SYMBOLS - COMMUNICATION PLANS

OUTSIDE PLANT PLANS, DIAGRAMS

MH — NEW MAINTENANCE VAULT. SEE DETAILS ON SHEET T0501

MH — EXISTING MAINTENANCE VAULT.

HH — EXISTING UTILITY HAND HOLE.

NEW COMMUNICATION DUCTBANK

— COM ——— COM — EXISTING COMMUNICATION DUCTBANK

— CATV——— CATV— EXISTING CABLE TV/UTILITY DUCTBANK

EXISTING DUCTBANK TO BE REMOVED. SYSTEM TYPE SHOWN BY SPECIFIC LINE TYPE ON PLAN SHEET.

SPLICE CASE SYMBOL
- CSC-## = COPPER SPLICE CASE ID
- FSC-## = FIBER SPLICE CASE ID

WIRING RACEWAY TYPES

EXPOSED CONDUIT - SINGLE LINE

CONCEALED CONDUIT - SINGLE LINE

CONDUIT ROUTED VERTICALLY

CONDUIT ROUTED HORIZONTALLY/PDS CONDUIT. SIZES AS SHOWN.

OUTLETS

- SEE SCHEDULE AND DETAILS ON SHEETS T-501 FOR COMMUNICATION OUTLET INFORMATION

1 — COMMUNICATION OUTLET MOUNTED 18" AFF UON.

1 — COMMUNICATIONS OUTLET MOUNTED TO STRUCTURAL STEEL IN OPEN AREAS OR ABOVE CEILINGS. UON. FOR WIRELESS ACCESS POINTS

COMMUNICATIONS GENERAL INFORMATION

1 (OR) 1

FACEPLATE TYPE (REFER TO COMM DETAILS ON SHEET T-501 FOR FACEPLATE TYPE DESCRIPTIONS)

OUTLETS WITH ELECTRICAL RECEPTACLES

- SEE COMMUNICATIONS OUTLET DETAILS FOR POWER AND COMMUNICATIONS REQUIREMENTS
- BOX AND CONDUIT PROVIDED AS PART OF ELECTRICAL SCOPE OF WORK

CEILING MOUNTED

1 — FLOORBOX RECESSED POWER/COMM

FPD — RECESSED POWER/COMM

FPD — SURFACE POWER/COMM

CABLE TRAY

- MOUNTING HEIGHT AND SIZE AS INDICATED ON PLANS

TELECOMMUNICATIONS WIRE BASKET CABLE TRAY - COMPLY WITH TIA-607 GROUNDING AND BONDING REQUIREMENTS

TELECOMMUNICATION LADDER STYLE CABLE RUNWAY - COMPLY WITH TIA-607 GROUNDING AND BONDING REQUIREMENTS

COMM ROOM EQUIPMENT

COMMUNICATIONS RACK

COMMUNICATIONS CABINET

TELECOMMUNICATIONS MAIN GROUND BAR (TMGB)
- TGB SIMILAR
- SEE DETAIL B2 ON SHEET EG501

FIRE RATED PLYWOOD BACKBOARD ALONG WALL AS SHOWN ON PLANS. PAINTING NOT REQUIRED.

CONDUIT INTO ROOM FROM FLOOR BELOW
- 4" UON
- PROVIDE PROTECTIVE BUSHING AT BOTH ENDS

SYMBOLS - COMMUNICATION PLANS (CONT.)

COMMUNICATIONS DEVICES

J — JUNCTION BOX, CEILING

J — JUNCTION BOX, WALL

S — 8" ROUND CEILING LOUDSPEAKER

H — WALL MOUNT HORN LOUDSPEAKER

SECURITY DEVICE GENERAL INFORMATION

A1 — DOOR SECURITY HARDWARE CALLOUT. SEE TY500 SERIES SHEETS FOR DETAILS.

SECURITY CAMERA (BY OTHERS) SHOWN FOR REFERENCE ONLY

⊥ = WALL MOUNT WHERE APPLICABLE

(= PTZ WHERE APPLICABLE

DM — DUAL TECHNOLOGY MOTION DETECTOR

PM — PASSIVE INFRARED MOTION DETECTOR

SYMBOLS - COMMUNICATION RISERS / ONE-LINES / ELEVATIONS

S — 8" ROUND CEILING LOUDSPEAKER

H — WALL MOUNT HORN LOUDSPEAKER

SYMBOL MODIFIERS

AC	ABOVE COUNTER MOUNTING
FPD	FLAT PANEL DISPLAY
POLE	COMMUNICATIONS AND POWER POLE FROM CEILING TO SYSTEMS FURNITURE
PROJ	PROJECTOR
R	EXISTING RACEWAY AND JUNCTION BOX TO REMAIN AND TO BE RE-USED.
SB	SMART BOARD
TV	TELEVISION
XX" AFF	MOUNT XX" AFF
XX"W X X"D	WIDTH AND DEPTH OF CABLE TRA
PHN	48" AFF FOR PHONE .
DDP	NETWORK CONNECTION FOR HVAC DDP CONTROL PANEL.
MTR	CONNECTION TO MEDIA CONVERTER IN NEAREST COMMUNICATIONS ROOM AS SHOWN.

OUTSIDE PLANT GENERAL NOTES:

1. EXISTING FACILITIES SHALL REMAIN OPERATIONAL FOR DURATION OF CONSTRUCTION. NEW TELECOMMUNICATIONS (OSP) DUCTBANKS AND FIBER OPTIC CABLING REQUIRED TO SUPPORT EXISTING FACILITIES SHALL BE IN PLACE PRIOR TO DEMOLITION.
2. CONTRACTOR SHALL LOCATE AND VERIFY ALL TELECOM SYSTEMS WITHIN THE IDENTIFIED AREAS PRIOR TO STARTING ANY WORK. ANY DISCREPANCIES BETWEEN INFORMATION SHOWN AND ACTUAL CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACTING OFFICER.
3. PROVIDE ALL MATERIALS, LABOR AND EQUIPMENT REQUIRED FOR A COMPLETE AND OPERATIONAL INSTALLATION. MATERIALS AND WORKMANSHIP SHALL FULLY COMPLY WITH THE REQUIREMENTS OF THE LATEST EDITION OF THE ARMY TECHNICAL CRITERIA FOR INSTALLATION INFORMATION INFRASTRUCTURE ARCHITECTURE (I3A), JOINT BASE LEWIS-MCCHORD NETWORK ENTERPRISE CENTER (NEC) STANDARDS, AND TIA STANDARDS.
4. DUCTS CLASSIFIED STUB-OUTS SHALL BE PLUGGED INSIDE THE MAINTENANCE HOLE OR BUILDING, TAGGED IDENTIFYING THEM AS STUB-OUTS AND CAPPED ON THE FAR END TO PREVENT SOLID AND WATER FROM ENTERING THE DUCT. A LOCATOR BALL SHALL BE PLACED AT THE STUB-OUT LOCATION.
5. EXISTING COMMERCIAL SERVICE PROVIDER COMCAST ARE PRESENT AND PROVIDING SERVICES TO SEVERAL BUILDINGS. COORDINATE CONSTRUCTION SCHEDULES WITH COMCAST TO MAINTAIN SERVICE DURING CONSTRUCTION. DEMOLISH ANY UNDERGROUND CABLES THAT ARE ABANDONED BY THE COMMERCIAL SERVICE PROVIDER.
6. TELECOM MANHOLES SHALL BE UTILITY VAULT OR APPROVED EQUAL AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND IN ACCORDANCE WITH THE I3A AND TIA STANDARDS. MANHOLES SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 7000 PSI AT 28-DAYS, MEET AASHTO H-20 LOADING, INCLUDE GALVANIZED EMBEDDED PULLING IRONS IN EACH CORNER, TOP AND BOTTOM, INCLUDE FOUR GALVANIZED C-CHANNELS ON EACH LONGITUDINAL SIDE, AND SHALL BE EQUIPPED WITH PVC DUCT TERMINATIONS AT ALL POINTS OF ENTRY. PROVIDE GROUNDING AND BONDING PER I3A CRITERIA. NOTIFY NEC 48-HOURS PRIOR TO INSTALLATION OF MANHOLES TO OBTAIN APPROVAL ON ORIENTATION
7. INSTALL DUCTS IN MANHOLES AT THE LOWEST AVAILABLE DUCT POSITIONS TO ALLOW DUCTS TO BE PLACED ON TOP IF REQUIRED IN THE FUTURE. COORDINATE WITH POWER DUCT BANK INSTALLATION AND AVOID PLACEMENT OF DUCTS THAT WOULD PREVENT THE ABILITY TO INSTALL FUTURE DUCTS. TRANSITION DUCT BANKS FROM TRENCH DEPTH TO LOWER DUCT WINDOWS IN NO LESS THAN 30-LINEAR FEET TO MAINTAIN MINIMUM BEND RADIUS. COORDINATE WITH NEC FOR INSPECTION OF DUCT BANK INSTALLATION PRIOR TO ENCASING IN 3000 PSI REINFORCED CONCRETE. CONCRETE ENCASEMENT SHALL SURROUND DUCTS WITH NO VOIDS. ALL NEW DUCTS SHALL BE TESTED WITH A 12-INCH NON-FLEXIBLE MANDREL WITH A DIAMETER THAT IS 1/2" LESS THAN THE DUCT INSIDE DIAMETER FOR ALL DUCTS TOUCHED BY THIS PROJECT. ALL DUCTS, SUB-DUCTS AND INNERDUCTS SHALL BE SEALED IAW I3A.
8. PROVIDE A 20' SLACK LOOP OF FIBER OPTIC IN EACH MAINTENANCE HOLE WHERE CABLE IS PULLED THROUGH. PROVIDE 50' OF SLACK LOOP OF FIBER OPTIC CABLE ON EACH SIDE OF A SPLICE CASE IN EACH MAINTENANCE HOLE WHERE CABLE IS SPLICE.
9. ALL EXISTING MAINTENANCE HOLES THAT REQUIRE NEW SPLICES, OR THOSE WHERE EXISTING SPLICES ARE OPENED, SHALL BE BONDED AND GROUNDED. IF NO BONDING RIBBON AND GROUND ROD EXIST, THEY SHALL BE INSTALLED, AND ALL OTHER EXISTING SPLICE CASES SHALL BE BONDED AND GROUNDED.

