NEW FT. CAMPBELL NATIONAL GUARD READINESS CENTER

FORT CAMPBELL, CHRISTIAN COUNTY, KENTUCKY

SBC Project No. 368/014-01-2021

OWNER:

STATE OF TENNESSEE
DEPARTMENT OF MILITARY

DESCRIPTION OF THE WORK

THE PROJECT CONSISTS OF A NEW 34,065SF READINESS CENTER AND ALL SITE WORK. RELOCATION OF EQUIPMENT FACILITIES OF THE ADJACENT UTES FACILITY IS INCLUDED.

INDEX OF DRAWINGS

T1.0 TITLE SHEET

ARCHITECTURAL
A2.1 BUILDING FLOOR PLAN
A2.3 BUILDING ROOF PLAN
A3.1 BUILDING ELEVATIONS
A5.1 BUILDING SECTIONS

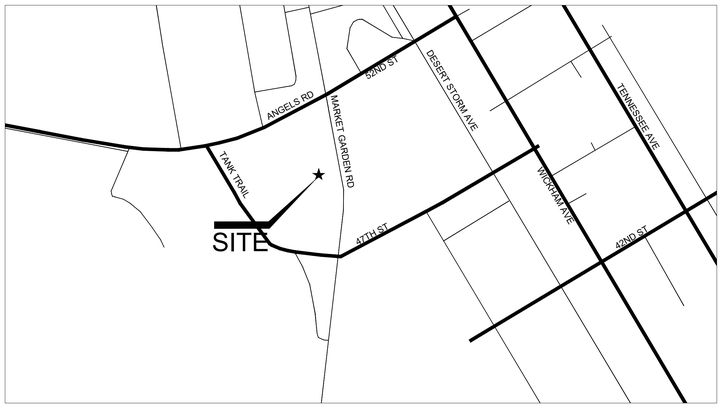
CIVIL
C0.00 COVER SHEET
C1.00 EXISTING CONDITIONS
C2.00 DEMOLITION PLAN
C3.00 SITE PLAN
C4.00 GRADING & DRAINAGE PLAN
C5.00 UTILITY PLAN
C6.00 SITE DETAILS
C6.01 SITE DETAILS

MECHANICAL
M1.1 PARTIAL FLOOR PLAN - MECHANICAL
M1.2 PARTIAL FLOOR PLAN - MECHANICAL

FIRE PROTECTION
FP0.1 NOTES, SCHEDULES & DETAILS - FIRE PROTECTION
FP1.1 PARTIAL FLOOR PLAN - FIRE PROTECTION
FP1.2 PARTIAL FLOOR PLAN - FIRE PROTECTION

PLUMBING
P0.1 SCHEDULES AND NOTES - PLUMBING
P0.2 DETAILS - PLUMBING
P1.1 PARTIAL FLOOR PLAN - PLUMBING
P1.2 PARTIAL FLOOR PLAN - PLUMBING

ELECTRICAL
E0.1 LEGEND & SCHEDULES - ELECTRICAL
E0.2 DETAILS - ELECTRICAL
E0.3 UL DETAILS - ELECTRICAL
E3.1 PARTIAL FLOOR PLAN - POWER & COMM - ELECTRICAL
E3.2 PARTIAL FLOOR PLAN - POWER & COMM - ELECTRICAL
E4.1 PARTIAL FLOOR PLAN - MECHANICAL POWER - ELECTRICAL
E4.2 PARTIAL FLOOR PLAN - MECHANICAL POWER - ELECTRICAL
E5.1 ENLARGED PLANS - ELECTRICAL



VICINITY MAP - FORT CAMPBELL, KY.

BUILDING DATA

OCCUPANCY - B, A-2 - MIXED OCCUPANCY
TYPE CONSTRUCTION - II-B UNPROTECTED, SPRINKLERED
BUILDING AREA- 34,065 s.f.

APPLICABLE CODES

2012 INTERNATIONAL BUILDING CODE (EXCLUDING CHAPTERS 11 & 3411)
2012 INTERNATIONAL ENERGY CONSERVATION CODE
2012 INTERNATIONAL MECHANICAL CODE
2012 INTERNATIONAL PLUMBING CODE
2012 INTERNATIONAL FIRE CODE
2012 NFPA 101 LIFE SAFETY CODE
2017 NATIONAL ELECTRICAL CODE NFPA 70
2010 ADA STANDARDS FOR ACCESSIBLE DESIGN

GENERAL NOTES

1. ACCESS TO THE PROJECT SITE FOR FIELD INSPECTION PRIOR TO BIDDING SHALL BE BY CONTRACTING CSM. JAMES GASTON AT 270-798-7695 EXT. 4553 WITH 24 HR. ADVANCE NOTICE

2. DOCUMENTATION OF EXISTING CONDITIONS:
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DOCUMENT EXISTING CONDITIONS CONCERNING EXISTING DAMAGE THAT COULD BE CONSTRUED TO HAVE BEEN CAUSED BY CONSTRUCTION OPERATIONS. THIS MAY BE BY METHODS OF THE CONTRACTOR'S CHOOSING, EITHER VIDEO OR DIGITAL PHOTOGRAPHY. ALL CONDITIONS MUST BE DOCUMENTED AND FILED WITH THE ARCHITECT PRIOR TO CONSTRUCTION.

3. BASE ACCESS PROTOCOLS TO BE DETERMINED AT THE PRE-BID CONFERENCE.

LYLE·COOK·MARTIN
ARCHITECTS
310 Franklin Street / Clarksville, TN 37040
TEL 931.552.4771 / EMAIL mduncan@lylecookmartin.com

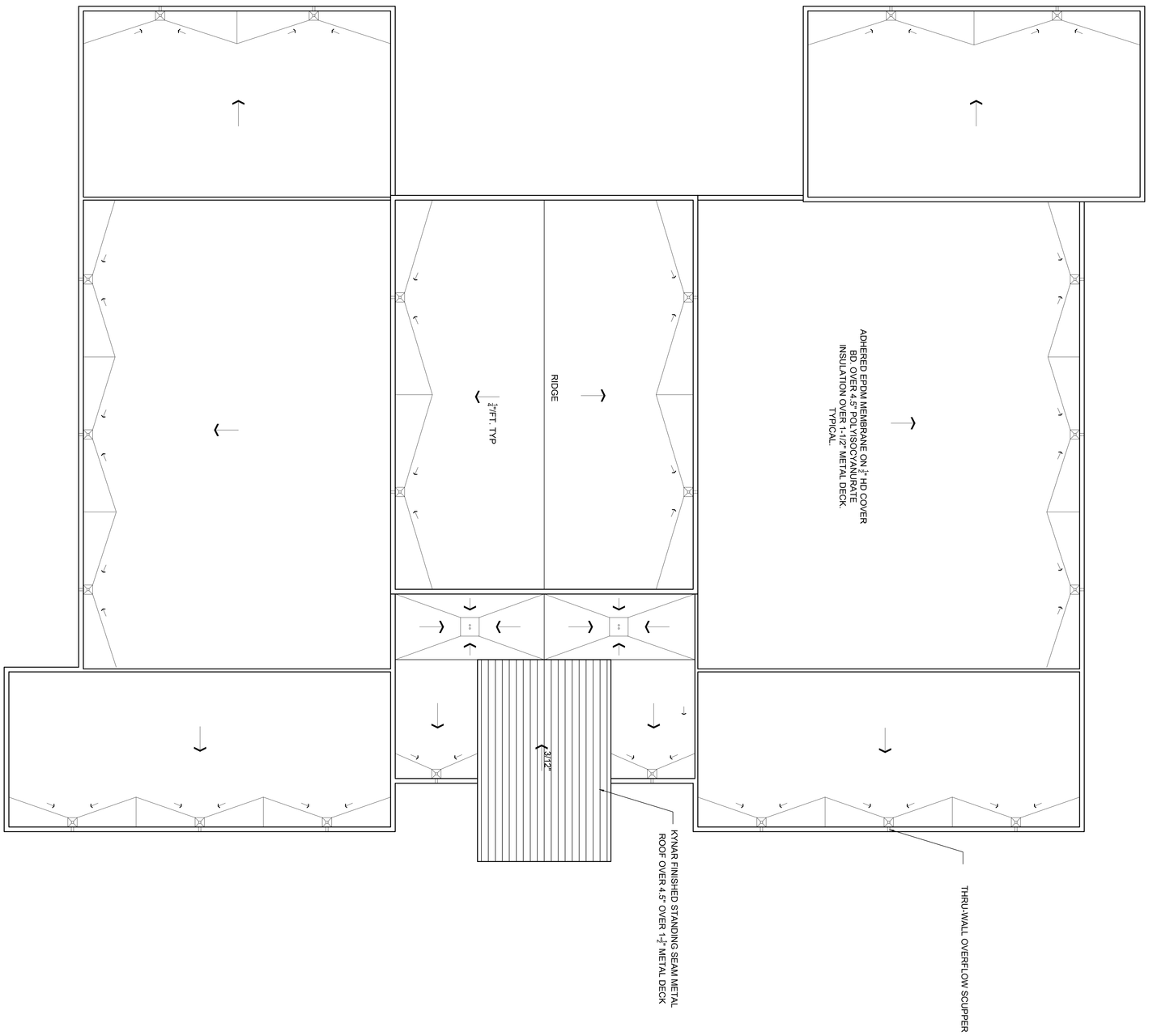
NEW FT. CAMPBELL NATIONAL GUARD READINESS CENTER
SBC PROJECT # 368/014-01-2021
COVER SHEET AND GENERAL INFORMATION

Project No.	1423
Issue Date	11-18-22
Drawn By	MSD
Revision Date	
Revision Date	
Revision Date	

T1.0
SHEET NO.

1 A2.1 FLOOR PLAN
3/32" = 1'-0"

LYLE·COOK·MARTIN
ARCHITECTS
310 Franklin Street / Clarksville, TN 37040
TEL 931.552.4771/ EMAIL mduncan@lylecookmartin.com



1 / A2.1 ROOF PLAN

3/32" = 1'-0"

A2.3

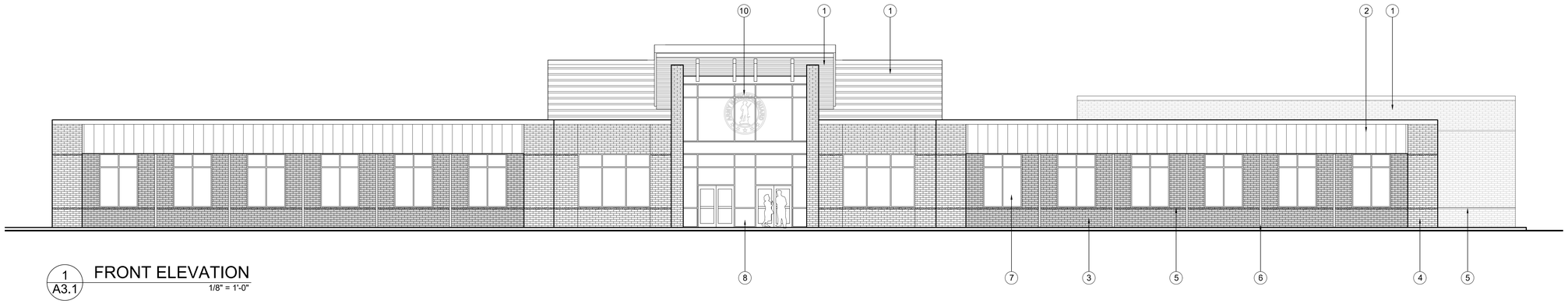
SHEET NO.

Project No.	1423
Issue Date	11-18-22
Drawn By	MSD
Revision Date	
Revision Date	
Revision Date	

NEW FT. CAMPBELL NATIONAL GUARD READINESS CENTER
SBC PROJECT # 368/014-01-2021

BUILDING ROOF PLAN

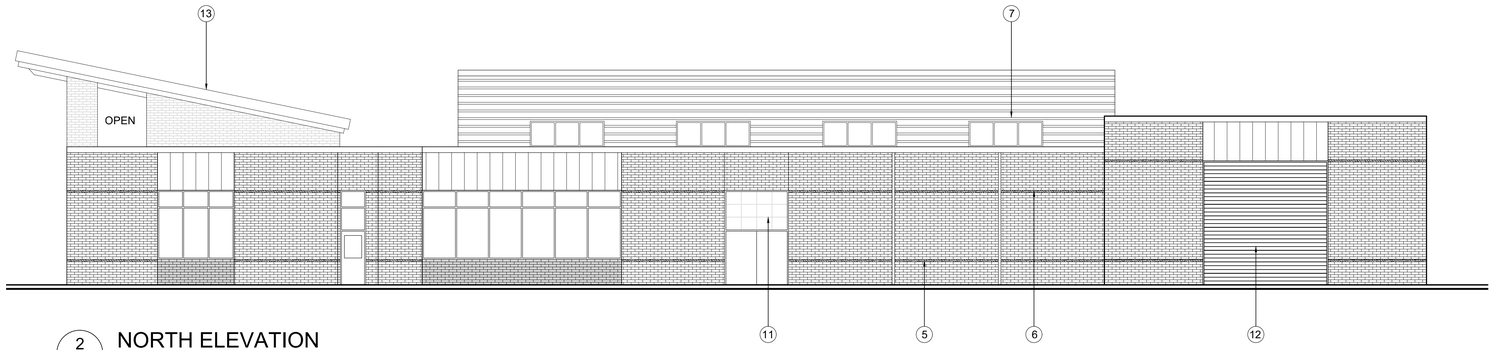
LYLE·COOK·MARTIN
ARCHITECTS
310 Franklin Street / Clarksville, TN 37040
TEL 931.552.4771/ EMAIL mduncan@lylecookmartin.com



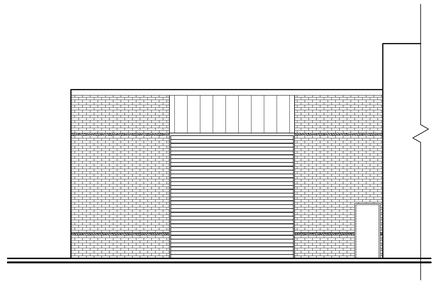
1 A3.1 FRONT ELEVATION
1/8" = 1'-0"

KEYNOTES

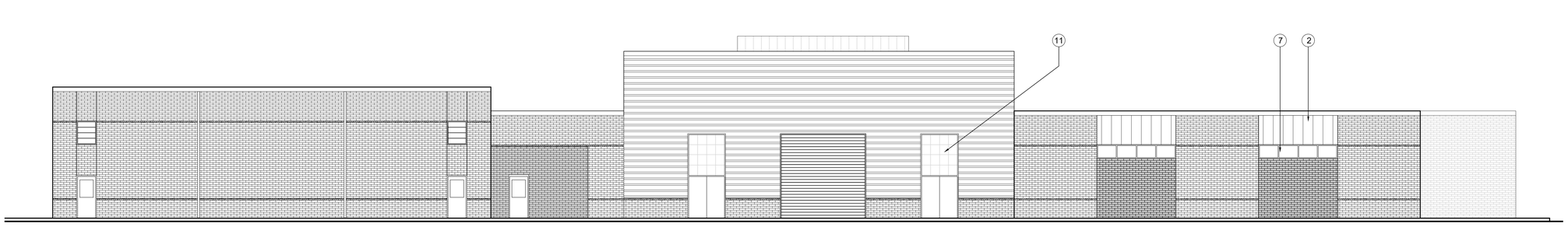
1. METAL SIDING TYPE 1
2. METAL SIDING TYPE 2
3. BRICK VENEER TYPE 2
4. BRICK VENEER TYPE 1
5. CEST STONE HOV2. ACCENT
6. BRICK REVEAL INSET DETAIL
7. STOREFRONT GLAZING SYSTEM
8. CURTAIN WALL GLAZING SYSTEM
9. WOOD LOOK METAL SOFFIT
10. "GUARD" LOGO ON INNER GLAZING
11. TRANSLUCENT WALL PANEL
12. OVERHEAD COILING DOOR
13. S.S. METAL ROOFING



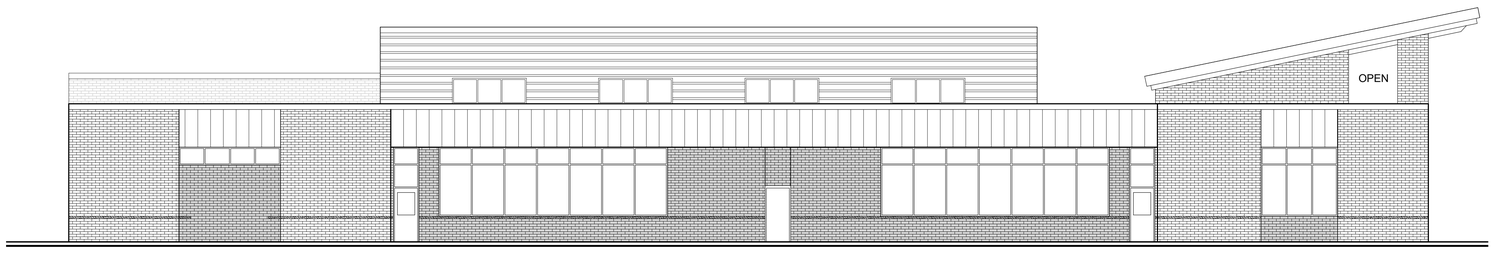
2 A3.1 NORTH ELEVATION
1/8" = 1'-0"



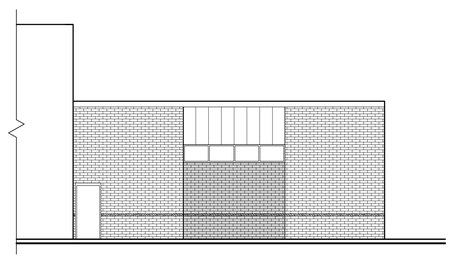
3 A3.1 GYM SOUTH ELEVATION
1/8" = 1'-0"



4 A3.1 WEST ELEVATION
1/8" = 1'-0"



5 A3.1 SOUTH ELEVATION
1/8" = 1'-0"



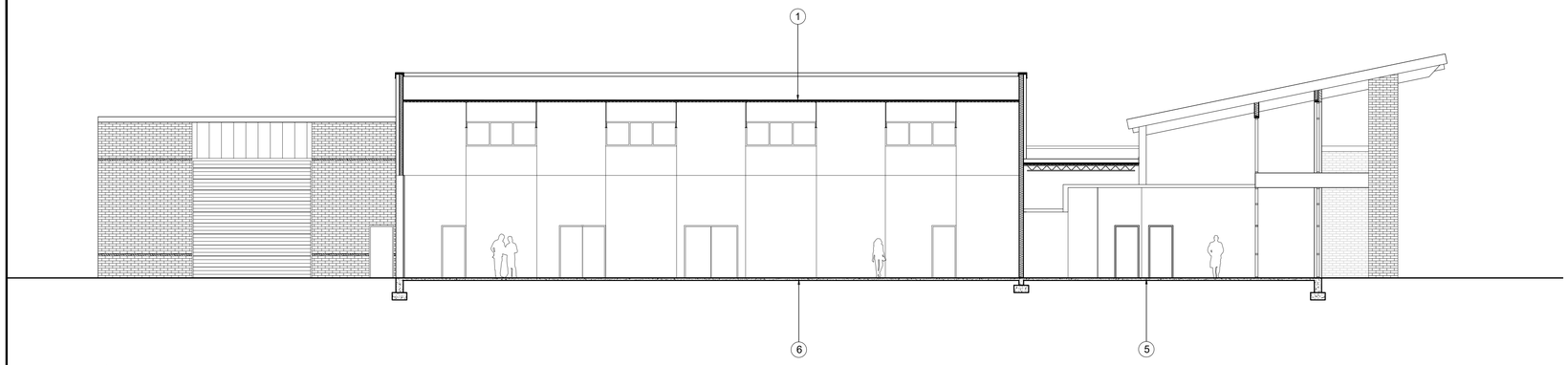
6 A3.1 LOCKER NORTH ELEVATION
1/8" = 1'-0"

LYLE·COOK·MARTIN
ARCHITECTS
310 Franklin Street / Clarksville, TN 37040
TEL 931.552.4771/ EMAIL mduncan@lylecookmartin.com

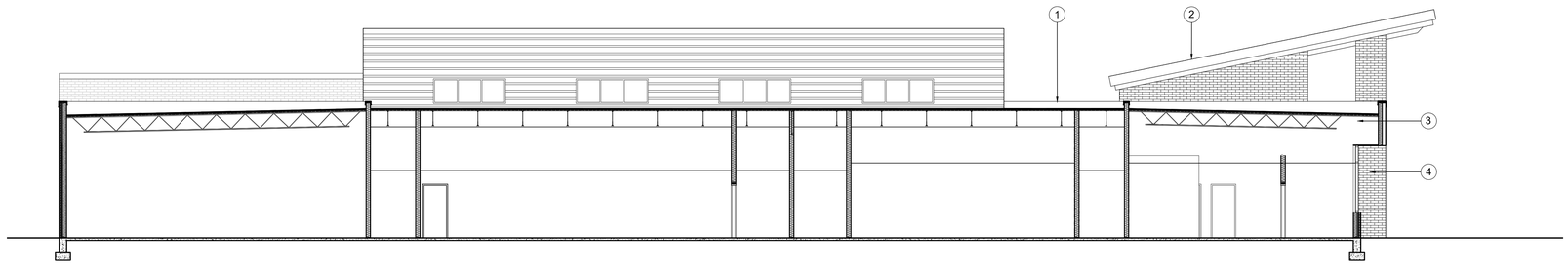
NEW FT. CAMPBELL NATIONAL GUARD READINESS CENTER
SBC PROJECT # 368/014-01-2021
BUILDING ELEVATIONS

Project No.	1423
Issue Date	11-18-22
Drawn By	MSD
Revision Date	
Revision Date	
Revision Date	

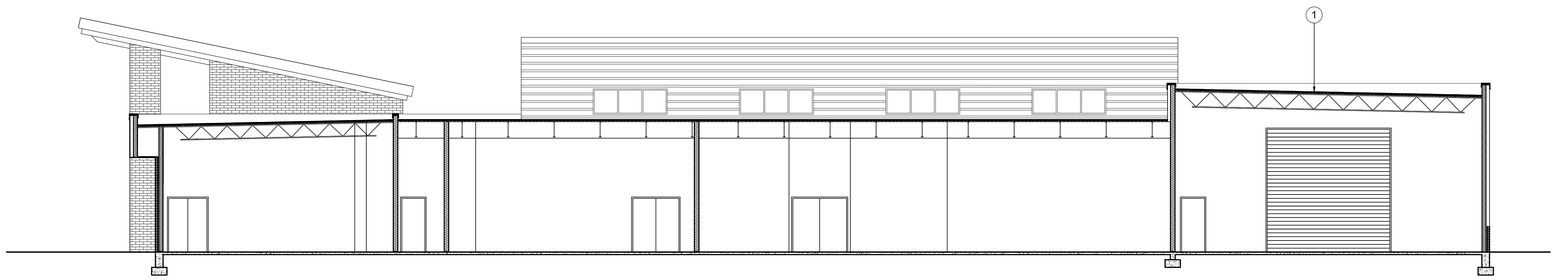
A3.1
SHEET NO.



