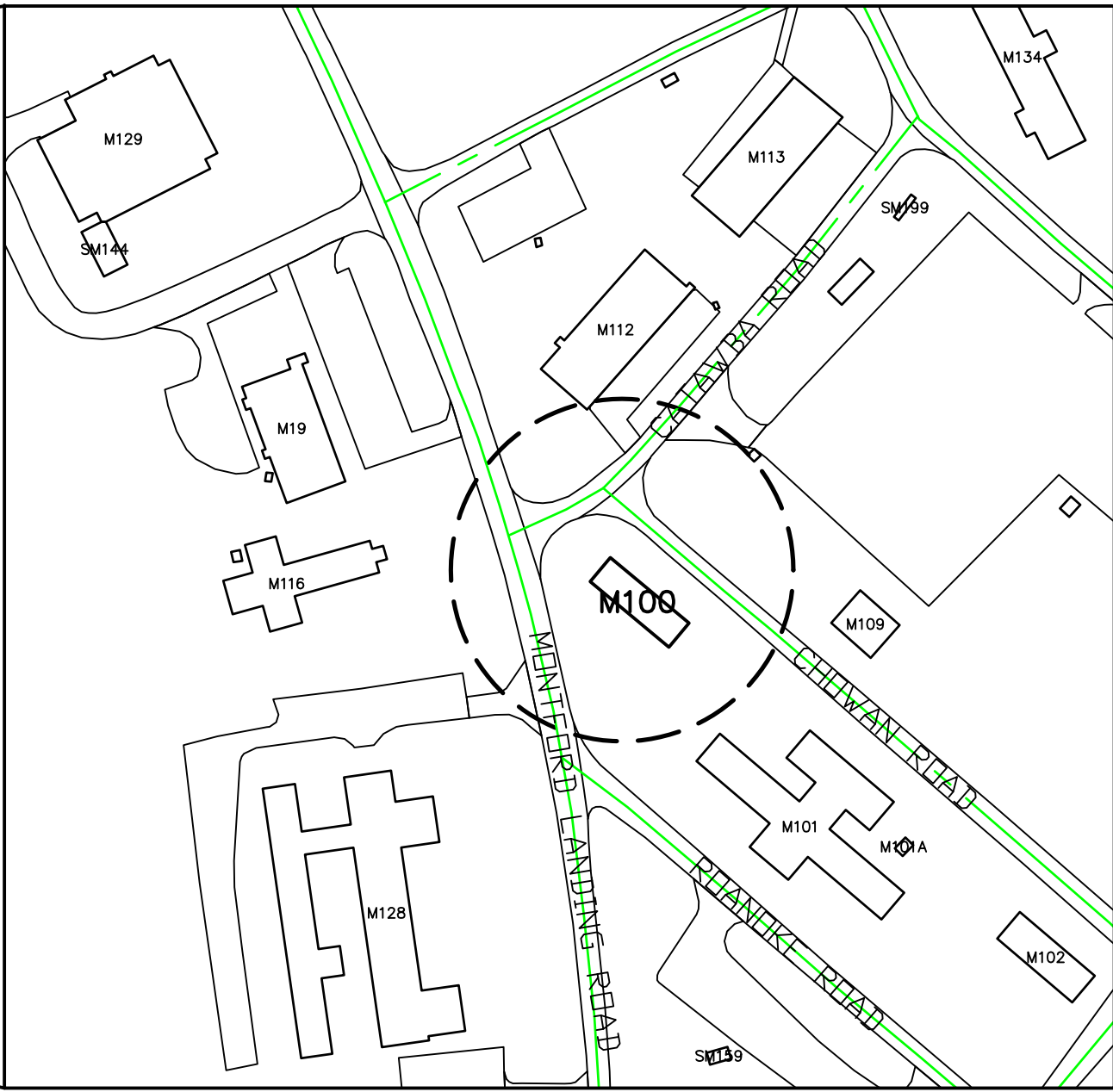
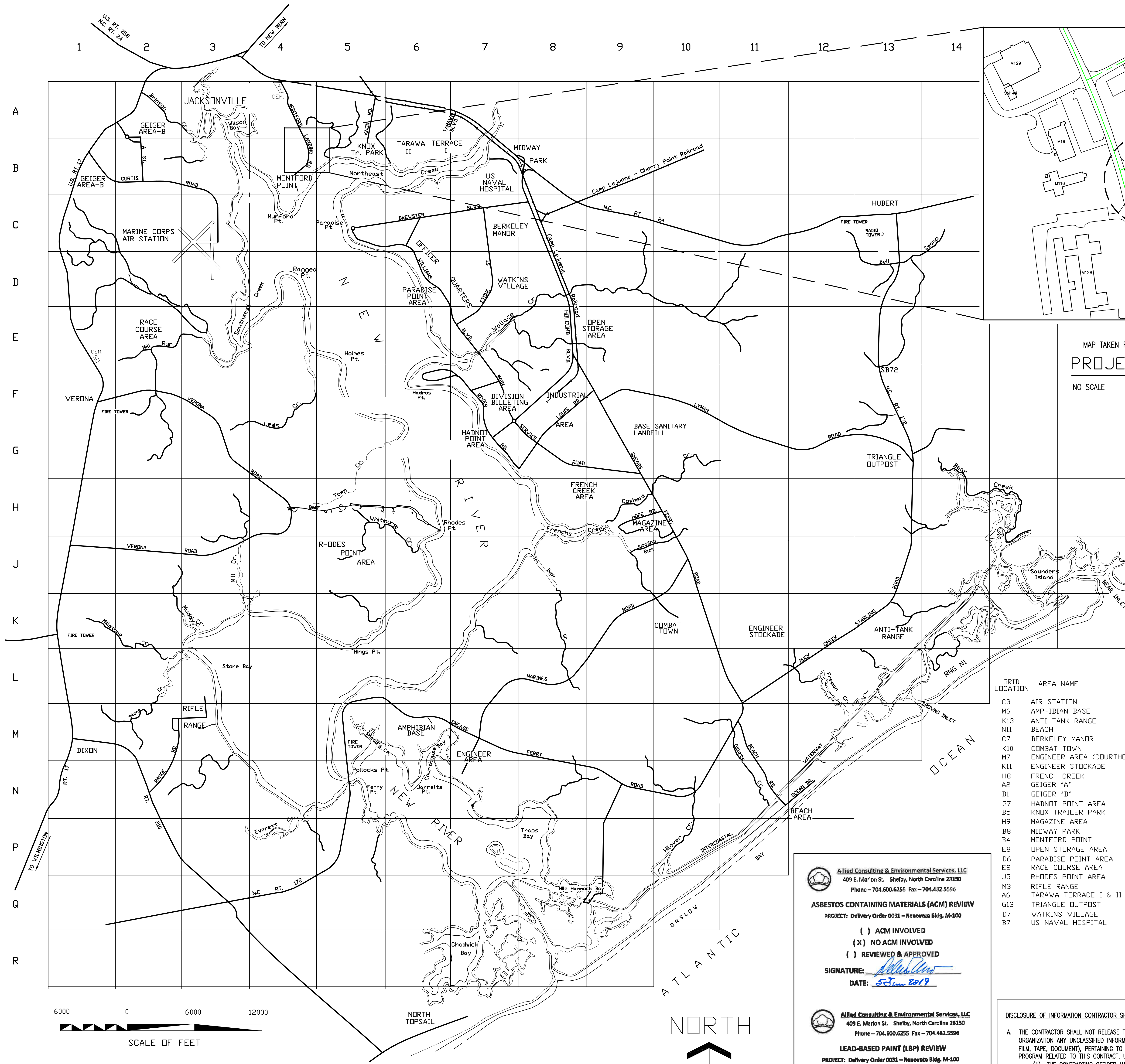
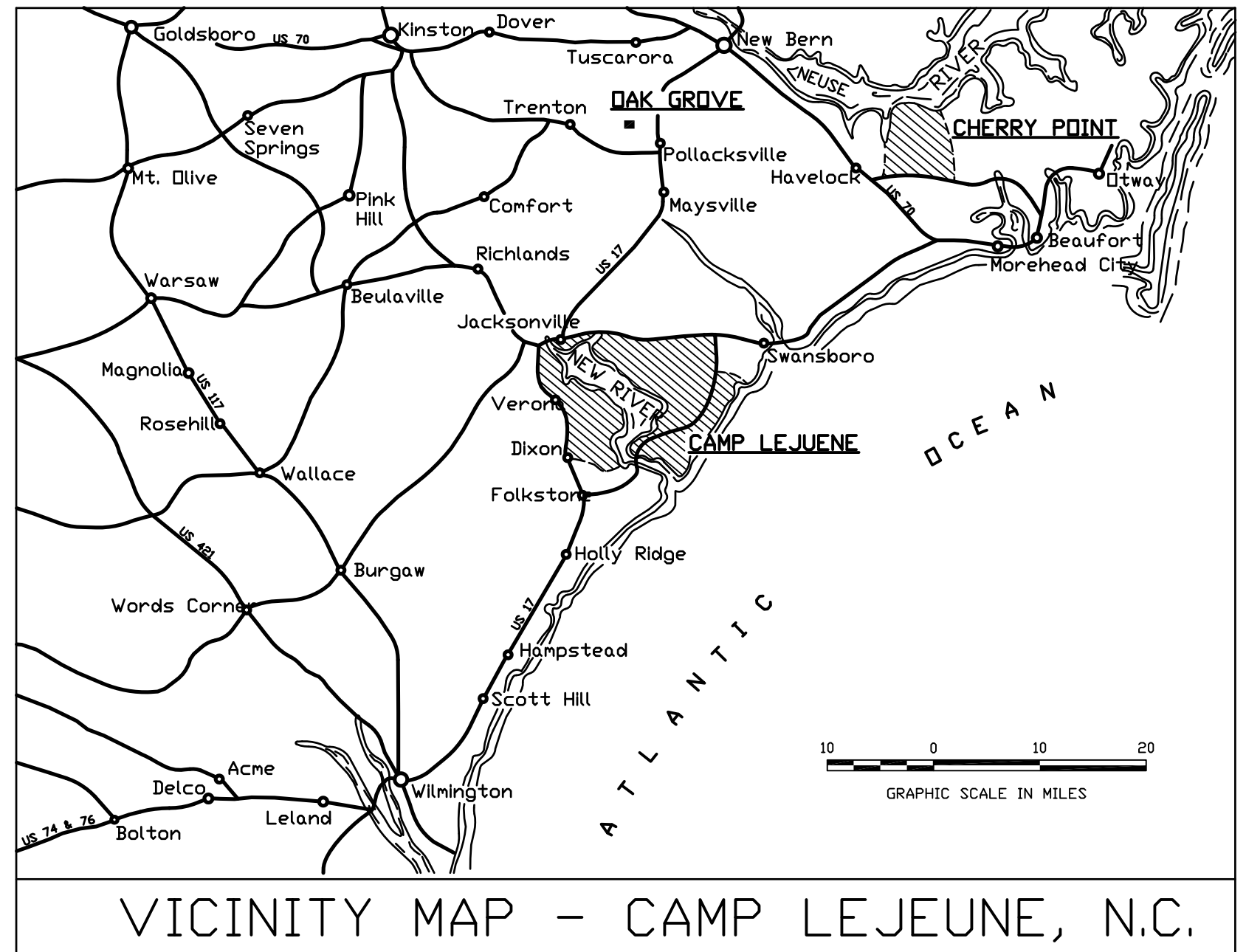


REVISIONS			
SYN.		DATE	APPROVED



MAP TAKEN FROM THE UPPER RIGHT OF GRID B4
PROJECT AREA MAP
 NO SCALE



LIST OF DRAWINGS

1	60024962	T-1	LOCATION MAPS, DRAWING LIST, NOTES	24	60024985	P-3	PLUMBING WASTE-VENT PLAN PLAN
2	60024963	LS-1	LIFE SAFETY LEGEND AND NOTES	25	60024986	P-4	PLUMBING DOMESTIC WATER PLAN
3	60024964	LS-2	LIFE SAFETY FLOOR PLAN	26	60024987	P-5	PLUMBING DETAILS
4	60024965	H-1	HAZARDOUS MATERIALS FLOOR PLAN	27	60024988	M-1	NOTES, ABBREVIATIONS & LEGENDS
5	60024966	C-1	SITE PLAN	28	60024989	M-2	MECHANICAL DEMOLITION FLOOR PLAN
6	60024967	C-2	SITE DETAILS	29	60024990	M-3	MECHANICAL FLOOR PLAN
7	60024968	A-1	FLOOR PLANS	30	60024991	M-4	MECHANICAL DETAILS
8	60024969	A-2	DOOR SCHEDULES	31	60024992	M-5	MECHANICAL SCHEDULES
9	60024970	A-3	FINISH SCHEDULES	32	60024993	M-6	MECHANICAL CONTROLS
10	60024971	A-4	BUILDING ELEVATIONS	33	60024994	M-7	MECHANICAL CONTROLS
11	60024972	A-5	BUILDING SECTIONS AND HEAD PLANS	34	60024995	E-1	ABBREVIATIONS, LEGEND, SUMMARIES, DETAIL
12	60024973	A-6	CEILING PLANS	35	60024996	E-2	GENERAL NOTES, DEMOLITION NOTES
13	60024974	A-7	ROOF PLANS	36	60024997	E-3	ELECTRICAL RISER
14	60024975	A-8	DETAIL SECTIONS	37	60024998	E-4	ELECTRICAL DETAILS
15	60024976	A-9	DETAILS AND WINDOW SECTIONS	38	60024999	E-5	ELECTRICAL UTILITY POLE DETAILS
16	60024977	A-10	DETAIL SECTIONS	39	60025000	E-6	DETAILS, PANEL SCHEDULE, FIXTURE SCHEDULE
17	60024978	A-11	PROJECT IDENTIFICATION SIGN	40	60025001	E-7	ELECTRICAL LIGHTING DETAILS
18	60024979	FA-1	FIRE ALARM NOTES AND LEGEND	41	60025002	E-8	ELECTRICAL DATA RISER AND DETAILS
19	60024980	FA-2	EXISTING FIRE ALARM FLOOR PLAN	42	60025003	E-9	ELECTRICAL POWER AND SYSTEMS DEMOLITION
20	60024981	FA-3	RENOVATED FIRE ALARM FLOOR PLAN	43	60025004	E-10	ELECTRICAL LIGHTING DEMOLITION
21	60024982	FA-4	FIRE ALARM DETAILS AND DIAGRAMS	44	60025005	E-11	ELECTRICAL POWER AND SYSTEMS
22	60024983	P-1	ABBR., LEGEND, SCHED., NOTES	45	60025006	E-12	BASEMENT LIGHTING PLAN
23	60024984	P-2	PLUMBING DEMOLITION PLANS				

GRID LOCATION	AREA NAME
C3	AIR STATION
M6	AMPHIBIAN BASE
K13	ANTI-TANK RANGE
N11	BEACH
C7	BERKELEY MANOR
K10	COMBAT TOWN
M7	ENGINEER AREA (COURTHOUSE BAY)
K11	ENGINEER STOCKADE
H8	FRENCH CREEK
A2	GEIGER 'A'
B1	GEIGER 'B'
G7	HADNOT POINT AREA
B5	KNOX TRAILER PARK
H9	MAGAZINE AREA
B8	MIDWAY PARK
B4	MONTFORD POINT
E8	OPEN STORAGE AREA
D6	PARADISE POINT AREA
E2	RACE COURSE AREA
J5	RHODES POINT AREA
M3	RIFLE RANGE
A6	TARAWA TERRACE I & II
G13	TRIANGLE OUTPOST
D7	WATKINS VILLAGE
B7	US NAVAL HOSPITAL

Allied Consulting & Environmental Services, LLC
 409 E. Marion St. Shelby, North Carolina 28150
 Phone - 704.600.6255 Fax - 704.482.5595

ASBESTOS CONTAINING MATERIALS (ACM) REVIEW
 PROJECT: Delivery Order 0031 - Renovation Bldg. M-300

() ACM INVOLVED
 (X) NO ACM INVOLVED
 () REVIEWED & APPROVED

SIGNATURE: *Robert L. Smith, III*
 DATE: 5/21/2019

Allied Consulting & Environmental Services, LLC
 409 E. Marion St. Shelby, North Carolina 28150
 Phone - 704.600.6255 Fax - 704.482.5595

LEAD-BASED PAINT (LBP) REVIEW
 PROJECT: Delivery Order 0031 - Renovation Bldg. M-100

(X) LBP INVOLVED
 () NO LBP INVOLVED
 () REVIEWED & APPROVED

SIGNATURE: *Robert L. Smith, III*
 DATE: 5/21/2019

DISCLOSURE OF INFORMATION CONTRACTOR SHALL COMPLY AS FOLLOWS:

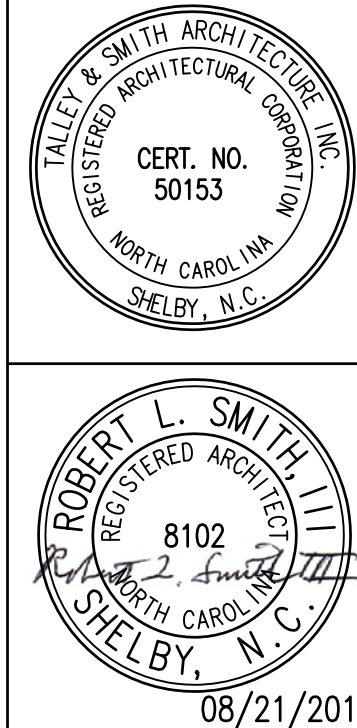
A. THE CONTRACTOR SHALL NOT RELEASE TO ANYONE OUTSIDE THE CONTRACTOR'S ORGANIZATION ANY UNCLASSIFIED INFORMATION, REGARDLESS OF MEDIUM (E.G., FILM, TAPE, DOCUMENT), PERTAINING TO ANY PART OF THIS CONTRACT OR ANY PROGRAM RELATED TO THIS CONTRACT, UNLESS:

(1) THE CONTRACTING OFFICER HAS GIVEN PRIOR WRITTEN APPROVAL; OR

(2) THE INFORMATION IS OTHERWISE IN THE PUBLIC DOMAIN BEFORE THE DATE OF RELEASE.


B. REQUESTS FOR APPROVAL SHALL IDENTIFY THE SPECIFIC INFORMATION TO BE RELEASED, THE MEDIUM TO BE USED, AND THE PURPOSE FOR THE RELEASE. THE CONTRACTOR SHALL SUBMIT ITS REQUEST TO THE CONTRACTING OFFICER AT LEAST 45 DAYS BEFORE THE PROPOSED DATE FOR RELEASE.

C. THE CONTRACTOR AGREES TO INCLUDE A SIMILAR REQUIREMENT ON EACH SUBCONTRACTOR UNDER THIS CONTRACT. SUBCONTRACTORS SHALL SUBMIT REQUESTS FOR AUTHORIZATION TO RELEASE THROUGH THE PRIME CONTRACTOR TO THE CONTRACTING OFFICER.

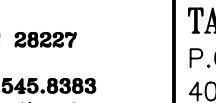


SHEET TITLE: LOCATION MAPS, DRAWING LIST, NOTES		T-1	
TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150		DEPARTMENT OF THE NAVY MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA	
DES. Robert L. Smith, III DR. Steven C. Fender CHK. Robert L. Smith, III SUBMITTED BY:		RENOVATE BUILDING M100 CAMP LEJEUNE, NORTH CAROLINA	
DESIGN DIR.	APPROVED:	DATE:	DATE:
SATISFACTORY TO:	DATE:	SIZE: F	CODE IDENT. NO. 80091
		NAVFAC DRAWING NO. 60024962	
		CONST. CONTR. NO. N40085-19-B-0062	
		SHEET 1 OF 45	

LOCATION MAP - U. S. MARINE CORPS BASE - CAMP LEJEUNE, N.C.

 <p>Lovett Consultants</p>	<p>SHEET TITLE:</p> <h1 style="margin: 0;">LIFE SAFETY NOTES AND LEGEND</h1>	<div style="font-size: 48pt; font-weight: bold; margin: 0;">LS-1</div>
	<p>4455 Morris Park Dr. Suite H Mint Hill, NC 28227</p> <p>Ph. 704.545.8383 Firm Protection & Building Code Specialists NC Firm License No. P-0296</p>	

<p>TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150</p>	<p>DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND</p> <h2 style="margin: 0;">MARINE CORPS BASE</h2> <p>CAMP LEJEUNE, NORTH CAROLINA</p>
--	---



RENOVATE BUILDING M100

CAMP LEJEUNE, NORTH CAROLINA

DES. CMM					
DR. MEW					
CHK. JLL					
SUBMITTED BY:					
DESIGN DIR.					
APPROVED:					

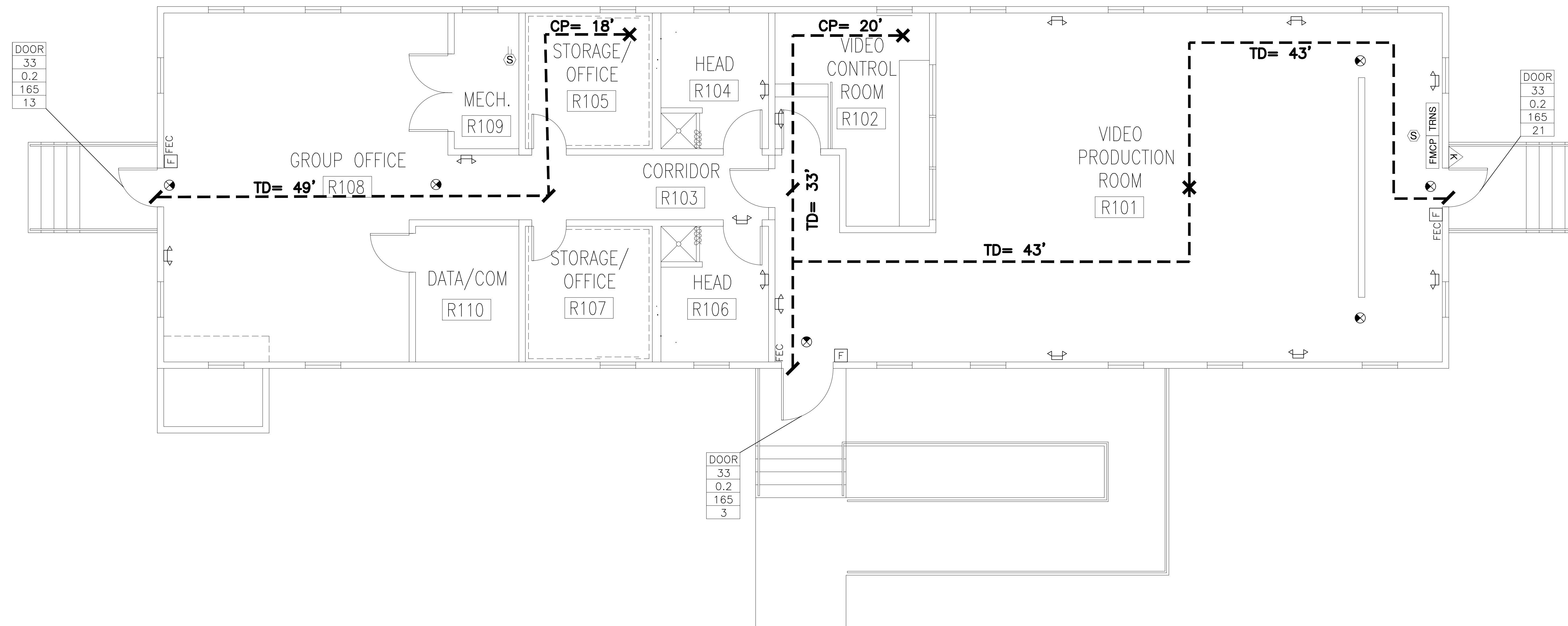
<div style="font-size: 36pt; font-weight: bold;">F</div>	<p>SIZE</p> <div style="font-size: 24pt; font-weight: bold;">80091</div>	<p>CODE IDENT. NO.</p>	<p>NAVJAG DRAWING NO.</p> <div style="font-size: 24pt; font-weight: bold;">60024963</div>
<p>SATISFACTORY TO:</p>		<p>CONST. CONTR. NO. N40085-19-B-0035</p>	
<p>SCALE: NOTED</p>	<p>SPEC: 05-19-0035</p>	<p>SHEET 02 OF 45</p>	

08/21/2019

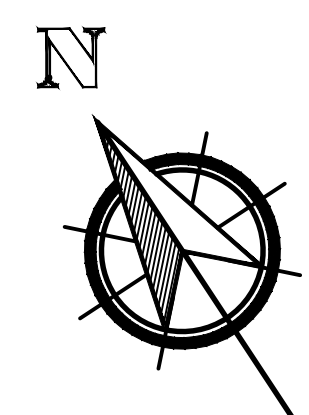
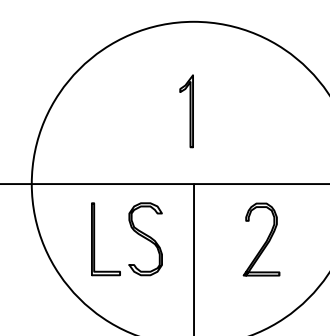
REVISIONS			
SYM.		DATE	APPROVED

SHEET NOTES:

1. REFERENCE LS-1 FOR NOTES AND LEGEND.




LIFE SAFETY FLOOR PLAN

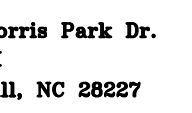
$$1/4'' = 1'-0''$$


1/4"=1'-0" 1' 0' 1' 5' 10' 15'

SEE DISCLOSURE OF INFORMATION STATEMENT ON SHEET T-1

 Lovett Consultants 4405 Morris Park Dr. Suite #2 Mint Hill, NC 28227 Ph: 704.545.8393 Fire Protection & Building Code Specialists NC Firm License No: F-0290	SHEET TITLE: <h1 style="margin: 0;">LIFE SAFETY FLOOR PLAN</h1>	<div style="font-size: 48pt; font-weight: bold; margin: 0;">LS-2</div>
	TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150	DEPARTMENT OF THE NAVAL NAVAL FACILITIES ENGINEERING COMMAND <h2 style="margin: 0;">MARINE CORPS BASE</h2> CAMP LEJEUNE, NORTH CAROLINA

DES:	GMM	<div style="font-size: 24pt; font-weight: bold; margin: 0;">RENOVATE BUILDING M100</div> CAMP LEJEUNE, NORTH CAROLINA
DR:	MEW	
CHK:	JLL	
SUBMITTED BY:		
DESIGN DIR:		
APPROVED:		
SATISFACTORY TO:		



SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
F	80091	60024964
		CONST. CONTR. NO. N40085-19-B-0035
SCALE: NOTED	SPEC: 05-19-0035	SHEET 03 OF 45

08/21/2019

REVISIONS			
SYMBOL		DATE	APPROVED

ASBESTOS CONTAINING MATERIALS (ACM)
NOTES INDICATED ON PLAN

ASBESTOS WAS NOT DETECTED IN TESTING FOR THIS PROJECT AND IS NOT NOTED IN BASE REPORTS. IF CONTRACTOR ENCOUNTERS MATERIALS THAT ARE SUSPECT ACM THAT ARE NOT INDICATED HEREIN OR IN THE AVAILABLE REPORTS, CONTACT CONTRACTING OFFICER BEFORE PROCEEDING.

LEAD BASED PAINT SURFACES (LBP) NOTES

THE FOLLOWING SURFACES HAVE BEEN DETERMINED TO HAVE LEAD OR LEAD BASED PAINT (LBP) OR ARE ASSUMED TO CONTAIN LBP BASED ON THE SAMPLE AREAS TESTED. SEE TESTING REPORTS INCLUDED IN PROJECT SPECIFICATIONS.

- A

INTERIOR PAINT ON INTERIOR WOOD DOORS AND DOOR FRAMES – WHITE/OFF-WHITE
DOORS E102, E103, E104, E105, E106, E107, & E109
APPROXIMATE QUANTITY = 7 DOORS
- B

PAINT ON INTERIOR SIDE OF EXTERIOR DOORS AND DOOR FRAMES – WHITE/OFF-WHITE
DOORS E101A, E101B, & E108
APPROXIMATE QUANTITY = 3 DOORS
- C

INTERIOR PAINT ON GYPSUM BOARD WALLS – GREEN
APPROXIMATE QUANTITY OF GYPSUM BOARD = 700 SQUARE FEET
MOST GYPSUM BOARD HAS BEEN REMOVED. CURRENT WALLS ARE WHITE, BUT IT APPEARS THAT A LAYER OF GREEN PAINT IS UNDER THE WHITE PAINT.

ENCLOSED SURFACES WERE NOT TESTED FOR LBP.

DUE TO THE AGE OF THE BUILDING, IN ADDITION TO THE SPECIFIC ITEMS NOTED, TAKE PRECAUTIONS WHEN DISTURBING PAINTED SURFACES THE SAME AS IF SURFACE MIGHT HAVE LBP. TAKE PRECAUTIONS WHENEVER WORK ACTIVITIES WILL CREATE A PAINT DUST.

NOTE THAT PAINT COLORS LISTED ABOVE ARE THOSE VISIBLE AND ARE LISTED FOR CONVENIENCE ONLY. THE ACTUAL LAYER CONTAINING LBP MAY BE BELOW THE VISIBLE LAYER OF PAINT.

ACM ABATEMENT AND LBP REMOVAL NOTES

ACM: REMOVE ACM ENTIRELY. IT IS GOVERNMENT'S INTENT THAT THE BUILDING IS ASBESTOS FREE AT COMPLETION OF PROJECT. DISPOSE OF PROPERLY.

LBP: WHERE WORK IN PROJECT DISTURBS SURFACES WITH LBP OR WHERE ITEMS WITH LBP ARE TO BE REMOVED, TAKE PRECAUTIONS AS SPECIFIED, AS REQUIRED FOR WORKER AND OCCUPANT SAFETY, AND AS REQUIRED BY APPLICABLE REGULATIONS AND AGENCIES HAVING JURISDICTION. ITEMS AND MATERIALS TO BE REMOVED THAT ARE IDENTIFIED TO HAVE LBP SHALL BE REMOVED INTACT OR AS UNITS AND PROPERLY DISPOSED. LBP IN GOOD CONDITION ON SURFACES THAT ARE NOT DISTURBED OR REMOVED MAY REMAIN.

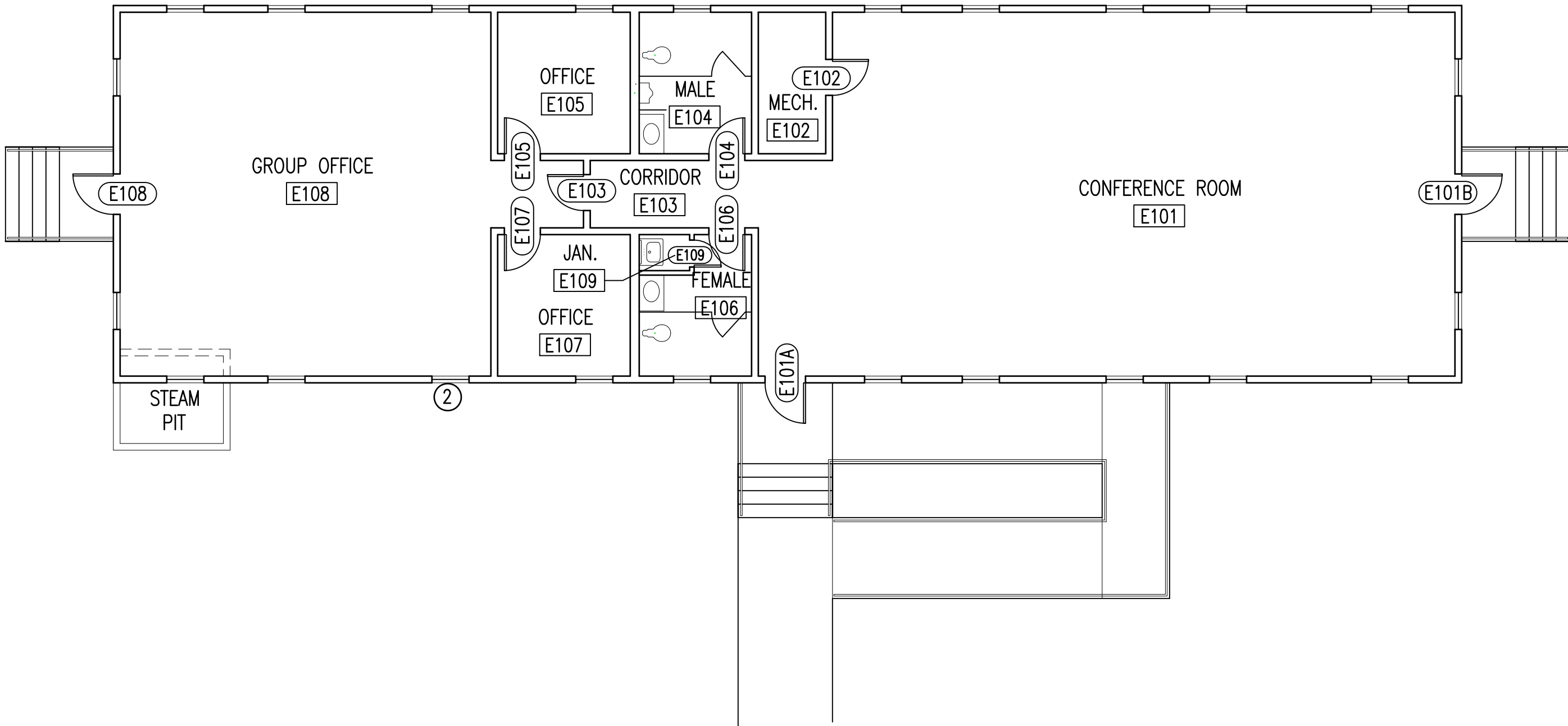
ACM & LBP: INFORMATION SHOWN ON DRAWINGS IS AN INTERPRETATION OF THE TESTING DATA AVAILABLE. QUANTITIES SHOWN MAY VARY FROM REPORT DOCUMENTS. CONTRACTORS ARE REQUIRED TO REVIEW REPORTS PROVIDED AND VERIFY THE CONCLUSIONS SHOWN THEREIN OR TO DRAW THEIR OWN CONCLUSIONS BASED ON THE REPORTS AND THEIR OWN KNOWLEDGE AND EXPERIENCE. NO ADJUSTMENTS WILL BE MADE FOR COSTS THAT COULD HAVE BEEN DETERMINED FROM REPORTS, DRAWINGS, AND OTHER AVAILABLE INFORMATION.

PCB & MERCURY REMOVAL NOTES

REFERENCE ELECTRICAL AND MECHANICAL SHEETS INDICATING REMOVAL OF FLUORESCENT LIGHT FIXTURES AND HEATING THERMOSTATS. THE BALLASTS SHALL BE TREATED AS CONTAINING PCB AND THE LAMPS AS CONTAINING MERCURY. THERMOSTATS SHALL BE TREATED AS CONTAINING MERCURY. BALLASTS, LAMPS, AND THERMOSTATS SHALL BE DISPOSED OF ACCORDING TO SPECIFICATIONS AND BASE ENVIRONMENTAL MANAGEMENT DIVISION GUIDELINES.

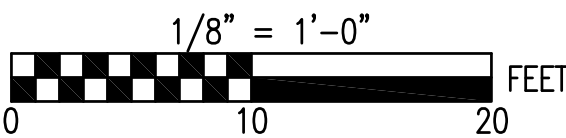
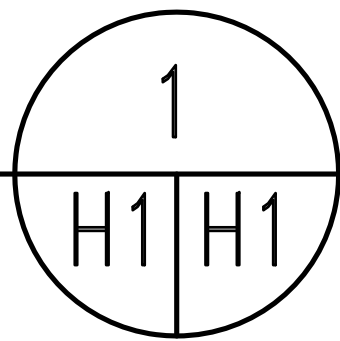
GENERAL HAZARDOUS MATERIALS DRAWING NOTE

HAZARDOUS MATERIALS PLANS ARE NOT INTENDED TO BE AN ALL INCLUSIVE REPRESENTATION OF THE SCOPE OF HAZARDOUS MATERIALS. REFER TO OTHER DRAWINGS TO BETTER UNDERSTAND THE BUILDING AND SCOPE OF MATERIALS.



HAZARDOUS MATERIALS FLOOR PLAN M100

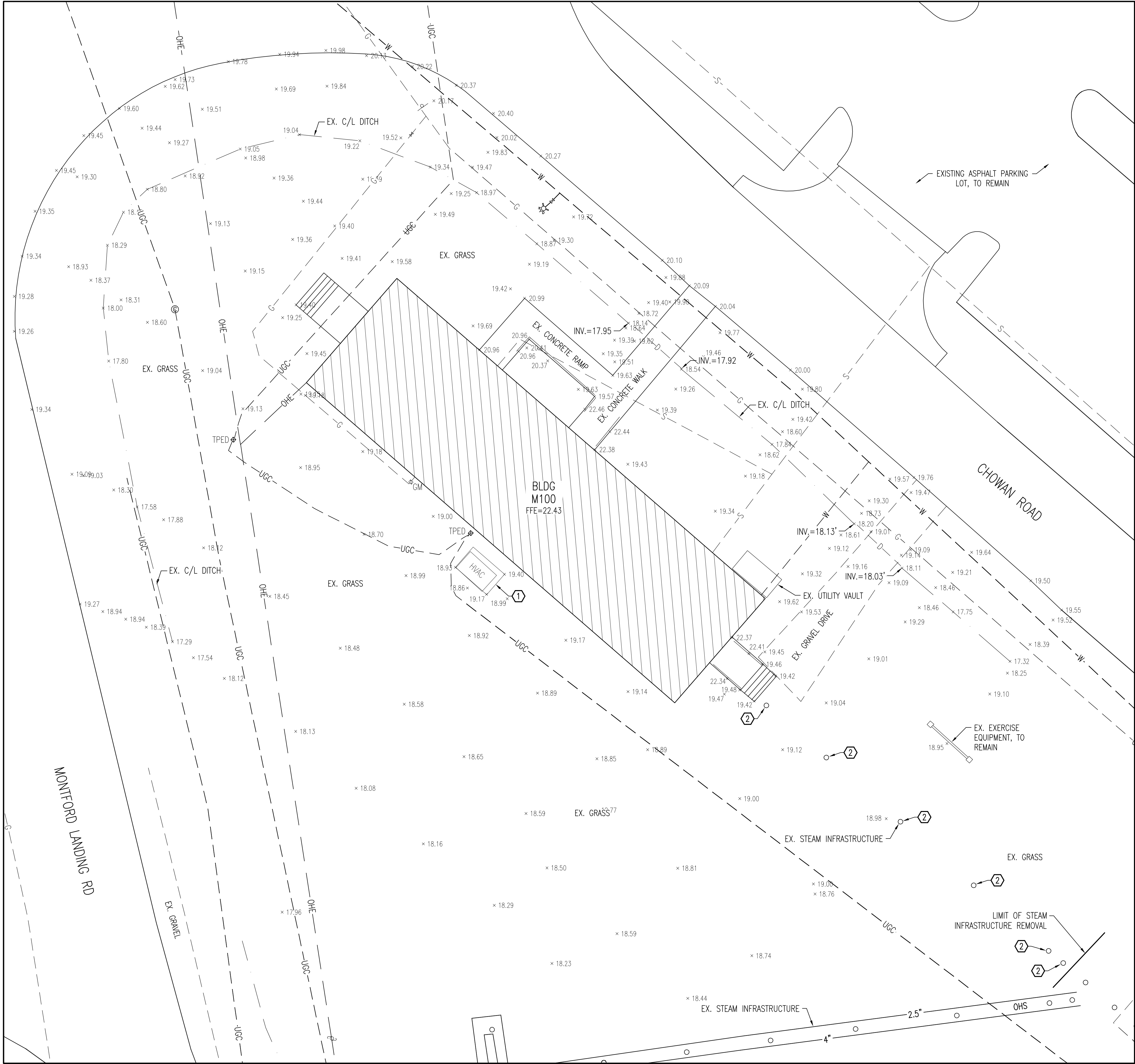
1/8" = 1'-0"



SEE DISCLOSURE OF INFORMATION STATEMENT ON SHEET T-1

	SHEET TITLE: HAZARDOUS MATERIALS PLAN		H-1	
	TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150 DES. Robert L. Smith, III DR. Steven C. Fender CHK. Robert L. Smith, III SUBMITTED BY: DESIGN DIR. APPROVED: DATE SATISFACTORY TO: DATE		DEPARTMENT OF THE NAVY MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA RENOVATE BUILDING M100 CAMP LEJEUNE, NORTH CAROLINA CODE IDENT. NO. 80091 NAVFAC DRAWING NO. 60024965 CONST. CONTR. NO. N40085-19-B-0062 SCALE: NOTED SPEC. 05-19-0062 SHEET 4 OF 45	

REVIEWS			
SYM		DATE	APPROVED



CIVIL LEGEND		
EXISTING	DESCRIPTION	NEW
	WATER VALVE	
	POST INDICATOR VALVE	
	SANITARY SEWER MANHOLE	
	COMMUNICATIONS MANHOLE	
	SANITARY SEWER CLEANOUT	
	STORM DRAIN DROP INLET	
	FIRE HYDRANT	
	COMMUNICATIONS PEDESTAL	
	UTILITY POLE/POLE WITH LIGHT	
	GUY WIRE	
	OVERHEAD STEAM	
	SANITARY SEWER (GRAVITY)	
	SANITARY FORCE MAIN	
	STORM SEWER	
	DOMESTIC WATER	
	OVERHEAD ELECTRICAL	
	UNDERGROUND ELECTRICAL	
	UNDERGROUND COMMUNICATIONS	
	CONCRETE	
	ASPHALT	
	GRAVEL	
	SURVEY CONTROL POINT	
	SPOT ELEVATIONS	
	TREE LINE / CLEARING LIMIT	
	SOURCE/DESTINATION UNKNOWN	
	SIGN	
	DEMOLITION ITEMS	

ABBREVIATIONS	
APPROX.	APPROXIMATE/APPROXIMATELY
CJ	CONTRACTION JOINT
CL, C/L	CENTER LINE
CF	CUBIC FEET
CONT.	CONTINUOUS
CMP	CORRUGATED METAL PIPE
CONC.	CONCRETE
CPP	CORRUGATED PLASTIC PIPE
CUMM.	CUMULATIVE
DIA, Ø	DIAMETER
DI	(STORM DRAIN) DROP INLET
DMH	DRAINAGE MANHOLE
ELEV.	ELEVATION
E	EASTING
ELEC.	ELECTRIC; ELECTRICAL
ETC.	ET CETERA
EX., EXIST.	EXISTING
FES	FLARED END SECTION
FH	FIRE HYDRANT
HVAC	HEATING, VENTILATION AND AIR CONDITIONING (EQUIPMENT)
INVERT	INVERT
MAG	MAG NAIL (CONTROL)
MAX	MAXIMUM
MIN	MINIMUM
N	NORTHING
NO./#	NUMBER
PIV	POST INDICATOR VALVE
PVC	POLYVINYL CHLORIDE (PIPE)
RCP	REINFORCED CONCRETE PIPE
SMH	SANITARY SEWER MANHOLE
SF	SQUARE FOOT/FEET
SLT	SILT FENCE
TBM	TEMPORARY BENCHMARK
TYP.	TYPICAL
VOL.	VOLUME
WWF	WELDED WIRE FABRIC
&	AND
@	AT
±	PLUS OR MINUS
%	PERCENT
=	EQUALS

GENERAL CONSTRUCTION NOTES:

- THE LOCATION AND DEPTHS OF EXISTING UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR WILL BE RESPONSIBLE FOR SCANNING THE AREA OF WORK TO IDENTIFY TO HIS OWN SATISFACTION THE EXTENT OF UTILITIES PRESENT INCLUDING THE UTILITIES INDICATED TO BE PRESENT, THOSE NOT SHOWN, AND THOSE SHOWN TO BE IN A DIFFERENT LOCATION.
- PHYSICAL SITE FEATURES OUTSIDE THE AREA OF WORK OR THOSE FEATURES NOT RELEVANT TO THE WORK BEING PERFORMED ARE NOT SHOWN FOR CLARITY.
- ALL EXISTING VEGETATED AREAS DISTURBED DURING CONSTRUCTION MUST BE REVEGETATED IN ACCORDANCE WITH THE PROJECT VEGETATION PLAN, SEE DETAIL A, SHEET C-2.

DEMOLITION WORK ITEMS (THIS SHEET):

- REMOVE HVAC EQUIPMENT AND CONCRETE PAD - SEE MECHANICAL PLANS.
- REMOVE STEAM SYSTEM SUPPORT POLES TO POINT SHOWN.

DISCLOSURE OF INFORMATION

THE CONTRACTOR SHALL COMPLY AS FOLLOWS:

A. THE CONTRACTOR SHALL NOT RELEASE TO ANYONE OUTSIDE THE CONTRACTOR'S ORGANIZATION ANY UNCLASSIFIED INFORMATION, REGARDLESS OF THE MEDIUM (E.G. FILM, TAPE, DOCUMENT), PERTAINING TO ANY PART OF THIS CONTRACT OR ANY PROGRAM RELATED TO THIS CONTRACT, UNLESS

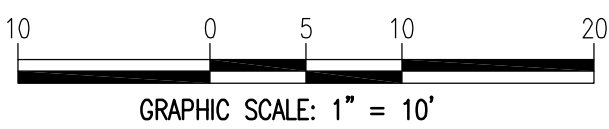
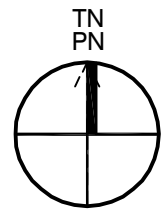
- THE CONTRACTING OFFICER HAS GIVEN PRIOR WRITTEN APPROVAL; OR
- THE INFORMATION IS OTHERWISE IN THE PUBLIC DOMAIN BEFORE THE DATE OF RELEASE.

B. REQUESTS FOR APPROVAL SHALL IDENTIFY THE SPECIFIC INFORMATION TO BE RELEASED, THE MEDIUM TO BE USED, AND THE PURPOSE FOR THE RELEASE. THE CONTRACTOR SHALL SUBMIT ITS REQUEST TO THE CONTRACTING OFFICER AT LEAST 45 DAYS BEFORE THE PROPOSED DATE OF RELEASE.

C. THE CONTRACTOR AGREES TO INCLUDE A SIMILAR REQUIREMENT IN EACH SUBCONTRACT UNDER THIS CONTRACT. SUBCONTRACTORS SHALL SUBMIT REQUESTS FOR AUTHORIZATION TO RELEASE THROUGH THE PRIME CONTRACTOR TO THE CONTRACTING OFFICER.

SITE PLAN

SCALE: 1" = 10'



SITE MAPPING AND SITE DESIGN BY:
AVOLIS ENGINEERING, P.A.
P.O. BOX 15584
NEW BERN, NC 28561
(252) 633-0068
LICENSE NO. C-0706



SHEET TITLE:		C-1	
TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150		DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA	
DES. J. K. AVOLIS, P.E. DR. MSP / WFF CHK. J. C. AVOLIS, P.E. SUBMITTED BY: DESIGN DIR. T. H. BURTON, P.E.		RENOVATE BUILDING M100 CAMP LEJEUNE, NORTH CAROLINA	
APPROVED: PWO OR OICC DATE		SIZE: F CODE IDENT. NO: 80091	NAVFAC DRAWING NO. 60024966 CONSTR. CONTR. NO. N40085-19-B-0062
SATISFACTORY TO: DATE		SCALE: NOTED	SPEC: 05-19-0062 SHEET 5 OF 45

REVISIONS			
SYM		DATE	APPROVED

TEMPORARY VEGETATIVE SEEDING
(PRIOR TO ESTABLISHING PERMANENT VEGETATION)

AFTER COMPLETION OF GRADING ACTIVITIES AND THE CONSTRUCTION OF SWALES, ALL EXPOSED AREAS MUST BE SEEDED TO THE FOLLOWING SPECIFICATIONS:

SEED BED

LIME	1-1/2 TON PER ACRE
FERTILIZER	1/2-TON PER ACRE

SEED

RYE GRAIN	50 LBS PER ACRE
TALL FESCUE	100 LBS PER ACRE

SUPPLEMENTAL SEED

MAY THROUGH AUGUST:

CENTPEDE	5 LBS PER ACRE
----------	----------------

PROCEDURE

STRAW MULCH MUST BE APPLIED AT A RATE WHICH WILL INSURE APPROXIMATELY 75% COVERAGE OF THE SEEDED AREA. THE STRAW AND SOWN SEED WILL BE LIGHTLY DISCED INTO THE BED TO GIVE IT FURTHER RESISTANCE TO BLOWING AND WASHING. THE CONTRACTOR MUST GUARANTEE A FULL STAND OF GRASS OVER THE ENTIRE DISTURBED AREA. IF NECESSARY THE CONTRACTOR WILL WET DOWN THE AREAS TO ASSIST IN SEED GERMINATION OR AID IN GROWTH IN TIMES OF EXCESSIVELY DRY WEATHER. A STAND OF GRASS WILL BE CONSIDERED ACCEPTABLE WHEN THE ENTIRE STAND OF GRASS IS AT LEAST FOUR INCHES HIGH AND HAS ACHIEVED AT LEAST 95% COVERAGE OF DISTURBED AREAS. RESEEDING WILL BE REQUIRED AS NECESSARY BY THE CONTRACTOR TO OBTAIN THE SPECIFIED STAND OF GRASS.

PERMANENT VEGETATION

ALL DISTURBED AREAS NOT COVERED WITH BUILDINGS, PAVEMENTS, OR OTHER IMPERMEABLE SURFACES MUST BE SODDED WITH CENTPEDE SOLID SOD AS THE FINAL/PERMANENT VEGETATION.

SPECIAL SEEDING NOTE:

ALL DENUDED AREAS WILL, WITHIN 7 CALENDAR DAYS OF COMPLETION OF ANY PHASE OF GRADING OR CEASING OF GRADING ACTIVITIES, BE PLANTED AND PROVIDED WITH TEMPORARY OR PERMANENT GROUND COVER, DEVICES, OR STRUCTURES SUFFICIENT TO RESTRAIN EROSION.

ALL DENUDED AREAS WILL, WITHIN 7 DAYS OF COMPLETION OF CONSTRUCTION, BE PROVIDED PERMANENT GROUND COVER.

A

VEGETATION PLAN

NOT TO SCALE

DISCLOSURE OF INFORMATION

THE CONTRACTOR SHALL COMPLY AS FOLLOWS:

A. THE CONTRACTOR SHALL NOT RELEASE TO ANYONE OUTSIDE THE CONTRACTOR'S ORGANIZATION ANY UNCLASSIFIED INFORMATION, REGARDLESS OF THE MEDIUM (E.G. FILM, TAPE, DOCUMENT), PERTAINING TO ANY PART OF THIS CONTRACT OR ANY PROGRAM RELATED TO THIS CONTRACT, UNLESS

1. THE CONTRACTING OFFICER HAS GIVEN PRIOR WRITTEN APPROVAL; OR

2. THE INFORMATION IS OTHERWISE IN THE PUBLIC DOMAIN BEFORE THE DATE OF RELEASE.

B. REQUESTS FOR APPROVAL SHALL IDENTIFY THE SPECIFIC INFORMATION TO BE RELEASED, THE MEDIUM TO BE USED, AND THE PURPOSE FOR THE RELEASE. THE CONTRACTOR SHALL SUBMIT ITS REQUEST TO THE CONTRACTING OFFICER AT LEAST 45 DAYS BEFORE THE PROPOSED DATE OF RELEASE.

C. THE CONTRACTOR AGREES TO INCLUDE A SIMILAR REQUIREMENT IN EACH SUBCONTRACT UNDER THIS CONTRACT. SUBCONTRACTORS SHALL SUBMIT REQUESTS FOR AUTHORIZATION TO RELEASE THROUGH THE PRIME CONTRACTOR TO THE CONTRACTING OFFICER.

<div></div>	SHEET TITLE:		C-2			
	TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150		<div>DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND</div> MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA			
	DES: J. K. AVOLIS, P.E.		RENOVATE BUILDING M100			
DR: MSP / WFF						
CHK: J. C. AVOLIS, P.E.						
SUBMITTED BY:						
<div><div>SITE MAPPING AND SITE DESIGN BY: AVOLIS ENGINEERING, P.A. P.O. BOX 15584 NEW BERN, NC 28561 (252) 633-0068</div><div>AS PROJECT #19010 </div></div>	DESIGN DIR: T. H. BURTON, P.E.		CAMP LEJEUNE, NORTH CAROLINA			
	APPROVED: PWO OR OICC	DATE	SIZE: F	CODE IDENT. NO: 80091	NAVFAC DRAWING NO. 60024967	
	SATISFACTORY TO:		DATE	CONSTR. CONTR. NO. N40085-19-B-0062		
	SCALE: NOTED		SPEC: 05-19-0062		SHEET 6 OF 45	



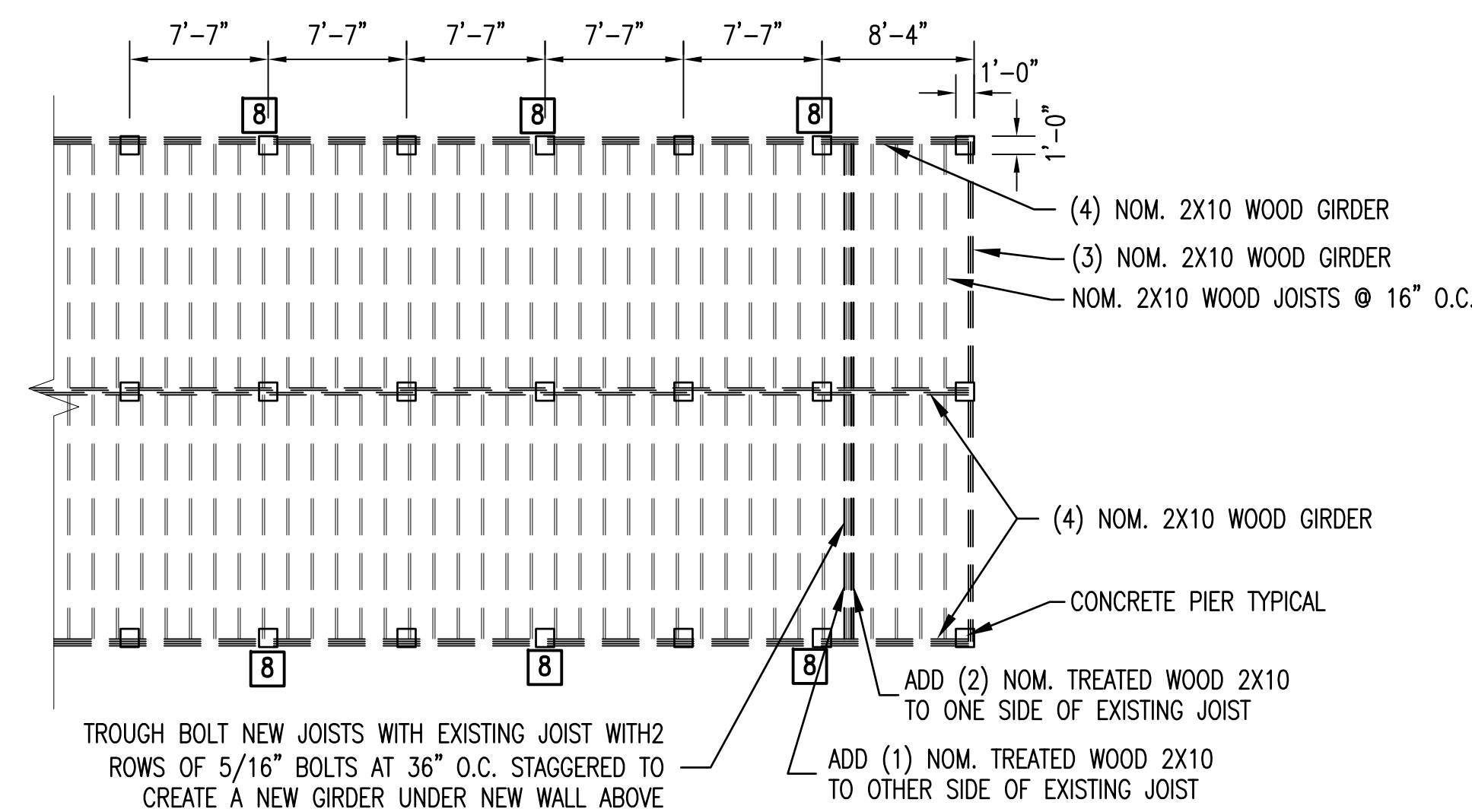
GENERAL PROJECT NOTES:

- DIMENSIONS ON PLANS ARE APPROXIMATE. VERIFY DIMENSIONS ON JOB.
- NOTING CONVENTION ON PLANS AND DETAILS: ON PLANS AND DETAILS TITLED AS "EXISTING CONDITIONS," ITEMS SHOWN AND NOTED ARE EXISTING UNLESS SPECIFICALLY INDICATED OTHERWISE. ON PLANS AND DETAILS TITLED AS "NEW" OR "RENOVATED CONDITIONS," ITEMS SHOWN AND NOTED ARE NEW OR ALTERED UNLESS SPECIFICALLY INDICATED OTHERWISE. TO DETERMINE FULL EXTENT OF WORK REQUIRED, COMPARE EXISTING CONDITIONS PLANS AND DETAILS TO NEW OR RENOVATED CONDITIONS PLANS AND DETAILS.
- THE WORDS "PAINT", "PAINTING", "REPAINT", OR "REFINISH" CARRY WITH THEM THE CONNOTATION THAT SURFACE PREPARATION, PRIMING (OR STAINING) AND NUMBER OF COATS OF PAINT (OR CLEAR FINISH) DESCRIBED IN THE SPECIFICATIONS ARE REQUIRED.
- PAINT COLORS SHALL BE AS STATED IN THE "INTERIOR COLOR SCHEDULE" INCLUDED IN THESE DRAWINGS. IF COLOR IS NOT STATED, COLOR SHALL BE SAME AS EXISTING. CONTRACTING OFFICER RESERVES THE RIGHT TO MAKE FINAL COLOR SELECTIONS.
- CAULKING/SEALANT IS REQUIRED AT ALL LOCATIONS PRESENTLY HAVING OR NORMALLY REQUIRING CAULKING/SEALANT INCLUDING BUT NOT NECESSARILY LIMITED TO: DOORS, WINDOWS, LOUVERS, VENTS, AND MASONRY CONTROL AND EXPANSION JOINTS.
- WHERE NEW WORK IS REQUIRED THAT WILL REPLACE EXISTING MATERIALS THE NEW WORK SHALL MATCH THE EXISTING AS CLOSELY AS POSSIBLE.
- CONDITIONS, DETAILS, AND AREAS OF WORK SHOWN ON THESE DRAWINGS ARE BASED ON FIELD INVESTIGATIONS AND SHOULD REPRESENT CURRENT CONDITIONS. IF CONDITIONS ARE ENCOUNTERED THAT ARE SIGNIFICANTLY DIFFERENT FROM THOSE SHOWN, IMMEDIATELY NOTIFY CONTRACTING OFFICER OF SUCH CONDITIONS PRIOR TO PROCEEDING WITH WORK IN THE AREA IN QUESTION. MINOR VARIATIONS WITH LITTLE IMPACT ON THE SCOPE OF WORK SHALL NOT BE CONSIDERED SIGNIFICANT.
- WHERE AN ITEM OR FEATURE IS SHOWN ON DRAWINGS THAT DEPICT EXISTING CONDITIONS, AND SUCH ITEM OR FEATURE IS NOT SHOWN ON DRAWINGS THAT DEPICT NEW OR ALTERED CONDITIONS, IT IS INFERRED THAT THE ITEM OR FEATURE IS TO BE REMOVED AS PART OF THIS WORK AND ALL SURFACES DISTURBED ARE TO BE NEATLY REPAIRED AND PATCHED TO MATCH EXISTING UNLESS INDICATED OTHERWISE. INCLUDE SUCH WORK IN BID PRICE.
- WHERE AN ITEM OR FEATURE IS TO BE REMOVED THE REQUIREMENT FOR REMOVAL INCLUDES THAT ALL RELATED APPURTENANCES ALSO BE REMOVED UNLESS INDICATED OTHERWISE. FOR EXAMPLE, WHERE AN EXISTING DOOR AND FRAME ARE TO BE REMOVED, THE HARDWARE, THRESHOLD, STOPS, ETC. ARE ALSO TO BE REMOVED.
- FOR EACH ACTIVITY THAT INVOLVES DISTURBANCE TO AN EXISTING SURFACE OR SURFACES, THE ACTIVITY CARRIES WITH IT THE STIPULATION THAT ALL DISTURBED SURFACES BE NEATLY REPAIRED AND PATCHED TO MATCH EXISTING. FOR EXAMPLE, WHERE INTERIOR PARTITIONS ARE REMOVED IT IS REQUIRED THAT ANY DISTURBED WALL, FLOOR, CEILING, TRIMS, BASE, ETC. THAT REMAINS BE NEATLY REPAIRED AND PATCHED TO MATCH EXISTING.
- IF EXISTING MATERIALS CANNOT BE REPAIRED AND PATCHED, NEW MATERIALS SHALL BE PROVIDED. WHERE NEW MATERIALS ARE REQUIRED TO BE BUILT INTO THE EXISTING STRUCTURE OR MATERIALS, OR BUILT ADJOINING EXISTING STRUCTURE OR MATERIALS, THE TEXTURE AND FINISH OF THE NEW MATERIAL SHALL MATCH THE EXISTING AND SHALL BE NEATLY BLENDED INTO THE EXISTING. ALIGN NEW MASONRY JOINTING, VERTICAL OR HORIZONTAL LINES, METAL WALL PANELS, ETC. WITH EXISTING.
- HOLES AND OTHER DAMAGE CAUSED BY TEMPORARY INSTALLATIONS, BARRIERS, ETC. SHALL BE REPAIRED IN A MANNER COMPATIBLE WITH AND EQUAL TO EXISTING CONDITIONS.
- WHERE NEW WORK IS REQUIRED AND DRAWINGS AND SPECIFICATIONS ARE NOT SPECIFIC AS TO TYPE AND QUALITY OF WORK, PROVIDE TYPE AND QUALITY EQUAL TO OR BETTER THAN CORRESPONDING WORK ON EXISTING BUILDING. IN THE ABSENCE OF ANY CORRESPONDING WORK ON EXISTING BUILDING, PROVIDE FIRST QUALITY INDUSTRY STANDARD COMPATIBLE TO EXISTING BUILDING. CONTRACTING OFFICER SHALL MAKE FINAL DETERMINATION OF WHETHER OR NOT CONTRACTOR'S PROPOSED WORK COMPLIES.
- GOVERNMENT WILL REMOVE INTERIOR BUILDING CONTENTS. GOVERNMENT WILL MOVE STORAGE UNITS AND EQUIPMENT A MINIMUM OF 10' AWAY FROM EXTERIOR PERIMETER OF BUILDING.

GENERAL NOTES FOR THIS SHEET:

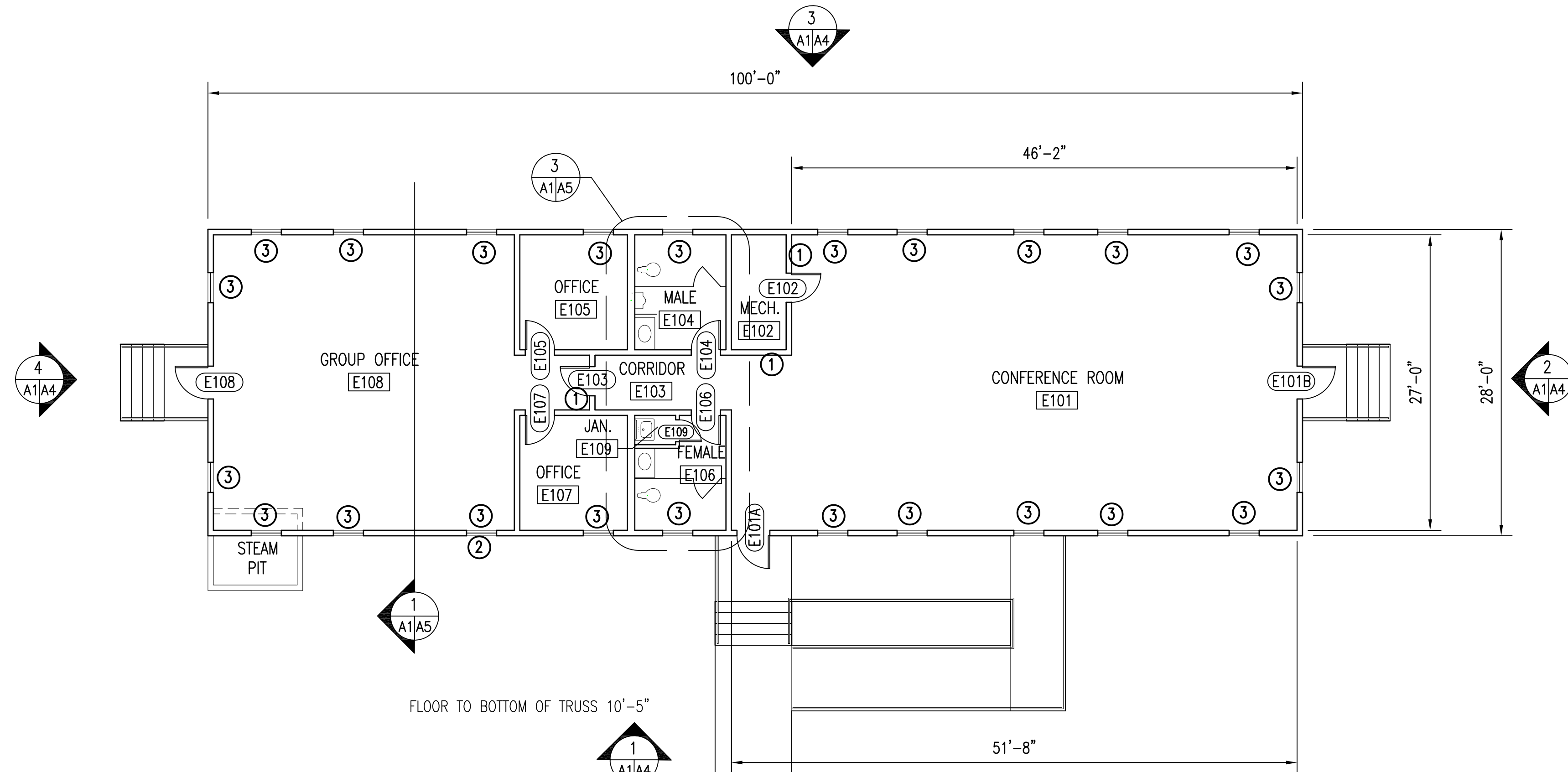
- REMOVE WINDOWS AND FROM THE BUILDING AND PROVIDE NEW - SEE DETAIL 1/A1/A9 AND 2/A1/A9.
- REMOVE INTERIOR AND EXTERIOR DOORS AND DOOR FRAMES FROM BUILDING AND PROVIDE NEW DOORS AND FRAMES - SEE DOOR SCHEDULES SHEET A2.
- REMOVE ALL EXTERIOR WOOD SIDING AND SHEATHING FROM THE BUILDING AND PROVIDE NEW SHEATHING, AND CEMENT FIBER LAP SIDING - SEE DETAILS 1/A5/A8 AND 2/A5/A8.
- IN ADDITION TO DETERIORATED WOOD FRAMING UNDER WINDOWS - SEE NOTE 3 ON EXISTING CONDITIONS FLOOR PLAN - SOME OF THE WOOD STUDS IN THE EXTERIOR WALLS ARE ALSO DETERIORATED. INCLUDE IN PROJECT TO REPLACE 100 2x4 WOOD STUDS WITH NEW FOR FULL HEIGHT OF WALL. CONTRACTOR SHALL INSPECT EXISTING CONDITIONS WITH CONTRACTING OFFICER AND SELECT THE 100 STUDS THAT ARE IN THE WORST CONDITION. IF OTHER WOOD FRAMING MUST BE REPLACED, COORDINATE WITH CONTRACTING OFFICER.
- REMOVE REMAINING GYPSUM BOARD FROM WALLS AND SUB-CEILINGS AND PROVIDE NEW FINISHES AS SCHEDULED ON SHEET A3. (MOST GYPSUM BOARD HAS ALREADY BEEN REMOVED.)
- NOTE THAT APPROXIMATELY 3/4 OF THE INTERIOR GYPSUM BOARD WALL FINISH, BATT INSULATION, LAY-IN CEILINGS, AND SUB CEILINGS HAVE BEEN REMOVED AS PART OF REMEDIATION WORK PERFORMED AFTER 2018 STORM DAMAGE.
- DUE TO STORM DAMAGE, WATER ENTERED THE BUILDING AND THE BUILDING HAS MOLD. PERFORM COMPLETE MOLD REMOVAL THROUGHOUT THE BUILDING, ATTIC, AND CRAWL SPACE. AFTER DEMOLITION WORK IS COMPLETE, CLEAN STRUCTURE THAT REMAINS AND KILL ALL MOLD WITH A BLEACH SOLUTION OR OTHER SIMILAR MOLD KILLER. ALL MOLD AND MILDEW MUST BE REMOVED BEFORE STARTING RENOVATION WORK.
- PROVIDE ACOUSTICAL PANELS ON WALLS OF AREA R101 WHERE INDICATED ON RENOVATED FLOOR PLAN. PROVIDE FINISHED OPENINGS IN ACOUSTICAL PANELS FOR ACCESS ELECTRICAL, MECHANICAL AND FIRE ALARM DEVICES IN THE WALLS. PANELS SHALL COVER WINDOWS AND MUST BE REMOVABLE AT WINDOWS TO ALLOW FOR ACCESS TO WINDOW - SEE DETAIL 3/A1/A10.
- CONTRACTOR SHALL INCLUDE TO REPLACE 800 S.F. EACH OF EXISTING DETERIORATED WOOD FLOOR AND SUB FLOOR.

REVISIONS		
SYN	DATE	APPROVED



PARTIAL FOUNDATION PLAN

1/8" = 1'-0"

3
A1/A1

EXISTING CONDITIONS FLOOR PLAN M100

1/8" = 1'-0"

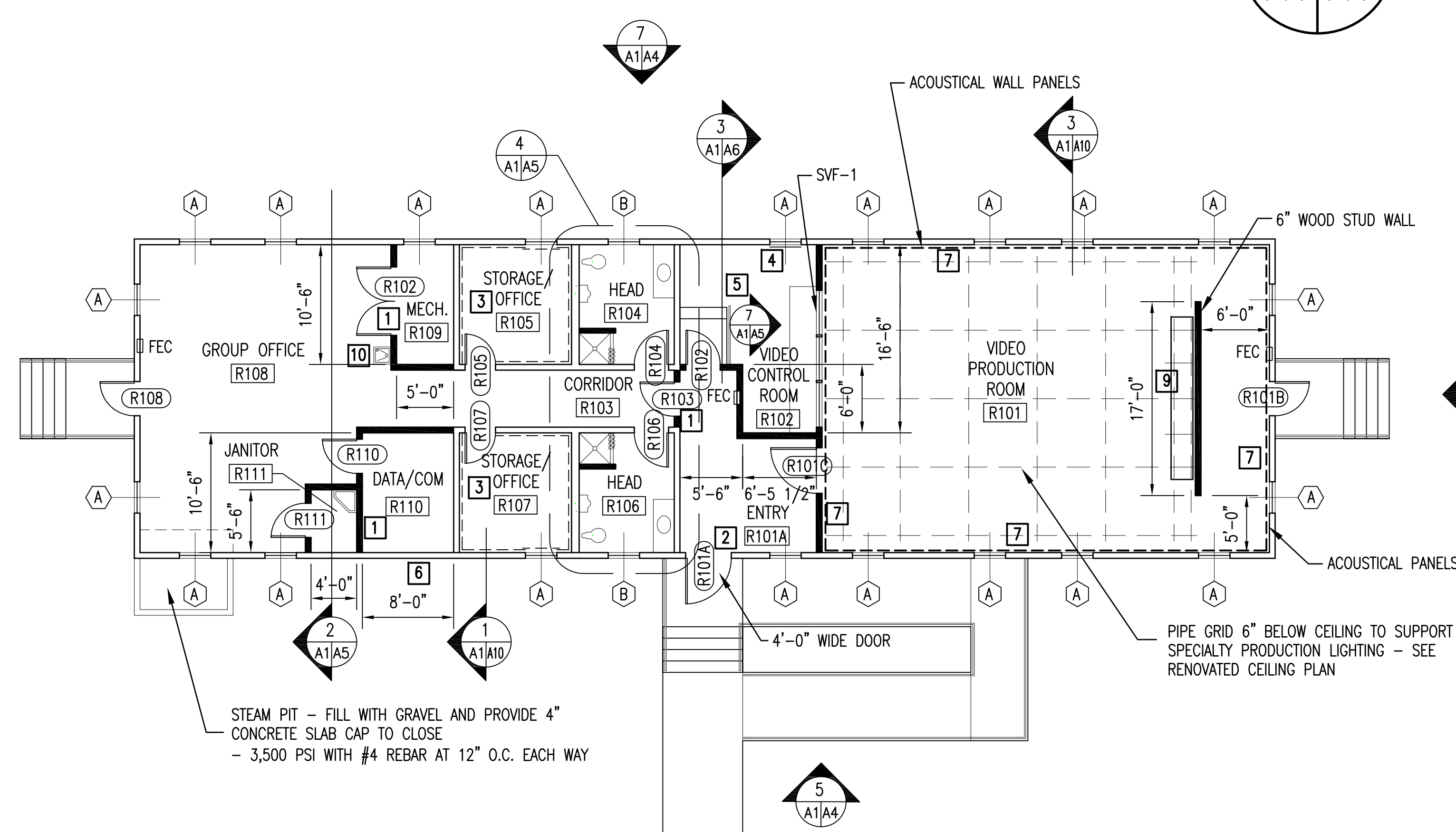
1
A1/A1

EXISTING CONDITIONS NUMBERED NOTES ON THIS SHEET:

- REMOVE WOOD STUD WALLS/PARTITIONS - SEE RENOVATED PLAN FOR NEW CONFIGURATION.
- REMOVE WINDOW PER BASE TELEPHONE REQUIREMENTS FOR DATA/COMM ROOMS.
- THE 2x4 WOOD FRAMING UNDER EACH WINDOW IS DETERIORATED FROM WATER AND TERMITE DAMAGE. REMOVE ALL WOOD FRAMING UNDER WINDOWS AND REBUILD THE WALL UNDER EACH WINDOW WITH FRAMING IN THE SAME CONFIGURATION AS THE EXISTING, INCLUDE A NEW WOOD BOTTOM PLATE. SEE PICTURES THIS SHEET.



PICTURES OF EXISTING DAMAGED AND DETERIORATED WOOD UNDER WINDOWS. SEE NOTE 3 ABOVE.



