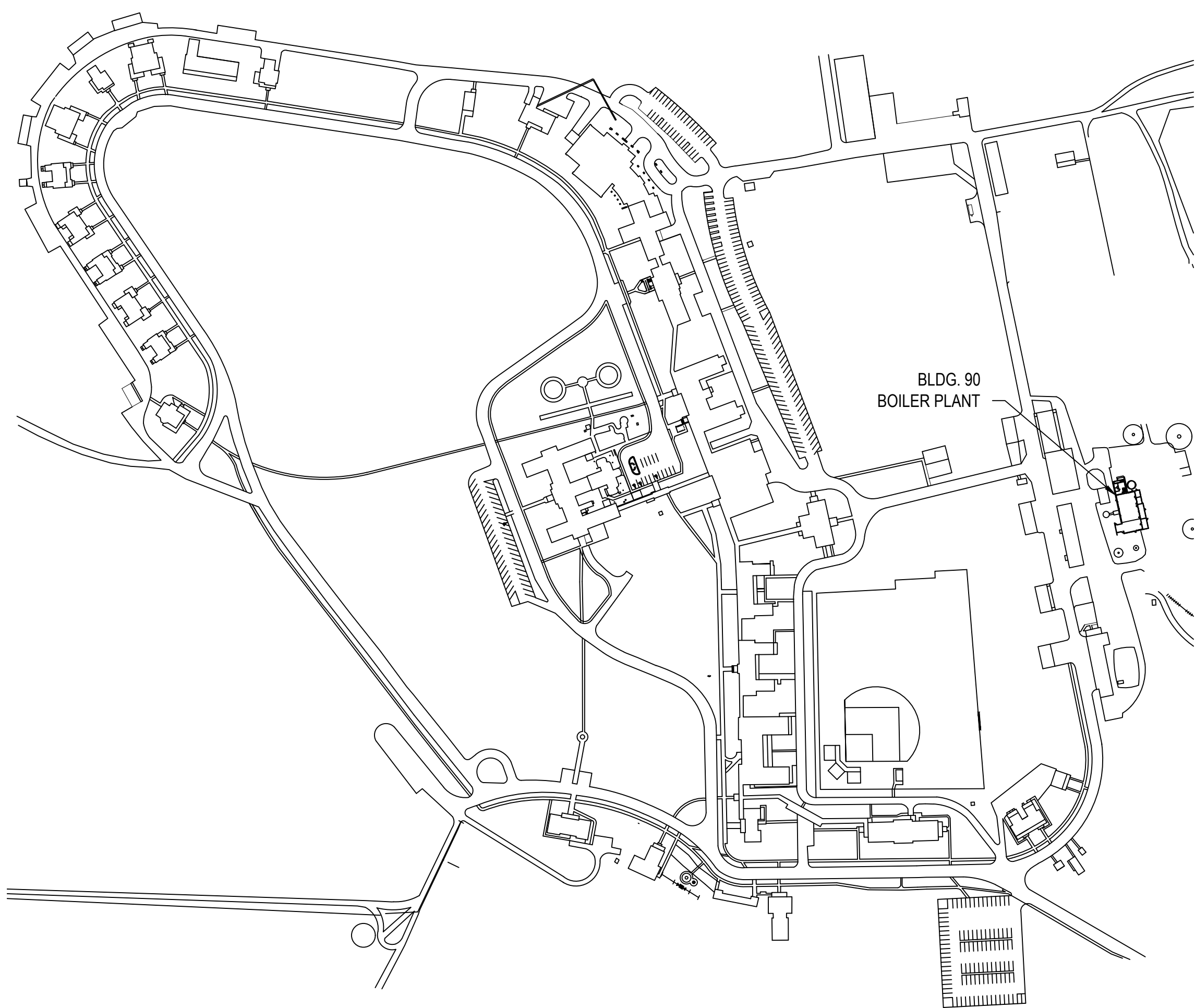


SHERIDAN VA MEDICAL CENTER SHERIDAN, WY VAMC PROJECT #: 666-18-114 BUILDING 90 REPLACE COAL BOILERS DESIGN

AREA OF WORK

RENDERED IMAGE

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CONSULTANTS:

ARCHITECT/ENGINEERS:

STAMP:

Drawing Title
COVER SHEET

Phase
100% CONSTRUCTION DOCUMENTS

Project Title
BUILDING 90 REPLACE COAL BOILERS DESIGN

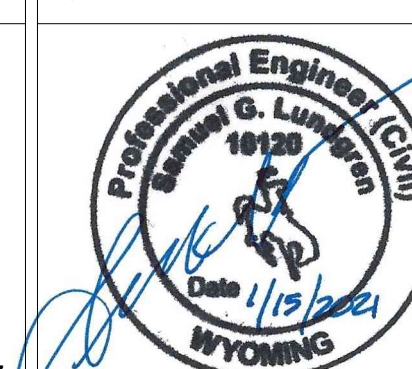
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Checked
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SITE ABBREVIATIONS

