALIGNED. PATCH EXISTING FINISHES TO REMAIN AS REQUIRED TO ACHIEVE A SMOOTH TRANSITION TO NEW WORK
- WHERE EXISTING OPENINGS ARE TO BE INFILLED, MATCH THE CONSTRUCTION OF THE EXISTING WALL AND PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING AND NEW WORK
- SEE ARCHITECTURAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS AND EQUIPMENT NOT SHOWN.

NEW WORK KEYNOTES: 1--5

- PROVIDE NEW FAN COIL UNIT IN SAME LOCATION AS UNIT REMOVED. SEE SCHEDULE SHEET M-601. SUSPEND UNDER CEILING GRID. PROVIDE DUAL TEMP PIPING, DRAIN PIPING AND OUTSIDE AIR DUCTWORK. SEE FCU AND DUCT HW WATER COIL PIPING DETAIL ON SHEET M-501 FOR PIPING. BALANCE OUTSIDE AIR TO CFM SHOWN IN SCHEDULE. RECONNECT CONTROLS AND PROGRAM. REUSE EXISTING THERMOSTAT TO NEW FCU-3.
- PROVIDE NEW PUMP, P-1, AND BALANCE TO FLOWS SCHEDULED. SEE PUMP SCHEDULE SHEET M-601. SEE P-1 SUSPENDED IN-LINE PUMP DETAIL SHEET M-501. RE-CONNECT EXISTING CONTROLS TO THE NEW PUMP AND VERIFY OPERATION.
- PROVIDE A NEW EXHAUST FAN FOR THE MECHANICAL ROOM. SEE SCHEDULE SHEET M-601. PROVIDE DUCTWORK AND VENT AS SHOWN.
- PROVIDE NEW 2" CONDENSATE PIPE TO REPLACE BROKEN PIPE WITHIN WALL AND UNDER SIDEWALK. CONNECTS TO COOLING WELL IN ROAD.
- PROVIDE TAPS FOR NEW STEAM AND CONDENSATE LINES TO NEW HEATING AND VENTILATING UNIT, HVU-1. SEE SHEET M-405 FOR UNIT LOCATION.
- PROVIDE 1 HOUR FIRE STOPPING FOR THE PIPE PASSING THROUGH THE FIRE RATED WALL.
- PROVIDE NEW 1 1/2" DTR PIPE AS SHOWN.
- PROVIDE STEAM AND CONDENSATE LINES AS SHOWN. SEE M-405 FOR CONTINUATION.
- BALANCE WATER AND OUTSIDE AIR AS SCHEDULED ON M-601.
- PROVIDE OUTSIDE AIR DUCT AS SHOWN AND BALANCE WATER AND OUTSIDE AIR AS SCHEDULED ON SHEET M-601.
- PROVIDE NEW PUMP, P-2, AND BALANCE TO FLOWS SCHEDULED. SEE PUMP SCHEDULE SHEET M-601. SEE P-2 IN-LINE CENTRIFUGAL PUMP DETAIL SHEET M-501. RE-CONNECT EXISTING CONTROLS TO THE NEW PUMP AND VERIFY OPERATION.

GRAPHIC SCALE



APPROVED	DATE
FOR COMMANDER NAFAAC	DESCRIPTION
ACTIVITY	DATE
SUBFACTORY TO DATE	DATE
DES: WSF	DRAW: WSF
CHK: GEB	DATE:
BRANCH MANAGER: G.E. BAILEY, P.E.	DATE:
CHIEF ENGR/ARCH: S.M. LANTZ, P.E.	DATE:
DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND	NAVAL FACILITIES ENGINEERING COMMAND
HEAD LITTLE CREEK	HEAD LITTLE CREEK
JOINT EXPEDITIONARY BASE LITTLE CREEK-FORT STORY	JOINT EXPEDITIONARY BASE LITTLE CREEK-FORT STORY
VIRGINIA BEACH, VA	VIRGINIA BEACH, VA
RENOVATIONS AND REPAIRS TO BUILDING 2009	RENOVATIONS AND REPAIRS TO BUILDING 2009
ENLARGED EAST END OFFICES, PLAN VIEW AND MECH ROOM 119 - NEW WORK	ENLARGED EAST END OFFICES, PLAN VIEW AND MECH ROOM 119 - NEW WORK
SCALE: AS NOTED	PROJECT NO.: 1361870
CONSTR. CONTR. NO. N/A	NAFAAC DRAWING NO. 12719135
SHEET 30 OF 39	M-406
DRAWFORM REVISION: 10 MARCH 2009	

2 PIPE FAN COIL UNIT AND OUTSIDE AIR DISTRIBUTION SCHEDULE

TAG NO.	ROOM NO.	TYPE	S.A. CFM	O.A. CFM MAX NOTE 1	COOLING					HEATING		CV	ELECTRICAL DATA NOTE 2				REMARKS	
					DUAL TEMP GPM	WATER P.D. FT.W.G.	EAT DB °F	EAT WB °F	TOTAL CAPACITY MBH	SENSIBLE CAPACITY MBH	EAT DB °F		TOTAL CAPACITY BTU/HR	HP	MOTOR WATTS	VOLTS		PHASE
FCU-1	120	VERTICAL, EXPOSED CABINET	545	35	2.3	3	76.5	64.5	11.6	10.5	69.2	9.2	2.0	1/8	-	120	1	EXISTING FCU NOTES 4, 5
FCU-2	121	HORIZONTAL, EXPOSED CABINET	455	40	1.8	3	76.2	66.9	9.1	7.2	68.5	9.5	1.6	1/12	-	120	1	EXISTING FCU NOTES 1, 4, 5, 6
FCU-3	117	HORIZONTAL, EXPOSED CABINET	300	130	1.5	3	76.5	65.2	7.4	5.9	69.8	0.9	1.1	1/5	-	120	1	REPLACE UNIT WITH NEW, NOTES 1-7
FCU-4	115	HORIZONTAL, EXPOSED CABINET	425	140	2.0	2	76.2	64.6	9.9	8.4	69.6	0.8	1.7	1/8	-	120	1	EXISTING FCU NOTES 1, 4, 5, 6
FCU-5	113	HORIZONTAL, EXPOSED CABINET	480	140	2.2	3	76.2	64.6	10.9	9.4	70.2	1.6	1.9	1/8	-	120	1	EXISTING FCU NOTES 1, 4, 5, 6
FCU-6	111	HORIZONTAL, EXPOSED CABINET	1100	170	4.3	3	76.2	64.2	21.5	20.1	70.5	1.7	2.6	1/5 1/5	-	120	1	EXISTING FCU NOTES 1, 4, 5, 6, 7
FCU-7	110	HORIZONTAL, EXPOSED CABINET	485	80	1.8	3	76.2	64.6	10.9	9.4	70.2	1.6	1.6	1/8	-	120	1	EXISTING FCU NOTES 1, 4, 5, 6, 7
FCU-8	109	HORIZONTAL, EXPOSED CABINET	180	80	1.0	1	76.5	64.9	5.0	4.1	70.1	0.5	0.7	1/20	-	120	1	EXISTING FCU NOTES 1, 4, 5, 6, 7
FCU-9	109	HORIZONTAL, EXPOSED CABINET	280	80	1.0	1	76.5	64.9	5.0	4.1	70.1	0.6	0.9	1/12	-	120	1	EXISTING FCU NOTES 1, 4, 5, 6, 7
FCU-10	116	HORIZONTAL, EXPOSED CABINET	600	90	2.4	5	76.5	64.9	15.0	13.0	69.3	5.8	1.6	1/8	-	120	1	EXISTING FCU NOTES 1, 4, 5, 6, 7
FCU-11	116	HORIZONTAL, EXPOSED CABINET	535	90	2.4	3	76.5	64.9	10.3	8.9	69.3	5.7	2.1	1/8	-	120	1	EXISTING FCU NOTES 1, 4, 5, 6, 7
FCU-12	114	HORIZONTAL, EXPOSED CABINET	400	80	1.9	3	76.4	65.2	9.3	7.7	69.6	5.2	1.6	1/8	-	120	1	EXISTING FCU NOTES 1, 4, 5, 6
FCU-13	114	HORIZONTAL, EXPOSED CABINET	395	90	1.9	3	76.4	65.2	9.3	7.6	69.6	5.1	1.6	1/8	-	120	1	EXISTING FCU NOTES 1, 4, 5, 6
FCU-14	112	HORIZONTAL, EXPOSED CABINET	450	80	2.1	3	76.6	65.0	10.3	8.8	69.7	5.4	1.8	1/8	-	120	1	EXISTING FCU NOTES 1, 4, 5, 6
FCU-15	112	HORIZONTAL, EXPOSED CABINET	450	90	2.1	3	76.6	65.0	10.3	8.7	69.7	5.4	1.8	1/8	-	120	1	EXISTING FCU NOTES 1, 4, 5, 6
FCU-16	108	HORIZONTAL, EXPOSED CABINET	330	70	1.5	4	76.6	65.2	7.5	6.3	69.2	3.9	1.1	1/12	-	120	1	EXISTING FCU NOTES 1, 4, 5, 6
FCU-17	108	HORIZONTAL, EXPOSED CABINET	655	130	3.0	5	76.6	65.2	15.0	12.7	69.2	7.9	2.0	1/8	-	120	1	EXISTING FCU NOTES 1, 4, 5, 6
FCU-18	118	VERTICAL, EXPOSED CABINET	425	75	3.2	4	76.3	67.0	15.7	10.2	69.1	5.0	2.4	1/8	-	120	1	EXISTING FCU NOTES 4, 5, 7
FCU-19	131	HORIZONTAL, CONCEALED CABINET	500	80	2.1	4	76.5	64.7	10.4	9.4	69.8	1.8	1.6	1/5	-	120	1	PROVIDE NEW UNIT, NOTES 1 - 8
FCU-20	127	HORIZONTAL, CONCEALED CABINET	730	430	2.4	3	76.3	67.2	12.0	7.7	69.4	21.9	2.1	1/8	-	120	1	PROVIDE NEW UNIT, NOTES 1 - 8