RENOVATED CONDITIONS FLOOR PLAN M100

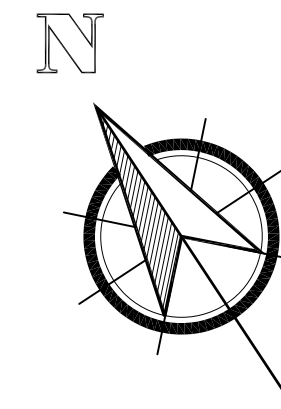
1/8" = 1'-0"

2
A1/A1

RENOVATED CONDITIONS NUMBERED NOTES ON THIS SHEET:

- PROVIDE NOM. 2X4 WOOD STUD WALLS/PARTITIONS, EXCEPT PROVIDE 6" STUDS WHERE NOTED - WALL/PARTITIONS HATCHED SOLID ARE NEW. BUILD UP TO BOTTOM CHORD OF TRUSSES.
- PROVIDE LARGER OPENING IN EXISTING WALL - SEE DOOR SCHEDULE ON SHEET A3.
- PROVIDE EXPANDED METAL SECURITY CAGE ON INTERIOR WALLS AND CEILING - SEE DETAIL SECTION 1/A1/A10.
- PROVIDE BLACK OUT SHADE ON WINDOW IN AREA R102 - SEE WINDOW DETAIL 2/A1/A9.
- FLOOR IN SOUND ROOM RAISED 12" - SEE DETAIL 3/A1/A6.
- PROVIDE WOOD FRAMING IN-FILL WHERE WINDOW WAS REMOVED.
- PROVIDE ACOUSTICAL WALL PANELS AS INDICATED ON WALLS OF AREA R101. SEE DETAIL 2/A1/A10 AND 3/A1/A10.
- PROVIDE WOOD COLUMN IN WALL AND GLU-LAM BEAM TO SUPPORT NEW LIGHTING PIPE FRAME - SEE DETAIL 2/A1/A10 AND 4/A1/A10.
- GOVERNMENT WILL FURNISH BACKDROP LIFT SYSTEM. CONTRACTOR SHALL INSTALL THE BACKDROP LIFT SYSTEM. PROVIDE (2) PIPES 2'-6" LONG FOR ADDITIONAL SUPPORT.
- PROVIDE EWC WITH BOTTLE FILLER.
- PAINT BACKDROP WALL FLOOR TO CEILING - CHROMA KEY BLUE.

- NEW 2x4 WOOD STUD WALL, STUDS AT 16" O.C. EXCEPT WHERE NOTED AS 6" STUDS - SEE RENOVATED CONDITIONS NOTE 1
- FEC FIRE EXTINGUISHER CABINET - SEMI-RECESSED CABINET
- FE FIRE EXTINGUISHER - WALL MOUNTED BRACKET

1/8" = 1'-0"
0 10 20 FEET

SEE DISCLOSURE OF INFORMATION STATEMENT ON SHEET T-1

	SHEET TITLE: FLOOR PLANS		A-1	
	TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150 DES. Robert L. Smith, III DR. Steven C. Fender CHK. Robert L. Smith, III SUBMITTED BY: DESIGN DIR. APPROVED: SATISFACTORY TO:		DEPARTMENT OF THE NAVY MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA RENOVATE BUILDING M100 CAMP LEJEUNE, NORTH CAROLINA NAVFAC DRAWING NO. 60024968 CONST. CONTR. NO. N40085-19-B-0062 SHEET 7 OF 45	

REVISIONS			
SYN.		DATE	APPROVED

SCHEDULE OF EXISTING DOORS AND FRAMES

E100 SEE THIS SYMBOL ON FLOOR PLAN FOR IDENTIFYING DOOR NUMBER

DOOR NO.	DOOR SIZE	DOOR TYPE	GLASS PANEL	LOUVER OR UC	HDW. NO.	FIRE RATING	ROUGH OPENING WHERE APPLICABLE	FRAME TYPE	FRAME DEPTH	FRAME POSITION	THRESH DETAIL	LINTEL	REMARKS	DOOR NO.
E101A	3-0 X 7-0	WD-1	24" X 24"	-	-	-	3'-3" X 7'-1 1/2"	WDF	-	-	-	-	REMOVE DOOR, FRAME, & HARDWARE COMPLETE	E101A
E101B	3-0 X 7-0	WD-1	24" X 24"	-	-	-	3'-3" X 7'-1 1/2"	WDF	-	-	-	-	REMOVE DOOR, FRAME, & HARDWARE COMPLETE	E101B
E102	3-0 X 7-0	WD-2	-	-	-	-	3'-3" X 7'-1 1/2"	WDF	-	-	-	-	REMOVE DOOR, FRAME, & HARDWARE COMPLETE	E102
E103	2-8 X 6-8	WD-2	-	-	-	-	2'-11" X 6'-9 1/2"	WDF	-	-	-	-	REMOVE DOOR, FRAME, & HARDWARE COMPLETE	E103
E104	3-0 X 7-0	WD-2	-	-	-	-	3'-3" X 7'-1 1/2"	WDF	-	-	-	-	REMOVE DOOR, FRAME, & HARDWARE COMPLETE	E104
E105	3-0 X 7-0	WD-2	-	-	-	-	3'-3" X 7'-1 1/2"	WDF	-	-	-	-	REMOVE DOOR, FRAME, & HARDWARE COMPLETE	E105
E106	3-0 X 7-0	WD-2	-	-	-	-	3'-3" X 7'-1 1/2"	WDF	-	-	-	-	REMOVE DOOR, FRAME, & HARDWARE COMPLETE	E106
E107	3-0 X 7-0	WD-2	-	-	-	-	3'-3" X 7'-1 1/2"	WDF	-	-	-	-	REMOVE DOOR, FRAME, & HARDWARE COMPLETE	E107
E108	3-0 X 7-0	WD-1	24" X 24"	-	-	-	3'-3" X 7'-1 1/2"	WDF	-	-	-	-	REMOVE DOOR, FRAME, & HARDWARE COMPLETE	E108
E109	2-0 X 7-0	WD-2	-	-	-	-	2'-3" X 7'-1 1/2"	WDF	-	-	-	-	REMOVE DOOR, FRAME, & HARDWARE COMPLETE	E109
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

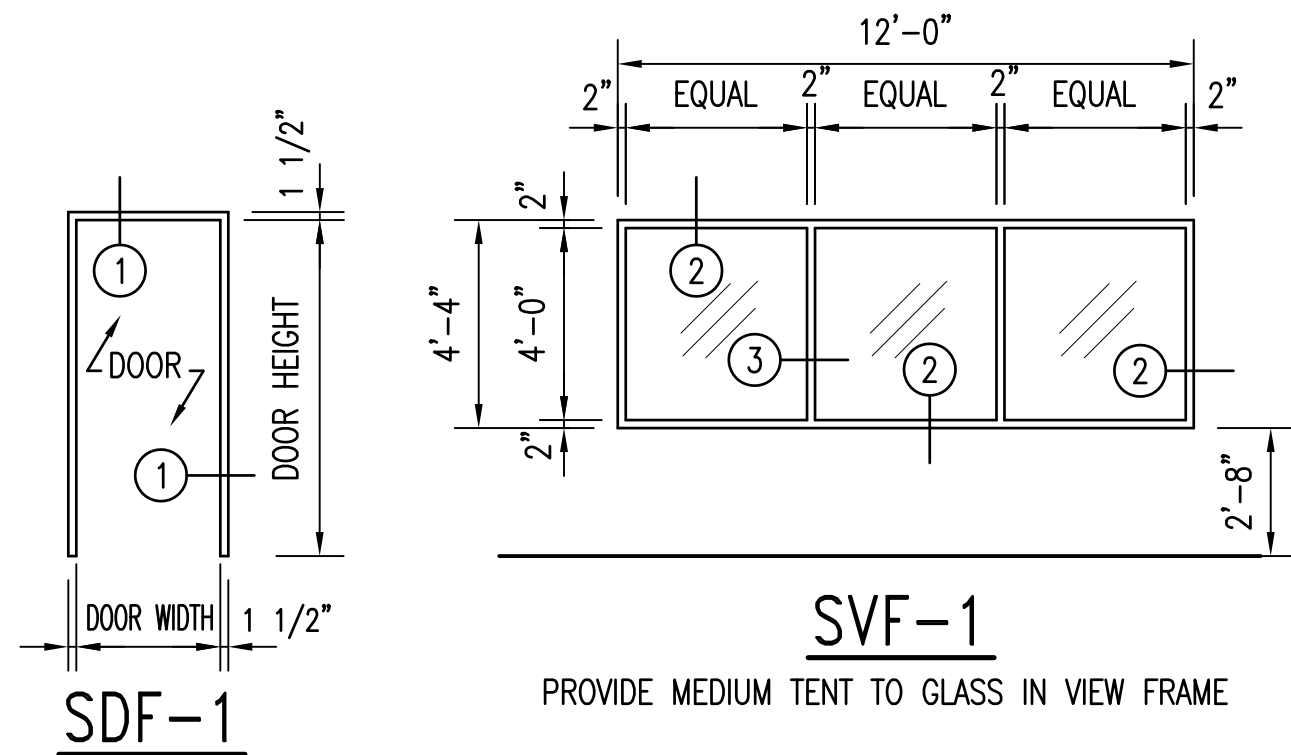
SCHEDULE OF RENOVATED DOORS AND FRAMES

R100 SEE THIS SYMBOL ON FLOOR PLAN FOR IDENTIFYING DOOR NUMBER

DOOR NO.	DOOR SIZE	DOOR TYPE	GLASS PANEL	LOUVER OR UC	HDW. NO.	FIRE RATING	ROUGH OPENING WHERE APPLICABLE	FRAME TYPE	FRAME DEPTH	FRAME POSITION	THRESH DETAIL	LINTEL	REMARKS	DOOR NO.
R101A	4-0 X 7-0	SD-1	-	-	2	-	-	SDF-1	6 1/2"	1	-	-	PROVIDE DOOR, FRAME, & HARDWARE COMPLETE	R101A
R101B	3-0 X 7-0	SD-1	-	-	1	-	-	SDF-1	6 1/2"	1	-	-	PROVIDE DOOR, FRAME, & HARDWARE COMPLETE	R101B
R101C	4-0 X 7-0	WD-1	-	-	3	-	-	SDF-1	6"	2	-	-	PROVIDE DOOR, FRAME, & HARDWARE COMPLETE	R101C
R102	3-0 X 7-0	WD-1	-	-	3	-	-	SDF-1	6"	2	-	-	PROVIDE DOOR, FRAME, & HARDWARE COMPLETE	R102
R103	3-0 X 7-0	WD-1	-	-	3	-	-	SDF-1	6"	2	-	-	PROVIDE DOOR, FRAME, & HARDWARE COMPLETE	R103
R104	3-0 X 7-0	WD-1	-	-	4	-	-	SDF-1	6"	3	-	-	PROVIDE DOOR, FRAME, & HARDWARE COMPLETE	R104
R105	3-0 X 7-0	SD-2	-	-	3	-	-	SDF-1	6"	3	-	-	PROVIDE DOOR, FRAME, & HARDWARE COMPLETE	R105
R106	3-0 X 7-0	WD-1	-	-	4	-	-	SDF-1	6"	3	-	-	PROVIDE DOOR, FRAME, & HARDWARE COMPLETE	R106
R107	3-0 X 7-0	SD-2	-	-	3	-	-	SDF-1	6"	3	-	-	PROVIDE DOOR, FRAME, & HARDWARE COMPLETE	R107
R108	3-0 X 7-0	SD-1	-	-	1	-	-	SDF-1	6 1/2"	1	-	-	PROVIDE DOOR, FRAME, & HARDWARE COMPLETE	R108
R109	PR 3-0 X 7-0	WD-1	-	-	6	-	-	SDF-1	6"	2	-	-	PROVIDE DOOR, FRAME, & HARDWARE COMPLETE	R109
R110	3-0 X 7-0	WD-1	-	-	5	-	-	SDF-1	6"	2	-	-	PROVIDE DOOR, FRAME, & HARDWARE COMPLETE	R110
R111	3-0 X 7-0	WD-1	-	-	5	-	-	SDF-1	6"	2	-	-	PROVIDE DOOR, FRAME, & HARDWARE COMPLETE	R111
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SVF-1	12-0 X 4-4	-	-	-	-	-	-	SVF-1	6"	2	-	-	-	SVF-1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

NOTES CONCERNING RENOVATED SCHEDULE:

- PROVIDE DOOR, FRAME, AND HARDWARE AS SCHEDULED ABOVE IN EXISTING AND NEW OPENINGS.
- FIELD VERIFY EXISTING OPENINGS TO RECEIVE NEW STEEL FRAMES.
- PROVIDE 4" ALUMINUM SADDLE THRESHOLD AT DOOR LOCATIONS WHERE FLOOR FINISHES CHANGE.
- PROVIDE 4" ALUMINUM SADDLE THRESH AND HOODED DOOR BOTTOM ON EXTERIOR DOORS.
- EXTERIOR DOORS SHALL BE BLAST RESISTANT AS PER SPECIFICATIONS SECTION 08 11 13 STEEL DOORS AND FRAMES.
- PROVIDE SOUND GASKETS ON DOORS R101A, R101B, R101C, R102, AND R103.
- PROVIDE CDX09 DOOR LOCK AT DOORS R105 AND R107 IN ADDITION TO SCHEDULED HARDWARE.

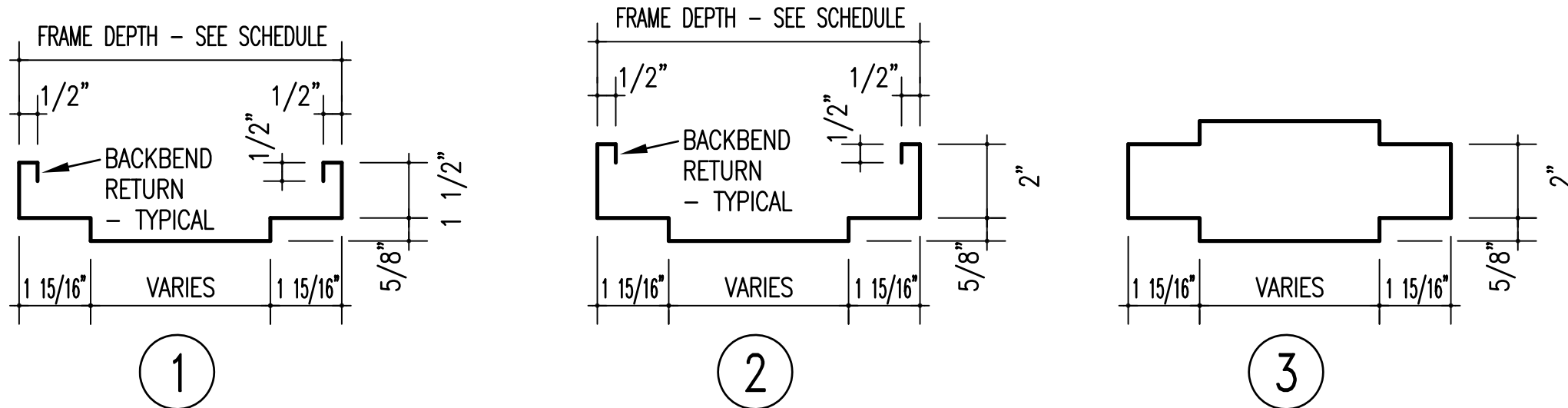


FIELD VERIFY EXISTING CONDITIONS AND DIMENSIONS.

DOOR FRAME TYPES

1/4" = 1'-0"

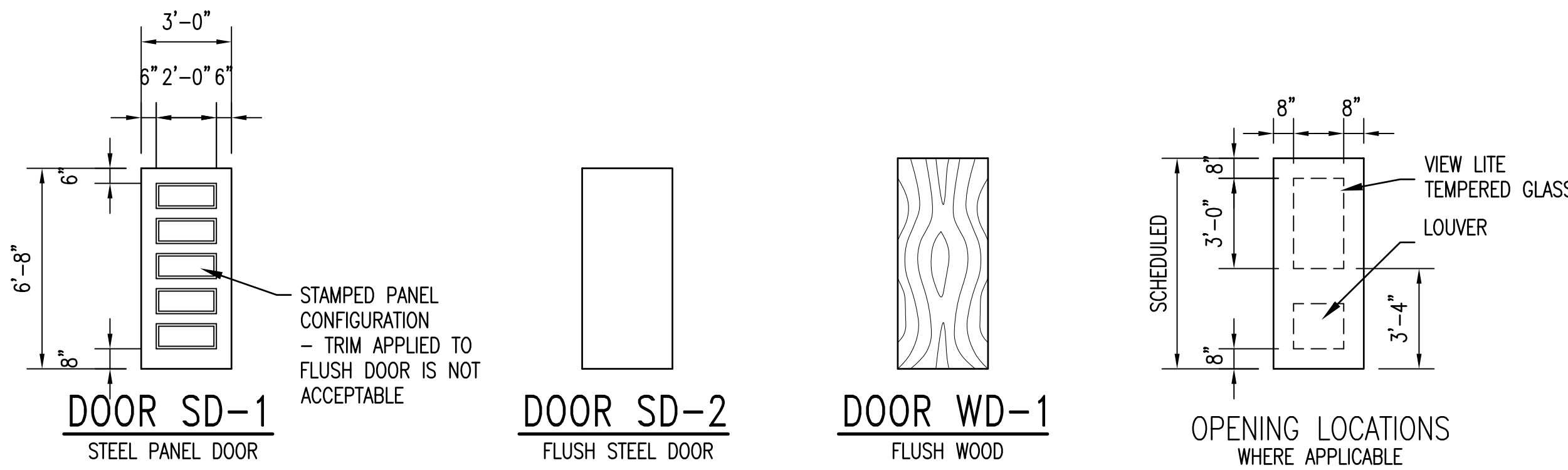
SDF = STEEL DOOR FRAME
SVF = STEEL VIEW FRAME



FRAME SECTIONS

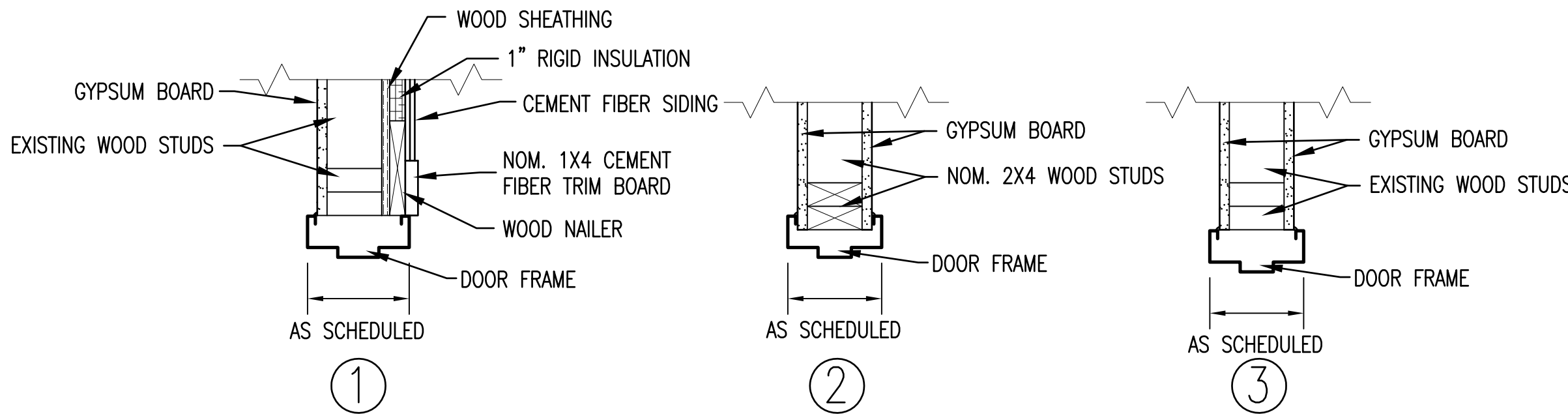
3" = 1'-0"

NOTE THAT BACKBEND RETURNS ARE REQUIRED ON ALL FRAMES.



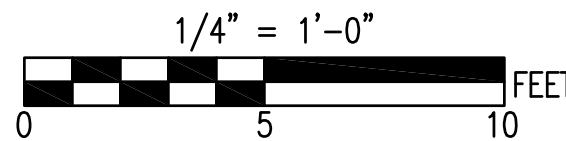
DOOR TYPES

1/4" = 1'-0"



DOOR FRAME POSITIONING DETAILS

1 1/2" = 1'-0"



SEE DISCLOSURE OF INFORMATION STATEMENT ON SHEET T-1


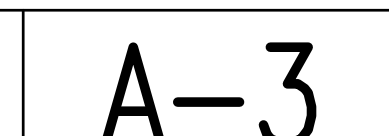
	SHEET TITLE: DOOR SCHEDULES		A-2	
	TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150		DEPARTMENT OF THE NAVY MARINE CORPS ENGINEERING COMMAND CAMP LEJEUNE, NORTH CAROLINA	
	DES. Robert L. Smith, III DR. Steven C. Fender CHK. Robert L. Smith, III		RENOVATE BUILDING M100 CAMP LEJEUNE, NORTH CAROLINA	
	SUBMITTED BY: DESIGN DIR. APPROVED: [Signature] DATE: [Date] SATISFACTORY TO: [Signature] DATE: [Date]		CODE IDENT. NO. 80091 NAVFAC DRAWING NO. 60024969 CONST. CONTR. NO. N40085-19-B-0062 SCALE: NOTED SPEC. 05-19-0062 SHEET 8 OF 45	

EXISTING FINISH SCHEDULE BUILDING M100															[E100] — SEE THIS SYMBOL ON FLOOR PLANS FOR CORRESPONDING ROOM NUMBER		
ROOM NO.	ROOM NAME	FLOOR				BASE		WALL			CEILING			CEILING HT.	REMARKS	ROOM NO.	
			CARPET (REMOVED)				4" COVED RUBBER (REMOVED)								EXISTING CONDITIONS FINISH NOTE: GOVERNMENT HAS REMOVED MANY OF THE EXISTING FINISHES AS PART OF THE STORM REMEDIATION WORK AFTER THE HURRICANES IN 2018. REMOVE APPLIED FINISHES THAT REMAIN.		
			12" X 12" VCT				NONE										
			CARPET				2" X 2" CERAMIC TILE										
E101	CONFERENCE ROOM	•				•		•				•			-	-	E101
E102	MECHANICAL ROOM		•				•	•		•			•		-	-	E102
E103	CORRIDOR			•			•	•		•			•		-	-	E103
E104	MALE HEAD				•			•		•			•		-	-	E104
E105	OFFICE			•			•	•		•			•		-	-	E105
E106	FEMALE HEAD				•			•		•			•		-	-	E106
E107	OFFICE			•			•	•		•			•		-	-	E107
E108	GROUP OFFICE				•		•	•		•			•		-	-	E108
E109	JANITOR				•			•		•					-	-	E109

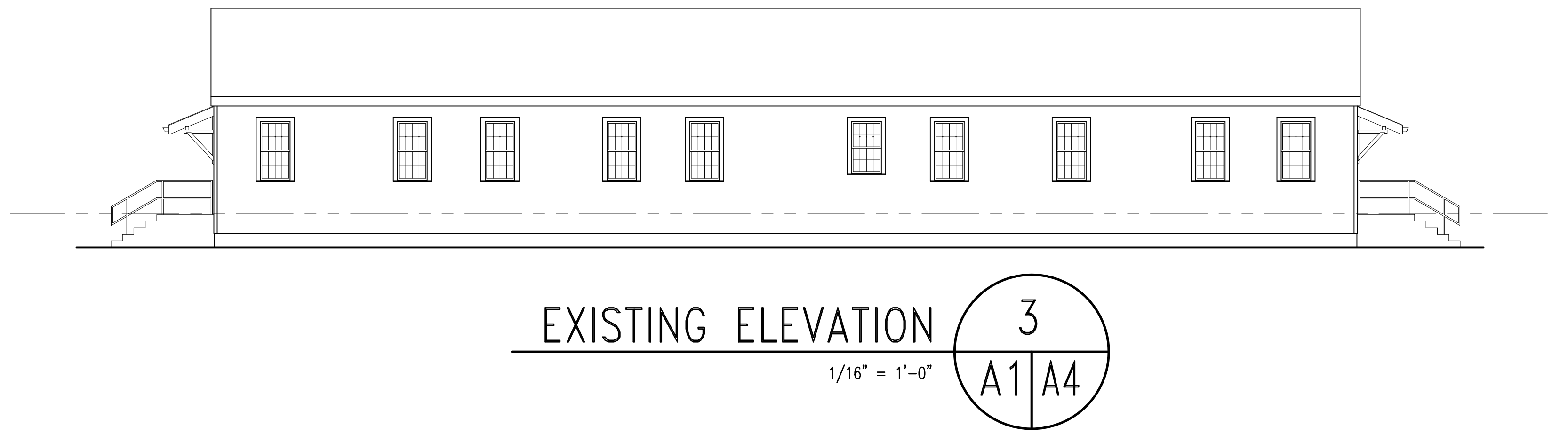
SEE INTERIOR CONDITIONS NEW COLOR SCHEDULE ON THIS SHEET FOR MORE FINISH INFORMATION.

EXTERIOR COLOR SELECTIONS
BY BASE ARCHITECT.



		SHEET TITLE:			
TALLEY & SMITH ARCHITECTURE INC. REGISTERED ARCHITECTURAL ENGINEERING CERT. NO. 50153 NORTH CAROLINA SHELBY, N.C.		FINISH SCHEDULES		A-3	
TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150		DEPARTMENT OF THE NAVY MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA			
DES. Robert L. Smith, III DR. Steven C. Fender CHK. Robert L. Smith, III SUBMITTED BY: DESIGN DIR:		RENOVATE BUILDING M100 CAMP LEJEUNE, NORTH CAROLINA			
APPROVED:		DATE	SIZE F	CODE IDENT. NO. 80091	NAVFAC DRAWING NO. 60024970
SATISFACTORY TO:		DATE	CONST. CONTR. NO. N40085-19-B-0062		
08/21/2019		SCALE: NOTED SPEC. 05-19-0062 SHEET 9 OF 45			

REVISIONS			
SYL		DATE	APPROVED

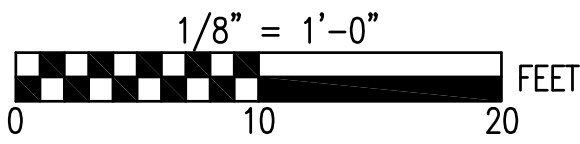
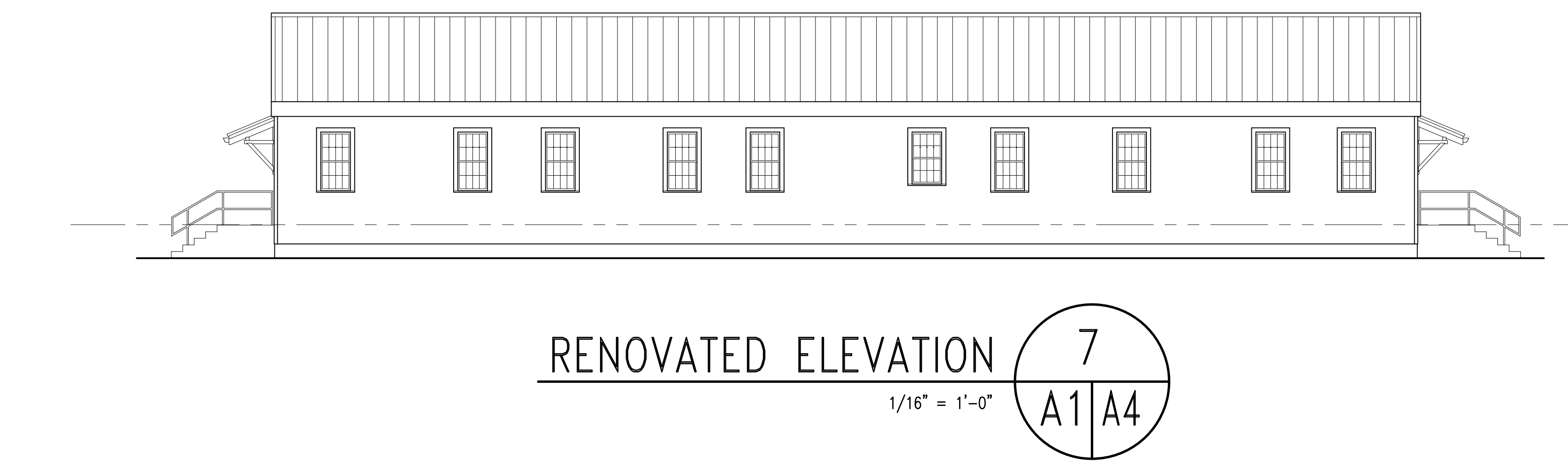
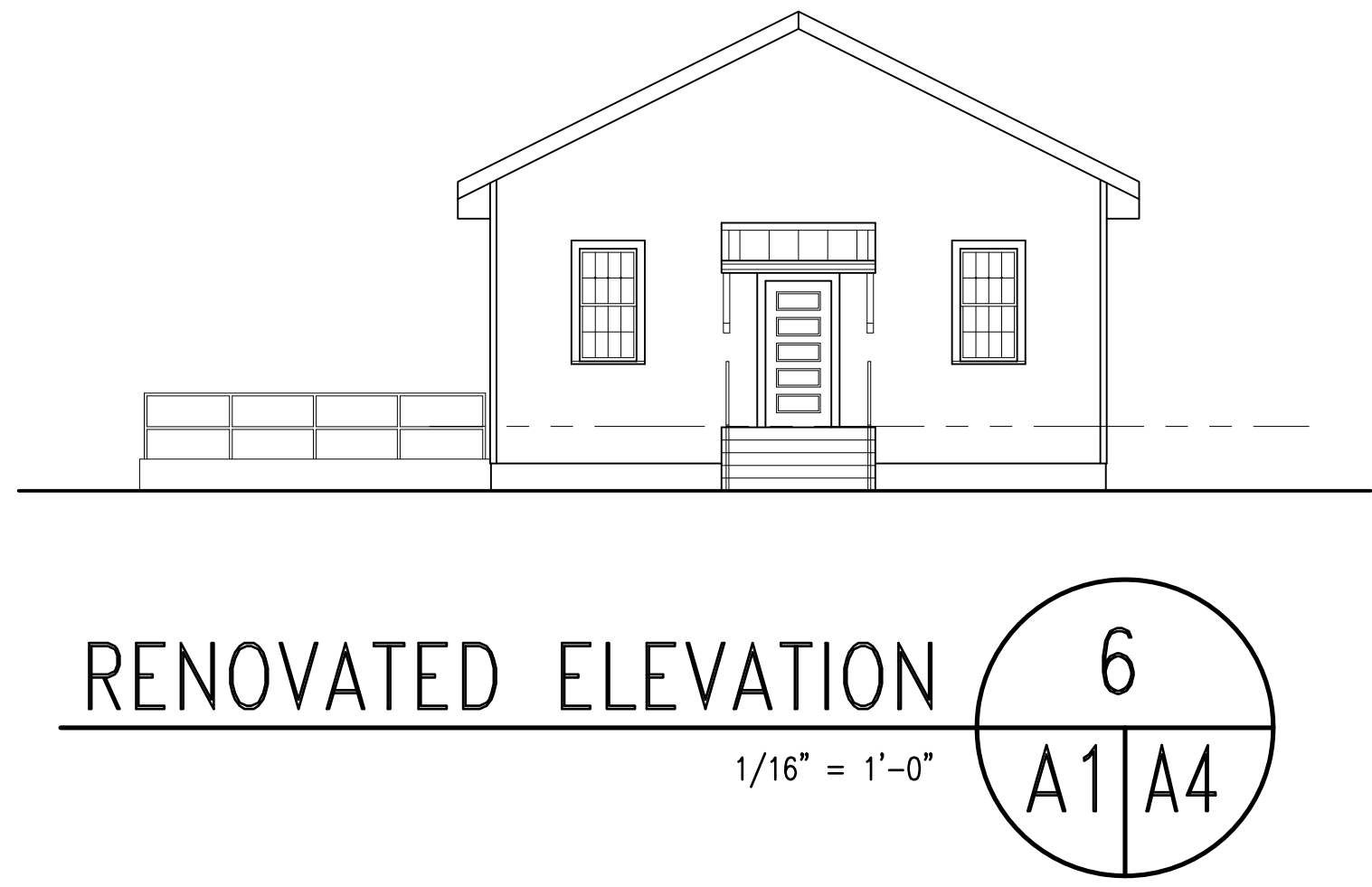
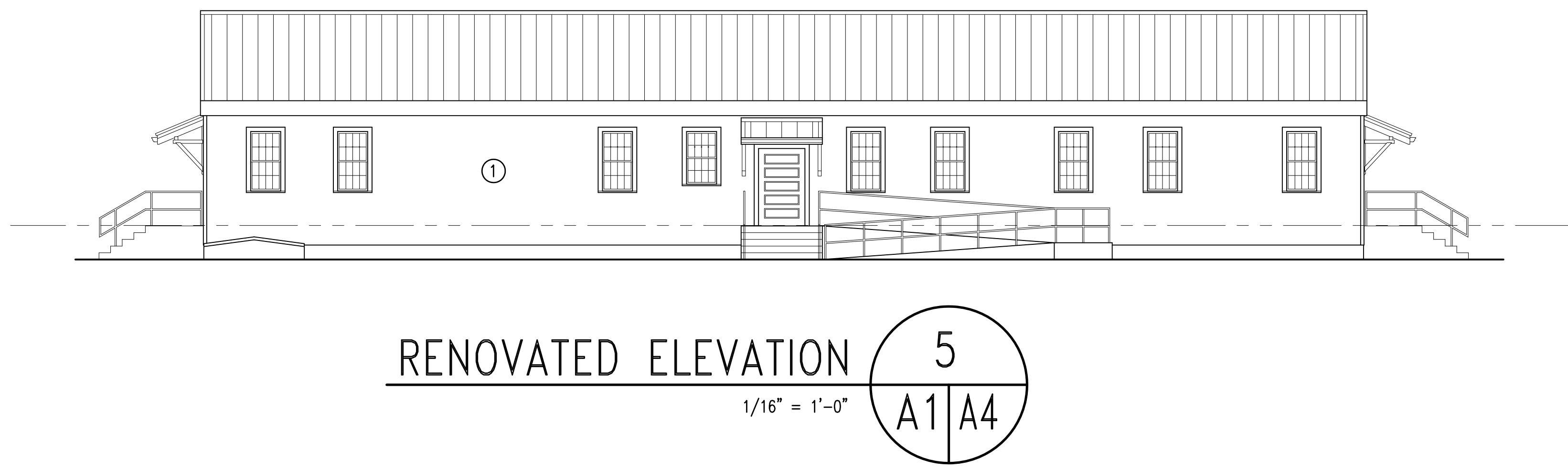


GENERAL NOTES ON THIS SHEET:


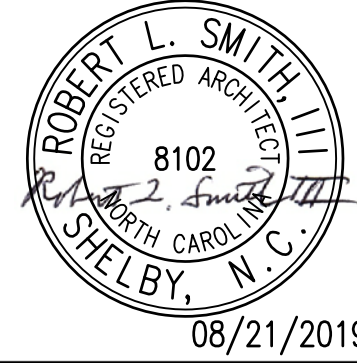
1. REMOVE WINDOWS FROM BUILDING AND PROVIDE NEW - SEE WINDOW DETAILS ON SHEET A9.
2. REMOVE EXTERIOR DOORS AND FRAMES FROM BUILDING AND PROVIDE NEW - SEE DOOR SCHEDULES SHEET A2.
3. REMOVE ALL WOOD SIDING AND PLYWOOD SHEATHING FROM THE BUILDING AND PROVIDE NEW - SEE WALL SECTION 2/A5/A8.
4. REMOVE SHINGLES AND UNDERLAYMENT (DOWN TO EXISTING WOOD ROOF DECK) AND PROVIDE NEW LAYER OF ROOF DECK AND METAL ROOF SYSTEM - SEE WALL SECTION 2/A5/A8.
5. REMOVE GABLE END WALL LOUVERS - INFILL WITH TYPICAL EXTERIOR WALL SYSTEM - SEE MECHANICAL DRAWINGS FOR LOCATIONS OF NEW HVAC LOUVERS.
6. EXISTING STEEL PIPE HANDRAILS' FINISH IS CHALKY AND RUSTY. CLEAN, REMOVE ALL RUST, AND PAINT. COLOR SHALL BE COORDINATED WITH CONTRACTING OFFICER.
7. PAINT ALL EXISTING EXTERIOR PAINTED MATERIALS THAT REMAIN. PAINT NEW MATERIALS THAT ARE NOT PRE-FINISHED BY MANUFACTURER.

NUMBERED NOTES ON THIS SHEET:

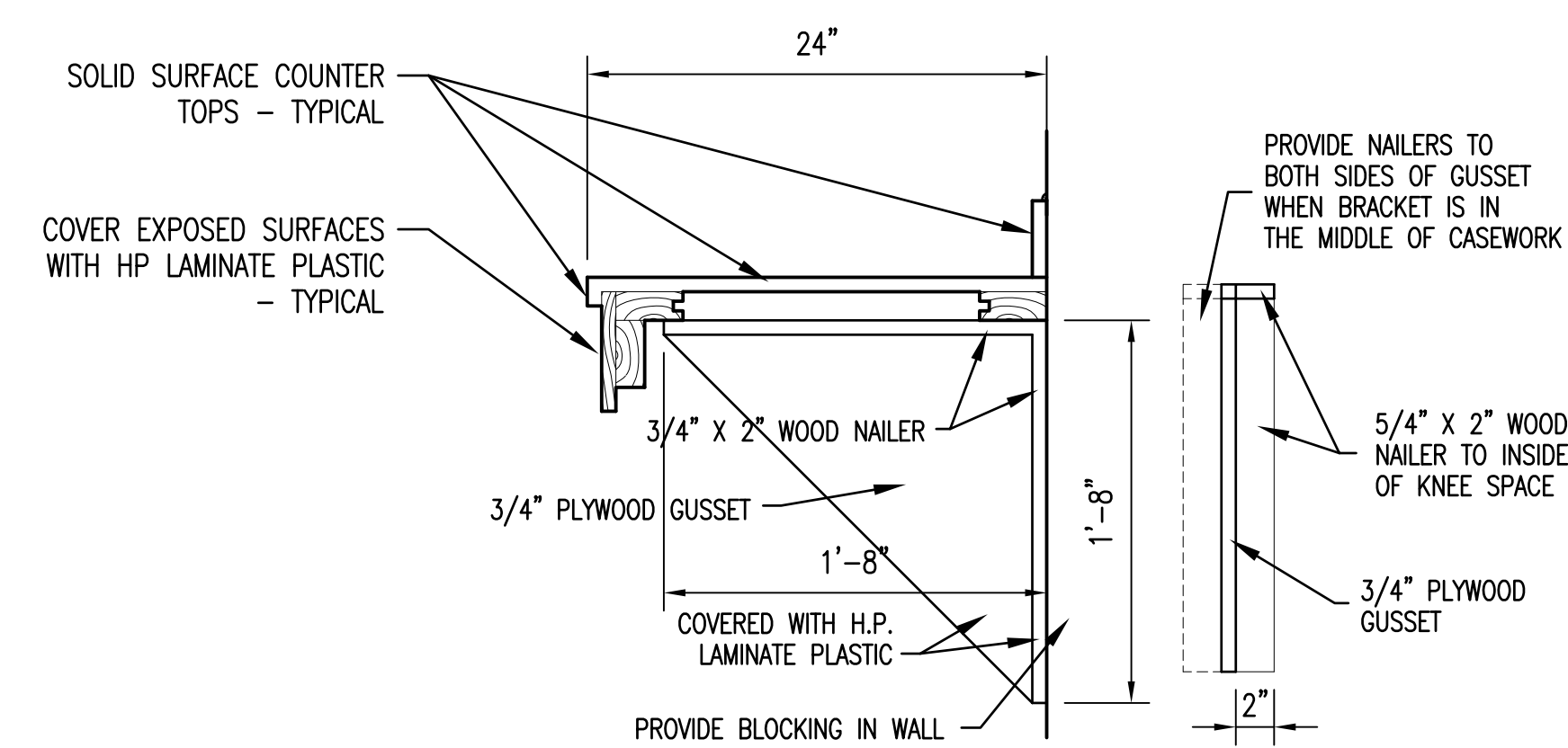
- ① REMOVE WINDOW AND INFILL WITH TYPICAL WALL CONSTRUCTION.



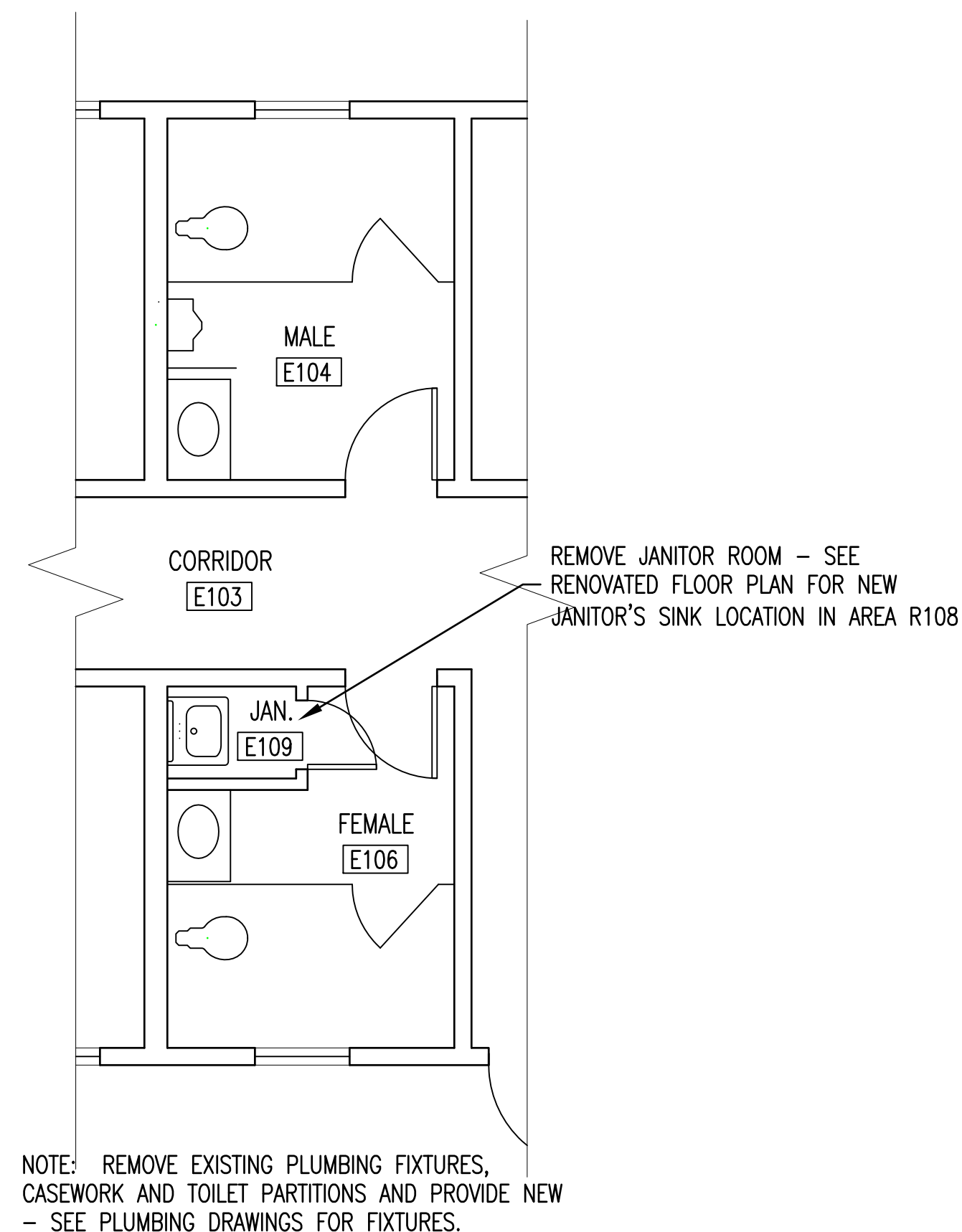
SEE DISCLOSURE OF INFORMATION STATEMENT ON SHEET T-1

	SHEET TITLE: ELEVATIONS		A-4	
	TALLEY & SMITH ARCHITECTURE, INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150 SHELBY, N.C.		DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA	
	DES. Robert L. Smith, III DR. Steven C. Fender CHK. Robert L. Smith, III SUBMITTED BY: DESIGN DIR. APPROVED: SATISFACTORY TO:		RENOVATE BUILDING M100 CAMP LEJEUNE, NORTH CAROLINA	
	DATE: 08/21/2019	SIZE: F	CODE IDENT. NO.: 80091	NAVFAC DRAWING NO.: 60024971
SCALE: NOTED		SPEC. 05-19-0062	SHEET 10 OF 45	

REVISIONS			
SYM.		DATE	APPROVED



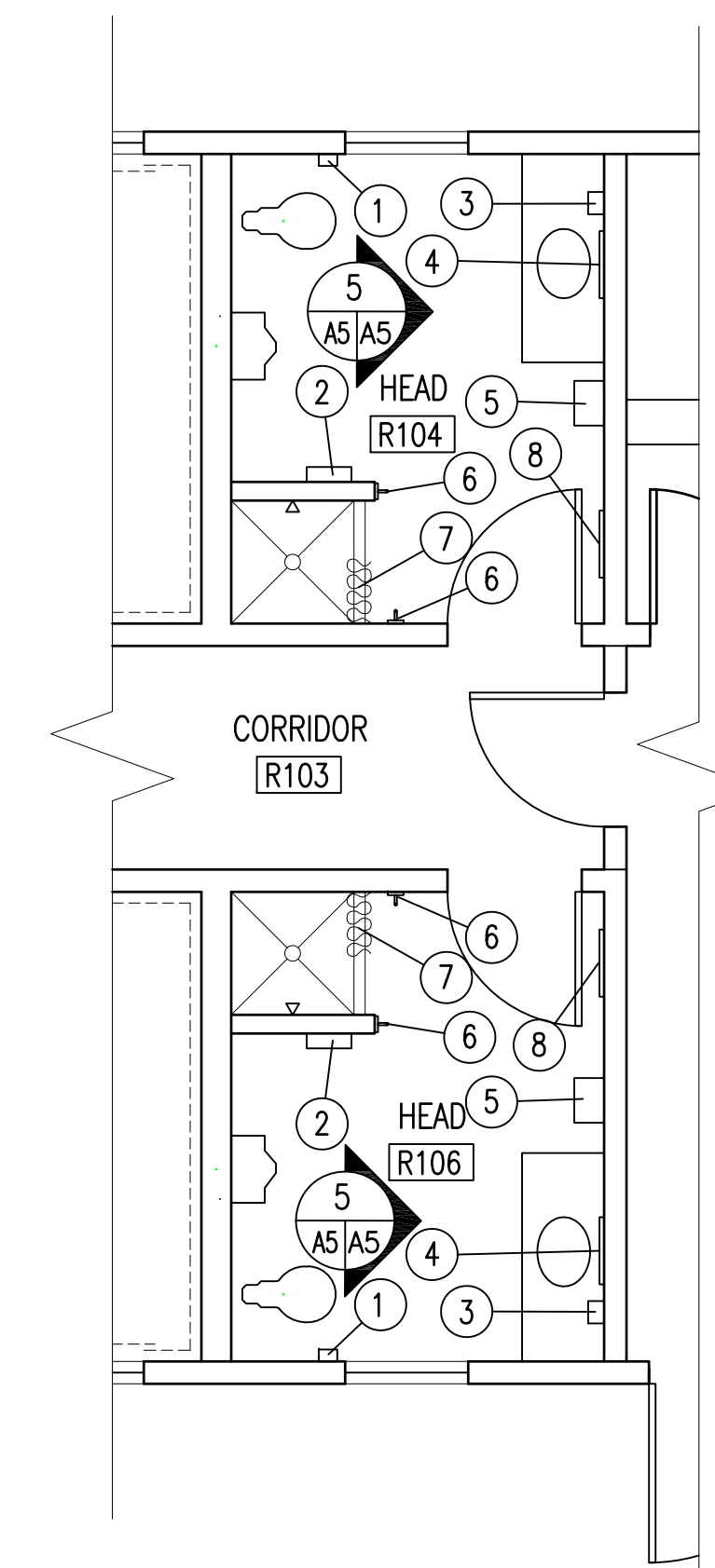
WOOD BRACKET DETAIL 6
NOT TO SCALE A5/A5



EXISTING ENLARGED
HEAD PLAN

1/4" = 1'-0"

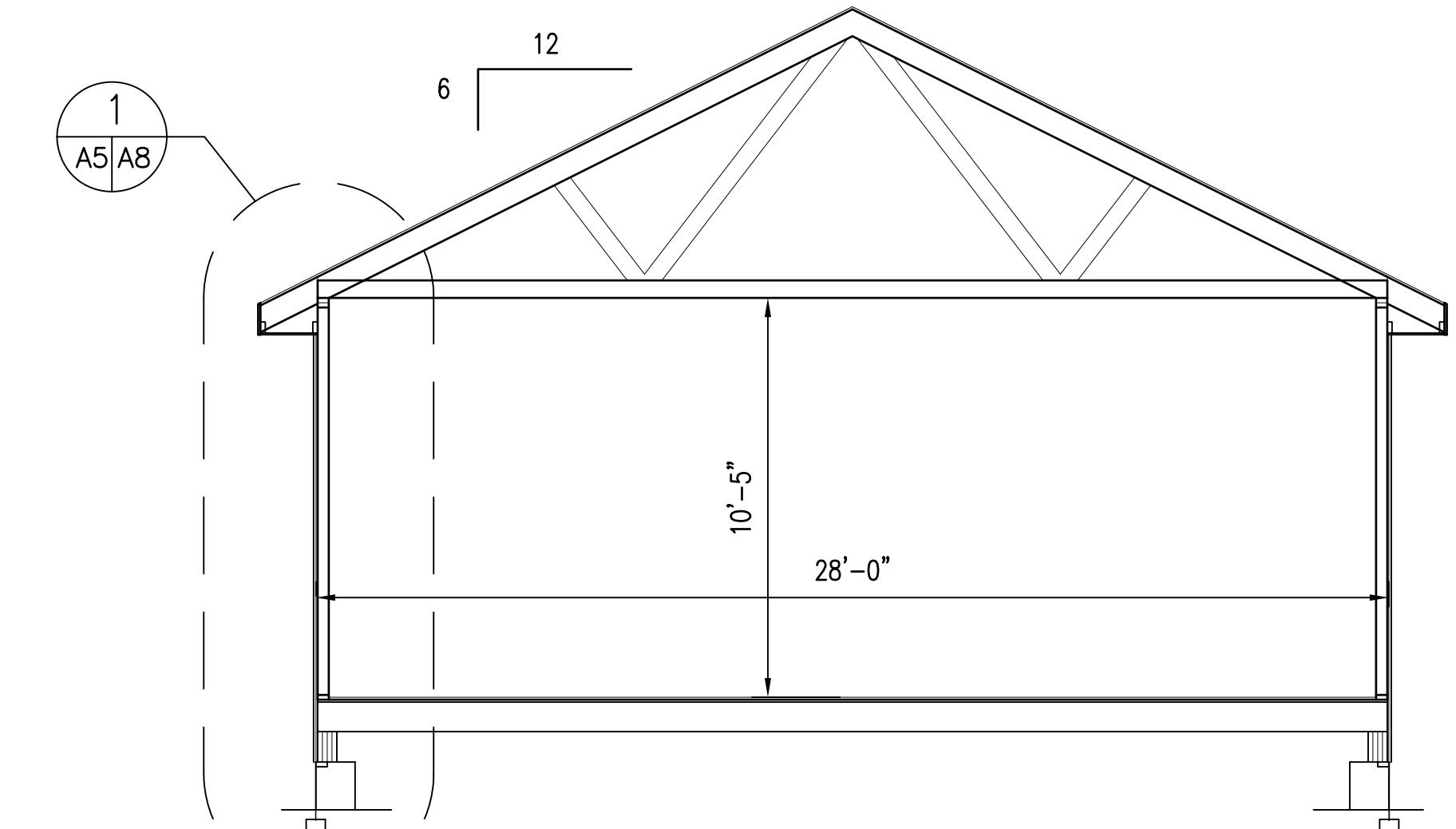
3
A1/A5



RENOVATED ENLARGED
HEAD PLAN

HEADS DESIGNATED FOR ABLE-BODIED USE. 1/4" = 1'-0"

4
A1/A5

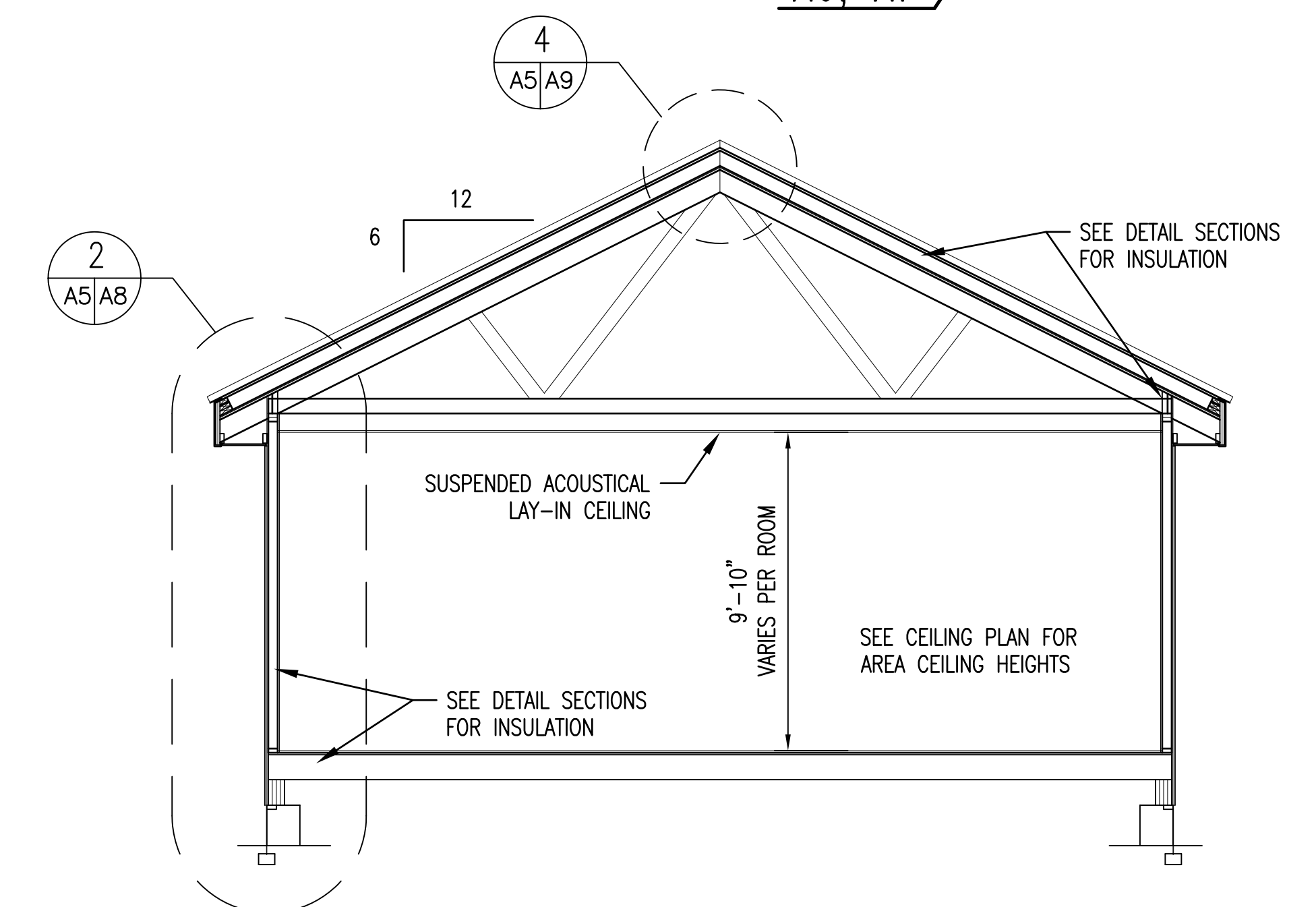


EXISTING CONDITIONS
BUILDING SECTION

$1/4" = 1'-0"$

A6, A7

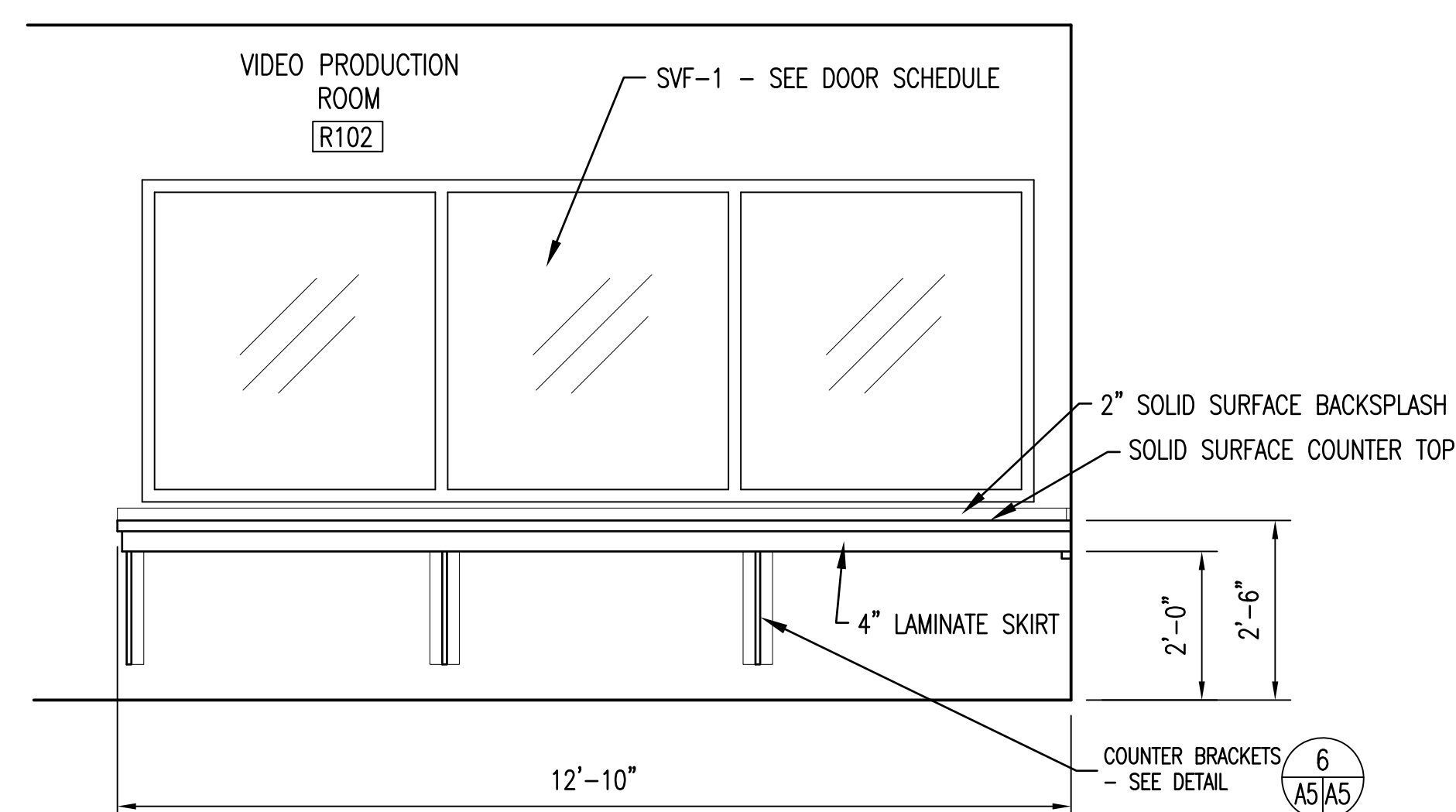
1
A1 | A5



RENOVATED CONDITIONS
BUILDING SECTION

$1/4" = 1'-0"$
A6, A7

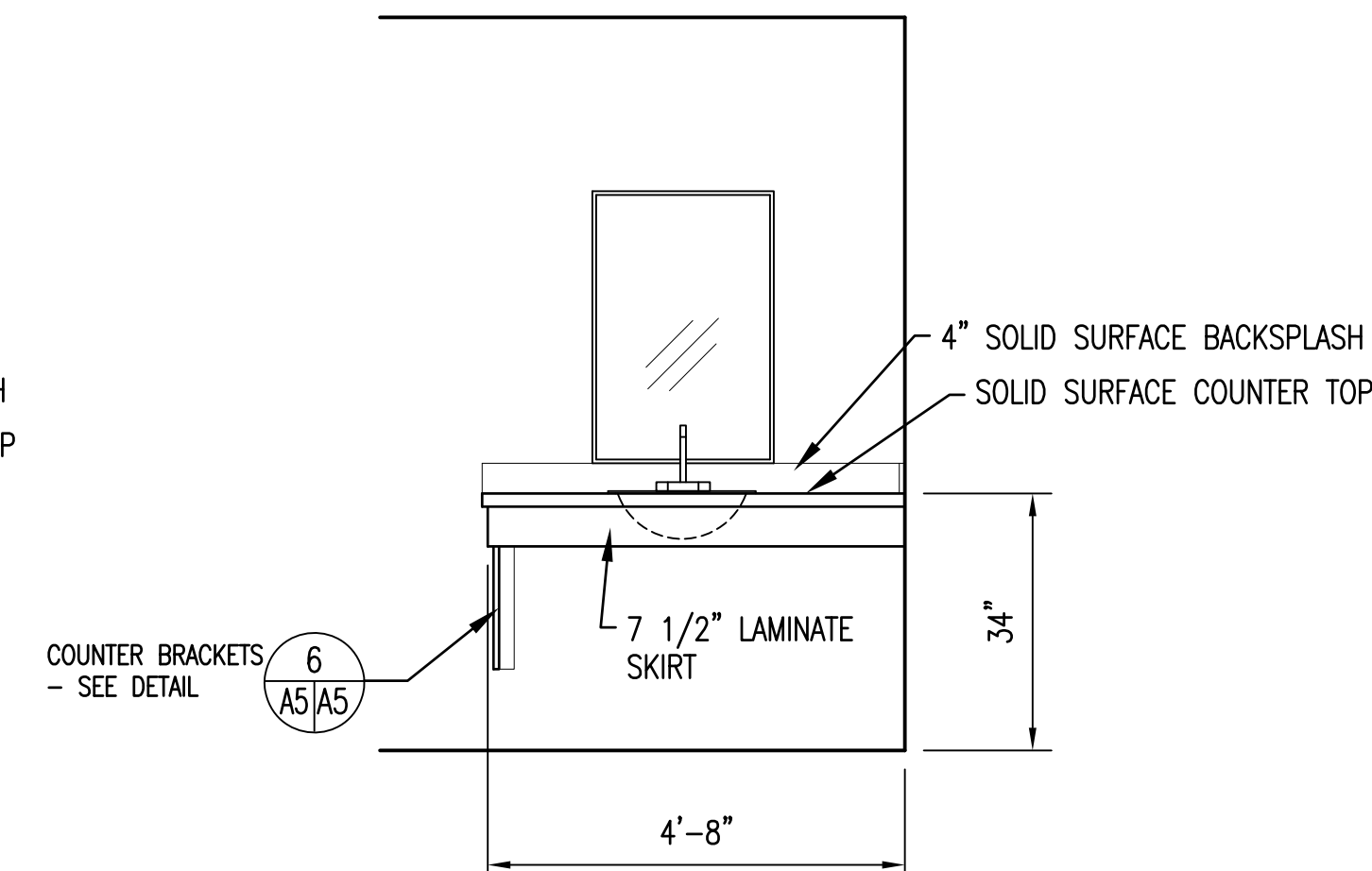
2
A1 A5



ELEVATION 7
1/2" = 1'-0" A1/A5

COUNTERTOP DEPTH SHALL BE 2'-4".

PROVIDE (4) 4" GROMMETS EVENLY SPACED AT REAR OF COUNTERTOP.



ELEVATION 5
 $1/2" = 1'-0"$ A5 | A5

CASEWORK FROM AREA R106 SHOWN ABOVE,
CASEWORK IN AREA R104 IS OPPOSITE HAND.

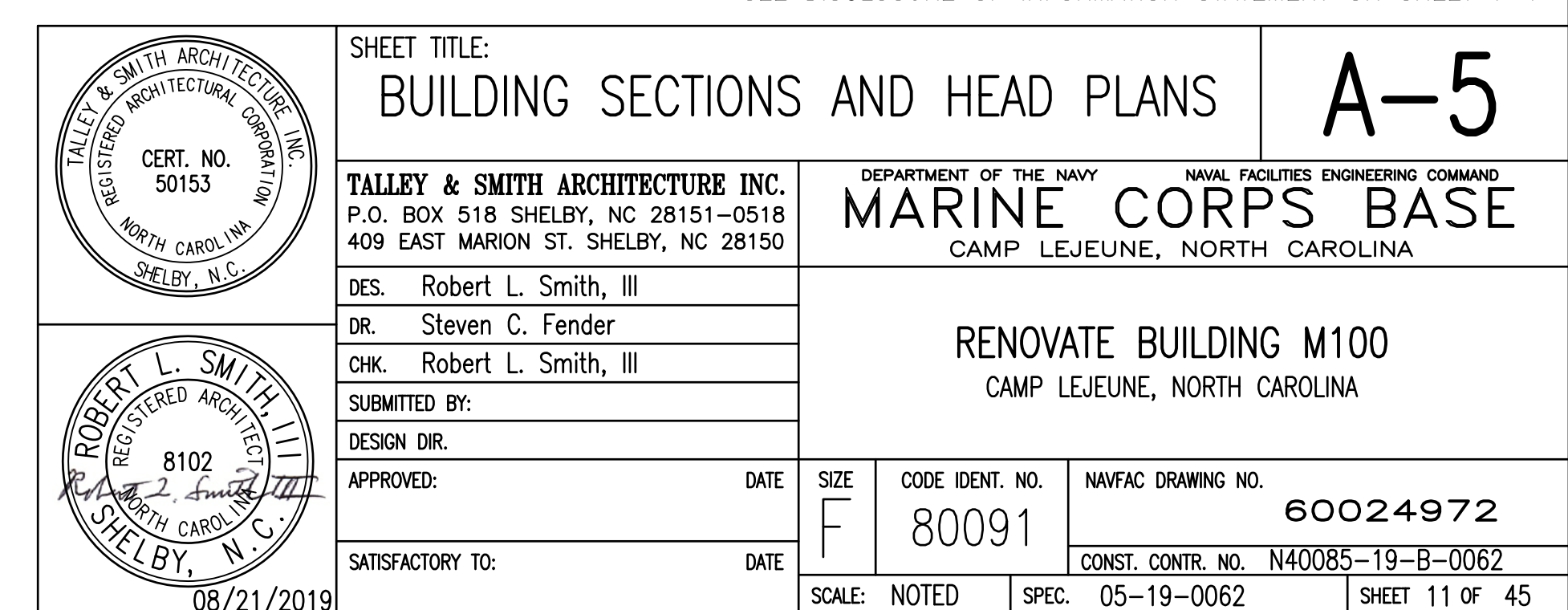
- TOILET ACCESSORIES:

- | | |
|--------------------------|--------------------------|
| ① TOILET PAPER DISPENSER | ⑤ ELECTRIC HAND DRYER |
| ② PAPER TOWEL DISPENSER | ⑥ TOWEL HOOK |
| ③ SOAP DISPENSER | ⑦ SHOWER CURTAIN AND ROD |
| ④ 24" x 36" MIRROR | ⑧ 24" x 50" MIRROR |

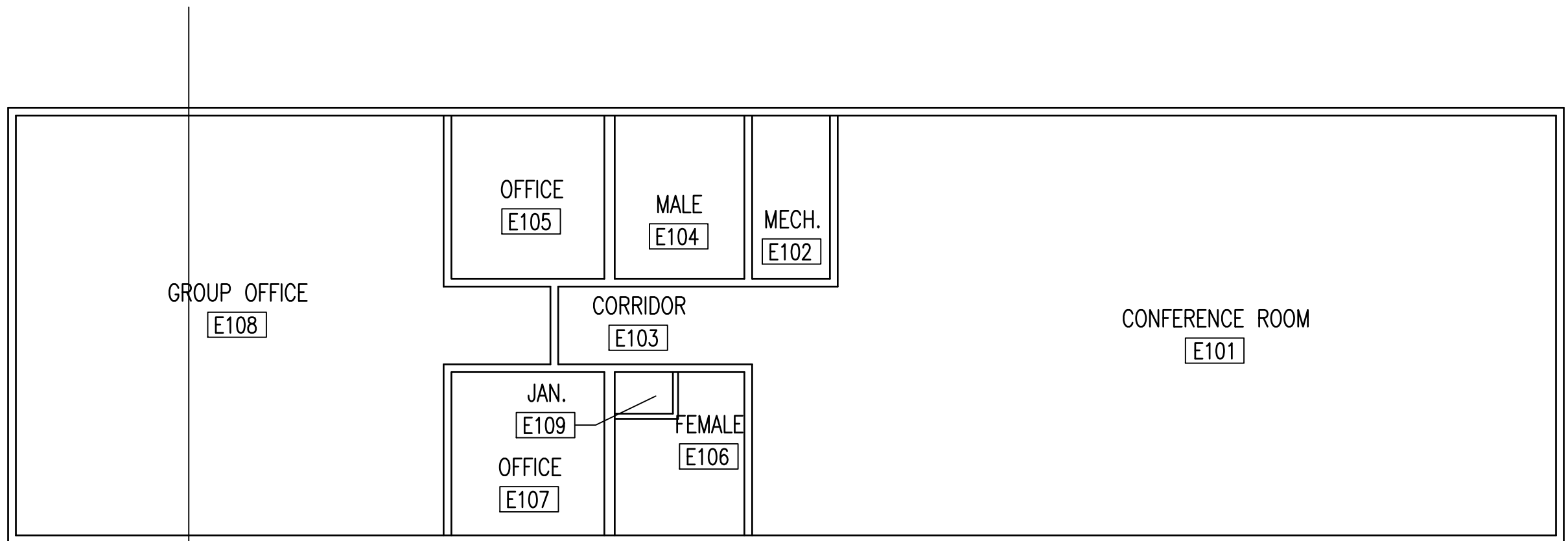
TOILET ACCESSORIES SHOWN ON DRAWINGS ARE TO INDICATE LOCATIONS AND ITEMS REQUIRED. SIZES OF TOILET ACCESSORIES SHOWN MAY OR MAY NOT MATCH ITEMS SPECIFIED TO BE PROVIDED.



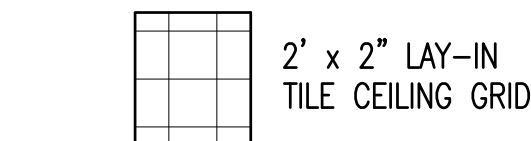
SEE DISCLOSURE OF INFORMATION STATEMENT ON SHEET T-1



REVISIONS			
SYMBOL	DESCRIPTION	DATE	APPROVED



RENOVATED CONDITIONS CEILING PLAN LEGEND



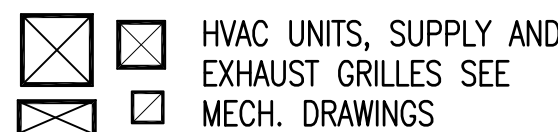
2' x 2" LAY-IN
TILE CEILING GRID



GYPSUM BOARD



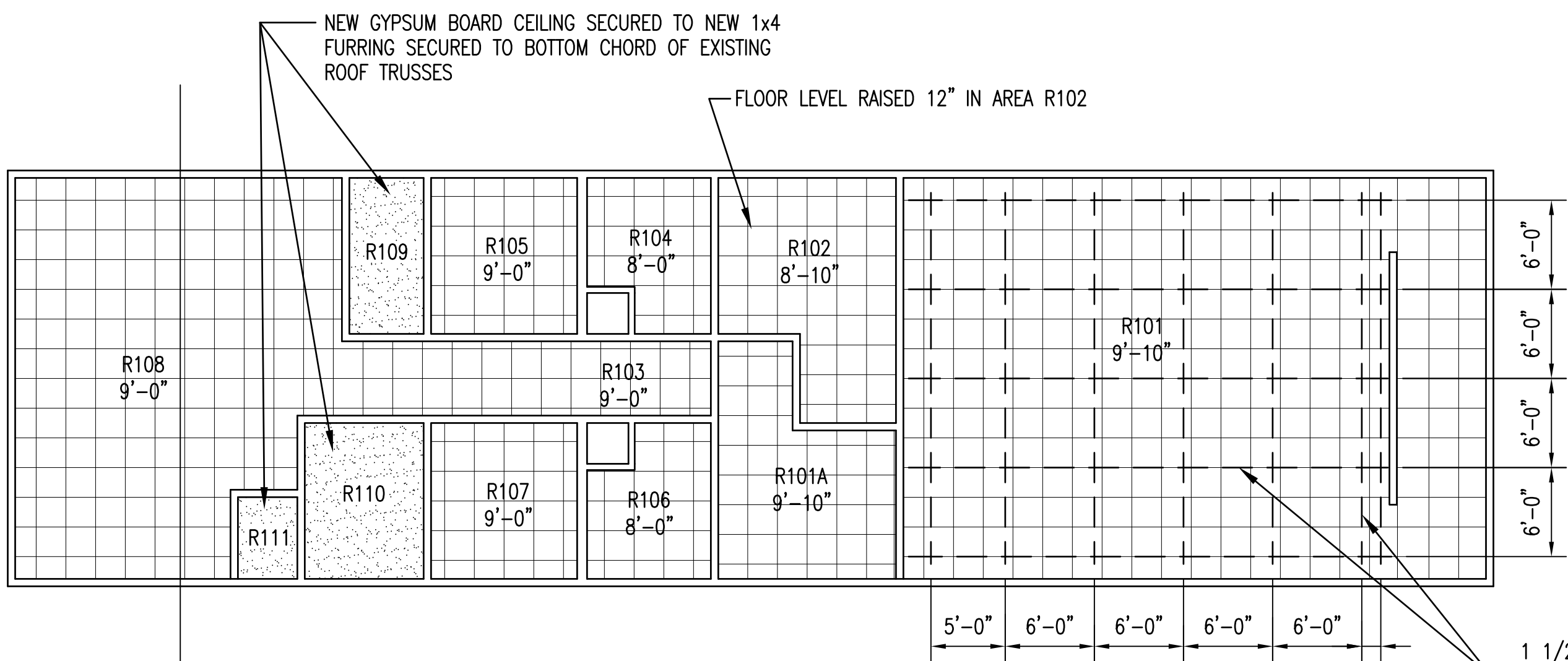
LIGHT FIXTURES
SEE ELECT. DWGS.