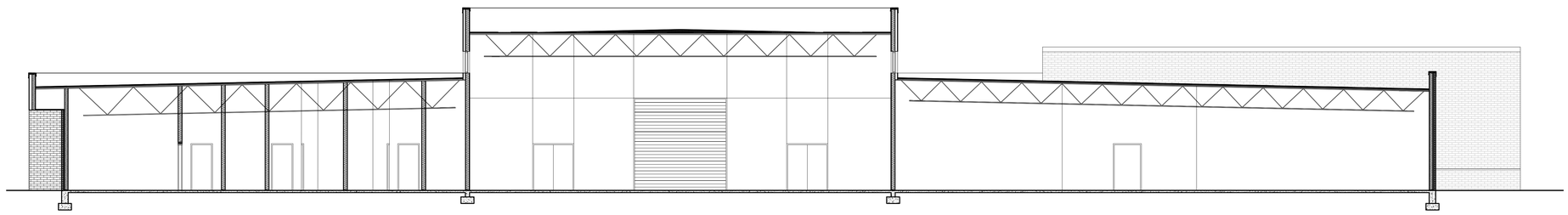
1 A5.1 BUILDING SECTION
1/8" = 1'-0"



2 A5.1 BUILDING SECTION
1/8" = 1'-0"



3 A5.1 BUILDING SECTION
1/8" = 1'-0"



4 A5.1 BUILDING SECTION
1/8" = 1'-0"

KEYNOTES

1. SINGLE PLY ROOF SYSTEM ON METAL DECK ON BAR JOISTS SLOPED ¼"/FT. TYP.
2. STANDING SEAM METAL ROOFING ON METAL ROOF DECK ON THE STEEL FRAME
3. TYPICAL CMU/ BRICK VANEER WALL SYSTEM
4. STOREFRONT GLAZING SYSTEM
5. 4" CONCRETE SLAB ON GRADE
6. 6" REINFORCED SLAB ON GRADE

LYLE·COOK·MARTIN
ARCHITECTS
310 Franklin Street / Clarksville, TN 37040
TEL 931.552.4771 / EMAIL mdumcan@lylecookmartin.com

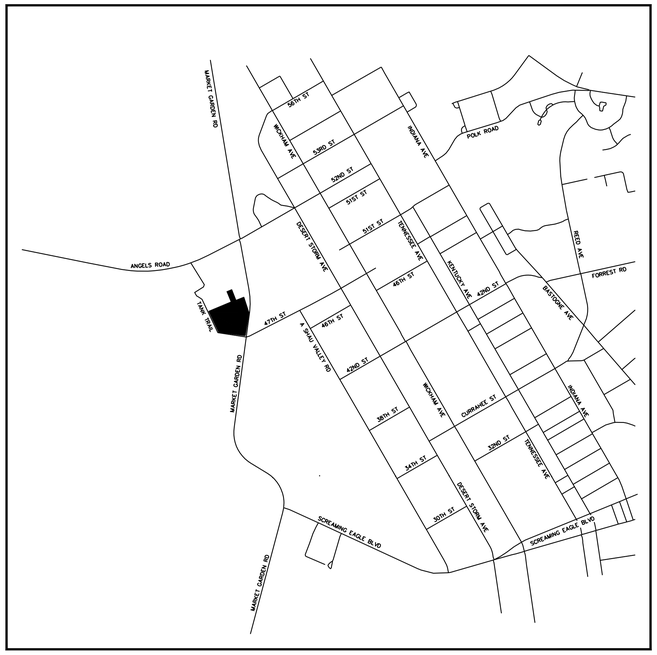
NEW FT. CAMPBELL NATIONAL GUARD READINESS CENTER
SBC PROJECT # 368/014-01-2021

BUILDING SECTIONS

Project No.	1423
Issue Date	11-18-22
Drawn By	MSD
Revision Date	
Revision Date	
Revision Date	

A5.1
SHEET NO.

CLARKSVILLE NATIONAL GUARD READINESS CENTER
FORT CAMPBELL, KY



LEGEND:

- BENCHMARK
- FIRE HYDRANT
- POST TYPE BLOWOFF HYDRANT
- GUY ANCHOR
- POWER POLE
- SANITARY SEWER MANHOLE
- VALVE
- TRAFFIC SIGN
- HEADWALL
- AREA DRAIN
- CURB INLET
- FIRE DEPARTMENT CONNECTION
- STREET LIGHT
- PROPERTY LINE
- EASEMENT LINE
- MINIMUM BUILDING SETBACK LINE
- OHE — OVERHEAD ELECTRIC LINE
- W — WATER LINE
- G — GAS LINE
- S — SANITARY SEWER LINE
- ST — STORM LINE
- F — FIRE LINE
- UGE — UNDERGROUND ELECTRIC LINE
- T — TELECOMMUNICATION LINE
- FM — SEWER FORCE MAIN
- CENTER LINE
- STREAM LINE
- WTL — WETLAND
- WWC — WET WEATHER CONVEYANCE
- WQB — WATER QUALITY BUFFER
- X — FENCE LINE
- S — TREE LINE

- E — ELECTRIC MANHOLE
- T — TELEPHONE MANHOLE
- ST — STORM MANHOLE
- T — TRANSFORMER
- S — SECONDARY BOX
- SECTIONALIZER
- TV — CABLE TV JUNCTION BOX
- TE — PHONE JUNCTION BOX
- BP — BACKFLOW PREVENTER
- GM — GAS METER
- WM — WATER METER
- xx.xx — EXISTING SPOT ELEVATION
- XX.XX — PROPOSED SPOT ELEVATION
- GUARDRAIL
- 1PE — 1 PHASE ELECTRIC
- 2PE — 2 PHASE ELECTRIC
- 3PE — 3 PHASE ELECTRIC
- SC — SECONDARY CONDUIT
- LOC — LIMITS OF CONSTRUCTION
- RW — RAW WATER LINE
- BP — BP PIPELINE
- UD — UNDERDRAIN
- RW — RETAINING WALL
- CTV — CABLE TV
- SF — SILT FENCE
- GA — GUY WIRE
- OHE — OVERHEAD ELECTRIC LINE
- TD — TRENCH DRAIN
- IRR — IRRIGATION
- TP — TREE PROTECTION FENCE
- RAILROAD

811 Know what's below. Call before you dig.

SHEET INDEX:

C1.00 EXISTING CONDITIONS
C2.00 DEMOLITION PLAN
C3.00 SITE PLAN
C4.00 GRADING & DRAINAGE PLAN
C5.00 UTILITY PLAN
C6.00 PROJECT DETAILS
C6.01 PROJECT DETAILS

MOORE
DESIGN SERVICES
P.O. BOX 691
2386 ROSSVIEW ROAD
CLARKSVILLE, TN 37041
PHONE: (931) 648-9411
FAX: (931) 647-6756
www.mooreengr.com

LYLE·COOK·MARTIN
ARCHITECTS
310 Franklin Street / Clarksville, TN 37040
TEL 931.552.4771/ EMAIL mduncan@lylecookmartin.com

NEW FT. CAMPBELL NATIONAL GUARD READINESS CENTER
SBC PROJECT # 368/014-01-2021
COVER SHEET

Project No.	1423
Issue Date	12-1-2022
Drawn By	JEEB
Revision Date	
Revision Date	
Revision Date	

C0.00 SHEET NO.

NEW FT. CAMPBELL NATIONAL GUARD READINESS CENTER
SBC PROJECT # 368/014-01-2021

EXISTING CONDITIONS

LYLE·COOK·MARTIN
ARCHITECTS
310 Franklin Street / Clarksville, TN 37040
TEL 931.552.4771 / EMAIL mduncan@lylecookmartin.com

Project No.	1423
Issue Date	12-1-2022
Drawn By	JEB
Revision Date	
Revision Date	
Revision Date	
Revision Date	

SHEET NO. C1.00

MOORE
DESIGN SERVICES
P.O. BOX 691
2386 KOSSIE WARD ROAD
CLARKSVILLE, TN 37041
PHONE: (931) 648-9411
FAX: (931) 647-6756
www.mooreengr.com

N.A.D. 1983
KENTUCKY STATE PLANE COORDINATE SYSTEM

DRAWING SCALE: 1"=50'

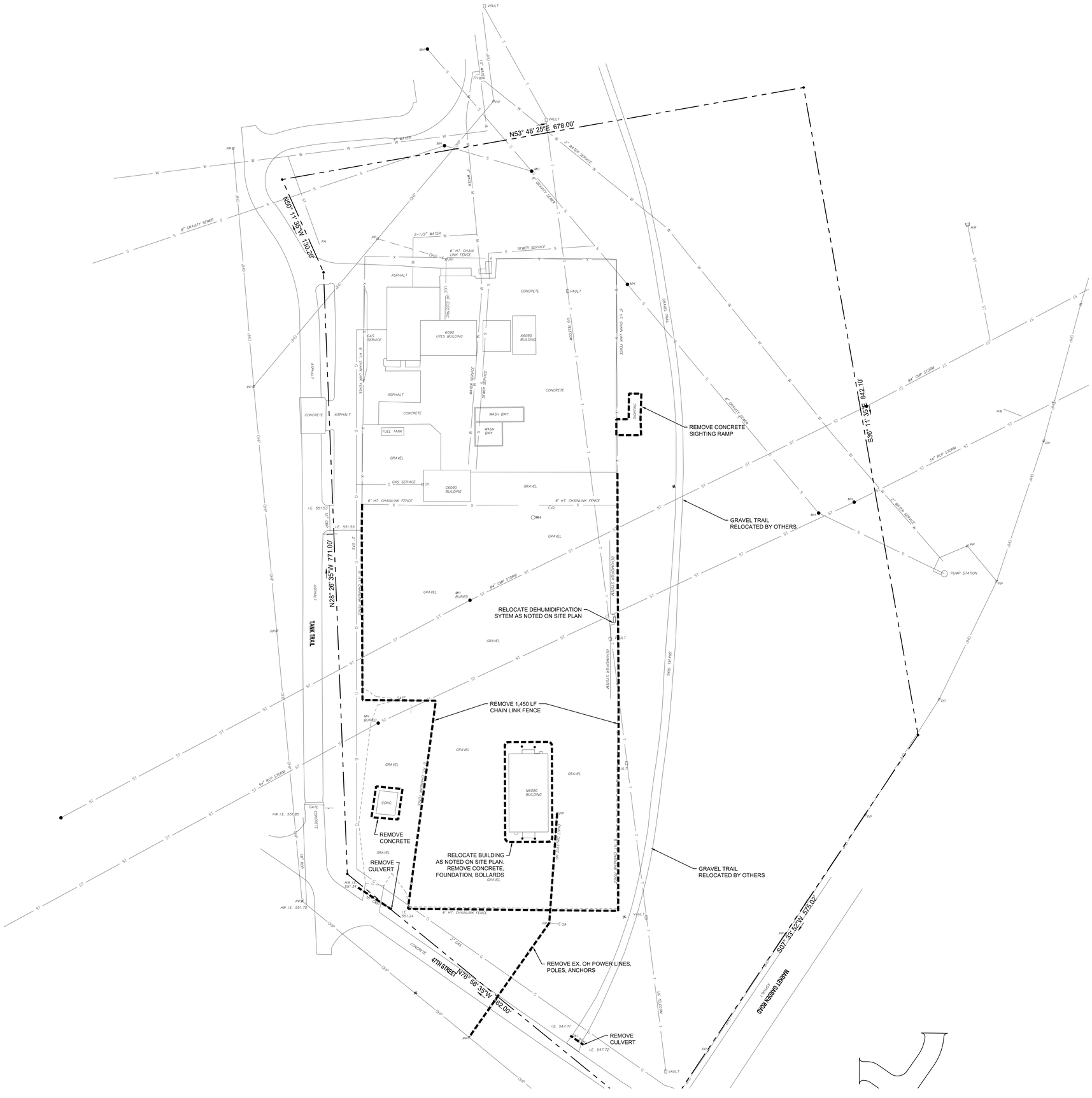
811 Know what's below. Call before you dig.

N.A.D. 1983
KENTUCKY STATE PLANE COORDINATE SYSTEM

NORTH

50 00 50 100

DRAWING SCALE: 1"=50'



811 Know what's below. Call before you dig.

MOORE
DESIGN SERVICES
P.O. BOX 691
2386 ROSSVIEW ROAD
CLARKSVILLE, TN 37041
PHONE: (931) 648-9411
FAX: (931) 647-6756
www.mooreengr.com

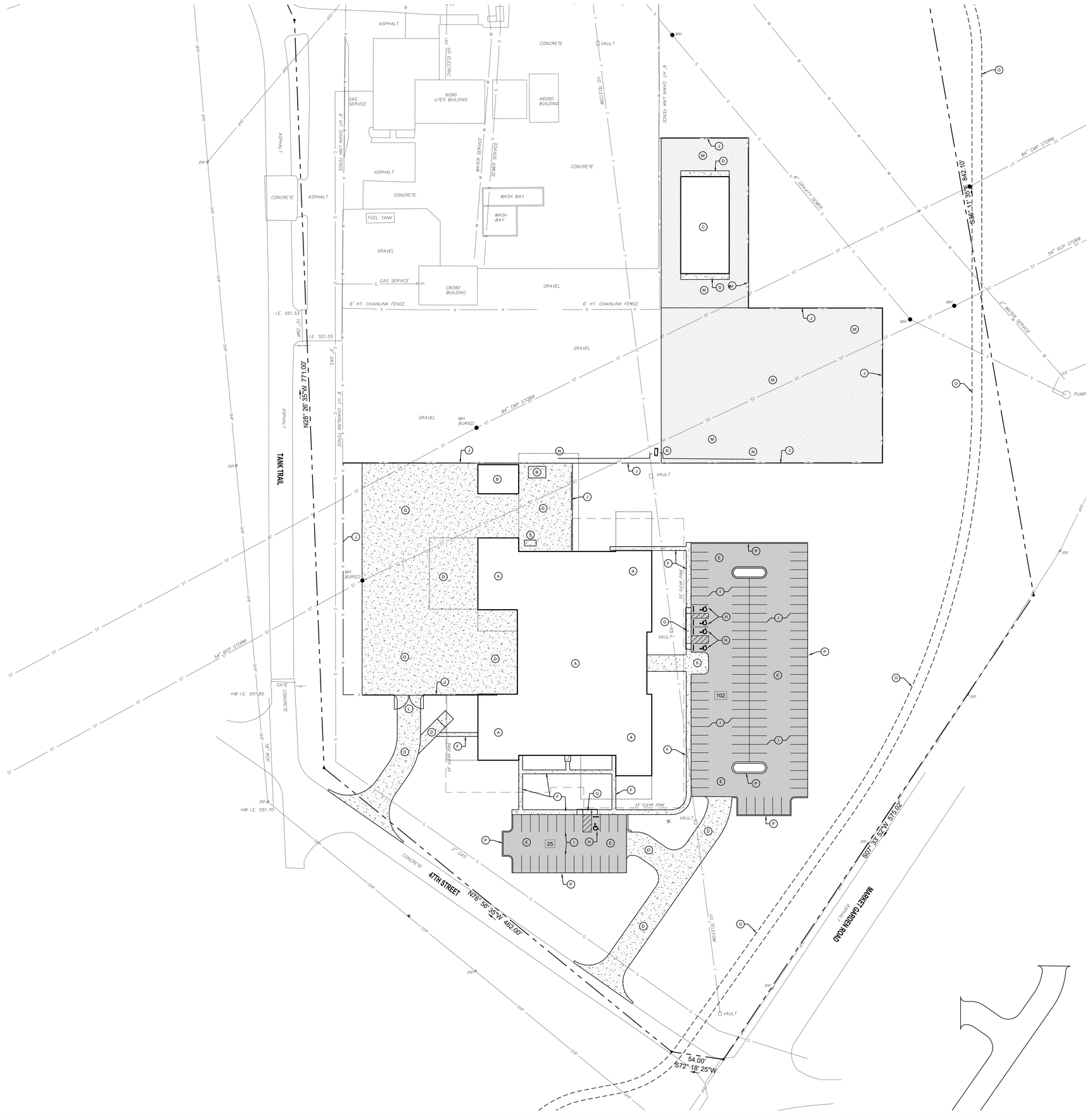
LYLE·COOK·MARTIN
ARCHITECTS
310 Franklin Street / Clarksville, TN 37040
TEL 931.552.4771 / EMAIL mduncan@lylecookmartin.com

NEW FT. CAMPBELL NATIONAL GUARD READINESS CENTER
SBC PROJECT # 368/014-01-2021

DEMOLITION PLAN

Project No.	1423
Issue Date	12-1-2022
Drawn By	JEB
Revision Date	
Revision Date	
Revision Date	

C2.00
SHEETING



SITE IMPROVEMENTS LEGEND:

- (A) NG READINESS CENTER, SEE ARCHITECTURAL PLANS
- (B) STORAGE BUILDING, SEE ARCHITECTURAL PLANS
- (C) RELOCATE CC6090 BUILDING, SEE ARCHITECTURAL PLANS
- (D) CONCRETE PAVEMENT, SEE C6.00
- (E) ASPHALT PAVEMENT, SEE C6.00
- (F) CONCRETE SIDEWALK, SEE C6.00
- (G) ACCESSIBLE RAMP, SEE C6.00
- (H) ACCESSIBLE PARKING SPACE, INCLUDING MARKINGS, SIGNS, CURB STOPS, SEE C6.00
- (I) 4" PAINTED TRAFFIC MARKINGS (WHITE) TYP., SEE C6.00
- (J) 6' CHAIN LINK FENCE & BARBED WIRE (2,700 LF +/-), SEE C6.01
- (K) CONCRETE DUMPSTER PAD, SEE C6.00
- (L) 30' SWING GATE, SEE C6.01
- (M) GRAVEL ROADWAY, SEE C6.00
- (N) RELOCATE DEHUMIDIFIER SYSTEM
- (O) GRAVEL TRAIL, RELOCATED BY OTHERS
- (P) 6" POST CURB, SEE C6.00
- (Q) 6" DIA. BOLLARD, SEE C6.00
- (R) CHILLER PAD, SEE C6.00
- (S) GENERATOR PAD, SEE C6.00

LYLE·COOK·MARTIN
ARCHITECTS
310 Franklin Street / Clarksville, TN 37040
TEL 931.552.4771 / EMAIL mduncan@lylecookmartin.com

NEW FT. CAMPBELL NATIONAL GUARD READINESS CENTER
SBC PROJECT # 368/014-01-2021

SITE PLAN

Project No.	14-23
Issue Date	12-1-2022
Drawn By	JEB
Revision Date	
Revision Date	
Revision Date	

MOORE
DESIGN SERVICES
P.O. BOX 691
2386 ROSSVIEW ROAD
CLARKSVILLE, TN 37041
PHONE: (931) 648-9411
FAX: (931) 647-6756
www.mooreengr.com

C3.00
SHEET NO.

Know what's below. Call before you dig.

LYLE·COOK·MARTIN
ARCHITECTS
310 Franklin Street / Clarksville, TN 37040
TEL 931.552.4771 / EMAIL mduncan@lylecookmartin.com

NEW FT. CAMPBELL NATIONAL GUARD READINESS CENTER
SBC PROJECT # 368/014-01-2021
GRADING & DRAINAGE PLAN

Project No.	1423
Issue Date	12-1-2022
Drawn By	JEB
Revision Date	
Revision Date	
Revision Date	

SHEET NO. C4.00

MOORE
DESIGN SERVICES
P.O. BOX 691
2386 KOONTZ TOWN ROAD
CLARKSVILLE, TN 37043
PHONE: (931) 648-9411
FAX: (931) 647-6756
www.mooreengr.com

N.A.D. 1983
KENTUCKY STATE PLANE COORDINATE SYSTEM

DRAWING SCALE: 1"=40'

BIORETENTION AREA

PROPOSED 36000 SF FFE 555.00

PROPOSED NG READINESS CENTER FFE 555.00

STORAGE FFE 555.00

MARKET GARDEN ROAD

4TH STREET

TANK TRAIL

S36° 11' 35"E 842.10'

S03° 33' 39"W 518.02'

N16° 56' 35"W 462.00'

N28° 26' 35"W 771.00'

60 LF 18" RCP @1.00%

80 LF 18" RCP @1.00%

54.00'

S72° 18' 25"W

130.20'

6' HT. CHAIN LINK FENCE

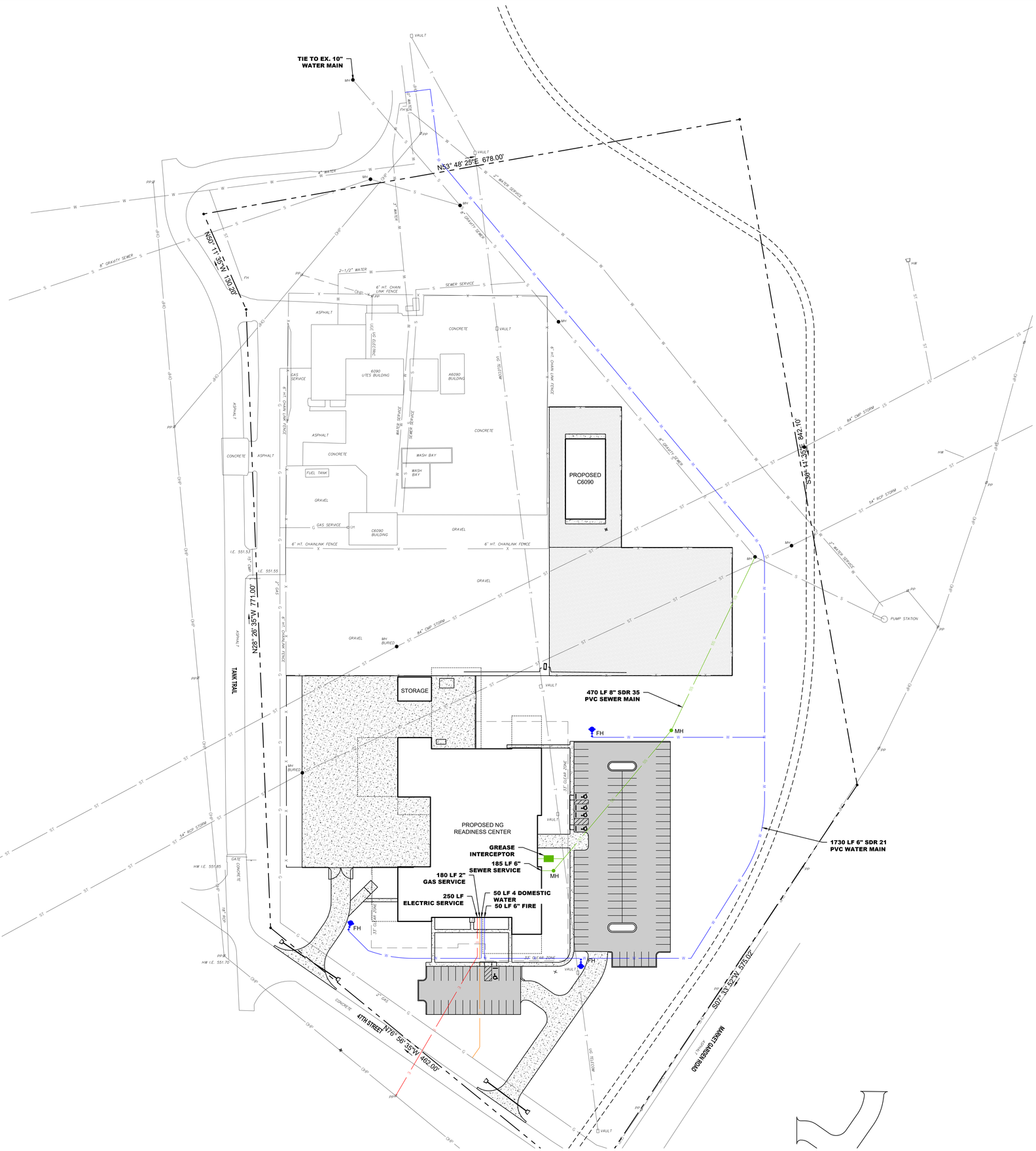
811 Know what's below. Call before you dig.