- NOTES:
 1. OUTSIDE AIR IS SUPPLIED BY SEPARATELY DUCTED DEDICATED OUTSIDE AHU-1 TO THE FAN COIL UNITS EXCEPT FCU-1 & FCU-18.
 2. PROVIDE 3-SPEED FAN MOTOR, PROVIDE HIGH STATIC FAN MOTOR TO OVERCOME DIRTY FILTERS.
 3. PROVIDE FACTORY INSTALLED PIPING PACKAGES WITH 3-WAY VALVES.
 4. CHILLED WATER INLET TEMP 46 DEG F WITH A 10 DEG DELTA TEMP. HOT WATER INLET TEMP 130 DEG F WITH A 20 DEG DELTA TEMP.
 5. FCUS ARE FREE DISCHARGE UNITS WITH AN ASSUMED EXTERNAL STATIC PRESSURE OF 0.1" W.C.. FOR NEW UNITS, FCU-19 & FCU-20 PROVIDE DUCTED SUPPLIES AND RETURNS.
- NOTES (CONTINUED):
 6. BALANCE THE AIR FLOWS TO THE NEW AMOUNTS AS SCHEDULED.
 7. BALANCE THE WATER FLOWS TO THE NEW AMOUNTS AS SCHEDULED.
 8. PROVIDE DUCTED RETURN.

DESIGN CONDITIONS

LOCATION	HEATING		COOLING		REMARKS
	DB	WB	DB	WB	
OUTSIDE AIR TEMPERATURES	24'	21'	91'	76'	
CONDITIONED OUTSIDE AIR	70' ± 2	-	55'	54.4'	TREATED BY AHU, FED TO FCUS
ALL OTHER INTERIOR SPACES	70' ± 2	-	75' ± 2	-	
CONFERENCE/TRAINING 133	70' ± 2	-	AMBIENT	AMBIENT	VENTILATION IS AMBIENT OA TEMPERATURES

DUCT CONSTRUCTION AND LEAKAGE TEST

SYSTEM	DUCT PRESSURE CLASS (IN WG)				DUCT SEAL CLASS	DUCT LEAKAGE CLASS	
	SUPPLY	RETURN	EXHAUST	OUTSIDE AIR		RECTANGULAR	ROUND
EXHAUST DUCT	-	-	1"	-	A	24	12
SUPPLY DUCT	1"	-	-	-	A	24	12
RETURN DUCT	-	1"	-	-	A	24	12
OUTSIDE AIR	-	-	-	1"	A	24	12

ALL DUCT SHALL BE SEALED TO DUCT SEAL CLASS A.
 ALL DUCT SHALL BE TESTED FOR LEAKAGE

PUMP SCHEDULE

MARK	TYPE	SERVICE	GPM	HEAD IN FT.	MINIMUM EFFICIENCY	PUMP MOTOR					REMARKS
						HP	RPM	VOLTS	PHASE	Hz	
P-1	INLINE	DUAL TEMP	79.6	44.7	60%	2.0	1750	208	3	60	DT, MANUALLY SWITCH ROUTING FOR CW OR HW
P-2	INLINE	HOT WATER	15.0	21.74	SEE REMARK	1/3	1750	120	1	60	PROVIDE EFFICIENCY AS HIGH AS POSSIBLE.
COND P-1	RESEVOIR	CONDENSATE	65.0 MAX	15.0	-	1/50	-	120	1	60	LITTLE GIANT CONDENSATE PUMP VCMA-15ULS

- NOTES FOR PUMPS P-1 AND P-2:
 1. PROVIDE NEW CALIBRATED, MANUAL BALANCING VALVE FOR THESE PUMPS.
 2. CURRENT P-2 IS MOUNTED UPSIDE DOWN. INSTALL THE NEW PUMP CORRECTLY, WITH SUPPORT BRACKET UNDERNEATH.
 3. P-1 BASIS OF DESIGN IS B&G 2AB e-90.
 4. P-2 BASIS OF DESIGN IS B&G 1/6 HP PL-45.
 5. SUPPORT PUMP FROM ABOVE. DO NOT SOLELY SUPPORT PUMP FROM PIPE.
 6. BOTH PUMPS - TRIPLE DUTY VALVES ARE NOT ALLOWED.

FAN SCHEDULE

MARK	SERVICE	LOCATION	QTY	TYPE	CFM	ESP (IN WG)	FAN DATA			ELECTRICAL DATA			DRIVE	MOTOR RPM	NOTES
							RPM	MHP	MAX. SONES	HP	VOLTS	PHASE			
EF-3	EXHAUST	FEMALE HEAD/LOCKER ROOM	1	INLINE	535	0.4	1080	1/6	2.0	325 W	115	1	DIRECT	1075	SCHEDULE AND AFTER HOURS SWITCH
EF-4	EXHAUST	MECHANICAL ROOM 119	1	CEILING EXHAUST	100	0.2	2795	1/6	1.3	53 W	115	1	DIRECT	1075	THERMOSTAT

HEATING AND VENTILATING UNIT SCHEDULE

TAG NO.	TYPE	S.A. CFM	O.A. CFM	R.A. CFM	ESP (W.G.)	STEAM HEATING					ELECTRICAL DATA			ISOLATION		REMARKS		
						EAT DB °F	LAT DB °F	TOTAL CAPACITY MBH	AIR MAX P.D. IN. W.G.	FLOW LBS/HR	ENTERING PRESS. PSIG	HP	NEMA STARTER SIZE	VOLTS	PHASE		TYPE	MIN DEFLECT IN.
HVU-1	HORIZONTAL AIR HANDLER	2,220	2,220	0	0.49	38.3	90.0	126.3	0.30	108.4	9	1.5	0	208	3	SPRING	0.75	NOTES 1 - 3
	HEATING CONDITION	2,220	1,400	820														

- NOTES:
 1. PROVIDE STEAM COIL WITH SEA COAST PROTECTION.
 2. PROVIDE FILTRATION 2" THICK, MERV 8. PROVIDE A MANUAL GAGE TO SHOW FILTER DIFFERENTIAL PRESSURE ACROSS THE FILTER BANK.
 3. DURING HEATING MODE, THE RETURN AIR DAMPER WILL OPEN AND THE OUTSIDE AIR DAMPER WILL THROTTLE DOWN THE AMOUNT OF OUTSIDE AIR BEING BROUGHT IN TO THE UNIT AT AN OA TEMP OF 65 DEG F OR BELOW. ON A RISE IN OA TEMP ABOVE 65 DEG F, THE REVERSE WILL HAPPEN. THE AIRFLOW VALUES ARE ON THE SECOND LINE.