HVAC UNITS, SUPPLY AND
EXHAUST GRILLES SEE
MECH. DRAWINGS

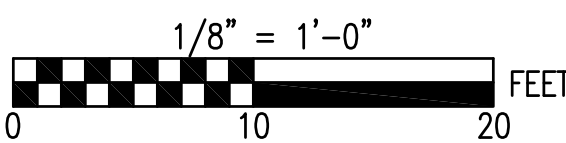
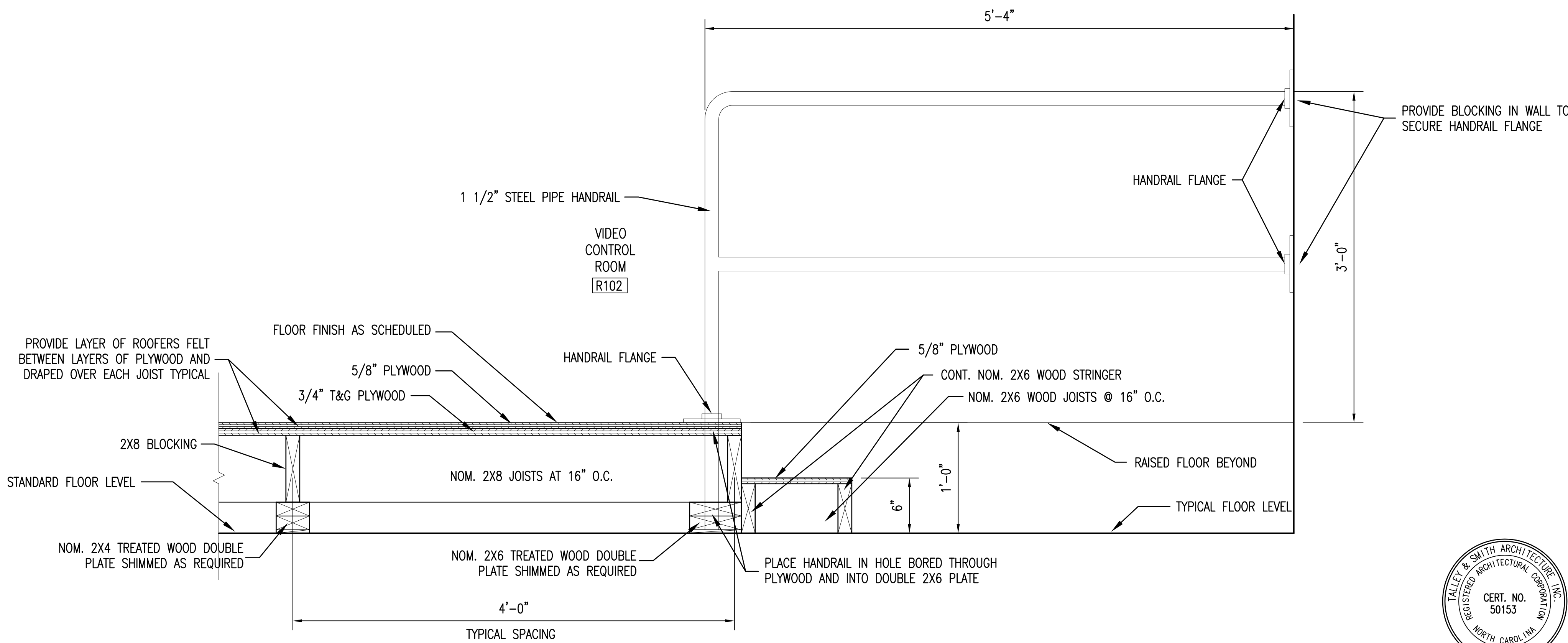
CEILING PLAN LEGEND

THE CEILING PLANS ARE INTENDED TO SHOW MAJOR CEILING COMPONENTS FOR COORDINATION OF ALL TRADES. NOT ALL CEILING COMPONENTS ARE SHOWN NOR DO ALL THE COMPONENTS SHOWN ON THE LEGEND NECESSARILY OCCUR ON THIS PROJECT. SEE ALL DRAWINGS FOR COMPONENTS THAT OCCUR ON THE CEILINGS.

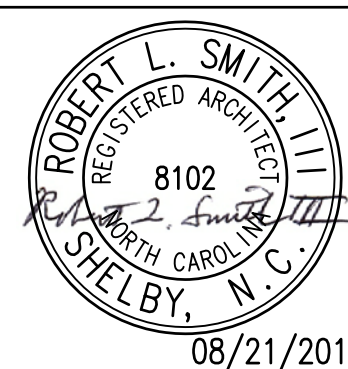


RENOVATED CEILING PLAN

1/8" = 1'-0"

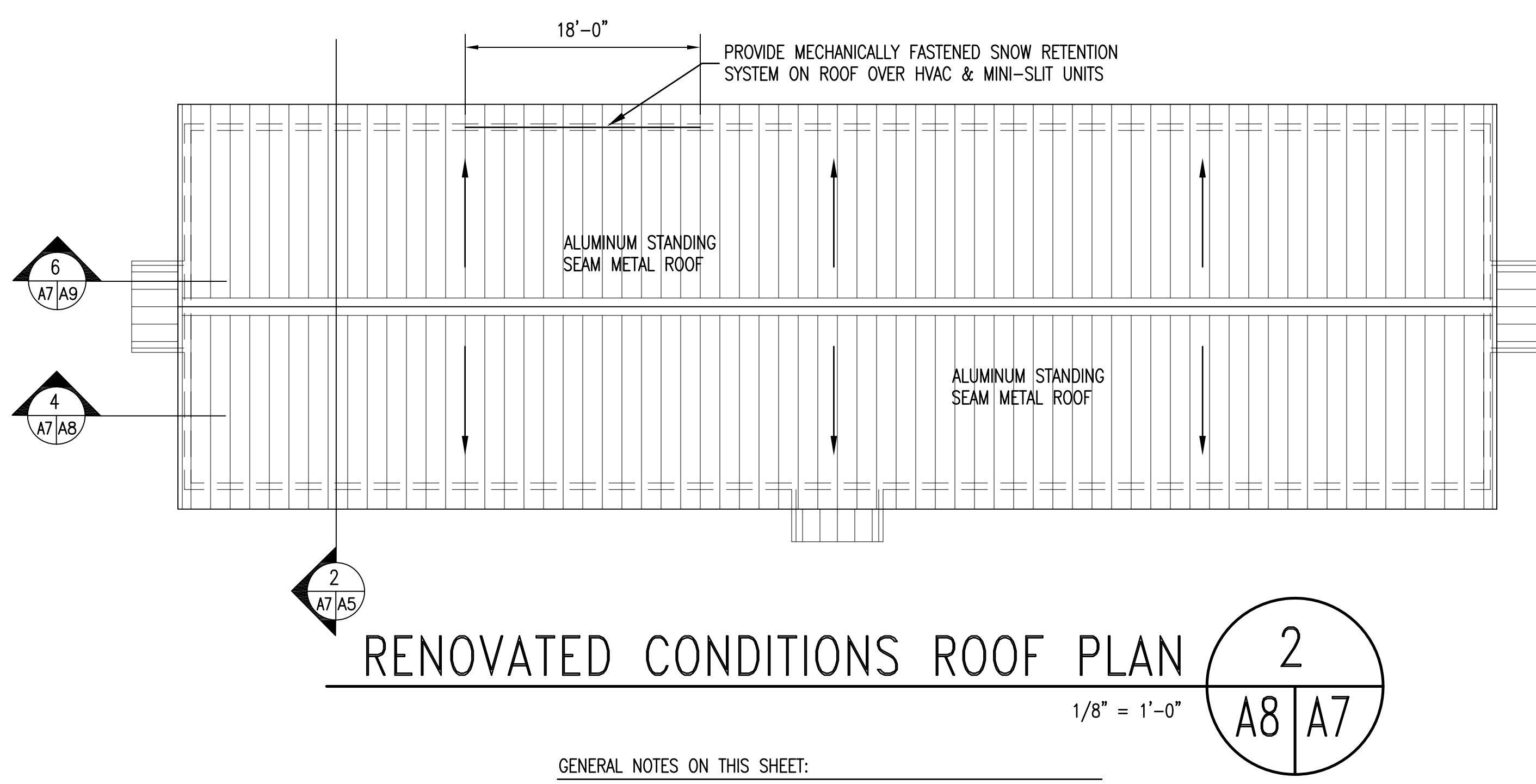
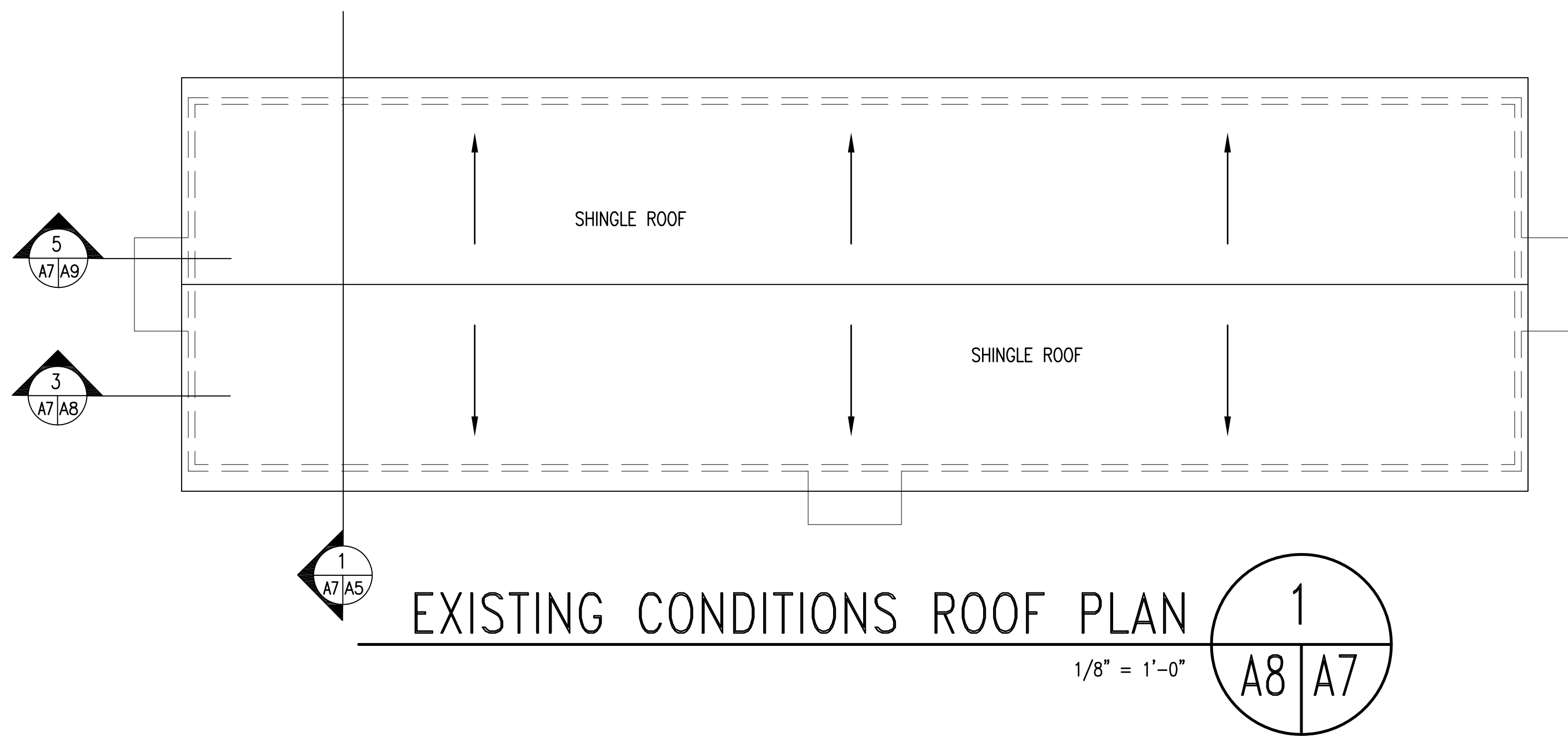


SEE DISCLOSURE OF INFORMATION STATEMENT ON SHEET T-1



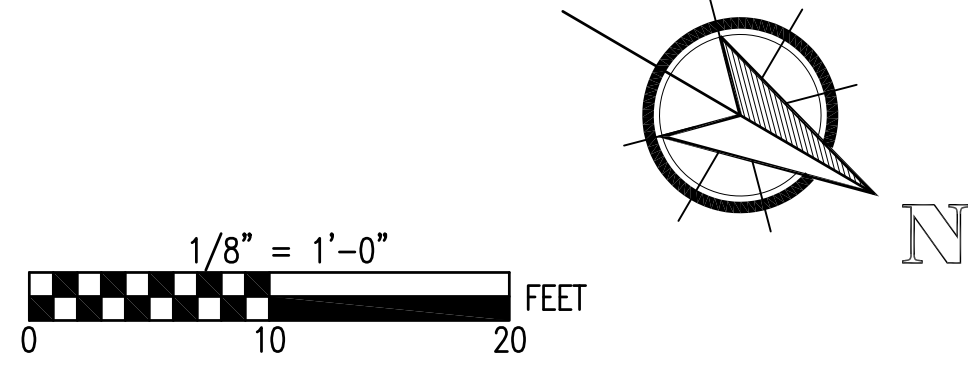
SHEET TITLE:		CEILING PLANS		A-6	
TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150		DEPARTMENT OF THE NAVY MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA		RENOVATE BUILDING M100 CAMP LEJEUNE, NORTH CAROLINA	
DES. Robert L. Smith, III		DR. Steven C. Fender		SUBMITTED BY:	
CHK. Robert L. Smith, III		DESIGN DIR.		APPROVED:	
SATISFACTORY TO:		DATE		SIZE	
8102		F		CODE IDENT. NO.	
80091		NAVFAC DRAWING NO.		60024973	
CONST. CONTR. NO. N40085-19-B-0062		SPEC. 05-19-0062		SHEET 12 OF 45	
SCALE: NOTED		DATE		08/21/2019	

REVISIONS			
SYMBOL		DATE	APPROVED



GENERAL NOTES ON THIS SHEET:

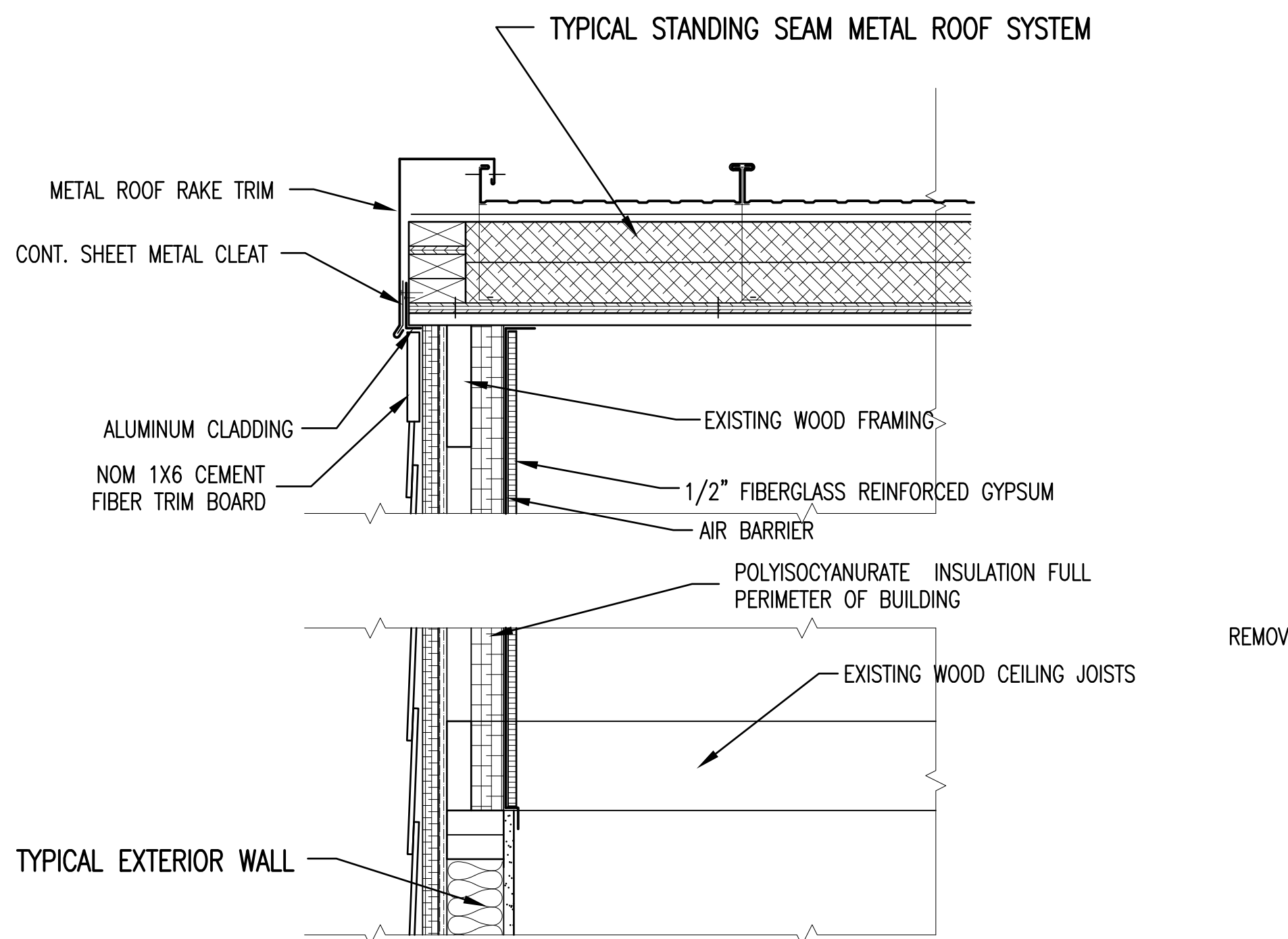
1. REMOVE EXISTING SHINGLES AND ROOF UNDERLAYMENT. EXISTING WOOD ROOF DECK TO REMAIN. REPLACE DAMAGED AREAS OF ROOF DECK AS NECESSARY. INCLUDE IN PROJECT TO REPAIR 4 AREAS, EACH ABOUT 4' X 4' IN SIZE.
2. PROVIDE NEW WOOD ROOF DECKING AND NEW STANDING SEAM METAL ROOF SYSTEM AS SHOWN IN RENOVATED WALL SECTION 2/A5/A8.
3. ROOF IS 6/12 PITCH UNLESS INDICATED OTHERWISE.
4. CONTRACTOR SHALL INCLUDE TO REPLACE 800 S.F. OF EXISTING DETERIORATED ROOF DECK.



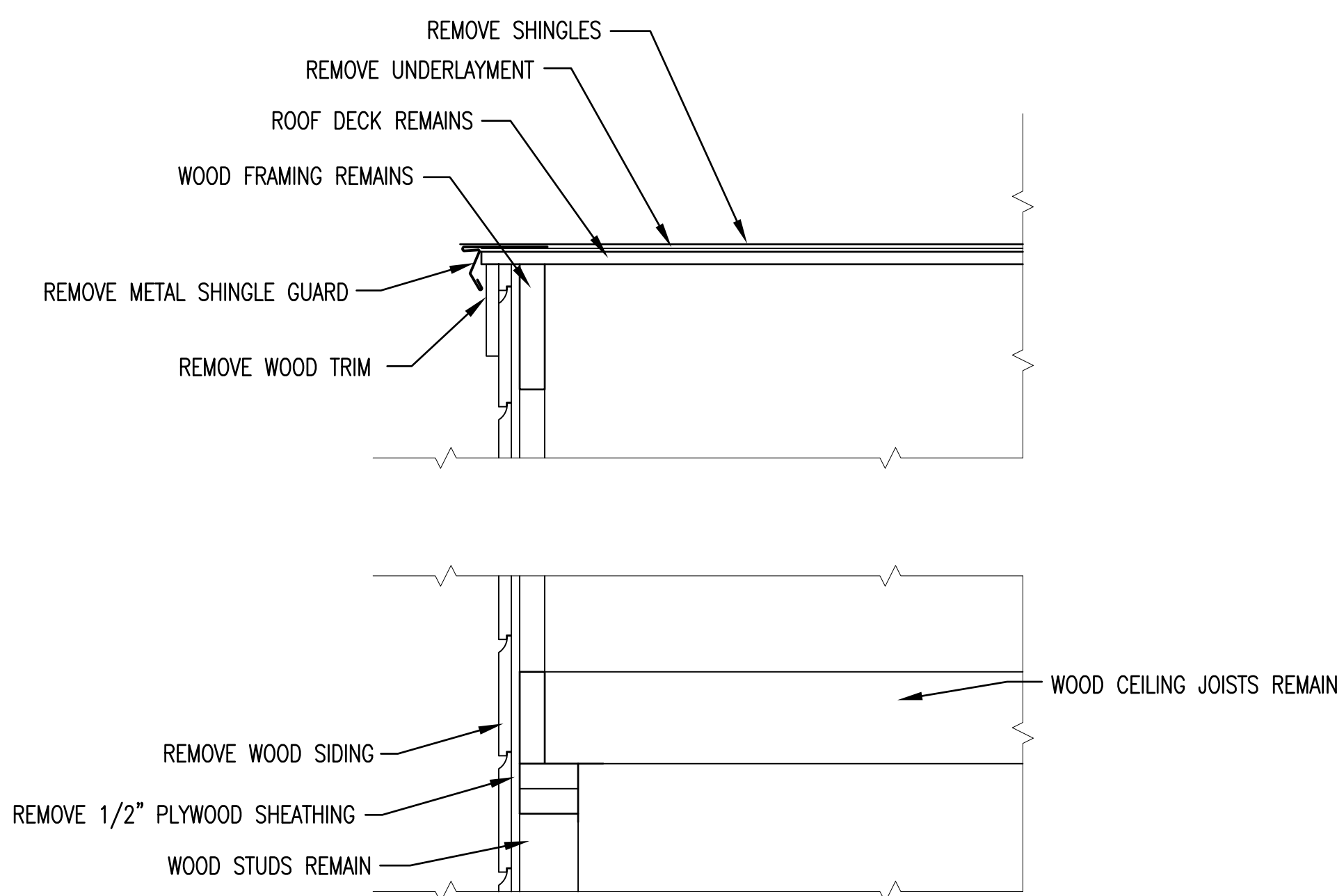
SEE DISCLOSURE OF INFORMATION STATEMENT ON SHEET T-1

	SHEET TITLE: ROOF PLANS		A-7	
	TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150		DEPARTMENT OF THE NAVY MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA	
	DES. Robert L. Smith, III DR. Steven C. Fender CHK. Robert L. Smith, III		RENOVATE BUILDING M100 CAMP LEJEUNE, NORTH CAROLINA	
	SUBMITTED BY: DESIGN DIR. APPROVED: _____ DATE _____ SATISFACTORY TO: _____ DATE _____		SIZE F	CODE IDENT. NO. 80091
		SCALE: NOTED	SPEC. 05-19-0062	SHEET 13 OF 45

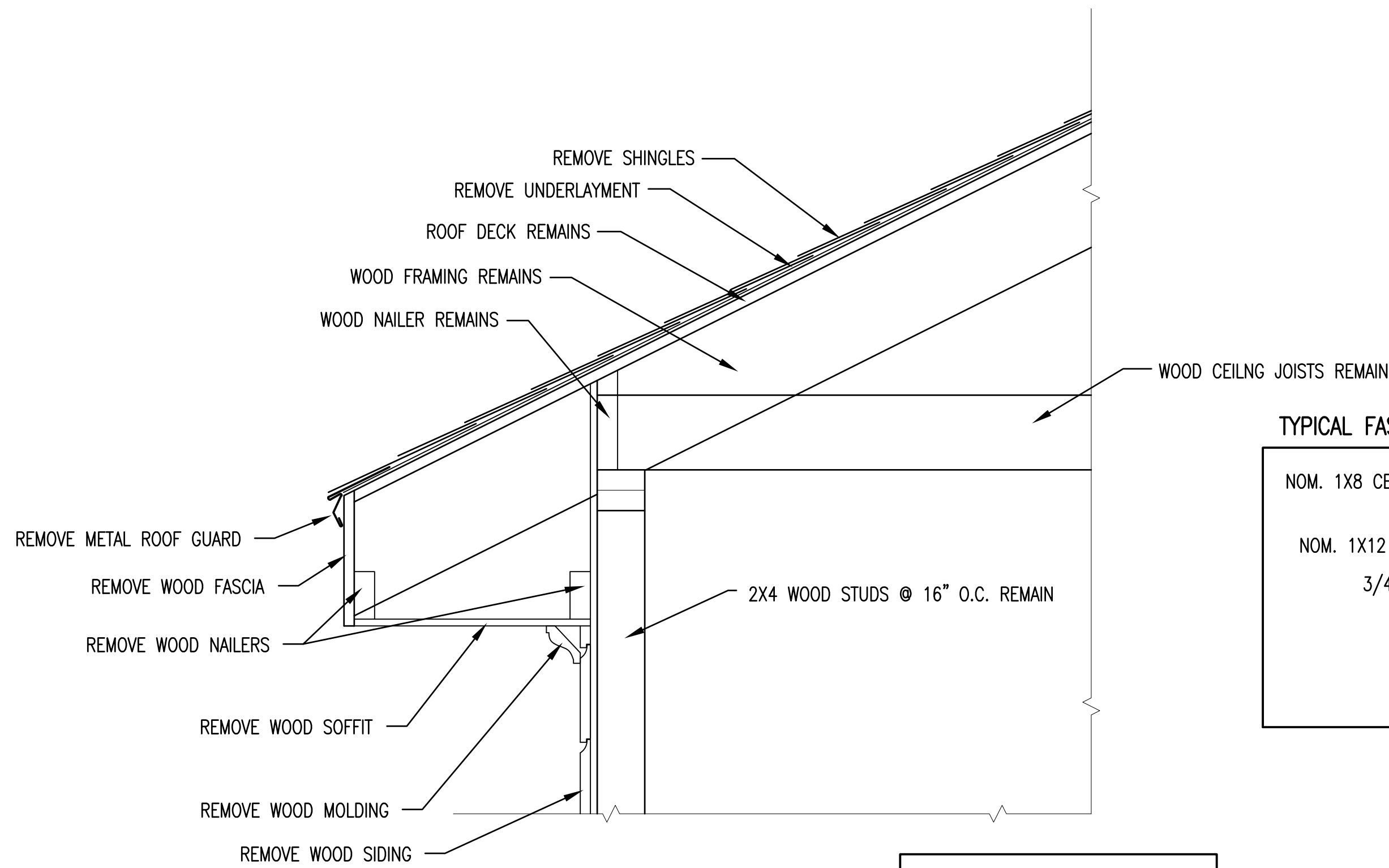
REVISIONS			
SYN.		DATE	APPROVED



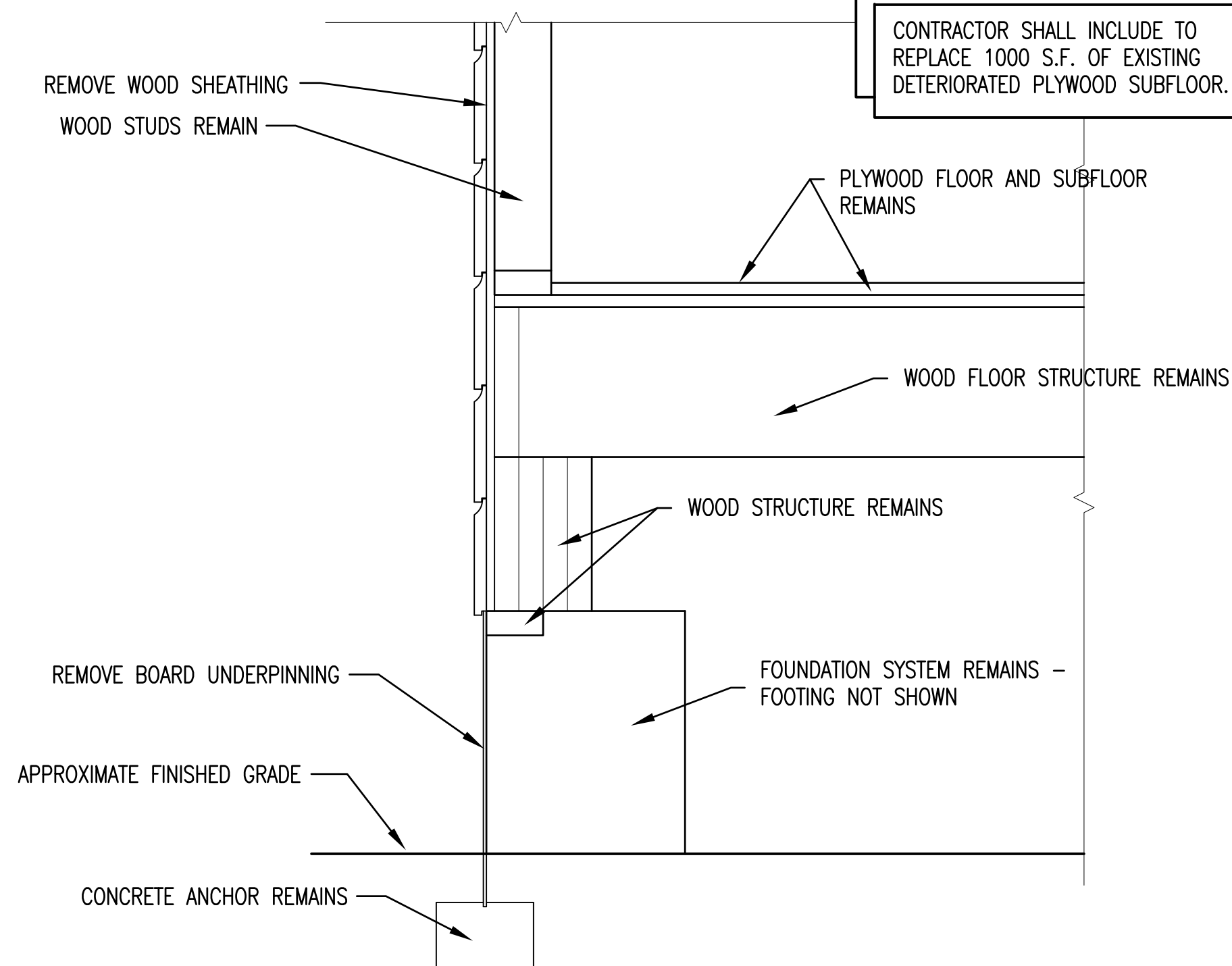
RENOVATED RAKE SECTION 4
1 1/2" = 1'-0" A7/A8



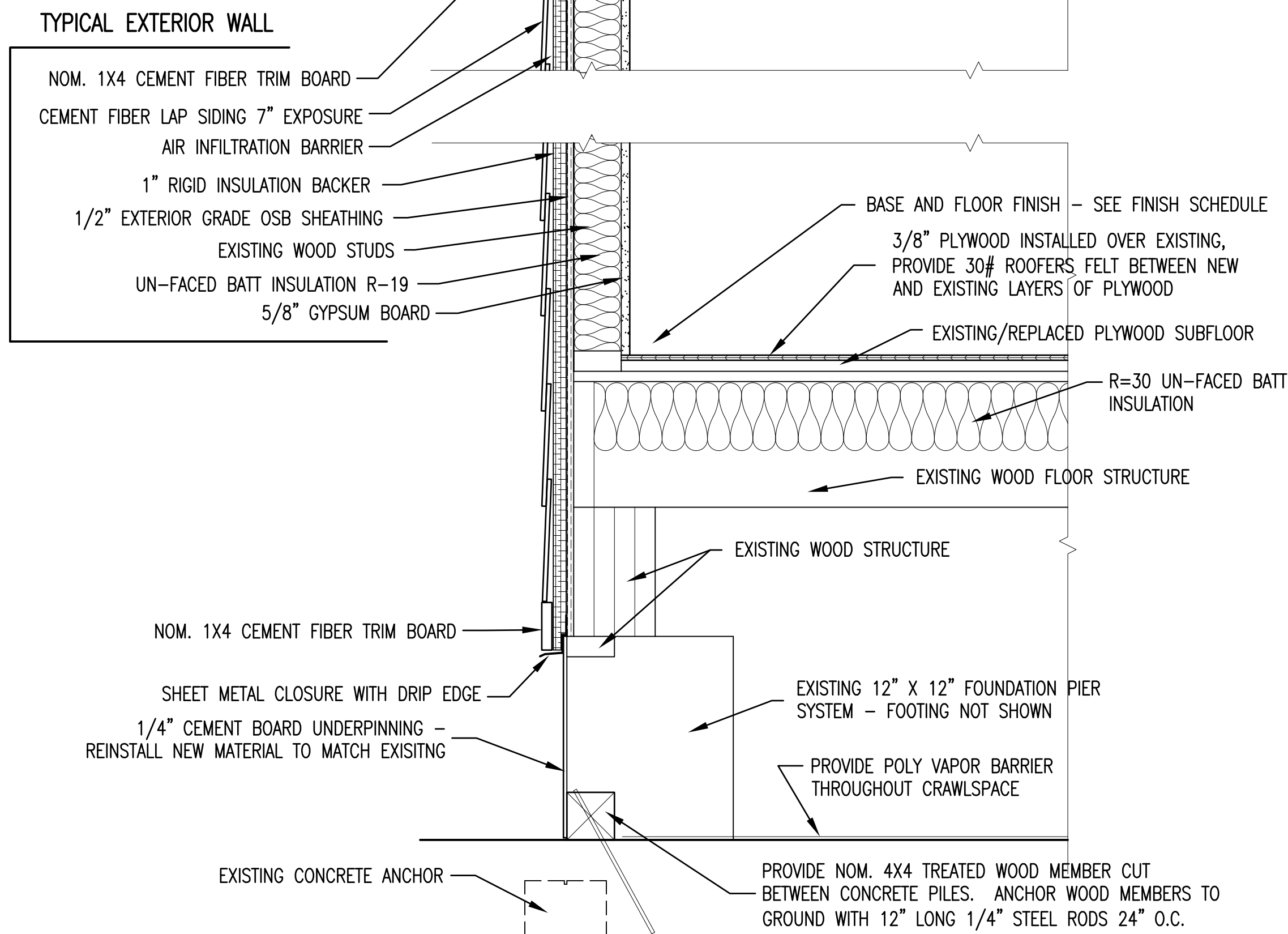
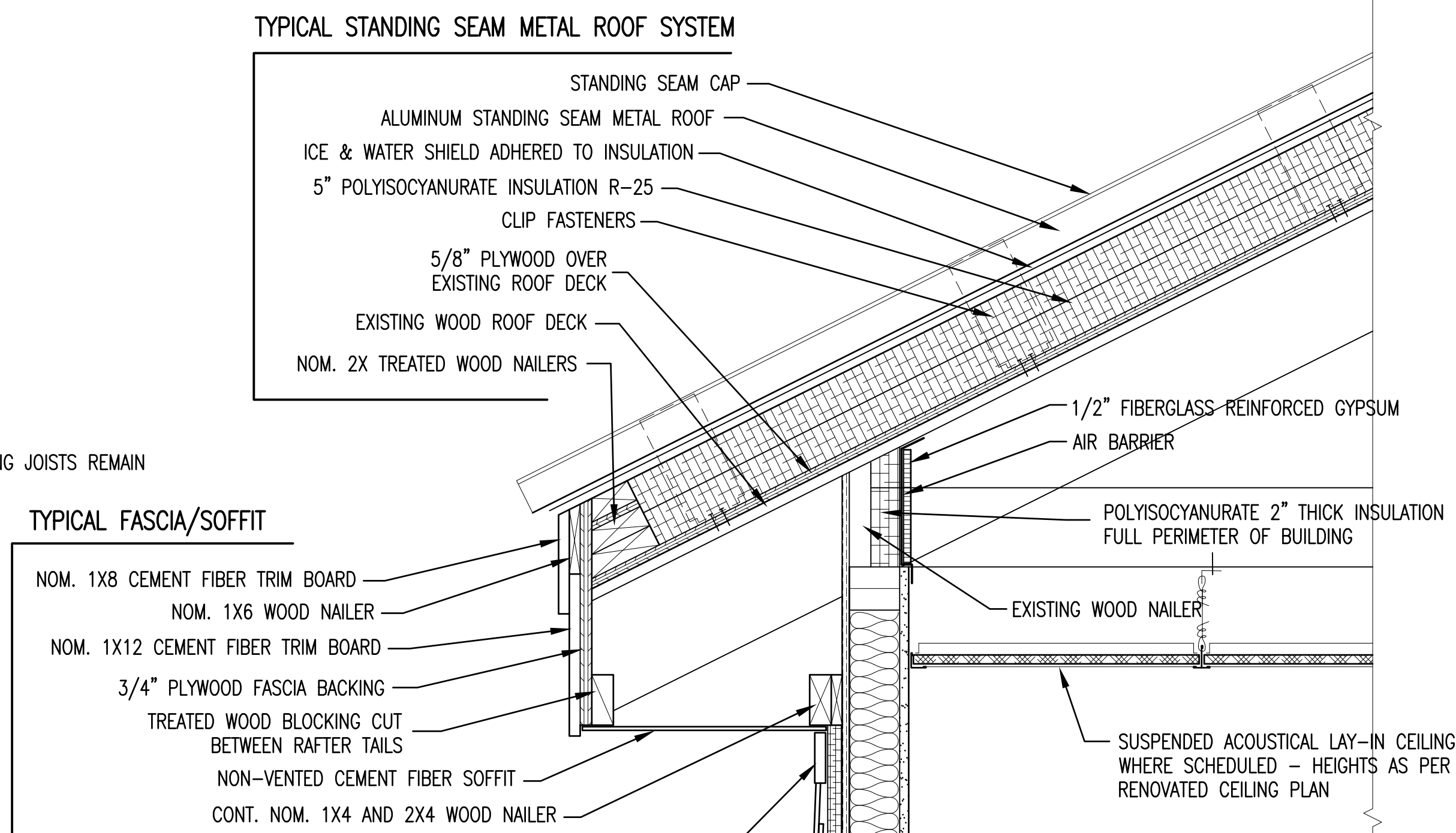
EXISTING RAKE SECTION 3
1 1/2" = 1'-0" A7/A8



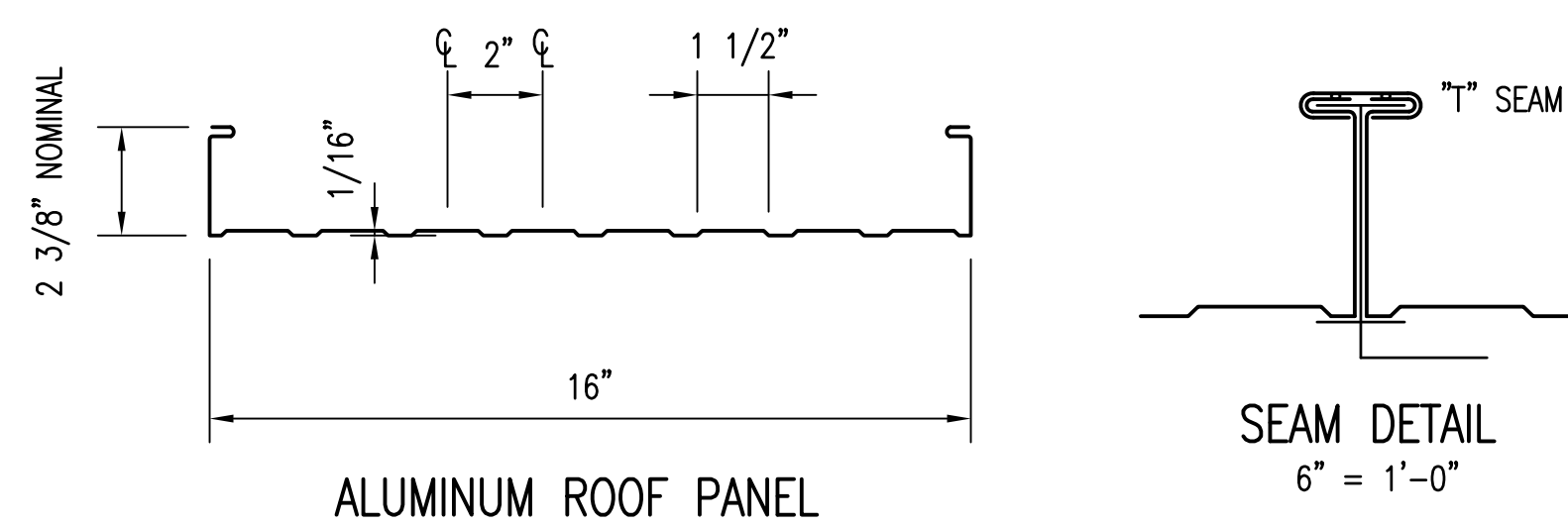
CONTRACTOR SHALL INCLUDE TO REPLACE 1000 S.F. OF EXISTING DETERIORATED PLYWOOD SUBFLOOR.



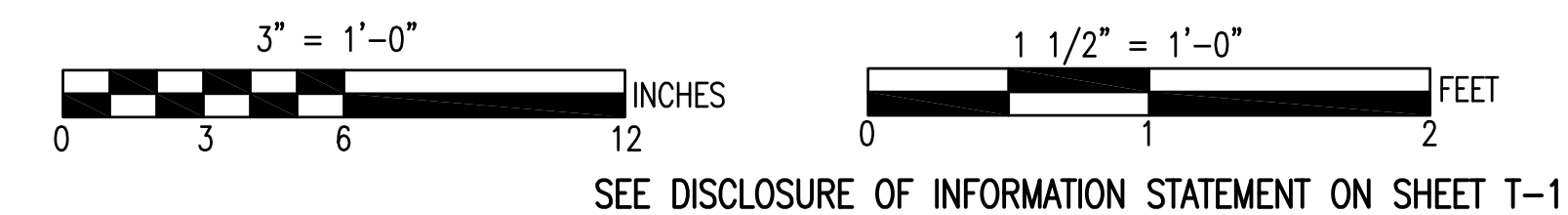
EXISTING WALL SECTION 1
1 1/2" = 1'-0" A5/A8



RENOVATED WALL SECTION 2
1 1/2" = 1'-0" A5/A8

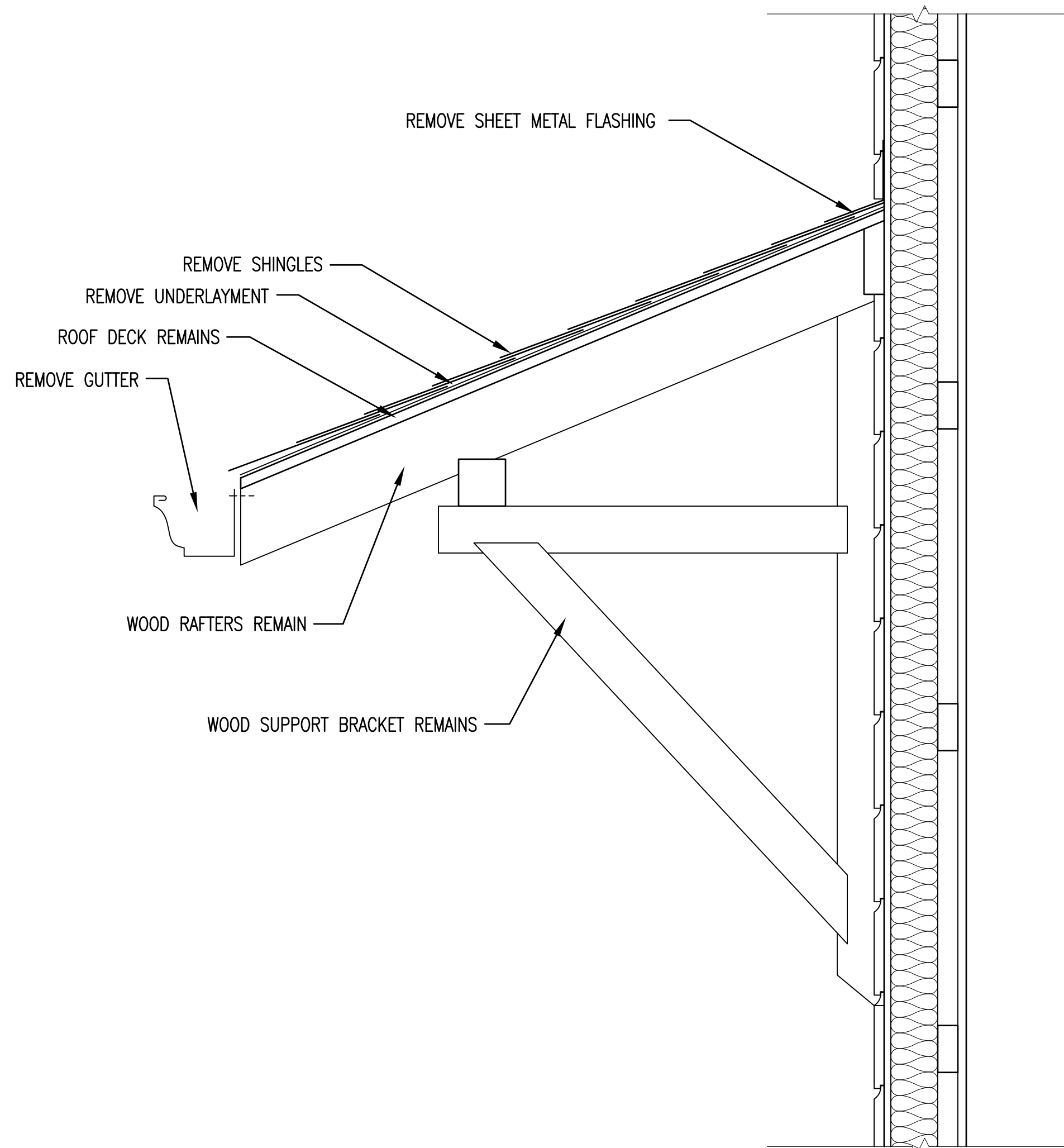
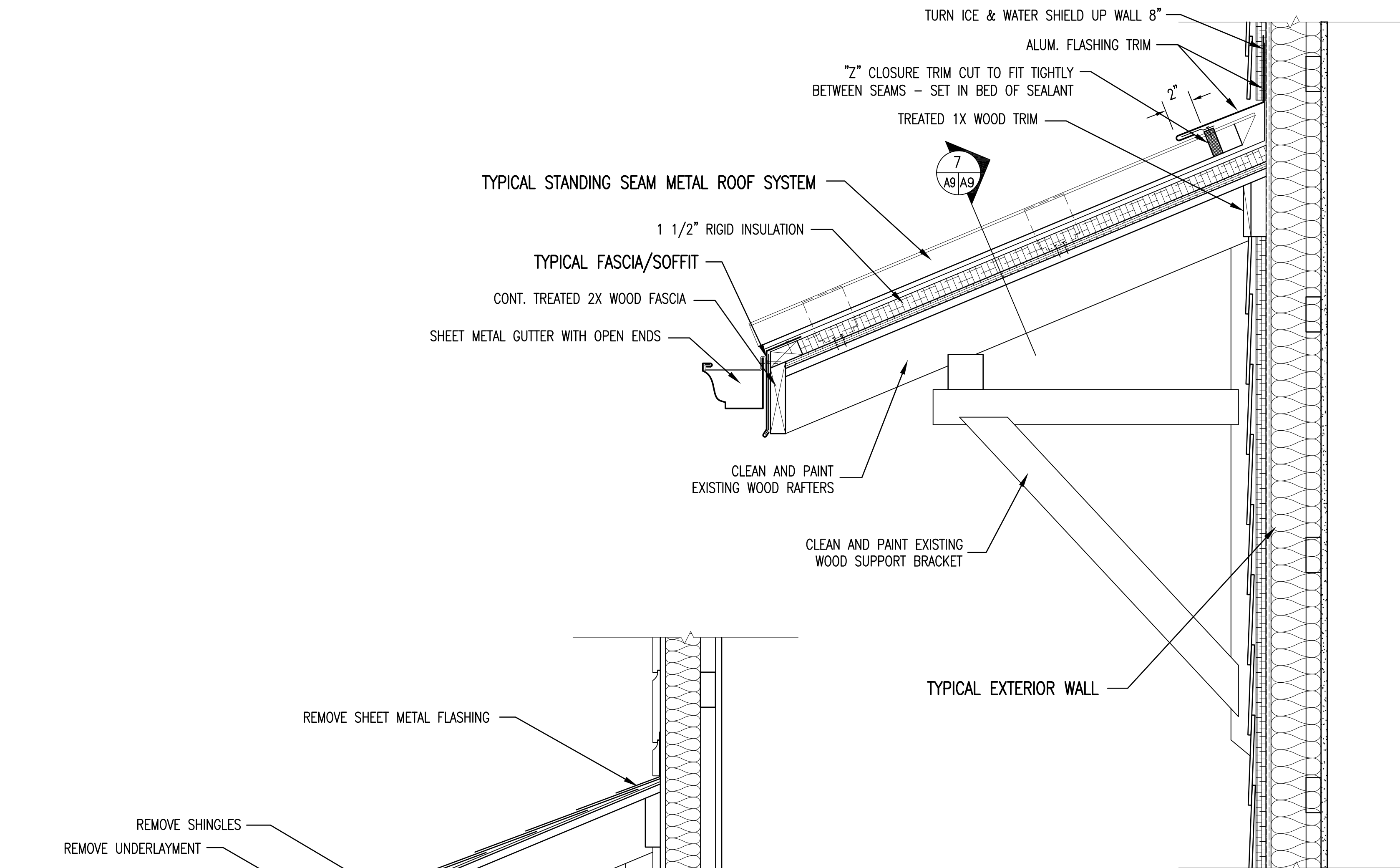


STANDING SEAM METAL ROOF SYSTEM AND ROOF COMPONENT CONFIGURATIONS 5
3" = 1'-0" A8/A8



 TALLEY & SMITH ARCHITECTURE INC. CERT. NO. 50153 NORTH CAROLINA SHELBY, N.C.	SHEET TITLE:		DETAIL SECTIONS		A-8
	TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150		DEPARTMENT OF THE NAVY MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA		
 ROBERT L. SMITH REGISTERED ARCHITECT NORTH CAROLINA SHELBY, N.C.	DES. Robert L. Smith, III		RENOVATE BUILDING M100		60024975
	DR. Steven C. Fender		CAMP LEJEUNE, NORTH CAROLINA		
CHK. Robert L. Smith, III		SUBMITTED BY:		NAVFAC DRAWING NO.	
DESIGN DIR.		APPROVED:		CODE IDENT. NO. 80091	
SATISFACTORY TO:		DATE		CONST. CONTR. NO. N40085-19-B-0062	
08/21/2019		SCALE: NOTED		SPEC. 05-19-0062	
				SHEET 14 OF 45	

REVISIONS			
SYN.		DATE	APPROVED



NOTES SAME AS DETAIL 1/A5/A8 UNLESS INDICATED OTHERWISE

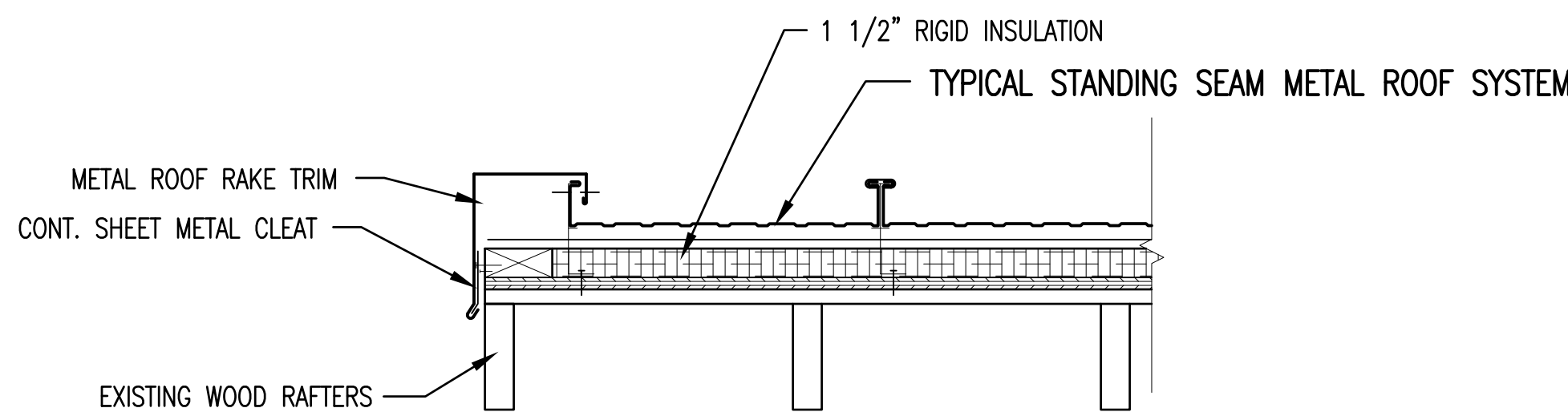
EXISTING AWNING SECTION

1 1/2" = 1'-0"

NOTES SAME AS DETAIL 2/A5/A8 UNLESS INDICATED OTHERWISE

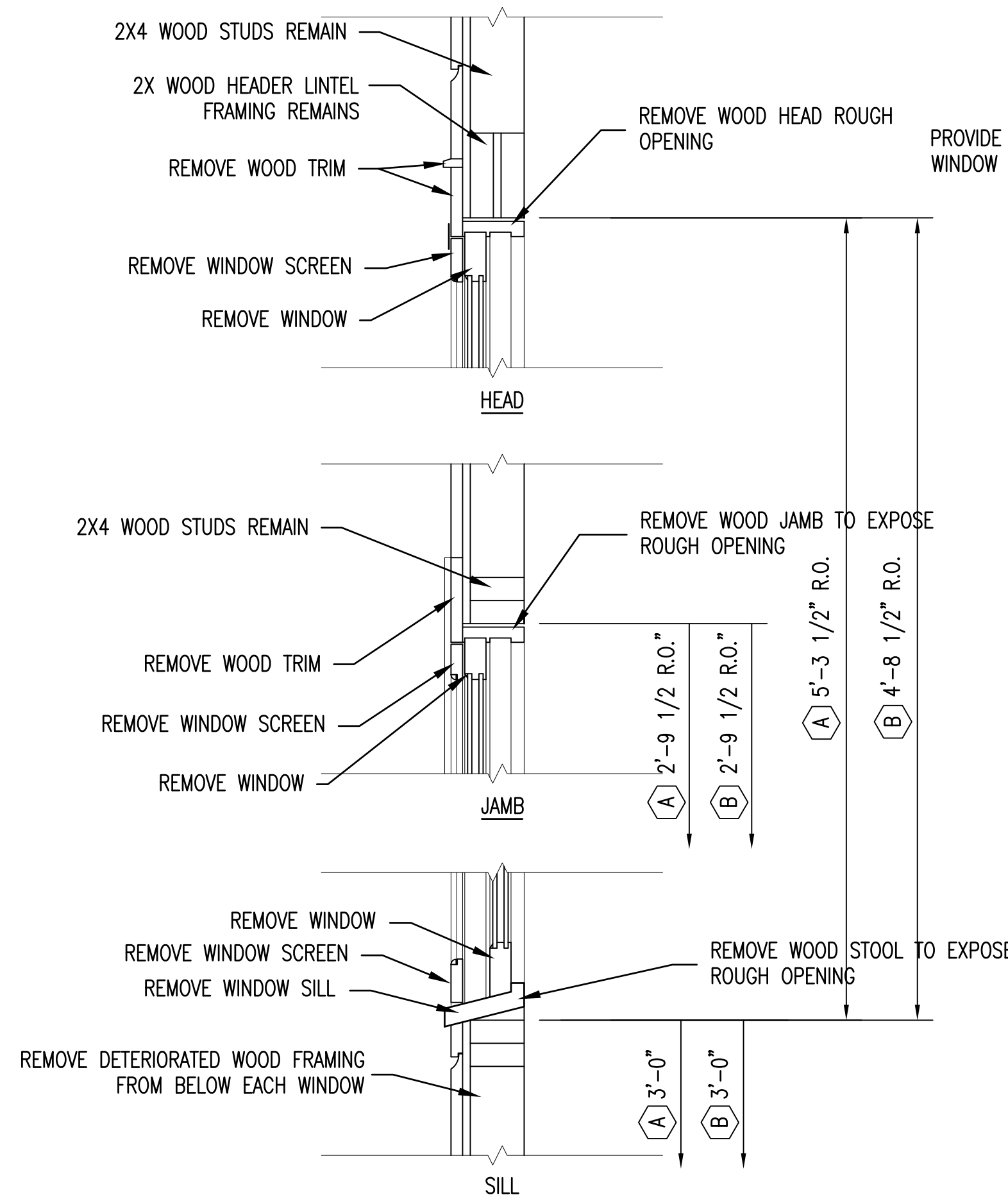
RENOVATED AWNING SECTION

1 1/2" = 1'-0"



RENOVATED AWNING SECTION

1 1/2" = 1'-0"



NOTES SAME AS DETAIL 1/A5/A8 UNLESS INDICATED OTHERWISE

EXISTING WINDOW DETAIL

FILED VERIFY EXISTING OPENINGS

1 1/2" = 1'-0"

CORDED ROLLER BLACKOUT SHADE NOTES:

BASIS OF DESIGN IS THE SIGNATURE BLACKOUT VINYL ROLLER SHADES AVAILABLE FROM AWARDBLINDS.COM. EQUAL PRODUCTS BY OTHER REPUTABLE MANUFACTURERS ARE ACCEPTABLE.

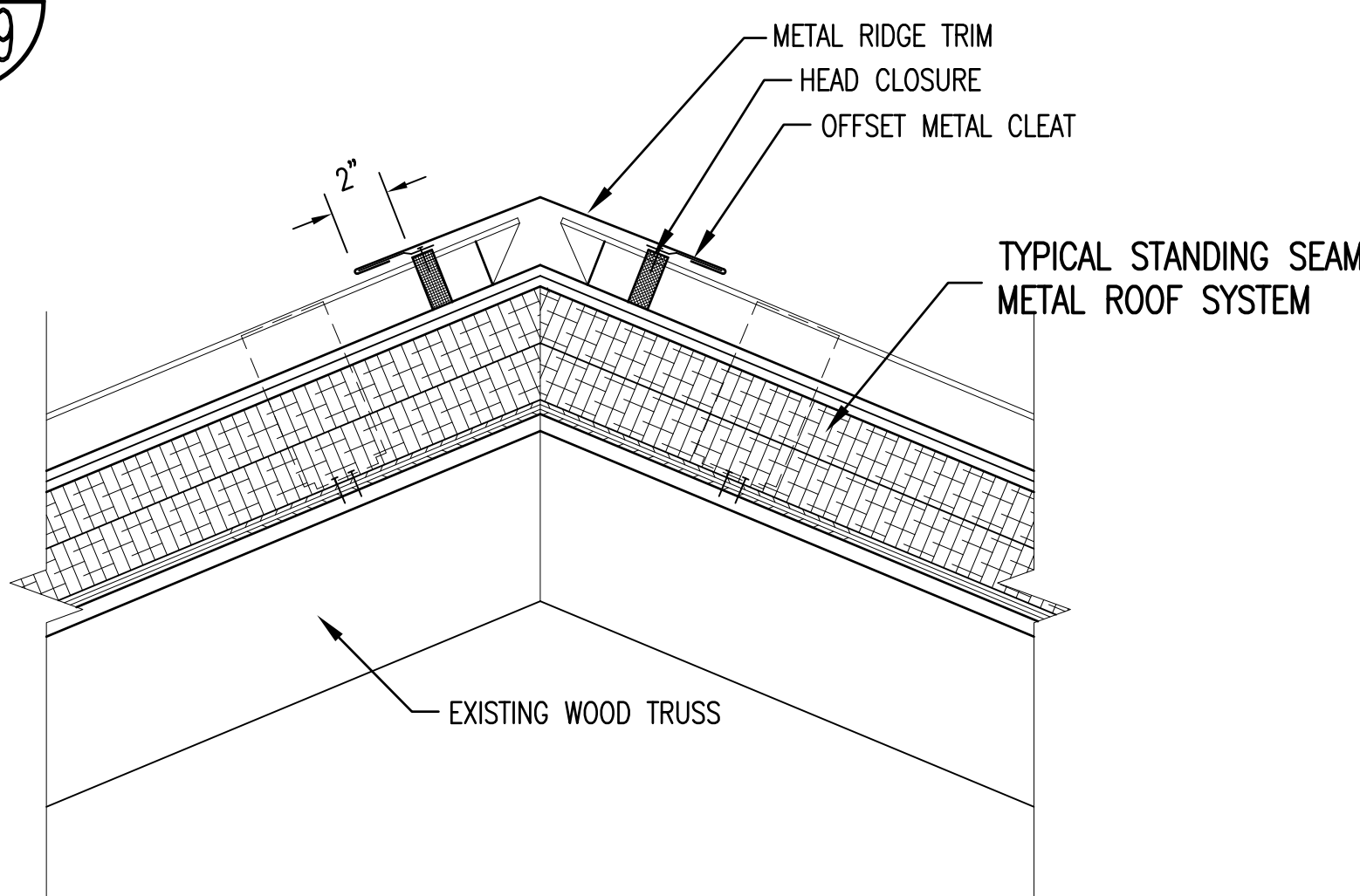
MANUAL OPERATION WITH CONTINUOUS CORD LOOP.

STANDARD ROLL CONFIGURATION WITH SHADE FLUSH AGAINST WINDOW TRIM.

INCLUDE SQUARE FASCIA VALANCE (BLACK).

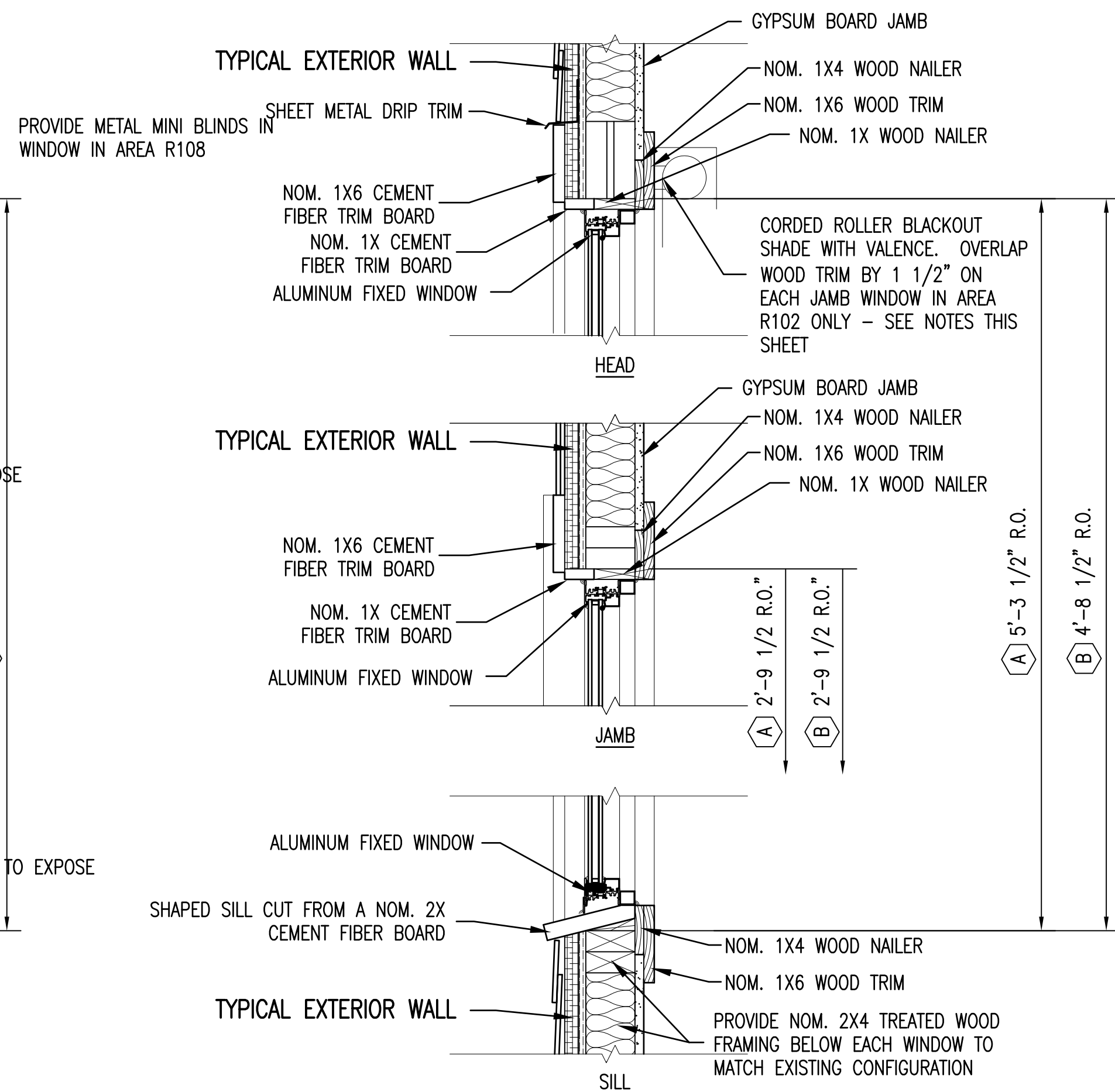
INCLUDE EXTERNAL ALUMINUM HEM BAR (BLACK).

PEWTER COLOR SHADE FABRIC.



RENOVATED RIDGE DETAIL SECTION

1 1/2" = 1'-0"

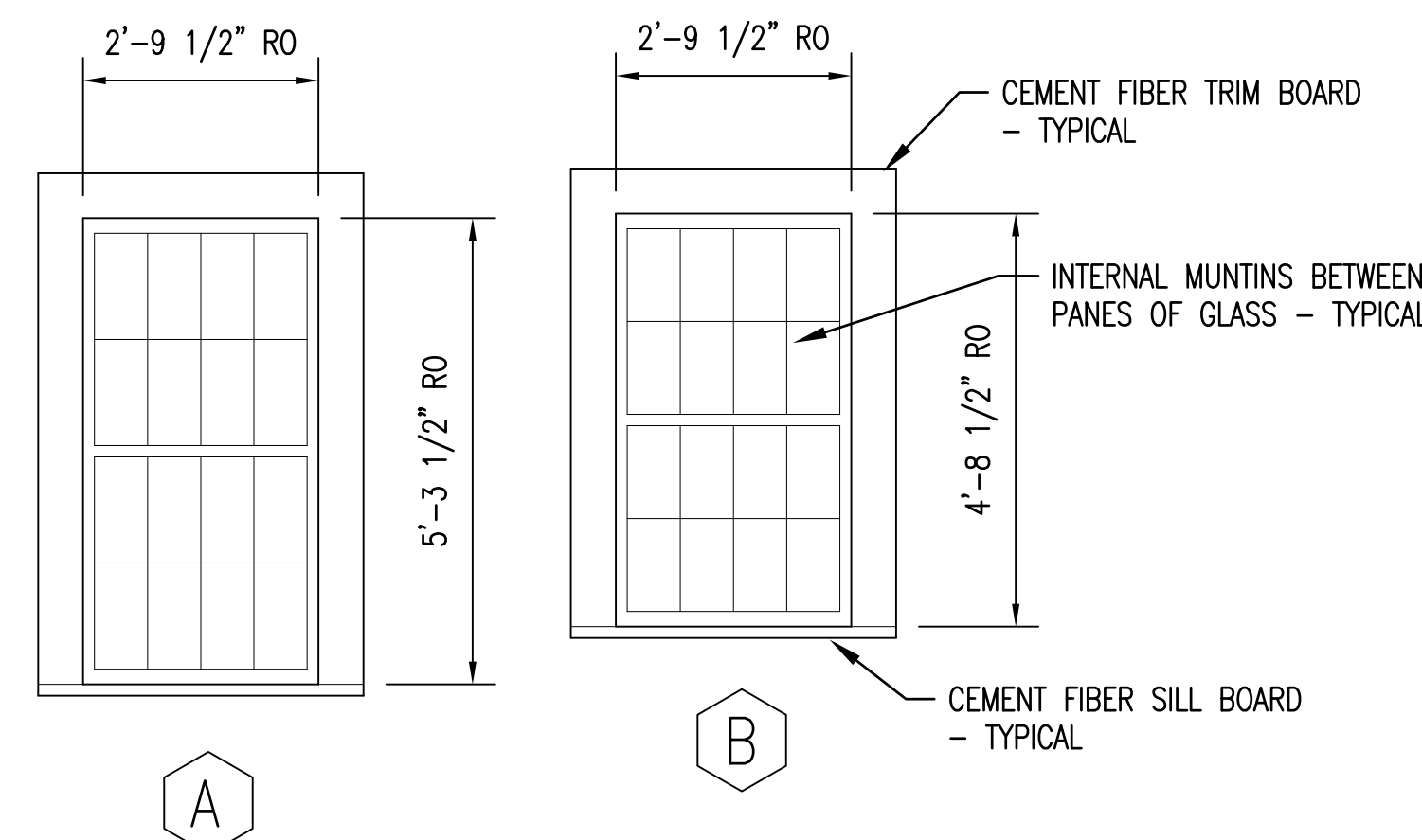


NOTES SAME AS DETAIL 2/A5/A8 UNLESS INDICATED OTHERWISE

RENOVATED WINDOW DETAIL

SEE RENOVATED WINDOW ELEVATIONS 3/A9/A9

1 1/2" = 1'-0"

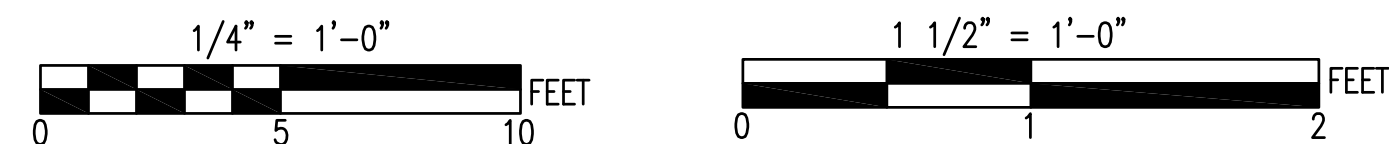


FIXED ALUMINUM FRAME WINDOWS
CONFIGURED TO GIVE THE APPEARANCE OF SINGLE HUNG WINDOWS FROM A DISTANCE
BLAST RESISTANT
FIELD VERIFY EXISTING WINDOW ROUGH OPENINGS

RENOVATED WINDOW ELEVATIONS

1/2" = 1'-0"

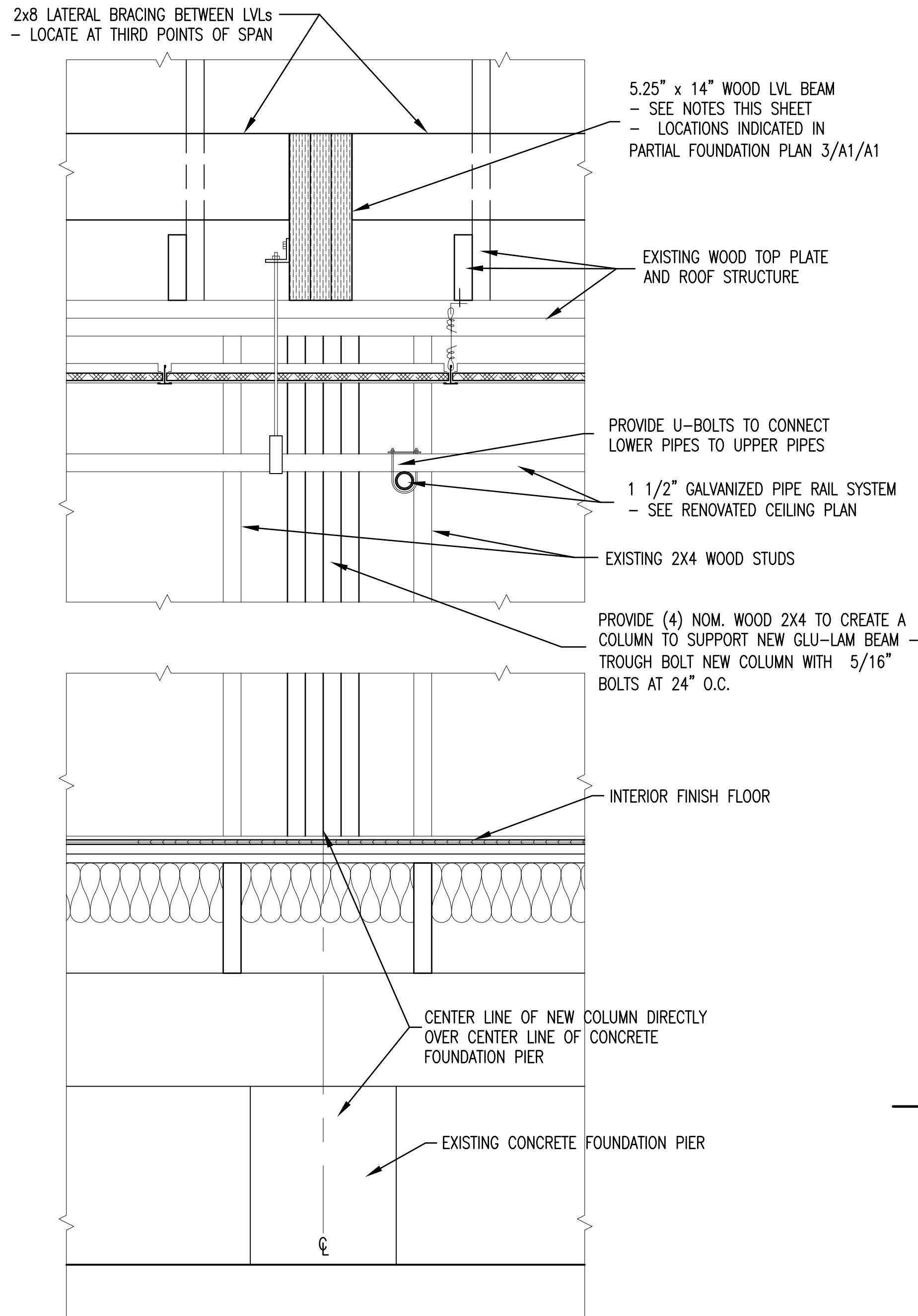
1. PROVIDE OBSCURE GLASS IN WINDOWS IN AREAS R104, R105, R106, R107, AND R109.
2. PROVIDE METAL MINI BLINDS IN WINDOW IN AREA R108.