| | | | |
|---------|--------------------------------------------------------|---------|-------------------------------------|
| ABAN | ABANDON | EC | EDGE OF CURB |
| ABBRV | ABBREVIATION | EJ | EXPANSION JOINT |
| ABC | AGGREGATE BASE COURSE | EL | EASEMENT LINE OR ELEVATION |
| AC | ASPHALTIC CONCRETE | ENGR | ENGINEER |
| ACP | ASPHALTIC CONCRETE PAVING | EOS | EDGE OF SLAB |
| ADA | AMERICANS WITH DISABILITIES ACT | EP | EDGE OF PAVEMENT (PAVING) |
| AGGR | AGGREGATE | EPA | ENVIRONMENTAL PROTECTION AGENCY |
| ALT | ALTERNATE OR ALTITUDE | EPT | EXTERNAL PIPE THREAD |
| AMT | AMOUNT | EQ | EQUAL |
| APPROX | APPROXIMATE | EQL SP | EQUALLY SPACED |
| ASB | ASBESTOS | ERD | EXISTING ROOF DRAIN |
| ASCE | AMERICAN SOCIETY OF CIVIL ENGINEERS | ESMT | EASEMENT |
| ASI | ARCHITECT'S SUPPLEMENTAL INSTRUCTION | EST | ESTIMATE |
| ASPH | ASPHALT | EXIST | EXISTING |
| ASSY | ASSEMBLY | EXFP | EXISTING GRADE |
| AVE | AVENUE | EXT GR | EXTERIOR |
| AWWA | AMERICAN WATER WORKS ASSOCIATION | EXT | EXTERIOR GRADE |
| | | EXT GR | EXTERIOR GRADE |
| B&F | BELL AND FLANGE | | |
| B&S | BELL AND SPIGOT | F | FAHRENHEIT, FEMALE, FIRE LINE |
| BC | BACK OF CURB | F METER | F METER |
| BCV | BUTTERFLY CHECK VALVE | FD | FLOOR DRAIN |
| BDRY | BOUNDARY | FF EL | FINISH FLOOR ELEVATION |
| BFP | BACKFLOW PREVENTER | FH | FIRE HYDRANT |
| BFV | BUTTERFLY VALVE | FL | FILLET |
| BITUM | BITUMINOUS | FIN | FINISH |
| BL | BASE LINE | FLG | FLANGE |
| BLDG | BUILDING | FLRD | FLOOR DRAIN |
| BLT | BUILT | FLTR | FILTER |
| BLVD | BOULEVARD | FLUOR | FLUORESCENT |
| BM | BEAM OR BENCHMARK | FN | FENCE |
| BN | BULLNOSE | FOC | FACE OF CURB |
| BRG | BEARING | FP | FIRE PROTECTION OR FLAGPOLE |
| BSTR | BOOSTER | FBM | FEET PER MINUTE |
| BV | BALL VALVE | FPS | FEET PER SECOND |
| BW | BOTH WAYS | FPW | FIRE PROTECTION WATER SUPPLY |
| BWG | BIRMINGHAM WIRE GAUGE | FSP | FIRE STANDPIPE |
| | | FSS | FLOW SENSING SWITCH |
| CAP | CAPACITY | FT | FEET OR FOOT |
| CB | CATCH BASIN OR CEMENT BASE | FTG | FOOTING |
| CD | CONSTRUCTION DOCUMENTS OR CONTRACT DOCUMENTS | FW | FLOOD WALL |
| CDW | CHILLED DRINKING WATER | G | GROUND OR NATURAL GAS |
| CDWR | CHILLED DRINKING WATER RETURN | G LN | GAS LINE |
| CDWS | CHILLED DRINKING WATER SUPPLY | GA | GAGE |
| CEM | CEMENT OR CEMETERY | GAL | GALLON |
| CF | CONTRACTOR FURNISHED | GC | GENERAL CONTRACTOR |
| CFS | CUBIC FEET PER SECOND | GCO | GRADE CLEANOUT |
| CHFR | CHAMFER | GDR | GUARD RAIL |
| CHK | CHECK | GI | GALVANIZED IRON |
| CHKV | CHECK VALVE | GP | GALVANIZED IRON PIPE |
| CI | CAST IRON OR CURB INLET | GR | GROUND LEVEL |