STEAM ACTUATOR SCHEDULE

MARK	LOCATION	MAX FLOW LBS/HR	CV	ACTUATOR P.D. PSIG	INLET PRESSURE PSIG	INLET DIA IN	OUTLET DIA IN	NOTES
STEAM CONTROL VALVE	CONFERENCE/TRAINING 133	325	9.48	5	14	1 1/4	1 1/2	NOTES 1 - 4

- NOTES:
 1. PROVIDE CAST IRON BODY, PLUG STYLE, SS PLUG AND SEAT, PTFE PACKING MATERIAL, NC VALVE, MODULATING CAPACITY AND RETRACTABLE STEM.
 2. PROVIDE A ACTUATOR. PROVIDE A VOLTAGE THAT IS COORDINATED WITH THE CONTROLS CONTRACTOR PREFERENCES.
 3. CLASS IV SHUT OFF.
 4. BASIS OF DESIGN SPIRAX SARCO 1"LEA31PTSUSS.2 Cv 12 NPT, ACTUATOR AEL62213FS MODULATING CONTROL, 4-20 ma SIGNAL (VERIFY WITH CONTROLS)

DX ROOFTOP UNIT SCHEDULE

TAG NO.	TYPE	S.A. CFM	O.A. CFM	ESP INCHES W.G.	COOLING				HEATING			*ELECTRICAL DATA				REMARKS		
					EAT DB °F	EAT WB °F	TOTAL CAPACITY MBH	SENSIBLE CAPACITY MBH	EAT DB °F	TOTAL CAPACITY MBH	FLOW GPM	CV	WATER P.D. FT.W.G.	HP	MOTOR WATTS		VOLTS	PHASE
RTU-2	ROOFTOP UNIT	4200	920	1.31	79.1	67.3	180.3	116.0	69.3	141.4	15.0	10.3	1.0	5	-	208	3	HEATING COIL IS A DUCT MOUNTED COIL WITHIN BUILDING
		NEW VALUE																

- NOTES:
 1. EXISTING UNIT HAD 4060 CFM SUPPLY AIR, 920 CFM OUTSIDE AIR, AND 3140 CFM RETURN AIR PRIOR TO CHANGE. 4. INCREASE UNIT FLOW 140 CFM.
 2. HOT WATER INLET TEMP 130 DEG F WITH A 20 DEG DELTA TEMP.
 3. EXISTING HOT WATER COIL. LEAVE CURRENT GPM AND VALVE.

AIR HANDLER SCHEDULE

TAG NO.	TYPE	S.A. CFM	O.A. CFM	ESP (W.G.)	COOLING				HEATING				*ELECTRICAL DATA				REMARKS					
					EAT DB °F	EAT WB °F	TOTAL CAPACITY MBH	SENSIBLE CAPACITY MBH	FLOW GPM	CV	WATER P.D. FT.W.G.	EAT DB °F	TOTAL CAPACITY MBH	FLOW GPM	CV	WATER P.D. FT.W.G.		HP	MOTOR WATTS	VOLTS	PHASE	
AHU-1	EXISTING HORIZONTAL AIR HANDLER	2200	2200	0.49"	91.0	76.0	170.3	89.5	36.7	18.8	8.5	24.0	99.2	9.9	13.0	1.3	1.5	-	208	3	NOTES 1 AND 2	
AHU-2	RECESSED CEILING DUCTLESS SPLIT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	NOTE 3

- NOTES:
 1. CHILLED WATER INLET TEMP 45 DEG F WITH A 10 DEG DELTA TEMP. HOT WATER INLET TEMP 130 DEG F WITH A 20 DEG DELTA TEMP.
 2. EXISTING UNIT. RE-SHEAVE AND BALANCE UNIT TO PROVIDE NEW AIRFLOW AND STATIC. FORMER AIRFLOW WAS 1828 CFM ACTUAL AT 0.78 INCHES W.C. EXTERNAL STATIC PRESSURE..
 3. EXISTING UNIT. CONDENSATE PUMP WITHIN UNIT HAS FAILED. PROVIDE A NEW EXTERNAL CONDENSATE PUMP. SEE PUMP SCHEDULE.

APPR	DATE	DESCRIPTION	SYM

NAVFAC

APPROVED

FOR COMMANDER NAVFAC

ACTIVITY

SATISFACTORY TO DATE

DES: WSF DRW: WSF CHK: GEB

BRANCH MANAGER G.E. BAILEY, P.E.

CHIEF ENG/ARCH: S.M. LANTZ, P.E.

DEPARTMENT OF THE NAVY

NAVAL FACILITIES ENGINEERING COMMAND

NAVAL FACILITIES ENGINEERING COMMAND

FEAD LITTLE CREEK

NAVAL FACILITIES ENGINEERING COMMAND

LEBLOS - VIRGINIA BEACH, VA

JOINT EXPEDITIONARY BASE LITTLE CREEK-FORT STORY

VIRGINIA BEACH, VA

RENOVATIONS AND REPAIRS TO BUILDING 2009

MECHANICAL SCHEDULES

SCALE: NONE

EPROJECT NO.: 1361870

CONSTR. CONTR. NO. N/A

NAVFAC DRAWING NO. 12719137

SHEET 32 OF 39

M-601

DRAWING REVISION: 10 MARCH 2009

FILE NAME: P:\V\LittleCreek\Buildings\2015_1361870_DBB_Reorgnize Admin_Spaces_B_Design\BLOC_2009\Drawings\Sheet\13_Mechanical\1361870-M-601.dwg LAYOUT NAME: M-601 PLOTTED: Wednesday, March 30, 2016 - 9:53am USER: kurt.fleischer

FILE NAME: P:\VA\Hitec\en\MultipleBuildings\2015_1361870_LDBB_Reorganize_Admin_Specs\B_Design\BDDC_2009\Drawings\Sheet\13_Mechanical\1361870-M-801.dwg LAYOUT NAME: M-801 PLOTTED: Wednesday, March 30, 2016 - 10:06am USER: hurr.flechner

DIFFUSER/REGISTER/GRILL SCHEDULE

MARK NO.	TYPE	CFM	MAX P.D. (IN. WG.)	MAXIMUM FRAME SIZE INCHES	MAX NECK SIZE INCHES	MAX N.C.	SERVICE	FINISH	REMARKS
A	LAY IN CEILING	90	0.10	24"x24"	6"ø	20	SUPPLY	WHITE	4 WAY THROW, 6"x6" TITUS TDC-AA
B	LAY IN CEILING	160	0.10	24"x24"	8"ø	20	SUPPLY	WHITE	4 WAY THROW, 9"x9" TITUS TDC-AA
C	LAY IN CEILING	250	0.10	24"x24"	10"ø	20	SUPPLY	WHITE	4 WAY THROW, 12"x12" TITUS TDC-AA
D	SURFACE MOUNT	220 - 250	0.10	24"x24"	10"ø	20	SUPPLY	WHITE	4 WAY THROW, 12"x12" TITUS TDC-AA
E	SURFACE MOUNT	400	0.10	24"x24"	12"ø	20	SUPPLY	WHITE	4 WAY THROW, 15"x15" TITUS TDC-AA, DUCT MOUNTED
RA	LAY IN CEILING	70	0.02	24"x24"	6"ø	-	RETURN	WHITE	FILTER GRILLE, 1/2"x1/2"x1" CORES, TITUS 50-FF
RB	LAY IN CEILING	300 - 385	0.02	24"x24"	12"ø	-	RETURN	WHITE	FILTER GRILLE, 1/2"x1/2"x1" CORES, TITUS 50-FF
RC	SURFACE MOUNT	420	0.02	24"x24"	12"ø	-	RETURN	WHITE	FILTER GRILLE, 1/2"x1/2"x1" CORES, TITUS 50-FF
RD	DUCT MOUNT	820	0.04	26"x14"	24"x12"	13	RETURN	WHITE	LOUVERED GRILLE, 3/4" BLADES, 35 DEG. TITUS 35OFL
EA	LAY IN CEILING	60	0.02	24"x24"	6"ø	-	EXHAUST	WHITE	EGGCRATE GRILLE, 1/2"x1/2"x1" CORES, TITUS 50-F
EB	SURFACE MOUNT	235 - 240	0.02	12"x12"	10"ø	-	EXHAUST	WHITE	EGGCRATE GRILLE, 1/2"x1/2"x1" CORES, TITUS 50-F