LEGEND NOTES

1. SYMBOLS ORIENTATION DOES NOT IMPLY DEVICE OR EQUIPMENT ORIENTATION UNLESS NOTED AS SUCH. SEE REFLECTED CEILING PLANS FOR LIGHT FIXTURE POSITIONS AND ORIENTATIONS.
2. SYMBOL SIZE DOES NOT IMPLY EQUIPMENT SIZE, UON.
3. MOUNTING HEIGHT INDICATED IN LEGEND AND ON THE DRAWINGS SHALL BE THE DISTANCE MEASURED FROM THE CENTER OF THE DEVICE TO THE FINISHED FLOOR.
4. NOT ALL SYMBOLS ON THIS SHEET ARE USED AS PART OF THIS PROJECT.

INSIDE PLANT GENERAL NOTES:

1. BACKBONE CABLING SHALL BE INSTALLED IN AREA CABLE TRAYS AND BACKBONE CONDUITS AS SHOWN. BACKBONE CABLING SHALL NOT BE INSTALLED USING J-HOOKS OR ANY OTHER METHOD.
2. HORIZONTAL CABLING THROUGHOUT THE FACILITY SHALL NOT EXCEED 295 FEET PER EIA/TIA GUIDELINES. CONTRACTOR SHALL ROUTE PATHWAYS AND CABLES TO ENSURE THIS DISTANCE IS NOT EXCEEDED. CONTRACTOR SHALL NOTIFY COR PRIOR TO PATHWAY AND CABLE INSTALLATION IF THERE ARE AREAS WHERE THE EXPECTED DISTANCE MAY BE EXCEEDED.
3. HORIZONTAL CABLING SERVING WALL MOUNTED COMMUNICATIONS OUTLETS IN STANDARD WALLS SHALL BE ROUTED FROM COMMUNICATIONS OUTLET IN MINIMUM 1" CONDUIT FROM EACH COMMUNICATIONS OUTLET TO AREA CABLE TRAY, AND IN AREA CABLE TRAY TO DESIGNATED COMMUNICATION ROOM.
4. ALL CONDUITS SHALL BE CONCEALED UNLESS OTHERWISE NOTED ON PLAN. CONDUITS INSTALLED IN SPACES WITH CONCRETE OR CMU WALLS SHALL BE SURFACE MOUNTED.
5. ALL CABLING SHALL BE LABELED IN ACCORDANCE WITH EIA/TIA-606-B, LABELING STANDARD FOR NETWORKS.
6. USE WIDE BEND RADIUS CONDUITS FOR ALL CONDUITS CONTAINING COMMUNICATIONS CABLING TO FACILITATE CABLE PULLING.
7. ALL COMMUNICATION EQUIPMENT AND OUTLET INSTALLATION LOCATIONS SHALL BE COORDINATED WITH FURNITURE INSTALLATION.
8. COORDINATE PENETRATIONS IN FIRE RATED WALLS WITH DETAILS SHOWN ON ARCHITECTURAL SHEETS.
9. ALL PENETRATIONS IN WALLS, INCLUDING FIRE-RATED WALLS, SHALL CONFORM TO THE ARCHITECTURAL PENETRATION DETAILS ON ARCHITECTURAL SHEETS.
10. CONTRACTOR SHALL PROVIDE CONDUITS, BACKBOXES, AND PULL-STRINGS FOR GFGI EQUIPMENT. COORDINATE FINAL LOCATIONS OF CARD READERS, PASSIVE INFRA-RED SENSORS, AND LOCATION OF CONTROL PANELS WITH THE COR PRIOR TO SUBMITTING CONDUIT AND BACKBOX LOCATION SHOP-DRAWINGS FOR GOVERNMENT REVIEW.
11. MAINTAIN 12-INCHES CLEAR SPACE ABOVE CABLE TRAYS AND PROVIDE HORIZONTAL ACCESS TO CABLE TRAYS. BOTTOM OF TRAYS SHALL BE MOUNTED 3" MINIMUM ABOVE DROP CEILINGS TO ALLOW ROOM FOR REMOVAL AND REPLACEMENT OF CEILING TILES.
12. ALL BACKBONE CABLE RUNS SHALL HAVE 10' MAINTENANCE LOOPS AT BOTH ENDS. ALL HORIZONTAL CABLE RUNS SHALL HAVE 10' MAINTENANCE LOOPS AT THE TR END.
13. PROVIDE COMPLETE SEISMIC ANCHORAGE AND BRACING FOR THE LATERAL AND VERTICAL SUPPORT OF RACEWAYS AND EQUIPMENT FOR SEISMIC DESIGN CATEGORY D.
14. PROVIDE ALL MATERIALS, LABOR AND EQUIPMENT REQUIRED FOR A COMPLETE AND OPERATIONAL INSTALLATION. MATERIALS AND WORKMANSHIP SHALL FULLY COMPLY WITH THE REQUIREMENTS OF THE LATEST EDITION OF THE ARMY TECHNICAL CRITERIA FOR UFC 3-580-01, JOINT BASE LEWIS-MCCHORD NETWORK ENTERPRISE CENTER (NEC) STANDARDS, AND TIA STANDARDS.
15. INSTALL TELECOMMUNICATIONS PULL BOXES IN STRAIGHT SECTIONS OF CONDUIT. DO NOT USE BOXES IN LIEU OF SWEEPING BENDS. PROVIDE BOXES WHEN:
    1. RACEWAY SECTIONS INCLUDES (2) TWO OR MORE 90 DEGREE BENDS OR EQUIVALENT.
    2. LENGTH OF RACEWAY SECTION IS GREATER THAN 100 FEET.