| CIP | CAST-IN-PLACE OR CAST IRON PIPE | GL | GALLONS PER DAY |
| CJ | CONSTRUCTION JOINT OR CONTROL JOINT | GPD | GATE VALVE |
| CL | CENTER LINE, CLASS, OR CLOSE | GTV | GUTTER |
| CLL | CONTRACT LIMIT LINE | | |
| CLOS | CLOSURE | H&CW | HOT AND COLD WATER |
| CMP | CORRUGATED METAL PIPE | HAZ MAT | HAZARDOUS MATERIALS |
| CND | CONDUIT | HB | HOSE BIBB |
| CNDS | CONDENSATE | HDPE | HIGH DENSITY POLYETHYLENE |
| CO | CERTIFICATE OF OCCUPANCY, CLEANOUT, COMPANY, OR CUTOFF | HNDRL | HANDRAIL |
| CONC | CONCENTRIC OR CONCRETE | HP | HIGH PRESSURE |
| CONSTR | CONSTRUCTION | HV | HOSE VALVE |
| CONSULT | CONSULTANT | HYD | HYDRANT |
| CONTR | CONTRACT OR CONTRACTOR | HYDR | HYDRAULIC |
| COORD | COORDINATE | ID | INSIDE DIAMETER OR INSIDE DIMENSION |
| COR | CONTRACTING OFFICER'S REPRESENTATIVE | IMH | INLET MANHOLE |
| COTG | CLEANOUT TO GRADE | INCL | INCLUDED |
| COV | COVER OR CUT OFF VALVE | INCR | INCREMENT |
| COV PL | COVER PLATE | INSTL | INSTALL |
| CPLG | COUPLING | INV | INVERT |
| CPP | CORRUGATED PLASTIC PIPE | INV EL | INVERT ELEVATION |
| CRP | CONDENSATE RETURN PUMP | IP | IRON PIPE |
| CRT YD | COURTYARD | IPS | IRON PIPE SIZE |
| CSB | CONCRETE SPLASH BLOCK | IPT | IRON PIPE THREADED |
| CSI | CONSTRUCTION SPECIFICATIONS INSTITUTE | IW | IRRIGATION WATER |
| CSP | CONCRETE SEWER PIPE | | |
| CSTL | CAST STEEL | L | ANGLE |
| CU | COPPER OR CUBIC | LAT | LATITUDE |
| CU FT | CUBIC FEET | LF | LINEAR FEET (FOOT) |
| CU IN | CUBIC INCH | LIN | LINEAR |
| CU YD | CUBIC YARD | LNG | LONGITUDE |
| CV | CONTROL VALVE | LOC | LOCATION |
| CW | CLOCKWISE | LONG | LONGITUDINAL |
| | | LOS | LINE OF SIGHT |
| DA | DRAINAGE AREA | LP | LIQUID PROPANE |
| DAT | DATUM | LPA | LIQUID PROPANE AIR MIXTURE |
| D-B | DESIGN-BUILD | LPT | LOW POINT |
| DBA | UNIT OF SOUND LEVEL | LS | LUMP SUM |
| DEG | DEGREE | LT | LIGHT |
| DEL | DELETE | LTG | LIGHTING |
| DEMO | DEMOLITION | | |
| DEPT | DEPARTMENT | MAINT | MAINTENANCE |
| DET | DETAIL | MAX | MAXIMUM |
| DEV | DEVELOPMENT | MED | MEDIUM |
| DHW | DOMESTIC HOT WATER | MER | MERIDIAN |
| DI | DROP INLET | MFD | MANUFACTURED |
| DIA | DIAMETER | MFG | MANUFACTURING |
| DIFF | DIFFERENCE OR DIFFERENTIAL | MGT | MANAGEMENT |
| DIM | DIMENSION | MH | MANHOLE |
| DIP | DUCTILE IRON PIPE | MIN | MINIMUM |
| DOM | DOMESTIC | MISC | MISCELLANEOUS |
| DR | DRAIN OR DRIVE | ML | MATERIALS LIST |
| DS | DOWNSPOUT | MN | MAGNETIC NORTH |
| DSBL | DISABLE | MOD | MODEL OR MODIFY |
| DW | DOMESTIC WATER | MON | MONUMENT |
| DWG | DRAWING | MTG | MEETING |
| DWR | DOMESTIC WATER RETURN OR DRAWER | MULT | MULTIPLE |
| DWS | DOMESTIC WATER SUPPLY | MUNIC | MUNICIPAL |

