# SECURITY FORCES ADMIN & STORAGE FACILITY
# ULYB112022
# 139th MISSOURI AIR NATIONAL GUARD
# ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

| | |
|---|---|
| MISSOURI AIR NATIONAL GUARD | OWNER |
| HTK ARCHITECTS, PA | ARCHITECT |
| KDK ENGINEERS | STRUCTURAL ENGINEER |
| LATIMER, SOMMERS & ASSOCIATES | MECHANICAL / ELECTRICAL ENGINEER |
| TERRACON | GEOTECHNICAL ENGINEER |

LOCATION MAP

NORTH

SHEET INDEX


INFORMATION

| | |
|---|---|
| G101 | TITLE SHEET |
| G102 | INFORMATION |
| G103 | CODE PLANS |

CIVIL

| | |
|---|---|
| C050 | EXISTING TOPOGRAPHY |
| C100 | SITE PLAN |
| C101 | SITE DETAILS |
| C102 | SITE DETAILS |
| C103 | SITE DETAILS |
| C104 | SITE DETAILS |
| C105 | SITE DETAILS |
| C200 | GRADING PLAN |
| C201 | ROAD PLAN & PROFILE |
| C300 | UTILITY PLAN |
| C301 | SEWER DETAILS |
| C302 | SEWER DETAILS |
| C303 | WATER DETAILS |
| C400 | EROSION CONTROL PLAN |
| C401 | SWPP DETAILS |
| C402 | SWPP DETAILS |
| C500 | BORING LOG MAP |

ARCHITECTURAL

| | |
|---|---|
| A101 | ARCHITECTURAL FLOOR PLAN |
| A201 | BUILDING ELEVATIONS |
| A301 | BUILDING SECTIONS |
| A302 | WALL SECTIONS |
| A401 | ROOF PLAN & DETAILS |
| A501 | DOOR, FRAME, & WINDOW SCHEDULES & DETAILS |
| A601 | REFLECTED CEILING PLANS |
| FE101 | FIXED EQUIPMENT ELEVATIONS |

STRUCTURAL

| | |
|---|---|
| S001 | GENERAL NOTES |
| S101 | FIRST FLOOR & FOUNDATION PLAN |
| S201 | CONCRETE SCHEDULE & DETAILS |

MECHANICAL

| | |
|---|---|
| ME101 | SITE PLAN - MECH/ELEC |
| ME102 | PARTIAL SITE PLAN - MECH/ELEC |
| ME103 | PHOTOMETRICS SITE PLAN |
| ME201 | SITE DETAILS |
| ME301 | BUILDING AUTOMATION SYSTEM DIAGRAMS |
| M101 | FLOOR PLAN - BELOW GRADE - PLUMBING |
| M102 | FLOOR PLAN - PLUMBING |
| M201 | FLOOR PLAN - HVAC |
| M202 | PARTIAL FLOOR PLAN - HVAC |
| M301 | MECHANICAL DETAILS & SCHEDULES |
| M302 | MECHANICAL SCHEDULES |

FIRE PROTECTION

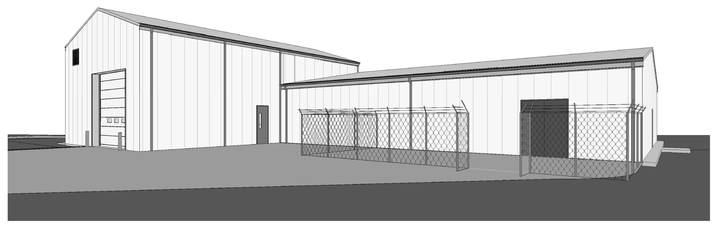
| | |
|---|---|
| FP101 | FLOOR PLAN - FIRE SPRINKLER |

ELECTRICAL

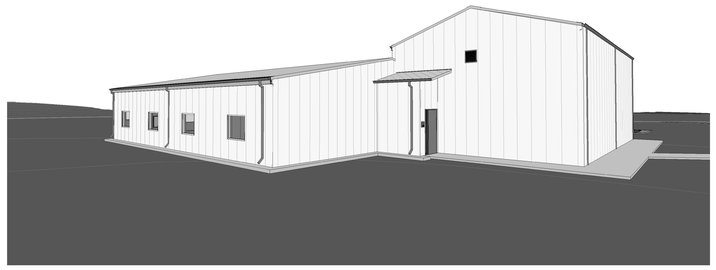
| | |
|---|---|
| E101 | FLOOR PLANS - POWER |
| E201 | FLOOR PLAN - LIGHTING |
| E301 | FLOOR PLAN - FIRE ALARM |
| E401 | ELECTRICAL DETAILS AND SCHEDULES |
| E402 | ELECTRICAL SCHEDULES |

TELECOM

| | |
|---|---|
| T101 | SITE PLAN - TELECOM |
| T102 | FLOOR PLANS - TELECOM |
| T103 | TELECOM DETAILS AND SCHEDULES |

VIEW FROM NORTH



VIEW FROM SOUTH


HTK ARCHITECTS PA
500 S. KANSAS AVE
TOPEKA, KANSAS 66612
P 785.266.5373
8300 W 110TH ST, STE 250
OVERLAND PARK, KANSAS 66210
P 913.663.5373
www.htkarchitects.net


STATE OF MISSOURI
CHARLES R. SMITH
NUMBER A-2007030589
ARCHITECT

DATE:
2014-07-24

REVISED DATE:

SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD

ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

SHEET CONTENTS:
TITLE SHEET

HTK PROJECT NUMBER:
ULYB112022
10008.01 - 0018

SHEET NUMBER:
G101

ORIGINAL CONTRACT DOCUMENTS

7/23/2014 2:19:28 PM C:\Users\jms\Documents\Security Forces Building_Central_jms.rvt

## GRAPHIC SYMBOLS

E / J — EXPANSION JOINT

C / J — CONTROL JOINT

F / C — FLOOR COVERING CHANGE

S / C — SAWCUT CONCRETE FLOOR JOINTS- REFERENCE STRUCTURAL DRAWINGS FOR COMPLETE LOCATIONS

100'-0" — NEW FINISH SPOT ELEVATIONS IN FEET AND INCHES (OR ON SITE PLAN IN FEET AND DECIMALS)

EX 100'-0" — EXISTING SPOT ELEVATION

NEW DOOR

EXISTING DOOR

D1 — DOOR MARK - REFERENCE DOOR AND FRAME SCHEDULE

LOCATION OF SYMBOL ON PAIR OF DOORS INDICATES THE ACTIVE LEAF

1 / A1.1 SIM — SECTION MARK-1 = DETAIL NUMBER; A1.1 = SHEET NUMBER

BUILDING SECTION

WALL SECTION

6 / A2.2 — INTERIOR ELEVATION MARKER: A2.2 = SHEET NUMBER; 6 = DETAIL NUMBER

A2.1 / 6 — BUILDING ELEVATION MARKER: A2.1 = SHEET NUMBER; 6 = DETAIL NUMBER

W1 — WOOD FRAME MARK - REFERENCE FRAME ELEVATIONS.

S1 — STEEL FRAME MARK - REFERENCE FRAME ELEVATIONS

A1 — ALUMINUM FRAME MARK - REFERENCE FRAME ELEVATIONS

M12A(3) — PARTITION MARK - REFERENCE PARTITION SCHEDULE ( ) INDICATES FIRE RATING OF WALL IN HOURS

TB - 4' MB - 6' — TB=4': TACKBOARD - 4' LENGTH.

MB=6': MARKER BOARD - 6' LENGTH. (NOTE: MOUNT BOTTOM @ 2'-6" A.F.F. U.N.O.)

TS: TACK STRIP

1 — PLAN NOTES

1 / A1.1 SIM — DETAIL MARKS: 1 = DETAIL NUMBER; A1.1 = SHEET NUMBER; SIM = SIMILAR

LEVEL 1 / 0'-0" — ELEVATION MARK IN FEET AND INCHES

I A1 □ B2 ○ C3 — COLUMN: A1= COLUMN NUMBER (IF NOT SHOWN, COLUMN NUMBER PER GRID)

B5 | B5 | B5 — CASEWORK DESIGNATION; NUMBER INDICATES UNIT NUMBER IDENTIFIED IN MANUFACTURED CASEWORK SCHEDULE. REFERENCE SPECIFICATIONS.

1 — EQUIPMENT OR FURNISHINGS SHOWN ON FLOOR PLANS. INDICATES FURNISHINGS BY OWNER (N.I.C.) ON FIXED EQUIPMENT PLANS

FURNITURE TAG, WHEN FURNITURE IS INCLUDED IN CONTRACT

MR - 4' — MR - 4': MAP RAIL 4'-0" MOUNT @ 8'-6" A.F.F.

GLASS TYPE - REFERENCE GLASS SCHEDULE ON SHEET A501

FD 99'-10" — FLOOR DRAIN (ELEVATION IN FEET AND INCHES WHERE INDICATED)

MOP/JANITOR SINK

WATERCLOSET, URINAL, LAVATORY (RESPECTIVELY)

D.F.(2) D.F. — DRINKING FOUNTAIN - REFERENCE PLUMBING

F.E.C. — F.E.C.: FIRE EXTINGUISHER CABINET F.H.C.P. FIRE HOSE CABINET

FS - 5' — FS - 5': ELECTRIC PROJECTION SCREEN, 5'-0" IN LENGTH

LOCKERS: X INDICATES FILLER UNITS

COLUMN

COLUMN GRID NUMBERS AND/OR LETTERS

Note: REF. SITE PLAN LEGEND, ROOF PLAN LEGEND AND CEILING PLAN LEGEND FOR ADDITIONAL NOTES AND LEGENDS.

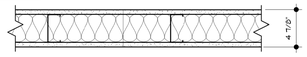
## ABBREVIATIONS

NOTE: REFER TO SPECIFICATIONS FOR ADDITIONAL ABBREVIATIONS OF REFERENCED STANDARDS, REGULATORY AGENCIES, ASSOCIATIONS AND OTHERS

| | | | |
|---|---|---|---|
| A.B | ANCHOR BOLT | MAS | MASONRY |
| ABV | ABOVE | MAT, MATL | MATERIAL |
| AD | ACTUAL DIMENSION, ACCESS DOOR | MAX | MAXIMUM |
| | | MB | MARKER BOARD |
| ADJ | ADJACENT | MC | MECHANICAL CONTRACTOR |
| AFF | ABOVE FINISH FLOOR | MDO | MEDIUM DENSITY OVERLAY |
| AHU | AIR HANDLING UNIT | MECH | MECHANICAL MECHANISM |
| ALT | ALTERNATE | MFGR | MANUFACTURER |
| ALUM | ALUMINUM | MH | MANHOLE |
| ANCH | ANCHOR | MIN | MINIMUM |
| ANGL | ANGLE | MISC | MISCELLANEOUS |
| ARCH | ARCHITECTURAL | MO | MASONRY OPENING |
| @ | AT | MS | MACHINE SCREW |
| AVG R | AVERAGE 'R' FACTOR FOR INSULATION | MTL | METAL |
| B/C | BACK OF CURB | N | NORTH |
| BD | BOARD | NA | NOT APPLICABLE |
| BLDG | BUILDING | NIC | NOT IN CONTRACT |
| BM | BEAM | NO.# | NUMBER |
| BM | BENCH MARK | NOM | NOMINAL |
| BRG | BEARING | NTS | NOT TO SCALE |
| BTM | BOTTOM | NWCMU | NORMAL WEIGHT CONCRETE MASONRY UNIT |
| BUR | BUILT-UP ROOFING | | |
| CABT | CABINET | OA | OVERALL |
| CB | CATCH BASIN | OC(S) | ON CENTER (STAGGERED, IF 2 ROWS) |
| CH | COAT HOOK | OD | OVERFLOW DRAIN |
| CI | CAST IRON | OFF | OFFICE |
| CIP | CAST-IN-PLACE | OP | OPERABLE |
| CJ | CONTROL JOINT | OPNG | OPENING |
| CL | CENTER LINE | OTO | CUT-TO OUT |
| CLG | CEILING | OZ | OUNCE |
| CMU | CONCRETE MASONRY UNIT | | |
| CMT | CERAMIC MOSAIC TILE | PARTN | PARTITION |
| CMP | CORRUGATED METAL PIPE | PBD | PARTICLE BOARD |
| CO | CLEAN OUT | PC | PORTLAND CEMENT, PIECE |
| COL | COLUMN | PERIM | PERIMETER |
| CONC | CONCRETE | PL | PLATE |
| COND | CONDITION | PLAM | PLASTIC LAMINATE |
| CONST | CONSTRUCTION | PNL | PANEL |
| CONT | CONTINUOUS, CONTINUE | PWD | PLYWOOD |
| COR.I | COMMUNICATIONS RISER | PR | PAIR |
| CTSK | COUNTERSINK | PSF | POUNDS PER SQUARE FOOT |
| CUH | CABINET UNIT HEATER | PSI | POUNDS PER SQUARE INCH |
| | | PVMT | PAVEMENT |
| DBL | DOUBLE | | |
| DF | DRINKING FOUNTAIN | QTY | QUANTITY |
| DIA | DIAMETER | QT | QUARRY TILE |
| DIM | DIMENSION | | |
| DR | DOOR | R/R | REMOVE & REPLACE |
| DWG | DRAWING | R | RADIUS |
| DWG(S) | DRAWING (S) | RA | RETURN AIR |
| DS(D) | DOWNSPOUT (OUTLET) | RCP | REINFORCED CONCRETE PIPE |
| DTL | DETAIL | RD | ROOF DRAIN |
| | | REF | REFER TO, REFERENCE |
| E | EAST | REFL | REFLECTED |
| EA | EACH | REINF | REINFORCING, REINFORCED |
| EC | ELECTRICAL CONTRACTOR | REQ'D | REQUIRED |
| EF | EACH FACE | REV | REVERSED |
| EJ | EXPANSION JOINT | RJ | RUSTICATION JOINT |
| ELEC | ELECTRICAL | RMB | RECORDS |
| EL. ELEV | ELEVATION | RO | ROUGH OPENING |
| ENCL | ENCLOSURE | RTU | ROOF TOP UNIT |
| EQ | EQUAL | | |
| EQUIP | EQUIPMENT | S | SOUTH |
| EA | EACH WAY | SAN | SANITARY |
| EXP | EXPANSION | SC | SAWCUT |
| EXT | EXTERIOR, EXTERNAL | SD | SOAP DISPENSER |
| EXIST,EX | EXISTING | SECT | SANITARY |
| | | SF | SQUARE FOOT |
| FDC | FIRE DEPARTMENT CONNECTION | SFCMU | SPLIT FACE CONCRETE MASONRY UNIT |
| FA | FRESH AIR | | |
| FD | FLOOR DRAIN | SHT | SHEET |
| FE | FIRE EXTINGUISHER | SHWR | SHOWERS |
| FEC | FIRE EXTINGUISHER CABINET | SIM | SIMILAR |
| FFCO | FLUSH FLOOR CLEANOUT | SLV | SHORT LEG VERTICAL |
| FH | FLAT HEAD | SMS | SHEET METAL SCREWS |
| FHC | FIRE HOSE CABINET | SND | SANITARY NAPKIN DISPENSER |
| FIN | FINISH | SNR | SANITARY NAPKIN RECEPTACLE |
| F | FLOWLINE | SPEC | SPECIFICATION |
| FL,FLR | FLOOR | SQ | SQUARE |
| FLRG | FLOORING | SS | STAINLESS STEEL |
| FND | FOUNDATION | STD | STANDARD |
| FOS | FACE OF STRUCTURE | STL | STEEL |
| FR | FIRE RATED, FIRE RESISTIVE | STRUCT | STRUCTURAL |
| FS | FLOOR SINK, FOOD SERVICE | SUSP | SUSPENSION |
| FT | FEET OR FOOT | SYM | SYMMETRICAL |
| F.V. | FIELD VERIFY | | |
| | | TB | TACKBOARD |
| GA | GAUGE | TD | TOWEL DISPENSER & DISPOSER (PAPER); OR TRENCH DRAIN |
| GALV | GALVANIZED | T & G | TONGUE AND GROOVE |
| GC | GENERAL CONTRACTOR | TEMP | TEMPERED, TEMPORARY |
| GEN | GENERAL | TEXT | TEXTURED |
| GI | GALVANIZED IRON | THK | THICK |
| GL | GLASS | TLT | TOILET |
| GYP | GYPSUM | TOC | TOP OF CURB OR CONCRETE |
| HB | HOSE BIBB | TOS | TOP OF SLAB, STEEL OR STRUCTURE |
| HC | HANDICAPPED (ACCESSIBLE) | | |
| HD | HAND DRYER | TP | TOILET PAPER DISPENSER |
| HDWE | HARDWARE | TPL | TWO PERSON LOCKER |
| HD WD | HARD WOOD | TS | TACK STRIP |
| HM | HOLLOW METAL | TWS | TACTILE WARNING SURFACE |
| HT | HEIGHT | TXFR | TRANSFORMER |
| HORIZ | HORIZONTAL, HORIZONTALLY | TYP | TYPICAL |
| HPL | HIGH PRESSURE LAMINATE | | |
| HR | HOUR | UNO | UNLESS NOTED OTHERWISE |
| HVAC | HEATING VENTILATING & AIR CONDITIONING | US | URINAL SCREEN |
| | | V.C.P. | VITEOUS CLAY PIPE |
| ID | INSIDE DIAMETER | V.C.T. | VINYL COMPOSITION TILE |
| INSUL | INSULATION | VERT. | VERTICAL, VERTICALLY |
| INT | INTERIOR | V.W.C. | VINYL WALL COVERING |
| INTERM | INTERMEDIATE | | |
| | | W | WEST |
| JB | JUNCTION BOX | W/ | WITH |
| JT(S) | JOINT(S) | WC | WATER CLOSET |
| | | WD | WOOD |
| LB | LOCKER BENCH | WDW | WINDOW |
| LCS | LIQUID CAULK SURFACE | W/O | WITH OUT |
| LLV | LONG LEG VERTICAL | WO | WHERE OCCURS |
| LT WT | LIGHTWEIGHT | WT | WEIGHT |
| LT | LIGHT | WWF | WELDED WIRE FABRIC |
| LWCMU | LIGHTWEIGHT CONCRETE MASONRY UNIT | WPS | WATERPROOFING |

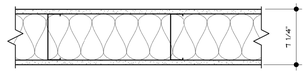
## PARTITION TYPES

### GYPSUM




GSB — GYPSUM BOARD PARTITION: 3 5/8" METAL STUDS @ 16" OC - COVER EACH SIDE WITH 5/8" GYPSUM BOARD, EXTEND PARTITION TO UNDERSIDE OF DECK AND FILL VOIDS WITH ACOUSTICAL INSULATION. FIRE RATED PARTITION - UL #U419

GSB — GYPSUM BOARD PARTITION: 3 5/8" METAL STUDS @ 16" OC - COVER EACH SIDE WITH 5/8" GYPSUM BOARDS, EXTEND PARTITION TO 4" ABOVE CEILING AND FILL VOIDS WITH ACOUSTICAL INSULATION.




GYPSUM BOARD PARTITION: 6" METAL STUDS @ 16" OC - COVER EACH SIDE WITH 5/8" GYPSUM BOARDS, EXTEND PARTITION TO UNDERSIDE OF DECK AND FILL VOIDS WITH ACOUSTICAL INSULATION. FIRE RATED PARTITION - UL #U419

GYPSUM BOARD PARTITION: 6" METAL STUDS @ 16" OC - COVER EACH SIDE WITH 5/8" GYPSUM BOARDS, EXTEND PARTITION TO 4" ABOVE FINISH CEILING AND FILL VOIDS WITH ACOUSTICAL INSULATION.

### GYPSUM BOARD GENERAL NOTES

UNLESS NOTED OTHERWISE, PROVIDE ACOUSTICAL INSULATION IN ALL PARTITIONS.

FRAME AROUND DUCTWORK, BACK BRACE AS REQUIRED FOR STABILITY.

REFER TO HOLLOW METAL FRAME DETAILS FOR ADDITIONAL DETAIL REQUIREMENTS.

EXTEND STUDS TO TOP RUNNER ATTACHED TO STRUCTURE ABOVE, OR BACK BRACE TO STRUCTURE AS NECESSARY TO FULLY STABILIZE THE PARTITIONS.

REFER TO COLUMN DETAILS FOR ADDITIONAL DETAIL REQUIREMENTS.

REFER TO FINISH SCHEDULE FOR WALL FINISH.

ALL PENETRATIONS THROUGH GYPSUM BOARD PARTITIONS EXPOSED TO VIEW WILL BE TRIMMED NEAT AND TRUE AND SEALED.

WHEN PARTITION EXTENDS TO STEEL BEAM ABOVE, FILL VOIDS BETWEEN DECK AND TOP OF STEEL BEAM WITH ACOUSTICAL INSULATION.

WHERE JOISTS PENETRATE PARTITIONS EXTENDING TO STRUCTURE ABOVE, HOLD PARTITIONS 2" CLEAR OF JOIST TO ALLOW FOR DEFLECTION AND FILL VOID WITH ACOUSTICAL INSULATION.

WALLS THAT FORM INACCESSIBLE CHASES SHALL HAVE GYPSUM BOARD ON ROOM FINISH SIDE ONLY.

REFER TO CODE PLAN FOR LOCATION OF RATED WALLS. ALL PENETRATIONS IN RATED WALLS SHALL BE FIRE CAULKED.

WALL EXTENDING ABOVE CEILING NEED ONLY BE FIRE TAPED. NO OTHER FINISH REQUIRED.

## MATERIALS

- LOW VOLUME CHANGE SUBBASE COURSE
- EARTH
- SAND
- GRANULAR FILL / DRAINAGE MATERIAL
- CONCRETE (ELEVATION/SECTION)
- PRECAST CONC./P.C. PLASTER/CUT STONE
- RIGID INSULATION
- STEEL
- WOOD FRAMING OR BLOCKING
- FINISH WOOD
- PLYWOOD
- TILE
- ROOF INSULATION
- BATT INSULATION
- GLASS (ELEVATION/SECTION)
- GYPSUM BOARD (ELEVATION/SECTION)

## GENERAL NOTES

1) GENERAL CONTRACTOR SHALL NOTIFY THE CONTRACTING OFFICE OF ANY DISCREPANCIES BETWEEN SPECIFICATIONS AND DRAWINGS, BETWEEN MULTIPLE SPECIFICATION SECTIONS AND/OR BETWEEN MULTIPLE DRAWINGS. THE CONTRACTING OFFICE WILL DETERMINE WHICH SHALL GOVERN.

2) GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS OF THE JOB SITE INCLUDING UTILITIES AND EXISTING STRUCTURES PRIOR TO BEGINNING WORK AND REPORT ANY DISCREPANCIES TO THE CONTRACTING OFFICE.

3) GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR STABILITY OF THE STRUCTURE DURING CONSTRUCTION INCLUDING ALL BRACING AND BRACING REQUIRED TO RESIST REQUIRED VERTICAL AND LATERAL FORCES.

4) ALL ARCHITECTURAL FLOOR PLAN DIMENSIONS ARE FROM FACE OF CONCRETE AND FINISHED DRYWALL U.N.O.

5) GYPSUM BOARD PARTITIONS ARE TYPE GSB UNLESS INDICATED OTHERWISE.

6) GENERAL CONTRACTOR SHALL PROVIDE 5½" HIGH CONCRETE CURBS AT ALL ELECTRICAL PANELS AND WHERE 2 OR MORE CONDUITS ARE EXPOSED AT THE FLOOR LINE.

7) MECHANICAL /ELECTRICAL CONTRACTOR SHALL SIZE AND GENERAL CONTRACTOR SHALL FORM, DOWEL AND FOUR INTERIOR AND EXTERIOR BASES FOR MECHANICAL AND ELECTRICAL EQUIPMENT (3½" AT INTERIOR LOCATIONS AND 8½" AT EXTERIOR LOCATIONS UNLESS INDICATED OTHERWISE). REFER TO GENERAL PROVISIONS OF MECHANICAL SPECIFICATIONS FOR MINIMUM SIZES. UNLESS INDICATED OTHERWISE, REINFORCE WITH 4"x4" - W4.0xW4.0 WWF.

8) NO WALL FINISH OTHER THAN PAINT IS REQUIRED BEHIND CABINETS, CHALKBOARDS, TACKBOARDS, ETC UNLESS WALL BEHIND IS EXPOSED TO VIEW AND/OR WHERE NOTED OTHERWISE.

9) PROVIDE WALL BASE AT ALL CABINETS, SHELVING AND COUNTERS; AND AS SCHEDULED.

10) CONTINUE CONTROL JOINTS, INCLUDING SEALANTS, ABOVE CEILING ELEVATIONS FOR FULL HEIGHT OF WALL OR PARTITION.

11) PROVIDE 2x6 FIRE-RETARDANT TREATED BLOCKING IN GYPSUM BOARD PARTITIONS BEHIND CASEWORK; BLOCK AT TOP OF BASE UNITS, TOP & BOTTOM OF WALL UNITS, TOP AND MID-HEIGHT OF TALL UNITS. PROVIDE 2x6 FIRE-RETARDANT TREATED BLOCKING IN GYPSUM BOARD PARTITIONS BEHIND GRAB BARS, DOOR STOPS, WALL-MOUNTED SHELVING, WALL-MOUNTED TV'S AND OTHER LOCATIONS AS SPECIFIED OR NOTED. CUT TO FIT SNUGLY BETWEEN STUDS & KERF AT STUD FLANGES TO FIT FIRMLY TO BACK OF DRYWALL.

12) REFER TO STRUCTURAL DRAWINGS AND SPECIFICATIONS FOR REINFORCING STEEL IN POURED CONCRETE.

13) REFER TO CODE COMPLIANCE PLANS FOR FIRE RATINGS OF PARTITIONS AND SMOKE BARRIER LOCATIONS. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION OF PARTITIONS AND BARRIERS TO COMPLY WITH RATINGS INDICATED.

## KEYNOTES

Note: Keynotes are drawn from a master list & may not be sequentially numbered. Sizes (ex: 2x4 or other info) following keynote on drawings indicates criteria for those materials/locations which may differ from std. material specified.

| | | | | | |
|---|---|---|---|---|---|
| 033000 | -1 | CONCRETE STRUCTURE | 095000 | -1 | CERAMIC MOSAIC TILE ( " X " ) |
| | -2 | CONCRETE FLOOR SLAB | | -2 | GLAZED WALL TILE ( " X " ) |
| | -3 | VAPOR BARRIER | | -3 | QUARRY TILE ( " X " ) |
| | -4 | WELDED WIRE FABRIC | | -4 | PORCELAIN FLOOR TILE ( " X " ) |
| | -5 | STEEL REINFORCING BAR | | -5 | QUARRY TILE ( " X " ) |
| | -6 | RUSTICATION JOINT | | -6 | TILE BASE |
| | -7 | WATERSTOP | | -7 | TILE CAP |
| | -8 | DOVETAIL ANCHOR SLOT | | -8 | TILE BASE |
| | -9 | SIDEWALK | | -9 | TILE CAP |
| | -10 | PREMOLDED JOINT FILLER | | -10 | SETTING BED |
| | -11 | STEEL BAR DOWEL | | -11 | CRACK ISOLATION MEMBRANE |
| 055000 | -1 | METAL ANGLE | | -12 | METAL EDGE STRIP |
| | -4 | STEEL CHANNEL | 095113 | -1 | ACOUSTICAL PANEL ( " X ") (" = FIRE RATED) |
| | -5 | STEEL LINTEL | | -2 | CEILING SUSPENSION SYSTEM |
| | -6 | STEEL PIPE | | -3 | EDGE MOLD TRIM |
| | -7 | STEEL TUBE | | -4 | AUXILIARY SUPPORT FRAMING |
| | -8 | STEEL PLATE | | -5 | RESILIENT FLOOR TILE |
| | -10 | STEEL LADDER | 096516 | -1 | RESILIENT BASE |
| | | STEEL SIDEWALK TROUGH-DRAIN COVER | | -2 | RESILIENT STAIR TREADS |
| | | | | -3 | RESILIENT STAIR RISERS |
| | | | | -4 | RESILIENT STAIR NOSINGS |
| 055213 | -1 | STEEL PIPE HANDRAIL | 096723 | -1 | RESINOUS BASE |
| | -2 | STEEL PIPE GUARDRAIL | 096810 | -1 | CARPET TILE |
| 059300 | -2 | STEEL GRATING | 099113 | -1 | EXTERIOR PAINT |
| | -3 | STEEL FRAME ( " ") | 099123 | -1 | INTERIOR PAINT |
| 061000 | -1 | 2X NOGG NAILER ( " ") | 101100 | -1 | MARKERBOARD |
| | -2 | 2X NOGG BLOCKING ( " ") | | -2 | TACKBOARD |
| | -3 | 2X WOOD FURRING ( " ") | | -3 | CHALKBOARD |
| | -4 | PLYWOOD ( " ) | | -4 | SIGNAGE |
| | -5 | 1X TILE | | -5 | DISPLAY RAIL PANEL |
| | -6 | 1X TILE | | -6 | DISPLAY RAIL COVERING |
| | -7 | ORIENTED STRAND BOARD ( " ) | | -7 | SLIDING DISPLAY UNIT |
| 064023 | -1 | PLASTIC-LAMINATE-FACED ARCHITECTURAL CABINETS | 101414 | -1 | DIMENSIONAL LETTER SIGNAGE |
| | | | 101423 | -1 | PANEL SIGNAGE |
| | | | 102113 | -1 | TOILET COMPARTMENT |
| | -2 | HIGH PRESSURE LAMINATE | | -2 | URINAL SCREEN |
| | -3 | CABINET LINER LAMINATE | 102116 | -1 | SHOWER COMPARTMENT |
| | -4 | PARTICLE BOARD | | -2 | DRESSING COMPARTMENT |
| | -5 | PLYWOOD | 102253 | -1 | OPERABLE PANEL PARTITION |
| | -6 | 3MM EDGE HOLDING STRIP | 102800 | -1 | IMPACT-RESISTANT CORNER GUARD |
| | -7 | SOLID WOOD BLOCKING | | -2 | IMPACT-RESISTANT CHAIR RAIL |
| | -8 | HARDWOOD | | -3 | SOAP DISPENSER |
| | -9 | STEEL TUBE/LEG FRAME | | -4 | TISSUE DISPENSER |
| | -10 | SOLID SURFACE SILL | 102800 | -1 | SOAP DISPENSER |
| | -11 | SOLID SURFACE COUNTER | | -2 | TISSUE DISPENSER |
| | | | | -3 | TOWEL DISPENSER |
| 072100 | -1 | FOUNDATION WALL OR UNDERSLAB INSULATION (R- ) | | -4 | FRAMED MIRROR |
| | | | | -5 | SANITARY NAPKIN DISPENSER |
| | | | | -6 | SANITARY NAPKIN DISPOSER |
| | -2 | CAVITY WALL INSULATION (R- ) | | -7 | GRAB BAR |
| | | | | -8 | WASTE RECEPTACLE |
| | -3 | BUILDING INSULATION - INFACED (R- ) | | -9 | SHOWER SEAT |
| | | | | -10 | SHOWER CURTAIN ROD |
| | -4 | BUILDING INSULATION - FACED (R-) | | -11 | COAT/ROBE HOOK |
| | | | | -12 | TOWEL BAR |
| | -5 | SILL SEALER | | -13 | SHOWER CURTAIN |
| | -6 | SAFING INSULATION | | -14 | DIAPER CHANGING STATION |
| | -7 | SPRAY-APPLIED CELLULOSIC INSULATION | | -15 | ELECTRIC HAND DRYER REF ELEC.) |
| | | | 104413 | -1 | FIRE EXTINGUISHER CABINET |
| | -8 | SPRAY POLYURETHANE FOAM INSULATION | | -2 | FIRE HOSE CABINET |
| | | | 105113 | -1 | CORRIDOR LOCKER |
| 072113 | -1 | MODIFIED BITUMINOUS SHEET AIR BARRIER | | -2 | ATHLETIC LOCKER |
| | | | | -3 | LOCKER BENCH |
| 076200 | -1 | SHEET METAL FLASHING AND COUNTERFLASHING | 115213 | -1 | PROJECTION SCREEN |
| | | | 122113 | -1 | HORIZONTAL LOUVER BLINDS |
| | | | 133419 | -1 | PRE-ENGINEERED BUILDING |
| | -2 | PRE-FINISHED ROOF EDGE | | -2 | FRAME |
| | | | | -3 | COLUMN |
| | -3 | PRE-FINISHED COPING | | -4 | GIRT |
| | -4 | SHEET METAL RIDGE | | -5 | PURLIN |
| | -5 | SHEET METAL GUTTER | | -6 | PREFINISHED WALL PANEL (I = INSULATED) |
| | -6 | SHEET METAL DOWNSPOUT | | -7 | PREFINISHED ROOF PANEL |
| | -7 | SHEET METAL SCUPPER | | -8 | INSULATION (R- ) (F = FACED) |
| | -9 | SNOW GUARD | | | |
| 076413 | -1 | PENETRATION FIRESTOPPING | | -9 | PREFINISHED METAL GUTTER |
| | | | | -10 | PREFINISHED DOWNSPOUT |
| 076446 | -1 | FIRE-RESISTIVE JOINT SYSTEM | | -11 | PREFINISHED METAL SOFFIT PANEL |
| 079200 | -1 | JOINT SEALANT - RAKE WIDTH REQUIRED | | -12 | PREFINISHED METAL FLASHING |
| | -2 | JOINT FILLER | | -13 | METAL PANEL CLOSURE |
| | -3 | GASKET | | -14 | BASE ANGLE |
| | -4 | BACKER ROD | | -15 | FRAMED OPENING HEADER OR JAMB CHANNEL |
| 079500 | -1 | EXPANSION CONTROL | | | |
| 081113 | -1 | HOLLOW METAL DOOR | | -16 | TUBE GIRT |
| | -2 | HOLLOW METAL FRAME | 311000 | -1 | SITE CLEARING |
| | -3 | FRAME ANCHOR | 312000 | -1 | EARTH MOVING |
| | -4 | LOUVER | | -2 | INTERIOR FILL |
| | -5 | PLASTER GUARD | | -3 | EXTERIOR FILL |
| 081416 | -1 | FLUSH WOOD DOOR | | -4 | GRANULAR DRAINAGE COURSE |
| 085113 | -1 | ACCESS DOOR | | | |
| | -2 | ACCESS DOOR FRAME | | -5 | DRAINAGE BACKFILL |
| 085613 | -1 | SECTIONAL OVERHEAD DOOR | | -6 | SUBBASE COURSE |
| | | | | -7 | DRAINAGE GEOTEXTILE |
| | -2 | SECTIONAL OVERHEAD DOOR TRACK | | -8 | SEPARATION GEOTEXTILE |
| | | | 312316 | -1 | EXCAVATING |
| | -3 | WEATHERSTRIPPING | 313116 | -1 | TERMITE CONTROL |
| 084113 | -1 | ALUMINUM ENTRANCE | 321313 | -1 | CONCRETE PAVING |
| DOOR | | | 321373 | -1 | CONCRETE PAVING JOINT SEALANTS |
| | -2 | ALUMINUM STOREFRONT FRAME | 321723 | -1 | PAVEMENT MARKINGS |
| 088000 | -1 | GLAZING (AS SCHEDULED) | 329200 | -1 | TURF/GRASS |
| 089000 | -1 | LOUVER | | | |
| | -2 | VENT | | | |
| 092216 | -1 | STEEL STUD ( " ) | | | |
| | -2 | STEEL STUD RUNNER ( " ) | | | |
| | -3 | FURRING CHANNEL | | | |
| 092400 | -1 | GYPSUM BOARD ( " ) | | | |
| | -2 | FIRE RATED GYPSUM BOARD ( " ) | | | |
| | -3 | CEMENTITIOUS TILE BACKER PANEL | | | |
| | -4 | METAL SUSPENSION SYSTEM | | | |
| | -5 | ACOUSTICAL SEALANT | | | |
| | -6 | ACOUSTICAL INSULATION (") | | | |
| | -7 | METAL EDGE TRIM | | | |
| | -8 | AXIAL SUPPORT FRAMING | | | |
| | -9 | METAL CONTROL JOINT | | | |
| | -10 | HIGH IMPACT GYPSUM BOARD | | | |


HTK ARCHITECTS PA
8300 NIELSON ST, STE 250
OVERLAND PARK, KANSAS 66210
P 913.663.5373
500 S. KANSAS AVE
TOPEKA, KANSAS 66612
P 785.266.5373
www.htkarchitects.net


STATE OF MISSOURI — CHARLES R. SMITH — NUMBER A-2007030589 — ARCHITECT

DATE:
- 2014-07-24

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

SHEET CONTENTS:
- INFORMATION

HTK PROJECT NUMBER:
- ULYB112022
10008.01 - 0018

SHEET NUMBER:

G102

ORIGINAL CONTRACT DOCUMENTS

7/23/2014 2:19:45 PM C:\Users\jms\Documents\Security Forces Building_Central_jms.rvt

**GENERAL INFORMATION:**

LOCATION: SECURITY FORCES BUILDING #303
139th Airlift Wing
Missouri Air National Guard
705 f Memorial Drive
St. Joseph, MO 64503

RESPONDING FIRE DEPARTMENT: 139th Firehouse

**PROJECT DESCRIPTION:**

SECURITY FORCES ADMIN AND STORAGE BUILDING — PROJECT NO: ULYB 112022

**APPLICABLE CODES AND STANDARDS**

UNIFIED FACILITIES CODE - FIRE PROTECTION ENGINEERING FOR FACILITIES (UFC 3-600-01) 26 SEPT 2006, INCL CHANGE 3
UNIFIED FACILITIES CODE - DoD MINIMUM ANTITERRORISM STANDARDS (UFC 4-010-01) 9 FED 2012, INCL CHANGE 1
INTERNATIONAL BUILDING CODE (IBC) 2009
INTERNATIONAL MECHANICAL CODE (IMC) 2009
INTERNATIONAL PLUMBING CODE (IPC) 2012
INTERNATIONAL FIRE CODE (IFC) 2009
NATIONAL ELECTRIC CODE (NEC) 2011
NFPA 101 - LIFE SAFETY CODE
NFPA 13 - INSTALLATION OF SPRINKLER SYSTEMS, 2002
NFPA 72 - NATIONAL FIRE ALARM CODE, 2013
AMERICANS WITH DISABILITIES ACT (ADA) & ARCHITECTURAL BARRIERS ACT (ABA) GUIDELINES 2010

**OCCUPANCY (Section 303) & STRUCTURAL CLASSIFICATION**

A-3 : TRAINING ROOMS
B : OFFICES AND INCIDENTAL SPACES
S-1 : MOBILITY STORAGE

MIXED OCCUPANCY — 1HR SEPARATION REQUIRED BETWEEN B AND A-3 OCCUPANCIES (TABLE 508.4)
NO SEPARATION REQUIRED BETWEEN B AND S-1 (TABLE 508.4)

**TYPE OF CONSTRUCTION & GENERAL BUILDING LIMITATIONS:**

| | |
|---|---|
| Construction Type II-B FULLY SPRINKLERED | Table 601 |
| Structural frame including columns, girders & trusses: | 0 HR |
| Bearing exterior walls: | 0 HR |
| Bearing interior walls: | 0 HR |
| Nonbearing exterior walls & partitions: | 0 HR |
| Nonbearing interior walls & partitions: | 0 HR |
| Floor construction including supporting beams & joists: | 0 HR |
| Roof construction including supporting beams & joists: | 0 HR |

| GROUP | ALLOWABLE / ACTUAL: | STORIES ALLOW / ACTUAL |
|---|---|---|
| A-3 | 9,500 SF / 1,127 SF | 2 / 1 |
| B | 23,000 SF / 2,382 SF | 4 / 1 |
| S-1 | 17,500 SF / 1,954 SF | 3 / 1 |
| TOTAL: | 5,972 GSF | |

AREA MODIFICATIONS: (SECTION 506)
FULLY SPRINKLERED = 200% INCREASE
100% OPEN FRONTAGE = 75% INCREASE
A-3 = 9,500 + (9,500) (2) + (9,500)(.75) = 35,625 SF
B = 23,000 + (23,000)(2) + (23,000)(.75) = 86,250 SF
S-1 = 17,500 + (17,500)(2) + ( 17,500)(.75) = 65,625 SF
ACTUAL AREA: 5,972 SF

**ACTIVE LIFE SAFETY SYSTEMS:**

| | |
|---|---|
| Fire Alarm: | Required:Provided: |
| FACP: | Required:Provided: |
| Remote Annunciator Panel: | Required:Provided: |
| Smoke Detection: | Required:Provided: |
| Exit Signs: | Required:Provided: |
| Egress Lighting: | Required:Provided: |
| Emergency Lights: | Battery backups |
| Backup Power: | Required:Provided |
| Suppression- Standpipes: | Required:Provided: |
| Suppression- Automatic: | Required:Provided: |
| Fire Extinguishers: | Required:Provided: |

ORDINARY HAZARD OCCUPANCY
MAXIMUM TRAVEL DISTANCE TO EXTINGUISHER: 75 FT
MAXIMUM FLOOR AREA SERVED BY EXTINGUISHER: 11,250 SF
MINIMUM EXTINGUISHER RATING: 2A

MINIMUM EGRESS WIDTH: CORRIDORS - 44", DOORS - 32"
PATH OF TRAVEL SHALL NOT EXCEED 250' (A & S-1), 300' (B)
EXIT ACCES WIDTH REQUIRED 100 OCCUPANTS x .15"PERSON = 15"
TOTAL WIDTH PROVIDED: 100.5

PLUMBING FIXTURES: IPC 2009 TABLE 403.1

| | A-3 | B | S-1 |
|---|---|---|---|
| WC MALE: | 1 PER 125 | 1 PER 25 | 1 PER 100 |
| WC FEMALE: | 1 PER 65 | 1 PER 25 | 1 PER 100 |
| LAV MALE: | 1 PER 200 | 1 PER 40 | 1 PER 100 |
| LAV FEMALE: | 1 PER 200 | 1 PER 40 | 1 PER 100 |
| DRINKING FOUNTAIN: | 1 PER 500 | 1 PER 100 | 1 PER 1000 |
| SERVICE SINK: | 1 | 1 | 1 |

| FIXTURES PROVIDED: | WC | U | LAV |
|---|---|---|---|
| MALE: | 2 | 2 | 2 |
| FEMALE: | 2 | | 2 |
| DRINKING FOUNTAIN: | 2 | | |
| SERVICE SINK: | 1 | | |

**CODE SYMBOL LEGEND**

| SYMBOL | DESCRIPTION | PROTECTIVE ELEMENTS |
|---|---|---|
| | EXIT- EXTERIOR | |
| | EXIT- INTERIOR (Assembly occ. over 50 and exits from floor/s.) | |
| | FIRE EXTINGUISHER | |
| | FIRE DEPARTMENT CONNECTION | |
| | STANDPIPE | |
| | HOSE CABINET | |
| | HOSE CABINET WITH EXTINGUISHER | |
| | FIRE EXTINGUISHER SPACING (Show Radius) | Show Radius |
| | NON PROTECTED EXIT PATH | None per exemption for fully Sprinklered A, B, E, F, M, S, & U Occupancies |
| P P | LIMITED PROTECTION EXIT PATH | Automatic Smoke Detection Throughout Exit Path. |
| | PROTECTED EXIT PATH | 1 Hour Fire Partition wall construction. 20 minute rated door assembly. Fire & Smoke Dampers. |
| | PROTECTED EXIT PATH (Sprinklered R Occupancy) | 1/2 Hour Fire Partition wall construction. 20 - minute rated door assembly. Fire & Smoke Dampers. |
| | SPECIAL COVERAGE | Limited Sprinkler Coverage |
| 1 1 | 1 HOUR EXIT PASSAGEWAY | 1 Hour Fire Barrier wall construction. No openings other than required exit doors. 1 hour door assembly |
| 2 2 | 2 HOUR EXIT PASSAGEWAY | 2 Hour Fire Barrier wall construction. No openings other than required exit doors. 1 1/2-hour door assembly |
| 1 1 | 1 HOUR EXIT ENCLOSURE (vertical) (stairwell- 3 stories or less) | 1 Hour Fire Barrier wall construction. No openings other than required exit doors. 1 hour door assembly |
| 2 2 | 2 HOUR EXIT ENCLOSURE (vertical) ( stairwell- 4 stories or more) | 2 Hour Fire Barrier wall construction. No openings other than required exit doors. 1 1/2-hour door assembly |
| | 1 HOUR FIRE BARRIER (Occupancy and Incidental Use Areas) | 1 hour Fire Barrier wall construction. 3/4 hr. rated door assembly. Fire Dampers. (edit if requirement for sprinklered buildings) |
| | 2 HOUR FIRE BARRIER (Occupancy) | 2 hour Fire Barrier wall construction. 1 1/2 hour rated door assembly. Fire Dampers. |
| | 3 HOUR FIRE BARRIER (Occupancy) | 3 hour Fire Barrier wall construction. 3 hour rated door assembly. Fire Dampers. |
| | 4 HOUR FIRE BARRIER (Occupancy) | 4 hour Fire Barrier wall construction. 3 hour rated door assembly. Fire Dampers. |
| 2 2 | 2 HOUR FIRE WALL (Building Separation) | 2 hour Fire Wall construction per IBC 705. 1 1/2 hour door assembly. Fire dampers when ductwork is allowed to penetrate wall. |
| 3 3 | 3 HOUR FIRE WALL (Building Separation) | 3 hour Fire Wall construction per IBC 705. 3 hour door assembly. Fire dampers when ductwork is allowed to penetrate wall. |
| 4 4 | 4 HOUR FIRE WALL (Building Separation) | 4 hour Fire Wall construction per IBC 705. 3 hour door assembly. Fire dampers when ductwork is allowed to penetrate wall. |
| 1 1 | 1 HOUR SHAFT (3 stories or less) | 1 hour Fire Barrier wall construction. 1 hour door assembly. Fire/smoke Dampers. |
| 2 2 | 2 HOUR EXIT ENCLOSURE (4 stories or more) | 2 hour Fire Barrier wall construction. 1 1/2 hour door assembly. Fire/smoke Dampers. |
| | SPRINKLERED INCIDENTAL USE AREAS | Wall construction to resist the passage of smoke from floor to floor to F.R. floor/ceiling assembly. Self or automatic closing doors w/ no air transfer gribes |
| | FIRE PARTITIONS (dwelling/unit separation) (I-1 and R occupancies) | 1 hour resistive rated walls. 3/4 hour rated door assembly. Fire Dampers. |
| | SMOKE BARRIERS (I-2 and I-3 occupancies) | 1 hour resistive rated walls. 20 minute rated door assembly. Smoke Dampers. |
| 1905/59.5" 60" | ACCUMULATED EXIT WIDTH AT REQUIRED EXIT (clear width) | Occupants/Required width. Provided Width |
| | PUBLIC FIRE HYDRANT (show distance from building) | |
| CONF / AM 65 | ROOM DESIGNATION | Room type/Occupancy Type Maximum Allowable Occupants |
| 40 60 40 | SHOW ACCUMULATED OCCUPANT LOADS FOR COMPLEX EXIT PATHS | |

HTK ARCHITECTS PA
5001 S. KANSAS AVE
SUITE A, SUITE 150
OVERLAND PARK, KANSAS 66212
P 785.266.5373
F 913.663.5373
www.htkarchitects.net

DATE:
● 2014-06-12
REVISED DATE:
●

SECURITY FORCES ADMIN & STORAGE FACILITY
139th MISSOURI AIR NATIONAL GUARD
705 MEMORIAL AIRPORT ST. JOSEPH, MO

SHEET CONTENTS:
● CBF INFO SHEET

PROJECT NUMBER:
● ULYB112022
10008.01 - 0018

SHEET NUMBER:
CFP1

TYPE B2

C:\Users\jms\Documents\Security Forces Building_Central_jms.rvt 4/3/2014 11:31:01 AM




1 CODE SITE PLAN
1" = 50'-0"

NORTH

GRAPHIC SCALE
0 50 100 150 200

HTK ARCHITECTS PA
5001 S. KANSAS AVE
SUITE A, SUITE 150
OVERLAND PARK, KANSAS 66212
P 785.266.5373
F 913.663.5373
www.htkarchitects.net

DATE:
● 2014-07-23
REVISED DATE:
●

SECURITY FORCES ADMIN & STORAGE FACILITY
139th MISSOURI AIR NATIONAL GUARD
705 MEMORIAL AIRPORT ST. JOSEPH, MO

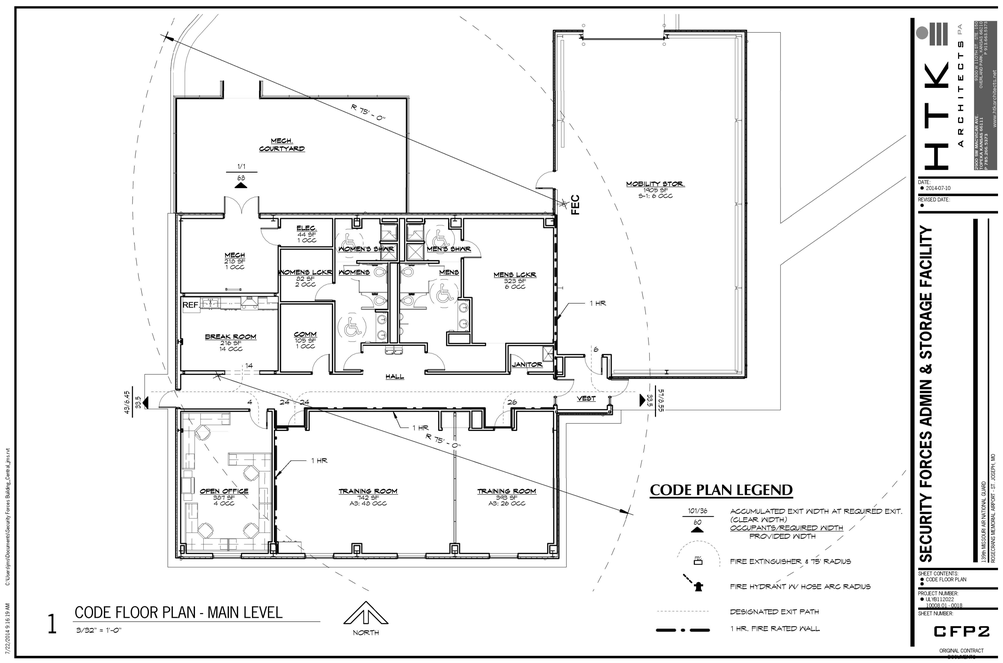
SHEET CONTENTS:
● CODE SITE PLAN

PROJECT NUMBER:
● ULYB112022
10008.01 - 0018

SHEET NUMBER:
CSP

ORIGINAL CONTRACT DOCUMENTS

3/25/2014 10:07:45 AM C:\Users\jms\Documents\Security Forces Building_Central_jms.rvt




**CODE PLAN LEGEND**

121/36 — ACCUMULATED EXIT WIDTH AT REQUIRED EXIT. (CLEAR WIDTH)
OCCUPANTS/REQUIRED WIDTH
PROVIDED WIDTH

FIRE EXTINGUISHER, 4 75' RADIUS

FIRE HYDRANT W/ HOSE ARC RADIUS

DESIGNATED EXIT PATH

1 HR. FIRE RATED WALL

1 CODE FLOOR PLAN - MAIN LEVEL
3/32" = 1'-0"

NORTH

HTK ARCHITECTS PA
5001 S. KANSAS AVE
SUITE A, SUITE 150
OVERLAND PARK, KANSAS 66212
P 785.266.5373
F 913.663.5373
www.htkarchitects.net

DATE:
● 2014-07-10
REVISED DATE:
●

SECURITY FORCES ADMIN & STORAGE FACILITY
139th MISSOURI AIR NATIONAL GUARD
705 MEMORIAL AIRPORT ST. JOSEPH, MO

SHEET CONTENTS:
● CODE FLOOR PLAN

PROJECT NUMBER:
● ULYB112022
10008.01 - 0018

SHEET NUMBER:
CFP2

ORIGINAL CONTRACT DOCUMENTS

7/22/2014 9:16:19 AM C:\Users\jms\Documents\Security Forces Building_Central_jms.rvt

STATE OF MISSOURI
CHARLES R. SMITH
NUMBER PA-2007030589
ARCHITECT
7-22-14

HTK ARCHITECTS PA
5001 S. KANSAS AVE
SUITE A, SUITE 150
OVERLAND PARK, KANSAS 66212
P 785.266.5373
F 913.663.5373
www.htkarchitects.net

DATE:
● 2014-07-24
REVISED DATE:
●

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

SHEET CONTENTS:
● CODE PLANS

HTK PROJECT NUMBER:
● ULYB112022
10008.01 - 0018

SHEET NUMBER:
G103

ORIGINAL CONTRACT DOCUMENTS

7/23/2014 2:19:54 PM C:\Users\jms\Documents\Security Forces Building_Central_jms.rvt

*CP 1 = BM 1*
*ELEV = 817.53*
*N: 1314859.144*
*E: 2675974.525*
*Set ½" rebar w/red CFS Control cap*

*1) To East b/c @ entrance to fire station 22.60' W*
*2) To centerline of E-W asphalt road (Panigot)99.0' N*
*3) To centerline of gravel entrance to dirt pile 25.0' E*
*4) To centerline of san sew manhole 48.19' NNE*

*CP 2 = BM 2*
*ELEV = 813.70*
*N: 1314111.272*
*E: 2675793.542*
*Found 3" Aluminum Disc stamped COR 2 (hand stamp) &*
*AIR NATIONAL GUARD MIDLAND SURVEYING LC000120 2013 TETRA TECH-MEAD & HUNT*
*PROPERTY BOUNDARY (machine stamp)*

*1) To centerline of asphalt road to South (Ave. A) 40.0' E*
*2) To centerline of asphalt road to East (Rosecrans)71.0' S*
*3) To fence-line to East 12.7' N*
*4) To green t-post w/red top 0.6' NW*

*CP 11 = BM 11*
*ELEV = 813.41*
*Found 3" Aluminum Disc stamped COR 2 (hand stamp) &*
*AIR NATIONAL GUARD MIDLAND SURVEYING LC000120 2013 TETRA TECH-MEAD & HUNT*
*PROPERTY BOUNDARY (machine stamp)*

*1) To centerline of E-W asphalt road 60.0' S N: 1314097.811 E: 2676264.490*
*2) To centerline of gravel entrance to North 22.0' E*
*3) To centerline @ base of power pole 88.1' WSW*
*4) To green t-post w/red top 0.6' N*

*CONTROL:*
*Horizontal Datum*

*NAD 1983 (conus)*

*US State Plane 1983 Zone Missouri West 2403*
*Units - US Survey Feet*
*Coordinates raised to Ground at Point #1*

*GSF = 1.0000784341 = 0.999921572*
*CP#1 Ground = N= 1314859.144 E= 2675974.525*
*CP#1 State Plane = N= 1314859.144 E= 2675974.525*

*Vertical Datum*

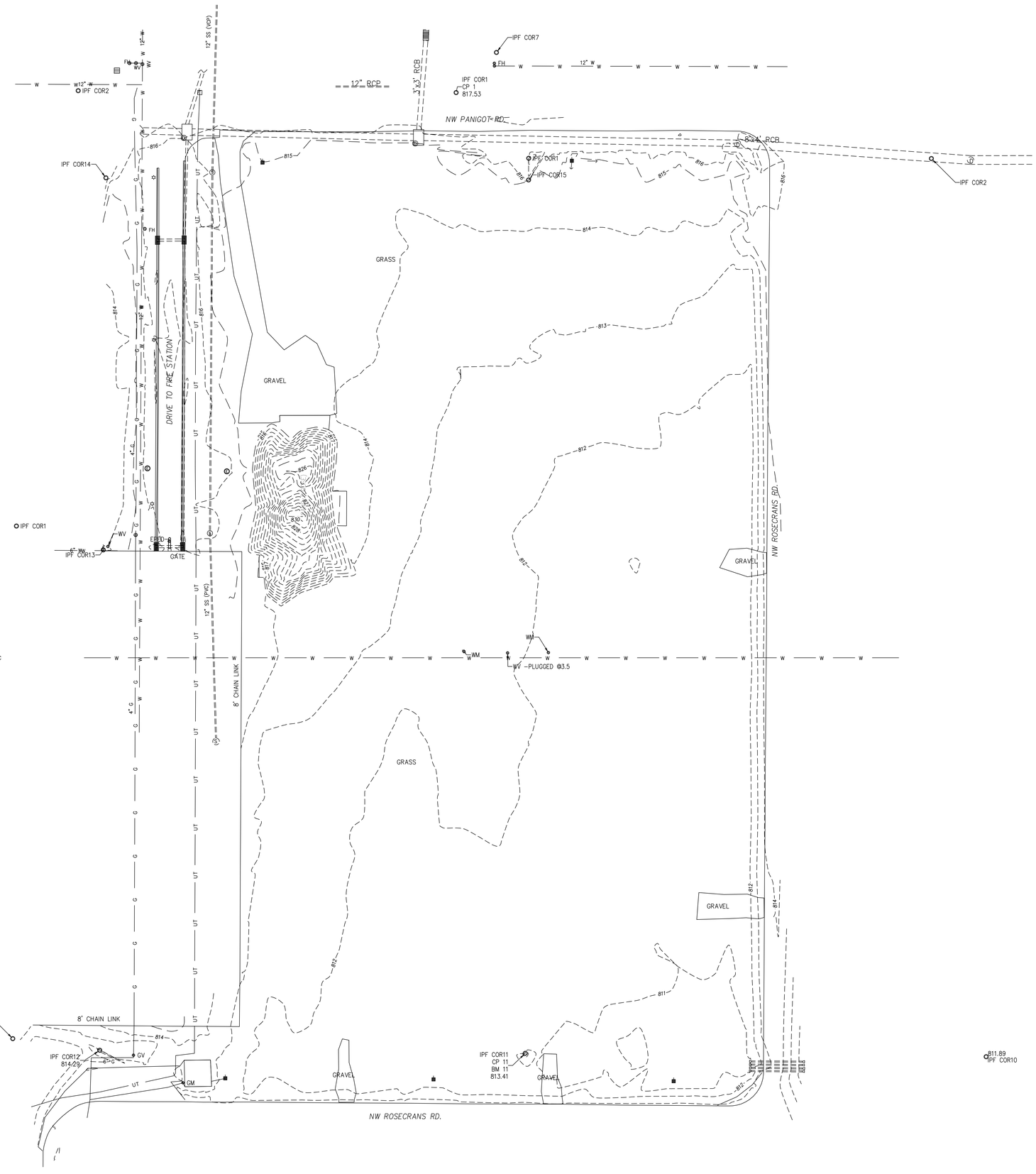
*NAVD88*

*Geoid Model GEOD09 (conus)*
*From OPUS observation on CP# 1 10/21/13*

*CP# 1 Elev = 817.53*

**LEGEND**

| | | | |
|---|---|---|---|
| ⊙ | SET 1/2" X 24" REBAR W/O CAP CLS 80 | POB | POINT OF BEGINNING |
| ○ | IRON PIN FOUND | (M) | MEASURED |
| GM | GAS METER | (P) | PLATTED |
| WM | WATER METER | (C.R.) | CALC FROM RECORD |
| FH | FIRE HYDRANT | S | SANITARY MANHOLE |
| EPED | ELEC PEDESTAL | D | STORM SEWER MANHOLE |
| TRAN | TRANSFORMER | TR | TRAFFIC MANHOLE |
| AC | AIR COND. UNIT | TEL | TELEPHONE MANHOLE |
| BM | BENCHMARK | E | ELECTRICAL MANHOLE |
| WH | WATER HYDRANT | TSB | TRAFFIC SIGNAL BOX |
| SCO | SEWER CLEANOUT | TBX | TELEPHONE BOX |
| | SECTION CORNER | —UT— | UNDERGROUND TELEPHONE |
| | DECIDUOUS TREE | —UE— | UNDERGROUND ELECTRIC |
| | CONIFEROUS TREE | —UFO— | UNDERGROUND FIBER OPTIC |
| | BUSH | —W— | WATER LINE |
| -X-X- | FENCE | —G— | GAS LINE |
| | LIGHT POLE | = = = = | STORM SEWER |
| YL | YARD LAMP | = = = = | SANITARY SEWER |
| | GUY WIRE | ——— | PROPERTY LINE |
| | POWER POLE | - - - - | EASEMENT LINE |
| | SIGN | T | TELEPHONE PEDESTAL |
| B.S.L. | BUILDING SETBACK LINE | | SPRINKLER HEAD |
| W.E. | WATER EASEMENT | SHCB | SPRINKLER HEAD CONTROL BOX |
| U.E. | UTILITY EASEMENT | RD | ROOF DRAIN |
| | CONTROL POINT | MB | MAILBOX |
| WV | WATER VALVE | FDC | FIRE DEPT. CONNECTION |
| GV | GAS VALVE | | STORM INLET |
| PM | PARKING METER | FP | FLAG POLE |
| BOL | BOLLARD | FPH | FLAG POLE HOLDER |




40 0 40 80
SCALE IN FEET


HTK ARCHITECTS

KEVIN E. HOLLAND
NUMBER PE-2010006786
PROFESSIONAL ENGINEER
STATE OF MISSOURI


DATE:
2014-07-24

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD

ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

SHEET CONTENTS:
EXISTING TOPOGRAPHY

HTK PROJECT NUMBER:
ILLYB112022
10008.01 - 0018

SHEET NUMBER:
C050

100% CONTRACT DOCUMENTS


CFS ENGINEERS
cfse.com
2930 SW Woodside Dr, Topeka, KS 66614
o: 785-272-4706 f: 785-272-4736



X:\811\Proj\10122B\DWG\Arch\Proj. Ex Topo - 7.21.2014 3:45:59 PM

CP 1 = BM 1
ELEV = 817.53
N: 1314859.144
E: 2675974.525
Set ½" rebar w/red CFS Control cap

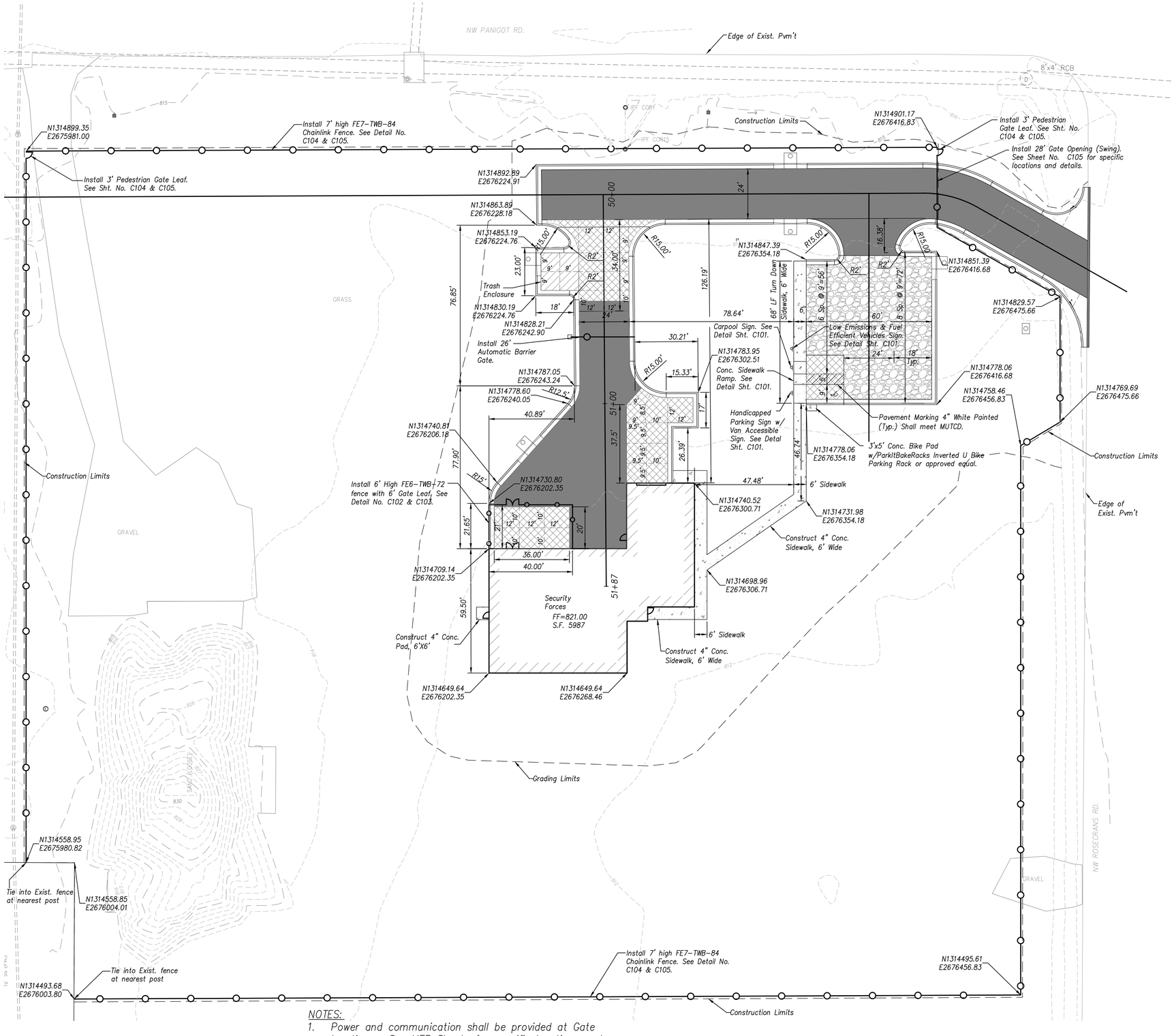
1) To East b/c @ entrance to fire station 22.60' W
2) To centerline of E–W asphalt road (Panigot)99.0' N
3) To centerline of gravel entrance to dirt pile 25.0' E
4) To centerline of san sew manhole 48.19' NNE

CP 2 = BM 2
ELEV = 813.70
N: 1314111.272
E: 2675793.542
Found 3" Aluminum Disc stamped COR 2 (hand stamp) & AIR NATIONAL GUARD MIDLAND SURVEYING LC000120 2013 TETRA TECH–MEAD & HUNT PROPERTY BOUNDARY (machine stamp)

1) To centerline of asphalt road to South (Ave. A) 40.0' E
2) To centerline of asphalt road to East (Rosecrans)71.0' S
3) To fence–line to East 12.7' N
4) To green t–post w/red top 0.6' NW

CP 11 = BM 11
ELEV = 813.41
Found 3" Aluminum Disc stamped COR 2 (hand stamp) & AIR NATIONAL GUARD MIDLAND SURVEYING LC000120 2013 TETRA TECH–MEAD & HUNT PROPERTY BOUNDARY (machine stamp)

1) To centerline of E–W asphalt road 60.0' S N: 1314097.811
E: 2676264.490
2) To centerline of gravel entrance to North 22.0' E
3) To centerline @ base of power pole 88.1' WSW
4) To green t–post w/red top 0.6' N




SCALE IN FEET
20 0 20 40

LEGEND

- 4" Sidewalk
- 8" Asphaltic Conc. Pvmt.
- 7" Reinforced Conc. Pvmt.
- 8" Reinforced Conc. Pvmt.
- 6" Aggregate Surfacing (Type 5)
- Concrete Joint

NOTES:
1. Power and communication shall be provided at Gate locations. See MEP Sheets for specific locations and details.
2. JOINTS: All concrete shall be jointed as shown. All joints shall be sealed. Sealant shall be silicone per detail.


HTK ARCHITECTS

CFS ENGINEERS
cfse.com
2930 SW Woodside Dr, Topeka, KS 66614
o: 785-272-4706 f: 785-272-4736


KEVIN K. HOLLAND — STATE OF MISSOURI — NUMBER PE-2010006786 — PROFESSIONAL ENGINEER

DATE:
2014-07-24

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

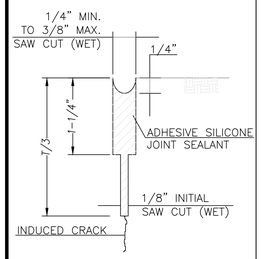
SHEET CONTENTS:
SITE PLAN

HTK PROJECT NUMBER:
ULYB112022
10008.01 - 0018

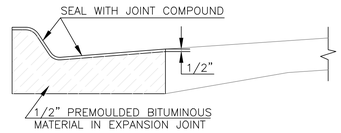
SHEET NUMBER:
C100

100% CONTRACT DOCUMENTS


J:\2013\htq\132287\DWGS\Arch\Arq. Site - 7/25/2014 11:07:12 AM




SILICONE JOINT

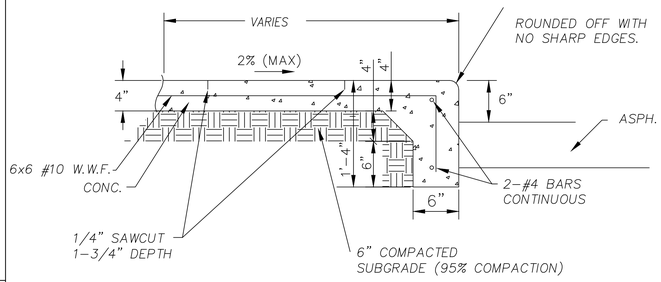



## CURB AND GUTTER EXPANSION JOINT DETAILS

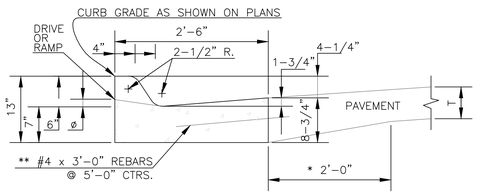
NOTE: 1/2" EXPANSION JOINTS TO BE PLACED AT THE END OF ALL INTERSECTION RETURNS.

SAND IS NOT AN APPROVED FILL OR SUBGRADE MATERIAL.

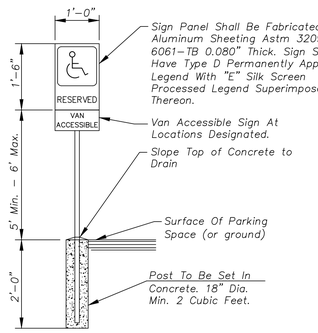
ALL EXPANSION JOINTS SHALL BE SEALED WITH APPROVED MATERIAL.



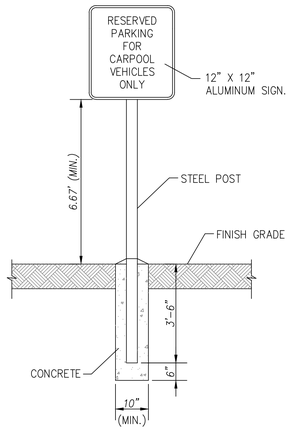

## TYPICAL TURN DOWN SIDEWALK DETAIL




## COMBINED CURB & GUTTER-TYPE I



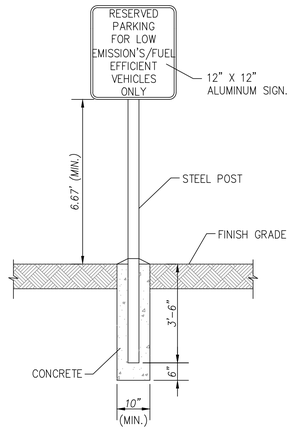

## HANDICAPPED PARKING SIGN




NOTES:

1. "RESERVED PARKING FOR CARPOOL VEHICLES ONLY" SIGN SHALL ONLY BE PLACED AT POSITION SHOWN ON SITE PLAN.

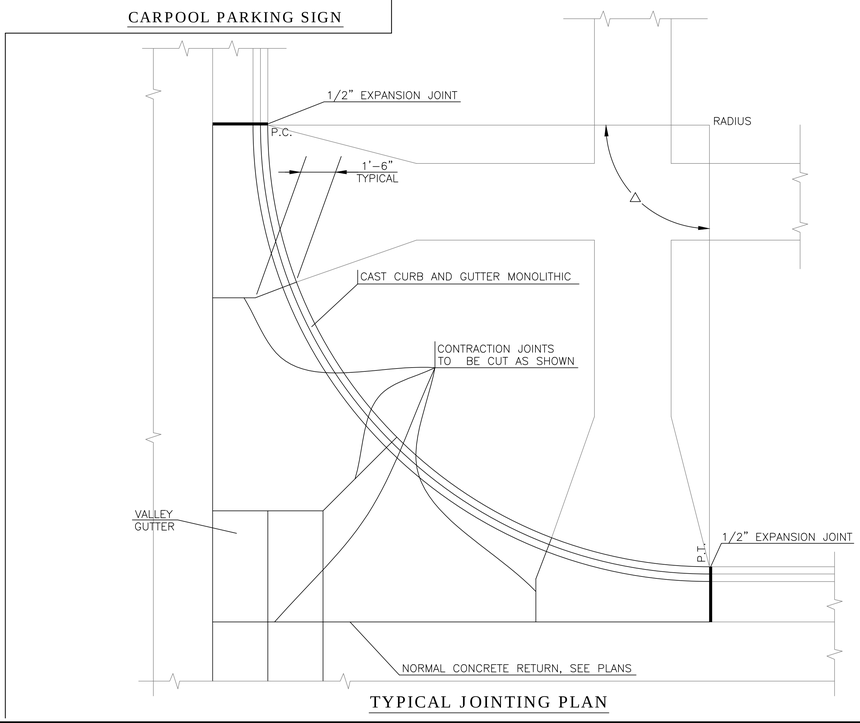
## CARPOOL PARKING SIGN



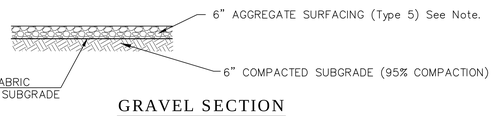

NOTES:

1. "RESERVED PARKING FOR LOW EMISSIONS FUEL EFFICIENT VEHICLES ONLY" SIGN SHALL ONLY BE PLACED AT POSITION SHOWN ON SITE PLAN.

## LOW EMISSION'S & FUEL EFFICIENT VEHICLES PARKING SIGN



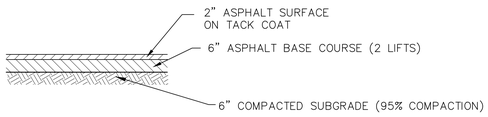

## TYPICAL JOINTING PLAN




## GRAVEL SECTION

NOT TO SCALE

AGGREGATE TO PLACED IN TWO LIFTS AND COMPACTED TO 95%.



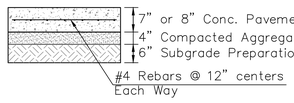

## ASPHALTIC CONCRETE PAVEMENT SECTION

NOT TO SCALE

NOTE:

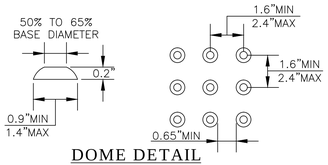
1. ASPHALTIC CONCRETE THAT DOES NOT ABUT CURB AND GUTTER, TURNDOWN SIDEWALK OR CONCRETE PAVEMENT SHALL TAPER @ 1:1.