SEE DISCLOSURE OF INFORMATION STATEMENT ON SHEET T-1

	SHEET TITLE: DETAILS AND WINDOW SECTIONS		A-9	
	TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150 DES. Robert L. Smith, III DR. Steven C. Fender CHK. Robert L. Smith, III SUBMITTED BY: DESIGN DIR. APPROVED:		DEPARTMENT OF THE NAVY MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA RENOVATE BUILDING M100 CAMP LEJEUNE, NORTH CAROLINA	
	SATISFACTORY TO:	DATE:	SIZE: E1	CODE IDENT. NO. 80091
08/21/2019	SCALE: NOTED	SPEC. 05-19-0062	NAVFAC DRAWING NO. 60024976	CONST. CONTR. NO. N40085-19-B-0062
				SHEET 15 OF 45

REVISIONS			
SYN.		DATE	APPROVED

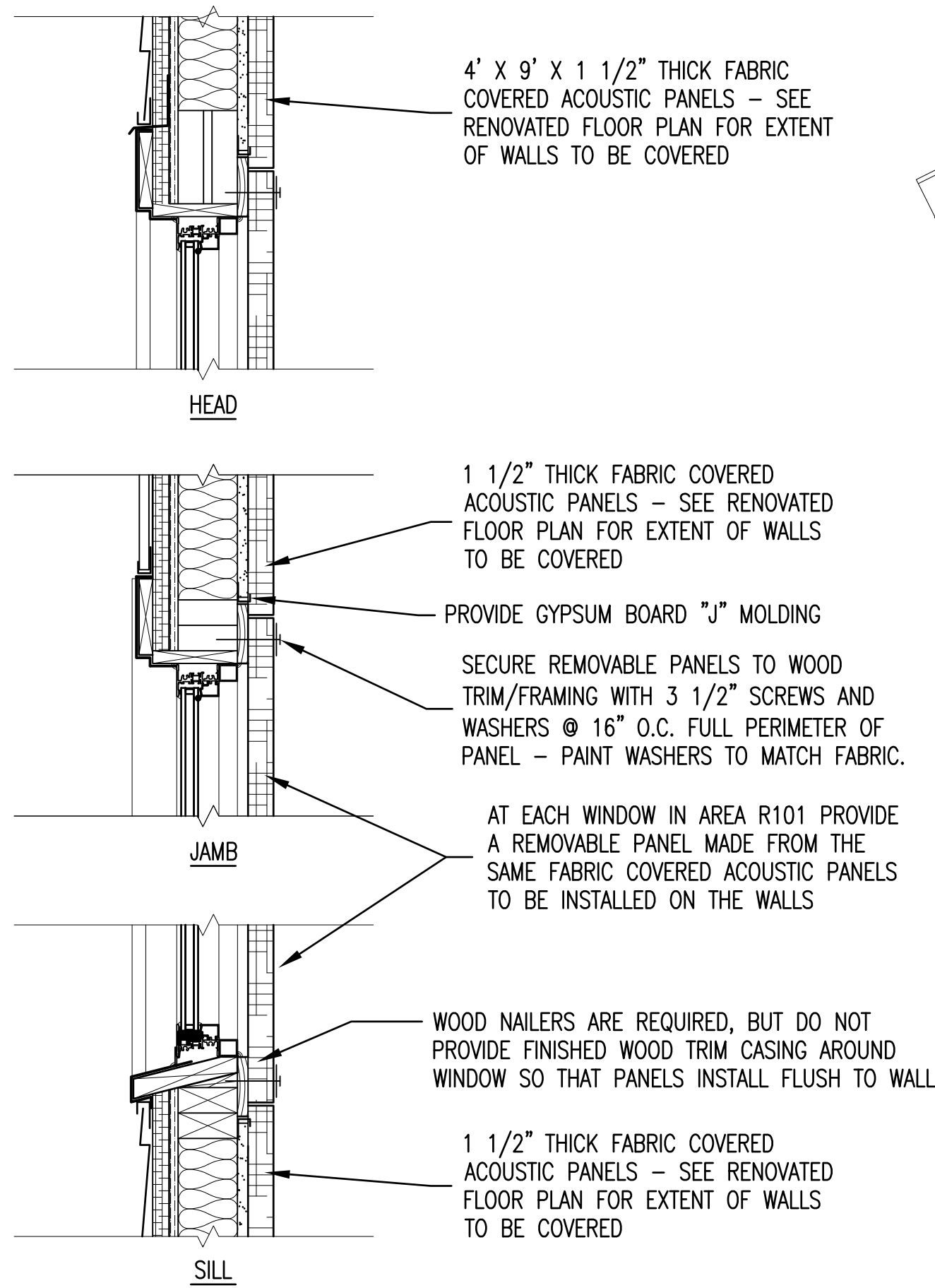


NOTES SAME AS DETAIL 2/A5/A8 UNLESS INDICATED OTHERWISE

RENOVATED DETAIL SECTION 4

THIS DETAIL APPLIES TO AREAS R101

1 1/2" = 1'-0"

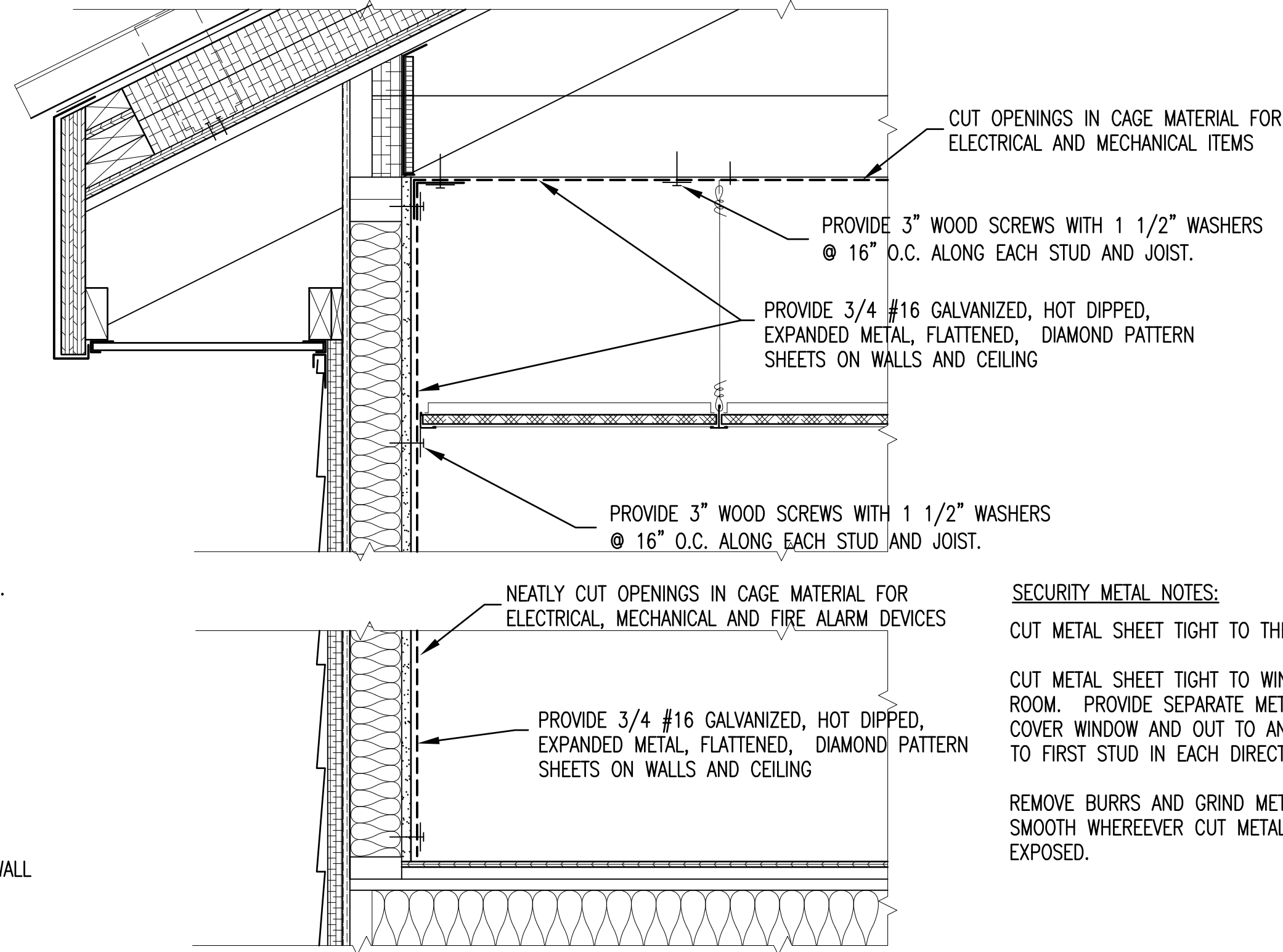


NOTES SAME AS DETAIL 2/A2/A9 UNLESS INDICATED OTHERWISE

RENOVATED DETAIL SECTION 3

THIS DETAIL APPLIES TO ALL WINDOWS IN AREA R101

1 1/2" = 1'-0"



NOTES SAME AS DETAIL 2/A5/A8 UNLESS INDICATED OTHERWISE

RENOVATED DETAIL SECTION 1

THIS DETAIL APPLIES TO AREAS R105 AND R107

1 1/2" = 1'-0"



LVL BEAM NOTES:

LVL: 3 PLIES 1.75" x 14"

DEFLECTION: LL = 480, TL = 240, TL DEFLECTION 1.199" (L/276)

DESIGN LOAD: 200 PLF (UNIFORM)

FASTENERS: FASTEN ALL PLIES USING 3 ROWS OF 10d BOX NAILS AT 12" O.C. MAXIMUM END DISTANCE NOT TO EXCEED 6".

BRACING: PROVIDE LATERAL BRACING AT THIRD POINTS OF SPAN.

ACOUSTIC WALL PANEL NOTES:

BASIS OF DESIGN IS MBI COLORSONIX WALL PANEL SERIES 1800F-1560-ZIN. EQUAL PANELS BY OTHER REPUTABLE MANUFACTURERS ARE ACCEPTABLE.

1 1/2" THICK PANELS AVAILABLE IN RECTANGULAR SIZES UP TO 4' x 10'.

CORE: 6-7# FIBERGLASS.

SURFACE FINISH: POLYESTER FABRIC.

COLOR: TO BE SELECTED FROM MANUFACTURER'S STANDARD AVAILABLE COLORS.

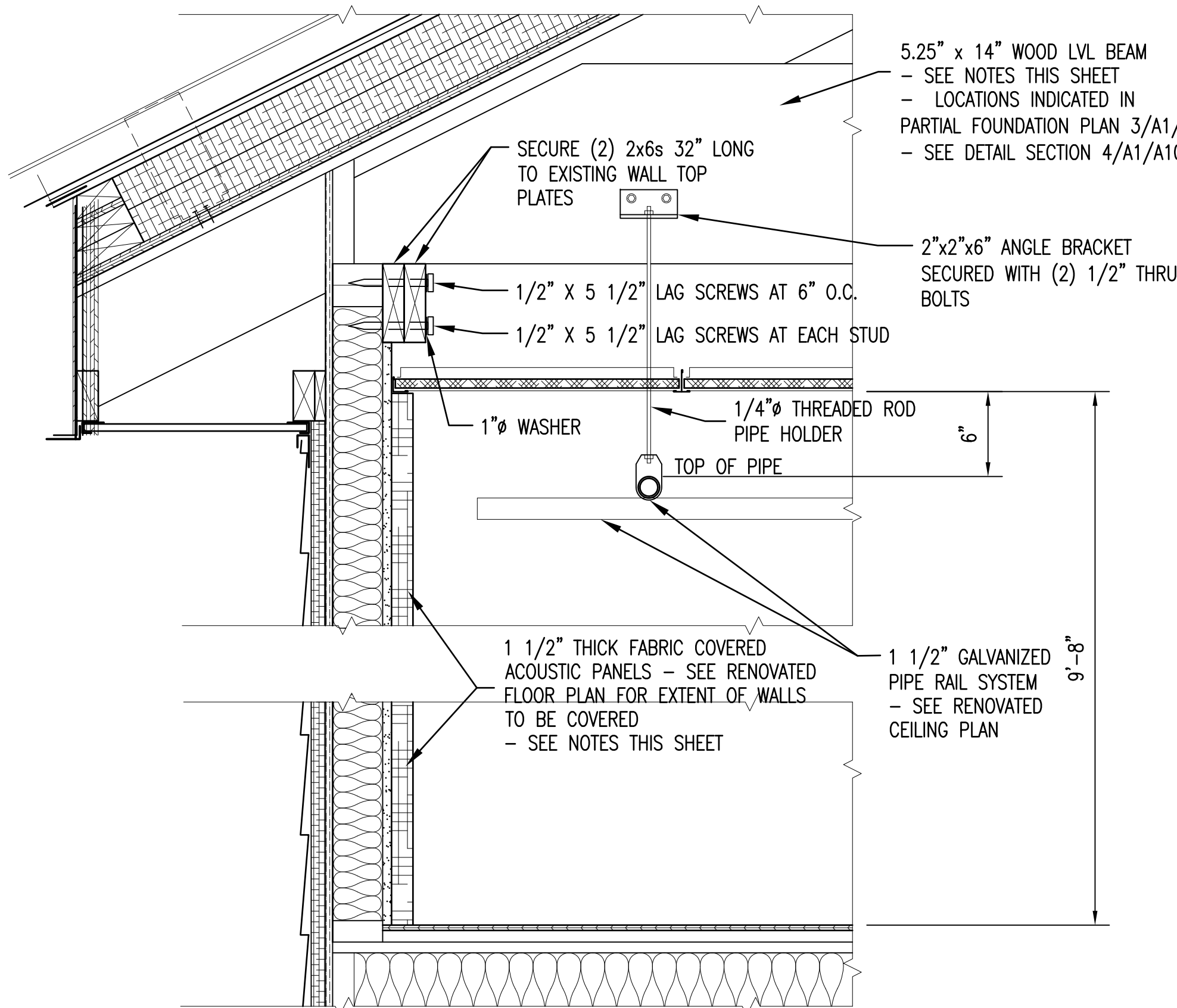
EDGES: SQUARE EDGE, CHEMICALLY HARDENED.

ACOUSTICAL ABSORPTION PERFORMANCE: 0.90 N.R.C. OR HIGHER.

FINISH RATING: CLASS A, PER ASTM E84 25/0/50.

MOUNTING: "Z" CLIP MOUNTING SYSTEM.

INSTALLATION: INSTALLATION CONTRACTOR SHALL HAVE AT LEAST 5 YEARS' EXPERIENCE INSTALLING ACOUSTICAL PANEL SYSTEMS. PROVIDE DOCUMENTATION WITH A LIST OF PROJECTS AND REFERENCES.

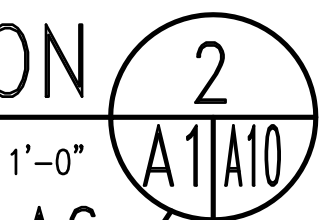


NOTES SAME AS DETAIL 2/A5/A8 UNLESS INDICATED OTHERWISE

RENOVATED DETAIL SECTION 2

THIS DETAIL APPLIES TO AREAS R101


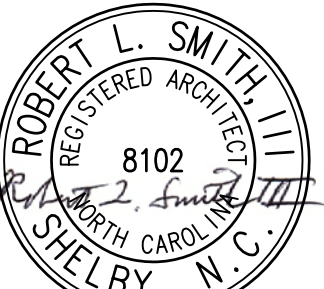
1 1/2" = 1'-0"



A6



SEE DISCLOSURE OF INFORMATION STATEMENT ON SHEET T-1

 TALLEY & SMITH ARCHITECTURE INC. CERT. NO. 50153 REGISTERED ARCHITECTURAL FIRM NORTH CAROLINA SHELBY, N.C.	SHEET TITLE: DETAIL SECTIONS		A-10	
	TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150		DEPARTMENT OF THE NAVY MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA	
 ROBERT L. SMITH REGISTERED ARCHITECT NORTH CAROLINA SHELBY, N.C.	DES. Robert L. Smith, III		RENOVATE BUILDING M100 CAMP LEJEUNE, NORTH CAROLINA	
	DR. Steven C. Fender			
CHK. Robert L. Smith, III				
SUBMITTED BY:				
DESIGN DIR.				
APPROVED:		DATE	SIZE E1	CODE IDENT. NO. 80091
SATISFACTORY TO:		DATE	SCALE: NOTED	SPEC. 05-19-0062
08/21/2019				NAVFAC DRAWING NO. 60024977 CONST. CONTR. NO. N40085-19-B-0062 SHEET 16 OF 45

GENERAL:

1. REFER TO FA-4 FOR DETAIL DIAGRAMS AND SEQUENCE OF OPERATIONS MATRIX.
2. THE LAYOUT SHOWN, IS TO CONVEY THE DESIGN INTENT. THE FINAL SYSTEM LAYOUT SHALL BE COMPLETED BY THE SUBCONTRACTOR IN ACCORDANCE WITH LISTED DESIGN CRITERIA.
3. SUBCONTRACTOR RESPONSIBLE FOR SPEAKER LAYOUT PROVIDING THE REQUIRED CIS OF 0.7.

DESIGN CRITERIA - FIRE ALARM/MASS NOTIFICATION SYS.

- THE SYSTEM SHALL COMPLY WITH THE FOLLOWING CODES AND STANDARDS.
1. NFPA 70 NATIONAL ELECTRICAL CODE - 2020 ED.
2. NFPA 72 NATIONAL FIRE ALARM AND SIGNALING CODE - 2019 ED.
3. NFPA 101 LIFE SAFETY CODE - 2018 ED.
4. UFC 1-200-01 GENERAL BUILDING REQUIREMENTS WITH CHANGE 2, 1 NOV 2018.
5. UFC 3-600-01 DESIGN FIRE PROTECTION ENGINEERING FOR FACILITIES WITH CHANGE 3, 10 MAY 2019.
6. UFC 3-520-01 INTERIOR ELECTRICAL SYSTEM WITH CHANGE 1, 20 MARCH 2019.
7. UFC 4-021-01 DESIGN AND O&M: MASS NOTIFICATION SYSTEMS WITH CHANGE 1, 1 JAN 2010.

DEMOLITION NOTES:

1. REMOVE EXISTING FIRE ALARM SYSTEM COMPLETE, REMOVE JUNCTION BOXES, AND ASSOCIATED WIRING.
2. REMOVE ABANDONED CONDUIT WHERE NOT EMBEDDED IN MASONRY WALLS OR CONCRETE SLABS.
3. FIELD VERIFY EXISTING CONDITIONS THAT MAY AFFECT THE SYSTEM OPERATION, INSTALLATION, OR COMPLIANCE WITH THE DESIGN DRAWINGS AND NOTIFY THE CONTRACTING OFFICER PRIOR TO BEGINNING WORK.
4. DAMAGE CAUSED BY DEMOLITION MUST BE REPAIRED (I.E. CEILING TILE, WALL FINISHES, SCREW HOLES, HOLES LEFT FROM CONDUIT, DEVICE/EQUIPMENT REMOVAL, ETC.).

CONTROL PANEL:

1. THE FIRE ALARM /MASS NOTIFICATION CONTROL PANEL (FMCP) SHALL BE A SITE PROGRAMMABLE ADDRESSABLE SYSTEM WITH VOICE EVACUATION.
2. THE FMCP SHALL BE LOCATED IN AN YEAR-ROUND ENVIRONMENTALLY CONDITIONED SPACE AND SEMI-RECESSED WHEN IN A FINISHED SPACE.
3. THE FMCP SHALL HAVE AN 80 CHARACTER (MIN.) LCD ALPHANUMERIC DISPLAY AND A 400 EVENT NON-VOLATILE HISTORY LOG MEMORY
4. CABINETS/PANELS (CONTROL, BATTERY, POWER BOOSTER, ETC.) SHALL BE SEMI-RECESSED WHEN LOCATED IN A FINISHED SPACE.
5. ALL CONTROL FUNCTIONS SHALL BE ACCESSIBLE ONLY BY USER CODE OR SECURED BEHIND A LOCKED CABINET.

POWER/BATTERIES:

1. PRIMARY AC POWER TO THE SYSTEM SHALL BE FED FROM A DEDICATED CIRCUIT WITH A RED CIRCUIT BREAKER AND A LOCK OPEN DEVICE.
2. SECONDARY POWER SHALL BE BY RECHARGEABLE BATTERIES SIZED TO OPERATE THE SYSTEM FOR EITHER 48 HRS IN STANDBY/SUPERVISOR MODE WITH AN ADDITIONAL 15 MIN IN ALARM OR 60 MIN FULL ALARM IMMEDIATELY AFTER LOSS OF PRIMARY POWER, WHICHEVER IS GREATER.
3. THE SYSTEM SHALL INCLUDE FULLY AUTOMATIC, SOLID STATE BATTERY CHARGER(S) UTILIZING A TRICKLE-CHARGE OR A FLOAT-CHARGE. THE CHARGER(S) SHALL HAVE THE CAPACITY TO RECHARGE BATTERIES TO 95% OF FULL CHARGE WITHIN 48 HOURS.
4. THE BATTERIES WITH CHARGER(S) SHALL BE HOUSED IN THE FMCP CABINET OR AN ADJACENT BATTERY CABINET THAT IS LOCKED WITH THE SAME KEY AS THE FMCP.
5. PRIMARY POWER TO THE MASS NOTIFICATION TRANSCEIVER SHALL BE FED BY A DEDICATED CIRCUIT WITH A RED CIRCUIT BREAKER AND LOCK OPEN DEVICE. CIRCUIT TO BE LOCATED IN THE SAME ELECTRICAL PANEL AS THE FMCP CIRCUIT.

INITIATING CIRCUITS (SLC):

1. THE INITIATING CIRCUITS SHALL BE CLASS "B".
2. ALL SMOKE DETECTORS CONNECTED TO THE FMCP SHALL HAVE AN ADJUSTABLE ALARM VERIFICATION FEATURE, INITIALLY SET AT 20 SECONDS.
3. ALL SMOKE DETECTORS SHALL BE PHOTO-ELECTRIC UNLESS NOTED OTHERWISE.
4. MANUAL PULL STATIONS SHALL BE ADDRESSABLE DOUBLE ACTION TYPE WITH MECHANICAL RESET FEATURES. IF RESET BY KEY, IT SHALL BE THE SAME AS REQUIRED FOR THE FMCP.

NOTIFICATION CIRCUITS (NAC):

1. THE NOTIFICATION CIRCUITS SHALL BE A CLASS "B".
2. THE AUDIBLE ALARM NOTIFICATION SHALL BE BY VOICE EVACUATION SYSTEM. SPEAKERS SHALL HAVE MANUALLY SELECTABLE MULTI/VARIABLE WATTAGE, 0.25 TO 1.0 WATTS IN 0.25 WATT INCREMENTS. INITIAL SETTING TO BE AT 0.50 WATTS.
3. VOICE MESSAGES SHALL BE FEMALE, AND UTILIZE THE INSTALLATION'S STANDARD SIGNALS AND MESSAGES. MESSAGES SHALL BE APPROVED BY THE SERVING FIRE DEPARTMENT OR AHJ.
4. THE NUMBER AND PLACEMENT OF SPEAKER(S) TO BE SUFFICIENT TO PROVIDE 0.70 (CIS SCORE) AUDIBILITY RATING WITHIN THE AREA WITH ALL DOORS, FIRE SHUTTERS, MOVABLE PARTITIONS, AND SIMILAR DEVICES CLOSED.
5. VISUAL NOTIFICATION SHALL BE PROVIDED IN ALL NORMALLY OCCUPIED, PUBLIC, AND COMMON USE AREAS. OFFICES DESIGNED FOR FOUR OR MORE PERSONS SHALL HAVE VISUAL NOTIFICATION.
6. VISUAL NOTIFICATION SHALL BE PROVIDED IN ALL NORMALLY UNOCCUPIED AREAS GREATER THAN 900 SQ. FT. SUCH AS MECH., ELECTRICAL, STORAGE, COMMUNICATIONS, JANITORS ROOMS, AND SIMILAR SPACES.
7. STROBES SHALL HAVE MANUALLY SELECTABLE CANDELA RATINGS, 15 TO 110 CANDELA. CANDELA RATING SHALL BE BASED ON LOCATION AND QUANTITY IN A ROOM IN ACCORDANCE WITH NFPA 72.
8. VISIBLE NOTIFICATION APPLIANCES SHALL HAVE A CLEAR LENS IN A WHITE HOUSING MARKED "ALERT" IN RED.

WIRING, CONDUIT:

1. ALL CONDUCTORS TO BE RUN IN 3/4" MINIMUM RIGID METAL CONDUIT (EMT). PROVIDE CONDUIT SIZES, QUANTITIES, AND CONFIGURATION IN ACCORDANCE WITH LISTED DESIGN CRITERIA AND APPROVED SHOP DRAWINGS.
2. ALL CONDUCTORS SHALL BE EITHER STRANDED OR SOLID COPPER. 18 AWG MIN FOR SLC AND 16 AWG MIN. FOR NAC CIRCUITS
3. ALL CONDUIT, WIRES, AND CABLES IN FINISHED SPACES SHALL BE CONCEALED IN WALLS, CEILING, AND SIMILAR SPACES.
4. ALL CONDUCTORS TO RUN SPLICE FREE FROM DEVICE TO DEVICE. WIRE NUTS, CRIMPED CONNECTORS, OR TWISTING OF CONDUCTORS IS PROHIBITED.
5. RUN ALL WIRING TO AND WITHIN THE CONTROL PANELS IN THE VERTICAL OR HORIZONTAL PLANE, MAKE ALL TURNS AT 90 DEGREES ANGLES, AND TIGHTLY BUNDLED AND WRAPPED. IDENTIFY ALL CONDUCTORS INDIVIDUALLY WITH PERMANENT PRINTED LABELS AFFIXED WITH SHRINK WRAP.
6. DEVICE CONNECTIONS SHALL BE THE DEVICE SCREW TERMINALS OR TERMINAL STRIPS MOUNTED WITHIN THE JUNCTION BOX.
7. ALL CONDUIT, JUNCTION/BACK BOXES, COVERS, AND COUPLINGS ARE TO BE FACTORY PAINTED RED IN UNFINISHED AREAS (E.G. ABOVE CEILINGS, IN MECHANICAL ROOMS, ETC).
8. IN FINISHED SPACES, ALL CONDUIT, JUNCTION/BACK BOXES, COVERS AND COUPLINGS ARE PERMITTED TO BE PAINTED TO MATCH ROOM FINISH. THE INSIDE COVER OF JUNCTION BOXES TO BE IDENTIFIED AS "FIRE ALARM". CONDUIT TO HAVE 3/4" RED BANDS EVERY 20 FT AND BOTH SIDES OF ALL FLOORS, WALLS, AND CEILING PENETRATIONS.
9. PROVIDE A SURGE SUPPRESSOR (SPD) ON ALL SLC AND NAC CIRCUIT THAT LEAVE OR ENTER THE FACILITY'S EXTERIOR ENCLOSURE (EXCLUDING WALL MOUNTED DEVICES) (EG. SPEAKER). LOCATE SPD AT FIRST CONNECTION CLOSEST TO WHERE CIRCUIT ENTERS OR LEAVES THE FACILITY, PRIOR TO THE DEVICE.
10. 120 VAC CIRCUITS TO CONTROL PANELS, SUBPANELS, TRANSMITTERS, AMPLIFIER PANELS, AND BOOSTER PANELS SHALL BE EQUIPPED WITH SPD. THE SPD SHALL BE LOCATED IN AN ADJACENT HINGED TERMINAL BOX.

REVISIONS			
SYM.		DATE	APPROVED

LEGEND

- MANUAL PULL STATION
- SMOKE DETECTOR
- IN DUCT SMOKE DETECTOR
- HEAT DETECTOR
- HORN STROBE; # INDICATES CANDELA RATING
- SPEAKER STROBE; # INDICATES CANDELA RATING
- FIRE DEPARTMENT KNOX BOX
- WALL MOUNT STROBE; # INDICATES CANDELA RATING
- SPEAKER
- FIRE ALARM CONTROL PANEL
- FIRE ALARM/MASS NOTIFICATION CONTROL PANEL
- MASS NOTIFICATION TRANSCEIVER
- END OF LINE RESISTOR
- AUTONOMOUS CONTROL UNIT
- REMOTE TEST STATION

SUBSCRIPTS

- (WP)

WEATHERPROOF
- (CM)

CEILING MOUNT

SEE DISCLOSURE OF INFORMATION STATEMENT ON SHEET T-1

<div><div></div><div>4405 Morris Park Dr. Suite H Mint Hill, NC 28227 Ph. 704.545.8383 Fire Protection & Building Code Specialists NC Firm License No: F-0896</div></div> <div><div></div></div>	SHEET TITLE: FIRE ALARM NOTES AND LEGEND		FA-1		
	TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150		DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA		
	DES. GMM		RENOVATE BUILDING M100 CAMP LEJEUNE, NORTH CAROLINA		
	DR. GLP				
	CHK. JLL				
	SUBMITTED BY:				
	DESIGN DIR:				
	APPROVED:		SIZE F	CODE IDENT. NO. 80091	NAVFAC DRAWING NO. 60024979
	SATISFACTORY TO:		CONST. CONTR. NO. N40085-19-B-0035		
			SCALE: NOTED	SPEC. 05-19-0035	SHEET 18 OF 45

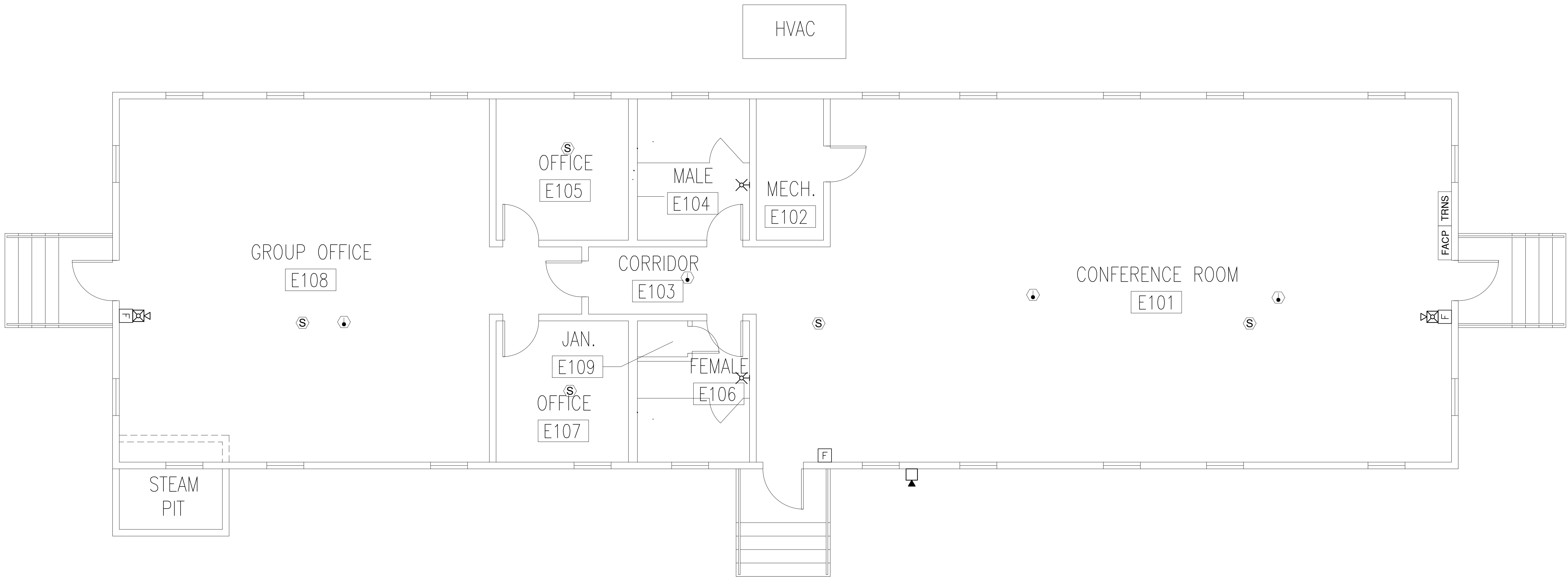
REVISIONS			
SYM.		DATE	APPROVED

- SHEET NOTES:
1.

REFERENCE FA-1 FOR NOTES AND LEGEND.
2.

REFERENCE FA-4 FOR DETAILS AND DIAGRAMS.
3.

ALL EXISTING FIRE ALARM DEVICES AND COMPONENTS TO BE REMOVED.



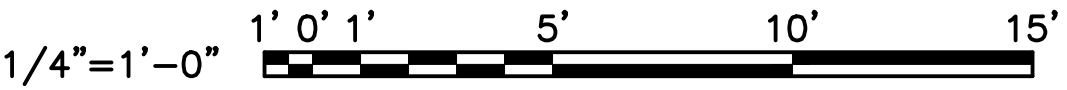
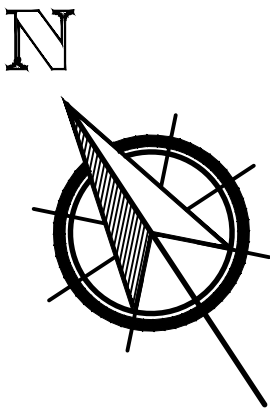
EXISTING FIRE ALARM FLOOR PLAN

1

FA

2

1/4" = 1'-0"



SEE DISCLOSURE OF INFORMATION STATEMENT ON SHEET T-1

<div><div><div><div><div></div><div>Lovett Consultants</div></div><div><div>4405 Morris Park Dr.</div><div>Suite H</div><div>Mint Hill, NC 28227</div><div>Ph. 704.546.8383</div><div>Fire Protection & Building Code Specialists</div><div>NC Firm License No: F-0296</div></div></div><div><div>PROFESSIONAL SEAL</div><div>60085-19</div><div>ENGINEER</div><div>WINTER L. LOVE</div><div>08/21/2019</div></div></div></div>	SHEET TITLE: EXISTING FIRE ALARM FLOOR PLAN		FA-2	
	TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150			
	DES. GMM DR. ANP CHK. JLL SUBMITTED BY: DESIGN DIR:			
	APPROVED:			
SATISFACTORY TO:		SIZE F	CODE IDENT. NO. 80091	
		SCALE: NOTED	NAVFAC DRAWING NO. 60024980	
		SPEC. 05-19-0035	CONST. CONTR. NO. N40085-19-B-0035	
			SHEET 19 OF 45	

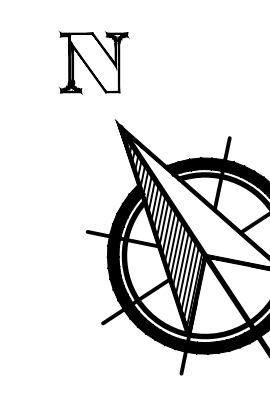
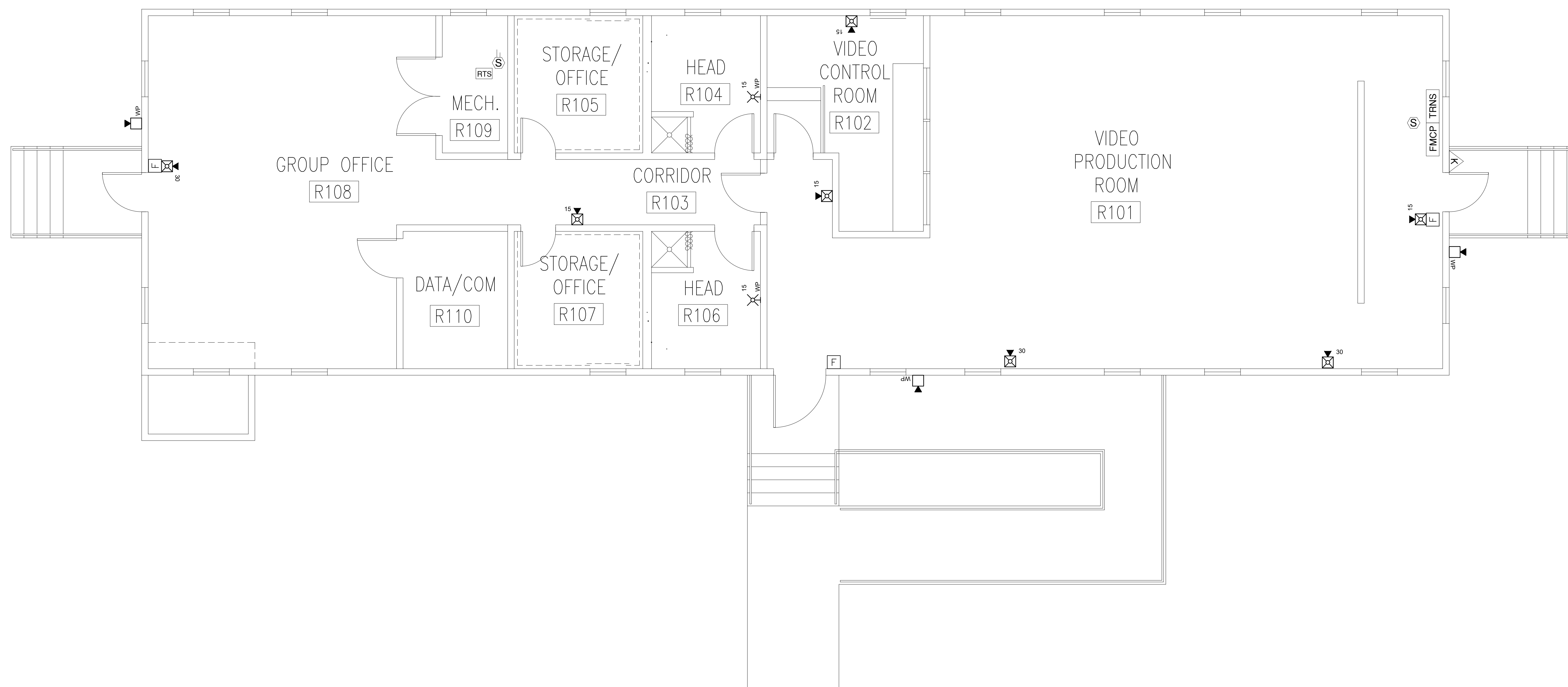
RENOVATE BUILDING M100
CAMP LEJEUNE, NORTH CAROLINA

REVISIONS			
SYM.		DATE	APPROVED

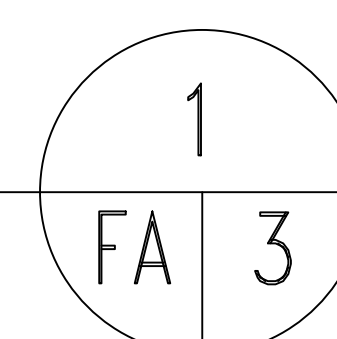
SHEET NOTES:

1. REFERENCE FA-1 FOR NOTES AND LEGEND.
2. REFERENCE FA-4 FOR DETAILS AND DIAGRAMS.

1. REFERENCE FA-1 FOR NOTES AND LEGEND.
2. REFERENCE FA-4 FOR DETAILS AND DIAGRAMS.





RENOVATED FIRE ALARM FLOOR PLAN

$$1/4'' = 1'-0''$$


1/4"=1'-0" 1' 0' 1' 5' 10' 15'

SEE DISCLOSURE OF INFORMATION STATEMENT ON SHEET T-1

 Lovett Consultants	SHEET TITLE: <div style="font-size: 2em; text-align: center; margin-top: 10px;"> RENOVATED FIRE ALARM FLOOR PLAN </div>	<div style="font-size: 4em; font-family: cursive;"> FA-3 </div>		
	4450 Morris Park Dr. Suite H Mint Hill, NC 28227 Ph. 704.545.8393 Fire Protection & Building Code Specialists NC Firm License No. F-0096	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top;"> TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150 </td> <td style="width: 50%; vertical-align: top;"> DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND <div style="font-size: 2em; text-align: center; margin-top: 10px;"> MARINE CORPS BASE </div> CAMP LEJEUNE, NORTH CAROLINA </td> </tr> </table>		TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150
TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150	DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND <div style="font-size: 2em; text-align: center; margin-top: 10px;"> MARINE CORPS BASE </div> CAMP LEJEUNE, NORTH CAROLINA			

	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%; vertical-align: top;"> DES. GMM DR. ANP CHK. JLL SUBMITTED BY: DESIGN DIR. </td> <td style="width: 70%; vertical-align: top;"> <div style="text-align: center; margin-bottom: 20px;"> RENOVATE BUILDING M100 CAMP LEJEUNE, NORTH CAROLINA </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">SIZE</td> <td style="width: 35%;">CODE IDENT. NO.</td> <td style="width: 50%;">NAVFAC DRAWING NO.</td> </tr> <tr> <td style="text-align: center; font-size: 2em;">F</td> <td style="text-align: center; font-size: 2em;">80091</td> <td style="text-align: center; font-size: 1.5em;">60024981</td> </tr> <tr> <td colspan="2"></td> <td style="text-align: center;">CONST. CONTR. NO. N40085-19-B-0035</td> </tr> <tr> <td>SCALE: NOTED</td> <td>SPEC. 05-19-0035</td> <td>SHEET 20 OF 45</td> </tr> </table> </td> </tr> </table>	DES. GMM DR. ANP CHK. JLL SUBMITTED BY: DESIGN DIR.	<div style="text-align: center; margin-bottom: 20px;"> RENOVATE BUILDING M100 CAMP LEJEUNE, NORTH CAROLINA </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">SIZE</td> <td style="width: 35%;">CODE IDENT. NO.</td> <td style="width: 50%;">NAVFAC DRAWING NO.</td> </tr> <tr> <td style="text-align: center; font-size: 2em;">F</td> <td style="text-align: center; font-size: 2em;">80091</td> <td style="text-align: center; font-size: 1.5em;">60024981</td> </tr> <tr> <td colspan="2"></td> <td style="text-align: center;">CONST. CONTR. NO. N40085-19-B-0035</td> </tr> <tr> <td>SCALE: NOTED</td> <td>SPEC. 05-19-0035</td> <td>SHEET 20 OF 45</td> </tr> </table>	SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.	F	80091	60024981			CONST. CONTR. NO. N40085-19-B-0035	SCALE: NOTED	SPEC. 05-19-0035	SHEET 20 OF 45
DES. GMM DR. ANP CHK. JLL SUBMITTED BY: DESIGN DIR.	<div style="text-align: center; margin-bottom: 20px;"> RENOVATE BUILDING M100 CAMP LEJEUNE, NORTH CAROLINA </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">SIZE</td> <td style="width: 35%;">CODE IDENT. NO.</td> <td style="width: 50%;">NAVFAC DRAWING NO.</td> </tr> <tr> <td style="text-align: center; font-size: 2em;">F</td> <td style="text-align: center; font-size: 2em;">80091</td> <td style="text-align: center; font-size: 1.5em;">60024981</td> </tr> <tr> <td colspan="2"></td> <td style="text-align: center;">CONST. CONTR. NO. N40085-19-B-0035</td> </tr> <tr> <td>SCALE: NOTED</td> <td>SPEC. 05-19-0035</td> <td>SHEET 20 OF 45</td> </tr> </table>	SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.	F	80091	60024981			CONST. CONTR. NO. N40085-19-B-0035	SCALE: NOTED	SPEC. 05-19-0035	SHEET 20 OF 45		
SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.													
F	80091	60024981													
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SCALE: NOTED	SPEC. 05-19-0035	SHEET 20 OF 45													

08/21/2019

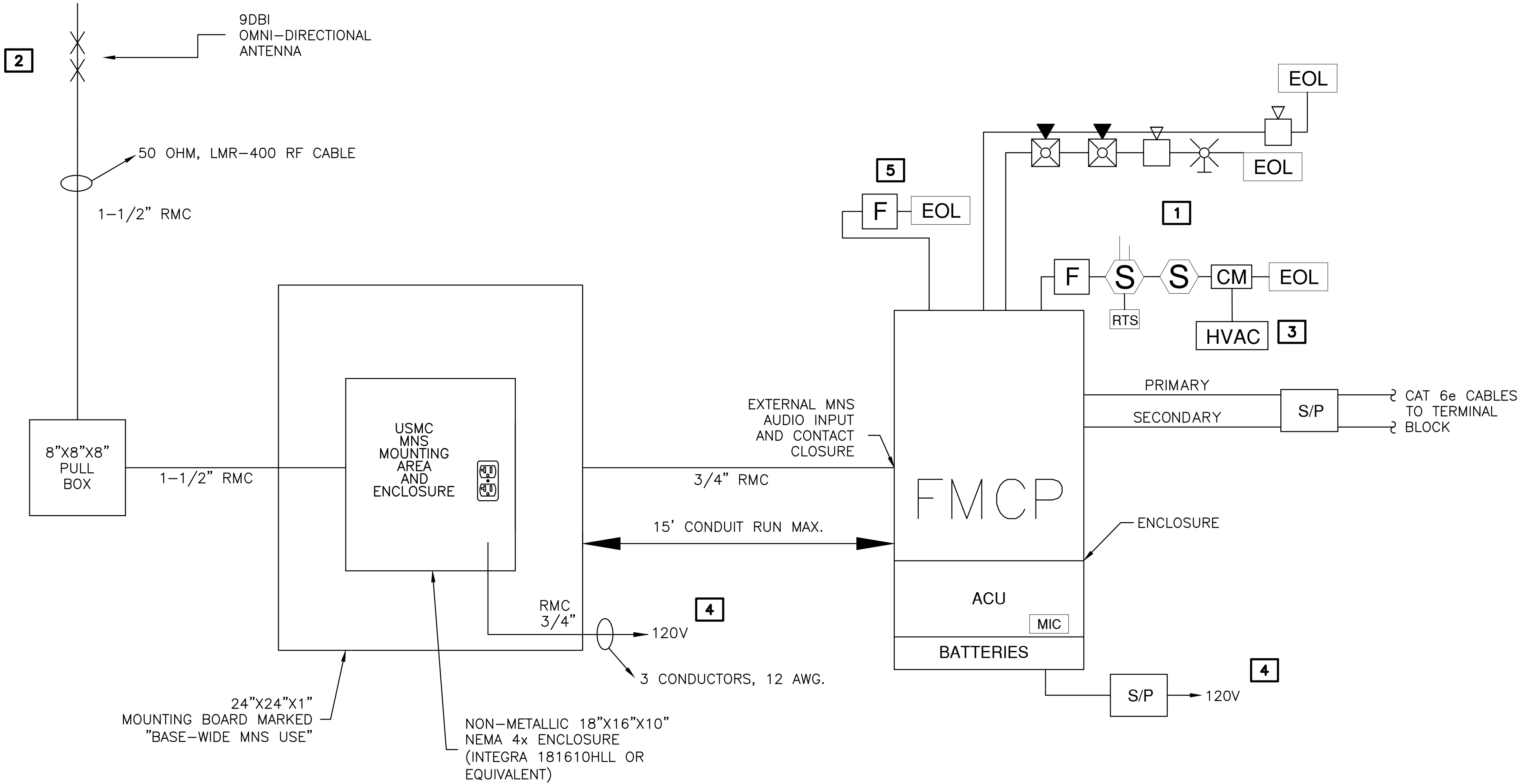
REVISIONS		
SYM.	DATE	APPROVED

SHEET NOTES:

- REFERENCE FA-1 FOR NOTES AND LEGEND.
- REFERENCE FA-3 FOR FLOOR PLAN

KEY NOTES:

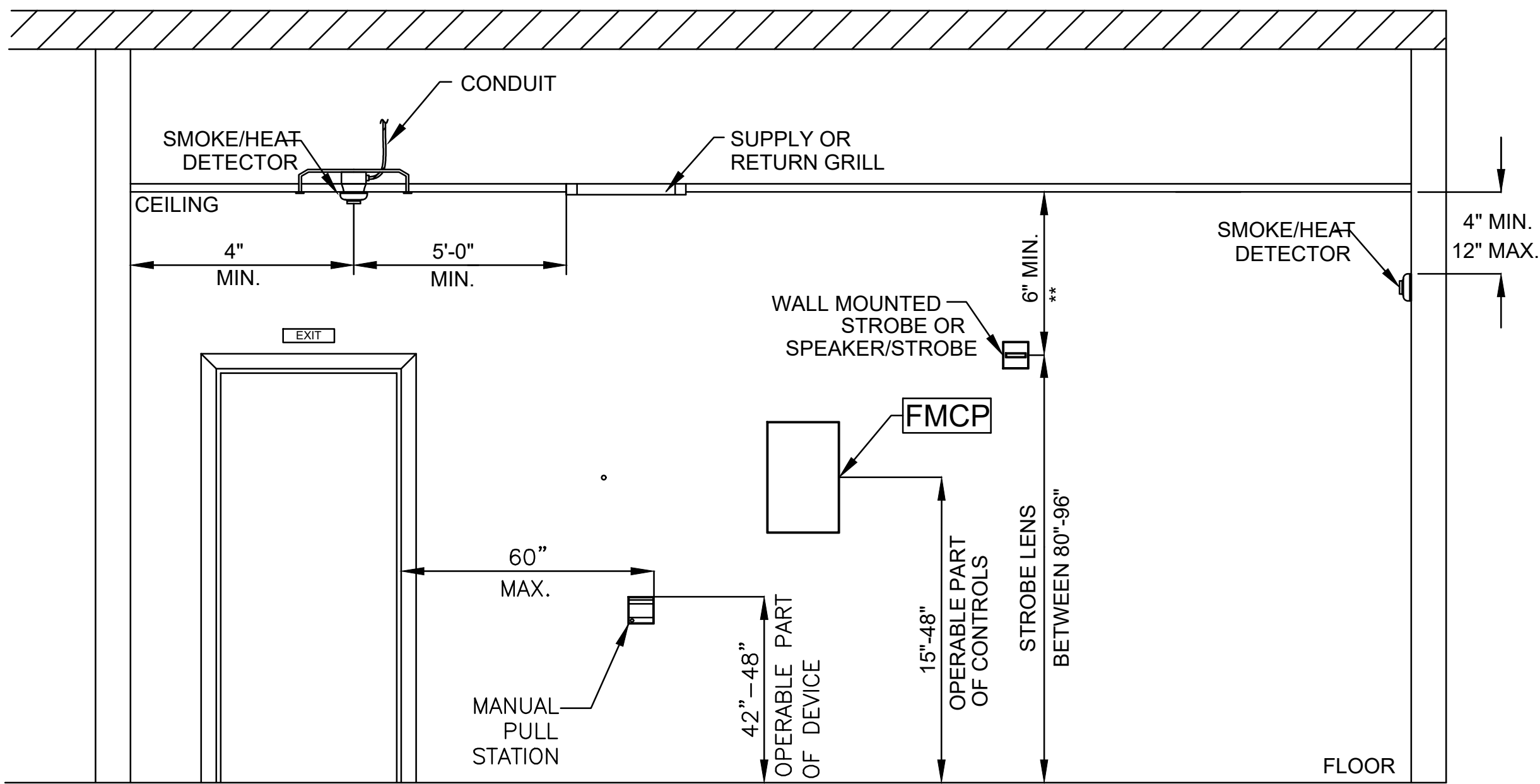
- SEE FLOOR PLAN FOR EXACT NUMBER AND LOCATION OF DEVICES.
- 4 FEET ABOVE THE APEX OF THE ROOFLINE WITH A UL LISTED WEATHERHEAD
- TO INITIATE HVAC SHUTDOWN.
- CIRCUITS PROVIDED W/ RED BREAKERS. LOCK OPEN DEVICE AND FED FROM THE SAME ELECTRICAL PANEL.
- SEPARATE SLC CIRCUIT THAT WILL NOT BE PLACED ON TEST MODE



RISER DETAIL

NTS

1



** ONLY WHEN 80"-96" CAN NOT BE MET

MOUNTING HEIGHTS

NTS

3

ACTION TO BE INITIATED ↓ ACTION DEVICE INITIATED	ACTION TO BE INITIATED →												
	ACTUATE AUDIBLE & VISUAL ALARM SIGNAL INDICATOR & ALARM @ FMCP	ACTUATE AUDIBLE & VISUAL SUPERVISORY SIGNAL INDICATOR & ALARM @ FMCP	ACTUATE AUDIBLE & VISUAL TROUBLE SIGNAL INDICATOR & ALARM @ FMCP	DISPLAY / PRINT CHANGE OF STATUS ON FMCP	TRANSMIT SIGNAL TO MONITORING STATION	ACTUATE FIRE ALARM AUDIBLE MESSAGE	ACTIVATE ALERT VISUAL APPLIANCES	INITIATE SHUTDOWN OF ASSOCIATED AHU	OVERRIDE / SILENCE BUILDING PA SYSTEM / MUSIC / TV'S	OVERRIDE PRE-RECORDED DIGITIZED VOICE MESSAGE	OVERRIDE FIRE ALARM AUDIBLE SIGNALS	BROADCAST MNS AUDIBLE MESSAGE	OVERRIDE LOCAL OPERATING STATION
MANUAL PULL STATION	X			X	X	X	X		X				
GENERAL SMOKE DETECTOR	X			X	X	X	X		X				
DUCT SMOKE DETECTOR		X		X	X			X					
FIRE ALARM AC POWER FAILURE			X	X	X								
FIRE ALARM SYS LOW BATTERY			X	X	X								
OPEN CIRCUIT/GROUND FAULT			X	X	X								
NOTIFICATION APPLIANCE SHORT			X	X	X								
FIRE ALARM LIVE VOICE MESSAGE	X			X	X	X	X		X	X			
MNS LIVE VOICE MESSAGE		X		X	X		X		X	X	X	X	
MNS AUTONOMOUS CONTROL UNIT		X		X	X		X		X		X	X	X

OPERATIONAL MATRIX

NTS

2

SEE DISCLOSURE OF INFORMATION STATEMENT ON SHEET T-1

 4405 Morris Park Dr. Suite 2 Mint Hill, NC 28227 Ph: 704.545.8383 Fire Protection & Building Code Specialists NC Firm License No: F-0898	SHEET TITLE: FIRE ALARM DETAILS AND DIAGRAMS		FA-4			
	TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150		DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA			
	DES: GMM		RENOVATE BUILDING M100 CAMP LEJEUNE, NORTH CAROLINA			
	DR: GLP					
	CHK: JLL					
	SUBMITTED BY:					
	DESIGN DR:		SIZE F	CODE IDENT. NO. 80091		
	APPROVED:					
	SATISFACTORY TO:					
08/21/2019		NAVFAC DRAWING NO. 60024982		CONST. CONTR. NO. N40085-19-B-0035		
SCALE: NOTED		SPEC: 05-19-0035				
		SHEET 21 OF 45				

PLUMBING GENERAL NOTES

1. SCOPE OF WORK: THESE DRAWINGS AND ACCOMPANYING SPECIFICATIONS DESCRIBE SCOPE OF WORK REQUIRED FOR PLUMBING SYSTEMS. LABOR AND MATERIAL SHALL BE PROVIDED AS REQUIRED FOR A COMPLETE, WORKMANLIKE INSTALLATION OF ALL SYSTEMS SHOWN ON DIAGRAMMATIC DRAWINGS AND/OR AS SPECIFIED HEREIN.
2. CONTRACTOR: THE WORD "CONTRACTOR", "PLUMBING CONTRACTOR", AND "P.C." AS USED HEREIN SHALL MEAN THE PLUMBING INSTALLER UNLESS OTHERWISE QUALIFIED.
3. DRAWINGS: DRAWINGS ARE DIAGRAMMATIC AND MAY NOT COMPLETELY DESCRIBE EVERY DETAIL OF THE INSTALLATION. HOWEVER, CONTRACTOR IS RESPONSIBLE FOR FURNISHING COMPLETE SYSTEMS INCLUDING ALL REQUIRED EQUIPMENT AND ACCESSORIES TO OBTAIN FULLY FUNCTIONING PLUMBING SYSTEMS.
4. CODE COMPLIANCE: COMPLY WITH THE LATEST EDITIONS OF THE FOLLOWING STANDARDS AND CODES, INsofar AS THEY APPLY:
- INTERNATIONAL PLUMBING CODE.
- INTERNATIONAL FUEL GAS CODE.
5. PERMITS AND INSPECTIONS: OBTAIN ALL PERMITS, LICENSES, INSPECTIONS, ETC., REQUIRED FOR THE WORK AND PAY FOR SAME. FURNISH A FINAL CERTIFICATE OF INSPECTION AND APPROVAL FROM THE AUTHORITY HAVING JURISDICTION PRIOR TO ACCEPTANCE OF THE WORK.
6. SUPERVISION: PROVIDE SKILLED SUPERINTENDENTS TO SUPERVISE THE WORK FROM THE BEGINNING TO COMPLETION AND FINAL INSPECTION.
7. PROGRESS OF WORK: PERFORM WORK IN ACCORDANCE WITH SCHEDULE AND REQUIREMENTS OF THE GENERAL CONTRACTOR. UNDER NO CIRCUMSTANCES SHALL THIS CONTRACTOR DELAY THE OVERALL PROJECT SCHEDULE.
8. COORDINATION: COORDINATE PLUMBING WORK WITH THE WORK OF OTHER TRADES. LOCATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE UNLESS SPECIFICALLY DIMENSIONED. ARRANGE PLUMBING SO AS NOT TO INTERFERE WITH THE WORK OF OTHER TRADES. VERIFY ACTUAL BUILDING STRUCTURE PRIOR TO DUCT FABRICATION AND ADJUST LAYOUT AS REQUIRED. INCLUDE ALL OFFSETS IN DUCTS, FITTINGS, PIPING, ETC. AS REQUIRED TO PROPERLY INSTALL EQUIPMENT.
9. EQUIPMENT LOCATIONS: DETERMINE EXACT EQUIPMENT AND MATERIALS LOCATIONS TO PROVIDE BEST ARRANGEMENT AND TO FACILITATE PROPER MAINTENANCE AND SERVICING OF EQUIPMENT.
10. LISTING AND LABELING: ALL EQUIPMENT SHALL BE LABELED OR LISTED BY UL OR OTHER APPROVED TESTING AGENCY WHERE REQUIRED.
11. STORAGE SPACE: CONSULT WITH THE GENERAL CONTRACTOR REGARDING JOB SITE STORAGE FOR PLUMBING MATERIALS TO BE INSTALLED UNDER THIS PROJECT. STORAGE SPACE MUST BE SECURED AND CONTRACTOR'S REPRESENTATIVE MUST BE ON JOB BEFORE ANY MATERIAL MAY BE RECEIVED.
12. CLEANUP: REMOVE ALL DEBRIS GENERATED IN THE ACCOMPLISHMENT OF WORK UNDER THIS PROJECT. CLEAN, REPLACE OR REPAIR ALL SURFACES SOILED OR DAMAGED DURING THE COURSE OF THE WORK. REMOVE DEBRIS DAILY SO TO MAINTAIN SAFE WORKING CONDITIONS.
13. RECORD DRAWINGS: MAINTAIN ONE SET OF "RED-LINED" RECORD DRAWINGS ON SITE AT ALL TIMES AND PROVIDE DRAWINGS TO CONTRACTING OFFICER PRIOR TO FINAL INSPECTION.
14. EXISTING BUILDINGS AND CONSTRUCTION:
- A. WORK UNDER THIS CONTRACT IS TO BE PERFORMED IN AN EXISTING BUILDING. BUILDING LAYOUT INDICATED IS DEVELOPED FROM [EXISTING RECORD DOCUMENTS AND] LIMITED FIELD VERIFICATION FOR THE PURPOSES OF DESCRIBING THE WORK. VERIFY ALL EXISTING CONDITIONS AND ADJUST WORK AS REQUIRED TO SUIT ACTUAL FIELD CONDITIONS.
- B. PERFORM ALL WORK IN ACCORDANCE WITH SAFETY REGULATIONS.
- C. DO NOT CUT ANY STRUCTURAL MEMBERS WITHOUT EXPRESS WRITTEN INSTRUCTIONS FROM CONTRACTING OFFICER. PROVIDE CUTTING AND PATCHING FOR EXISTING FINISHES AS REQUIRED.
- D. COORDINATE INSTALLATION OF NEW PLUMBING SYSTEMS WITH EXISTING BUILDING SYSTEMS. ADJUST ARRANGEMENTS AS REQUIRED TO ACCOMMODATE INTERFERENCES.

PLUMBING DEMOLITION NOTES

- PLUMBING DEMOLITION NOTES:
1. THE PLUMBING CONTRACTOR SHALL REVIEW THE DRAWINGS AND SPECIFICATIONS FOR DEMOLITION REQUIREMENTS AND LAYOUT HIS WORK IN A COMPATIBLE AND COMPLEMENTARY MANNER. REMOVE ALL FIXTURES, EQUIPMENT, PIPING, SUPPORTS, ACCESSORIES, ETC. MADE OBSOLETE BY THESE ALTERATIONS AS SHOWN IN THE PLUMBING DRAWINGS. ALL ITEMS TO BE REMOVED OR MODIFIED MAY NOT BE SHOWN. HOWEVER, THIS CONTRACTOR SHALL REMOVE ANY PLUMBING WORK AS REQUIRED BY THE CONSTRUCTION OR AS DIRECTED BY THE OWNER OR THE ENGINEER. SURVEY THE AFFECTED AREAS BEFORE SUBMITTING A BID.
2. ALL EXISTING PLUMBING FIXTURES, EQUIPMENT AND PIPING SHALL BE REMOVED UNLESS NOTED OTHERWISE.
3. THESE DRAWINGS ARE COMPILED BY THE ARCHITECT/ENGINEER FROM THE OWNER'S AS-BUILT RECORD DRAWINGS AND LIMITED FIELD VERIFICATION OF EXISTING CONDITIONS FOR THE PURPOSE OF INDICATING THE WORK REQUIRED AND ARE BELIEVED TO BE CORRECT. NOTWITHSTANDING, THE PLUMBING CONTRACTOR SHALL VERIFY ALL PIPING, FIXTURE LOCATIONS, DIMENSIONS, MATERIALS AND ALL FIELD CONDITIONS AFFECTING HIS WORK.
4. WHERE PLUMBING SYSTEMS PASS THROUGH THE DEMOLITION AREAS TO SERVE OTHER PORTIONS OF THE PREMISES, THEY SHALL REMAIN OR BE SUITABLY RELOCATED AND THE SYSTEM RESTORED TO NORMAL OPERATION. ADVISE THE ARCHITECT/ENGINEER IMMEDIATELY IF SUCH CONDITIONS ARE UNCOVERED BEFORE PROCEEDING WITH ADDITIONAL WORK.
5. PROTECT ALL EXISTING LIFE SAFETY SYSTEMS, FIRE ALARM AND PUBLIC ADDRESS SYSTEMS AND MAINTAIN THEM IN OPERATION THROUGHOUT THE PROGRESS OF THE WORK. NOTIFY THE OWNER AND ARCHITECT/ENGINEER IN WRITING WHEN SHUTDOWNS ARE REQUIRED PRIOR TO ANY OUTAGE OF SERVICE. WHERE THE DURATION OF A PROPOSED OUTAGE CANNOT BE TOLERATED BY THE OWNER, PROVIDE TEMPORARY CONNECTIONS AS REQUIRED TO MAINTAIN SERVICE.
6. SURVEY THE EFFECTED AREAS BEFORE SUBMITTING A BID AS ALL EXISTING CONDITIONS CANNOT BE COMPLETELY DEPICTED ON THE DRAWINGS AND SOME UNUSUAL CONDITIONS MAY EXIST.

PLUMBING FIXTURE SCHEDULE

DRAWING CODE	FIXTURE	PIPE SIZE			
		DCW	DHW	WASTE	VENT
WC1	HARD WIRED SENSOR FLUSH VALVE WATER CLOSET	1"	-	4"	2"
UR1	HARD WIRED SENSOR FLUSH VALVE URINAL	3/4"	-	2"	2"
LAV2	HARD WIRED SENSOR FAUCET COUNTERTOP LAVATORY	1/2"	1/2"	2"	2"
SH1	PRE-FAB SHOWER	1/2"	1/2"	2"	2"
EW1	DRINKING - WATER COOLER	1/2"	-	2"	2"
EW1	ELECTRIC WATER HEATER	1-1/4"	1-1/4"	-	-
MS1	MOP SINK	1/2"	1/2"	3"	2"
CP1	IN-LINE WET ROTOR, LEAD FREE BRONZE BODY, 3-SPEED, 115/160, 87W. BUILT IN THERMAL PROTECTION. 1GPM@9TDP	-	3/4"	-	-
WH1	WALL HYDRANT	3/4"	-	-	-
MX1	THERMOSTATIC MIXING VALVE	3/4"	3/4"	-	-
BFP	BACKFLOW PREVENTER	3"	-	-	-
FD1	FLOOR DRAIN	-	-	2"	-

PLUMBING LEGEND

CA	COMPRESSED AIR PIPING
C	CONDENSATE PIPING
140F	DOMESTIC 140°F WATER PIPING
140R	DOMESTIC 140°F RETURN WATER PIPING
	DOMESTIC COLD WATER PIPING
	DOMESTIC HOT WATER CIRCULATION PIPING
	DOMESTIC HOT WATER PIPING
F	FILTERED WATER PIPING
	FIRE SPRINKLER PIPING
FM	FORCE MAIN PIPING
	GAS PIPING (NAT. OR LP)
GW	GREASE WASTE PIPING
	NITROUS OXIDE PIPING
O2	O2 (OXYGEN) PIPING
OD	OVERFLOW ROOF DRAIN PIPING
	ROOF DRAIN PIPING
	SANITARY VENT PIPING
	SANITARY WASTE PIPING
T	TEPID WATER PIPING
	VACUUM PIPING
	BACKFLOW PREVENTION DEVICE
	BALL VALVE
	CHECK VALVE
	CIRCUIT SETTER (BALANCING VALVE)
	CIRCULATION PUMP
	CONTROL VALVE
	EXTENT OF DEMOLITION
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FS	FLOOR SINK
	GAS-REGULATOR VALVE
	GATE VALVE
	GATE VALVE IN RISER
GCO	GRADE CLEANOUT
HB	HOSE BIBB
	PIPE CAP
	PIPE ELBOW
	PIPE ELBOW DOWN
	PIPE ELBOW UP
	PIPE TEE
	PIPE TEE DOWN
	PIPE TEE UP
SP	SUMP PUMP
1	DEMOLITION KEYED NOTE TAG
1	NEW WORK KEYED NOTE
	POINT OF CONNECTION - NEW TO EXISTING
	PRESSURE REDUCING VALVE
	SOLENOID VALVE
140F	THERMOSTATIC MIXING VALVE
WCO	WALL CLEANOUT
WH	WALL HYDRANT
	WASHING MACHINE BOX
	WATER HAMMER ARRESTOR

NOTE: ALL ITEMS LISTED IN THIS SCHEDULE MAY NOT BE USED IN PROJECT

PLUMBING ABBREVIATIONS

(X)	EXISTING
ADA	AMERICANS WITH DISABILITIES ACT
BRZ	BRONZE
C.I.	CAST IRON
CO	CLEANOUT
CONC.	CONCRETE
DCW	DOMESTIC COLD WATER
DHW	DOMESTIC HOT WATER
EW	ELECTRIC WATER COOLER
EW	ELECTRIC WATER HEATER
FO	FLOOR CLEANOUT
FD	FLOOR DRAIN
GA	GAUGE
GAL	GALLON
GCO	GRADE CLEANOUT
GPF	GALLONS PER FLUSH
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
HB	HOSE BIBB
INCL	INCLUDED
LAV	LAVATORY
MS	MOP SERVICE BASIN
NKL	NICKEL
NON SIMULT.	NON SIMULTANEOUS
O.F.L.C.	OPEN FRONT LESS COVER
OB	OUTLET BOX
OC	ON CENTER
PRESS. BAL.	PRESSURE BALANCED
RCVY.	RECOVERY
SA	WATER HAMMER ARRESTOR
SH	SHOWER
SK	SINK
SLD.	SLIDE
SS	STAINLESS STEEL
TDH	TOTAL DYNAMIC HEAD
UR	URINAL
V	VENT
VB	VACUUM BREAKER
VC	VITREOUS CHINA
VR	VANDAL RESISTANT
VTR	VENT THROUGH ROOF
W	WASTE
WC	WATER CLOSET
WCO	WALL CLEANOUT
WH	WALL HYDRANT

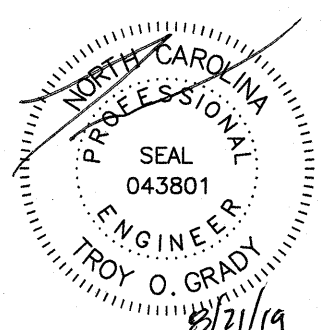
NOTE: ALL ABBREVIATIONS MAY NOT BE USED IN PROJECT.

PLUMBING LOADS

WASTE (DRAINAGE FIXTURE UNITS)	16.5
WATER	75 GPM

REVISIONS			
SYN.		DATE	APPROVED

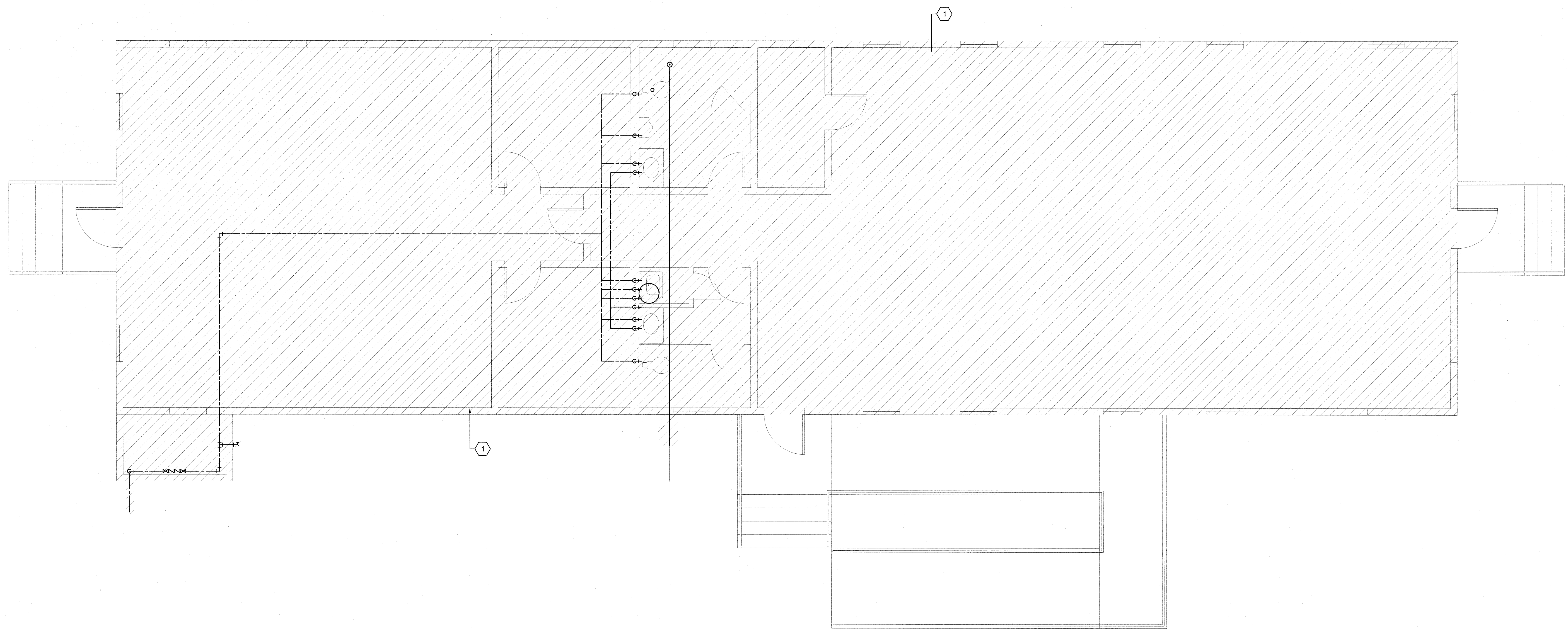
SEE DISCLOSURE OF INFORMATION STATEMENT ON SHEET T-1

CBHF Engineers, PLLC 2246 Yaupon Drive Wilmington, NC 28401 Phone: 910.791.4000 Fax: 910.791.5268 www.cbhfenigneers.com <small>© Copyright 2018 CBHF Engineers, PLLC NCEP P-6506</small> 	SHEET TITLE: PLUMBING ABBR, LEGEND, SCHED., NOTES		P-1	
	TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150		DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA	
	DES. JBS		RENOVATE BLDG. M100 CAMP LEJEUNE, NORTH CAROLINA	
	DR. JBS			
	CHK. TOG			
	SUBMITTED BY: T H BURTON, PE			
APPROVED:	DATE	SIZE F	CODE IDENT. NO. 80091	
SATISFACTORY TO:		DATE	NAVFAC DRAWING NO. 60024983	
		SCALE: NOTED	CONST. CONTR. NO. N40085-15-D-0859	
		SPEC. 05-19-0062	SHEET 22 OF 45	

DEMOLITION KEYED NOTES

1 REMOVE ALL PLUMBING FIXTURES INCLUDING WASTE, VENT, NATURAL GAS, AND DOMESTIC WATER PIPING AND ALL ACCESSORIES IN ENTIRETY. RECYCLE SCRAP METAL AS PART OF DEMOLITION AND DECONSTRUCTION OPERATIONS.