| | | | |
|---------|---------------------------------------------------|----------|----------------------------------------------|
| N | NORTH | SEP TNK | SEPTIC TANK |
| NA | NOT APPLICABLE | SF | SQUARE FOOT (FEET) |
| NAT | NATURAL | SJ | SCORED JOINT |
| NATL | NATIONAL | SLEV | SLEEVE |
| NBL | NATIONAL BUILDING CODE | SM | SILTY SAND |
| NE | NOT EXCEEDING | SMH | STEAM MANHOLE |
| NIC | NOT IN CONTRACT | SMP | SUMP PUMP |
| NO | NUMBER | SOV | SHUT OFF VALVE |
| NOM | NOMINAL | SP | STANDPIPE OR SUMP PIT |
| NORM | NORMAL | SP EL | SPOT ELEVATION |
| NRCP | NON-REINFORCED CONCRETE PIPE | SPEC | SPECIFICATION |
| NTP | NOTICE TO PROCEED | SPKLR | SPRINKLER |
| NTS | NOT TO SCALE | SPLY | SUPPLY |
| | | SPR | SPRINKLER LINE |
| OC | ON CENTER | SQ | SQUARE |
| OFD | OVERFLOW DRAIN | SQ IN | SQUARE INCH |
| OPNG | OPENING | SQ YD | SQUARE YARD |
| OZ | OUNCE | SR | STEAM RETURN |
| | | SS | SANITARY SEWER, STEAM SUPPLY, OR STORM SEWER |
| P | PUMP | SSP | STAINLESS STEEL PIPE |
| PA | PULL ANCHOR | SST | STAINLESS STEEL |
| PB | PULL BOX | ST | STREET OR STORM DRAIN |
| PC | POINT OF CURVE | ST W | STORM WATER |
| PCA | PORTLAND CEMENT ASSOCIATION | STA | STATION |
| PCC | PRECAST CONCRETE | STD | STANDARD |
| PCCP | CONCRETE PAVEMENT | STM | STEAM |
| PCT | PERCENT | STURV | SURVEY |
| PER | PERCENT | STXK | SUMP TANK |
| PEN | PENETRATE | SW | SIDEWALK |
| PERF | PERFORATED | SWG | SEWAGE |
| PERIM | PERIMETER | SWR | SEWER |
| PERM | PERMANENT | SYM | SYMBOL |
| PERP | PERPENDICULAR | | |
| PG | PRESSURE GAGE OR PROFILE GRADE | T&M | TIME AND MATERIALS |
| PH | PHASE | TAN | TANGENT |
| PHWR | PRIMARY HOT WATER RETURN | TAN | TEMPORARY BENCHMARK |
| PHWS | PRIMARY HOT WATER SUPPLY | TBM | TEST BORING-XX (E.G., TB-01) |
| PI | POINT OF INTERSECTION | TB-XX | TRAFFIC CONTROL PLAN |
| PV | POST INDICATOR VALVE | TC | TRENCH DRAIN |
| PL | PROPERTY LINE | TD | TOP ELEVATION |
| PLAS | PLASTIC OR PLASTER | TE | TEMPORARY |
| PMPST | PUMP SUCTION | THK | THICKNESS |
| PN | PART NUMBER | THRU | THROUGH |
| PNEU | PNEUMATIC | TMH | TOP OF MANHOLE |
| PO | POST OFFICE OR PURCHASE ORDER | TN | TRUE NORTH |
| POLY | POLYETHYLENE (PLASTIC) | TNL | TUNNEL |
| PORT | PORTABLE | TO | TOP OF |
| POTW | POTABLE WATER | TO FDN | TOP OF FOUNDATION |
| POW LN | POWER LINE | TOB | TOP OF BEAM |
| PP | POLYPROPYLENE (PLASTIC) | TOC | TOP OF CONCRETE OR TOP OF CURB |
| PR | PUMPED RETURN | TOC FTG | TOP OF CONCRETE FOOTING |
| PRCST | PRECAST | TOC WALL | TOP OF CONCRETE WALL |
| PREFMD | PREFORMED | TOF | TOP OF FOOTING |
| PRELIM | PRELIMINARY | TOP | TOP OF PAVEMENT |
| PREP | PREPARATION | TOPO | TOPOGRAPHY |
| PROP | PROPERTY | TOS | TOP OF SLAB |
| PRV | PRESSURE REGULATOR VALVE OR PRESSURE RELIEF VALVE | TR | TOP OF RIM |
| | | TWR | TREATED WATER RETURN |
| PS CONC | PRESTRESSED CONCRETE | TWS | TREATED WATER SUPPLY |
| PSI | POUNDS PER SQUARE INCH | TYP | TYPICAL |
| PSL | PIPE SLEEVE | | |
| PT | POST-TENSIONED | UFC | UNIFORM FIRE CODE |
| PT CONC | POST-TENSIONED CONCRETE | UGND | UNDERGROUND |
| PTRV | PRESSURE TEMPERATURE RELIEF VALVE | UGND | UNLESS OTHERWISE NOTED |
| PV | PAVED | UP | UTILITY POLE |
| PVC | POLYVINYL CHLORIDE (PLASTIC) | UPS | UNINTERRUPTIBLE POWER SUPPLY |
| | | UTIL | UTILITY |
| QTR | QUARTER | VA | VETERAN AFFAIRS |
| QTY | QUANTITY | VAR | VARIES |
| QUAD | QUADRANT | VHA | VETERANS HEALTH ADMINISTRATION |
| QUAL | QUALITY | VB | VALVE BOX |
| | | VC | VERTICAL CURVE |
| R | RADIUS OR RANGE | VCO | VACUUM CLEANER OUTLET |
| RAD | RADIAN | VCT | VITRIFIED CLAY TILE VINYL COMPOSITION |
| RC | REINFORCED CONCRETE | | |
| RCB | REINFORCED CONCRETE BOX | VERT | VERTICAL |
| RCCP | REINFORCED CONCRETE CULVERT PIPE | VIC | VICINITY |
| RCP | REINFORCED CONCRETE PIPE | VIF | VERIFY IN FIELD |
| RD | ROAD OR ROOF DRAIN | VOL | VOLUME |
| RDC | REDUCER | | |
| REP | REPAIR | W | WASTE, WEST, OR WIDE |
| REPL | REPLACE | W/ | WITH |
| REQ | REQUIRE | W/O | WITHOUT |
| REQD | REQUIRED | WI | WROUGHT IRON |
| RESIL | RESILIENT | WL | WATER LINE |
| RFI | REQUEST FOR INFORMATION | WM | WATER METER WIRE MESH |
| RFP | REQUEST FOR PROPOSAL | WM | WIRE MESH WATER METER |
| ROW | RIGHT OF WAY | WO | WORK ORDER |
| RT | RIGHT | WP | WATER PUMP |
| RV | RELIEF VALVE | WT | WATER TABLE |
| RW | ROADWAY | WT EL | WATER ELEVATION |
| RWL | RAIN WATER LEADER | WTR | WATER |
| RWR | RECESSED WASTE RECEPTACLE | WW | WASTE WATER |
| | | | |
| SAMP | SAMPLE | XFMR | TRANSFORMER |
| SAN | SANITARY | | |
| SB | SPLASH BLOCK | | |
| SCHED | SCHEDULE | | |
| SOP | SCHEDULE | | |
| SD | SCUPPER | | |
| SD | STORM DRAIN | | |
| SDL | SADDLE | | |
| SDMH | STORM DRAIN MANHOLE | | |
| SECT | SECTION | | |
| SEG | SEGMENT | | |