2. TOP WIDTH TO MATCH THAT SHOWN ON PLANS.

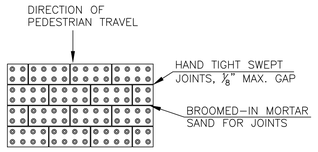



## 7" REINFORCED CONCRETE PAVEMENT
## 8" REINFORCED CONCRETE TRASH DUMPSTER

NOT TO SCALE

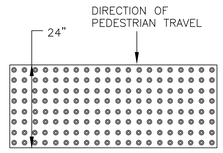



## DOME DETAIL

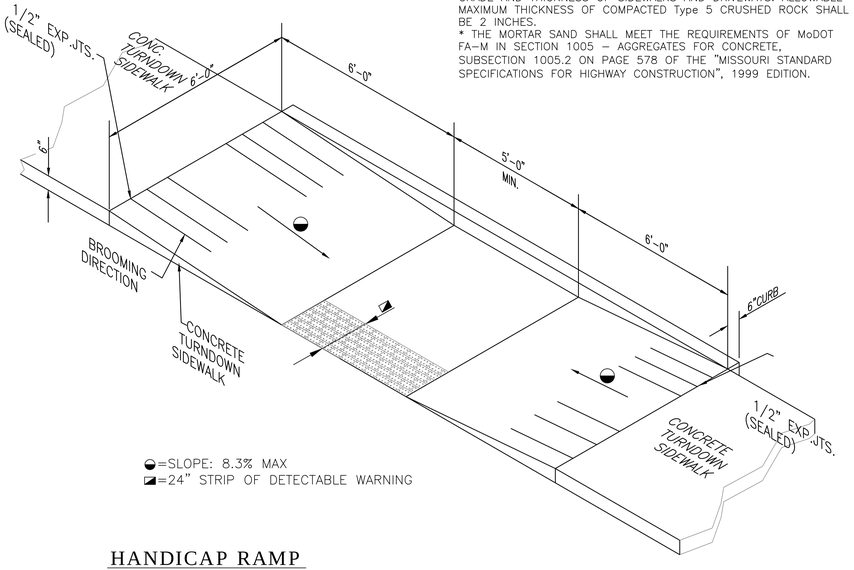



## RUNNING BOND/PARALLEL ALIGNMENT AND JOINT DETAIL

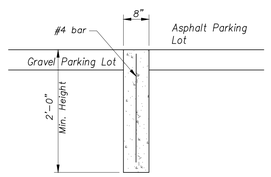
Installation pattern for detectable warning paving bricks




## ARMOR-TILE CAST IN PLACE DETECTABLE WARNING SYSTEM




## HANDICAP RAMP




## HEADER CURB DETAIL

NOTE:

Type 5 aggregate for base shall consist of crushed stone, sand and gravel or reclaimed asphalt or concrete. The aggregate shall not contain more than 15 percent deleterious rock and shale. The fraction passing the No. 40 sieve shall have a plasticity index not to exceed six. Any sand, silt and clay, and any deleterious rock and shale shall be uniformly distributed throughout the material.

Type 5 aggregate shall be in accordance with the following gradation requirements:

Sieve Percent by Weight
Passing 1-inch 100
Passing 1/2-inch 60-90
Passing No. 4 35-60
Passing No. 30 10-35
Passing No. 200 0-15

## SIDEWALK (RESIDENTIAL AND COMMERCIAL) CONSTRUCTION

* SIDEWALKS SHALL BE CONSTRUCTED USING 4" THICK CONCRETE, EXCEPT AT DRIVEWAY CROSSINGS, WHERE IT SHALL BE 8" THICK PAVEMENT CLASS CONCRETE, 4000 PSI.
* FINE GRADING MATERIAL SHALL BE CRUSHED ROCK (ASTM C 33 No. 57). ALLOWABLE MAXIMUM COMPACTED THICKNESS OF Type 5 SHALL BE 2".
* SAND IS NOT AN APPROVED FILL, SUBGRADE, OR FINE GRADING MATERIAL UNDER PAVEMENT, SIDEWALKS, RAMPS, OR DRIVEWAYS.
* ALL SIDEWALKS AND RAMPS WITHIN PUBLIC RIGHTS-OF-WAY SHALL MEET THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG).

## SPECIAL REQUIREMENTS FOR WHEELCHAIR RAMP CONSTRUCTION

* WHEELCHAIR RAMPS SHALL BE CONSTRUCTED USING 6" THICK CONCRETE (4000 PSI) AS DETAILED IN THE SPECIFICATIONS.
* RAMPS SHALL HAVE A DETECTABLE WARNING AREA COMPLYING WITH ADA ACCESSIBILITY GUIDELINES (ADAAG). A 6" CONCRETE THICKNESS SHALL BE PLACED UNDER THE DETECTABLE WARNING AREA.
* DETECTABLE WARNINGS SHALL BE 24 INCHES IN THE DIRECTION OF TRAVEL AND EXTEND THE FULL WIDTH OF THE TRAVERSABLE PORTION OF THE RAMP, BUT SHALL NOT EXTEND ONTO THE PORTION OF THE RAMP TRANSITIONING BACK TO CURB HEIGHT.
* DETECTABLE WARNING PAVERS SHALL HAVE A COMPRESSIVE STRENGTH GREATER THAN 8000 PSI, A WATER ABSORPTION MAXIMUM OF 5% AND SHALL MEET OR EXCEED ASTM C-936 AND FREEZE-THAW TESTING PER SECTION 8 OF ASTM C-67. PAVERS SHALL BE PAVED STONE DETECTABLE WARNING PAVER, OR APPROVED EQUAL. ARMORTILE DETECTABLE WARNING SYSTEM OR APPROVED EQUAL WILL ALSO BE ALLOWED.
* EXPANSION JOINTS SHALL BE SEALED WITH APPROVED JOINT SEALANT WHERE SIDEWALKS AND DRIVE ENTRANCES INTERSECT WITH PAVEMENT CURB.
* THE BRICKS SHALL BE PLACED IN A PATTERN THAT CONFORMS TO THIS DRAWING AND ALIGNED IN THE DIRECTION OF PEDESTRIAN TRAVEL.
* THE BRICKS SHALL HAVE A TRUNCATED DOME TOP SURFACE FOR DETECTABLE WARNING TO PEDESTRIANS AND COMPLY WITH THE AMERICAN DISABILITIES ACT GUIDELINES (ADAAG).
* THE TRUNCATED DOME AREA SHALL BE A MAXIMUM WIDTH OF THE SIDEWALK RAMP OR MEDIAN RAMP. WIDER MEDIAN ISLANDS WILL RESULT IN A GAP BETWEEN THE TRUNCATED DOME AREAS.
* THE TRUNCATED DOME AREA SHALL BE A CONTRASTING COLOR TO THE ADJACENT SURFACES. IT SHALL HAVE A MINIMUM OF 70% CONTRAST IN LIGHT REFLECTANCE BETWEEN THE DETECTABLE WARNING AND ADJOINING SURFACE. COLOR PER CITY OF ST. JOSEPH STD.
* THE BRICKS SHALL BE SAW CUT ONLY AND ANY BRICK SHALL NOT BE LESS THAN 25% OF A FULL BRICK.
* THE ARMOR-TILE CAST IN PLACE DETECTABLE WARNING SYSTEM, PAVESTONE DETECTABLE WARNING PAVERS OR APPROVED EQUAL SHALL BE USED IN ALL WHEELCHAIR RAMPS. ARMOR-TILE DEPTH SHALL BE INCLUDED IN MINIMUM 6" THICKNESS.
* CRUSHED ROCK, CONFORMING TO REQUIREMENTS OF ASTM C 33 No. 57 AS SPECIFIED MAY ONLY BE USED UNDER SIDEWALKS AND DRIVEWAYS FOR THE PURPOSE OF MAKING FINAL ADJUSTMENTS TO DIRT SUBGRADE, WHERE NECESSARY, TO INSURE PROPER FINAL GRADE AND THICKNESS OF SIDEWALKS AND DRIVEWAYS. ALLOWABLE MAXIMUM THICKNESS OF COMPACTED Type 5 CRUSHED ROCK SHALL BE 2 INCHES.
* THE MORTAR SAND SHALL MEET THE REQUIREMENTS OF MoDOT FA-M IN SECTION 1005 - AGGREGATES FOR CONCRETE, SUBSECTION 1005.2 ON PAGE 578 OF THE "MISSOURI STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION", 1999 EDITION.

HTK ARCHITECTS

KEVIN R. HOLLAND
NUMBER PE-2010006786
07/31/14

DATE:
2014-07-24

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD

ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

SHEET CONTENTS:
SITE DETAILS

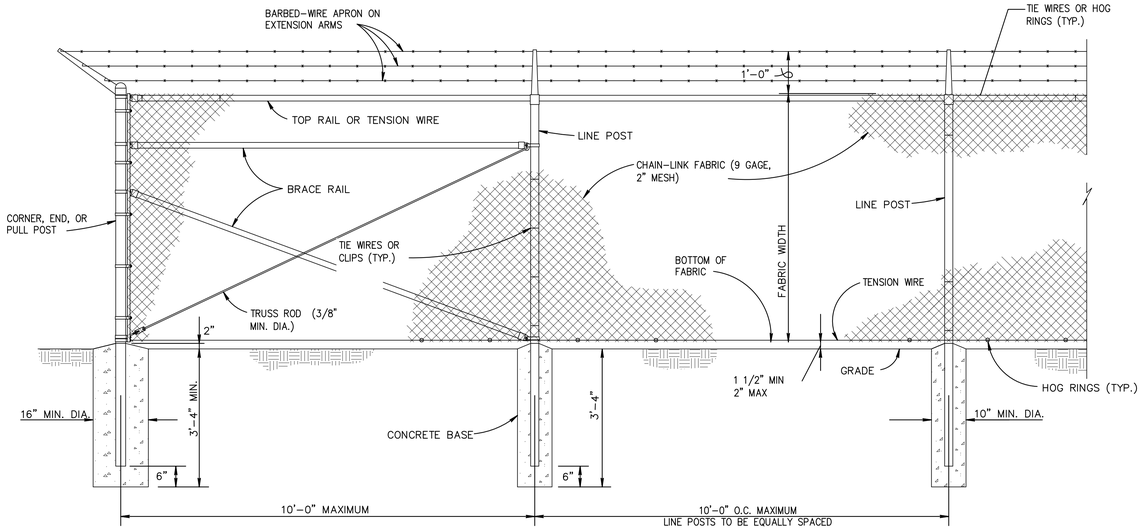
HTK PROJECT NUMBER:
ULYB12022
10008.01 - 0018

SHEET NUMBER:
C101

100% CONTRACT DOCUMENTS

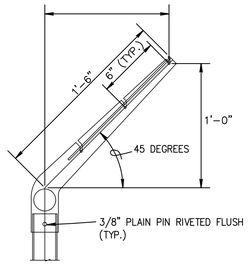
CFS ENGINEERS
cfse.com
2930 SW Woodside Dr, Topeka, KS 66614
o: 785-272-4706 f: 785-272-4736

J:\2012\Proj\125228\DWGS\DETAILS.dwg, SITE DETAILS 1, 7/31/2014 3:53:26 PM

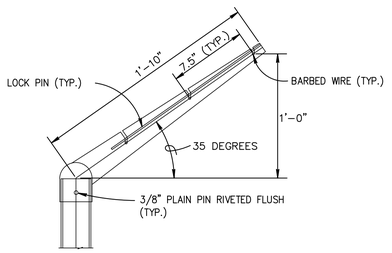



1 CHAIN-LINK SECURITY FENCE DETAIL

NO SCALE




LINE POST




CORNER POST

EXTENSION ARM DETAILS

NO SCALE

| STEEL POST SCHEDULE | | | |
|---|---|---|---|
| USE AND SECTION | MINIMUM OUTSIDE DIMENSIONS (NOMINAL) | | |
| | FABRIC WIDTH 72" OR LESS | FABRIC WIDTH 84" TO 96" | FABRIC WIDTH 108" AND OVER |
| CORNER, END & PULL POSTS | | | |
| TUBULAR – ROUND | 2.375" O.D. | 2.875" O.D. | 4.00" O.D. |
| TUBULAR – SQUARE | 2.00" SQ. | 2.50" SQ. | 3.00" SQ. |
| C–SECTION (ROLL–FORMED) | 3.50" X 3.50" | 3.50" X 3.50" | ——— |
| LINE POSTS | | | |
| TUBULAR – ROUND | 1.90" O.D. | 2.375" O.D. | 2.875" O.D. 2.25" |
| H–SECTION | 2.25" X 1.70" 1.875" | 2.25" X 1.70" | X 1.70" |
| C–SECTION (ROLL–FORMED) | X 1.625" | 2.25" X 1.70" | ——— |
| TOP, BOTTOM & BRACE RAILS | | | |
| TUBULAR – ROUND | 1.66" O.D. | | |
| TUBULAR – SQUARE | 1.50" SQ. | | |
| H–SECTION | 1.625" X 1.50" | | |
| C–SECTION (ROLL–FORMED) | 1.625" X 1.25" | | |

1 NOTES:

1. DETAILS SHOWN ARE TO CLARIFY REQUIREMENTS AND ARE NOT INTENDED TO LIMIT OTHER TYPES OF FENCE SECTIONS AND METHODS OF INSTALLATION THAT COMPLY WITH THE SPECIFICATIONS.

2. WIRE TIES, RAILS, POSTS, AND BRACES SHALL BE CONSTRUCTED ON THE SECURE SIDE OF THE FENCE ALIGNMENT. CHAIN–LINK FABRIC SHALL BE PLACED ON THE SIDE OPPOSITE THE SECURE AREA.

3. UNLESS SPECIFICALLY SHOWN OR SPECIFIED, ALL FE6 FENCE SHALL HAVE AN APRON EXTENDED OUTWARD FROM THE AREA BEING PROTECTED.

4. C–SECTION POSTS SHALL BE INSTALLED SO THAT THE VOID INSIDE THE POST IS COMPLETELY FILLED WITH CONCRETE UP TO THE TOP OF THE FOUNDATION.

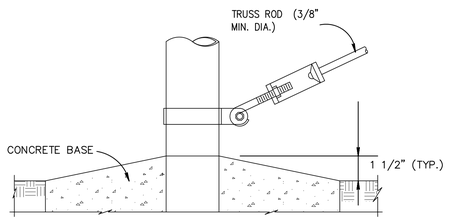
FENCE LEGEND:

TYPE FE6 – CHAIN–LINK FENCE W/BARBED–WIRE ON SINGLE OUTRIGGER
TR – FENCE WITH TOP RAIL AND TENSION WIRE AT BOTTOM
TBR – FENCE WITH TOP AND BOTTOM RAILS
TWB – TENSION WIRE TOP AND BOTTOM
TWBR – FENCE WITH TOP TENSION WIRE AND BOTTOM RAIL
FINAL NUMBER IS FABRIC WIDTH IN INCHES.

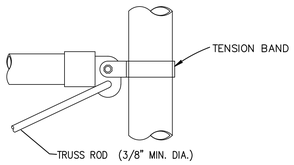
EXAMPLES

FE6–TR–72 – CHAIN–LINK SECURITY FENCE WITH BARBED–WIRE ON SINGLE OUTRIGGER, TOP RAIL, AND 72 INCH FABRIC WIDTH.

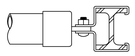
FE5–TWB–84 – CHAIN–LINK SECURITY FENCE WITH NO APRON, TOP AND BOTTOM TENSION WIRE, AND 84 INCH FABRIC WIDTH.




1 TRUSS ROD AND BAND

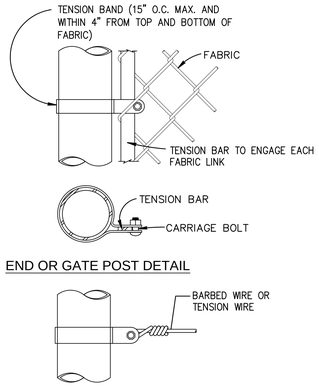



ROUND POST



H-BEAM

BRACE RAIL CLAMP DETAILS




END OR GATE POST DETAIL

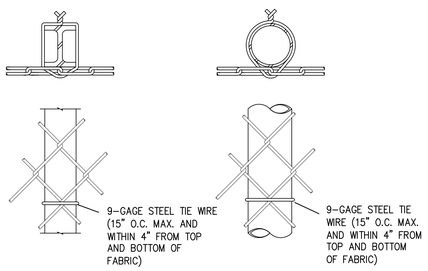



TENSION BAND DETAIL

FASTENING DETAILS

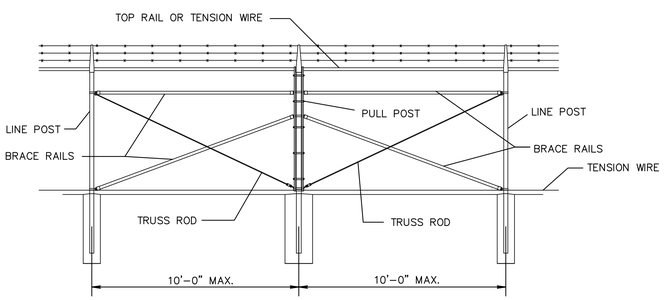
NO SCALE

TOP OR BRACE RAIL ATTACHMENT




LINE POST ATTACHMENTS

NO SCALE

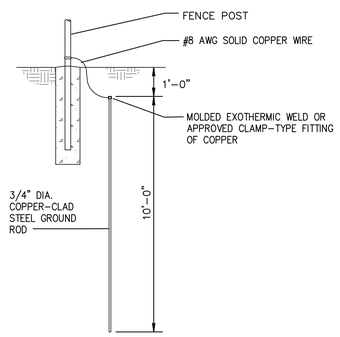



BRACE PANEL DETAIL

NO SCALE

NOTE:

PROVIDE BRACE PANEL WHENEVER STRAIGHT RUNS EXCEED 500 FEET.




GROUNDING DETAIL

NO SCALE

FE6 CHAIN-LINK SECURITY FENCE DETAILS

FOR NON-SENSORED FENCE
MECHANICAL ENCLOSURE FENCE & GATE
(6' FABRIC HEIGHT)


CFS ENGINEERS
cfse.com
2930 SW Woodside Dr, Topeka, KS 66614
p: 785-272-4706 f: 785-272-4736



HTK ARCHITECTS

KEVIN K. HOLLAND
NUMBER PE-2010006786
PROFESSIONAL ENGINEER
STATE OF MISSOURI


DATE:
2014-07-24

REVISED DATE:

SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD

ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

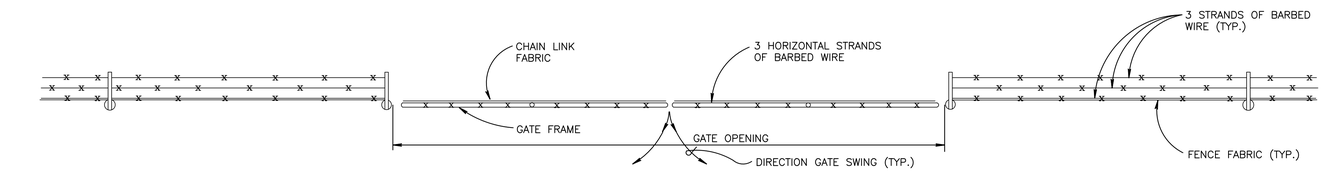
SHEET CONTENTS:
SITE DETAILS

HTK PROJECT NUMBER:
ULYB112022
10008.01 - 0018

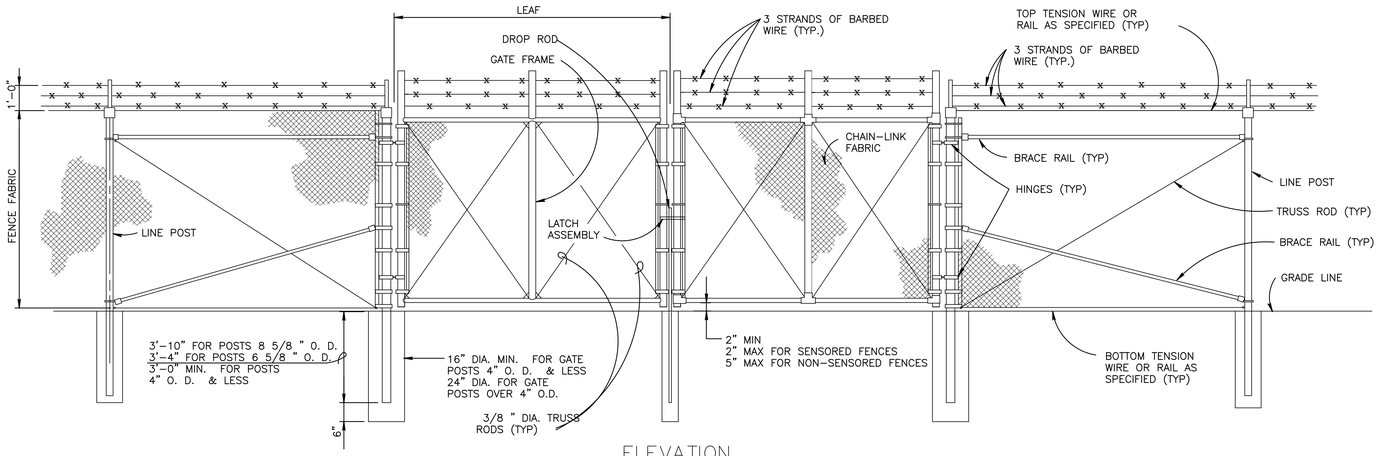
SHEET NUMBER:
C102

100% CONTRACT DOCUMENTS


F:\2015\Proj\152287\DWG\SHEETS\15-Proj_SHEETSTABS_7-7-15 7/9/14 5:53:37 PM



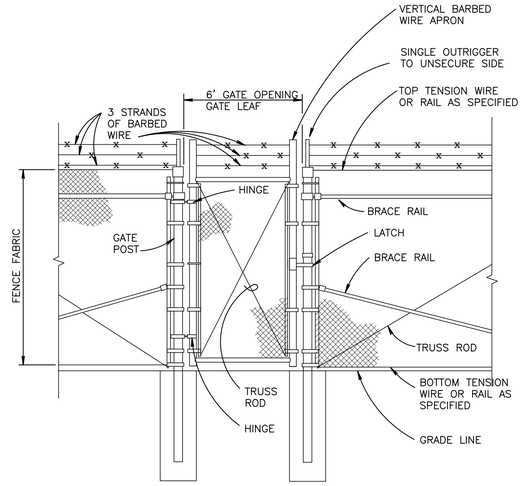

PLAN




ELEVATION

## DOUBLE SWING GATE (TYPE FE-6 FENCE)

NO SCALE




## 6' GATE LEAF PERSONNEL GATE TYPE FE-6 FENCE

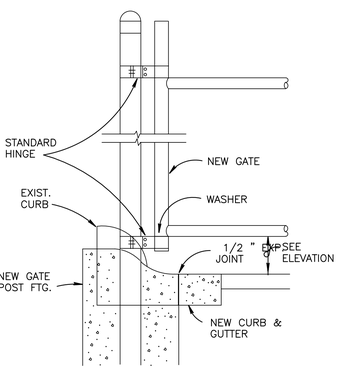
NO SCALE

NOTES:

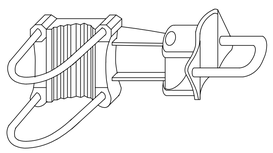
1. FOR NON-SENSORED FENCES, DETAILS SHOWN ARE TO CLARIFY REQUIREMENTS AND ARE NOT INTENDED TO LIMIT OTHER TYPE OF FENCE SECTIONS AND METHODS OF INSTALLATION WHICH COMPLY WITH THE SPECIFICATIONS.
2. SWING GATES SHALL BE CONSTRUCTED WITH DROP RODS, PADLOCKS, LATCH ASSEMBLY AND GATE KEEPERS EXCEPT AS NOTED.
3. ALL GATE FRAMES SHALL MEET THE MINIMUM REQUIREMENTS OF ASTM F900 1.90" NOMINAL (ROUND) OR 2.00" NOMINAL (SQUARE). GATE FRAMES SHALL BE OF WELDED CONSTRUCTION OR SHALL BE ASSEMBLED USING HEAVY FITTINGS. AT CONTRACTOR'S OPTION A WELDED HORIZONTAL BRACE MAY BE USED IN LIEU OF TRUSS RODS TO BRACE ALL-WELDED GATE FRAMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER RIGID CONSTRUCTION OF ALL GATES SUPPLIED.
4. GATES SHALL BE DESIGNATED AS FOLLOWS:
   FENCE TYPE – FE5, FE6, ETC.
   FENCE HEIGHT – INCHES
   TYPE OPENING – SO (SINGLE)
   – DO (DOUBLE)
   HINGE – RA (STANDARD)
   – HO (OFFSET)
   OPENING – FEET (CLEAR OPENING BETWEEN GATE POSTS)

   EXAMPLES: FE6-84-DO-RA-24
   FE5-48-SO-HO-6

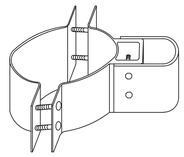
| GATE POST SCHEDULE | |
|---|---|
| GATE LEAF WIDTH (NOMINAL) | OUTSIDE DIMENSION (NOMINAL) |
| 6' OR LESS | 2.875" OD<br>2.5" SQ |
| GREATER THAN 6' TO 12' | 4.0" OD |
| GREATER THAN 12' TO 18' | 6.625" OD |
| MORE THAN 18' | 8.625" OD |




PLAN



OFFSET HINGE

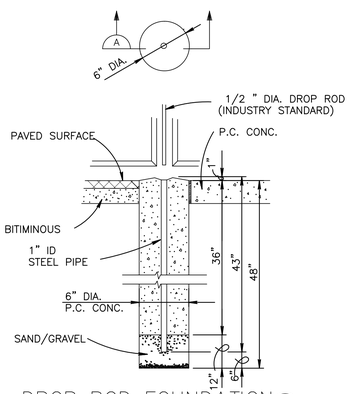


STANDARD HINGE

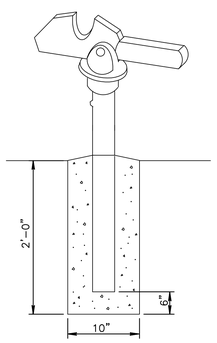



## GATE POST SECTION AT CURB AND GUTTER

NO SCALE

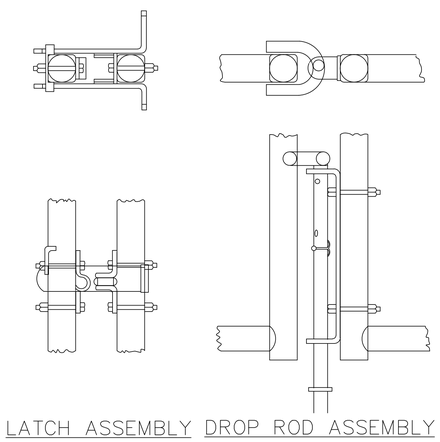



## DROP ROD FOUNDATION




## GATE KEEPER

(TO HOLD GATE OPEN)



LATCH ASSEMBLY DROP ROD ASSEMBLY

## SWING GATE DETAILS

NO SCALE

## FE6 CHAIN-LINK SECURITY FENCE DETAILS

FOR NON-SENSORED FENCE
MECHANICAL ENCLOSURE FENCE & GATE
(6' FABRIC HEIGHT)

HTK ARCHITECTS

KEVIN K. HOLLAND
NUMBER PE-2010006786
07/31/14

CFS ENGINEERS
cfse.com
2930 SW Woodside Dr, Topeka, KS 66614
p: 785-272-4706 f: 785-272-4736

DATE:
2014-07-24

REVISED DATE:

**SECURITY FORCES ADMIN & STORAGE FACILITY**

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

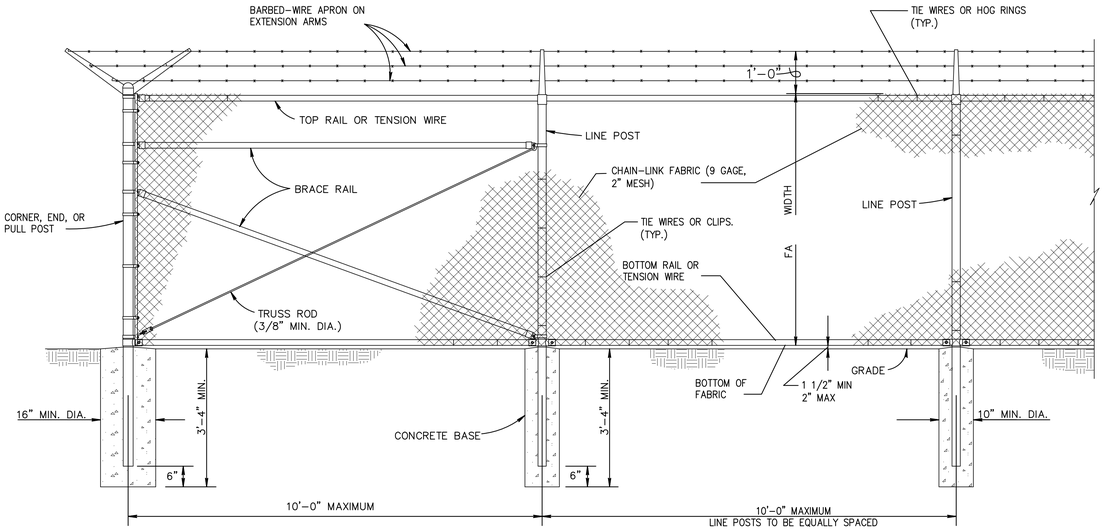
SHEET CONTENTS:
SITE DETAILS

HTK PROJECT NUMBER:
ULYB112022
10008.01 - 0018

SHEET NUMBER:
C103

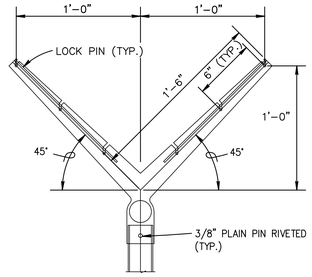
100% CONTRACT DOCUMENTS

J:\2013\Proj\130128\DWG\SHEETS\03-Proj_SHT_DETAILS 5_7-23-2014 3:55:09 PM

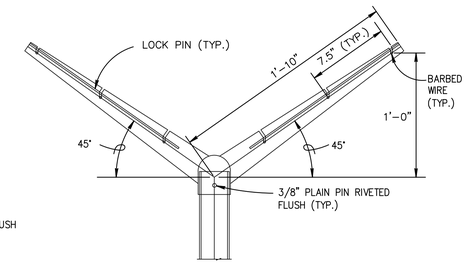



1 CHAIN-LINK SECURITY FENCE DETAIL

NO SCALE




LINE POST




CORNER POST

EXTENSION ARM DETAILS

NO SCALE

| STEEL POST SCHEDULE | | | |
|---|---|---|---|
| USE AND SECTION | MINIMUM OUTSIDE DIMENSIONS (NOMINAL) | | |
| | FABRIC WIDTH 72" OR LESS | FABRIC WIDTH 84" TO 96" | FABRIC WIDTH 108" AND OVER |
| CORNER, END & PULL POSTS | | | |
| TUBULAR – ROUND | 2.375" O.D. | 2.875" O.D. | 4.00" O.D. |
| TUBULAR – SQUARE | 2.00" SQ. | 2.50" SQ. | 3.00" SQ. |
| C–SECTION (ROLL–FORMED) | 3.50" X 3.50" | 3.50" X 3.50" | ——— |
| LINE POSTS | | | |
| TUBULAR – ROUND | 1.90" O.D. | 2.375" O.D. | 2.875" O.D. |
| H–SECTION | 2.25" X 1.70" | 2.25" X 1.70" | 2.25" X 1.70" |
| C–SECTION (ROLL–FORMED) | 1.875" X 1.625" | 2.25" X 1.70" | ——— |
| TOP, BOTTOM & BRACE RAILS | | | |
| TUBULAR – ROUND | 1.66" O.D. | | |
| TUBULAR – SQUARE | 1.50" SQ. | | |
| H–SECTION | 1.625" X 1.50" | | |
| C–SECTION (ROLL–FORMED) | 1.625" X 1.25" | | |

NOTES:

1. DETAILS SHOWN ARE TO CLARIFY REQUIREMENTS AND ARE NOT INTENDED TO LIMIT OTHER TYPES OF FENCE SECTIONS AND METHODS OF INSTALLATION THAT COMPLY WITH THE SPECIFICATIONS.

2. WIRE TIES, RAILS, POSTS, AND BRACES SHALL BE CONSTRUCTED ON THE SECURE SIDE OF THE FENCE ALIGNMENT. CHAIN–LINK FABRIC SHALL BE PLACED ON THE SIDE OPPOSITE THE SECURE AREA.

3. C–SECTION POSTS SHALL BE INSTALLED SO THAT THE VOID INSIDE THE POST IS COMPLETELY FILLED WITH CONCRETE UP TO THE TOP OF THE FOUNDATION.

4. BOTTOM RAIL SHALL BE ATTACHED TO DOUBLE RAIL ENDS USING 3/8" CARRIAGE BOLTS AS SHOWN.

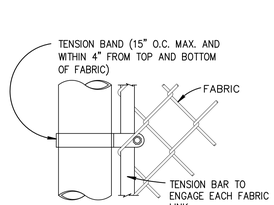
FENCE LEGEND:

TYPE FE5 – CHAIN–LINK FENCE WITHOUT BARBED–WIRE APRON
TYPE FE6 – CHAIN–LINK FENCE W/BARBED–WIRE ON SINGLE OUTRIGGER
TYPE FE7 – CHAIN–LINK FENCE W/BARBED–WIRE ON DOUBLE OUTRIGGER
TYPE FE8 – CHAIN–LINK FENCE W/BARBED–WIRE AND BARBED–TAPE ON DOUBLE OUTRIGGER
TR – FENCE WITH TOP RAIL AND TENSION WIRE AT BOTTOM
TBR – FENCE WITH TOP AND BOTTOM RAILS
TWB – TENSION WIRE TOP AND BOTTOM
TWBR – FENCE WITH TOP TENSION WIRE AND BOTTOM RAIL
FINAL NUMBER IS FABRIC WIDTH IN INCHES.

EXAMPLES

FE6–TR–72 – CHAIN–LINK SECURITY FENCE WITH BARBED–WIRE ON SINGLE OUTRIGGER, TOP RAIL, AND 72 INCH FABRIC WIDTH.

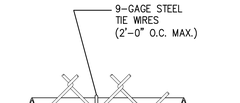
FE5–TWB–84 – CHAIN–LINK SECURITY FENCE WITH NO APRON, TOP AND BOTTOM TENSION WIRE, AND 84 INCH FABRIC WIDTH.



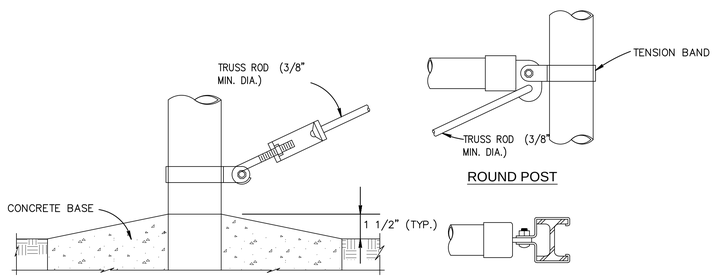

END OR GATE POST DETAIL




TENSION BAND DETAIL




TOP OR BRACE RAIL ATTACHMENT

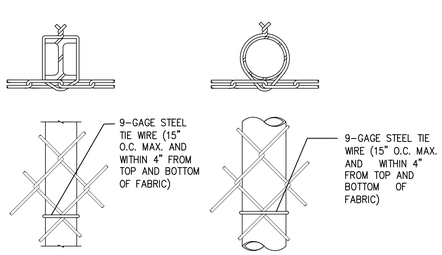



TRUSS ROD AND BAND

ROUND POST

H-BEAM

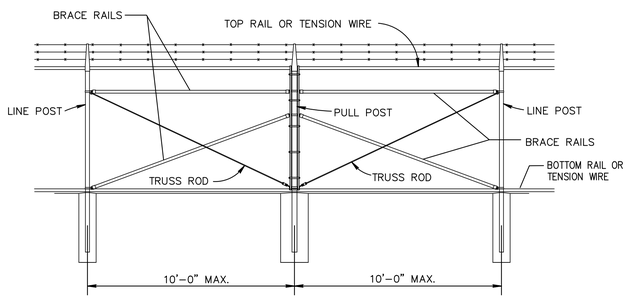
BRACE RAIL CLAMP DETAILS




LINE POST ATTACHMENTS

FASTENING DETAILS

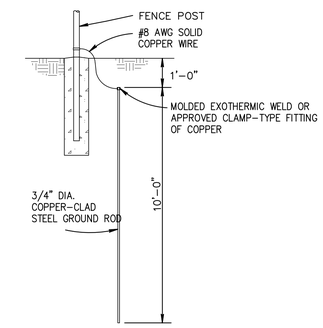
NO SCALE




BRACE PANEL DETAIL

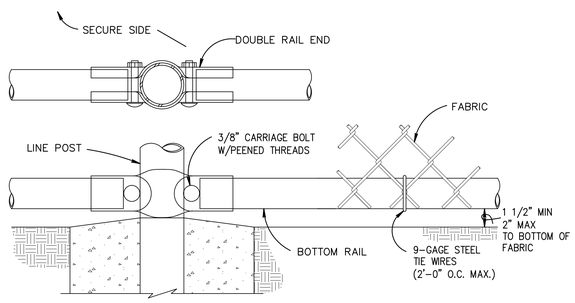
NO SCALE

NOTE:
PROVIDE BRACE PANEL WHENEVER STRAIGHT RUNS EXCEED 500 FEET.




GROUNDING DETAIL

NO SCALE




BOTTOM RAIL DETAIL

NO SCALE

FE7 CHAIN-LINK SECURITY FENCE DETAILS

FOR NON-SENSORED FENCE PERIMETER SECURITY FENCE & GATE (7' FABRIC HEIGHT)

HTK ARCHITECTS

KEVIN E. HOLLAND NUMBER PE-2010006786 STATE OF MISSOURI PROFESSIONAL ENGINEER

DATE:
2014-07-24

REVISED DATE:

SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD

ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

SHEET CONTENTS:
SITE DETAILS

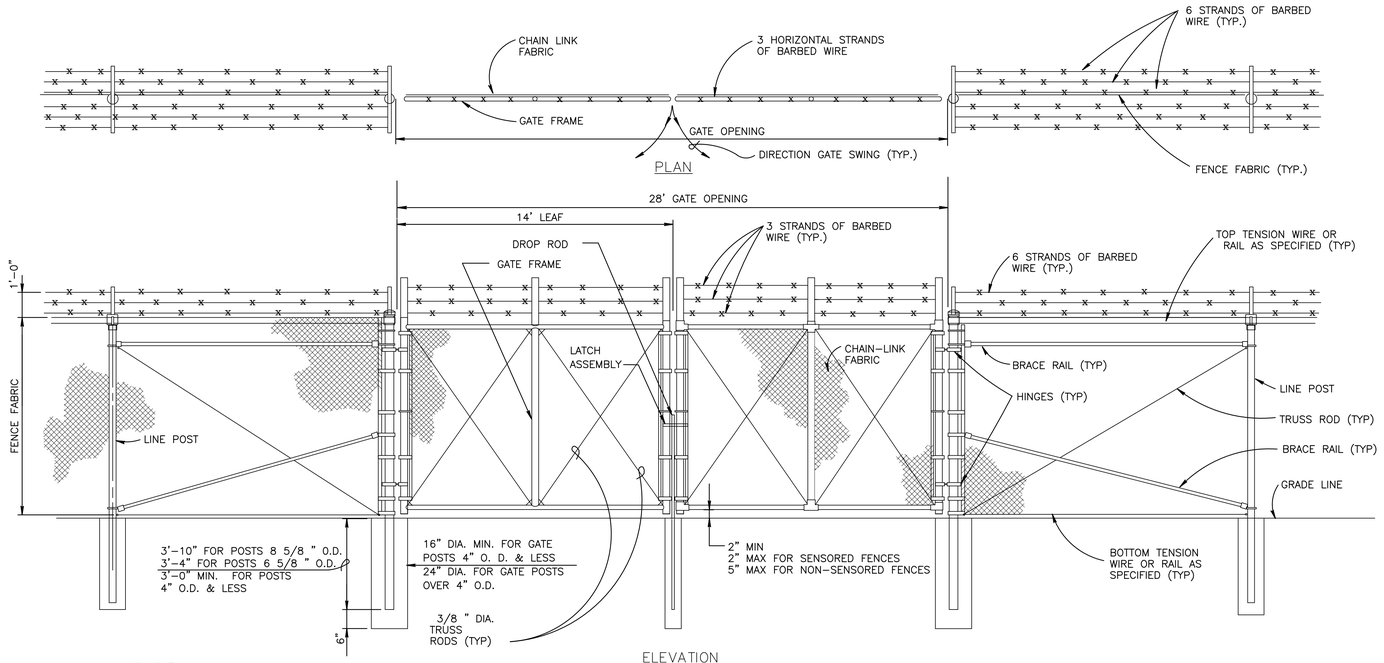
HTK PROJECT NUMBER:
ULYB112022
10008.01 - 0018

SHEET NUMBER:
C104

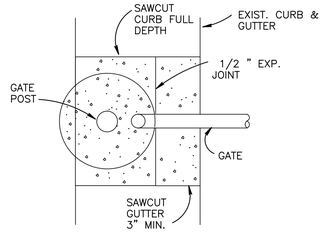
100% CONTRACT DOCUMENTS

CFS ENGINEERS
cfse.com
2930 SW Woodside Dr, Topeka, KS 66614
o: 785-272-4706 f: 785-272-4796

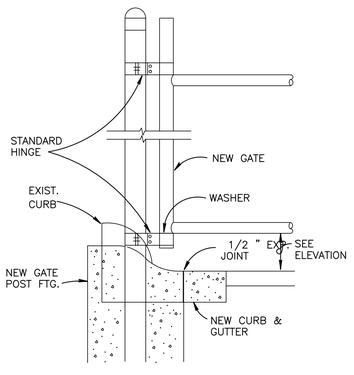
J:\2013\Proj\13122613\CWD\DETAILS.dwg, SITE DETAILS A, 7/31/2014 3:56:16 PM



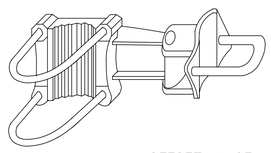

14' GATE LEAF DOUBLE SWING GATE (TYPE FE7 FENCE)
(FOR TYPE FE8 ADD REINFORCED BARBED TAPE)
NO SCALE



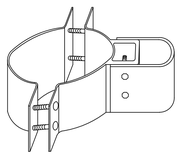

PLAN



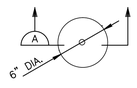

GATE POST SECTION
AT CURB AND GUTTER
NO SCALE

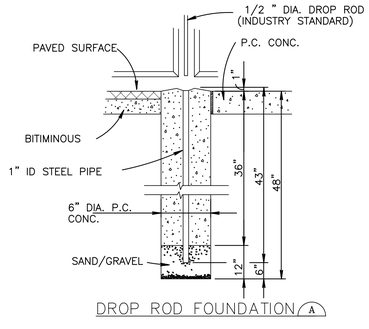


OFFSET HINGE

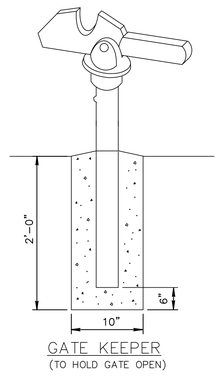


STANDARD HINGE



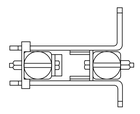

DROP ROD FOUNDATION A

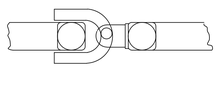


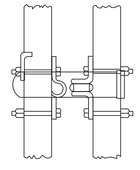

GATE KEEPER
(TO HOLD GATE OPEN)

SWING GATE DETAILS
NO SCALE

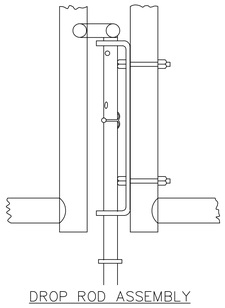
| GATE POST SCHEDULE | |
|---|---|
| GATE LEAF WIDTH (NOMINAL) | OUTSIDE DIMENSION (NOMINAL) |
| 6' OR LESS | 2.875" OD<br>2.5" SQ |
| GREATER THAN 6' TO 12' | 4.0" OD |
| GREATER THAN 12' TO 18' | 6.625" OD |
| MORE THAN 18' | 8.625" OD |



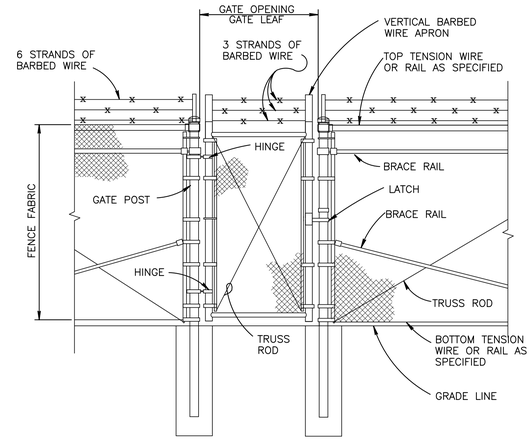




LATCH ASSEMBLY



DROP ROD ASSEMBLY




PERSONNEL GATE
TYPE FE7 & FE8 FENCE
NO SCALE

NOTES;

1. FOR NON-SENSORED FENCES, DETAILS SHOWN ARE TO CLARIFY REQUIREMENTS AND ARE NOT INTENDED TO LIMIT OTHER TYPE OF FENCE SECTIONS AND METHODS OF INSTALLATION THAT COMPLY WITH THE SPECIFICATIONS.
2. SWING GATES SHALL BE CONSTRUCTED WITH DROP RODS, PADLOCKS BY OWNER, LATCH ASSEMBLY AND GATE KEEPERS EXCEPT AS NOTED.
3. ALL GATE FRAMES SHALL MEET THE MINIMUM REQUIREMENTS OF ASTM F900 1.90" NOMINAL (ROUND) OR 2.00" NOMINAL (SQUARE). GATE FRAMES SHALL BE OF WELDED CONSTRUCTION OR SHALL BE ASSEMBLED USING HEAVY FITTINGS. AT CONTRACTOR'S OPTION A WELDED HORIZONTAL BRACE MAY BE USED IN LIEU OF TRUSS RODS TO BRACE ALL-WELDED GATE FRAMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER RIGID CONSTRUCTION OF ALL GATES SUPPLIED.
4. GATES SHALL BE DESIGNATED AS FOLLOWS:
   FENCE TYPE – FE5, FE6, ETC.
   FENCE HEIGHT – INCHES
   TYPE OPENING – SO (SINGLE)
   – DO (DOUBLE)
   HINGE – RA (STANDARD)
   – HO (OFFSET)
   OPENING – FEET (CLEAR OPENING BETWEEN GATE POSTS)

   EXAMPLES: FE6-84-DO-RA-24
   FE5-48-SO-HO-6

FE7 CHAIN-LINK SECURITY FENCE
DETAILS
FOR NON-SENSORED FENCE
PERIMETER SECURITY FENCE & GATE
(7' FABRIC HEIGHT)

HTK ARCHITECTS

KEVIN E. HOLLAND
NUMBER PE-2010006786
07/29/14

DATE:
2014-07-24

REVISED DATE:

SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

SHEET CONTENTS:
SITE DETAILS

HTK PROJECT NUMBER:
ULYB112022
10008.01 - 0018

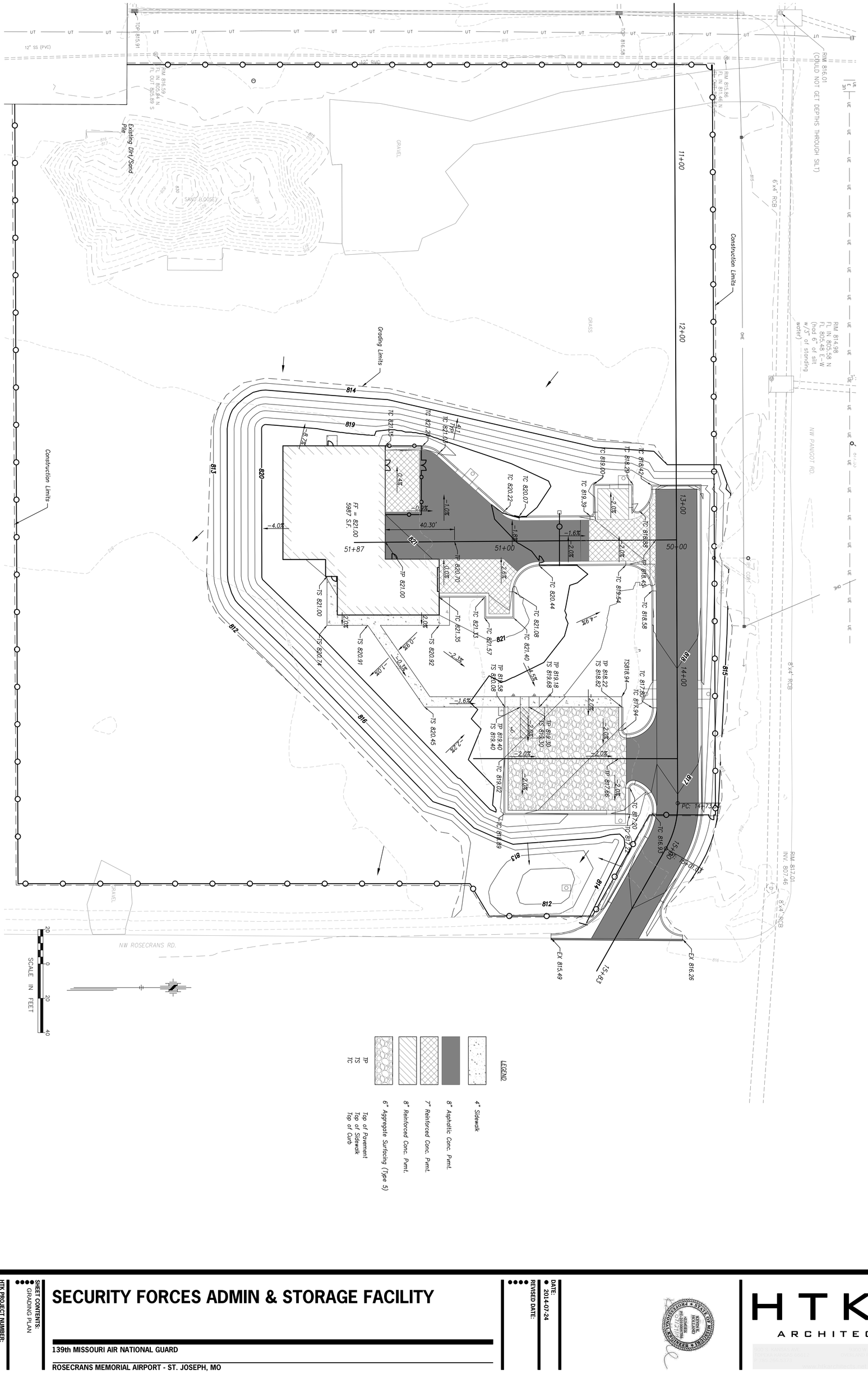
SHEET NUMBER:
C105

100% CONTRACT DOCUMENTS

CFS ENGINEERS
cfse.com
2930 SW Woodside Dr, Topeka, KS 66614
o: 785-272-4706 f: 785-272-4736

J:\2013\hwy\13023\PWD\CIVIL\DETAILS\dwg, SITE DETAILS 5, 7/21/2014 3:57:23 PM

J:\2013\Proj\135220\DWGS\site.dwg, Grading Option 3, 7/25/2014 11:08:55 AM





CFS ENGINEERS
cfse.com
2930 SW Woodside Dr. Topeka, KS 66614
o 785-272-4706 f 785-272-4796


# SECURITY FORCES ADMIN & STORAGE FACILITY

**139th MISSOURI AIR NATIONAL GUARD**

**ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO**

**SHEET CONTENTS:** GRADING PLAN

**HTK PROJECT NUMBER:** 013612022
**100636.01 - 0018**

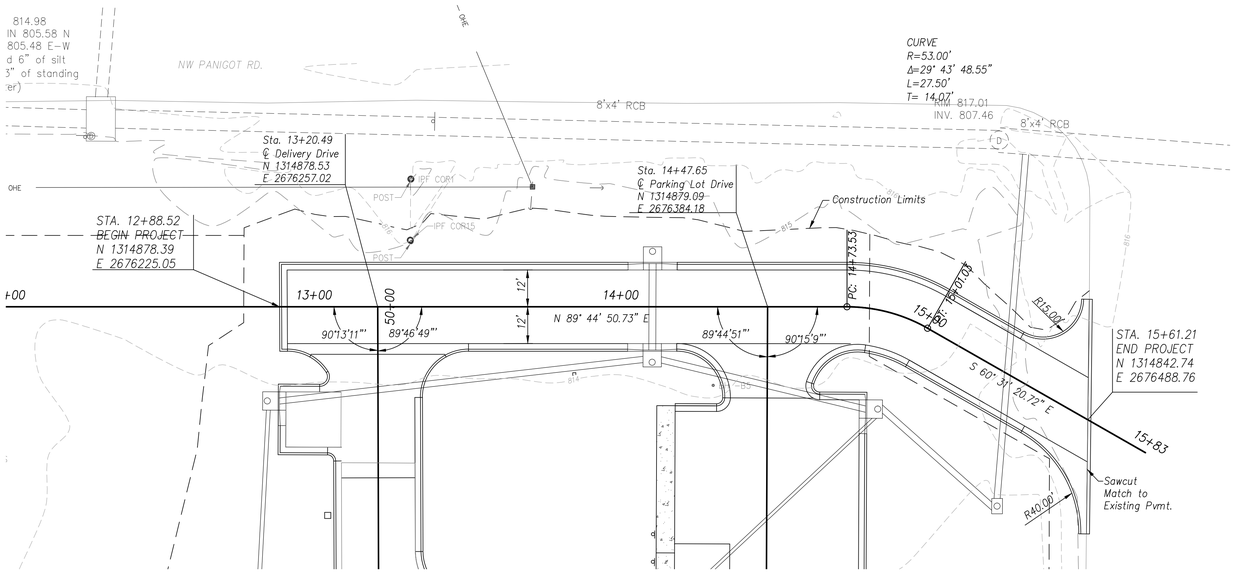
**SHEET NUMBER:** C200

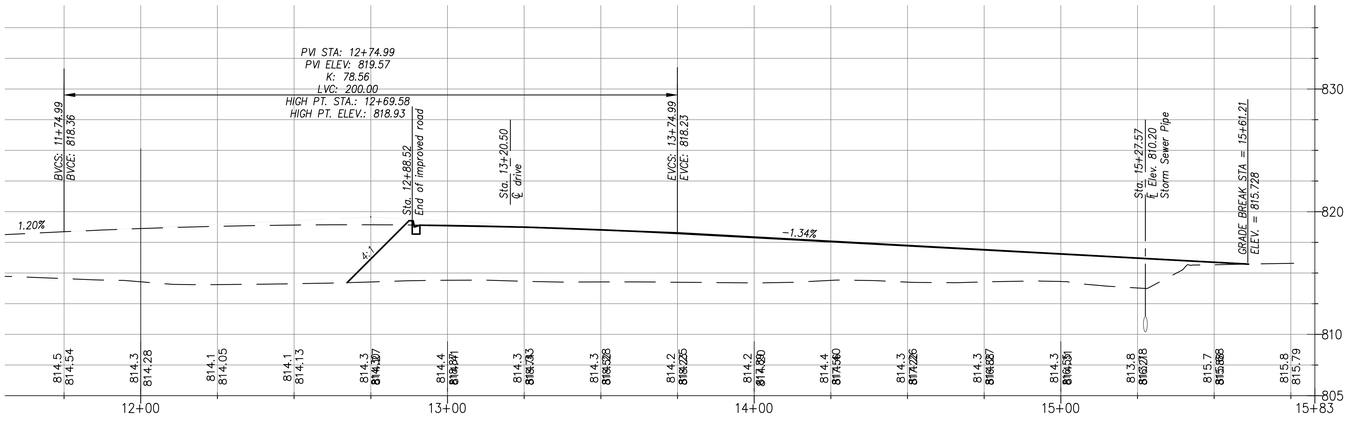
**100% CONTRACT DOCUMENTS**

**DATE:** 2014-07-24

**REVISED DATE:**


HTK ARCHITECTS PA




## Centerline of Road Alignment Data

*Tangent Data*

| Description | PT Station | Northing | Easting |
|---|---|---|---|
| Start: | 10+00.00 | 1314877.12 | 2675936.535 |
| End: | 14+73.533 | 1314879.208 | 2676410.063 |

*Tangent Data*

| Parameter | Value | Parameter | Value |
|---|---|---|---|
| Length: | 473.533 | Course: | N 89° 44' 50.7306" E |

*Curve Point Data*

| Description | Station | Northing | Easting |
|---|---|---|---|
| PC: | 14+73.533 | 1314879.208 | 2676410.063 |
| RP: | | 1314826.208 | 2676410.293 |
| PT: | 15+01.034 | 1314872.347 | 2676436.377 |

*Circular Curve Data*

| Parameter | Value | Parameter | Value |
|---|---|---|---|
| Delta: | 29° 43' 48.5497" | Type: | RIGHT |
| Radius: | 53 | Length: | 27.501 |
| Tangent: | 14.068 | Mid–Ord: | 1.774 |
| External: | 1.835 | Chord: | 27.194 |
| Course: | S 75° 23' 14.9945" E | | |

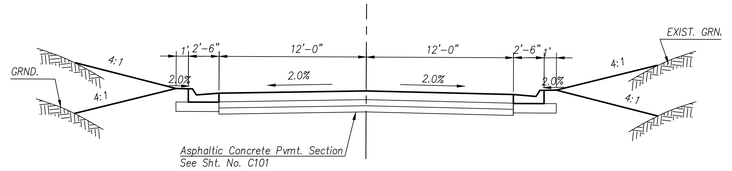
*Tangent Data*

| Description | PT Station | Northing | Easting |
|---|---|---|---|
| Start: | 15+01.034 | 1314872.347 | 2676436.377 |
| End: | 15+82.845 | 1314832.09 | 2676507.597 |

*Tangent Data*

| Parameter | Value | Parameter | Value |
|---|---|---|---|
| Length: | 81.811 | Course: | S 60° 31' 20.7197" E |

SCALE IN FEET
20 0 20 40
PLAN: Lat. & Long.
PROFILE: Horiz. same as above
Vert.




ROAD TYPICAL SECTION

HTK ARCHITECTS

KEVIN K. HOLLAND
NUMBER PE-2010006786
PROFESSIONAL ENGINEER
STATE OF MISSOURI

DATE:
2014-07-24

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD

ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

SHEET CONTENTS:
ROAD PLAN AND PROFILE

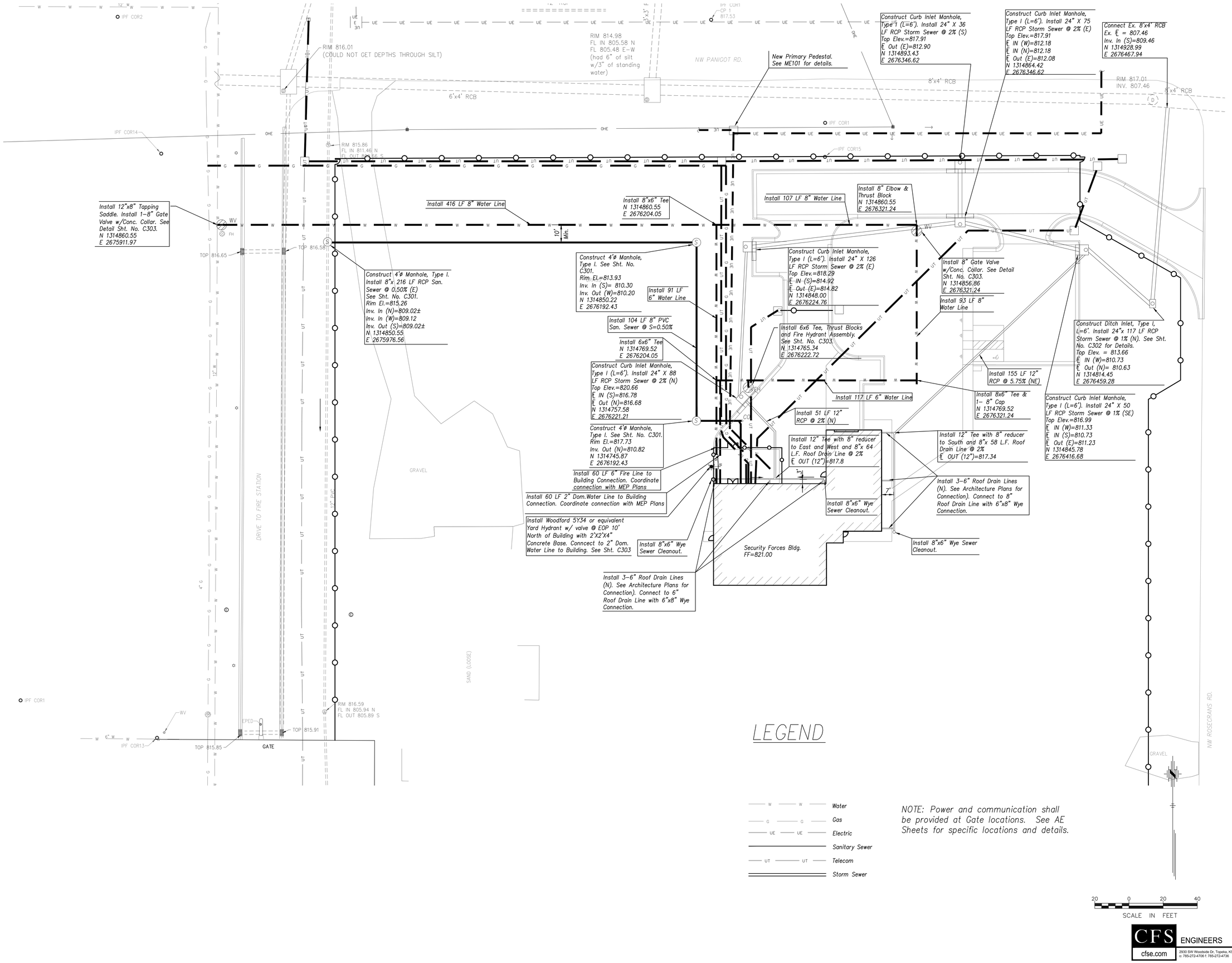
HTK PROJECT NUMBER:
ULY8112022
10008.01 - 0018

SHEET NUMBER:
C201

100% CONTRACT DOCUMENTS

CFS ENGINEERS
cfse.com
2930 SW Woodside Dr, Topeka, KS 66614
o: 785-272-4706 f: 785-272-4736

J:\2012\hyc\132128\CAD\Land dwg, Sheet # & P...7/21/2014 5:39:13 PM




HTK ARCHITECTS

KEVIN K. HOLLAND
NUMBER PE-2010006786
STATE OF MISSOURI
PROFESSIONAL ENGINEER

DATE:
2014-07-24

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD

ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

SHEET CONTENTS:
UTILITY PLAN

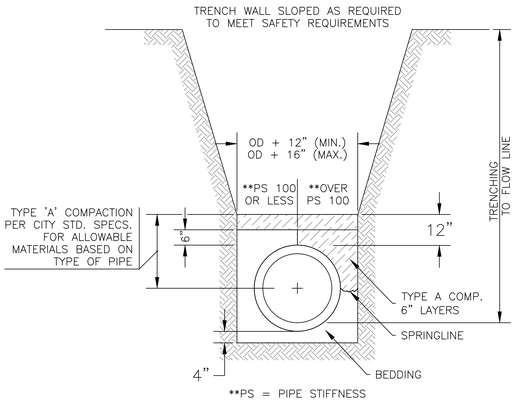
HTK PROJECT NUMBER:
ULYB112022
10008.01 - 0018

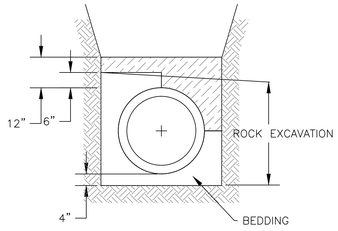
SHEET NUMBER:
C300

100% CONTRACT DOCUMENTS

CFS ENGINEERS
cfse.com
2930 SW Woodside Dr, Topeka, KS 66614
p: 785-272-4706 f: 785-272-4736

J:\2013\Proj\130128\DWG\Plan-Eng_130ltr_ 7/25/2014 11:19:21 AM




## TRENCHING DETAILS

NOTES:

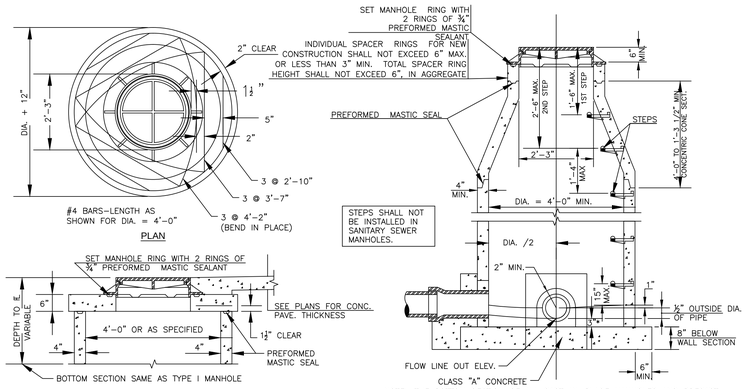
1. THE TRENCH SHALL BE EXCAVATED TO 4" BELOW BOTTOM OF THE PIPE BARREL & BACKFILLED AS SHOWN ABOVE WITH AN APPROVED BEDDING MATERIAL.
2. WHEN THE SEWER IS TO BE INSTALLED IN ROCK, THE TRENCH IS TO BE EXCAVATED TO A MINIMUM DEPTH OF 4" BELOW THE BOTTOM OF THE PIPE AND BACKFILLED IN 6" COMPACTED LAYERS WITH AN APPROVED BEDDING MATERIAL AS SHOWN ABOVE. THE ROCK EXCAVATED TO BE PAID AS A SEPARATE BID ITEM. THE EMBEDMENT, IN ALL CASES, TO BE INCLUDED IN THE PRICE BID PER TRENCH, EXCAVATION, AND BACKFILL.

### STANDARDS FOR SETTING LINE AND GRADE FOR SEWER CONSTRUCTION:

1. STAKES, SPIKES, SHINERS, OR CROSSES SET BY TRANSIT AT THE SURFACE ON AN OFFSET FROM THE SEWER CENTER LINE.
2. STAKES ARE TO BE SET IN THE TRENCH BOTTOM ON THE SEWER LINE AS THE ROUGH GRADE FOR SEWER IS COMPLETED.
3. ELEVATIONS GIVEN TO THE FINISHED TRENCH GRADE AND SEWER INVERT, WHILE SEWER LAYING PROGRESSES.

### STANDARD METHODS FOR TRANSFERRING LINE AND GRADE TO SEWER TRENCH BOTTOM:

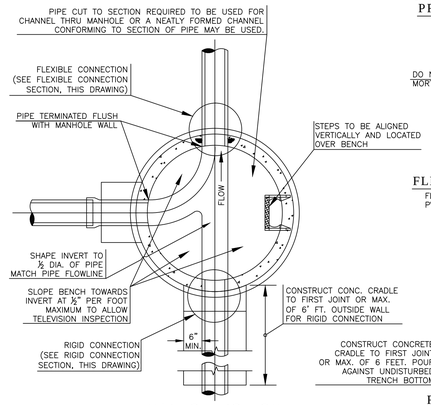
1. ELECTRONIC LASER EQUIPMENT–STAKING SHALL BE AT 25' INTERVALS FOR THE FIRST 100' AND EVERY 100' THEREAFTER UNTIL THE NEXT MANHOLE IS REACHED.
2. BATTER BOARDS AND BATTER BOARD SUPPORTS–STAKING SHALL BE EVERY 25'.



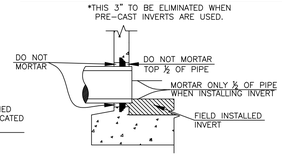

## STANDARD MANHOLE TYPE II

NOTE: THE BOTTOM SECTION OF ALL CAST–IN–PLACE MANHOLES AND PRECAST MANHOLES NOT BUILT MONOLITHICALLY WITH THE BASE SHALL BE SET INTO A STEEL REINFORCED (#4 @ 12" E.W.) CONCRETE BASE (4,000 PSI) A MINIMUM OF 4 INCHES. IN THIS CASE, THE BASE THICKNESS SHALL BE INCREASED TO 12 INCHES.

## PRE-CAST STANDARD MANHOLE TYPE I

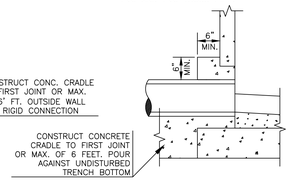



## MANHOLE BOTTOM PLAN



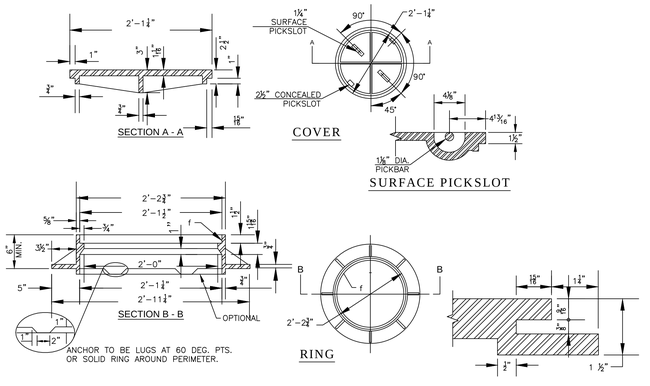

## FLEXIBLE CONNECTION SECTION

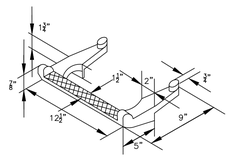
FLEXIBLE CONNECTIONS MAY BE USED FOR DIP, PVC AND PVC TRUSS PIPE.




## RIGID CONNECTION SECTION

RIGID CONNECTION SHALL BE USED FOR VCP, RCP AND CMP.




## DETAIL OF CAST IRON MANHOLE STEP

(FOR PRECAST MANHOLE TO BE USED IN STORM SEWER SYSTEMS ONLY)

VESTAL MANUFACTURING NO. 918–P, CLAY AND BAILEY NO. 2115, NEENAH NO. R–1981–I OR EQUAL AS FURNISHED BY MANUFACTURER OF PRECAST MANHOLE.

COPOLYMER POLYPROPYLENE PLASTIC STEP, PS1–PF or PS2–PF, MANUFACTURED BY M.A. IND. INC. OR APPROVED EQUAL MAY BE USED AS AN ALTERNATE TO DETAILED CASTING. THIS STEP MAY BE CAST IN PLACE OR INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDED INSTALLATION PROCEDURE.

### DETAIL OF MANHOLE CASTINGS

CASTINGS SHALL CONFORM TO THE REQUIREMENTS OF "SPECIFICATIONS FOR GRAY IRON CASTINGS" IN ACCORDANCE WITH A.S.T.M. A 48, CLASS 35B.

MINIMUM TENSILE STRENGTH OF EACH CASTING SHALL BE AT LEAST 30,000 PSI.

AVERAGE WT. COVER 185 LBS., RING 220 LBS. VARIATION IN WEIGHT WILL NOT EXCEED THE SPECIFIED WEIGHTS BY MORE THAN 4%.

CASTINGS ARE TO BE MANUFACTURED TRUE TO PATTERN AND WITH SATISFACTORY FIT OF COMPONENT PARTS. CASTINGS SHALL BE FREE OF DEFECTS. DIMENSIONS AS DETAILED ON PLAN SHALL NOT DEVIATE BY MORE THAN 1/16" PER FOOT.

SEATING SURFACES OF CASTINGS SHALL BE MACHINED AS REQUIRED TO PREVENT ROCKING.

ALL CASTINGS SHALL BE FURNISHED IN BARE METAL AND SHALL HAVE MANUFACTURER'S NAME CAST INTO CASTING.

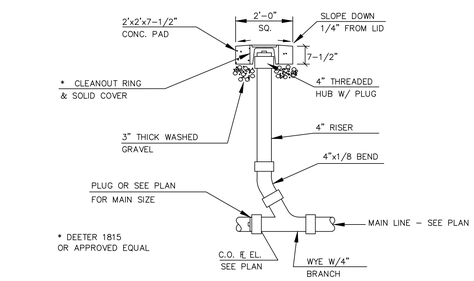
CASTINGS SHALL CONFORM TO THE PROVISIONS OF UNITED STATES CUSTOMS REGULATIONS. CASTING MANUFACTURER SHALL CARRY AT LEAST $3,000,000 PRODUCT LIABILITY INSURANCE.

### MANHOLE CONSTRUCTION NOTES

ALL MANHOLE CONSTRUCTION SHALL BE WATER TIGHT.

TOP OF 8" FLOOR SLAB TO BE 3" MIN. BELOW FLOW LINE ELEV. OF THE OUTLET PIPE TO INSURE SUFFICIENT MIN. THICKNESS OF SHAPED INVERT.