NOTE: NECK SIZE IS FOR DUCT CONNECTION

LOUVER SCHEDULE

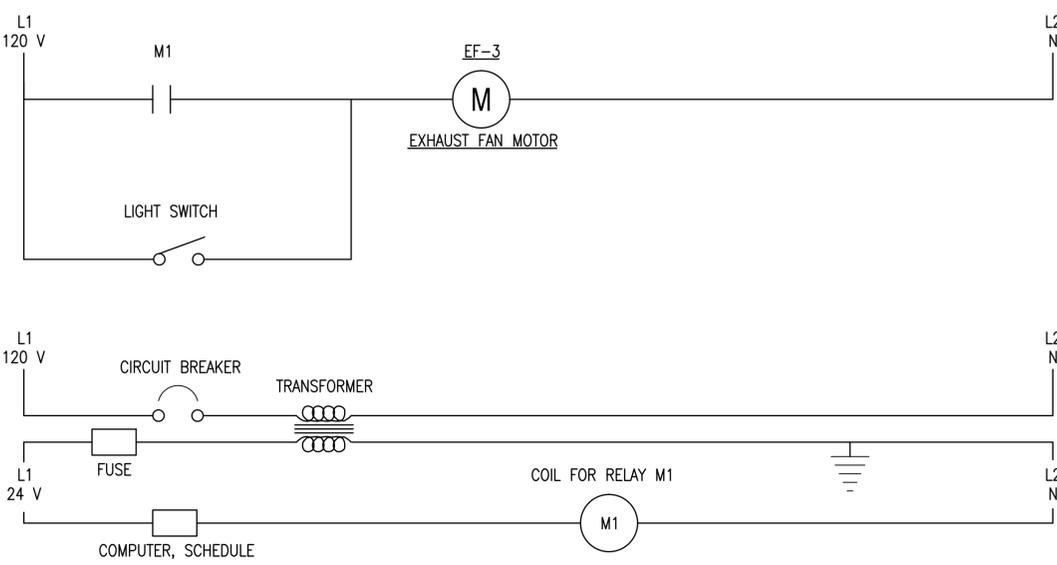
MARK NO.	TYPE	CFM	MAX P.D. (IN. WG.)	MINIMUM FRAME SIZE INCHES	FREE AREA SQ FT	FINISH	REMARKS
LV-1	INTAKE	2,220	0.10	48" W x 24" H	3.7	WHITE	PROVIDE BIRD AND INSECT SCREEN
LV-2	EXHAUST	430	0.10	28" W x 12" H	0.62	WHITE	PROVIDE BIRD AND INSECT SCREEN

EF-4 CONTROL SEQUENCE

PROVIDE A LINE VOLTAGE THERMOSTAT FOR THE EXHAUST FAN. SET POINT SHALL BE 70 +/- 2 DEG F.

EF-3 CONTROL SCHEMATIC AND SEQUENCES OF OPERATION

EXHAUST FAN EF-3 SHALL BE ENERGIZED AND RUN BY A SCHEDULE, 0600 - 1700 (ADJ). IT SHALL ALSO BE ABLE TO BE TURNED ON IN THE OFF HOURS BY A LIGHT SWITCH.



CONTROL SEQUENCES FAN COIL UNITS, EXHAUST FAN, HVU-1

CONTROLS SEQUENCES
THE EXISTING CONTROLS ARE BY JOHNSON CONTROLS. BLDG 2009 IS A STAND ALONE SYSTEM THAT DOES NOT TIE INTO THE BASE DDC. EACH EXISTING FAN COIL UNIT HAS A CONTROLLER THAT IS PROGRAMMABLE. THIS PROJECT MOVES EXISTING THERMOSTAT CONTROLS AND REUSES THEM, LEAVES MANY AS IS, AND PROVIDES NEW THERMOSTAT CONTROLS.

FOR FAN COIL UNITS SERVED BY THE DUAL TEMPERATURE SYSTEM, (DUAL TEMP), PROGRAMMABLE LOW VOLTAGE THERMOSTATS WILL CONTROL THE UNIT OR UNITS BY CONTROLLING THE WATER VALVES AND THE FAN. SET POINTS SHALL BE 70 +/- 2 DEG F HEATING AND 75 +/- 2 DEG F COOLING. FAN AUTOMATIC SETTING SHALL BE ABLE TO BE PROGRAMMED TO START AT 0630 AND SHUT OFF AT 1600. THERMOSTAT SHALL BE CAPABLE OF A MANUAL FAN ON. WHERE ONE THERMOSTAT CONTROLS TWO FAN COIL UNITS, BOTH HEATING AND COOLING WILL BE TWO STAGE WITH THE DIFFERENCE IN STAGES APPROXIMATELY A DEGREE AND A HALF. OUTSIDE AIR WILL FLOW THROUGH THE UNIT REGARDLESS IF THE UNIT IS RUNNING OR NOT KEEPING BUILDING PRESSURIZATION. THE OUTSIDE AIR TO EACH UNIT WILL BE FROM A CONSTANT VOLUME AIR HANDLER BALANCED TO SCHEDULED VALUES. FCU-20 RUNS SIMILAR TO THE OTHERS WITH A BLEND OF OUTSIDE AIR AND RECIRCULATED AIR.

IN THE MECHANICAL ROOM, RM 119, THE EXISTING DUAL TEMP PUMP, P-1, RUNS CONTINUOUSLY THROUGH EXISTING CONTROLS. RECONNECT EXISTING CONTROLS TO NEW PUMP AND VERIFY THE SEQUENCE. THE SEASONAL SWITCHOVER MUST BE BY HAND. VALVES WILL BE CLOSED AND OPENED TO ALLOW THE ROUTING OF FLOW THROUGH THE HOT WATER HEAT EXCHANGER AND THE PUMP. STEAM VALVE TO THE HEAT EXCHANGER IS SET BY HAND. THE EXISTING HOT WATER PUMP, P-2, IS CONTROLLED BY THE RTU-2 THERMOSTAT AND CONTROLLER. RECONNECT EXISTING CONTROLS TO NEW PUMP AND VERIFY THE SEQUENCE.

FOR THE EXISTING OUTSIDE AIR HANDLER, AHU-1, A DUCT THERMOSTAT CONTROLS THE VALVE SETTINGS. SET POINTS SHALL BE 70 +/- 2 DEG F HEATING AND COOLING. A NORMALLY CLOSED (NC) SOLENOID VALVE SHALL ROUTE DT WATER FLOW TO THE CORRECT COIL, HEATING (PREHEAT POSITION) OR COOLING. EACH COIL SHALL HAVE AN ADDITIONAL DRAIN LINE TIED TO THE CONDENSATE DRAIN WITH A NC VALVE AND A NORMALLY OPEN (NO) VALVE IN SERIES. ON SWITCH OVER, THE NO SHALL BE DE-ENERGIZED AND DRAIN THE COIL FOR THE SEASON. THE NEW EF-3 SHALL BE INTERLOCKED WITH THE EXISTING AHU-1.

FOR THE EXISTING PACKAGED HEAT PUMP ROOFTOP UNIT, RTU-2, A PROGRAMMABLE LOW VOLTAGE THERMOSTAT CONTROLS THE UNIT. SET POINTS ARE BE 70 +/- 0.5 DEG F HEATING AND 75 +/- 0.5 DEG F COOLING. FAN AUTOMATIC SETTING IS PROGRAMMED TO START AT 0630 AND SHUT OFF AT 1600. THERMOSTAT IS CAPABLE OF A MANUAL FAN ON. FOR AUXILIARY HEAT, THE THERMOSTAT SHALL TURN ON P-2, OPEN A NC VALVE, AND HAVE HOT WATER FLOW THROUGH THE HOT WATER DUCT COIL.