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SEATTLE, WASHINGTON

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9400 WARD PARKWAY
KANSAS CITY, MO 64114

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FILE NAME: 110314_T0001
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RECORD NUMBER: 20s/141-83-04

FY20 SOF 22 STS OPERATIONS FACILITY, JOINT BASE LEWIS McCHORD, WA
PROJECT NO. PN PQWY083008

TELECOMMUNICATIONS GENERAL NOTES AND LEGEND

SHEET IDENTIFICATION
T0001

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ABBREVIATIONS

A	AMPERES
AC	ALTERNATING CURRENT
ACS	ACCESS CONTROL SYSTEM
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AFP	ABOVE FINISHED PLATFORM
AIC	AMPERES INTERRUPTING CAPACITY
AMP	AMPLIFIER
AV	AUDIO/VIDEO
AWG	AMERICAN WIRE GAUGE
BMS	BALANCED MAGENTIC SWITCH
BPOC	BUILDING POINT OF CONNECTION
C	CONDUIT
CAT	CATEGORY
CATV	CABLE TELEVISION
CBP	COPPER BACKBONE PATCH PANEL
CCTV	CLOSED CIRCUIT TELEVISION
CKT	CIRCUIT
CL	CENTERLINE
CO	COPIER
COMM	COMMUNICATIONS
COR	CONTRACTING OFFICER REPRESENTATIVE
CP	COMMUNICATIONS PANEL
CPP	COPPER HORIZONTAL PATCH PANEL
CSC	COPPER SPLICE CASE
CT	CABLE TRAY
Cu	COPPER
DC	DIRECT CURRENT
DDC	DIRECT DIGITAL CONTROLS
DDP	DYNAMIC DISPLAY PANEL
DLM	DIGITAL LIGHTING MANAGEMENT
DSS	DUCTLESS SPLIT SYSTEM
EC	EMPTY CONDUIT
ECU	EMERGENCY CONTROL UNIT
EF	EXHAUST FAN
EGC	EQUIPMENT GROUNDING CONDUCTOR
EIA	ELECTRONICS INDUSTRIES ASSOCIATIONS
EM/NL	EMERGENCY / NIGHT LIGHT
EMCS	ENERGY MANAGEMENT AND CONTROL SYSTEM
EMT	ELECTRICAL METALLIC TUBING
EPO	EMERGENCY POWER OFF
EX	EXISTING
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FBO	FURNISHED BY OTHERS
FO	FIBER OPTIC
FPD	FLAT PANEL DISPLAY
FPP	FIBER OPTIC PATCH PANEL
FPPB	FIBER PATCH PANEL (BACKBONE)
FR	FIRE RATED
FSC	FIBER SPLICE CASE
FSCP	FIRE SYSTEM CONTROL PANEL
FT	FEET OR FOOT
FTR	FIRE ALARM TRANSMITTER/TRANSCEIVER
G OR GND	GROUND
GB	GROUND BUSBAR
GFE	GOVERNMENT FURNISHED EQUIPMENT
GFGI	GOVERNMENT FURNISHED AND INSTALLED
GFI	GROUND FAULT INTERRUPTER
GFP	GROUND FAULT PROTECTION
GFR	GROUND FAULT RELAY
GRS	GALVANIZED RIGID STEEL CONDUIT
HH	HAND HOLE
HID	HIGH INTENSITY DISCHARGE
HOA	HAND-OFF-AUTO SWITCH
HZ	HERTZ
I.E.	FOR EXAMPLE
IDS	INTRUSION DETECTION SYSTEM
IG	ISOLATED GROUND
IN	INCANDESCENT
K	KILO
KCMIL	THOUSAND CIRCULAR MILS
KV	KILOVOLT AMPERES
KWH	KILOWATT HOURS
LC	LIGHTING CONTACTOR
LPI	LIGHTNING PROTECTION INSTALLER
LPS	LIGHTNING PROTECTION SYSTEM
LW	LOCKABLE WIREWAY
MAX	MAXIMUM
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MDP	MAIN DISTRIBUTION PANEL
MECH	MECHANICAL
MGB	MAIN GROUND BUSBAR
MH	MANHOLE
MLO	MAIN LUGS ONLY
MM	MULTIMODE
MN/PA	MASS NOTIFICATION/PUBLIC ADDRESS
MTD	MOUNTED
MTR	METER
N	NEUTRAL CONDUCTOR
N.C.	NORMALLY CLOSED
N.O.	NORMALLY OPEN
NAC	NOTIFICATION APPLIANCE CIRCUIT BOOSTER POWER SUPPLY
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NIPR	NON-CLASSIFIED INTERNET PROTOCOL ROUTING
NL	NIGHT LIGHT
NTS	NOT TO SCALE
OCC	OCCUPANCY SENSOR
P	POLE
PHN	PHONE
PIR	PASSIVE INFRARED
PIV	POST INDICATOR VALVE
PR	PAIR
PTS	PROTECTED TRANSMISSION SYSTEM
PVC	POLYVINYL CHLORIDE
RCP	REFLECTED CEILING PLAN
REX	REQUEST TO EXIT
RGS	RIGID GALVANIZED STEEL CONDUIT
RM	ROOM
RMC	RIGID METAL CONDUIT
SCCR	SHORT CIRCUIT CURRENT RATING
SM	SINGLE MODE
SPD	SURGE PROTECTIVE DEVICE
SPECS	CONTRACT SPECIFICATIONS
SPST	SINGLE POLE SINGLE THROW
SRG	STATIC REFERENCE GRID
STR	STRAND
SWBD	SWITCHBOARD
T	TRANSFORMER
TB	TELEPHONE BACKBOARD
TGB	TELECOMMUNICATIONS GROUND BUSBAR
TMGB	TELECOMMUNICATIONS MAIN GROUND BUSBAR
TR	TELECOMMUNICATIONS ROOM
TYP	TYPICAL
UL	UNDERWRITERS' LABORATORIES
UON	UNLESS OTHERWISE NOTED
UTP	UNSHIELDED TWISTED PAIR
V	VOLTS
VA	VOLT AMPERES
VFD	VARIABLE FREQUENCY DRIVE
VGA	VIDEO GRAPHICS ARRAY
VRC	VERTICAL RECIPROCATING CONVEYOR
W	WIRE OR WATT
WM	WIRE MANAGEMENT
WP	WEATHERPROOF
XFMR	TRANSFORMER
Z	IMPEDANCE

Cameras marked yellow.

Monitoring station marked green.

Camera locations are approximate.