REVISIONS			
SYM.		DATE	APPROVED



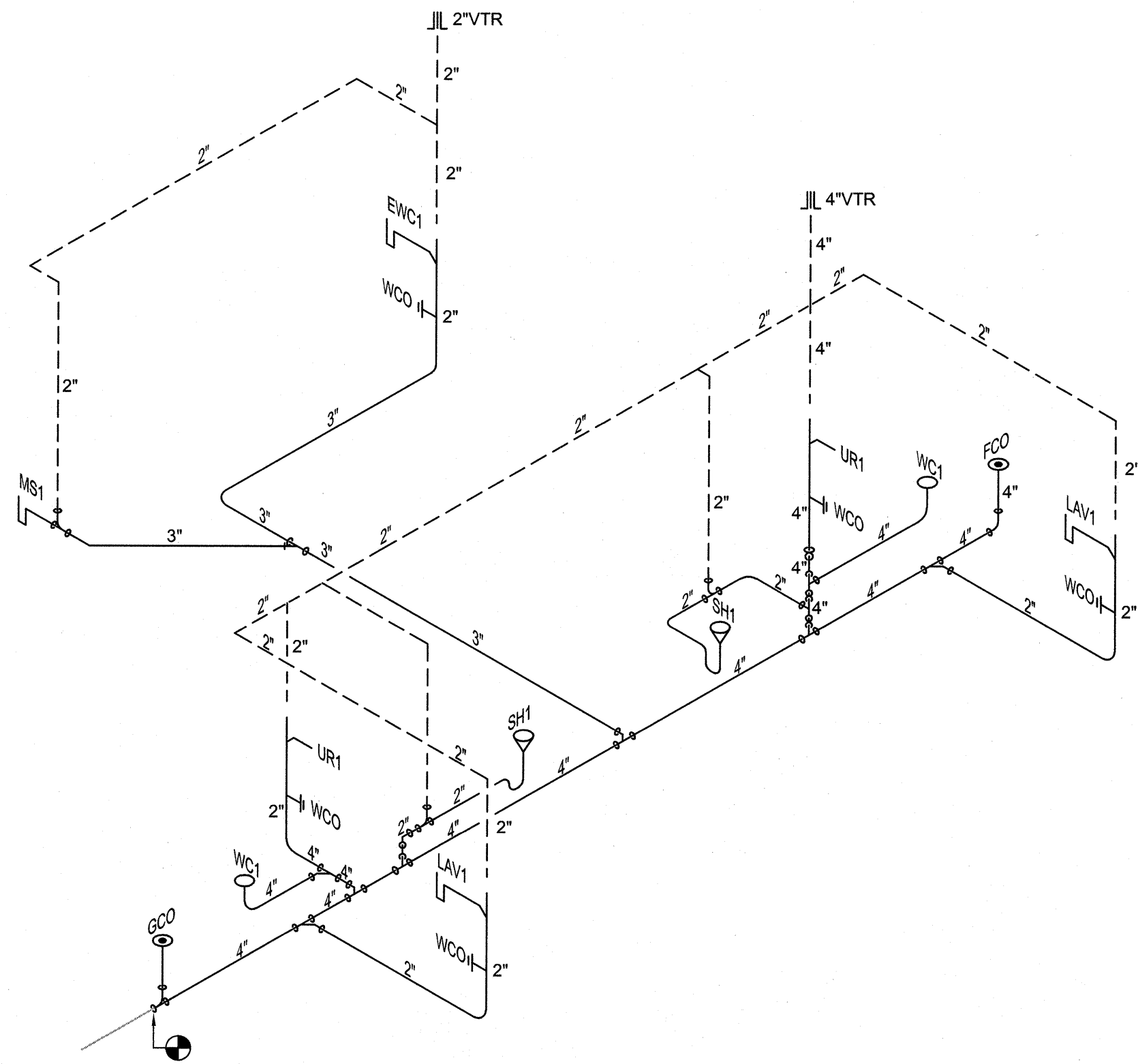
1 FIRST FLOOR DEMOLITION PLAN
NOT TO SCALE

PLAN NORTH

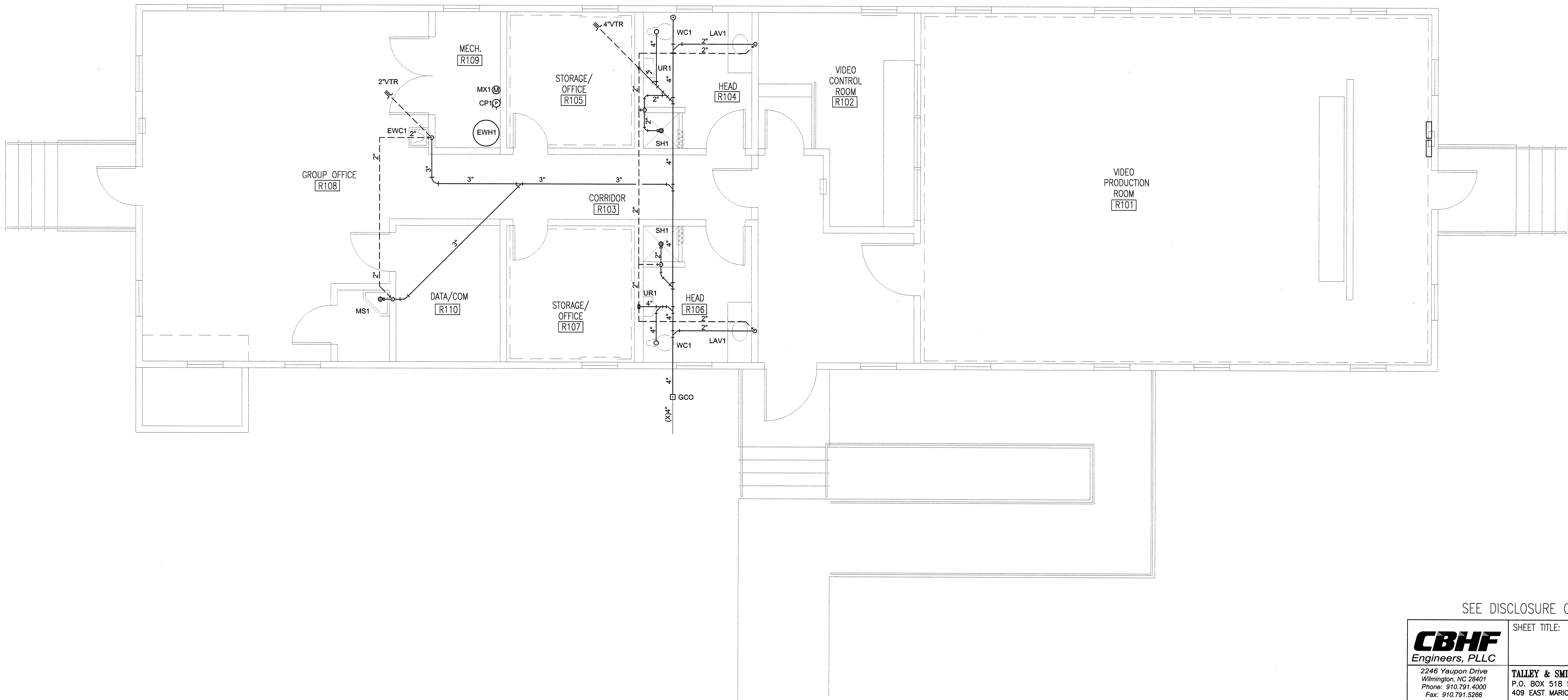
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CBHF Engineers, PLLC 2246 Yaupon Drive Wilmington, NC 28401 Phone: 910.791.4000 Fax: 910.791.9266 www.cbhfengineers.com © Copyright 2019 CBHF Engineers, PLLC NCEM #0006 	SHEET TITLE:		PLUMBING DEMOLITION		P-2
	TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150		DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA		
	DES. JBS		RENOVATE BLDG. M100 CAMP LEJEUNE, NORTH CAROLINA		
	DR. JBS				
	CHK. TOG				
SUBMITTED BY:					
DESIGN DIR. T H BURTON, PE					
APPROVED:		DATE	SIZE F	CODE IDENT. NO. 80091	NAVFAC DRAWING NO. 60024984
SATISFACTORY TO:		DATE	SCALE: NOTED	SPEC: 05-19-0062	SHEET 23 OF 45

REVISIONS			
SYM.		DATE	APPROVED



2 WASTE-VENT RISER DIAGRAM
NOT TO SCALE



1 FIRST FLOOR PLAN
NOT TO SCALE

SEE DISCLOSURE OF INFORMATION STATEMENT ON SHEET T-1

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	TALLEY & SMITH ARCHITECTURE INC. <small>P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150</small>		
	DES. JBS DR. JBS CHK. TOG SUBMITTED BY: DESIGN DIR. T. H. BURTON, PE		DEPARTMENT OF THE NAVY MARINE CORPS BASE <small>CAMP LEJEUNE, NORTH CAROLINA</small>
	APPROVED: _____ DATE _____ SATISFACTORY TO: _____ DATE _____		RENOVATE BLDG. M100 CAMP LEJEUNE, NORTH CAROLINA
	SIZE F	CODE IDENT. NO. 80091	NAVFAC DRAWING NO. 60024985
	SCALE: NOTED	SPEC. 05-19-0062	SHEET 24 OF 45

REVISIONS			
SYN.		DATE	APPROVED

CONSTRUCTION KEYED NOTES

1

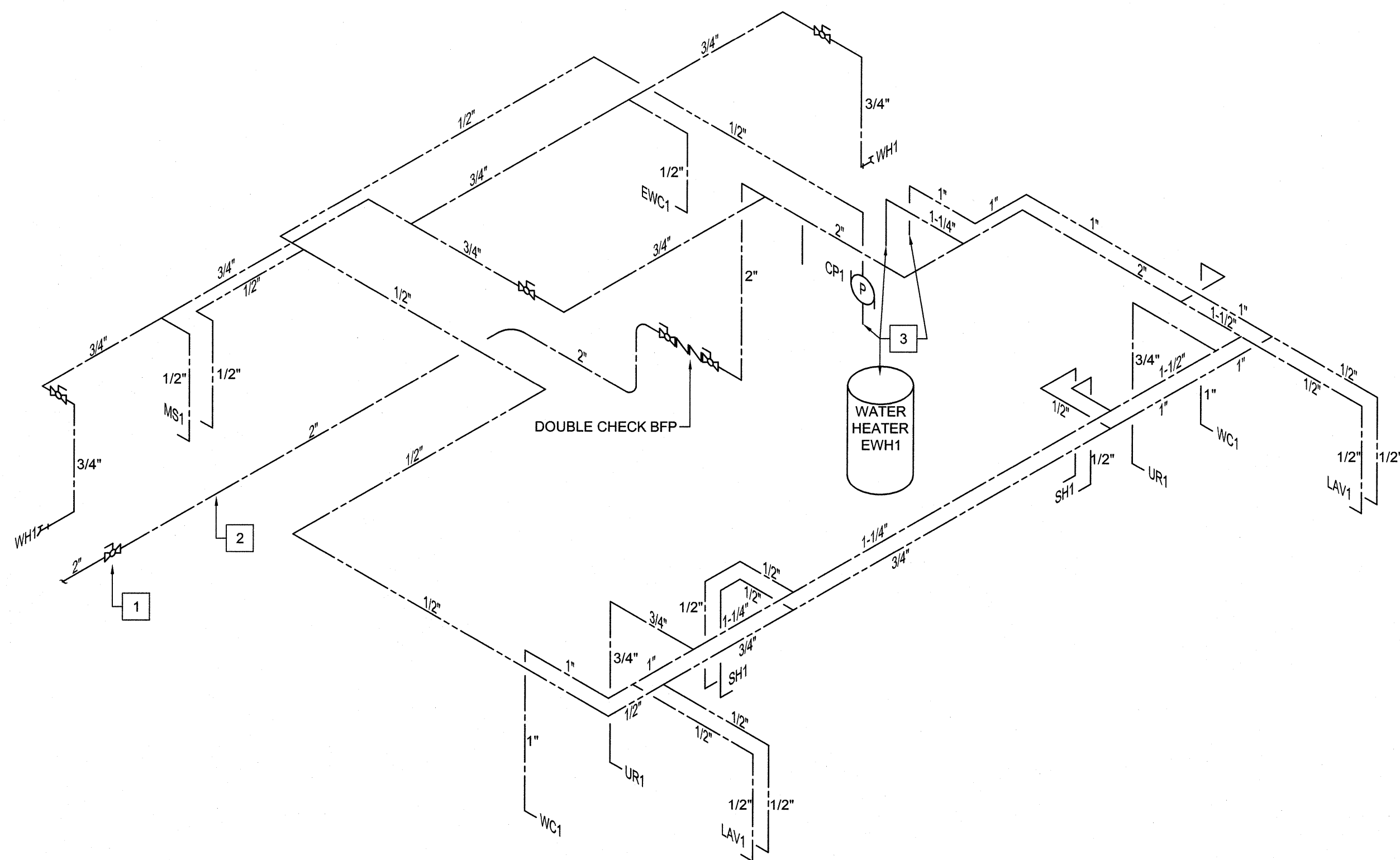
INSTALL SHUTOFF VALVE IN VALVE BOX.

2

ROUTE DCW PIPING IN CRAWL SPACE TO MECHANICAL ROOM.

3

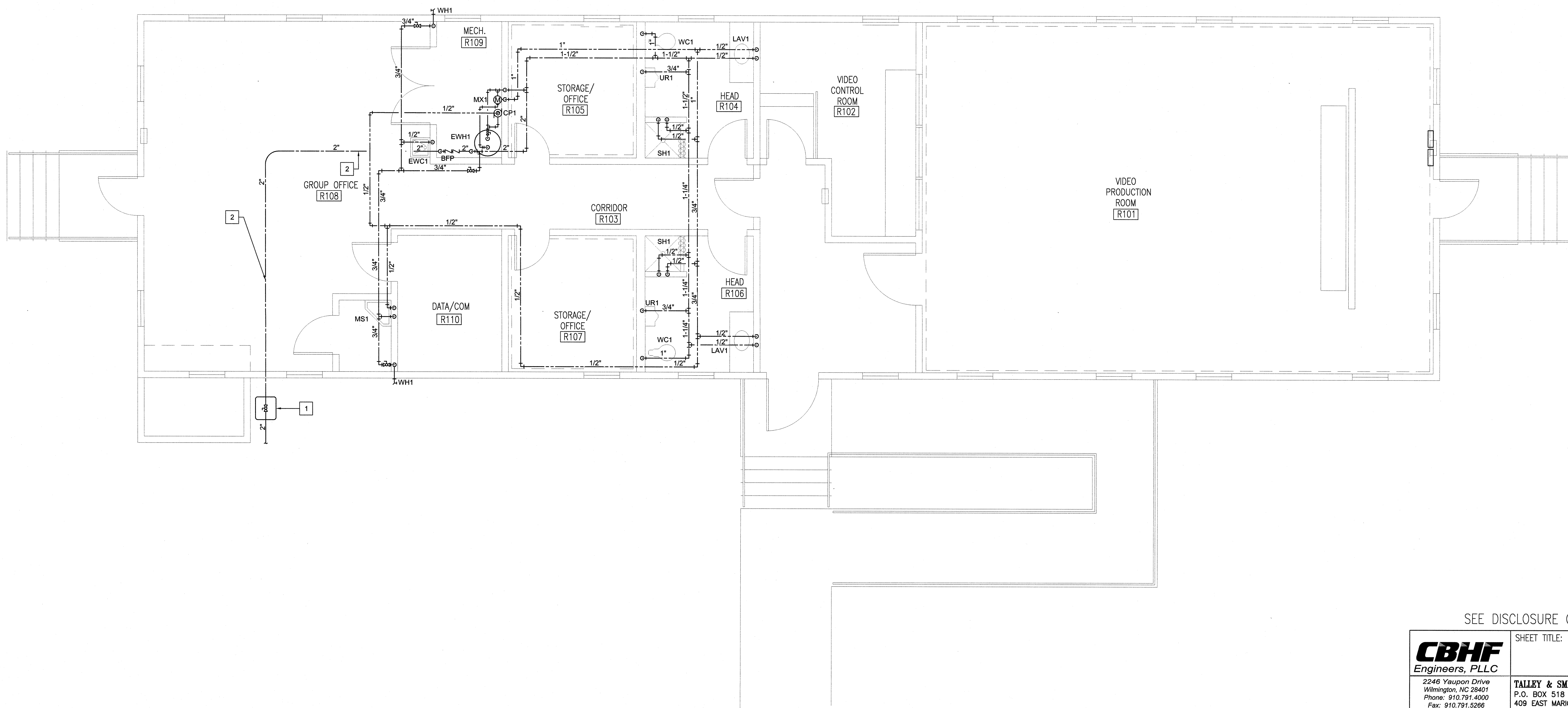
SEE WATER HEATER DETAIL SHEET P-5 FOR PIPING DETAIL.



2

DOMESTIC WATER RISER DIAGRAM

NOT TO SCALE



1

FIRST FLOOR PLAN

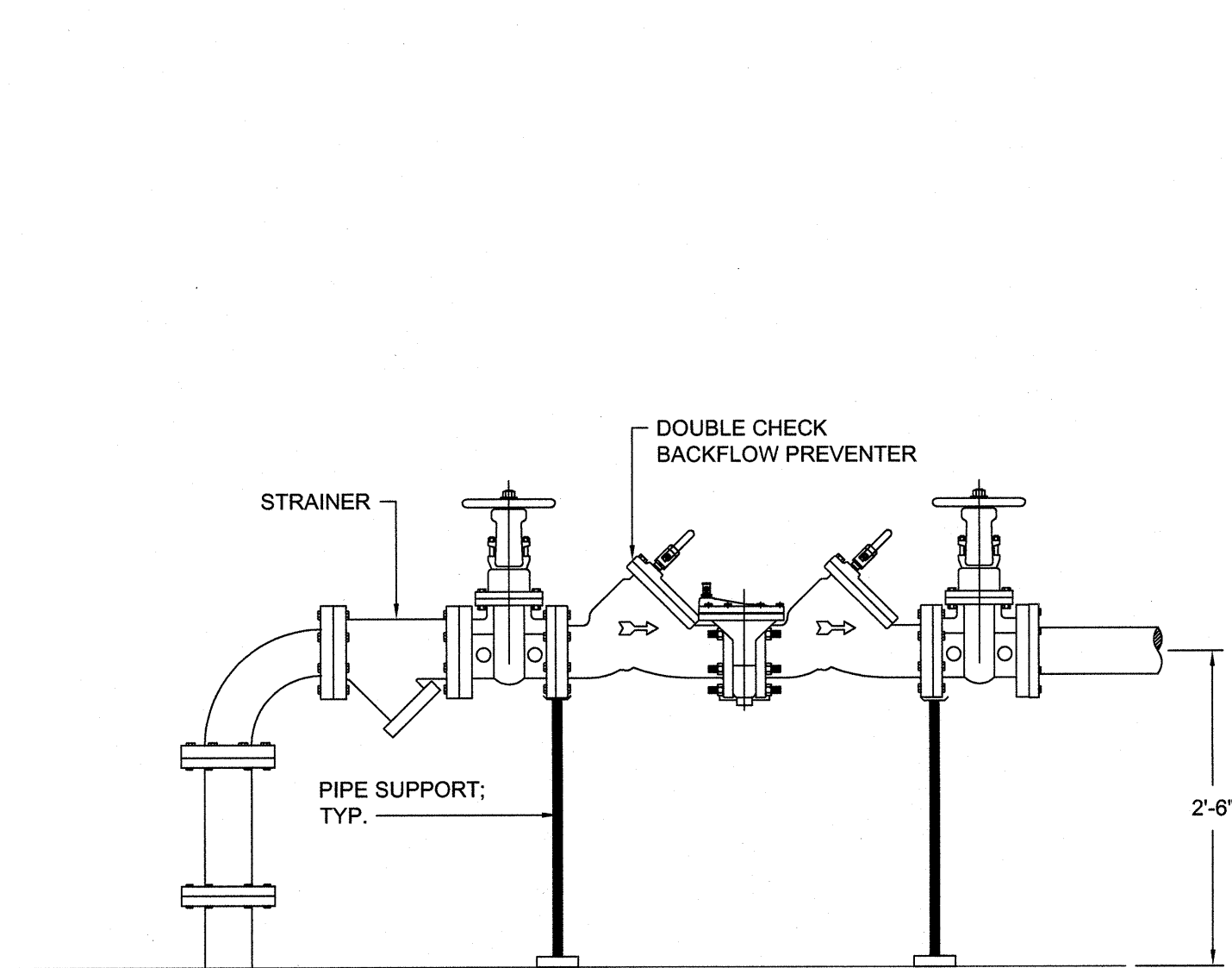
NOT TO SCALE

PLAN NORTH

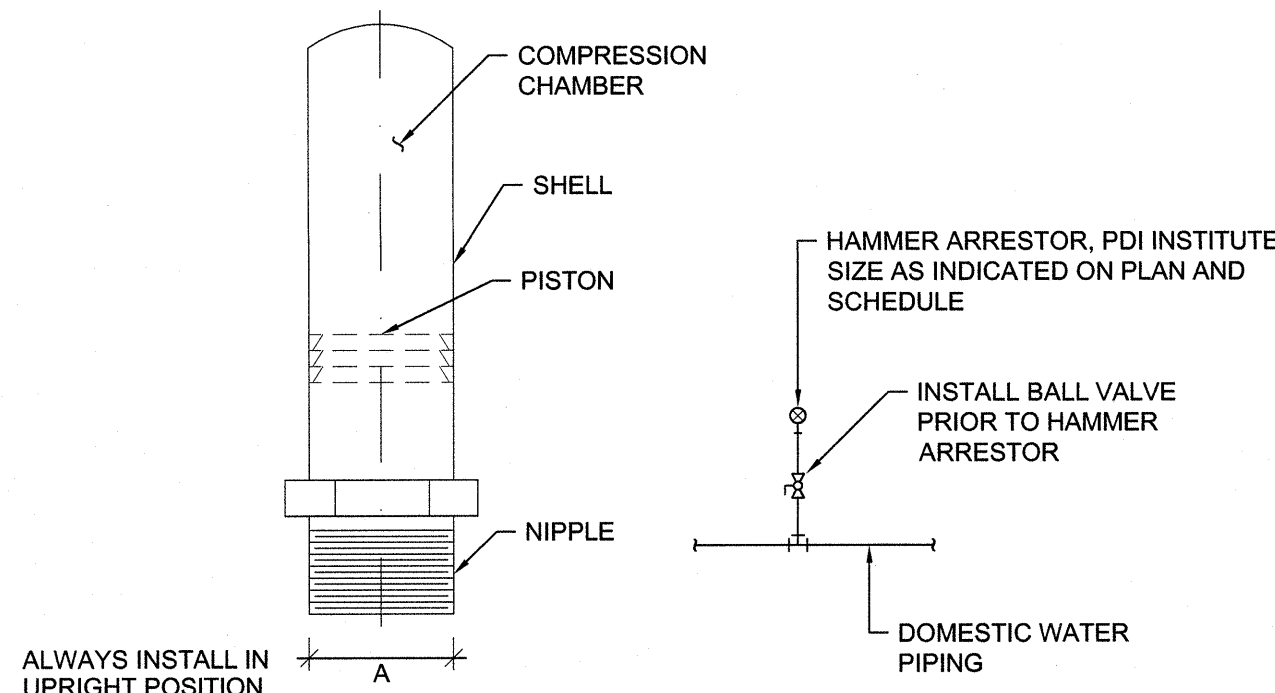
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	<div> TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150 </div>		<div> DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA </div>
	DES: JBS DR: JBS CHK: TOG SUBMITTED BY:		<div> RENOVATE BLDG. M100 CAMP LEJEUNE, NORTH CAROLINA </div>
	DESIGN DIR: T H BURTON, PE APPROVED:		
	SATISFACTORY TO:		DATE:
SCALE: NOTED		SPEC: 05-19-0062	SHEET 25 OF 45

REVISIONS			
SYM.		DATE	APPROVED

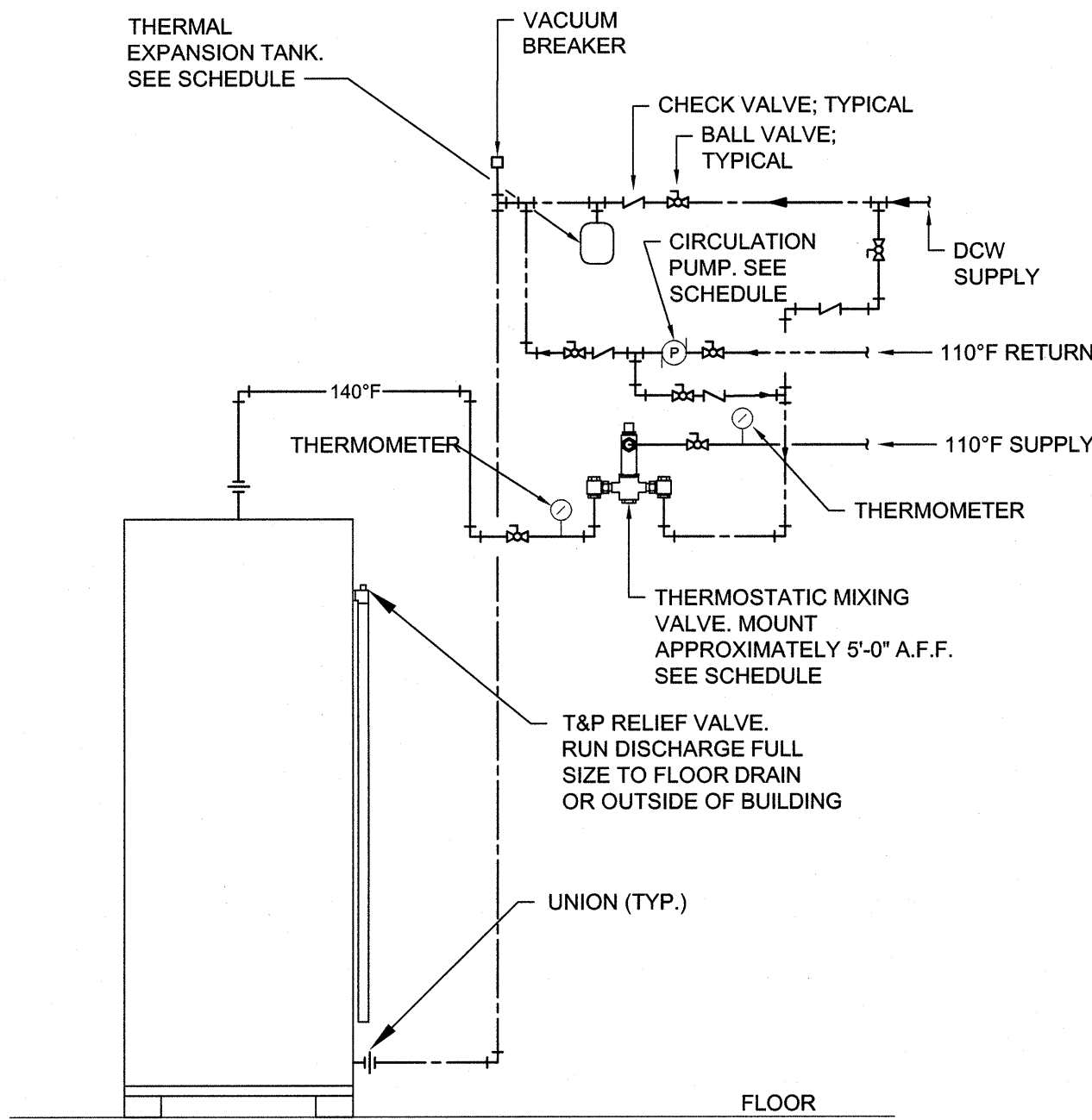


1 **WATER SERVICE ENTRANCE DETAIL**
NOT TO SCALE

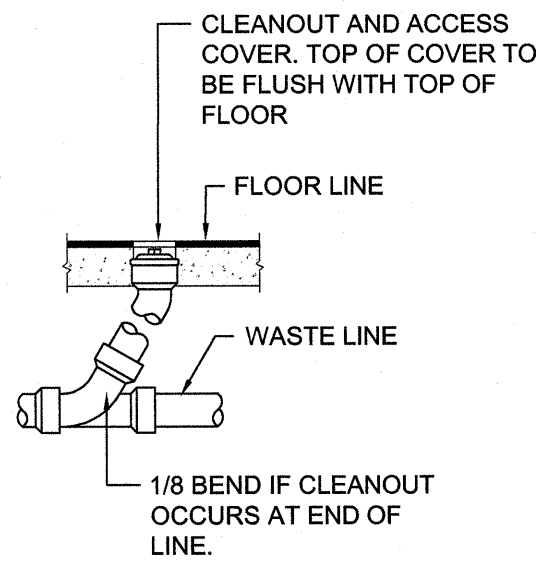


JOSAM NO.	P.D.I. SYMBOL	FIXTURE UNIT RATING	A SIZE
7501-S	A	1-11	1/2
7502-S	B	12-32	3/4
7503-S	C	33-60	1
7504-S	D	61-113	1 1/4
7505-S	E	114-154	1 1/2
7506-S	F	155-330	2

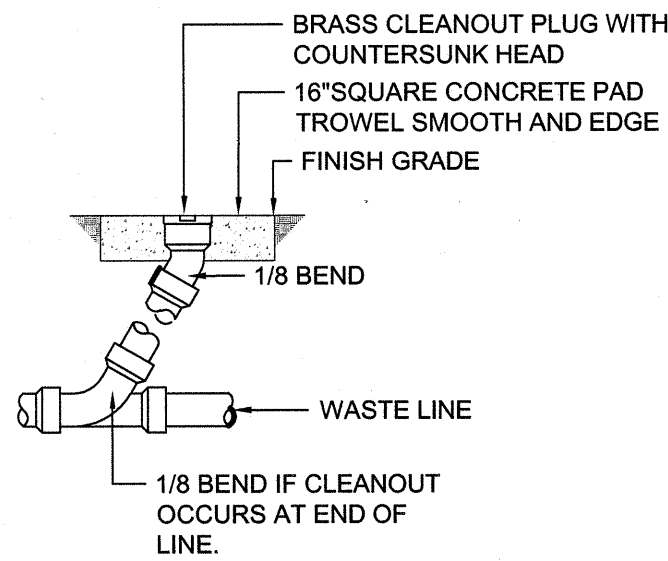
2 **WATER HAMMER ARRESTOR DETAIL**
NOT TO SCALE



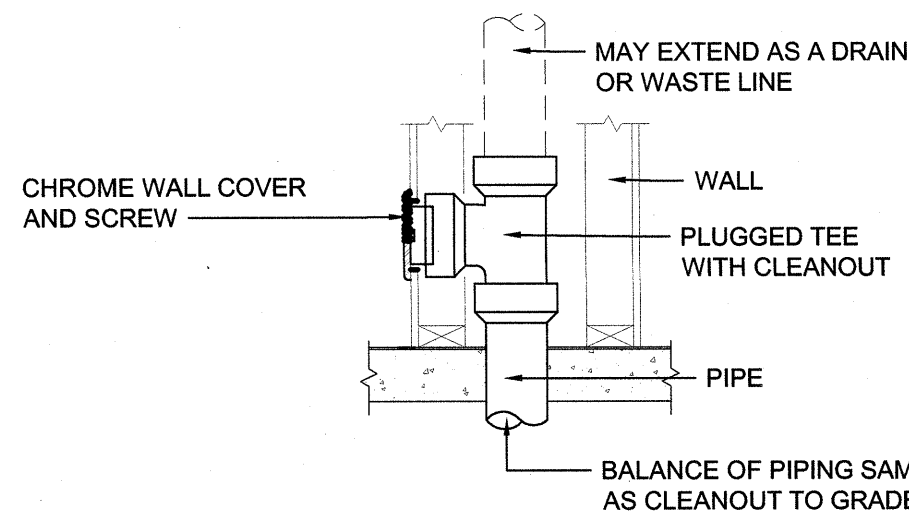
3 **WATER HEATER DETAIL**
NOT TO SCALE



FLOOR CLEANOUT (FCO)



GRADE CLEANOUT (GCO)



WALL CLEANOUT (WCO)

4 **CLEANOUT DETAILS**
NOT TO SCALE

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	TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150		DEPARTMENT OF THE NAVY MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA		
	DES. JBS		RENOVATE BLDG. M100 CAMP LEJEUNE, NORTH CAROLINA		
	DR. JBS				
	CHK. TOG				
SUBMITTED BY:		DESIGN DR. T. H. BURTON, PE			
APPROVED:		DATE	SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
TROY O. GRADY		8/21/19	F	80091	60024987
SATISFACTORY TO:		DATE	SCALE:	SPEC:	SHEET 26 OF 45
			NOTED	05-19-0062	

ABBREVIATIONS

TERM	ABBREVIATION	TERM	ABBREVIATION
ABOVE FINISHED FLOOR	AFF	INCH OF WATER GAUGE	INWG
ABOVE GROUND	AG	INDOOR UNIT	IDU
ABOVE SEA LEVEL	ASL	IRON PIPE SIZE	IPS
ACROSS THE LINE	ACL	KILOVOLT-AMP	KVA
AIR ADMITTANCE VALVE	AAV	KILOWATT	KW
AIR CONDITIONING (-ING, -ED)	AIR COND	KILOWATT HOUR	KWH
AIR-HANDLING UNIT	AHU OR AH	LEAVING AIR TEMPERATURE	LAT
AIR FLOW MEASURING STATION	AFMA	LEAVING WATER TEMPERATURE	LWT
AMBIENT	AMB	LENGTH	LG
AMPERE (AMP, AMPS)	AMP	LINEAR FEET	LF
ANALOG INPUT	AI	MAXIMUM	MAX
ANALOG OUTPUT	AO	MAXIMUM OVERCURRENT PROTECTION	MOC
AND	&	MEDIUM-PRESSURE STEAM	MPS
APPARATUS DEW POINT	ADP	MILES PER HOUR	MPH
APPROXIMATE	APPROX	MINIMUM	MIN
ARCHITECT	ARCH	MINIMUM CIRCUIT AMPERES	MCA
ATMOSPHERE	ATM	MINUTE	MIN
AVERAGE	AVG	MANUFACTURER	MFR
BRAKE HORSEPOWER	BHP	MOTOR CONTROL CENTER	MCC
BROWN & SHARPE WIRE GAGE	B&S	NOISE CRITERIA	NC
BRITISH THERMAL UNIT	BTU	NON-STANDARD PART LOAD	NPLV
BRITISH THERMAL UNIT PER HOUR	BTUH	NORMALLY OPEN	NO
1000 BRITISH THERMAL UNIT	MBH	NORMALLY CLOSED	NC
BUILDING	BLDG	NOT APPLICABLE	N/A
BUILDING AUTOMATION SYSTEM	BAS	NOT IN CONTRACT	NTIC
CELSIUS	°C	NOT TO SCALE	NTS
CHILLED WATER RETURN	CHWR	NUMBER	NO
CHILLED WATER SUPPLY	CHWS	ON CENTER	OC
COEFFICIENT, VALVE FLOW	CV	OUNCE	OZ
COEFFICIENT OF PERFORMANCE FACTOR	COP	OUTDOOR UNIT	ODU
COMPRESSOR	COMP	OUTSIDE AIR	OA
CONCRETE	CONC	PACKAGE UNIT	PU
CONDENSER (-ING, -ATION)	COND	PACKAGE TERMINAL AIR CONDITIONER	PTAC
CONNECTION	CONN	PARTS PER MILLION	PPM
CONTINUATION	CONT	PERCENT	%
COOLING LOAD	CLG LOAD	PHASE	PH
CUBIC FEET	CU FT	POUNDS	LBS
CUBIC INCH	CU IN	POUNDS PER SQUARE FOOT	PSF
CUBIC FEET PER MINUTE	CFM	POWER VENTILATOR	PV
CFM, STANDARD CONDITIONS	SCFM	PRESSURE	PRESS
DECIBEL	DB	PRESSURE REDUCING VALVE	PRV
DEGREE	DEG OR °	PRESSURE SAFETY VALVE	PSV
DEDICATED OUTDOOR AIR SYSTEM	DOAS	PUMPED CONDENSATE	PC
DEGREES FAHRENHEIT	DEG. F	QUANTITY	QTY
DETAIL	DET	RATED LOAD AMPS	RLA
DEW-POINT TEMPERATURE	DPT	REGULATE	REGIRC
DIAMETER	DIA	REDUCED PRESSURE BACKFLOW PREVENTER	RPZ
DIAMETER, INSIDE	ID	REFRIGERANT (12, 22, ETC.)	R22, R410
DIAMETER, OUTSIDE	OD	REFRIGERANT LIQUID	RL
DIFFERENCE OR DELTA	DIFF	REFRIGERANT SUCTION	RS
DIGITAL INPUT	DI	REQUIRED	REQD OR REQ'D
DIGITAL OUTPUT	DO	RELATIVE HUMIDITY	RH
DOMESTIC HOT WATER	DHW	RETURN AIR	RA
DOMESTIC HOT WATER RECIRCULATION	DHWR	REVOLUTIONS PER MINUTE	RPM
DRY-BULB TEMPERATURE	DBT	REVOLUTIONS PER SECOND	RPS
DUCTLESS SPLIT SYSTEM AIR HANDLER	DAH	ROOF VENTILATOR	RV
DUCTLESS SPLIT SYSTEM HEAT PUMP	DHP	ROOF TOP UNIT	RTU
ENERGY EFFICIENCY RATING	ERR	SAFETY FACTOR	SF
EFFICIENCY	EFF	SEASONAL ENERGY EFFICIENCY RATIO	SEER
ELECTRIC UNIT HEATER	EUH	SECOND	S
ELEVATION	EL	SHADING COEFFICIENT	SC
ENTERING	ENT	SPECIFICATION	SPEC
ENTERING WATER TEMPERATURE	EWT	SQUARE	SQ
ENTERING AIR TEMPERATURE	EAT	STANDARD	STD
EXISTING	(X)	STATIC PRESSURE	SP
EXTERNAL AMBIENT TEMPERATURE	EAT	SUPPLY	SPLY
EXTERNAL STATIC PRESSURE	ESP	SUPPLY AIR	SA
EXHAUST AIR	EA	TEMPERATURE	TEMP
EXHAUST FAN	EF	TEMPERATURE DIFFERENCE	TD
FACE VELOCITY	FVEL	THERMOSTAT	T STAT
FAHRENHEIT	°F	TONS OF REFRIGERATION	TONS
FEET PER MINUTE	FPM	TO BE DETERMINED	TBD
FEET PER SECOND	FPS	TOP OF STEEL	TOS
FLOOR	FLR	TOTAL DYNAMIC HEAD	TDH
FOOT OR FEET	FT	TYPICAL	TYP
FULL LOAD AMPS	FLA	U-FACTOR	U
GAGE OR GAUGE	GA	UNDER GROUND	UG
GALLONS	GAL	UNLESS OTHERWISE NOTED	UN
GALLONS PER HOUR	GPH	UNIT HEATER - ELECTRIC	UH
GALLONS PER MINUTE	GPM	VARIABLE AIR VOLUME	VAV
GALLONS PER DAY	GPD	VARIABLE FREQUENCY DRIVE	VFD
GAS UNIT HEATER	GUH	VELOCITY	VEL
GRAINS	GR	VENTILATION, VENT	VENT
HEAD	HD	VENT THRU ROOF	VTR
HEAT EXCHANGER	HX	VERTICAL	VERT
HEATING AND VENTILATION UNIT	HV	VOLT	V
HEATING, VENTILATION AND AIR CONDITIONING	HVAC	VOLT AMPERE	VA
HEIGHT	HGT	VOLUME	VOL
HERTZ	HZ	WATER PRESSURE DROP	WPD
HIGH DENSITY POLYPROPYLENE	HDPE	WATER GAUGE	WG
HIGH-PRESSURE STEAM	HPS	WATT	W
HORSEPOWER, HEAT PUMP	HP	WATT-HOUR	WH
HOT WATER COIL	HWC	WITH	WI
HOUR(S)	HR	WEIGHT	WT
HUMIDITY, RELATIVE	RH	WET BULB	WB
INTEGRATED PART LOAD VALUES	IPLV	YARD	YD
INCH	IN.	YEAR	YR

NOTE: ALL ABBREVIATIONS MAY NOT BE USED IN PROJECT.

MECHANICAL LEGEND

AHU#	AIR HANDLING UNIT NUMBER
BC#	BRANCH CONTROLLER NUMBER
DAH#	DUCTLESS AIR HANDLING UNIT NUMBER
DHP#	DUCTLESS HEAT PUMP UNIT NUMBER
E#	EXHAUST GRILLE NUMBER
F#	EXHAUST FAN NUMBER
HP#	HEAT PUMP UNIT NUMBER
I#	INTAKE GRILLE NUMBER
PU#	PACKAGED UNIT NUMBER
PV#	POWER VENTILATOR NUMBER
R#	RETURN GRILLE NUMBER
RH#	ROOF HOOD SCHEDULE
RPM	ROTATIONS PER MINUTE
S#	SUPPLY DIFFUSER NUMBER
	EMERGENCY SHUT OFF
	THERMOSTAT / TEMPERATURE SENSOR
	EXTENT OF DEMOLITION
	CONNECTION POINT - NEW TO EXISTING
	INDICATES TO DEMOLISH
	1-HR RATED
	REFRIGERANT PIPING
	VOLUME DAMPER
	SECTION CALLOUT
	DIFFUSER / REGISTER / GRILLE NO. AS SHOWN ON PLAN AND SCHEDULE
	AIRFLOW, CFM

MECHANICAL DEMOLITION NOTES

- THE MECHANICAL CONTRACTOR SHALL REVIEW THE DRAWINGS AND SPECIFICATIONS FOR DEMOLITION REQUIREMENTS AND LAYOUT HIS WORK IN A COMPATIBLE AND COMPLEMENTARY MANNER. REMOVE ALL EQUIPMENT, DUCTWORK, SUPPORTS, CONTROLS, ACCESSORIES, ETC., AND MECHANICAL ITEMS MADE OBSOLETE BY THESE ALTERATIONS AS SHOWN IN THE MECHANICAL DRAWINGS. ALL ITEMS TO BE REMOVED OR MODIFIED MAY NOT BE SHOWN, HOWEVER, THIS CONTRACTOR SHALL REMOVE ANY MECHANICAL WORK AS REQUIRED BY THE CONSTRUCTION.
- PREPARE A DEMOLITION PLAN AND SUBMIT PROPOSED DEMOLITION, AND REMOVAL PROCEDURES FOR APPROVAL BEFORE WORK IS STARTED. PLAN SHALL BE APPROVED BY CONTRACTING OFFICER PRIOR TO WORK BEGINNING. DO NOT BEGIN DEMOLITION UNTIL AUTHORIZATION IS RECEIVED FROM THE CONTRACTING OFFICER.
- BEFORE BEGINNING ANY DEMOLITION WORK, SURVEY THE SITE AND EXAMINE THE DRAWINGS AND SPECIFICATIONS TO DETERMINE THE EXTENT OF THE WORK, RECORD EXISTING CONDITIONS IN THE PRESENCE OF THE CONTRACTING OFFICER SHOWING THE CONDITION OF STRUCTURES AND OTHER FACILITIES ADJACENT TO AREAS OF ALTERATION OR REMOVAL. PHOTOGRAPHS SIZED 4 INCH WILL BE ACCEPTABLE AS A RECORD OF EXISTING CONDITIONS. INCLUDE IN THE RECORD THE ELEVATION OF THE TOP OF FOUNDATION WALLS, FINISH FLOOR ELEVATIONS, POSSIBLE CONFLICTING ELECTRICAL, CONDUITS, PLUMBING LINES, ALARMS SYSTEMS, THE LOCATION AND EXTENT OF EXISTING CRACKS AND OTHER DAMAGE AND DESCRIPTION OF SURFACE CONDITIONS THAT EXIST PRIOR TO BEFORE STARTING WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY AND DOCUMENT ALL REQUIRED OUTAGES WHICH WILL BE REQUIRED DURING THE COURSE OF WORK, AND TO NOTE THESE OUTAGES ON THE RECORD DOCUMENT. SUBMIT SURVEY RESULTS.
- EXCEPT FOR SALVAGED ITEMS, AND FOR MATERIALS OR EQUIPMENT SCHEDULED FOR SALVAGE, ALL MATERIALS AND EQUIPMENT REMOVED AND NOT REUSED OR SALVAGED, SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM GOVERNMENT PROPERTY. TITLE TO MATERIALS RESULTING FROM DEMOLITION AND DECONSTRUCTION, AND MATERIALS AND EQUIPMENT TO BE REMOVED, IS VESTED IN THE CONTRACTOR UPON APPROVAL BY THE CONTRACTING OFFICER OF THE CONTRACTOR'S DEMOLITION, DECONSTRUCTION, AND REMOVAL PROCEDURES, AND AUTHORIZATION BY THE CONTRACTING OFFICER TO BEGIN DEMOLITION AND DECONSTRUCTION. THE GOVERNMENT WILL NOT BE RESPONSIBLE FOR THE CONDITION OR LOSS OF, OR DAMAGE TO, SUCH PROPERTY AFTER CONTRACT AWARD, SHOWING FOR SALE OR SELLING MATERIALS AND EQUIPMENT ON SITE IS PROHIBITED.
- THESE DRAWINGS ARE COMPILED BY THE ENGINEER FROM THE OWNER'S RECORD DRAWINGS AND LIMITED FIELD VERIFICATION OF EXISTING CONDITIONS FOR THE PURPOSE OF INDICATING THE WORK REQUIRED AND ARE BELIEVED TO BE CORRECT. NOTWITHSTANDING, THE CONTRACTOR SHALL VERIFY ALL DUCTWORK, EQUIPMENT LOCATIONS, DIMENSIONS AND ALL FIELD CONDITIONS AFFECTING HIS WORK.
- WHERE MECHANICAL SYSTEMS PASS THROUGH THE DEMOLITION AREAS TO SERVE OTHER PORTIONS OF THE PREMISES, THEY SHALL REMAIN OR BE SUITABLY RELOCATED AND THE SYSTEM RESTORED TO NORMAL OPERATION. ADVISE THE CONTRACTING OFFICER IMMEDIATELY IF SUCH CONDITIONS ARE UNCOVERED BEFORE PROCEEDING WITH ADDITIONAL WORK.
- DO NOT INTERRUPT EXISTING UTILITIES SERVING OCCUPIED OR USED FACILITIES, EXCEPT WHEN AUTHORIZED IN WRITING BY THE CONTRACTING OFFICER. DO NOT INTERRUPT EXISTING UTILITIES SERVING FACILITIES OCCUPIED AND USED BY THE GOVERNMENT EXCEPT WHEN APPROVED IN WRITING AND THEN ONLY AFTER TEMPORARY UTILITY SERVICES HAVE BEEN APPROVED AND PROVIDED. DO NOT BEGIN DEMOLITION OR DECONSTRUCTION WORK UNTIL ALL UTILITY DISCONNECTIONS HAVE BEEN MADE. SHUT OFF AND CAP UTILITIES FOR FUTURE USE, AS INDICATED. TEMPORARY SERVICES INCLUDING BUILDING HEAT AND HEATING OF DOMESTIC WATER SHALL BE REQUIRED WHEN ANY INTERRUPTION OF SUCH SERVICES EXCEEDS 12 HOURS EXCEPT WHEN AUTHORIZED IN WRITING BY THE CONTRACTOR OFFICER.

MECHANICAL GENERAL NOTES

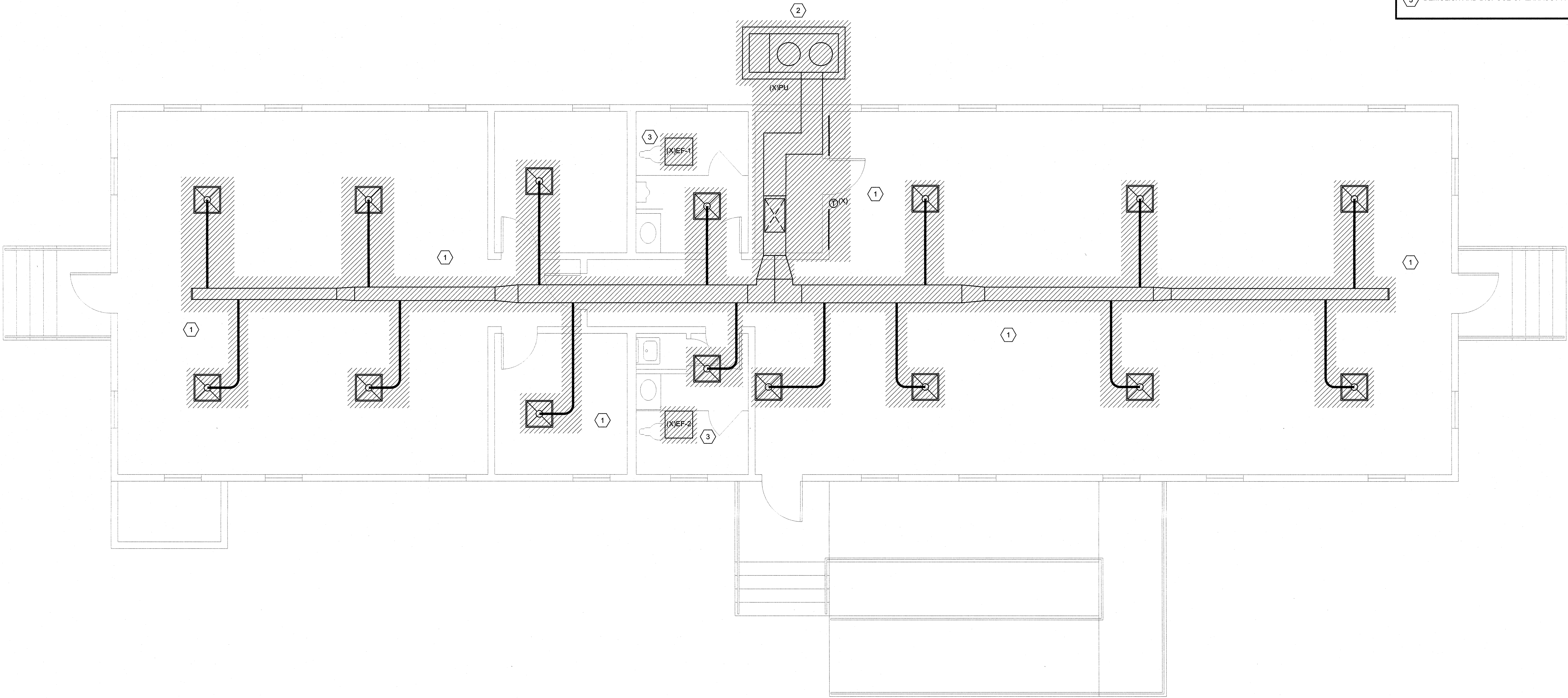
- SCOPE OF WORK: THESE DRAWINGS AND ACCOMPANYING SPECIFICATIONS DESCRIBE THE SCOPE OF WORK REQUIRED FOR PROJECT MECHANICAL HEATING, VENTILATING AND AIR CONDITIONING SYSTEMS. CONTRACTOR SHALL PROVIDE ALL LABOR AND MATERIAL REQUIRED FOR COMPLETE, FULLY FUNCTIONING MECHANICAL SYSTEMS COMPLYING WITH THE INTENT OF THE DRAWINGS AND SPECIFICATIONS.
- DRAWINGS: DRAWINGS ARE DIAGRAMMATIC AND MAY NOT COMPLETELY DESCRIBE EVERY DETAIL OF THE INSTALLATION. HOWEVER, CONTRACTOR IS RESPONSIBLE FOR FURNISHING COMPLETE SYSTEMS INCLUDING ALL REQUIRED EQUIPMENT AND ACCESSORIES TO OBTAIN FULLY FUNCTIONING HVAC SYSTEMS.
- MANUFACTURER'S RECOMMENDATIONS - INSTALL ALL EQUIPMENT IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- WORKMANSHIP - UTILIZE SKILLED MECHANICS TO OBTAIN A HIGH QUALITY PROFESSIONAL FINISH INSTALLATION WHEN COMPLETED. WORK OF UNACCEPTABLE QUALITY SHALL BE REMOVED AND REWORKED AT NO ADDITIONAL COST. CONTRACTING OFFICER SHALL BE THE JUDGE OF WORKMANSHIP AND THEIR OPINION WILL BE FINAL. IN ADDITION, ANY EXISTING CONSTRUCTION DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE CONTRACTING OFFICER BY THE CONTRACTOR AT NO ADDITIONAL COST.
- SUPERVISION: PROVIDE SKILLED SUPERINTENDENTS TO SUPERVISE THE WORK FROM THE BEGINNING TO COMPLETION AND FINAL INSPECTION.
- PROGRESS OF WORK: PERFORM WORK IN ACCORDANCE WITH SCHEDULE AND REQUIREMENTS OF THE OWNER. UNDER NO CIRCUMSTANCES SHALL THIS CONTRACTOR DELAY THE OVERALL PROJECT SCHEDULE.
- COORDINATION: COORDINATE MECHANICAL WORK WITH THE WORK OF OTHER TRADES. LOCATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE UNLESS SPECIFICALLY DIMENSIONED. LAYOUT MECHANICAL WORK SO AS NOT TO INTERFERE WITH THE WORK OF OTHER TRADES. VERIFY ACTUAL BUILDING STRUCTURE PRIOR TO DUCT FABRICATION AND ADJUST ARRANGEMENT AS REQUIRED. INCLUDE ALL OFFSETS IN DUCTS, FITTINGS, PIPING, ETC. AS REQUIRED TO PROPERLY INSTALL EQUIPMENT.
- EQUIPMENT LOCATIONS: DETERMINE EXACT EQUIPMENT AND MATERIALS LOCATIONS TO PROVIDE BEST ARRANGEMENT AND TO FACILITATE PROPER MAINTENANCE AND SERVICING OF EQUIPMENT.
- LISTING AND LABELING: ALL EQUIPMENT SHALL BE LABELED OR LISTED BY UL OR OTHER APPROVED TESTING AGENCY WHERE REQUIRED.
- CLEANUP: REMOVE ALL DEBRIS GENERATED IN THE ACCOMPLISHMENT OF WORK UNDER THIS PROJECT. CLEAN, REPLACE OR REPAIR ALL SURFACES SOILED OR DAMAGED DURING THE COURSE OF THE WORK. REMOVE DEBRIS DAILY SO TO MAINTAIN SAFE WORKING CONDITIONS.
- DEMOLISH EXISTING EQUIPMENT PADS AS REQUIRED TO ACCOMMODATE NEW EQUIPMENT LAYOUT.

SEE DISCLOSURE OF INFORMATION STATEMENT ON SHEET T-1

CBHF Engineers, PLLC 2246 Yaupon Drive Wilmington, NC 28401 Phone: 910.791.4000 Fax: 910.791.5266 www.cbhfengineers.com <small>© Copyright 2013 CBHF Engineers, PLLC NCEP-PA-0008</small>	SHEET TITLE: MECHANICAL NOTES		M-1
	ABBREVIATIONS & LEGENDS		
	TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150		
	DES. GAS DR. GAS CHK. TOG SUBMITTED BY: DESIGN DIR. T. H. BURTON, PE APPROVED:		
	DATE DATE DATE		
SEAL 043801 TROY O. GRADY ENGINEER	SIZE F CODE IDENT. NO. 80091 NAVFAC DRAWING NO. 60024988 CONST. CONTR. NO. N40085-15-D-0859	DEPARTMENT OF THE NAVY MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA RENOVATE BLDG. M100 CAMP LEJEUNE, NORTH CAROLINA	
SATISFACTORY TO:		SCALE: NOTED SPEC: 05-19-0062	SHEET 27 OF 45

REVISIONS			
SYM.		DATE	APPROVED

DEMOLITION KEYED NOTES	
1	DEMOLISH AND DISPOSE OF ALL SUPPLY AND RETURN DUCTWORK INCLUDING BUT NOT LIMITED TO HANGERS, INSULATION, CONTROLS, GRILLES AND DIFFUSERS.
2	DEMOLISH AND DISPOSE OF OUTDOOR UNIT AND CONCRETE PAD INCLUDING BUT NOT LIMITED TO DUCTWORK CONTROLS AND INSULATION.
3	DEMOLISH AND DISPOSE OF EXHAUST FAN AND EXHAUST DUCTWORK INCLUDING EXISTING ROOF VENTS.



1

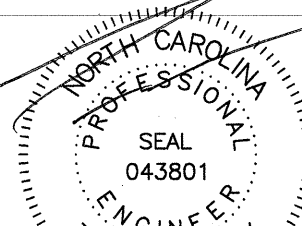
FIRST FLOOR PLAN

1/4" = 1'-0"

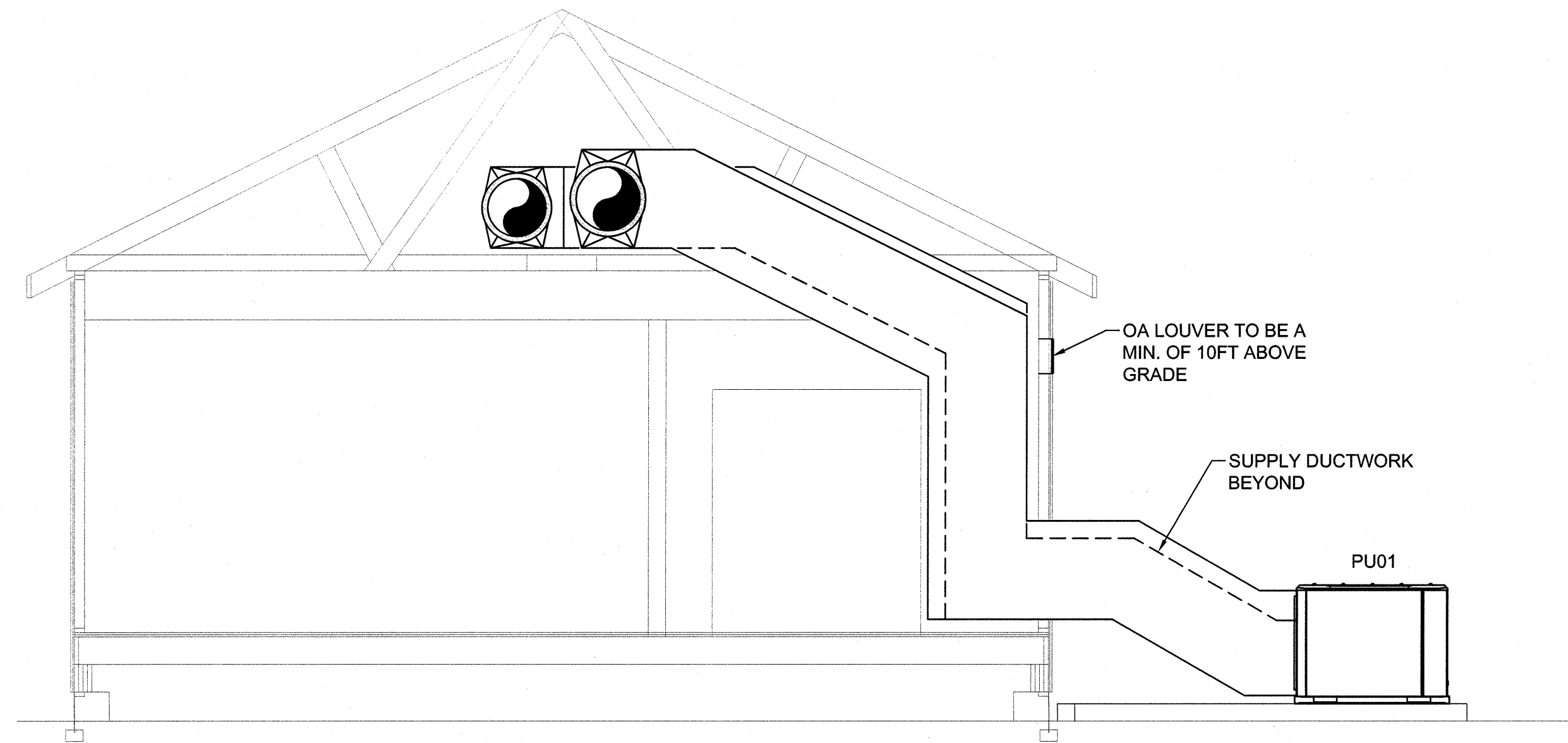
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PLAN NORTH

SEE DISCLOSURE OF INFORMATION STATEMENT ON SHEET T-1

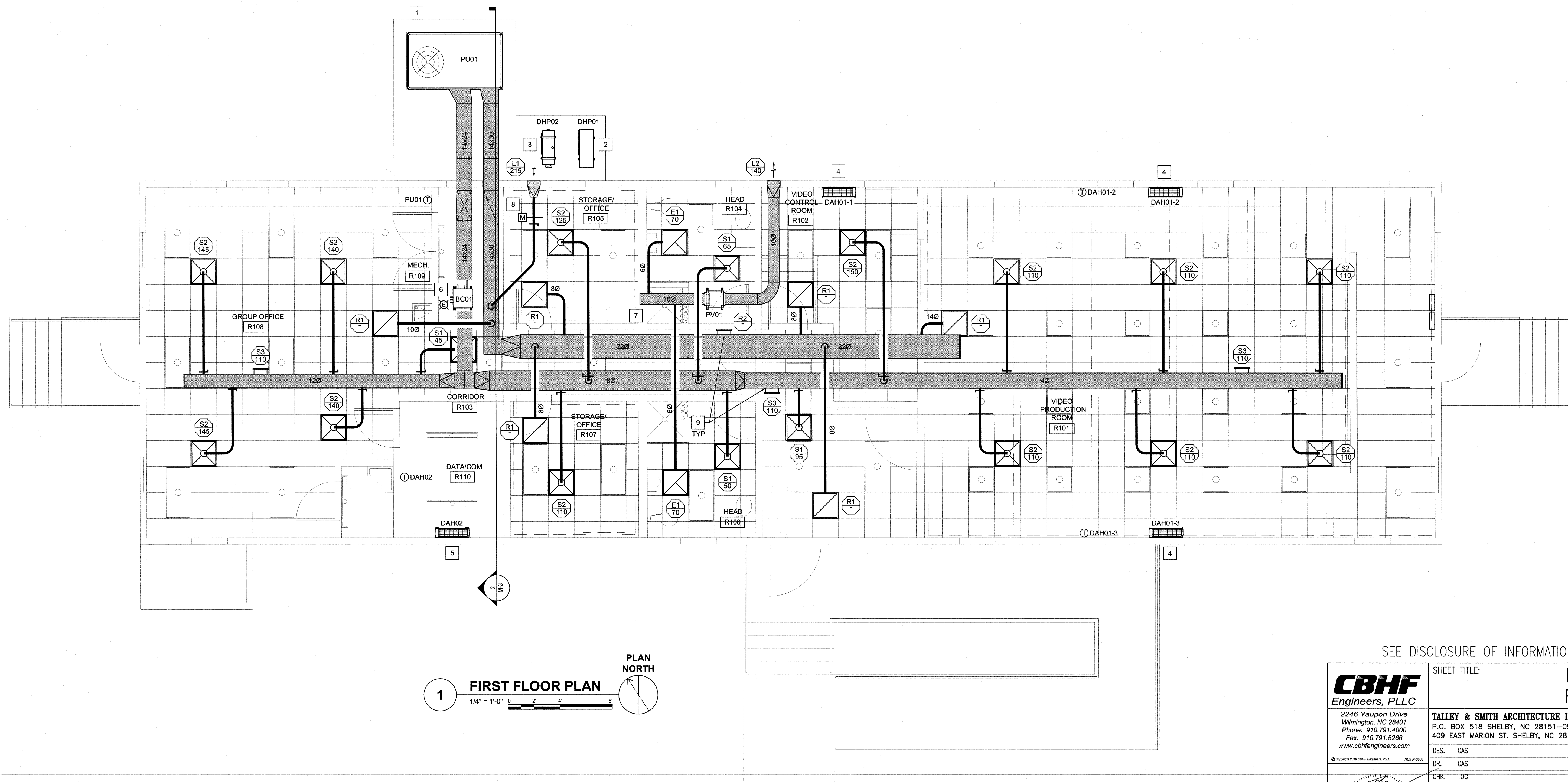
CBHF Engineers, PLLC 2246 Yaupon Drive Wilmington, NC 28401 Phone: 910.791.4000 Fax: 910.791.5266 www.cbhfengineers.com <small>©Copyright 2018 CBHF Engineers, PLLC NCEC 100628</small>	SHEET TITLE:		MECHANICAL DEMOLITION FLOOR PLAN		M-2
	TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150		DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA		
	DES. GAS		RENOVATE BLDG. M100 CAMP LEJEUNE, NORTH CAROLINA		
	DR. GAS				
	CHK. TOG				
 T. O. GRADY PROFESSIONAL ENGINEER STATE OF NORTH CAROLINA NO. 043801	SUBMITTED BY:		SIZE F		80091
	DESIGN DIR. T. H. BURTON, PE		CODE IDENT. NO.		
	APPROVED:		NAVFAC DRAWING NO. 60024989		
	SATISFACTORY TO:		CONST. CONTR. NO. N40085-15-D-0859		
			SCALE: NOTED		
		SPEC. 05-19-0062		SHEET 28 OF 45	

REVISIONS			
SYM.		DATE	APPROVED



2 MECHANICAL ROOM SECTION
NOT TO SCALE

- CONSTRUCTION KEYED NOTES
1. INSTALL NEW PACKAGED UNIT ON 6" CONCRETE PAD. ROUTE DUCTWORK INTO MECHANICAL ROOM. PENETRATIONS TO BE MADE WEATHER TIGHT. REFER TO SECTION 2/M-3 FOR MORE INFORMATION.
 2. INSTALL OUTDOOR UNIT ON 6" CONCRETE PAD. ROUTE REFRIGERANT PIPING INTO MECHANICAL ROOM TO ASSOCIATED BRANCH CIRCUIT CONTROLLER.
 3. INSTALL OUTDOOR UNIT ON 6" CONCRETE PAD. ROUTE REFRIGERANT PIPING INTO MECHANICAL ROOM AND THEN TO ASSOCIATED AIR HANDLER.
 4. INSTALL AIR HANDLER HIGH ON WALL WHILE MAINTAINING MANUFACTURERS RECOMMENDED CLEARANCE. ROUTE REFRIGERANT PIPING TO BRANCH CIRCUIT CONTROLLER. ROUTE CONDENSATE PIPING DOWN INSIDE WALL CAVITY TO EXTERIOR OF BUILDING AND SPILL TO GRADE.
 5. INSTALL AIR HANDLER HIGH ON WALL WHILE MAINTAINING MANUFACTURERS RECOMMENDED CLEARANCE. ROUTE REFRIGERANT PIPING TO OUTSIDE UNIT. ROUTE CONDENSATE PIPING DOWN INSIDE WALL CAVITY TO EXTERIOR OF BUILDING AND SPILL TO GRADE.
 6. SUSPEND BRANCH CONTROLLER FROM STRUCTURE ABOVE. ROUTE REFRIGERANT PIPING TO ASSOCIATED AIR HANDLING UNITS.
 7. SUSPEND INLINE POWER VENTILATOR PV01 FROM STRUCTURE ABOVE. ROUTE EXHAUST DUCT WORK TO ROOF HOOD RH01 (NOT SHOWN) INSTALLED ON ROOF.
 8. INSTALL MOTORIZED OUTDOOR AIR DAMPER AND MANUAL BALANCE DAMPER.
 9. INSTALL SUPPLY AND RETURN GRILLES IN ATTIC SPACE.



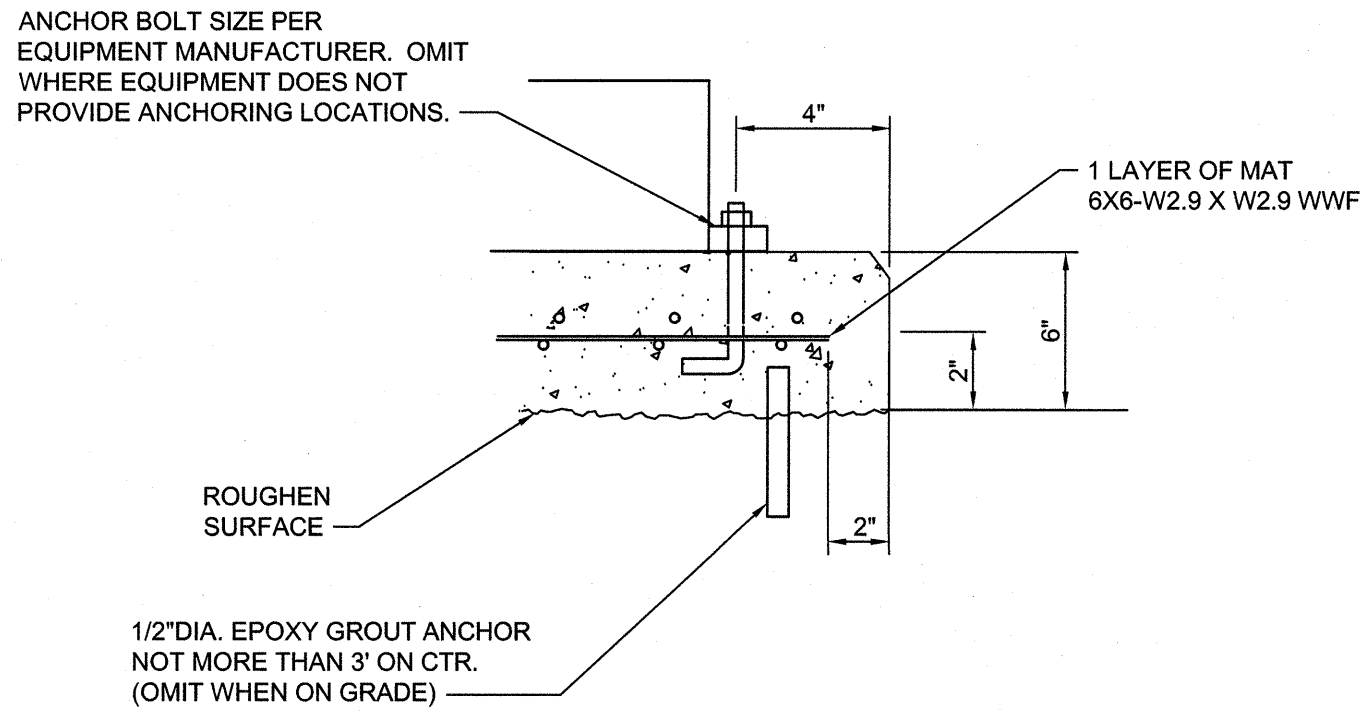
1 FIRST FLOOR PLAN
1/4" = 1'-0"

SEE DISCLOSURE OF INFORMATION STATEMENT ON SHEET T-1

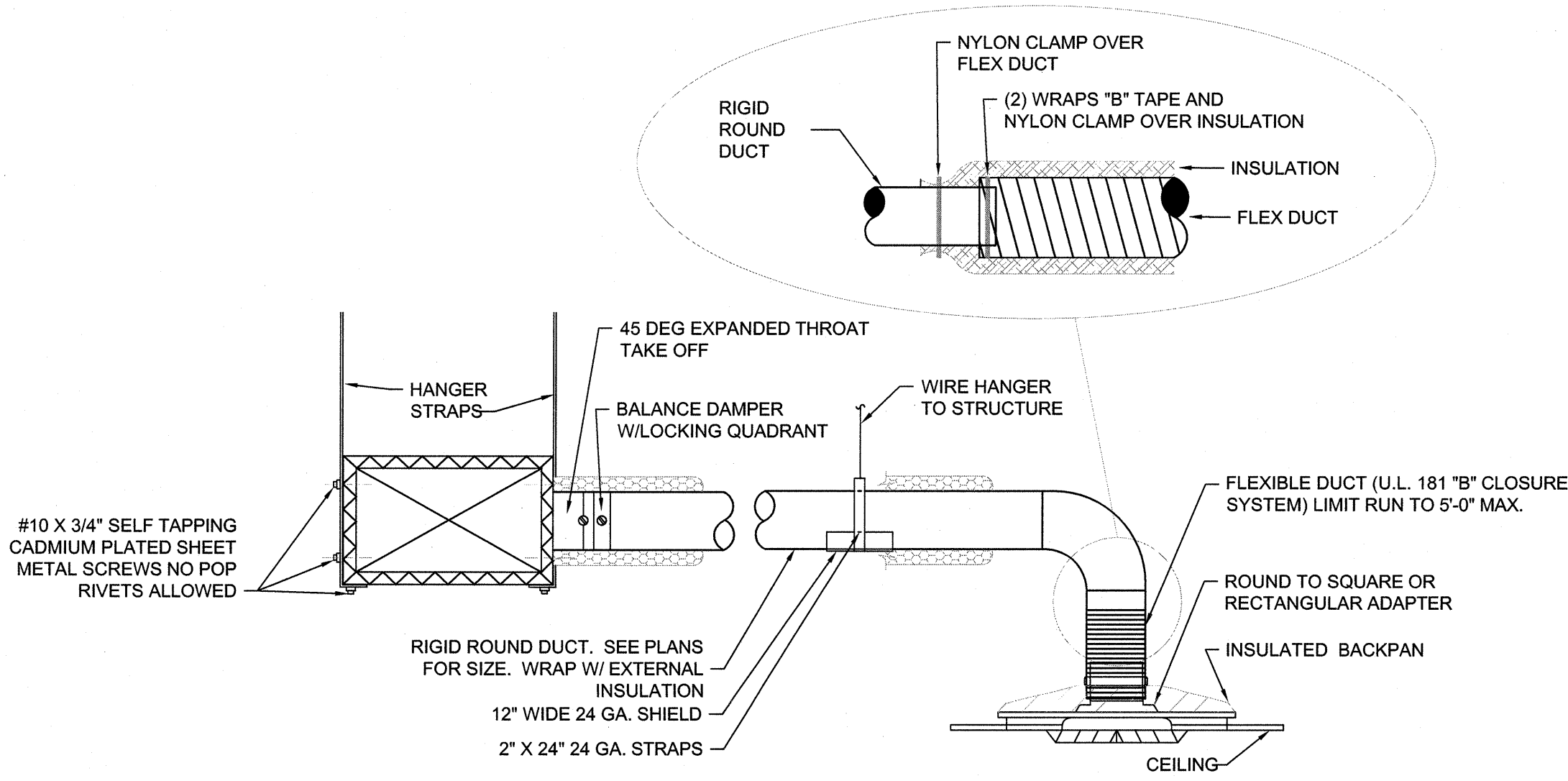
CBHF Engineers, PLLC 2246 Yaupon Drive Wilmington, NC 28401 Phone: 910.791.4000 Fax: 910.791.5266 www.cbhfhengineers.com <small>©Copyright 2019 CBHF Engineers, PLLC. NCEP P-10006</small>	SHEET TITLE:		MECHANICAL FLOOR PLAN		M-3	
	TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150		DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA			
	DES. GAS		RENOVATE			
	DR. GAS		BLDG. M100			
	CHK. TOG		CAMP LEJEUNE, NORTH CAROLINA			
	SUBMITTED BY:		NAVFAC DRAWING NO.		60024990	
	DESIGN DIR. T. H. BURTON, PE		CODE IDENT. NO.		80091	
	APPROVED:		DATE		CONST. CONTR. NO. N40085-15-D-0859	
	SATISFACTORY TO:		DATE		SHEET 29 OF 45	
SCALE: NOTED		SPEC. 05-19-0062				

REVISIONS			
SYM.		DATE	APPROVED

- NOTE:
1. SINGLE LAYER OF MAT AND 2 ANCHOR BOLTS ARE ADEQUATE FOR ALL EQUIPMENT EXCEPT BOILERS OVER 400 MBH AND STORAGE TANKS.
 2. MESH SHALL BE FURNISHED IN SHEETS.
 3. ALL PAD EDGES SHALL BE CHAMFERED.
 4. CONCRETE COMPRESSIVE STRENGTH SHALL BE 4,000 PSI AT 28 DAYS
 5. ONLY ANCHOR EQUIPMENT WITH MANUFACTURER SUPPLIED ANCHOR MOUNTS



1 EQUIPMENT PAD DETAIL
NOT TO SCALE



2 DIFFUSER CONNECTION DETAIL
NOT TO SCALE

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	TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150		DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA			
	DES. GAS		RENOVATE BLDG. M100 CAMP LEJEUNE, NORTH CAROLINA			
	CHK. TOG					
	SUBMITTED BY:					
	DESIGN DIR. T. H. BURTON, PE					
	APPROVED:		DATE	SIZE F	CODE IDENT. NO. 80091	NAVFAC DRAWING NO. 60024991
	SATISFACTORY TO:		DATE	SCALE: NOTED	SPEC. 05-19-0062	SHEET 30 OF 45
	SEAL 043801 ENGINEER TROY O. GRADY 8/2/19					

REVISIONS			
SYM.		DATE	APPROVED

PACKAGED UNIT SCHEDULE

DRAWING CODE	SYSTEM TYPE	COOLING				HOT GAS REHEAT		NATURAL GAS HEATING				EVAPORATOR FAN				ELECTRICAL				WEIGHT (LBS.)	NOTES	ACCESSORIES
		TOTAL (MBH)	SENSIBLE (MBH)	EFFICIENCY	EAT ("Fdb"/"Fwb)	REHEAT CAPACITY (MBH)	COOLING LDB W/ REHEAT ("F)	GAS INPUT (MBH)	GAS OUTPUT (MBH)	STAGES	EAT ("Fdb)	SUPPLY AIRFLOW MAXIMUM(CFM)	OUTSIDE AIRFLOW (CFM)	ESP (IN. WG.)	POWER SUPPLY (V/PH/Hz)	MCA	MCCP					
PU01	GAS-PACK	68	50	EER	12.6	75.5 / 68.1	33.6	68.3	80	64	MODULATING	66.8	2,200	215	0.75	208/3/60	31.0	45	1168	1,2	A,B,C,D,E,F,G	
NOTES:																						
1. REFER TO SPECIFICATION SECTION 23 73 33 - HEATING, VENTILATION, AND COOLING SYSTEM FOR FURTHER REQUIREMENTS.																						
2. CONDENSER COILS TO BE COATED FOR EXPOSURE TO ASTM B117-90 3000 HOUR SALT SPRAY RESISTANCE TEST WITH NO DEGRADATION.																						
ACCESSORIES:																						
A. PROVIDE WITH HOT GAS RE-HEAT FOR DEHUMIDIFICATION CYCLE.																						
B. STAINLESS STEEL GAS HEAT EXCHANGER.																						
C. PROVIDE BACNET MSTP INTERFACE AND WALL MOUNTED ZONE TEMPERATURE AND HUMIDITY SENSOR																						
D. COIL GUARDS.																						
E. HAIL GUARDS.																						
F. PHASE MONITOR.																						
G. PROVIDE VARIABLE SPEED SUPPLY FAN VIA ECM MOTOR.																						

LOUVER SCHEDULE

DRAWING CODE	TYPE	FRAME	DESCRIPTION	MATERIAL	LOUVER DEPTH (IN.)	SIZE (W x H) (IN.)	SERVICE	AIRFLOW (CFM)	PERFORMANCE RATINGS			NOTES	ACCESSORIES
									FREE AREA (SF)	S.P. LOSS (IN.H2O)	WATER PENETRATION (OZ./SF)		
L1	FIXED	CHANNEL	HORIZONTAL, DRAINABLE-BLADE	ALUMINUM	4	12 x 12	INTAKE	215	0.35	0.04	0	1,2	A, B
L2	FIXED	CHANNEL	HORIZONTAL, DRAINABLE-BLADE	ALUMINUM	4	16 x 12	EXHAUST	340	0.35	0.04	0	1,2	A
NOTES: ACCESSORIES: A. BIRD SCREENING (MATERIAL TO MATCH LOUVER MATERIAL). B. PROVIDE MOTORIZED DAMPER WITH END PROVING SWITCH.													