GENERAL

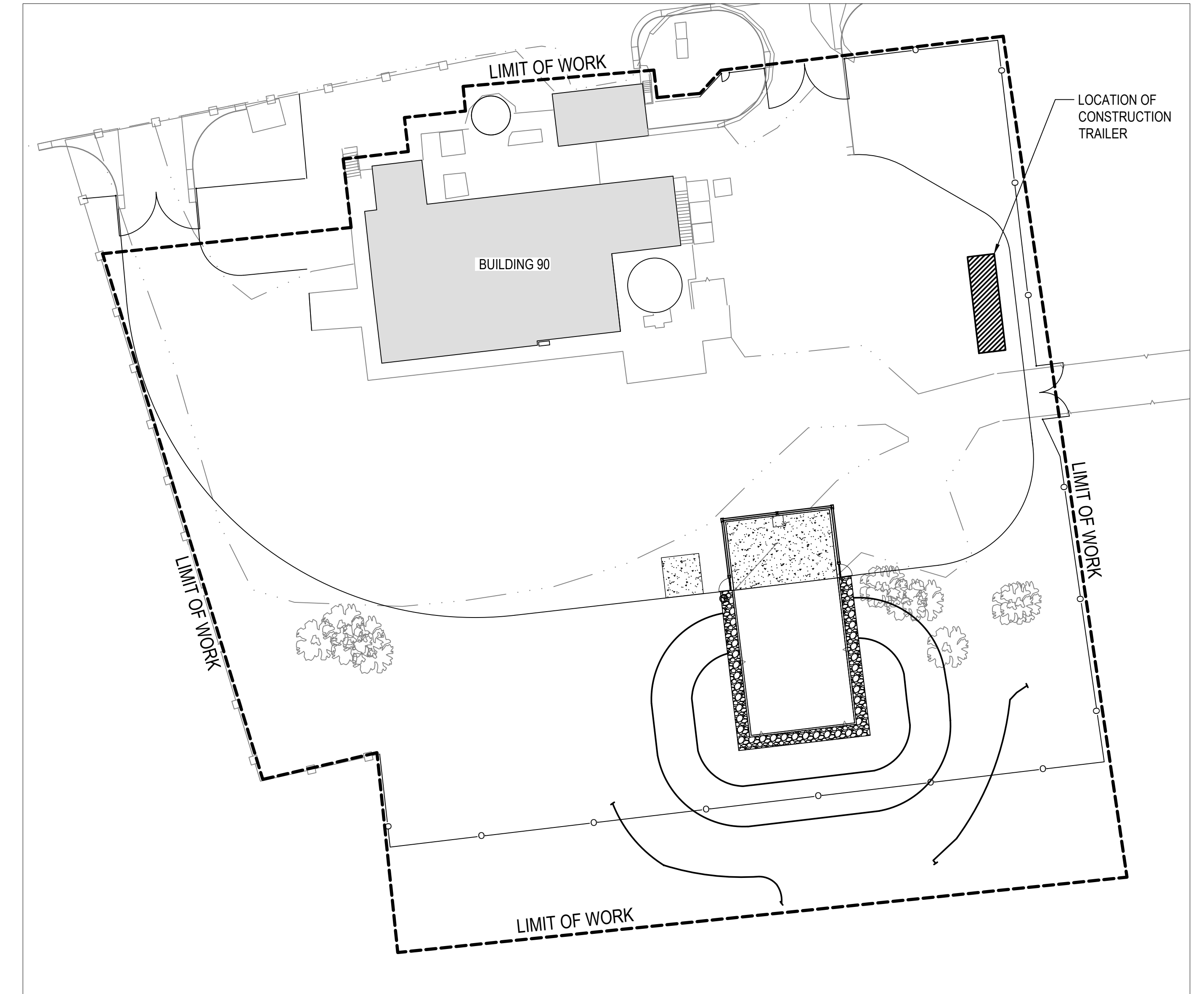
- REFERENCES WITHIN THIS DRAWING SET TO PHASE 3 ARE REFERRING TO THE SHERIDAN VAMC BOILER UPGRADE PHASE 3 (PROJECT NUMBER 666-16-117). COORDINATE WITH PHASE 3 DRAWINGS AND VHA COR FOR ADDITIONAL PROJECT REQUIREMENTS.
- ALL QUANTITIES ARE CONSIDERED APPROXIMATE AND ARE FOR ESTIMATING PURPOSES ONLY.
- THE CONTRACTOR SHALL INCLUDE ALL MATERIALS, TOOLS, EQUIPMENT, LABOR AND APPURTENANT ITEMS TO COMPLETE THE WORK WITHIN THE BID PRICE.
- THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE SITE PRIOR TO BIDDING AND CONSTRUCTION.

EXISTING UTILITIES

- UTILITY LOCATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE BASED ON RECORDS OF VETERANS AFFAIRS. ALL UTILITY LOCATIONS ARE SUBJECT TO THE ACCURACY OF THE LOCATION METHOD AND ARE SUBJECT TO RELOCATION FROM THE TIME THAT THE DRAWINGS WERE PREPARED. NO EXCAVATION WAS PERFORMED.
- THE CONTRACTOR MUST NOTIFY THE VHA COR OF ALL UTILITIES ENCOUNTERED DURING CONSTRUCTION AND MUST NOT BACKFILL UNTIL THE CONTRACTOR HAS MADE RECORD OF ITS TYPE, SIZE AND LOCATION.
- CONTRACTOR MUST CONTACT THE ENGINEERING DIVISION OF VETERANS AFFAIRS AND/OR APPROVED THIRD PARTY FOR ANY NEEDED LOCATES.

ENVIRONMENTAL

- WORK SITE AND EXCAVATIONS GENERAL CONTRACTOR IS RESPONSIBLE FOR INSTALLING TEMPORARY ENVIRONMENTAL CONTROLS AROUND EXCAVATED AREAS AND SOIL STOCK PILES TO ENSURE THAT RUNOFF IS CONTROLLED.
- ALL DISTURBED AREAS MUST BE RECLAIMED WITH VIABLE TOPSOIL PER SECTION 2.3 PLANTING SOILS IN 32 90 00 PLANTING SPECIFICATION PRIOR TO THE PLACEMENT OF SEED.
- WDEQ CONSTRUCTION PERMIT REQUIREMENTS: "THE SMALL CONSTRUCTION GENERAL PERMIT (SCGP) COVERS STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES THAT DISTURB AT LEAST ON ACRE, BUT LESS THAN FIVE ACRES. SMALL CONSTRUCTION ACTIVITIES ALSO INCLUDE DISTURBANCES OF LESS THAN 1 ACRE WHEN THAT DISTURBANCE IS PART OF A LARGER COMMON PLAN OF DEVELOPMENT OR SALE THAT WILL ULTIMATELY DISTURB BETWEEN ONE AND FIVE ACRES."