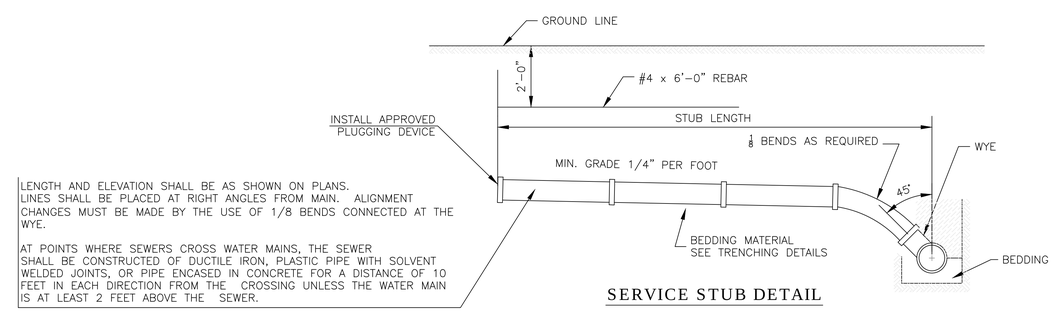
ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO A.S.T.M. DESIGNATION C478




## SEWER CLEANOUT DETAIL

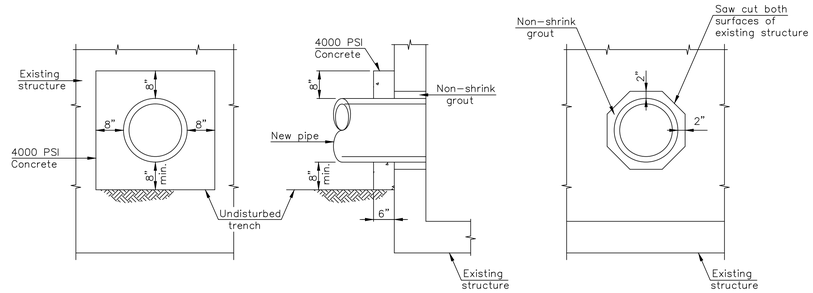
*N.T.S.*

Note: sewer cleanout to be utilized for sanitary sewer service line or storm sewer roof drain lines as noted on plans.




## SERVICE STUB DETAIL

## STANDARD MANHOLE DETAILS




ELEVATION OUTSIDE OF STRUCTURE — SECTION — ELEVATION INSIDE OF STRUCTURE

## DETAIL NEW PIPE INTO EXISTING STRUCTURE

Note: Use this detail also when replacing an existing pipe with a new pipe of the same size or larger. If replacing an existing pipe with a smaller new pipe, saw cut and remove the existing concrete as shown to provide the 2" clearance. If the minimum clearance shown already exists after removing the existing pipe, roughen the inside surface and construct connection as shown above.

HTK ARCHITECTS

KEVIN K. HOLLAND — STATE OF MISSOURI — NUMBER PE-2010006786 — PROFESSIONAL ENGINEER

DATE:
2014-07-24

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD

ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

SHEET CONTENTS:
SEWER DETAILS

HTK PROJECT NUMBER:
ULYB112022
10008.01 - 0018

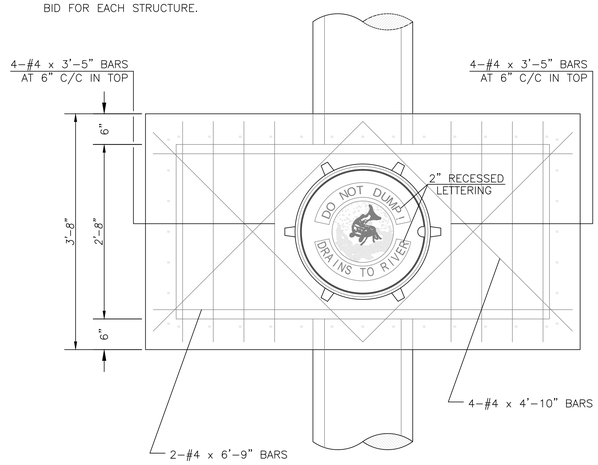
SHEET NUMBER:
C301

100% CONTRACT DOCUMENTS

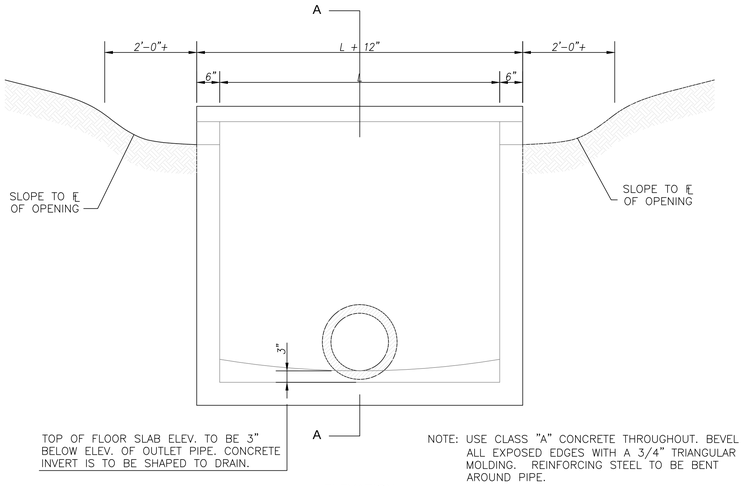
CFS ENGINEERS
cfse.com
2930 SW Woodside Dr, Topeka, KS 66614
p: 785-272-4706 f: 785-272-4736

P:\2017\Proj\10128\DWG\SKETCH\S-Proj_SEWER DETAILS 1_7-21-2014 4:43:28 PM

NOTE: REINF. STEEL BARS IN DITCH INLET SHALL BE INCLUDED IN THE PRICE BID FOR EACH STRUCTURE.

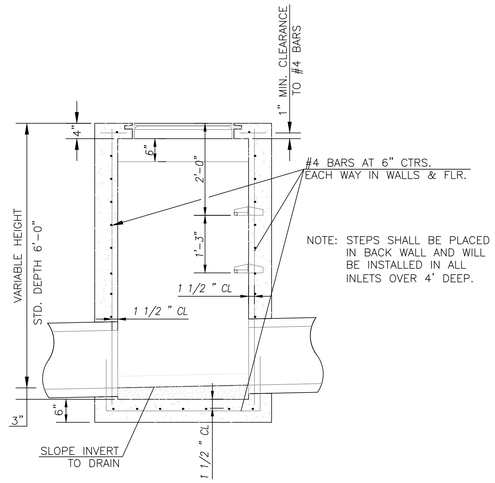



PLAN



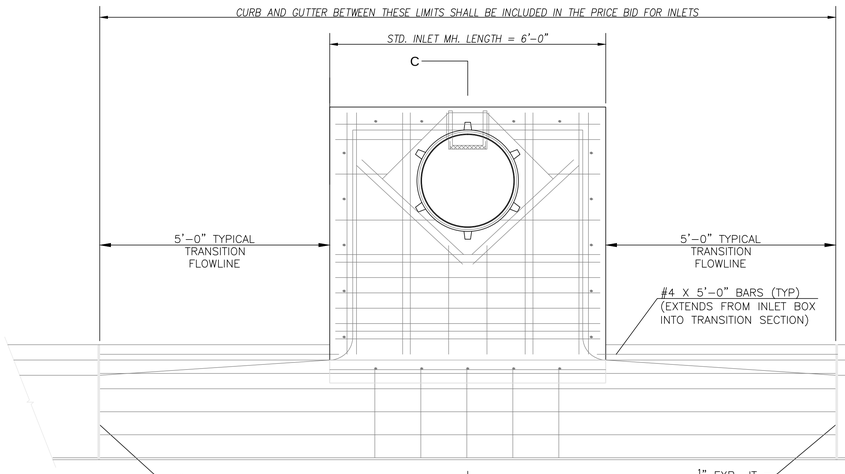

ELEVATION

NOTE: USE CLASS "A" CONCRETE THROUGHOUT. BEVEL ALL EXPOSED EDGES WITH A 3/4" TRIANGULAR MOLDING. REINFORCING STEEL TO BE BENT AROUND PIPE.



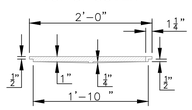

SECTION A-A

## DITCH INLET-TYPE I

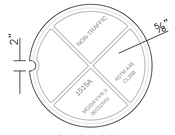



PLAN

TOP OF COVER



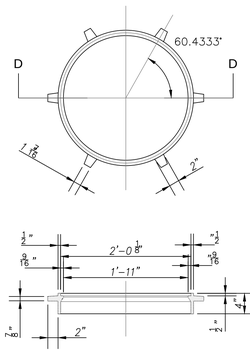

COVER SECTION




BACK OF COVER

MANHOLE COVER

WT. 69 lbs.

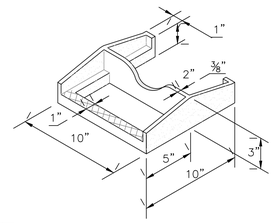



SECTION D-D

FRAME CASTING

WT. 64 lbs.

CLAY AND BAILEY NO. 3215 OR APPROVED EQUAL.

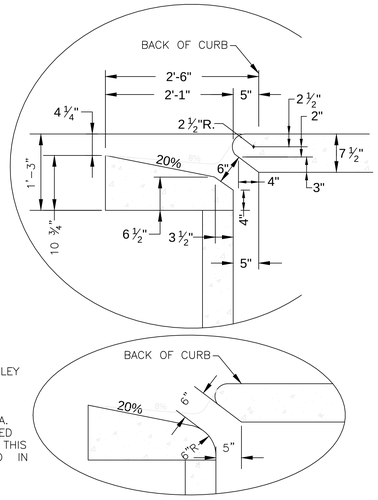



MH STEP CASTING

WT. 11 lbs.

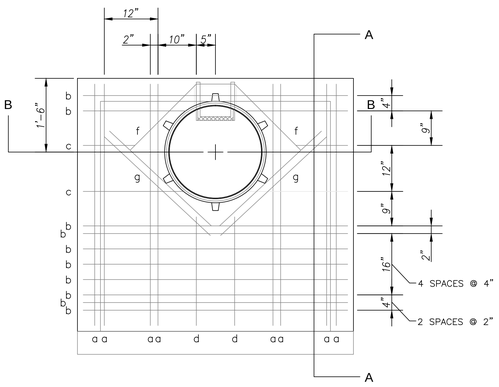
CLOW–NATIONAL NO. F–3650 CLAY AND BAILEY NO. 2113 NEENAH R–1980–E OR EQUAL

COPOLYMER POLYPROPYLENE PLASTIC STEP, PS1–PF or PS2–PF, MANUFACTURED BY M.A. IND. INC. OR APPROVED EQUAL MAY BE USED AS AN ALTERNATE TO DETAILED CASTING. THIS STEP MAY BE CAST IN PLACE OR INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDED INSTALLATION PROCEDURE.




NOSE & OPENING DETAILS

EITHER OPTION MAY BE USED TO OBTAIN 6" OPENING

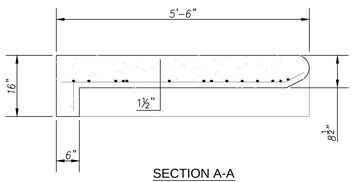



LONGITUDINAL BAR SIZE

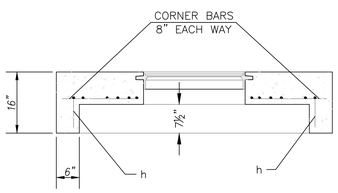
L = 4' – 5' #4 BAR
L = 6' – 7' #5 BAR
L = 8' – 10' #6 BAR
ALL TRANSVERSE BARS ARE #4'S

#4, #5, #6 BARS, ASTM A–615, GRADE 60

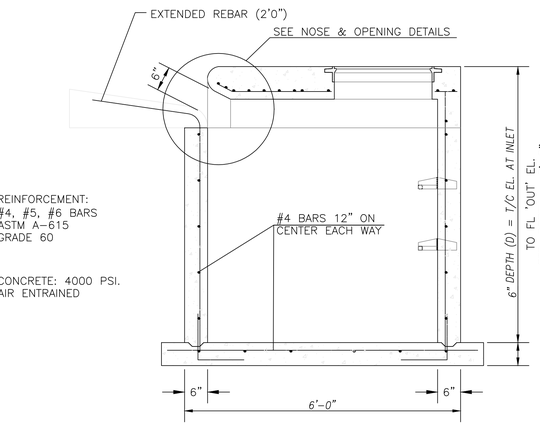
CONCRETE: 4000 PSI. AIR ENTRAINED




SECTION A-A

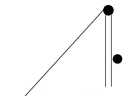



SECTION B-B

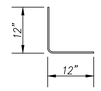



SECTION C-C

JOINT DESIGN IF MORE THAN ONE SECTION.



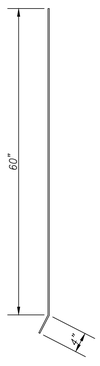
TIE ALL REBAR INTERSECTIONS IN RISER WALLS EXCEPT: #3 BAR GRADE 40 WELDED TO TOP OF VERTICAL BARS



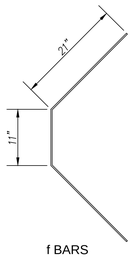

CORNER BARS #4 BARS 24" LONG TIE @ 12" CENTERS ALL CORNERS

REINFORCEMENT:
#4, #5, #6 BARS
ASTM A–615
GRADE 60

CONCRETE: 4000 PSI.
AIR ENTRAINED




a BARS




f BARS

h BARS

NOTES:
1. STEPS SHALL BE INSTALLED IN ALL INLETS OVER 4' DEEP AND LOCATED UNDER MANHOLE RING AND COVER.
2. SUPPLIERS SHALL GRIND ALL BURRS SMOOTH ON CASTINGS.
3. THE INLET TOP SHALL SIT SQUARELY ON TOP OF THE INLET BOTTOM SECTION. THE INLET WALLS SHALL NOT BE OFFSET MORE THAN ONE INCH BETWEEN TOP AND BOTTOM SECTIONS.

## CURB INLET-TYPE I-P

HTK ARCHITECTS

KEVIN K. HOLLAND — STATE OF MISSOURI — NUMBER PE-2010006786 — 07/21/14 — PROFESSIONAL ENGINEER

DATE:
2014-07-24

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD

ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

SHEET CONTENTS:
SEWER DETAILS

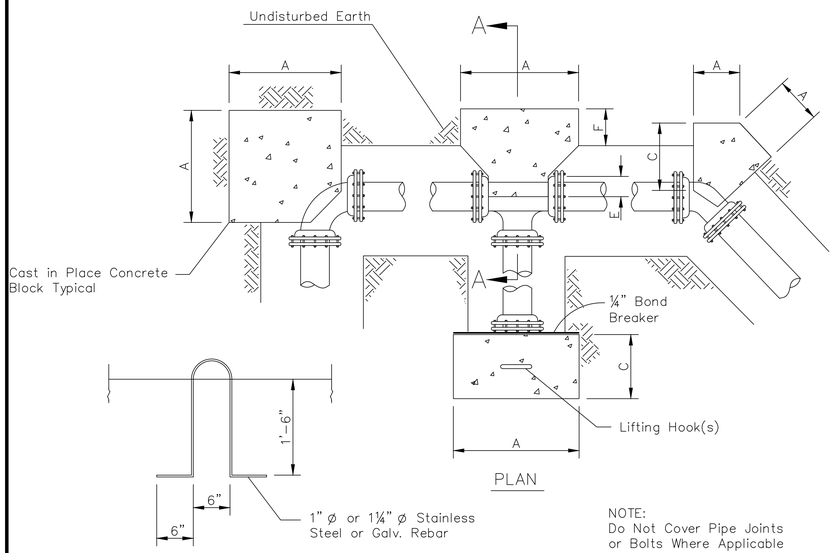
HTK PROJECT NUMBER:
ULY8112022
10008.01 - 0018

SHEET NUMBER:
C302

100% CONTRACT DOCUMENTS

CFS ENGINEERS
cfse.com
2930 SW Woodside Dr, Topeka, KS 66614
o: 785-272-4706 f: 785-272-4736

J:\2011Proj\139\10008\DWG\ARCH\ARCH-Proj. SDW\08 DETAILS 2. 7/21/2014 4:04:17 PM

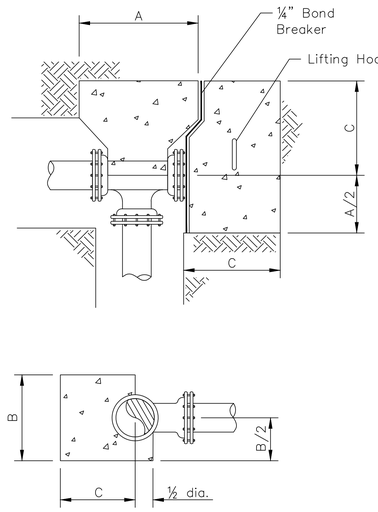



PLAN

LIFTING HOOK DETAIL

1 – 1" ø for 15" and smaller piping
2 – 1¼" ø for 18" & 24" piping

NOTE:
Do Not Cover Pipe Joints
or Bolts Where Applicable
With Concrete.




SECTION A–A

## CONCRETE BLOCKING DETAILS

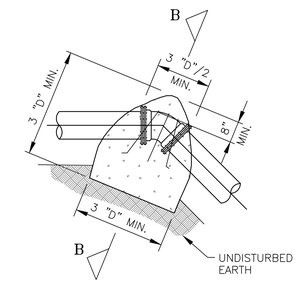
NOTE: Each Anchor Block shall have a minimum bearing area of 5 S.F.

HORIZONTAL THRUST BLOCK DIMENSIONS

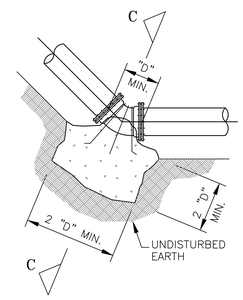
| PIPE DIA. | TEES | | | | | | PLUGS | | | 90° BEND | | | 45° BEND | | | 22.5° BEND | | | 11.25° BEND | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | A | B | C | A | B | C | A | B | C | A | B | C | A | B | C |
| 4" | 13 | 22 | 9 | 13 | – | – | 13 | 22 | 9 | 18 | 12 | 9 | 9 | 12 | 12 | 6 | 12 | 12 | – | – | – |
| 6" | 24 | 30 | 16 | 16 | 6 | 6 | 24 | 30 | 12 | 24 | 18 | 16 | 10 | 24 | 12 | 7 | 18 | 12 | – | – | – |
| 8" | 34 | 32 | 21 | 18 | 7 | 6 | 34 | 32 | 18 | 30 | 26 | 21 | 13 | 36 | 18 | 9 | 24 | 18 | 9 | 24 | 18 |
| 10" | 40 | 42 | 23 | 22 | 8 | 6 | 40 | 42 | 24 | 35 | 34 | 24 | 18 | 38 | 27 | 12 | 30 | 27 | 12 | 30 | 27 |
| 12" | 48 | 52 | 27 | 24 | 9 | 6 | 48 | 52 | 24 | 42 | 42 | 30 | 21 | 48 | 33 | 14 | 36 | 30 | 10 | 42 | 24 |
| 16" | 54 | 54 | 32 | 30 | 12 | 6 | 54 | 54 | 24 | 50 | 42 | 36 | 24 | 48 | 40 | 15 | 42 | 34 | 10 | 42 | 24 |
| 18" | 60 | 60 | 34 | 32 | 12 | 6 | 60 | 60 | 24 | 54 | 48 | 38 | 27 | 54 | 44 | 17 | 46 | 37 | 10 | 42 | 24 |
| 24" | 96 | 72 | 36 | 34 | 19 | 8 | 96 | 72 | 24 | 82 | 60 | 60 | 44 | 60 | 72 | 22 | 60 | 54 | 15 | 48 | 36 |

NOTE:

ALL DIMENSIONS ARE IN INCHES.
BLOCKING DESIGNED FOR 150 PSI AND 1500 PSF SOIL BEARING.
BLOCKING FOR REDUCED BRANCH TEE SHALL BE AS LISTED UNDER TEES AND BRANCH DIAMETER.
MAINTAIN MINIMUM "F" DIMENSIONS.



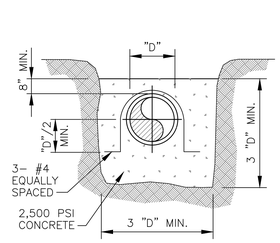

ELEVATION – OVERBREAK



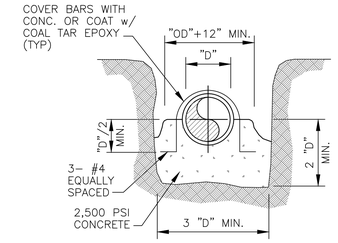

ELEVATION – UNDERBREAK

VERTICAL THRUST BLOCK

| ANGLE | 11¼° | 22½° | 45° | 90° |
|---|---|---|---|---|
| PIPE Dia. (in) | VOLUME (CY) | VOLUME (CY) | VOLUME (CY) | VOLUME (CY) |
| 4 to 8 | 0.5 | 1.0 | 1.8 | 2.5 |
| 10 to 12 | 1.1 | 2.2 | 4.0 | 5.7 |
| 16 to 18 | 2.5 | 4.9 | 9.0 | 12.7 |
| 20 | 3.1 | 6.0 | 11.1 | 15.7 |
| 24 | 4.4 | 8.7 | 16.0 | 22.6 |
| 30 | 5.2 | 10.1 | 18.8 | 26.5 |
| 36 | 7.5 | 14.6 | 27.0 | 38.2 |
| 42 | 10.1 | 19.9 | 36.7 | 52.0 |
| 48 | 13.2 | 26.0 | 48.0 | 67.9 |
| 54 | 16.8 | 32.9 | 60.7 | 85.9 |
| 60 | 20.7 | 40.6 | 75.0 | 106.0 |




SECTION B–B – OVERBREAK



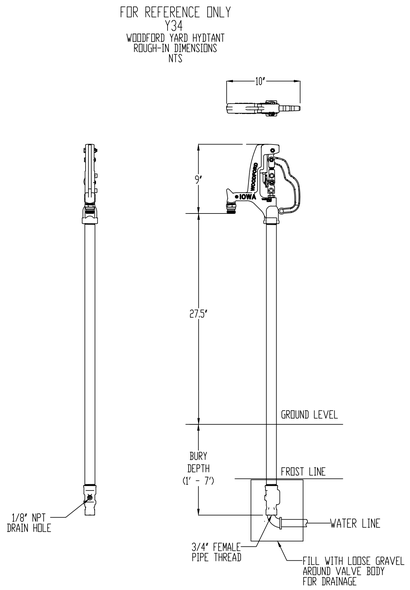

SECTION C–C – UNDERBREAK

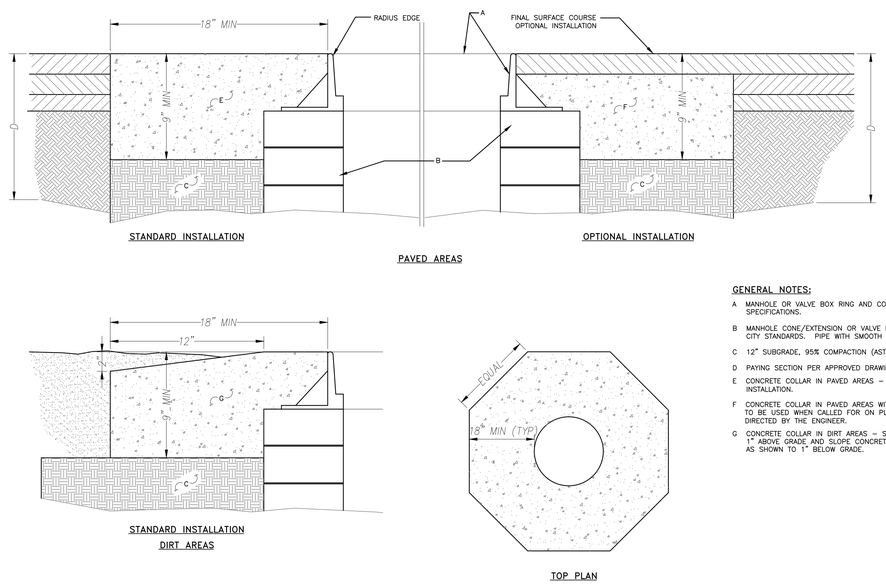
GENERAL NOTES

1. SEE MECHANICAL PLANS FOR ADDITIONAL WATERLINE DETAILS.
2. PROVIDE THRUST BLOCKING ON ALL BENDS, FITTINGS, TEES, REDUCERS, ETC.

THRUST BLOCK GENERAL NOTES

1. THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED SOIL. EXCAVATE LOOSE SOIL AND EXTEND THRUST BLOCK TO UNDISTURBED SOIL AT NO ADDITIONAL COST.
2. ON TEES AND BENDS EXTEND THRUST BLOCK THE FULL LENGTH OF FITTING. ALL REINFORCING STEEL USED FOR THRUST BLOCKING SHALL BE #4, GRADE 60.
3. BACKFILL SHALL CONSIST ENTIRELY OF CLEAN SOIL AND/OR SMALL ROCK FRAGMENTS. UNSUITABLE SOILS EXCAVATED FROM THE TRENCH SHALL BE REPLACED WITH COMPACTED SOIL AS APPROVED BY THE ENGINEER. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
4. PIPE DIMENSIONS "D" NOMINAL PIPE DIAMETER
   "OD" NOMINAL PIPE DIAMETER.
5. SEE CHART FOR DIMENSIONS.
6. USE 8 MIL PLASTIC BETWEEN FITTINGS AND THRUST BLOCKS.
7. CONTRACTOR TO PROVIDE THRUST BLOCK DESIGNED FOR MIN. 225 PSI FOR FIRE LINE APPLICATIONS.




GENERAL NOTES:

A MANHOLE OR VALVE BOX RING AND COVER PER SPECIFICATIONS.

B MANHOLE CONE/EXTENSION OR VALVE PIPE PER CITY STANDARDS. PIPE WITH SMOOTH INTERIOR.

C 12" SUBGRADE, 95% COMPACTION (ASTM).

D PAVING SECTION PER APPROVED DRAWINGS.

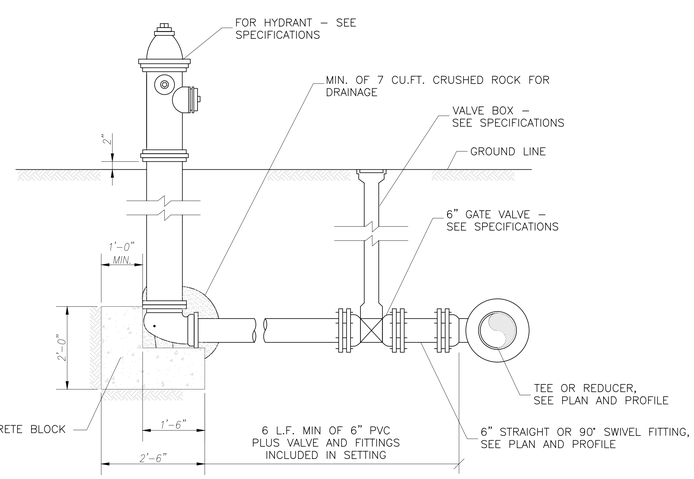
E CONCRETE COLLAR IN PAVED AREAS – TYPICAL INSTALLATION.

F CONCRETE COLLAR IN PAVED AREAS WITH ASPHALT CAP. TO BE USED WHEN CALLED FOR ON PLANS OR AS DIRECTED BY THE ENGINEER.

G CONCRETE COLLAR IN DIRT AREAS – SET RING 1" ABOVE GRADE AND SLOPE CONCRETE DOWN AS SHOWN TO 1" BELOW GRADE.

## CONCRETE COLLAR DETAIL

NO SCALE:




* NOTE: EACH ANCHOR BLOCK SHALL HAVE A MINIMUM BEARING AREA OF 5 S.F.

## FIRE HYDRANT SETTING

NO SCALE:


CFS ENGINEERS
cfse.com
2930 SW Woodside Dr, Topeka, KS 66614
o: 785-272-4706 f: 785-272-4736



HTK ARCHITECTS


KEVIN E. HOLLAND
NUMBER PE-2010006786
STATE OF MISSOURI
PROFESSIONAL ENGINEER

DATE:
2014-07-24

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

SHEET CONTENTS:
WATER DETAILS

HTK PROJECT NUMBER:
ULYB12022
10008.01 - 0018

SHEET NUMBER:
C303

100% CONTRACT DOCUMENTS

J:\2012\ProJ\12122B\DWGS\DETAILS.dwg, WATER DETAILS 1, 7/31/2014 4:06:49 PM

*GENERAL NOTES:*

*1. NO CLEARING OR GRADING ACTIVITIES SHALL BEGIN UNTIL ADEQUATE SEDIMENT AND EROSION CONTROL DEVICES HAVE BEEN INSTALLED.*

*2. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE AND MAINTAIN ALL SEDIMENT AND EROSION CONTROL MEASURES DURING ALL PHASES OF THE CONSTRUCTION UNTIL PROJECT ACCEPTANCE BY THE OWNER. SHOULD THE OWNER DETERMINE THAT THE INSTALLATION OR MAINTENANCE IS INADEQUATE, THE CONTRACTOR SHALL CORRECT IMMEDIATELY AT HIS EXPENSE.*

*3. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ADEQUATE SEDIMENT AND EROSION CONTROL DEVICES TO PREVENT SEDIMENT FROM REACHING PUBLIC RIGHT-OF-WAY, STREAMS OR ADJACENT PROPERTY. IN THE EVENT THAT THE DEVICES FAIL TO PROTECT THESE AREAS, THE CONTRACTOR SHALL REMOVE THE SEDIMENT AND RESTORE THE AREAS TO THEIR ORIGINAL OR BETTER CONDITION.*

*4. THE CONTRACTOR SHALL PHASE CONSTRUCTION TO MINIMIZE THE AMOUNT OF EXPOSED BARE GROUND AT ANY ONE TIME. AREAS THAT HAVE NOT BEEN DISTURBED FOR A PERIOD OF 14 CALENDAR DAYS SHALL RECEIVE TEMPORARY SEEDING.*

*5. THE CONTRACTOR SHALL STOCKPILE TOPSOIL IN AN AREA APPROVED BY THE OWNER. STOCKPILES SHALL BE TEMPORARILY SEEDED AND ENCIRCLED WITH SILT FENCE.*

*6. UPON REMOVAL OF THE EROSION CONTROL MEASURES, THE CONTRACTOR SHALL RE-GRADE AND RE-SEED ALL AREAS THAT ARE DISTURBED BY THE REMOVALS.*

*7. THE CONTRACTOR SHALL INSPECT ALL SEDIMENT AND EROSION CONTROL MEASURES AT LEAST EVERY SEVEN DAYS AND WITHIN TWENTY FOUR HOURS OF A RAINFALL EVENT TOTALING 1/2" OR MORE WITHIN A TWENTY FOUR HOUR PERIOD. THE CONTRACTOR SHALL ALSO INSPECT ALL MEASURES PRIOR TO A FORECAST RAINFALL EVENT TO ENSURE THEY ARE IN WORKING ORDER.*

*8. THE CONTRACTOR SHALL REMOVE ALL SEDIMENT FROM THE FLOW AREAS AND MAKE ALL NECESSARY REPAIRS TO MAINTAIN THE INTEGRITY OF THE SEDIMENT CONTROL MEASURES. SEDIMENT SHALL BE REMOVED ONCE IT REACHES 1/2 THE INSTALLED HEIGHT OF THE MEASURE.*

*9. ALL DISTURBED AREAS SHALL BE PERMANENTLY SEEDED IN ACCORDANCE WITH THE SPECIFICATIONS.*

*10. SEDIMENT CONTROL MEASURES SHALL BE REMOVED ONCE AT LEAST 70 PERCENT OF THE PERMANENT COVER IS ESTABLISHED OVER 100 PERCENT OF THE BASIN AREA.*

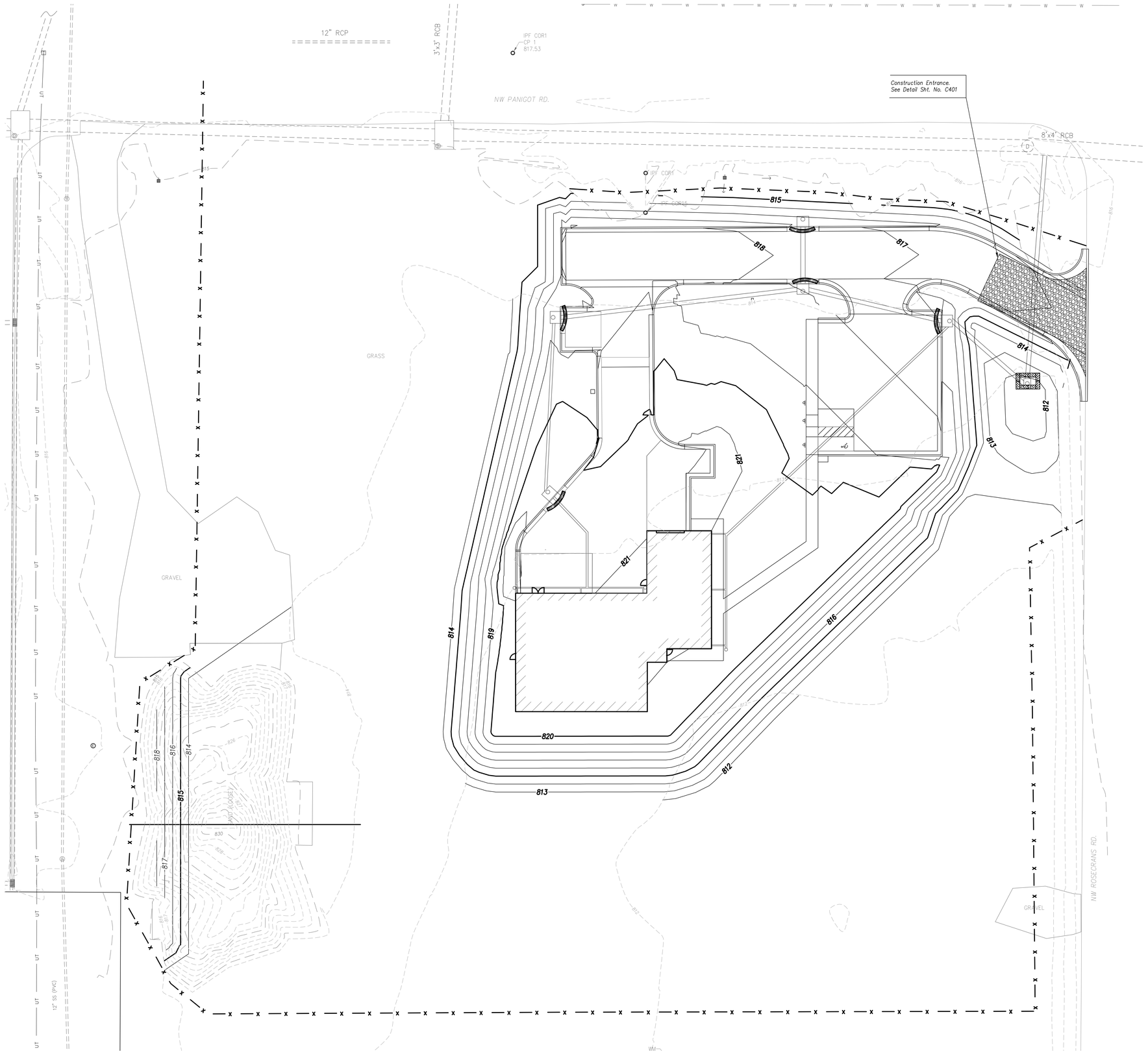
*11. ALL CONSTRUCTION RELATED VEHICLES SHALL ENTER AND EXIT THE SITE AT THE NOTED CONSTRUCTION ENTRANCE ONLY.*

*12. THE CONTRACTOR SHALL SPRINKLE THE BARREN AREAS AS NECESSARY TO CONTROL DUST.*

*13. THE CONTRACTOR IS RESPONSIBLE TO INSPECT THE EROSION CONTROL MEASURES DAILY AND MAKE ANY NECESSARY REPAIRS IMMEDIATELY.*

*14. THE CONTRACTOR SHALL MONITOR AND KEEP ROADS FREE FROM DIRT AND DEBRIS DAILY.*

*15. THE CONTRACTOR SHALL PROVIDE A CONCRETE WASHOUT BASIN TO CONTAIN ALL LIQUIDS GENERATED FROM THE RINSING OF CONCRETE MIXER CHUTES AND HOPPERS. THE BASIN SHALL BE IMPERMEABLE AND OF SUFFICIENT SIZE TO CONTAIN ALL LIQUIDS GENERATED FROM WASHOUT. THE LIQUIDS SHALL BE TRANSPORTED FROM THE SITE AND DISPOSED OF IN A MISSOURI DEPARTMENT OF CONSERVATION APPROVED MANNER..*




20 0 20 40
SCALE IN FEET

*LEGEND*

- Sediment Barrier
- Filter Fabric
- Curb Inlet Sediment Protection

*NOTE:*
*Use existing fill material in lowest 2' of fill.*

CFS ENGINEERS
cfse.com
2930 SW Woodside Dr, Topeka, KS 66614
o: 785-272-4706 f: 785-272-4796

HTK ARCHITECTS

KEVIN E. HOLLAND
NUMBER PE-2010006786
STATE OF MISSOURI
PROFESSIONAL ENGINEER

**DATE:**
2014-07-24

**REVISED DATE:**

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

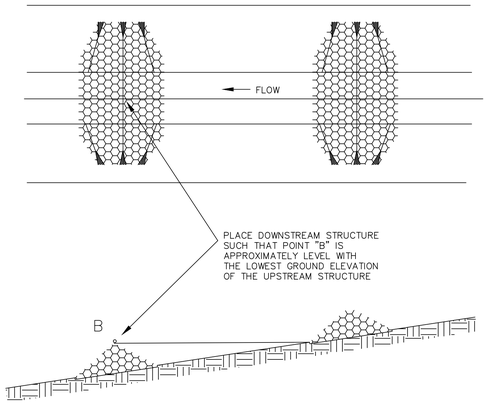
**SHEET CONTENTS:**
EROSION CONTROL PLAN

**HTK PROJECT NUMBER:**
ULYB112022
10008.01 - 0018

**SHEET NUMBER:**
C400

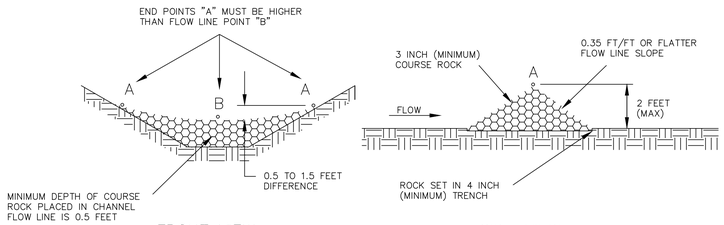
100% CONTRACT DOCUMENTS

J:\2013\Proj\130128\DWG\Grad.dwg, Erosion control, 7/31/2014 4:47:16 PM




| D-50 OF ROCK (INCHES) | DOWNSTREAM FLOWLINE SLOPE OF STRUCTURES (FT/FT) 0.35 0.30 0.25 0.20 0.15 0.10 MAXIMUM WATER DEPTH OVER ROCK (INCHES) | | | | | |
|---|---|---|---|---|---|---|
| 3 | 0.6 | 0.7 | 0.8 | 1.0 | 1.3 | 1.9 |
| 6 | 1.2 | 1.4 | 1.6 | 2.0 | 2.6 | 3.9 |

RECOMMENDED ROCK SIZE & FLOW DEPTHS




FRONT VIEW SIDE VIEW

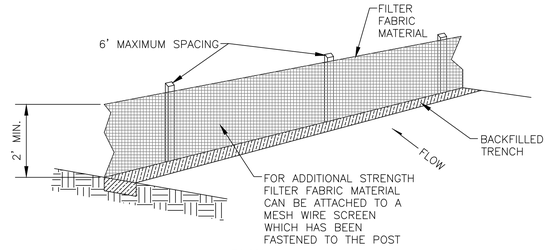
## ROCK DITCH CHECK

*NOTES:*

*1. WHEN USED TO CONTROL SEDIMENT FROM STEEP SLOPES, FILTER FENCES SHOULD BE PLACED AWAY FROM THE TOE OF A SLOPE FOR INCREASED HOLDING CAPACITY.*

*2. WHEN SEDIMENT FILLS THE AREA BEHIND THE SILT FENCE TO 1/2 THE HEIGHT OF THE SILT FENCE, THE CONTRACTOR SHALL REMOVE THE SEDIMENT.*

*3. WHEN STRAW BALES ARE INSTALLED AT THE TOE OF A SLOPE TO TRAP SEDIMENT THEY SHOULD BE PLACED AWAY FROM THE TOE FOR INCREASED HOLDING CAPACITY.*




PLAN

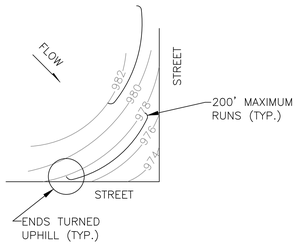



FIGURE A

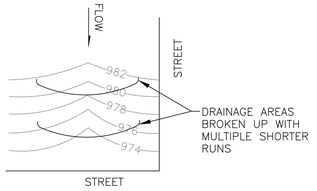
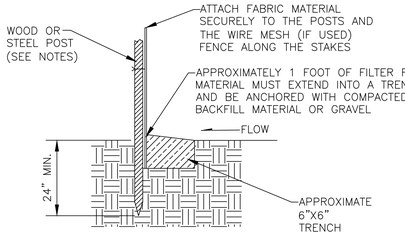



FIGURE B




PROFILE

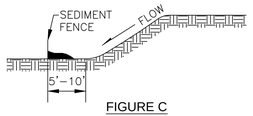
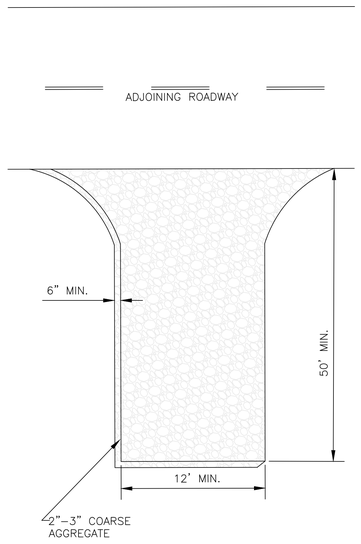



FIGURE C

NOTES:

1. THE USE OF OR HAY/STRAW BALES IS THE CONTRACTOR'S OPTION. IF HAY BALES ARE USED PLACE TIGHTLY TOGETHER AND WOOD STAKED IN CENTER OF BALES WITH 2"X2"X4' (MIN.) LENGTH STAKES. BALES SHOULD BE EMBEDDED INTO THE SOIL A MINIMUM OF 6".
2. THE SEDIMENT FENCES SHALL BE PLACED ALONG CONTOUR LINES, WITH A SHORT SECTION TURNED UPGRADE AT EACH END OF THE BARRIER TO HOLD WATER AND SEDIMENT (SEE FIGURE A).
3. AREAS THAT CONTAIN LARGER CONCENTRATIONS OF WATER SHALL LIMIT LENGTHS OF SILT FENCES TO NO LONGER THAN 200 FOOT LENGTHS (SEE FIGURE A).
4. AREAS SHOULD BE BROKEN UP WITH INTERIOR SEDIMENT FENCE TO MINIMIZE WATER CONCENTRATIONS AND LONG SLOPES (SEE FIGURE B).
5. SEDIMENT FENCES INSTALLED AT TOE OF SLOPES SHALL BE PLACED 5 FEET TO 10 FEET AWAY (DOWNSTREAM) TO CREATE SEDIMENT STORAGE (SEE FIGURE C).
6. DEPTH OF WATER CONCENTRATIONS SHOULD NOT EXCEED 1.5 FEET AT ANY POINT ALONG THE FENCE.

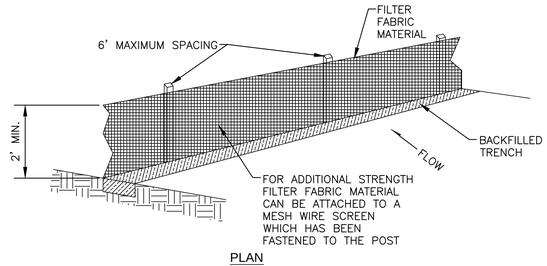
## SILT FENCE




NOTES:

1. GEOTEXTILE FABRIC MAY BE USED AS AN UNDERLINER IN WET CONDITIONS TO PROVIDE STABILITY.
2. TURNING RADIUS SUFFICIENT TO ACCOMMODATE LARGE TRUCKS IS TO BE PROVIDED.
3. MUST BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR DIRECT FLOW OF SEDIMENT ON TO STREETS.

## CONSTRUCTION ENTRANCE




PLAN

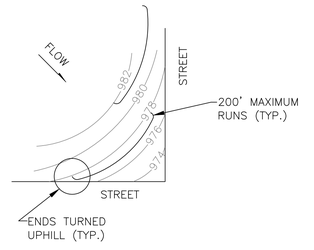



FIGURE A

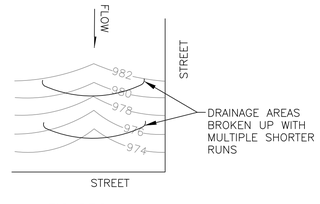
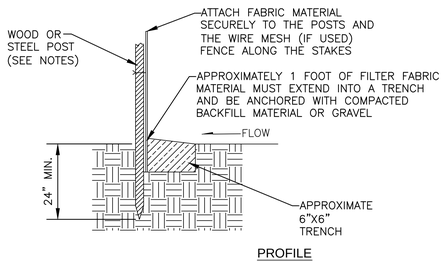



FIGURE B




PROFILE

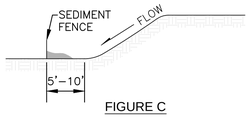



FIGURE C


HTK ARCHITECTS

CFS ENGINEERS
cfse.com
2930 SW Woodside Dr, Topeka, KS 66614
o: 785-272-4706 f: 785-272-4796


KEVIN K. HOLLAND NUMBER PE-2010006786 STATE OF MISSOURI PROFESSIONAL ENGINEER

**DATE:** 2014-07-24

**REVISED DATE:**

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD

ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

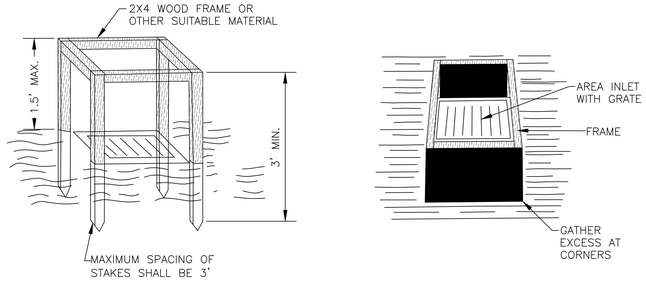
**SHEET CONTENTS:** SWPP DETAILS

**HTK PROJECT NUMBER:** ULYB112022 10008.01 - 0018

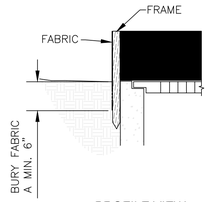
**SHEET NUMBER:** C401

100% CONTRACT DOCUMENTS


J:\2015\Proj\150245\DWG\DETAILS.dwg, SWPP DETAILS 1, 7/31/2014 4:08:37 PM




TOP VIEWS




PROFILE VIEW

NOTES:

1. BASE OF FABRIC SHALL BE BURIED AT LEAST 6" BELOW GROUND SURFACE AND BACKFILLED WITH CRUSHED STONE OR COMPACTED MATERIAL.
2. MESH WIRE FENCE MAY BE USED TO SUPPORT FABRIC. TOP OF FENCE SHOULD BE LEVEL WITH FRAME AND BOTTOM BURIED 6" BELOW GROUND.
3. MAY BE NECESSARY TO BUILD A TEMPORARY DIKE ON DOWN-SLOPE SIDE OF STRUCTURE TO PREVENT BYPASS FLOW.
4. STRAW BALES OR GRAVEL FILLED FILTER BAGS MAY BE USED IN LIEU OF FABRIC. IF STRAW BALES ARE USED, TWO 36" (MINIMUM) LONG, 2"X2" HARDWOOD STAKES SHALL BE DRIVEN THROUGH EACH BALE AND SET BACK 12" TO 24" FROM INLET. IF FILTER BAGS ARE USED, PLACE BAGS SUCH THAT NO GAPS ARE EVIDENT.

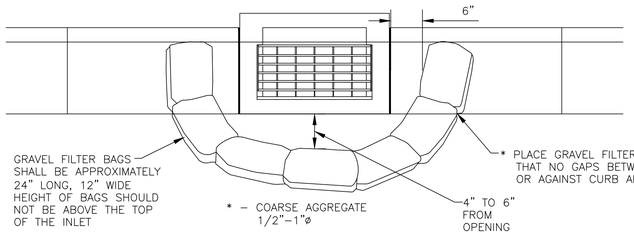
## AREA INLET PROTECTION

GENERAL NOTES:

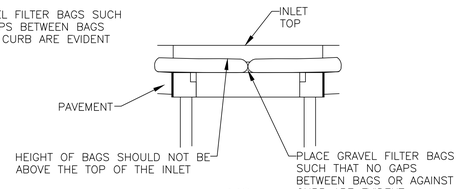
1. ANY EROSION AND SEDIMENT CONTROL MEASURES INTENDED TO CONTROL EROSION OF AN EARTH DISTURBANCE OPERATION SHALL BE INSTALLED BEFORE ANY EARTH DISTURBANCE OPERATIONS TAKE PLACE.
2. THE CONTRACTOR SHALL INSPECT THE LAND DISTURBANCE SITE AFTER EACH SIGNIFICANT RAINFALL EVENT WITHIN A 24-HOUR PERIOD AND ASSURE THAT ALL EROSION AND SEDIMENT CONTROL MEASURES ARE IN WORKING CONDITION PRIOR TO ANY FORECASTED RAINFALL. SEDIMENT REMOVAL SHALL AND ALL NECESSARY REPAIRS SHALL BE MADE TO MAINTAIN THE INTEGRITY OF THE EROSION AND SEDIMENT CONTROL MEASURES. SEDIMENT SHALL BE REMOVED ONCE IT REACHES HALF OF THE INSTALLED HEIGHT OF MEASURE.
3. THE CONTRACTOR SHALL MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES DURING ALL PHASES OF CONSTRUCTION UNTIL OWNER ACCEPTS WORK AS COMPLETE. THE CONTRACTOR SHALL PROVIDE TEMPORARY SEEDING, BERMS, SILT FENCE, SEDIMENT TRAPS OR OTHER MEANS TO PREVENT SEDIMENT FROM REACHING STREAMS, PUBLIC RIGHT-OF-WAY OR ADJACENT PROPERTY.
4. SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REMOVED ONCE 70 PERCENT OF THE PERMANENT COVER IS ESTABLISHED.
5. THE CONTRACTOR SHALL TEMPORARILY SEED AND MULCH ALL DISTURBED AREAS IF THERE HAS BEEN NO CONSTRUCTION ACTIVITY ON THEM FOR A PERIOD OF 14 CALENDAR DAYS. IF THE ENGINEER DETERMINES THAT A SITE HAS A POTENTIAL FOR EROSION, STABILIZATION OF SOIL MAY BE REQUIRED BY THE ENGINEER. TEMPORARY SEED MIXTURE SHALL BE APPROVED BY THE ENGINEER OR AS FOLLOWS:

| TYPE: | APPLICATION RATE: |
|---|---|
| WINTER WHEAT | 120 LBS PER ACRE |
| RYEGRASS | 75 LBS PER ACRE |

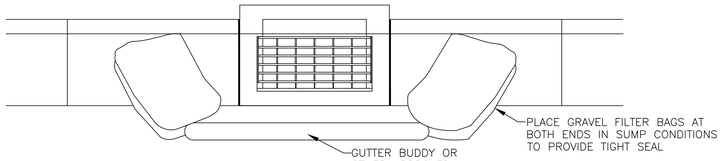
REPAIRS AND RESEEDING SHALL BE PERFORMED BY THE CONTRACTOR AT THE DIRECTION OF THE ENGINEER AT NO ADDITIONAL COST TO THE CITY. IF VEGETATIVE MEASURES ARE NOT EFFECTIVE, NON-VEGETATIVE OPTION MAY BE REQUIRED.




PLAN

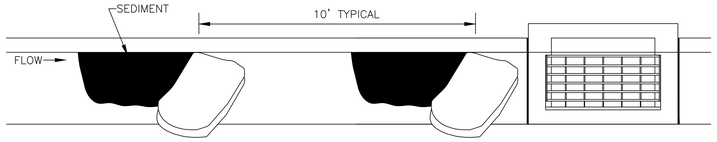



PROFILE




PLAN

## SUMP CONDITIONS




PLAN

## IN GRADE CONDITIONS

NOTES:
1. OTHER APPROVED CURB INLET SEDIMENT FILTERS MAY BE USED.
2. IMMEDIATELY FOLLOWING INLET CONSTRUCTION AND PRIOR TO CONSTRUCTION OF CURB AND INLET THROAT, PROTECT INLET OPENING BY INSTALLING A 2"X6" BOARD WRAPPED IN SILT FENCE AROUND PERIMETER. SEE AREA INLET DETAIL ON THIS PAGE.
3. CONTRACTOR TO CLEAN OUT SEDIMENT AFTER EACH SIGNIFICANT RAINFALL EVENT.
4. DURING CONSTRUCTION OF RESIDENTIAL SUBDIVISIONS, GRAVEL FILTER BAGS SHALL BE REPLACED PRIOR TO DEGRADATION. 5. ANY SEDIMENT OR GRAVEL DEPOSITED IN INLET SHALL BE REMOVED PROMPTLY.

## CURB INLET SEDIMENT PROTECTION

HTK ARCHITECTS

KEVIN K. HOLLAND
NUMBER PE-2010006786
PROFESSIONAL ENGINEER
STATE OF MISSOURI

DATE:
2014-07-24

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD

ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

SHEET CONTENTS:
SWPP DETAILS

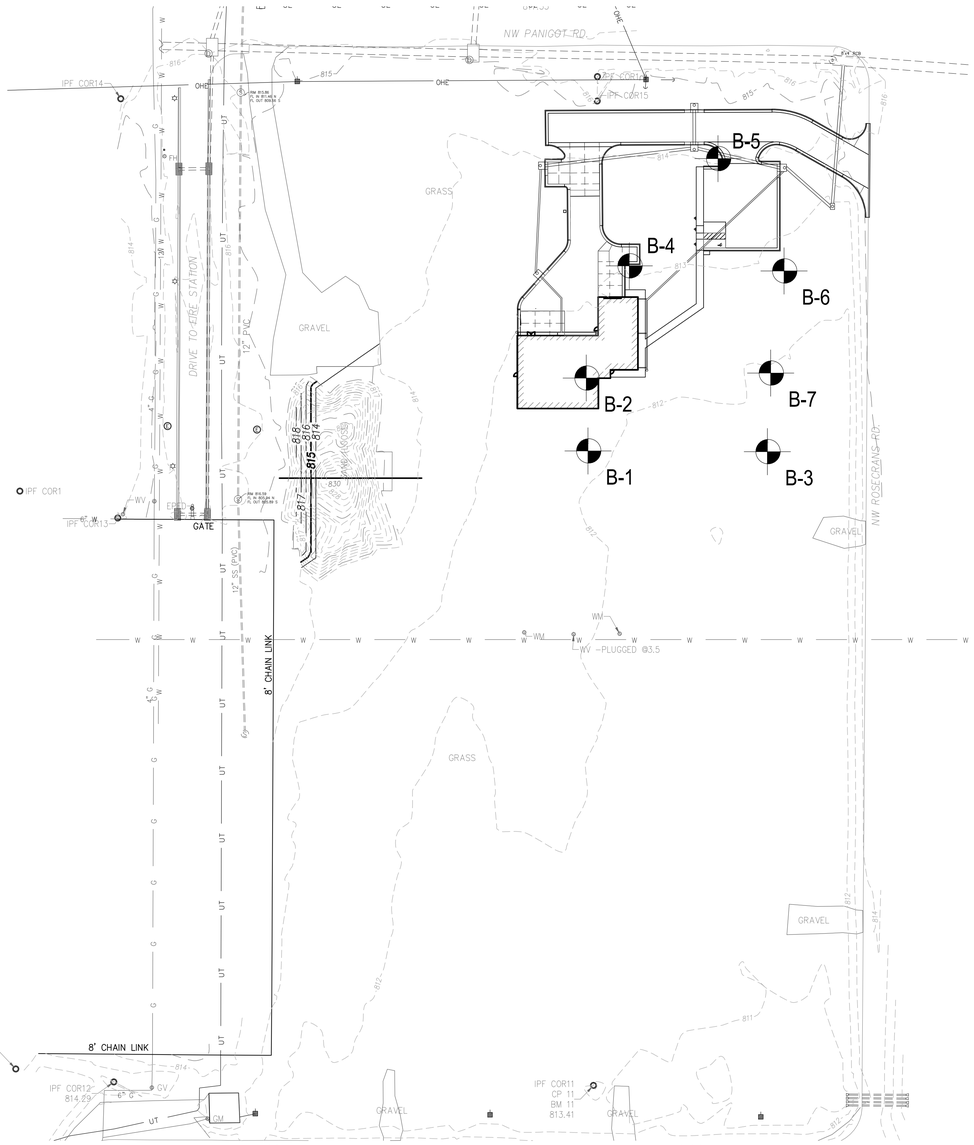
HTK PROJECT NUMBER:
ULYB112022
10008.01 - 0018

SHEET NUMBER:
C402

100% CONTRACT DOCUMENTS

CFS ENGINEERS
cfse.com
2930 SW Woodside Dr, Topeka, KS 66614
o: 785-272-4706 f: 785-272-4736

J:\2013\fms\15\128\DWGS\DETAILS.dwg, SWPP DETAILS 2, 7/21/2014 4:48:52 PM




## BORING LOG NO. B-1

Page 1 of 1

**PROJECT:** 139th Security Forces Building
**CLIENT:** HTK Architects Topeka, KS
**SITE:** Panigot Road and 26th Road St. Joseph, MO

LOCATION See Exhibit A-2
Approximate Surface Elev: 817 (Ft.) +/-

| DEPTH | ELEVATION (Ft.) | SAMPLE TYPE | FIELD TEST RESULTS | LABORATORY TORVANE/HP (psf) | UNCONFINED COMPRESSIVE STRENGTH (psf) | WATER CONTENT (%) | DRY UNIT WEIGHT (pcf) |
|---|---|---|---|---|---|---|---|
| 0.3 | 816.5±* | | | | | | |
| 0.3 – 4" TOPSOIL | | | | | | | |
| FAT CLAY (CH), gray-brown, hard | | | | >9000 (HP) | | 13 | 108 |
| | | | | >9000 (HP) | | 8 | |
| 2.0 | 815±* | | | | | | |
| SILT (ML), sandy, brown to gray, medium stiff to stiff | | | | >9000 (HP) | | 14 | |
| | | | | | | 24 | |
| | | | 2-2-2 N=4 | | | 40 | |
| | | | 2-3-3 N=6 | | | 27 | |
| | | | 6-7-8 N=15 | | | 29 | |
| 28.5 | 788.5±* | | | | | | |
| SAND (SP), gray, medium dense to dense | | | 6-19-20 N=39 | | | 19 | |
| | | | 10-10-15 N=25 | | | 21 | |
| 40.0 | 777±* | | 10-15-20 N=35 | | | 20 | |
| *Boring Terminated at 40 Feet* | | | | | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method: 9-20': Hollow-stem auger 20'-40': Wash boring
Abandonment Method: Boring backfilled with soil cuttings and bentonite chips upon completion.
See Exhibit A-10 for description of field procedures
See Appendix B for description of laboratory procedures and additional data (if any).
See Appendix C for explanation of symbols and abbreviations.
Notes:

**WATER LEVEL OBSERVATIONS**
While sampling

Terracon, 13910 West 99th Terrace, Lenexa, Kansas

Boring Started: 10/21/2013 | Boring Completed: 10/22/2013
Drill Rig: CME 550 | Driller: SS
Project No.: 02135197 | Exhibit: A-3

## BORING LOG NO. B-2

Page 1 of 1

**PROJECT:** 139th Security Forces Building
**CLIENT:** HTK Architects Topeka, KS
**SITE:** Panigot Road and 26th Road St. Joseph, MO

LOCATION See Exhibit A-2
Approximate Surface Elev: 817.5 (Ft.) +/-

| DEPTH | ELEVATION (Ft.) | SAMPLE TYPE | FIELD TEST RESULTS | LABORATORY TORVANE/HP (psf) | UNCONFINED COMPRESSIVE STRENGTH (psf) | WATER CONTENT (%) | DRY UNIT WEIGHT (pcf) |
|---|---|---|---|---|---|---|---|
| 0.3 | 817.2±* | | | | | | |
| 0.3 – 4" TOPSOIL | | | | | | | |
| FAT CLAY (CH), brown, very stiff to hard | | | | 8500 (HP) | | 17 | |
| 6.0 | 811.5±* | | | | 6148 | 20 | 99 |
| LEAN CLAY (CL), silty, brown, medium stiff | | | | | 3591 | 27 | 91 |
| 13.5 | 804±* | | 2-2-2 N=4 | | | 39 | |
| SILT (ML), sandy, gray-brown, loose | | | 2-2-3 N=5 | | | 29 | |
| 20.0 | 797.5±* | | 2-3-4 N=7 | | | 14 | |
| *Boring Terminated at 20 Feet* | | | | | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method: Boring backfilled with soil cuttings and bentonite chips upon completion.
See Exhibit A-10 for description of field procedures
See Appendix B for description of laboratory procedures and additional data (if any).
See Appendix C for explanation of symbols and abbreviations.
Notes:

**WATER LEVEL OBSERVATIONS**
While drilling

Terracon, 13910 West 99th Terrace, Lenexa, Kansas

Boring Started: 10/22/2013 | Boring Completed: 10/22/2013
Drill Rig: CME 550 | Driller: SS
Project No.: 02135197 | Exhibit: A-4

## BORING LOG NO. B-3

Page 1 of 1

**PROJECT:** 139th Security Forces Building
**CLIENT:** HTK Architects Topeka, KS
**SITE:** Panigot Road and 26th Road St. Joseph, MO

LOCATION See Exhibit A-2
Approximate Surface Elev: 816.5 (Ft.) +/-

| DEPTH | ELEVATION (Ft.) | SAMPLE TYPE | FIELD TEST RESULTS | LABORATORY TORVANE/HP (psf) | UNCONFINED COMPRESSIVE STRENGTH (psf) | WATER CONTENT (%) | DRY UNIT WEIGHT (pcf) |
|---|---|---|---|---|---|---|---|
| 0.3 | 816.2±* | | | | | | |
| 0.3 – 4" TOPSOIL | | | | | | | |
| FAT CLAY (CH), silty, brown, medium stiff to stiff | | | 6-5-4 N=9 | | | 11 | |
| | | | 2-3-3 N=6 | | | 21 | |
| 6.5 | 808.5±* | | 5-5-4 N=9 | | | 28 | |
| LEAN CLAY (CL), silty, brown, medium stiff | | | 2-2-2 N=4 | | | 33 | |
| 18.5 | 798±* | | 2-2-2 N=4 | | | 33 | |
| SILT (ML), sandy, gray, loose | | | 1-2-3 N=5 | | | 36 | |
| 30.0 | 796.5±* | | | | | | |
| *Boring Terminated at 20 Feet* | | | | | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Abandonment Method: Boring backfilled with soil cuttings and bentonite chips upon completion.
See Exhibit A-10 for description of field procedures
See Appendix B for description of laboratory procedures and additional data (if any).
See Appendix C for explanation of symbols and abbreviations.
Notes:

**WATER LEVEL OBSERVATIONS**
While drilling

Terracon, 13910 West 99th Terrace, Lenexa, Kansas

Boring Started: 10/22/2013 | Boring Completed: 10/22/2013
Drill Rig: CME 550 | Driller: SS
Project No.: 02135197 | Exhibit: A-6

## BORING LOG NO. B-4

Page 1 of 1

**PROJECT:** 139th Security Forces Building
**CLIENT:** HTK Architects Topeka, KS
**SITE:** Panigot Road and 26th Road St. Joseph, MO

LOCATION See Exhibit A-2
Approximate Surface Elev: 817.5 (Ft.) +/-

| DEPTH | ELEVATION (Ft.) | SAMPLE TYPE | FIELD TEST RESULTS | LABORATORY TORVANE/HP (psf) | UNCONFINED COMPRESSIVE STRENGTH (psf) | WATER CONTENT (%) | DRY UNIT WEIGHT (pcf) |
|---|---|---|---|---|---|---|---|
| 0.3 | 817.2±* | | | | | | |
| 0.3 – 4" TOPSOIL | | | | | | | |
| SILT (ML), brown, medium stiff to stiff | | | 3-4-4 N=8 | | | 10 | |
| | | | 3-3-3 N=6 | | | 11 | |
| 8.5 | 809±* | | 6-6-3 N=9 | | | 15 | |
| SAND (SP), brown to gray-brown, loose to medium dense | | | 4-5-6 N=11 | | | 5 | |
| | | | 4-5-5 N=10 | | | 12 | |
| 20.0 | 797.5±* | | 2-3-4 N=7 | | | 17 | |
| *Boring Terminated at 20 Feet* | | | | | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Abandonment Method: Boring backfilled with soil cuttings and bentonite chips upon completion.
See Exhibit A-10 for description of field procedures
See Appendix B for description of laboratory procedures and additional data (if any).
See Appendix C for explanation of symbols and abbreviations.
Notes:

**WATER LEVEL OBSERVATIONS**
While drilling

Terracon, 13910 West 99th Terrace, Lenexa, Kansas

Boring Started: 10/22/2013 | Boring Completed: 10/22/2013
Drill Rig: CME 550 | Driller: SS
Project No.: 02135197 | Exhibit: A-6

## BORING LOG NO. B-5

Page 1 of 1

**PROJECT:** 139th Security Forces Building
**CLIENT:** HTK Architects Topeka, KS
**SITE:** Panigot Road and 26th Road St. Joseph, MO

LOCATION See Exhibit A-2
Approximate Surface Elev: 818.0 (Ft.) +/-

| DEPTH | ELEVATION (Ft.) | SAMPLE TYPE | FIELD TEST RESULTS | LABORATORY TORVANE/HP (psf) | UNCONFINED COMPRESSIVE STRENGTH (psf) | WATER CONTENT (%) | DRY UNIT WEIGHT (pcf) |
|---|---|---|---|---|---|---|---|
| 0.3 | 817.7±* | | | | | | |
| 0.3 – 4" TOPSOIL | | | | | | | |
| LEAN CLAY (CL), dark brown | | | 4-4-3 N=7 | | | 9 | |
| SILT (ML), sandy, brown, medium stiff | | | 3-3-2 N=5 | | | 11 | |
| 9.1 | 808±* | | 3-4-4 N=8 | | | 13 | |
| SAND (SP), with silt, brown, stiff | | | 4-5-6 N=11 | | | 10 | |
| 10.0 | 808±* | | | | | | |
| *Boring Terminated at 10 Feet* | | | | | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method: Boring backfilled with soil cuttings and bentonite chips upon completion.
See Exhibit A-10 for description of field procedures
See Appendix B for description of laboratory procedures and additional data (if any).
See Appendix C for explanation of symbols and abbreviations.
Notes:

**WATER LEVEL OBSERVATIONS**
No free water observed

Terracon, 13910 West 99th Terrace, Lenexa, Kansas

Boring Started: 10/22/2013 | Boring Completed: 10/22/2013
Drill Rig: CME 550 | Driller: SS
Project No.: 02135197 | Exhibit: A-7

## BORING LOG NO. B-6

Page 1 of 1

**PROJECT:** 139th Security Forces Building
**CLIENT:** HTK Architects Topeka, KS
**SITE:** Panigot Road and 26th Road St. Joseph, MO

LOCATION See Exhibit A-2
Approximate Surface Elev: 817.5 (Ft.) +/-

| DEPTH | ELEVATION (Ft.) | SAMPLE TYPE | FIELD TEST RESULTS | LABORATORY TORVANE/HP (psf) | UNCONFINED COMPRESSIVE STRENGTH (psf) | WATER CONTENT (%) | DRY UNIT WEIGHT (pcf) |
|---|---|---|---|---|---|---|---|
| 0.3 | 817.2±* | | | | | | |
| 0.3 – 4" TOPSOIL | | | | | | | |
| FAT CLAY (CH), brown, medium stiff | | | 3-3-3 N=6 | | | 30 | |
| 2.5 | 814.5±* | | | | | | |
| SILT (ML), sandy, brown, medium stiff | | | 3-3-2 N=5 | | | 16 | |
| 10.0 | 807.5±* | | 3-3-3 N=5 | | | 16 | |
| *Boring Terminated at 10 Feet* | | | | | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Abandonment Method: Boring backfilled with soil cuttings and bentonite chips upon completion.
See Exhibit A-10 for description of field procedures
See Appendix B for description of laboratory procedures and additional data (if any).
See Appendix C for explanation of symbols and abbreviations.
Notes:

**WATER LEVEL OBSERVATIONS**
No free water observed

Terracon, 13910 West 99th Terrace, Lenexa, Kansas

Boring Started: 10/22/2013 | Boring Completed: 10/22/2013
Drill Rig: CME 550 | Driller: SS
Project No.: 02135197 | Exhibit: A-8

## BORING LOG NO. B-7

Page 1 of 1

**PROJECT:** 139th Security Forces Building
**CLIENT:** HTK Architects Topeka, KS
**SITE:** Panigot Road and 26th Road St. Joseph, MO

LOCATION See Exhibit A-2
Approximate Surface Elev: 816.5 (Ft.) +/-

| DEPTH | ELEVATION (Ft.) | SAMPLE TYPE | FIELD TEST RESULTS | LABORATORY TORVANE/HP (psf) | UNCONFINED COMPRESSIVE STRENGTH (psf) | WATER CONTENT (%) | DRY UNIT WEIGHT (pcf) |
|---|---|---|---|---|---|---|---|
| 0.3 | 816±* | | | | | | |
| 0.3 – 6" TOPSOIL | | | | | | | |
| FAT CLAY (CH), silty, brown, medium stiff to stiff | | | 3-4-5 N=9 | | | 21 | |
| | | | 3-4-4 N=8 | | | 25 | |
| 8.5 | 808±* | | 2-2-2 N=4 | | | 27 | |
| SILT (ML), sandy, brown, medium stiff | | | 2-3-4 N=7 | | | 26 | |
| 10.0 | 806.5±* | | | | | | |
| *Boring Terminated at 10 Feet* | | | | | | | |

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
Abandonment Method: Boring backfilled with soil cuttings and bentonite chips upon completion.
See Exhibit A-10 for description of field procedures
See Appendix B for description of laboratory procedures and additional data (if any).
See Appendix C for explanation of symbols and abbreviations.
Notes:

**WATER LEVEL OBSERVATIONS**
No free water observed

Terracon, 13910 West 99th Terrace, Lenexa, Kansas

Boring Started: 10/22/2013 | Boring Completed: 10/22/2013
Drill Rig: CME 550 | Driller: SS
Project No.: 02135197 | Exhibit: A-9

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 031913.GPJ - TERRACON_STD_TEMPLATE.GDT 11/21/13

HTK ARCHITECTS

KEVIN K. HOLLAND
NUMBER PE-2010006786
07/31/14
PROFESSIONAL ENGINEER
STATE OF MISSOURI

DATE: 2014-07-24
REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

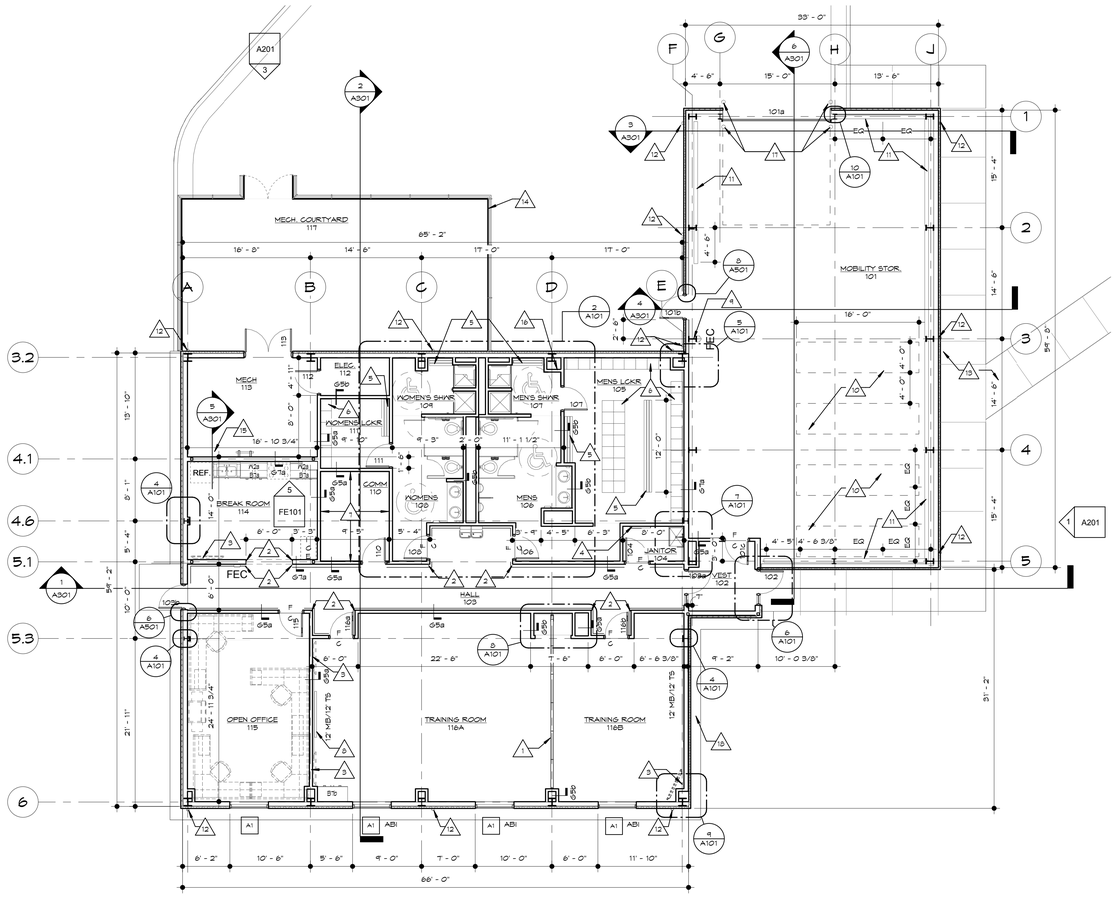
SHEET CONTENTS:
- BORING LOG MAP

HTK PROJECT NUMBER:
ULYB112022
10008.01 - 0018

SHEET NUMBER:
C500
100% CONTRACT DOCUMENTS

CFS ENGINEERS
cfse.com
2930 SW Woodside Dr, Topeka, KS 66614
o: 785-272-4706 f: 785-272-4736