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FY20 SOF 22 STS OPERATIONS FACILITY,
JOINT BASE LEWIS McCHORD, WA
PROJECT NO. PN POWY883008

TELECOMMUNICATIONS ABBREVIATIONS

SHEET IDENTIFICATION
T0002

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EXPIRES 12-31-20
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10/4/2019

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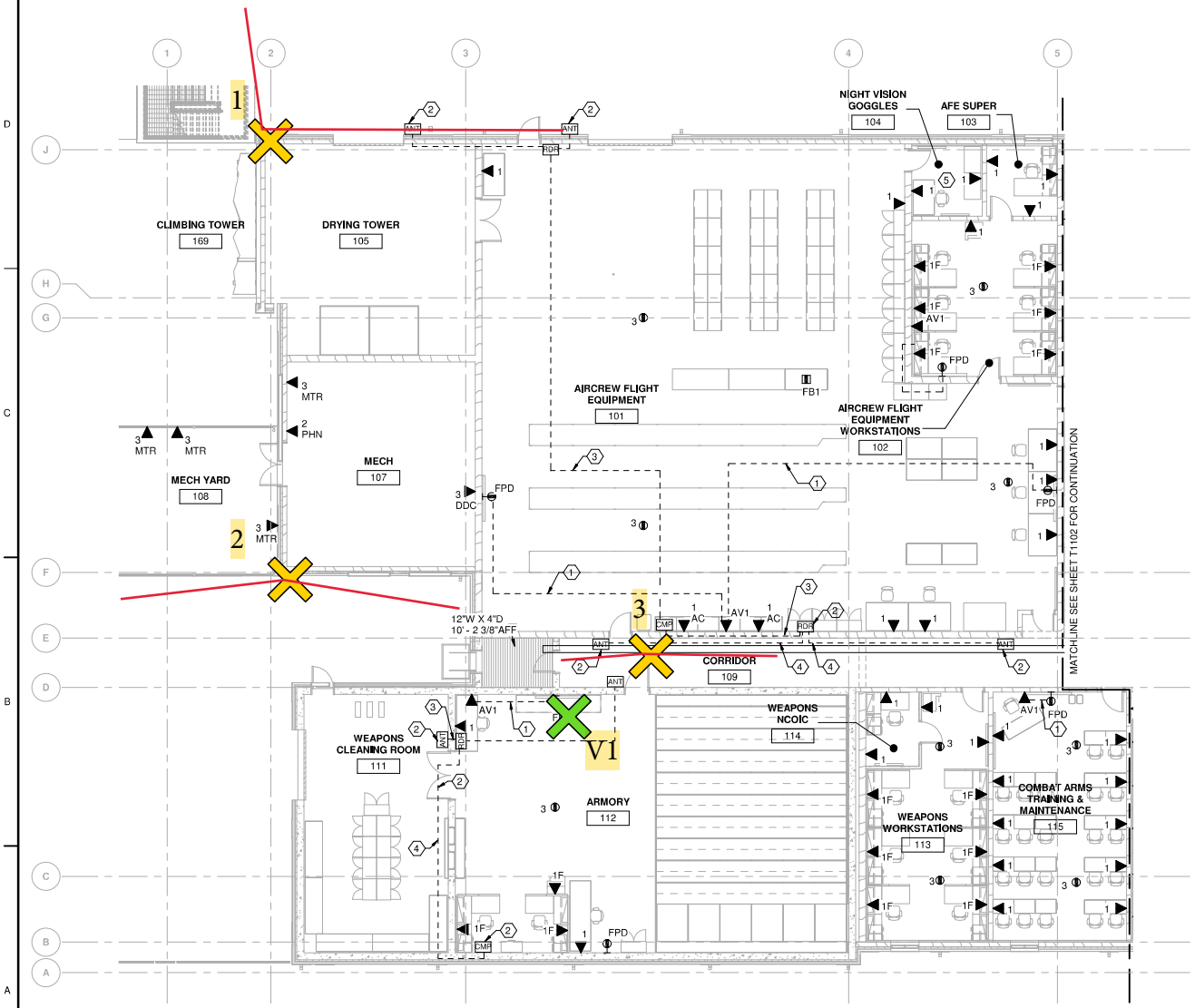

NOTES:

1. REFER TO SHEET T0001 AND T0002 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.
2. PROVIDE EXPANSION/FLEXIBLE CONNECTIONS WHERE CONDUITS CROSS EXPANSION JOINTS AND STRUCTURAL WALL GAPS. REFER TO ARCHITECTURAL SHEETS FOR LOCATIONS.
3. WELDED, BOLTED, SCREWED OR SHOT-IN ATTACHMENTS SHALL NOT BE PLACED WITHIN DRYING TOWER STRUCTURAL BRACING PROTECTED ZONES. SEE STRUCTURAL DRAWINGS FOR PROTECTED ZONE LOCATIONS.

KEYED NOTES:

1. PROVIDE REQUIRED CABLING AND CONDUIT FROM FLAT PANEL DISPLAY TO AV FACEPLATE OR FLOOR BOX LOCATION. SEE FACEPLATE DETAIL SHEET T4501 FOR MORE INFORMATION.
2. GFGI RFID ANTENNA, ROUTER AND COMPUTER.
3. PROVIDE 1" EMT CONDUIT FROM ANTENNA LOCATION TO ROUTER LOCATION FOR GFGI COAXIAL CABLE. COORDINATE FINAL LOCATION WITH RFID SYSTEM INSTALLATION.
4. PROVIDE 1" EMT CONDUIT AND (1) CATEGORY 6 NETWORK CABLE CONCEALED FROM ROUTER LOCATION TO DESKTOP COMPUTER LOCATION AS SHOWN FOR GFGI RFID SYSTEM. COORDINATE FINAL LOCATION WITH RFID SYSTEM INSTALLATION.
5. WALL PLATES IN THIS ROOM SHALL BE BLACK IN COLOR.

A1 TELECOMMUNICATIONS PLAN - GROUND LEVEL - AREA A
SCALE: 1/8" = 1'-0"

0 4' 8' 16'

N

KEY PLAN
NOT TO SCALE

US Army Corps of Engineers ®
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MARK	DESCRIPTION	DATE
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SEATTLE DISTRICT
SEATTLE, WASHINGTON

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FY20 SOF 22 STS OPERATIONS FACILITY,
JOINT BASE LEWIS McCHORD, WA
PROJECT NO. PN POWY0830092

TELECOMMUNICATIONS PLAN - GROUND FLOOR - AREA A

BICSI
TYSON Q BANKS
REG. No. 202296R
EXPIRES 12-31-20
10/4/2019

SHEET IDENTIFICATION
T1101

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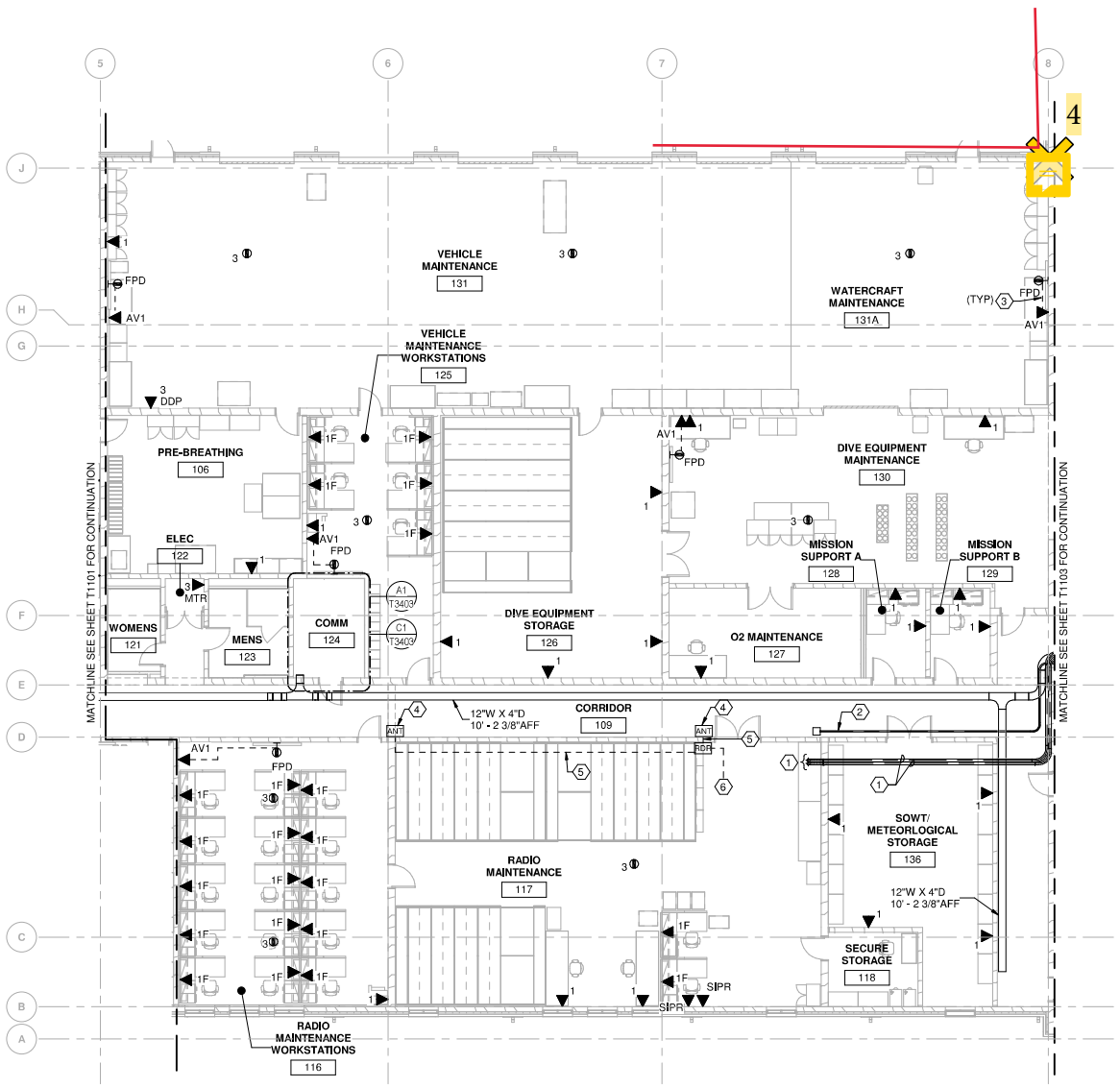