N.A.D. 1983
KENTUCKY STATE PLANE COORDINATE SYSTEM

NORTH

50 00 50 100

DRAWING SCALE: 1"=50'



811 Know what's below. Call before you dig.

LYLE·COOK·MARTIN
ARCHITECTS
310 Franklin Street / Clarksville, TN 37040
TEL 931.552.4771 / EMAIL mduncan@lylecookmartin.com

NEW FT. CAMPBELL NATIONAL GUARD READINESS CENTER

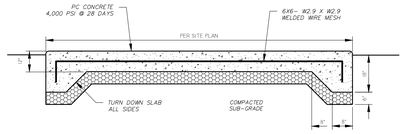
SBC PROJECT # 368/014-01-2021

UTILITY PLAN

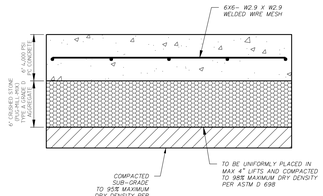
Project No.	1423
Issue Date	12-1-2022
Drawn By	JEB
Revision Date	
Revision Date	
Revision Date	

MOORE
DESIGN SERVICES
P.O. BOX 691
2386 ROSSVIEW ROAD
CLARKSVILLE, TN 37041
PHONE: (931) 648-9411
FAX: (931) 647-6756
www.mooreengr.com

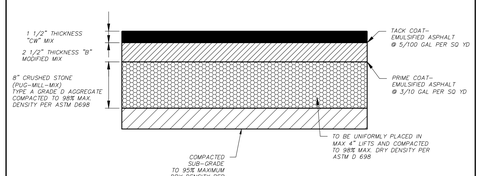
C5.00
SHEET NO.



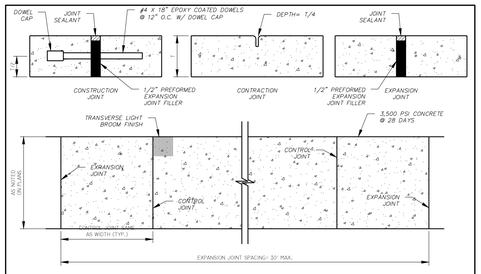
DUMPSTER/ MECHANICAL ENCLOSURE PADS



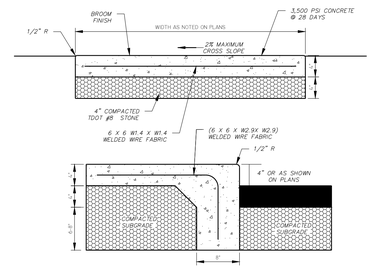
CONCRETE PAVEMENT SECTION



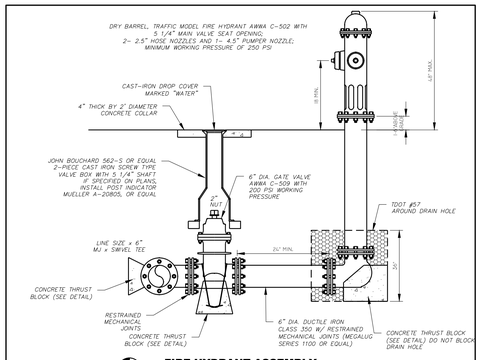
ASPHALT PAVEMENT SECTION



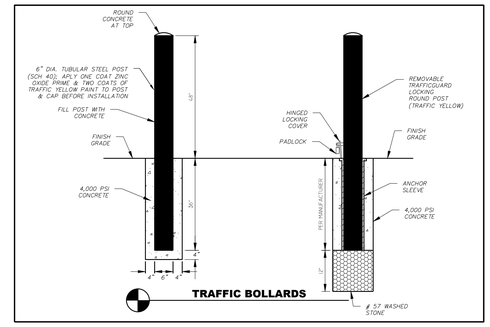
NOTES:
1. USE TDOT CLASS A CONCRETE HAVING A MIN. COMPRESSIVE STRENGTH OF 3,500 PSI AT 28 DAYS, AIR CONTENT OF 4-7%, MAX WATER/CEMENT RATIO OF 0.46.
1. EXPANSION JOINTS SHALL BE 1/2" IN SIZE AND BE FILLED WITH MASTIC MATERIAL.
2. EXPANSION JOINTS SHALL BE PLACED AT ALL PC'S, PT'S, GRADE BREAKS, DRIVEWAYS, CURBS, AND RIGID STRUCTURES.
3. ALL CONTROL JOINTS SHALL BE TOOLED AND 1/4" DEEP, 3/8" WIDE.
4. MAXIMUM LONGITUDINAL SLOPE IS 5.00%



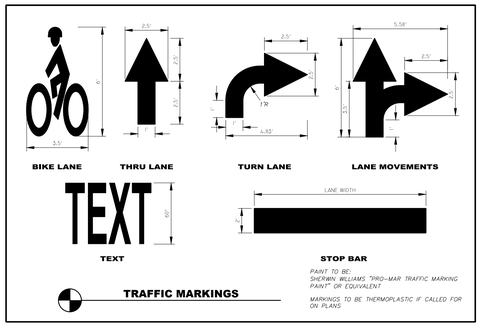
CONCRETE SIDEWALK



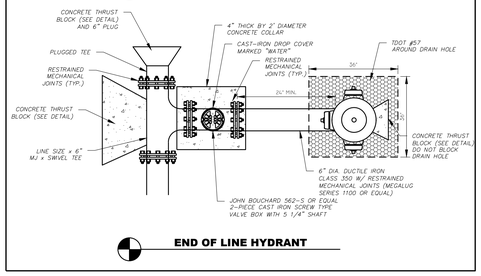
FIRE HYDRANT ASSEMBLY



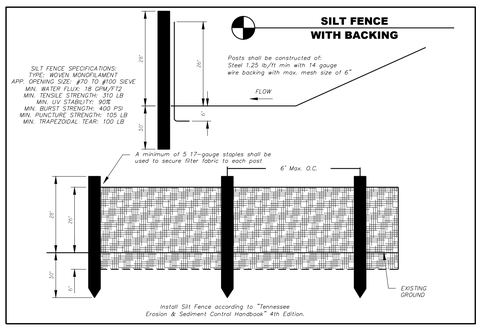
TRAFFIC BOLLARDS



TRAFFIC MARKINGS

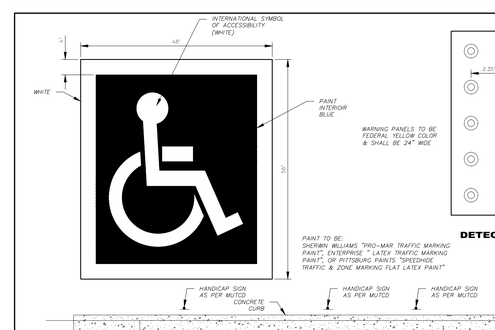


END OF LINE HYDRANT

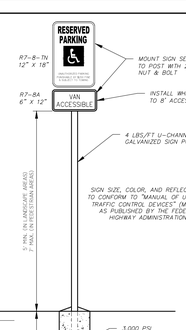


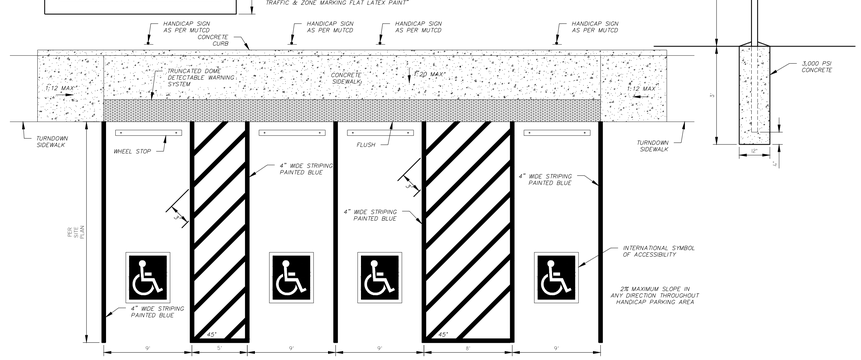
SILT FENCE WITH BACKING

Install Silt Fence according to "Tennessee Erosion & Sediment Control Handbook" 4th Edition.

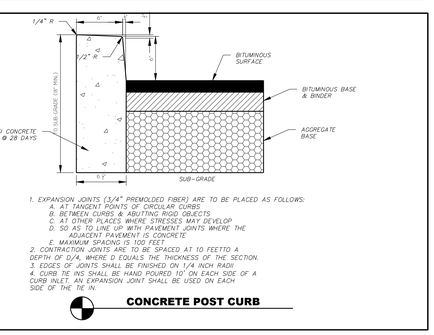


DETECTABLE WARNING MATS



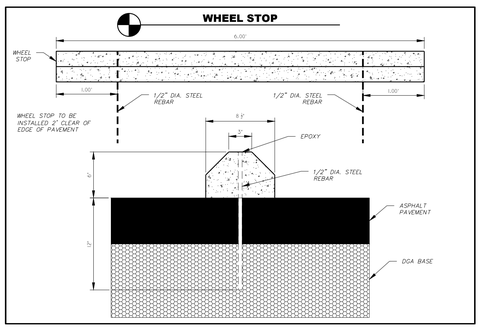


ACCESSIBLE PARKING



1. EXPANSION JOINTS (3/4" PREMOLDED FIBER) ARE TO BE PLACED AS FOLLOWS:
   A. AT TANGENT POINTS OF CIRCULAR CURBS.
   B. BETWEEN CURBS & ABUTTING RIGID OBJECTS.
   C. AT OTHER PLACES WHERE STRESSES MAY DEVELOP.
   D. SO AS TO LINE UP WITH PAVEMENT JOINTS WHERE THE ADJACENT PAVEMENT IS CONCRETE.
   E. MAXIMUM SPACING IS 100 FEET.
2. CONTRACTION JOINTS ARE TO BE SPACED AT 10 FEETTO A DEPTH OF D/4, WHERE D EQUALS THE THICKNESS OF THE SECTION.
3. EDGES OF JOINTS SHALL BE FINISHED ON 1/4 INCH RADII.
4. CURB TIE INS SHALL BE HAND POURED 10' ON EACH SIDE OF A CURB INLET. AN EXPANSION JOINT SHALL BE USED ON EACH SIDE OF THE TIE IN.

CONCRETE POST CURB



WHEEL STOP

MOORE
DESIGN SERVICES
P.O. BOX 691
2386 ROSSVIEW ROAD
CLARKSVILLE, TN 37041
PHONE: (931) 648-9411
FAX: (931) 647-6756
www.mooreengr.com

LYLE·COOK·MARTIN
ARCHITECTS
310 Franklin Street / Clarksville, TN 37040
TEL 931.552.4771/ EMAIL mduncan@lylecookmartin.com

NEW FT. CAMPBELL NATIONAL GUARD READINESS CENTER
SBC PROJECT # 368/014-01-2021
SITE DETAILS

Project No.	14-23
Issue Date	12-1-2022
Drawn By	JEB
Revision Date	
Revision Date	
Revision Date	

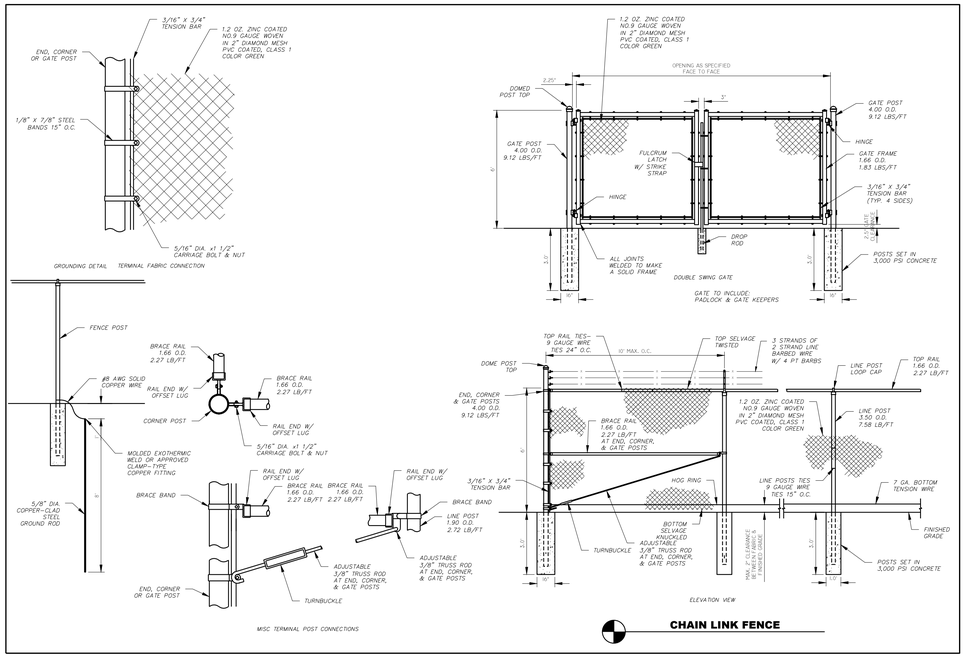
C6.00
SHEET NO.

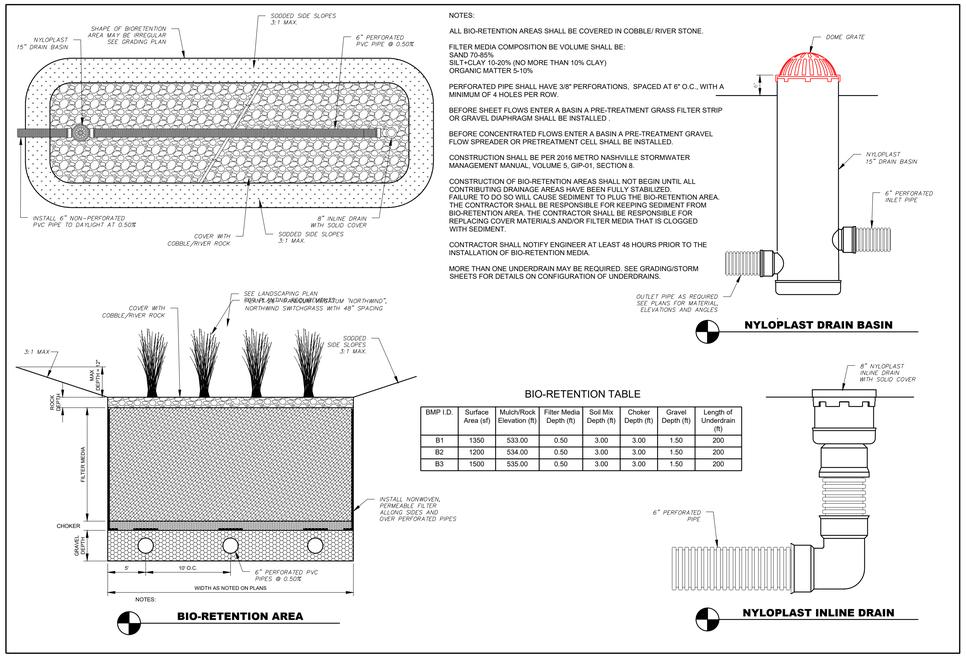
N.A.D. 1983
KENTUCKY STATE PLANE COORDINATE SYSTEM

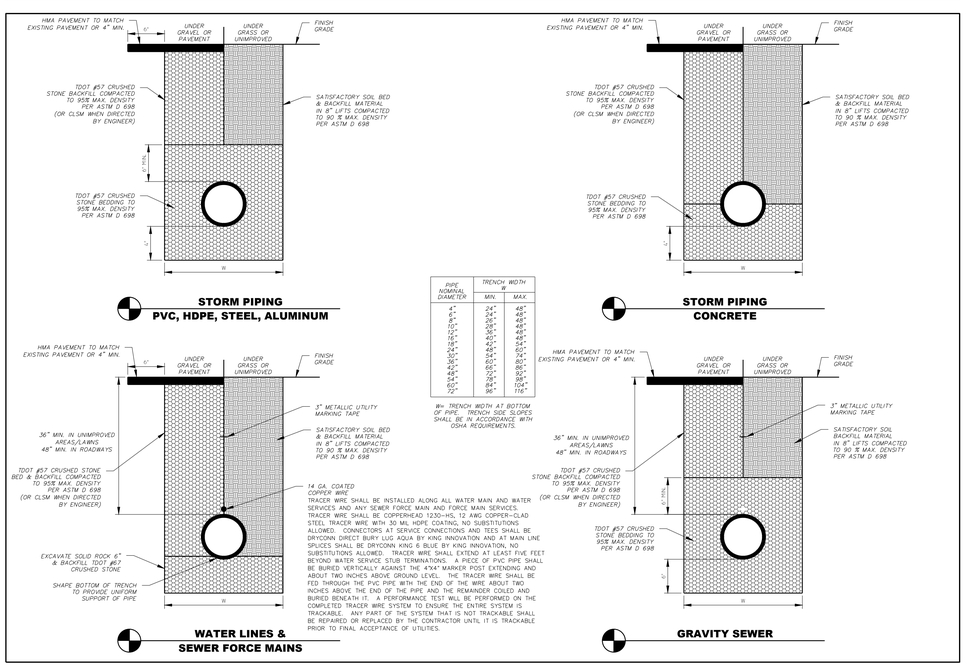
NORTH

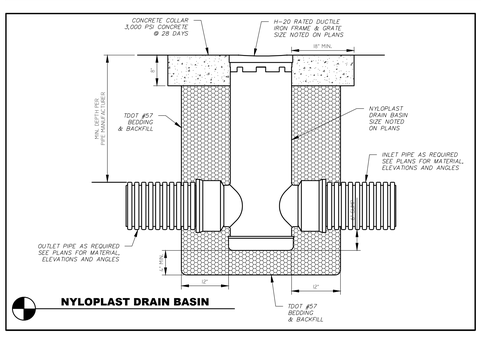
50 00 50 100

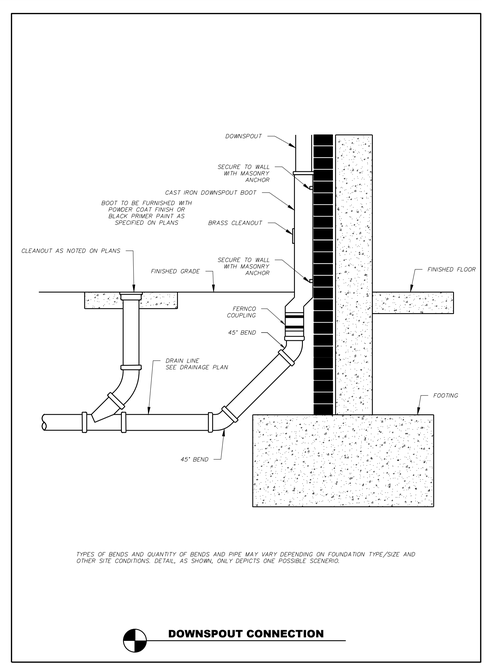
DRAWING SCALE: 1"=50'

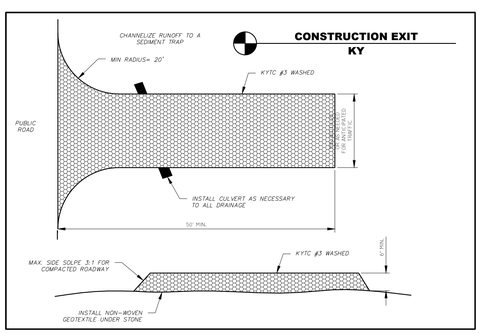


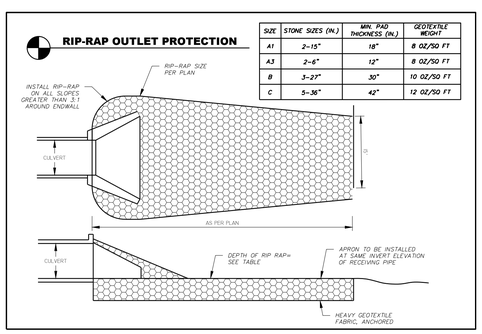


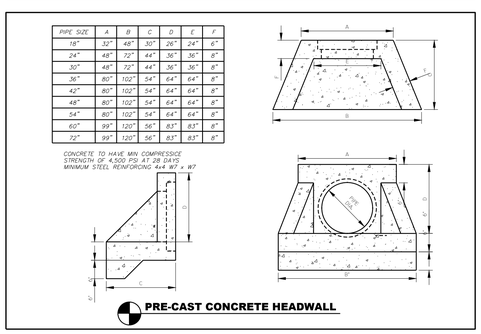












MOORE DESIGN SERVICES
P.O. BOX 691
2386 ROSSVIEW ROAD
CLARKSVILLE, TN 37041
PHONE: (931) 648-9411
FAX: (931) 647-6756
www.mooreengr.com

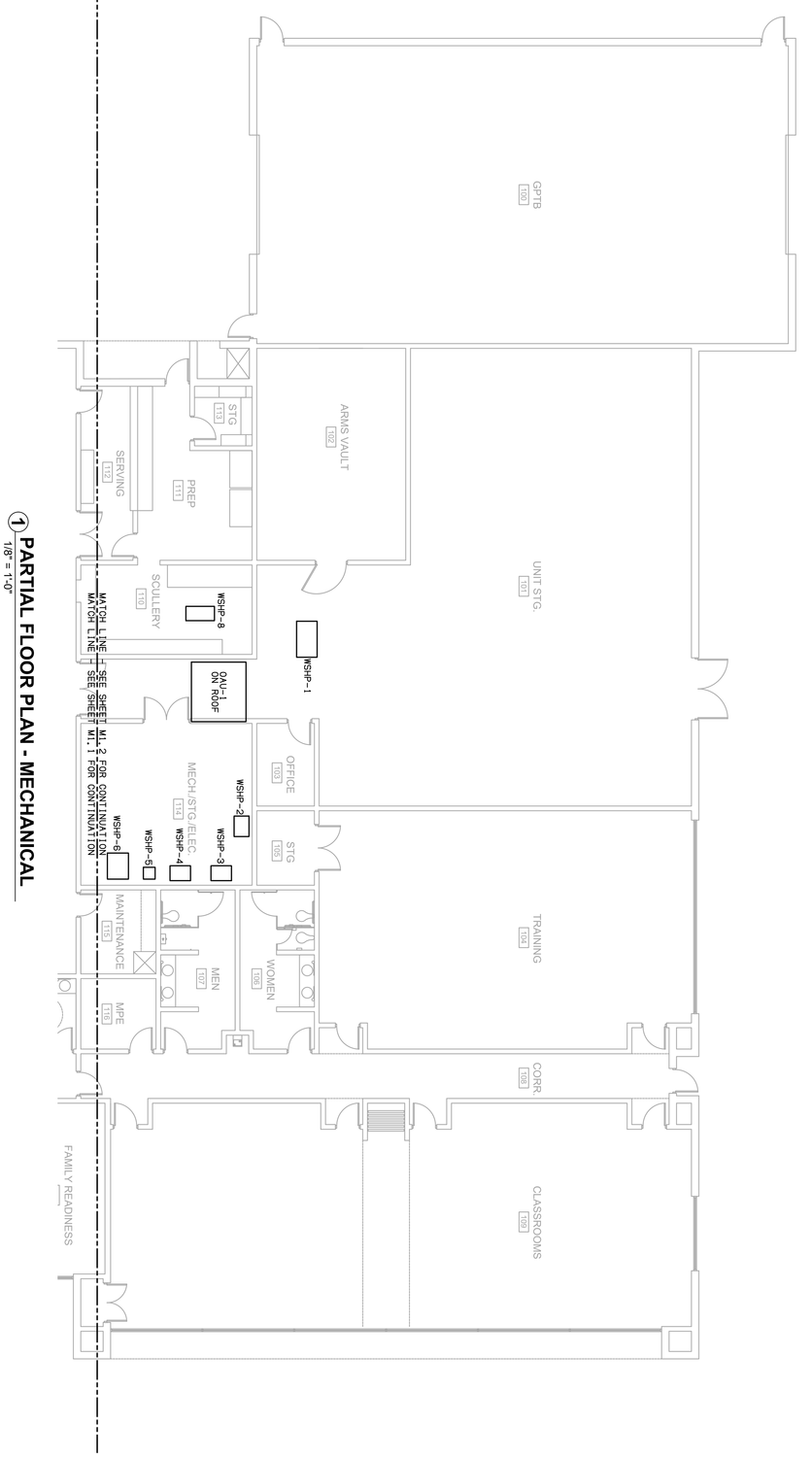
LYLE·COOK·MARTIN
ARCHITECTS
310 Franklin Street / Clarksville, TN 37040
TEL 931.552.4771 / EMAIL mdduncan@lylecookmartin.com