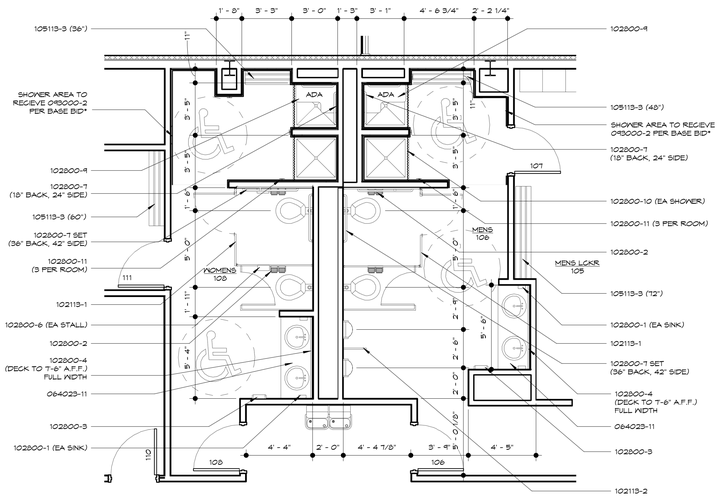
X:\2013\PROJ\135\CDWG\Sht-Proj_Sod Boring_ 7-21-2014 4:51:41 PM




## 1 FLOOR PLAN

1/8" = 1'-0"

PLAN NORTH

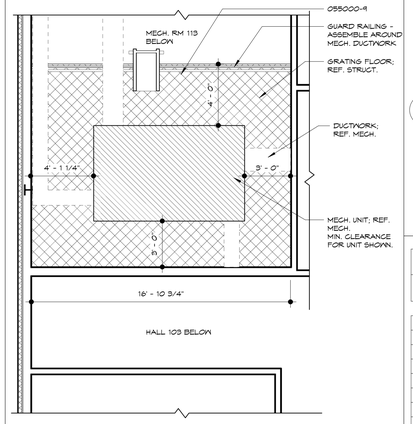



## 2 ENLARGED RESTROOM PLANS

1/4" = 1'-0"

PLAN NORTH

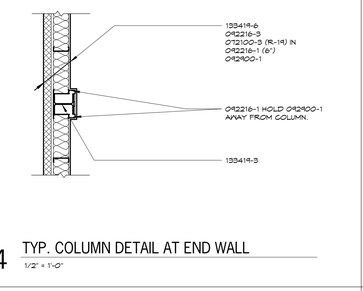
* REFERENCE TYPICAL WALL TILE PATTERN 9A201




## 3 MEZZANINE LEVEL

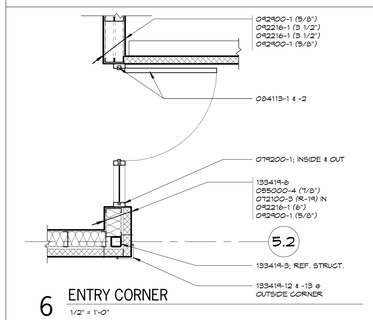
1/4" = 1'-0"

PLAN NORTH



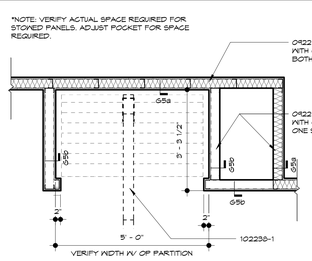

## 4 TYP. COLUMN DETAIL AT END WALL

1/2" = 1'-0"



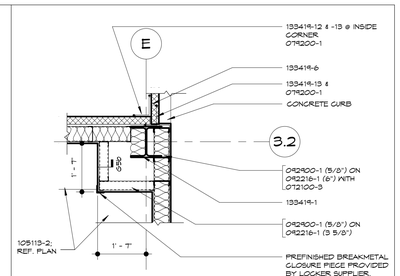

## 6 ENTRY CORNER

1/2" = 1'-0"



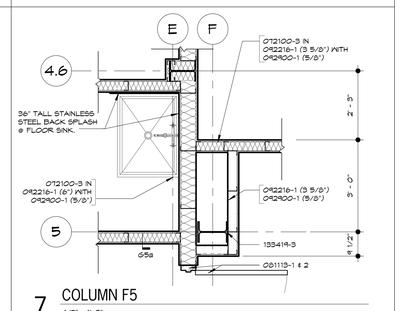

## 8 OPERABLE PARTITION POCKET (BY ABI)

1/2" = 1'-0"



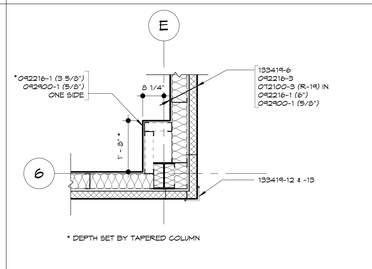

## 5 COLUMN E3.2

1/2" = 1'-0"



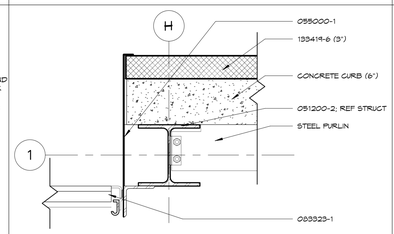

## 7 COLUMN F5

1/2" = 1'-0"




## 9 COLUMN E6

1/2" = 1'-0"




## 10 OVHD DOOR TO WALL DTL

1 1/2" = 1'-0"

## KEYNOTES

Note: Keynotes are drawn from a master list. It may not be sequentially numbered. Sizes (Ex. 2x4) or other info. following keynote on drawings indicates criteria for those materials/locations which may differ from std. material specified.

| | | | | | |
|---|---|---|---|---|---|
| 055000 | -1 | CONCRETE STRUCTURE | 093000 | -1 | CERAMIC MOSAIC TILE ( " x " ) |
| | -2 | CONCRETE FLOOR SLAB | | -2 | GLAZED WALL TILE ( " x " ) |
| | -3 | VAPOR BARRIER | | -3 | QUARRY TILE ( " x " ) |
| | -4 | WELDED WIRE FABRIC | | -4 | PORCELAIN FLOOR TILE ( " x " ) |
| | -5 | STEEL REINFORCING BAR | | -5 | TILE BASE |
| | -6 | RUSTICATION JOINT | | -6 | TILE CAP |
| | -7 | WATERSTOP | | -7 | SETTING BED |
| | -8 | EXPOSED AGGREGATE FINISH | | -8 | CRACK ISOLATION MEMBRANE |
| | -9 | SIDEWALK | 095000 | -1 | METAL EDGE STRIP |
| | -10 | PREMOLDED JOINT FILLER | 095113 | -1 | ACOUSTICAL PANEL ( " x ") (" = FIRE RATED) |
| | -11 | STEEL BAR DOWEL | | -2 | CEILING SUSPENSION SYSTEM |
| 055000 | -1 | STEEL ANGLE | | -3 | EDGE MOLD TRIM |
| | -2 | STEEL CHANNEL | | -4 | AUXILIARY SUPPORT FRAMING |
| | -3 | STEEL LINTEL | 096516 | -1 | RESILIENT FLOOR TILE |
| | -4 | STEEL PIPE | | -2 | WALL BASE |
| | -5 | STEEL TUBE | | -3 | EDGE STRIP |
| | -6 | STEEL PLATE | 096723 | -1 | RESINOUS FLOORING |
| | -7 | STEEL LADDER | | -2 | RESINOUS BASE |
| | -10 | STEEL SIDEWALK TRENCHDRAIN COVER | 096813 | -1 | CARPET TILE |
| | | | 099113 | -1 | EXTERIOR PAINT |
| 055213 | -1 | STEEL PIPE HANDRAIL | 099123 | -1 | INTERIOR PAINT |
| | -2 | STEEL PIPE GUARDRAIL | 101200 | -1 | MARKERBOARD |
| 055300 | -1 | STEEL GRATING | | -2 | TACKBOARD |
| | -2 | STEEL FRAME | | -3 | CHALKBOARD |
| 061000 | -1 | 2X WOOD NAILER ( " ) | | -4 | TACKSTRIP |
| | -2 | 2X WOOD BLOCKING ( " ) | | -5 | DISPLAY WALL PANEL |
| | -3 | 1X WOOD CONTINUOUS (") | | -6 | DISPLAY WALL COVERING |
| | -4 | PLYWOOD ( " ) | | -7 | SLIDING DISPLAY UNIT |
| | -5 | #30 FELT | 101416 | -1 | DIMENSIONAL LETTER SIGNAGE |
| | -6 | #15 FELT | 101423 | -1 | PANEL SIGNAGE |
| | -7 | ORIENTED STRAND BOARD ( " ) | 102113 | -1 | TOILET COMPARTMENT |
| 064023 | -1 | PLASTIC-LAMINATE-FACED ARCHITECTURAL CABINETS | 102216 | -1 | URINAL SCREEN |
| | | | | -1 | SHOWER COMPARTMENT |
| | -2 | HIGH PRESSURE LAMINATE | | -2 | DRESSING COMPARTMENT |
| | -3 | CABINET LINER LAMINATE | 102258 | -1 | OPERABLE PANEL PARTITION |
| | -4 | PARTICLE BOARD | 102800 | -1 | IMPACT-RESISTANT CORNER GUARD |
| | -5 | PLYWOOD | | -2 | IMPACT-RESISTANT CHAIR RAIL |
| | -6 | 3MM EDGE MOLDING | 102800 | -1 | SOAP DISPENSER |
| | -7 | SOLID WOOD BLOCKING | | -2 | TISSUE DISPENSER |
| | -8 | HARDWOOD | | -3 | TOWEL DISPENSER |
| | -9 | STEEL TUBE/LEG FRAME | | -4 | FRAMED MIRROR |
| | -10 | SOLID SURFACE SILL | | -5 | SANITARY NAPKIN DISPENSER |
| | -11 | SOLID SURFACE COUNTER | | -6 | SANITARY NAPKIN DISPOSER |
| 072100 | -1 | FOUNDATION WALL OR INSIDE SLAB INSULATION (R- ) | | -7 | GRAB BAR |
| | | | | -8 | WASTE RECEPTACLE |
| | -2 | CAVITY WALL INSULATION (R- ) | | -9 | SHOWER SEAT |
| | -3 | BUILDING INSULATION - INFACED (R- ) | | -10 | SHOWER CURTAIN ROD |
| | -4 | BUILDING INSULATION - FACED (R-) | | -11 | COAT/ROBE HOOK |
| | | | | -12 | TOWEL BAR |
| | -5 | SILL SEALER | | -13 | SHOWER CURTAIN |
| | -6 | BAFFIN INSULATION | | -14 | DIAPER CHANGING STATION |
| | -7 | SPRAY-APPLIED CELLULOSIC INSULATION | | -15 | ELECTRIC HAND DRYER REF. ELEC.) |
| | -8 | SPRAY POLYURETHANE FOAM INSULATION | 104413 | -1 | FIRE EXTINGUISHER CABINET |
| | | | | -2 | FIRE HOSE CABINET |
| | | | 105113 | -1 | CORRIDOR LOCKER |
| 072313 | -1 | MODIFIED BITUMINOUS SHEET AIR BARRIER | | -2 | ATHLETIC LOCKER |
| | | | | -3 | ATM BOOTH |
| 076200 | -1 | SHEET METAL FLASHING AND COUNTERFLASHING | 119213 | -1 | PROJECTION SCREEN |
| | | | 122113 | -1 | HORIZONTAL LOUVER BLINDS |
| | | | 133416 | -1 | PRE-ENGINEERED BUILDING |
| | -2 | PRE-FINISHED ROOF EDGE | | -2 | FRAME |
| | -3 | PRE-FINISHED COPING | | -3 | COLUMN |
| | -4 | SHEET METAL RESLET | | -4 | GIRT |
| | -5 | SHEET METAL GUTTER | | -5 | PURLIN |
| | -6 | SHEET METAL DOWNSPOUT | | -6 | PREFINISHED WALL PANEL (I = INSULATED) |
| | -7 | SHEET METAL SCUPPER | | -7 | PREFINISHED ROOF PANEL |
| 077253 | -1 | SNOW GUARD | | -8 | INSULATION (R- ) (IF = FACED) |
| 078413 | -1 | PENETRATION FIRESTOPPING | | -9 | PREFINISHED METAL GUTTER |
| | | | | -10 | PREFINISHED DOWNSPOUT |
| 078446 | -1 | FIRE-RESISTIVE JOINT SYSTEM | | -11 | PREFINISHED METAL SOFFIT PANEL |
| 079200 | -1 | JOINT SEALANT - RAKE (WIDE REQUIRED | | -12 | PREFINISHED METAL FLASHING |
| | -2 | JOINT FILLER | | -13 | METAL PANEL CLOSURE |
| | -3 | GASKET | | -14 | BASE ANGLE |
| | -4 | BACKER ROD | | -15 | FRAMED OPENING HEADER OR JAMB CHANNEL |
| 079500 | -1 | EXPANSION CONTROL | | -16 | TUBE GIRT |
| 081113 | -1 | HOLLOW METAL DOOR | 311000 | -1 | SITE CLEARING |
| | -2 | HOLLOW METAL FRAME | 312000 | -1 | EARTH MOVING |
| | -3 | FRAME ANCHOR | | -2 | INTERIOR FILL |
| | -4 | LOUVER | | -3 | EXTERIOR FILL |
| | -5 | PLASTER GUARD | | -4 | GRANULAR DRAINAGE COURSE |
| 081416 | -1 | FLUSH WOOD DOOR | | -5 | DRAINAGE BACKFILL |
| 083113 | -1 | ACCESS DOOR | | -6 | SUBBASE COURSE |
| | -2 | ACCESS DOOR FRAME | | -1 | DRAINAGE GEOTEXTILE |
| 083613 | -1 | SECTIONAL OVERHEAD DOOR | | -2 | SEPARATION GEOTEXTILE |
| | | | 312316 | -1 | EXCAVATING |
| | -2 | SECTIONAL OVERHEAD DOOR TRACK | 313116 | -1 | TERMITE CONTROL |
| | -3 | WEATHERSTRIPPING | 321313 | -1 | CONCRETE PAVING |
| 084113 DOOR | -1 | ALUMINUM ENTRANCE | 321373 | -1 | CONCRETE PAVING JOINT SEALANTS |
| | -2 | ALUMINUM STOREFRONT FRAME | 321723 | -1 | PAVEMENT MARKINGS |
| | | | 329200 | -1 | TURF/GRASS |
| 088000 | -1 | GLAZING (AS SCHEDULED) | | | |
| 089000 | -1 | LOUVER | | | |
| | -2 | VENT | | | |
| 092216 | -1 | STEEL STUD ( " ) | | | |
| | -2 | STEEL STUD RUNNER ( " ) | | | |
| | -3 | FURRING CHANNEL | | | |
| 092900 | -1 | GYPSUM BOARD ( " ) | | | |
| | -2 | FIRE RATED GYPSUM BOARD ( " ) | | | |
| | -3 | CEMENTITIOUS TILE BACKER PANEL | | | |
| | -4 | METAL SUSPENSION SYSTEM | | | |
| | -5 | ACOUSTICAL SEALANT | | | |
| | -6 | ACOUSTICAL INSULATION (") | | | |
| | -7 | METAL STUD TRIM | | | |
| | -8 | AXILLARY SUPPORT FRAMING | | | |
| | -9 | METAL CONTROL JOINT | | | |
| | -10 | HIGH IMPACT GYPSUM BOARD | | | |

## ROOM FINISH SCHEDULE LEGEND

FLOOR
0 NO FINISH
10 SEALED CONCRETE
11 VINYL COMPOSITION TILE
12 CERAMIC TILE
13 CARPET TILE
14 RESINOUS

WALL BASE
0 NO FINISH
21 4" TOP-SET RUBBER
23 RESINOUS COVE

WALLS
0 NO FINISH
30 LATEX ENAMEL PAINT
31 EPOXY PAINT
32 6" CERAMIC TILE (BY ABI)
33 PREFINISHED METAL PANEL
34 PAINT STRUCTURE (BY ABI)

CEILING
0 NO FINISH
40 SUSPENDED 2X4 ACOUSTIC LAY-IN PANEL
41 LATEX ENAMEL PAINT
42 PAINT ALL EXPOSED DUCTWORK, CONDUIT, STRUCTURE, ETC. (BY ABI)

## ROOM FINISH SCHEDULE

| Number | Name | Floor Finish | Base Finish | Ceiling Finish | NORTH (or TYP.) | EAST | SOUTH | WEST | Comments |
|---|---|---|---|---|---|---|---|---|---|
| 101 | MOBILITY STOR. | 10 | 0 | 0, (42) | 33, (34) | | 30 | 30 | |
| 102 | VEST | 14 | 21 | 41 | 30 | | | | |
| 103 | HALL | 11 | 21 | 40 | 30 | | | | 6, 7 |
| 104 | JANITOR | 14 | 23 | 40 | 31 | | | | |
| 105 | MENS LCKR | 14 | 23 | 40 | 31, (32) | | | | |
| 106 | MENS | 14 | 23 | 40 | 31, (32) | | | | |
| 107 | MEN'S SHWR | 14 | 23 | 31 | 32 | | | | 3 |
| 108 | WOMENS | 14 | 23 | 40 | 31, (32) | | | | |
| 109 | WOMEN'S SHWR | 14 | 23 | 31 | 32 | | | | 3 |
| 110 | COMM | 10 | 21 | 0 | 30 | | | | |
| 111 | WOMENS LCKR | 14 | 23 | 40 | 31, (32) | | | | |
| 112 | ELEC. | 10 | 21 | 0 | 30 | | | | |
| 113 | MECH | 10 | 21 | 0 | 30 | | | | |
| 114 | BREAK ROOM | 11 | 21 | 40 | 30 | | | | |
| 115 | OPEN OFFICE | 13 | 21 | 40 | 30 | | | | |
| 116 | Room | | | | | | | | |
| 116A | TRAINING ROOM | 13 | 21 | 40 | 30 | | | | |
| 116B | TRAINING ROOM | 13 | 21 | 40 | 30 | | | | |

## ROOM FINISH SCHEDULE NOTES

*NOTES IN PARENTHESES BY ALTERNATE BID ITEM (ABI)

1. PAINT STRUCTURE TO MATCH INSIDE FACE OF WALL AND ROOF PANELS (BY ABI). PANEL ITSELF DOES NOT REQUIRE PAINTING
2. CERAMIC TILE (BY ABI)
3. SHOWER BASIN PREFINISH TERAZZO
4. PAINT DUCTWORK & CONDUIT (BY ABI)
5. ALL GYP BOARD WALLS & CEILINGS SHALL BE EPOXY PAINT
6. FLOOR TILE BORDER WITH CONTRASTING COLOR.
7. CHAIR RAIL ON ALL WALLS IN HALL 103.

## ARCHITECTURAL PLAN NOTES

GENERAL: COORDINATE WITH WORK SHOWN ON STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS, REF. I'E SHEET FOR EQUIP. COORDINATION

1. OPERABLE PANEL PARTITION (BY ABI). SUPPORT STRUCTURE IN BASE BID.
2. CORNER GUARD
3. TELEVISION WALL BRACKET. VERIFY MOUNTING HEIGHT W/ OWNER AT TIME OF INSTALLATION.
4. MOP HANGER & STAINLESS STEEL SHELF 4' - 0"
5. LOCKER ROOM BENCH.
6. DOUBLE STACKED LOCKERS.
7. 3/4" FIRERATED PLYWOOD ON ALL WALLS TO 8' A.F.F. PAINT WHITE FULL HEIGHT.
8. CEILING RECESSED MOTORIZED SCREEN.
9. SURFACE MOUNT FIRE EXTINGUISHER CABINET TO STEEL COLUMN. PROVIDE ADDITIONAL SUPPORT BRACKETS AS REQUIRED.
10. EQUIPMENT RACKS BY OWNER. MAX 12' TALL.
11. INTERIOR STEEL BOLLARD AND GUARD RAIL SYSTEM. REF DETAIL IN SECTION 5A302.
12. DOWNSPOUT CONNECT TO UNDERGROUND STORM PIPING. REF CIVIL.
13. CONCRETE SIDEWALK. REF CIVIL.
14. FENCED MECHANICAL COURTYARD. REF CIVIL AND MECH PLANS
15. LADDER TO MECHANICAL MEZZANINE. COORDINATE W/ LOCATION OF MECHANICAL EQUIPMENT. PROVIDE REINFORCING & BLOCKING IN WALL TO SUPPORT ATTACHMENT OF LADDER.
16. 10'x10' ACCESS PANEL IN WALL @ 36" A.F.F. COORDINATE WITH LOCATION OF FDC
17. STEEL BOLLARD.
18. 18" MOW STRIP.

HTK ARCHITECTS PA
8300 W 110TH ST, STE 250
OVERLAND PARK, KANSAS 66210
P 913.663.5373
500 S. KANSAS AVE
TOPEKA, KANSAS 66612
P 785.266.5373
www.htkarchitects.net

STATE OF MISSOURI
CHARLES R. SMITH
NUMBER A-2007030589
ARCHITECT

DATE:
2014-07-24

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

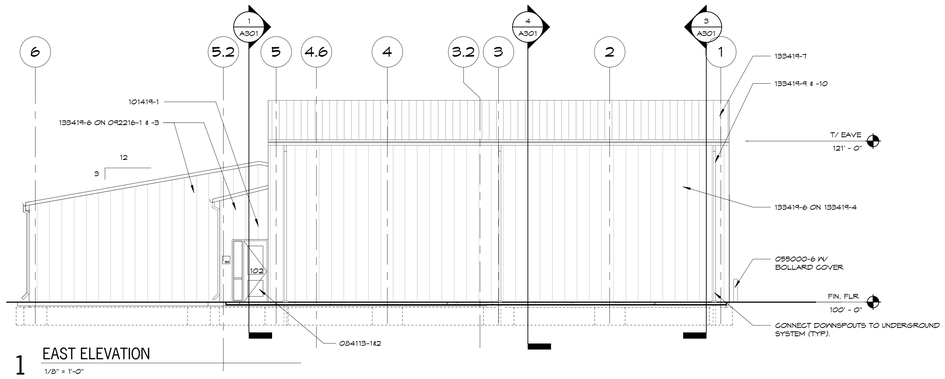
139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

SHEET CONTENTS:
ARCHITECTURAL FLOOR PLAN

HTK PROJECT NUMBER:
ULYB112022
10008.01 - 0018

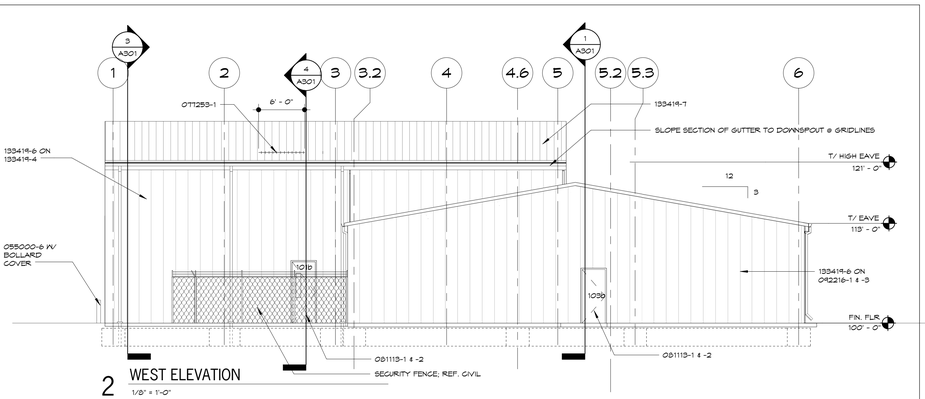
SHEET NUMBER:
A101
ORIGINAL CONTRACT DOCUMENTS

7/24/2014 4:46:16 PM C:\Users\jms\Documents\Security Forces Building_Central_jms.rvt



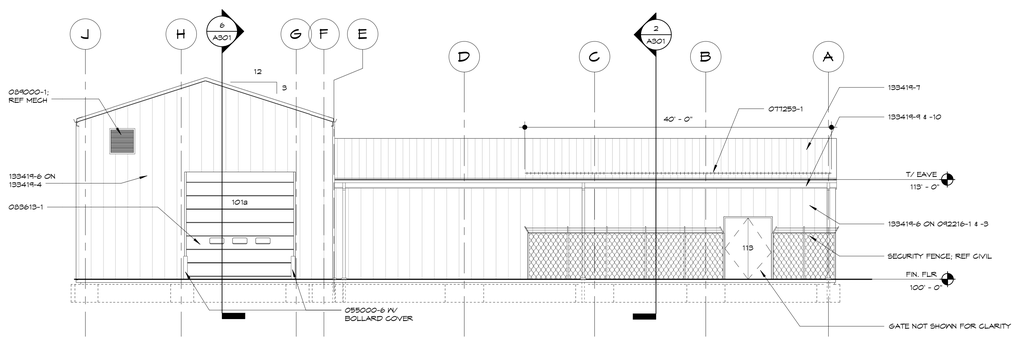

1 EAST ELEVATION

1/8" = 1'-0"



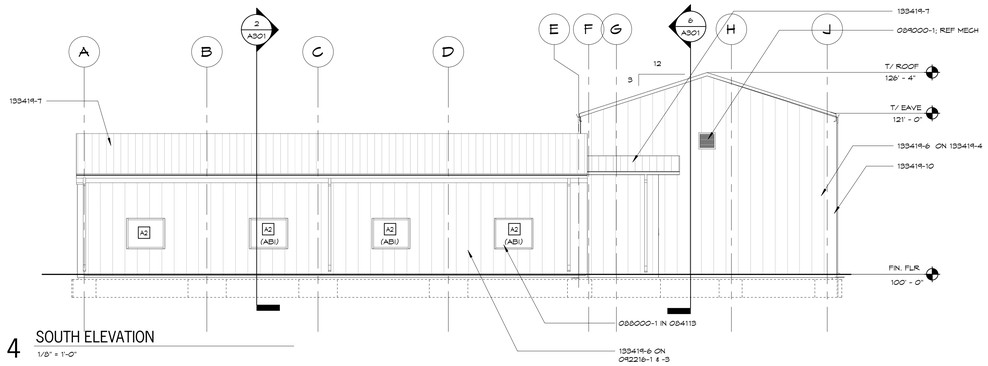

2 WEST ELEVATION

1/8" = 1'-0"



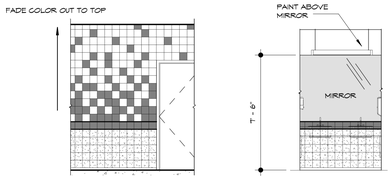

3 NORTH ELEVATION

1/8" = 1'-0"




4 SOUTH ELEVATION

1/8" = 1'-0"




TYP WALL




@ MIRROR

## WALL TILE LEGEND

- 6" X 6" WALL TILE, GRAY-BLUE (SUMMER RAIN), SATIN
- 6" X 6" WALL TILE, PALE GRAY/WHITE, GLOSS
- 6" X 6" WALL TILE, DARK GRAY (SMOKEY QUARTZ), GLOSS

*NOTE:
IF LESS THAN A HALF TILE IS IN A CORNER, ADJACENT TILE ON ADJACENT WALL MUST MATCH IN COLOR.

5 RESTROOM WALL TILE PATTERN (TYP.)

1/4" = 1'-0"

## KEYNOTES

Note: Keynotes are drawn from a master list, it may not be sequentially numbered. Sizes (6x, 2x4) or other info. following keynote on drawings indicates criteria for those materials/locations which may differ from std. material specified.

| | | | | | |
|---|---|---|---|---|---|
| 033000 | -1 | CONCRETE STRUCTURE | 093000 | -1 | CERAMIC MOSAIC TILE ( " X " ) |
| | -2 | CONCRETE FLOOR SLAB | | -2 | GLAZED WALL TILE ( " X " ) |
| | -3 | VAPOR BARRIER | | -3 | QUARRY TILE ( " X " ) |
| | -4 | WELDED WIRE FABRIC | | -4 | PORCELAIN FLOOR TILE ( " X " ) |
| | -5 | STEEL REINFORCING BAR | | -5 | TILE BASE |
| | -6 | RUSTICATION JOINT | | -6 | TILE CAP |
| | -7 | WATERSTOP | | -7 | SETTING BED |
| | -8 | DOVETAIL ANCHOR SLOT | | -8 | CRACK ISOLATION MEMBRANE |
| | -9 | SIDEWALK | | -9 | METAL EDGE STRIP |
| | -10 | PREMOLDED JOINT FILLER | 095000 | -1 | ACOUSTICAL PANEL ( " X " ) (" = FIRE RATED) |
| | -11 | STEEL BAR DOWEL | | -2 | CEILING SUSPENSION SYSTEM |
| 055000 | -1 | STEEL ANGLE | | -3 | EDGE MOLDING |
| | -4 | STEEL CHANNEL | | -4 | ACOUSTICAL INSERT FRAMING |
| | -5 | STEEL LINTEL | | -1 | RUBBER CEMENT FLOOR TILE |
| | -6 | STEEL PIPE | | -2 | WALL BASE |
| | -7 | STEEL TUBE | | -3 | EDGE STRIP |
| | -8 | STEEL PLATE | | -1 | RESINOUS FLOORING |
| | -9 | STEEL LADDER | | -2 | RESINOUS BASE |
| | -10 | STEEL SIDEWALK TRENCH GRATE COVER | | -1 | CARPET TILE |
| | | | | -1 | EXTERIOR PAINT |
| | | | | -2 | INTERIOR PAINT |
| 055213 | -1 | STEEL PIPE HANDRAIL | | -1 | MARKERBOARD |
| | -2 | STEEL PIPE GUARDRAIL | | -2 | TACKBOARD |
| 055300 | -1 | STEEL GRATING | | -3 | CHALKBOARD |
| | -2 | STEEL FRAME | | -4 | TACKSTRIP |
| 061000 | -1 | 2X WOOD NAILER ( " ) | | -5 | DISPLAY WALL PANEL |
| | -2 | 2X WOOD BLOCKING ( " ) | | -6 | DISPLAY WALL MOLDING |
| | -3 | 1X WOOD CONTINUOUS (") | | -7 | SLIDING DISPLAY UNIT |
| | -4 | PLYWOOD ( " ) | 101416 | -1 | DIMENSIONAL LETTER SIGNAGE |
| | -5 | #30 FELT | 101423 | -1 | PANEL SIGNAGE |
| | -6 | #15 FELT | 102113 | -1 | TOILET COMPARTMENT |
| | -7 | ORIENTED STRAND BOARD ( " ) | | -2 | PARTIAL SCREEN |
| 064023 | -1 | PLASTIC-LAMINATE-FACED ARCHITECTURAL CABINETS | 102116 | -1 | SHOWER COMPARTMENT |
| | | | | -2 | DRESSING COMPARTMENT |
| | -2 | HIGH PRESSURE LAMINATE | 102230 | -1 | OPERABLE PANEL PARTITION |
| | -3 | CABINET LINER LAMINATE | 102600 | -1 | IMPACT-RESISTANT CORNER GUARD |
| | -4 | PARTICLE BOARD | | -2 | IMPACT-RESISTANT CHAIR RAIL |
| | -5 | PLYWOOD | | -3 | SOAP DISPENSER |
| | -6 | 3MM EDGE MOLDING | | -2 | TISSUE DISPENSER |
| | -7 | SOLID WOOD BLOCKING | | -3 | TOWEL DISPENSER |
| | -8 | HARDWOOD | | -4 | FRAMED MIRROR |
| | -9 | STEEL TUBE/LEG FRAME | | -5 | SANITARY NAPKIN DISPENSER |
| | -10 | SOLID SURFACE SILL | | -6 | SANITARY NAPKIN DISPOSER |
| | -11 | SOLID SURFACE COUNTER | | -7 | GRAB BAR |
| 072100 | -1 | FOUNDATION WALL OR UNDER SLAB INSULATION (R- ) | | -8 | WASTE RECEPTACLE |
| | | | | -9 | SHOWER SEAT |
| | -2 | CAVITY WALL INSULATION (R- ) | | -10 | SHOWER CURTAIN ROD |
| | -3 | BUILDING INSULATION - UNFACED (R- ) | | -11 | COAT/ROBE HOOK |
| | | | | -12 | TOWEL BAR |
| | -4 | BUILDING INSULATION - FACED (R-) | | -13 | SHOWER CURTAIN |
| | | | | -14 | DIAPER CHANGING STATION |
| | -5 | SILL SEALER | | -15 | ELECTRIC HAND DRYER REF ELEC.) |
| | -6 | BAFFING INSULATION | | | |
| | -7 | SPRAY-APPLIED CELLULOSIC INSULATION | 104413 | -1 | FIRE EXTINGUISHER CABINET |
| | | | | -2 | FIRE HOSE CABINET |
| | -8 | SPRAY POLYURETHANE FOAM INSULATION | 105113 | -1 | CORRIDOR LOCKER |
| 072115 | -1 | MODIFIED BITUMINOUS SHEET AIR BARRIER | | -2 | ATHLETIC LOCKER |
| | | | | -3 | LOCKER BENCH |
| 076200 | -1 | SHEET METAL FLASHING AND COUNTERFLASHING | 115213 | -1 | PROJECTION SCREEN |
| | | | 122113 | -1 | HORIZONTAL LOUVER BLINDS |
| | | | 133416 | -1 | PRE-ENGINEERED BUILDING |
| | -2 | PRE-FINISHED ROOF EDGE | | -2 | FRAME |
| | -3 | PRE-FINISHED COPING | | -3 | GOLUMN |
| | -4 | SHEET METAL REGLET | | -4 | GIRT |
| | -5 | SHEET METAL GUTTER | | -5 | PURLIN |
| | -6 | SHEET METAL DOWNSPOUT | | -6 | PREFINISHED WALL PANEL (I = INSULATED) |
| | -7 | SHEET METAL SCUPPER | | -7 | PREFINISHED ROOF PANEL |
| | -1 | SNOW GUARD | | -8 | INSULATION (R- ) (F = FACED) |
| 077253 | -1 | PENETRATION FIRESTOPPING | | -9 | PREFINISHED METAL GUTTER |
| 078413 | | | | -10 | PREFINISHED DOWNSPOUT |
| 078446 | -1 | FIRE-RESISTIVE JOINT SYSTEM | | -11 | PREFINISHED METAL SOFFIT PANEL |
| 079200 | -1 | JOINT SEALANT - RAKE JNKERE REQUIRED | | -12 | PREFINISHED METAL FLASHING |
| | -2 | JOINT FILLER | | -13 | METAL PANEL CLOSURE |
| | -3 | GASKET | | -14 | BASE ANGLE |
| | -4 | BACKER ROD | | -15 | FRAMED OPENING HEADER OR JAMB CHANNEL |
| 079500 | -1 | EXPANSION CONTROL | | -16 | TUBE GIRT |
| 081113 | -1 | HOLLOW METAL DOOR | 311000 | -1 | SITE CLEARING |
| | -2 | HOLLOW METAL FRAME | 312000 | -1 | EARTH MOVING |
| | -3 | FRAME ANCHOR | | -2 | INTERIOR FILL |
| | -4 | LOUVER | | -3 | EXTERIOR FILL |
| | -5 | PLASTER GUARD | | -4 | GRANULAR DRAINAGE COURSE |
| 081416 | -1 | FLUSH WOOD DOOR | | -5 | DRAINAGE BACKFILL |
| 083113 | -1 | ACCESS DOOR | | -6 | SUBBASE COURSE |
| | -2 | ACCESS DOOR FRAME | | -7 | DRAINAGE GEOTEXTILE |
| 083613 | -1 | SECTIONAL OVERHEAD DOOR | | -8 | SEPARATION GEOTEXTILE |
| | -2 | SECTIONAL OVERHEAD DOOR TRACK | 312316 | -1 | DEWATERING |
| | -3 | WEATHERSTRIPPING | 313116 | -1 | TERMITE CONTROL |
| 084113 | -1 | ALUMINUM ENTRANCE | 321313 | -1 | CONCRETE PAVING |
| DOOR | -2 | ALUMINUM STOREFRONT FRAME | 321373 | -1 | CONCRETE PAVING JOINT SEALANTS |
| 088000 | -1 | GLAZING (AS SCHEDULED) | 321723 | -1 | PAVEMENT MARKINGS |
| 089000 | -1 | LOUVER | 329200 | -1 | TURF/GRASS |
| | -2 | VENT | | | |
| 092216 | -1 | STEEL STUD ( " ) | | | |
| | -2 | STEEL STUD RUNNER ( " ) | | | |
| | -3 | FURRING CHANNEL | | | |
| 092900 | -1 | GYPSUM BOARD ( " ) | | | |
| | -2 | FIRE RATED GYPSUM BOARD ( | | | |
| | -3 | CEMENTITIOUS TILE BACKER PANEL | | | |
| | -4 | METAL SUSPENSION SYSTEM | | | |
| | -5 | ACOUSTICAL SEALANT | | | |
| | -6 | ACOUSTICAL INSULATION (") | | | |
| | -7 | METAL EDGE TRIM | | | |
| | -8 | AUXILIARY SUPPORT FRAMING | | | |
| | -9 | METAL CONTROL JOINT | | | |
| | -10 | HIGH IMPACT GYPSUM BOARD | | | |

HTK ARCHITECTS PA
8300 NIEMAN ROAD, STE 150
OVERLAND PARK, KANSAS 66212
P 913.663.5373
500 S. KANSAS AVE.
TOPEKA, KS 66612
P 785.266.5373
www.htkarchitects.net

STATE OF MISSOURI
CHARLES R. SMITH
NUMBER
A-2007030589
ARCHITECT

DATE:
- 2014-07-24

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

SHEET CONTENTS:
- BUILDING ELEVATIONS

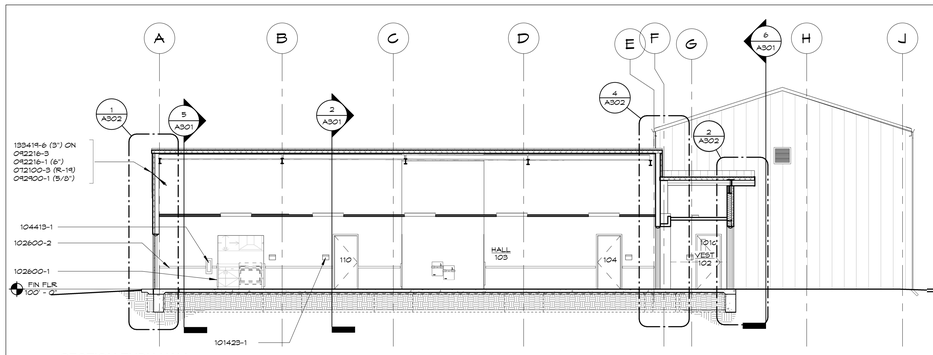
HTK PROJECT NUMBER:
- ULYB112022
  10008.01 - 0018

SHEET NUMBER:

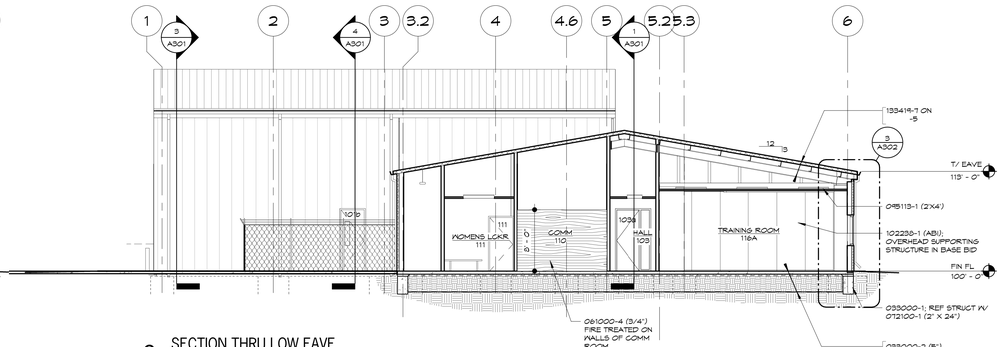
A201

ORIGINAL CONTRACT DOCUMENTS

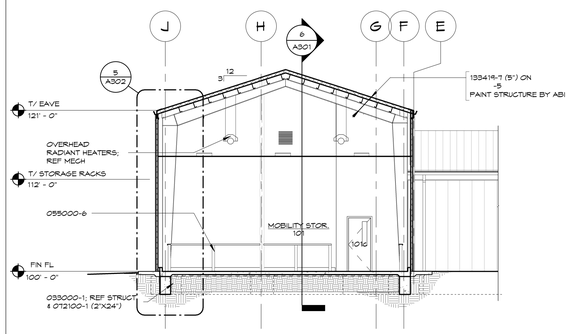
7/23/2014 2:15:36 PM C:\Users\jms\Documents\Security Forces Building_Central_jms.rvt



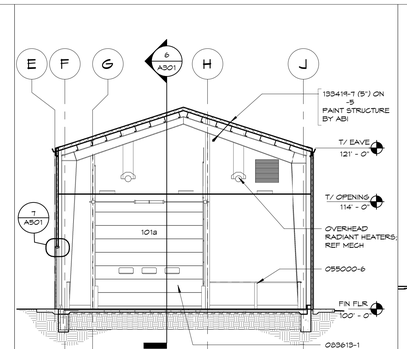

1 SECTION THRU HALL
1/8" = 1'-0"



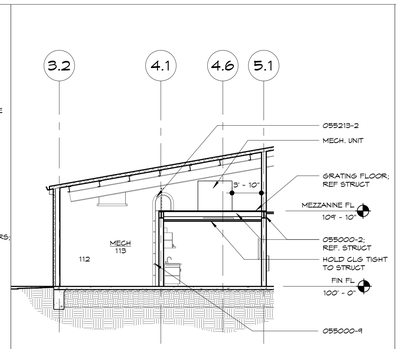

2 SECTION THRU LOW EAVE
1/8" = 1'-0"



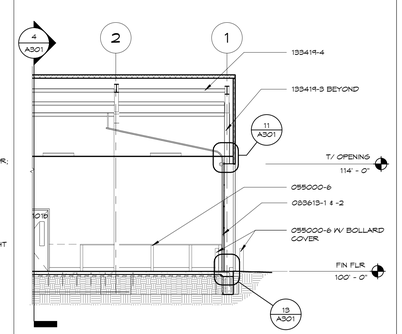

3 SECTION THRU HIGH EAVE
1/8" = 1'-0"




4 SECTION THRU MOBILITY STORAGE EXT. DOOR
1/8" = 1'-0"




5 MEZZANINE SECTION
1/8" = 1'-0"

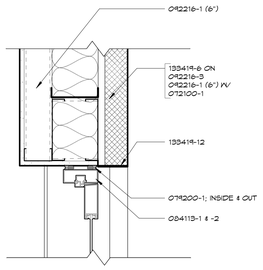



6 SECTION THRU OVHD DOOR
1/8" = 1'-0"

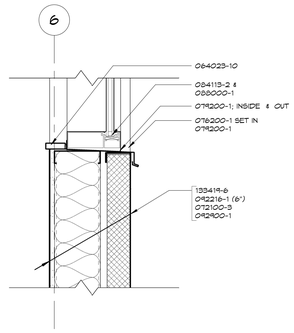
## KEYNOTES

Note: Keynotes are drawn from a master list & may not be sequentially numbered. Sizes (Ex. 2x4) or other info following keynote on drawings indicates criteria for those materials/locations which may differ from std. material specified.

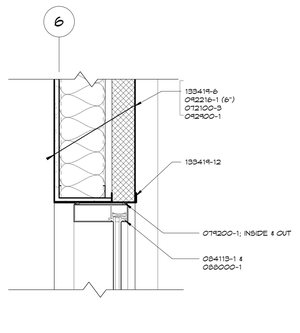
| | | | | | |
|---|---|---|---|---|---|
| 033000 | +1 | CONCRETE STRUCTURE | 093000 | +1 | CERAMIC MOSAIC TILE ( 4" X 4" ) |
| | -2 | CONCRETE FLOOR SLAB | | +2 | GLAZED WALL TILE ( 4" X 4" ) |
| | -3 | VAPOR BARRIER | | | |
| | -4 | WELDED WIRE FABRIC | | -3 | QUARRY TILE ( 7" X 7" ) |
| | -5 | STEEL REINFORCING BAR | | -4 | PORCELAIN FLOOR TILE ( 4" X 4" ) |
| | -6 | RUSTICATION JOINT | | | |
| | -7 | WATERSTOP | | -5 | TILE BASE |
| | -8 | DOVETAIL ANCHOR | | -6 | TILE CAP |
| | -9 | SIDEWALK | | -7 | SETTING BED |
| | -10 | PREMOLDED JOINT FILLER | | -8 | CRACK ISOLATION MEMBRANE |
| | -11 | STEEL BAR DOWEL | | -9 | METAL EDGE STRIP |
| 055000 | +1 | STEEL ANGLE | 095113 | +1 | ACOUSTICAL PANEL ( 2' X 2' ) (F = FIRE RATED) |
| | -4 | STEEL CHANNEL | | | |
| | -5 | STEEL LINTEL | | -2 | CEILING SUSPENSION SYSTEM |
| | -6 | STEEL PIPE | | -3 | EDGE MOLD TRIM |
| | -7 | STEEL TUBE | | -4 | AUXILIARY SUPPORT FRAMING |
| | -8 | STEEL PLATE | 096514 | +1 | RESILIENT FLOOR TILE |
| | -10 | STEEL LADDER | | -2 | WALL BASE |
| | -11 | STEEL SIDEWALK TRENCH-DRAIN COVER | | -3 | EDGE STRIP |
| | | | 096723 | +1 | RESINOUS FLOORING |
| 055213 | +1 | STEEL PIPE HANDRAIL | | +2 | RESINOUS BASE |
| | -2 | STEEL PIPE GUARDRAIL | 096813 | +1 | CARPET TILE |
| 055300 | +1 | STEEL GRATING | 099123 | +1 | EXTERIOR PAINT |
| | -2 | STEEL TRENCH | 099123 | +1 | INTERIOR PAINT |
| 061000 | +1 | 2X WALL ( " ) | 101100 | +1 | MARKERBOARD |
| | -2 | 2X WOOD BLOCKING ( " ) | | -2 | TACKBOARD |
| | -3 | IN WOOD CONTINUOUS (") | | -3 | CHALKBOARD |
| | -4 | PLYWOOD ( " ) | | -4 | TACKSTRIP |
| | -5 | #30 FELT | | -5 | DISPLAY WALL PANEL |
| | -6 | #15 FELT | | -6 | DISPLAY WALL GOVERING |
| | -7 | ORIENTED STRAND BOARD ( " ) | | -7 | SLIDING DISPLAY UNIT |
| 064023 | +1 | PLASTIC-LAMINATE-FACED ARCHITECTURAL CABINETS | 101416 | +1 | DIMENSIONAL LETTER SIGNAGE |
| | | | 101423 | +1 | PANEL SIGNAGE |
| | | | 102113 | +1 | TOILET COMPARTMENT |
| | -2 | HIGH PRESSURE LAMINATE | | +2 | URINAL SCREEN |
| | -3 | CABINET LINER LAMINATE | 102119 | +1 | SHOWER COMPARTMENT |
| | -4 | PARTICLE BOARD | | -2 | DRESSING COMPARTMENT |
| | -5 | PLYWOOD | 102239 | +1 | OPERABLE PANEL PARTITION |
| | -6 | 3MM EDGE MOLDING | 102800 | +1 | IMPACT-RESISTANT CORNER GUARD |
| | -7 | SOLID WOOD BLOCKING | | +2 | IMPACT-RESISTANT CHAIR RAIL |
| | -8 | HARDWOOD | | | |
| | -9 | STEEL TUBE-LEG FRAME | | | |
| | -10 | SOLID SURFACE SILL | 102900 | +1 | SOAP DISPENSER |
| | -11 | SOLID SURFACE COUNTER W/INTEGRAL SINK | | -2 | TISSUE DISPENSER |
| | | | | -3 | TOWEL DISPENSER |
| 072100 | +1 | FOUNDATION WALL OR UNDER SLAB INSULATION (R- ) | | +4 | FRAMED MIRROR |
| | | | | -5 | SANITARY NAPKIN DISPENSER |
| | | | | -6 | SANITARY NAPKIN DISPOSER |
| | -2 | CAVITY WALL INSULATION (R- ) | | -7 | GRAB BAR |
| | | | | -8 | WASTE RECEPTACLE |
| | -3 | BUILDING INSULATION - UNFACED (R- ) | | -9 | SHOWER SEAT |
| | | | | -10 | SHOWER CURTAIN ROD |
| | -4 | BUILDING INSULATION - FACED (R-) | | -11 | COAT/ROBE HOOK |
| | | | | -12 | TOWEL BAR |
| | -5 | SILL SEALER | | -13 | SHOWER CURTAIN |
| | -6 | BATTS INSULATION | | -14 | DIAPER CHANGING STATION |
| | -7 | SPRAY-APPLIED CELLULOSIC INSULATION | | -15 | ELECTRIC HAND DRYER REF. ELEC.) |
| | | | 104413 | +1 | FIRE EXTINGUISHER CABINET |
| | -8 | SPRAY POLYURETHANE FOAM INSULATION | | -2 | FIRE HOSE CABINET |
| | | | 105113 | +1 | CORRIDOR LOCKER |
| 072113 | +1 | MODIFIED BITUMINOUS SHEET AIR BARRIER | | -2 | ATHLETIC LOCKER |
| | | | | -3 | LOCKER BENCH |
| 076200 | +1 | SHEET METAL FLASHING AND COUNTERFLASHING | 115213 | +1 | PROJECTION SCREEN |
| | | | 122113 | +1 | HORIZONTAL LOUVER BLINDS |
| | | | 133419 | +1 | PRE-ENGINEERED BUILDING |
| | -2 | PRE-FINISHED ROOF EDGE | | +2 | FRAME |
| | | | | -3 | COLUMN |
| | -3 | PRE-FINISHED COPING | | +4 | GIRT |
| | -4 | SHEET METAL RIDGE | | -5 | PURLIN |
| | -5 | SHEET METAL GUTTER | | +6 | PREFINISHED WALL PANEL (I = INSULATED) |
| | -6 | SHEET METAL DOWNSPOUT | | +7 | PREFINISHED ROOF PANEL |
| | +7 | SHEET METAL SCUPPER | | -8 | INSULATION (R- ) |
| 077253 | -1 | SNOW GUARD | | | (F = FACED) |
| 079413 | -1 | PENETRATION FIRESTOPPING | | -9 | PREFINISHED METAL GUTTER |
| | | | | -10 | PREFINISHED DOWNSPOUT |
| 079446 | -1 | FIRE-RESISTIVE JOINT SYSTEM | | -11 | PREFINISHED METAL SOFFIT PANEL |
| 079200 | +1 | JOINT SEALANT - RAKE WHERE REQUIRED | | -12 | PREFINISHED METAL FLASHING |
| | -2 | JOINT FILLER | | -13 | METAL PANEL CLOSURE |
| | -3 | GASKET | | -14 | BASE ANGLE |
| | -4 | BACKER ROD | | -15 | FRAMED OPENING HEADER OR JAMB CHANNEL |
| 079500 | +1 | EXPANSION CONTROL | | | |
| 081113 | +1 | HOLLOW METAL DOOR | | -16 | TUBE GIRT |
| | -2 | HOLLOW METAL FRAME | 311000 | +1 | SITE CLEARING |
| | -3 | FRAME ANCHOR | 312000 | +1 | EARTH MOVING |
| | -4 | LOUVER | | -2 | INTERIOR FILL |
| | -5 | PLASTER GUARD | | -3 | EXTERIOR FILL |
| 081416 | -1 | FLUSH WOOD DOOR | | -4 | GRANULAR DRAINAGE COURSE |
| 083113 | -1 | ACCESS DOOR | | | |
| | -2 | ACCESS DOOR FRAME | | -5 | DRAINAGE BACKFILL |
| 083613 | +1 | SECTIONAL OVERHEAD DOOR | | -6 | SUBBASE COURSE |
| | | | | -7 | DRAINAGE GEOTEXTILE |
| | -2 | SECTIONAL OVERHEAD DOOR TRACK | | -8 | SEPARATION GEOTEXTILE |
| | | | 312317 | +1 | DEWATERING |
| | -3 | WEATHERSTRIPPING | 312516 | +1 | TERMITE CONTROL |
| | +1 | ALUMINUM ENTRANCE | 321313 | +1 | CONCRETE PAVING |
| 084113 DOOR | | | 321373 | +1 | CONCRETE PAVING JOINT SEALANTS |
| | -2 | ALUMINUM STOREFRONT FRAME | 321723 | +1 | PAVEMENT MARKINGS |
| 088000 | +1 | GLAZING (AS SCHEDULED) | 329200 | +1 | TURF/GRASS |
| 089000 | +1 | LOUVER | | | |
| | -2 | VENT | | | |
| 092216 | +1 | STEEL STUD ( " ) | | | |
| | -2 | STEEL STUD RUNNER ( " ) | | | |
| | -3 | FURRING CHANNEL | | | |
| 092400 | +1 | GYPSUM BOARD ( " ) | | | |
| | -2 | FIRE RATED GYPSUM BOARD ( " ) | | | |
| | -3 | CEMENTITIOUS TILE BACKER PANEL | | | |
| | -4 | METAL SUSPENSION SYSTEM | | | |
| | -5 | ACOUSTICAL SEALANT | | | |
| | -6 | ACOUSTICAL INSULATION (") | | | |
| | -7 | METAL EDGE TRIM | | | |
| | -8 | AUXILIARY SUPPORT FRAMING | | | |
| | -9 | METAL CONTROL JOINT | | | |
| | -10 | HIGH IMPACT GYPSUM BOARD | | | |



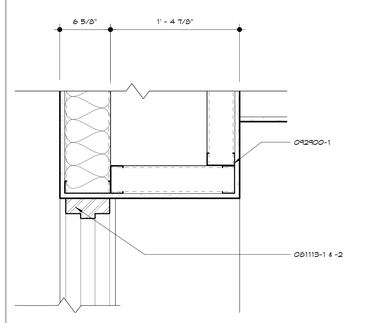

7 EAST ENTRY DOOR HEADER
1 1/2" = 1'-0"



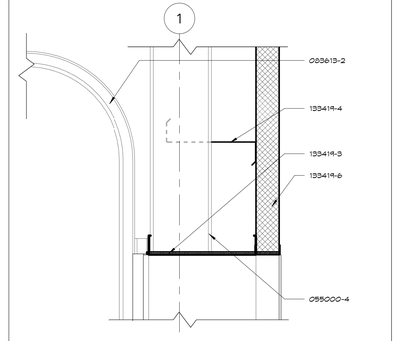

8 TYPICAL WINDOW SILL
1 1/2" = 1'-0"



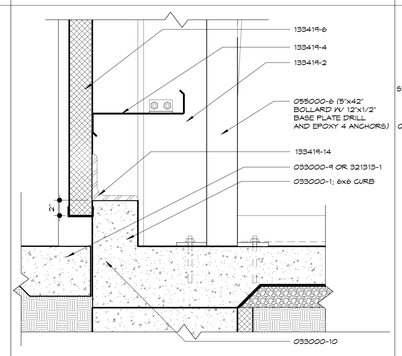

9 TYPICAL WINDOW HEAD
1 1/2" = 1'-0"



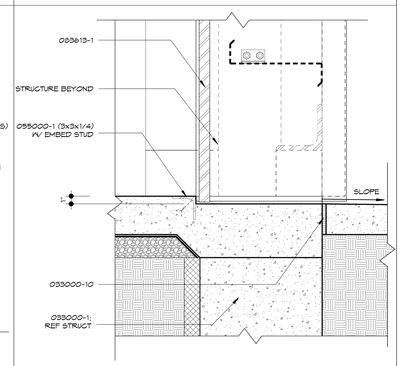

10 VESTIBULE DOOR HEADER DETAIL
1 1/2" = 1'-0"




11 OVHD DOOR HEAD
1 1/2" = 1'-0"




12 BASE OF WALL @ MOBILITY STORAGE
1 1/2" = 1'-0"




13 OVHD DOOR BASE RECESS
1 1/2" = 1'-0"

NOTE: REFER TO STRUCTURAL DRAWINGS FOR REINFORCING STEEL IN EXTERIOR WALLS AND CONCRETE NOT SHOWN

NOTE: REFER TO ALL DETAILS (DETAILS LOCATED ON THIS SHEET, PRECEEDING SHEETS AND FOLLOWING SHEETS) FOR APPLICABLE NOTES NOT SHOWN

NOTE: REFER TO ALL SECTIONS (SECTIONS LOCATED ON THIS SHEET, PRECEEDING SHEETS AND FOLLOWING SHEETS) FOR APPLICABLE NOTES NOT SHOWN

HTK ARCHITECTS PA
8300 NIEMAN ROAD, SUITE 250
OVERLAND PARK, KANSAS 66214
P 913.663.5373
500 S. KANSAS AVE.
TOPEKA, KS 66612
P 785.266.5373
www.htkarchitects.net

STATE OF MISSOURI
CHARLES R. SMITH
NUMBER A-2007030589
ARCHITECT
7-24-14

DATE:
2014-07-24

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

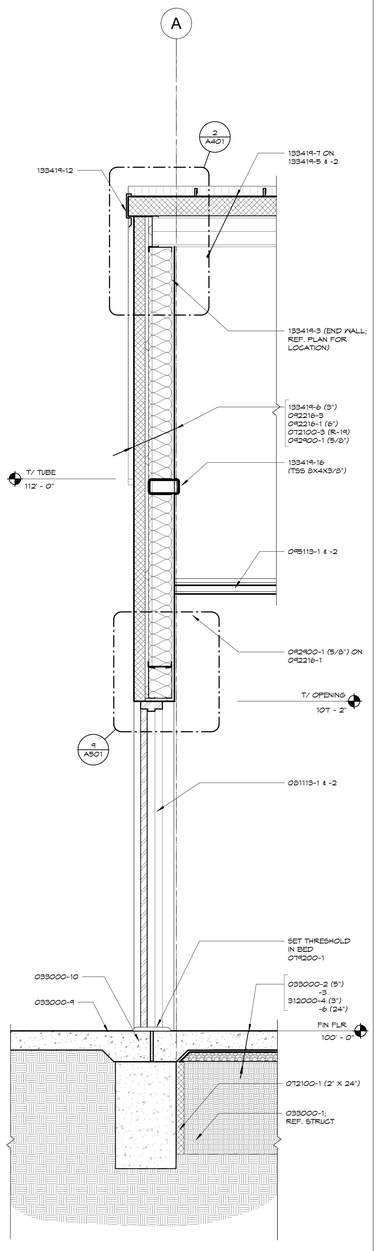
SHEET CONTENTS:
BUILDING SECTIONS

HTK PROJECT NUMBER:
ULYB112022
10008.01 - 0018

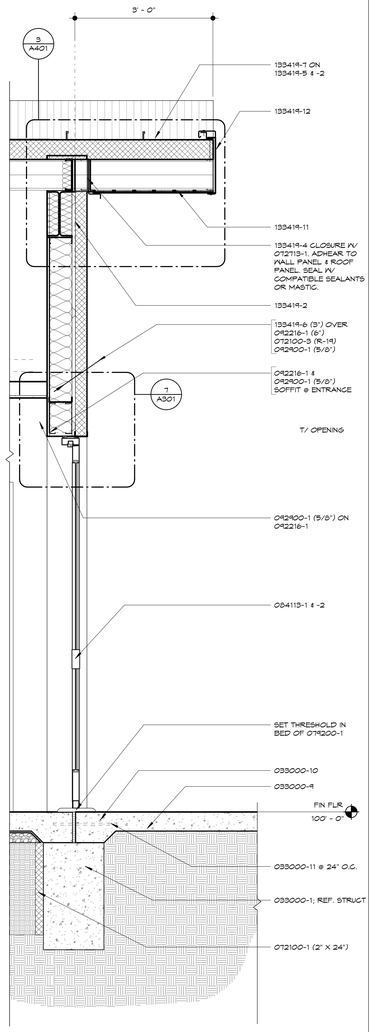
SHEET NUMBER:
A301

ORIGINAL CONTRACT DOCUMENTS

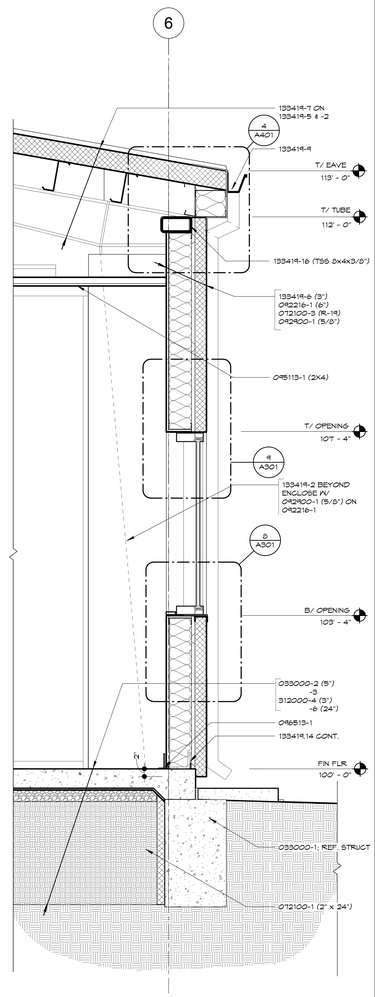
7/24/2014 4:53:00 PM C:\Users\jms\Documents\Security Forces Building_Central_jms.rvt



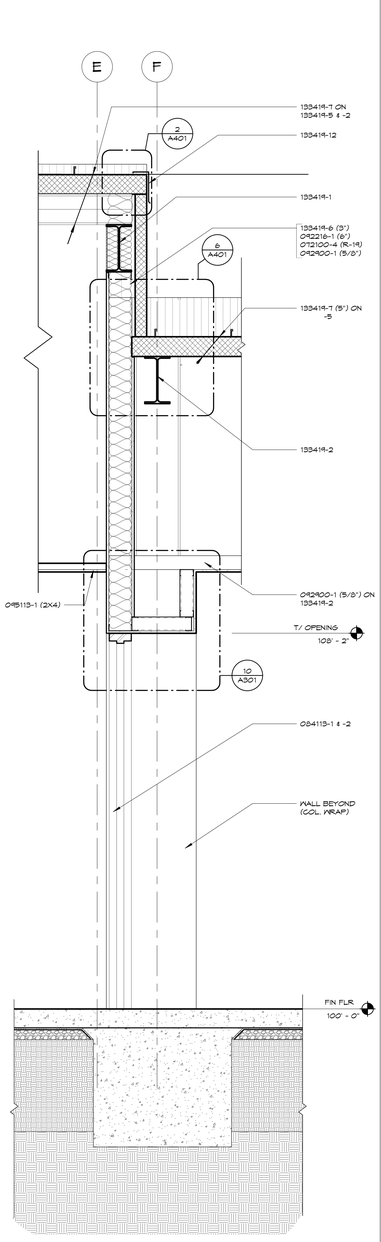

1 WEST END WALL
3/4" = 1'-0"



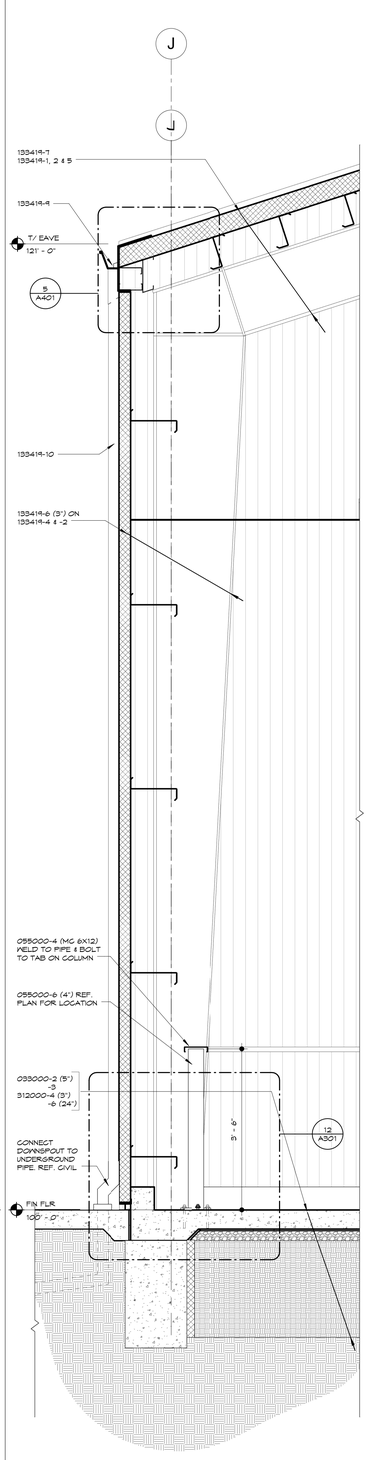

2 EAST ENTRY
3/4" = 1'-0"




3 TYPICAL WALL - ADMIN WING
3/4" = 1'-0"




4 VESTIBULE WALL
3/4" = 1'-0"




5 MOBILITY STORAGE WALL
3/4" = 1'-0"

## KEYNOTES

NOTE: Keynotes are drawn from a master list & may not be sequentially numbered. Sizes (Ex. 2x4) or other info. following keynote on drawings indicates criteria for those materials/locations which may differ from std. material specified.

| | | | | | |
|---|---|---|---|---|---|
| 033000 | -1 | CONCRETE STRUCTURE | 093000 | -1 | CERAMIC MOSAIC TILE ( " X " ) |
| | -2 | CONCRETE FLOOR SLAB | | -2 | GLAZED WALL TILE ( " X " ) |
| | -3 | VAPOR BARRIER | | -3 | QUARRY TILE ( " X " ) |
| | -4 | WELDED WIRE FABRIC | | -4 | PORCELAIN FLOOR TILE ( " X " ) |
| | -5 | STEEL REINFORCING BAR | | -5 | TILE BASE |
| | -6 | RUSTICATION JOINT | | -6 | TILE CAP |
| | -7 | WATERSTOP | | -7 | SETTING BED |
| | -9 | DOVETAIL ANCHOR SLOT | | -9 | CRACK ISOLATION MEMBRANE |
| | -10 | PREMOLDED JOINT FILLER | | -9 | METAL EDGE STRIP |
| | -11 | STEEL BAR DOWEL | 095113 | -1 | ACOUSTICAL PANEL ( " X ") (* = FIRE RATED) |
| 055000 | -1 | STEEL ANGLE | | -2 | CEILING SUSPENSION SYSTEM |
| | -4 | STEEL CHANNEL | | -3 | EDGE MOLD TRIM |
| | -5 | STEEL LINTEL | | -4 | AUXILIARY SUPPORT FRAMING |
| | -6 | STEEL PIPE | 096516 | -1 | RESILIENT FLOOR TILE |
| | -7 | STEEL TUBE | | -2 | WALL BASE |
| | -9 | STEEL PLATE | | -3 | EDGE STRIP |
| | -8 | STEEL LADDER | 096123 | -1 | RESINOUS FLOORING |
| | -10 | STEEL SIDEWALK TRENCHDRAIN COVER | | -2 | RESINOUS BASE |
| 055213 | -1 | STEEL PIPE HANDRAIL | 096813 | -1 | CARPET TILE |
| 055300 | -1 | STEEL GRATING | 099113 | -1 | EXTERIOR PAINT |
| | -2 | STEEL FRAME | 099123 | -1 | INTERIOR PAINT |
| 061000 | -1 | 2X WOOD NAILER ( " ) | 101120 | -1 | MARKERBOARD |
| | -2 | 2X WOOD BLOCKING ( " ) | | -2 | TACKBOARD |
| | -3 | 1X WOOD CONTINUOS (") | | -3 | CHALKBOARD |
| | -4 | PLYWOOD ( " ) | | -4 | TACKSTRIP |
| | -5 | #30 FELT | | -5 | DISPLAY WALL PANEL |
| | -6 | #15 FELT | | -6 | DISPLAY WALL COVERING |
| | -7 | ORIENTED STRAND BOARD ( " ) | | -7 | SLIDING DISPLAY UNIT |
| 064023 | -1 | PLASTIC-LAMINATE-FACED ARCHITECTURAL CABINETS | 101416 | -1 | DIMENSIONAL LETTER SIGNAGE |
| | -2 | HIGH PRESSURE LAMINATE | 101423 | -1 | PANEL SIGNAGE |
| | -3 | CABINET LINER LAMINATE | 102113 | -1 | TOILET COMPARTMENT |
| | -4 | PARTICLE BOARD | 102116 | -1 | URINAL SCREEN |
| | -5 | PLYWOOD | | -1 | SHOWER COMPARTMENT |
| | -6 | 3MM EDGE MOLDING | 102258 | -2 | DRESSING COMPARTMENT |
| | -7 | SOLID WOOD BLOCKING | 102800 | -1 | OPERABLE PANEL PARTITION |
| | -9 | HARDWOOD | | -1 | IMPACT-RESISTANT CORNER GUARD |
| | -8 | STEEL TUBE/LEG FRAME | | -2 | IMPACT-RESISTANT CHAIR RAIL |
| | -10 | SOLID SURFACE SILL | 102900 | -1 | SOAP DISPENSER |
| | -11 | SOLID SURFACE COUNTER INTEGRAL SINK | | -2 | TISSUE DISPENSER |
| 072100 | -1 | FOUNDATION WALL OR UNDER SLAB INSULATION (R- ) | | -3 | TOWEL DISPENSER |
| | -2 | CAVITY WALL INSULATION (R- ) | | -4 | FRAMED MIRROR |
| | -3 | BUILDING INSULATION - UNFACED (R- ) | | -5 | SANITARY NAPKIN DISPENSER |
| | -4 | BUILDING INSULATION - FACED (R-) | | -6 | SANITARY NAPKIN DISPOSER |
| | -5 | SILL SEALER | | -7 | GRAB BAR |
| | -6 | SAFING INSULATION | | -8 | WASTE RECEPTACLE |
| | -7 | SPRAY-APPLIED CELLULOSIC INSULATION | | -9 | SHOWER SEAT |
| | -8 | SPRAY POLYURETHANE FOAM INSULATION | | -10 | SHOWER CURTAIN ROD |
| 072113 | -1 | MODIFIED BITUMINOUS SHEET AIR BARRIER | | -11 | COAT/ROBE HOOK |
| 076200 | -1 | SHEET METAL FLASHING & COUNTERFLASHING | | -12 | TOWEL BAR |
| | -2 | PRE-FINISHED ROOF EDGE | | -13 | SHOWER CURTAIN |
| | -3 | PRE-FINISHED COPING | | -14 | DIAPER CHANGING STATION |
| | -4 | SHEET METAL RESILET | | -15 | ELECTRIC HAND DRYER REF. ELEC.) |
| | -5 | SHEET METAL GUTTER | 104413 | -1 | FIRE EXTINGUISHER CABINET |
| | -6 | SHEET METAL DOWNSPOUT | | -2 | FIRE HOSE CABINET |
| 077253 | -1 | SNOW GUARD | 105113 | -1 | COAT/CLOTHES LOCKER |
| 078413 | -1 | PENETRATION FIRESTOPPING | | -2 | ATHLETIC LOCKER |
| 078446 | -1 | FIRE-RESISTIVE JOINT SYSTEM | | -3 | LOCKER BENCH |
| 079200 | -1 | JOINT SEALANT - RAKE WHERE REQUIRED | 113013 | -1 | PROJECTION SCREEN |
| | -2 | JOINT FILLER | 122113 | -1 | HORIZONTAL LOUVER BLINDS |
| | -3 | GASKET | 133419 | -1 | PRE-ENGINEERED BUILDING |
| | -4 | BACKER ROD | | -2 | FRAME |
| 079500 | -1 | EXPANSION CONTROL | | -8 | COLUMN |
| 081113 | -1 | HOLLOW METAL DOOR | | -9 | GIRT |
| | -2 | HOLLOW METAL FRAME | | -7 | PREFINISHED ROOF PANEL |
| | -3 | FRAME ANCHOR | | -8 | INSULATION (R- (7" = FACED) |
| | -4 | LOUVER | | -9 | PREFINISHED WALL PANEL (1 = INSULATED) |
| | -5 | PLASTER GUARD | | -10 | PREFINISHED DOWNSPOUT |
| 081416 | -1 | FLUSH WOOD DOOR | | -11 | PREFINISHED METAL SOFFIT PANEL |
| 083113 | -1 | ACCESS DOOR | | -12 | PREFINISHED METAL FLASHING |
| | -2 | ACCESS DOOR FRAME | | -13 | METAL PANEL CLOSURE |
| 083613 | -1 | SECTIONAL OVERHEAD DOOR | | -14 | BASE ANGLE |
| | -2 | SECTIONAL OVERHEAD DOOR TRACK | | -15 | FRAMED OPENING HEADER OR JAMB CHANNEL |
| | -3 | WEATHERSTRIPPING | 312316 | -1 | TUBE GIRT |
| 084113 | -1 | ALUMINUM ENTRANCE | 312319 | -1 | SITE CLEARING |
| DOOR | | | 312000 | -1 | EARTH MOVING |
| | -2 | ALUMINUM STOREFRONT FRAME | | -2 | INTERIOR FILL |
| 088000 | -1 | GLAZING (AS SCHEDULED) | | -3 | EXTERIOR FILL |
| 089000 | -1 | LOUVER | | -4 | GRANULAR DRAINAGE COURSE |
| 092216 | -2 | VENT | | -5 | DRAINAGE BACKFILL |
| | -1 | STEEL STUD ( " ) | | -6 | SUBBASE COURSE |
| | -2 | STEEL STUD RUNNER ( " ) | | -7 | DRAINAGE GEOTEXTILE |
| | -3 | FURRING CHANNEL | | -8 | SEPARATION GEOTEXTILE |
| 092900 | -1 | GYPSUM BOARD ( " ) | 312316 | -1 | DEWATERING |
| | -2 | FIRE RATED GYPSUM BOARD ( " | 312319 | -1 | TERMITE CONTROL |
| | -3 | CEMENTITIOUS TILE BACKER PANEL | 321313 | -1 | CONCRETE PAVING |
| | -4 | METAL SUSPENSION SYSTEM | 321373 | -1 | CONCRETE PAVING JOINT SEALANTS |
| | -5 | ACOUSTICAL SEALANT | 321123 | -1 | PAVEMENT MARKINGS |
| | -6 | ACOUSTICAL INSULATION (") | 329200 | -1 | TURF/GRASS |
| | -7 | METAL SOFFIT TRIM | | | |
| | -8 | AUXILIARY SUPPORT FRAMING | | | |
| | -4 | METAL CONTROL JOINT | | | |
| | -10 | HIGH IMPACT GYPSUM BOARD | | | |

NOTE: REFER TO STRUCTURAL DRAWINGS FOR REINFORCING STEEL IN EXTERIOR WALLS AND CONCRETE NOT SHOWN

NOTE: REFER TO ALL DETAILS (DETAILS LOCATED ON THIS SHEET, PRECEEDING SHEETS AND FOLLOWING SHEETS) FOR APPLICABLE NOTES NOT SHOWN

NOTE: REFER TO ALL SECTIONS (SECTIONS LOCATED ON THIS SHEET, PRECEEDING SHEETS AND FOLLOWING SHEETS) FOR APPLICABLE NOTES NOT SHOWN