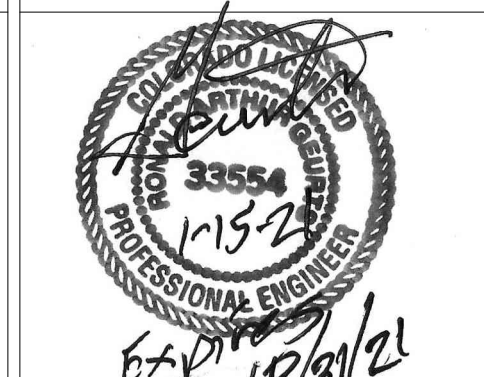


CONSULTANTS:

ARCHITECT/ENGINEERS:



STAMP:



Drawing Title
CIVIL GENERAL NOTES

Approved: Project Director

Phase
100% CONSTRUCTION DOCUMENTS

Project Title
BUILDING 90 REPLACE COAL BOILERS DESIGN

Project Number
666-18-114

Building Number
90

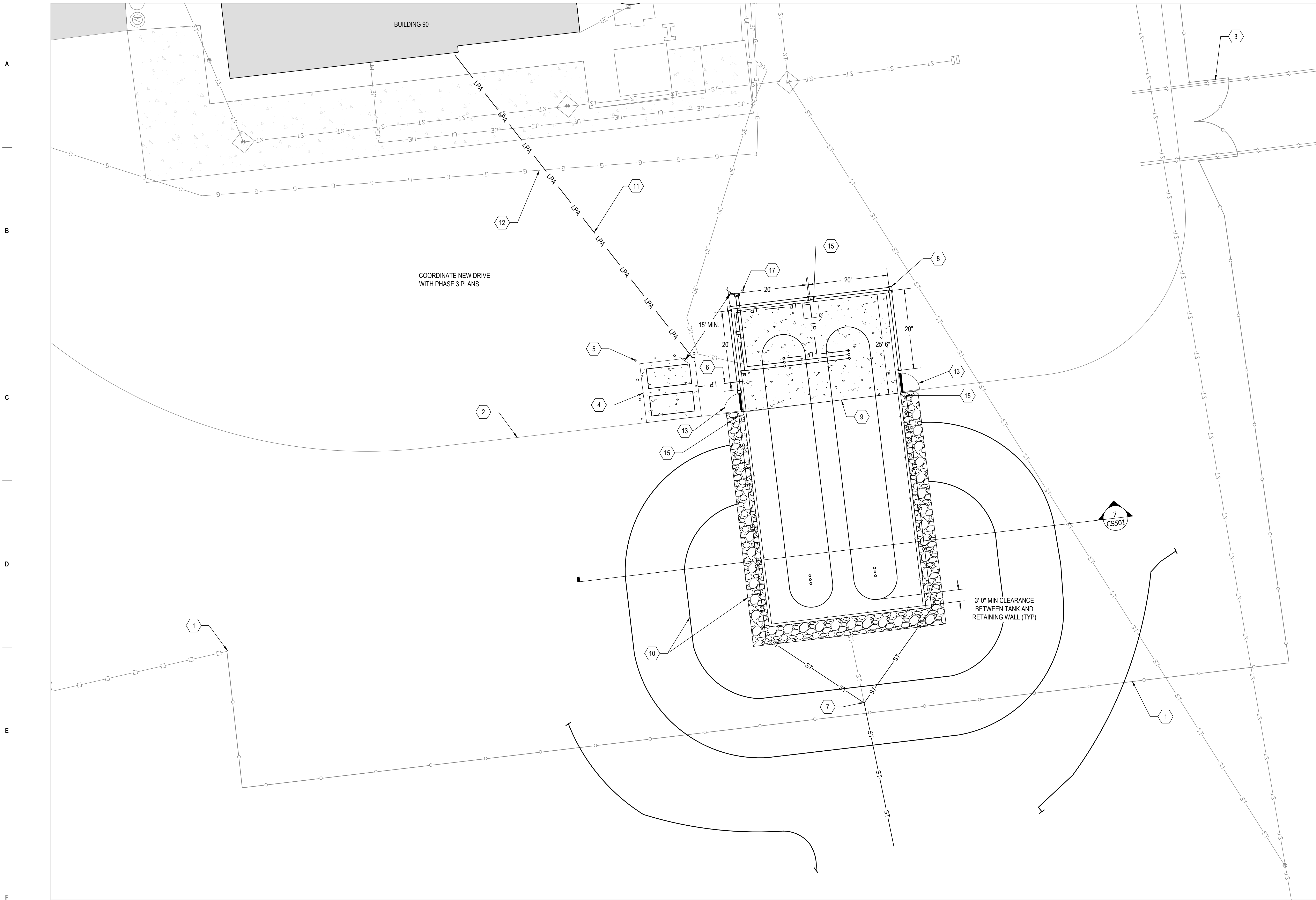
Drawing Number
C-001

Location
VAMC SHERIDAN, WYOMING

Issue Date
01/15/2020

Checked
BRD

Drawn
DJD



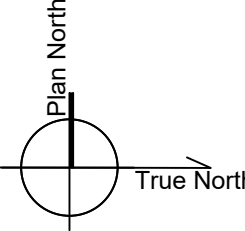
- GENERAL NOTES**
- A. CONTRACTOR IS RESPONSIBLE FOR RETURNING SITE TO ITS PREVIOUS CONDITION, OR BETTER, INCLUDING BUT NOT LIMITED TO SOD, CONCRETE, GRAVEL ROADS, DRAINAGE SWALES, ETC.
 - B. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES TO THE VA COR BEFORE PROCEEDING WITH WORK.
 - C. CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL TEMPORARY SIGNAGE, INCLUDING BUT NOT LIMITED TO CONSTRUCTION ACCESS, PARKING LOT CLOSURES AND EXITS/ENTRANCES.