NEW FT. CAMPBELL NATIONAL GUARD READINESS CENTER
SBC PROJECT # 368/014-01-2021

SITE DETAILS

Project No.	1423
Issue Date	12-1-2022
Drawn By	JEB
Revision Date	
Revision Date	
Revision Date	

C6.01
SHEET NO



1 PARTIAL FLOOR PLAN - MECHANICAL

1/8" = 1'-0"

HNA ENGINEERING

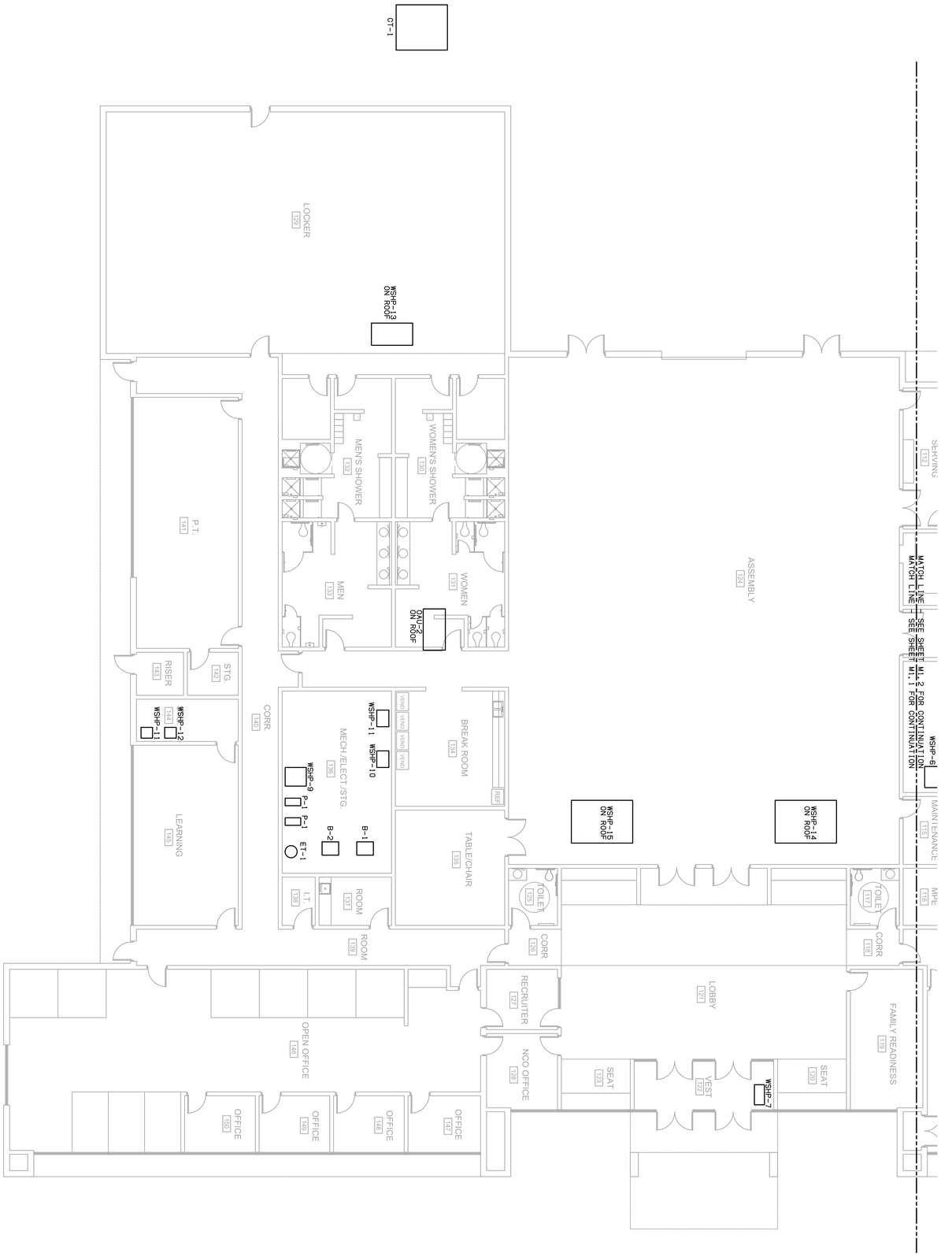
M1.1
SHEET NO.

Project No.	1423
Issue Date	12-08-22
Drawn By	
Revision Date	
Revision Date	
Revision Date	

NEW FT. CAMPBELL NATIONAL GUARD READINESS CENTER
SBC PROJECT # 368/014-01-2021

PARTIAL FLOOR PLAN - MECHANICAL

LYLE·COOK·MARTIN
ARCHITECTS
310 Franklin Street / Clarksville, TN 37040
TEL 931.552.4771/ EMAIL mduncan@lylecookmartin.com



1 PARTIAL FLOOR PLAN - MECHANICAL

1/8" = 1'-0"

HNA ENGINEERING

M1.2
SHEET NO.

Project No.	1423
Issue Date	12-08-22
Drawn By	
Revision Date	
Revision Date	
Revision Date	

NEW FT. CAMPBELL NATIONAL GUARD READINESS CENTER
SBC PROJECT # 368/014-01-2021

PARTIAL FLOOR PLAN - MECHANICAL

LYLE·COOK·MARTIN
ARCHITECTS
310 Franklin Street / Clarksville, TN 37040
TEL 931.552.4771/ EMAIL mduncan@lylecookmartin.com

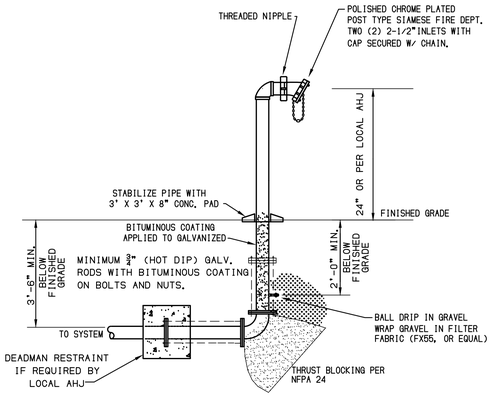
FIRE PROTECTION NOTES:

- A 100 PERCENT HYDRAULICALLY CALCULATED AUTOMATIC SPRINKLER SYSTEM SHALL BE INSTALLED BY FIRE PROTECTION CONTRACTOR IN ACCORDANCE WITH NFPA-13 REQUIREMENTS.
- CLASSIFICATIONS PER NFPA-13 ARE AS FOLLOWS:
  CORRIDORS, LOBBIES, VESTIBULES, OFFICES, ETC: LIGHT HAZARD
  MECHANICAL ROOMS, EQUIPMENT ROOMS, STORAGE ROOMS, ETC: ORDINARY HAZARD GRP 1
- SYSTEMS SHALL BE INSTALLED PER NFPA, FEDERAL, STATE CODES AND LOCAL AUTHORITY HAVING JURISDICTION, CONTRACT DOCUMENTS AND INSURANCE UNDERWRITER. THE INSURANCE UNDERWRITER REQUIREMENTS SHALL HAVE AUTHORITY OVER CONTRACT DOCUMENTS IF CONTRACT DOCUMENTS ARE LESS STRINGENT THAN INSURANCE UNDERWRITER REQUIREMENTS.
- CONTRACTOR SHALL INSTALL SYSTEM THAT DOES NOT VIOLATE ANY CHAPTERS OF NFPA.
- CONTRACTOR SHALL COORDINATE WITH ALL OTHER TRADES, PARTITION LAYOUTS, WALL LAYOUTS AND OBSTRUCTIONS PRIOR TO INSTALLATION OF SYSTEM TO AVOID CONFLICTS IN PIPE ROUTING, SPRINKLER HEAD PLACEMENTS AND INSTALLATION OF SYSTEM.
- EXCEPTIONS AND ADJUSTMENTS PER NFPA-13 SHALL TAKEN INTO CONSIDERATION WITH THE LAYOUT OF SPRINKLER HEADS.
- SPRINKLER HEAD SHALL BE INSTALLED 12" MAXIMUM OF FLOOR/ROOF DECK IN AREAS WITH NO CEILINGS.
- CONTRACTOR SHALL INSTALL SPRINKLER HEADS IN A NEAT AND ORDERLY FASHION AND SHALL INSTALL IN THE CENTER OF CEILING TILES WHERE THERE IS A CEILING GRID.
- CONTRACTOR SHALL PROVIDE REQUIRED AMOUNT OF SPRINKLER HEADS TO COVER AREA AROUND ALL OBSTRUCTIONS PER NFPA-13.
- CONTRACTOR SHALL OBTAIN THE REQUIRED FLOW TEST PER NFPA FROM LOCAL UTILITY COMPANY OR LOCAL FIRE DEPARTMENT.
- CONTRACTOR SHALL PROVIDE AND INSTALL AN APPROVED UL LISTED FIRE STOP SYSTEM FOR RATED PENETRATIONS.
- CONTRACTOR SHALL COORDINATE WITH ARCHITECTURAL SERIES AND SPECIFICATIONS FOR ALL SLEEVEING AND SEALING OF NON RATED PENETRATIONS.
- ALL NEW SPRINKLER PIPING SHALL BE SCH. 10 OR 40 BLACK STEEL. THREADED, GROOVED OR WELDED JOINTS AND FITTINGS MAY BE USED. FLEXIBLE SPRINKLER DROPS SERVING SPRINKLERS IN CEILINGS SHALL BE ALLOWED.
- CONTRACTOR SHALL PROVIDE AND INSTALL ADDITIONAL SPRINKLER HEADS PER NFPA-13 FOR COVERAGE AROUND OBSTRUCTIONS, DUCTWORK, ETC.

LEGEND - SPRINKLER HEADS

SYMBOL	TEMP.	DESCRIPTION & REMARKS	K	CONN.
●	VARIES	STANDARD COVERAGE QUICK RESPONSE SEMI-RECESSED PENDENT.	5.6	1/2"
○	VARIES	STANDARD COVERAGE QUICK RESPONSE BRASS UPRIGHT	5.6	1/2"
▶	VARIES	STANDARD COVERAGE QUICK RESPONSE DRY HORIZONTAL SIDEWALL	5.6	3/4"

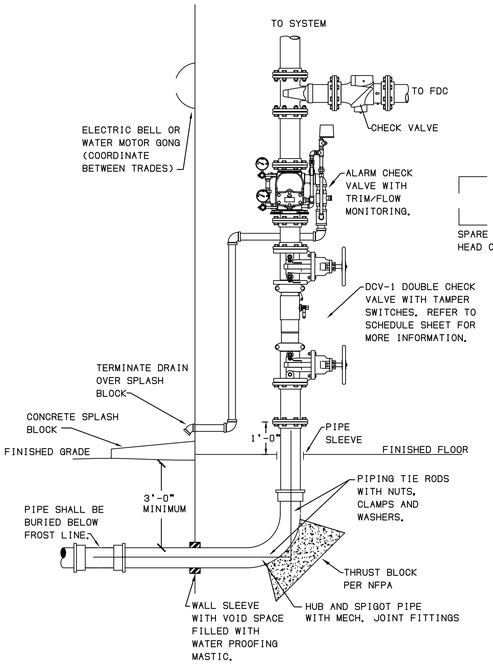
NOTES:
* CONTRACTOR SHALL COORDINATE ALL TEMPERATURE REQUIREMENTS OF SPRINKLER HEADS PER NFPA-13 PRIOR TO ORDERING SPRINKLERS.
* CONTRACTOR SHALL PROVIDE AND FURNISH COLORS OF COVER PLATES AND SPRINKLERS PER ARCHITECT.



TYPICAL NOTES:

1)-ALL EXPOSED PIPING AND FITTINGS TO BE GALVANIZED
2)-40' MAX. FROM FDC TO FIRE APPARATUS ACCESS (DRIVEWAY)
3)-100' MAX. FROM FDC TO FIRE HYDRANT
4)-40' MIN. FROM FDC TO FACE OF BUILDING

FIRE DEPARTMENT CONNECTION DETAIL
NO SCALE



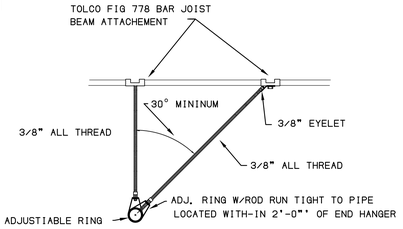
MATERIALS, AND ARRANGEMENT OF PIPING AND COMPONETS SHALL BE INSTALLED IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL CODE, OWNERS INSURANCE AND NFPA REQUIREMENTS.

FIRE RISER DETAIL
NO SCALE

DOUBLE CHECK VALVE SCHEDULE

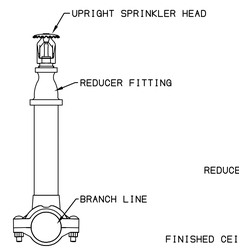
DESIGNATION:	DCV-1	
SERVICE:	FIRE WATER	
TOTAL NUMBER:	1	
MANUFACTURER:	WATTS	ZURN
MODEL NO:	757-NRS	350AST-NRS
FLOW RATE:	600	600
SIZE:	4"	4"
PSI LOSS:	3	3

DOUBLE CHECK NOTES:
- PROVIDE FLOW AND TAMPER SWITCHES ON OSY VALVES.

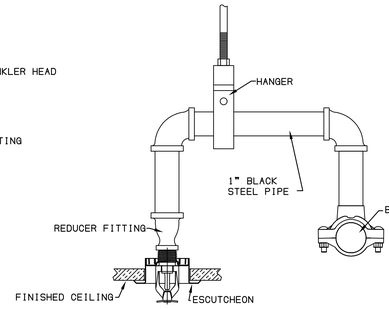


- FOR 6" & 8" PIPE USE 1/2" MATERIALS IN LIEU OF 3/8"

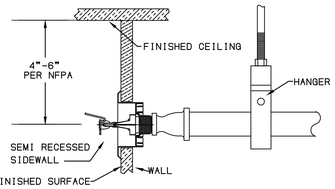
BRANCHLINE END RESTRAINT
NO SCALE



UPRIGHT



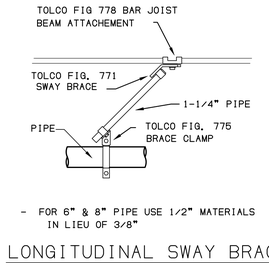
SEMI-RECESSED



SIDEWALL

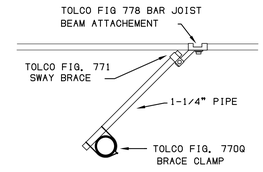
REFER TO NOTES, NFPA 13 AND OWNERS UNDERWRITERS INSURANCE FOR ADDITIONAL INFORMATION AND REQUIREMENTS. REFER TO FLOOR PLANS FOR LOCATIONS AND TYPES OF DIFFERENT TYPES OF SPRINKLER HEADS.

SPRINKLER HEAD DETAIL
NO SCALE



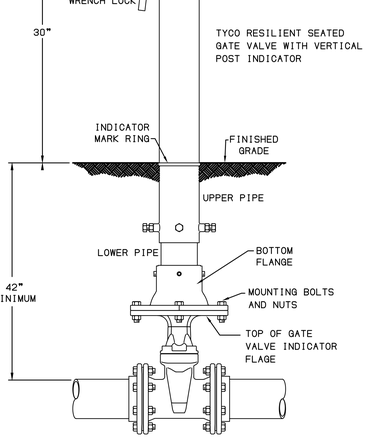
- FOR 6" & 8" PIPE USE 1/2" MATERIALS IN LIEU OF 3/8"

LONGITUDINAL SWAY BRACE
NO SCALE



- FOR 6" & 8" PIPE USE 1/2" MATERIALS IN LIEU OF 3/8"

LATERAL SWAY BRACE DETAIL
NO SCALE



POST INDICATOR VALVE DETAIL
NO SCALE

LYLE·COOK·MARTIN
ARCHITECTS
310 Franklin Street / Clarksville, TN 37040
TEL 931.552.4771/ EMAIL mduncan@lylecookmartin.com

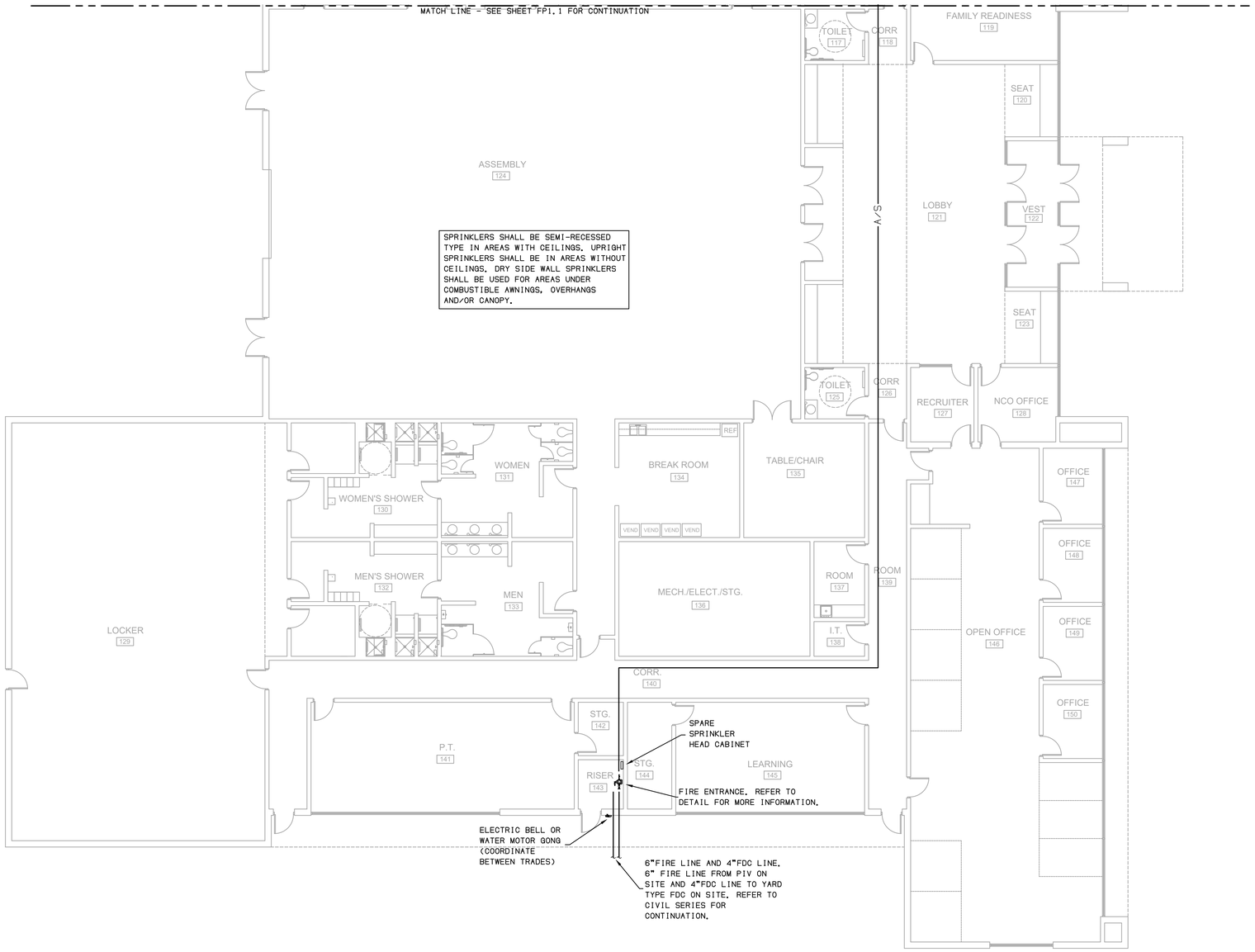
NEW FT. CAMPBELL NATIONAL GUARD READINESS CENTER
SBC PROJECT # 368/014-01-2021

NOTES, SCHEDULES & DETAILS - FIRE PROTECTION

Project No.	1423
Issue Date	12-08-22
Drawn By	AMB
Revision Date	
Revision Date	
Revision Date	

HNA ENGINEERING

FP0.1
SHEET NO.