POWER VENTILATOR SCHEDULE

DRAWING CODE	FAN TYPE	SERVICE	CAPACITIES				ELECTRICAL					SONES	WEIGHT (LBS.)	NOTES	ACCESSORIES	
			AIRFLOW (CFM)	ESP (IN. WG.)	DRIVE ARRANGEMENT	FAN RPM	MOTOR RPM	MOTOR TYPE	MOTOR SIZE (HP)	V/PH/Hz	MCA					MOCP
PV01	IN-LINE CENTRIFUGAL FANS	EXHAUST	140	0.25	DIRECT	1411	1725	ECM	1/15	115V/1/60	1	15	5.3	50	1,2	A
NOTES:																
1. REFER TO SPECIFICATION SECTION 23 73 33 - HEATING, VENTILATION, AND COOLING SYSTEM FOR FURTHER REQUIREMENTS.																
2. CONTINUOUS OPERATION DURING OCCUPIED TIMES. REFER TO CONTROL SEQUENCE FOR FURTHER INFORMATION.																
ACCESSORIES:																
A. MOTORIZED DAMPER WITH END PROVING SWITCH.																

DUCTLESS SPLIT SYSTEM SCHEDULE

DRAWING CODE (INDOOR)	DRAWING CODE (OUTDOOR)	INDOOR UNIT		OUTDOOR UNIT		MIN SEER	MIN COP	INDOOR UNIT			OUTDOOR UNIT			NOTES	ACCESSORIES		
		ARI COOLING 80/67/95	ARI HEATING 70/47	COOLING CAPACITY	HEATING CAPACITY			FAN	ELECTRICAL	WEIGHT	ELECTRICAL	WEIGHT					
		TOTAL	TOTAL					SA MIN-MAX (CFM)	VOLTAGE (V/PH/Hz)	MCA (AMPS)	(LBS)	VOLTAGE (V/PH/Hz)	MCA (AMPS)			MOCP (AMPS)	(LBS)
		(MBH)	(MBH)	(MBH)	(MBH)												
DAH01-1		12.0	14.4					145-399	208/1/60	1	22			1	A,B,C,D		
DAH01-2		14.0	18.0	35.4	36.0	19.2	3.5	205-533	208/1/60	1	22	208/1/60	22.1	25	139	1	A,B,C,D
DAH01-3	DHP01	14.0	18.0					205-533	208/1/60	1	22			1	A,B,C,D		
NOTES:																	
1. REFER TO SPECIFICATION SECTION 23 73 33 - HEATING, VENTILATION, AND COOLING SYSTEM FOR FURTHER REQUIREMENTS.																	
ACCESSORIES:																	
A. ELECTRICAL CONTRACTOR TO PROVIDE CONDUIT AND CONDUCTOR FROM OUTDOOR UNIT TO INDOOR UNIT.																	
B. HEAT PUMP COILS TO BE COATED FOR EXPOSURE TO ASTM B117-90 3000 HOUR SALT SPRAY RESISTANCE TEST WITH NO DEGRADATION.																	
C. BACNET MSTP DDC CONTROL SYSTEM INTERFACE																	
D. WIRED WALL-MOUNTED REMOTE CONTROLLER WITH VANDAL PROOF ENCLOSURE.																	

DUCTLESS SPLIT SYSTEM SCHEDULE

DRAWING CODE (IDU / ODU)	ARI COOLING 80/67/95		ARI HEATING 70/47	MIN SEER	MIN HSPF	INDOOR UNIT FAN SA MIN-MAX (CFM)	ELECTRICAL VOLTAGE (V/PH/Hz) TUA (AMPS)	WEIGHT (LBS)	OUTDOOR UNIT ELECTRICAL VOLTAGE (V/PH/Hz) TUA (AMPS)	MOCP (AMPS)	WEIGHT (LBS)	REFRIGERANT PIPING MAXIMUM LENGTH (FT.)	MAXIMUM HEIGHT DIFFERENTIAL (FT.)	NOTES	ACCESSORIES		
	TOTAL (MBH)	MIN (MBH)	TOTAL (MBH)														
DAH02 / DHP02	12	15	14.4	23.1	12.5	109-364	208/1/60	1	22	208/1/60	9	15	81	65	40	1	A,B,C,D
NOTES: 1. REFER TO SPECIFICATION SECTION 23 73 33 - HEATING, VENTILATION, AND COOLING SYSTEM FOR FURTHER REQUIREMENTS. ACCESSORIES: A. ELECTRICAL CONTRACTOR TO PROVIDE CONDUIT AND CONDUCTOR FROM OUTDOOR UNIT TO INDOOR UNIT. B. HEAT PUMP COILS TO BE COATED FOR EXPOSURE TO ASTM B117-90 3000 HOUR SALT SPRAY RESISTANCE TEST WITH NO DEGRADATION. C. BACNET MSTP DDC CONTROL SYSTEM INTERFACE D. WIRED WALL-MOUNTED REMOTE CONTROLLER WITH VANDAL PROOF ENCLOSURE.																	

DIFFUSERS, REGISTERS AND GRILLES SCHEDULE

DRAWING CODE	TYPE	SERVICE	NECK SIZE (IN.)	MODULE SIZE (IN.)	MATERIAL	FINISH	MOUNTING	NOTES	ACCESSORIES
S1	SQUARE CEILING DIFFUSER	SUPPLY	60	24 X 24	ALUMINUM	WHITE	T-BAR	1,2	A
S2	SQUARE CEILING DIFFUSER	SUPPLY	80	12 X 12	ALUMINUM	WHITE	T-BAR	1,2	A
S4	SPIRAL DUCT GRILLE	SUPPLY	-	14 X 6	ALUMINUM	WHITE	DUCT SURFACE	1	B
R1	FIXED FACE GRILLE	RETURN	20 X 20	24 X 24	ALUMINUM	WHITE	T-BAR	1,2	
R2	SPIRAL DUCT GRILLE	RETURN	-	18 X 6	ALUMINUM	WHITE	DUCT SURFACE	1	
E1	FIXED FACE GRILLE	EXHAUST	20 X 20	24 X 24	ALUMINUM	WHITE	T-BAR	1,2	
NOTES: 1. REFER TO SPECIFICATION SECTION 23 37 13 - DIFFUSERS, REGISTERS, AND GRILLES FOR FURTHER INFORMATION. 2. DUCT BRANCH CONNECTION SIZE TO BE EQUAL TO THE NECK SIZE OF DIFFUSER UNLESS NOTED OTHERWISE ON PLANS.									
ACCESSORIES: A. VOLUME DAMPER. B. AIR SCOOP.									

BRANCH BOX SCHEDULE

DRAWING CODE	POWER INPUT (RATED) COOLING (kw)	POWER INPUT (RATED) HEATING (kw)	ELECTRICAL			WEIGHT	NOTES	ACCESSORIES
			VOLTAGE (V/PH/Hz)	MCA (A)	MOCP (A)			
BC01	0.003	0.003	208/1/60	0.05	15	15	1,2	A
NOTES: 1. REFER TO SPECIFICATION SECTION 23 73 33 - HEATING, VENTILATION, AND COOLING SYSTEM FOR FURTHER REQUIREMENTS.								
ACCESSORIES: A. SUCTION AND LIQUID LINES SERVICE ISOLATION VALVES FOR ALL PORTS.								

SEE DISCLOSURE OF INFORMATION STATEMENT ON SHEET T-1

CBHF <i>Engineers, PLLC</i> 2246 Yeupon Drive Wilmington, NC 28401 Phone: 910.791.4000 Fax: 910.791.5266 www.cbhfengineers.com <small>©Copyright 2016 CBHF Engineers, PLLC USF # 0086</small> 	SHEET TITLE:		MECHANICAL SCHEDULES		M-5	
	TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151--0518 409 EAST MARION ST. SHELBY, NC 28150		DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA			
	DES. GAS		DR. GAS			
	CHK. TOG					
	SUBMITTED BY:					
	DESIGN DIR. T. H. BURTON, PE					
	APPROVED:		DATE	SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
	SATISFACTORY TO:		DATE	F	80091	60024992
	SCALE: NOTED		SPEC: 05-19-0062	SHEET 31 OF 45		

SEQUENCE OF OPERATION - PACKAGED UNIT

UNIT SHALL BE PROVIDED WITH A FACTORY BACNET COMMUNICATION INTERFACE. ALL MODES OF OPERATION WILL BE CONTROLLED BY FACTORY CONTROL INTERFACE. ALL OUTPUTS AND INPUTS ON UNIT WILL BE PROVIDED BY EQUIPMENT MANUFACTURER AND BE TIED INTO FACTORY BACNET COMMUNICATIONS INTERFACE. ZONE TEMPERATURE SENSORS, HUMIDITY SENSORS WILL BE BY DDC SYSTEM MANUFACTURER. OUTSIDE AIR DAMPER ACTUATOR AND PROVING SWITCH SHALL BE PROVIDED AND INSTALLED BY DDC CONTRACTOR.

RUN CONDITIONS - SCHEDULED:

THE UNIT SHALL RUN ACCORDING TO A USER DEFINABLE TIME SCHEDULE IN THE FOLLOWING MODES:

- OCCUPIED MODE: THE UNIT SHALL MAINTAIN
 - A 75°F (ADJ.) SETPOINT WHEN OUTSIDE AIR TEMPERATURE IS GREATER THAN 80°F
 - A 70°F (ADJ.) SETPOINT WHEN OUTSIDE AIR TEMPERATURE IS LESS THAN 50°F
 - SETPOINT SHALL RESET LINEARLY WHEN OUTSIDE AIR TEMPERATURE IS BETWEEN 50°F AND 80°F

- UNOCCUPIED MODE (NIGHT SETBACK): THE UNIT SHALL MAINTAIN
 - A 85°F (ADJ.) COOLING SETPOINT.
 - A 55°F (ADJ.) HEATING SETPOINT.
 - ONCE THE COOLING OR HEATING IS ENABLED DUE TO EXCEEDING THE NIGHT SETBACK, THE UNIT SHALL CONTINUE TO COOL OR HEAT UNTIL THE SETPOINT IS EXCEEDED BY 5°F.
 - A 60% (ADJ.) HUMIDITY SETPOINT.

ALARMS SHALL BE PROVIDED AS FOLLOWS:

- HIGH ZONE TEMP: IF THE ZONE TEMPERATURE IS GREATER THAN THE COOLING SETPOINT BY A USER DEFINABLE AMOUNT (ADJ.).
- LOW ZONE TEMP: IF THE ZONE TEMPERATURE IS LESS THAN THE HEATING SETPOINT BY A USER DEFINABLE AMOUNT (ADJ.).
- HIGH ZONE HUMIDITY: IF THE ZONE HUMIDITY IS GREATER THAN THE HUMIDITY SETPOINT BY A USER DEFINABLE AMOUNT (ADJ.).

ZONE SETPOINT ADJUST:

THE OCCUPANT SHALL BE ABLE TO ADJUST THE ZONE TEMPERATURE HEATING AND COOLING SETPOINTS AT THE ZONE SENSOR.

ZONE OPTIMAL START:

THE UNIT SHALL USE AN OPTIMAL START ALGORITHM FOR MORNING START-UP. THIS ALGORITHM SHALL MINIMIZE THE UNOCCUPIED WARM-UP OR COOL-DOWN PERIOD WHILE STILL ACHIEVING COMFORT CONDITIONS BY THE START OF SCHEDULED OCCUPIED PERIOD.

ZONE UNOCCUPIED OVERRIDE:

A TIMED LOCAL OVERRIDE CONTROL SHALL ALLOW AN OCCUPANT TO OVERRIDE THE SCHEDULE AND PLACE THE UNIT INTO AN OCCUPIED MODE FOR 120 MINUTES (ADJ.). AT THE EXPIRATION OF THIS TIME, CONTROL OF THE UNIT SHALL AUTOMATICALLY RETURN TO THE SCHEDULE.

EMERGENCY SHUTDOWN:

THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM UPON RECEIVING AN EMERGENCY SHUTDOWN SIGNAL. EMERGENCY SHUTDOWN TO BE A HARDWIRE INTERLOCK.

SUPPLY AIR SMOKE DETECTION:

THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM UPON RECEIVING A SUPPLY AIR SMOKE DETECTOR STATUS. SMOKE DETECTION TO BE A HARDWIRE INTERLOCK.

SUPPLY FAN:

SINGLE ZONE VAV CONTROLLER SHALL VARY THE INDOOR FAN SPEED AS THE ZONE COOLING OR HEATING LOAD CHANGES, WHILE COOLING CAPACITY IS CYCLED TO MAINTAIN THE SUPPLY AIR TEMPERATURE AT SETPOINT. THE INDOOR FAN SHALL OPERATE AT MAXIMUM SPEED WHENEVER THE HEATER OPERATING. THE SUPPLY FAN SHALL RUN ANYTIME THE UNIT IS COMMANDED TO RUN, UNLESS SHUTDOWN ON SAFETIES. TO PREVENT SHORT CYCLING, THE SUPPLY FAN SHALL HAVE A USER DEFINABLE (ADJ.) MINIMUM RUNTIME.

ALARMS SHALL BE PROVIDED AS FOLLOWS:

- SUPPLY FAN FAILURE: COMMANDED ON, BUT THE STATUS IS OFF.
- SUPPLY FAN IN HAND: COMMANDED OFF, BUT THE STATUS IS ON.
- SUPPLY FAN RUNTIME EXCEEDED: STATUS RUNTIME EXCEEDS A USER DEFINABLE LIMIT (ADJ.).

COOLING:

THE CONTROLLER SHALL MEASURE THE ZONE TEMPERATURE AND STAGE THE COOLING TO MAINTAIN ITS COOLING SETPOINT. TO PREVENT SHORT CYCLING, THE STAGE SHALL HAVE A USER DEFINABLE (ADJ.) MINIMUM RUNTIME.

THE COOLING SHALL BE ENABLED WHENEVER:

- THE ZONE TEMPERATURE IS ABOVE COOLING SETPOINT.
- AND THE SUPPLY FAN STATUS IS ON.
- AND THE HEATING IS NOT ACTIVE.

GAS HEATING STAGE:

THE CONTROLLER SHALL MEASURE THE ZONE TEMPERATURE AND STAGE THE HEATING TO MAINTAIN ITS HEATING SETPOINT. TO PREVENT SHORT CYCLING, THE STAGE SHALL HAVE A USER DEFINABLE (ADJ.) MINIMUM RUNTIME.

THE HEATING SHALL BE ENABLED WHENEVER:

- THE ZONE TEMPERATURE IS BELOW HEATING SETPOINT.
- AND THE SUPPLY FAN STATUS IS ON.
- AND THE COOLING IS NOT ACTIVE.

MINIMUM OUTSIDE AIR VENTILATION:

THE OUTSIDE AIR DAMPER SHALL MAINTAIN A MINIMUM AIRFLOW SCHEDULED WHENEVER OCCUPIED. THE OUTSIDE AIR DAMPER SHALL CLOSE WHEN IN UNOCCUPIED MODE.

DEHUMIDIFICATION:

THE CONTROLLER SHALL MEASURE THE ZONE HUMIDITY AND OVERRIDE THE COOLING SEQUENCE TO MAINTAIN ZONE HUMIDITY AT OR BELOW 60% RH (ADJ.) BY ENABLING HOT-GAS REHEAT. DEHUMIDIFICATION SHALL BE ENABLED WHENEVER THE SUPPLY FAN STATUS IS ON.

ALARMS SHALL BE PROVIDED AS FOLLOWS:

- HIGH ZONE HUMIDITY: IF THE ZONE HUMIDITY IS GREATER THAN 70% (ADJ.).

DISCHARGE AIR TEMPERATURE:

THE CONTROLLER SHALL MONITOR THE DISCHARGE AIR TEMPERATURE.

ALARMS SHALL BE PROVIDED AS FOLLOWS:

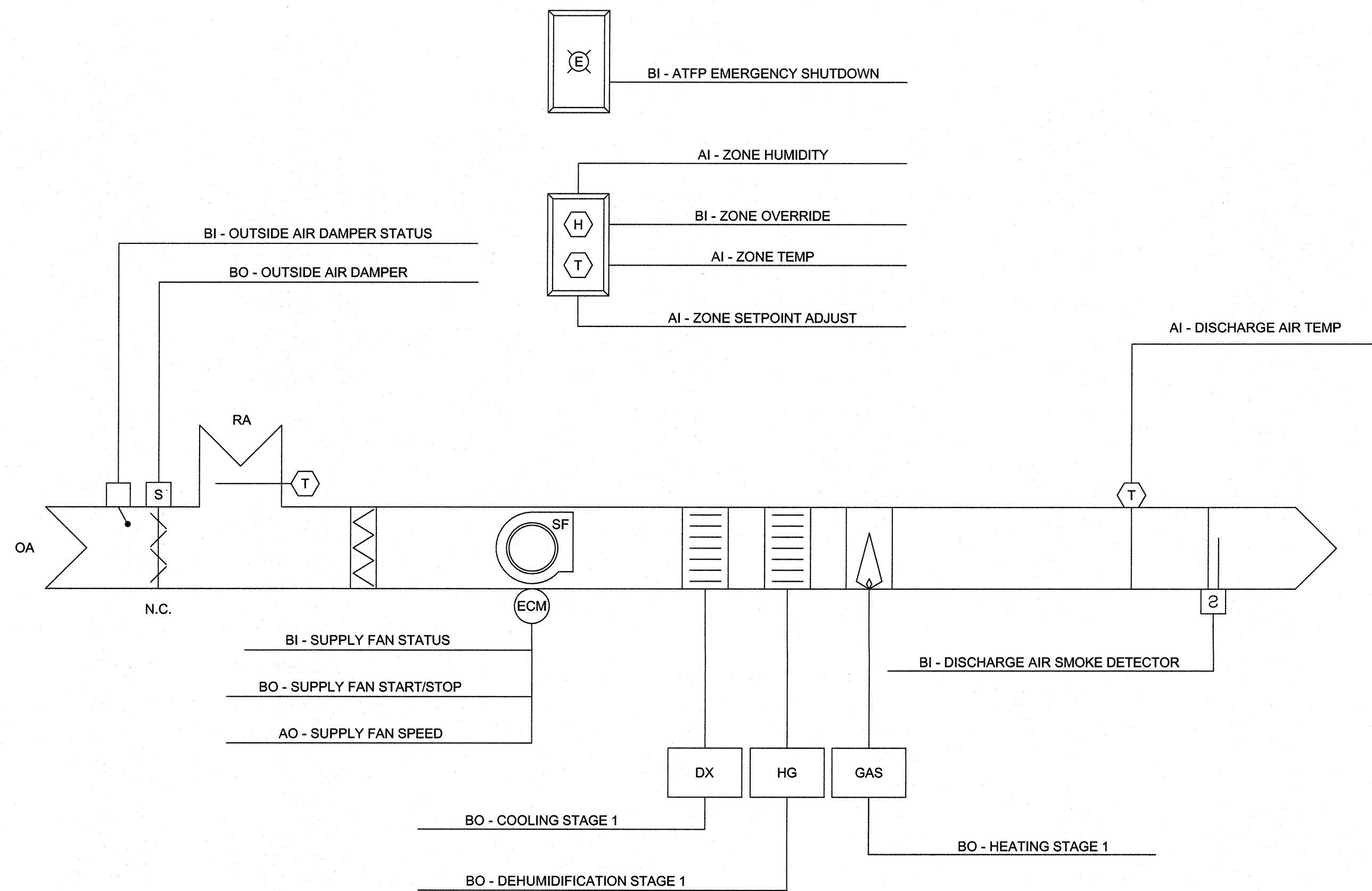
- HIGH DISCHARGE AIR TEMP: IF THE DISCHARGE AIR TEMPERATURE IS GREATER THAN 120°F (ADJ.).
- LOW DISCHARGE AIR TEMP: IF THE DISCHARGE AIR TEMPERATURE IS LESS THAN 40°F (ADJ.).

FAN STATUS:

THE CONTROLLER SHALL MONITOR THE FAN STATUS.

ALARMS SHALL BE PROVIDED AS FOLLOWS:

- FAN FAILURE: COMMANDED ON, BUT THE STATUS IS OFF.
- FAN IN HAND: COMMANDED OFF, BUT THE STATUS IS ON.
- FAN RUNTIME EXCEEDED: FAN STATUS RUNTIME EXCEEDS A USER DEFINABLE LIMIT (ADJ.).



1 PU01 CONTROL SCHEMATIC
NOT TO SCALE

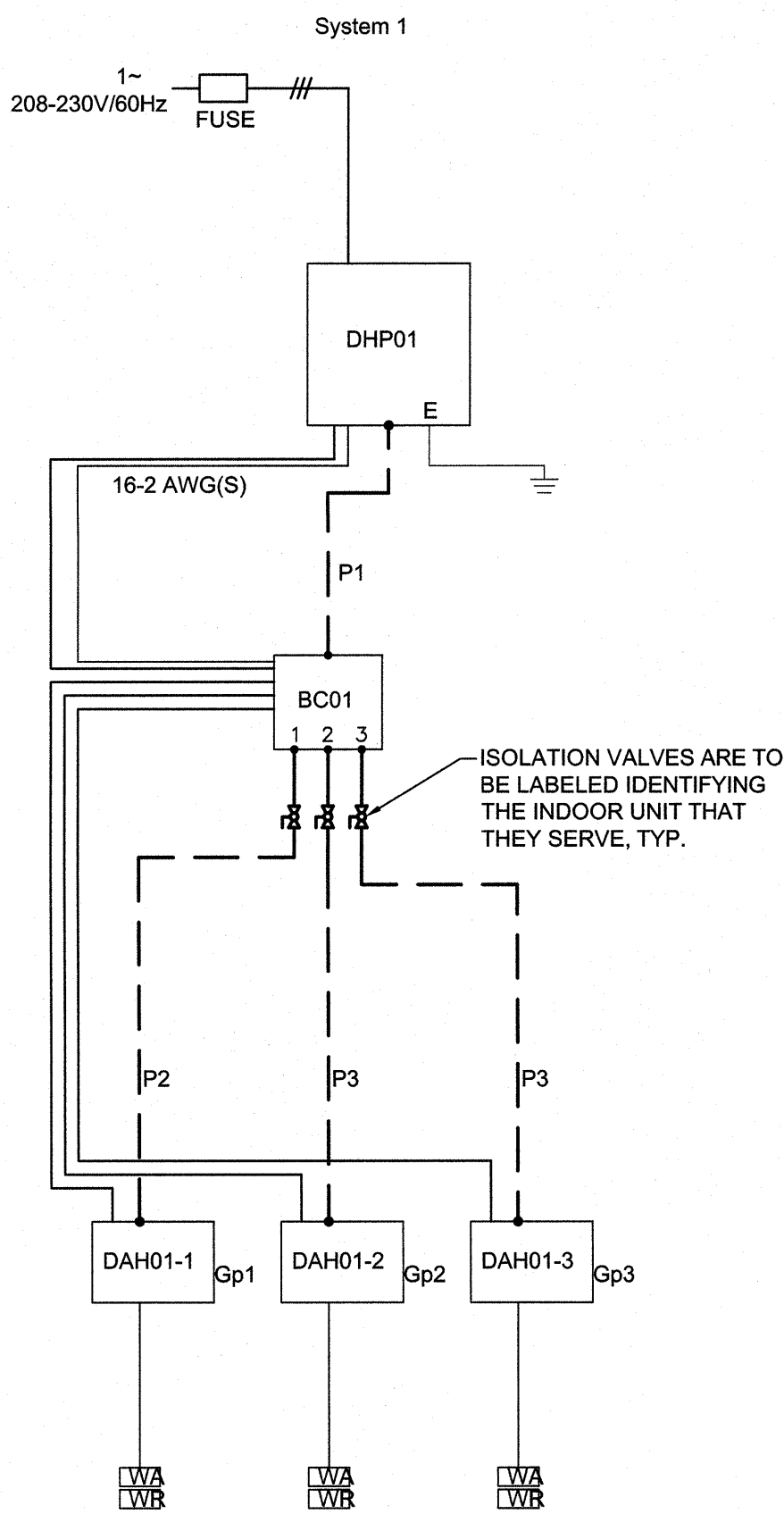
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CBHF Engineers, PLLC 2246 Yeupon Drive Wilmington, NC 28401 Phone: 910.791.4000 Fax: 910.791.5266 www.cbhfengineers.com <small>Copyright 2019 CBHF Engineers, PLLC NCB-P-0006</small>	SHEET TITLE: MECHANICAL CONTROLS		M-6	
	TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150		DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA	
	DES. GAS	RENOVATE BLDG. M100 CAMP LEJEUNE, NORTH CAROLINA		
	DR. GAS			
	CHK. TOG			
	SUBMITTED BY:			
DESIGN DIR. T H BURTON, PE	APPROVED:	DATE	SIZE F	CODE IDENT. NO. 80091
SATISFACTORY TO:	DATE	SCALE: NOTED	SPEC: 05-19-0062	NAVJAC DRAWING NO. 60024993 CONST. CONTR. NO. N400B5-15-D-0859
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19009 - M100	
DIAGRAM SYMBOL LEGEND	CONT.No PAGE
DISPLAY DESCRIPTION	
POWER WIRE	
CONTROL WIRE	
REF. PIPE	

PIPING AND CONTROLS	
SYMBOL LIQUID PIPE/GAS PIPE SIZE	
P1	3/8 / 5/8
P2	1/4 / 3/8
P3	1/4 / 1/2
SYMBOL MODEL NUMBER	
WAWR STOCK CONTROLLER	



ADDITIONAL REFRIGERANT CHARGE IS NEEDED DEPENDING ON THE SIZE AND LENGTH OF EXTENDED PIPING. PLEASE REFER THE AMOUNT OF PRE-CHARGE AND THE FORMULA OF CALCULATION WHICH IS MENTIONED ON THE DATA BOOK.

1.25MM²(16 AWG) : 1.25MM²(16 AWG) OR MORE. 0.75MM²(20 AWG) : BETWEEN 0.5MM²(24 AWG) & 0.75MM²(20 AWG).

NOTE: VRF SYSTEM SCHEMATIC SHOWN IS FOR REFERENCE ONLY AND IS FOR BASIS OF DESIGN. MANUFACTURER IS USED THE SYSTEM SCHEMATIC AND RECOMMENDED INSTALLATION REQUIREMENTS SHOULD BE FOLLOWED AND APPROVED BY GENERAL CONTRACTOR AND ENGINEER. APPROVED ALTERNATE MANUFACTURERS CAN BE FOUND IN EQUIPMENT SCHEDULES.

NOTE: PIPING LENGTHS NOT SHOWN ON THESE DIAGRAMS. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR DETERMINING PIPING LENGTHS USING MOST DIRECT ROUTING WHILE MAINTAINING ACCEPTABLE CONCEALMENT. PIPE ROUTING SHALL BE APPROVED BY GENERAL CONTRACTOR AND ENGINEER.

1 DHP01 CONTROL SCHEMATIC

NOT TO SCALE

POWER VENTILATOR POINTS LIST											
POINT NAME	HARDWARE POINTS					SOFTWARE POINTS					SHOW ON GRAPHIC
	AI	AO	BI	BO	AV	BV	LOOP	SCHED	TREND	ALARM	
ZONE TEMP	X								X		X
EXHAUST AIR DAMPER STATUS			X						X		X
FAN STATUS			X						X		X
EXHAUST AIR DAMPER				X					X		X
FAN START/STOP				X					X		X
COOLING SETPOINT					X				X		X
EXHAUST AIR DAMPER FAILURE										X	
EXHAUST AIR DAMPER IN HAND										X	
FAN FAILURE										X	
FAN IN HAND										X	
FAN RUNTIME EXCEEDED										X	
HIGH ZONE TEMP										X	

POWER VENTILATOR SEQUENCE OF OPERATION

POWER VENTILATOR - ON/OFF BASED ON ZONE TEMPERATURE

RUN CONDITIONS - SCHEDULED:
THE FAN SHALL RUN WHEN ZONE TEMPERATURE EXCEEDS THE ZONE TEMPERATURE SETPOINT OF 85°F (ADJ.).

FAN:
THE FAN SHALL HAVE A USER DEFINABLE (ADJ.) MINIMUM RUNTIME.

EXHAUST AIR DAMPER:
THE EXHAUST AIR DAMPER SHALL OPEN ANYTIME THE UNIT RUNS AND SHALL CLOSE ANYTIME THE UNIT STOPS. THE EXHAUST AIR DAMPER SHALL CLOSE 30 SEC (ADJ.) AFTER THE FAN STOPS.

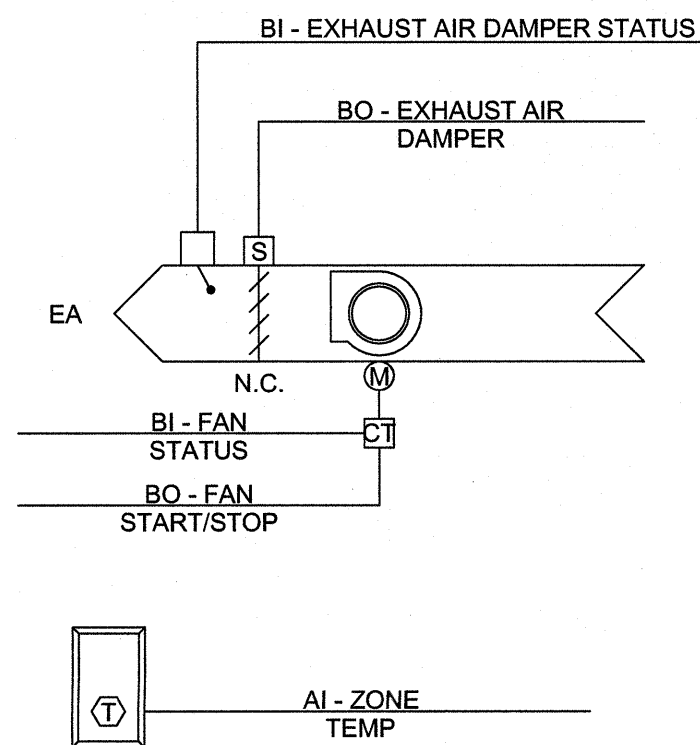
DAMPER STATUS:
THE FAN SHALL BE ENABLED AFTER THE DAMPER STATUS HAS PROVEN.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
• DAMPER FAILURE: COMMANDED OPEN, BUT THE STATUS IS CLOSED.
• DAMPER IN HAND: COMMANDED CLOSED, BUT THE STATUS IS OPEN.

FAN STATUS:
THE CONTROLLER SHALL MONITOR THE FAN STATUS.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
• FAN FAILURE: COMMANDED ON, BUT THE STATUS IS OFF.
• FAN IN HAND: COMMANDED OFF, BUT THE STATUS IS ON.
• FAN RUNTIME EXCEEDED: FAN STATUS RUNTIME EXCEEDS A USER DEFINABLE LIMIT (ADJ.).

HARDWIRE INTERLOCK DAMPER END PROVING SWITCH WITH FAN MOTOR.

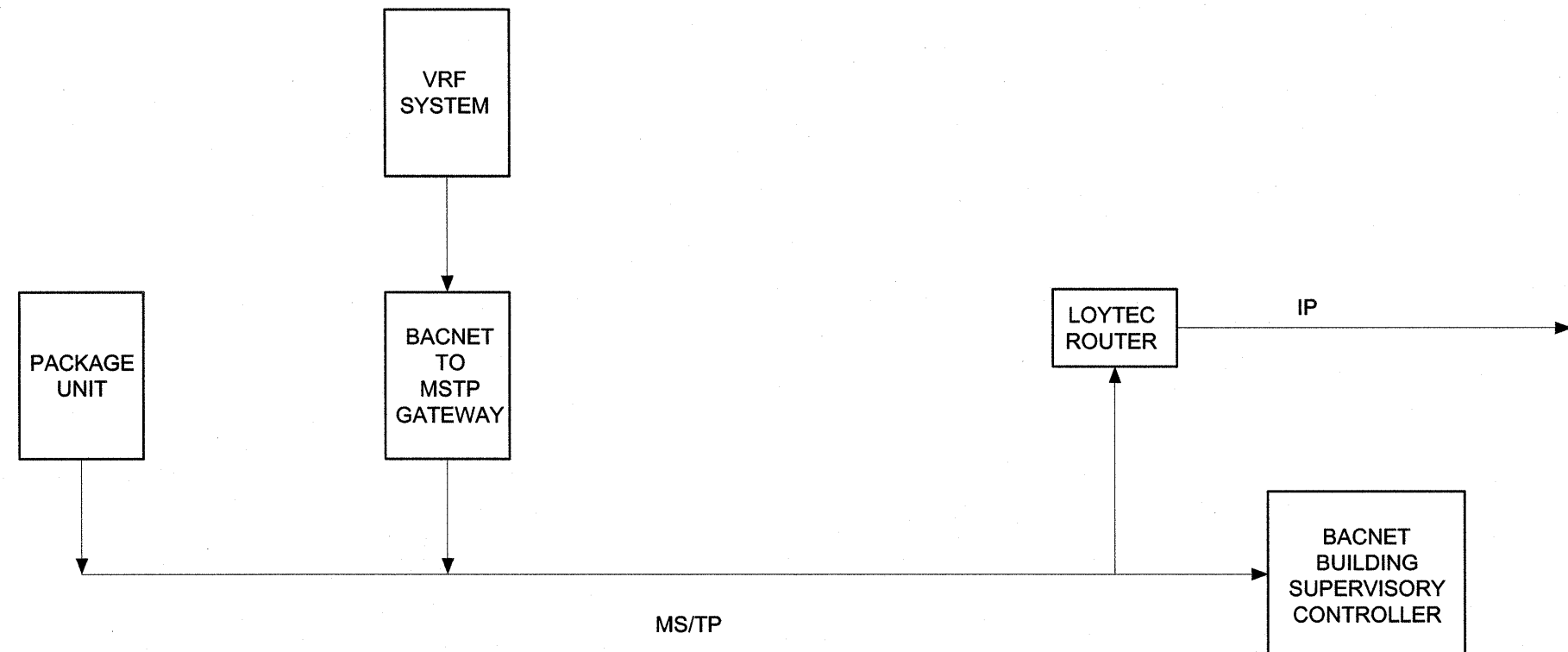


2 POWER VENTILATOR CONTROLS - PV01

NOT TO SCALE

VRF SYSTEM	
DESCRIPTION: SPLIT SYSTEM, VARIABLE REFRIGERANT HEAT RECOVERY SYSTEM CONSISTING OF MULTIPLE INDOOR AIR HANDLERS WITH MULTIPLE SPEED AIR VOLUME, UNDER CONTROL OF DDG SYSTEM.	
HEAT PUMP INDOOR AIR HANDLER	
EACH INDOOR UNIT SHALL BE SCHEDULED ON BY THE BMS SYSTEM AT THE OCCUPIED TIMES DEFINED BY THE OWNER.	
THE INDOOR UNITS SHALL BE SET TO AUTO MODE DURING OCCUPIED TIMES, DURING UNOCCUPIED TIMES THE INDOOR UNITS SHALL BE OFF.	
THE BMS SHALL SET THE OCCUPIED AND UNOCCUPIED TEMPERATURE SET-POINTS. BMS SHALL GLOBALLY SET THIS AS A SINGLE HEATING/COOLING SET POINT, WITH AN AMBIENT RESET, 70F AT 50F AMBIENT, AND 76F AT 80F AMBIENT, LINEAR IN BETWEEN.	
A TIMED LOCAL OVERRIDE CONTROL SHALL ALLOW AN OCCUPANT TO OVERRIDE THE SCHEDULE AND PLACE THE UNIT INTO AN OCCUPIED MODE FOR 120 MINUTES (ADJ.). AT THE EXPIRATION OF THIS TIME, CONTROL OF THE UNIT SHALL AUTOMATICALLY RETURN TO THE SCHEDULE.	
DURING UNOCCUPIED TIMES THE BMS SHALL SEND THE OFF COMMAND TO THE INDOOR UNIT AT THE START OF UNOCCUPIED TIMES AND EVERY TWO HOURS THEREAFTER TO REINFORCE THE SETBACK CONDITIONS. THE BMS SHALL MONITOR THE ROOM TEMPERATURE AT THE REMOTE CONTROLLER IN THE SPACE AND COMMAND THE UNIT ON IF THE OWNER SPECIFIED UNOCCUPIED LIMITS ARE EXCEED. THE BMS SHALL SEND THE COOL MODE COMMAND WHEN THE TEMPERATURE UPPER LIMIT IS EXCEEDED OR THE HEAT MODE COMMAND WHEN THE TEMPERATURE LOWER LIMIT IS EXCEEDED. THE BMS SHALL SEND THE TEMPERATURE UPPER OR LOWER LIMIT AS THE SPACE TEMPERATURE SET-POINT DURING UNOCCUPIED TIME.	

VRF SYSTEM INDOOR AIR HANDLER POINTS LIST						
INDOOR UNIT CONTROL POINT DESCRIPTION	SOFTWARE POINTS		DISPLAY	ALARMS		
	NETWORK VARIABLE INPUT	NETWORK VARIABLE OUTPUT		HIGH LIMIT	LOW LIMIT	ABNORMALITY
ON/OFF	x					
SET MODE	x					
SET TEMPERATURE	x		x			
MODE STATE		x	x			
ROOM TEMPERATURE		x	x	x	x	
FAN SPEED STATE		x	x			
INDOOR UNIT NOTIFY		x	x			
ERROR CODE		x	x			x



SEE DISCLOSURE OF INFORMATION STATEMENT ON SHEET T-1

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	TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150			
DES. GAS		MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA		
DR. GAS		RENOVATE BLDG. M100 CAMP LEJEUNE, NORTH CAROLINA		
CHK. TOG		DESIGN DIR. T. H. BURTON, PE		
SUBMITTED BY:		APPROVED:		
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SATISFACTORY TO:		DATE		
SIZE F		CODE IDENT. NO. 80091		
SCALE: NOTED		SPEC. 05-19-0062		
NAVAC DRAWING NO. 60024994		CONST. CONTR. NO. N40085-15-D-0859		
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ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
	2x4 LIGHT FIXTURE, RECESSED OR SURFACE MOUNTED LETTER INDICATES FIXTURE TYPE (SEE FIXTURE SCHEDULE)
	4FT OR 8FT CHANNEL LIGHT FIXTURE, SUSPENDED OR SURFACE MOUNTED LETTER INDICATES FIXTURE TYPE (SEE FIXTURE SCHEDULE)
	RECESSED LIGHT FIXTURE LETTER INDICATES FIXTURE TYPE (SEE FIXTURE SCHEDULE)
	SURFACE LIGHT FIXTURE LETTER INDICATES FIXTURE TYPE (SEE FIXTURE SCHEDULE)
	WALL MOUNTED LIGHT FIXTURE LETTER INDICATES FIXTURE TYPE (SEE FIXTURE SCHEDULE)
	EXIT SIGN, SINGLE FACE, CEILING. ARROW INDICATES DIRECTION. LETTER INDICATES FIXTURE TYPE (SEE FIXTURE SCHEDULE)
	EMERGENCY LIGHTING UNIT, 2-HEAD WITH BATTERY BACK-UP, WALL MOUNTED, "NOT SWITCHED" LETTER INDICATES FIXTURE TYPE (SEE FIXTURE SCHEDULE)
	POWER & SWITCH LEG
	UNSWITCHED LEG
	CONDUIT, HOME RUN TO PANEL BOARD
	SWITCH, SINGLE POLE, 120/277VAC, 20A, MOUNTED AT 46" AFF UNLESS OTHERWISE NOTED (SEE ELECTRICAL MOUNTING HEIGHT DETAIL).
	3-WAY SWITCH, SINGLE POLE 120/277 VAC, 20A, MOUNTED AT 46" AFF UNLESS OTHERWISE NOTED
	HEAVY DUTY DIMMER, 20A, 1500W @ 120 VAC, 0-10V CAPABLE, WITH OCCUPANCY SENSOR, SINGLE BUTTON ON/OFF CONTROL, 180° COVERAGE, PIR MOUNTED AT 46" AFF UNLESS OTHERWISE NOTED (SEE ELECTRICAL MOUNTING HEIGHT DETAIL).
	HEAVY DUTY DIMMER, 3 WAY/4 WAY CAPABLE, 20A, 1500W @ 120 VAC, 0-10V CAPABLE, MOUNTED AT 46" AFF UNLESS OTHERWISE NOTED (SEE ELECTRICAL MOUNTING HEIGHT DETAIL).
	CEILING MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR, 360° COVERAGE, PIR
	WALL MOUNTED OCCUPANCY SENSOR, SINGLE BUTTON ON/OFF CONTROL, 180° COVERAGE, PIR, MOUNTED AT 46" AFF UNLESS OTHERWISE NOTED.
	RECEPTACLE, DUPLEX, 120VAC, 20A, MOUNTED 16" AFF, UNLESS OTHERWISE NOTED. (SEE ELECTRICAL MOUNTING HEIGHT DETAIL.) WP - LISTED WEATHER-RESISTANT TYPE DEVICE WITH WEATHERPROOF IN USE COVER GFI - GROUND FAULT CIRCUIT INTERRUPTER TYPE, 120VAC, 20A, MOUNTED 24" AFF LOCATE GFI TEST SWITCH IN A READILY ACCESSIBLE LOCATION
	RECEPTACLE, DUPLEX, 120VAC, 20A, MOUNTED 6" ABOVE COUNTER TOP OR BACK SPLASH. GFI - GROUND FAULT CIRCUIT INTERRUPTER TYPE, 120VAC, 20A, MOUNTED 24" AFF LOCATE GFI TEST SWITCH IN A READILY ACCESSIBLE LOCATION (SEE ELECTRICAL MOUNTING HEIGHT DETAIL.)
	RECEPTACLE, QUADPLEX, 120VAC, 20A MOUNTED 16" AFF UNLESS OTHERWISE NOTED (SEE ELECTRICAL MOUNTING HEIGHT DETAIL.)
	RECEPTACLE, DUPLEX, 120VAC, 20A, MOUNTED BELOW COUNTER FOR FAUCET CONTROL. GFI - GROUND FAULT CIRCUIT INTERRUPTER TYPE, 120VAC, 20A, LOCATE GFI TEST SWITCH IN A READILY ACCESSIBLE LOCATION
	JUNCTION BOX - CEILING/ABOVE CEILING MOUNTED

ELECTRICAL LEGEND

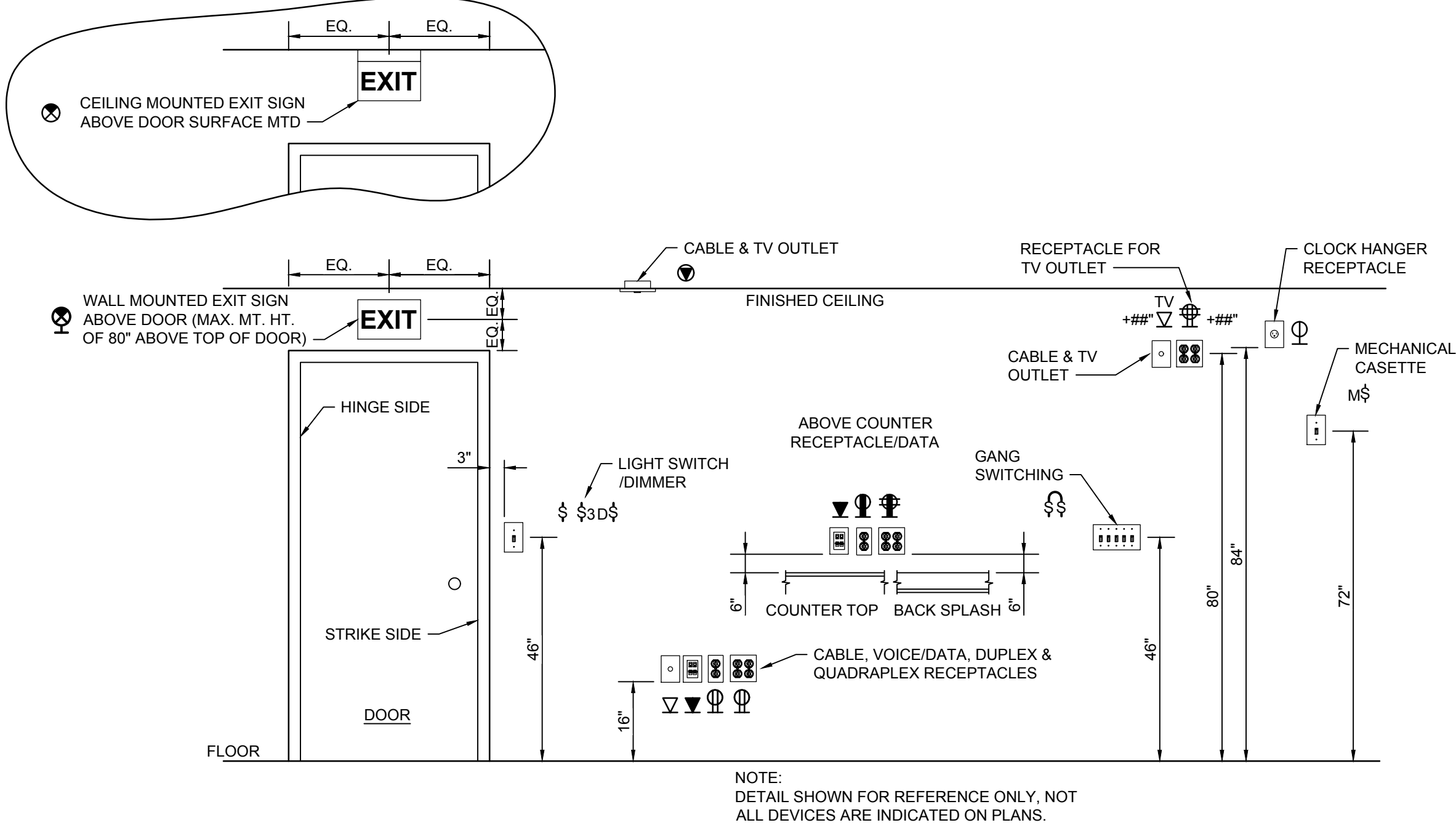
SYMBOL	DESCRIPTION
	JUNCTION BOX, SIZE AS DESIGNATED, WITH CONDUIT AS DESIGNATED, WITH BLANK COVER
	FLUSH VALVE JUNCTION BOX, MOUNTED BEHIND FLUSH VALVE, COORDINATE WITH PLUMBING CONTRACTOR. PROVIDE 1" CONDUIT TO ABOVE GRID TO PLUMBING CONTRACTOR SUPPLIED, ELECTRICAL CONTRACTOR INSTALLED CONTROLLER
	CEILING MOUNTED 120V, 20A, J-BOX AND CORD WITH CORD END, TYPE L5-20 PER DETAIL 2, PLAN E-11
	RECESSED STEEL FLOOR BOX, METALLIC FINISH COVER, WITH 1 - 120V, 20A, DUPLEX RECEPTACLE, AND A 1" CONDUIT TO BOX FOR FUTURE CONTROL WIRING, CONDUIT TO ROUTE TO 6" ABOVE FLOOR BELOW CONTROL DESK IN ROOM R102
	RECEPTACLE, 125/250V, 20A, 1φ, 4 WIRE TWIST LOCK, L14-20R
	RECEPTACLE, 125V, 20A, 1φ, 3 WIRE TWIST LOCK, L5-20R
	DISCONNECT SWITCH, FUSED, HEAVY DUTY, SIZE AS INDICATED ON DRAWINGS #/A = DISCONNECT SIZE / # = NUMBER OF POLES / # = NEMA RATING, #/MAF = FUSE SIZE
	MANUAL MOTOR STARTER, ELECTRICAL CONTRACTOR SHALL COORDINATE POLES AND SIZE WITH EQUIPMENT
	PANEL BOARD, SURFACE OR RECESSED MOUNTED AS SHOWN. SIZE, RATINGS, AND MOUNTING AS INDICATED ON PANEL SCHEDULE. CONTRACTOR IS RESPONSIBLE FOR REQUIRED CLEARANCE IN FRONT OF ELECTRICAL PANEL. SEE NEC TABLE 110.26 WORKING SPACES FOR ADDITIONAL CLEARANCE CONDITIONS.
	UTILITY METER
	CABLE TRAY, LADDER TYPE
	COMBINATION DATA/TELEPHONE OUTLET, MOUNTED 18" AFF UNLESS OTHERWISE NOTED. PROVIDE 1 1/4" CONDUIT TO DATA/COMM CLOSET W/PULL STRING.
	WIRELESS ACCESS POINT, 1 DATA IN A DUAL GANG BOX WITH A SINGLE GANG PLASTER RING. PROVIDE 1" CONDUIT TO DATA/COMM CLOSET WITH PULL STRING. OWNER SHALL PROVIDE SURGE PROTECTOR AND WAP DEVICE, THE ELECTRICAL CONTRACTOR SHALL INSTALL.
	FLOOR MOUNTED DATA RACK
	GROUND BUS, "TGB" INDICATES TELECOMMUNICATIONS GROUND BAR, "EGB" INDICATES ELECTRICAL GROUND BAR
	3/4" FIRE RETARDANT PLYWOOD, 4x8", MOUNT 12" AFF ALL WALLS IN DATA/COMM ROOM
	HATCHING INDICATES ITEMS TO BE DEMOLISHED. REMOVE DEVICE, EQUIPMENT, FIXTURE INDICATED, CIRCUIT, AND CONDUIT BACK TO SOURCE UNLESS OTHERWISE NOTED.
	DETAIL, SECTION OR PLAN NUMBER DRAWING SHEET PLAN, DETAIL OR SECTION APPEARS ON ENLARGED PLAN ELEVATION

TYPICAL ABBREVIATIONS:

A, AMP	AMPERE
AFB	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
AIC	AMPERE INTERRUPTING CAPACITY
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BOF	BOTTOM OF FIXTURE
BRKR	BREAKER
C, CND	CONDUIT
CAB	CABINET
CAT	CATALOG
CL	CHLORINE
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CKT	CIRCUIT
CLG	CEILING
CP	CONTROL PANEL
CR	CONTROL RELAY, CORROSION RESISTANT
CS	CONTROL SWITCH
CV	CONTROL VALVE
CT	CURRENT TRANSFORMER
CU	COPPER
EF	EXHAUST FAN
EMER	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
ENCL	ENCLOSURE
EQUIP	EQUIPMENT
EWIC	ELECTRIC WATER COOLER
EWI	ELECTRIC WATER HEATER
EPRF	EXPLOSION PROOF
FA	FIRE ALARM
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FBO	FURNISHED BY OTHERS
FLA	FULL LOAD AMPS
FLR	FLOUORESCENT
FLR	FLOOR
FWI	FURNISHED WITH EQUIPMENT
GEN	GENERATOR
G, GND	GROUND
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
HH	HANDHOLE
HID	HIGH INTENSITY DISCHARGE
HOA	HAND-OFF-AUTO
HP	HORSE POWER
HPF	HIGH POWER FACTOR
HPS	HIGH PRESSURE SODIUM
HTR	HEATER
HV	HIGH VOLTAGE
HZ	HERTZ
IMC	INTERMEDIATE METALLIC CONDUIT
INCAND	INCANDESCENT
JB	JUNCTION BOX
K	THOUSAND
KCMIL	THOUSAND CIRCULAR MILLS
KVA	KILOVOLT AMPERE
KW	KILOWATTS
KWH	KILOWATT-HOURS
LP	LIGHTING PANEL, LIGHT POLE
LTG	LIGHTING
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTOR
MDP	MAIN DISTRIBUTION PANEL
MFR	MANUFACTURER
MH	MANHOLE
MLO	MAIN LUGS ONLY
MTD	MOUNTED
MTG	MOUNTING
MTS	MANUAL TRANSFER SWITCH
MV	MEDIUM VOLTAGE
N, NEUT	NEUTRAL
NA	NOT APPLICABLE
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRIC CODE
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
P	POLE
PA	PUBLIC ADDRESS
PB	PULL BOX, PUSH-BUTTON
PF	POWER FACTOR
PH.φ	PHASE
PLC	PROGRAMMABLE LOGIC CONTROLLER
PNL	PANEL
PP	POWER PANEL, POWER POLE
PT	POTENTIAL TRANSFORMER
PWR	POWER
RECPT, RCP	RECEPTACLE
REQD	REQUIRED
RGS	RIGID GALVANIZED STEEL CONDUIT
RM	ROOM
RTU	REMOTE TELEMETRY UNIT
SCR	DC MOTOR DRIVE
SH	SHEET
SPEC	SPECIFICATION
SST	SELECTOR SWITCH
SW	STAINLESS STEEL
SWBD	SWITCH
SWGR	SWITCHBOARD
TEL	SWITCH GEAR
TPS	TELEPHONE
TVSS	TWISTED PAIR SHIELDED
TYP	TRANSIENT VOLTAGE SURGE SUPPRESSER
UGND	TYPICAL
UH	UNDERGROUND
UON	UNIT HEATER
UTIL	UNLESS OTHERWISE NOTED
V	UTILITY
VFD	VOLTS
W	VARIABLE FREQUENCY DRIVE
WH	WIRE, WATT
WP	WATT-HOUR
XFMR	WEATHERPROOF TRANSFORMER

LOAD SUMMARY

VOLTAGE	PHASE
208	3
LARGEST MOTOR APPROX. AMPS	5 AMPS
LARGEST MOTOR APPROX. AMPS x .25	1 AMPS
HVAC	
PV01	8,935 VA
DHP02	166 VA
DAH02	1,498 VA
DHP01	3,677 VA
DAH01-1	166 VA
DAH01-2	166 VA
DAH01-3	166 VA
BC01	1,747 VA
PV01	96 VA
SUB-TOTAL HVAC DEMAND	16,619 VA
SUB-TOTAL HVAC DEMAND	46 AMPS
EQUIPMENT	
EW001	4,500 VA
EW001	600 VA
HAND DRYERS(x2)	2,400 VA
SUB-TOTAL EQUIPMENT DEMAND	7,500 VA
SUB-TOTAL EQUIPMENT DEMAND	21 AMPS
ADD FOR LARGEST MOTOR	1 AMPS
TOTAL EQUIPMENT DEMAND	22 AMPS
LIGHTING	
LIGHTS (INTERIOR, BASED ON NEC 220.12)	6,683 VA
LIGHTS (EXTERIOR)	51 VA
SIGN	1,200 VA
TOTAL LIGHTING LOAD	7,934 VA
LIGHTING LOAD x 1.25	9,918 VA
TOTAL DEMAND FOR LIGHTING	28 AMPS
RECEPTACLES	
RECEPTACLES	11,316 VA
FIRST 10000VA	10,000 VA
REMAINDER @ 50%	655 VA
TOTAL DEMAND FOR RECEPTACLE/POWER PANELS	10,655 VA
TOTAL DEMAND FOR RECEPTACLE/POWER PANELS	30 AMPS
TOTAL DEMAND BUILDING AMPS	125 AMPS
TOTAL DEMAND BUILDING AMPS	45,108 VA
TOTAL BUILDING CONNECTED LOAD	43,369 VA



1 ELECTRICAL DEVICES - MOUNTING HEIGHT DETAIL


SEE DISCLOSURE OF INFORMATION STATEMENT ON SHEET T-1

CBHF Engineers, PLLC 2246 Yaupon Drive Wilmington, NC 28401 Phone: 910.791.4000 Fax: 910.791.5266 www.cbhfenrines.com	SHEET TITLE: ELECTRICAL ABBREVIATIONS, LEGEND, SUMMARIES, DETAIL		E-1	
TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 Phone: 910.791.4000 Fax: 910.791.5266 www.cbhfenrines.com		DEPARTMENT OF THE NAVY MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA		
DES. JLG DR. JLG CHK. JPF SUBMITTED BY: DESIGN DIR. T.H. BURTON, PE		RENOVATE BLDG. M100 CAMP LEJEUNE, NORTH CAROLINA		
APPROVED: DATE SATISFACTORY TO: DATE		SIZE F CODE IDENT. NO. 80091 NAVFAC DRAWING NO. 60024995 CONST. CONTR. NO. N40085-15-0-0859	SCALE: NOTED SPEC. 05-19-0062 SHEET 34 OF 45	