- KEYNOTES**
1. COORDINATE WITH PHASE 3 PLANS FOR LOCATION OF NEW FENCE.
 2. COORDINATE WITH PHASE 3 PLANS FOR LOCATION OF NEW DRIVE.
 3. COORDINATE WITH PHASE 3 PLANS FOR NEW ENTRANCE GATE.
 4. INSTALL VAPORIZER/MIXER CONCRETE PAD AT DIMENSIONS PROVIDED BY MANUFACTURER. REFERENCE CIVIL DETAIL 02/CS501.
 5. PLACE BOLLARDS (7) AROUND CONCRETE PAD @ 5' OC MAX BETWEEN POLES. REFERENCE CIVIL DETAILS 01-02/CS501.
 6. NEW LIQUID PROPANE LINE TO VAPORIZER AT PUMP STATION.
 7. DOUBLE WYE CONNECTION TO EXISTING STORM DRAIN; DAYLIGHT STORM DRAIN FOLLOWING EXISTING SLOPE.
 8. INSTALL REMOVABLE PANEL PRE-CAST CONCRETE WALL WITH "H"-COLUMNS (TYP).
 9. NEW CONCRETE PAD TO EXTEND EXISTING FOR UNDER THE PROPANE TANK. REFERENCE CONCRETE CONNECTION DETAIL 10/CS501.
 10. GABION WALL AND SLOPED BERM, REFERENCE DETAILS CS501 AND GRADING PLAN CG101.
 11. ROUTE OF LPA LINE. REFERENCE MECHANICAL DRAWINGS.
 12. COORDINATE WITH NATURAL GAS COMPANY PRIOR TO INSTALLATION.
 13. TANK BERM 12"x4" HINGED LOUVER ACCESS DOOR. REFERENCE DETAIL 09/CS501.
 14. BELOW GABION STORM DRAIN; REFERENCE DETAIL 07/CS501.
 15. CAP ENDS OF NEW 4" STORM DRAIN AT END LOCATIONS SHOWN.
 16. LOCATION OF LP PUMP SKID.
 17. PLACE BOLLARDS (2) AROUND FILL STATION @ 5' OC MAX BETWEEN POLES. REFERENCE CIVIL DETAILS 01-02/CS501.

LEGEND

| | | |
|-------|-------|--------------------------------------|
| — LPA | — LPA | — NEW LIQUID PROPANE AIR LINE |
| — LP | — LP | — NEW LIQUID PROPANE |
| — ST | — ST | — EXISTING STORM DRAIN |
| — ST | — ST | — NEW STORM DRAIN |
| □ | □ | — EXISTING FENCE LINE |
| ○ | ○ | — PHASE 3 FENCING |
| — G | — G | — EXISTING NATURAL GAS LINE |
| — UE | — UE | — EXISTING UNDERGROUND ELECTRIC LINE |

1 CIVIL SITE PLAN
 SCALE: 1" = 10'
 0 2'-6" 5' 10' 20' 30' 40'



| | |
|---------|-------|
| Issued: | Date: |
| | |

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VEG 20.07

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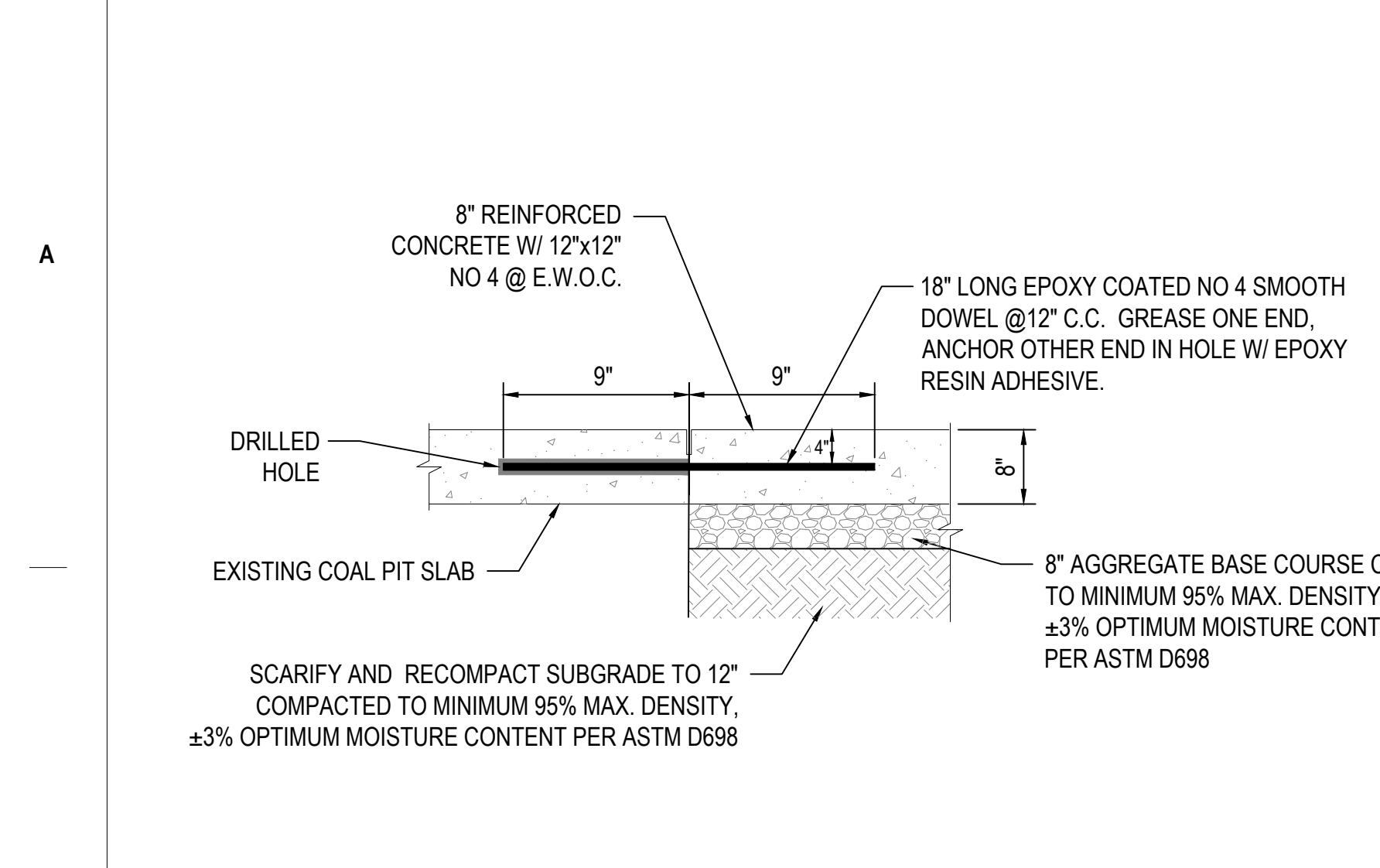