1 Partial Floor Plan - Fire Protection
1/8" = 1'-0"

LYLE·COOK·MARTIN
ARCHITECTS
310 Franklin Street / Clarksville, TN 37040
TEL 931.552.4771/ EMAIL mduncan@lylecookmartin.com

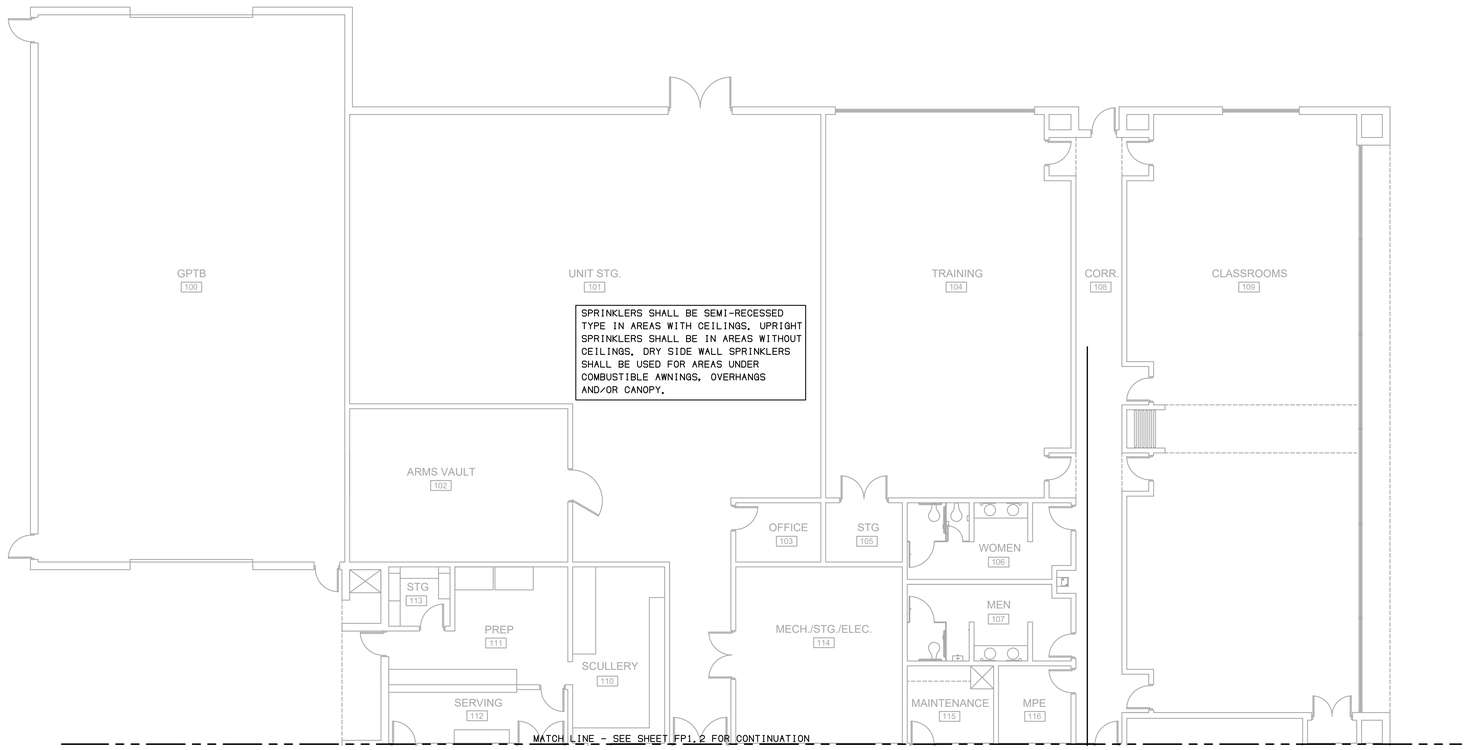
NEW FT. CAMPBELL NATIONAL GUARD READINESS CENTER
SBC PROJECT # 368/014-01-2021

PARTIAL FLOOR PLAN - FIRE PROTECTION

Project No.	1423
Issue Date	12-08-22
Drawn By	AMB
Revision Date	
Revision Date	
Revision Date	

HNA ENGINEERING

FP1.1
SHEET NO.



1 Partial Floor Plan - Fire Protection
1/8" = 1'-0"

LYLE·COOK·MARTIN
ARCHITECTS
310 Franklin Street / Clarksville, TN 37040
TEL 931.552.4771/ EMAIL mduncan@lylecookmartin.com

NEW FT. CAMPBELL NATIONAL GUARD READINESS CENTER
SBC PROJECT # 368/014-01-2021

PARTIAL FLOOR PLAN - FIRE PROTECTION

Project No.	1423
Issue Date	12-08-22
Drawn By	AMB
Revision Date	
Revision Date	
Revision Date	

HNA ENGINEERING

FP1.2
SHEET NO.

PLUMBING FIXTURE SCHEDULE

TAG	FIXTURE TYPE	FLUSH / FAUCET / SHOWER HEAD	TRIM AND REMARKS	TRAP SIZE	MIN. SIZE CONN. SW	SV	CW	HW
WC-1	WATER CLOSET, STANDARD, WHITE VITREOUS CHINA, ELONGATED BOWL, FLOOR MOUNTED, 1-1/2" TOP SPUD, SIPHON JET ACTION, AMERICAN STANDARD "MADERA" 2234.001 OR EQUAL.	CHROME PLATED, MANUAL OPERATION, DIAPHRAGM TYPE FLUSH VALVE WITH CAST WALL FLANGE AND SWEAT SOLDER KIT, 1.28GPF. ZURN Z6000AV-HET-CPM	SEAT TO BE ELONGATED, OPEN FRONT, SOLID PLASTIC WITH SELF SUSTAINING CHECK HINGES, COLOR WHITE, BEMIS 1955SSC.	INT.	4"	2"	1"	---
WC-2	WATER CLOSET, ADA COMPLIANT, WHITE VITREOUS CHINA, ELONGATED BOWL, FLOOR MOUNTED, 1-1/2" TOP SPUD, SIPHON JET ACTION, AMERICAN STANDARD "MADERA" 3043.001 OR EQUAL.	CHROME PLATED, MANUAL OPERATION, DIAPHRAGM TYPE FLUSH VALVE WITH CAST WALL FLANGE AND SWEAT SOLDER KIT, 1.28GPF. ZURN Z6000AV-HET-CPM	SEAT TO BE ELONGATED, OPEN FRONT, SOLID PLASTIC WITH SELF SUSTAINING CHECK HINGES, COLOR WHITE, BEMIS 1955SSC.	INT.	4"	2"	1"	---
U-1	URINAL, STANDARD AND ADA COMPLIANT, WHITE VITREOUS CHINA, WALL HUNG, SIPHON JET ACTION, 3/4" TOP SPUD, 1.0 GPF, AMERICAN STANDARD "ALLBROOK 6550.001 OR EQUAL.	CHROME PLATED, MANUAL OPERATION, DIAPHRAGM TYPE FLUSH VALVE WITH CAST WALL FLANGE AND SWEAT SOLDER KIT, 1.0 GPF. ZURN Z6003AV-WS1-CPM	PROVIDE APPROPRIATE FLOOR MOUNTED CARRIER, REFER TO ARCHITECTURAL SERIES FOR MOUNTING HEIGHTS.	INT.	3"	2"	1"	---
L-1	WHITE VITREOUS CHINA, ADA COMPLIANT, SELF RIMMING LAVATORY WITH 1 FAUCET HOLE EQUAL TO AMERICAN STANDARD "AQUALYN" 0475.047.	POLISHED CHROME, ADA COMPLIANT SINGLE HANDLE, DECK MOUNTED, 0.5 GPM, DELTA "CLASSIC" 520-HGM-DST. PROVIDE AND INSTALL ASSE 1070 COMPLIANT WATTS LFUSG-B MIXING VALVE.	1-1/4" GRID WITH TAILPIECE, ZURN Z8743-PC. P-TRAP TO BE 1-1/2" BRASS (17 GA. MIN), ZURN Z8700-PC SERIES. PROVIDE SUPPLIES AND STOPS, ZURN Z8800 SERIES. INSTALL CONCEALED FLOOR MOUNTED ARM CARRIER, PROVIDE DEARBORN SAFETY SERIES INSLUATION ON ALL EXPOSED TRIM.	1-1/2"	2"	1-1/2"	1/2"	1/2"
S-1	SINK, 1-COMP, ADA COMPLIANT, STAINLESS STEEL (TYPE 304, 18 GA.), 25"x22", 6" DEPTH, TOP MOUNT, 3 HOLE DRILLED, CENTER REAR DRAIN, ELKAY "CROSSTOWN" ECTSRAD25226.	POLISHED CHROME, ADA COMPLIANT SINGLE HANDLE, DECK MOUNTED, 1.8 GPM, DELTA "CLASSIC" 100-DST.	BASKET STRAINLER WITH TAILPIECE, ZURN ZP2000BW-SS. P-TRAP TO BE 1-1/4" BRASS (17 GA. MIN), ZURN Z8700. PROVIDE APPLICABLE WHEEL HANDLE STOPS AND SUPPLIES, ZURN Z8800 SERIES.	2"	2"	2"	1/2"	1/2"
S-2	SINK, 2-COMP, ADA COMPLIANT, STAINLESS STEEL (TYPE 304, 18 GA.), 33"x22", 6" DEPTH, SELF RIMMING, 3 HOLE DRILLED, CENTER REAR DRAIN, ELKAY "CROSSTOWN" ECTSRAD33226.	POLISHED CHROME, ADA COMPLIANT SINGLE HANDLE, DECK MOUNTED, 1.8 GPM, DELTA "CLASSIC" 100-DST.	BASKET STRAINLER WITH TAILPIECE, ZURN ZP2000BW-SS. P-TRAP TO BE 1-1/4" BRASS (17 GA. MIN), ZURN Z8700. PROVIDE APPLICABLE WHEEL HANDLE STOPS AND SUPPLIES, ZURN Z8800 SERIES.	2"	2"	2"	1/2"	1/2"
DF-1	ELECTRIC BOTTLE FILLER AND SINGLE HEIGHT HANDS FREE DRINKING FOUNTAINS, ADA COMPLIANT, WALL HUNG WITH 8.0 GPH CAPACITY OF 50°F DRINKING WATER AT 80°F INLET AND 90° AMBIENT TEMPERATURE, ELKAY LZWS-SFGRN28K, SEE ARCH SERIES FOR MOUNTING HEIGHTS.		PUSH BARS AND PUSHBAR ATTACHMENT HARDWARE TO BE METAL. FOUNTAIN AND CABINETS TO BE SATIN STAINLESS STEEL. P-TRAP TO BE 1-1/2" BRASS (17 GA. MIN), ZURN ZR365-PC. PROVIDE SUPPLIES AND STOPS. INSTALL CONCEALED FLOOR MOUNTED ARM CARRIER.	1-1/2"	2"	1-1/2"	1/2"	1/2"
SH-1	SHOWER (STANDARD): REFER TO ARCHITECTURAL FOR SURROUND INFORMATION.	SHOWER PRESSURE BALANCING VALVE EQUAL TO DELTA R10000-UNWS, FIXED SHOWER HEAD WITH LEVER HANDLE EQUAL TO DELTA TH13132.	PROVIDE WITH zURN Z-415 SHOWER DRAIN WITH NICKEL BRONZE STRAINER.	2"	2"	2"	1/2"	1/2"
SH-2	SHOWER (ADA COMPLIANT): REFER TO ARCHITECTURAL FOR SURROUND, GRAB BARS AND SEAT INFORMATION.	SHOWER PRESSURE BALANCING VALVE EQUAL TO DELTA R10000-UNWS, HAND HELD SHOWER HEAD WITH 59" HOSE, WITH 24" GRAB BAR AND WITH LEVER HANDLE EQUAL TO DELTA T13H152.	PROVIDE WITH zURN Z-415 SHOWER DRAIN WITH NICKEL BRONZE STRAINER.	2"	2"	2"	1/2"	1/2"
MB-1	MOP BASIN, CRESENT, PRECAST TERRAZZO, 12"DEEP, 28"X28", STAINLESS STEEL CAP ON THRESHOLD AND TILING FLANGES, FIAT MODEL TSBCR1100.	SERVICE SINK FAUCET, CHROME PLATED, INTEGRAL VACUUM BREAKER, WALL BRACE WITH LEVER HANDLES AND HOSE THREADED SPOUT EQUAL TO ZURN Z843M1.	PROVIDE 3"CAST BRASS CHROME-PLATED STRAINER, STAINLESS STEEL CAP, HOSE AND WALL HOOK, SPLASH CATCHER PANELS, AND MOP HANGER BRACKET. PROVIDE 3" P-TRAP.	3"	3"	2"	3/4"	3/4"
NFWH	WALL HYDRANT (NON-FREEZE), KEY OPERATED WITH CHROME PLATED FACE, INTEGRAL VACUUM BREAKER, WOODFORD 65 SERIES.	--	3/4" HOSE CONNECTION, ALL BRONZE HEAD, SEAT CASTING AND INTERNAL WORKING PARTS, GALVANIZED WALL CASING AND HYDRANT KEY.	--	--	--	3/4"	--
NFRH	SANITARY ROOF HYDRANT (NON-FREEZE), CAST IRON MOUNTING SYSTEM, INTEGRAL VACUUM BREAKER, BACKFLOW PROTECTED, VENTURI ACTION, RESERVOIR WOODFORD SRH-MS SERIES.	--	3/4" HOSE CONNECTION, ALL BRONZE HEAD, SEAT CASTING AND INTERNAL WORKING PARTS, GALVANIZED WALL CASING AND HYDRANT KEY.	--	--	--	3/4"	--
FD-1	FLOOR DRAIN: CAST IRON FLOOR DRAIN WITH BOTTOM OUTLET, COMBINATION INVERTIBLE MEMBRANE CLAMP, ADJUSTABLE COLLAR, SEEPAGE OPENINGS, POLISHED NICKEL BRONZE LIGHT DUTY LEVELING STRAINER WITH VANDAL PROOF SCREW - ZURN Z415BZ.		SET TOP OF DRAINS FLUSH WITH FINISHED FLOOR, PROVIDE AND INSTALL TRAP GUARD INSERTS ON ALL FLOOR DRAINS NOT SERVED BY TRAP PRIMER.	DWG	DWG	2"	---	---
FS-1	FLOOR SINK: HALF GRATE 12"X12"X8" DEEP CAST IRON FLOOR SINK WITH ANCHOR FLANGE, BOTTOM DOME ANTI SPLASH STRAINER, ACID RESISTANT PORCELAIN INTERIOR WITH ACID RESISTANT HALF GRATE EQUAL TO ZURN Z1901.		SET TOP OF DRAINS 1/2" ABOVE FINISHED FLOOR.	DWG	DWG	2"	---	---
RD-1	ROOF DRAIN (PRIMARY): CAST IRON ROOF DRAIN WITH FLANGE, FLASHING RING, UNDER DECK CLAMPS, ALUMINIUM DOME, STRAINER, AND ADJUSTABLE EXTENSION, ZURN Z100.			DWG	DWG	---	---	---
OD-1	ROOF DRAIN (OVERFLOW): CAST IRON ROOF DRAIN WITH FLANGE, FLASHING RING, UNDER DECK CLAMPS, ALUMINIUM DOME, STRAINER, 2" INTERNAL WATER DAMAND ADJUSTABLE EXTENSION, ZURN Z100.			DWG	DWG	---	---	---
FCO	FLOOR CLEANOUT: CAST IRON CLEANOUT WITH THREADED ADJUSTABLE HOUSING, FLANGED FERRULE WITH TAPERED BRASS PLUG, ROUND, SECURED, SCORIATED NICKEL BRONZE TOP - ZURN Z1400.		SET TOP OF CLEANOUT COVER FLUSH WITH FINISHED FLOOR.	DWG	DWG	---	---	---
WCO	WALL CLEANOUT: CAST IRON CLEANOUT WITH TAPERED BRASS PLUG, ROUND STAINLESS STEEL COVER PLATE WITH SCREW - ZURN Z1441.			DWG	DWG	---	---	---
GCO	GRADE CLEANOUT: HEAVY DUTY CAST IRON CLEANOUT WITH THREADED ADJUSTABLE HOUSING, FLANGED FERRULE WITH TAPERED BRASS PLUG, HEAVY DUTY, SECURED, SCORIATED CAST IRON TOP - ZURN Z1400.		IF CLEANOUT IS NOT LOCATED IN CONCRETE POUR CONCRETE PAD AROUND CLEANOUT COVER MINIMUM OF 12"X12"X4"	DWG	DWG	---	---	---

PLUMBING NOTES:

- CONTRACTOR SHALL COORDINATE THE UTILITY SERVICE CONNECTIONS WITH CIVIL PRIOR TO INSTALLATION OF UTILITIES.

-CONTRACTOR SHALL COORDINATE WITH OWNER THE DISRUPTION OF ANY SERVICE A MINIMUM OF 72 HOURS IN ADVANCE.

- CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE PLUMBING SYSTEM AS A WHOLE WITH ALL THE TRADES INVOLVED TO AVOID ROUTING CONFLICTS/PROBLEMS. IF COFLICTS/PROBLEMS ARE FOUND AND CAN NOT BE RESOLVED BY THE INVOLVED TRADES THEN THE ARCHITECT SHALL BE CONSULTED AND THEIR DECISION SHALL GOVERN.

-IF THE VENT PENETRATIONS OF THE ROOF ARE REQUIRED TO BE 3" AND LARGER BY CODE, THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL REQUIRED INCREASERS BELOW ROOF DECK AND PENETRATE THE ROOF WITH THE MINIMUM REQUIRED PIPE SIZE.

-CONTRACTOR SHALL PROVIDE AND INSTALL PISTON TYPE WATER HAMMER ARRESTORS ON WATER LINES SERVING FLUSH VALVES AND QUICK CLOSING VALVES. CONTRACTOR SHALL SIZE AND INSTALL WATER HAMMER ARRESTORS WITH THE REQUIREMENTS OF THE PLUMBING AND DRAINAGE INSTITUTE GUIDELINES.

- CONTRACTOR SHALL COORDINATE ALL VENTS AND ROOF PENETRATIONS WITH MECHANICAL EQUIPMENT PRIOR TO INSTALLATION. ALL VENT THROUGH ROOFS SHALL BE ROUTED A MINIMUM OF 15 FEET AWAY FROM FRESH AIR INTAKES FROM MECHANICAL EQUIPMENT.

- FURNISH AND INSTALL DEEP SEAL P-TRAPS & TRAP GUARD INSERTS ON FLOOR DRAINS NOT FED BY AN AUTOMATIC TRAP PRIMER SYSTEM, WHERE REQUIRED BY CODE.

- CONTRACTOR SHALL COORDINATE WITH THE MANUFACTURERS EQUIPMENT CUT SHEETS AND LAYOUT OF ALL EQUIPMENT THAT WILL BE PROVIDED BY OWNER AND GENERAL CONTRACTOR PRIOR TO THE INSTALLATION OF PLUMBING ROUGH-INS. CONTRACTOR SHALL PROVIDE AND INSTALL PLUMBING ROUGH IN FOR ALL EQUIPMENT. CONTRACTOR SHALL PROVIDE AND INSTALL ALL REQUIRED GAUGES, PRESSURE REDUCING VALVES, WATER HAMMER ARRESTORS, SHUT-OFF VALVES, CHECK VALVES, BACK FLOW PREVENTION DEVICES ETC THAT ARE REQUIRED BY THE MANUFACTURER FOR THEIR EQUIPMENT. CONTRACTOR SHALL ALSO PROVIDE AND INSTALL ALL ITEMS REQUIRED BY LOCAL, STATE AND FEDERAL CODES FOR PLUMBING ROUGH-INS.

- ALL FIXTURES, EQUIPMENT AND PIPING SHOWN ON THESE DRAWINGS SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODE REQUIREMENTS.

- PENETRATIONS THROUGH NEW WALLS AND FLOORS SHALL BE SLEEVED AND/OR PATCHED. REFER TO ARCHITECTURAL SERIES FOR FINISH INFORMATION.

- ALL NEW PIPE PENETRATIONS OF FIRE RATED WALLS, AS SHOWN BY THE LIFE SAFETY PLANS, SHALL HAVE A UL LISTED F RATING EQUAL TO THE WALL FIRE RATING. SEE PLUMBING PLANS FOR UL PENETRATION DETAILS.

- ALL WORK SHOWN IS PART OF BASE BID EXCEPT WHERE OTHERWISE DESIGNATED.

- SEISMICALLY BRACE ALL PIPE AS REQUIRED BY LOCAL CODE REQUIREMENTS.

- PIPING SHALL NOT BE INSTALLED OVER ELECTRICAL EQUIPMENT.

- CAULK AROUND ALL PLUMBING FIXTURES. CAULK COLOR SHALL MATCH PLUMBING FIXTURE COLOR.

- EXACT LOCATIONS OF MECHANICAL EQUIPMENT SHALL BE VERIFIED WITH THE MECHANICAL CONTRACTOR. ALL REQUIRED CONDENSATE PIPING SHALL BE COORDINATED WITH THIS EQUIPMENT.

- SANITARY SEWER PIPING SHALL BE SLOPED AS FOLLOWS: 3" SANITARY WASTE PIPING AND LARGER SHALL BE ROUTED AT 1/8" PER FOOT MINIMUM. 2" SANITARY WASTE PIPING AND SMALLER SHALL BE ROUTED AT 1/4" PER FOOT MINIMUM.

- CONTRACTOR TO PROVIDE PROPERLY SIZED ISOLATION VALVES AT ALL DOMESTIC WATER BRANCH PIPING AND ALL DOMESTIC WATER PIPING SERVING INDIVIDUAL FIXTURES OR RESTROOMS. VALVES TO BE INSTALLED IN AN ACCESSIBLE LOCATION ABOVE TILE CEILING.

- CONTRACTOR TO PROPERLY BALANCE DOMESTIC HOT WATER AND HOT WATER RETURN SYSTEMS. CONTRACTOR TO PROVIDE CALINBRATED BALANCING VALVES ON HOT WATER RETURN PIPING AS NECESSARY.

- ALL CONDENSATE PIPING ROUTED ABOVE CEILING SHALL HAVE A CLEANOUT AT ALL 90 DEGREE TURNS AND EVERY 50'.

- CONTRACTOR SHALL ESTABLISH A SEQUENCE OF INSTALLATION WITH OTHER TRADES WORKING ON THE PROJECT. CONTRACTOR SHALL THOROUGHLY COORDINATE ALL SYSTEMS WITH OTHER TRADES.

- CATHODIC PROTECTION, IF REQUIRED, IS THE CONTRACTOR'S RESPONSIBILITY. CONTRACTOR SHALL PROTECT ALL UNDERGROUND METALLIC PIPING FROM CORROSION. REFER TO SOILS REPORT. UNDERGROUND PIPING MAY ALSO BE PROTECTED WITH POLYETHYLENE ENCASEMENT CONFORMING TO ANSI/AWWA REQUIREMENTS. ALL PIPING SHALL BE WRAPPED COMPLETELY WITH ENCASEMENT TO A POINT AT LEAST 12 A.F.G OR FIN. FLOOR. ENCASEMENT SHALL BE FREE OF TEARS WITH ALL JOINTS COMPLETELY SEALED. NO PORTION OF THE PIPE SHALL BE LEFT EXPOSED TO CORROSIVE SOIL.

- PLASTIC PIPING IS NOT ALLOWED IN PLENUM SPACES.

GAS WATER HEATER SCHEDULE

DESIGNATION:	WH-1
SERVICE:	DOMESTIC HOT WATER
MANUFACTURER:	INTELIHOT
MODEL NO:	IN501
BTUH INPUT:	499,000
SET WATER TEMP:	140°F
CONDENSING:	YES
DIRECT VENT:	YES
FUEL CONNECTION:	1-1/2"
ELEC CONNECTION:	120V/1ϕ/60HZ
FLUE SIZE:	4"

WATER HEATER NOTES:
- PROVIDE WITH CONDENSATE NEUTRALIZATION KIT.
- COORDINATE WITH MECHANICAL SERIES FOR ROUTING OF FLUES/INTAKES.
- PROVIDE AND INSTALL SEISMIC RESTRAINT ON WATER HEATER.

RECIRCULATION PUMP SCHEDULE

DESIGNATION:	CP-1
SERVICE:	DOMESTIC HOT WATER RETURN
TOTAL NUMBER:	1
MANUFACTURER:	BELL AND GOSSET
MODEL NO:	NBF-18S
GPM:	3
FEET OF HEAD:	12
TYPE:	IN-LINE
WATTS/AMPS:	90 / 0.74
ELEC CONNECTION:	120V/1ϕ/60HZ

PUMP NOTES:
- PUMP SHALL BE UL/FM LISTED AND APPROVED.
- PROVIDE AND INSTALL SEISMIC RESTRAINT ON PUMP.
- PROVIDE UNIONS AT PUMP SO PUMP CAN BE TAKEN OUT OF SYSTEM AND SERVICED.