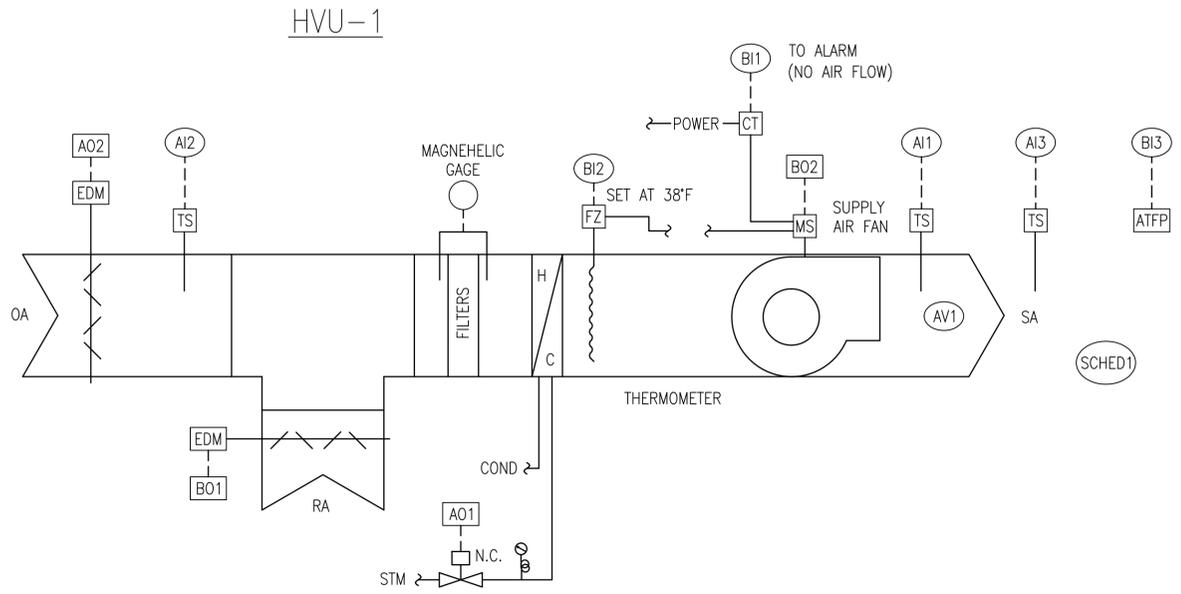
NEW HVU-1 SHALL VENTILATE THE NEW CONFERENCE ROOM. IT SHALL BE CONTROLLED ON OR OFF IN THREE WAYS. THE FIRST METHOD - PROVIDE AN OCCUPANCY SENSOR. WHEN THE OCCUPANCY SENSOR DETECTS PEOPLE WITHIN THE ROOM, THE UNIT SHALL RUN. THE SECOND METHOD - PROVIDE A PROGRAMMABLE CONTROLLER THAT CAN BE PROGRAMMED AND SCHEDULED FOR A MEETING. THE SCHEDULER SHALL BE CAPABLE OF BEING PROGRAMMED IN ONE HALF HOUR INCREMENTS, 7 DAYS A WEEK, FOR 4 EVENTS. WHEN THE SCHEDULED TIME IS REACHED, THE UNIT SHALL RUN. THE THIRD METHOD - THE STEAM COIL REACHES FREEZING CONDITIONS, THIS UNIT SHALL RUN IN HEATING MODE. SEE FREEZE PROTECTION BELOW. HVU-1 SHALL SHUT OFF WHEN THE OCCUPANCY SENSOR DOES NOT DETECT PEOPLE WITHIN THE ROOM FOR 20 MINUTES (ADJ), WHEN THE SCHEDULED TIME TO RUN ENDS OR WHEN THE FREEZESTAT RESETS ITSELF.

WHEN HVU-1 IS COMMANDED TO RUN, THE OUTSIDE AIR DAMPER SHALL OPEN. WHEN THE DAMPER IS OPEN, THE UNIT FAN SHALL COME ON AND VENTILATE THE SPACE. WHEN THE OUTSIDE AIR TEMPERATURE IS BELOW 65 +/- 1 DEG F (ADJ), THE UNIT SHALL BE IN HEATING MODE. THE STEAM VALVE SHALL BE MODULATED OPEN TO CONTROL THE SPACE TEMPERATURE. AFTER 10 MINUTES (ADJ), THE OUTSIDE AIR DAMPER SHALL OPEN TO 1400 CFM AND THE RETURN DAMPER SHALL OPEN TO 800 CFM. WHEN THE DAMPERS ARE OPEN, THE UNIT FAN SHALL COME ON. ON A RISE IN ROOM (SPACE) TEMPERATURE TO 70 +/- 1 DEG F (ADJ), THE STEAM VALVE SHALL CLOSE. WHEN THE UNIT IS OFF IN EITHER MODE, THE FAN SHALL BE OFF AND THE DAMPERS SHALL CLOSE.

FREEZE PROTECTION: EVEN IF HVU-1 IS OFF, IF THE FREEZESTAT DROPS TO 38 +/- 2 DEG F (ADJ), THE STEAM VALVE SHALL OPEN FULLY TO HEAT THE COIL. IN ADDITION, IF THE UNIT IS RUNNING, THE FAN SHALL SHUT OFF AND THE DAMPERS SHALL CLOSE. THE FREEZESTAT SHALL BE AN AUTOMATIC RESET DEVICE. ONCE THE TEMPERATURE RISES TO 43 +/- 2 DEG F (ADJ), THE UNIT SHALL RETURN TO THE MODE IT WAS IN BEFORE THE FREEZESTAT TRIPPED (OFF OR HEATING AND VENTILATING).

ATFP: WHEN THE ATFP SWITCH IS PRESSED, THE UNIT SHALL SHUT DOWN. RESET THROUGH THE DDC INTERFACE (SOFTWARE).

DIRTY FILTERS: THE LOADING OF THE FILTERS SHALL BE MEASURED BY A MAGNEHELIC GAGE MOUNTED ON THE FILTER SECTION. THERE WILL BE NO DDC ALARM FOR A DIRTY FILTER.



HVU-1	
ANALOG INPUT	
(AI1)	SA TEMP
(AI2)	OA TEMP
(AI3)	CONFERENCE ROOM SPACE TEMP
BINARY INPUT	
(B1)	SUPPLY FAN MOTOR STATUS
(B2)	SAFETY INTERLOCK - FREEZE
(B3)	ATFP
ANALOG OUTPUT	
(AO1)	STEAM VALVE
(AO2)	OA DAMPER VARIABLE POSITION
BINARY OUTPUT	
(BO1)	RA DAMPER MOTOR OPEN/CLOSED
(BO2)	SUPPLY FAN START/STOP
ANALOG VALUE	
(AV1)	CONFERENCE ROOM SETPOINT
SCHEDULE	
(SCHED1)	SCHEDULE

	DATE
	DESCRIPTION
	REV

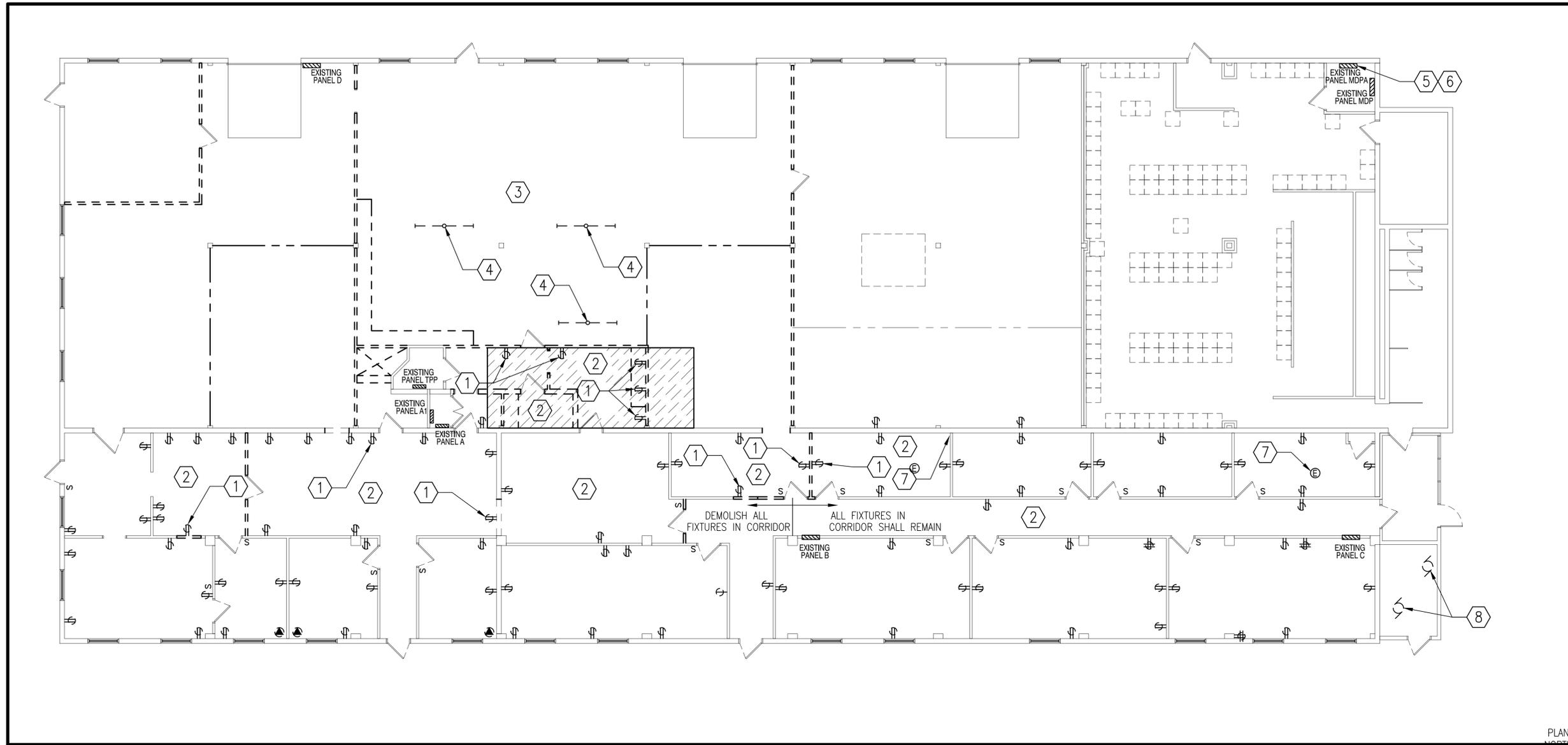
APPROVED	A/E INFO
FOR COMMANDER NAVFAC	
ACTIVITY	
SATISFACTORY TO DATE	
DES: WSF	DRW: WSF
CHK: GEB	
BRANCH MANAGER G.E. BAILEY, P.E.	
CHIEF ENGR/ARCH S.M. LANTZ, P.E.	