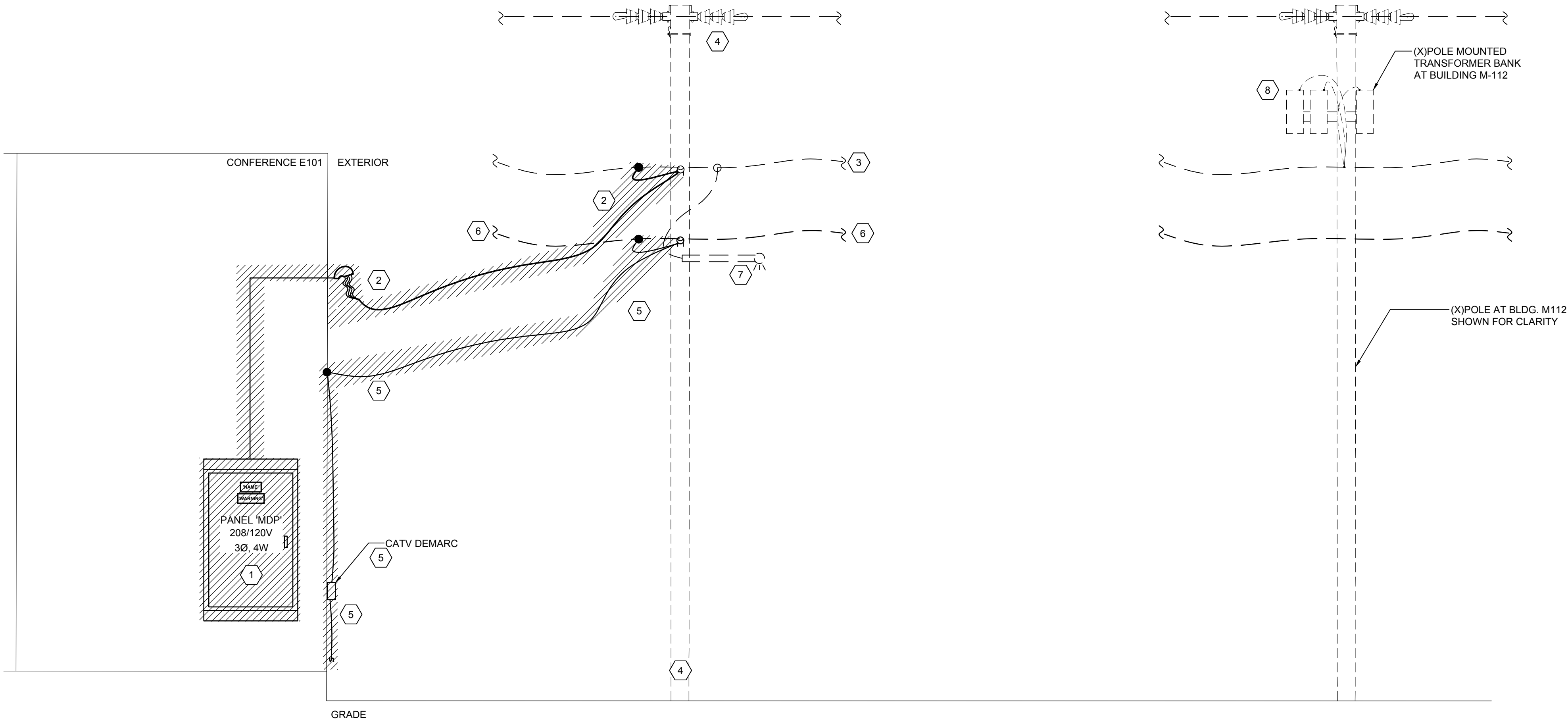
REVISIONS			
SYN.		DATE	APPROVED

GENERAL NOTES		GENERAL DEMOLITION NOTES	
<div>1. ALL ELECTRICAL WORK SHALL BE IN FULL COMPLIANCE WITH NFPA 70 THE NORTH CAROLINA STATE BUILDING CODE, ALL LOCAL CODES AND ORDINANCES AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.</div> <div>2. ALL EQUIPMENT PROVIDED BY THE CONTRACTOR SHALL BE LISTED AND LABELED BY A NATIONALLY-RECOGNIZED TESTING AGENCY, ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION, FOR THE CONDITIONS OF INSTALLATION. ALL MATERIAL, EQUIPMENT AND DEVICES SHALL BE NEW CURRENT PRODUCTS OF MANUFACTURERS REGULARLY ENGAGED IN THE PRODUCTION OF SUCH PRODUCTS. EQUIPMENT SHALL BE SUITABLE FOR ITS APPLICATION (E.G. WHEN INSTALLED OUTDOORS, IT SHALL BE WEATHERPROOF, ETC.)</div> <div>3. THE CONTRACTOR SHALL REVIEW ALL DRAWINGS AND SPECIFICATIONS FOR WORK REQUIREMENTS, THE AMOUNT OF SPACE AVAILABLE FOR ELECTRICAL EQUIPMENT, AND LAYOUT HIS WORK IN A COMPATIBLE AND COMPLEMENTARY MANNER.</div> <div>4. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THOROUGHLY FAMILIARIZING HIMSELF WITH ANY CONTRACTUAL REQUIREMENTS AS MAY BE SET FORTH IN THE OTHER DIVISIONS OF THE PROJECT SPECIFICATIONS.</div> <div>5. UNLESS SPECIFICALLY NOTED OTHERWISE, SYSTEMS PROVIDED OR INSTALLED BY THE CONTRACTOR SHALL BE COMPLETE AND FULLY-FUNCTIONING AFTER INSTALLATION. INCIDENTAL COMPONENTS MAY NOT BE SHOWN, AND ALL WORK WHICH MAY BE REASONABLY IMPLIED AS BEING INCIDENTAL TO THIS WORK, BUT REQUIRED FOR THE PROPER OPERATION OF THE EQUIPMENT OR SYSTEM, SHALL BE PROVIDED BY THE CONTRACTOR AND INCLUDED IN THE BID. ADDITIONAL CIRCUITS SHALL BE INSTALLED WHEREVER NEEDED TO CONFORM TO THE SPECIFIC REQUIREMENTS OF EQUIPMENT.</div> <div>6. TEMPORARY POWER CONNECTIONS AS REQUIRED SHALL BE PROVIDED BY THE CONTRACTOR AND INCLUDED IN THE BID. ALL TEMPORARY EQUIPMENT WIRING SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE. THE CONTRACTOR SHALL PROVIDE DETAILS, METHODS, MATERIALS, ETC. FOR REVIEW PRIOR TO MAKING TEMPORARY CONNECTIONS. FURNISH AND INSTALL ALL EQUIPMENT AND MATERIALS INCLUDING CONTROL EQUIPMENT, MOTOR STARTERS, BRANCH AND FEEDER CIRCUIT BREAKERS, PANELBOARDS, TRANSFORMERS, ETC. FOR TEMPORARY POWER. COORDINATE WITH THE ELECTRICAL UTILITY COMPANY AS REQUIRED.</div> <div>7. THE WORK SHALL INCLUDE COMPLETE TESTING OF ALL EQUIPMENT AND WIRING AT THE COMPLETION OF WORK AND ANY MINOR CORRECTIONS, CHANGES OR ADJUSTMENTS NECESSARY FOR THE PROPER FUNCTIONING OF THE SYSTEM AND EQUIPMENT.</div> <div>8. ALL EQUIPMENT SHOWN DOTTED OR DASHED IS BY OTHERS OR IS EXISTING, AS NOTED.</div> <div>9. ALL ELECTRICAL EQUIPMENT SHALL, AT ALL TIMES DURING CONSTRUCTION, BE ADEQUATELY PROTECTED AGAINST MECHANICAL INJURY, OR DAMAGE BY WATER AND/OR THE ELEMENTS. ELECTRICAL EQUIPMENT SHALL NOT BE STORED OUT OF DOORS, BUT SHALL BE STORED IN DRY PERMANENT SHELTERS. IF AN APPARATUS HAS BEEN DAMAGED, OR HAS BEEN SUBJECT TO POSSIBLE INJURY BY WATER OR THE ELEMENTS, SUCH DAMAGE SHALL BE REPLACED AT NO ADDITIONAL COST.</div> <div>10. DO NOT SCALE ELECTRICAL DRAWINGS. REFER TO THE ARCHITECTURAL DRAWINGS FOR DIMENSIONS.</div> <div>11. CIRCUIT LAYOUTS ARE NOT INTENDED TO SHOW THE NUMBER OF FITTINGS, OR OTHER INSTALLATION DETAILS. UNLESS NOTED OTHERWISE, THE EXACT ROUTING OF FEEDER AND BRANCH CIRCUIT RACEWAYS AND CABLES IS THE RESPONSIBILITY OF THE CONTRACTOR. RISER AND GENERAL CIRCUIT ARRANGEMENTS ARE SHOWN SCHEMATICALLY/DIAGRAMMATICALLY ONLY. THE CONTRACTOR SHALL ROUTE CONDUITS AS REQUIRED BY THE CONDITIONS OF THE INSTALLATION.</div> <div>12. UNLESS DIMENSIONED, DEVICE LOCATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE. ADJUST EXACT LOCATIONS AS REQUIRED TO SERVE THE INTENDED PURPOSE AND TO AVOID CONFLICTS AND INTERFERENCES WITH OTHER TRADES. EXACT DEVICE LOCATIONS SHALL BE AS INDICATED ON THE ARCHITECTURAL DRAWINGS OR AS DIMENSIONED. IF NOT SHOWN ON THE ARCHITECTURAL DRAWINGS OR DIMENSIONED ON THE ELECTRICAL DRAWINGS, VERIFY EXACT LOCATION WITH THE CONTRACTING OFFICER PRIOR TO ROUGH-IN.</div> <div>13. CONDUIT TERMINATING IN PRESSED STEEL BOXES SHALL HAVE DOUBLE LOCKNUTS AND INSULATED BUSHINGS. CONDUITS TERMINATING IN GASKETED ENCLOSURES SHALL BE TERMINATED WITH GROUNDING TYPE CONDUIT HUBS.</div> <div>14. BRANCH CIRCUIT HOMERUNS SHOWN ON DRAWINGS INDICATE PHASE CONDUCTORS, NEUTRAL, EQUIPMENT GROUND CONDUCTORS AS REQUIRED. ADDITIONAL CONDUCTORS REQUIRED FOR CONTROL SHALL BE INCLUDED EVEN IF NOT EXPLICITLY SHOWN.</div> <div>15. SEAL ALL CONDUIT OPENINGS THROUGH EXTERIOR BUILDING WALLS WATERTIGHT.</div> <div>16. IN WET LOCATIONS AND EXTERIOR, ALL WIRING DEVICES SHALL BE WEATHER-RESISTANT LISTED WITH WEATHERPROOF WHILE IN USE COVER. LIGHTING FIXTURES SHALL BE APPROPRIATELY RATED AND LISTED FOR THE ENVIRONMENT ITO BE INSTALLED IN.</div> <div>17. RACEWAYS PENETRATING FLOORS, CEILINGS OR WALLS SHALL BE PROPERLY SEALED SMOKETIGHT.</div> <div>18. ALL RACEWAYS SHALL BE CONCEALED WHERE POSSIBLE IF APPLICABLE, MATCH EXISTING RACEWAY INSTALLATION METHODS AND ROUTINGS AT OR NEAR EXISTING FACILITIES.</div> <div>19. INSTALL EXPOSED RACEWAYS PARALLEL TO OR AT RIGHT ANGLES TO NEARBY SURFACES OR STRUCTURAL MEMBERS, AND FOLLOW THE SURFACE CONTOURS AS MUCH AS POSSIBLE. NO DIAGONAL RUNS WILL BE ALLOWED. ALL CONDUITS SHALL BE RUN STRAIGHT AND TRUE. RUN PARALLEL OR BANKED RACEWAYS TOGETHER ON COMMON SUPPORTS WHERE PRACTICAL. MAKE BENDS IN PARALLEL OR BANKED RUNS FROM SAME CENTERLINE TO MAKE BENDS PARALLEL.</div> <div>20. PATCHING OF WATERPROOFED SURFACES SHALL RENDER THE AREA OF THE PATCHING COMPLETELY WATERPROOF.</div> <div>21. ALL MOTORS, DRY TYPE TRANSFORMERS AND OTHER VIBRATING EQUIPMENT SHALL BE CONNECTED TO THE CONDUIT SYSTEM BY MEANS OF A SHORT SECTION (18 INCH MINIMUM) OF FLEXIBLE CONDUIT UNLESS OTHERWISE INDICATED. AN EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED INSIDE THE FLEXIBLE CONDUIT AND TERMINATE AT THE LOAD END WITH AN APPROVED GROUNDING CLAMP OR LUG.</div> <div>22. SURFACE MOUNTED PANELBOARDS, JUNCTION, OUTLET AND PULL BOXES, RACEWAYS, ETC., INSTALLED ON EXTERIOR SURFACES OR INSIDE ON EXTERIOR WALLS SHALL BE SUPPORTED BY SPACERS TO PROVIDE A 1/4" MINIMUM CLEARANCE BETWEEN THE WALL AND EQUIPMENT.</div> <div>23. CEILINGS MOUNTED DEVICES INSTALLED IN ACOUSTICAL TILE CEILING AREAS SHALL BE SUPPORTED FROM THE STRUCTURE ABOVE WITH RODS OF SUFFICIENT SIZE TO PREVENT VERTICAL MOVEMENT OF THE OUTLET BOX. BRIDGES ALONE ARE NOT ADEQUATE UNLESS SPECIFICALLY APPROVED. CEILING MOUNTED EXIT LIGHT FIXTURES SHALL BE INSTALLED LEVEL. DO NOT SUPPORT DEVICES FROM ACOUSTICAL CEILING TILE.</div> <div>24. PROVIDE ADHESIVE BACKED RECEPTACLE DEVICE PLATE LABELS IDENTIFYING THE CIRCUIT FEEDING THE DEVICE. LABELS SHALL INDICATE PANEL AND CIRCUIT NUMBER. ALSO PROVIDE IDENTIFICATION FOR MULTI-WIRE BRANCH CIRCUIT PHASE CONDUCTORS IN PANELBOARD.</div> <div>25. FINAL TYPED PANELBOARD DIRECTORIES INSTALLED IN THE PANELBOARD DOOR POCKET SHALL INCLUDE FINAL ACTUAL ROOM NAMES AND NUMBERS IN ADDITION TO THE GENERAL DESCRIPTION SHOWN ON THE PANEL SCHEDULES ON THE DRAWINGS.</div> <div>26. CONDUCTOR SIZING IS BASED ON 75 DEGREE C. COPPER NEC RATINGS, UNLESS NOTED OTHERWISE. THE CONTRACTOR SHALL VERIFY, PRIOR TO INSTALLATION OF CONDUCTORS OR CONDUIT FEEDING ANY EQUIPMENT, THE ELECTRICAL EQUIPMENT IS RATED FOR USE WITH 75 DEGREE C. WIRING. IF ANY EQUIPMENT IS RATED FOR USE WITH LESS THAN 75 DEGREE C. CONDUCTORS, THE CONTRACTOR SHALL NOTIFY THE CONTRACTING OFFICER IMMEDIATELY FOR EVALUATION/CORRECTION.</div> <div>27. DO NOT PULL CONDUCTORS UNTIL THE CONDUIT SYSTEM IS COMPLETE IN EVERY DETAIL. IN THE CASE OF CONCEALED WORK, "COMPLETE" MEANS UNTIL ALL ROUGH PLASTERING OR MASONRY HAS BEEN COMPLETED.</div> <div>28. WHERE SIZE IS NOT SHOWN ON THE DRAWINGS, BRANCH CIRCUITS SHALL CONSIST OF #12 OR #10 AWG MINIMUM PHASE, NEUTRAL AND EQUIPMENT GROUND CONDUCTORS IN 3/4" MINIMUM RACEWAY.</div> <div>29. USE #10 AWG CONDUCTORS FOR 20 AMPERE, 120 VOLT BRANCH CIRCUITS WITH A TOTAL INSTALLED LENGTH GREATER THAN 75 FEET AND/OR BRANCH CIRCUIT HOMERUNS LONGER THAN 50 FEET. I.E.: #12 AWG INCREASED TO #10 AWG FOR RECEPTACLE BRANCH CIRCUITS OVER 75 FEET TOTAL LENGTH (INCLUDING THE AWG HOMERUN SEGMENT) AND HOMERUNS OVER 50 FEET.</div> <div>30. COMMON NEUTRAL CONDUCTORS OF MULTIWIRE RECEPTACLE BRANCH CIRCUIT HOMERUNS SHALL BE #10 AWG MINIMUM.</div> <div>31. KEEP CONDUCTOR SPLICES TO A MINIMUM. INSTALL SPLICES AND TAPES THAT POSSESS EQUIVALENT OR BETTER MECHANICAL STRENGTH AND INSULATION RATINGS THAN CONDUCTORS BEING SPLICED. USE SPLICE AND TAP CONNECTORS COMPATIBLE WITH CONDUCTOR MATERIAL. INSTALL CONDUCTORS AT EACH OUTLET WITH AT LEAST 6 INCHES OF SLACK. CONNECT OUTLETS AND COMPONENTS TO WIRING AND TO GROUND AS INDICATED AND INSTRUCTED BY THE MANUFACTURER.</div> <div>32. DO NOT SPLICE BRANCH CIRCUIT HOMERUNS WITHOUT THE PERMISSION OF THE CONTRACTING OFFICER. HOMERUNS SHALL BE CONTINUOUS FROM THE LAST OUTLET BOX TO THE SERVING PANELBOARD.</div> <div>33. DO NOT COMBINE BRANCH CIRCUIT HOMERUNS UNLESS SPECIFICALLY INDICATED ON THE DRAWINGS.</div>	<div>34. DO NOT CHANGE CIRCUITING SHOWN WITHOUT PERMISSION OF THE CONTRACTING OFFICER.</div> <div>35. TROUGH TAPS SHALL BE AT SWITCH AMPACITY, UNLESS NOTED OTHERWISE.</div> <div>36. INSTALL WIRING DEVICES AT HEIGHTS AS SHOWN ON THE DRAWINGS. ALSO COORDINATE MOUNTING HEIGHTS WITH THE ARCHITECTURAL DRAWINGS AND CASEWORK DETAILS. IF CONFLICTING, ARCHITECTURAL DRAWINGS AND DETAILS SHALL GOVERN.</div> <div>37. PROVIDE GROUND FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL IN ACCORDANCE WITH THE NEC INCLUDING ALL ELECTRIC WATER COOLERS, EXTERIOR RECEPTACLES AND RECEPTACLES IN AREAS SUBJECT TO POSSIBLE WET CONDITIONS. ALL RECEPTACLES INSTALLED WITHIN 6 FEET OF A SINK SHALL BE GFI PROTECTED. ALL RECEPTACLES IN NON-RESIDENTIAL KITCHENS SHALL BE GFI PROTECTED.</div> <div>38. IN AREAS IN WHICH DUAL LEVEL SWITCHING IS INDICATED (TYPICALLY BY 2 OR MORE ADJACENT, GANGED SWITCHES), PROVIDE THE APPROPRIATE NUMBER OF CONDUCTORS TO FACILITATE THIS FUNCTION (AS TYPICALLY SHOWN).</div> <div>39. CONNECT BATTERY PACK TYPE EMERGENCY AND EXIT LIGHTING FIXTURES TO UN-SWITCHED LIGHTING CIRCUIT SERVING THE SPACE LIGHTED BY THE EMERGENCY AND EXIT FIXTURES. THESE CONNECTIONS ARE INTENTIONALLY NOT SHOWN TO MAINTAIN DRAWING FOR CLARITY.</div> <div>40. COORDINATE LIGHTING FIXTURE LOCATIONS WITH THE ARCHITECTURAL REFLECTED CEILING PLAN. IF CONFLICTS ARE NOTED, REQUEST CLARIFICATION FROM THE CONTRACTING OFFICER BEFORE PROCEEDING.</div> <div>41. ADJACENT SWITCHES SHALL BE GANGED. INSTALL BARRIERS BETWEEN UNLIKE VOLTAGE SECTIONS.</div> <div>42. SEPARATE NEUTRALS ARE REQUIRED FOR ALL DIMMED LIGHTING CIRCUITS.</div> <div>43. WHERE THE DRAWINGS INDICATE A LIGHTING FIXTURE IS TO BE PROVIDED WITH SPECIAL FEATURES/SWITCHING (DIMMING, EMERGENCY BATTERY BALLAST, MULTILEVEL, ETC), THE CONTRACTOR SHALL PROVIDE THESE FIXTURES WITH THE APPROPRIATE BALLASTING TO ACCOMMODATE THE SPECIAL FEATURE. THE CONTRACTOR SHALL PROVIDE THE FIXTURES AS INDICATED IN THE LIGHTING FIXTURE SCHEDULE WITH MODIFICATIONS AS REQUIRED BY DRAWING NOTES.</div> <div>44. COORDINATE LOCATIONS OF PLUMBING, MECHANICAL, DATA AND TELEPHONE AND AUDIOVISUAL EQUIPMENT. GOVERNMENT-PROVIDED TELECOMMUNICATIONS AND DATA CABLES WILL BE PROVIDED AND INSTALLED BY THIS CONTRACTOR. LEAVE PULL WIRES OR ROPES OF ADEQUATE TENSILE STRENGTH IN ALL EMPTY CONDUITS.</div> <div>45. PROVIDE TELEPHONE, FIBER AND DATA SERVICE ENTRANCE CONDUIT IN SIZES AND LOCATIONS AS SHOWN ON THE DRAWINGS AND AS REQUIRED BY THE GOVERNMENT AND THE SERVICE UTILITIES. UTILITY SERVICE ENTRANCE CABLES WILL BE PROVIDED AND INSTALLED BY THIS CONTRACTOR. LEAVE PULL WIRES OR ROPES OF ADEQUATE TENSILE STRENGTH IN ALL EMPTY CONDUITS.</div> <div>46. INSTALLATION INFORMATION PACKED WITH LIGHTING FIXTURES, DEVICES AND EQUIPMENT SHALL BE RETAINED FOR INCLUSION IN THE OPERATIONS AND MAINTENANCE MANUALS.</div> <div>47. THE CONTRACTOR SHALL PERFORM ALL CUTTING AND PATCHING NECESSARY TO INSTALL ALL EQUIPMENT AS REQUIRED AND SHALL RE-ESTABLISH ALL FINISHES TO THEIR ORIGINAL CONDITION WHERE CUTTING AND PATCHING OCCUR. ALL CUTTING AND PATCHING SHALL BE DONE IN A THOROUGHLY WORKMANSHIP MANNER. SAW CUT CONCRETE AND MASONRY PRIOR TO BREAKING OUT SECTIONS. ALL PATCHING MATERIALS AND WORKMANSHIP SHALL BE PERFORMED BY TRADESMEN EXPERIENCED IN THAT WORK. ALL WORK SHALL BE SUBJECT TO THE APPROVAL OF THE RESPECTIVE SUPPLIERS AND VENDORS AND THE GOVERNMENT BEFORE ROUGH-IN. ADJUST LIGHTING FIXTURES, RECEPTACLES AND ELECTRICAL EQUIPMENT TO ACCOMMODATE THIS EQUIPMENT. ADVISE THE GOVERNMENT OF CONFLICTS BEFORE ROUGH-IN.</div> <div>48. BEFORE COMMENCING WORK OR ORDERING MATERIALS, THE CONTRACTOR SHALL COORDINATE WITH OTHER TRADES AND VERIFY THE NAMEPLATE RATINGS OF ALL EQUIPMENT (MOTORS, HEATERS, COMPRESSORS, ETC.) AND ADJUST THE RATINGS OF THE ELECTRICAL EQUIPMENT (SWITCHES, FUSES, CIRCUIT BREAKERS, FEEDERS, ETC.) AS APPROPRIATE TO SERVE THIS EQUIPMENT.</div> <div>49. ENERGIZE EQUIPMENT ONLY AFTER OBTAINING PERMISSION FROM THE CONTRACTOR PROVIDING THE EQUIPMENT.</div> <div>50. UNLESS SPECIFICALLY NOTED OTHERWISE, THE CONTRACTOR SHALL MAKE FINAL CONNECTIONS TO ALL UTILIZATION EQUIPMENT SHOWN ON THE DRAWINGS. VERIFY THE TYPE OF FINAL CONNECTION AND PROVIDE APPROPRIATE WIRING METHOD. THE CONTRACTOR SHALL COORDINATE WITH THE MECHANICAL AND PLUMBING EQUIPMENT, PRIOR TO ORDERING OR INSTALLATION OF ANY EQUIPMENT, TO VERIFY MECHANICAL AND PLUMBING EQUIPMENT REQUIREMENTS ARE PROVIDED IN THE ELECTRICAL DESIGN. THE CONTRACTOR WILL NOT BE COMPENSATED FOR COSTS ASSOCIATED WITH CHANGING THE ELECTRICAL SYSTEMS TO MATCH UTILIZATION EQUIPMENT, EVEN IF THE ELECTRICAL WORK IS INSTALLED PER THE ELECTRICAL DRAWINGS.</div> <div>51. THE CONTRACTOR SHALL FURNISH ALL STARTERS AND CONTROLS FOR THEIR EQUIPMENT. THE CONTRACTOR SHALL PROVIDE ALL SAFETY SWITCHES, SHALL MOUNT STARTERS AND PROVIDE WIRING AND CONNECTIONS TO LINE SIDE OF STARTERS. THE CONTRACTOR SHALL PROVIDE LOAD SIDE WIRING AND CONNECTIONS TO MECHANICAL AND PLUMBING EQUIPMENT. FOR RESISTANCE TYPE LOADS WHERE STARTERS OR CONTACTORS ARE NOT REQUIRED, THE CONTRACTOR SHALL PROVIDE ALL POWER WIRING AND CONNECTIONS COMPLETE TO EQUIPMENT. THE MECHANICAL AND PLUMBING CONTRACTORS SHALL PROVIDE ALL CONTROL WIRING AND CONNECTIONS AND DEVICES FOR THEIR EQUIPMENT.</div> <div>52. TELECOMMUNICATIONS AND DATA CABLES WILL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. OSP CABLING SHALL BE INSTALLED BY THE GOVERNMENT. LEAVE PULL WIRES OR ROPES OF ADEQUATE TENSILE STRENGTH IN ALL EMPTY CONDUITS.</div> <div>54. THE CONTRACTOR SHALL PERFORM ALL CUTTING AND PATCHING NECESSARY TO INSTALL ALL EQUIPMENT AS REQUIRED AND SHALL REESTABLISH ALL FINISHES TO THEIR ORIGINAL CONDITION WHERE CUTTING AND PATCHING OCCUR. ALL CUTTING AND PATCHING SHALL BE DONE IN A THOROUGHLY WORKMANSHIP MANNER. SAW CUT CONCRETE AND MASONRY PRIOR TO BREAKING OUT SECTIONS. ALL PATCHING MATERIALS AND WORKMANSHIP SHALL BE PERFORMED BY TRADESMEN EXPERIENCED IN THAT WORK. ALL WORK SHALL BE SUBJECT TO THE APPROVAL OF THE CONTRACTING OFFICER.</div> <div>55. CORE DRILL HOLES IN EXISTING CONCRETE WALLS AS REQUIRED.</div> <div>56. INSTALL WORK AT SUCH TIME AS TO REQUIRE THE MINIMUM AMOUNT TO CUTTING AND PATCHING.</div> <div>57. CUT OPENINGS ONLY LARGE ENOUGH TO ALLOW EASY INSTALLATION OF THE CONDUIT.</div> <div>58. ABANDONED POWER WIRING, RACEWAYS AND CONDUCTORS, SHALL BE REMOVED BACK TO THEIR SOURCE. THE ACCESSIBLE PORTIONS OF ABANDONED CABLES (VOICE, DATA, VIDEO, ALARM, ETC.) SHALL BE REMOVED.</div> <div>59. THE EXISTING ELECTRICAL SYSTEMS DEPICTED ON THESE DRAWINGS HAVE BEEN COMPILED BY THE ENGINEER FROM THE GOVERNMENT'S RECORD DRAWINGS AND LIMITED FIELD VERIFICATION OF THE EXISTING CONDITIONS FOR THE PURPOSE OF INDICATING THE WORK REQUIRED AND ARE BELIEVED TO BE CORRECT. NOTWITHSTANDING, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, POINTS OF ACCESS AND FIELD CONDITIONS AFFECTING HIS WORK.</div> <div>60. THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH THE EXISTING ELECTRICAL SYSTEMS AND THE EXISTING BUILDING. THE SUBMISSION OF THE PROPOSAL BY THE CONTRACTOR SHALL BE CONSIDERED EVIDENCE THAT HE OR HIS REPRESENTATIVE HAS VISITED THE SITE AND BUILDINGS AND NOTED THE LOCATION AND CONDITIONS UNDER WHICH THE WORK WILL BE PERFORMED AND THAT HE TAKES FULL RESPONSIBILITY OF ALL FACTORS GOVERNING HIS WORK. NO EXTRAS WILL BE CONSIDERED BECAUSE OF ADDITIONAL WORK NECESSITATED BY EXISTING JOB CONDITIONS THAT ARE NOT INDICATED ON THE DRAWINGS.</div> <div>61. ALL UNUSED OUTLET BOXES SHALL BE REMOVED OR, WITH SPECIFIC APPROVAL OF THE CONTRACTING OFFICER, SHALL BE BLANKED WITH STAINLESS STEEL PLATES. ALL OPENINGS IN EXISTING WALLS AND CEILINGS MADE BY THIS CONTRACTOR SHALL BE REPAIRED TO AN EQUAL FINISH AS ADJACENT SURFACES.</div> <div>62. PROVIDE ALL ELECTRICAL RELOCATION WORK ASSOCIATED WITH THE RELOCATING OF EQUIPMENT FOR THE EXISTING FACILITIES, INCLUDING DISCONNECTING ALL EXISTING WIRING AND CONDUITS AND PROVIDING NEW WIRING AND CONDUITS TO THE RELOCATED EQUIPMENT.</div> <div>63. SEE "KEYED" GENERAL DEMOLITION NOTES" FOR ADDITIONAL REQUIREMENTS.</div> <div>64. SAFETY<div>A. COMPLY WITH OSHA AND NEC ARC FLASH PROTECTION REQUIREMENTS.</div><div>B. FOR EQUIPMENT BEING REMOVED AND REPLACED, THE CONTRACTOR SHALL DE-ENERGIZE THE EQUIPMENT AND MAKE IT SAFE PRIOR TO REMOVAL AND COMPLY WITH OSHA REQUIREMENTS FOR LOCKING-OUT AND TAGGING EQUIPMENT TO PREVENT INADVERTENT RE-ENERGIZING.</div><div>C. WHERE EQUIPMENT IS BEING REMOVED, BUT NOT REPLACED, REMOVE THE CONDUCTORS FEEDING THE EQUIPMENT BACK TO THE POINT WHERE THEY RECEIVE POWER. REMOVE ACCESSIBLE CONDUITS. ABANDON IN PLACE INACCESSIBLE CONDUITS. AFTER REMOVAL OF EQUIPMENT, REPAIR ANY OPENING LEFT TO MATCH SURROUNDINGS WALLS, CEILINGS, OR FLOORS TO THE CONTRACTING OFFICER SATISFACTION.</div><div>D. COORDINATE WITH THE OTHER TRADES, PRIOR TO BID, AND INCLUDE IN THE BASE BID THE ELECTRICAL DISCONNECTION OF ANY EQUIPMENT BEING DEMOLISHED, EVEN IF NOT EXPLICITLY SHOWN. UNLESS NOTED OTHERWISE, REMOVE ALL DEMOLISHED EQUIPMENT FROM THE PROPERTY.</div></div>	<div>1. DEMOLITION SHALL BE AS DESCRIBED HEREIN AND AS SHOWN ON THE CONTRACT DRAWINGS. IDENTIFY ACTIVE UTILITIES, AND AT THE APPROPRIATE TIME, DISCONNECT AND CAP OFF SUCH UTILITIES AND PROVIDE EXPERIENCED PERSONNEL ON SITE DURING GENERAL CONTRACTOR DEMOLITION OPERATIONS TO PERFORM SUCH OPERATIONS AND RESOLVE ISSUES. REMOVE MATERIALS NOTED FOR SALVAGE AND REUSE. IDENTIFY AND MARK WIRING AND DEVICES TO REMAIN FOR THE GENERAL CONTRACTOR.</div> <div>2. THE CONTRACTOR SHALL REVIEW THE ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR DEMOLITION REQUIREMENTS AND CARRY OUT HIS WORK IN A COMPATIBLE AND COMPLEMENTARY MANNER. REMOVE ALL WIRING DEVICES, BOXES, FIXTURES, EXPOSED ABANDONED RACEWAYS, HANGARS, ETC., AND THOSE MADE OBSOLETE BY THESE ALTERATIONS AND AS SHOWN ON THE ELECTRICAL DRAWINGS. ALL ITEMS TO BE REMOVED OR MODIFIED MAY NOT BE SHOWN, HOWEVER, THIS CONTRACTOR SHALL REMOVE ANY ELECTRICAL WORK AS REQUIRED BY THE CONSTRUCTION OR AS DIRECTED BY THE GOVERNMENT OR CONTRACTING OFFICER. SURVEY THE AFFECTED AREAS BEFORE SUBMITTING A BID AS ALL EXISTING CONDITIONS CANNOT BE COMPLETELY DEPICTED ON THE DRAWINGS AND SOME UNUSUAL CONDITIONS MAY EXIST.</div> <div>3. REMOVE, RELOCATE, AND EXTEND EXISTING INSTALLATIONS TO ACCOMMODATE NEW CONSTRUCTION.</div> <div>4. VERIFY FIELD MEASUREMENTS AND CIRCUITING ARRANGEMENTS ARE AS SHOWN ON DRAWINGS.</div> <div>5. VERIFY THAT ABANDONED WIRING AND EQUIPMENT SERVE ONLY ABANDONED FACILITIES.</div> <div>6. DISCONNECT AND/OR DE-ENERGIZE ELECTRICAL SYSTEMS IN WALLS, FLOORS, AND CEILINGS SCHEDULED FOR REMOVAL.</div> <div>7. PROVIDE TEMPORARY AND/OR PERMANENT WIRING AND CONNECTIONS AS SHOWN AND/OR AS REQUIRED BY CONDITIONS TO MAINTAIN EXISTING SYSTEMS IN SERVICE DURING CONSTRUCTION. WHEN WORK MUST BE PERFORMED ON ENERGIZED EQUIPMENT OR CIRCUITS, AND WHEN SUCH WORK IS SPECIFICALLY APPROVED BY THE GOVERNMENT AND PERMITTED BY REGULATORY AUTHORITIES, USE PERSONNEL EXPERIENCED IN SUCH OPERATIONS.</div> <div>8. EXISTING ELECTRICAL SERVICE: COORDINATE POWER OUTAGES WITH THE GOVERNMENT AND UTILITY COMPANY. MAINTAIN EXISTING SYSTEMS IN SERVICE. DISABLE SYSTEMS ONLY TO MAKE SWITCHOVERS AND CONNECTIONS. OBTAIN PERMISSION FROM THE GOVERNMENT AT LEAST 24 HOURS BEFORE PARTIALLY OR COMPLETELY DISABLING SYSTEM. MINIMIZE OUTAGE DURATION. MAKE TEMPORARY CONNECTIONS TO MAINTAIN SERVICE IN AREAS ADJACENT TO WORK AREA.</div> <div>9. CONTINUOUS SERVICE IS REQUIRED ON ALL CIRCUITS AND OUTLETS AFFECTED BY THESE CHANGES, EXCEPT WHERE THE GOVERNMENT WILL PERMIT AN OUTAGE FOR A SPECIFIC TIME. OBTAIN GOVERNMENT CONSENT BEFORE REMOVING ANY CIRCUIT FROM CONTINUOUS SERVICE.</div> <div>10. ENDS OF ALL CONDUITS TO REMAIN SHALL BE TIGHTLY PLUGGED TO EXCLUDE DUST AND MOISTURE WHILE THE BUILDING IS UNDER RENOVATION.</div> <div>11. SECURE ALL CIRCUITS, RACEWAYS, CABLE AND CONDUCTORS THAT, AS A RESULT FROM THIS CONSTRUCTION, ARE ABANDONED OR UNUSED. REMOVE UNUSED EXPOSED CONDUIT AND WIRING BACK TO POINT OF CONCEALMENT INCLUDING ABANDONED CONDUIT ABOVE ACCESSIBLE CEILINGS. REMOVE UNUSED WIRING IN CONCEALED CONDUITS BACK TO SOURCE OR NEAREST POINT OF USAGE. BLANK ABANDONED KNOCKOUTS IN REMAINING BOXES. INSTALL BLANK PLATES FOR ALL UNUSED OUTLETS THAT WILL REMAIN AS A RESULT OF THIS CONSTRUCTION. ALL SUCH WORK SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES AND ORDINANCES.</div> <div>12. TRACE OUT EXISTING WIRING THAT IS TO BE RELOCATED OR REMOVED AND PERFORM THE RELOCATION OR REMOVAL WORK AS REQUIRED FOR A COMPLETE OPERATING AND SAFE SYSTEM.</div> <div>13. RECONNECT EXISTING CIRCUITS SEPARATED AS A RESULT OF THIS CONSTRUCTION.</div> <div>14. DELIVER ALL REMOVED AND SALVAGED LIGHTING FIXTURES, WIRING DEVICES, FIRE ALARM DEVICES, SPEAKERS, ETC., TO THE GOVERNMENT, OR AT THE GOVERNMENT'S OPTION, DISPOSE OF PROPERLY OFF SITE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL ENVIRONMENTAL REGULATIONS. FEES ASSOCIATED WITH DISPOSAL SHALL BE INCLUDED IN THE CONTRACTOR'S BASE BID.</div> <div>15. COORDINATE WITH THE OTHER TRADES, PRIOR TO BID, AND INCLUDE IN THE BASE BID THE ELECTRICAL DISCONNECTION OF ANY EQUIPMENT BEING DEMOLISHED, EVEN IF NOT EXPLICITLY SHOWN. UNLESS NOTED OTHERWISE, REMOVE ALL DEMOLISHED EQUIPMENT FROM THE PROPERTY AND IDENTIFIED IN THE ELECTRICAL DRAWINGS.</div> <div>16. THESE DRAWINGS ARE COMPILED BY THE ARCHITECT/ENGINEER FROM THE GOVERNMENT'S RECORD DRAWINGS AND LIMITED FIELD VERIFICATION OF EXISTING CONDITIONS FOR THE PURPOSE OF INDICATING THE WORK REQUIRED AND ARE BELIEVED TO BE CORRECT. NOTWITHSTANDING, THE CONTRACTOR SHALL VERIFY ALL CIRCUITS, WIRING, CONDUIT, DIMENSIONS, POINTS OF ACCESS AND ALL FIELD CONDITIONS AFFECTING HIS WORK. BEGINNING OF DEMOLITION MEANS THE CONTRACTOR ACCEPTS EXISTING CONDITIONS.</div> <div>17. THE CONTRACTOR IS RESPONSIBLE FOR DISPOSAL OF ALL LAMPS CONTAINING MERCURY IN A LINED LANDFILL IN ACCORDANCE WITH NC GEN STATUTE 309.10M.</div> <div>18. SEE GENERAL NOTES FOR ADDITIONAL REQUIREMENTS.</div>	

SEE DISCLOSURE OF INFORMATION STATEMENT ON SHEET T-1

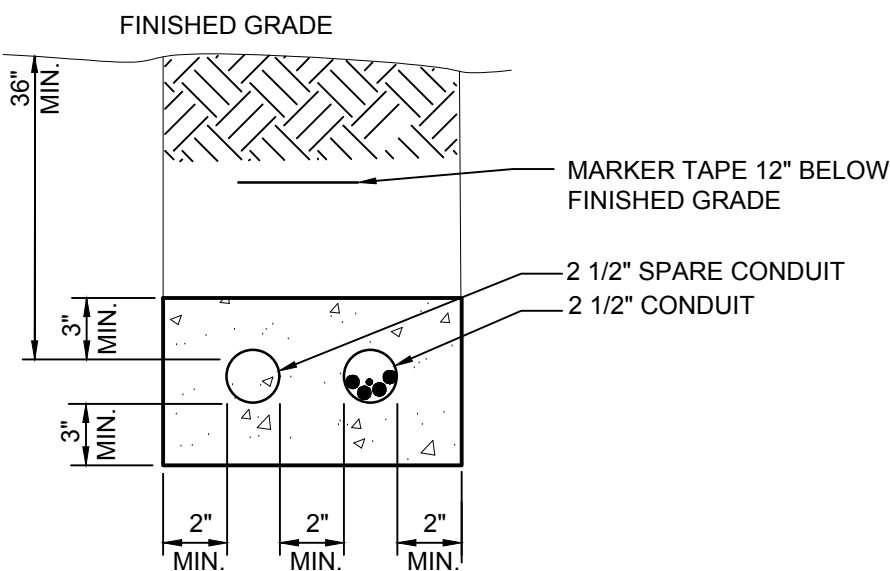
<div>CBHF Engineers, PLLC</div> <div>2246 Yaupon Drive Wilmington, NC 28401 Phone: 910.791.4000 Fax: 910.791.5266 www.cbhfindengineers.com</div> <div><small>©Copyright 2013 CBHF Engineers, PLLC NCSP-P-0006</small></div> <div><div>08/21/19</div></div>	SHEET TITLE: <div>ELECTRICAL GENERAL NOTES, DEMOLITION NOTES</div>		<div>E-2</div>		
	<div>TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150</div>		<div>DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA</div>		
	<div>DES. JLJ DR. JLJ CHK. JPF SUBMITTED BY: DESIGN DIR. T.H. BURTON, PE</div>		<div>RENOVATE BLDG. M100 CAMP LEJEUNE, NORTH CAROLINA</div>		
	APPROVED:	DATE	SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
SATISFACTORY TO:		DATE	F	80091	60024996
			SCALE: NOTED	SPEC. 05-19-0062	SHEET 35 OF 45

REVISIONS			
SYL		DATE	APPROVED

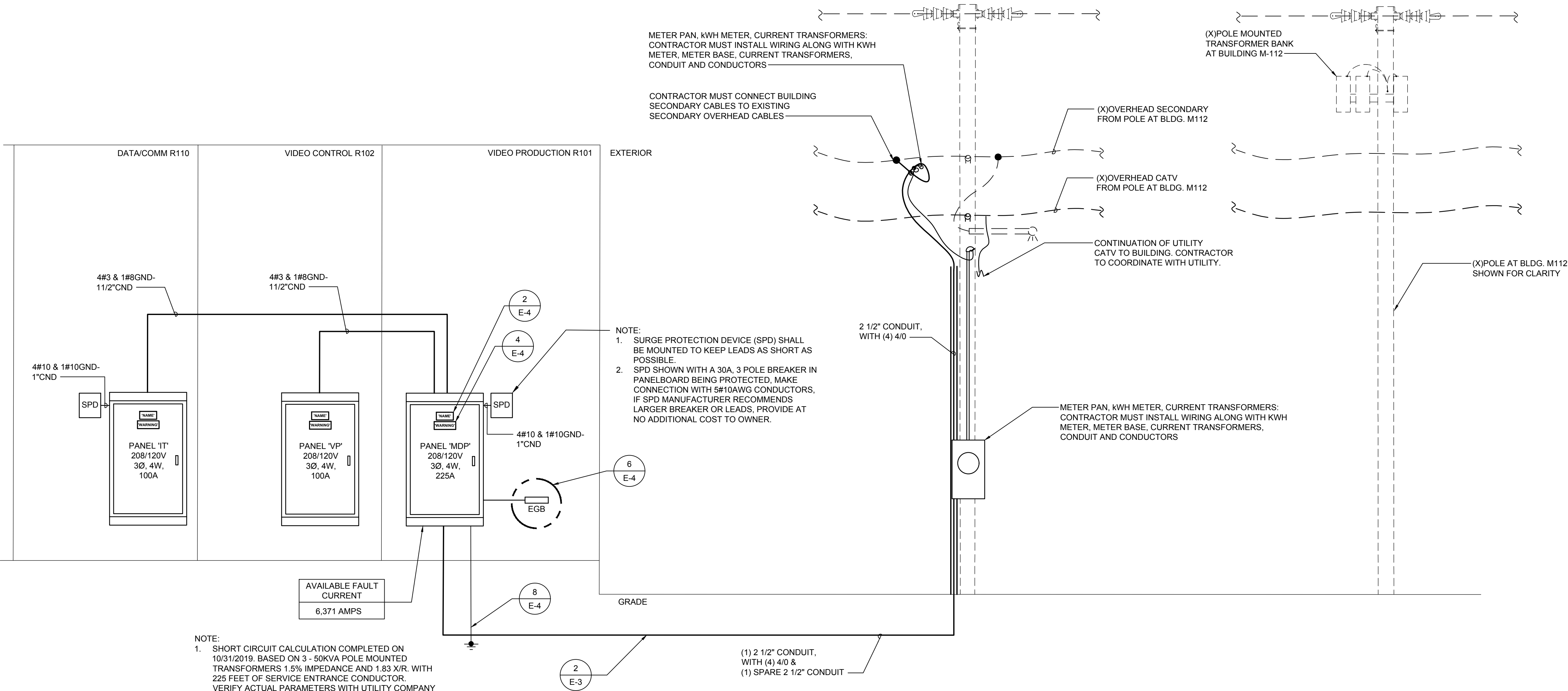


1 ELECTRICAL RISER DIAGRAM (DEMOLITION)
NOT TO SCALE

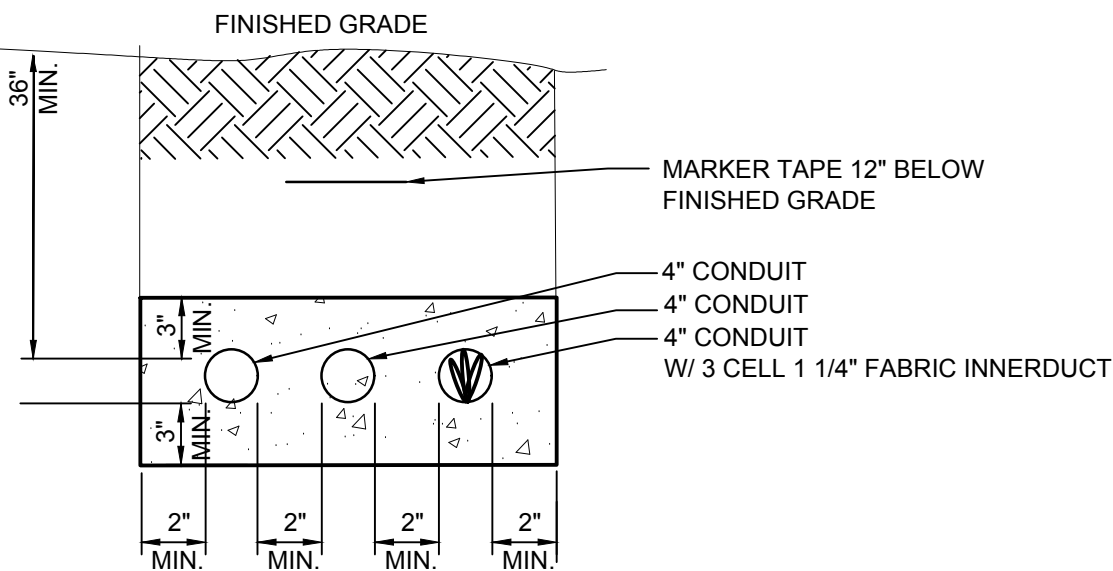
DEMOLITION KEYED NOTES	
1	PANELBOARD: DISCONNECT AND REMOVE FEED CONDUIT AND CONDUCTORS IN ENTIRETY. REMOVE PANEL, BRANCH CIRCUIT CONDUIT AND CONDUCTORS IN THEIR ENTIRETY.
2	OVERHEAD SECONDARY FROM POLE #304: DISCONNECT AND REMOVE SECONDARY, WEATHERHEAD, CONDUIT, CONDUCTORS AND SUPPORTS IN THEIR ENTIRETY.
3	(X)SECONDARY OVERHEAD CONDUCTORS TO TRANSFORMERS: CONTRACTOR SHALL PROTECT DURING DEMOLITION AND CONSTRUCTION FOR RELOCATION TO NEW POLE AND RE-USE.
4	(X)UTILITY POLE P304: CONTRACTOR SHALL PROTECT DURING DEMOLITION AND CONSTRUCTION FOR RE-USE.
5	UTILITY AND DISTRIBUTION CATV CABLEING: CONTRACTOR MUST REMOVE CABLE, AND SUPPORTS IN ENTIRETY FROM POLE #304 TO BUILDING DEMARC AND OUT TO INTERIOR OF BUILDING.
6	(X)OVERHEAD UTILITY CATV CABLEING: CONTRACTOR SHALL PROTECT DURING DEMOLITION AND CONSTRUCTION FOR RE-USE.
7	(X)POLE MOUNTED FIXTURE: PROTECT DURING DEMOLITION AND CONSTRUCTION.
8	(X)OVERHEAD TRANSFORMER BANK AT BUILDING M112: CONTRACTOR MUST PROTECT DURING DEMOLITION AND CONSTRUCTION.



2 SECONDARY DISTRIBUTION DUCTBANK SECTION
NOT TO SCALE



3 ELECTRICAL RISER DIAGRAM (NEW WORK)
NOT TO SCALE

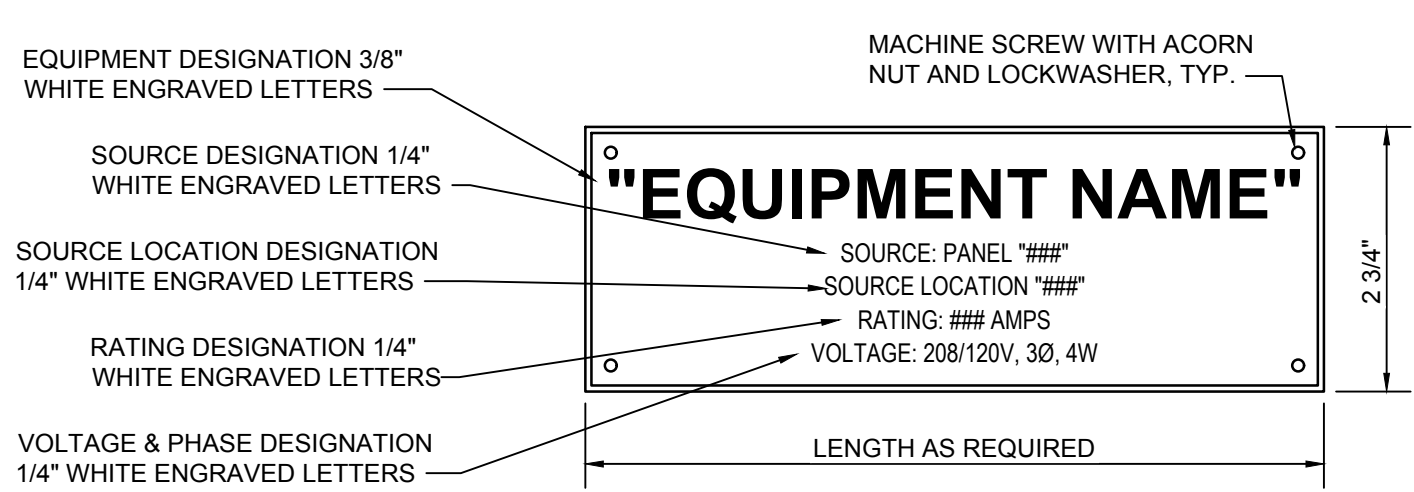


4 DATA/COMM OSP DUCTBANK SECTION
NOT TO SCALE

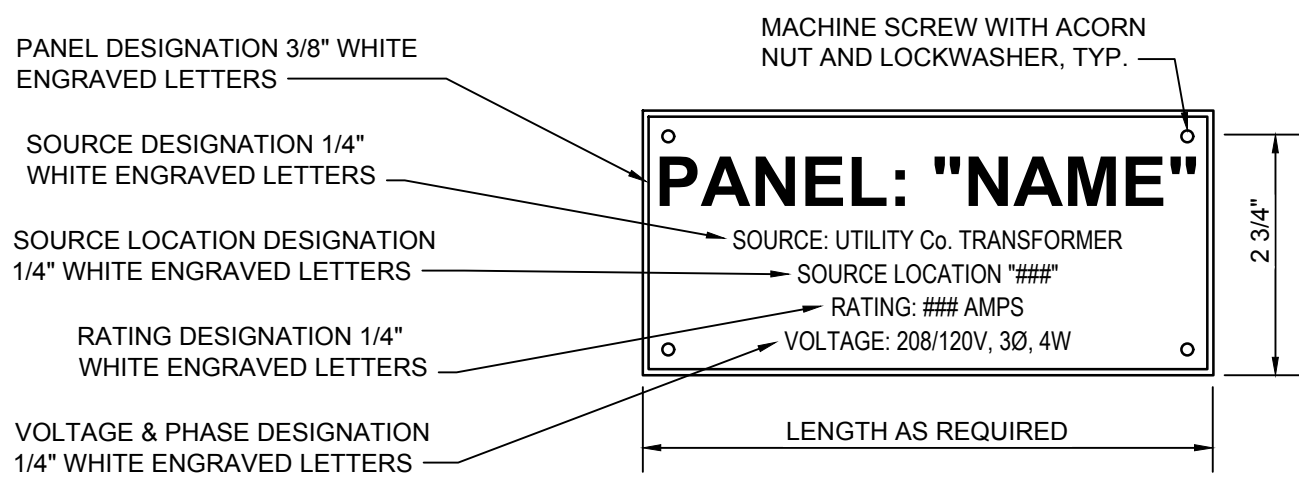
SEE DISCLOSURE OF INFORMATION STATEMENT ON SHEET T-1

CBHF Engineers, PLLC 2246 Yaupon Drive Wilmington, NC 28401 Phone: 910.791.4000 Fax: 910.791.5266 www.cbhfenrners.com <small>© Copyright 2019 CBHF Engineers, PLLC NCEP-0026</small>	SHEET TITLE: ELECTRICAL RISERS		E-3	
	TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150		DEPARTMENT OF THE NAVY MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA	
	DES. JLG DR. JLG CHK. JFF SUBMITTED BY: DESIGN DIR. T.H. BURTON, PE		RENOVATE BLDG. M100 CAMP LEJEUNE, NORTH CAROLINA	
	APPROVED:	DATE	SIZE F	CODE IDENT. NO. 80091 NAVFAC DRAWING NO. 60024997
SATISFACTORY TO:	DATE	SCALE: NOTED	SPEC. 05-19-0062	CONST. CONTR. NO. N40085-15-0-0859 SHEET 36 OF 45

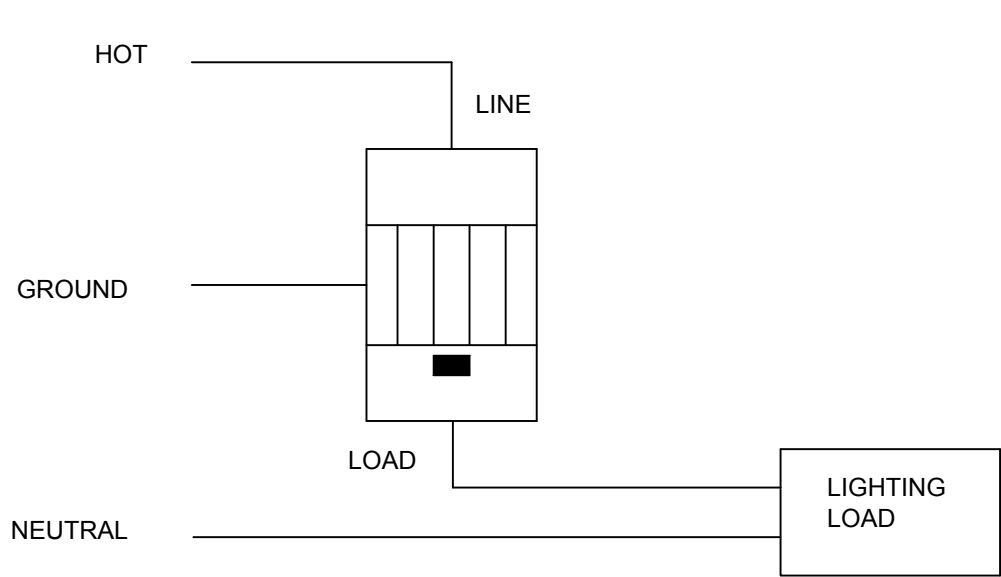
REVISIONS			
SYL		DATE	APPROVED



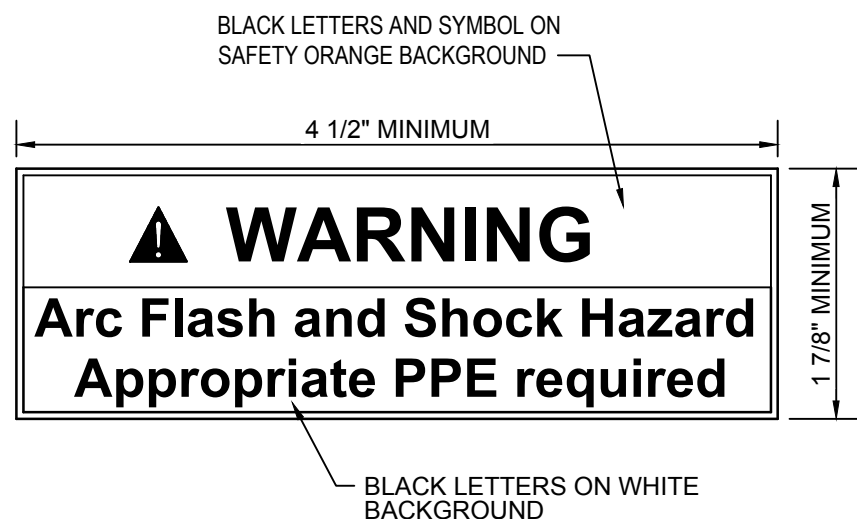
1 TYPICAL EQUIPMENT NAMEPLATE DETAIL
NOT TO SCALE



2 TYPICAL PANELBOARD NAMEPLATE DETAIL
NOT TO SCALE

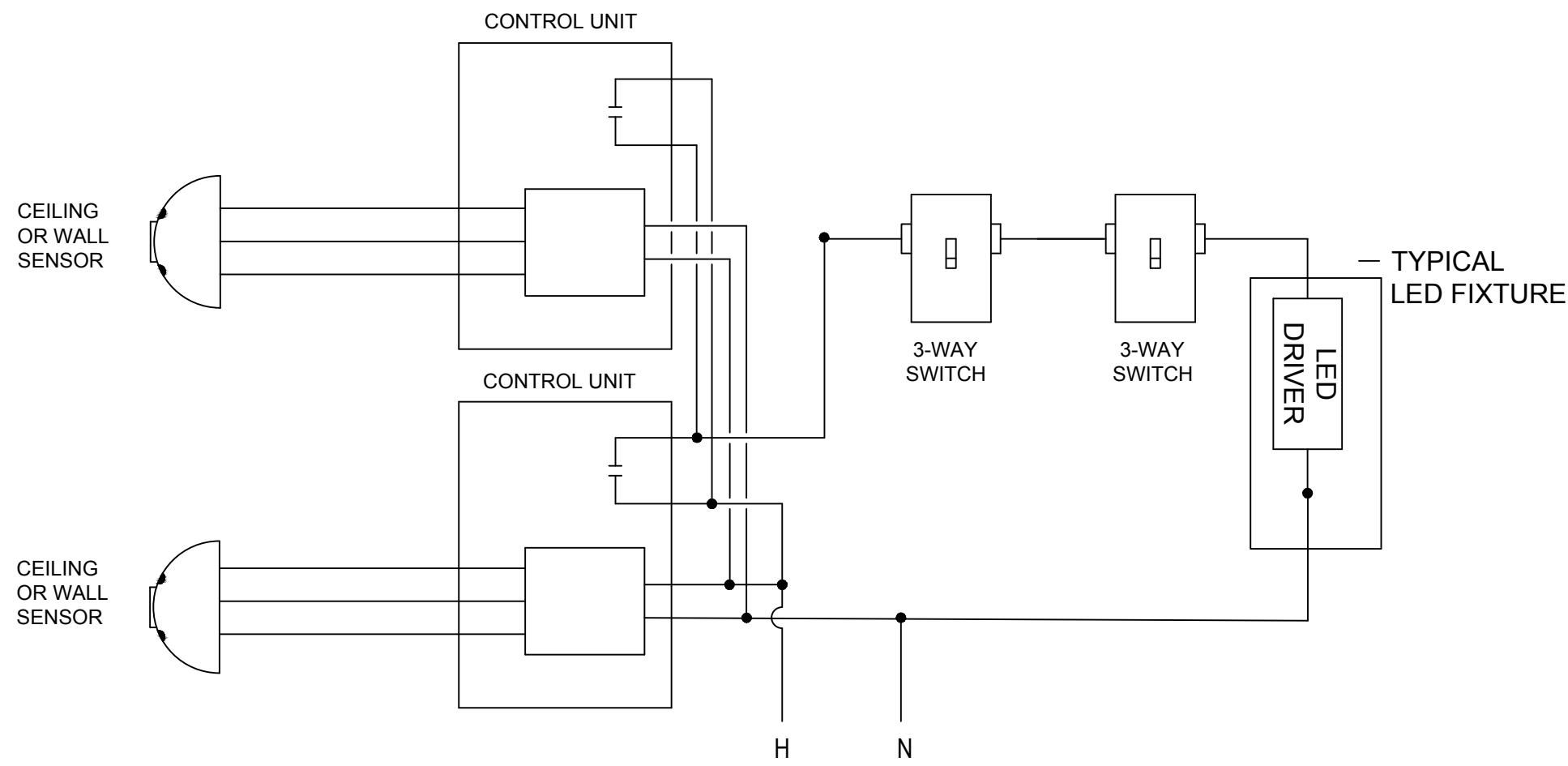


3 OCCUPANCY SENSOR WALL SWITCH DIAGRAM
NOT TO SCALE



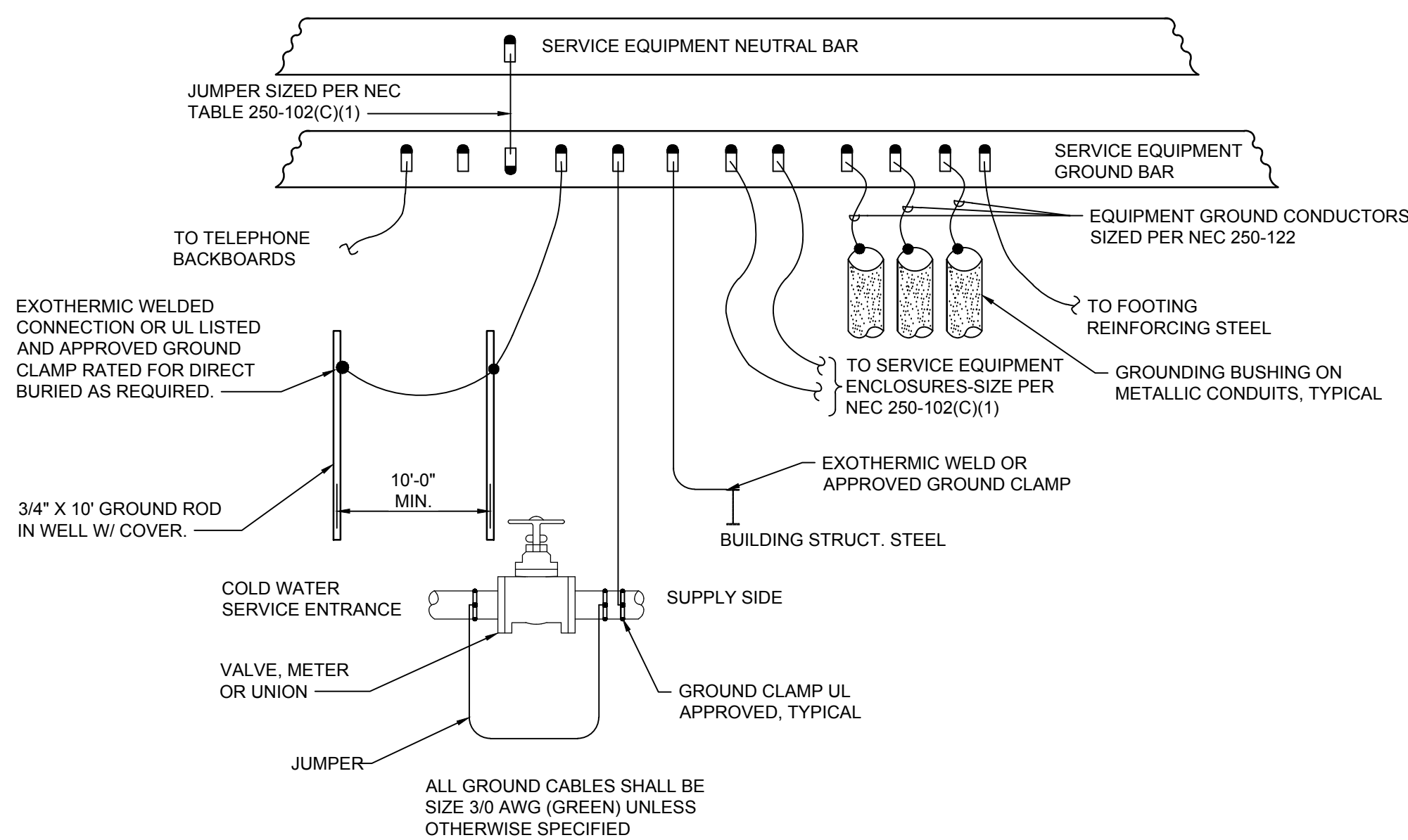
NOTES:
1. LABEL SHOWN CAN BE SOURCED FROM SAFETYSIGN.COM, OTHER SUPPLIERS ARE COMPLIANTSIGNS.COM & SETON.COM
2. THIS WARNING LABEL MINIMALLY COMPLIES WITH NEC, HOWEVER IF ELECTRICAL EQUIPMENT IS LIKELY TO REQUIRE EXAMINATION OR MAINTENANCE WHILE ENERGIZED A DETAILED SHORT CIRCUIT AND ARC FLASH HAZARD ANALYSIS IS RECOMMENDED.

4 ELECTRICAL EQUIPMENT WARNING LABEL DETAIL
NOT TO SCALE

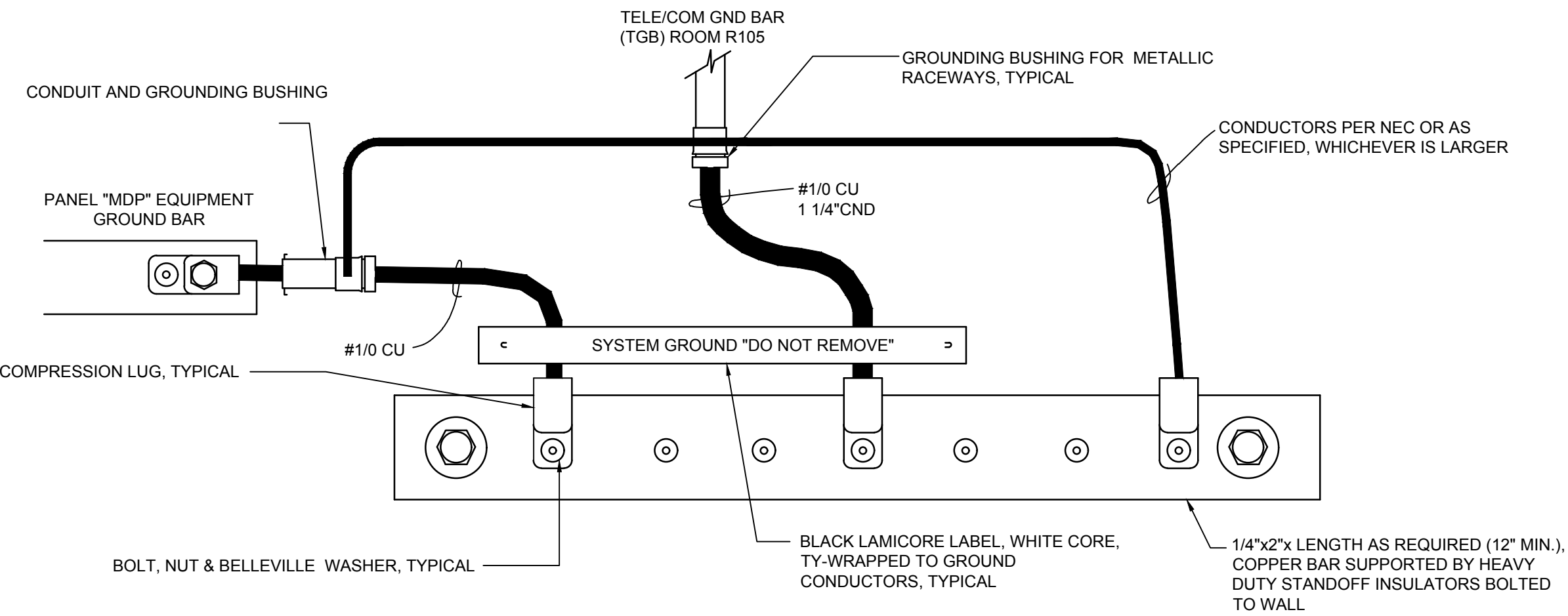


5 OCCUPANCY SENSOR 3 WAY SWITCH WITH MULTIPLE CEILING SENSOR WIRING DIAGRAM
NOT TO SCALE

NOTE:
OCCUPANCY SENSOR WIRING SCHEMATICS ARE PROVIDED TO INDICATE SWITCHING FUNCTION(S) REQUIRED. COMPONENTS AND CONNECTIONS BETWEEN COMPONENTS ARE REPRESENTATIVE ONLY AND MAY NOT BE APPLICABLE FOR ALL MANUFACTURER'S DEVICES. CONSULT ACTUAL APPROVED DEVICE MANUFACTURER APPLICATION INFORMATION AND INSTALLATION INSTRUCTIONS FOR COMPONENTS AND WIRING REQUIRED BEFORE ROUGHING IN AND INSTALLING SYSTEMS.



6 SERVICE GROUNDING DETAIL
NOT TO SCALE

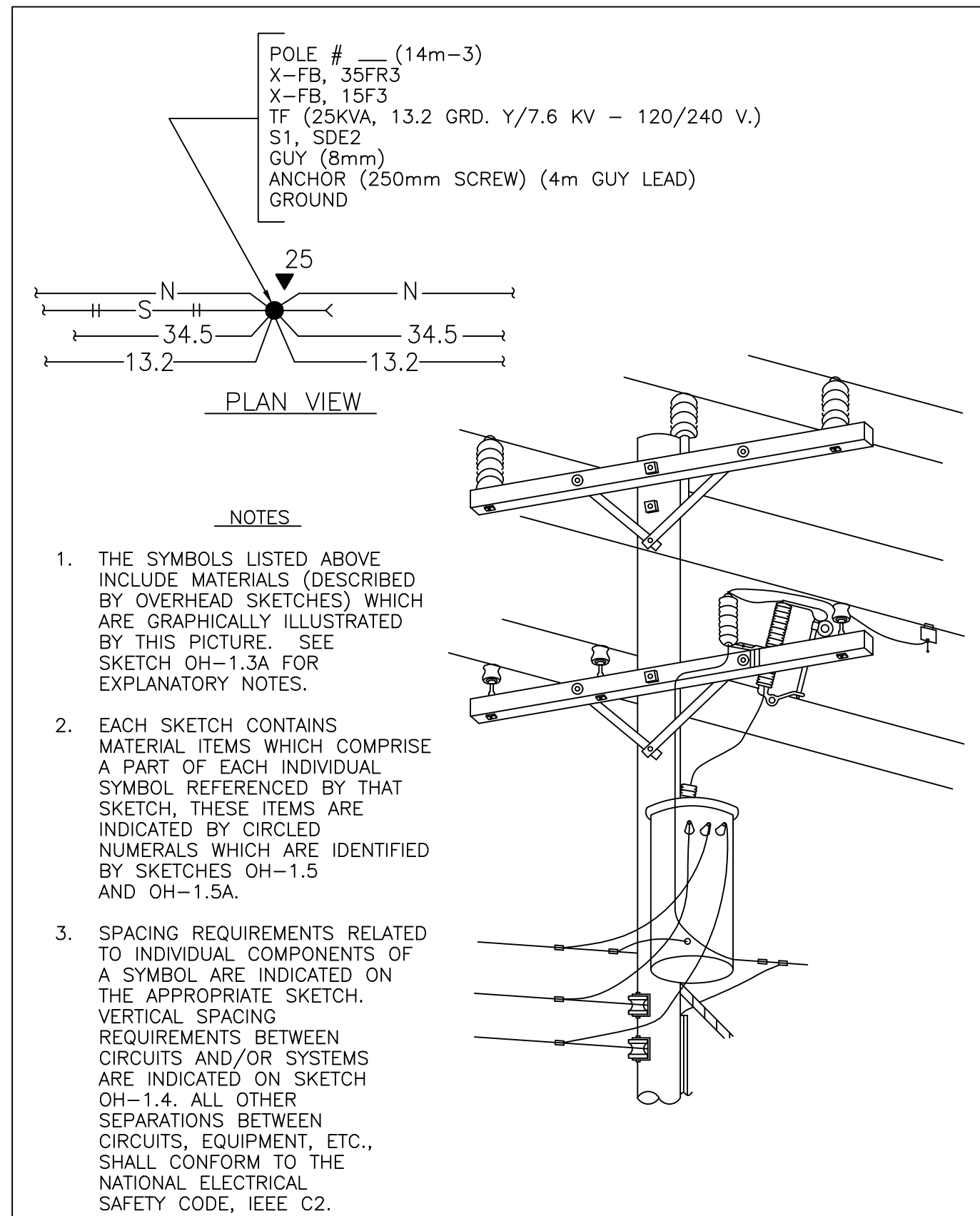


7 'EGB' GROUND BAR DETAIL
NOT TO SCALE

SEE DISCLOSURE OF INFORMATION STATEMENT ON SHEET T-1

CBHF Engineers, PLLC 2246 Yaupon Drive Wilmington, NC 28401 Phone: 910.791.4000 Fax: 910.791.5266 www.cbhfenigneers.com		SHEET TITLE: ELECTRICAL DETAILS		E-4	
DES: JLG		TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150		DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA	
DR: JLG		RENOVATE BLDG. M100 CAMP LEJEUNE, NORTH CAROLINA		SIZE F	
CHK: JPF		CODE IDENT. NO. 80091		NAVJAC DRAWING NO. 60024998	
SUBMITTED BY:		DESIGN DIR. T. H. BURTON, PE		CONST. CONTR. NO. N40085-15-D-0859	
APPROVED:		DATE		SCALE: NOTED	
SATISFACTORY TO:		DATE		SPEC. 05-19-0062	
08/21/19				SHEET 37 OF 45	

REVISIONS			
SYM.		DATE	APPROVED



METHOD OF SHOWING SYMBOLS			
SKETCH DATE	JUNE 2002	STYLE	OH-1.3

EXPLANATORY NOTES – METHOD OF SHOWING SYMBOLS

1. SYMBOLS ARE SHOWN IN THE BASIC ORDER AS THEY APPEAR ON THE POLE, BY STARTING AT THE TOP AND WORKING DOWN.
2. NUMERALS PRECEDING THE SYMBOL INDICATE THE MINIMUM REQUIRED VOLTAGE (KV) RATING (5,15,35) OF THE ASSEMBLY, IF APPLICABLE.
3. NUMERAL FOLLOWING THE SYMBOL INDICATES THE NUMBER OF CONDUCTORS ASSOCIATED WITH THE ASSEMBLY, IF APPLICABLE.
4. NUMERAL IN PARENTHESIS FOLLOWING THE SYMBOL DENOTES THE NUMBER OF ASSEMBLIES REQUIRED, IF MORE THAN ONE.
5. DATA IN PARENTHESIS FOLLOWING THE SYMBOL PROVIDES INFORMATION RELATIVE TO THE SYMBOL.

EXPLANATION OF SYMBOLS LISTED FOR POLE ON SKETCH OH-1.3

PROVIDE 45 FOOT LONG, CLASS 3 POLE CONTAINING:

X-FB - 8' CROSSARM WITH FLAT BRACE

35FR3 - 35KV INSULATORS, FLAT (MOUNTED HORIZONTAL ON CROSS-ARM), RIDGE PIN (CENTER PHASE ON POLE TOP PIN), THREE CONDUCTORS

X-FB - 8' CROSSARM WITH FLAT BRACE

15F3 - 15KV INSULATORS, FLAT (MOUNTED HORIZONTAL ON CROSSARM), THREE CONDUCTORS. NOTE: THIS SYMBOL CALLS FOR THREE CROSSARM MOUNTED PINS IN LIEU OF RIDGE PIN ON CENTER PHASE.

TF - TRANSFORMER ON FLAT (HORIZONTAL) CONSTRUCTION. DATA IN PARENTHESIS DESCRIBES THE TRANSFORMER CHARACTERISTICS

S1 - SECONDARY, ONE CONDUCTOR, TANGENT CONSTRUCTION (COMMON NEUTRAL).

SDE2 - SECONDARY DEADEND, TWO CONDUCTORS, OPEN WIRE

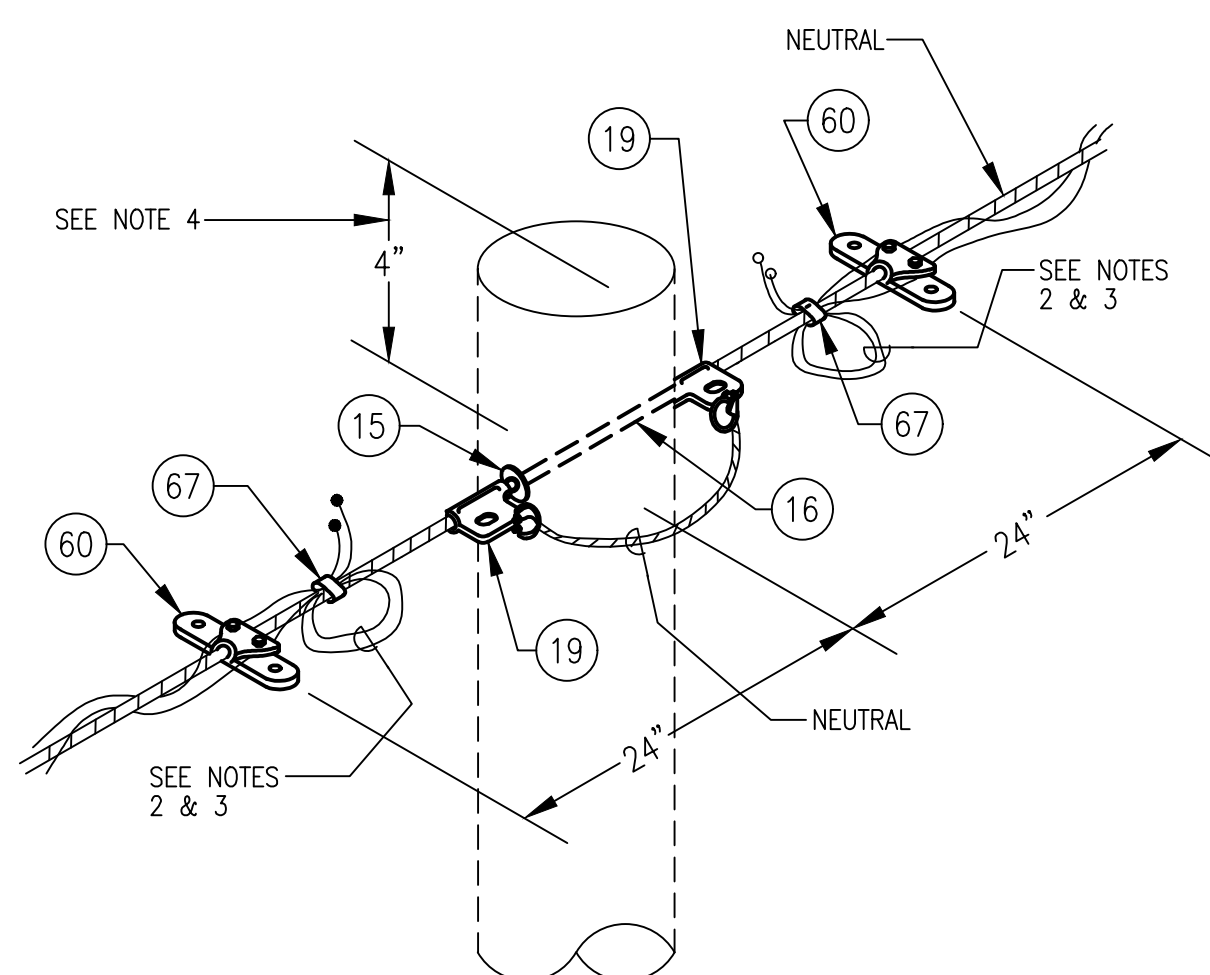
GUY (5/16") - DOWN GUY - WIRE SIZE 5/16"

ANCHOR - 10" SCREW TYPE ANCHOR WITH 12 FT. GUY LEAD.
(10" SCREW) NOTE: NO PLATE IS INCLUDED FOR THE ANCHOR SYMBOL

GROUND - NO EXPLANATION NECESSARY

EXPLANATION OF NOTES/SYMBOLS

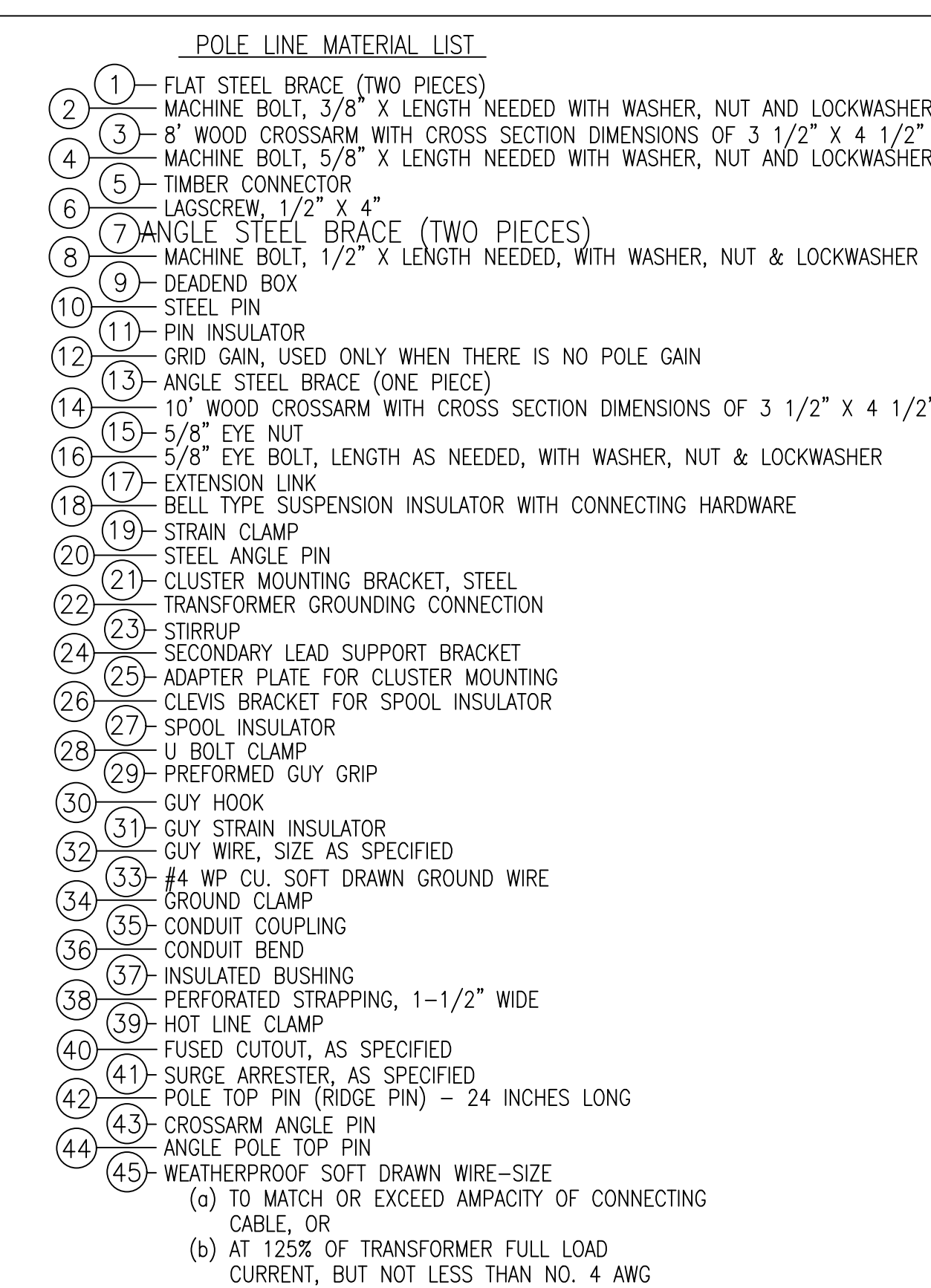
SKETCH DATE	JUNE 2002	STYLE	OH-1.3A
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- ### NOTES
1. DRAWING REPRESENTS A STDE OR SQDDE. OMIT ONE EACH OF ITEMS (19) (60) AND (67) FOR USE WITH STDE OR SQDDE.
 2. CABLE MAY EXTEND ON THROUGH WITHOUT BEING CUT, WHEN REQUIRED.
 3. COIL CONDUCTORS SO THEY WILL BE LONG ENOUGH TO BE JOINED AND SPLICED TOGETHER.
 4. WHEN USED AT TOP OF POLE, INSTALL MACHINE BOLT 4" DOWN FROM TOP OF POLE.

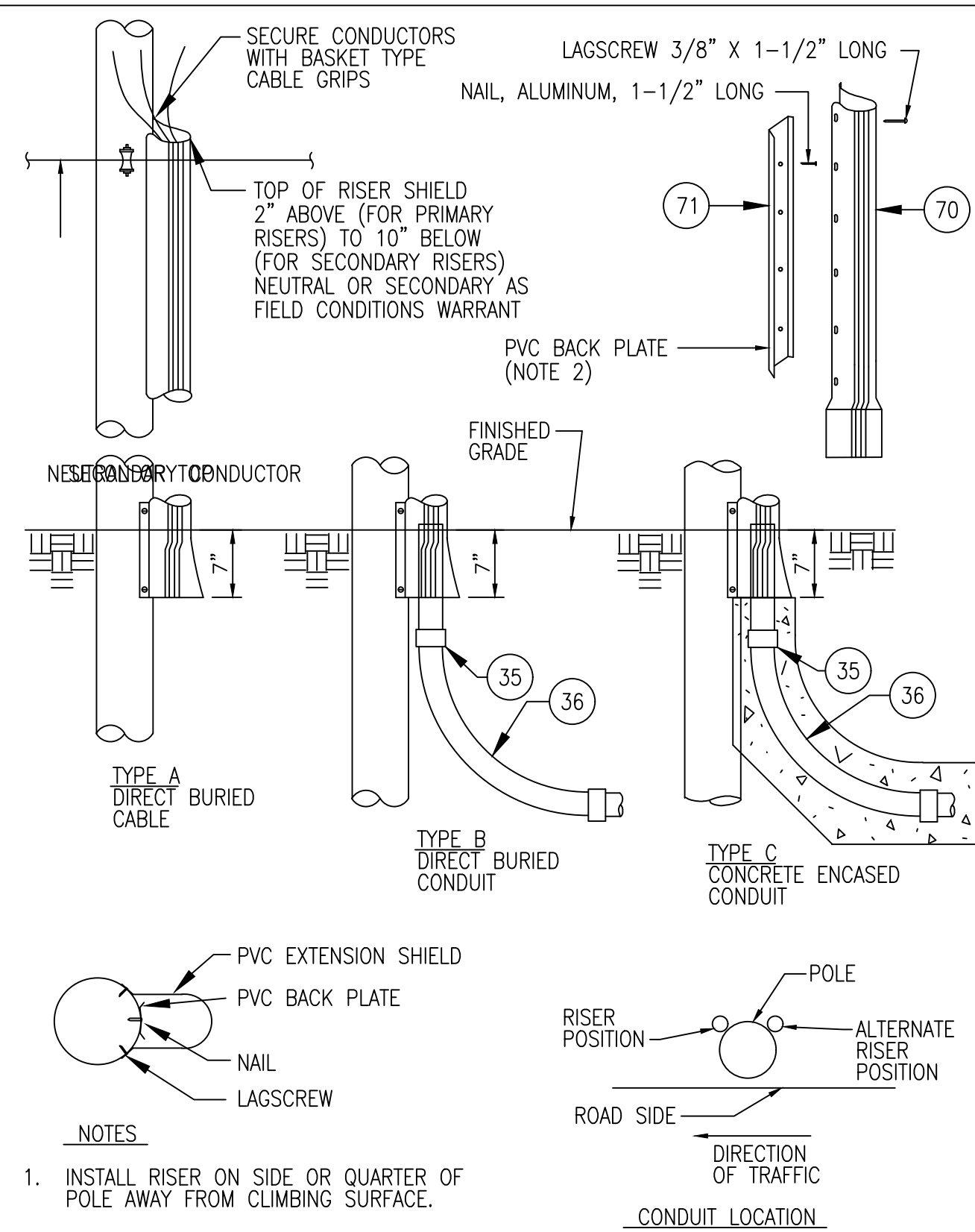
STDDE, SQDDE, STDE, SQDE
(0-600V)

SKETCH DATE	JUNE 2002	STYLE	OH-40
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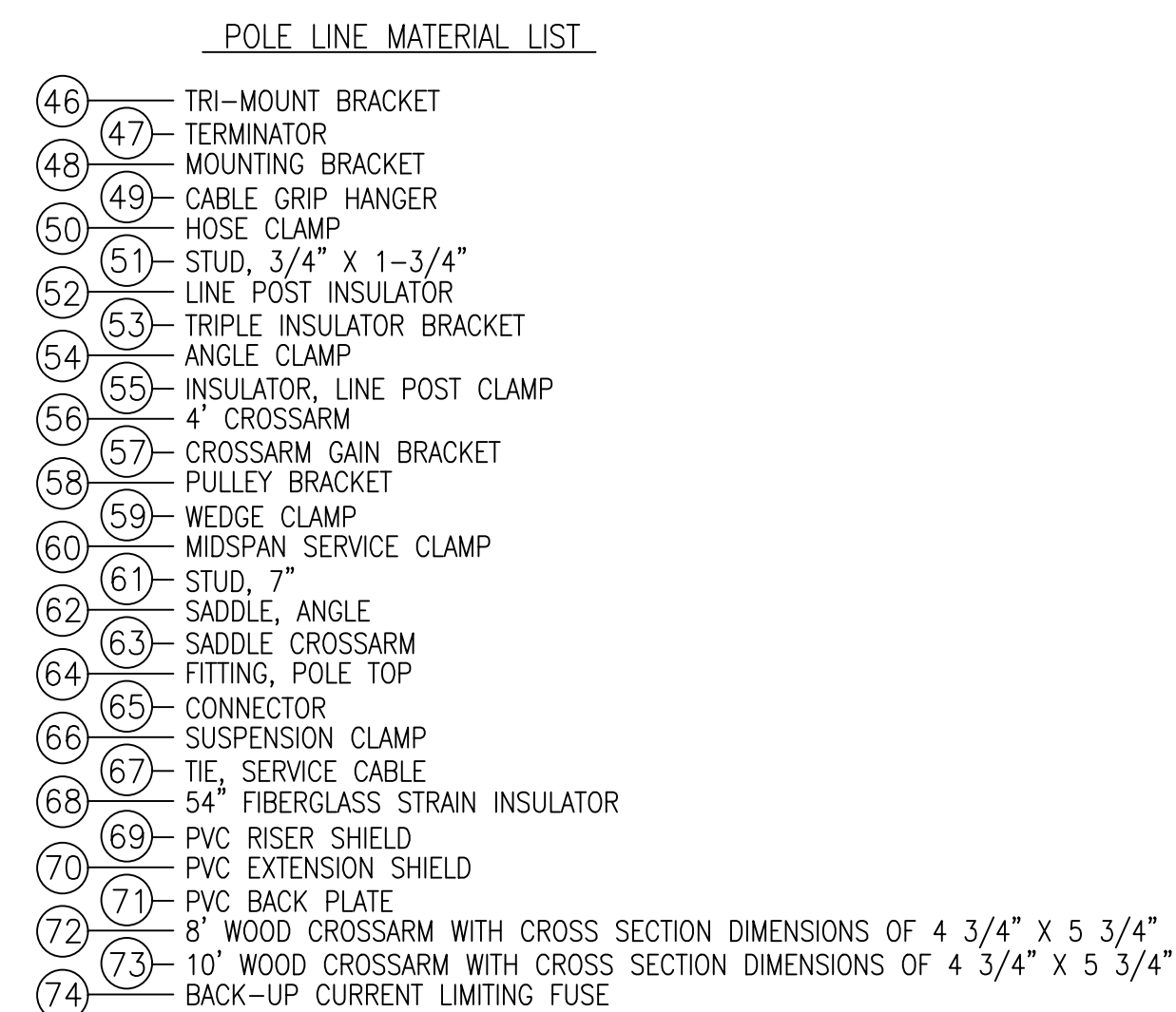
POLY LINE MATERIAL LIST

SKETCH DATE	JUNE 2002	STYLE	OH-1.5
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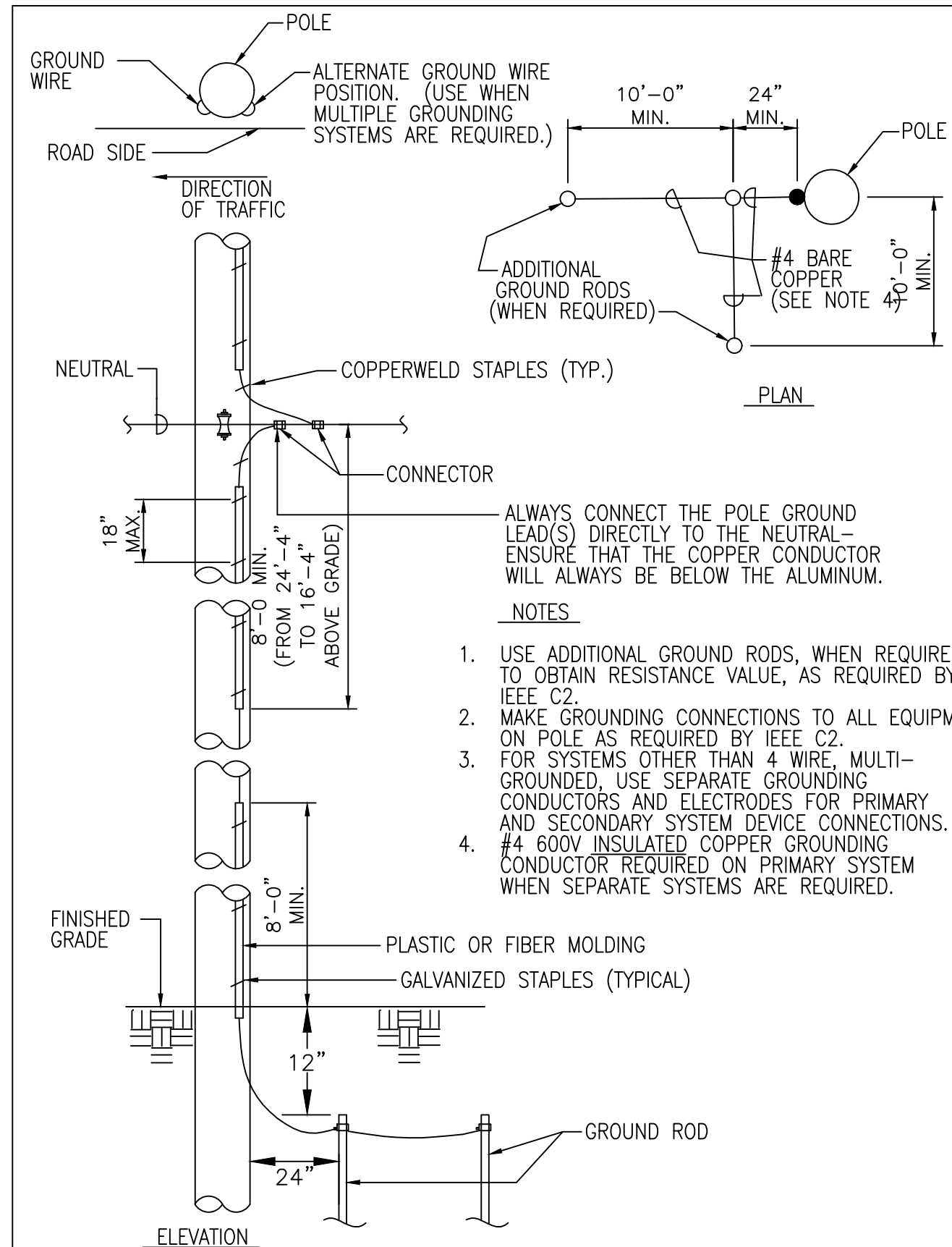
PVC RISER SHIELD
(SIZE & TYPE AS INDICATED)

SKETCH DATE	JUNE 2002	STYLE	OH-34
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POLY LINE MATERIAL LIST



SKETCH DATE	JUNE 2002	STYLE	OH-1.5A
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GROUND

SKETCH DATE	JUNE 2002	STYLE	OH-41
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SEE DISCLOSURE OF INFORMATION STATEMENT ON SHEET T-

 <p>CBHF Engineers, PLLC</p> <p>2240 Yaupon Drive Wilmington, NC 28401 Phone: 910.791.4000 Fax: 910.791.5266 www.cbhfenr.com</p> <p><small>© Copyright 2010 CBHF Engineers, PLLC NCSP-056</small></p>  <p>08/21/19</p>	<p>SHEET TITLE:</p> <p>ELECTRICAL UTILITY POLE DETAILS</p>	<p>E-5</p>
	<p>TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150</p>	<p>DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND</p> <p>MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA</p> <p>RENOVATE BLDG. M100 CAMP LEJEUNE, NORTH CAROLINA</p>
<p>DES. JLG</p> <p>DR. JLG</p> <p>CHK. JPF</p> <p>SUBMITTED BY:</p> <p>DESIGN DIR. T H BURTON, PE</p>	<p>DATE</p> <p>DATE</p> <p>DATE</p>	<p>SIZE</p> <p>F</p> <p>CODE IDENT. NO.</p> <p>80091</p> <p>SCALE: NOTED</p>
<p>APPROVED:</p> <p>SATISFACTORY TO:</p>	<p>DATE</p> <p>DATE</p>	<p>NAVFAC DRAWING NO.</p> <p>60024999</p> <p>CONST. CONTR. NO. N40085-15-D-0859</p> <p>SPEC. 05-19-0062</p> <p>SHEET 38 OF 45</p>

REVISIONS			
SYM.		DATE	APPROVED

PANEL MDP											SERVICE EQUIPMENT LISTED					
TYPE: NEMA 1 BOLT-ON DOOR-IN-DOOR WITH-IN HINGED TRIM FRONT COVER	208 MOUNT: FEED:	120 FLUSH BOTTOM	V.	3	PH.	4	WIRE	PROVIDE IF CHECKED:	XX XX	EQUIP. GROUND BUS NEUTRAL BUS GUTTER TAPS SUB-FEED LUGS						
LOAD SERVED	LOAD VA	CKT BKR	CKT #	LOAD VA			CKT #	CKT BKR	LOAD VA	LOAD SERVED						
PUMP	2,978	453	3	3,578	2,978	4	201	2	600	EWCT (NOTE 3)						
HAND DRYER R104	2,978	5	5		4,078	6	201	1	1,100	SIGN						
HAND DRYER R106	832	201	9	932		10	201	100	MECHANICAL DAMPER							
EWHD1	1,537	202	11		1,897	12	201	360	RECEPTS: R103							
SPARE	1,537	1	13	2,257		14	201	720	RECEPTS: R106							
RECEPTS: R108	900	201	15		2,088	16	25/3	2,088	CH-101-DAH01-1-DAH01-2-DAH01-3							
RECEPTS: R108 EXT GFI	1,080	201	19	1,260		20	201	180	PUMP (NOTE 2)							
RECEPTS: R107	720	201	21		900	22	201	180	FAIRINGS (NOTE 2)							
RECEPTS: R101 EXT GFI	1,080	201	23		1,260	24	201	180	RECEPT: R104 FLUSH VALVES FAUCET							
RECEPTS: R109 EXT GFI/CPOT	360	201	25	636		26	201	270	RECEPT: R104 PUMP							
RECEPTS: R101 EXT GFI	900	201	27		1,080	28	201	180	RECEPT: R105 FLUSH VALVES FAUCET							
RECEPTS: R101 EXT GFI	720	201	29			30	201	180	RECEPT: R106							
RECEPTS: R101	360	201	31	900		32	201	540	RECEPTS: R102							
RECEPTS: R102	360	201	33		720	34	201	360	RECEPTS: R102							
RECEPTS: R102	180	201	35			540	36	201	360	RECEPTS: R102						
RECEPTS: R103 THRU R110	1,193	201	37	1,193		38	201	SPARE								
RECEPTS: R102	1,295	201	39		1,295	40	201	SPARE								
SPARE	1,292	201	41			42	201	SPARE								
PANEL IT	1,292	100/3	43	1,292		44	201	SPARE								
RECEPTS: R102	1,472	100/3	45		1,472	46	201	SPARE								
RECEPTS: R102	1,380	201	47			1,380	48	201	SPARE							
PANEL VP	2,880	100/3	49	2,980		50	30/3	100	SPD							
RECEPTS: R102	2,340	201	51		2,440	52	201	100	SPD							
RECEPTS: R102	2,340	201	53			2,440	54	201	100	SPD						
NOTES:											15,028	13,805	15,463	TOTAL VOLT TAPS	225	A. BUS (TOPPER)
1. HVAC & REFRIGERATION EQUIPMENT MUST USE TYPE HACR BREAKERS.											125	115	129	CONTR. AMPS.	225	A. MAIN CIRCUIT BREAKER
2. PROVIDE CIRCUIT BREAKER LOCKING DEVICE FOR FACU ALONG WITH IDENTIFYING CIRCUIT BREAKER IN ACCORDANCE WITH NEC 760.41															25 KAIC MIN.	
3. PROVIDE GFI BREAKER																

PANEL VP														SERVICE EQUIPMENT LISTED														
TYPE: NEMA 1 SWITCHED OUTPUT PANEL FLOOR MOUNTED	208 FEED:	120 TOP	V.	3	PH.	4	WIRE	PROVIDE IF CHECKED:	XX XX	EQUIP. GROUND BUS NEUTRAL BUS GUTTER TAPS SUB-FEED LUGS																		
LOAD SERVED	LOAD VA	CKT BKR	CKT #	LOAD VA			CKT #	CKT BKR	LOAD VA	LOAD SERVED																		
RECEPTS: CEILING ROW 1	900	201	4	1,440		5	201	540	RECEPTS: FLOOR ROW 1																			
RECEPTS: CEILING ROW 2	900	201	3		1,440	4	201	540	RECEPTS: FLOOR ROW 2																			
RECEPTS: CEILING ROW 3	900	201	7		1,440	6	201	540	RECEPTS: FLOOR ROW 3																			
RECEPTS: CEILING ROW 4	900	201	7	1,440		8	201	540	RECEPTS: FLOOR ROW 4																			
RECEPTS: CEILING ROW 5	900	201	8		900	10	201	SPARE																				
RECEPTS: CEILING ROW 6	900	201	11		900	12	201	SPARE																				
SPARE	201	13	0			14	201	SPARE																				
SPARE	201	15	0			16	201	SPARE																				
SPARE	201	17	0			18	201	SPARE																				
SPARE	201	19	0			20	201	SPARE																				
SPARE	201	21	0			22	201	SPARE																				
SPARE	201	23	0			24	201	SPARE																				
SPARE	201	25	0			26	201	SPARE																				
SPARE	201	27	0			28	201	SPARE																				
SPARE	201	29	0			30	201	SPARE																				
NOTES:																												
1. HVAC & REFRIGERATION EQUIPMENT MUST USE TYPE HACR BREAKERS																												
2. PROVIDE CIRCUIT BREAKER LOCKING DEVICE FOR FACU ALONGS WITH IDENTIFYING CIRCUIT BREAKER IN ACCORDANCE WITH NEC 760.41																												
3. PROVIDE GFI BREAKER																												

PANEL IT

TYPE: NEMA 1
SWITCHED OUTPUT PANEL
FLOOR MOUNTED

208
MOUNT:
FEED:

120
SURFACE
TOP

V.