A1 TELECOMMUNICATIONS PLAN - GROUND LEVEL - AREA B

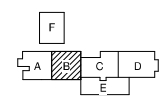
SCALE: 1/8" = 1'-0"

NOTES:

1. REFER TO SHEET T0001 AND T0002 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.
2. PROVIDE EXPANSION/FLEXIBLE CONNECTIONS WHERE CONDUITS CROSS EXPANSION JOINTS AND STRUCTURAL WALL GAPS. REFER TO ARCHITECTURAL SHEETS FOR LOCATIONS.

KEYED NOTES:

1. PROVIDE (2) 4" EMT CONDUITS FOR RADIO ANTENNA CABLE TO ROOF LOCATION. STUB CONDUITS 1' BELOW CEILING.
2. PROVIDE CATEGORY 2 EMT PDS PER CNSSI 7003.
3. PROVIDE REQUIRED CABLING AND CONDUIT FROM FLAT PANEL DISPLAY TO AV FACEPLATE OR FLOOR BOX LOCATION. SEE FACEPLATE DETAIL SHEET T4501 FOR MORE INFORMATION.
4. GFGI RFID ANTENNA, ROUTER AND COMPUTER.
5. PROVIDE 1" EMT CONDUIT FROM ANTENNA LOCATION TO ROUTER LOCATION FOR GFGI COAXIAL CABLE. COORDINATE FINAL LOCATION WITH RFID SYSTEM INSTALLATION.
6. PROVIDE 1" EMT CONDUIT AND (1) CATEGORY 6 NETWORK CABLE TO RFID SERVER IN ROOM 141. COORDINATE FINAL LOCATION WITH RFID SYSTEM INSTALLATION.



KEY PLAN

NOT TO SCALE

US Army Corps of Engineers ®
Seattle District

MARK	DESCRIPTION	DATE
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US ARMY CORPS OF ENGINEERS
SEATTLE DISTRICT
SEATTLE, WASHINGTON

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RECORD NUMBER: 208/141-83-04

FY20 SOF 22 STS OPERATIONS FACILITY, JOINT BASE LEWIS McCHORD, WA
PROJECT NO. PN POWY083008

TELECOMMUNICATIONS PLAN - GROUND FLOOR - AREA B

SHEET IDENTIFICATION
T1102

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A1 TELECOMMUNICATIONS PLAN - GROUND LEVEL - AREA C

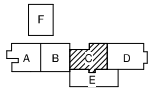
SCALE: 1/8" = 1'-0"

NOTES:

1. REFER TO SHEET T0001 AND T0002 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.
2. PROVIDE EXPANSION/FLEXIBLE CONNECTIONS WHERE CONDUITS CROSS EXPANSION JOINTS AND STRUCTURAL WALL GAPS. REFER TO ARCHITECTURAL SHEETS FOR LOCATIONS.

KEYED NOTES:

1. PROVIDE (2) 4" EMT CONDUITS FROM RADIO MAINTENANCE AREA TO ANTENNA ROOF LOCATION.
2. PROVIDE CATEGORY 2 EMT PDS PER CNSSI 7003.
3. PROVIDE REQUIRED CABLING AND CONDUIT FROM FLAT PANEL DISPLAY TO AV FACEPLATE OR FLOOR BOX LOCATION. SEE FACEPLATE DETAIL SHEET T4501 FOR MORE INFORMATION.



KEY PLAN

NOT TO SCALE

US Army Corps of Engineers ®
Seattle District

MARK	DESCRIPTION	DATE
0	RTA SUBMITTAL	OCT 2019

US ARMY CORPS OF ENGINEERS
SEATTLE DISTRICT
SEATTLE, WASHINGTON

BURNS & McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114

DESIGNED BY: T. BANKS
DRAWN BY: M. BAX
CHECKED BY: C. SAMBERN
SUBMITTED BY:
SIZE: 22" x 34"
FILE NAME: 110314_T1103
ISSUE DATE: OCTOBER 4, 2019
SOLICITATION NUMBER: W912DW20R0001
PROJECT NUMBER: PN PQWY083008 P2 468174
RECORD NUMBER: 208/141-83-04