RENOVATIONS AND REPAIRS TO BUILDING 2009

CONTROLS AND SCHEDULE

SCALE: AS NOTED	
PROJECT NO.: 1361870	
CONSTR. CONTR. NO. N/A	
NAVFAC DRAWING NO. 12719138	
SHEET 33 OF 39	
M-801	
DRAWING REVISION: 10 MARCH 2009	

FILE NAME: P:\VA\LittleCreek\MultipleBuildings\2015_1361870_DBB_Reorganize_Admin_Spaces\B_Design\BLOC_2009\Drawings\Sheet\14_Electrical\1361870-ED101.dwg LAYOUT NAME: ED101 PLOTTED: Wednesday, March 30, 2016 - 10:17am USER: hurflechner



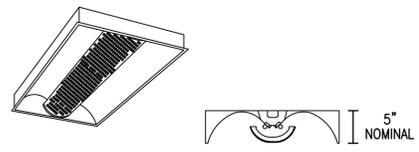
ELECTRICAL DEMOLITION PLAN

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

DEMOLITION NOTES	
1. DEMOLISH EXISTING RECEPTACLE COMPLETE. PULL BACK WIRING TO PREVIOUS RECEPTACLE ON SAME CIRCUIT. ALL OTHER EXISTING RECEPTACLES ARE SHOWN FOR REFERENCE AND SHALL REMAIN.	7. DISCONNECT EXISTING PUMPS. EXISTING CIRCUITING SHALL REMAIN.
2. DEMOLISH EXISTING LIGHT FIXTURES AND ASSOCIATED SWITCHING COMPLETE IN THIS ROOM.	
3. EXISTING LIGHT FIXTURES SHALL REMAIN, EXCEPT WHERE NOTED.	
4. DEMOLISH EXISTING LIGHT FIXTURE. EXISTING CIRCUIT SHALL REMAIN.	
5. REMOVE EXISTING PANEL. EXISTING CIRCUITS SHALL BE DISCONNECTED AND SHALL REMAIN FOR RECONNECTION.	
6. EXISTING MAIN FEEDER CONDUCTORS SHALL REMAIN FOR RECONNECTION.	
7. DISCONNECT EXISTING FCU-3 & FCU-6. EXISTING CIRCUITING SHALL REMAIN.	

GRAPHIC SCALE	

APPROVED	DATE	APP'R
FOR COMMANDER NAVFAC		
ACTIVITY		
SATISFACTORY TO	DATE	
DES: CTM	DRW: CTM	CHK: REN
BRANCH MANAGER G.E. BAILEY, P.E.		
CHIEF ENG/ARCH S.M. LANTZ, P.E.		
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND JEBOPS - VIRGINIA BEACH, VA FEAD LITTLE CREEK JOINT EXPEDITIONARY BASE LITTLE CREEK-FORT STORY VIRGINIA BEACH, VA RENOVATIONS AND REPAIRS TO BUILDING 2009 ELECTRICAL DEMOLITION PLAN		
SCALE:	AS NOTED	
PROJECT NO.:	1361870	
CONSTR. CONTR. NO.	N/A	
NAVFAC DRAWING NO.	12719141	
SHEET	35	OF 39
ED101		
<small>DRAWFORM REVISION: 10 MARCH 2009</small>		



LUMINAIRE REQUIREMENTS:

- HOUSING - DIE-FORMED, COLD-ROLLED STEEL, WITH REINFORCEMENT RIBS FOR RIGIDITY. ENDCAPS SECURED WITH TABS, SCREWS OR RIVETS. FIXTURE SHALL NOT PERMANENTLY DEFORM OUT OF "SQUARE" WHEN PICKED UP FROM ANY CORNER.
- FINISH - MULTI-STAGE PHOSPHATE BONDING TREATMENT FINISHED WITH HIGH REFLECTANCE (MINIMUM 85%), BAKED WHITE ENAMEL FINISH.
- REFLECTORS - TWO-PIECE CURVED ALUMINUM WITH MATTE WHITE FINISH.
- LIGHT BASKET - PERFORATED STEEL (HOLES OR SLOTS) WITH SAME FINISH AS HOUSING, AND WHITE OPAL ACRYLIC OVERLAY.
- LAMPS - LINEAR FLUORESCENT T8, TYPICALLY WITH WATTAGES AS INDICATED. SEE LIGHTING FIXTURE SCHEDULE.
- BALLAST - CLASS P, THERMALLY-PROTECTED, HIGH POWER FACTOR (≥.95), ELECTRONIC TYPE WITH SOUND RATING A. SEE SPECIFICATION OR LIGHTING FIXTURE SCHEDULE FOR BALLAST OPTIONS AND SPECIFICS.
- CERTIFICATION - UL LISTED AND LABELED.
- PHOTOMETRICS - MINIMUM VALUE OF COEFFICIENT OF UTILIZATION (CU) AND EFFICIENCY, GIVEN INTERIOR CAVITY REFLECTANCES OF 80-50-20:

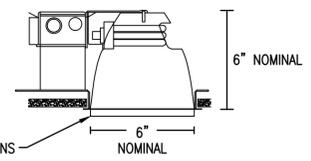
2 LAMP (F32/T8)
W/ PERFORATED LIGHT BASKET

RCR	CU
1	67
2	58
3	51
4	45

EFFICIENCY - 66%

DIRECT/INDIRECT RECESSED 2' X 4' FLUORESCENT

REVISED: AUGUST 2004 LIGHTING PLATE: NL-8
 FIXTURE TYPE $\triangle A$ $\triangle A1$

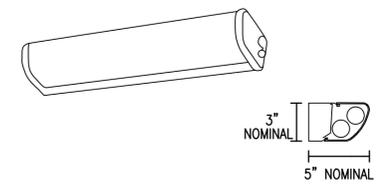


LUMINAIRE REQUIREMENTS:

- HOUSING - ONE-PIECE, DIE-STAMPED, COLD ROLLED STEEL OR ACRYLIC-ENAMELED ALUMINUM. PROVIDE WITH PRE-WIRED JUNCTION BOX HAVING SNAP-ON ACCESS COVER. ACCESS TO JUNCTION BOX FROM BELOW CEILING SHALL BE PROVIDED THROUGH FIXTURE AFTER REMOVAL OF REFLECTOR.
- REFLECTOR - ONE-PIECE, CLEAR, SPUN ALUMINUM, IRIDESCENCE-SUPPRESSED.
- BALLAST - CLASS P, MULTI-VOLT (120V-277V INPUT), HIGH POWER FACTOR (≥.95), PROGRAMMED RAPID START ELECTRONIC TYPE WITH ≤10% TOTAL HARMONIC DISTORTION. BALLAST SHALL BE CAPABLE OF UNIVERSALLY OPERATING 26W OR 32 WATT LAMPS.
- LAMPS - MULTI-TUBE, COMPACT FLUORESCENT WITH 4-PIN BASE. PROVIDE WITH WATTAGES AS INDICATED. SEE LIGHTING FIXTURE SCHEDULE.
- LENS/TRIM - * OPTIONS INCLUDE DROPPED OR FLAT OPAL LEXAN; DROPPED OR FLAT OPAL GLASS; OR FRESNEL GLASS. SEE LIGHTING FIXTURE SCHEDULE.
- CERTIFICATION - UL LISTED AND LABELED FOR DAMP LOCATIONS.