BACKFLOW PREVENTER SCHEDULE

DESIGNATION:	BFP-1	
SERVICE:	DOMESTIC WATER	
TOTAL NUMBER:	1	
MANUFACTURER:	WATTS	ZURN
MODEL NO:	957-OSY	375-AST
FLOW RATE:	---	---
SIZE:	2-1/2"	2-1/2"
PSI LOSS:	10	10

BACKFLOW NOTES:
- PROVIDE WITH AIR GAP FITTING AND STRAINER.
- ROUTE DRAIN TO FLOOR DRAIN AND TERMINATE WITH AIR GAP.
- SIZE DRAIN PER MANUFACTURER'S RECOMMENDATIONS.

LEGEND

LINE TYPE	DESCRIPTION
——SW——	SANITARY WASTE
– – SV – –	SANITARY VENT
——CD——	CONDENSATE
– – IV – –	INDIRECT VENT
——GW——	GREASE WASTE
——GV——	GREASE VENT
——– ——–	COLD WATER
——– – ——–	HOT WATER
————	HOT WATER RETURN

HNA ENGINEERING

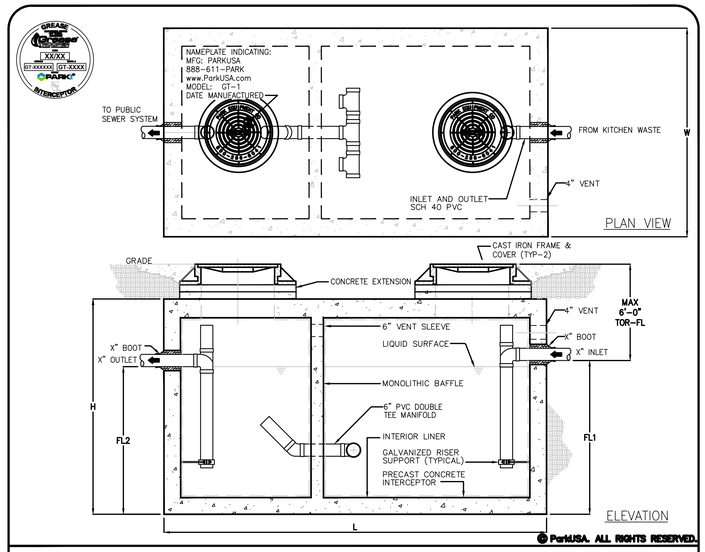
LYLE·COOK·MARTIN
ARCHITECTS
310 Franklin Street / Clarksville, TN 37040
TEL 931.552.4771/ EMAIL mduncan@lylecookmartin.com

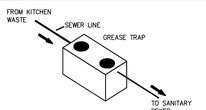
NEW FT. CAMPBELL NATIONAL GUARD READINESS CENTER
SBC PROJECT # 368/014-01-2021

SCHEDULES AND NOTES - PLUMBING

Project No.	1423
Issue Date	12-08-22
Drawn By	AMB
Revision Date	
Revision Date	
Revision Date	
Revision Date	

P0.1
SHEET NO.





TYPICAL APPLICATIONS INCLUDE COMMERCIAL AND INDUSTRIAL FOOD SERVICE KITCHENS WHERE EXCESSIVE GREASE MAY INTERFERE WITH THE PROPER DRAINAGE OF THE SEWER SYSTEM. THE GREASE INTERCEPTOR IS GENERALLY BURIED BELOW GRADE FOR GRAVITY FLOW SEWER SYSTEMS. A SAMPLE WELL IS UTILIZED ON THE OUTLET SIDE FOR SAMPLING BY THE LOCAL WATER AUTHORITY.

GREASE INTERCEPTOR SCHEDULE

MODEL NO.	CAPACITY USGal	GREASE CAP. (LBS)	EMPTY WT (LBS)	LENGTH L	WIDTH W	HEIGHT H	INLET FL1	OUTLET FL2
GT-500	500	1,200	9,500	7'-10"	4'-4"	4'-6"	3'-3"	3'-0"
GT-750	750	1,700	9,900	7'-10"	4'-4"	6'-0"	4'-5"	4'-2"
GT-1000	1,000	2,300	13,350	8'-8"	5'-0"	6'-0"	4'-9"	4'-6"
GT-1250	1,250	2,900	14,650	9'-2"	5'-8"	6'-0"	4'-9"	4'-6"
GT-1500	1,500	3,500	16,050	9'-2"	5'-8"	7'-0"	5'-9"	5'-6"
GT-2000	2,000	4,600	21,250	9'-0"	6'-0"	8'-0"	6'-9"	6'-6"
GT-2500	2,500	5,700	27,050	13'-0"	7'-0"	7'-0"	5'-9"	5'-6"
GT-3000	3,000	6,900	33,150	13'-0"	7'-0"	8'-0"	6'-9"	6'-6"
GT-3500	3,500	8,000	38,550	13'-0"	7'-0"	8'-6"	7'-3"	7'-0"
GT-4000	4,000	9,300	38,100	16'-0"	8'-6"	7'-0"	5'-9"	5'-6"

OTHER SIZES ARE AVAILABLE. CONTACT US FOR MORE INFORMATION

SPECIFICATIONS

CONCRETE : CLASS I/II CONCRETE WITH DESIGN STRENGTH OF 4500 PSI AT 28 DAYS. UNIT IS OF MONOLITHIC CONSTRUCTION AT FLOOR, FIRST STAGE OF WALL AND BAFFLE WITH SECTIONAL RISER TO REQUIRED DEPTH. (MONOLITHIC BAFFLE REQUIRED, SLIDE-IN TYPE IS NOT ACCEPTABLE)

REINFORCEMENT: GRADE 60 REINFORCED WITH STEEL REBAR CONFORMING TO ASTM A615 ON REQUIRED CENTERS OR EQUAL.

C.I. CASTINGS: MANHOLE FRAMES, COVERS OR GRATES ARE MANUFACTURED OF GREY CAST IRON CONFORMING TO ASTM A48 CLASS 30. MANHOLE SHALL BE NOMINAL 24 INCH DIAMETER AND BE TRAFFIC DUTY.

ENGINEERING DATA

THE GREASE INTERCEPTOR IS STRUCTURALLY & HYDRAULICALLY ENGINEERED TO CONFORM TO UPC/IPC AND REGIONAL PLUMBING CODES RECOMMENDED IN MOST CITIES. CONSULT WITH LOCAL AUTHORITIES FOR SPECIFIC APPLICATION REQUIREMENTS.

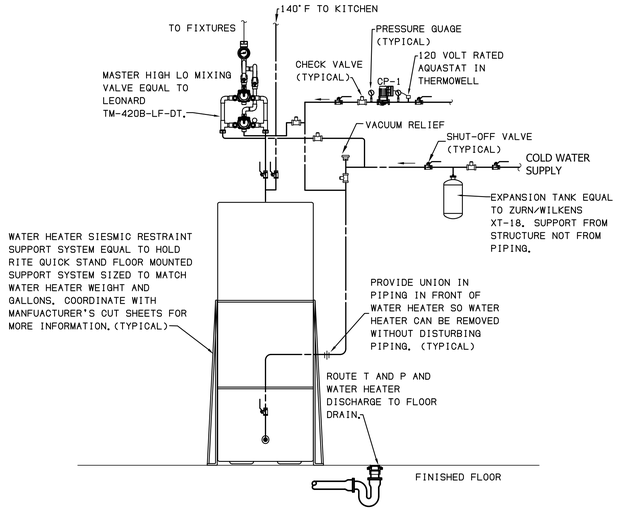
SHOP DRAWINGS SHALL INCLUDE COMPLETE STRUCTURAL & BOUYANCY CALCULATIONS CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER UPON REQUEST.

CONSULT WITH PARKUSA COMPANY FOR EXACT EXCAVATION DIMENSIONS & SHIPPING INFORMATION.

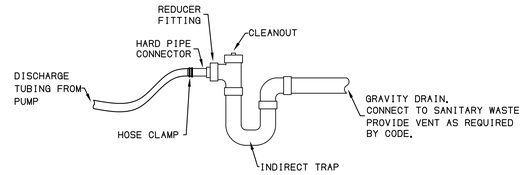
888.611.PARK
www.parkusa.com
PARK USA
DESIGN FOR WATER

GREASE INTERCEPTOR SERIES GT
500 THRU 4000 GALLON CAPACITY

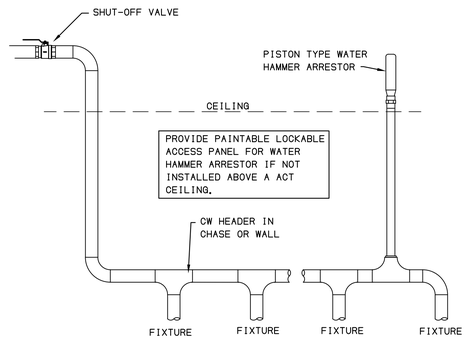
PM	DRN	ENG	DWG. NO.	REV.
DATE 06/18			GT-1	A



WH-1 DETAIL
NO SCALE

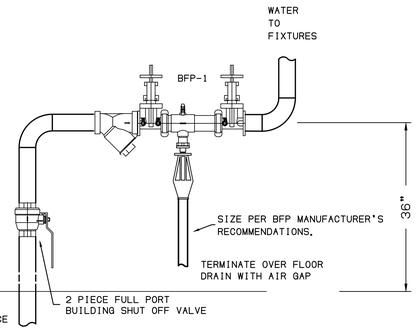


PUMPED CONDENSATE TRAP DETAIL
NO SCALE

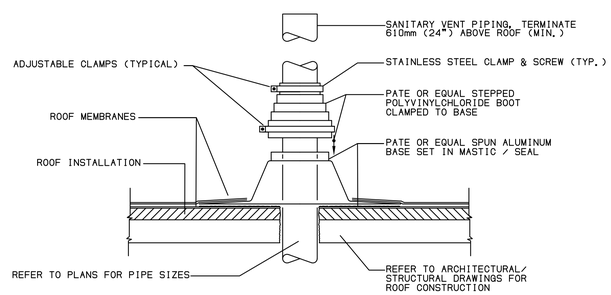


WATER HAMMER ARRESTOR SHALL BE INSTALLED AT ALL LOCATIONS WHERE WATER HAMMER CONDITIONS COULD POTENTIALLY EXIST, IE: FLUSH VALVES (MULTIPLE OR SINGLE FIXTURE RESTROOMS), QUICK CLOSING VALVES, SOLENOID VALVES, WASHING MACHINES, ETC. REFER TO MANUFACTURERS CUT SHEETS FOR SIZING AND PLACEMENT OF WATER HAMMER ARRESTORS PRIOR TO ORDERING. IF INSTRUCTIONS ARE NOT SUPPLIED REFER TO PDI GUIDELINES.

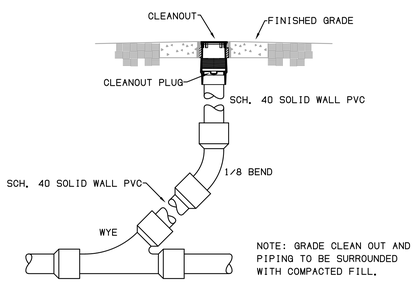
WATER HAMMER ARRESTOR
NO SCALE



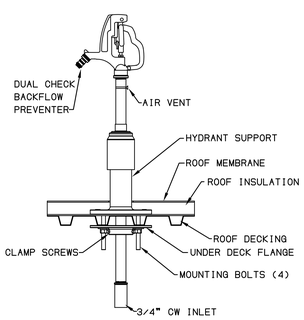
BACKFLOW DEVICE DETAIL
NO SCALE



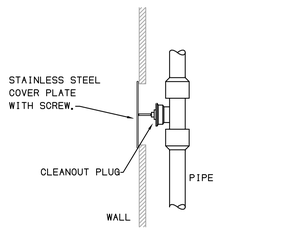
VENT THROUGH ROOF DETAIL
NO SCALE



GRADE CLEANOUT DETAIL
NO SCALE



SANITARY ROOF HYDRANT DETAIL
NO SCALE



WCO CLEANOUT DETAIL
NO SCALE

LYLE·COOK·MARTIN
ARCHITECTS
310 Franklin Street / Clarksville, TN 37040
TEL 931.552.4771/ EMAIL mduncan@lylecookmartin.com

NEW FT. CAMPBELL NATIONAL GUARD READINESS CENTER
SBC PROJECT # 368/014-01-2021

DETAILS - PLUMBING

Project No.	1423
Issue Date	12-08-22
Drawn By	AMB
Revision Date	
Revision Date	
Revision Date	

HNA ENGINEERING

P0.2
SHEET NO.

LYLE·COOK·MARTIN
ARCHITECTS
310 Franklin Street / Clarksville, TN 37040
TEL 931.552.4771 / EMAIL mdunean@lylecookmartin.com

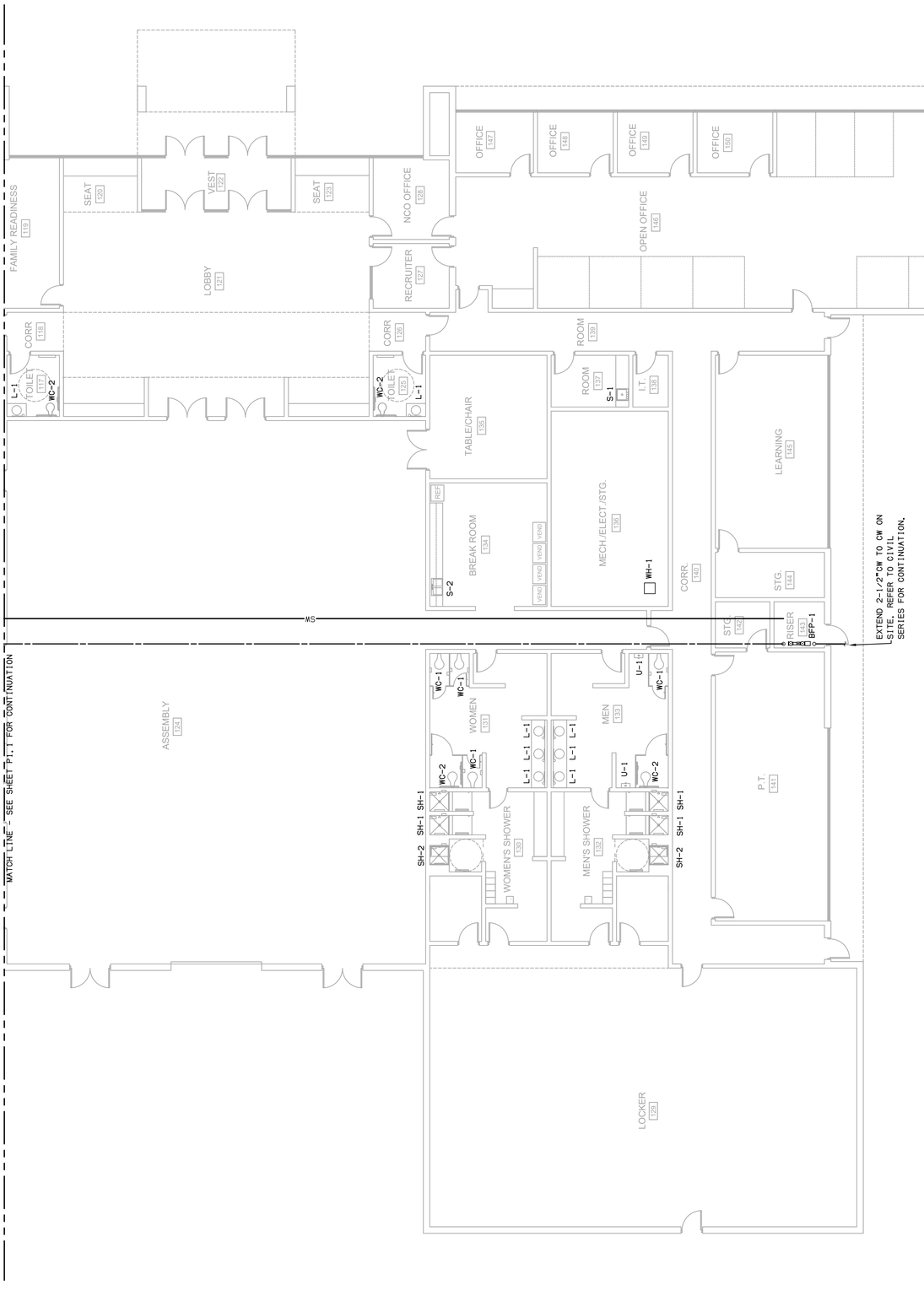
NEW FT. CAMPBELL NATIONAL GUARD READINESS CENTER
SBC PROJECT # 368/014-01-2021

PARTIAL FLOOR PLAN - PLUMBING

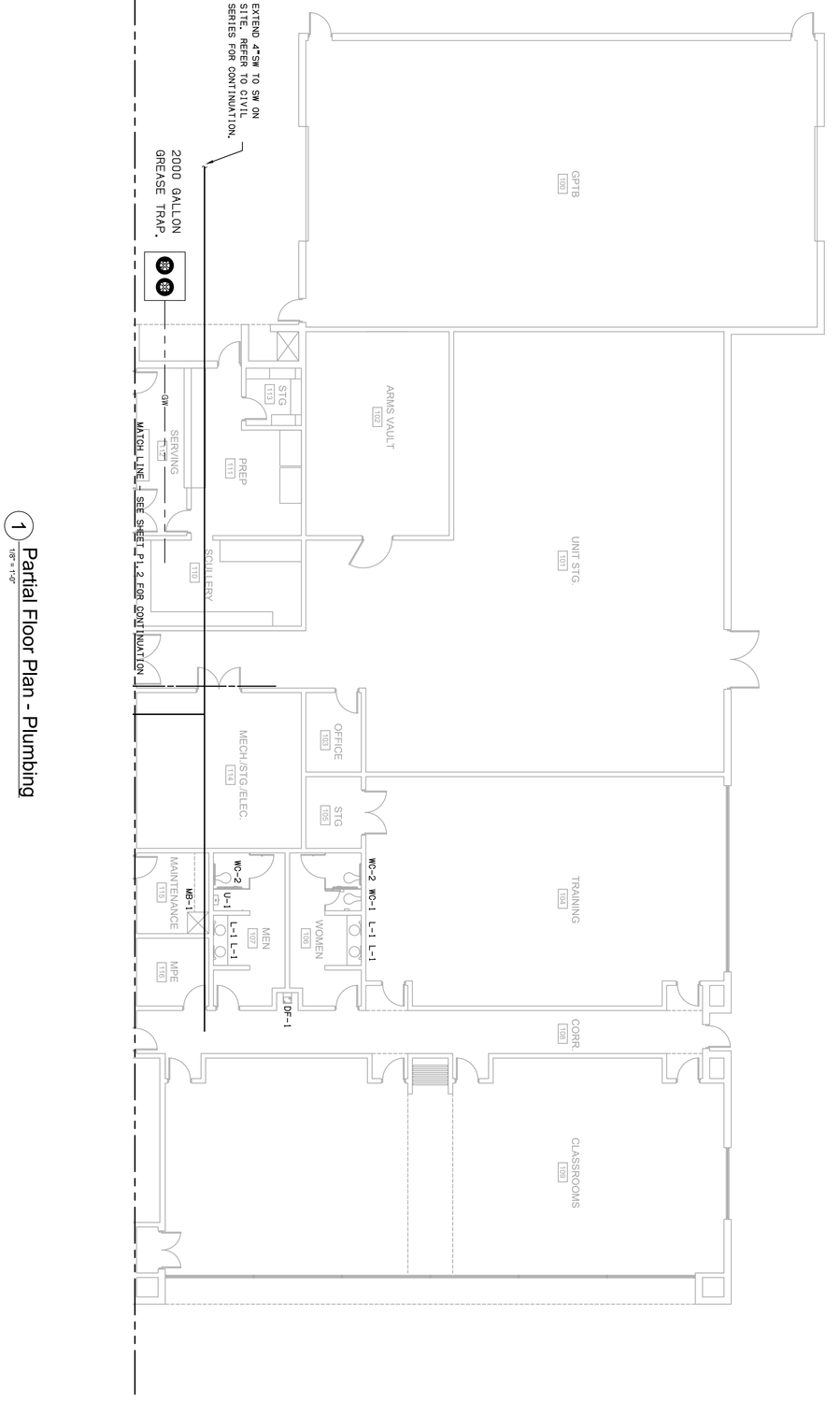
Project No.	1423
Issue Date	12-05-22
Drawn By	AMB
Revision Date	
Revision Date	
Revision Date	
Revision Date	

SHEET NO.
P1.1

HNA ENGINEERING



1 Partial Floor Plan - Plumbing
1/8" = 1'-0"



1 Partial Floor Plan - Plumbing

1/8" = 1'-0"

HNA ENGINEERING

P1.2

SHEET NO.