HTK ARCHITECTS PA
8300 W 110TH ST, STE 250
OVERLAND PARK, KANSAS 66210
P 913.663.5373
500 S. KANSAS AVE
TOPEKA, KS 66612
P 785.266.5373
www.htkarchitects.net

STATE OF MISSOURI
CHARLES R. SMITH
NUMBER A-2007030589
ARCHITECT

DATE:
2014-07-24

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

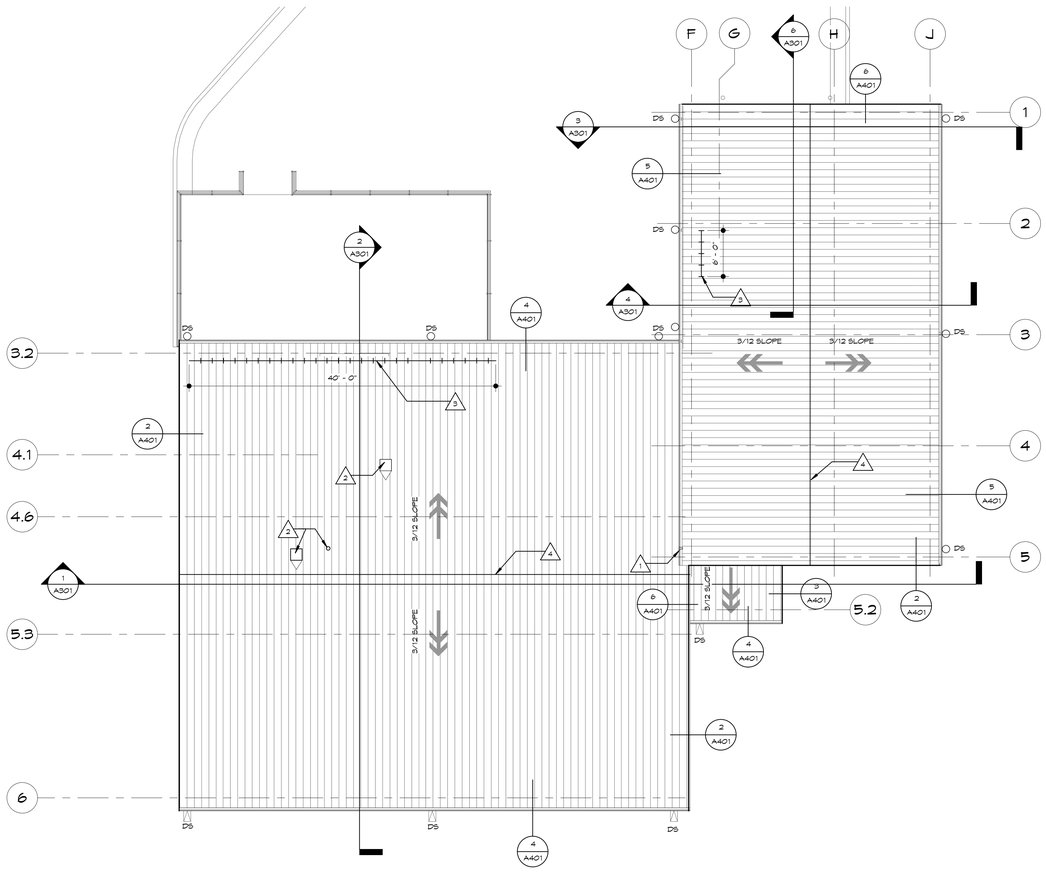
SHEET CONTENTS:
WALL SECTIONS

HTK PROJECT NUMBER:
ULYB112022
10008.01 - 0018

SHEET NUMBER:
A302

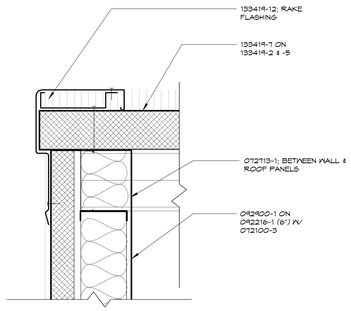
ORIGINAL CONTRACT DOCUMENTS

7/23/2014 2:16:15 PM C:\Users\jms\Documents\Security Forces Building_Central_jms.rvt

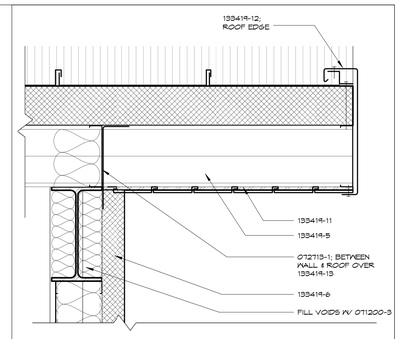



1 ROOF PLAN
1/8" = 1'-0"

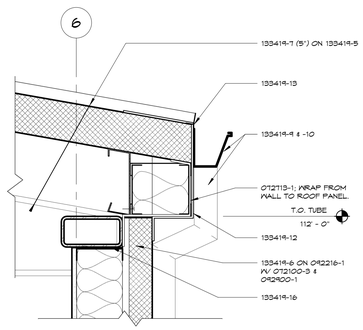
PLAN NORTH



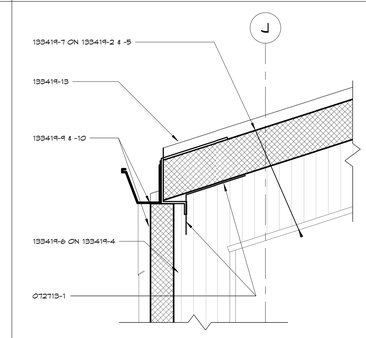

2 ROOF EDGE - END WALL
1 1/2" = 1'-0"



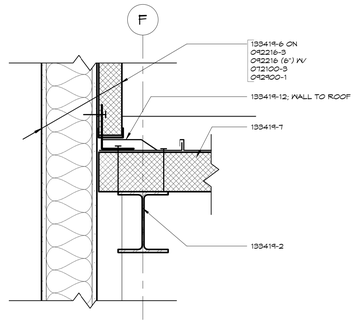

3 ROOF OVERHANG
1 1/2" = 1'-0"




4 ROOF EAVE
1 1/2" = 1'-0"




5 ROOF EAVE - HIGH ROOF
1 1/2" = 1'-0"




6 ROOF TO WALL TRANSITION
1 1/2" = 1'-0"

## KEYNOTES

Note: Keynotes are drawn from a master list. It may not be sequentially numbered. Sizes (Ex. 2x4) or other info. following keynote on drawings indicates criteria for those materials/locations which may differ from std. material specifies.

| | | | | | |
|---|---|---|---|---|---|
| 033000 | -1 | CONCRETE STRUCTURE | 053000 | -1 | CERAMIC MOSAIC TILE ( " X " ) |
| | -2 | CONCRETE FLOOR SLAB | | -2 | GLAZED WALL TILE ( " X " ) |
| | -3 | VAPOR BARRIER | | -3 | QUARRY TILE ( " X " ) |
| | -4 | WELDED WIRE FABRIC | | -4 | PORCELAIN FLOOR TILE ( " X " ) |
| | -5 | STEEL REINFORCING BAR | | -5 | TILE BASE |
| | -6 | RUSTICATION JOINT | | -6 | TILE CAP |
| | -7 | WATERSTOP | | -7 | SETTING BED |
| | -8 | DOVETAIL ANCHOR | | -8 | CRACK ISOLATION MEMBRANE |
| | -9 | SIDEWALK | | -9 | METAL EDGE STRIP |
| | -10 | PREMOLDED JOINT FILLER | 054000 | -1 | AGGVISCAL PANEL ( " X ") (1" = FIRE RATED) |
| | -11 | STEEL BAR DOWEL | | -2 | CEILING SUSPENSION SYSTEM |
| 055000 | -1 | STEEL ANGLE | | -3 | EDGE MOLD TRIM |
| | -4 | STEEL CHANNEL | 055113 | -1 | AGGVISCAL PANEL ( " X ") (1" = FIRE RATED) |
| | -5 | STEEL LINTEL | | -4 | AUXILIARY SUPPORT FRAMING |
| | -6 | STEEL PIPE | | -1 | RESILIENT FLOOR TILE |
| | -7 | STEEL TUBE | 096514 | -2 | WALL BASE |
| | -8 | STEEL PLATE | | -3 | EDGE STRIP |
| | -9 | STEEL LADDER | 096723 | -1 | RESINOUS FLOORING |
| | -10 | STEEL SIDEWALK TRENCHDRAIN COVER | | -2 | RESINOUS BASE |
| 055213 | -1 | STEEL PIPE HANDRAIL | 096813 | -1 | CARPET TILE |
| 055300 | -1 | STEEL GRATING | 099113 | -1 | EXTERIOR PAINT |
| | -2 | STEEL FRAME | 099123 | -1 | INTERIOR PAINT |
| 061000 | -1 | 2X WOOD NAILER ( " ) | 101100 | -1 | MARKERBOARD |
| | -2 | 2X WOOD BLOCKING ( " ) | | -2 | TACKBOARD |
| | -3 | 1X WOOD CONTINOUS ( " ) | | -3 | CHALKBOARD |
| | -4 | PLYWOOD ( " ) | | -4 | TACKSTRIP |
| | -5 | #30 FELT | | -5 | DISPLAY WALL PANEL |
| | -6 | #15 FELT | | -6 | DISPLAY WALL COVERING |
| | -7 | ORIENTED STRAND BOARD ( " ) | | -1 | SLIDING DISPLAY UNIT |
| 064023 | -1 | PLASTIC-LAMINATE-FACED ARCHITECTURAL CABINETS | 101414 | -1 | DIMENSIONAL LETTER SIGNAGE |
| | | | 101423 | -1 | PANEL SIGNAGE |
| | -2 | HIGH PRESSURE LAMINATE | 102113 | -1 | TOILET COMPARTMENT |
| | -3 | CABINET LINER LAMINATE | 102116 | -1 | URINAL SCREEN |
| | -4 | PARTICLE BOARD | | -2 | SHOWER COMPARTMENT |
| | -5 | PLYWOOD | 102253 | -2 | DRESSING COMPARTMENT |
| | -6 | 3MM EDGE MOLDING | 102800 | -1 | OPERABLE PANEL PARTITION |
| | -7 | SOLID WOOD BLOCKING | | -1 | IMPACT-RESISTANT CORNER GUARD |
| | -8 | HARDWOOD | | -2 | IMPACT-RESISTANT CHAIR RAIL |
| | -9 | STEEL TUBE-LEG FRAME | | -3 | SOAP DISPENSER |
| | -10 | SOLID SURFACE SILL | 102800 | -1 | TISSUE DISPENSER |
| | -11 | SOLID SURFACE COUNTER W/INTEGRAL SINK | | -2 | TOWEL DISPENSER |
| 072100 | -1 | FOUNDATION WALL DR. UNDER SLAB INSULATION (R- ) | | -3 | SANITARY NAPKIN DISPENSER |
| | | | | -4 | FRAMED MIRROR |
| | | | | -5 | SANITARY NAPKIN DISPOSER |
| | -2 | CAVITY WALL INSULATION (R- ) | | -6 | GRAB BAR |
| | -3 | BUILDING INSULATION - UNFACED (R- ) | | -7 | GRAB BAR |
| | | | | -8 | WASTE RECEPTACLE |
| | -4 | BUILDING INSULATION - FACED (R-) | | -9 | SHOWER SEAT |
| | | | | -10 | SHOWER CURTAIN ROD |
| | -5 | SILL SEALER | | -11 | COAT/ROBE HOOK |
| | -6 | SAFING INSULATION | | -12 | TOWEL BAR |
| | -7 | SPRAY-APPLIED CELLULOSIC INSULATION | | -13 | SHOWER CURTAIN |
| | | | | -14 | DIAPER CHANGING STATION |
| | | | | -15 | ELECTRIC HAND DRYER REF. ELEC.) |
| | -8 | SPRAY POLYURETHANE FOAM INSULATION | 104413 | -1 | FIRE EXTINGUISHER CABINET |
| | | | | -2 | FIRE HOSE CABINET |
| 072113 | -1 | MODIFIED BITUMINOUS SHEET AIR BARRIER | 105113 | -1 | CORRIDOR LOCKER |
| | | | | -2 | ATHLETIC LOCKER |
| | | | | -3 | LOCKER BENCH |
| 076200 | -1 | SHEET METAL FLASHING AND COUNTERFLASHING | 119213 | -1 | PROJECTION SCREEN |
| | | | 122113 | -1 | HORIZONTAL LOUVER BLINDS |
| | -2 | PRE-FINISHED ROOF EDGE | 133419 | -1 | PRE-ENGINEERED BUILDING |
| | -3 | PRE-FINISHED COPING | | -2 | FRAME |
| | -4 | SHEET METAL REGLET | | -3 | GIRT |
| | -5 | SHEET METAL GUTTER | | -4 | PURLIN |
| | -6 | SHEET METAL DOWNSPOUT | | -5 | PURLIN |
| | | | | -6 | PREFINISHED WALL PANEL (1 = INSULATED) |
| | | | | -7 | PREFINISHED ROOF PANEL |
| | -7 | SHEET METAL SCUPPER | | -8 | INSULATION (R- ) |
| 077253 | -1 | SNOW GUARD | | -9 | (1" FACED) |
| 078413 | -1 | PENETRATION FIRESTOPPING | | -9 | PREFINISHED METAL GUTTER |
| | | | | -10 | PREFINISHED DOWNSPOUT |
| 078446 | -1 | FIRE-RESISTIVE JOINT SYSTEM | | -11 | PREFINISHED METAL SOFFIT PANEL |
| 079200 | -1 | JOINT SEALANT - RAKE THERE REQ'IRED | | -12 | PREFINISHED METAL FLASHING |
| | -2 | JOINT FILLER | | -13 | METAL PANEL CLOSURE |
| | -3 | GASKET | | -14 | BASE ANGLE |
| | -4 | BACKER ROD | | -15 | FRAMED OPENING HEADER |
| 079500 | -1 | EXPANSION CONTROL | | -16 | TUBE SHAPE CHANNEL |
| 081113 | -1 | HOLLOW METAL DOOR | | -1 | SITE CLEARING |
| | -2 | HOLLOW METAL FRAME | 312000 | -1 | EARTH MOVING |
| | -3 | FRAME ANCHOR | 312200 | -2 | STRUCTURAL FILL |
| | -4 | DOOR | | -3 | INTERIOR FILL |
| | -5 | PLASTER GUARD | | -4 | EXTERIOR FILL |
| 081416 | -1 | FLUSH WOOD DOOR | | -5 | GRANULAR DRAINAGE COURSE |
| 083113 | -1 | ACCESS DOOR | | -6 | DRAINAGE BACKFILL |
| | -2 | ACCESS DOOR FRAME | | -7 | SUBBASE COURSE |
| 083613 | -1 | SECTIONAL OVERHEAD DOOR | | -8 | DRAINAGE GEOTEXTILE |
| | -2 | SECTIONAL OVERHEAD DOOR TRACK | | -9 | SEPARATION GEOTEXTILE |
| | -3 | WEATHERSTRIPPING | 312316 | -1 | EXCAVATION |
| 084113 | -1 | ALUMINUM ENTRANCE | 312316 | -1 | TERMITE CONTROL |
| DOOR | | | 321313 | -1 | CONCRETE PAVING |
| | -2 | ALUMINUM STOREFRONT FRAME | 321373 | -1 | CONCRETE PAVING JOINT SEALANTS |
| 088000 | -1 | GLAZING (AS SCHEDULED) | 321723 | -1 | PAVEMENT MARKINGS |
| 089000 | -1 | LOUVER | 329200 | -1 | TURF/GRASS |
| | -2 | VENT | | | |
| 092216 | -1 | STEEL STUD ( " ) | | | |
| | -2 | STEEL STUD RUNNER ( " ) | | | |
| | -3 | FURRING CHANNEL | | | |
| 092900 | -1 | GYPSUM BOARD ( " ) | | | |
| | -2 | FIRE RATED GYPSUM BOARD ( " ) | | | |
| | -5 | CEMENTITIOUS TILE BACKER PANEL | | | |
| | -6 | METAL SUSPENSION SYSTEM | | | |
| | -8 | ACOUSTICAL SEALANT | | | |
| | -9 | ACOUSTICAL INSULATION (") | | | |
| | -1 | METAL EDGE TRIM | | | |
| | -5 | AUXILIARY SUPPORT FRAMING | | | |
| | -6 | METAL CONTROL JOINT | | | |
| | -10 | HIGH IMPACT GYPSUM BOARD | | | |

## ROOF PLAN NOTES

GENERAL: COORDINATE WITH WORK SHOWN ON STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS.

1. AT SECTION OF HIGH ROOF ABOVE LOWER ROOF, SLOPE GUTTER TOWARDS DOWNSPOUT TO NORTH.
2. ROOF PENETRATION. REF. MECHANICAL AND PLUMBING DRAWINGS FOR ROOF PENETRATIONS NOT SHOWN ON THIS PLAN. COORDINATE BETWEEN TRADES. PROVIDE CRICKET ON HIGH SIDE FOR PENETRATIONS WITH A LONG DIMENSION LARGER THAN 12 INCHES.
3. SNOW GUARDS - ATTACH TO STANDING SEAM WITH NON-PIERCING CLIPS.
4. RIDGE CAP.

## ROOF PLAN LEGEND

- INDICATES SLOPED STRUCTURE
- FACTORY INSULATED METAL ROOF PANEL ON PRE-ENGINEERED BUILDING FRAME AND PURLINS.
- DS — DOWNSPOUT AND SPLASHBLOCK
- DS — DOWNSPOUT TO UNDERGROUND STORM SEWER SYSTEM.


HTK ARCHITECTS PA
8300 W 110TH ST, STE 250
OVERLAND PARK, KANSAS 66210
P 913.663.5373
500 S. KINGSHIGHWAY
ST. LOUIS, MISSOURI 63112
P 785.266.5373
www.htkarchitects.net


STATE OF MISSOURI
CHARLES R. SMITH
NUMBER A-2007030589
ARCHITECT

DATE:
- 2014-07-24

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

SHEET CONTENTS:
- ROOF PLAN & DETAILS

HTK PROJECT NUMBER:
- ULYB112022
10008.01 - 0018

SHEET NUMBER:
A401

ORIGINAL CONTRACT DOCUMENTS

7/23/2014 2:17:11 PM C:\Users\jms\Documents\Security Forces Building_Central_jms.rvt

## DOOR SCHEDULE

| PLAN MARK | DOOR | | | | FRAME | | | | | RATING | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | OPENING SIZE | | | | MATERIAL (B) | TYPE (C) | DETAILS | | | | |
| | W | H | TYPE (A) | MATERIAL (A) | | | HEAD (D) | JAMB (D) | OTHER (D) | | |
| 101a | 14' - 0" | 14' - 0" | OHD | INSUL STL. | HOL. MTL. | N/A | 11A301 | 10A101 | | | |
| 101b | 3' - 0" | 8' - 0" | NG | INSUL STL. | HOL. MTL. | S1 | 7A501 | 8A501 | 3A501 | | 1 |
| 101c | 3' - 0" | 7' - 0" | NG | W | HOL. MTL. | S1 | 4A501 | 5A501 | N/A | | 1 |
| 102 | 3' - 0" | 8' - 0" | FG | ALUM | ALUM | A2 | 7A301 | 6A101 | 2A501/3A501 | | 1 |
| 103a | 3' - 0" | 8' - 0" | F | ALUM | ALUM | A2 | 7A301 | 5A501 | 2A501 | | 1 |
| 103b | 3' - 0" | 7' - 0" | F | INSUL STL. | HOL. MTL. | S1 | 9A501 | 6A501 | N/A | - | |
| 104 | 3' - 0" | 7' - 0" | F | W | HOL. MTL. | S1 | 4A501 | 5A501 | N/A | - | |
| 106 | 3' - 0" | 7' - 0" | F | W | HOL. MTL. | S1 | 4A501 | 5A501 | N/A | - | |
| 107 | 3' - 0" | 7' - 0" | F | W | HOL. MTL. | S1 | 4A501 | 5A501 | N/A | - | |
| 108 | 3' - 0" | 7' - 0" | F | W | HOL. MTL. | S1 | 4A501 | 5A501 | N/A | - | |
| 110 | 3' - 0" | 7' - 0" | F | W | HOL. MTL. | S1 | 4A501 | 5A501 | N/A | 45 MIN | |
| 111 | 3' - 0" | 7' - 0" | F | W | HOL. MTL. | S1 | 4A501 | 5A501 | N/A | - | |
| 112 | 3' - 0" | 7' - 0" | F | W | HOL. MTL. | S1 | 4A501 | 5A501 | N/A | - | |
| 113 | 6' - 0" | 8' - 0" | F | INSUL STL. | HOL. MTL. | S2 | 7A301 | 6A501 | N/A | | |
| 115 | 3' - 0" | 7' - 0" | NG | W | HOL. MTL. | S1 | 4A501 | 5A501 | N/A | 45 MIN | |
| 116a | 3' - 0" | 7' - 0" | NG | W | HOL. MTL. | S1 | 4A501 | 5A501 | N/A | 45 MIN | |
| 116b | 3' - 0" | 7' - 0" | NG | W | HOL. MTL. | S1 | 4A501 | 5A501 | N/A | 45 MIN | |

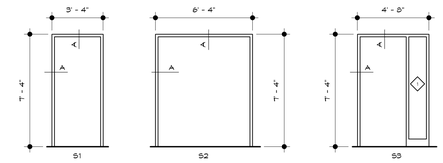
## DOOR & FRAME SCHEDULE NOTES

- All alum. frames are 4 1/2" deep and 2" wide- u.n.o.
- All steel welded frames are 3/4" wider than the nominal wall width - u.n.o
- All doors are 1 3/4" thick unless noted otherwise.
- Letters in parentheses ( ) A, B, C, D, E, & F at top of various columns in the schedule are for column identification & are clarified as follows:
  (A) To identify DOOR TYPES this sheet.
  (B) For DOOR MATERIAL AND FRAME MATERIAL:
  - S = Steel
  - A = Aluminum
  - W = Solid Wood

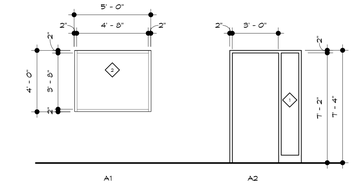
  (C) To identify FRAME TYPES refer to STEEL FRAME ELEVATIONS & ALUM. FRAME ELEVS.
  (D) FRAME DETAILS are referenced and shown as follows, unless noted otherwise:
  Frame Details are referenced in Door and Frame Schedule, and shown on this sheet. Steel Frame Profiles are referenced on Steel Frame Elevations, and shown on this sheet.
  Glass types are shown on Frame Elevations.
  (E) SCHEDULE NOTES:
  1. Laminated glazing in blast resistant frame.

## GLASS SCHEDULE

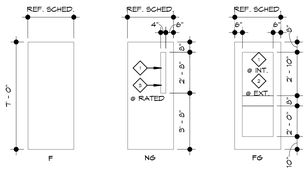
| MARK | TYPE |
|---|---|
| ◇ | 3/8" Clear Tempered, Laminated |
| ◇ | 1" Insulating:<br>A) Exterior - 1/4" Tinted Tempered<br>B) Interior - 3/8" Low-E Tempered, Laminated |
| ◇ 1 | Fire-Rated Glass, 45 min. |



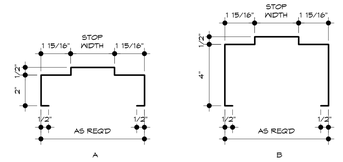

STEEL FRAMES




ALUMINUM FRAMES




DOOR TYPES




NOTE:
1) REF. PARTITION SCHED.
2) REF. STEEL FRAME ELEVS. FOR PROFILE APPLICATION.
3) SCHED. FOR FRAME WIDTH.

STEEL FRAME PROFILES

## KEYNOTES

NOTE: Keynotes are drawn from a master list & may not be sequentially numbered. Sizes (Ex: 2x4) or other info. following keynote on drawings indicates criteria for those materials/locations which may differ from std. material specified.

| | | | | | |
|---|---|---|---|---|---|
| 030000 | -1 | CONCRETE STRUCTURE | 093000 | -1 | CERAMIC MOSAIC TILE ( " X " ) |
| | -2 | CONCRETE FLOOR SLAB | | -2 | GLAZED WALL TILE ( " X " ) |
| | -3 | VAPOR BARRIER | | -3 | QUARRY TILE ( " X " ) |
| | -4 | WELDED WIRE FABRIC | | -4 | PORCELAIN FLOOR TILE ( " X " ) |
| | -5 | STEEL REINFORCING BAR | | -5 | TILE BASE |
| | -6 | KEY/CONSTRUCTION JOINT | | -6 | TILE CAP |
| | -7 | WATERSTOP | | -7 | SETTING BED |
| | -8 | ISO-METAL ANCHOR | | -8 | CRACK ISOLATION MEMBRANE |
| | -9 | SIDEWALK | | -9 | METAL EDGE STRIP |
| | -10 | PREMOLDED JOINT FILLER | 095113 | -1 | ACOUSTICAL PANEL ( " X " ) (F = FIRE RATED) |
| | -11 | STEEL BAR DOWEL | | -2 | CEILING SUSPENSION SYSTEM |
| 050000 | -1 | STEEL ANGLE | | -3 | EDGE MOLD TRIM |
| | -2 | STEEL CHANNEL | | -4 | AUXILIARY SUPPORT FRAMING |
| | -3 | STEEL LINTEL | 096514 | -1 | RESILIENT FLOOR TILE |
| | -4 | STEEL PIPE | | -2 | WALL BASE |
| | -5 | STEEL TUBE | | -3 | EDGE STRIP |
| | -6 | STEEL PLATE | 096723 | -1 | RESINOUS FLOORING |
| | -8 | STEEL LADDER | | -2 | RESINOUS BASE |
| | -10 | STEEL SIDEWALK TRENCHDRAIN COVER | 096813 | -1 | CARPET TILE |
| 055215 | -1 | STEEL PIPE HANDRAIL | | -2 | CARPET BASE |
| | -2 | STEEL PIPE GUARDRAIL | 099113 | -1 | EXTERIOR PAINT |
| 055500 | -1 | STEEL GRATING | 099123 | -1 | INTERIOR PAINT |
| | -2 | STEEL FRAME | 101100 | -1 | MARKERBOARD |
| 061000 | -1 | 2X WOOD NAILER ( " ) | | -2 | TACKBOARD |
| | -2 | 2X WOOD BLOCKING ( " ) | | -3 | CHALKBOARD |
| | -3 | 1X WOOD CONTINUOUS (") | | -4 | TACKSTRIP |
| | -4 | PLYWOOD ( " ) | | -5 | DISPLAY WALL PANEL |
| | -5 | #30 FELT | | -6 | DISPLAY WALL COVERING |
| | -6 | #15 FELT | | -7 | SLIDING DISPLAY UNIT |
| | -7 | ORIENTED STRAND BOARD ( " ) | 101416 | -1 | DIMENSIONAL LETTER SIGNAGE |
| 064023 | -1 | PLASTIC-LAMINATE-FACED ARCHITECTURAL CABINETS | 101423 | -1 | PANEL SIGNAGE |
| | -2 | HIGH PRESSURE LAMINATE | 102113 | -1 | TOILET COMPARTMENT |
| | -3 | CABINET LINER LAMINATE | 102116 | -1 | URINAL SCREEN |
| | -4 | PARTICLE BOARD | | -2 | SHOWER COMPARTMENT |
| | -5 | PLYWOOD | 102239 | -1 | DRESSING COMPARTMENT |
| | -6 | SMH EDGE MOLDING | 102800 | -1 | OPERABLE PANEL PARTITION |
| | -7 | SOLID WOOD BLOCKING | | -2 | IMPACT-RESISTANT CORNER GUARD |
| | -8 | HARDWOOD | | -3 | IMPACT-RESISTANT CHAIR RAIL |
| | -9 | STEEL TUBE/LGS FRAME | 102800 | -1 | SOAP DISPENSER |
| | -10 | SOLID SURFACE SILL | | -2 | TISSUE DISPENSER |
| | -11 | SOLID SURFACE COUNTER | | -3 | TOWEL DISPENSER |
| 072100 | -1 | FOUNDATION WALL OR UNDER SLAB INSULATION (R- ) | | -4 | FRAMED MIRROR |
| | | | | -5 | SANITARY NAPKIN DISPENSER |
| | | | | -6 | SANITARY NAPKIN DISPOSER |
| | -2 | CAVITY WALL INSULATION (R- ) | | -7 | GRAB BAR |
| | -3 | BUILDING INSULATION - INFACED (R- ) | | -8 | WASTE RECEPTACLE |
| | | | | -9 | SHOWER SEAT |
| | -4 | BUILDING INSULATION - FACED (R-) | | -10 | SHOWER CURTAIN ROD |
| | -5 | SILL INSULATION | | -11 | CURTAIN/ROBE HOOK |
| | -6 | SAFING INSULATION | | -12 | TOWEL BAR |
| | -7 | SPRAY-APPLIED CELLULOSIC INSULATION | | -13 | SOAP DISPENSER |
| | | | | -14 | DIAPER CHANGING STATION |
| | -8 | SPRAY-APPLIED POLYURETHANE FOAM INSULATION | | -15 | ELECTRIC HAND DRYER REF. ELEC.) |
| 072115 | -1 | MODIFIED BITUMINOUS SHEET AIR BARRIER | 104413 | -1 | FIRE EXTINGUISHER CABINET |
| 076200 | -1 | SHEET METAL FLASHING AND COUNTERFLASHING | | -2 | FIRE HOSE CABINET |
| | | | 105113 | -1 | LOCKER/LOCKER |
| | | | | -2 | ATHLETIC LOCKER |
| | | | | -3 | LOCKER BENCH |
| | -2 | PRE-FINISHED ROOF EDGE | 115213 | -1 | PROJECTION SCREEN |
| | | | 122113 | -1 | HORIZONTAL LOUVER BLINDS |
| | -3 | PRE-FINISHED COPING | 133416 | -1 | PRE-ENGINEERED BUILDING |
| | -4 | SHEET METAL RIDGLET | | -2 | FRAME |
| | -5 | SHEET METAL GUTTER | | -3 | COLUMN |
| | -6 | SHEET METAL DOWNSPOUT | | -4 | GIRT |
| | -7 | SHEET METAL SCUPPER | | -5 | PURLIN |
| 077253 | -1 | SNOW GUARD | | -6 | PREFINISHED WALL PANEL (I = INSULATED) |
| 078413 | -1 | PENETRATION FIRESTOPPING | | -7 | PREFINISHED ROOF PANEL |
| 078446 | -1 | FIRE-RESISTIVE JOINT SYSTEM | | -8 | INSULATION (R- ) (F = FACED) |
| 079200 | -1 | JOINT SEALANT - RAKE JNTS/ RE REQUIRED | | -9 | PREFINISHED METAL GUTTER |
| | | | | -10 | PREFINISHED DOWNSPOUT |
| | -2 | JOINT FILLER | | -11 | PREFINISHED METAL SOFFIT PANEL |
| | -3 | GASKET | | -12 | PREFINISHED METAL FLASHING |
| | -4 | BACKER ROD | | -13 | METAL PANEL CLOSURE |
| 079500 | -1 | EXPANSION CONTROL | | -14 | BASE ANGLE |
| 081113 | -1 | HOLLOW METAL DOOR | | -15 | FRAMED OPENING HEADER OR JAMB CHANNEL |
| | -2 | HOLLOW METAL FRAME | 311000 | -1 | SITE CLEARING |
| | -3 | FRAME ANCHOR | 312000 | -1 | EARTH MOVING |
| | -4 | LOUVER | | -2 | INTERIOR FILL |
| | -5 | PLASTER GUARD | | -3 | EXTERIOR FILL |
| 081416 | -1 | FLUSH WOOD DOOR | | -4 | GRANULAR DRAINAGE COURSE |
| 083113 | -1 | ACCESS DOOR | | -5 | DRAINAGE BACKFILL |
| 083613 | -1 | ACCESS DOOR FRAME | | -6 | SUBBASE COURSE |
| | -1 | SECTIONAL OVERHEAD DOOR | | -7 | DRAINAGE GEOTEXTILE |
| | -2 | SECTIONAL OVERHEAD DOOR TRACK | | -8 | SEPARATION GEOTEXTILE |
| | | | 312316 | -1 | DEWATERING |
| | -3 | WEATHERSTRIPPING | 313119 | -1 | TERMITE CONTROL |
| 084113 DOOR | -1 | ALUMINUM ENTRANCE | 321313 | -1 | CONCRETE PAVING |
| | -2 | ALUMINUM STOREFRONT FRAME | 321315 | -1 | CONCRETE PAVING JOINT SEALANTS |
| 088000 | -1 | GLAZING (AS SCHEDULED) | 321123 | -1 | PAVEMENT MARKINGS |
| 089000 | -1 | LOUVER | 329200 | -1 | TURF/GRASS |
| | -2 | VENT | | | |
| 092216 | -1 | STEEL STUD ( " ) | | | |
| | -2 | STEEL STUD RUNNER ( " ) | | | |
| | -3 | FURRING CHANNEL | | | |
| 092900 | -1 | GYPSUM BOARD ( " ) | | | |
| | -2 | FIRE RATED GYPSUM BOARD ( " ) | | | |
| | -3 | CEMENTITIOUS TILE BACKER PANEL | | | |
| | -4 | METAL SUSPENSION SYSTEM | | | |
| | -5 | ACOUSTICAL SEALANT | | | |
| | -6 | ACOUSTICAL INSULATION (") | | | |
| | -7 | METAL EDGE TRIM | | | |
| | -8 | AUXILIARY SUPPORT FRAMING | | | |
| | -9 | METAL CONTROL JOINT | | | |
| | -10 | HIGH IMPACT GYPSUM BOARD | | | |




1 HOLLOW METAL SIDELIGHT FRAME SILL
1 1/2" = 1'-0"




2 ALUMINUM SIDELIGHT SILL DETAIL
1 1/2" = 1'-0"




3 THRESHOLD DETAIL
3" = 1'-0"




4 GYP. BD. PARTITION HEAD DETAIL
1 1/2" = 1'-0"




5 GYP. BD. PARTITION JAMB DETAIL
1 1/2" = 1'-0"




6 MTL PNL W/ INSUL. JAMB DTL
1 1/2" = 1'-0"




7 MTL PANEL HEAD DETAIL
1 1/2" = 1'-0"




8 MTL PANEL DOOR JAMB
1 1/2" = 1'-0"




9 ENTRY DOOR HEADER
1 1/2" = 1'-0"


HTK ARCHITECTS PA
8300 NIELSON DR, STE 250
OVERLAND PARK, KANSAS 66212
P 913.663.5373
500 S. KANSAS AVE
TOPEKA, KANSAS 66612
P 785.266.5373
www.htkarchitects.net


STATE OF MISSOURI
CHARLES R. SMITH
7-24-14
NUMBER A-2007030589
REGISTERED ARCHITECT

DATE:
- 2014-07-24

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

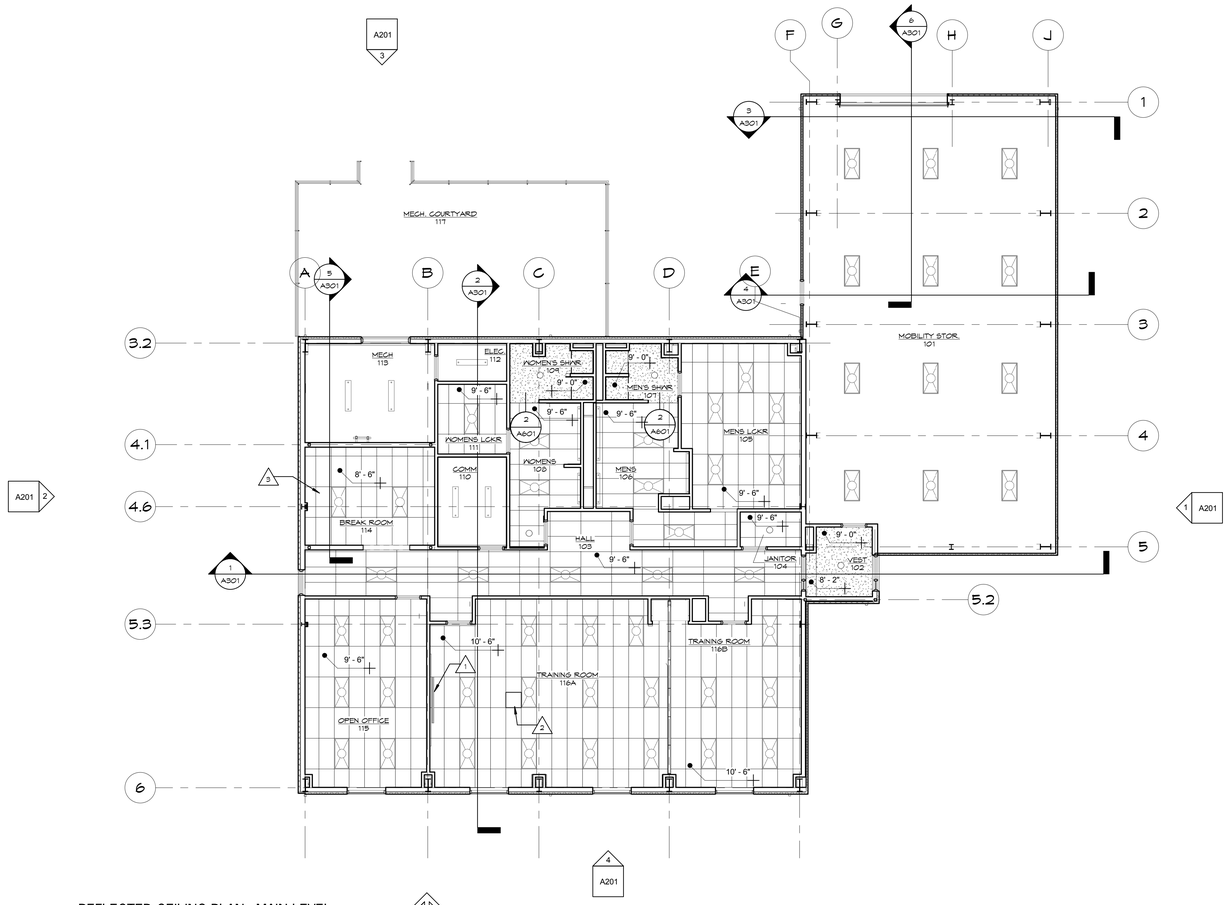
SHEET CONTENTS:
- DOOR, FRAME, & WINDOW SCHEDULES & DETAILS

HTK PROJECT NUMBER:
- ULYB112022
  10008.01 - 0018

SHEET NUMBER:
A501

ORIGINAL CONTRACT DOCUMENTS


7/24/2014 4:53:17 PM C:\Users\jms\Documents\Security Forces Building_Central_jms.rvt




1 REFLECTED CEILING PLAN - MAIN LEVEL
1/8" = 1'-0"

PLAN NORTH

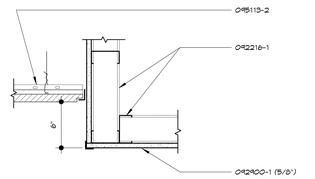
## REFLECTED CEILING PLAN LEGEND

- 2'-0" X 4'-0" ACOUSTICAL CEILING TILE 4 GRID
- PAINTED GYP. BD. 4 MTL. STUD SOFFIT
- 2'-0" X 4'-0" LIGHT FIXTURE, REF. ELEC.
- EXTERIOR STRIP LIGHT FIXTURE, REF. ELEC.
- WALL MOUNTED LIGHT FIXTURE, REF. ELEC.
- DOWNLIGHT FIXTURE, REF. ELEC.
- WALL WASHER FIXTURE, REF. ELEC.
- INTERIOR STRIP LIGHT FIXTURE, REF. ELEC.
- CEILING REGISTER, REF. MECH.
- CEILING RETURN, REF. MECH.

## REFLECTED CEILING PLAN NOTES

GENERAL: COORDINATE WITH WORK SHOWN ON STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS, REF. FE SHEET FOR EQUIP. COORDINATION

1. CEILING RECESSED PROJECTOR SCREEN, REF. DETAIL 9A601
2. AV PROJECTOR CEILING MOUNT, REF TELEGOM, ATTACH TO STRUCTURE ABOVE.
3. MECHANICAL MEZZANINE ABOVE CEILING. HOLD CEILING TIGHT TO STRUCTURE ABOVE.




2 CEILING TRANSITION
1 1/2" = 1'-0"

## KEYNOTES

Note: Keynotes are drawn from a master list; it may not be sequentially numbered. Sizes (Ex: 2x4) or other info. following keynote on drawings indicates criteria for those materials/locations which may differ from std. material specified.

| | | | | | |
|---|---|---|---|---|---|
| 033000 | -1 | CONCRETE STRUCTURE | 093000 | -1 | CERAMIC MOSAIC TILE ( " X " ) |
| | -2 | CONCRETE FLOOR SLAB | | -2 | GLAZED WALL TILE ( " X " ) |
| | -3 | VAPOR BARRIER | | -3 | QUARRY TILE ( " X " ) |
| | -4 | WELDED WIRE FABRIC | | -4 | PORCELAIN FLOOR TILE ( " X " ) |
| | -5 | STEEL REINFORCING BAR | | -5 | TILE BASE |
| | -6 | REGLET/SCREED JOINT | | -6 | TILE CAP |
| | -7 | WATERSTOP | | -7 | SETTING BED |
| | -8 | DOVETAIL ANCHOR | | -8 | CRACK ISOLATION MEMBRANE |
| | -9 | SIDEWALK | 095000 | -6 | METAL EDGE STRIP |
| | -10 | PREMOLDED JOINT FILLER | 095113 | -1 | ACOUSTICAL PANEL ( 'X' ) (1' = FIRE RATED) |
| | -11 | STEEL BAR DOWEL | | -2 | CEILING SUSPENSION SYSTEM |
| 050000 | -1 | STEEL ANGLE | | -3 | EDGE MOLD TRIM |
| | -2 | STEEL CHANNEL | | -4 | AUXILIARY SUPPORT FRAMING |
| | -3 | STEEL LINTEL | 096516 | -1 | RESILIENT FLOOR TILE |
| | -4 | STEEL PIPE | | -2 | WALL BASE |
| | -5 | STEEL TUBE | | -3 | EDGE STRIP |
| | -6 | STEEL PLATE | 096723 | -1 | RESINOUS FLOORING |
| | -7 | STEEL LADDER | | -2 | RESINOUS BASE |
| | -10 | STEEL SIDEWALK TRENCHDRAIN COVER | 096813 | -1 | CARPET TILE |
| 055213 | -1 | STEEL PIPE HANDRAIL | 099113 | -1 | EXTERIOR PAINT |
| | -2 | STEEL PIPE GUARDRAIL | 099123 | -1 | INTERIOR PAINT |
| 055300 | -1 | STEEL GRATING | 101100 | -1 | MARKERBOARD |
| | -2 | STEEL FRAME | | -2 | TACKBOARD |
| 061000 | -1 | 2X WOOD NAILER ( " ) | | -3 | CHALKBOARD |
| | -2 | 2X WOOD BLOCKING ( " ) | | -4 | TACKSTRIP |
| | -3 | 1X WOOD CONTINUOUS (1") | | -5 | DISPLAY WALL PANEL |
| | -4 | PLYWOOD ( " ) | | -6 | DISPLAY WALL COVERING |
| | -5 | #30 FELT | | -7 | SLIDING DISPLAY UNIT |
| | -6 | #15 FELT | 101416 | -1 | DIMENSIONAL LETTER SIGNAGE |
| | -7 | ORIENTED STRAND BOARD ( " ) | 101423 | -1 | PANEL SIGNAGE |
| 064023 | -1 | PLASTIC-LAMINATE-FACED ARCHITECTURAL CABINETS | 102113 | -1 | TOILET COMPARTMENT |
| | -2 | HIGH PRESSURE LAMINATE | | -2 | URINAL SCREEN |
| | -3 | CABINET LINER LAMINATE | 102116 | -1 | SHOWER COMPARTMENT |
| | -5 | PARTICLE BOARD | | -2 | DRESSING COMPARTMENT |
| | -6 | PLYWOOD | 102253 | -1 | OPERABLE PANEL PARTITION |
| | -7 | SOLID EDGE MOLDING | 102800 | -1 | IMPACT-RESISTANT CORNER GUARD |
| | -8 | SOLID WOOD BLOCKING | | -2 | IMPACT-RESISTANT CHAIR RAIL |
| | -9 | HARDWOOD | 102800 | -1 | SOAP DISPENSER |
| | -10 | STEEL TUBE/LEG FRAME | | -2 | TISSUE DISPENSER |
| | -11 | SOLID SURFACE SILL | | -3 | TOWEL DISPENSER |
| | -11 | SOLID SURFACE COUNTER W/INTEGRAL SINK | | -4 | FRAMED MIRROR |
| 072100 | -1 | FOUNDATION WALL OR UNDER SLAB INSULATION (R- ) | | -5 | SANITARY NAPKIN DISPENSER |
| | | | | -6 | SANITARY NAPKIN DISPOSER |
| | -2 | CAVITY WALL INSULATION (R- ) | | -7 | GRAB BAR |
| | -3 | BUILDING INSULATION - INFACED (R- ) | | -8 | WASTE RECEPTACLE |
| | -4 | BUILDING INSULATION - FACED (R-) | | -9 | SHOWER SEAT |
| | -5 | SILL SEALER | | -10 | SHOWER CURTAIN ROD |
| | -6 | SAFING INSULATION | | -11 | COAT/ROBE HOOK |
| | -7 | SPRAY-APPLIED CELLULOSIC INSULATION | | -12 | TOWEL BAR |
| | | | | -13 | SHOWER CURTAIN |
| | | | | -14 | DIAPER CHANGING STATION |
| | -8 | SPRAY POLYURETHANE FOAM INSULATION | | -15 | ELECTRIC HAND DRYER REF. ELEC.) |
| 072113 | -1 | MODIFIED BITUMINOUS SHEET AIR BARRIER | 104413 | -1 | FIRE EXTINGUISHER CABINET |
| 076200 | -1 | SHEET METAL FLASHING AND COUNTERFLASHING | | -2 | FIRE HOSE CABINET |
| | | | 105113 | -1 | CORRIDOR LOCKER |
| | -2 | PRE-FINISHED ROOF FLASHING | | -2 | ATHLETIC LOCKER |
| | -3 | PRE-FINISHED COPING | | -3 | LOCKER BENCH |
| | -4 | SHEET METAL RESLET | 119213 | -1 | PROJECTION SCREEN |
| | -5 | SHEET METAL GUTTER | 122113 | -1 | HORIZONTAL LOUVER BLINDS |
| | -6 | SHEET METAL DOWNSPOUT | 133416 | -1 | PRE-ENGINEERED BUILDING FRAME |
| 077100 | -1 | ROOF EDGE | | -2 | COLUMN |
| 077253 | -1 | SNOW GUARD | | -3 | GIRT |
| 078413 | -1 | PENETRATION FIRESTOPPING | | -4 | PURLIN |
| 078446 | -1 | FIRE-RESISTIVE JOINT SYSTEM | | -5 | PREFINISHED WALL PANEL (1 = INSULATED) |
| 079200 | -1 | JOINT SEALANT - RAKE WHERE REQUIRED | | -7 | PREFINISHED ROOF PANEL |
| | -2 | JOINT FILLER | | -8 | INSULATION (R- ) (1" = FACED) |
| | -3 | GASKET | | -9 | PREFINISHED METAL GUTTER |
| | -4 | BACKER ROD | | -10 | PREFINISHED DOWNSPOUT |
| 079500 | -1 | EXPANSION CONTROL | | -11 | PREFINISHED METAL SOFFIT PANEL |
| 081113 | -1 | HOLLOW METAL DOOR | | -12 | PREFINISHED METAL FLASHING |
| | -2 | HOLLOW METAL FRAME | 311000 | -1 | SITE CLEARING |
| | -3 | FRAME ANCHOR | 312000 | -1 | EARTH MOVING |
| | -4 | LOUVER | | -2 | INTERIOR FILL |
| | -5 | PLASTER GUARD | | -3 | EXTERIOR FILL |
| 081416 | -1 | FLUSH WOOD DOOR | | -4 | GRANULAR DRAINAGE COURSE |
| 083113 | -1 | ACCESS DOOR | | -5 | DRAINAGE BACKFILL |
| 083613 | -1 | SECTIONAL OVERHEAD DOOR | | -6 | SUBBASE COURSE |
| | -2 | SECTIONAL OVERHEAD DOOR TRACK | | -7 | DRAINAGE GEOTEXTILE |
| | -3 | WEATHERSTRIPING | 312316 | -8 | SEPARATION GEOTEXTILE |
| 084113 | -1 | ALUMINUM ENTRANCE | 313116 | -1 | DEWATERING |
| DOOR | | | 321216 | -1 | TERMITE CONTROL |
| | -2 | ALUMINUM STOREFRONT FRAME | 321313 | -1 | CONCRETE PAVING |
| 088000 | -1 | GLAZING (AS SCHEDULED) | 321373 | -1 | CONCRETE PAVING JOINT SEALANTS |
| 089000 | -1 | LOUVER | 321723 | -1 | PAVEMENT MARKINGS |
| | -2 | VENT | 329200 | -1 | TURF/GRASS |
| 092216 | -1 | STEEL STUD ( " ) | | | |
| | -2 | STEEL STUD RUNNER ( " ) | | | |
| | -3 | FURRING CHANNEL | | | |
| 092900 | -1 | GYPSUM BOARD ( " ) | | | |
| | -2 | FIRE RATED GYPSUM BOARD ( " ) | | | |
| | -3 | CEMENTITIOUS TILE BACKER PANEL | | | |
| | -4 | METAL SUSPENSION SYSTEM | | | |
| | -5 | ACOUSTICAL SEALANT | | | |
| | -6 | ACOUSTICAL INSULATION (") | | | |
| | -7 | METAL EDGE TRIM | | | |
| | -8 | AUXILIARY SUPPORT FRAMING | | | |
| | -9 | METAL CONTROL JOINT | | | |
| | -10 | HIGH IMPACT GYPSUM BOARD | | | |

HTK ARCHITECTS PA
8300 W 110TH ST, STE 250
OVERLAND PARK, KANSAS 66210
P 913.663.5373
500 S. KANSAS AVE
TOPEKA, KS 66612
P 785.266.5373
www.htkarchitects.net

STATE OF MISSOURI
CHARLES R. SMITH
NUMBER A-2007030589
ARCHITECT
7-24-14

DATE:
2014-07-24

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD

ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

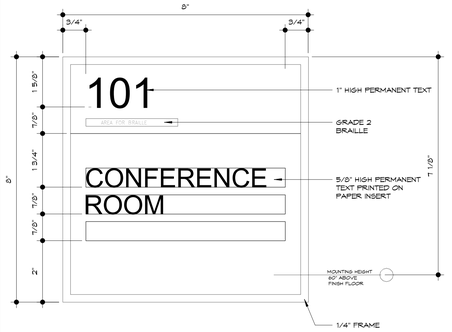
SHEET CONTENTS:
REFLECTED CEILING PLANS

HTK PROJECT NUMBER:
ULYB112022
10008.01 - 0018

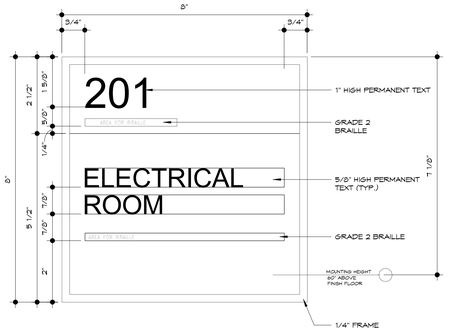
SHEET NUMBER:
A601

ORIGINAL CONTRACT DOCUMENTS

7/23/2014 2:18:38 PM C:\Users\jms\Documents\Security Forces Building_Central_jms.rvt



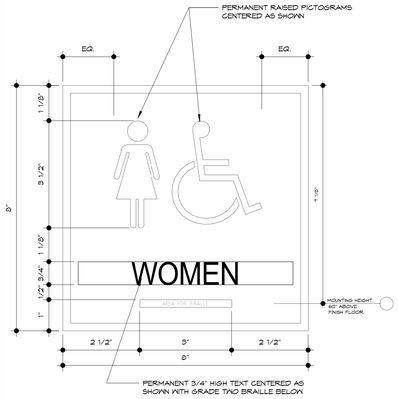

**SIGN TYPE A1**



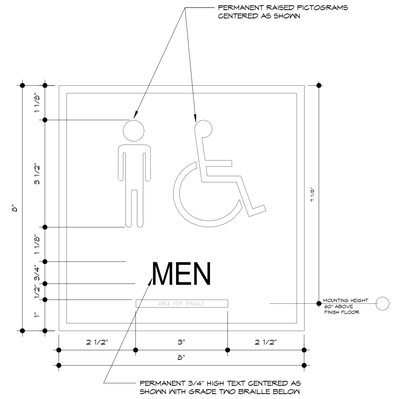

**SIGN TYPE B1**

| PANEL SIGN SCHEDULE | | | | |
|---|---|---|---|---|
| DOOR NUMBER | VISIBLE FROM ROOM NO. | SIGN TYPE | MESSAGE | |
| | | | NO. | WORDING |
| - | 106 | B1 | 105 | MEN'S LOCKER ROOM |
| - | 103 | B1 | 114 | BREAK ROOM |
| 101c | 102 | A1 | 101 | MOBILITY STORAGE |
| 102 | EXTERIOR | C1 | 303 | 303 |
| 104 | 103 | B1 | 104 | JANITOR |
| 106 | 103 | B3 | 106 | MEN |
| 107 | 105 | B1 | 107 | SHOWERS |
| 108 | 103 | B2 | 108 | WOMEN |
| 110 | 103 | B1 | 110 | COMMUNICATIONS |
| 111 | 108 | B1 | 111 | WOMEN'S LOCKER ROOM |
| 112 | 113 | B1 | 112 | ELECTRICAL |
| 115 | 103 | A1 | 115 | OFFICES |
| 116a | 103 | A1 | 116A | TRAINING ROOM A |
| 116b | 103 | A1 | 116B | TRAINING ROOM B |

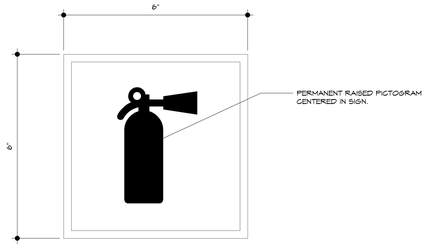
*NOTE: VERIFY FINAL WORDING AND ROOM NUMBERS WITH CONTRACTING OFFICER.




**SIGN TYPE B2**

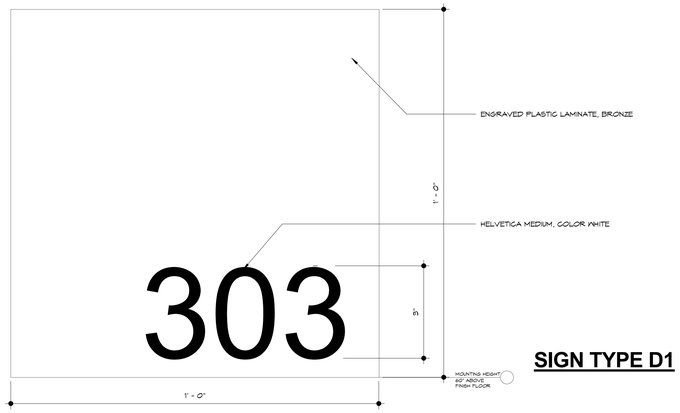



**SIGN TYPE B3**

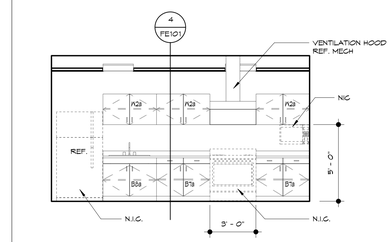



**SIGN TYPE C1**

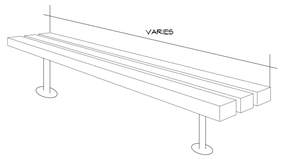
PROVIDE 1 AT EACH FIRE EXTINGUISHER CABINET




**SIGN TYPE D1**

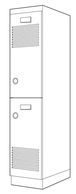



BREAK ROOM CASEWORK (BY ABI)




BENCH

a) VARIES



DOUBLE HEIGHT LOCKER
L1

a) 18w x 18d x 72h

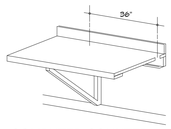
BASE UNITS:

DOOR DRAWER
B7

a) 42w x 24d x 34h
b) 48w x 24d x 34h

SINK
B8

a) 42w x 24d x 34h



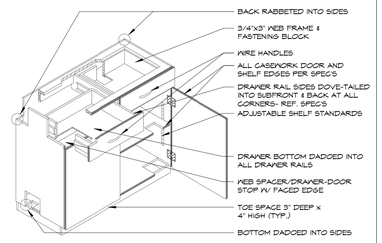

COMPUTER COUNTER
B40

a) 24d x 34h
b) 36d x 34h

WALL UNITS:

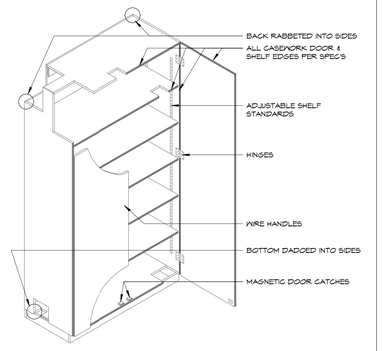
DOOR
W2

a) 42w x 14d x 24h



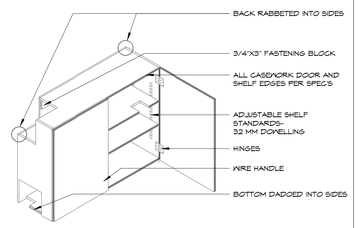

1 TYP. BASE CABINET

3" = 1'-0"



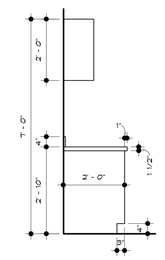

2 TYP. TALL CABINET

3" = 1'-0"




3 TYP. WALL CABINET

3" = 1'-0"




4 TYP. CASEWORK ELEVATIONS

1/2" = 1'-0"

## KEYNOTES

Note: Keynotes are drawn from a master list; it may not be sequentially numbered. Sizes (ex. 2x4) or other info. following keynote on drawings indicates criteria for those materials/locations which may differ from std. material specified.

| | | | | | |
|---|---|---|---|---|---|
| 033000 | -1 | CONCRETE STRUCTURE | 093000 | -1 | CERAMIC MOSAIC TILE ( " X " ) |
| | -2 | CONCRETE FLOOR SLAB | | -2 | GLAZED WALL TILE ( " X " ) |
| | -3 | VAPOR BARRIER | | | |
| | -4 | WELDED WIRE FABRIC | | | |
| | -5 | STEEL REINFORCING BAR | | -3 | QUARRY TILE ( " X " ) |
| | -6 | CONSTRUCTION JOINT | | -4 | PORCELAIN FLOOR TILE ( " X " ) |
| | -7 | WATERSTOP | | | |
| | -9 | DOVETAIL ANCHOR | | -5 | TILE BASE |
| | -11 | SIDEWALK | | -6 | TILE CAP |
| | -10 | PREMOLDED JOINT FILLER | | -7 | SETTING BED |
| | | | | -8 | CRACK ISOLATION MEMBRANE |
| | -11 | STEEL BAR DOWEL | | | |
| 055000 | -1 | STEEL ANGLE | | -9 | METAL EDGE STRIP |
| | -4 | STEEL CHANNEL | 095113 | -1 | ACOUSTICAL PANEL ( "X" ) (" = FIRE RATED) |
| | -5 | STEEL LINTEL | | | |
| | -6 | STEEL PIPE | | -2 | CEILING SUSPENSION SYSTEM |
| | -7 | STEEL TUBE | | -3 | EDGE MOLD TRIM |
| | -8 | STEEL PLATE | | -4 | AUXILIARY SUPPORT FRAMING |
| | -9 | STEEL LADDER | 096516 | -1 | RESILIENT FLOOR TILE |
| | -10 | STEEL SIDEWALK TRENCH/DRAIN COVER | | -2 | PVALL BASE |
| | | | | -3 | EDGE STRIP |
| | | | 096723 | -1 | RESINOUS FLOORING |
| 055213 | -1 | STEEL PIPE HANDRAIL | | -2 | RESINOUS BASE |
| | -2 | STEEL PIPE GUARDRAIL | 096813 | -1 | CARPET TILE |
| 055300 | -1 | STEEL GRATING | 099113 | -1 | EXTERIOR PAINT |
| | -2 | STEEL FRAME | 099123 | -1 | INTERIOR PAINT |
| 061000 | -1 | 2X WOOD NAILER ( " ) | 101100 | -1 | MARKERBOARD |
| | -2 | 2X WOOD BLOCKING ( " ) | | -2 | TACKBOARD |
| | -3 | 1X WOOD CONTINUOUS (") | | -3 | CHALKBOARD |
| | -4 | PLYWOOD ( " ) | | -4 | TACKSTRIP |
| | -5 | 430 FELT | | -5 | DISPLAY PVALL PANEL |
| | -6 | #15 FELT | | -6 | DISPLAY PVALL COVERING |
| | -7 | ORIENTED STRAND BOARD ( " ) | | -7 | SLIDING DISPLAY UNIT |
| 064023 | -1 | PLASTIC-LAMINATE-FACED ARCHITECTURAL CABINETS | 101416 | -1 | DIMENSIONAL LETTER SIGNAGE |
| | | | 101423 | -1 | PANEL SIGNAGE |
| | | | 102113 | -1 | TOILET COMPARTMENT |
| | -2 | HIGH-PRESSURE LAMINATE | | -2 | URINAL SCREEN |
| | -3 | CABINET LINER LAMINATE | 102116 | -1 | SHOWER COMPARTMENT |
| | -4 | PARTICLE BOARD | | -2 | DRESSING COMPARTMENT |
| | -5 | PLYWOOD | 102239 | -1 | OPERABLE PANEL PARTITION |
| | -6 | 3MM EDGE MOLDING | 102600 | -1 | IMPACT-RESISTANT CORNER GUARD |
| | -7 | SOLID WOOD BLOCKING | | | |
| | -9 | HARDWOOD | | -2 | IMPACT-RESISTANT CHAIR RAIL |
| | -4 | STEEL TUBE-LEG FRAME | 102800 | -1 | SOAP DISPENSER |
| | -10 | SOLID SURFACE SILL | | -2 | TISSUE DISPENSER |
| | -11 | SOLID SURFACE COUNTER INTEGRAL SINK | | -3 | TOWEL DISPENSER |
| 072100 | -1 | FOUNDATION WALL OR UNDER SLAB INSULATION (R- ) | | -4 | FRAMED MIRROR |
| | | | | -5 | SANITARY NAPKIN DISPENSER |
| | | | | -6 | SANITARY NAPKIN DISPOSER |
| | -2 | CAVITY WALL INSULATION (R- ) | | -7 | GRAB BAR |
| | -3 | BUILDING INSULATION - UNFACED (R- ) | | -8 | PASTE RECEPTACLE |
| | | | | -9 | SHOWER SEAT |
| | -4 | BUILDING INSULATION - FACED (R-) | | -10 | SHOWER CURTAIN ROD |
| | | | | -11 | COAT/ROBE HOOK |
| | -5 | SILL SEALER | | -12 | TOWEL BAR |
| | -6 | BATHS INSULATION | | -13 | SHOWER CURTAIN |
| | -7 | SPRAY-APPLIED CELLULOSIC INSULATION | | -14 | DIAPER CHANGING STATION |
| | | | | -15 | ELECTRIC HAND DRYER REF ELEC. |
| | -8 | SPRAY POLYURETHANE FOAM INSULATION | 104413 | -1 | FIRE EXTINGUISHER CABINET |
| | | | | -2 | FIRE HOSE CABINET |
| | | | 105113 | -1 | CORRIDOR LOCKER |
| 072119 | -1 | MODIFIED BITUMINOUS SHEET AIR BARRIER | | -2 | ATHLETIC LOCKER |
| | | | | -3 | LOCKER BENCH |
| 076200 | -1 | SHEET METAL FLASHING AND COUNTERFLASHING | 116213 | -1 | PROJECTION SCREEN |
| | | | 122113 | -1 | HORIZONTAL LOUVER BLINDS |
| | -2 | PRE-FINISHED ROOF EDGING | 133419 | -1 | PRE-ENGINEERED BUILDING |
| | | | | -2 | FRAME |
| | -5 | PRE-FINISHED COPING | | -3 | GOLIATH |
| | -4 | SHEET METAL REGLET | | -4 | GIRT |
| | -5 | SHEET METAL GUTTER | | -5 | PURLIN |
| | -6 | SHEET METAL DOWNSPOUT | | -6 | PREFINISHED WALL PANEL (I = INSULATED) |
| | -7 | SHEET METAL SCUPPER | | -7 | PREFINISHED ROOF PANEL |
| | -8 | SNOW GUARD | | -8 | INSULATION (R- ) ( " = FACED) |
| 077253 | -1 | PENETRATION FIRESTOPPING | | -9 | PREFINISHED METAL GUTTER |
| 078413 | -1 | FIRE-RESISTIVE JOINT SYSTEM | | -10 | PREFINISHED DOWNSPOUT |
| | | | | -11 | PREFINISHED METAL SOFFIT PANEL |
| 078446 | -1 | JOINT SEALANT - RAKE WHERE REQUIRED | | -12 | PREFINISHED METAL FLASHING |
| 079200 | -1 | JOINT FILLER | | -13 | METAL PANEL CLOSURE |
| | -3 | GASKET | | -14 | BASE ANGLE |
| | -4 | BACKER ROD | | -15 | FRAMED OPENING HEADER OR JAMB CHANNEL |
| 079500 | -1 | EXPANSION CONTROL | | | |
| 081113 | -1 | HOLLOW METAL DOOR | | -16 | TUBE GIRT |
| | -2 | HOLLOW METAL FRAME | 311000 | -1 | SITE CLEARING |
| | -3 | FRAME ANCHOR | 312000 | -1 | EARTH MOVING |
| | -4 | LOUVER | | -2 | INTERIOR FILL |
| | -5 | PLASTER GUARD | | -3 | EXTERIOR FILL |
| 081416 | -1 | FLUSH WOOD DOOR | | -4 | GRANULAR DRAINAGE COURSE |
| 083113 | -1 | ACCESS DOOR | | -5 | DRAINAGE BACKFILL |
| | -2 | ACCESS DOOR FRAME | | -6 | SUBBASE COURSE |
| 083613 | -1 | SECTIONAL OVERHEAD DOOR | | -7 | DRAINAGE GEOTEXTILE |
| | -2 | SECTIONAL OVERHEAD DOOR TRACK | | -8 | SEPARATION GEOTEXTILE |
| | | | 312316 | -1 | SEDIMENTING |
| | -3 | WEATHERSTRIPPING | 312319 | -1 | TERMITE CONTROL |
| 084113 DOOR | -1 | ALUMINUM ENTRANCE | 321313 | -1 | CONCRETE PAVING |
| | | | 321373 | -1 | CONCRETE PAVING JOINT SEALANTS |
| | -2 | ALUMINUM STOREFRONT FRAME | 321723 | -1 | PAVEMENT MARKINGS |
| 088000 | -1 | GLAZING (AS SCHEDULED) | 324000 | -1 | TURF/GRASS |
| 092000 | -1 | LOUVER | | | |
| | -2 | VENT | | | |
| 092216 | -1 | STEEL STUD ( " ) | | | |
| | -2 | STEEL STUD RUNNER ( " ) | | | |
| | -3 | FURRING CHANNEL | | | |
| 092900 | -1 | GYPSUM BOARD ( " ) | | | |
| | -2 | FIRE RATED GYPSUM BOARD ( " ) | | | |
| | -3 | CEMENTITIOUS TILE BACKER PANEL | | | |
| | -4 | METAL SUSPENSION SYSTEM | | | |
| | -5 | ACOUSTICAL SEALANT | | | |
| | -6 | ACOUSTICAL INSULATION (") | | | |
| | -7 | METAL EDGE TRIM | | | |
| | -8 | AUXILIARY SUPPORT FRAMING | | | |
| | -9 | METAL CONTROL JOINT | | | |
| | -10 | HIGH IMPACT GYPSUM BOARD | | | |

DATE:
- 2014-07-24

REVISED DATE:

HTK ARCHITECTS PA
8300 NALL AVENUE, SUITE 350
OVERLAND PARK, KANSAS 66212
P 913.663.5373
500 S. KANSAS AVE.
TOPEKA, KS 66612
P 785.266.5373
www.htkarchitects.net

STATE OF MISSOURI
CHARLES R. SMITH
NUMBER A-2007030589
ARCHITECT

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

SHEET CONTENTS:
- FIXED EQUIPMENT ELEVATIONS
- SIGNAGE

HTK PROJECT NUMBER:
- ULYB112022
  10008.01 - 0018

SHEET NUMBER:

FE101

ORIGINAL CONTRACT DOCUMENTS

7/23/2014 2:19:04 PM C:\Users\jms\Documents\Security Forces Building_Central_jms.rvt

# STRUCTURAL GENERAL NOTES

## 1. General

A. These notes and other drawing notes contained within, are provided to meet specific requirements and to supplement the contract specifications. These notes neither replace nor override the provisions and requirements for the contract specifications.
B. Contractor shall coordinate all structural work with work shown on all other drawings.
C. Contract drawings and specifications represent the finished structure. Contractor shall be responsible for all means and methods of construction including but not limited to, shoring and temporary bracing. Contractor shall undertake all necessary measures to endure safety of all persons and structures at the site and adjacent to the site. Visits to the site by the owner or the engineer shall not relieve the contractor of such responsibility.
D. If certain features are not fully shown or called for on the contract drawings or specifications, their construction shall be of the same character as for similar conditions that are shown or called for, with the approval of the contracting officer. Where sections vary, contractor shall provide smooth transitions between them, unless noted otherwise.
E. All products shall be installed in accordance with the manufacturers' written instructions and recommendations, unless noted otherwise.

## 2. DIMENSIONS

A. The dimensions given for existing dimensions are not exact and were obtained from the existing construction documents. Many dimensions of the new construction depend on the actual existing dimensions. It is the Contractors responsibility to determine the actual existing building dimensions by field measure and adjusting new dimensions accordingly prior to new construction. Existing footing depths and structural bearing locations are all important dimensions to be verified as well as all architectural elements. All major discrepancies shall be approved by the Architect prior to the excavation of new footings or fabrication of structural steel or other affected items.

## 3. STRUCTURAL DESIGN CRITERIA

A. The structural design loading was determined using the latest edition of the International Building Code and ASCE-7 (Minimum Design Loads for Buildings and Other Structures), the following design loads were used for the building design in addition to the dead weight of the structure, walls, ceilings, roofing, finishes, etc.:

B. Gravity Loads

| | | |
|---|---|---|
| 1. | Roof (snow load): | 20 psf (ground snow load) |
| 2. | ERV Mezzanine | 65 psf |
| 3. | Operable Wall | 80 plf |
| 4. | ATFP Window Frame loads: | |
| a. | Overhead door Grid Line 1 | 250 psf |
| b. | Double door Grid Line 3.2 | 250 psf |
| c. | Windows on Grid Line 6 | 864 psf |
| d. | Door on Grid Line A | 250 psf |
| e. | Door Grid Line E | 250 psf |

C. Lateral Loads

1. Wind Criteria

| | |
|---|---|
| Wind Velocity: | 90 mph (Service) |
| (The basic wind speed corresponds to a 3 sec. gust at 33 ft. above ground.) | |
| Exposure Category: | C |
| Internal Pressure Coefficient: | ±.55 |
| Importance Factor: | 1.0 |

2. Seismic Criteria

| | |
|---|---|
| Site Class: | D |
| Seismic Design Category: | B |
| Importance Factor: | 1.0 |
| Ss: | 0.12 g |
| S1: | 0.055 g |

D. Foundation Criteria
1. Allowable Bearing Pressure: 2000 psf (Column and Wall Footings)

## 4. Serviceability Criteria

A. The following criteria are based on un-factored loads, criteria for wind loads are to be determined for the .50 year recurrence. Do not reduce to 10 year recurrance.
B. Roof beams, joists and purlins.
1. L/240 Maximum vertical deflection under live, snow or wind loads
2. L/180 Maximum vertical deflection under dead + (live or snow).
C. Building Drift (Bare frame deflection)
1. Lateral drift is not to exceed H/300 under wind loading.
D. Columns
1. L/300 Maximum horizontal deflection under wind loading.
E. Structural window framing
1. L/60 Maximum horizontal deflection under ATFP loading.

## 5. FOUNDATIONS

A. Footings
1. Column and wall footings shall bear below any fill material and on stiff to very stiff native clay soils capable of safely supporting a specified allowable bearing pressure. The consulting engineering geologist shall verify the proper depth, quality of bearing material, and condition of bottom of excavation for all footings prior to placing of concrete.
2. In the event a satisfactory bearing material is encountered at a lower elevation than that shown, the base of spread footings shall be lowered and the footing constructed with increased depth, placing the noted footing bars 3" clear from the bottom and maintaining the noted top of footing as originally detailed. Reinforcing in wall footings which require deepening shall be maintained at its original location with the base of the footing excavation lowered as required. As an alternative to lowering the bottom of footings, excavations down to suitable bearing material may be filled with "flowable fill" back to proper bearing elevation. In no event shall the wall or column footings be constructed with a depth less than that shown in the design drawings.
3. All footings shall be poured to lines of neat excavation without formwork. See Specifications.

## 6. STRUCTURAL CONCRETE AND REINFORCING STEEL

A. The structural concrete has been designed in accordance with the latest edition of ACI "Building Code for Reinforced Concrete", ACI 318. All concrete work shall conform to ACI "Specifications for Structural Concrete in Buildings", ACI 301.
B. All structural concrete shall be normal weight concrete and shall have a minimum design compressive strength, f'c, of 3000 psi at 28 days with a minimum 7 day strength of 2000 psi. Concrete for exterior work such as sidewalks, drives, curbs, etc., shall be air-entrained concrete (6%± 1%) having a minimum design compressive strength, f'c, of 4500 psi at 28 days and a maximum water/cement ratio of 0.45.
C. All reinforcing bars shall conform to ASTM A615-85 Grade 60. Welded wire reinforcement shall conform to ASTM A185 and shall be furnished in flat sheets.
D. The minimum concrete coverage for reinforcing, unless otherwise noted, shall be 3/4" for formed slabs, 1 1/2" for ties and stirrups, 2" for formed walls and 3" for footings and other concrete deposited directly against earth. Bar supports shall be furnished in accordance with recommendations of ACI 315 (Detailing Manual). Welded wire reinforcement in slabs on grade shall be supported by metal chairs with sub-grade plates or on concrete bricks at 3'-0 cts. each way. "Pulling up" of fabric after concrete is deposited will not be allowed.
E. All bars shall lap with the proper development length as specified in ACI 318 at splices unless otherwise noted. Welded wire reinforcement shall be spliced with a minimum lap of one mesh space plus 2" between outermost cross wires for slabs on grade.
F. It shall be the responsibility of the Contractor that the bar lengths of all bars conform to applicable notes and details and that the actual number of bars used conforms to the noted spacing. See Specifications.