RECESSED COMPACT FLUORESCENT SHOWER LIGHT

REVISED: AUGUST 2004 LIGHTING PLATE: NL-38
 FIXTURE TYPE $\triangle C$

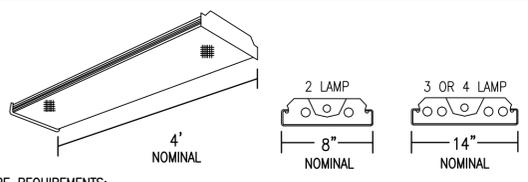


LUMINAIRE REQUIREMENTS:

- HOUSING - DIE-FORMED, COLD-ROLLED STEEL. ENDCAPS WHEN USED SHALL BE MADE FROM SAME MATERIAL AS HOUSING EXCEPT WHEN OPTIONAL FINISH SUCH AS CHROME IS SPECIFIED.
- FINISH - MULTI-STAGE PHOSPHATE BONDING TREATMENT FINISHED WITH HIGH REFLECTANCE (MINIMUM 85%), BAKED WHITE ENAMEL FINISH.
- DIFFUSER - 100% ACRYLIC, CLEAR PRISMATIC, OR WHITE OPAL ACRYLIC. DECORATIVE TREATMENTS ON DIFFUSER ENDS OPTIONAL.
- LAMPS - LINEAR FLUORESCENT T8 TYPICALLY, WITH WATTAGES AS INDICATED. SEE LIGHTING FIXTURE SCHEDULE.
- BALLAST - CLASS P, THERMALLY-PROTECTED, HIGH POWER FACTOR (≥.95), ELECTRONIC TYPE WITH SOUND RATING A. SEE SPECIFICATION OR LIGHTING FIXTURE SCHEDULE FOR BALLAST OPTIONS AND SPECIFICS.
- CERTIFICATION - UL LISTED AND LABELED.
- FIXTURE TYPES -
 TYPE A - 2' LENGTH WITH 1 OR 2 T8 FLUORESCENT LAMPS.
 TYPE B - 3' LENGTH WITH 1 OR 2 T8 FLUORESCENT LAMPS.
 TYPE C - 4' LENGTH WITH 1 OR 2 T8 FLUORESCENT LAMPS.

FLUORESCENT VANITY LIGHT

REVISED: AUGUST 2004 LIGHTING PLATE: NL-24
 FIXTURE TYPE $\triangle D$



LUMINAIRE REQUIREMENTS:

- HOUSING - DIE-FORMED, COLD-ROLLED STEEL, WITH REINFORCEMENT RIBS FOR RIGIDITY. ENDCAPS SHALL BE SAME MATERIAL AS HOUSING, SECURED WITH TABS, SCREWS OR RIVETS. FIXTURE SHALL NOT PERMANENTLY DEFORM OUT OF "SQUARE" WHEN PICKED UP FROM ANY CORNER.
- FINISH - MULTI-STAGE PHOSPHATE BONDING TREATMENT FINISHED WITH HIGH REFLECTANCE (MINIMUM 85%), BAKED WHITE ENAMEL FINISH.
- LENS - 100% ACRYLIC, CLEAR PRISMATIC, LINEAR SIDE PRISMS AND PYRAMIDAL BOTTOM PRISMS FOR BRIGHTNESS CONTROL AND MINIMAL LAMP IMAGING, RESPECTFULLY. LENS SHALL BE CAPABLE OF BEING HINGED FROM EITHER SIDE.
- LAMPS - LINEAR FLUORESCENT T8, TYPICALLY WITH WATTAGES AS INDICATED. SEE LIGHTING FIXTURE SCHEDULE.
- BALLAST - CLASS P, THERMALLY-PROTECTED, HIGH POWER FACTOR (≥.95), ELECTRONIC TYPE WITH SOUND RATING A. SEE SPECIFICATION OR LIGHTING FIXTURE SCHEDULE FOR BALLAST OPTIONS AND SPECIFICS.
- CERTIFICATION - UL LISTED AND LABELED.
- PHOTOMETRICS - MINIMUM VALUE OF COEFFICIENT OF UTILIZATION (CU) AND EFFICIENCY, GIVEN INTERIOR CAVITY REFLECTANCES OF 80-50-20:

2 LAMP (F32/T8)

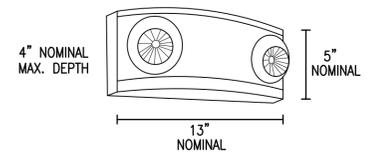
RCR	CU
1	76
2	67
3	60
4	54

EFFICIENCY - 76%

TYPE A - 2' LENGTH WITH 1 OR 2 T8 FLUORESCENT LAMPS.
 TYPE B - 4' LENGTH WITH 1 OR 2 T8 FLUORESCENT LAMPS.

FLUORESCENT WRAPAROUND - UTILITY AREAS

REVISED: AUGUST 2004 LIGHTING PLATE: NL-11
 FIXTURE TYPE $\triangle E$



LUMINAIRE REQUIREMENTS:

- HOUSING - UV STABLE, FLAME-RATED, HIGH-IMPACT THERMOPLASTIC IN WHITE OR BLACK TEXTURED FINISH.
- INTERNAL COMPONENTS - FULLY AUTOMATIC, SOLID STATE, CONSTANT VOLTAGE, CURRENT-LIMITED BATTERY CHARGER; MAINTENANCE-FREE LEAD-ACID BATTERY; AND BUILT-IN OVERLOAD AND LOW-VOLTAGE BATTERY PROTECTION.
- EXTERIOR HOUSING INDICATORS - LED AC-ON INDICATOR AND INTEGRAL TEST SWITCH.
- LAMP HEADS - UV STABLE, FLAME RATED POLYCARBONATE THERMOPLASTIC. MR16 HALOGEN LAMPS SHALL BE 5 WATTS, HIGH-OUTPUT OR AS INDICATED IN LIGHTING FIXTURE SCHEDULE.
- MOUNTING - DIRECTLY TO 4" OCTAGONAL OR SQUARE OUTLET BOX.
- CERTIFICATION - UL LISTED AND LABELED. COMPLIES WITH UL 924 AND NFPA 101 REQUIREMENTS. LISTED FOR DAMP LOCATIONS.
- OPTIONS - VOLTMETER, VANDEL-RESISTANT SHIELD, SELF-DIAGNOSTIC/TESTING ELECTRONICS AND WIRE GUARD.

DECORATIVE EMERGENCY LIGHTING UNIT

REVISED: AUGUST 2004 LIGHTING PLATE: NL-67
 FIXTURE TYPE $\triangle X$

LIGHTING FIXTURE SCHEDULE					
FIXTURE SYMBOL	STYLE & TYPE - SEE NAVFAC SKETCHES OR DETAILS ON PLANS	NUMBER AND TYPE OF LAMPS	VOLTAGE	MOUNTING	REMARKS
$\triangle A$	NL-8	(2) F32T8	120	RECESSED - CEILING	
$\triangle A1$	NL-8	(3) F32T8	120	RECESSED - CEILING	
$\triangle C$	NL-38	(1) 32WTRT	120	RECESSED - CEILING	NOTE 1
$\triangle D$	NL-24 - TYPE C	(2) F32T8	120	SURFACE - WALL	NOTE 1
$\triangle E$	NL-11 - TYPE B	(2) F32T8	120	SURFACE - CEILING	
$\triangle X$	NL-67	5W HO HALOGEN	120	SURFACE - WALL	NOTE 2

NOTES:

- FIXTURE SHALL BE RATED FOR WET LOCATIONS.
- PROVIDE BATTERY BACKUP PROVIDING FULL ILLUMINATION FOR A MINIMUM OF 90 MINUTES WHERE INDICATED.