FY20 SOF 22 STS OPERATIONS FACILITY, JOINT BASE LEWIS McCHORD, WA
PROJECT NO. PN PQWY083008

TELECOMMUNICATIONS PLAN - GROUND FLOOR - AREA C

SHEET IDENTIFICATION
T1103

BICSI
TYSON Q BANKS
REG. NO. 202296R
EXPIRES 12-31-20
RCDD
SIGNATURE
10/4/2019

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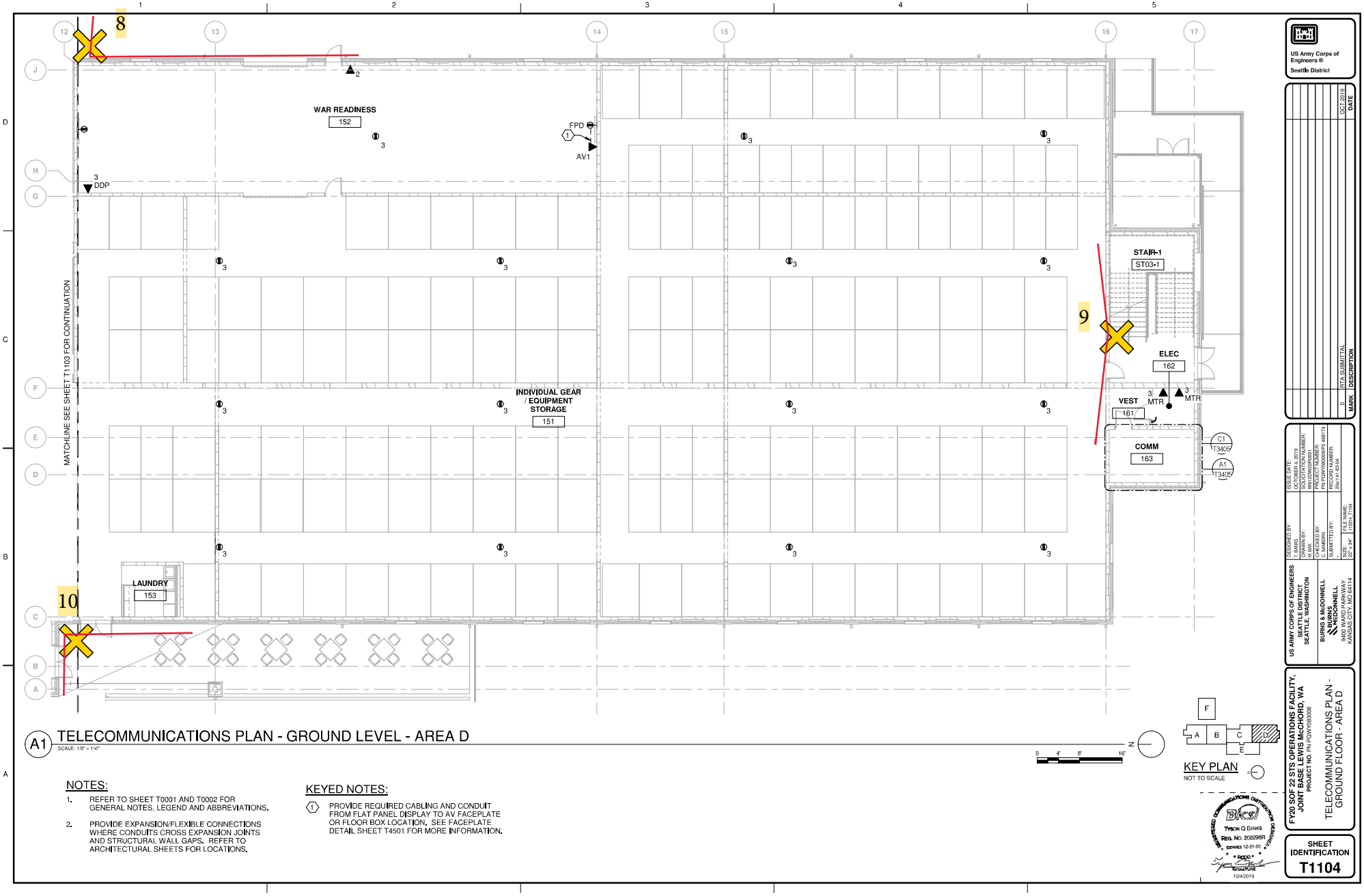
DATE: 10/1/2019 10:29:40 AM



A1 TELECOMMUNICATIONS PLAN - GROUND LEVEL - AREA D

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

NOTES:

1. REFER TO SHEET T0001 AND T0002 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.
2. PROVIDE EXPANSION/FLEXIBLE CONNECTIONS WHERE CONDUITS CROSS EXPANSION JOINTS AND STRUCTURAL WALL GAPS. REFER TO ARCHITECTURAL SHEETS FOR LOCATIONS.

KEYED NOTES:

(1) PROVIDE REQUIRED CABLING AND CONDUIT FROM FLAT PANEL DISPLAY TO AV FACEPLATE OR FLOOR BOX LOCATION. SEE FACEPLATE DETAIL SHEET T4501 FOR MORE INFORMATION.

KEY PLAN
NOT TO SCALE

US Army Corps of Engineers ®
Seattle District

MARK	DESCRIPTION	DATE
0	RTA SUBMITTAL	OCT 2019

US ARMY CORPS OF ENGINEERS
SEATTLE DISTRICT
SEATTLE, WASHINGTON

BURNS & MCDONNELL
BURNS MCDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114

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DRAWN BY: M. BAX
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SUBMITTED BY:
SIZE: 22" x 34"
FILE NAME: 110314_T1104

ISSUE DATE: OCTOBER 4, 2019
SOLICITATION NUMBER: W912DW20R0001
PROJECT NUMBER: 208174.0000.0000
PN PONYWB0009P2 468174
RECORD NUMBER: 20th H1 48134

FY20 SOF 22 STS OPERATIONS FACILITY, JOINT BASE LEWIS McCHORD, WA
PROJECT NO. PN PONYWB0008

TELECOMMUNICATIONS PLAN - GROUND FLOOR - AREA D

SHEET IDENTIFICATION
T1104

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TYSON Q BANKS
REG. NO. 202296R
EXPIRES 12-31-20
SIGNATURE
10/4/2019

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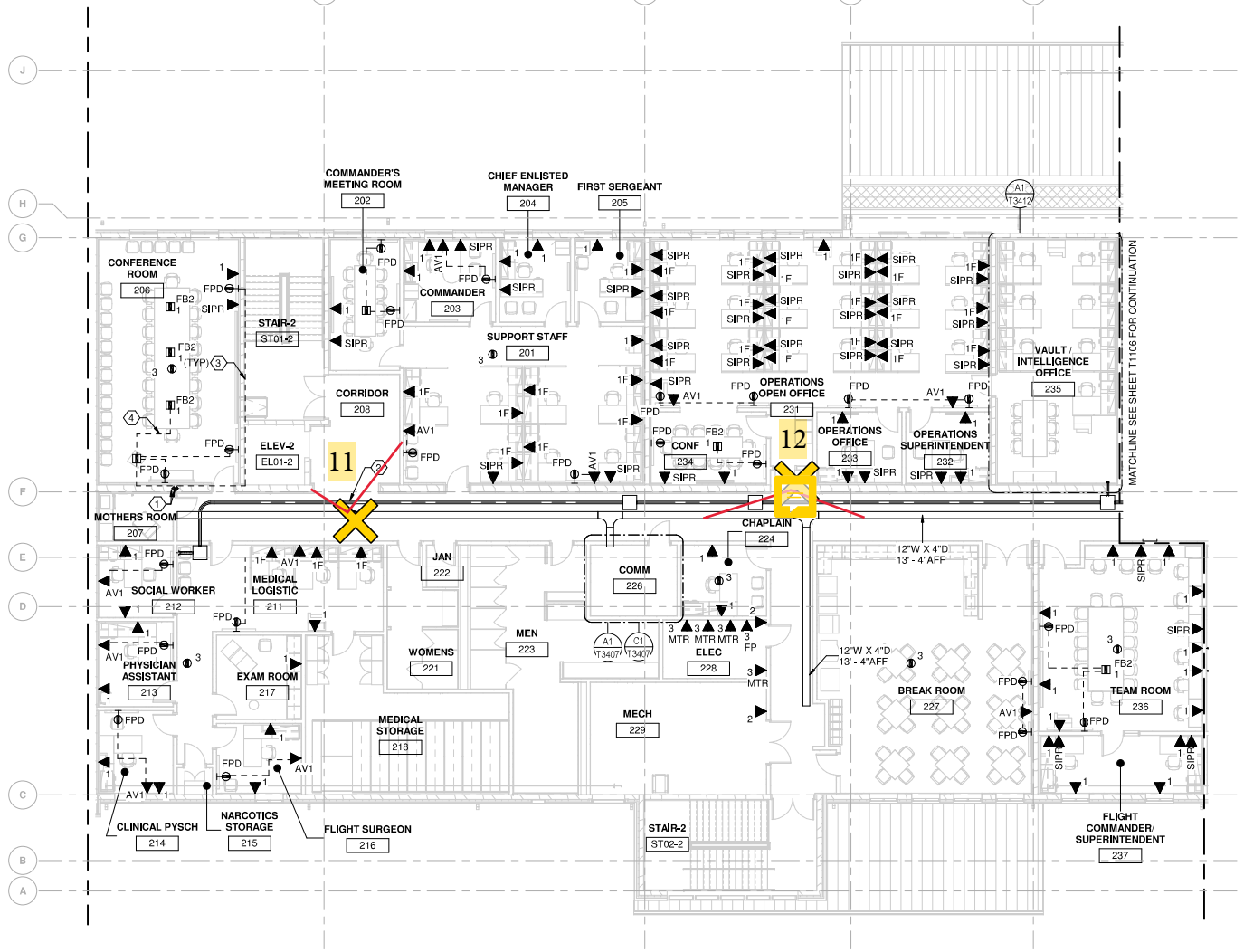


A1 TELECOMMUNICATIONS PLAN - SECOND FLOOR - AREA C

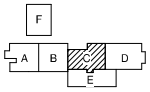
SCALE: 1/8" = 1'-0"

NOTES:

1. REFER TO SHEET T0001 AND T0002 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.
2. PROVIDE EXPANSION/FLEXIBLE CONNECTIONS WHERE CONDUITS CROSS EXPANSION JOINTS AND STRUCTURAL WALL GAPS. REFER TO ARCHITECTURAL SHEETS FOR LOCATIONS.