## 7. METALS

A. Structural Steel
1. All structural steel work shall conform to the AISC "Specifications for the Design, Fabrication and Erection of Structural Steel for Buildings" and the AISC "Code of Standard Practice for Steel Buildings and Bridges". Welding shall conform to the AWS "Structural Welding Code', D1.1, Sections 1 through 8. All weld filler metal shall have a minimum yield strength of 60 ksi. Steel tubing shall conform to ASTM A500, Grade B with a minimum yield strength of 46,000 psi. Steel pipe shall conform to ASTM A53, Type E or S, Grade B. Wide Flange W-Shapes shall conform to ASTM A992 with a minimum yield strength of 50,000 psi. All other structural steel shall conform to ASTM A36 with a minimum yield strength of 6,000 psi.
2. Field bolts shall be 3/4" A325 High Strength Bolts in 13/16" holes except where shown otherwise. All bolts shall be installed with washers provided under the turning element. Unless otherwise indicated, all bolts shall be installed to a snug-tightened condition.
3. Unless otherwise noted, all structural steel exposed to weather shall be hot dipped galvanized in accordance with ASTM A123. All fasteners connecting galvanized steel shall be galvanized in accordance with ASTM 153 and installed in holes oversized for the additional coating.
4. Detailing, fabrication, and erection of structural steel shall incorporate all applicable requirements of the Occupational Safety and Health Administration (OSHA) Safety and Health Standards for the Construction Industry, 29 CFR 1926 (including Part R Safety Standards for Steel Erection).
5. Proper fit in the field in accordance with good standard practice is the responsibility of the Contractor. See Architectural Drawings and Specifications for painting, miscellaneous iron and steel, and for provisions for fastening the work of other trades. See Specifications.

## 8. SPECIAL CONSTRUCTION

A. Pre-Engineered Metal Building (PEMB)
1. Reference specification section 133419
2. Metal building system shall be provided by a manufacturer who is a memeber of MBNA and holds an AISC category MB certification.
3. Metal building system shal be installed by a qualified erector who is acceptable to the manufacturer.
4. Metal building system shall be provided as delegate-engineered sytem in accordance with the requirements of the contract documents.
5. The contractor shall submit shop drawings and complete structural design analysis of the metal building system, including development of loads, description of individual and combined load cases, description of materials, comparison of permitted stresses versus computed stresses, calculation of deflections, anchor bolt layout, and foundation reactions.
6. Calculations and shop drawings shall bear the seal of a professional engineer licensed in Missouri.
7. Shop drawing approval shall be obtained prior to placing any foundations of fabrication of foundation reinforcing steel.
8. PEMB manufacturer shall design building structure for the loads shown section 3 - Structural Desing Criteia of this general note, in accordance with the design standards listed. All loads shall be considered mininums and are subject to verification and coordination by the PEMB manufacturer and the contractor. If actual loads of items are higher than those shown in section 2, the higher loads shall be used.
9. All structual reinforcement for door and window frames shall be designed using the ATFP loads stated in section 3. All design shall be in accordance to UFC 4-010-01, Section B-3.1.3.2 - Frames.
10. Metal building system shall be designed and furnished to support any hanging loads such as mechanical equipment or movable walls, etc. in addition to the design load criteria prescribed in the latest International Building Code IBC.
11. Any redesign of the foundation system required as a result of changes in the loads or dimensions of the metal building system shall be approved by the Structural Engineer. Any additional cost of redesign by the Structural Engineer shall be the responsibility of the General Contractor.

## 9. Special Inspections

A. Required in accordance with IBC Section 1704.
1. Frequency: Continuous unless specifically permitted by the principal code of record to be periodic.
2. Special inspector: Qualified person who has demonstrated competence to the satisfaction of the contracting officer.
B. Soils: Site preparation, bearing services fill materials and placement, and evaluation of in-place density.
C. Concrete Construction
1. Mix design and materials
2. Installation of embedded anchor bolts
3. Placement, curing, and protection techniques
4. Sampling and testing during placement
5. Strength verification
6. Exceptions: Non-structural slab on grade
D. Reinforcing steel
1. Type, size, and grade
2. Placement
E. Steel Construction
1. In-plant fabrication or fabrication certification
2. Materials, including weld fillers and high strength bolts
3. Welding and high strength bolt installation
4. Adhesive anchors
5. Framing and joint details, includeing stiffeners
6. Cold-formed steel framing installation and fasteners

## 10. BAR GRATING

A. The contractor shall provide all labor, materials, equipment and incidentals as shown and specified and are required to furnish and install grating. Materials shall comply with applicable provisions and recommendations of the following: NAAMM Metal Bar Grating Manuals designated ANSI/NAAMM MBG 531 for Steel Gratings. The steel used in the Bearing Bars shall be of rectangular section and conform to ASTM A569 Hot Rolled Carbon Steel Sheet and Strip. The Cross Bars shall be of ASTM A310 Carbon Steel Rods and Course Round Wire. No substitution of materials will be accepted unless they are submitted for review and the Architect/Engineer approves their use.
B. The contractor shall submit to the owner or its representative, for approval, shop drawings for fabrication and erection of the work. Included shall be plans, elevations, sections and details of the work. The contractor shall submit the manufacturer's specifications, load tables, anchor details and standard installation details. The contractor may be required to take field dimensions to verify "as built" conditions to ensure proper fit of grating.
C. Grating shall be McNichols bar grating type "GHB-100" or approved equal.
Bearing bars: Rectangular steel bars of an appropriate depth and thickness for the required load, on 1 3/16" centers. Other available centers may be selected at the discretion of the Architect/Engineer.
Cross Bars: Twisted wire rod, at 4" on center, resistance welded to the bearing bars and at right angles to them.
Surface: The bearing bars shall have a smooth top surface unless the Architect/Engineer determines the need for a serrated surface.
D. Loading: At a uniform load of 65 pounds per square foot, deflection shall not exceed ¼ inch over the required span.
E. Finish: Manufacturers standard shop coat of black paint or Galvanized as required by Architect/Engineer.
F. All required cutting, fitting and welding shall be performed in the manufacturers shop in accordance with the approved shop drawings and shall be in compliance with the NAAMM Metal Bar Grating Manual tolerances and welding standards. All cutouts to clear obstructions shall have a recommended clearance of 1 inch. When banding and toe plates are required they shall be welded to the grating in accordance with NAAMM standards. The finish coating, paint or galvanizing shall be applied after all of the required fabrication is complete.
G. The grating shall be received at the job site by the contractor, unloaded and protected from damage prior to the requirement for it to be installed. The installing contractor shall prepare the site for installation, determining that deviations from the approved drawings are corrected prior to grating placement. Grating shall be installed in accordance with the approved shop drawings and the installation clearances called for in the NAAMM Metal Bar Grating Manual, including the use of the prescribed anchor system. . Pipe penetrations of 4" or less shall be cut in the field. When installed, Grating Cross Bars shall be in alignment.


HTK ARCHITECTS PA
8300 W 119TH ST, STE 250
OVERLAND PARK, KANSAS 66213
P 913.663.5373
500 S. KINGS AVE
BRANSON, MO 65616
P 785.266.5373
www.htkarchitects.net


STATE OF MISSOURI
DARREN D. REYNOLDS
NUMBER 2010035174
PROFESSIONAL ENGINEER

DATE:
- 7/24/2014

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

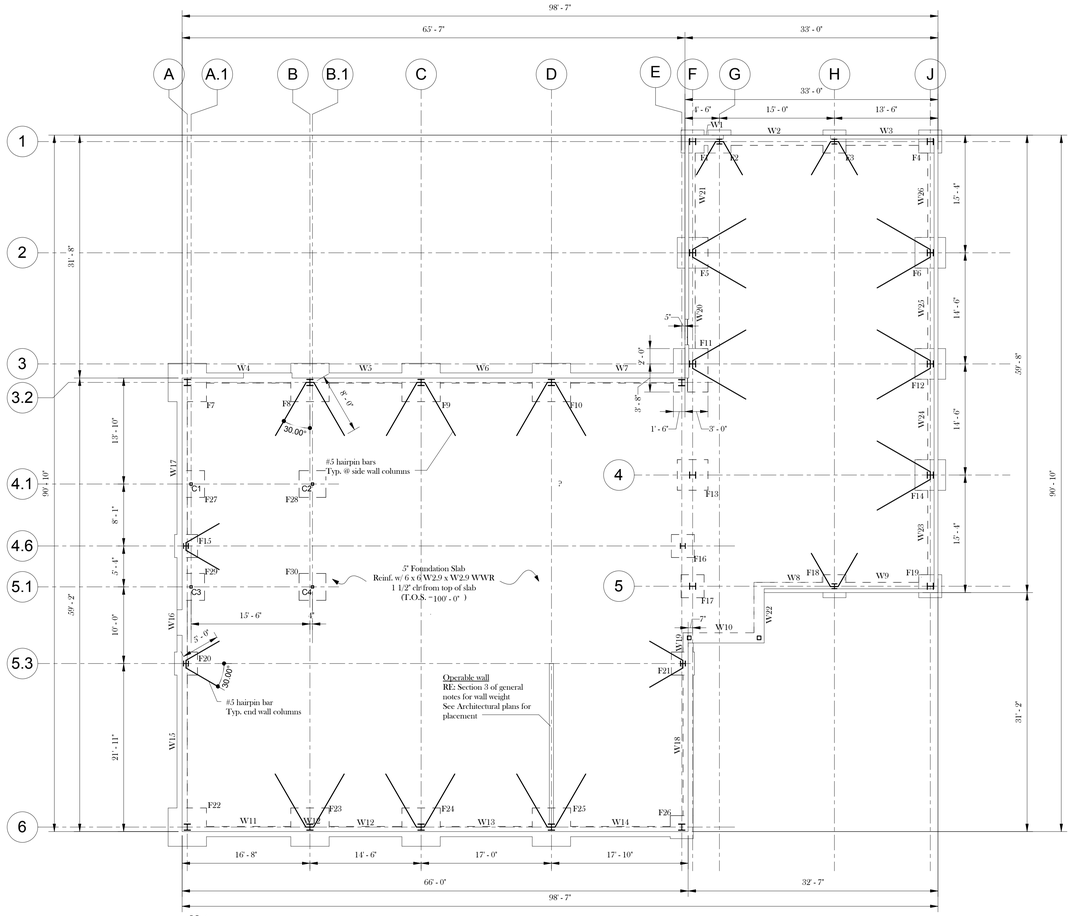
SHEET CONTENTS:
- General Notes

HTK PROJECT NUMBER:
- ULYB112022
  10008.01 - 0018

SHEET NUMBER:

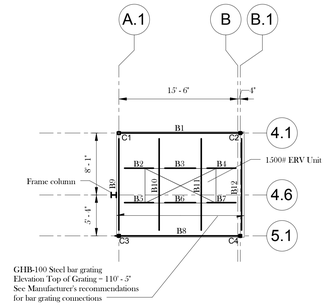
S001

100% CONTRACT DOCUMENTS




**Note:**
Design frame on grid line A for future expansion.
Bay west of grid line A will be 16'- 0".

1 1st Floor Framing & Foundation Plan
1/8" = 1'-0"



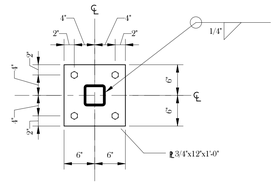

2 ERV Support Frame
1/8" = 1'-0"

**Steel Beam Schedule**

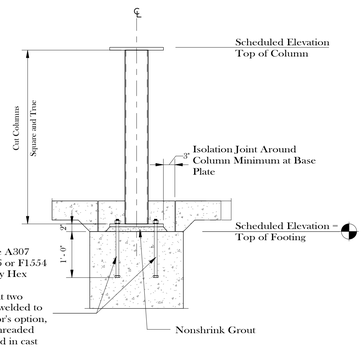
| Mark | Count | Shape | Beam Type | Left End Elevation | Right End Elevation | Left End Connection | Right End Connection |
|---|---|---|---|---|---|---|---|
| B1 | 1 | W10X15 | A | 110' - 4" | 110' - 4" | BE1 | BE1 |
| B2 | 1 | C8X11.5 | B | 110' - 4" | 110' - 4" | BE2 | BE2 |
| B3 | 1 | C8X11.5 | B | 110' - 4" | 110' - 4" | BE2 | BE2 |
| B4 | 1 | C8X11.5 | B | 110' - 4" | 110' - 4" | BE2 | BE2 |
| B5 | 1 | C8X11.5 | B | 110' - 4" | 110' - 4" | BE2 | BE2 |
| B6 | 1 | C8X11.5 | B | 110' - 4" | 110' - 4" | BE2 | BE2 |
| B7 | 1 | C8X11.5 | B | 110' - 4" | 110' - 4" | BE2 | BE2 |
| B8 | 1 | W10X15 | A | 110' - 4" | 110' - 4" | BE1 | BE1 |
| B9 | 1 | W8X10 | A | 110' - 4" | 110' - 4" | BE2 | BE2 |
| B10 | 1 | W8X10 | A | 110' - 4" | 110' - 4" | BE2 | BE2 |
| B11 | 1 | W8X10 | A | 110' - 4" | 110' - 4" | BE2 | BE2 |
| B12 | 1 | W8X10 | A | 110' - 4" | 110' - 4" | BE2 | BE2 |

**Steel Column Schedule**

| Mark | C1 | C3 | C2 | C4 |
|---|---|---|---|---|
| Top of Column | 109' - 6" | 109' - 6" | 109' - 6" | 109' - 6" |
| Column Shape | HSS8X8X1/4 | HSS8X8X1/4 | HSS8X8X1/4 | HSS8X8X1/4 |
| Bearing Elevation | 99' - 4" | 99' - 4" | 99' - 4" | 99' - 4" |
| Base Plate | BP1 | BP1 | BP1 | BP1 |
| Column Locations | A.1-4.1 | A.1-5.1 | B.1-4.1 | B.1-5.1 |

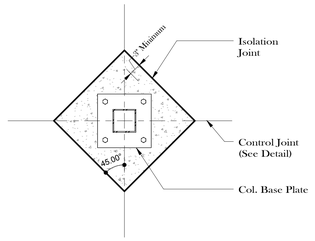



3 Base Plate BP1
1" = 1'-0"

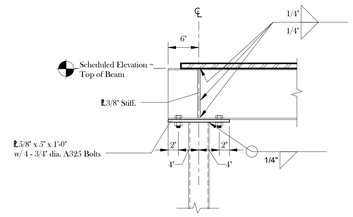



4 - 3/4" dia. Anchor Rods shall be A307 Heavy Hex Bolts or 3/4" dia. A36 or F1554 Gr.36 Threaded Rods with Heavy Hex nuts and washers. Rod threads at embedded end shall be "staked" at two places below nut, or nut shall be welded to rod on bottom side. At Contractor's option, Anchor Rods may be 3/4" dia. Threaded Rods post installed in holes drilled in cast concrete and embedded with epoxy adhesive.
(Hilti Hy200 of equal).

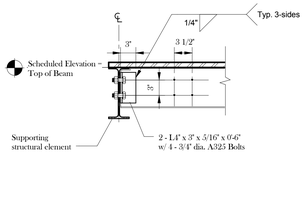
4 Typical HSS Column Elevation
3/4" = 1'-0"



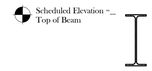

5 Column Isolation Pad
3/4" = 1'-0"




BE1 Beam End Connection - BE1
1" = 1'-0"




BE2 Beam End Connection - BE2
1" = 1'-0"




A Beam Type A
1" = 1'-0"

B Beam Type B
1" = 1'-0"

HTK ARCHITECTS PA
8300 W 110TH ST, STE 150
OVERLAND PARK, KANSAS 66210
P 913.663.5373
500 S. KANSAS AVE.
TOPEKA, KANSAS 66612
P 785.266.5373
www.htkarchitects.net

STATE OF MISSOURI
DARREN D. REYNOLDS
NUMBER 2010020844
PROFESSIONAL ENGINEER
7/24/2014

DATE:
7/24/2014

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

SHEET CONTENTS:
Framing Plans & Steel Details

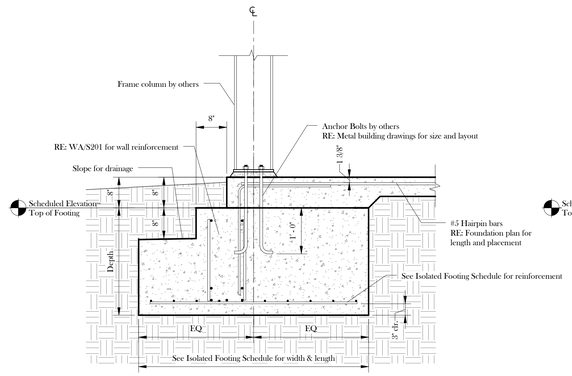
HTK PROJECT NUMBER:
ULYB112022
10008.01 - 0018

SHEET NUMBER:
S101

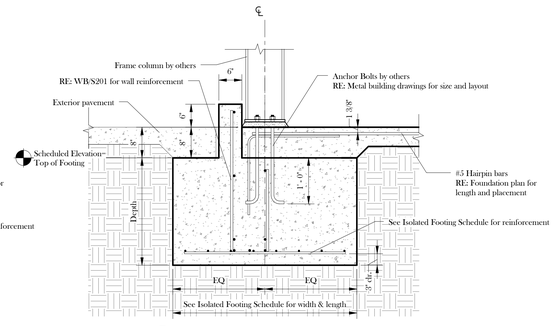
100% CONTRACT DOCUMENTS

**Isolated Footing Schedule**

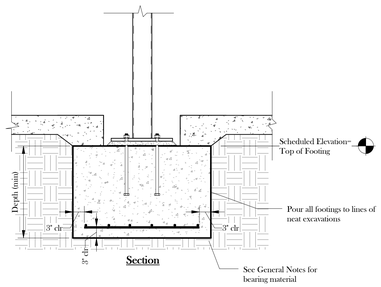
| Mark | Footing Type | Elevation Top Of Footing | Width | Length | Depth | Reinforcement |
|---|---|---|---|---|---|---|
| F1 | B | 99' - 4" | 3' - 0" | 3' - 0" | 2' - 4" | #4 bars @ 6" ctrs, E.W. |
| F2 | B | 99' - 4" | 3' - 0" | 3' - 0" | 2' - 4" | #4 bars @ 6" ctrs, E.W. |
| F3 | B | 99' - 4" | 3' - 0" | 3' - 0" | 2' - 4" | #4 bars @ 6" ctrs, E.W. |
| F4 | B | 99' - 4" | 3' - 0" | 3' - 0" | 2' - 4" | #4 bars @ 6" ctrs, E.W. |
| F5 | B | 99' - 4" | 4' - 0" | 4' - 0" | 2' - 4" | #4 bars @ 6" ctrs, E.W. |
| F6 | B | 99' - 4" | 4' - 0" | 4' - 0" | 2' - 4" | #4 bars @ 6" ctrs, E.W. |
| F7 | A | 99' - 4" | 5' - 0" | 5' - 0" | 2' - 4" | #4 bars @ 6" ctrs, E.W. |
| F8 | A | 99' - 4" | 5' - 0" | 5' - 0" | 2' - 4" | #4 bars @ 6" ctrs, E.W. |
| F9 | A | 99' - 4" | 5' - 0" | 5' - 0" | 2' - 4" | #4 bars @ 6" ctrs, E.W. |
| F10 | A | 99' - 4" | 5' - 0" | 5' - 0" | 2' - 4" | #4 bars @ 6" ctrs, E.W. |
| F11 | A/B | 99' - 4" | 4' - 6" | 5' - 8" | 2' - 4" | #4 bars @ 6" ctrs, E.W. |
| F12 | B | 99' - 4" | 4' - 0" | 4' - 0" | 2' - 4" | #4 bars @ 6" ctrs, E.W. |
| F13 | D | 99' - 4" | 4' - 0" | 4' - 0" | 2' - 4" | #4 bars @ 6" ctrs, E.W. |
| F14 | B | 99' - 4" | 4' - 0" | 4' - 0" | 2' - 4" | #4 bars @ 6" ctrs, E.W. |
| F15 | A | 99' - 4" | 3' - 0" | 3' - 0" | 2' - 4" | #4 bars @ 6" ctrs, E.W. |
| F16 | D | 99' - 4" | 3' - 0" | 3' - 0" | 2' - 4" | #4 bars @ 6" ctrs, E.W. |
| F17 | D | 99' - 4" | 3' - 0" | 3' - 0" | 2' - 4" | #4 bars @ 6" ctrs, E.W. |
| F18 | B | 99' - 4" | 3' - 0" | 3' - 0" | 2' - 4" | #4 bars @ 6" ctrs, E.W. |
| F19 | B | 99' - 4" | 3' - 0" | 3' - 0" | 2' - 4" | #4 bars @ 6" ctrs, E.W. |
| F20 | A | 99' - 4" | 3' - 0" | 3' - 0" | 2' - 4" | #4 bars @ 6" ctrs, E.W. |
| F21 | A | 99' - 4" | 3' - 0" | 3' - 0" | 2' - 4" | #4 bars @ 6" ctrs, E.W. |
| F22 | A | 99' - 4" | 5' - 0" | 5' - 0" | 2' - 4" | #4 bars @ 6" ctrs, E.W. |
| F23 | A | 99' - 4" | 5' - 0" | 5' - 0" | 2' - 4" | #4 bars @ 6" ctrs, E.W. |
| F24 | A | 99' - 4" | 5' - 0" | 5' - 0" | 2' - 4" | #4 bars @ 6" ctrs, E.W. |
| F25 | A | 99' - 4" | 5' - 0" | 5' - 0" | 2' - 4" | #4 bars @ 6" ctrs, E.W. |
| F26 | A | 99' - 4" | 3' - 0" | 3' - 0" | 2' - 4" | #4 bars @ 6" ctrs, E.W. |
| F27 | C | 99' - 4" | 3' - 6" | 3' - 6" | 2' - 4" | #4 bars @ 6" ctrs, E.W. |
| F28 | C | 99' - 4" | 3' - 6" | 3' - 6" | 1' - 4" | #4 bars @ 6" ctrs, E.W. |
| F29 | C | 99' - 4" | 3' - 6" | 3' - 6" | 2' - 4" | #4 bars @ 6" ctrs, E.W. |
| F30 | C | 99' - 4" | 3' - 6" | 3' - 6" | 1' - 4" | #4 bars @ 6" ctrs, E.W. |



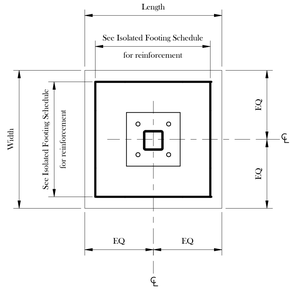

A Isolated Footing Type A
3/4" = 1'-0"




B Isolated Footing Type B
3/4" = 1'-0"

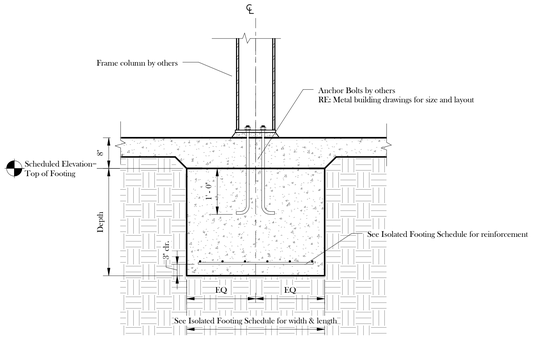



Section




Plan

C Isolated Footing Type C
3/4" = 1'-0"



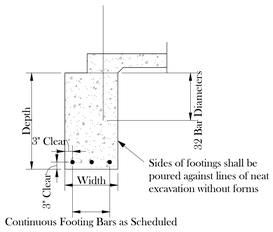

D Isolated Footing Type D
3/4" = 1'-0"

**Wall Footing Schedule**

| Mark | Footing Type | Top of Footing | Width | Depth | P | Notes |
|---|---|---|---|---|---|---|
| W1 | B | 99' - 4" | 1' - 4" | 2' - 4" | -- | |
| W2 | B | 99' - 4" | 1' - 4" | 2' - 4" | -- | 1 |
| W3 | B | 99' - 4" | 1' - 4" | 2' - 4" | -- | |
| W4 | A | 99' - 4" | 1' - 4" | 2' - 4" | 0' - 8" | 1 |
| W5 | A | 99' - 4" | 1' - 4" | 2' - 4" | 0' - 8" | |
| W6 | A | 99' - 4" | 1' - 4" | 2' - 4" | 0' - 8" | |
| W7 | A | 99' - 4" | 1' - 4" | 2' - 4" | 0' - 8" | |
| W8 | B | 99' - 4" | 1' - 4" | 2' - 4" | -- | |
| W9 | B | 99' - 4" | 1' - 4" | 2' - 4" | -- | |
| W10 | C | 99' - 4" | 1' - 4" | 2' - 4" | -- | |
| W11 | A | 99' - 4" | 1' - 4" | 2' - 4" | 0' - 8" | |
| W12 | A | 99' - 4" | 1' - 4" | 2' - 4" | 0' - 8" | |
| W13 | A | 99' - 4" | 1' - 4" | 2' - 4" | 0' - 8" | |
| W14 | A | 99' - 4" | 1' - 4" | 2' - 4" | 0' - 8" | |
| W15 | A | 99' - 4" | 1' - 4" | 2' - 4" | 0' - 8" | |
| W16 | A | 99' - 4" | 1' - 4" | 2' - 4" | 0' - 8" | 1 |
| W17 | A | 99' - 4" | 1' - 4" | 2' - 4" | 0' - 8" | |
| W18 | A | 99' - 4" | 1' - 4" | 2' - 4" | 0' - 8" | |
| W19 | A | 99' - 4" | 1' - 4" | 2' - 4" | 0' - 8" | |
| W20 | B | 99' - 4" | 1' - 4" | 2' - 4" | -- | 1 |
| W21 | B | 99' - 4" | 1' - 4" | 2' - 4" | -- | |
| W22 | C | 99' - 4" | 1' - 4" | 2' - 4" | -- | |
| W23 | B | 99' - 4" | 1' - 4" | 2' - 4" | -- | |
| W24 | B | 99' - 4" | 1' - 4" | 2' - 4" | -- | |
| W25 | B | 99' - 4" | 1' - 4" | 2' - 4" | -- | |
| W26 | B | 99' - 4" | 1' - 4" | 2' - 4" | -- | |

**Notes:**

1. Use Wall Type C at door openings.

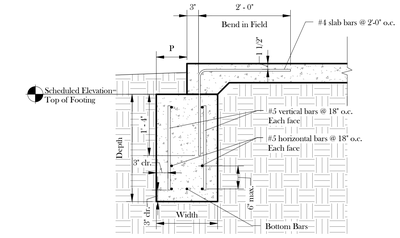



Continuous Footing Bars as Scheduled

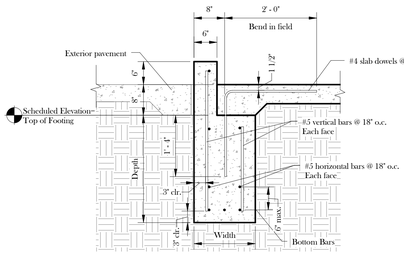
**Schedule of Wall Footing Bars**

| Width Of Footing | Reinforcement |
|---|---|
| 0' to 1'-2" | 2-#5 |
| 1'-2" to 1'-10" | 3-#5 |
| 1'-10" to 2'-6" | 4-#5 |
| 2'-6" to 3'-2" | 5-#5 |
| 3'-2" to 3'-10" | 6-#5 |
| 3'-10" to 4'-6" | 7-#5 |
| 4'-6" to 5'-2" | 8-#5 |
| 5'-2" to 5'-10" | 9-#5 |

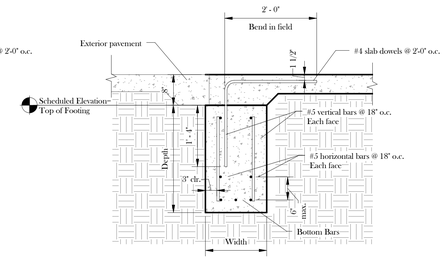
1 Typical Trenched Footing Reinforcement Detail
N.T.S



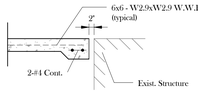

WA Wall Type A
3/4" = 1'-0"



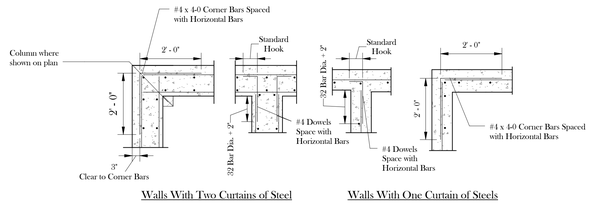

WB Wall Type B
3/4" = 1'-0"




WC Wall Type C
3/4" = 1'-0"




2 Thickened Slab at Free Slab edges
1/2" = 1'-0"

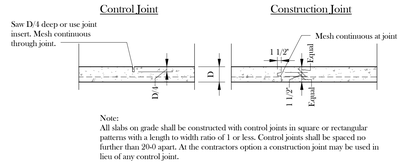



Walls With Two Curtains of Steel

Walls With One Curtain of Steels

Note:
Provide continuous vertical 2x4 key in pour joint at any wall intersection poured in two pours.

3 Typical Foundation Wall Corners
1/2" = 1'-0"




Note:
All slabs on grade shall be constructed with control joints in square or rectangular patterns with a length to width ratio of 1 or less. Control joints shall be spaced no further than 20-0 apart. At the contractors option a construction joint may be used in lieu of any control joint.

4 Slab Control Joint
1/2" = 1'-0"


HTK ARCHITECTS PA
8300 W 119TH ST, STE 250
OVERLAND PARK, KANSAS 66213
P 913.663.5373
500 S. KINGS AVE
BRANSON, MISSOURI 65616
P 785.266.5373
www.htkarchitects.net


DARREN D. REYNOLDS
NUMBER PE-2010-020978
PROFESSIONAL ENGINEER
7/24/2014

DATE:
- 7/24/2014

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

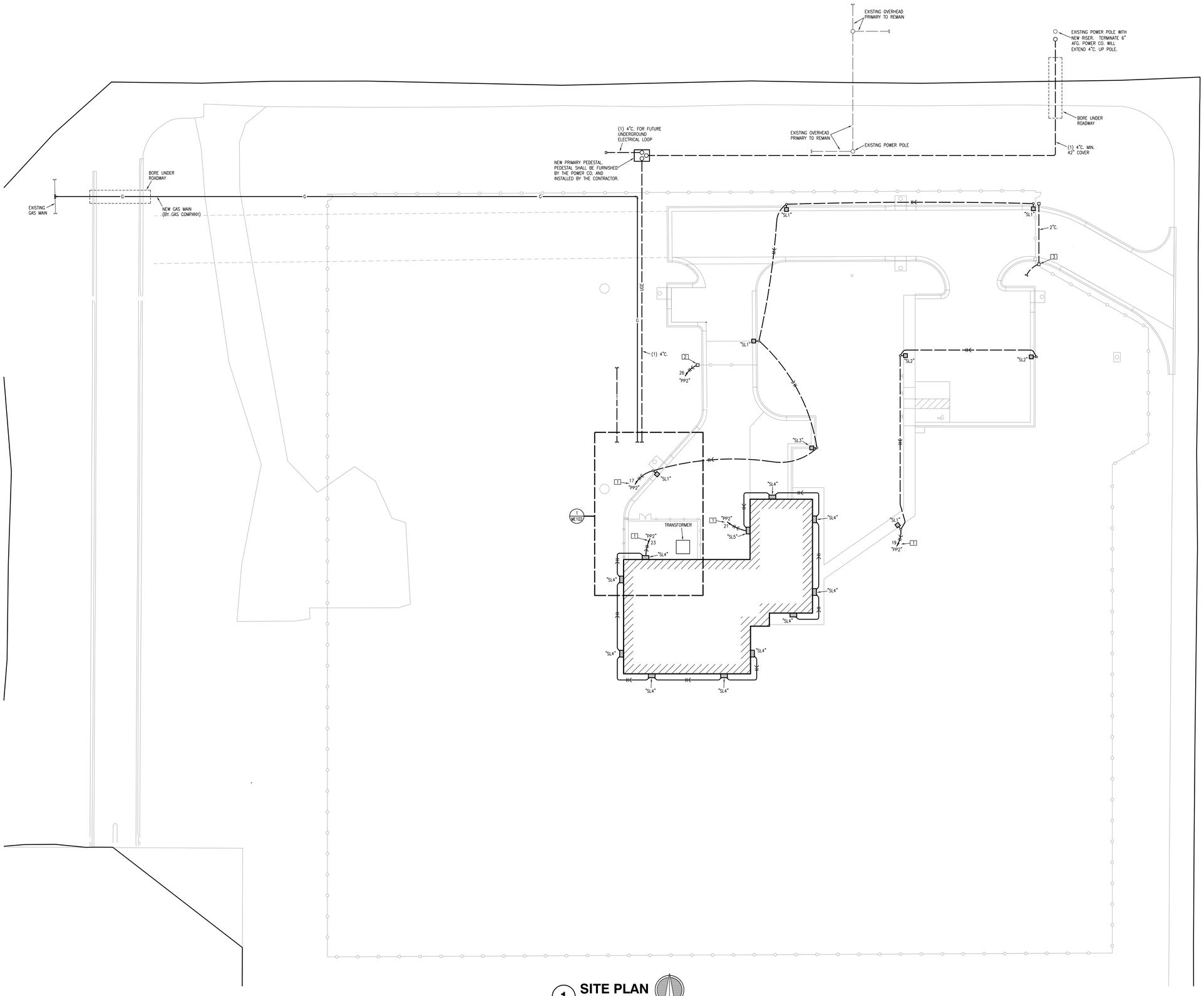
SHEET CONTENTS:
- Concrete Schedule & Details

HTK PROJECT NUMBER:
- ULYB112022
10008.01 - 0018

SHEET NUMBER:

S201

100% CONTRACT DOCUMENTS




1 **SITE PLAN**
1"=20'-0" MECH/ELEC

NORTH

**LEGEND:**

1. ROUTE CIRCUIT THRU LIGHTING CONTACTOR, CONTROLLED BY DDC SYSTEM.
2. SECURITY GATE POWER. VERIFY LOCATION WITH ARCHITECT.
3. FUTURE POWERED SECURITY GATE. VERIFY LOCATION WITH ARCHITECT. PROVIDE 2"C. WITH PULL STRING TO BUILDING. PROVIDE (2) 12x18 QUAZITE BOXES, ONE ON EACH SIDE OF ROAD CONNECTED WITH A 2"C.

**NOTES:**

1. REFER TO CIVIL, TELECOM AND ARCHITECTURAL SHEETS FOR ADDITIONAL INFORMATION.
2. NEW CONDUIT FOR PRIMARY ELECTRICAL EXTENSIONS SHALL BE PROVIDED BY THE CONTRACTOR. HORIZONTAL BELOW GRADE CONDUIT SHALL BE SCHEDULE 40 PVC. ALL 90° BENDS SHALL BE LONG SWEEP. ALL 90° BENDS AND RISERS SHALL BE GALVANIZED RIGID STEEL. MIN. BURY DEPTH OF HORIZONTAL BELOW GRADE CONDUIT FOR PRIMARY ELECTRICAL POWER SHALL BE 42".
3. NEW PRIMARY PEDESTAL SHALL BE FURNISHED BY POWER CO. INSTALLED BY THE CONTRACTOR.
4. ALL NEW PRIMARY CONDUCTORS SHALL BE PROVIDED BY POWER CO.

**UTILITY CONTACTS:**

| | |
|---|---|
| WATER: | JOHN HONTZ, MISSOURI AMERICAN WATER CO. (816) 387-6285 |
| SEWER: | ROGER SPARKS, CITY OF ST. JOSEPH (816) 271-4733 |
| GAS: | TOM McGILL, MISSOURI GAS ENERGY (816) 676-6240 |
| POWER: | BRENT HILL, KANSAS CITY POWER AND LIGHT (816) 387-6285 |

**ELECTRICAL LOAD PROFILE:**

| | |
|---|---|
| HVAC: | |
| HEATING AND VENTILATING | = 10.4 KW |
| AIR CONDITIONING | = 17.3 KW |
| LIGHTING: | |
| INTERIOR/EXTERIOR | = 6.4 KW/1.2 KW |
| CONVENIENCE POWER | = 11.2 KW |
| MISC. EQUIPMENT | = 10.7 KW |
| | TOTAL = 57.2 KW |

**GAS LOAD:**

| | |
|---|---|
| FURNACE INPUT: | 240 MBH |
| DOMESTIC WATER HEATER: | 100 MBH |
| VENT UNIT INPUT: | 100 MBH |
| RADIANT TUBE HEATER: | 150 MBH |
| | TOTAL = 590 MBH |


HTK ARCHITECTS PA
9300 W 110TH ST. STE. 150
OVERLAND PARK, KS 66210
P. 913.663.4373
9005 E. KANSAS AVE.
LIBERAL, KS 67901
P. 785.624.4373
WWW.HTKARCHITECTS.NET


STATE OF MISSOURI
RICHARD R. BEARDMORE
NUMBER PE-2005030699
PROFESSIONAL ENGINEER
7/23/14

DATE:
- 2014-07-24

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

SHEET CONTENTS:
- SITE PLAN - MECH/ELEC


LS&A Latimer Sommers & Associates, P.A.
CONSULTING ENGINEERS
3630 SW Summerfield Drive, Suite A
Topeka, Kansas 66614-3974
Telephone: (785) 233-3232
FAX: (785) 233-0647
Email: lsapa@lsapa.com


LSA PROJECT NO. 1302029

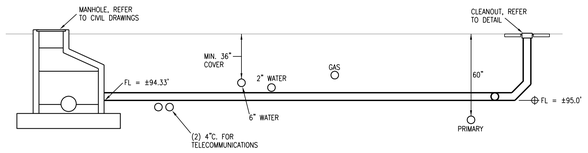
HTK PROJECT NUMBER:
- ULYB112022
  10008.01 - 0018

SHEET NUMBER:

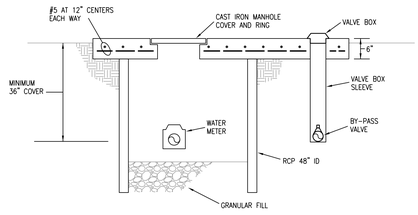
ME101

100% CONTRACT DOCUMENTS

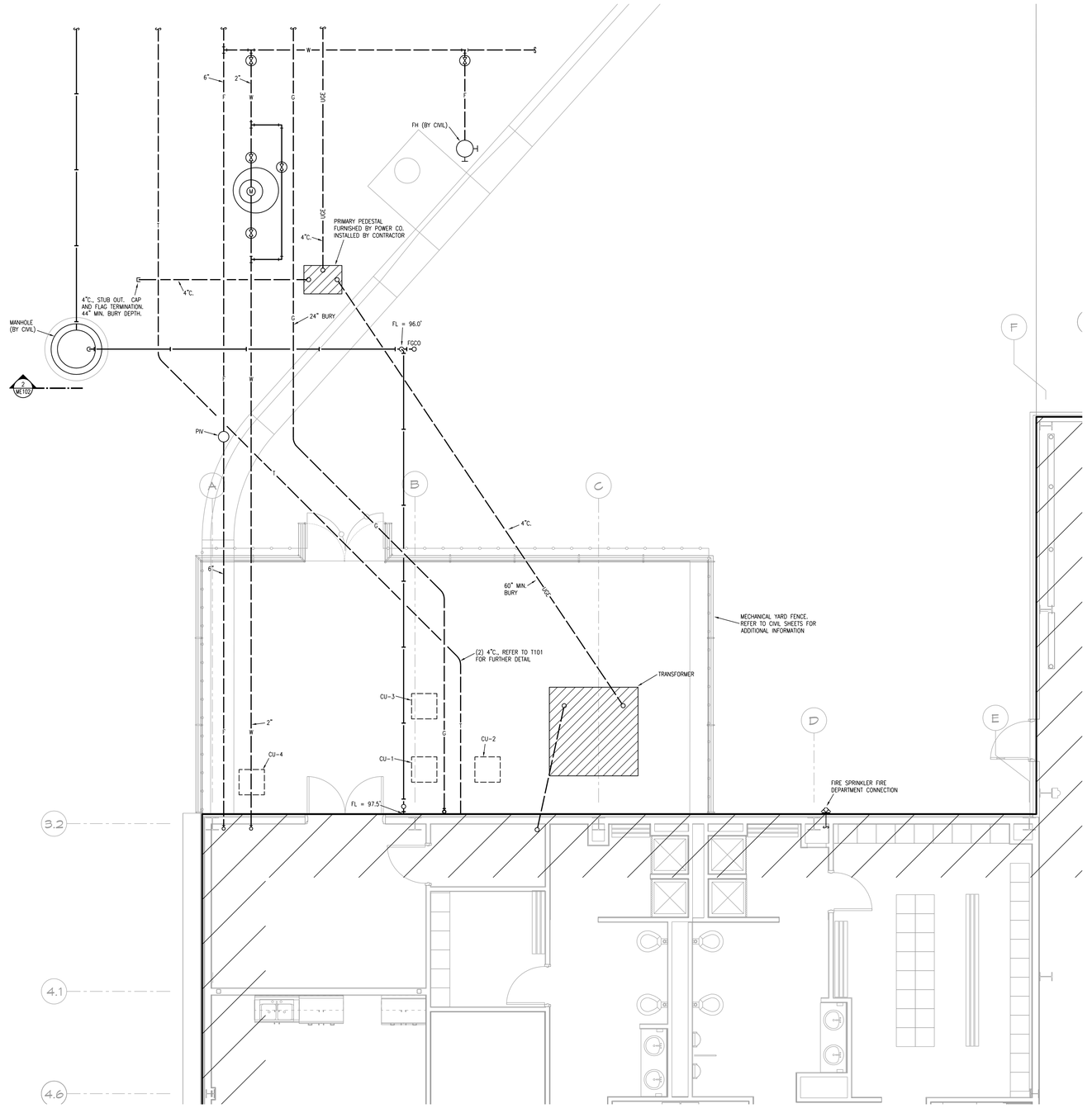

...ULYB112022-ME101_02_03.dwg, 1 07/21/14 EAN




## 2 SECTION
NO SCALE




## 3 WATER METER PIT DETAIL
NO SCALE




## 1 PARTIAL SITE PLAN
1/4"=1'-0" MECH/ELEC

NORTH

HTK ARCHITECTS PA
9300 W 110TH ST. STE. 150
OVERLAND PARK, KS 66210
P. 913.663.3373
9005 E KANSAS AVE.
SUITE A
DERBY, KS 67037
P. 785.266.3373
WWW.HTKARCHITECTS.NET

STATE OF MISSOURI
RICHARD R. BEARDMORE
NUMBER PE-2005020009
PROFESSIONAL ENGINEER
7/23/14

DATE:
- 2014-07-24

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

SHEET CONTENTS:
- PARTIAL SITE PLAN - MECH/ELEC

HTK PROJECT NUMBER:
- ULYB112022 : 10008.01 - 0018

SHEET NUMBER:

ME102

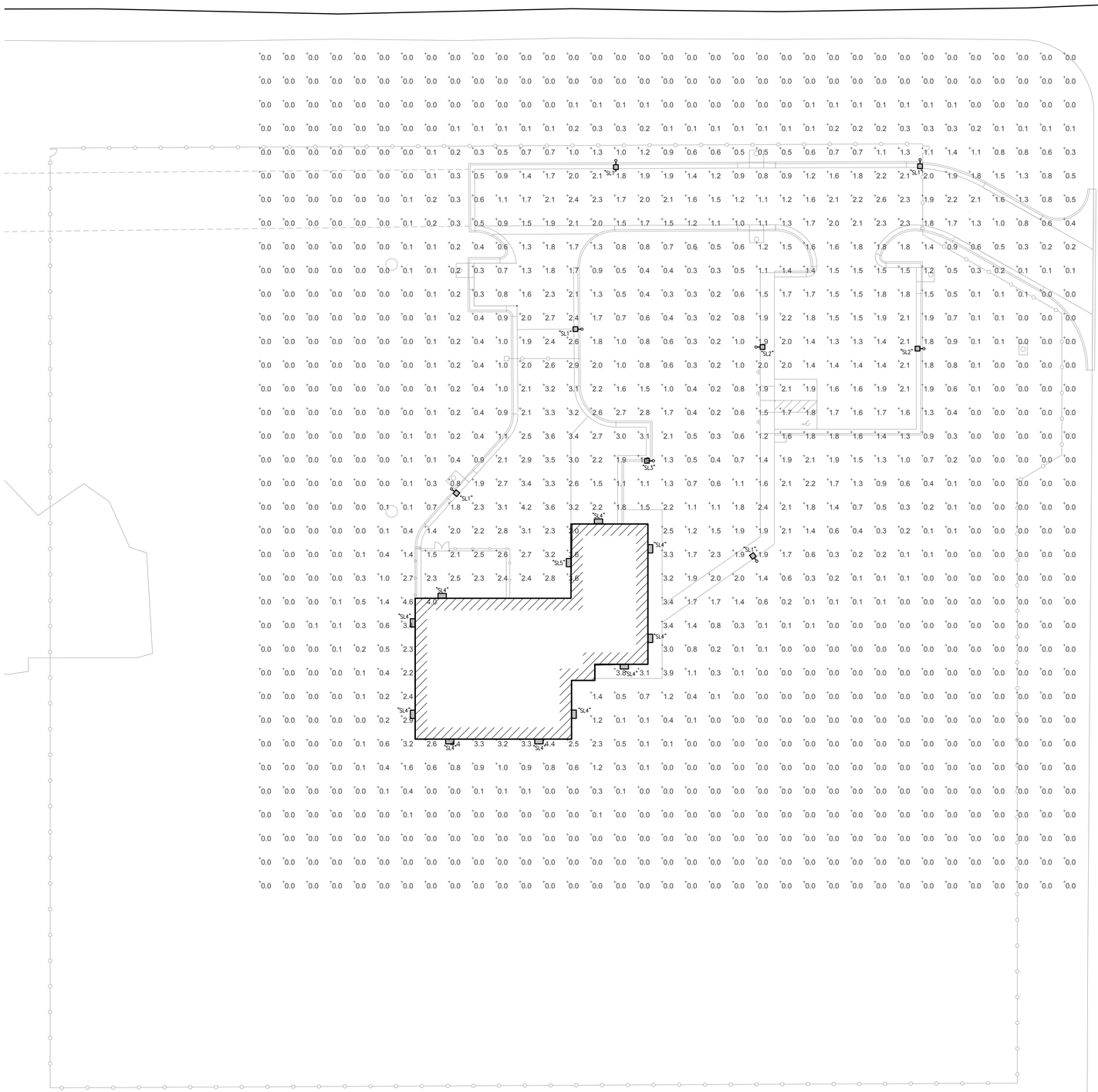
100% CONTRACT DOCUMENTS

LS&A Latimer Sommers & Associates, P.A.
CONSULTING ENGINEERS
3639 SW Summerfield Drive, Suite A
Topeka, Kansas 66614-2974
Telephone: (785) 233-3232
FAX: (785) 233-0647
Email: lsapa@lsapa.com

LSA PROJECT NO. 1302029

NOTES:

1. THIS SHEET IS PROVIDED FOR INFORMATION ONLY. PHOTOMETRICS REPRESENT THE LIGHTING RESULTANT OF THE POLE MOUNTED SITE LIGHTING LUMINAIRES AND BUILDING MOUNTED LIGHTING LUMINAIRES.




## 1 PHOTOMETRIC SITE PLAN

1" = 20'-0"

NORTH


HTK ARCHITECTS PA
9300 W 110TH ST. STE. 150
OVERLAND PARK, KS 66210
P 913.663.4373
9005 E. KANSAS AVE.
SUITE A
SPRINGFIELD, MO 65812
P 785.266.4373
WWW.HTKARCHITECTS.NET


STATE OF MISSOURI
RICHARD R. BEARDMORE
NUMBER PE-2009030695
PROFESSIONAL ENGINEER
7/23/14

DATE:
- 2014-07-24

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

SHEET CONTENTS:
- PHOTOMETRIC SITE PLAN


LS&A
Lattner Sommers & Associates, P.A.
CONSULTING ENGINEERS
3639 SW Summerfield Drive, Suite A
Topeka, Kansas 66614-3974
Telephone: (785) 233-3232
FAX: (785) 233-0647
Email: lsapa@lsapa.com

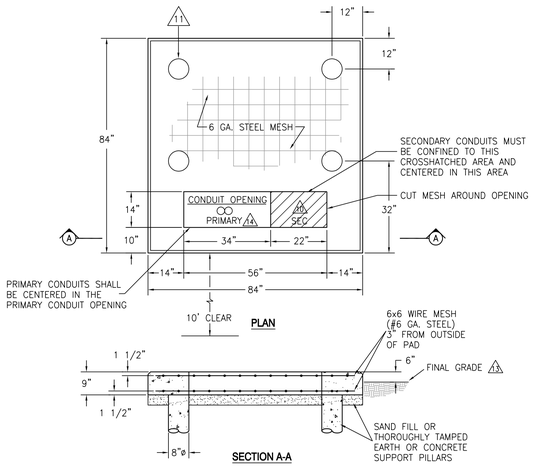

LSA PROJECT NO. 1302029

HTK PROJECT NUMBER:
- ULYB112022
  10008.01 - 0018

SHEET NUMBER:

ME103

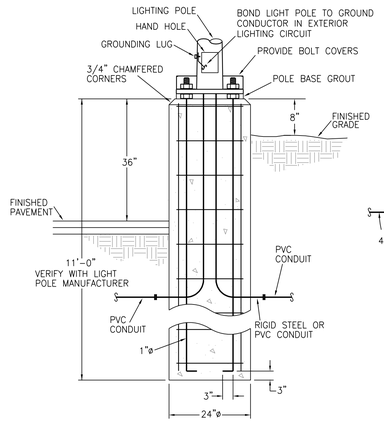
100% CONTRACT DOCUMENTS



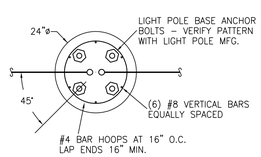

NOTES:

1. THE PAD LOCATION SHALL BE APPROVED BY POWER COMPANY.
2. TRANSFORMER SHALL BE INSTALLED NEAR THE CUSTOMER'S SERVICE ENTRANCE.
3. IF THE TRANSFORMER PAD IS INSTALLED IN AN AREA SUBJECT TO VEHICULAR TRAFFIC, THE INSTALLATION SHALL BE PROTECTED WITH A PIPE-RAIL GUARD.
4. FOR PROPER CLEARANCE AROUND THE TRANSFORMER, REFER TO POWER COMPANY.
5. CONTRACTOR SHALL EXTEND FORMS DOWN TO AT LEAST 3" BELOW AVERAGE GROUND LINE.
6. THE CONCRETE SHALL BE A MINIMUM OF 3,000 LB. MIX.
7. THE TOP OF THE TRANSFORMER PAD SHALL RECEIVE A SMOOTH TROWEL FINISH. THE CORNERS AND EDGES SHALL BE ROUNDED OR BEVELED.
8. THE CONDUIT OPENING SHALL BE FREE AND CLEAR OF CONCRETE.
9. THE TOPS OF THE CONDUITS SHALL BE FLUSH WITH THE TOP OF THE CONCRETE PAD.
10. NUMBER OF CONDUITS NECESSARY IS DEPENDENT ON THE MAXIMUM NUMBER OF SERVICE CONDUCTORS ALLOWED IN THE LOW-VOLTAGE COMPARTMENT OF THE TRANSFORMER. INSTALL 1" METERING CONDUIT FROM PAD TO METER ENCLOSURE WHEN TRANSFORMER RATED METERING IS SET ON ADJACENT BUILDING OR STAND AND METERING TRANSFORMERS ARE IN THE AMOUNT TRANSFORMER.
11. PILLARS ARE FORMED BY ANGERING AN 8" DIAMETER HOLE TO A DEPTH OF UNDISTURBED EARTH. A SEPARATOR, SUCH AS TAR PAPER, SHOULD BE PLACED BETWEEN THE PILLAR AND THE PAD SO THAT THE PAD CAN BE LEVELED AT A LATER TIME IF NECESSARY
12. POWER COMPANY SHALL RESERVE THE RIGHT NOT TO ACCEPT THE CONDITION OF THE CONCRETE PAD IF IT FAILS TO MEET THE REQUIREMENTS STATED IN THIS STANDARD.
13. THE 6" ABOVE GRADE CAN BE REDUCED TO 4" ABOVE FINISHED PAVEMENT.
14. CONDUIT OPENING DIMENSIONS PERTAIN TO ABBY AND GE (1991 AND NEWER) TRANSFORMERS. CHECK WITH POWER COMPANY'S LOCAL SERVICE CENTER TO BE SURE THAT THE OPENING IS THE CORRECT SIZE FOR THE TRANSFORMER DESIGNATED FOR THE JOB.
15. VERIFY PAD REGULATIONS WITH LOCAL POWER COMPANY.

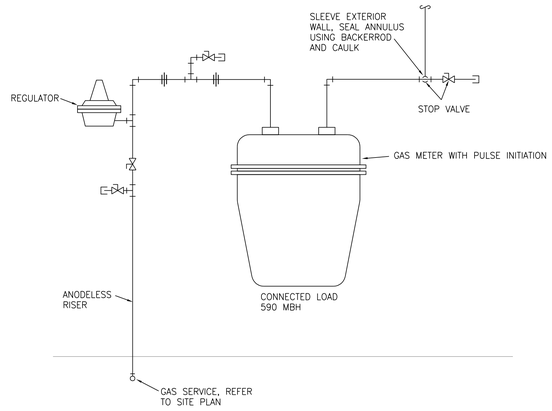
## 1 TRANSFORMER PAD DETAIL
1/2"=1'-0" 75-500 KVA



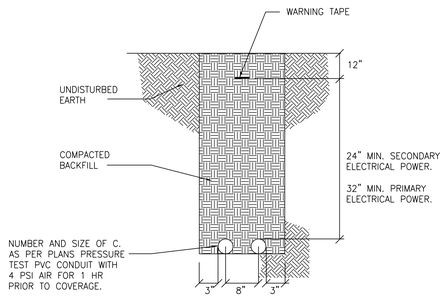

NOTE: ALL CONNECTIONS WITHIN LIGHT POLE SHALL BE DAMP LOCATION LABELED.



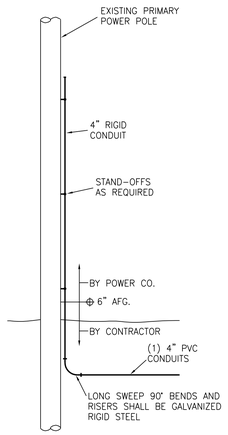

## 2 LIGHT POLE BASE DETAIL
NO SCALE



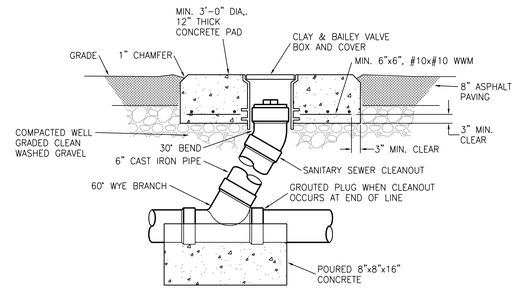

## 3 GAS METER PIPING SCHEMATIC
NO SCALE




## 4 UNDERGROUND CONDUIT
NO SCALE




## 5 POWER POLE DETAIL
NO SCALE




## 6 FLUSH GRADE CLEANOUT DETAIL
NO SCALE

LIGHT FIXTURE SCHDULE

| MARK | MANUFACT. | MODEL NUMBER | MOUNTING | | | FINISH | LAMPS | | | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | RECESS. | SURF. | WALL | | LED | FLUOR. | HID | CODE | QUAN. | |
| SL1 | COOPER | GLEON-AA-02-LED-E1-SL2 | | POLE | | BLACK | X | | | 103W LED | 1 | 1, 2, 3, 4 |
| SL2 | COOPER | GLEON-AA-02-LED-E1-SL3 | | POLE | | BLACK | X | | | 103W LED | 1 | 1, 2, 3, 4 |
| SL3 | COOPER | GLEON-AA-02-LED-E1-SL4 | | POLE | | BLACK | X | | | 103W LED | 1 | 1, 2, 3, 4 |
| SL4 | COOPER | IST-B01-LED-E1-GZW-BK | | | X | BLACK | X | | | 27W LED | 1 | 3 |
| SL5 | COOPER | IST-B02-LED-E1-BL4-BK | | | X | BLACK | X | | | 51W LED | 1 | 3 |

REMARKS:
1 - PROVIDE WITH (1) HEAD.
2 - VERIFY EPA RATING OF POLE WITH MANUFACTURE.
3 - 120 V.
4 - MOUNT ON 20' POLE

HTK ARCHITECTS PA
9300 W 110TH ST. STE. 150
OVERLAND PARK, KS 66210
P. 913.663.5373
9005 E KANSAS AVE.
SPRINGFIELD, MO 65807
P. 785.266.5373 WWW.HTKARCHITECTS.NET

STATE OF MISSOURI
RICHARD R. BEARDMORE
NUMBER PE-2009030695
PROFESSIONAL ENGINEER
7/23/14

DATE:
- 2014-07-24

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

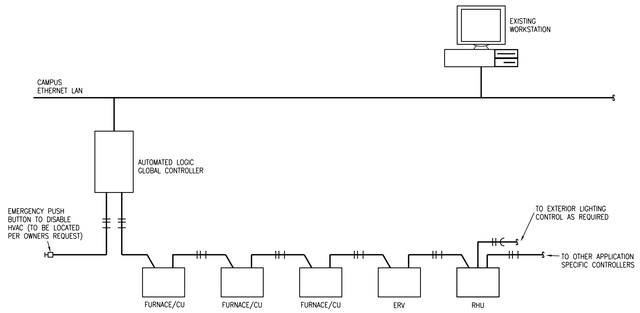
SHEET CONTENTS:
- SITE DETAILS

HTK PROJECT NUMBER:
- ULYB112022
10008.01 - 0018

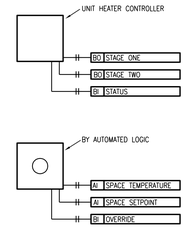
SHEET NUMBER:
ME201
100% CONTRACT DOCUMENTS

LS&A Latimer Sommers & Associates, P.A.
CONSULTING ENGINEERS
3639 SW Summerfield Drive, Suite A
Topeka, Kansas 66614-3974
Telephone: (785) 233-3232
FAX: (785) 233-0647
Email: lsapa@lsapa.com
LSA PROJECT NO. 1302029

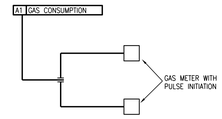
...\ULYB112022-ME201.dwg 96 07/11/14 GTC



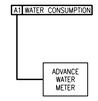

## 1 FMS NETWORK OVERVIEW DIAGRAM
NO SCALE



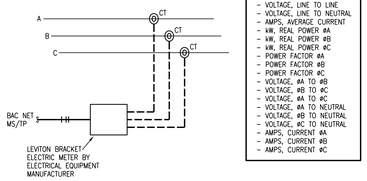

## 2 INFRARED RADIANT HEATER CONTROL
NO SCALE




## 3 GAS METER
NO SCALE




## 4 WATER METER
NO SCALE



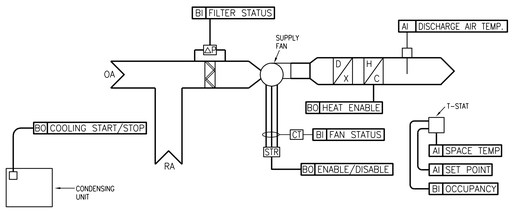

PROVIDE POINTS:

- kWH CONSUMPTION
- kW, REAL POWER
- VAR, REACTIVE POWER
- VA, APPARENT POWER
- POWER FACTOR
- VOLTAGE, LINE TO LINE
- VOLTAGE, LINE TO NEUTRAL
- AMPS, AVERAGE CURRENT
- kW, REAL POWER #A
- kW, REAL POWER #B
- kW, REAL POWER #C
- POWER FACTOR #A
- POWER FACTOR #B
- POWER FACTOR #C
- VOLTAGE, #A TO #B
- VOLTAGE, #B TO #C
- VOLTAGE, #A TO #C
- VOLTAGE, #A TO NEUTRAL
- VOLTAGE, #B TO NEUTRAL
- VOLTAGE, #C TO NEUTRAL
- AMPS, CURRENT #A
- AMPS, CURRENT #B
- AMPS, CURRENT #C

## 5 METERING
NO SCALE ELECTRICAL

FURNACE SEQUENCE OF OPERATION:

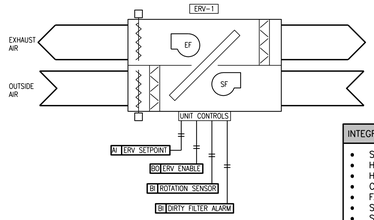
AIR COOLED HEAT PUMP SHALL BE PROVIDED WITH FACTORY CONTROLS AND PROGRAMMABLE THERMOSTAT. BUILDING DDC SYSTEM SHALL PROVIDE ENABLE/DISABLE CONTROL AND MONITOR POINTS AS SHOWN ON DIAGRAM.




## 6 AIR COOLED HEAT PUMP WITH GAS FIRED FURNACE CONTROL
NO SCALE (F-1, F-2, F-3)

ERV-1 SEQUENCE OF OPERATION:

ERV-1 SHALL BE PROVIDED WITH FACTORY CONTROLS. BUILDING DDC SYSTEM SHALL PROVIDE ENABLE/DISABLE CONTROL AND MONITOR POINTS AS SHOWN ON DIAGRAM.




INTEGRATION:

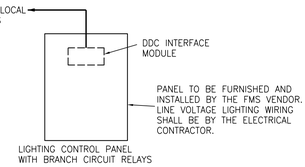
- SUPPLY AIR SETPOINT.
- HEAT WHEEL STATUS.
- HEAT WHEEL SUPPLY TEMP.
- COOLING ENABLED STATUS.
- FAN STATUS.
- SUPPLY AIR TEMP.
- SA HIGH STATE.
- RA LOW STATIC.
- SUPPLY FAN LOCKOUT.
- RETURN FAN LOCKOUT.
- UNIT ALARM.
- OCCUPIED STATUS.

## 7 ERV-1 CONTROL
NO SCALE

SITE LIGHTING CONTROL SEQUENCE OF OPERATION:

SITE LIGHTING CONTROL: THE SITE LIGHTING CONTROL PANEL AND ITS RESPECTIVE CIRCUITS WILL BE CONTROLLED VIA THE BUILDING AUTOMATION SYSTEM. REFER TO THE SITE LIGHTING POWER PANELS FOR THE CIRCUITS AND THEIR SERVICE. CIRCUITS OF SITE LIGHTING WILL BE INDIVIDUALLY CONTROLLABLE FROM THE BAS. A SEPARATE OUTPUT WILL BE PROVIDED FOR EACH CIRCUIT.

THE CIRCUITS WILL BE PROGRAMMED TO OPERATE ACCORDING TO A TIME-OF-DAY FUNCTION BUILT INTO THE FMS. IN THE LIGHTING MODE, THE LIGHTS WILL BE ENERGIZED UNTIL THE TIME OF DAY TURNS THEM OFF.




## 8 SITE LIGHTING CONTROL
NO SCALE (PANEL "SLCP")

HTK ARCHITECTS PA
9300 W 110TH ST. STE. 150
OVERLAND PARK, KS 66210
P. 913.663.4373
9005 E KANSAS AVE.
SUITE A
WICHITA, KS 67207
P. 785.266.4373
WWW.HTKARCHITECTS.NET

STATE OF MISSOURI
RICHARD R. BEARDMORE
NUMBER PE-2005030695
PROFESSIONAL ENGINEER
7/23/14

DATE:
- 2014-07-24

REVISED DATE:

SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

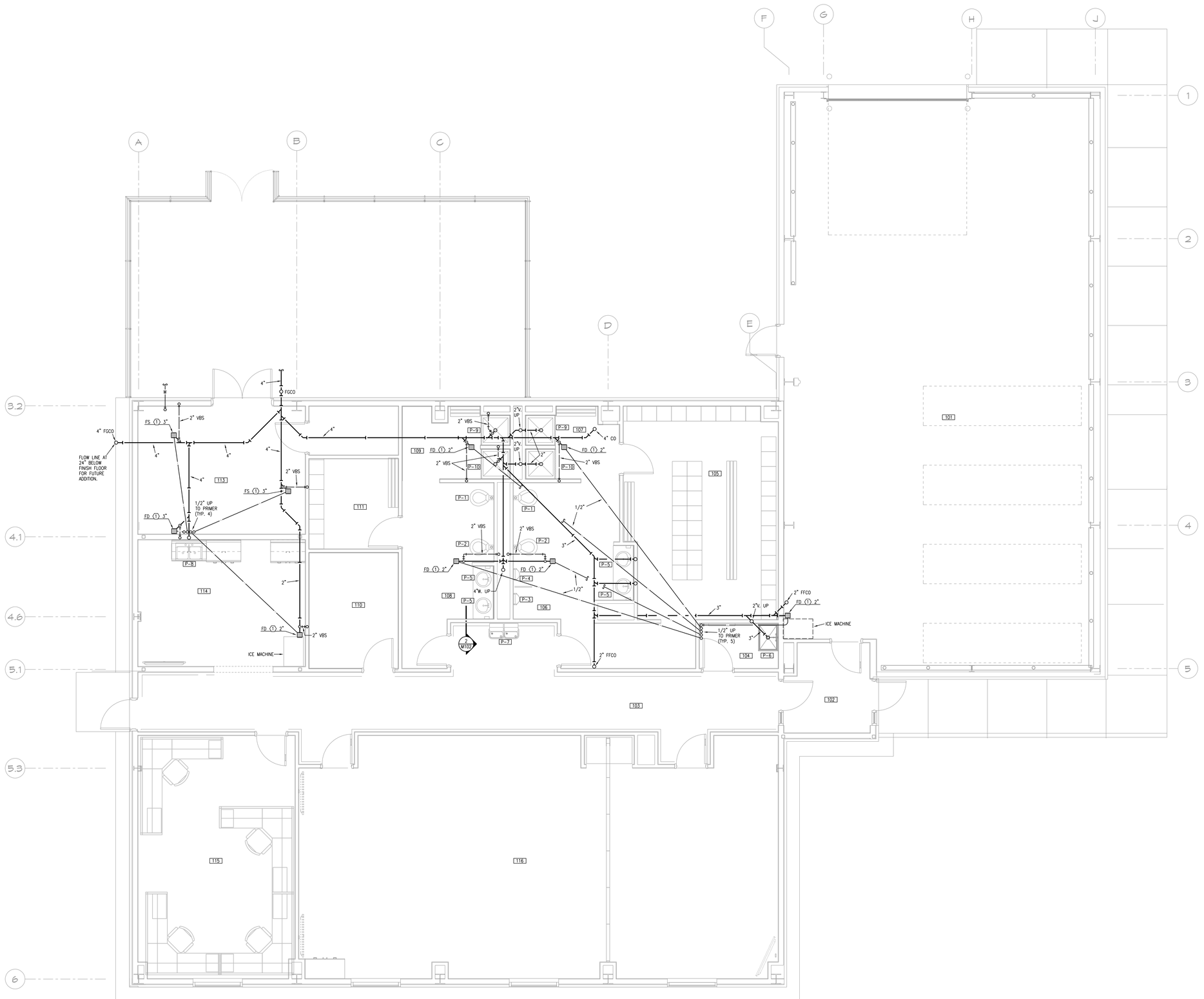
SHEET CONTENTS:
- BUILDING AUTOMATION SYSTEM DIAGRAMS

HTK PROJECT NUMBER:
- ULYB112022
  10008.01 - 0018

SHEET NUMBER:
ME301
100% CONTRACT DOCUMENTS

LS&A Latimer Sommers & Associates, P.A.
CONSULTING ENGINEERS
3639 SW Summerfield Drive, Suite A
Topeka, Kansas 66614-3974
Telephone: (785) 233-3232
FAX: (785) 233-0647
Email: lsapa@lsapa.com
LSA PROJECT NO. 1302029

...ME301.dwg 96 07/10/14 ALC




## 1 FLOOR PLAN
1/4"=1'-0" BELOW-GRADE PLUMBING

NORTH

NOTES:

1. VERIFY LOCATION OF ALL WASTE, VENT AND WATER PIPING PRIOR TO CONSTRUCTION.
2. DO NOT ROUTE PIPING OVER ELECTRICAL EQUIPMENT OR WITHIN NEC CLEARANCE REQUIREMENTS. COORDINATE EQUIPMENT INSTALLATION, ROUTING AND LOCATION WITH WORK OF OTHER TRADES.
3. COORDINATE ACCESS TO VALVES AND OTHER ABOVE CEILING EQUIPMENT EQUIPMENT WITH LUMINAIRES, ETC.
4. ALL BRANCH PIPING RUNS TO SINGLE PLUMBING FIXTURES SHALL BE 1/2" UNLESS NOTED OTHERWISE.
5. ALL PIPING SHALL BE TIGHT TO STRUCTURE UNLESS NOTED OTHERWISE OR AS REQUIRED FOR COORDINATION. FIELD COORDINATE AND PROVIDE OFFSETS AS REQUIRED.
6. ALL VALVES SHALL BE LOCATED ABOVE ACCESSIBLE CEILINGS. WHERE VALVES ARE LOCATED ABOVE HARD CEILING, AN 18"x18" MINIMUM ACCESS PANEL SHALL BE PROVIDED BY G/C, REFER TO ARCHITECTURAL.
7. NOT ALL OFFSETS AND DROPS ARE SHOWN ON PLANS. COORDINATE WITH ALL OTHER TRADES, EXISTING TRADES, STRUCTURE, AND INSTALL AS REQUIRED.
8. PROVIDE 3 1/2" CONCRETE HOUSEKEEPING PAD FOR ALL FLOOR MOUNTED EQUIPMENT INCLUDING WATER HEATER, EXPANSION TANK, ETC.
9. REFER TO SPECIFICATION FOR PIPE LABELING REQUIREMENTS.
10. ALL EXPOSED PIPING AND/OR INSULATED PIPING SHALL BE FIELD PAINTED TO MATCH ADJACENT SURFACES UNLESS IN MECHANICAL ROOMS. COORDINATE WITH ARCHITECTURAL.
11. ALL PIPING SHALL BE CONCEALED UNLESS NOTED OTHERWISE. ANY PIPING THAT MAY NEED TO BE EXPOSED DUE TO FIELD CONDITIONS SHALL BE COORDINATED WITH ARCHITECT AND ENGINEER PRIOR TO INSTALLATION.
12. ALL PLUMBING VENTS SHALL BE A MINIMUM OF 15 FT. FROM OUTSIDE AIR OPENINGS, INTAKE LOUVERS, PENTHOUSES, ETC. FIELD ROUTE AS REQUIRED.
13. SUPPORT, SUSPENSION, OR HANGING OF ALL PIPING AND METHODS SHALL BE REVIEWED WITH STRUCTURAL PRIOR TO INSTALLATION.
14. HOLE PENETRATIONS IN EXISTING WALLS SHALL BE REVIEWED WITH STRUCTURAL PRIOR TO INSTALLATION. A MINIMUM SEPARATION OF TWICE THE LARGEST HOLE DIAMETER SHALL BE REQUIRED BETWEEN ADJACENT PENETRATIONS.
15. REFER TO ARCHITECTURAL PLANS FOR FIXTURE MOUNTING HEIGHTS, ADA CLEARANCES, CONTROL LOCATIONS, ETC.
16. ALL PIPE INSULATION SYSTEMS SHALL MAINTAIN PROPER VAPOR BARRIER AS SPECIFIED. TAPE AND SEAL ALL JOINTS AND COVERS ACCORDINGLY. ALL ELBOWS AND FITTING COVERS SHALL BE ADEQUATELY PACKED WITH INSULATION.
17. ALL SINKS AND PLUMBING FIXTURES SCHEDULED FOR INSTALLATION IN BASE CABINETS OR OTHER MILLWORK SHALL BE COORDINATED WITH MILLWORK SHOP DRAWINGS PRIOR TO PURCHASE. VERIFY CLEARANCES, INSTALLATION AND FIT ACCORDINGLY. REPORT DEVIATIONS TO ARCHITECT AND ENGINEER FOR REVIEW.
18. COORDINATE ROUTING OF WASTE PIPING WITH EXISTING FOOTINGS.
19. PROVIDE SHUT-OFF VALVES AND FLEXIBLE PIPING FOR ALL FREE-STANDING EQUIPMENT FURNISHED BY OTHERS, I.E. REFRIGERATORS, ICE MACHINES, COFFEE MAKERS, WASHERS, COOLERS, ETC.
20. MINIMUM SLOPE OF WASTE PIPING SHALL BE 1/4" PER FT. VERIFY ELEVATIONS WITH NEW WASTE SERVICES. REFER TO CIVIL PLANS.
21. SAW-CUTTING OF EXISTING SLAB WILL BE REQUIRED IN ALL EXISTING RENOVATION AREAS. INSTALLATION SHALL OCCUR AFTER ALL UNDERSLAB DOMESTIC WATER AND ELECTRICAL HAS BEEN REMOVED OR DECOMMISSIONED.
22. VERIFY LOCATION OF ALL EXISTING FINISH FLOOR CLEANOUT AND COORDINATE WITH NEW FINISH FLOOR.