Project No.	1423
Issue Date	12-08-22
Drawn By	AMB
Revision Date	
Revision Date	
Revision Date	

NEW FT. CAMPBELL NATIONAL GUARD READINESS CENTER
SBC PROJECT # 368/014-01-2021

PARTIAL FLOOR PLAN - PLUMBING

LYLE·COOK·MARTIN
ARCHITECTS
310 Franklin Street / Clarksville, TN 37040
TEL 931.552.4771/ EMAIL mduncan@lylecookmartin.com

RECEPTACLE SCHEDULE

CALLOUT	SYMBOL	NEMA	VOLTS	FEATURES	NOTE 1	NOTE 2
Duplex Outlet			120V 1P 2W	GND	DUPLEX RECEPTACLE, MTD AT 18" AFF TO BOTTOM, UOI	
Duplex Outlet-EWC	EWC		120V 1P 2W	GND	DUPLEX RECEPTACLE FOR DRINKING FOUNTAIN	COORDINATE MOUNTING HEIGHT WITH PLUMBING CONTRACTOR
Duplex Outlet-GFCI			120V 1P 2W	GND	GFCI PROTECTED DUPLEX RECEPTACLE, MTD AT 18" AFF TO BOTTOM, UOI	IF OUTLET IS NOT EASILY ACCESSIBLE, PROVIDE GFCI BREAKER
Duplex Outlet-GFCI Above Counter			120V 1P 2W	GND	GFCI PROTECTED DUPLEX RECEPTACLE, MTD AT 4" ABOVE BACKSPLASH TO BOTTOM, UOI	COORDINATE WITH CASEWORK CONTRACTOR
Duplex Outlet-GFCI/WP			120V 1P 2W	WP, GND	GFCI PROTECTED DUPLEX RECEPTACLE, MTD AT 18" AFF TO BOTTOM, UOI	PROVIDE HEAVY DUTY, LOCKABLE, WHILE-IN-USE COVER
Duplex Outlet-Vending	V		120V 1P 2W	GND	DUPLEX RECEPTACLE FOR VENDING/REFRIGERATOR, MTD AT 48" AFF TO BOTTOM, UOI	DEDICATED CIRCUIT WITH GFCI BREAKER
Quad Outlet			120V 1P 2W	GND	QUAD RECEPTACLE, MTD AT 18" AFF TO BOTTOM, UOI	
Tele & Data			120V 1P 2W	GND	EMPTY 1" CONDUIT STUB UP TO ABOVE CEILING FOR TELEPHONE & DATA	MTD AT 18" AFF TO BOTTOM, UOI

DEVICE NOTE

1. ALL SWITCHES, RECEPTACLES, DEVICES, AND FACEPLATE FINISHES ARE TO BE COORDINATED WITH OWNER/ARCHITECT.

SWITCH SCHEDULE

CALLOUT	SYMBOL	NOTE 1	NOTE 2	NOTE 3
Occ Sensor - Ceiling Mount Line Voltage		CEILING MOUNTED, DUAL TECHNOLOGY, LINE VOLTAGE OCC SENSOR	ACUITY CONTROLS #CMR-PDT-10	MAX 800W @ 120V, 1200W @ 277V
Occ Sensor - Ceiling Mount Low Voltage	LV	CEILING MOUNTED, DUAL TECHNOLOGY, LOW VOLTAGE OCC SENSOR	ACUITY CONTROLS #CM-PDT-10	ACUITY CONTROLS #PP20
Switch	$	WALL MOUNTED SWITCH	MTD AT 48" AFF, UOI	
Switch-Dimmer	$d	WALL MOUNTED 0-10V DIMMER SWITCH, PROVIDE ALL 0-10V WIRING AS REQUIRED.	MTD AT 48" AFF, UOI	
Switch-Occupancy Sensor	$oc	WALL MOUNTED, DUAL TECHNOLOGY, OCCUPANCY SENSOR W/ MANUAL OVERRIDE SWITCH	ACUITY CONTROLS #WSX-PDT-WH	MTD AT 48" AFF, UOI
Switch-Three Way	$3	WALL MOUNTED THREE WAY SWITCH	MTD AT 48" AFF, UOI	

EQUIPMENT SCHEDULE

CALLOUT	SYMBOL	NEMA	VOLTS	AMPS	KVA	HP	CIRCUIT
WH-1			120V 1P 2W	0.83	0.1		

Fire Alarm Schedule

CALLOUT	SYMBOL	NOTE 1	NOTE 2	NOTE 3
Audio/Visual Alarm	S	FIRE ALARM COMBINATION AUDIBLE & VISUAL INDICATOR ALARM, WALL MTD		
Manual Pull Station	F	FIRE ALARM MANUAL PULL STATION, MTD 48" AFF TO BOTTOM, UOI		
Smoke Detector	S	FIRE ALARM SMOKE DETECTOR, MTD ON CEILING		
Visual Alarm		FIRE ALARM VISUAL INDICATOR ALARM, WALL MTD		

ELECTRICAL SYMBOLS

- NONFUSED DISCONNECT SWITCH - SIZE AS INDICATED
- FUSED DISCONNECT SWITCH - SIZE AS INDICATED
- COMBINATION STARTER/DISCONNECT - SIZE AS INDICATED
- $ TOGGLE SWITCH
- ———— FEEDER/BRANCH RUN OVERHEAD - CONCEALED IN OR ABOVE CEILING, IN WALL, OR EXPOSED ON STRUCTURE
- – – – – – EMERGENCY, NIGHT LIGHT, OR FEEDER/BRANCH CONCEALED BELOW FLOOR, IN WALL, OR BELOW GRADE
- P-16 HOME RUN TO CIRCUIT PANEL, NEUTRAL/HOT/GROUND. #12 COPPER, UOI

ABBREVIATIONS

a, b, c, etc.	DENOTES SWITCHING SCHEME
AC	MOUNT ABOVE COUNTER
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
BFG	BELOW FINISHED GRADE
EC	ELECTRICAL CONTRACTOR
EP	EXPLOSION PROOF
EX	EXISTING
FACP	FIRE ALARM CONTROL PANEL
FAA	FIRE ALARM ANNUNCIATOR PANEL
GC	GENERAL CONTRACTOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
MC	MECHANICAL CONTRACTOR
MTD	MOUNTED
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
SPD	SURGE PROTECTIVE DEVICE
STB	SHUNT TRIP BREAKER
UOI	UNLESS OTHERWISE INDICATED
WP	WEATHERPROOF

DRAWING LEGEND

DRAWING NO.	DESCRIPTION
E0.1	Legend & Schedules - Electrical
E0.2	One Line Diagram - Electrical
E0.3	Details - Electrical
E0.4	Details - Electrical
E3.1	Partial Floor Plan - Power/Comm
E3.2	Partial Floor Plan - Power/Comm
E4.1	Partial Floor Plan - Mechanical Power
E4.2	Partial Floor Plan - Mechanical Power
E5.1	Enlarged Plans - Electrical

HNA ENGINEERING

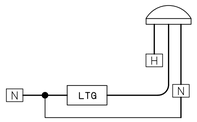
LYLE·COOK·MARTIN
ARCHITECTS
310 Franklin Street / Clarksville, TN 37040
TEL 931.552.4771/ EMAIL mduncan@jlecookmartin.com

NEW FT. CAMPBELL NATIONAL GUARD READINESS CENTER
SBC PROJECT # 368/014-01-2021

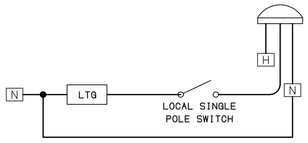
LEGENDS & SCHEDULES - ELECTRICAL

Project No.	1423
Issue Date	12-08-22
Drawn By	
Revision Date	
Revision Date	
Revision Date	

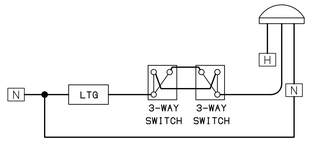
E0.1
SHEET NO.



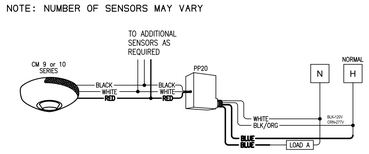
1 LINE VOLTAGE SENSOR



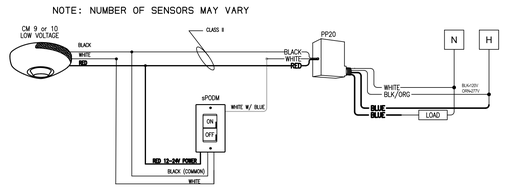
LINE VOLTAGE SENSOR
W/ SINGLE SWITCHING



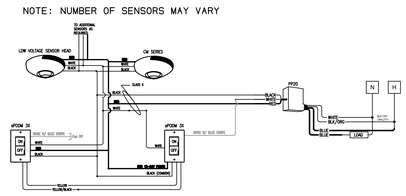
LINE VOLTAGE SENSOR
W/ 3-WAY SWITCHING



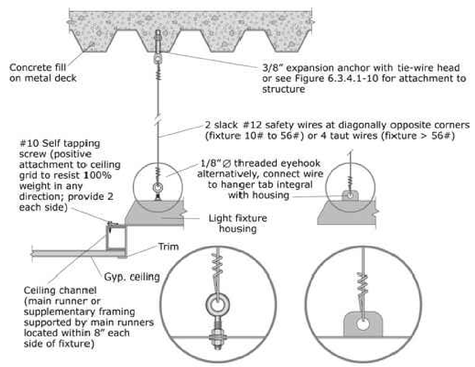
4 LOW VOLTAGE SENSORS



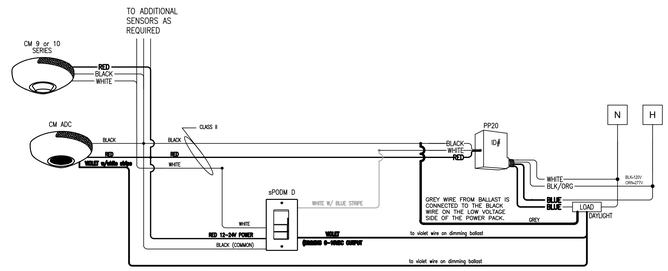
LOW VOLTAGE SENSORS
W/ SINGLE SWITCHING



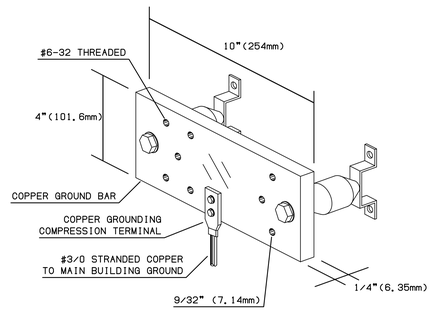
LOW VOLTAGE SENSORS
W/ 3-WAY SWITCHING



3 SEISMIC MOUNT DETAIL



LOW VOLTAGE SENSORS
W/ DAYLIGHT HARVESTING DIMMING



3 IT GROUND BAR DETAIL

LYLE·COOK·MARTIN
ARCHITECTS
310 Franklin Street / Clarksville, TN 37040
TEL 931.552.4771/ EMAIL mduncan@lylecookmartin.com

NEW FT. CAMPBELL NATIONAL GUARD READINESS CENTER
SBC PROJECT # 368/014-01-2021
DETAILS - ELECTRICAL

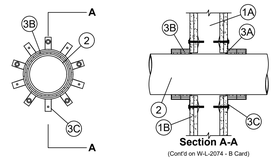
Project No.	1423
Issue Date	12-08-22
Drawn By	
Revision Date	
Revision Date	
Revision Date	

HNA ENGINEERING

E0.2
SHEET NO.

System No. W-L-2074

F Ratings - 1 and 2 Hr (See Item 1)
T Ratings - 3/4, 1 and 2 Hr (See Items 1 and 2)
L Rating At Ambient - Less Than 1 CFM/sq ft
L Rating At 400 F - Less Than 1 CFM/sq ft



Section A-A
(Cont'd on W-L-2074 - B Card)

1. **Wall Assembly -** The 1 or 2 h fire rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300, U400 or V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
   A. **Studs -** Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced 24 in. (610 mm) OC.
   B. **Gypsum Board* -** 5/8 in. (16 mm) thick, 4 ft (1.2 m) wide with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300, U400 or V400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 7 in. (178 mm).
   Except as noted in Item 2, the hourly F and T Ratings of the firestop system are equal to the hourly fire rating of the wall assembly in which it is installed.
2. **Through-Penetrants -** One nonmetallic pipe or conduit to be centered within the firestop system. A nom annular space of 1/8 to 1/4 in. (3 to 6 mm) is required within the firestop system. Pipe or conduit to be rigidly supported on both sides of wall assembly. The following types and sizes of nonmetallic pipes or conduit may be used:
   A. **Polyvinyl Chloride (PVC) Pipe -** Nom 6 in. (152 mm) diam (or smaller) Schedule 40 solid core or cellular PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
   B. **Flame Retardant Polypropylene (FRPP) Pipe -** Nom 6 in. (152 mm) diam (or smaller) Schedule 40 FRPP pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
   C. **Rigid Nonmetallic Conduit+ -** Nom 6 in. (152 mm) diam (or smaller) Schedule 40 PVC conduit installed in accordance with the National Electrical Code (NFPA No. 70.)
   D. **Chlorinated Polyvinyl Chloride (CPVC)Pipe -** Nom 6 in. (152 mm) diam (or smaller) SDR 13.5 CPVC pipe for use in closed (process or supply) piping systems.
   E. **Fiberglass Reinforced Pipe (FRP) -** Nom 6 in. (152 mm) diam (or smaller) glass fiber reinforced thermosetting resin pipe for use in closed (process or control) or vented (drain, waste or vent) piping systems. **When FRP pipe is used, T Rating is 3/4 hr.**

3. **Firestop System -** The firestop system shall consist of the following:
   A. **Fill, Void or Cavity Material* - Sealant -** Min 1/4 in. (6 mm) thickness of fill material applied within the annulus, flush with both surfaces of wall.
   SPECIFIED TECHNOLOGIES INC - SpecSeal 100, 101, 102, 105, 120 or 129 Sealant, SpecSeal LCI Sealant, Pensil 300 Sealant or SpecSeal Series SIL300 Sealant
   B. **Fill, Void or Cavity Material* - Wrap Strip -** Nom 1/8 or 3/16 in. (3.2 or 4.8 mm) thick intumescent material faced on both sides with a plastic film, supplied in 2 in. (51 mm) wide strips or nom 1/4 in. (6 mm) thick intumescent material faced on both sides with a plastic film, supplied in 1-1/2 in. (38 mm) wide strips. Two stacks of wrap strips, each consisting of three wrap strip layers, are individually wrapped around the through-penetrant with the ends buttted and held in place with masking tape. Butted ends in successive layers shall be aligned. Wrap strips are installed on each side of wall.
   SPECIFIED TECHNOLOGIES INC - SpecSeal BLU Wrap Strip, SpecSeal BLU2 Wrap Strip or SpecSeal RED Wrap Strip
   C. **Steel Collar -** Collar fabricated from coils of precut 0.022 in. (0.6 mm) thick (No. 26 MSG) galv sheet steel available from wrap strip manufacturer. Collar shall be min 3 in. (76 mm) deep with min six 1 in. (25 mm) wide by 2 in. (51 mm) long anchor tabs. Retainer tabs, 3/4 in. (19 mm) wide tapering down to 3/8 in. (10 mm) wide and located opposite the anchor tabs, are folded 90 degrees toward through-penetrant surface to maintain the annular space around the through-penetrant and to retain the wrap strips. Steel collar wrapped around wrap strips and through-penetrant with a 1 in. (25 mm) wide overlap along its perimeter joint and secured together by means of three No. 8 by 3/8 in. (10 mm) long steel screws. Wrap strip/steel collar assembly is slid along the through-penetrant until it abuts the surface of the wall. Steel collar tightened around wrap strips and through-penetrant using min 1/2 in. (13 mm) wide by 0.028 in. (0.7 mm) thick stainless steel hose clamp spaced 2 in. (51 mm) OC. Collar secured to wall by a min of six 1/8 in. (3.2 mm) diam by min 1-3/4 in. (45 mm) long molly bolts in conjunction with min 1/4 in. (6 mm) by 1-1/2 in. (38 mm) diam steel fender washers. Steel collar installed on each side of wall.
4. **Firestop Device* -** As an alternate to the wrap strip and the steel collar (Item Nos. 3B and 3C), a firestop device consisting of steel collar lined with an intumescent material sized to fit the specific diam of the nonmetallic through penetrant may be used. Device shall be installed in accordance with the installation instructions supplied with the product. The device shall be installed on the each side of the wall and secured to the wall with 1/8 in. (3.2 mm) diam by min 1-3/4 in. (45 mm) long steel molly bolts in conjunction with min 1-1/4 in. (32 mm) diam steel fender washers.

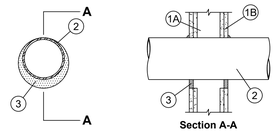
SPECIFIED TECHNOLOGIES INC - SpecSeal Firestop Collar, SpecSeal LCC Collar or SpecSeal SSC Collar. When SpecSeal LCC Collar or SpecSeal SSC Collar are used, the max annular space shall be 1/8 in. (3 mm) for max 2-1/2 in. (64 mm) diam pipe and shall be max 1/4 in. (6 mm) for pipe larger than 2-1/2 in. (64 mm) diam.

*Bearing the UL Classification Marking

+Bearing the UL Listing Mark

System No. W-L-1049

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Ratings - 1 and 2 Hr (See Item 1)	F Rating - 1 and 2 Hr (See Item 1)
T Rating - 0 Hr	FT Rating - 0 Hr
L Rating At Ambient - Less Than 1 CFM/sq ft	FH Rating - 1 and 2 Hr (See Item 1)
L Rating At 400 F - Less Than 1 CFM/sq ft	FTH Rating - 0 Hr
	L Rating At Ambient - Less Than 1 CFM/sq ft
	L Rating At 400 F - Less Than 1 CFM/sq ft



Section A-A

Wall Assembly - The 1 or 2 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300 or U400 Series Wall or Partition Design in the UL Fire Resistance Directory and shall include the following construction features:
A. **Studs -** Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 3-5/8 3-1/2 in. (89 mm) wide and spaced max 24 in. (610 mm) OC. When steel studs are used and the diam of opening exceeds the width of stud cavity, the opening shall be framed on all sides using lengths of steel stud installed between the vertical studs and screw-attached to the steel studs at each end. The framed opening in the wall shall be 4 to 6 in. (102 to 152 mm) wider and 4 to 6 in. (102 to 152 mm) higher than the diam of the penetrating item such that, when the penetrating item is installed in the opening, a 2 to 3 in. (51 to 76 mm) clearance is present between the penetrating item and the framing on all four sides.
B. **Gypsum Board* -** 5/8 in. (16 mm) thick, 4 ft (1.22 m) wide with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 26 in. (660 mm) for steel stud walls. Max diam of opening is 14-1/2 in. (368 mm) for wood stud walls.
The hourly F and FH Ratings of the firestop system are equal to the hourly fire rating of the wall assembly in which it is installed.

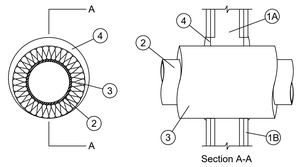
1A. **Metallic Sleeve -** (Optional, Not Shown) - Cylindrical sleeve fabricated from min 0.016 in. (0.41 mm) to max 0.105 in. (2.7 mm) thick sheet steel. Length of steel sleeve to be equal to the thickness of wall. Longitudinal seam of sleeve welded or overlapped min 1 in. (25 mm). The ends of the steel sleeve shall be flush or recessed max 1/4 in. (6 mm) from wall surfaces.

2. **Through Penetrant -** One metallic pipe, conduit or tubing to be installed either concentrically or eccentrically within the firestop system. Pipe, conduit or tubing may be installed at an angle not greater than 45 degrees from perpendicular. The annular space between pipe, conduit or tubing and periphery of opening shall be min 0 in. (0 mm, point contact) to max 2 in. (51 mm). For maximum 16 in. (406 mm) diam (or smaller) pipes, annular space shall be min 0 in. (0 mm, point contact) to max 2 in. (51 mm). Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
   A. **Steel Pipe -** Nom 36 in. (914 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
   B. **Iron Pipe -** Nom 36 in. (914 mm) diam (or smaller) cast or ductile iron pipe.
   C. **Conduit -** Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing, nom 6 in. (152 mm) diam (or smaller) steel conduit or nom 1 in. (25 mm) diam (or smaller) flexible steel conduit.
   D. **Copper Tubing -** Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tubing.
   E. **Copper Pipe -** Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.
3. **Fill, Void or Cavity Material* - Sealant -** Min 5/8 in. (16 mm) thickness of fill material applied within annulus, flush with both surfaces of wall. At the point contact location between through penetrant and gypsum board, a min 3/8 in. (10 mm) diam bead of fill material shall be applied at the gypsum board/through penetrant interface on both surfaces of wall.
   SPECIFIED TECHNOLOGIES INC - SpecSeal Series SSS Sealant or SpecSeal LCI Sealant

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

System No. W-L-5014

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Ratings - 1 and 2 Hr (See Item 1)	F Ratings - 1 and 2 Hr (See Item 1)
T Rating - 1 Hr	FT Rating - 1 Hr
L Rating At Ambient - Less Than 1 CFM/sq ft	FH Ratings - 1 and 2 Hr (See Item 1)
L Rating At 400 F - Less Than 1 CFM/sq ft	FTH Rating - 1 Hr
	L Rating At Ambient - Less Than 1 CFM/sq ft
	L Rating At 400 F - Less Than 1 CFM/sq ft



Section A-A

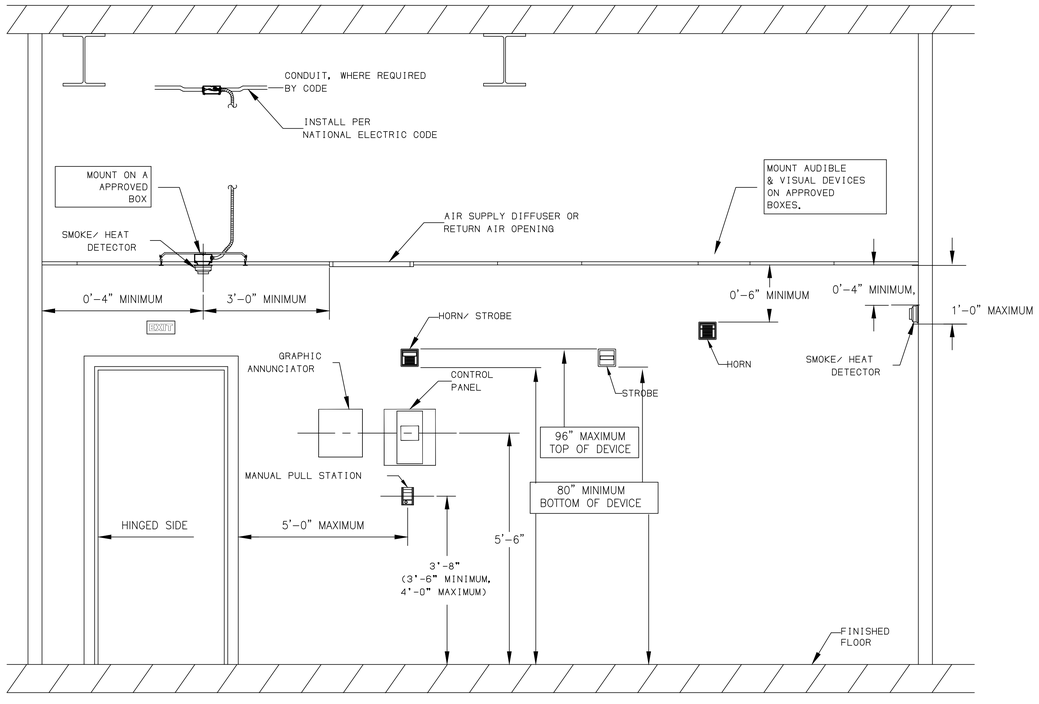
1. **Wall Assembly -** The 1 or 2 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300, U400 or V400 Series Wall and Partition Design in the UL Fire Resistance Directory and shall include the following construction features:
   A. **Studs -** Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced max 16 in. (406 mm) OC. Steel studs to be min 3-5/8 in. (92 mm) wide and spaced max 24 in. (610 mm) OC.
   B. **Gypsum Board* -** 5/8 in. (16 mm) thick, 4 ft (1.2 m) wide with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300, U400 or V400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 18 in. (457 mm).
   The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.

1A. **Metallic Sleeve -** (Optional, Not Shown) - Cylindrical sleeve fabricated from min 0.016 in. (0.41 mm) to max 0.105 in. (2.7 mm) thick sheet steel. Length of steel sleeve to be equal to the thickness of wall. Longitudinal seam of sleeve welded or overlapped min 1 in. (25 mm). The ends of the steel sleeve shall be flush or recessed max 1/4 in. (6 mm) from wall surfaces.