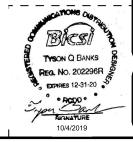
KEYED NOTES:

1. (2) 4" EMT CONDUITS FROM ROOF LOCATION TO RADIO ANTENNA ROOM ON GROUND LEVEL.
2. PROVIDE CATEGORY 2 EMT PDS PER CNSSI 7003.
3. PROVIDE REQUIRED CABLING AND CONDUIT FROM FLAT PANEL DISPLAY TO AV FACEPLATE OR FLOOR BOX LOCATION. SEE FACEPLATE DETAIL SHEET T4501 FOR MORE INFORMATION.
4. PROVIDE HDMI CABLE FROM CONTROLLER LOCATED IN PODIUM TO CONTROLLER LOCATED IN TABLE.



KEY PLAN

NOT TO SCALE



US Army Corps of Engineers ®
Seattle District

MARK	DESCRIPTION	DATE
0	RTA SUBMITTAL	OCT 2019

US ARMY CORPS OF ENGINEERS
SEATTLE DISTRICT
SEATTLE, WASHINGTON

BURNS & McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114

DESIGNED BY: T. BANKS
DRAWN BY: M. BAX
CHECKED BY: C. SABERIN
SUBMITTED BY:
SIZE: 22" x 34"
FILE NAME: 110314_T1105
ISSUE DATE: OCTOBER 4, 2019
SOLICITATION NUMBER: W912DW20R0001
PROJECT NUMBER: PN POWY083008P2 468174
RECORD NUMBER: 208/141-83-04

FY20 SOF 22 STS OPERATIONS FACILITY, JOINT BASE LEWIS McCHORD, WA
PROJECT NO. PN POWY083008

TELECOMMUNICATIONS PLAN - SECOND FLOOR - AREA C

SHEET IDENTIFICATION
T1105

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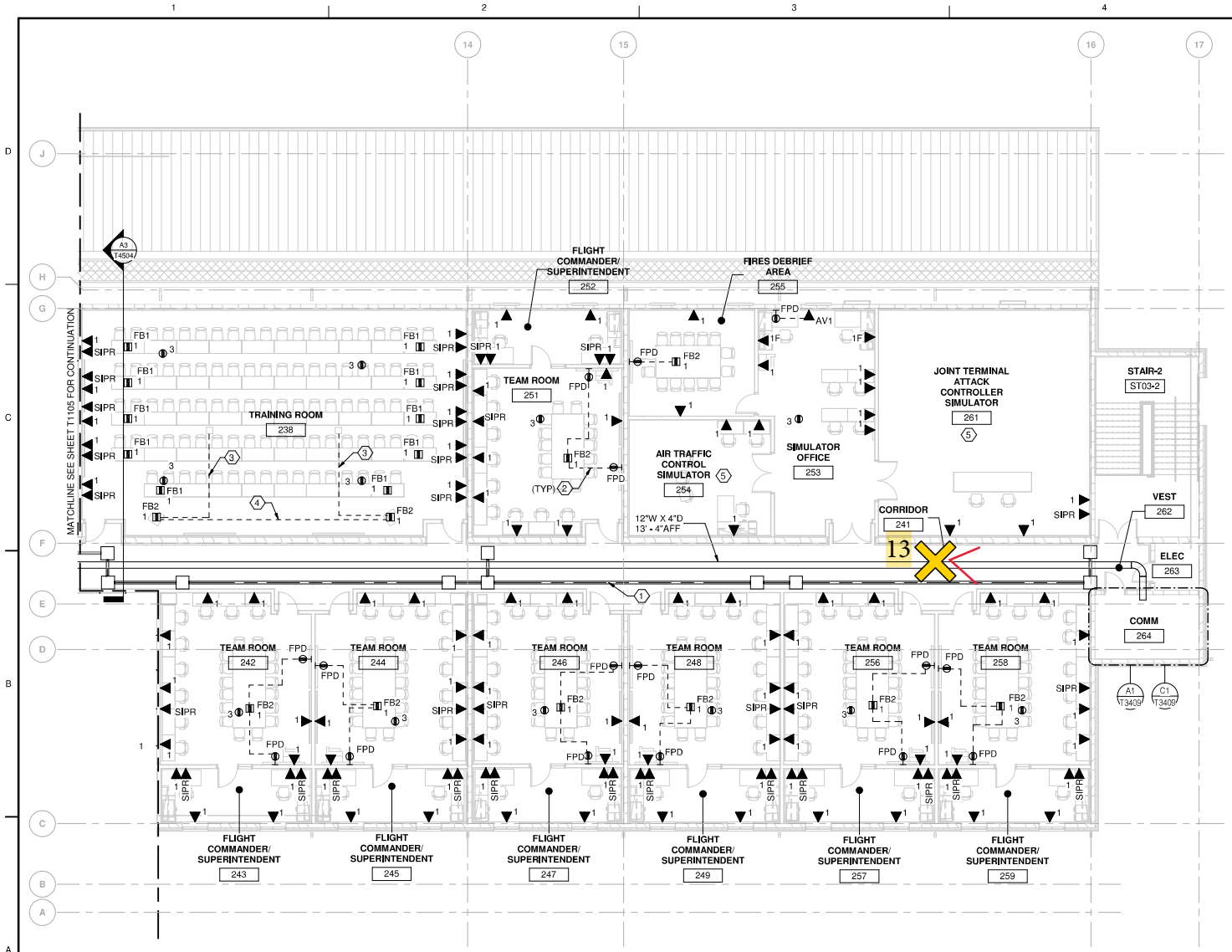
DATE: 10/1/2019 10:29:51 AM



A1 TELECOMMUNICATIONS PLAN - SECOND FLOOR - AREA D

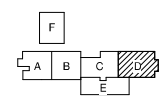
SCALE: 1/8" = 1'-0"

NOTES:

1. REFER TO SHEET T0001 AND T0002 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.
2. PROVIDE EXPANSION/FLEXIBLE CONNECTIONS WHERE CONDUITS CROSS EXPANSION JOINTS AND STRUCTURAL WALL GAPS. REFER TO ARCHITECTURAL SHEETS FOR LOCATIONS.

KEYED NOTES:

1. PROVIDE CATEGORY 2 EMT PDS PER CNSSI 7003.
2. PROVIDE REQUIRED CABLING AND CONDUIT FROM FLAT PANEL DISPLAY TO AV FACEPLAE OR FLOOR BOX LOCATION. SEE FACEPLATE DETAIL SHEET T4501 FOR MORE INFORMATION.
3. PROVIDE HDMI CABLE FROM OVERHEAD PROJECTORS LOCATED IN CEILING TO FLOOR BOX AS SHOWN.
4. PROVIDE CONDUIT BETWEEN FLOOR BOXES.
5. WALL PLATES IN THIS ROOM SHALL BE BLACK IN COLOR.