FILE NAME: P:\VA\LittleCreek\MultiplexBuildings\2015_1561870_UBBL_Reorganize Admin Spaces\B_Design\BLDG_2009\Drawings\Sheet\14_Electrical\1361870-EL501.dwg LAYOUT NAME: EL-501 PLOTTED: Wednesday, March 30, 2016 - 10:33am USER: nurlflechter

APPROVED: _____ DATE: _____

DESCRIPTION: _____

SCALE: AS NOTED

PROJECT NO.: 1361870

CONSTR. CONTR. NO.: N/A

NAVFAC DRAWING NO.: 12719142

SHEET 37 OF 39

EL501

DRAWING REVISION: 10 MARCH 2009

NAVFAC

DEPARTMENT OF THE NAVY
 NAVAL FACILITIES ENGINEERING COMMAND
 JEBELGS - VIRGINIA BEACH, VA
 FE00 LITTLE CREEK
 JOINT EXPEDITIONARY BASE LITTLE CREEK-FORT STORY
**RENOVATIONS AND REPAIRS
 TO BUILDING 2009**
 LIGHTING DETAILS AND FIXTURE SCHEDULE

BRANCH MANAGER G.E. BAILEY, P.E.
 CHIEF ENG/ARCH S.M. LANTZ, P.E.

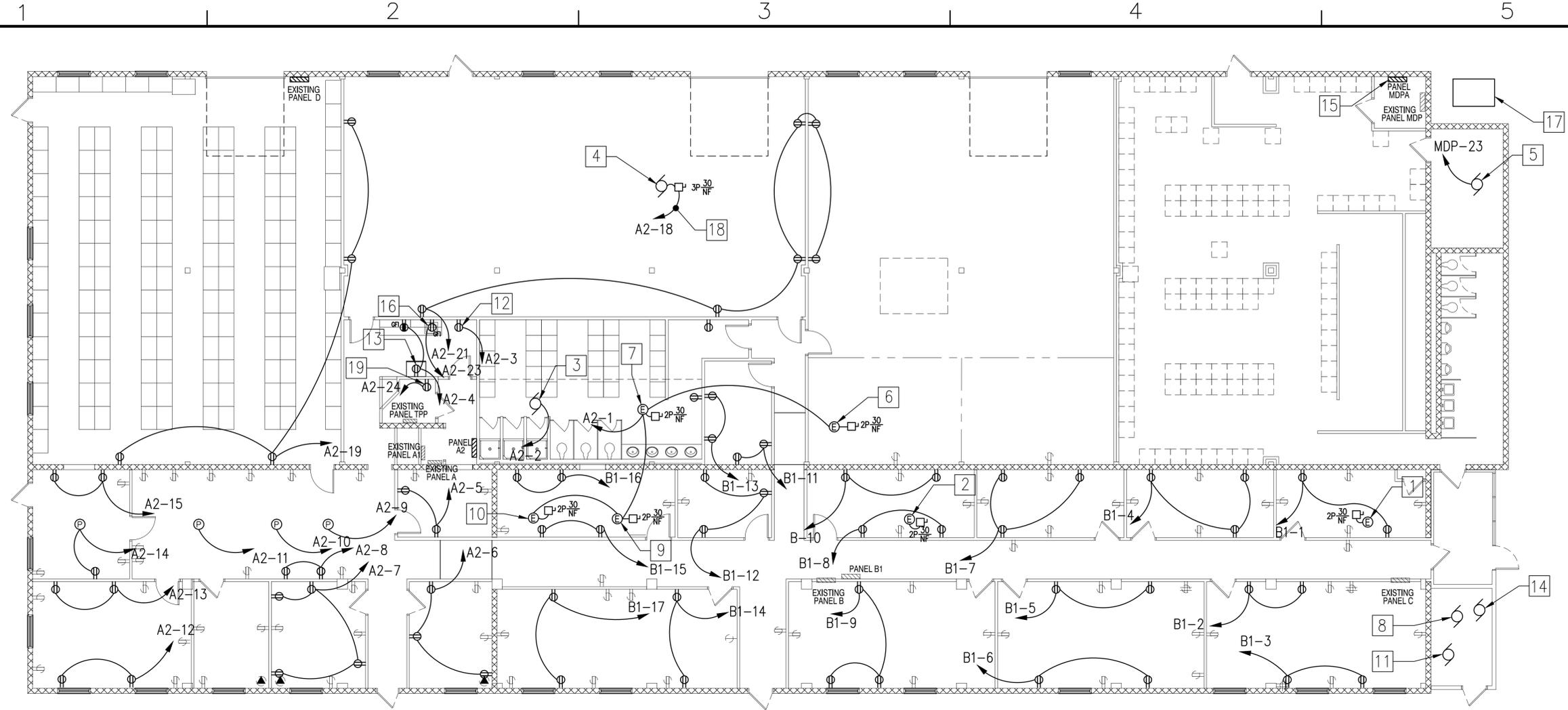
SATISFACTORY TO: _____ DATE: _____

DES: CTM ERW CTM CHK REN

ACTIVITY: _____

FOR COMMANDER NAVFAC: _____

APPROVED: _____

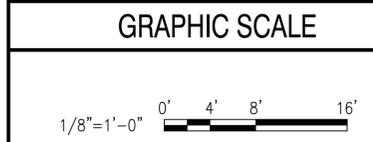


POWER PLAN - NEW WORK

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



POWER PLAN NOTES	
1. FCU-3. CONNECT TO EXISTING CIRCUIT.	17. EXISTING 225 kVA TRANSFORMER.
2. FCU-6. CONNECT TO EXSITING CIRCUIT.	18. (3)#12, #12 G, 1/2" C.
3. EF-3. 4.9 FLA, 120V, 1Ø.	19. PROVIDE RECEPTACLE ABOVE CEILING FOR CONDENSATE PUMP.
4. HVU-1. 7.4 FLA, 208V, 3Ø.	
5. PUMP-1 (ROOM 122). 1/6 HP, 120V, 3Ø.	
6. FCU-19. 3.88 FLA, 120V, 1Ø.	
7. FCU-20. 3.88 FLA, 120V, 1Ø.	
8. EF-4. 120V, 1Ø. CONNECT TO P-2'S EXISTING CIRCUIT (NOTE 14).	
9. FCU-8 (RELOCATED FROM ROOM 108). 120V, 1Ø.	
10. FCU-9 (RELOCATED FROM ROOM 108). 120V, 1Ø.	
11. P-1. 2 HP, 208V, 3Ø. CONNECT TO EXISTING CIRCUIT.	
12. VENDING MACHINE. 120V, 1Ø.	
13. REFRIGERATOR. 120V, 1Ø.	
14. P-2. 1/6 HP, 120V. Ø. CONNECT TO EXISTING CIRCUIT.	
15. PROVIDE PANELBOARD AND RECONNECT EXISTING CIRCUITS. SEE PANEL SCHEDULE, SHEET E-601.	
16. GARBAGE DISPOSAL. 120V, 1Ø.	



FILE NAME: P:\A\Hec\A\MultipleBuildings\2015_1361870\DBB_Responses\Admin_Spaces\B_Design\BDDC_2009\Drawings\Sheet\4_Electrical\1361870-EP101.dwg LAYOUT NAME: EP101 PLOTTED: Thursday, March 31, 2016 2:53pm USER: hurlflechter

APPROVED:	DATE:
FOR COMMANDER NAVFAC:	DESCRIPTION:
ACTIVITY:	SCALE:
SATISFACTORY TO:	DATE:
DES: CTM	DWG: CTM
CHK: REN	REN:
BRANCH MANAGER G.E. BAILEY, P.E.	
CHIEF ENG/ARCH S.M. LANTZ, P.E.	
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND JEBOPS - VIRGINIA BEACH, VA FEAD LITTLE CREEK JOINT EXPEDITIONARY BASE LITTLE CREEK-FORT STORY VIRGINIA BEACH, VA RENOVATIONS AND REPAIRS TO BUILDING 2009 POWER PLAN	
SCALE: AS NOTED	PROJECT NO.: 1361870
CONSTR. CONTR. NO. N/A	NAVFAC DRAWING NO. 12719143
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DRAWFORM REVISION: 10 MARCH 2009	