**DOMESTIC WATER CONNECTIONS**

| FIXTURE TYPE | DESCRIPTION | DOMESTIC COLD WATER | DOMESTIC HOT WATER |
|---|---|---|---|
| P-1 | FLUSH VALVE WATER CLOSET | 1 1/4" | – |
| P-2 | FLUSH VALVE WATER CLOSET | 1 1/4" | – |
| P-3 | FLUSH VALVE URINAL | 3/4" | – |
| P-4 | FLUSH VALVE URINAL | 3/4" | – |
| P-5 | WALL HUNG LAVATORY | 1/2" | 1/2" |
| P-6 | JANITORS SINK | 3/4" | 3/4" |
| P-7 | DRINKING FOUNTAIN | 1/2" | – |
| P-8 | DOUBLE COMPARTMENT COUNTERTOP SINK | 1/2" | 1/2" |
| P-9 | SHOWER | 1/2" | 1/2" |
| P-10 | SHOWER | 1/2" | 1/2" |
| P-11 | ICE MAKER | 1/2" | – |


HTK ARCHITECTS PA
9300 W 110TH ST. STE. 150
OVERLAND PARK, KS 66210
P. 913.663.5373
9005 E KANSAS AVE.
SPRINGFIELD, MO 65812
P. 785.266.5373
WWW.HTKARCHITECTS.NET


STATE OF MISSOURI
RICHARD R. BEARDMORE
NUMBER PE-2005030059
PROFESSIONAL ENGINEER
7/23/14

DATE:
- 2014-07-24

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

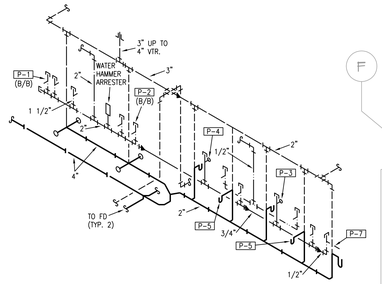
SHEET CONTENTS:
- FLOOR PLAN - BELOW-GRADE
- PLUMBING


LS&A Latimer Sommers & Associates, P.A.
CONSULTING ENGINEERS
3639 SW Summerfield Drive, Suite A
Topeka, Kansas 66614-3974
Telephone: (785) 233-3232
FAX: (785) 233-0647
Email: lsapa@lsapa.com
LSA PROJECT NO. 1302029

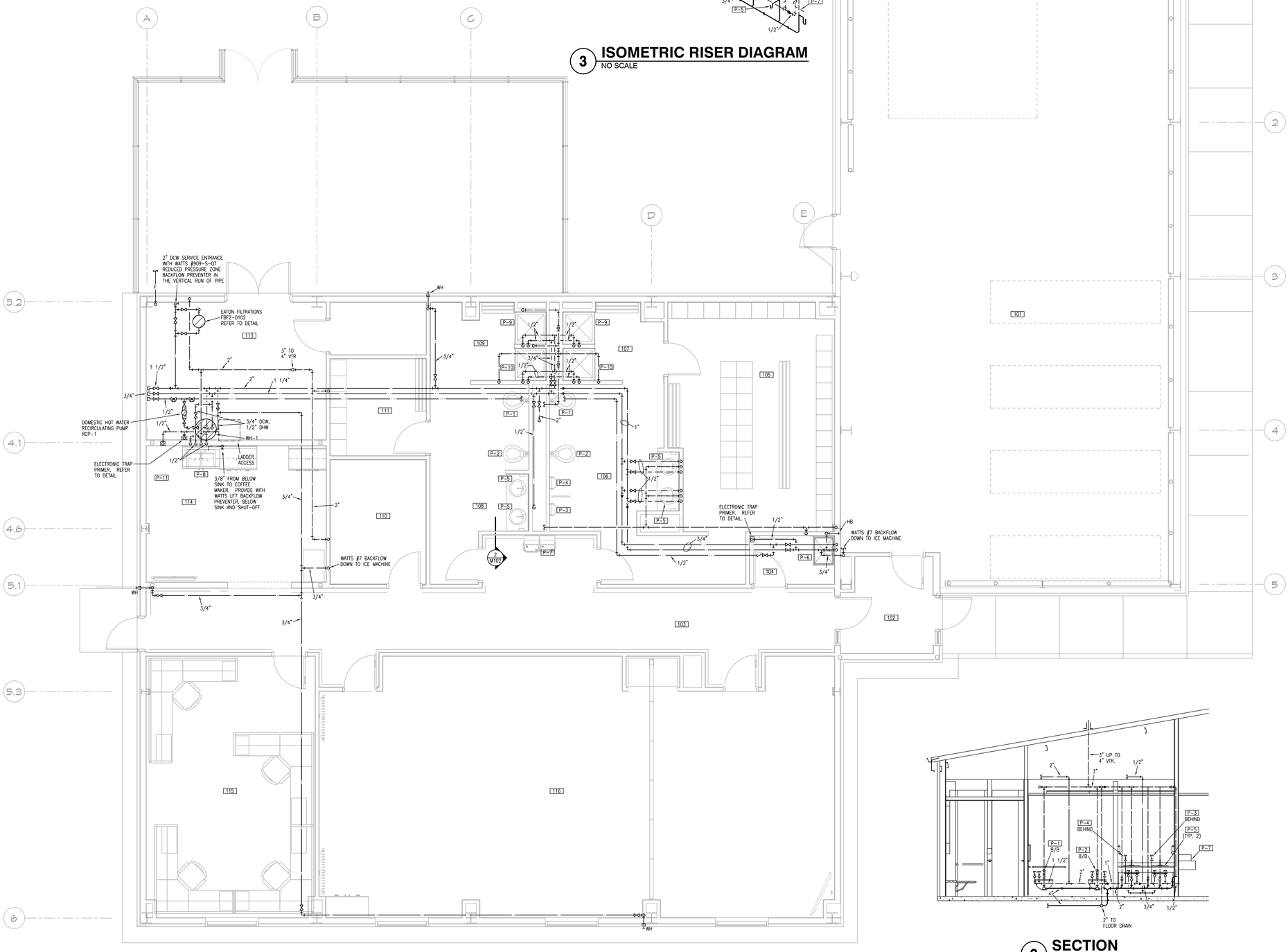

HTK PROJECT NUMBER:
- ULYB112022
  10008.01 - 0018

SHEET NUMBER:
M101
100% CONTRACT DOCUMENTS


...ULYB112022-M101_02.dwg 1 07/23/14 EJC




## 3 ISOMETRIC RISER DIAGRAM
NO SCALE




## 1 FLOOR PLAN
1/4"=1'-0" PLUMBING

NORTH




## 2 SECTION
1/4"=1'-0"

NOTES:

1. VERIFY LOCATION OF ALL WASTE, VENT AND WATER PIPING PRIOR TO CONSTRUCTION.
2. DO NOT ROUTE PIPING OVER ELECTRICAL EQUIPMENT OR WITHIN NEC CLEARANCE REQUIREMENTS. COORDINATE EQUIPMENT INSTALLATION, ROUTING AND LOCATION WITH WORK OF OTHER TRADES.
3. COORDINATE ACCESS TO VALVES AND OTHER ABOVE CEILING EQUIPMENT EQUIPMENT WITH LUMINAIRES, ETC.
4. ALL BRANCH PIPING RUNS TO SINGLE PLUMBING FIXTURES SHALL BE 1/2" UNLESS NOTED OTHERWISE.
5. ALL PIPING SHALL BE TIGHT TO STRUCTURE UNLESS NOTED OTHERWISE OR AS REQUIRED FOR COORDINATION. FIELD COORDINATE AND PROVIDE OFFSETS AS REQUIRED.
6. ALL VALVES SHALL BE LOCATED ABOVE ACCESSIBLE CEILINGS. WHERE VALVES ARE LOCATED ABOVE HARD CEILING, AN 18"x18" MINIMUM ACCESS PANEL SHALL BE PROVIDED BY G/C, REFER TO ARCHITECTURAL.
7. NOT ALL OFFSETS AND DROPS ARE SHOWN ON PLANS. COORDINATE WITH ALL OTHER TRADES, EXISTING TRADES, STRUCTURE, AND INSTALL AS REQUIRED.
8. PROVIDE 3 1/2" CONCRETE HOUSEKEEPING PAD FOR ALL FLOOR MOUNTED EQUIPMENT INCLUDING WATER HEATER, EXPANSION TANK, ETC.
9. REFER TO SPECIFICATION FOR PIPE LABELING REQUIREMENTS.
10. ALL EXPOSED PIPING AND/OR INSULATED PIPING SHALL BE FIELD PAINTED TO MATCH ADJACENT SURFACES UNLESS IN MECHANICAL ROOMS. COORDINATE WITH ARCHITECTURAL.
11. ALL PIPING SHALL BE CONCEALED UNLESS NOTED OTHERWISE. ANY PIPING THAT MAY NEED TO BE EXPOSED DUE TO FIELD CONDITIONS SHALL BE COORDINATED WITH ARCHITECT AND ENGINEER PRIOR TO INSTALLATION.
12. ALL PLUMBING VENTS SHALL BE A MINIMUM OF 15 FT. FROM OUTSIDE AIR OPENINGS, INTAKE LOUVERS, PENTHOUSES, ETC. FIELD ROUTE AS REQUIRED.
13. SUPPORT, SUSPENSION, OR HANGING OF ALL PIPING AND METHODS SHALL BE REVIEWED WITH STRUCTURAL PRIOR TO INSTALLATION.
14. HOLE PENETRATIONS IN EXISTING WALLS SHALL BE REVIEWED WITH STRUCTURAL PRIOR TO INSTALLATION. A MINIMUM SEPARATION OF TWICE THE LARGEST HOLE DIAMETER SHALL BE REQUIRED BETWEEN ADJACENT PENETRATIONS.
15. REFER TO ARCHITECTURAL PLANS FOR FIXTURE MOUNTING HEIGHTS, ADA CLEARANCES, CONTROL LOCATIONS, ETC.
16. ALL PIPE INSULATION SYSTEMS SHALL MAINTAIN PROPER VAPOR BARRIER AS SPECIFIED. TAPE AND SEAL ALL JOINTS AND COVERS ACCORDINGLY. ALL ELBOWS AND FITTING COVERS SHALL BE ADEQUATELY PACKED WITH INSULATION.
17. ALL SINKS AND PLUMBING FIXTURES SCHEDULED FOR INSTALLATION IN BASE CABINETS OR OTHER MILLWORK SHALL BE COORDINATED WITH MILLWORK SHOP DRAWINGS PRIOR TO PURCHASE. VERIFY CLEARANCES, INSTALLATION AND FIT ACCORDINGLY. REPORT DEVIATIONS TO ARCHITECT AND ENGINEER FOR REVIEW.
18. COORDINATE ROUTING OF WASTE PIPING WITH EXISTING FOOTINGS.
19. PROVIDE SHUT-OFF VALVES AND FLEXIBLE PIPING FOR ALL FREE-STANDING EQUIPMENT FURNISHED BY OTHERS, I.E. REFRIGERATORS, ICE MACHINES, COFFEE MAKERS, WASHERS, COOLERS, ETC.
20. MINIMUM SLOPE OF WASTE PIPING SHALL BE 1/4" PER FT. VERIFY ELEVATIONS WITH NEW WASTE SERVICES. REFER TO CIVIL PLANS.
21. SAW-CUTTING OF EXISTING SLAB WILL BE REQUIRED IN ALL EXISTING RENOVATION AREAS. INSTALLATION SHALL OCCUR AFTER ALL UNDERSLAB DOMESTIC WATER AND ELECTRICAL HAS BEEN REMOVED OR DECOMMISSIONED.
22. VERIFY LOCATION OF ALL EXISTING FINISH FLOOR CLEANOUT AND COORDINATE WITH NEW FINISH FLOOR.

**DOMESTIC WATER CONNECTIONS**

| FIXTURE TYPE | DESCRIPTION | DOMESTIC COLD WATER | DOMESTIC HOT WATER |
|---|---|---|---|
| P-1 | FLUSH VALVE WATER CLOSET | 1 1/4" | – |
| P-2 | FLUSH VALVE WATER CLOSET | 1 1/4" | – |
| P-3 | FLUSH VALVE URINAL | 3/4" | – |
| P-4 | FLUSH VALVE URINAL | 3/4" | – |
| P-5 | WALL HUNG LAVATORY | 1/2" | 1/2" |
| P-6 | JANITORS SINK | 3/4" | 3/4" |
| P-7 | DRINKING FOUNTAIN | 1/2" | – |
| P-8 | DOUBLE COMPARTMENT COUNTERTOP SINK | 1/2" | 1/2" |
| P-9 | SHOWER | 1/2" | 1/2" |
| P-10 | SHOWER | 1/2" | 1/2" |
| P-11 | ICE MAKER | 1/2" | – |


HTK ARCHITECTS PA
9300 W 110TH ST. STE. 150
OVERLAND PARK, KS 66210
P: 913.663.3373
9005 E KANSAS AVE.
SPRINGFIELD, MO 65812
P: 785.266.3373
WWW.HTKARCHITECTS.NET


STATE OF MISSOURI
RICHARD R. BEARDMORE
NUMBER PE-2005020059
PROFESSIONAL ENGINEER
12/13/14

DATE:
- 2014-07-24

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

SHEET CONTENTS:
- FLOOR PLAN - PLUMBING


LS&A Latimer Sommers & Associates, P.A.
CONSULTING ENGINEERS
3639 SW Burnett Drive, Suite A
Topeka, Kansas 66614-3974
Telephone: (785) 233-3232
FAX: (785) 233-0547
Email: lsapa@lsapa.com
LSA PROJECT NO. 1302029


HTK PROJECT NUMBER:
- ULYB112022
10008.01 - 0018

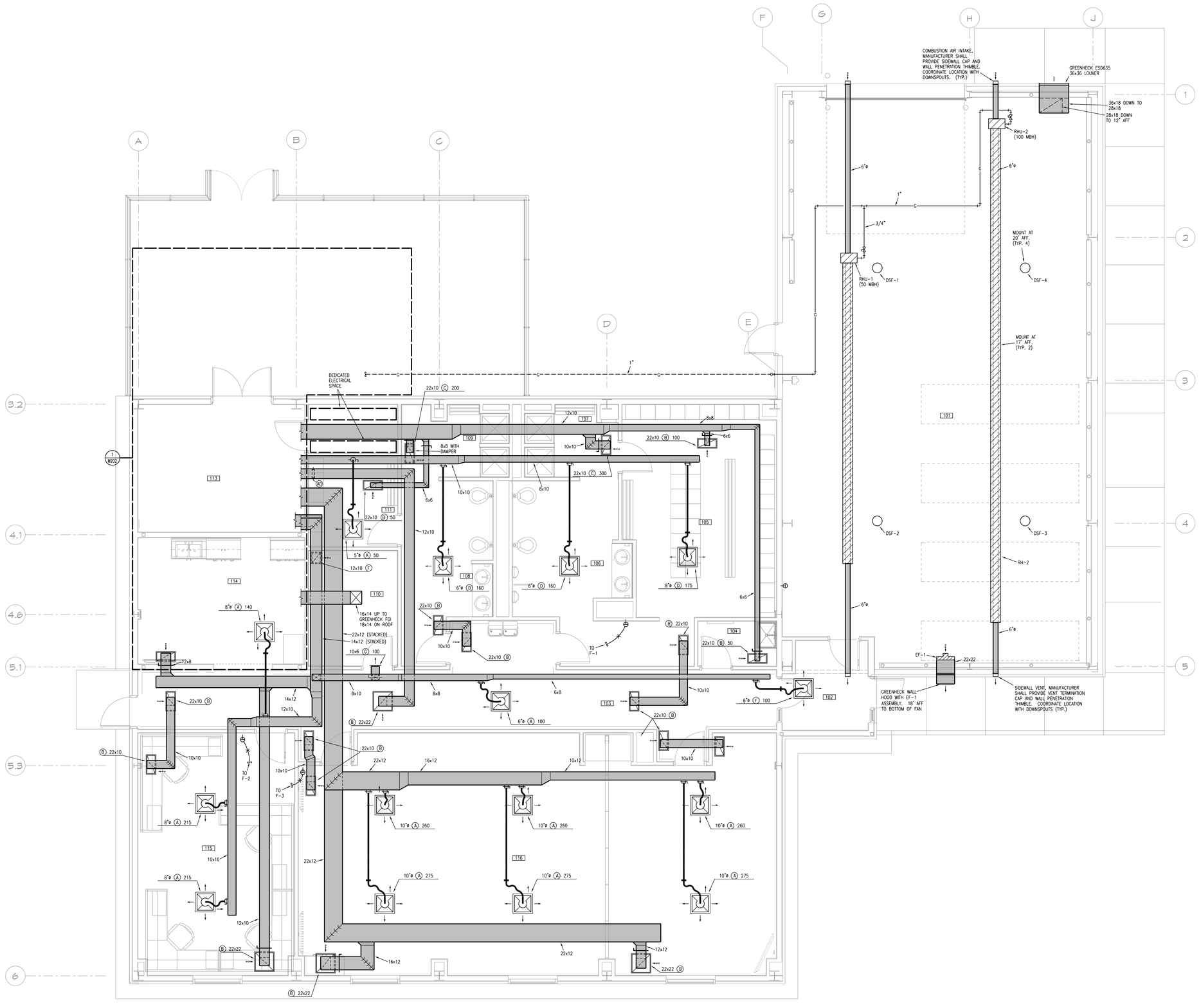
SHEET NUMBER:

M102

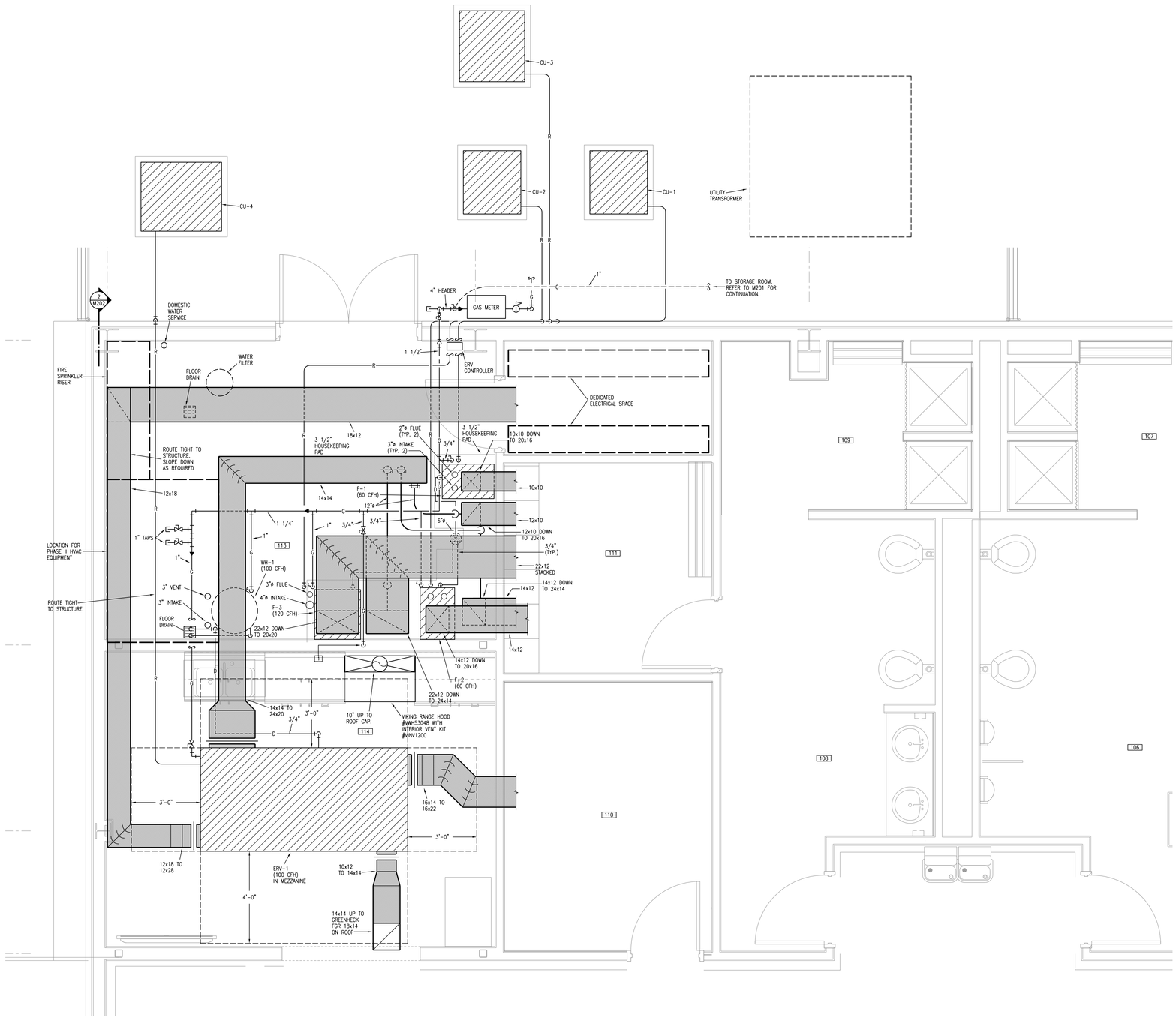
100% CONTRACT DOCUMENTS

NOTES:

1. ALL LOW PRESSURE DUCT RUN OUTS SHALL BE SAME SIZE AS DIFFUSER NECK.
2. DO NOT ROUTE DUCTWORK OVER ELECTRICAL EQUIPMENT OR WITHIN NEC CLEARANCE REQUIREMENTS.
3. COORDINATE DUCTWORK INSTALLATION, ROUTING AND LOCATION WITH WORK OF OTHER TRADES. COORDINATE ACCESS TO OTHER ABOVE CEILING EQUIPMENT. PROVIDE DUCTWORK OFFSETS WHERE REQUIRED.
4. ROUTE ALL DUCTWORK NO HIGHER THAN 14" AFF FOR ACCESS THROUGH CEILING TILE BELOW. ALL EQUIPMENT AND DAMPERS SHALL BE ACCESSIBLE BY LADDER UNLESS NOTED OTHERWISE.
5. ALL LOW PRESSURE CONCEALED ROUND DUCT SHALL BE SINGLE WALL SPIRAL, EXTERNAL INSULATED. LONGITUDINAL SEAM DUCTWORK IS ACCEPTABLE FOR ROUND DUCTS 10"ø OR SMALLER.
6. ALL LOW PRESSURE DUCT CONNECTIONS SHALL BE SEALED WITH WATER BASED SEALANT OR EQUIVALENT.
7. ALL DUCTWORK SHALL BE EXTERNALLY WRAPPED AND SHALL NOT HAVE LINER, INCLUDING VENTILATION AND EXHAUST DUCTS.
8. ALL DUCTWORK ELBOWS, TEES, CHANGE IN DIRECTION SHALL HAVE TURNING VANES.
9. ALL DUCTWORK AND EQUIPMENT SHALL BE SUPPORTED FROM STRUCTURE.

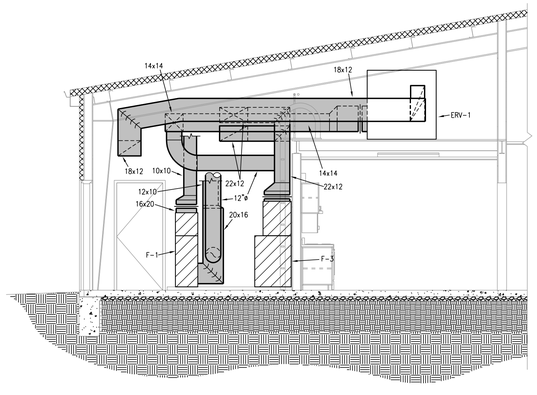

COMBUSTION AIR INTAKE, MANUFACTURER SHALL PROVIDE SIDEWALL CAP AND WALL PENETRATION THIMBLE. COORDINATE LOCATION WITH DOWNSPOUTS. (TYP.)
GREENHECK ESD635 36x36 LOUVER
36x18 DOWN TO 28x18
28x18 DOWN TO 12" AFF
RHU-2 (100 MBH)
RHU-1 (50 MBH)
DSF-1
DSF-2
DSF-3
DSF-4
MOUNT AT 20" AFF. (TYP. 4)
MOUNT AT 17" AFF. (TYP. 2)
RH-2
EF-1
22x22
GREENHECK WALL HOOD WITH EF-1 ASSEMBLY. 18" AFF TO BOTTOM OF FAN
SIDEWALL VENT, MANUFACTURER SHALL PROVIDE VENT TERMINATION CAP AND WALL PENETRATION THIMBLE. COORDINATE LOCATION WITH DOWNSPOUTS (TYP.)
DEDICATED ELECTRICAL SPACE
22x10 C 200
12x10
107
8x8
6x6
22x10 B 100
8x8 WITH DAMPER
109
10x10
22x10 C 300
8x10
113
111
22x10 B 50
6x6
12x10
5"ø A 50
12x10 F
114
110
16x14 UP TO GREENHECK FGI 18x14 ON ROOF
22x12 (STACKED)
14x12 (STACKED)
10x6 G 100
8"ø A 140
12x8
108
6"ø D 160
106
8"ø D 175
105
101
104
22x10 B
22x10 B 50
10x10
TO F-1
103
102
6"ø F 100
6"ø A 100
B 22x22
14x12
12x10
22x10 B
TO F-2
TO F-3
22x12
16x12
10"ø A 260
115
116
8"ø A 215
10"ø A 275
12x12
16x12
A1 M202
A6
A7
A8
A9
A10
A11
A12
A13
A14
A15
A16
A17
A18
A19
A20
A21
A22
A23
A24
A25
A26
A27
A28
A29
A30
A31
A32
A33
A34
A35
A36
A37
A38
A39
A40
A41
A42
A43
A44
A45

| LEGEND: |
| --- |
| 1 3/4" GAS DOWNT TO #MGB1, GUY GRAY METAL GAS BOX. |




## 1 PARTIAL FLOOR PLAN
1/2"=1'-0" HVAC

NORTH




## 2 SECTION
1/4"=1'-0"


HTK ARCHITECTS PA
9300 W 110TH ST. STE. 150
OVERLAND PARK, KS 66210
P. 913.663.5373
9005 E KANSAS AVE.
SUITE A
LIBERAL, KS 67901
P. 785.624.5373
WWW.HTKARCHITECTS.NET


STATE OF MISSOURI
RICHARD R. BEARDMORE
NUMBER PE-2005030009
PROFESSIONAL ENGINEER
7-23-14

DATE:
- 2014-07-24

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO


LS&A Latimer Sommers & Associates, P.A.
CONSULTING ENGINEERS
3639 SW Summerfield Drive, Suite A
Topeka, Kansas 66614-3974
Telephone: (785) 233-3232
FAX: (785) 233-0547
Email: lsapa@lsapa.com
LSA PROJECT NO. 1302029

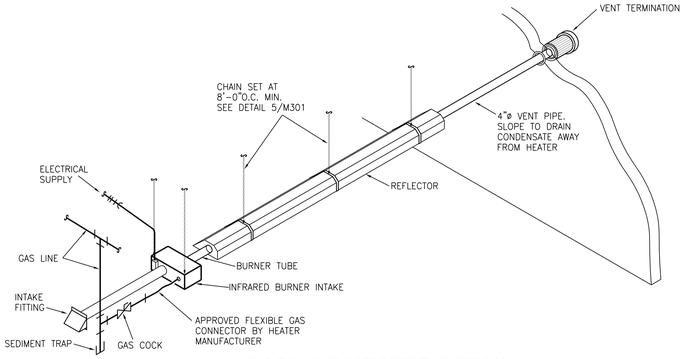

SHEET CONTENTS:
- PARTIAL FLOOR PLAN - HVAC

HTK PROJECT NUMBER:
- ULYB112022
10008.01 - 0018

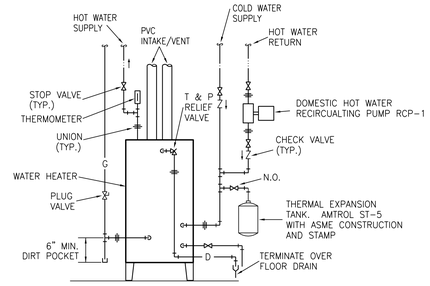
SHEET NUMBER:

M202

100% CONTRACT DOCUMENTS

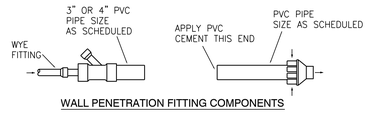



## 1 RADIANT HEATER DETAIL
NO SCALE

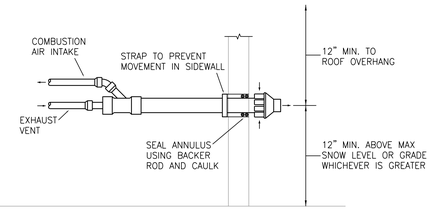



## 2 WATER HEATER DETAIL WITH RECIRCULATING PUMP
NO SCALE

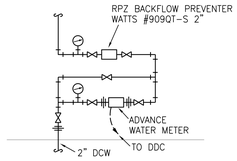
| PLASTIC PIPE DESIGNATIONS | | | |
|---|---|---|---|
| PVC – INTAKE AIR | | | |
| ASTM STANDARD | PIPE TYPE | ALLOWABLE TEMPERATURE | MARKING |
| F891 | CELLULAR CORE | 158 | ASTM F891 |
| D2665 | DWV PIPE | 158 | ASTM D2665 |
| D1785 | SCH. 40, 80, 120 | 158 | ASTM D1785 |
| D2241 | SDR SERIES | 158 | ASTM D2241 |
| PVC – INTAKE AIR | | | |
| ASTM STANDARD | PIPE TYPE | ALLOWABLE TEMPERATURE | MARKING |
| D2846 | CPVC 41 | 212 | ASTM D2846 |
| F441 | SCH. 40, 80 | 212 | ASTM F441 |
| F442 | SDR SERIES | 212 | ASTM F442 |
| ABS | | | |




WALL PENETRATION FITTING COMPONENTS

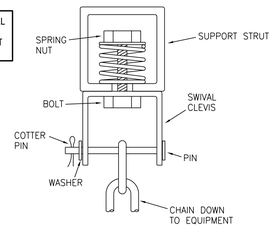



## 3 CONCENTRIC FURNACE VENT AND INTAKE TERMINATION DETAIL
NO SCALE

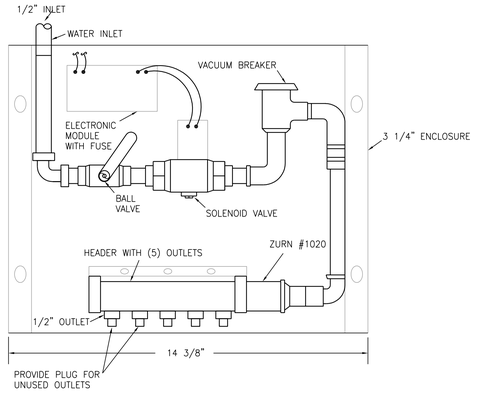



## 4 DOMESTIC WATER SERVICE ENTRANCE
NO SCALE

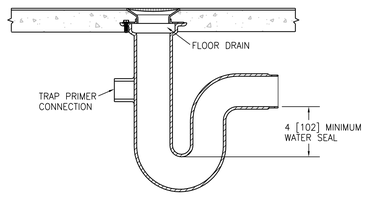
NOTE: PROVIDE BEAM CLAMP AND ALL REQUIRED AND ASSOCIATED HARDWARE TO SECURELY ATTACH SUPPORT STRUT TO BUILDING STRUCTURE.



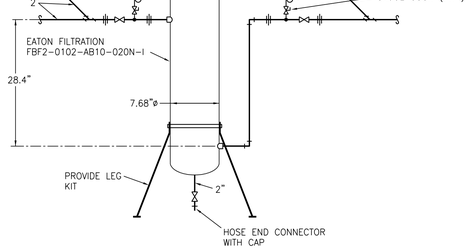

## 5 CHAIN SUPPORTED EQUIPMENT DETAIL
NO SCALE




## 6 ELECTRONIC TRAP PRIMER DETAIL
NO SCALE




## 7 DEEP SEAL TRAP DETAIL
NO SCALE




## 8 WATER FILTER DETAIL
NO SCALE

FURNISH WITH INITIAL INSTALLATION, 50 REPLACEMENT 10 MICRON FILTER BAGS.

| GRILLES, REGISTERS AND DIFFUSERS SCHEDULE | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MARK | MANUFACTURER | MODEL NUMBER | APPLICATION | | | FINISH | FRAME TYPE | DAMPER | REMARKS |
| | | | SUP. | RET. | EXH. | | | | |
| Ⓐ | PRICE | SMD/3P/4A/B12 | X | | | WHITE | LAY-IN | NO | 2, 3, 4, 5 |
| Ⓑ | PRICE | 535/3P/L/0/B12 | | X | X | WHITE | LAY-IN | NO | 1, 2 |
| Ⓒ | PRICE | 635/3P/L/0/B12 | | X | X | WHITE | LAY-IN | NO | 1, 2 |
| Ⓓ | PRICE | AMD/3P/4A/B12 | X | | | WHITE | LAY-IN | NO | 2, 3, 4, 5 |
| Ⓕ | PRICE | 535/TB/L/0/B12 | | X | X | WHITE | FLANGE | YES | 1, 2 |
| Ⓖ | PRICE | 520/TB/L/0/B12 | X | | | WHITE | FLANGE | NO | 1,2 |

REMARKS:
1. PROVIDE WITH NO SCREWHOLES.
2. COORDINATE EXACT SIZE OF OPENING AND DUCT REQUIRED.
3. PROVIDE WITH THROW PATTER AS SPECIFIED ON PLANS.
4. LAY-IN PANEL MOUNTED.
5. SQUARE TO ROUND ADAPTOR, BY CONTRACTOR.

| DESTRATIFICATION FAN | | | | | |
|---|---|---|---|---|---|
| MARK | MANUFACTURER | MODEL NUMBER | CFM | ELECTRICAL CHARACTERISTICS | REMARKS |
| DSF-1 | AIRIUS | A-15-SP-STD-120-W | 400 | 17W, 120V, 1 PH. | 1 |
| DSF-2 | AIRIUS | A-15-SP-STD-120-W | 400 | 17W, 120V, 1 PH. | 1 |
| DSF-3 | AIRIUS | A-15-SP-STD-120-W | 400 | 17W, 120V, 1 PH. | 1 |
| DSF-4 | AIRIUS | A-15-SP-STD-120-W | 400 | 17W, 120V, 1 PH. | 1 |

REMARKS:
1. PROVIDE (1) SPEED CONTROL SWITCH (TRIAC-120-1.5) TO CONTROL ALL (4) FANS.

HTK ARCHITECTS PA
9300 W 110TH ST. STE. 150
OVERLAND PARK, KS 66210
P. 913.663.5373
9005 E KANSAS AVE.
SUITE A
WICHITA, KS 67207
P. 785.266.5373
WWW.HTKARCHITECTS.NET

STATE OF MISSOURI
RICHARD R. BEARDMORE
NUMBER PE-2009030695
PROFESSIONAL ENGINEER
7/23/14

DATE:
- 2014-07-24

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

SHEET CONTENTS:
- MECHANICAL DETAILS AND SCHEDULES

LS&A Latimer Sommers & Associates, P.A.
CONSULTING ENGINEERS
3830 SW Summerfield Drive, Suite A
Topeka, Kansas 66614-3974
Telephone: (785) 233-3232
FAX: (785) 233-0647
Email: lsapa@lsapa.com
LSA PROJECT NO. 1302029

HTK PROJECT NUMBER:
- ULYB112022
  10008.01 - 0018

SHEET NUMBER:

M301

100% CONTRACT DOCUMENTS

...\ULYB112022-M301_02.dwg 96 07/23/14 EJG

## DOAS UNIT WITH ENERGY RECOVERY

| MARK | MFR. | MODEL NUMBER | SUPPLY FAN | | | EXHAUST FAN | | | COOLING CAPACITY | | | | | | HEATING CAPACITY | | | | | ENERGY RECOVERY | | | | | | | | ELECTRICAL CHARACTERISTICS | | | WEIGHT (LBS) | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | | | EXHAUST AIR | | | | FRESH AIR | | | | | | | | |
| | | | CFM | TSP | HP | CFM | TSP | HP | TOTAL (MBH) | EAT Db/Wb | LAT Db/Wb | SENSIBLE (MBH) | REHEAT (MBH) | LAT Db | OUTPUT (MBH) | EAT Db | LAT Db | INPUT (MBH) | TURN DOWN | CFM | SUM EAT Db/RH | WIN EAT Db/RH | CFM | SUM EAT Db/Wb | SUM LAT Db/Wb | WIN EAT Db | WIN LAT Db | VOLTAGE | MCA | MOCP | | |
| DOAS-1 | GREENHECK | ERCH-20-15L-S-IG-01 | 1100 | .75 | 3/4 | 1000 | 1.25 | 1 | 62.3 | 83.1/68.9 | 51.0/50.5 | 38.4 | 28 | 70 | 80 | 49 | 110∗ | 100 | 4:1 | 1000 | 78/50 | 68/35 | 1100 | 100/77 | 83.1/68.9 | -5/-6 | 49.4/41.8 | 208V., 3PH | 9.7 | 15 | 1493 | 1-17 |

∗ CONTROL LAT OF 68°

REMARKS:
1. CONSTANT VOLUME (ON/OFF) SUPPLY AND EXHAUST.
2. PROVIDE WITH FACTORY MOUNTED NON-FUSED DISCONNECT SWITCH.
3. PROVIDE WITH DIRECT DRIVE FANS.
4. PROVIDE REMOTE PANEL FOR INDOOR CONTROL AND ALARM ANNUNCIATION.
5. INTERNAL VIBRATION ISOLATION.
6. PROVIDE WITH OA MOTORIZED DAMPER INTERLOCK WITH FAN.
7. PROVIDE WITH EA MOTORIZED DAMPER INTERLOCK WITH FAN.
8. PROVIDE MIN 14" CURB. COORDINATE WITH STRUCTURAL AND ROOFING.
9. PROVIDE MERV 8 OUTDOOR AND EXHAUST FILTERS.
10. PROVIDE DUCT MOUNTED THERMOSTAT AND HUMIDISTAT.
11. DIRTY FILTER SENSOR FOR BOTH OUTDOOR AND EXHAUST FILTERS.
12. PROVIDE WITH ROTATION SENSOR.
13. PROVIDE TIMED EXHAUST FROST CONTROL.
14. PROVIDE 2" PLEATED MERV 8 FILTERS.
15. PROVIDE WITH MODULATING HOT GAS REHEAT.
16. PROVIDE 7 DAY PROGRAMMABLE TIME CLOCK CONTROL FOR UNIT SCHEDULING, INTEGRAL WITH CONTROL PANEL.
17. 18. PROVIDE WITH HIGH EFFICIENCY PLENUM SUPPLY AND EXHAUST FANS.

## FURNACE SCHEDULE

| MARK | MANUFACTURER | MODEL NUMBER | TOTAL CFM | OA CFM (FROM MUA UNIT) 70° 50%RH | MAT | | | HEATING | | FLUE SIZE | CA SIZE | ELECTRICAL CHARACTERISTICS | INDOOR COIL MODEL | EAT db/wb | LAT db/wb | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | HEATING | COOLING | | INPUT | OUTPUT | | | | | | | |
| | | | | | | db | wb | | | | | | | | | |
| F1 | TRANE | TUH 2B060A9 | 525 | 525 | 68 | 70 | 60 | 60,000 BTU/UR | 57,000 BTU/UR | 2 | 3 | 1/2 HP, 120V., 1PH. | 4 TXC B025BC 3HC | 72/60 | 55/53 | - |
| F2 | TRANE | TUH 2B060A9 | 765 | 115 | 68 | 78 | 65 | 60,000 BTU/UR | 57,000 BTU/UR | 2 | 3 | 1/2 HP, 120V., 1PH. | 4 TXC B025BC 3HC | 72/60 | 55/53 | - |
| F3 | TRANE | TUH 2D120A9 | 1600 | 640 | 68 | 78 | 65 | 120,000 BTU/UR | 104,000 BTU/UR | 3 | 4 | 1 HP, 120V., 1PH. | 4 TXC C049BC 3HC | 72/60 | 56/54 | - |

## OUTDOOR HEAT PUMP SCHEDULE

| MARK | MANUFACTURER | MODEL NUMBER | TOTAL MBH | SENSIBLE MBH | MINIMUM CIRCUIT AMPS | MAX FUSE SIZE | ELECTRICAL CHARACTERISTICS | REMARKS |
|---|---|---|---|---|---|---|---|---|
| CU-1 | TRANE | 4TWB30 18D1 | 14,896 | 11,020 | 9 | 15A. RK-5 | 208V., 1 PH. | 1, 2 |
| CU-2 | TRANE | 4TWB30 24D1 | 21,548 | 15,900 | 12 | 20A. RK-5 | 208V., 1 PH. | 1, 2 |
| CU-3 | TRANE | 4TWB30 48D1 | 42,000 | 32,400 | 28 | 50A. RK-5 | 208V., 1 PH. | 1, 2 |
| CU-4 | TRANE | 4TWB30 60E1 | 50,400 | 39,075 | 34 | 60A. RK-5 | 208V., 1 PH. | 1, 2 |

REMARKS:
1. LINE SIZES SHALL BE PROVIDED BY UNIT MANUFACTURER. NOTE ALL REFRIGERATED PIPING SHALL BE RIGID TYPE ACR COPPER DO NOT USE LINE SETS.
2. PROVIDE HAIL GUARDS ON ALL EXTERIOR CONDENSER COILS

## GAS WATER HEATER SCHEDULE

| MARK | MANUFACTURER | MODEL NUMBER | GAS INPUT (MBH) | OUTPUT (MBH) | TANK SIZE (GAL) | RECOVERY AT 70° F AT GAL/HR | ELECTRICAL CHARACTERISTICS | REMARKS |
|---|---|---|---|---|---|---|---|---|
| WH-1 | A.O. SMITH | BTX-100 | 100 | 96 | 50 | 203 | 120V. | 1, 2, 3 |

REMARKS:
1. ROUTE A 1/2" CONDENSATE LINE TO A FLOOR DRAIN.
2. PROVIDE WITH CONCENTRIC FLUE/INTAKE THRU ROOF. PROVIDE FLASHING AS REQUIRED.
3. REPLACE EXISTING WATER HEATER.
4. PROVIDE DOMESTIC HOT WATER RECIRCULATING PUMP REFERENCE SPECIFICATIONS.

## EXHAUST FAN SCHEDULE

| MARK | MANUFACTURER | MODEL NUMBER | CFM | EST TSP | ELECTRICAL CHARACTERISTICS | REMARKS |
|---|---|---|---|---|---|---|
| EF-1 | GREENHECK | SE1-1B-428-A5 | 2900 | 0.25 | 1/2 HP, 120V, 1PH | - |

NOTES:
1. PROVIDE WITH MOTOR SIDE GUARD.
2. PROVIDE ELECTRIC MOTORIZED BACK DRAFT DAMPERS - OPEN WHEN FAN IS ENERGIZED.
3. PROVIDE ELECTRONIC SPEED CONTROL.
4. PROVIDE WITH SHORT WALL HOUSING.

## GAS FIRED RADIANT HEATER

| MARK | MANUFACTURER | MODEL NUMBER | LENGTH | INPUT(BTU/H) | GAS TYPE | REMARKS |
|---|---|---|---|---|---|---|
| RHU-1 | RE-VERBER-RAY | DX3-30-50 | 31'-5" | 50,000 BTU/H | NATURAL | PROVIDE PROGRAMMABLE THERMOSTAT |
| RHU-2 | RE-VERBER-RAY | DX3-50-100 | 50'-9" | 100,000 BTU/H | NATURAL | PROVIDE PROGRAMMABLE THERMOSTAT |

## PLUMBING FIXTURE SCHEDULE

| MARK | MANUFACTURER/ MODEL | DESCRIPTION | FITTINGS | | REMARKS |
|---|---|---|---|---|---|
| | | | MANUFACTURER/ MODEL | DESCRIPTION | |
| P-1 | ZURN Z5615-BWL<br><br>ZURN 5950 | ADA COMPLIANT WATER CLOSET: WHITE VITREOUS CHINA, ELONGATED FRONT, WALL MOUNTED, FLUSH VALVE BOWL WITH TOP SPUD AND FLAT BOLT COVERS. 1.6 GALLON SIPHON JET FLUSHING ACTION. MOUNT TOP OF RIM AT 17" AFF.<br><br>PROVIDE FACEPLATE AND FOOT SUPPORTS FOR HANGER AND ALL OTHER REQUIRED MOUNTING HARDWARE.<br><br>SEAT: SOLID PLASTIC OPEN FRONT, WHITE FOR AN ELONGATED BOWL, INTEGRAL BUMPERS, EXTERNAL CHECK HINGES WITH STAINLESS STEEL POSTS. | ZURN ZER6000AV-CPM-WS1 | BATTERY POWERED, SENSOR ACTIVATED, QUIET, DIAPHRAGM FLUSHOMETER FOR EXPOSED WATER CLOSET INSTALLATION, CHROME PLATED, EQUIPPED WITH SENSOR UNIT AND BATTERIES, LOW BATTERY INDICATOR LIGHT, RANGE ADJUSTMENT SCREW, RANGE INDICATOR LIGHT, AND 24 HOUR SENTINEL FLUSH. DECORATIVE HANDLE CAP, 1 1/2" I.P.S. SCREWDRIVER BAK-CHEK ANGLE STOP WITH VACUUM BREAKER FLUSH CONNECTION, AND SPUD COUPLING FOR 1 1/2" TOP SPUD. PROVIDE WITH WALL AND SPUD FLANGES. 1.6 GALLON. PROVIDE WITH OVERRIDE COVER. | |
| P-2 | ZURN Z5615-BWL<br><br>ZURN 5950 | WATER CLOSET: WHITE VITREOUS CHINA, ELONGATED FRONT, WALL MOUNTED, FLUSH VALVE BOWL WITH TOP SPUD AND FLAT BOLT COVERS. 1.6 GALLON SIPHON JET FLUSHING ACTION. MOUNT TOP OF RIM AT 15" AFF.<br><br>PROVIDE FACEPLATE AND FOOT SUPPORTS FOR HANGER AND ALL OTHER REQUIRED MOUNTING HARDWARE.<br><br>SEAT: SOLID PLASTIC OPEN FRONT, WHITE FOR AN ELONGATED BOWL, INTEGRAL BUMPERS, EXTERNAL CHECK HINGES WITH STAINLESS STEEL POSTS. | ZURN ZER6000AV-CPM-WS1 | BATTERY POWERED, SENSOR ACTIVATED, QUIET, DIAPHRAGM FLUSHOMETER FOR EXPOSED WATER CLOSET INSTALLATION, CHROME PLATED, EQUIPPED WITH SENSOR UNIT AND BATTERIES, LOW BATTERY INDICATOR LIGHT, RANGE ADJUSTMENT SCREW, RANGE INDICATOR LIGHT, AND 24 HOUR SENTINEL FLUSH. DECORATIVE HANDLE CAP, 1 1/2" I.P.S. SCREWDRIVER BAK-CHEK ANGLE STOP WITH VACUUM BREAKER FLUSH CONNECTION, AND SPUD COUPLING FOR 1 1/2" TOP SPUD. PROVIDE WITH WALL AND SPUD FLANGES. 1.6 GALLON. PROVIDE WITH OVERRIDE COVER. | |
| P-3 | ZURN 5798 | ADA COMPLIANT URINAL: WHITE VITREOUS CHINA WALL HUNG URINAL WITH 3/4" TOP SPUD, 1.0 GALLON SIPHON JET FLUSHING ACTION. MOUNT FIXTURE RIM AT 17" AFF.<br><br>PROVIDE FLOOR MOUNTED, HEAVY DUTY TUBULAR STEEL UPRIGHTS, ADJUSTABLE CARRIER PLATED HANGER AND ALL OTHER REQUIRED MOUNTING HARDWARE. | ZURN ZER6003AV-CP-WS1 | BATTERY POWERED, SENSOR ACTIVATED, QUIET, DIAPHRAGM FLUSHOMETER FOR EXPOSED URINAL INSTALLATION, CHROME PLATED, EQUIPPED WITH SENSOR UNIT AND BATTERIES, LOW BATTERY INDICATOR LIGHT, RANGE ADJUSTMENT SCREW, RANGE INDICATOR LIGHT, AND 24 HOUR SENTINEL FLUSH. DECORATIVE HANDLE CAP, 3/4" I.P.S. SCREWDRIVER BAK-CHEK ANGLE STOP WITH VACUUM BREAKER FLUSH CONNECTION, AND SPUD COUPLING FOR 3/4" TOP SPUD. PROVIDE WITH WALL AND SPUD FLANGES. 1.0 GALLON. | |
| P-4 | ZURN 5798 | URINAL: WHITE VITREOUS CHINA WALL HUNG URINAL WITH 3/4" TOP SPUD, 1.0 GALLON SIPHON JET FLUSHING ACTION. MOUNT FIXTURE RIM AT 24" AFF.<br><br>PROVIDE FLOOR MOUNTED, HEAVY DUTY TUBULAR STEEL UPRIGHTS, ADJUSTABLE CARRIER PLATED HANGER AND ALL OTHER REQUIRED MOUNTING HARDWARE. | ZURN ZER6003AV-CP-WS1 | BATTERY POWERED, SENSOR ACTIVATED, QUIET, DIAPHRAGM FLUSHOMETER FOR EXPOSED URINAL INSTALLATION, CHROME PLATED, EQUIPPED WITH SENSOR UNIT AND BATTERIES, LOW BATTERY INDICATOR LIGHT, RANGE ADJUSTMENT SCREW, RANGE INDICATOR LIGHT, AND 24 HOUR SENTINEL FLUSH. DECORATIVE HANDLE CAP, 3/4" I.P.S. SCREWDRIVER BAK-CHEK ANGLE STOP WITH VACUUM BREAKER FLUSH CONNECTION, AND SPUD COUPLING FOR 3/4" TOP SPUD. PROVIDE WITH WALL AND SPUD FLANGES. 1.0 GALLON. | |
| P-5 | INTEGRAL SINK | SINK INTEGRAL WITH COUNTERTOP. REFER TO ARCHITECTURAL. | ZURN Z6915-MV-XL | SENSOR ACTIVATED, 4" CENTERSET FAUCET WITH, 1/2" CONNECTIONS AND GRID DRAIN WITHOUT POP-UP HOLE. VANDAL RESISTANT 1.5 GPM SPRAY. POLISHED CHROME FINISH. MIXING VALVE. | 1,2,3,4,5 |
| P-6 | STERN WILLIAMS SBC-1725 | JANITORS SINK: 32"x32"x12" ONE PIECE MOLDED STONE MOP BASIN STAINLESS STEEL INTEGRAL DRAIN BODY WITH CAULKED CONNECTION FOR 3" PIPE. COLOR SHALL BE WHITE AND UNIT SHALL BE ONE HOMOGENEOUS PIECE. PROVIDE WITH STAINLESS STEEL WALL GUARDS. | CHICAGO FAUCET 897-CP | SERVICE SINK FAUCET, WALL MOUNTED 8" CENTERS, WITH VACUUM BREAKER, PAIL HOOK, WALL BRACED, 36" HOSE AND WALL HOOK, TYPE 304SS, 20 GA. SPLASH PANELS. | |
| P-7 | ELKAY EZSTL8LC | ADA COMPLIANT DUAL HEIGHT ELECTRIC WATER COOLER: BARRIER FREE WATER COOLER PROVIDING 8 GPM OF 50 DEGREE WATER AT 90 DEGREE AMBIENT. FRONT AND SIDE PUSHBARS, ADA COMPLIANT, LEAD FREE. MOUNT WITH MIN. 27" KNEE CLEARANCE AND SPOUT AT NO MORE THAN 36" AFF. | | | 4 |
| P-8 | ELKAY LR3319<br><br>IN-SINK-ERATOR PRO 77 | DOUBLE COMPARTMENT SINK: SEAMLESS #18 GAUGE, TYPE 302 (18-8) NICKEL BEARING STAINLESS STEEL. LK-6K-H SATIN FINISH FULLY UNDERCOATED, HOLES AT 4" O.C., 7 5/8" BOWL DEPTH. 1 3/4" RADIUS COVED CORNERS. SELF RIMMING. REAR DRAIN.<br><br>GARBAGE DISPOSAL: STAINLESS STEEL SINK FLANGE, STOPPER, GRIND CHAMBER, TWO 360 DEG. SWIVEL IMPELLERS, AUTO REVERSING, PERMANENTLY LUBRICATED BEARINGS, CORROSION PROTECTION SHIELD. CONTINUOUS FEED 1 HORSEPOWER CAPACITOR START MOTOR. | ZURN Z82300-XL-CP8 | CAST BRASS KITCHEN FAUCET WITH METAL LEVER HANDLE, 1/2" CONNECTIONS. POLISHED CHROME FINISH, WITH ESCUTCHEON PLATE. PROVIDE BASKET STRAINER AND DRAIN. | 2,3,5,7 |
| P-9 | FIAT 30 MFT | 36"x36" ONE PIECE TERRAZO SHOWER BASIN, STAINLESS STEEL INTEGRAL DRAIN BODY WITH CAULKED CONNECTION FOR 2" PIPE. | ZURN Z7301-SS-MT-S9 | SHOWER UNIT: PRESSURE BALANCE SHOWER VALVE WITH VOLUME CONTROL, CERAMIC DISC VALVE CARTRIDGE WITH AN ADJUSTABLE HOT LIMIT SAFETY STOP, LOW LEAD FORGED BRASS BODY, ALL METAL LEVER HANDLE AND WALL ESCUTCHEON. | 9 |
| P-10 | FIAT ADA TN36x36 | 36"x36"NO THRESHOLD TERRAZO WHEEL CHAIR RECEPTOR WITH STAINLESS STEEL STRAINER PLATE, STAINLESS STEEL INTEGRAL DRAIN BODY WITH CAULKED CONNECTION FOR 2" PIPE. | ZURN Z7300-SS-HW2-MT | ADA COMPLIANT SHOWER UNIT: PRESSURE BALANCE SHOWER VALVE WITH VOLUME CONTROL, CERAMIC DISC VALVE CARTRIDGE WITH AN ADJUSTABLE HOT LIMIT SAFETY STOP, LOW LEAD FORGED BRASS BODY, ALL METAL LEVER HANDLE AND WALL ESCUTCHEON. PROVIDE WITH 32" SLIDE BAR, IN-LINE VACUUM BREAKER, 60" HOSE/HAND SHOWER AND WALL SUPPLY WITH 2.5 GPM ADJUSTABLE SPRAY HEAD. | 9 |
| P-11 | GUY GRAY M1B1 | ICE MAKER OUTLET BOX, 1/4" TURN VALVE. WHITE POWDER COAT STEEL. | | | |

REMARKS:
1 - PROVIDE CHROME PLATED BRASS TAILPIECE AND GRID DRAIN.
2 - PROVIDE CHROME PLATED BRASS P-TRAP.
3 - PROVIDE LOOSE KEY STOPS AND FLEXIBLE RISERS.
4 - PROVIDE CONCEALED ARM TYPE CARRIER WITH SQUARE TUBULAR STEEL UP-RIGHTS AND BLOCK TYPE BASES.
5 - INSULATE EXPOSED TAILPIECE, P-TRAP, AND WATER RISERS. REFER TO SPECIFICATIONS FOR INSULATION METHODS.
6 - PROVIDE HANDLE STOPS AND FLEXIBLE RISERS.
7 - PROVIDE CHROME PLATED BRASS TAILPIECE AND BASKET STRAINER.
8 - PROVIDE A 1/2" DRAIN LINE TO GRADE. COORDINATE DRAIN LOCATION WITH ENGINEER.

## MECHANICAL SYMBOLS LEGEND

| | | | |
|---|---|---|---|
| P-1 | WATER CLOSET & TYPE (TYP. FOR ALL PLUMBING FIXTURES) | | MANUAL DAMPER |
| | WASTE LINE ABOVE EARTH (W.) | | BACKDRAFT DAMPER |
| | WASTE LINE IN EARTH (W.) | | AUTOMATIC DAMPER |
| CO | CLEAN OUT | | FIRE DAMPER |
| FFCO | FLUSH FLOOR CLEAN OUT | | FIRE/SMOKE DAMPER |
| FGCO | FLUSH GRADE CLEAN OUT | | SMOKE DAMPER |
| 2" FD | FLOOR DRAIN AND TYPE | 6x6 80 | GRILLE, REGISTER OR DIFFUSER, SIZE, TYPE & CFM |
| RD | ROOF DRAIN | | VOLUME EXTRACTOR AND TURNING VANES |
| 2" RD | ROOF DRAIN AND TYPE | RAD SAD | RETURN, EXHAUST OR FRESH AIR DUCT SECTION UP & DOWN |
| V | VENT LINE (V.) | SAD RAD | SUPPLY AIR DUCT SECTION UP AND DOWN |
| DCW | DOMESTIC COLD WATER SUPPLY (DCW) | | FLEXIBLE DUCT CONNECTION |
| DHW | DOMESTIC HOT WATER SUPPLY (DHW) | | ROUND OR RECTANGULAR DUCT |
| DHWR | DOMESTIC HOT WATER RETURN (DHWR) | | FLEXIBLE DUCT |
| HB/36" | HOSE BIBB AND MOUNTING HEIGHT | T | THERMOSTAT |
| WH | WALL HYDRANT | L | REFRIGERANT LIQUID |
| F | FIRE LINE/STANDPIPE | S | REFRIGERANT SUCTION |
| D | DRAIN LINE | AD | ACCESS DOOR |
| G | NATURAL GAS LINE | AFF | ABOVE FINISHED FLOOR |
| 1/2 | RISE & DROP IN PIPE WITH CUT-OFF VALVE | EA | EXHAUST AIR |
| | REDUCER | OA | OUTSIDE AIR |
| | CHECK VALVE | RA | RETURN AIR |
| | STOP VALVE | SA | SUPPLY AIR |
| | BALANCING VALVE | VBS | VENT BELOW SLAB |
| | PLUG VALVE | VTR | VENT THRU ROOF |
| | 2-WAY CONTROL VALVE OR SOLENOID VALVE | | CONNECT NEW TO EXISTING |
| | 3-WAY CONTROL VALVE OR SOLENOID VALVE | | LOCKABLE GUARD |
| | PRESSURE REDUCING VALVE | | |
| | STRAINER | | |
| | UNION | | |
| | FLEXIBLE PIPE CONNECTION | | |

NOTES: ALL SYMBOLS SHOWN ABOVE MAY NOT APPEAR ON PLANS. REFER TO ELECTRICAL SYMBOLS LEGEND FOR ELECTRICAL SYMBOLS THAT MAY BE SHOWN ON MECHANICAL PLANS.


HTK ARCHITECTS PA
9300 W 110TH ST. STE. 150
OVERLAND PARK, KS 66210
P: 913.663.4373
9300 S KANSAS AVE.
TOPEKA, KS 66612
P: 785.266.4373
WWW.HTKARCHITECTS.NET


STATE OF MISSOURI
RICHARD R. BEARDMORE
NUMBER PE-2005020059
PROFESSIONAL ENGINEER
7/23/14

DATE:
- 2014-07-24

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

SHEET CONTENTS:
- MECHANICAL SCHEDULES

HTK PROJECT NUMBER:
- ULYB112022
  10008.01 - 0018

SHEET NUMBER:
M302
100% CONTRACT DOCUMENTS

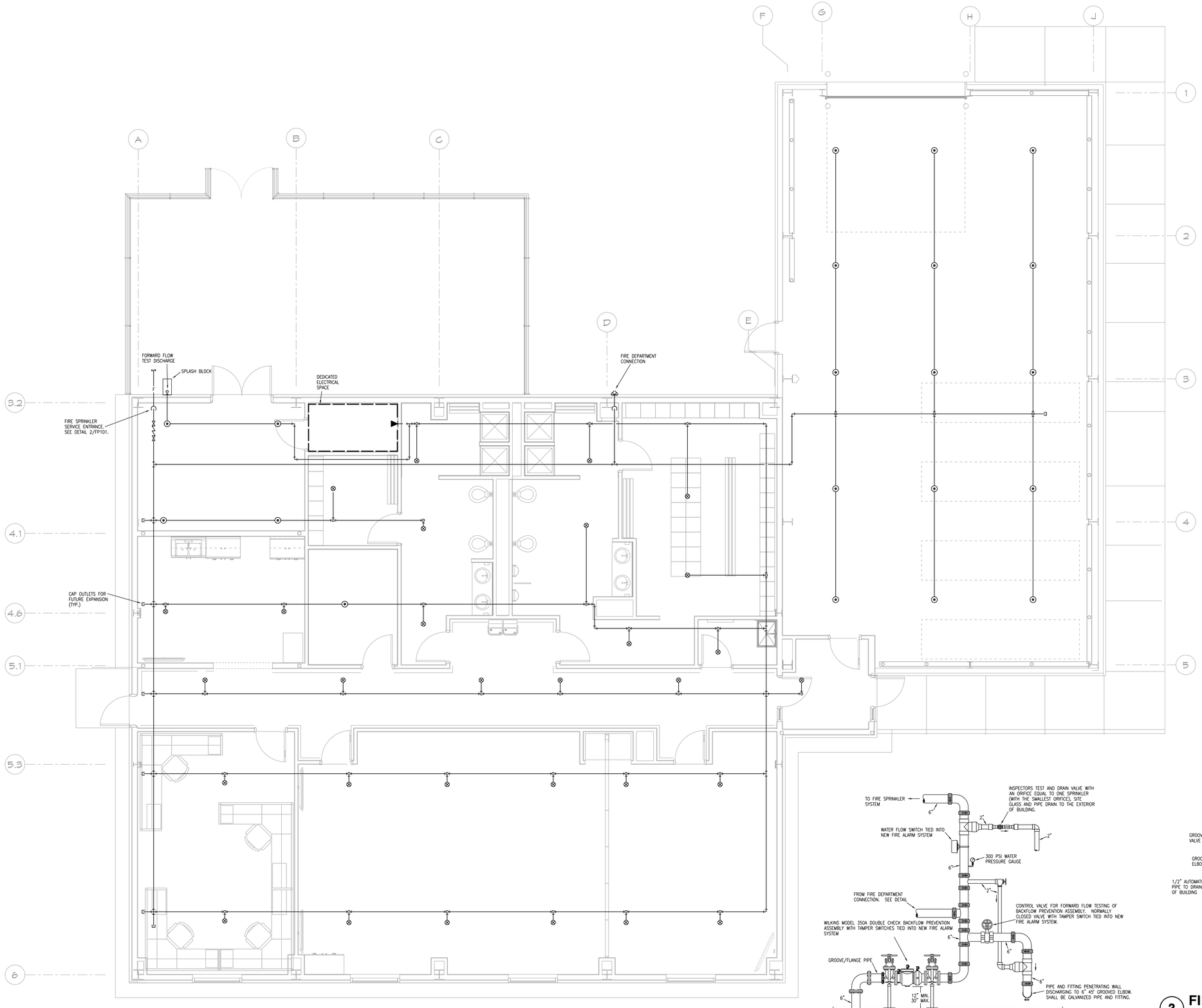

LS&A Latimer Sommers & Associates, P.A.
CONSULTING ENGINEERS
3639 SW Summerfield Drive, Suite A
Topeka, Kansas 66614-3974
Telephone: (785) 233-3232
FAX: (785) 233-0647
Email: lsapa@lsapa.com

LSA PROJECT NO. 1302029

| HEAD SUMMARY AND LEGEND: | |
|---|---|
| ⊗ | 155°, 1/2" RELIABLE FIFR 56 QUICK RESPONSE RECESSED CHROME PENDANT SIN. RA1414. EQ. BY VIKING. |
| ⊙ | 155°, 1/2" RELIABLE FIFR BRASS UPRIGHT SIN. R3625. EQ. BY VIKING. |
| ◀ | 155°, 1/2" VIKING MDL QUICK RESPONSE RECESSED SIDEWALL MOUNTED 4"-12" BELOW CEILING. EQ. BY RELIABLE. |

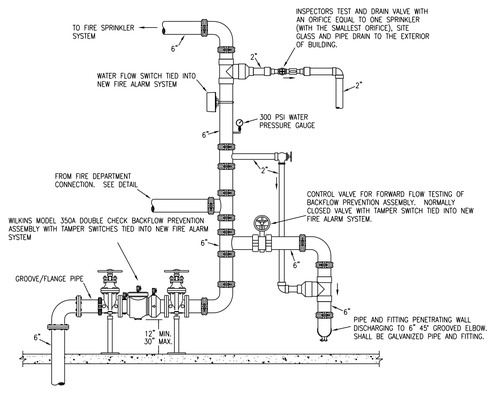
NOTES:

1. COORDINATE ROUTING OF PIPE WITH ALL OTHER TRADES.

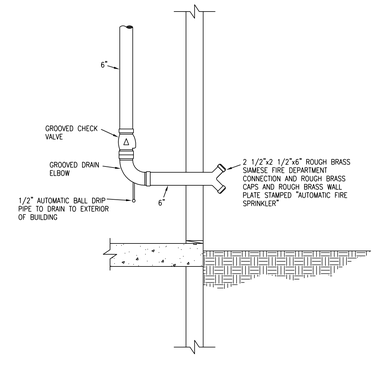



## 1 FLOOR PLAN
1/4" = 1'-0" FIRE SPRINKLER

NORTH




## 2 FIRE SPRINKLER RISER DETAIL
NO SCALE




## 3 FIRE DEPARTMENT CONNECTION
NO SCALE


HTK ARCHITECTS PA
9300 W 110TH ST. STE. 150
OVERLAND PARK, KS 66210
P. 913.663.4373
9005 E KANSAS AVE.
SUITE A
P. 785.266.4373
WWW.HTKARCHITECTS.NET


STATE OF MISSOURI
RICHARD R. BEARDMORE
NUMBER PE-2005030005
PROFESSIONAL ENGINEER
12-13-14

DATE:
- 2014-07-24

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

SHEET CONTENTS:
- FLOOR PLAN - FIRE SPRINKLER


LS&A Latimer Sommers & Associates, P.A.
CONSULTING ENGINEERS
3630 SW Summerfield Drive, Suite A
Topeka, Kansas 66614-3974
Telephone: (785) 233-3232
FAX: (785) 233-0647
Email: lsapa@lsapa.com
LSA PROJECT NO. 1302029


HTK PROJECT NUMBER:
- ULYB112022
  10008.01 - 0018

SHEET NUMBER:

FP101

100% CONTRACT DOCUMENTS


...ULYB112022-FP101.dwg 48 07/21/14 EAN

NOTES:

1. NO ELECTRICAL PANELS SHALL BE INSTALLED BELOW PIPING, DUCTWORK, OR MECHANICAL EQUIPMENT. REFER TO MECHANICAL PLANS FOR LOCATIONS.
2. FIELD COORDINATE FINAL LOCATION OF ALL EQUIPMENT WITH MECHANICAL TO MAINTAIN NEC CLEARANCES.
3. REFER TO FIRE ALARM PLANS FOR ADDITIONAL WORK AND ROUGH-IN REQUIREMENTS.
4. ALL THERMOSTAT CABLE SHALL BE IN CONDUIT.
5. ALL CONDUCTORS #12 THWN IN 1/2"C. UNLESS NOTED OTHERWISE.
6. VERIFY ALL FINAL LOCATION AND ELEVATION OF ALL WALL-MOUNTED EQUIPMENT, OUTLETS, DATA, PHONE LOCATIONS, ETC. WITH CASEWORK, OWNER AND ARCHITECTURAL. CONFIRM DEDICATED OUTLETS, COPIERS, ETC. WITH OWNER.
7. VERIFY ALL POWER, WIRING, RECEPTACLES, CIRCUIT, OVERCURRENT PROTECTION AND DATA REQUIREMENTS FOR ALL OWNER FURNISHED ITEMS SUCH AS COPIERS, ICE MAKERS, STAFF ROOM APPLIANCES ETC. CIRCUITS AND WIRING SHOWN ARE ESTIMATED ONLY.
8. ALL ELECTRICAL CIRCUITING IN ROOM 101 SHALL BE FROM ABOVE FLOOR SLAB. MOUNT RECEPTACLES IN THIS ROOM MINIMUM 24" AFF. DO NOT PLACE ANY ELECTRICAL WITHIN BOTTOM 12" OF ROOM.

LEGEND:

1. (2) #6 & (1) #10 GRD IN 3/4"C.
2. 30A. DISCONNECT 208V., 1PH., NEMA 3R ENCLOSURE FUSED AT 15A. RK5. MOUNTED ON UNISTRUT FRAME SUPPORTED FROM THE CONCRETE BELOW.
3. 30A., DISCONNECT 208V., 1PH., NEMA 3R ENCLOSURE FUSED AT 20A. RK5. MOUNTED ON UNISTRUT FRAME SUPPORTED FROM THE CONCRETE BELOW.
4. 60A. DISCONNECT 208V., 1PH., NEMA 3R ENCLOSURE FUSED AT 50A. RK5. MOUNTED ON UNISTRUT FRAME SUPPORTED FROM THE CONCRETE BELOW.
5. 60A. DISCONNECT 208V., 1PH., NEMA 3R ENCLOSURE FUSED AT 60A. RK5. MOUNTED ON UNISTRUT FRAME SUPPORTED FROM THE CONCRETE BELOW.
6. (2) #8 & (1) #10 GRD IN 3/4"C.
7. 30A., 120V. RECEPTACLE NEMA 5-30R.
8. RECEPTACLE FOR SECURITY CAMERAS. MOUNT 12' AFF.