KEY PLAN

NOT TO SCALE

US Army Corps of Engineers ®
Seattle District

MARK	DESCRIPTION	DATE
0	RTA SUBMITTAL	OCT 2019

US ARMY CORPS OF ENGINEERS
SEATTLE DISTRICT
SEATTLE, WASHINGTON

BURNS & McDONNELL
BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114

DESIGNED BY: T. BANKS
DRAWN BY: M. BAX
CHECKED BY: C. SAMBRIN
SUBMITTED BY:
SIZE: 22" x 34"
FILE NAME: 110314_T1106
ISSUE DATE: OCTOBER 4, 2019
SOLICITATION NUMBER: W912DW20R0001
PROJECT NUMBER: PN PQWY083008P2 468174
RECORD NUMBER: 208/141-83-04

FY20 SOF 22 STS OPERATIONS FACILITY, JOINT BASE LEWIS McCHORD, WA
PROJECT NO. PN PQWY083008

TELECOMMUNICATIONS PLAN - SECOND FLOOR - AREA D

SHEET IDENTIFICATION
T1106

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI
TYSON Q BANKS
REG. NO. 202296R
EXPIRES 12-31-20
RCDD
SIGNATURE
10/4/2019

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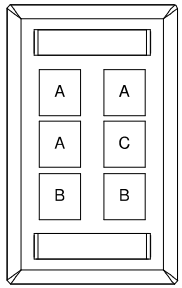
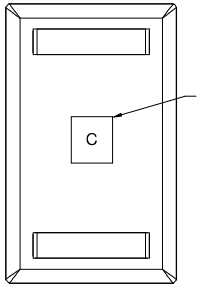


▼1 COMMUNICATIONS WALL FACEPLATE

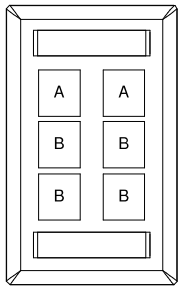
▼1F COMMUNICATIONS FURNITURE FACEPLATE

C1 COMM OUTLET TYPE 1
SCALE:NTS



▼2 COMMUNICATIONS WALL FACEPLATE

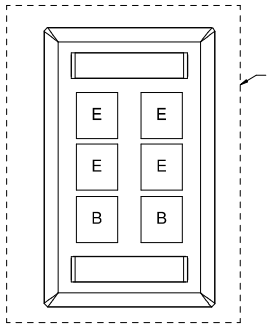
C2 COMM OUTLET TYPE 2
SCALE:NTS



◐3 COMMUNICATIONS CEILING FACEPLATE

▼3 COMMUNICATIONS WALL FACEPLATE

C3 COMM OUTLET TYPE 3
SCALE:NTS

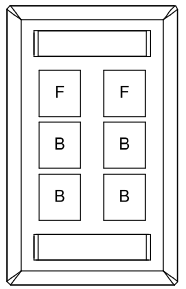


▼SIPR COMMUNICATIONS WALL FACEPLATE (MOUNTED AT 48" AFF UON.)

▼SIPR-F COMMUNICATIONS FURNITURE FACEPLATE (CABLING ROUTED WITHIN FURNITURE SYSTEM. PDS AND BOX NOT REQUIRED.)

NOTE:
1. SIPR NETWORK CABLING ROUTED IN PROTECTED DISTRIBUTION SYSTEM (PDS) AS INDICATED ON DRAWINGS FROM SIPR RACK TO SECURED AREA. SEE DETAIL A1 ON SHEET T4504 FOR DETAILED INFORMATION.

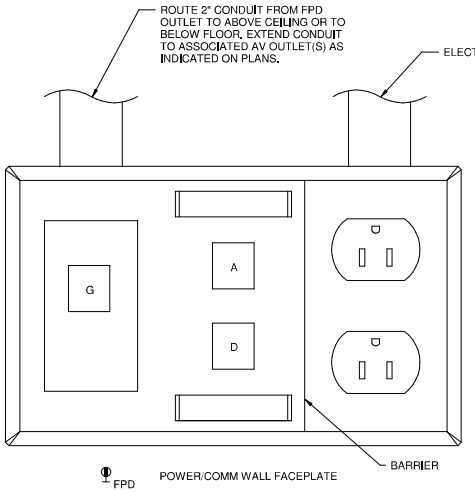
C4 COMM OUTLET TYPE SIPR
SCALE:NTS



▼JWIC COMMUNICATIONS WALL FACEPLATE

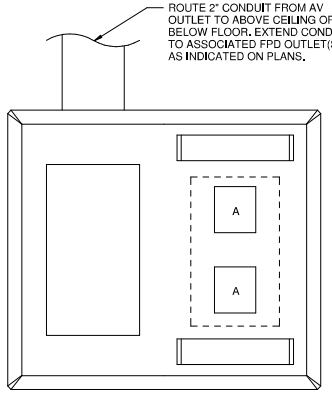
▼JWIC-F COMMUNICATIONS FURNITURE FACEPLATE

C5 COMM OUTLET TYPE JWIC
SCALE:NTS



FPD POWER/COMM WALL FACEPLATE

A1 COMM OUTLET TYPE FPD
SCALE:NTS



▼AV1 A/V WALL FACEPLATE

AV1 FLOORBOX WITH COMMUNICATIONS FACEPLATE

A2 COMM OUTLET TYPE AV1
SCALE:NTS

COMMUNICATIONS - MODULAR JACK AND CABLING FACEPLATE INFORMATION SCHEDULE

APPEARANCE	DESIGNATOR	MODULAR JACK	COLOR	CABLING	COLOR
	A	CAT 6 RJ-45 NON-KEYED DATA	BLUE	4-PAIR CATEGORY 6 UTP (COPPER PATCH PANEL)	BLUE
	B	BLANK INSERT	IVORY	NOT APPLICABLE	N/A
	C	CAT 6 RJ-45 NON-KEYED LEGACY TELEPHONE	IVORY	4-PAIR CATEGORY 6 UTP (110 BLOCK)	IVORY
	D	CATV F-TYPE CONNECTOR	BLACK	COAXIAL CABLING RG-6, NON-TERMINATED	BLACK
	E	SM FO SC-TYPE CONNECTOR SIPR	RED	2-STRAND SM FO CABLE SIPR (FIBER PATCH PANEL)	RED
	F	SM FO SC-TYPE CONNECTOR JWICS	YELLOW	2-STRAND SM FO CABLE JWICS (FIBER PATCH PANEL)	YELLOW
	G	HDMI	BLACK	HDMI	BLACK

NOTES:

1. SEE DRAWING T0001 AND T0002 FOR COMMUNICATIONS LEGEND, ABBREVIATIONS AND GENERAL NOTES.
2. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS.
3. CONTRACTOR SHALL INSTALL ALL CONDUITS WITH PULL STRINGS TO FACILITATE FUTURE CABLE ADDITIONS.
4. INSTALL FIBERMESH INNERDUCT WITHIN NEW CONDUITS WHERE FIBER OPTIC CABLING IS ROUTED.

BICSI
TYSON Q BANKS
REG. NO. 202296R
EXPIRES 12-31-20
10/4/2019

US Army Corps of Engineers ®
Seattle District

MARK	DESCRIPTION	DATE
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US ARMY CORPS OF ENGINEERS
SEATTLE DISTRICT
SEATTLE, WASHINGTON

DESIGNED BY: T. BANKS
DRAWN BY: M. BAK
CHECKED BY: C. BABERN

ISSUE DATE: OCTOBER 4, 2019
SOLICITATION NUMBER: W912DW22R0001
NWS CONTRACT NUMBER: PN POWY18S0003P2 468174
RECORD NUMBER: 29th HI 48144
SIZE: 22" x 34"
FILE NAME: 110314_T4501

BURNS & McDONNELL
SUBMITTED BY:
BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114

FY20 SOF 22 STS OPERATIONS FACILITY,
JOINT BASE LEWIS McCHORD, WA
PROJECT NO. PN POWY18S0008

TELECOMMUNICATIONS FACEPLATE DETAILS

SHEET IDENTIFICATION
T4501

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