3

PH.

4

WIRE

PROVIDE IF
CHECKED:

XX
XX

EQUIP. GROUND BUS
NEUTRAL BUS
GUTTER TAPS
SUB-FEED LUGS

LOAD SERVED	LOAD VA	CKT BKR	CKT #	LOAD VA			CKT #	CKT BKR	LOAD VA	LOAD SERVED
SERVER RACK	180	202	3	360		4	201	180	RECEPT: R110 ACCESS CONTROL	
SERVER RACK	180	201	3		540	5	201	360	RECEPTS: R110	
SPARE	180	201	5		1,280	6	201	1,080	RECEPTS: R110	
SPARE	201	9	832		832	10	15/2	832	CH-101-DAH02	
SPARE	201	11				12	201		SPARE	
SPARE	201	13	0			14	201		SPARE	
SPARE	201	15	0		0	16	201		SPARE	
SPARE	201	17	0		0	18	201		SPARE	
SPARE	201	19	0		0	20	201		SPARE	
SPARE	201	21	0		0	22	201		SPARE	
SPARE	201	23	0		0	24	201		SPARE	
SPARE	201	25	100		100	26	30/3	100	SPD	
SPARE	201	27	100		100	28	30/3	100	SPD	
SPARE	201	29			100	30	30/3	100	SPD	
				1,292	1,472	1,360	TOTAL	VOL-T AMPS	100	A BUS (COPPER)
				11	12	11	CONN. AMPS		100	A MAIN LUGS

NOTES:

1. HVAC & REFRIGERATION EQUIPMENT MUST USE
TYPE HACR BREAKERS.

2. PROVIDE CIRCUIT BREAKER LOCKING DEVICE FOR
FACU ALONG WITH IDENTIFYING CIRCUIT BREAKER
IN ACCORDANCE WITH NEC 760.41

3. PROVIDE GFI BREAKER

10 KAIC MIN.

LIGHTING FIXTURE SCHEDULE											
MARK	DESCRIPTION				SIZE/APERTURE	VOLTS	LAMPS	WATTS	LENS	COLOR	REMARKS
A	2 X 4 LED LAY-IN VOLUMETRIC LUMINAIRE				24"W X 48"L X 2.5"H	120V	LED 4000K 5400 LUMENS	49	VOLUMETRIC	WHITE	1. RECESSED CEILING LED DRIVER DIMMING 0-10V
B	2 X 2 LED LAY-IN VOLUMETRIC LUMINAIRE				24"W X 24"L X 2.5"H	120V	LED 4000K 4050 LUMENS	37	VOLUMETRIC	WHITE	2. RECESSED CEILING LED DRIVER DIMMING 0

REVISIONS			
SYM.		DATE	APPROVED

DECORATIVE EMERGENCY LIGHTING UNIT

1 TYPE E DETAIL
NOT TO SCALE

LUMINAIRE REQUIREMENTS:

- HOUSING - INJECTION-MOLDED, FAME-RETARDANT, HIGH-IMPACT, THERMOPLASTIC HOUSING WITH SNAP-FIT DESIGN COMPONENTS. TRACK AND SWIVEL ARRANGEMENT PERMITS FULL RANGE OF LAMP ADJUSTMENT.
- OPTICS - TWO 1.8W LED LAMPS FOR EMERGENCY LIGHT.
- ELECTRICAL - DUAL-VOLTAGE INPUT 120V OR 277V AC; EMERGENCY UNIT PROVIDED WITH TEST SWITCH, STATUS INDICATOR AND RECHARGEABLE BATTERY. MAINTENANCE-FREE NICKEL-CADMIUM BATTERY, 90 MINUTES OF EMERGENCY POWER.
- LISTINGS - UL LISTED, MEETS UL 924, NFPA 101, NFPA 70-NEC AND OSHA ILLUMINATION STANDARDS. DAMP LOCATION 32°F TO 122°F (0°C TO 50°C) LISTED STANDARD.

LED SURFACE SHOWER LIGHT

2 TYPE F DETAIL
NOT TO SCALE

LUMINAIRE REQUIREMENTS:

- HOUSING - ALUMINUM TOP-PLATE AND OUTER-RING.
- FINISH - THERMOSET POWDER COAT FINISH.
- LENS - FROSTED DIFFUSER.
- LAMP - LED
- DRIVER - DIMMABLE ELECTRONIC
- CERTIFICATION - UL LISTED AND LABELED FOR WET/DAMP LOCATION.

LED EXTERIOR EGRESS SURFACE

3 TYPE G DETAIL
NOT TO SCALE

LUMINAIRE REQUIREMENTS:

- HOUSING - CAST ALUMINUM HOUSING.
- FINISH - THERMOSET POWDER COAT FINISH.
- LENS - CLEAR GLASS.
- LAMPS - LEDs.
- DRIVER - ELECTRONIC >90% POWER FACTOR.
- ELECTRICAL - 120/277V
- CERTIFICATION - UL LISTED AND LABELED.
- INTEGRAL PHOTO CONTROL
- 90 MIN BATTERY BACK-UP

RECESSED LENSED LED DOWNLIGHT

4 TYPE H DETAIL
NOT TO SCALE

LUMINAIRE REQUIREMENTS:

- HOUSING - ONE-PIECE, NON-CORROSIVE STEEL WITH ALUMINUM HEAT SINK. HEAT SINK SHALL BE INCORPORATED DIRECTLY INTO DRIVER COMPARTMENT TO ENSURE MAXIMUM HEAT TRANSFER AND DISSIPATION.
- REFLECTOR - ONE-PIECE, IRIDESCENCE-SUPPRESSED ALUMINUM. PAINTED WHITE SELF-TRIM AND OTHER REFLECTOR FINISHES AS INDICATED.
- BALLAST/LED DRIVER - TYPE A - CLASS 1, CONSTANT CURRENT, ELECTRONIC DRIVER WITH 0-10 VOLT DIMMING FOR LED LIGHT SOURCE.
- LIGHT SOURCE - TYPE A - MULTI-LED ARRAY WITH MINIMUM CRI OF 70 AT A CCT OF 3500-4500 DEGREES K. LUMEN OUTPUT AND WATTAGE AS INDICATED.
- CERTIFICATION - UL AND/OR ETL LISTED FOR DAMP OR WET LOCATIONS AS INDICATED, AND RqHS COMPLIANT.
- OTHER - THE ABOVE SKETCH IS A NON-PROPRIETY GRAPHIC REPRESENTATION OF A LUMINAIRE THAT MAY MEET THE SPECIFICATION REQUIREMENTS AND IS NOT INTENDED TO INDICATE A CERTAIN MANUFACTURER'S PREFERENCE. ALL DIMENSIONS ARE NOMINAL AND VARY PER MANUFACTURER.

'ON AIR' SIGN

5 TYPE I DETAIL
NOT TO SCALE

LUMINAIRE REQUIREMENTS

- HOUSING - DIE-CAST ALUMINUM OR HIGH-IMPACT, UV-STABILIZED, INJECTION-MOLDED THERMOPLASTIC. SINGLE OR DOUBLE-FACED AS INDICATED.
- FINISH (ON CAST ALUMINUM HOUSING ONLY) - TEXTURED POWDER COAT FINISH OPTIONS INCLUDE WHITE, WHITE WITH BRUSHED ALUMINUM FACE, BLACK, OR BLACK WITH BRUSHED ALUMINUM FACE.
- LETTERS/CHEVRONS - MINIMUM 6" HIGH WITH 3/4" STROKE. RED OR GREEN LETTERS AS INDICATED. PROVIDE CHEVRONS AS INDICATED EITHER LEFT, RIGHT OR BOTH DIRECTIONS AS INDICATED.
- ILLUMINATION - PROVIDED BY RED, GREEN OR WHITE HIGH-OUTPUT LEDs INSIDE OF FIXTURE HOUSING. PROVIDE POLYSTYRENE DIFFUSER IN COLOR INDICATED WITH FREQUENCY-MATCHED SILKSCREEN COATING FOR MAXIMUM LED LIGHT OUTPUT.
- CERTIFICATION - UL LISTED AND CERTIFIED FOR DAMP LOCATIONS.

LED EXIT SIGN

6 TYPE X DETAIL
NOT TO SCALE

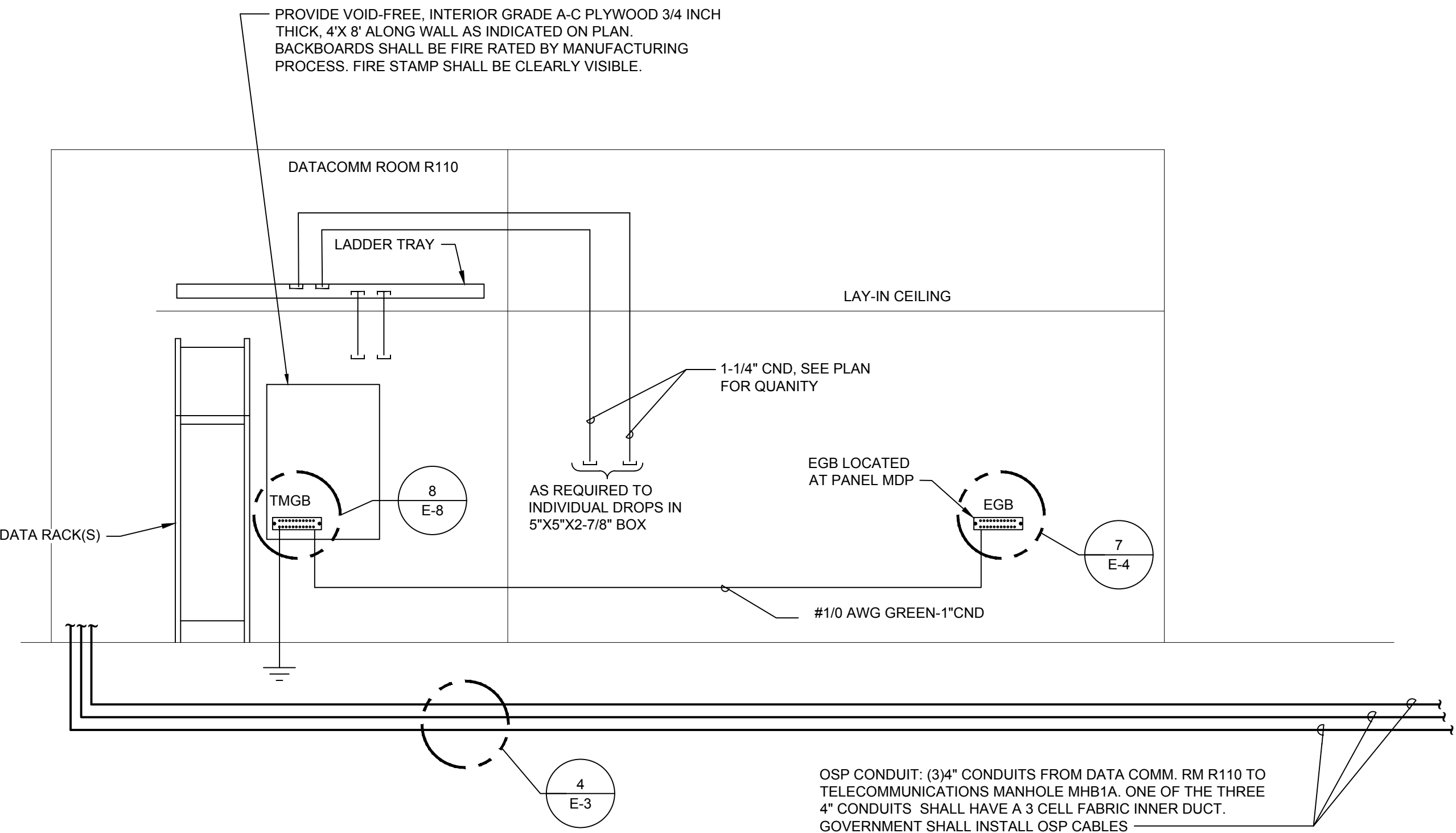
LUMINAIRE REQUIREMENTS

- HOUSING - DIE-CAST ALUMINUM OR HIGH-IMPACT, UV-STABILIZED, INJECTION-MOLDED THERMOPLASTIC. SINGLE OR DOUBLE-FACED AS INDICATED.
- FINISH (ON CAST ALUMINUM HOUSING ONLY) - TEXTURED POWDER COAT FINISH OPTIONS INCLUDE WHITE, WHITE WITH BRUSHED ALUMINUM FACE, BLACK, OR BLACK WITH BRUSHED ALUMINUM FACE.
- LETTERS/CHEVRONS - MINIMUM 6" HIGH WITH 3/4" STROKE. RED OR GREEN LETTERS AS INDICATED. PROVIDE CHEVRONS AS INDICATED EITHER LEFT, RIGHT OR BOTH DIRECTIONS AS INDICATED.
- EMERGENCY PACK - SOLID-STATE, CONSTANT-CURRENT TYPE BATTERY CHARGER WITH MAINTENANCE-FREE, NICKEL-CADMIUM BATTERY, AC-ON INDICATOR LAMP AND TEST SWITCH.
- MOUNTING - UNIVERSAL MOUNTING KIT FOR CEILING, WALL OR END-OF-FIXTURE MOUNTING.
- ILLUMINATION - PROVIDED BY RED, GREEN OR WHITE HIGH-OUTPUT LEDs INSIDE OF FIXTURE HOUSING. PROVIDE POLYSTYRENE DIFFUSER IN COLOR INDICATED WITH FREQUENCY-MATCHED SILKSCREEN COATING FOR MAXIMUM LED LIGHT OUTPUT.
- CERTIFICATION - UL LISTED AND CERTIFIED FOR DAMP LOCATIONS.

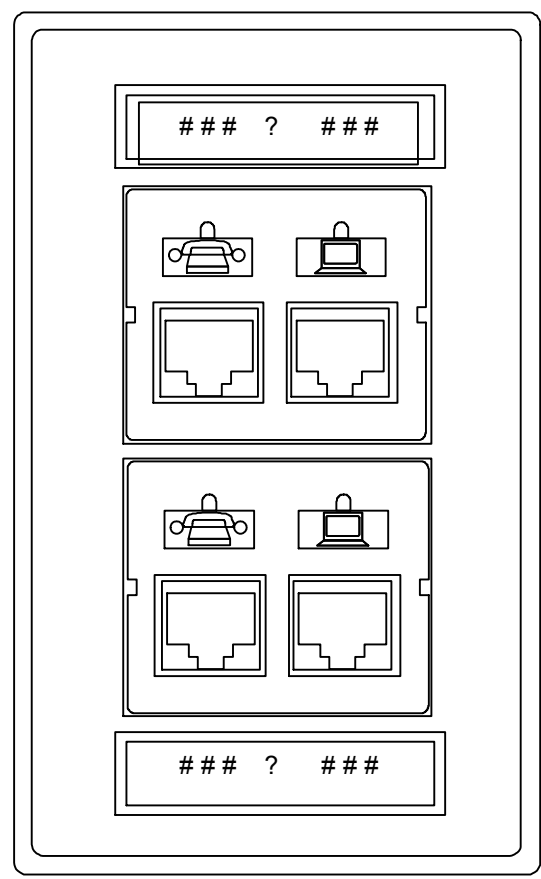
SEE DISCLOSURE OF INFORMATION STATEMENT ON SHEET T-1

CBHF Engineers, PLLC 2246 Yaupon Drive Wilmington, NC 28401 Phone: 910.791.4000 Fax: 910.791.5266 www.cbhfengineers.com <small>©Copyright 2019 CBHF Engineers, PLLC NCIP-P-0006</small>	SHEET TITLE: ELECTRICAL LIGHTING DETAILS		E-7
TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150	DEPARTMENT OF THE NAVY MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA		
DES: JLG DR: JLG CHK: JPF SUBMITTED BY: DESIGN DIR: T.H. BURTON, PE	RENOVATE BLDG. M100 CAMP LEJEUNE, NORTH CAROLINA		
APPROVED:	DATE: 08/21/19	SIZE: F	CODE IDENT. NO.: 80091
SATISFACTORY TO:	DATE:	NAVFAC DRAWING NO.: 60025001	CONST. CONTR. NO.: N40085-15-0-0859
SCALE: NOTED		SPEC: 05-19-0062	SHEET 40 OF 45

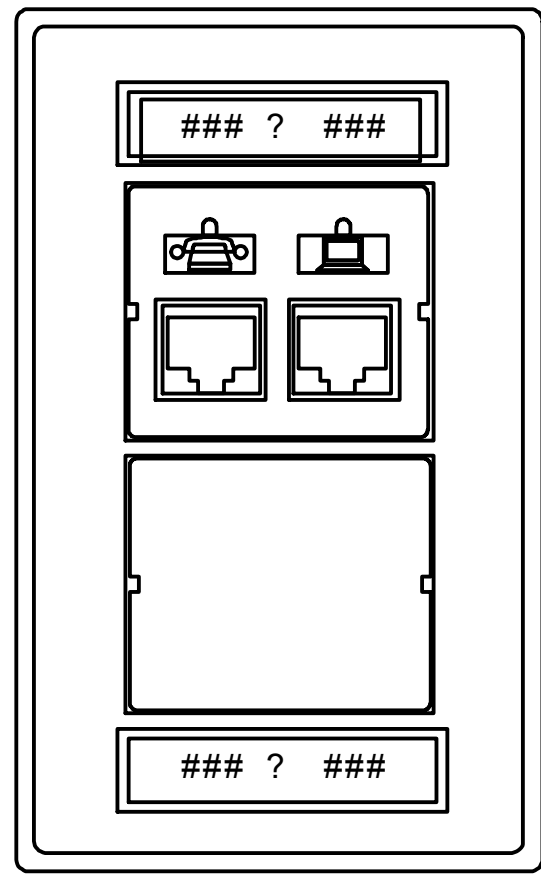
REVISIONS			
SYM.		DATE	APPROVED



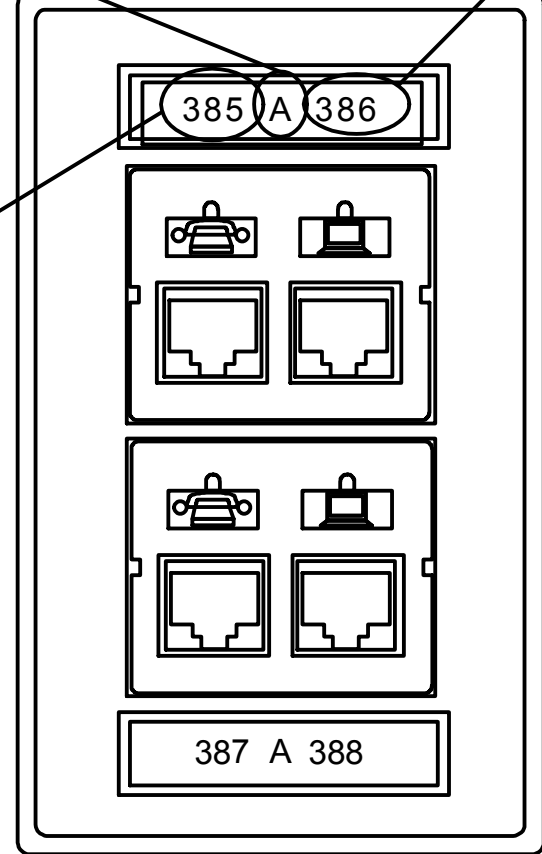
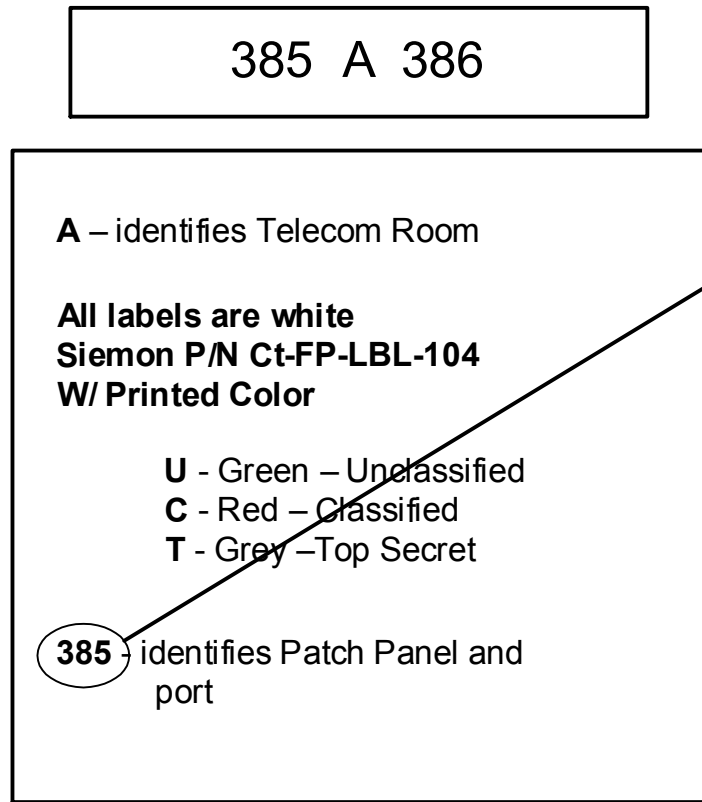
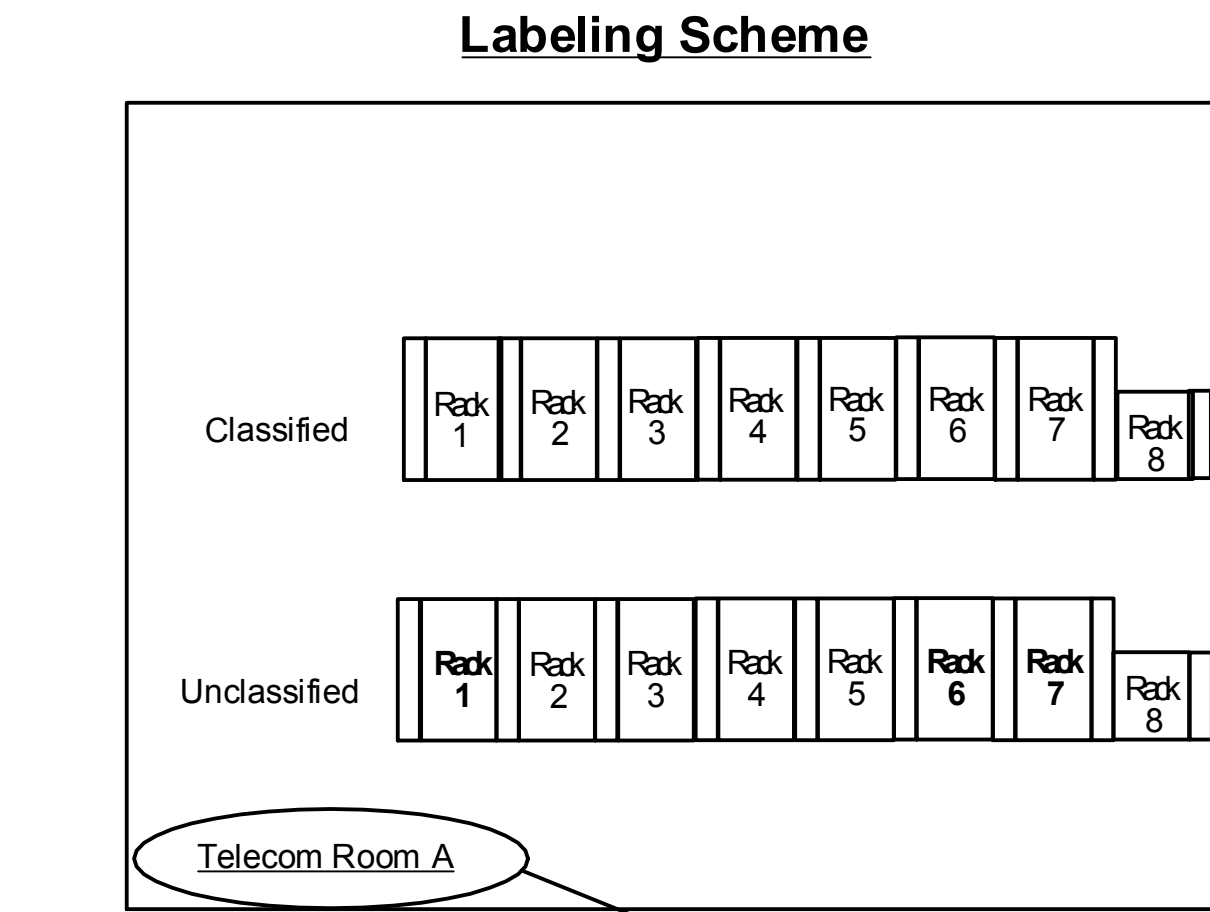
1 TELECOMMUNICATION RISER
NOT TO SCALE



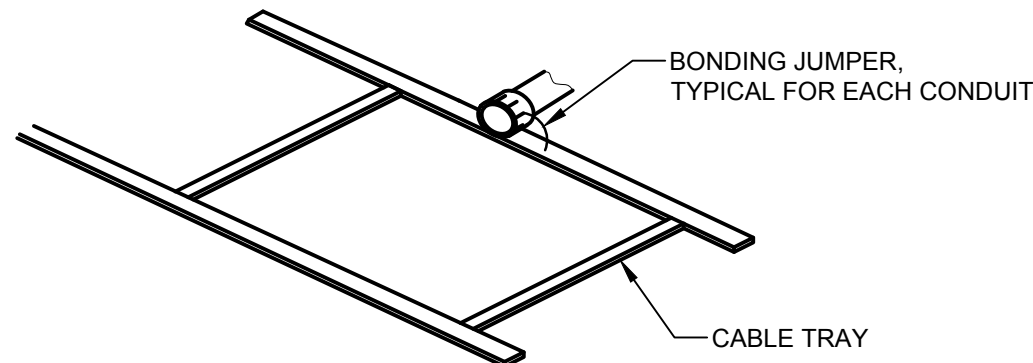
3 TYPICAL DATA OUTLET DETAIL
NOT TO SCALE



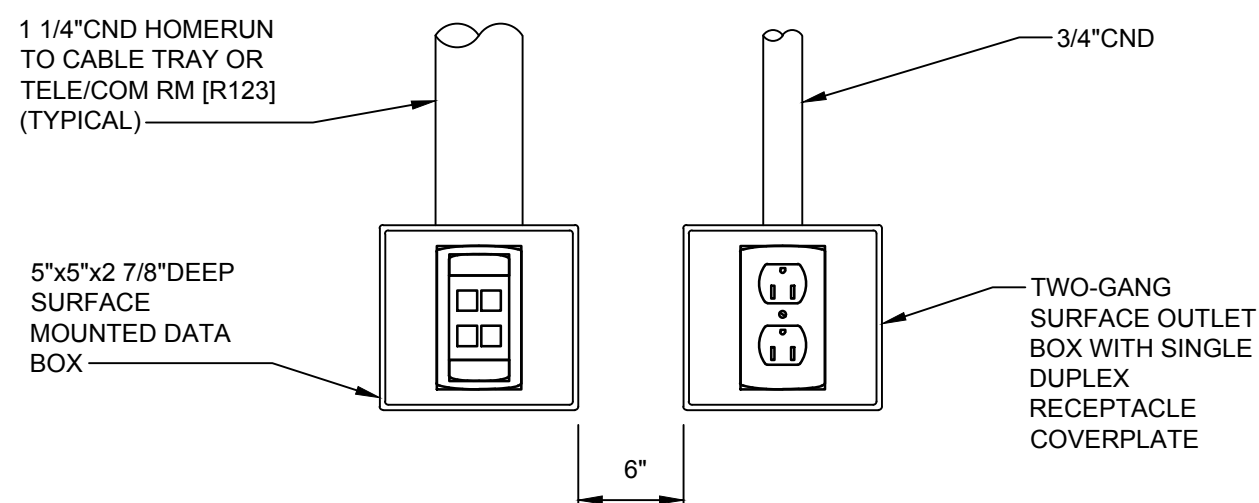
4 DDC AND FMCP OUTLET DETAIL
NOT TO SCALE



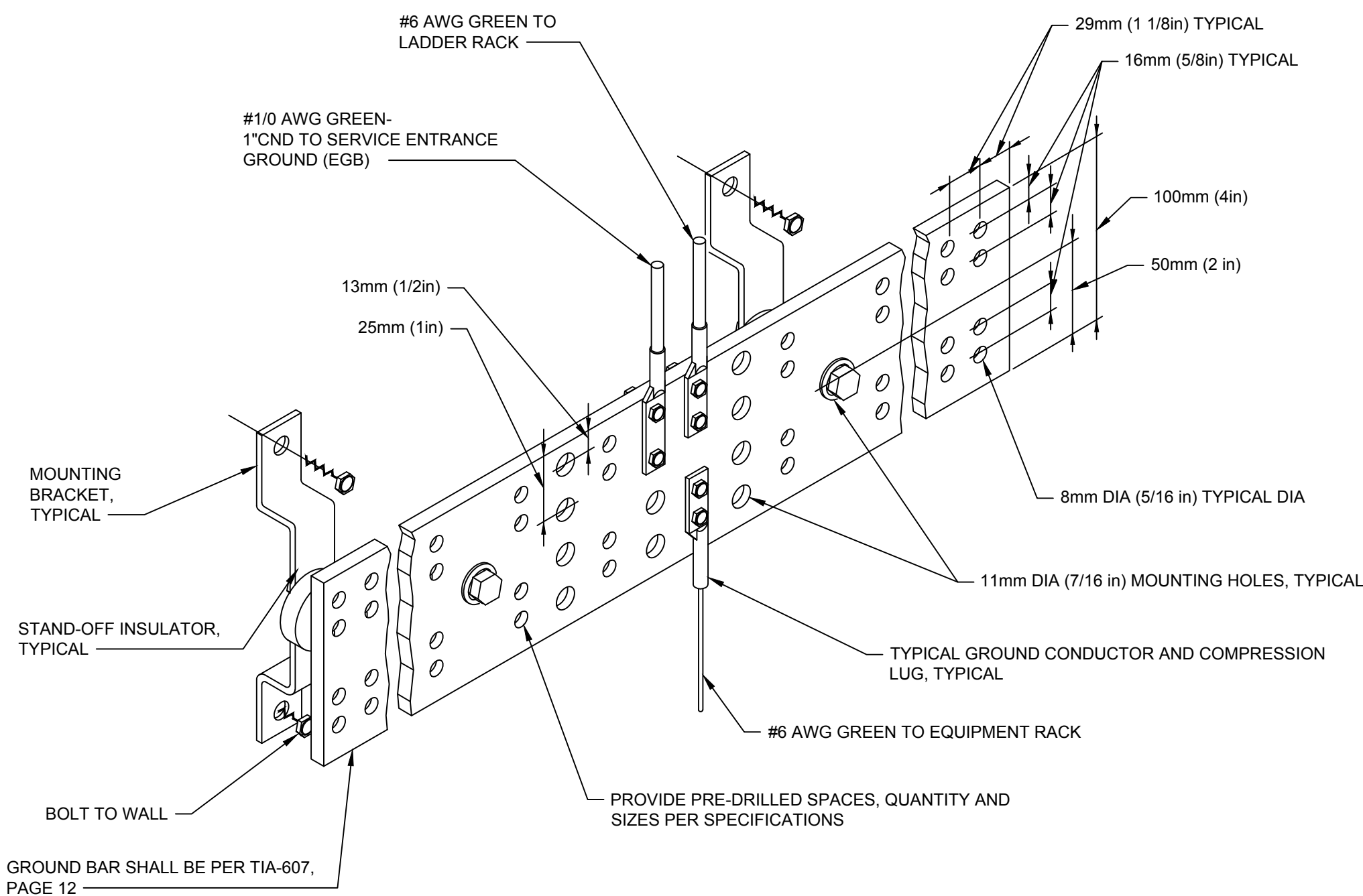
2 DATA OUTLET LABELING DETAIL
NOT TO SCALE



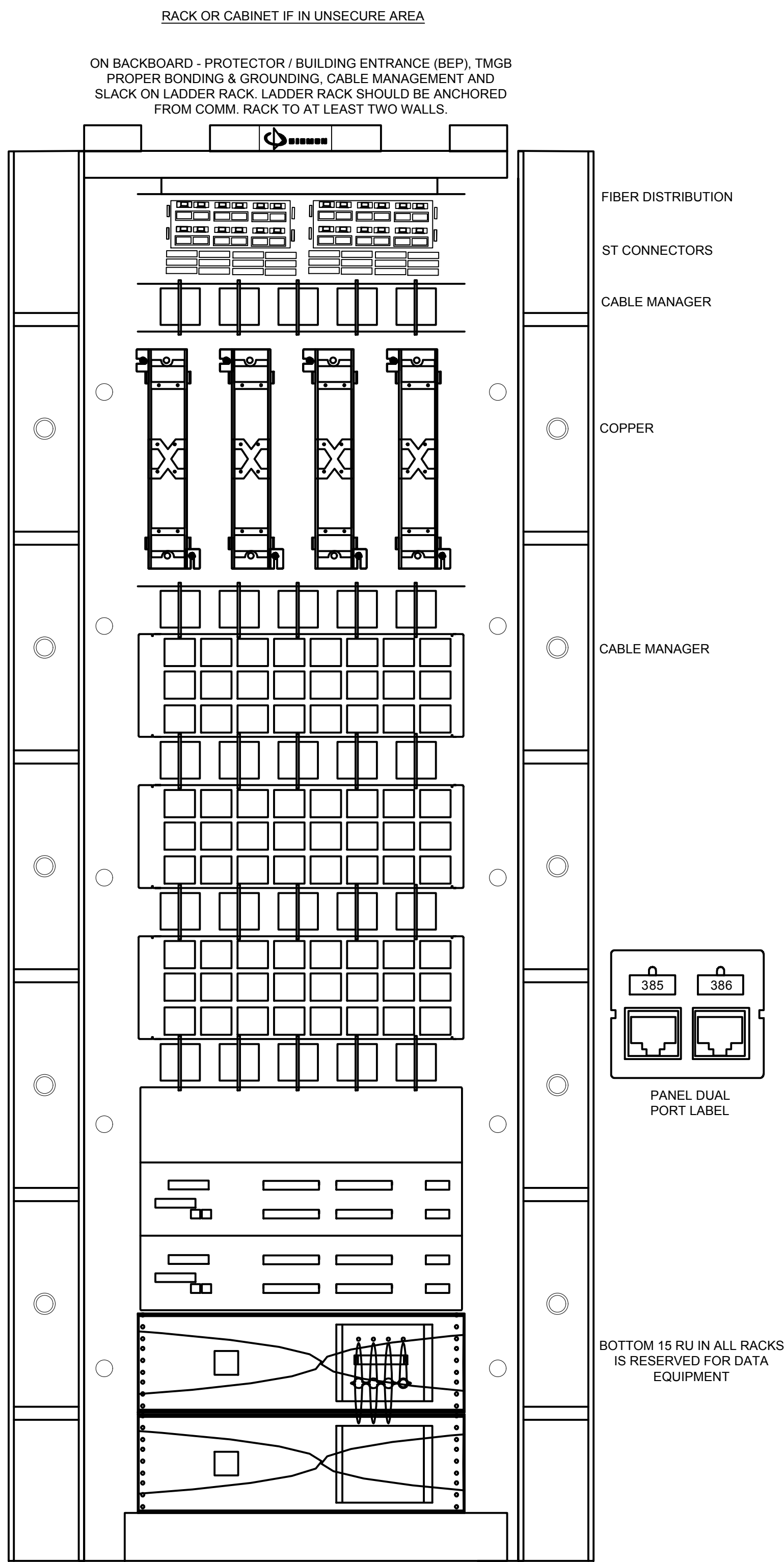
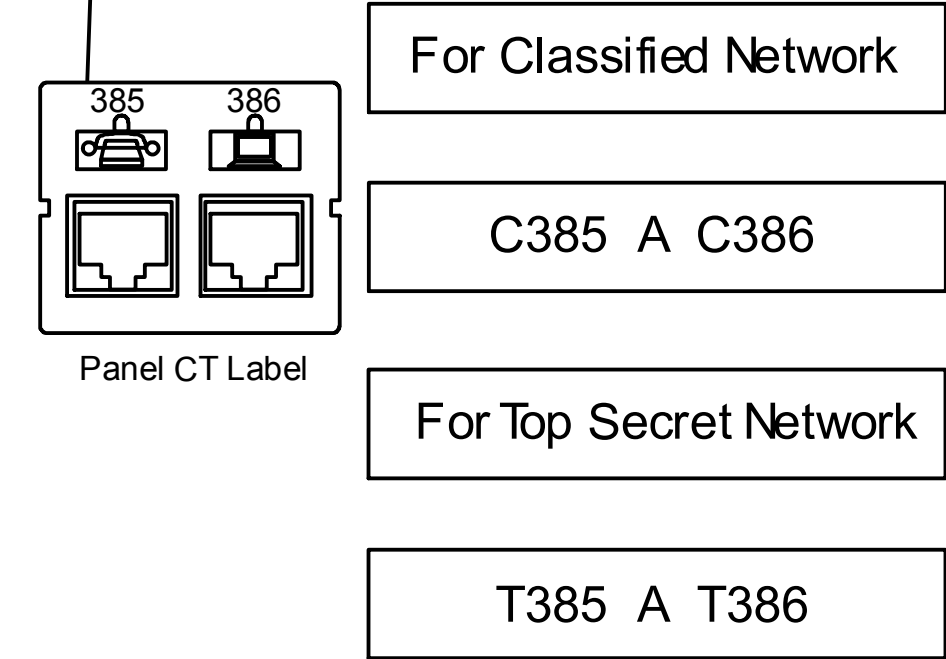
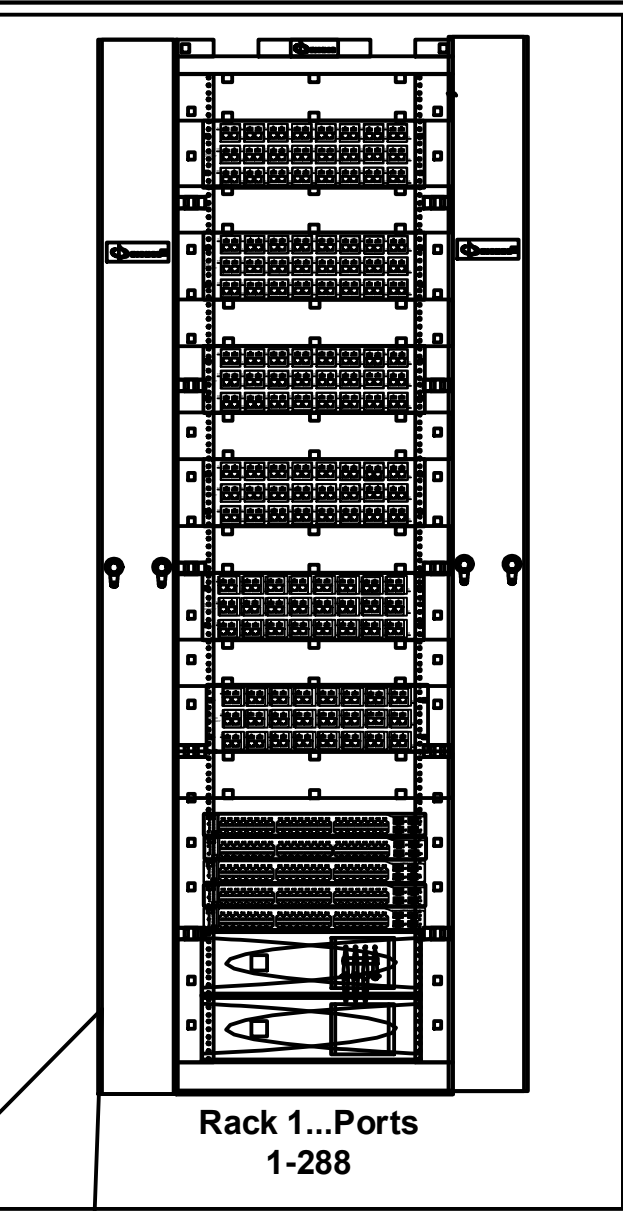
5 CONDUIT/TRAY BONDING DETAIL
NOT TO SCALE



6 DATA/RECEPTACLE MOUNTING DETAIL
NOT TO SCALE



8 TELECOMMUNICATIONS 'TGB' GROUND BAR DETAIL
NOT TO SCALE



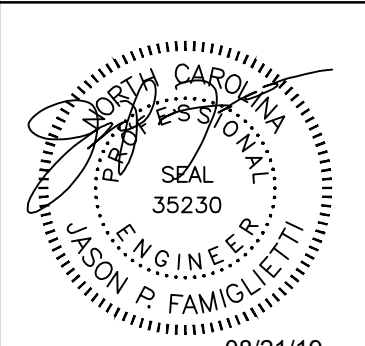
NUMBER OF TELECOMMUNICATIONS WORK OUTLETS IN BUILDING DETERMINE NUMBER OF PATCH PANELS AND NEED FOR ADDITIONAL RACKS.

IF 2 RACKS ARE USED: BACKBONE FIBER AND COPPER CABLE TERMINATIONS ARE IN THE LEFT RACK

IF 3 OR MORE RACKS ARE USED: PLACE THE FIBER AND COPPER TERMINATIONS IN THE CENTER RACKING TO REDUCE PATCH CORD LENGTH

7 ENCLOSURE/RACK ELEVATION EXAMPLE
NOT TO SCALE

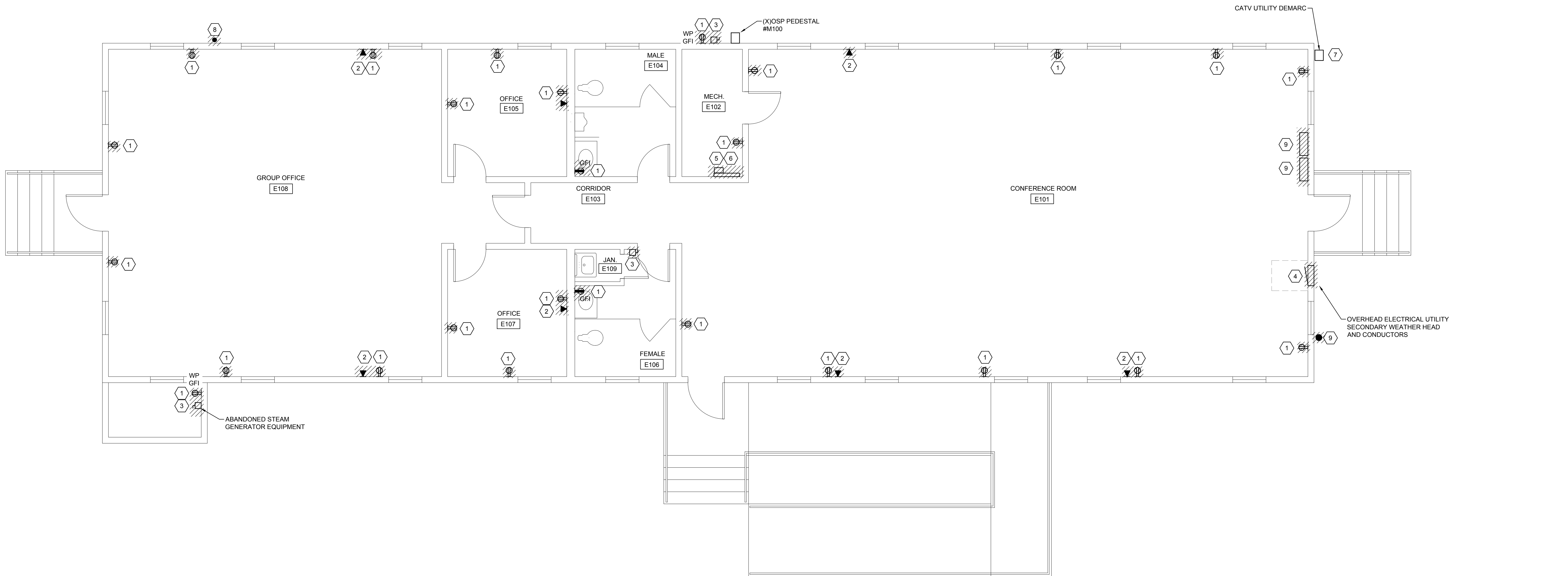
SEE DISCLOSURE OF INFORMATION STATEMENT ON SHEET T-1

CBHF Engineers, PLLC 2246 Yaupon Drive Wilmington, NC 28401 Phone: 910.791.4000 Fax: 910.791.5266 www.cbhfenrines.com ©Copyright 2013 CBHF Engineers, PLLC NCEP-P-008	SHEET TITLE: ELECTRICAL DATA RISER AND DETAILS		E-8			
	TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150		DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA			
	DES: JLG	RENOVATE BLDG. M100 CAMP LEJEUNE, NORTH CAROLINA				
	DR: JLG					
	CHK: JPF	CODE IDENT. NO. 80091 NAVJAC DRAWING NO. 60025002				
	SUBMITTED BY:					
DESIGN DIR. T.H. BURTON, PE		DATE	SIZE F	CONST. CONTR. NO. N40085-15-D-0859		
APPROVED:		DATE	SCALE: NOTED	SPEC. 05-19-0062		
SATISFACTORY TO:		DATE	SHEET 41 OF 45			

DEMOLITION KEYED NOTES

- 1 RECEPTACLES: CONTRACTOR MUST REMOVE DEVICE, BOX, CONDUIT, CONDUCTORS, FITTINGS ECT. IN ENTIRETY TO SOURCE.
- 2 DATA DEVICE: CONTRACTOR MUST REMOVE DEVICE, BOX, CONDUIT, CONDUCTORS, FITTINGS ECT. IN ENTIRETY TO SOURCE.
- 3 DISCONNECT: CONTRACTOR MUST REMOVE DISCONNECT, BOX, CONDUIT, CONDUCTORS, FITTINGS ECT. IN ENTIRETY TO EQUIPMENT AND TO SOURCE.
- 4 MAIN DISTRIBUTION PANEL: CONTRACTOR MUST REMOVE PANEL, DISTRIBUTION CONDUIT AND CONDUCTORS AND FEED CONDUIT AND CONDUCTORS IN ENTIRETY INCLUDING OVERHEAD SECONDARY CABLING TO UTILITY POLE #304. THIS INCLUDES BUT IS NOT LIMITED TO SUPPORTS, FITTINGS, HARDWARE ECT.
- 5 DATA/COMM BACKBOARD: CONTRACTOR MUST REMOVE DATA/COMM SYSTEM COMPLETE TO SOURCE INCLUDING BUT NOT LIMITED TO CABLES, CONDUIT, PATCH PANELS, FITTINGS ECT.
- 6 DATA/COMM OSP: CONTRACTOR SHALL REMOVE IN ENTIRETY TO PEDESTAL #M100#31.
- 7 CATV DEMARC: CONTRACTOR MUST REMOVE ALL CABLING DISTRIBUTING FROM CATV DEMARC INTO BUILDING. REMOVE DEMARC AND CABLING ON EXTERIOR OF BUILDING INCLUDING OVERHEAD FEED TO UTILITY POLE. COORDINATE REMOVAL WITH UTILITY.
- 8 ABANDONED CATV CABLE: CONTRACTOR MUST REMOVE IN ENTIRETY TO UTILITY POLE DISTRIBUTION POINT. COORDINATE REMOVAL WITH UTILITY.
- 9 FIRE ALARM EQUIPMENT, DEVICES AND TRANSMITTER: REMOVE EQUIPMENT, FIRE ALARM CONTROL PANEL, TRANSMITTER, ANTENNA, FIRE ALARM DEVICES, BOXES, RACEWAYS AND CONDUCTORS COMPLETE.

REVISIONS			
SYL		DATE	APPROVED



1 **ELECTRICAL POWER AND SYSTEMS DEMOLITION PLAN**

1/4" = 1'-0"

0 2' 4' 8'

NORTH

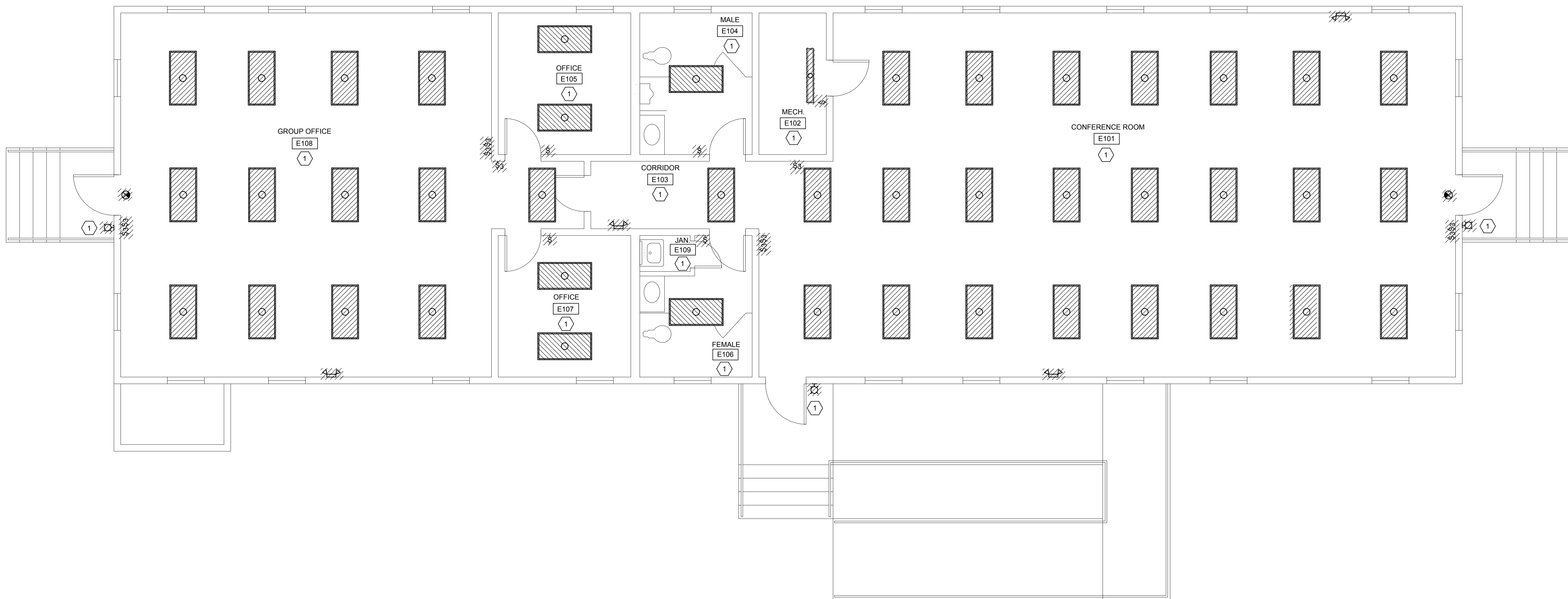
SEE DISCLOSURE OF INFORMATION STATEMENT ON SHEET T-1

CBHF Engineers, PLLC 2246 Yaupon Drive Wilmington, NC 28401 Phone: 910.791.4000 Fax: 910.791.5266 www.cbhfenigneers.com <small>©Copyright 2019 CBHF Engineers, PLLC NCIP-P-008</small>	SHEET TITLE: ELECTRICAL POWER AND SYSTEMS DEMOLITION		E-9	
	DESIGNED BY: JLG CHECKED BY: JPF SUBMITTED BY: T.H. BURTON, PE APPROVED: _____ SATISFACTORY TO: _____		TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150 MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA RENOVATE BLDG. M100 CAMP LEJEUNE, NORTH CAROLINA CODE IDENT. NO. 80091 NAVAC DRAWING NO. 60025003 CONST. CONTR. NO. N40085-15-0-0859	
SCALE: NOTED		SPEC: 05-19-0062		SHEET 42 OF 45

DEMOLITION KEYED NOTES

1 LIGHT FIXTURES, EXIT SIGNS, EMERGENCY LIGHTING, SWITCHES, CONDUIT, CONDUCTORS, BOXES ECT:
CONTRACTOR MUST REMOVE IN ENTIRETY TO SOURCE.

REVISIONS			
SYM.		DATE	APPROVED



1

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

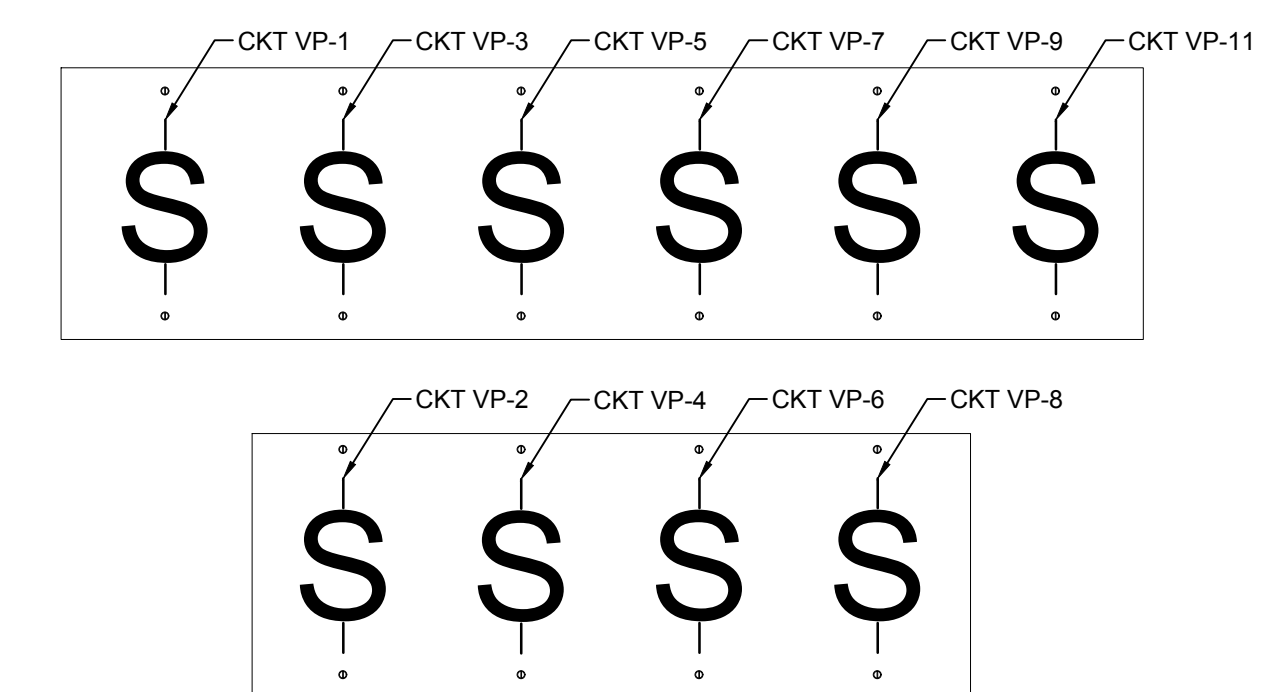
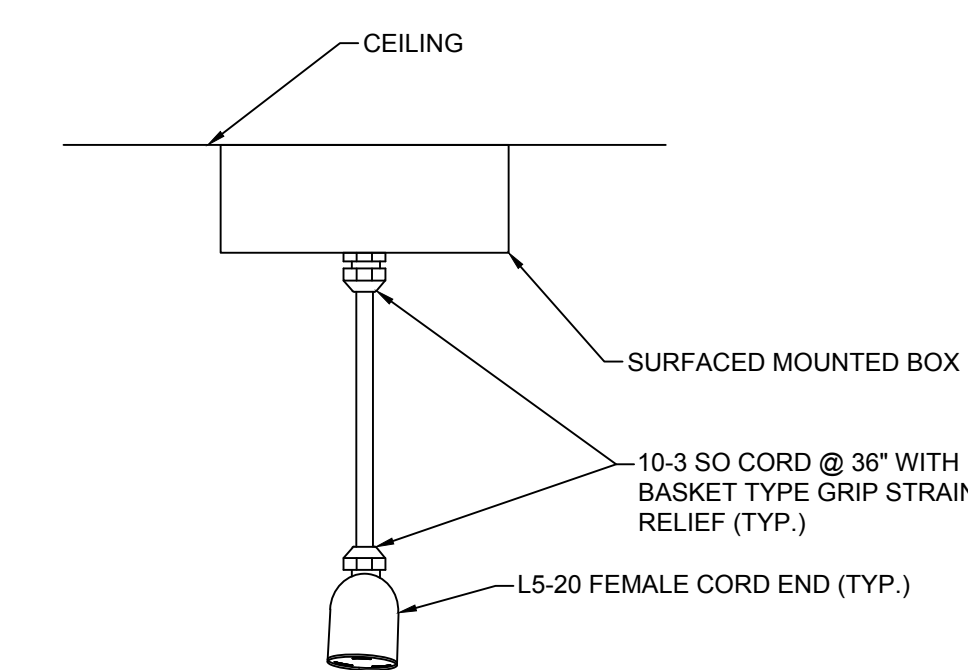
0'2'4'8'

NORTH

SEE DISCLOSURE OF INFORMATION STATEMENT ON SHEET T-1

CBHF Engineers, PLLC <small>2246 Yaupon Drive Wilmington, NC 28401 Phone: 910.791.4000 Fax: 910.791.5266 www.cbhfenigneers.com</small> <small>©Copyright 2019 CBHF Engineers, PLLC NCIP-P-008</small>	SHEET TITLE: ELECTRICAL LIGHTING DEMOLITION		E-10		
	TALLEY & SMITH ARCHITECTURE INC. <small>P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150</small>		MARINE CORPS BASE <small>DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND CAMP LEJEUNE, NORTH CAROLINA</small>		
	DES. JLG		RENOVATE BLDG. M100 CAMP LEJEUNE, NORTH CAROLINA		
	DR. JLG				
	CHK. JPF				
SUBMITTED BY:					
DESIGN DIR. T.H. BURTON, PE					
APPROVED:		DATE	SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
SATISFACTORY TO:		DATE	F	80091	60025004
SCALE: NOTED		SPEC. 05-19-0062	SHEET 43 OF 45		

(X)COMMUNICATIONS
MANHOLE MHB1A




3 CEILING POWER DROP DETAIL

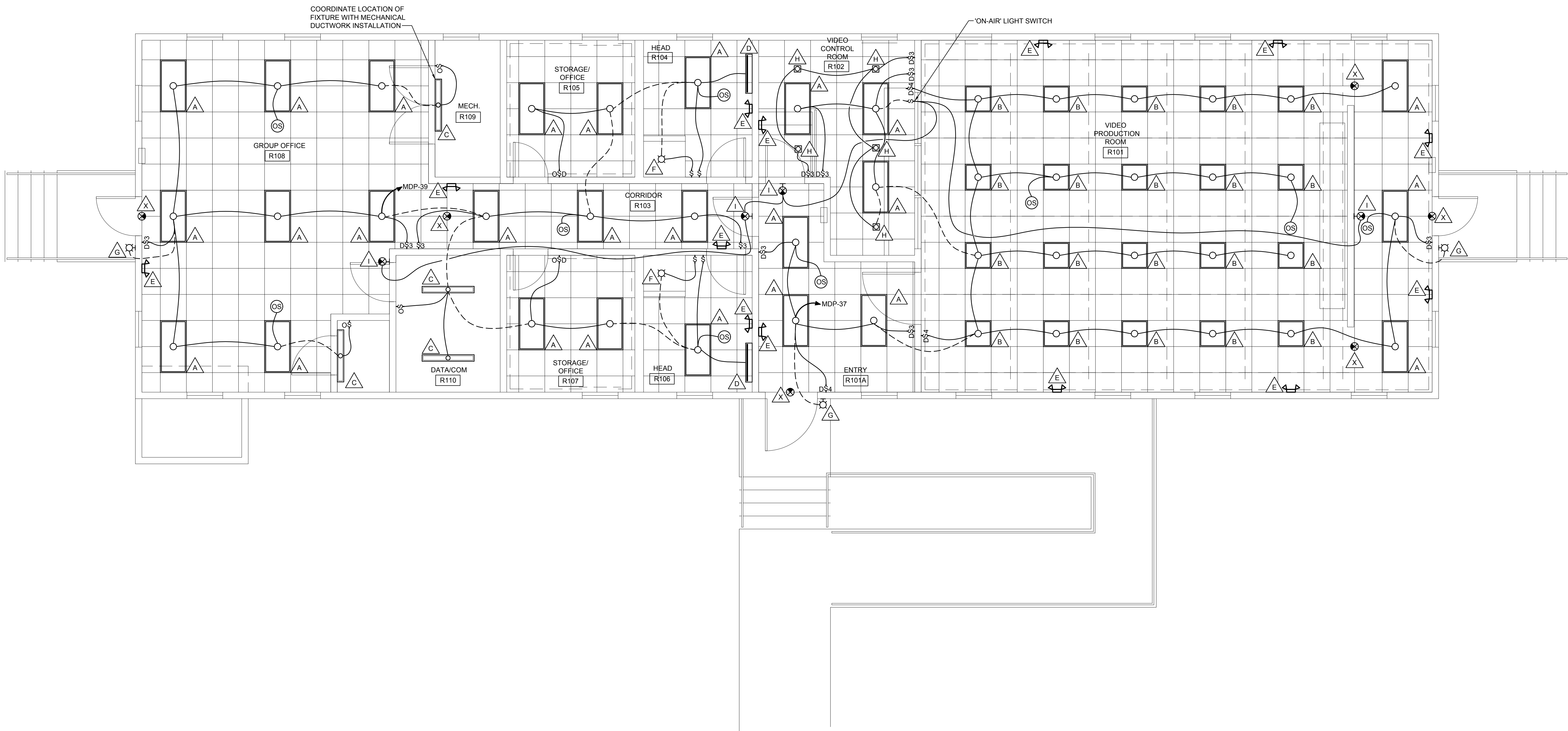
NOT TO SCALE

4

2 DATA/COMM R110 PLAN

SEE DISCLOSURE OF INFORMATION STATEMENT ON SHEET T-1																												
 <p>2245 Yeupon Drive Wilmington, NC 28401 Phone: 910.791.4000 Fax: 910.791.5266 www.cbhfengineers.com</p> <p><small>©Copyright 2010 CBHF Engineers, PLLC NCMA CODE</small></p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%; padding: 5px;">SHEET TITLE:</td> <td style="width: 40%; padding: 5px; text-align: center;">ELECTRICAL POWER AND SYSTEMS</td> <td style="width: 30%; padding: 5px; text-align: center; font-size: 2em;">E-11</td> </tr> <tr> <td colspan="3" style="padding: 10px;"> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 5px; vertical-align: top;"> TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150 </td> <td style="width: 50%; padding: 5px; vertical-align: top;"> DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA </td> </tr> <tr> <td colspan="2" style="padding: 10px; text-align: center;"> RENOVATE BLDG. M100 CAMP LEJEUNE, NORTH CAROLINA </td> </tr> </table> </td> </tr> <tr> <td colspan="3" style="padding: 10px;"> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 5px; vertical-align: top;"> DES. JLG DR. JLG CHK. JPF SUBMITTED BY: DESIGN DIR. T. H BURTON, PE </td> <td style="width: 50%; padding: 5px; vertical-align: top;"> DATE </td> </tr> <tr> <td colspan="2" style="padding: 10px;"> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%; padding: 5px; vertical-align: top;">APPROVED:</td> <td style="width: 30%; padding: 5px; vertical-align: top;">DATE</td> <td style="width: 30%; padding: 5px; vertical-align: top;"> SIZE <div style="font-size: 2em; text-align: center;">F</div> </td> <td style="width: 30%; padding: 5px; vertical-align: top;"> CODE IDENT. NO. <div style="font-size: 2em; text-align: center;">80091</div> </td> <td style="width: 30%; padding: 5px; vertical-align: top;"> NAVFAC DRAWING NO. <div style="font-size: 2em; text-align: center;">60025005</div> </td> </tr> <tr> <td colspan="2" style="padding: 5px;">SATISFACTORY TO:</td> <td colspan="3" style="padding: 5px;"> CONSTR. CONTR. NO. N40085-15-D-0859 </td> </tr> </table> </td> </tr> </table> </td> </tr> </table>	SHEET TITLE:	ELECTRICAL POWER AND SYSTEMS	E-11	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 5px; vertical-align: top;"> TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150 </td> <td style="width: 50%; padding: 5px; vertical-align: top;"> DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA </td> </tr> <tr> <td colspan="2" style="padding: 10px; text-align: center;"> RENOVATE BLDG. M100 CAMP LEJEUNE, NORTH CAROLINA </td> </tr> </table>			TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150	DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA	RENOVATE BLDG. M100 CAMP LEJEUNE, NORTH CAROLINA		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 5px; vertical-align: top;"> DES. JLG DR. JLG CHK. JPF SUBMITTED BY: DESIGN DIR. T. H BURTON, PE </td> <td style="width: 50%; padding: 5px; vertical-align: top;"> DATE </td> </tr> <tr> <td colspan="2" style="padding: 10px;"> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%; padding: 5px; vertical-align: top;">APPROVED:</td> <td style="width: 30%; padding: 5px; vertical-align: top;">DATE</td> <td style="width: 30%; padding: 5px; vertical-align: top;"> SIZE <div style="font-size: 2em; text-align: center;">F</div> </td> <td style="width: 30%; padding: 5px; vertical-align: top;"> CODE IDENT. 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REVISIONS			
SYM.		DATE	APPROVED



1

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

0 2 4 6 8

PLAN NORTH

SEE DISCLOSURE OF INFORMATION STATEMENT ON SHEET T-1

CBHF Engineers, PLLC 2246 Yaupon Drive Wilmington, NC 28401 Phone: 910.791.4000 Fax: 910.791.5266 www.cbhfenigneers.com <small>©Copyright 2019 CBHF Engineers, PLLC NCEP-P-008</small>	SHEET TITLE: ELECTRICAL LIGHTING PLAN		E-12	
	TALLEY & SMITH ARCHITECTURE INC. P.O. BOX 518 SHELBY, NC 28151-0518 409 EAST MARION ST. SHELBY, NC 28150		MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA	
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	APPROVED:	DATE	SIZE F	CODE IDENT. NO. 80091
	SATISFACTORY TO:	DATE	NAVFAC DRAWING NO. 60025006	CONST. CONTR. NO. N40085-15-0-0859
SCALE: NOTED		SPEC. 05-19-0062	SHEET 45 OF 45	