2. **Through Penetrants -** One metallic pipe or tubing to be installed either concentrically or eccentrically within the firestop system. Pipe or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes or tubing may be used:
   A. **Steel Pipe -** Nom 12 in. (305 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
   B. **Iron Pipe -** Nom 12 in. (305 mm) diam (or smaller) cast or ductile iron pipe.
   C. **Copper Tubing -** Nom 4 in. (102 mm) diam (or smaller) Type M (or heavier) copper tube.
   D. **Copper Pipe -** Nom 4 in. (102 mm) diam (or smaller) Regular (or heavier) copper pipe.
3. **Pipe Coverings* -** One of the following types of pipe coverings shall be used:
   A. **Pipe and Equipment Covering Materials* -** Max 2 in. (51 mm) thick hollow cylindrical heavy density (min 3.5 pcf or 56 kg/m3) glass fiber units jacketed on the outside with an all service jacket. Longitudinal joints sealed with metal fasteners or factory-applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product. The annular space between insulated penetrating item and the edge of the through opening shall be min 0 in. (point contact) to max 1-1/4 in. (32 mm).
   See **Pipe and Equipment Covering-Materials*** - (BRGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.
   B. **Pipe Covering Materials* -** Max 2 in. (51 mm) thick unfaced mineral fiber pipe insulation sized to the outside diam of pipe or tube. Pipe insulation secured with min 18 SWG steel wire spaced max 12 in. (305 mm) OC. The annular space between insulated penetrating item and the edge of the through opening shall be min 0 in. (point contact) to max 1-1/4 in. (32 mm).
   IG MINWOOL L L C - High Temperature Pipe Insulation 1200, High Temperature Pipe Insulation BWT or High Temperature Pipe Insulation Thermaloc.
   C. **Sheathing Material* -** Used in conjunction with Item 3B. Foil-scrim-kraft or all service jacket material shall be wrapped around the outer circumference of the pipe insulation (Item 3B) with the kraft side exposed. Longitudinal joints and transverse joints sealed with metal fasteners or butt tape.
   See **Sheathing Materials** (BVDV) category in the Building Materials Directory for names of manufacturers. Any sheathing material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.
4. **Fill, Void or Cavity Material* - Sealant -** Min 5/8 in. (16 mm) thickness of fill material applied within annulus, flush with both surfaces of wall. At point contact location between insulated through penetrant and gypsum board, a min 3/8 in. (10 mm) bead of fill material shall be applied to the insulated through penetrant/gypsum board interface on both sides of the wall.
   SPECIFIED TECHNOLOGIES INC - SpecSeal Series SSS Sealant or SpecSeal LCI Sealant

*Bearing the UL Classification Mark

NFPA 72 AND ADA DEVICE INSTALLATION REQUIREMENTS



HNA ENGINEERING

LYLE·COOK·MARTIN
ARCHITECTS
310 Franklin Street / Clarksville, TN 37040
TEL 931.552.4771 / EMAIL mduncan@lylecookmartin.com

NEW FT. CAMPBELL NATIONAL GUARD READINESS CENTER
SBC PROJECT # 368/014-01-2021

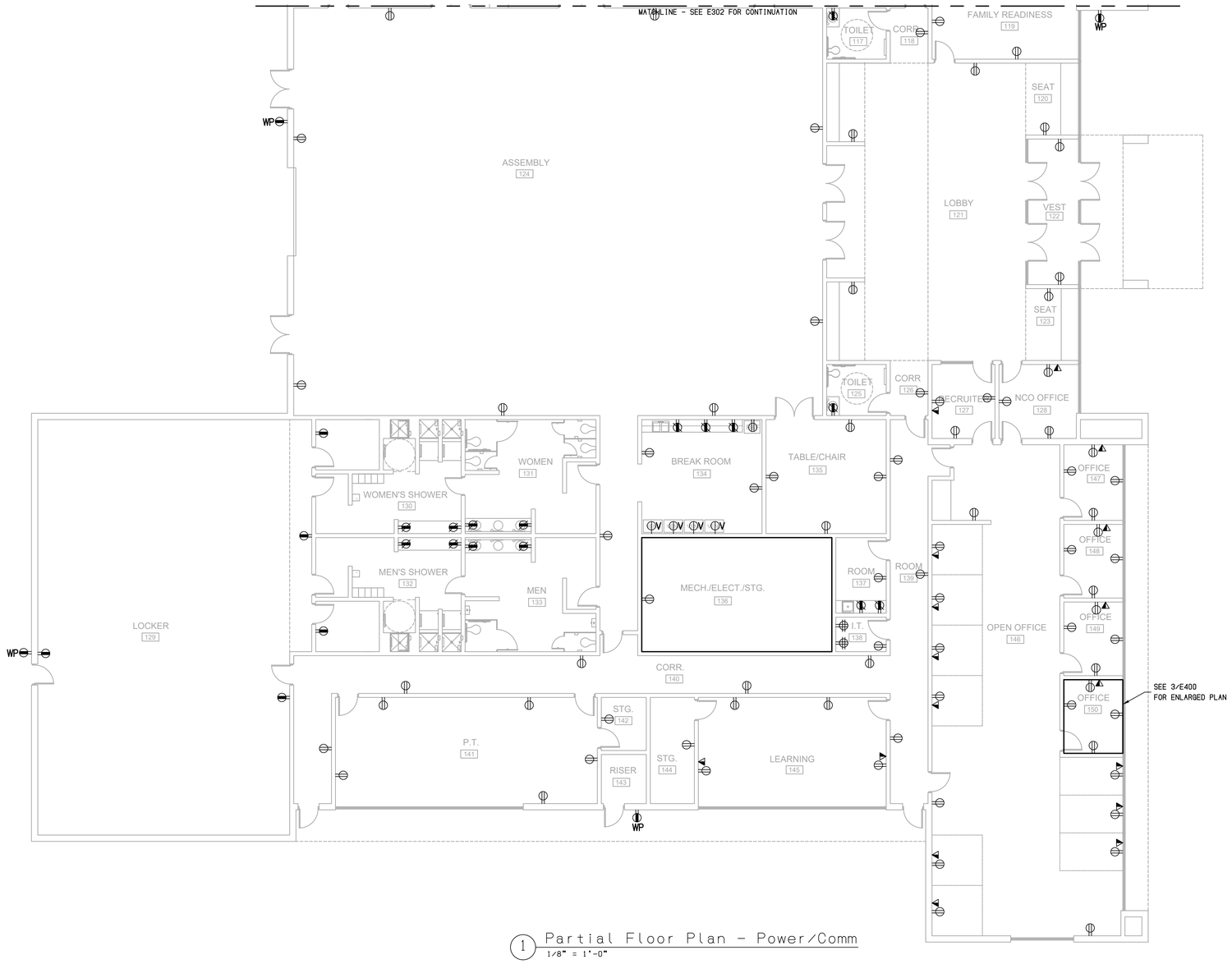
UL DETAILS - ELECTRICAL

Project No.	1423
Issue Date	12-08-22
Drawn By	
Revision Date	
Revision Date	
Revision Date	

E0.3
SHEET NO.

POWER NOTES

1. CONTRACTOR SHALL PROVIDE ALL CONNECTIONS AS REQUIRED FOR ALL MECHANICAL AND PLUMBING EQUIPMENT. COORDINATE EXACT REQUIREMENTS PRIOR TO ROUGH-IN.
2. CONTRACTOR SHALL VERIFY EXACT REQUIREMENTS OF ALL KITCHEN EQUIPMENT WITH VENDOR/OWNER PRIOR TO ROUGH-IN.
3. CONTRACTOR SHALL PROVIDE UPDATED, TYPE-WRITTEN PANEL SCHEDULES FOR ALL MODIFIED PANELS.
4. ALL KITCHEN RECEPTACLES TO BE GFCI UNLESS OTHERWISE INDICATED.



1 Partial Floor Plan - Power/Comm
1/8" = 1'-0"

LYLE·COOK·MARTIN
ARCHITECTS
310 Franklin Street / Clarksville, TN 37040
TEL 931.552.4771/ EMAIL mduncan@lylecookmartin.com

NEW FT. CAMPBELL NATIONAL GUARD READINESS CENTER
SBC PROJECT # 368/014-01-2021

Partial Floor Plan - Power & Comm. - Electrical

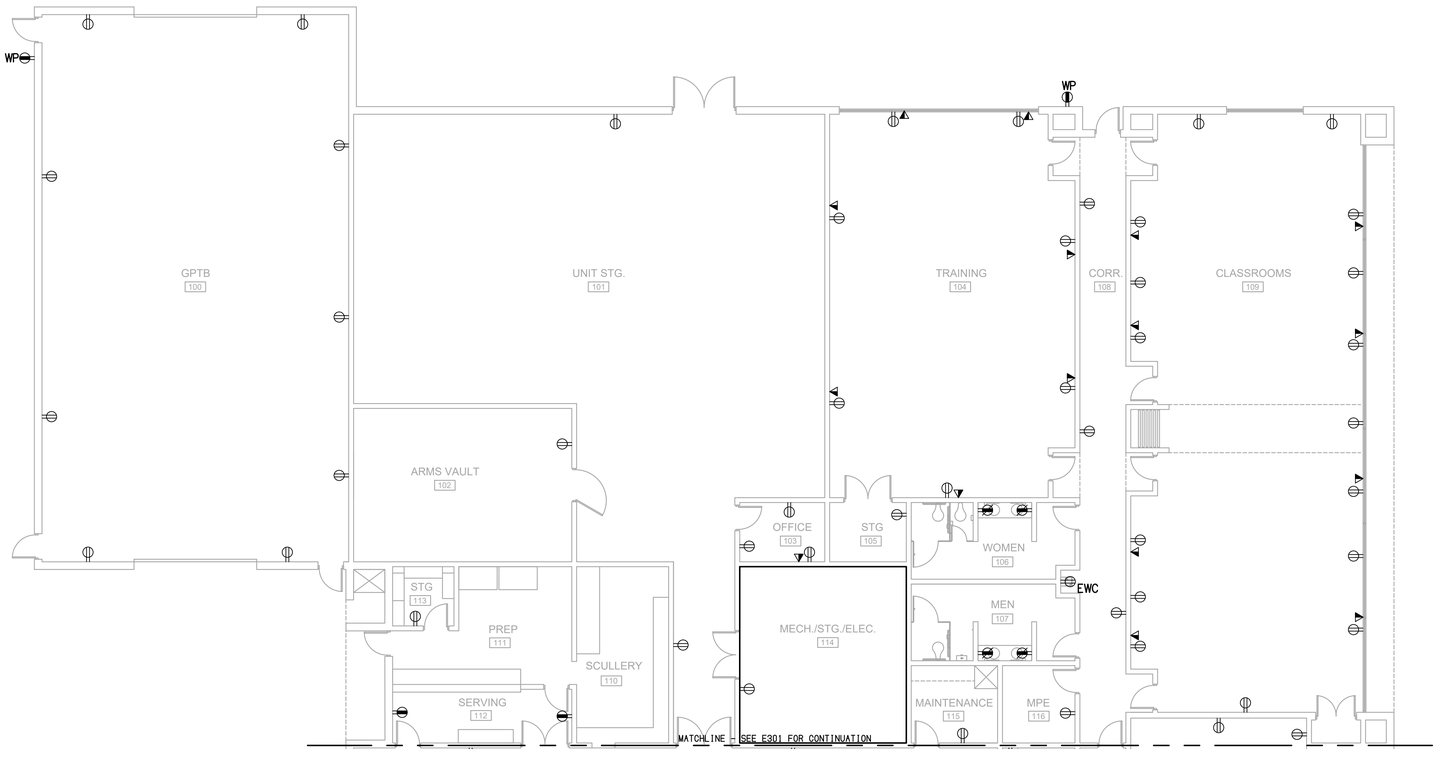
Project No.	1423
Issue Date	12-08-22
Drawn By	
Revision Date	
Revision Date	
Revision Date	

HNA ENGINEERING

E3.1
SHEET NO.

POWER NOTES

1. CONTRACTOR SHALL PROVIDE ALL CONNECTIONS AS REQUIRED FOR ALL MECHANICAL AND PLUMBING EQUIPMENT. COORDINATE EXACT REQUIREMENTS PRIOR TO ROUGH-IN.
2. CONTRACTOR SHALL VERIFY EXACT REQUIREMENTS OF ALL KITCHEN EQUIPMENT WITH VENDOR/OWNER PRIOR TO ROUGH-IN.
3. CONTRACTOR SHALL PROVIDE UPDATED, TYPE-WRITTEN PANEL SCHEDULES FOR ALL MODIFIED PANELS.
4. ALL KITCHEN RECEPTACLES TO BE GFCI UNLESS OTHERWISE INDICATED.



1 Partial Floor Plan - Power/Comm
1/8" = 1'-0"

LYLE·COOK·MARTIN
ARCHITECTS
310 Franklin Street / Clarksville, TN 37040
TEL 931.552.4771/ EMAIL mduncan@lylecookmartin.com

NEW FT. CAMPBELL NATIONAL GUARD READINESS CENTER
SBC PROJECT # 368/014-01-2021

Partial Floor Plan - Power & Comm. - Electrical

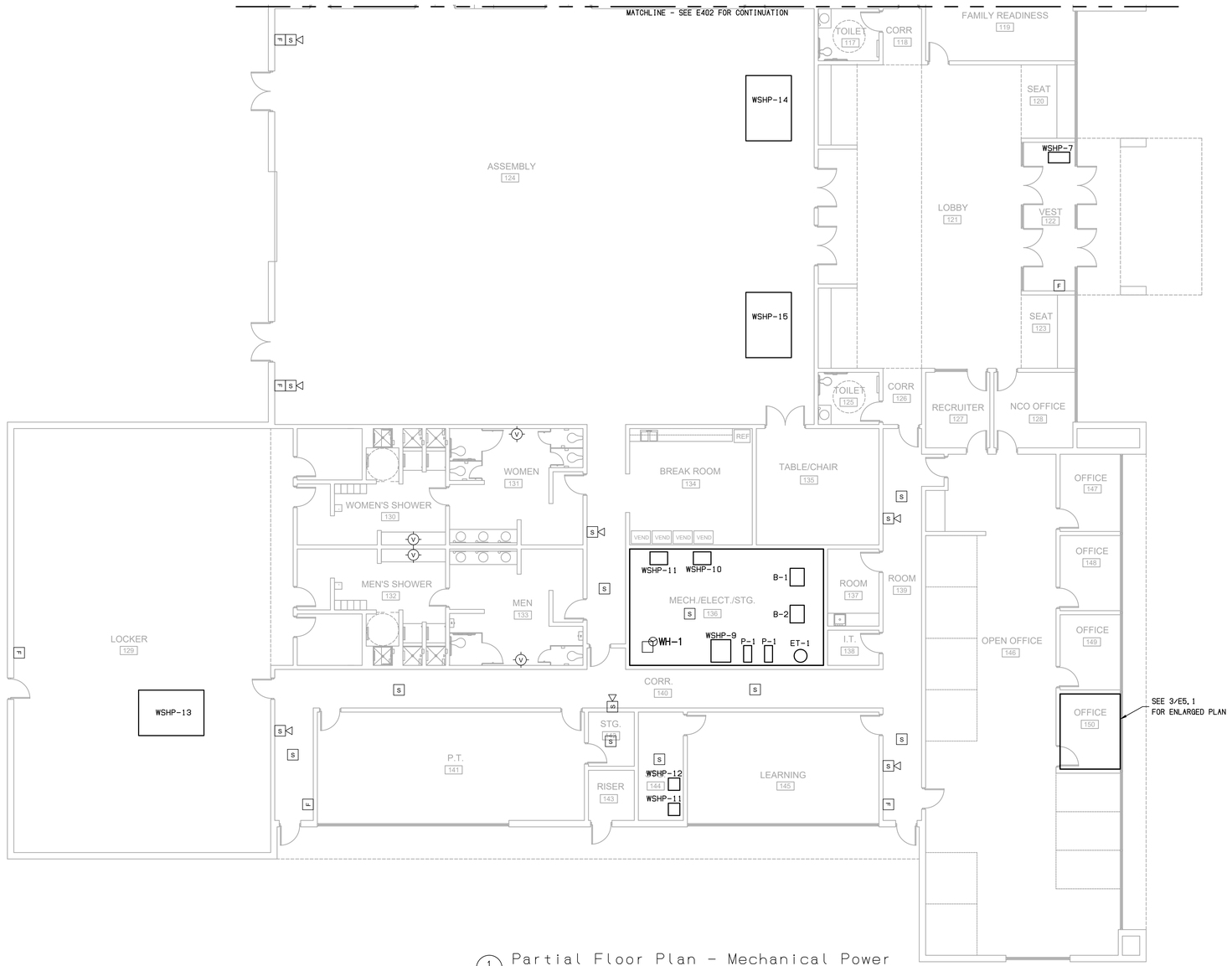
Project No.	1423
Issue Date	12-08-22
Drawn By	
Revision Date	
Revision Date	
Revision Date	

HNA ENGINEERING

E3.2
SHEET NO.

POWER NOTES

1. CONTRACTOR SHALL PROVIDE ALL CONNECTIONS AS REQUIRED FOR ALL MECHANICAL AND PLUMBING EQUIPMENT. COORDINATE EXACT REQUIREMENTS PRIOR TO ROUGH-IN.
2. CONTRACTOR SHALL PROVIDE UPDATED, TYPE-WRITTEN PANEL SCHEDULES FOR ALL MODIFIED PANELS.



1 Partial Floor Plan - Mechanical Power
1/8" = 1'-0"

LYLE·COOK·MARTIN
ARCHITECTS
310 Franklin Street / Clarksville, TN 37040
TEL 931.552.4771/ EMAIL mduncan@lylecookmartin.com

NEW FT. CAMPBELL NATIONAL GUARD READINESS CENTER
SBC PROJECT # 368/014-01-2021

Partial Floor Plan - Mechanical Power - Electrical

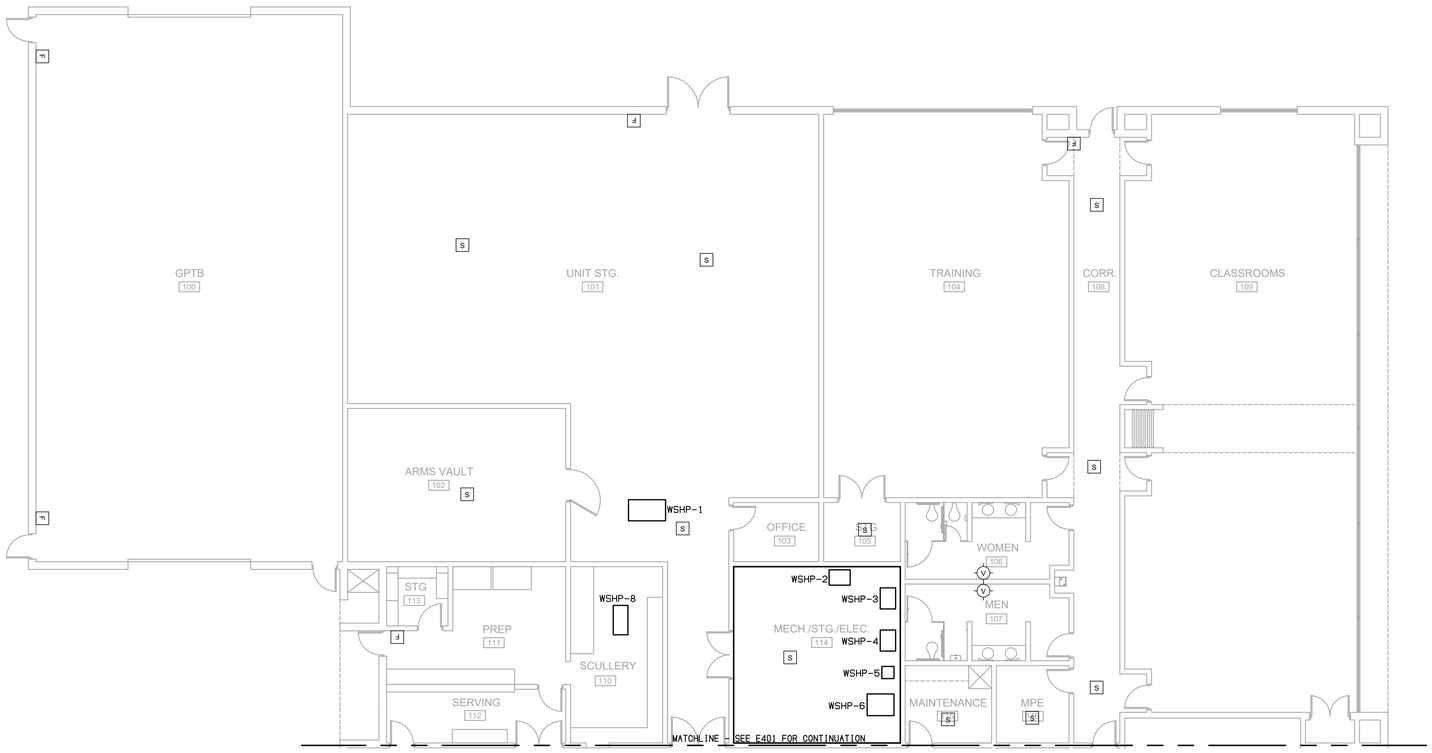
Project No.	1423
Issue Date	12-08-22
Drawn By	
Revision Date	
Revision Date	
Revision Date	

HNA ENGINEERING

E4.1
SHEET NO.

POWER NOTES

1. CONTRACTOR SHALL PROVIDE ALL CONNECTIONS AS REQUIRED FOR ALL MECHANICAL AND PLUMBING EQUIPMENT. COORDINATE EXACT REQUIREMENTS PRIOR TO ROUGH-IN.
2. CONTRACTOR SHALL PROVIDE UPDATED, TYPE-WRITTEN PANEL SCHEDULES FOR ALL MODIFIED PANELS.



1 Partial Floor Plan - Mechanical Power
1/8" = 1'-0"

LYLE·COOK·MARTIN
ARCHITECTS
310 Franklin Street / Clarksville, TN 37040
TEL 931.552.4771/ EMAIL mduncan@lylecookmartin.com

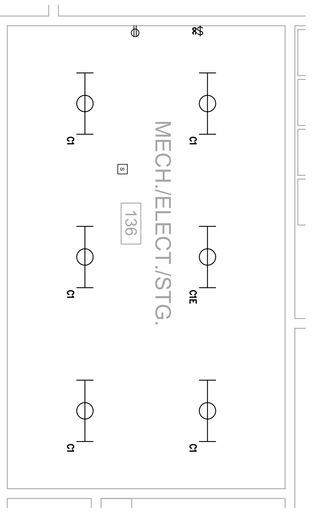
NEW FT. CAMPBELL NATIONAL GUARD READINESS CENTER
SBC PROJECT # 368/014-01-2021

Partial Floor Plan - Mechanical Power - Electrical

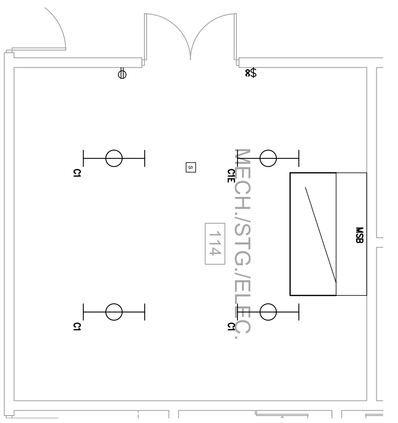
Project No.	1423
Issue Date	12-08-22
Drawn By	
Revision Date	
Revision Date	
Revision Date	

HNA ENGINEERING

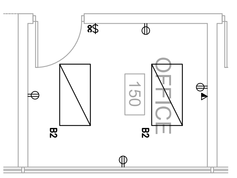
E4.2
SHEET NO.



1 Enlarged Mech/Elec. - Electrical
1/4" = 1'-0"



2 Enlarged Mech/Elec. - Electrical
1/4" = 1'-0"



3 Enlarged Office - Electrical
1/4" = 1'-0"

HNA ENGINEERING

E5.1
SHEET NO.

Project No.	1423
Issue Date	12-08-22
Drawn By	
Revision Date	
Revision Date	
Revision Date	

NEW FT. CAMPBELL NATIONAL GUARD READINESS CENTER
SBC PROJECT # 368/014-01-2021

Enlarged Plans - Electrical

LYLE·COOK·MARTIN
ARCHITECTS
310 Franklin Street / Clarksville, TN 37040
TEL 931.552.4771/ EMAIL mduncan@lylecookmartin.com