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

2 FLOOR PLAN
1/4"=1'-0" POWER
NORTH


HTK ARCHITECTS PA
9300 W 110TH ST. STE. 150
OVERLAND PARK, KS 66210
P. 913.663.3273
9005 E KANSAS AVE.
SUITE 140 KANSAS, MO 64138
P. 785.266.3273 WWW.HTKARCHITECTS.NET


STATE OF MISSOURI
RICHARD R. BEARDMORE
NUMBER PE-2005030695
PROFESSIONAL ENGINEER
7/23/14

DATE:
- 2014-07-24

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

SHEET CONTENTS:
- FLOOR PLANS - POWER

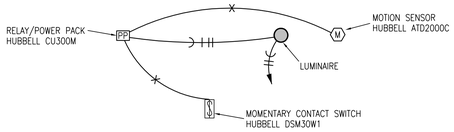
HTK PROJECT NUMBER:
- ULYB112022
  10008.01 - 0018

SHEET NUMBER:
E101
100% CONTRACT DOCUMENTS


LS&A Lattner Sommers & Associates, P.A.
CONSULTING ENGINEERS
3639 SW Summerfield Drive, Suite A
Topeka, Kansas 66614-3974
Telephone: (785) 233-3232
FAX: (785) 233-0947
Email: lsapa@lsapa.com
LSA PROJECT NO. 1302029



...ULYB112022-E101.dwg 48 07/11/14 cdc

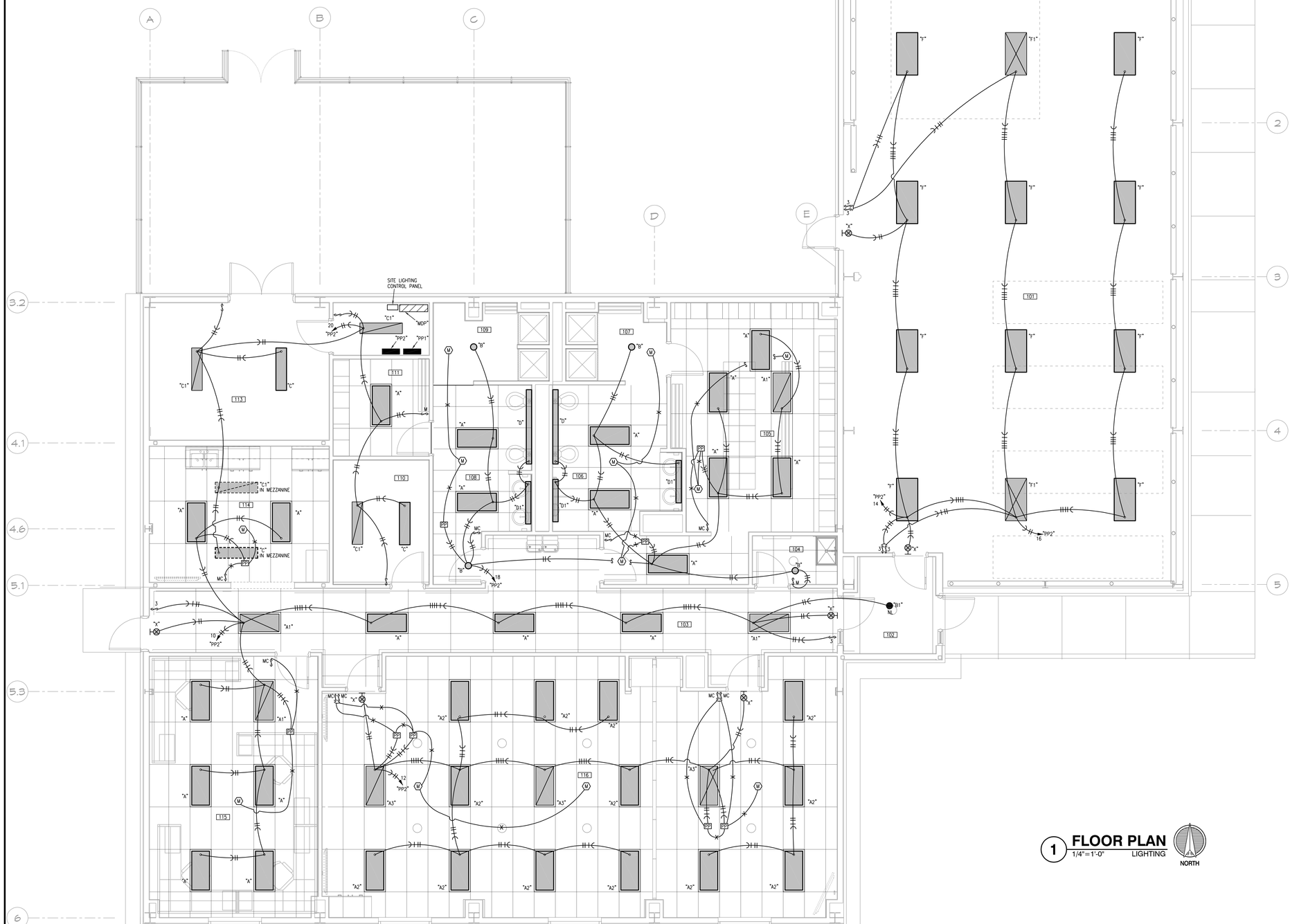



## 2 LIGHTING CONTROL SCHEMATIC
NO SCALE

| NOTES: |
|---|
| 1. COORDINATE LOCATIONS AND MOUNTING WITH OTHER DISCIPLINES AND STRUCTURE. IDENTIFY ANY AND ALL CONFLICTS, CEILING HEIGHT ISSUES, ETC. PRIOR TO INSTALLATION. |
| 2. REFER TO ARCHITECTURAL FOR CEILING TYPES, ELEVATIONS, ETC. |

**OCCUPANCY SENSOR SYMBOL SCHEDULE**

| MARK | DESCRIPTION |
|---|---|
| $\$_M$ | WALL MOUNTED, DUAL TECHNOLOGY SENSOR, SINGLE CIRCUIT CONTROL. ADAPTIVE MEMORY. HUBBELL MODEL AD1277I1. |
| $\$_{MC}$ | MOMENTARY CONTACT WALL SWITCH HUBBELL DSM30W1, IF DUAL LEVEL DSM30W2. |
| (M) | CEILING TYPE, DUAL TECHNOLOGY, OMNIDIRECTIONAL OCCUPANCY SENSOR. MAX HEIGHT 12'-0". HUBBELL MODEL ATD2000C. MOUNT PER MANUFACTURER'S REQUIREMENTS. 24V. |
| PP | SWITCHING RELAY POWER PACK CONTROL UNIT FOR MATCHING SENSOR. HUBBELL CU300M 120V. |




## 1 FLOOR PLAN
1/4"=1'-0" LIGHTING

NORTH


HTK ARCHITECTS PA
9300 W 110TH ST. STE. 150
OVERLAND PARK, KS 66210
P. 913-663-4373
9005 E KANSAS AVE.
SPRINGFIELD, MO 65812
P. 785-266-4373
WWW.HTKARCHITECTS.NET


STATE OF MISSOURI
RICHARD R. BEARDMORE
NUMBER PE-2005030009
PROFESSIONAL ENGINEER
7/23/14

DATE:
- 2014-07-24

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

SHEET CONTENTS:
- FLOOR PLAN - LIGHTING


LS&A Latimer Sommers & Associates, P.A.
CONSULTING ENGINEERS
3630 SW Summerfield Drive, Suite A
Topeka, Kansas 66614-3974
Telephone: (785) 233-3232
FAX: (785) 233-0647
Email: lsapa@lsapa.com
LSA PROJECT NO. 1302029

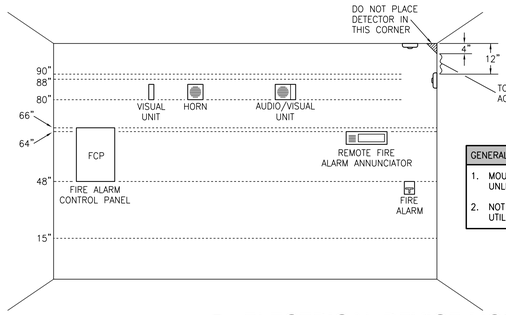

HTK PROJECT NUMBER:
- ULYB112022
  10008.01 - 0018

SHEET NUMBER:

E201

100% CONTRACT DOCUMENTS


...\ULYB112022-E201.dwg 48 07/23/14 EJC



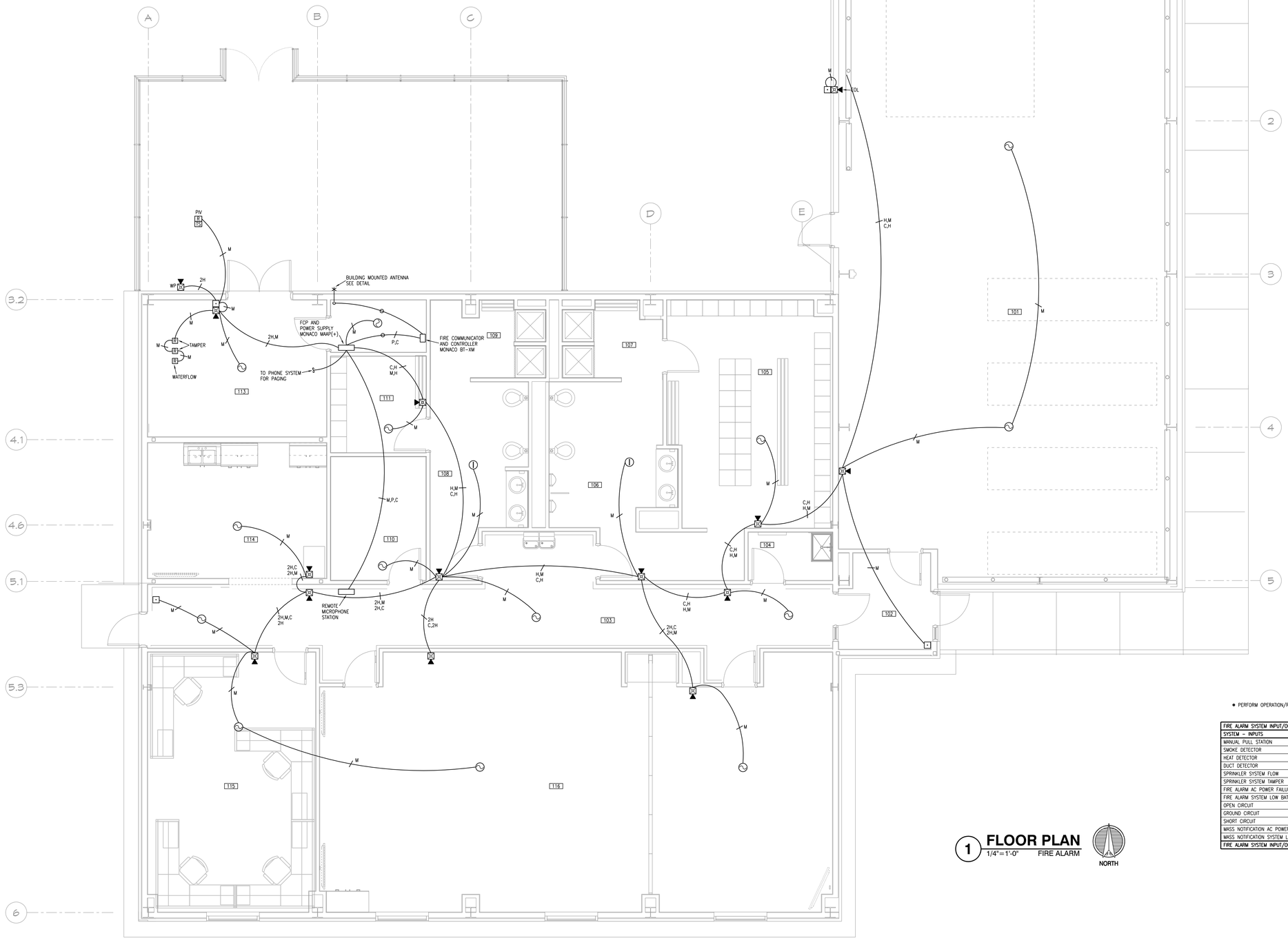

**GENERAL NOTES:**

1. MOUNT DEVICES AT HEIGHT INDICATED UNLESS NOTED OTHERWISE ON PLANS.
2. NOT ALL DEVICES SHOWN MAY BE UTILIZED ON PROJECT.

**DEVICE MOUNTING NOTES:**

1. VISUAL UNIT
   DEVICE BOTTOM 80" ABOVE HIGHEST FLOOR LEVEL OR TOP 6" BELOW CEILING; WHICHEVER IS LOWER.
2. AUDIO UNIT
   DEVICE BOTTOM 80" ABOVE HIGHEST FLOOR LEVEL OR TOP 6" BELOW CEILING; WHICHEVER IS LOWER.
3. AUDIO/VISUAL UNIT
   DEVICE BOTTOM 80" ABOVE HIGHEST FLOOR LEVEL OR TOP 6" BELOW CEILING; WHICHEVER IS LOWER.
4. PULL STATION
   HIGHEST OPERABLE PART SHALL NOT BE MORE THAN 48" ABOVE THE FLOOR.

## 2 ELECTRICAL DEVICE MOUNTING HEIGHTS
NO SCALE




## 1 FLOOR PLAN
1/4"=1'-0" FIRE ALARM

NORTH

## FIRE ALARM WIRE LIST

| | |
|---|---|
| H | AUDIBLE AND VISUAL CIRCUIT – 2 CONDUCTOR 14 AWG SOLID<br>NON-PLENUM RATER: FPLR — CONDUIT ONLY: THHN<br>BELDEN 5120UL — (2) #14 AWG (RED/BLACK)<br>AREA=0.0356 SQ. INCH. — AREA=0.0097 SQ. INCH (EACH) |
| K | REMOTE TEST SWITCH/LED CIRCUIT – (2) 2 CONDUCTOR 18 AWG SOLID<br>NON-PLENUM RATED: FPLR — CONDUIT ONLY: THHN<br>BELDEN 5320UL — (2) #8 AWG (PINK/BROWN)<br>AREA = 0.0179 SQ. INCH — (2) #18 AWG (WHITE/ORANGE)<br>AREA = 0.0055 SQ. INCH (EACH) |
| M | SLC CIRCUIT – 1 PAIR 16 AWG SOLID UNSHIELDED.<br>NON-PLENUM RATED: FPLR — CONDUIT ONLY: TFFN<br>BELDEN 5320UL AREA = 0.0179 SQ. INCH. — (2) #16 AWG (YELLOW/BLUE)<br>AREA=0.0055 SQ. INCH (EACH) |
| P | SLC POWER CIRCUIT – 2 CONDUCTOR 14 AWG SOLID<br>NON-PLENUM RATED: FPLR — CONDUIT ONLY: THHN<br>BELDEN 5120UL — (2) #14 AWG (YELLOW/BLUE)<br>AREA = 0.0356 SQ. INCH — AREA=0.0097 SQ. INCH (EACH) |
| R | RELAY CIRCUIT – 2 CONDUCTOR 14 AWG SOLID<br>NON-PLENUM RATED: FPLR — CONDUIT ONLY: THHN<br>BELDEN 5120UL — (2) #14 AWG (YELLOW/BLUE)<br>AREA = 0.0356 SQ. INCH — AREA=0.0097 SQ. INCH (EACH) |
| C | ANNUNCIATOR COMMUNICATION – 2 CONDUCTOR 16 TWISTED AND SHIELDED<br>NON-PLENUM RATED: FPLR<br>BELDEN 5200FE<br>DIAMETER: 0.184 INCH<br>AREA = 0.0266 SQ. INCH |
| | UHF CABLE FOR ANTENNA BY SYSTEM MANUFACTURE |

| CONDUIT SIZE | CONDUCTOR AREA | CONDUIT SIZE | CONDUCTOR AREA |
|---|---|---|---|
| 1/2" | 0.12 SQ INCH.* | 1 1/4" | 0.60 SQ INCH.* |
| 3/4" | 0.21 SQ INCH.* | 1 1/2" | 0.82 SQ INCH.* |
| 1" | 0.34 SQ INCH.* | 2" | 1.34 SQ INCH.* |

* 40% FILL PER N.E.C.

THE CABLE SPECIFIED HERE ARE FOR REFERENCE OF REQUIRED ELECTRICAL CHARACTERISTICS AS WELL AS CODE REQUIREMENTS. ALTERNATE SUPPLIERS MAY BE SUBSTITUTED PROVIDED EQUIVALENT CHARACTERISTICS ARE MAINTAINED. ITEMS SUCH AS CAPACITANCE BETWEEN CONDUCTORS AND WIRE GAUGE CAN BE CRUCIAL TO BE CIRCUIT DESIGN OF THIS SYSTEM INSTALLATION.

NOTE: EQUIVALENT CABLES BY WEST PENN. ALL CONDUCTORS AND CABLES SHALL BE IN CONDUIT.

## NFPA SYMBOLS LEGEND

| | |
|---|---|
| | SMOKE DETECTOR |
| S | SMOKE DETECTOR WITH SOUNDER BASE |
| ISO | SMOKE DETECTOR WITH ISOLATOR BASE |
| | WALL MOUNTED SMOKE DETECTOR |
| | HEAT DETECTOR |
| | DUCT DETECTOR |
| | ADDRESSABLE MANUAL PULL STATION |
| | DOOR HOLDER |
| | FLOW DETECTOR/SWITCH |
| | TAMPER DETECTOR |
| TS | TAMPER SWITCH |
| T | TEST STATION |
| R | MR101/C SHUTDOWN RELAY, SPDT W/RED |
| | A/V (WALL MOUNTED) 24 VDC |
| | AUDIO/VISUAL NOTIFICATION UNIT WITH SPEAKER AND SECONDARY AMBER STROBE ** |
| | STROBE |
| | BELL ANNUNCIATOR |
| | HORN/SPEAKER |
| FCP | FIRE ALARM CONTROL PANEL |
| | FIREMAN'S PHONE |
| ARA | AREA RESCUE CALL STATION |
| ARA M | AREA RESCUE MASTER STATION |
| ZAM S | SIGNAL ZAM |
| ZAM C | CONTROL ZAM |
| ZAM DET | DETECTOR ZAM |
| IAM | MONITOR MODULE |
| IAM R | RELAY IAM |
| PC | GRAPHIC COMMAND CENTER |
| FAA | REMOTE FIRE ALARM AUDIO |
| FSA | REMOTE ANNUNCIATOR WITH AUDIO |
| ANN | ANNUNCIATOR |
| FS | FIRE SMOKE DAMPER |
| NAC | NAC POWER EXTENDER |

* ALL SYMBOLS SHOWN ABOVE MAY NOT APPEAR ON PLANS
** PROVIDE IN SAME HOUSING

● PERFORM OPERATION/REPORT DEVICE STATUS

| FIRE ALARM SYSTEM INPUT/OUTPUT MATRIX | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SYSTEM – INPUTS | | | | | | | | | | | | |
| MANUAL PULL STATION | ● | | | | | | ● | ● | | | ● | |
| SMOKE DETECTOR | ● | | | | | | ● | ● | | | ● | |
| HEAT DETECTOR | ● | | | | | | ● | ● | | | ● | |
| DUCT DETECTOR | | | ● | | | | | | | ● | | ● |
| SPRINKLER SYSTEM FLOW | ● | | | | | | ● | ● | | | ● | |
| SPRINKLER SYSTEM TAMPER | | | | | | ● | ● | | | ● | | |
| FIRE ALARM AC POWER FAILURE | | | | | | ● | ● | | | ● | | |
| FIRE ALARM SYSTEM LOW BATTERY | | | | | | ● | ● | | | ● | | |
| OPEN CIRCUIT | | | | | | ● | ● | | | ● | | |
| GROUND CIRCUIT | | | | | | ● | ● | | | ● | | |
| SHORT CIRCUIT | | | | | | ● | ● | | | ● | | |
| MASS NOTIFICATION AC POWER FAILURE | | | | | | ● | ● | | | ● | | |
| MASS NOTIFICATION SYSTEM LOW BATTERY | | | | | | ● | ● | | | ● | | |
| FIRE ALARM SYSTEM INPUT/OUTPUT MATRIX | A | B | C | D | E | F | G | H | I | J | K | L |

ACTUATE COMMON VISUAL ALARM SIGNAL INDICATOR AT FCP
ACTUATE COMMON AUDIBLE SUPERVISORY SIGNAL AT FCP
ACTUATE COMMON VISUAL SUPERVISORY SIGNAL AT FCP
ACTUATE AUDIBLE TROUBLE SIGNAL AT FCP
ACTUATE COMMON VISUAL TROUBLE SIGNAL AT FCP
TRANSMIT ALARM AND VISUAL INFORMATION TO REMOTE ANNUNCIATORS
TRANSMIT SUPERVISORY AND VISUAL INFORMATION TO REMOTE ANNUNCIATORS
TRANSMIT TROUBLE AND VISUAL INFORMATION TO REMOTE ANNUNCIATORS
SHUT DOWN ELEVATOR(S) AND SEND SIGNAL TO REMOTE ANNUNCIATORS
SHUT DOWN AC POWER AND SEND SIGNAL TO REMOTE ANNUNCIATORS
SHUT DOWN ALL HVAC UNITS AND SEND SIGNAL TO REMOTE ANNUNCIATORS


LS&A
Latimer Sommers & Associates, P.A.
CONSULTING ENGINEERS
3639 SW Summerfield Drive, Suite A
Topeka, Kansas 66614-3974
Telephone: (785) 233-3232
FAX: (785) 233-0547
Email: lsapa@lsapa.com
LSA PROJECT NO. 1302029



HTK ARCHITECTS PA
9300 W 110TH ST. STE. 150
OVERLAND PARK, KS 66210
P. 913.663.5373
9305 E.KANSAS AVE.
SUITE A WICHITA, KS 67207
P. 785.266.5373
WWW.HTKARCHITECTS.NET


STATE OF MISSOURI
RICHARD R. BEARDMORE
NUMBER PE-2005030695
PROFESSIONAL ENGINEER
12-13-14

DATE:
● 2014-07-24

REVISED DATE:
●
●
●
●

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

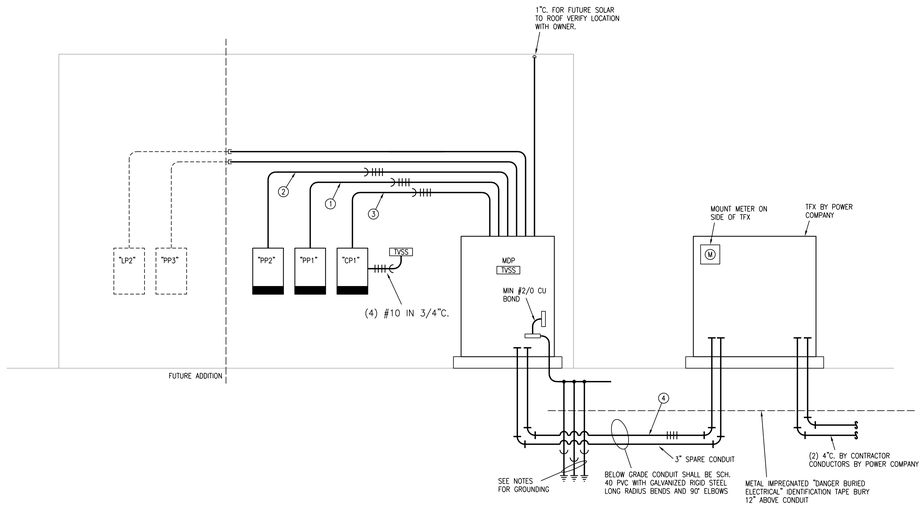
SHEET CONTENTS:
● FLOOR PLAN - FIRE ALARM

HTK PROJECT NUMBER:
● ULYB112022
10008.01 - 0018

SHEET NUMBER:
E301

100% CONTRACT DOCUMENTS


... ULYB112022-E301.dwg 48 07/11/14 CFC



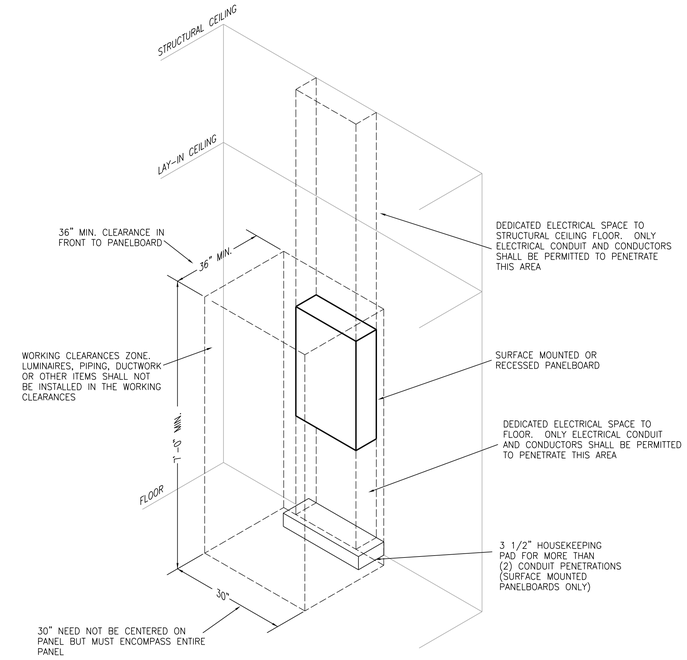

## 1 ELECTRICAL DISTRIBUTION RISER DIAGRAM
NO SCALE

**NOTES:**

1. BELOW GRADE CONDUIT SHALL BE SCH. 40 PVC ALL BENDS SHALL BE LONG RADIUS GRSC. ALL RISERS SHALL BE GRSC.
2. PROVIDE "DANGER BURIED ELECTRICAL" TAPE THAT IS METAL IMPREGNATED A MINIMUM OF 12" ABOVE ALL EXTERIOR CONDUIT.
3. MIN. BURY EXTERIOR CONDUIT SHALL BE 36" FOR SECONDARY VOLTAGE, 42" FOR PRIMARY VOLTAGE.
4. SERVICE ENTRANCE GROUND.
   A. ALL GROUNDING CONDUCTORS SHALL BE MIN #1/0 BARE COPPER.
   B. PROVIDE MIN. (3) 3/4"ø x10' LONG COPPER GROUND RODS SPACED AT 20' CENTERS CONNECTED TO GROUND BUS USING BARE COPPER CONDUCTOR.
   C. PROVIDE MIN. 20" OF BARE COPPER CONDUCTOR ENCASED IN CONCRETE WITH MIN. 2" CONCRETE COVER.
   D. PROVIDE BARE COPPER CONNECTION TO EFFECTIVELY GROUNDED METAL WATER MAIN WITHIN 5FT OF SERVICE ENTRANCE.
5. ALL FEEDERS AND CONDUCTORS SHALL UTILIZE FULL LENGTH COLORED INSULATION PER NEC COLOR CODING.
6. PROVIDE ALL PANELBOARDS WITH HINGED DOOR-WITHIN-DOOR COVER AND LOCKING CLASP.

**LEGEND:**

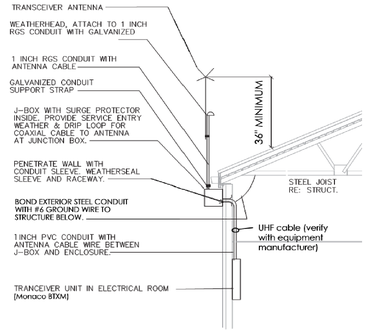
1. (4) #3 & (1) #8 GRD IN 1 1/4"C.
2. (4) #3 & (1) #8 GRD IN 1 1/4"C.
3. (4) #3 & (1) #8 GRD IN 1 1/4"C.
4. (1) SET OF (4) 500 KCMIL IN 3"C.




**NOTE:**

COORDINATE ALL WORK WITH OTHER TRADES. MAINTAIN ALL OTHER NEC CLEARANCES AND REQUIREMENTS.

## 2 TYPICAL CLEARANCE AT ELECTRICAL PANELBOARD DETAIL
NO SCALE




NOTE:
MODIFY ANTENNA MOUNTING AS REQUIRED TO ACCOMODATE EXACT LOCATION COORDINATED WITH C.O.R.

## 3 MASS NOTIFICATION ANTENNA DETAIL
NO SCALE

## ELECTRICAL SYMBOLS LEGEND

| | | | |
|---|---|---|---|
| | CONDUIT CONCEALED IN CEILING OR WALL | $ | SWITCH - SINGLE POLE |
| | CONDUIT CONCEALED IN FLOOR SLAB | $ 3, 4 | 3-WAY, 4-WAY |
| | EXPOSED CONDUIT | "A" | LIGHT FIXTURE AND TYPE |
| | HOMERUN - ARROW INDICATES CKT., LINES INDICATE WIRES | | FLUORESCENT LIGHT FIXTURE |
| | GROUND WIRE | | EMERGENCY LIGHT FIXTURE WITH BATTERY PACK |
| | GROUNDING ROD | | FIXTURE ON LIFE SAFETY BRANCH OF EMERGENCY SYSTEM |
| | SINGLE RECEPTACLE | | INCANDESCENT OR H.I.D. LIGHT FIXTURE |
| | DUPLEX RECEPTACLE (20 AMP UNLESS NOTED) | | INCANDESCENT OR H.I.D. LIGHT FIXTURE (WALL MOUNTED) |
| | FOURPLEX RECEPTACLE | | EXIT LIGHT (CEILING OR WALL MOUNTED) |
| | 208 OR 240 VOLT RECEPTACLE (20 AMP UNLESS NOTED) | | FLUSH PANELBOARD (LIGHT & RECEPTACLES) |
| C | CLOCK RECEPTACLE | | SURFACE PANELBOARD (LIGHT & RECEPTACLES) |
| ▼ | TELE/DATA OUTLET * | | DISTRIBUTION PANEL OR SWITCHBOARD |
| ▽ | TELE/DATA OUTLET * | AC | DEVICE LOCATED ABOVE COUNTER |
| | PUSHBUTTON | AFF | ABOVE FINISHED FLOOR |
| S | CEILING SPEAKER | D | DIMMER |
| | BELL | E | INDICATES EXISTING DEVICE |
| | MOTOR | EDF | ELECTRIC DRINKING FOUNTAIN |
| | FUSIBLE SWITCH (BUSSMAN SSU) | GFI | GROUND FAULT INTERRUPTER |
| | DISCONNECT SWITCH (D.S.) | NL | NIGHTLIGHT FIXTURE, WIRED HOT |
| | COMBINATION MOTOR STARTER (CMS) | WP | WEATHERPROOF |
| R | RELAY | | CONNECT NEW TO EXISTING |
| | JUNCTION BOX | | LOCKABLE GUARD |
| T | THERMOSTAT | | |

NOTES: ALL SYMBOLS SHOWN ABOVE MAY NOT APPEAR ON PLANS. REFER TO MECHANICAL SYMBOLS LEGEND FOR MECHANICAL SYMBOLS THAT MAY BE SHOWN ON ELECTRICAL PLANS. * 4x4 BACKBOX WITH SINGLE GANG PLASTER RING AND A 1 1/4" CONDUIT TO ABOVE ACCESSIBLE CEILING.

| MARK: "MDP" | CIRCUIT BREAKER DISTRIBUTION PANELBOARD SCHEDULE | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MANUFACTURER: SQUARE D I-LINE I-LINE C.B.'S | CLASS: . , BUS BRACING: 25K. A.I.C. | | | | | | FEEDER: (1) SET OF (4) 500 KCMIL IN 3"C. | |
| | 120/208 VOLTS, 3 PHASE, 4 WIRE | | | | | | | |
| | 400 AMP MAIN BUS, (UL) GRD. BUS | | | | | | | |
| UNIT NO. | LOAD | | CIRCUIT BREAKER | | TRIP | | BRANCH FEEDER | |
| | EQUIPMENT SERVED | FLA | FRAME SIZE | TYPE | AMP | POLE | CONDUIT | WIRE OR BUSWAY |
| | MAIN C.B. | - | 400 | LA | 300 | 3 | - | - |
| 1 | ERV | 10 | 100 | FA | 15 | 3 | 3/4" | (4) #12 & (1) #12 GRD. |
| 2 | CU-1 | 9 | 100 | FA | 15 | 2 | 3/4" | (2) #12 & (1) #12 GRD. |
| 3 | CU-2 | 12 | 100 | FA | 20 | 2 | 3/4" | (2) #12 & (1) #12 GRD. |
| 4 | CU-3 | 28 | 100 | FA | 50 | 2 | 3/4" | (2) #8 & (1) #8 GRD. |
| 5 | CU-4 | 34 | 100 | FA | 60 | 2 | 3/4" | (2) #6 & (1) #6 GRD. |
| 6 | PP1 | 15 | 100 | FA | 100 | 3 | 1 1/4" | (4) #3 & (1) #8 GRD. |
| 7 | PP2 | 43 | 100 | FA | 70 | 3 | 1 1/4" | (4) #3 & (1) #8 GRD. |
| 8 | CP1 | 20 | 100 | FA | 70 | 3 | 1 1/4" | (4) #3 & (1) #8 GRD. |
| 9 | SPARE | - | 100 | FA | 70 | 3 | - | - |
| 10 | SPARE | - | 100 | FA | 100 | 3 | - | - |
| 11 | SPARE | - | 100 | FA | 100 | 3 | - | - |
| 12 | SPACE | - | 100 | - | - | - | - | - |
| 13 | TVSS | - | 100 | - | 30 | 3 | 1" | (4) #3 & (1) #8 GRD. |

NOTES:
1. AVAILABLE FAULT CURRENT. 8,681 AMPS SCCA.
2. PROVIDE WITH ARC FLASH WARNING LABELS.
3. PROVIDE WITH 120KA/PHASE 10-MODE TVSS PANEL WITH PHASE LIGHTS, SURGE COUNTER AND AUDIBLE ALARM.
4. DIVERSIFIED PEAK LOAD=134A.
5. PROVIDE WITH GFCI PROTECTION.
6. PROVIDE WITH POWER MONITORING AS INDICATED ON SHEET ME 301.


HTK ARCHITECTS PA
9300 W 110TH ST. STE. 150
OVERLAND PARK, KS 66210
P 913.663.3373
9005 E KANSAS AVE.
SPRINGFIELD, MO 65812
P 785.266.3373
WWW.HTKARCHITECTS.NET


STATE OF MISSOURI
RICHARD R. BEARDMORE
NUMBER PE-2009030095
PROFESSIONAL ENGINEER
7/23/14

DATE:
- 2014-07-24

REVISED DATE:
-
-
-
-

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

SHEET CONTENTS:
- ELECTRICAL DETAILS AND SCHEDULES

HTK PROJECT NUMBER:
- ULYB112022
  10008.01 - 0018

SHEET NUMBER:

E401

100% CONTRACT DOCUMENTS


LS&A
Latimer Sommers & Associates, P.A.
CONSULTING ENGINEERS
3639 SW Summerfield Drive, Suite A
Topeka, Kansas 66614-3974
Telephone: (785) 233-3232
FAX: (785) 233-0647
Email: lsapa@lsapa.com
LSA PROJECT NO. 1302029



... ULYB112022-E401_2.dwg 96 07/11/14 CDC

## PANELBOARD SCHEDULE

PANEL NO.: "CP1" | LOCATION: . | KAIC: 10
PANEL TYPE: NQ | VOLTS: 208 | PHASE: 3 | WIRE: 4 | MAINS: 100 MLO

| DESCRIPTION | WATTS/PHASE A | B | C | C/B TRIP | | C/B TRIP | WATTS/PHASE A | B | C | DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|
| RECEPTACLE | 400 | | | 20 | 1 2 | 30 | 2000 | | | RACK RECEPTACLE |
| RECEPTACLE | | 400 | | 20 | 3 4 | 30 | | 2000 | | RACK RECEPTACLE |
| RECEPTACLE | | | 400 | 20 | 5 6 | 20 | | | | SPARE |
| SPARE | | | | 20 | 7 8 | 20 | | | | SPARE |
| SPARE | | | | 20 | 9 10 | 20 | | | | SPARE |
| SPARE | | | | 20 | 11 12 | 20 | | | | SPARE |
| SPARE | | | | 20 | 13 14 | 20 | | | | SPARE |
| SPARE | | | | 20 | 15 16 | 20 | | | | SPARE |
| SPARE | | | | 20 | 17 18 | 20 | | | | SPARE |
| SPARE | | | | 20 | 19 20 | 30 | | | | TVSS |
| SPARE | | | | 20 | 21 22 | 3P | | | | |
| SPACE | | | | 20 | 23 24 | | | | | |
| | | | | | 25 26 | | | | | SPACE |
| | | | | | 27 28 | | | | | |
| | | | | | 29 30 | | | | | |
| CONNECTED LOAD | 400 | 400 | 400 | | | | 2000 | 2000 | – | CONNECTED LOAD |

PHASE LOADS

| PHASE | WATTS CONNX. | WATTS DIV'SD. | AMPERES CONNX. | AMPERES DIV'SD. |
|---|---|---|---|---|
| A | 2400 | | 20 | 17 |
| B | 2400 | | 20 | 17 |
| C | 400 | | 3 | 2 |

REMARKS

FEEDERS: (4) #4 & (1) #8 GRD. IN 1 1/4"C.

*PROVIDE WITH DOOR IN DOOR COVER.

## PANELBOARD SCHEDULE

PANEL NO.: "PP1" | LOCATION: . | KAIC: 10
PANEL TYPE: NQ | VOLTS: 208 | PHASE: 3 | WIRE: 4 | MAINS: 225 MLO

| DESCRIPTION | WATTS/PHASE A | B | C | C/B TRIP | | C/B TRIP | WATTS/PHASE A | B | C | DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|
| F-1 | 1176 | | | 20 | 1 2 | 20 | 600 | | | WH-1 |
| F-2 | | 1176 | | 20 | 3 4 | 20 | | 1176 | | EF-1 |
| F-3 | | | 1920 | 20 | 5 6 | 20 | | | 1200 | DSF |
| GARAGE DOOR | 1200 | | | 20 | 7 8 | 20 | 1200 | | | DSF |
| ICE MACHINE ** | | 400 | | 20 | 9 10 | 20 | | 1000 | | RH 1 & 2 |
| RECEPTACLE ** | | | 400 | 20 | 11 12 | 20 | | | 400 | RECEPTACLE |
| RECEPTACLE ** | 400 | | | 20 | 13 14 | 20 | 400 | | | FACP |
| RECEPTACLE ** | | 600 | | 20 | 15 16 | 20 | | 200 | | RECEPTACLE |
| RECEPTACLE ** | | | 600 | 20 | 17 18 | 20 | | | 200 | RECEPTACLE |
| RECEPTACLE | 600 | | | 20 | 19 20 | 20 | 200 | | | RECEPTACLE |
| RECEPTACLE | | 600 | | 20 | 21 22 | 20 | | 400 | | RECEPTACLE |
| RECEPTACLE | | | 400 | 20 | 23 24 | 20 | | | 400 | RECEPTACLE |
| RECEPTACLE | 400 | | | 20 | 25 26 | 20 | 800 | | | RECEPTACLE |
| RECEPTACLE | | 800 | | 20 | 27 28 | 50 | | 2600 | | OVEN |
| DDC PANEL | | | 400 | 20 | 29 30 | 2P | | | 2600 | |
| MASS NOTIFICATION | 400 | | | 20 | 31 32 | 20 | | | | SPARE |
| SPARE | | | | 20 | 33 34 | 20 | | | | SPARE |
| SPARE | | | | 20 | 35 36 | 20 | | | | SPARE |
| SPARE | | | | 20 | 37 38 | 20 | | | | SPARE |
| SPARE | | | | 20 | 39 40 | 20 | | | | SPARE |
| SPARE | | | | 20 | 41 42 | 20 | | | | SPARE |
| CONNECTED LOAD | 3776 | 3576 | 3320 | | | | 3200 | 5376 | 4800 | CONNECTED LOAD |

PHASE LOADS

| PHASE | WATTS CONNX. | WATTS DIV'SD. | AMPERES CONNX. | AMPERES DIV'SD. |
|---|---|---|---|---|
| A | 6976 | | 58.2 | 49.4 |
| B | 8952 | | 74.6 | 63.4 |
| C | 8120 | | 67.7 | 57.5 |

REMARKS

FEEDERS: (4) #3 & (1) #8 GRD. IN 1 1/4"C.

* PROVIDE WITH DOOR IN DOOR COVER.
** PROVIDE GROUND FAULT CIRCUIT INTERRUPTION OR CIRCUIT BREAKER.

## PANELBOARD SCHEDULE

PANEL NO.: "PP2" | LOCATION: . | KAIC: 10
PANEL TYPE: NQ | VOLTS: 208 | PHASE: 3 | WIRE: 4 | MAINS: 225

| DESCRIPTION | WATTS/PHASE A | B | C | C/B TRIP | | C/B TRIP | WATTS/PHASE A | B | C | DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|
| RECEPTACLE | 400 | | | 20 | 1 2 | 20 | 400 | | | RECEPTACLE |
| COPIER | | 600 | | 20 | 3 4 | 20 | | 600 | | RECEPTACLE |
| RECEPTACLE | | | 600 | 20 | 5 6 | 20 | | | 200 | RECEPTACLE |
| RECEPTACLE | 400 | | | 20 | 7 8 | 20 | 800 | | | RECEPTACLE |
| PROJECTOR SCREEN | | 500 | | 20 | 9 10 | 20 | | 910 | | LIGHTING |
| PROJECTOR | | | 1000 | 20 | 11 12 | 20 | | | 1600 | LIGHTING |
| RECEPTACLE | 600 | | | 20 | 13 14 | 20 | 1728 | | | LIGHTING |
| RECEPTACLE | | 1200 | | 20 | 15 16 | 20 | | 864 | | LIGHTING |
| SITE LIGHTING | | | 515 | 20 | 17 18 | 20 | | | 850 | LIGHTING |
| SITE LIGHTING | 309 | | | 20 | 19 20 | 20 | 420 | | | LIGHTING |
| SITE LIGHTING | | 162 | | 20 | 21 22 | 20 | | 400 | | CAMERA |
| SITE LIGHTING | | | 160 | 20 | 23 24 | 20 | | | | SECURITY GATE |
| SPARE | | | | 20 | 25 26 | 20 | | | | SPARE |
| SPARE | | | | 20 | 27 28 | 20 | | | | SPARE |
| SPARE | | | | 20 | 29 30 | 20 | | | | SPARE |
| SPARE | | | | 20 | 31 32 | 20 | | | | SPARE |
| SPARE | | | | 20 | 33 34 | 20 | | | | SPARE |
| SPARE | | | | 20 | 35 36 | 20 | | | | SPARE |
| SPARE | | | | 20 | 37 38 | 20 | | | | SPARE |
| SPARE | | | | 20 | 39 40 | 20 | | | | SPARE |
| SPARE | | | | 20 | 41 42 | 20 | | | | SPARE |
| CONNECTED LOAD | 1709 | 2462 | 2275 | | | | 3348 | 2774 | 2650 | CONNECTED LOAD |

PHASE LOADS

| PHASE | WATTS CONNX. | WATTS DIV'SD. | AMPERES CONNX. | AMPERES DIV'SD. |
|---|---|---|---|---|
| A | 5057 | | 42.1 | 31.6 |
| B | 5176 | | 43.1 | 32.4 |
| C | 4925 | | 41.0 | 30.8 |

REMARKS

FEEDERS: (4) #3 & (1) #8 GRD. IN 1 1/4"C.

*PROVIDE WITH DOOR IN DOOR COVER.

## LIGHT FIXTURE SCHDULE

| MARK | MANUFACT. | MODEL NUMBER | MOUNTING RECESS. | SURF. | WALL | FINISH | LAMPS INCAND. | FLUOR. | LED | CODE | QUAN. | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | WILLIAMS | DIG-S24-28T5S-WPR-EB2-UNV | X | | | WHITE | | X | | 28W T5 | 2 | 1, 5 |
| A1 | SAME AS TYPE "A", WITH EMERGENCY BATTERY | | | | | | | | | | | 1, 2, 5 |
| A2 | WILLIAMS | DIG-S24-28T5S-WPR-EB3-UNV | X | | | WHITE | | X | | 28W T5 | 3 | 1, 5 |
| A3 | SAME AS TYPE "A2", WITH EMERGENCY BATTERY | | | | | | | | | | | 1, 2, 5 |
| B | WILLIAMS | LED60-PH20/835-CS-EDD*PH-120 | X | | | WHITE | | | X | 30W | 1 | 5 |
| B1 | SAME AS TYPE "B", WITH EMERGENCY BATTERY | | | | | | | | | | | 2, 5 |
| C | WILLIAMS | 82-4-28T5S-EB2-UNV | | X | | WHITE | | X | | 28W T5 | 2 | 1, 5 |
| C1 | SAME AS TYPE"C", WITH EMERGENCY BATTERY | | | | | | | | | | | 1, 2, 5 |
| D | WILLIAMS | WS-8-28T5S-S-WSBL/15/130-EB2-UNV | X | | | WHITE | | X | | 28W T5 | 2 | 1, 5 |
| D1 | WILLIAMS | WS-4-28T5S-S-WSBL/15/130-EB2-UNV | X | | | WHITE | | X | | 28W T5 | 1 | 1, 5 |
| F | WILLIAMS | GL-4-454T5H-EB4-UNV | | X | | WHITE | | X | | 54W T5HO | 4 | 1, 5 |
| F1 | SAME AS TYPE "F", WITH EMERGENCY BATTERY | | | | | | | | | | | 1, 2, 5 |
| X | WILLIAMS | EXIT-R-EM-WHT | | X | X | WHITE | | | | - | | 5 |
| X1 | WILLIAMS | EXIT/REMOTE-SF-R-WHT-RH | | X | X | WHITE | | | | - | | 3, 5 |

REMARKS:
1-PROVIDE WITH PROGRAM START ELECTRONIC BALLAST
2-EMERGENCY BATTERY, PROVIDES 90 MINUTES OF FULL OPERATION.
3-PROVIDE WITH REMOTE HEAD AS SHOWN ON PLANS.
4-MOUNT DIRECTLY BELOW DUCTWORK.
5 - 120 V.


HTK ARCHITECTS PA
9300 W 110TH ST. STE. 150
OVERLAND PARK, KS 66212
P: 913.663.3373
WWW.HTKARCHITECTS.NET


STATE OF MISSOURI
RICHARD R. BEARDMORE
NUMBER PE-2005030095
PROFESSIONAL ENGINEER
7/23/14

DATE:
- 2014-07-24

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO


LS&A Latimer Sommers & Associates, P.A.
CONSULTING ENGINEERS
3630 SW Summerfield Drive, Suite A
Topeka, Kansas 66614-3974
Telephone: (785) 233-3232
FAX: (785) 233-0647
Email: lsapa@lsapa.com
LSA PROJECT NO. 1302029

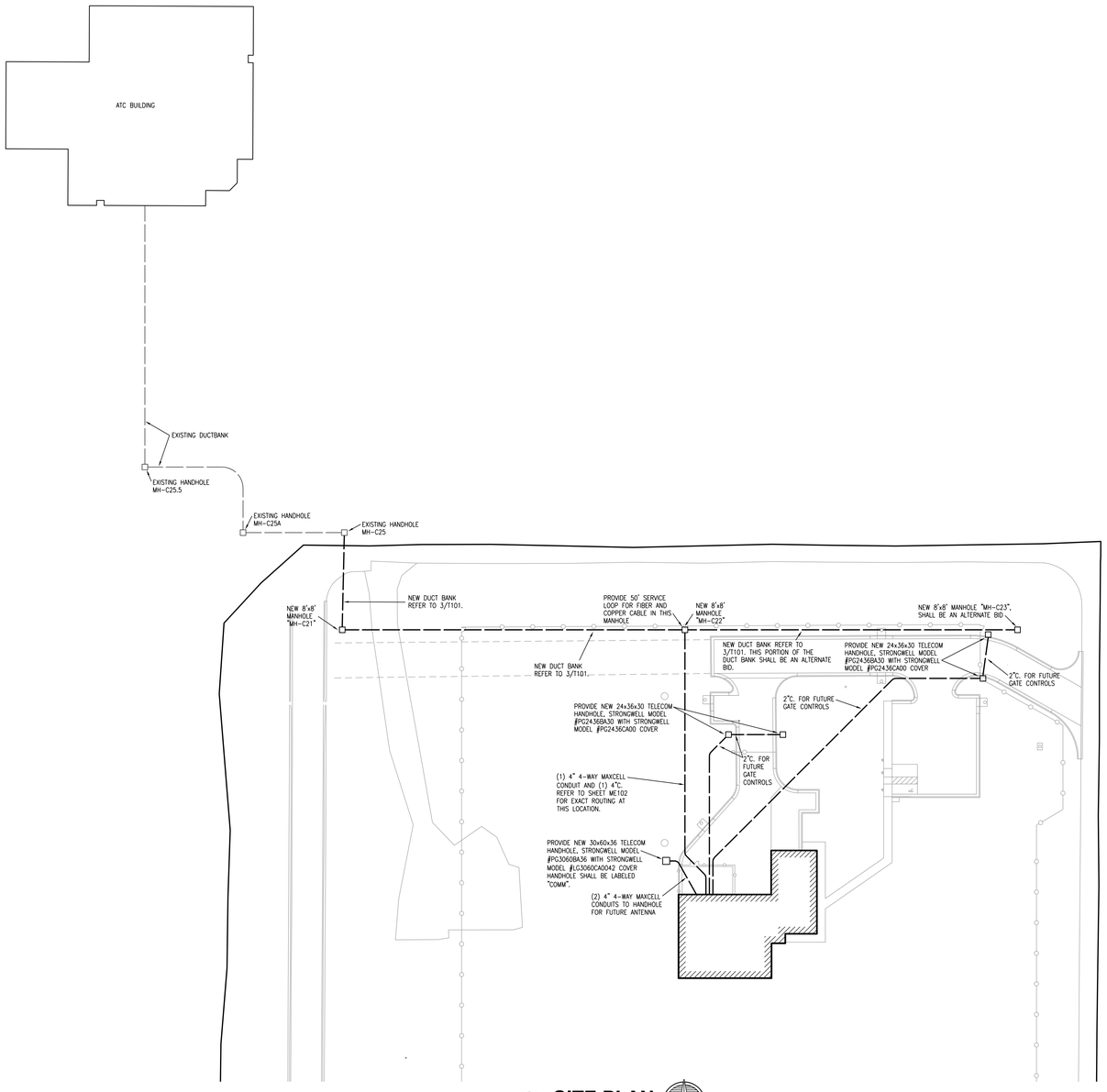

SHEET CONTENTS:
- ELECTRICAL SCHEDULES

HTK PROJECT NUMBER:
- ULYB112022
  10008.01 - 0018

SHEET NUMBER:

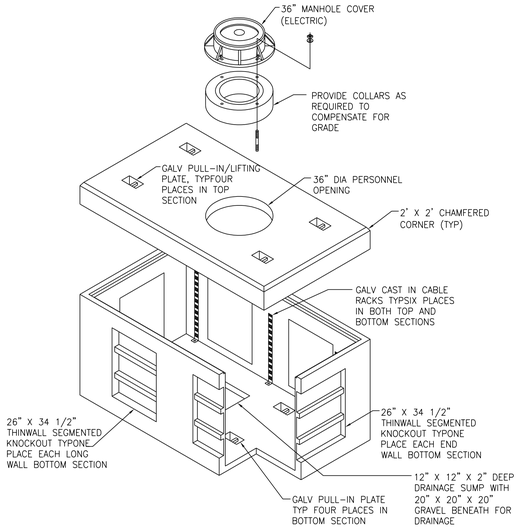
E402

100% CONTRACT DOCUMENTS




## 1 SITE PLAN
1"=40'-0" TELECOM

NORTH



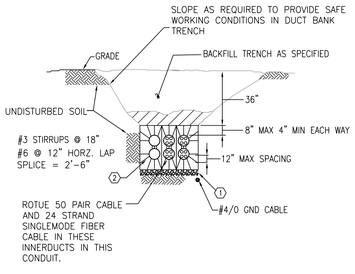

**MANHOLE VAULT NOTES:**

1. VAULT SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF MISSOURI. SUBMIT DRAWINGS WITH ENGINEERS SEAL THAT INCLUDES LISTING OF DESIGN CRITERION FOR APPROVAL PRIOR TO PURCHASE OF EQUIPMENT, MATERIALS, DEVICES, ETC.
2. MATERIAL REQUIREMENTS: MINIMUM CONCRETE COMPRESSION STRENGTH AT 28 DAYS SHALL BE 4000 PSI. MINIMUM REINFORCING STEEL YIELD STRENGTH SHALL BE 60 KSI.
3. ALLOWABLE SOIL BEARING PRESSURE UNDER VAULT SHALL BE 1500 PSI NET.
4. DESIGN LATERAL PRESSURE CRITERION: WHEN LOAD SURCHARGE SHALL BE 120 PSF UNIFORMS (LATERAL) SOIL DENSITY SHALL BE 120#/CUBIC FOOT, KO (AT REST)= 0.50, WATER TABLE 5'-0" BELOW GRADE (MINIMUM FACTOR OF SAFETY FOR BUOYANCY SHALL BE 1.5). DEPTH OF COVER AT COMMUNICATIONS MANHOLE WILL BE 6'-0" IN THE FUTURE.
5. WATERPROOF MANHOLE (VAULT) IN ACCORDANCE WITH SPECIFICATION SECTION 02532.
6. SEE SHEET 1/T101 FOR SPECIFIC MANHOLE DIMENSIONS.
7. ALL MANHOLES SHALL BE BURIED IN THEIR ENTIRETY WITH ONLY THE MANHOLE LID/COVER SHOWING.

## 2 PRECAST COMMUNICATIONS MANHOLE VAULT
NO SCALE

**DUCT BANK NOTES:**

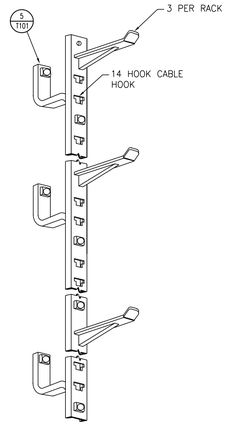
1. DUCT BANKS MAY BE EARTH FORMED WITH UNDISTURBED EARTH PROVIDED THE EARTH WILL STAND TO A NEAR VERTICAL SLOPE. IF TRENCH IS OVER-EXCAVATED, COMPACT AS SPECIFIED.
2. REFER TO DUCT BANK SECTIONS FOR NUMBER, SIZE, CONFIGURATION & MATERIALS OF CONDUIT.
3. TIE DOWN CONDUITS AS REQUIRED TO PREVENT THE CONDUIT FROM FLOATING.
4. PROVIDE (4) 4-WAY 1 1/4" PVC QUAD-LOC DUCTS AND (2) 4" SCHEDULE 40 PVC DUCT.
5. CONDUIT SPACING TO BE 3 INCHES.
6. ALL DUCT BANKS ARE TO BE ENCLOSED IN CONCRETE WHEN ROUTED UNDER ROADS.
7. CONDUITS SHALL BE SLOPED A MINIMUM OF 1/8 IN./FT. FROM MANHOLE TO MANHOLE AND MANHOLE TO STUB UP TO PROVIDE DRAINAGE TO MANHOLE SUMPS.



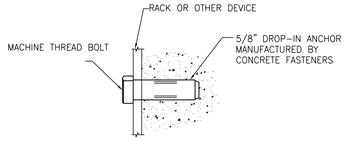

**DUCT BANK LEGEND:**

1. PROVIDE 6" CRUSHED AGGREGATE.
2. PROVIDE PREFABRICATED CONDUIT SUPPORT SYSTEM THAT SHALL MEET SPACING REQUIREMENTS.

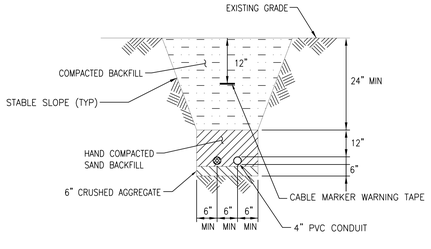
## 3 COMMUNICATIONS DUCT BANK TRENCH SECTION
NO SCALE




## 4 TYPICAL MANHOLE CABLE RACK DETAIL
NO SCALE




## 5 TYPICAL MANHOLE BOLT DETAIL
NO SCALE




## 6 COMMUNICATIONS DIRECT BURIED DUCTS
NO SCALE

HTK ARCHITECTS PA
9300 W 110TH ST. STE. 150
OVERLAND PARK, KS 66210
P. 913.663.4373
9005 E KANSAS AVE.
SUITE A
LIBERAL, KS 67901
P. 785.624.3373
WWW.HTKARCHITECTS.NET

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
KEVIN W. TAYLOR
REG. NO. 151618R
EXPIRES 12-31-15
SIGNATURE
7-25-14

STATE OF MISSOURI
RICHARD R. BEARDMORE
NUMBER PE-2009009955
PROFESSIONAL ENGINEER
7-23-14

DATE:
- 2014-07-24

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

SHEET CONTENTS:
- SITE PLAN - TELECOM

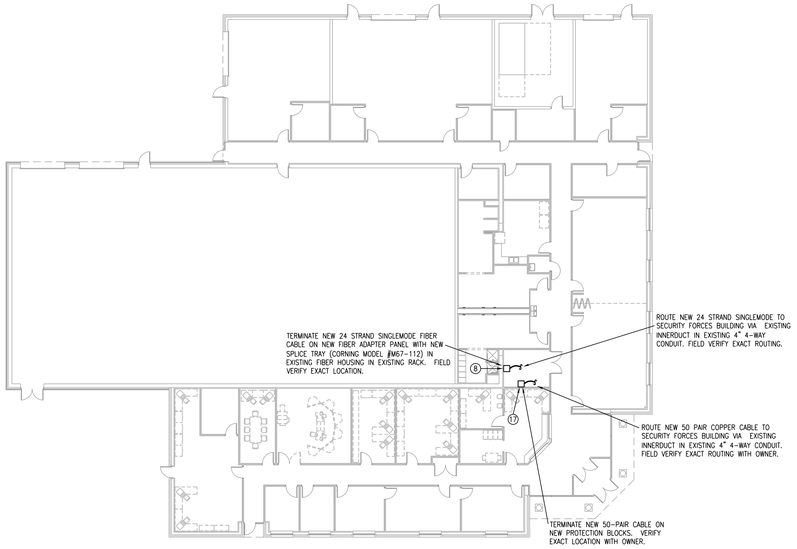
HTK PROJECT NUMBER:
- ULYB112022
  10008.01 - 0018

SHEET NUMBER:
T101
100% CONTRACT DOCUMENTS

LS&A Latimer Sommers & Associates, P.A.
CONSULTING ENGINEERS
3639 SW Summerfield Drive, Suite A
Topeka, Kansas 66614-2974
Telephone: (785) 233-3232
FAX: (785) 233-0647
Email: lsapa@lsapa.com
LSA PROJECT NO. 13020209

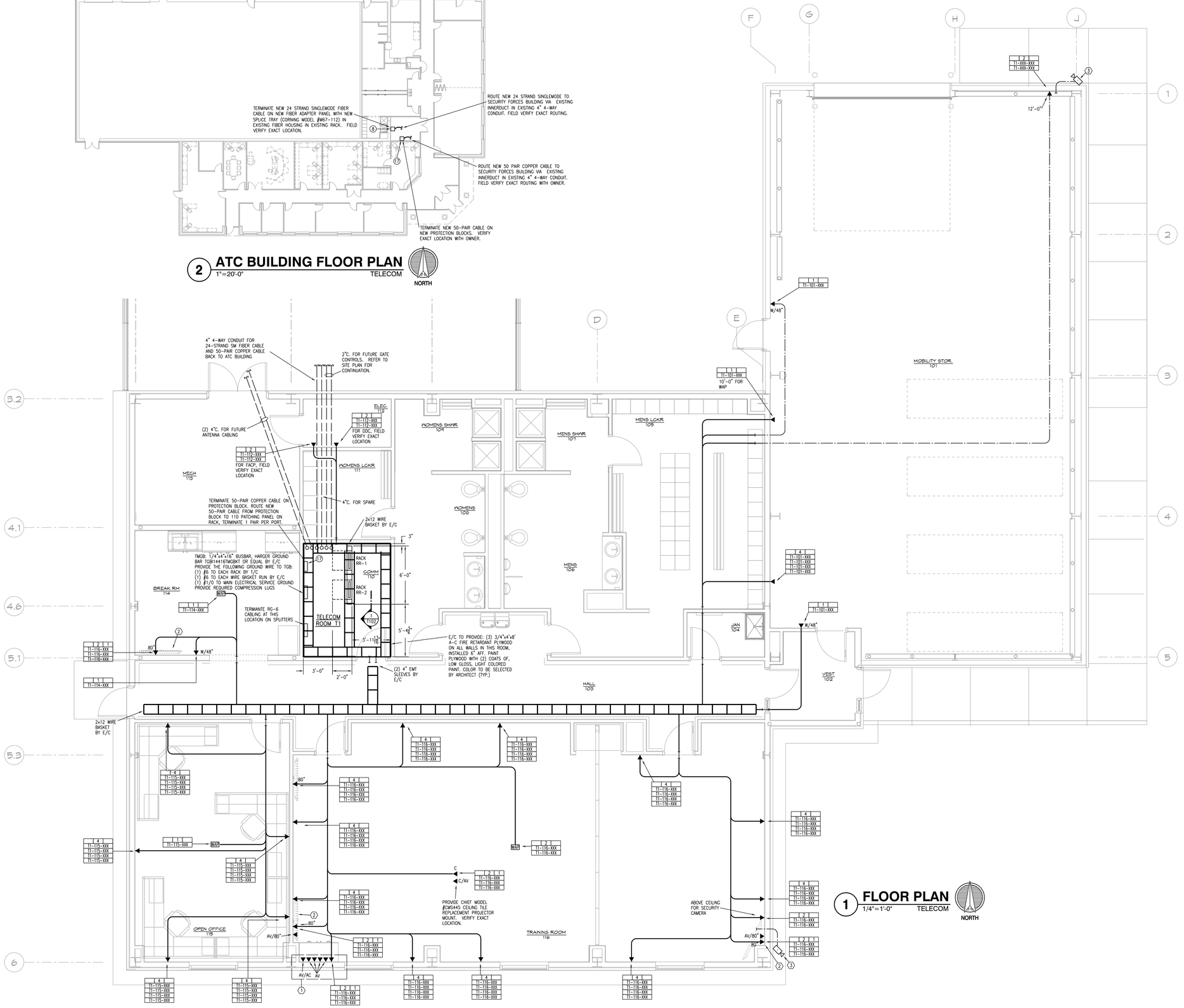
...ULYB112022-1101.dwg 1 07/22/14 KWT

| LEGEND: |
|---|
| (1) AV OUTLET, REFER TO DETAIL 3/T103. |
| (2) PROVIDE CHIEF MODEL #PDRUB TELEVISION MOUNT FOR OWNER PROVIDED TELEVISION. VERIFY MOUNTING HEIGHT AND EXACT LOCATION WITH OWNER. |
| (3) SECURITY CAMERA, PELCO MODEL #SD4E35-PG-E1 SPECTRA IV AND MOUNTING HARDWARE. |




## 2 ATC BUILDING FLOOR PLAN
1"=20'-0" TELECOM

NORTH




## 1 FLOOR PLAN
1/4"=1'-0" TELECOM

NORTH


LS&A Latimer Sommers & Associates, P.A.
CONSULTING ENGINEERS
3830 SW Summerfield Drive, Suite A
Topeka, Kansas 66614-3974
Telephone: (785) 233-3232
FAX: (785) 233-0647
Email: lsapa@lsapa.com
LSA PROJECT NO. 1302029



HTK ARCHITECTS PA
9300 W 110TH ST. STE. 150
OVERLAND PARK, KS 66210
P: 913.663.5373
WWW.HTKARCHITECTS.NET
9505 E.KANSAS AVE.
WICHITA, KS 67207
P: 785.266.3373


REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
KEVIN W. TAYLOR
REG. NO. 151618R
EXPIRES 12-31-15
SIGNATURE
7-25-14

STATE OF MISSOURI
RICHARD R. BEARDMORE
NUMBER PE-2005020059
PROFESSIONAL ENGINEER
7/23/14

DATE:
- 2014-07-24

REVISED DATE:

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

SHEET CONTENTS:
- FLOOR PLANS - TELECOM

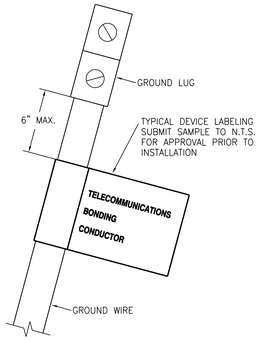
HTK PROJECT NUMBER:
- ULYB112022
10008.01 - 0018

SHEET NUMBER:

T102

100% CONTRACT DOCUMENTS


... T102.dwg 1 07/10/14 MAT




## 1 GROUND WIRE LABEL
NO SCALE

| NOTES: |
|---|
| 1. VERIFY ROOM NUMBERS WITH OWNER PRIOR TO LABELING FACEPLATES. |
| 2. PROVIDE BONDING JUMPERS BETWEEN ALL SECTIONS OF WIRE BASKET RUNWAY. |
| 3. PROVIDE A #6 GREEN GROUND WIRE FROM BUSBAR TO ALL RACKS. LABEL ACCORDING TO OWNER SPECIFICATIONS. SEE DETAIL. |
| 4. CONTRACTOR TO FIELD VERIFY ALL MEASUREMENTS PRIOR TO INSTALLATION. |
| 5. PROVIDE LABELING OF ALL RACKS AND LOCATE ON TOP RAIL. SUBMIT SAMPLE TO OWNER FOR APPROVAL PRIOR TO INSTALLATION. |
| 6. PROVIDE LABELING FOR ALL GROUND WIRE AT EVERY TERMINATION POINT. SUBMIT SAMPLE TO OWNER FOR APPROVAL PRIOR TO INSTALLATION. |
| 7. T/C TO INSTALL FIRE STOP IN ALL SLEEVES AND CONDUITS. INSTALL PER MANUFACTURERS LISTED UL SYSTEM. |
| 8. CONDUITS THAT HAVE A INTERNAL DIAMETER OF 2" OR LESS SHALL HAVE A BEND RADIUS OF AT LEAST 6 TIMES THE INTERNAL CONDUIT DIAMETER AND 10 TIMES THE INTERNAL DIAMETER FOR CONDUITS LARGER THAN 2". |
| 9. MOUNT ALL CABLES WITH A D-RING OR OTHER ACCEPTABLE FASTENER. PROVIDE WIRE TIES EVENLY SPACED TO PROVIDE A CLEAN INSTALLATION. |

| LEGEND: | | |
|---|---|---|
| SYMBOL | DESCRIPTION | REMARKS |
| ▼ | TELECOMMUNICATIONS OUTLET | 1 |
| ▼W | TELECOMMUNICATIONS OUTLET WALL PHONE PLATE | 2 |
| ▼AV | AUDIO/VISUAL OUTLET | 3 |
| —·—·— | EMT CONDUIT BY E/C (1 1/4" UNLESS NOTED OTHERWISE) | 4 |
| —+—+— | EMT SLEEVE BY E/C (2" UNLESS NOTED OTHERWISE) | 4 |
| | DUPLEX RECEPTACLE | |
| | FOURPLEX RECEPTACLE | |
| | SURFACE PANELBOARD | |
| | WIRE BASKET RUNWAY | |
| AFF | ABOVE FINISHED FLOOR | |
| T/C | TELECOMMUNICATION CONTRACTOR | |
| E/C | ELECTRICAL CONTRACTOR | |
| G/C | GENERAL CONTRACTOR | |
| AC | DEVICE LOCATED ABOVE COUNTER | |
| TMGB | TELECOMMUNICATIONS MAIN GROUNDING BUSBAR | |
| TGB | TELECOMMUNICATIONS GROUNDING BUSBAR | |
| ——— | TELECOMMUNICATIONS CABLING | 5 |
| TCP | TEMPERATURE CONTROL PANEL | |
| FACP | FIRE ALARM CONTROL PANEL | |
| SM | SINGLEMODE FIBER | |
| MM | MULTIMODE FIBER | |
| WAP | WIRELESS ACCESS POINT | 6 |
| VOICE DATA VIDEO TELECOM OUTLET # | TELECOMMUNICATIONS CABLING IDENTIFIER | |

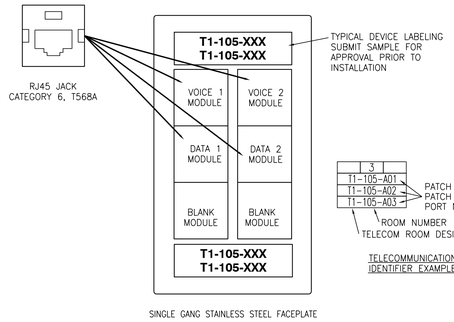
1 - 4x4 BACKBOX W/ SINGLE GANG PLASTER RING AND 1" CONDUIT TO ABOVE ACCESSIBLE CEILING AS INDICATED ON DRAWINGS BY E/C.
2 - 2x4 BACKBOX WITH 3/4" CONDUIT TO ABOVE ACCESSIBLE CEILING.
3 - 4x4 STEEL CITY BACKBOX, MODEL NUMBER 72171-1-1/4 WITH DOUBLE GANG PLASTER RING BY E/C.
4 - E/C TO PROVIDE CONDUIT BUSHING ON CONDUIT PRIOR TO T/C INSTALLING CABLING.
5 - CABLING SHALL BE SUPPORTED WITH J-HOOKS AT 48" O.C. WHERE NOT IN CONDUIT.
6 - 2x4 SURFACE MOUNT BACKBOX LOCATED ABOVE ACCESSIBLE CEILING.

| TELECOMMUNICATIONS CABLING SCHEDULE | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MARK | DESCRIPTION | CABLE CONDUCTORS | MANUFACTURER | MODEL NUMBER | PROVIDED BY | INSTALLED BY | NOMINAL O.D. | JACKET COLOR | REMARKS |
| 1 | 24F SM OSP ALTOS | 24 STRAND | CORNING | O24EU4-T4101D203 | T/C | T/C | 0.41" | BLACK | |
| 2 | CAT3 50 PAIR OSP COPPER CABLE | 50 PAIR | GENERAL CABLE | 7525793 | T/C | T/C | 0.64" | BLACK | |
| 3 | CAT3 50 PAIR ISP COPPER CABLE | 50 PAIR | GENERAL CABLE | 2133161 | T/C | T/C | 0.56" | GREY | |
| 4 | SERIES 6 (RG6) COAX CABLE | 1 | UNIPRISE | 5727 | T/C | T/C | 0.272" | BLACK | 1 |
| 5 | CATEGORY 6 HORIZONTAL CABLING | 4 PAIR | BERKTEK | 10167477 | T/C | T/C | 0.231" | BLUE | 1 |
| 6 | 5 FT CATEGORY 6 PATCH CABLE | 4 | LEVITON | 6D460-04L | | | | BLUE | PROVIDE 75 |
| 7 | 7 FT CATEGORY 6 PATCH CABLE | 4 | LEVITON | 6D460-07L | | | | BLUE | PROVIDE 100 |
| 8 | 10 FT CATEGORY 6 PATCH CABLE | 4 | LEVITON | 6D460-10L | | | | BLUE | PROVIDE 50 |
| 9 | 15 FT CATEGORY 6 PATCH CABLE | 4 | LEVITON | 6D460-15L | | | | BLUE | PROVIDE 25 |
| | | | | | | | | | |

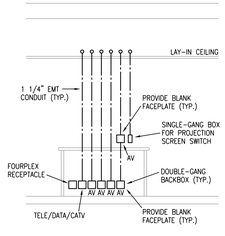
REMARKS:
1 - RISER RATED
2 - PLENUM RATED

| TELECOMMUNICATIONS HARDWARE SCHEDULE | | | | | | |
|---|---|---|---|---|---|---|
| MARK | MANUFACTURER | MODEL/PART NUMBER | PROVIDED BY | INSTALLED BY | DESCRIPTION | REMARKS |
| 1 | CABLOFIL | CF | E/C | T/C | WIRE BASKET TRAY SIZE AS SHOWN ON PLANS | 1, 2, 3 |
| 2 | PANDUIT | WMP1E | T/C | T/C | HORIZONTAL CABLE MANAGEMENT | |
| 3 | PANDUIT | WMPV45E | T/C | T/C | VERTICAL CABLE MANAGEMENT | |
| 4 | B-LINE | CB556084XUFB | T/C | T/C | RACK, 2 POST, 84"Hx21.25"W | 6, 7 |
| 5 | GEIST | BRC100-1025 | T/C | T/C | POWER STRIP WITH NEMA 5-20P PLUG AND (10) NEMA 5-20R OUTLETS | |
| 6 | MAXCELL | MXD3456BK | T/C | T/C | MAXCELL W TRACER | |
| 7 | MAXCELL | MXD3456BK | T/C | T/C | MAXCELL WITHOUT TRACER | |
| 8 | CORNING | CCH-CP24-B3 | T/C | T/C | 24F LC APC SM COUP PANEL | |
| 9 | CORNING | CCS-03U | T/C | T/C | FIBER CLOSET SPLICE HOUSING | 4 |
| 10 | CORNING | 2806032-01 | T/C | T/C | FUSION SPLICE SLEEVES (50) | |
| 11 | CORNING | F1-0100SL | T/C | T/C | FO SELF LAM TAGS | |
| 12 | LEVITON | 43080-1L4 | T/C | T/C | SINGLE GANG, 4-PORT FACEPLATE WITH ID WINDOW (STAINLESS STEEL) | |
| 13 | LEVITON | 61110-RL6 | T/C | T/C | QUICKPORT CATEGORY 6 UTP CONNECTOR MODULE (BLUE) | 5 |
| 14 | LEVITON | 69586-U48 | T/C | T/C | 48-PORT CATEGORY 6 PATCH PANEL (2 RU) | 5 |
| 15 | LEVITON | 41084-FGF | T/C | T/C | F-CONNECTOR (GREY) | |
| 16 | LEVITON | 41084-BGB | T/C | T/C | BLANK INSERTS (GREY) | |
| 17 | TII NETWORK TECHNOLOGIES | 24050110M110PC | T/C | T/C | 50 PAIR 110 ENTRY PROTECTION WITH PROTECTORS | |
| 18 | SIEMONS | S110D(5)1-100RFT | T/C | T/C | 110 PATCHING PANEL | |
| 19 | BLONDER TONGUE | SRT-8A | T/C | T/C | (8) PORT DIRECTIONAL TAP | |
| 20 | BLONDER TONGUE | BIDA 86A-30 | T/C | T/C | WALL MOUNTED DISTRIBUTION AMPLIFIER 30 dB, 40-860 MHZ | |
| 21 | BLONDER TONGUE | FRDA-S4A-860-43PA | T/C | T/C | FIBER OPTIC RECEIVER, SINGLE-MODE | |
| 22 | BLONDER TONGUE | SXRS-2 | T/C | T/C | 2-WAY TAP | |
| 23 | CHAMPIONS PRECAST INC. | 080-080-080T | T/C | T/C | PRECAST CONCRETE 8'x8'x8' MANHOLE WITH CAST IRON FRAME/COVER | |
| | | | | | | |

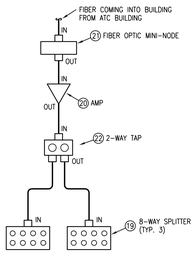
REMARKS:
1 - PROVIDE ASSOCIATED HARDWARE COMPONENTS TO COMPLETE INSTALLATION PER MFC REQUIREMENTS.
2 - EQUIVALENTS BY FLEXTRAY, B-LINE, MEGA SNAKE BY SNAKE TRAY, AND WIREMOLD 2x8 AND LARGER.
3 - PROVIDE DROPS-OUTS AS REQUIRED.
4 - PROVIDE REQUIRED CORNING #AC120K1-009S SM LC/APC 3M PIGTAILS AND CORNING #M67-112 SPLICE TRAY 24F FUSION.
5 - WIRE CABLING T568A.
6 - PROVIDE WITH 12" LADDER RACK AT TOP OF RACK TO STRUCTURAL BUILDING COMPONENT ON BACK WALL AND ATTACH TO AN L-BRACKET WITH J-BOLTS.
7 - PROVIDE UPPER TRAY ON FRONT AND BACK OF RACK, CHATSWORTH MODEL #12183-719.



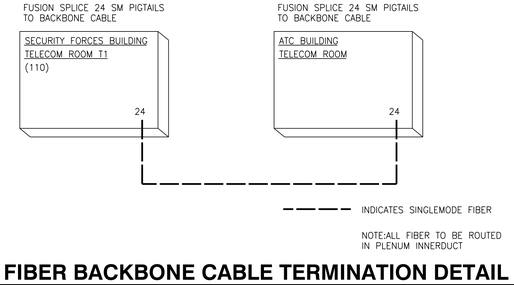

## 2 SINGLE GANG FACEPLATE DETAIL
NO SCALE — WALL PLATE



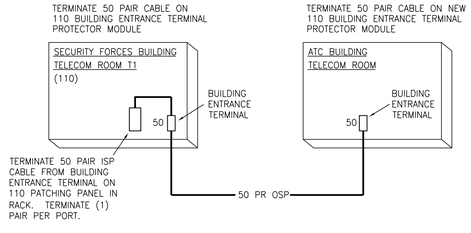

## 3 AV OUTLET DETAIL
NO SCALE



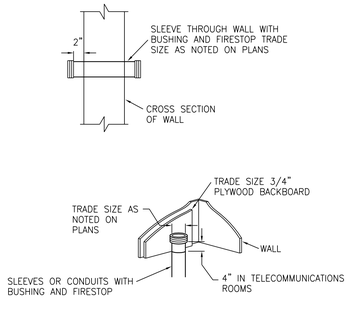

## 4 CATV RISER DIAGRAM
NO SCALE



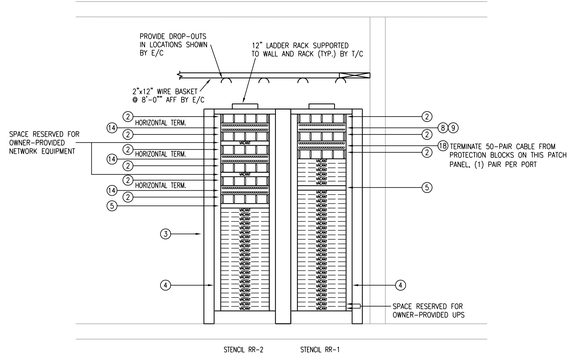

## 5 FIBER BACKBONE CABLE TERMINATION DETAIL
NO SCALE




## 6 COPPER BACKBONE CABLE TERMINATION DETAIL
NO SCALE




## 7 SLEEVE/CONDUIT DETAIL
NO SCALE




## 8 ELEVATION
1/2"=1'-0"


HTK ARCHITECTS PA
9300 W 110TH ST. STE. 150
OVERLAND PARK, KS 66210
P: 913.663.3373
9005 E KANSAS AVE.
SPRINGFIELD, MO 65807
P: 785.266.3373
WWW.HTKARCHITECTS.NET


REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI
KEVIN W. TAYLOR
REG. NO. 151618R
EXPIRES 12-31-15
7-25-14
SIGNATURE

STATE OF MISSOURI
RICHARD R. BEARDMORE
NUMBER PE-2005020095
PROFESSIONAL ENGINEER
7/23/14

DATE:
- 2014-07-24

REVISED DATE:
-
-
-
-

# SECURITY FORCES ADMIN & STORAGE FACILITY

139th MISSOURI AIR NATIONAL GUARD
ROSECRANS MEMORIAL AIRPORT - ST. JOSEPH, MO

SHEET CONTENTS:
- TELECOM DETAILS AND SCHEDULES

HTK PROJECT NUMBER:
- ULYB112022
10008.01 - 0018

SHEET NUMBER:
T103
100% CONTRACT DOCUMENTS


LS&A Lattner Sommers & Associates, P.A.
CONSULTING ENGINEERS
5639 SW Summerfield Drive, Suite A
Topeka, Kansas 66614-3974
Telephone: (785) 233-3232
FAX: (785) 233-0947
Email: lsapa@lsapa.com
LSA PROJECT NO. 1302020



...T103.dwg 1 06/11/14 KWT