Drawing Title
CIVIL SITE PLAN

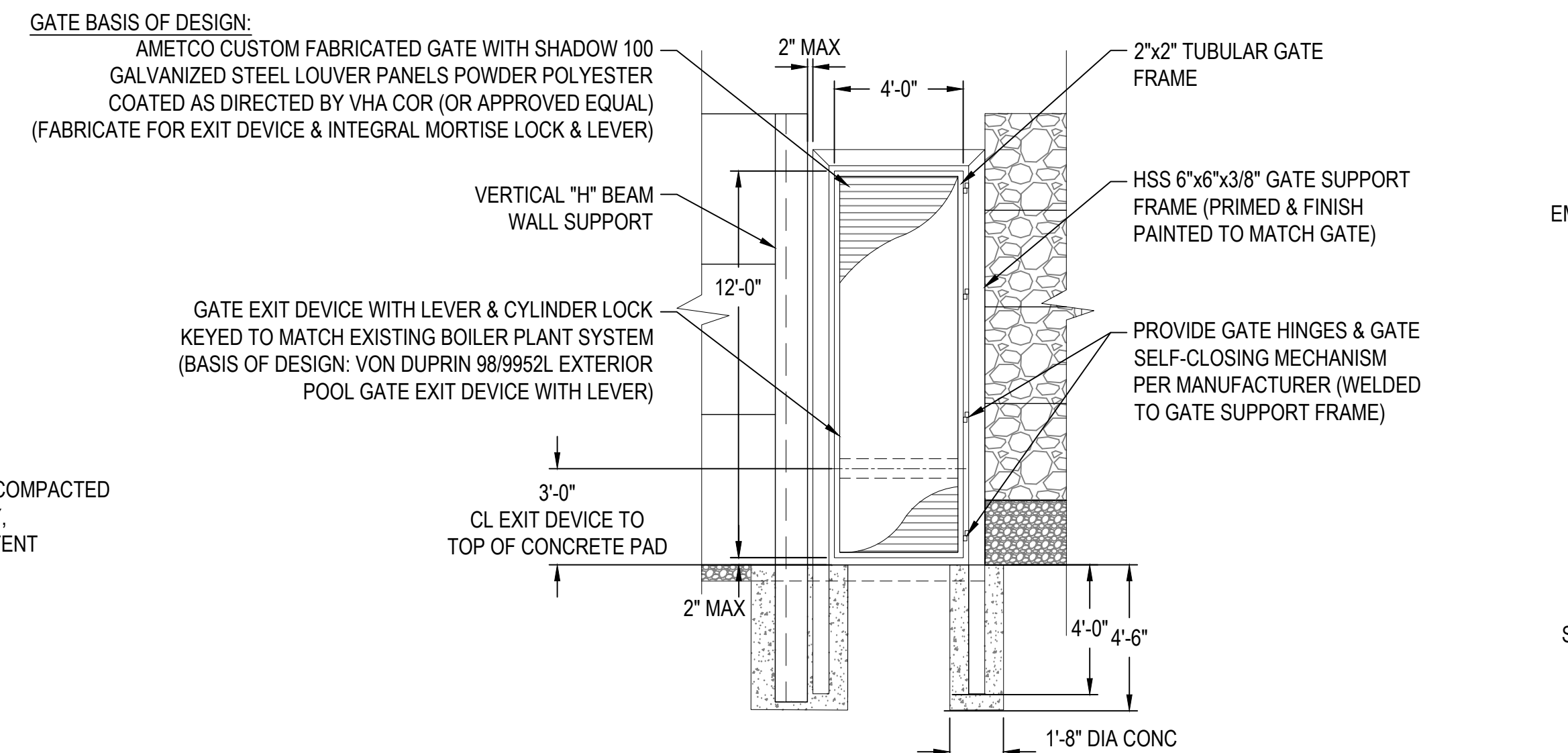
Approved: Project Director

Phase
100% CONSTRUCTION DOCUMENTS

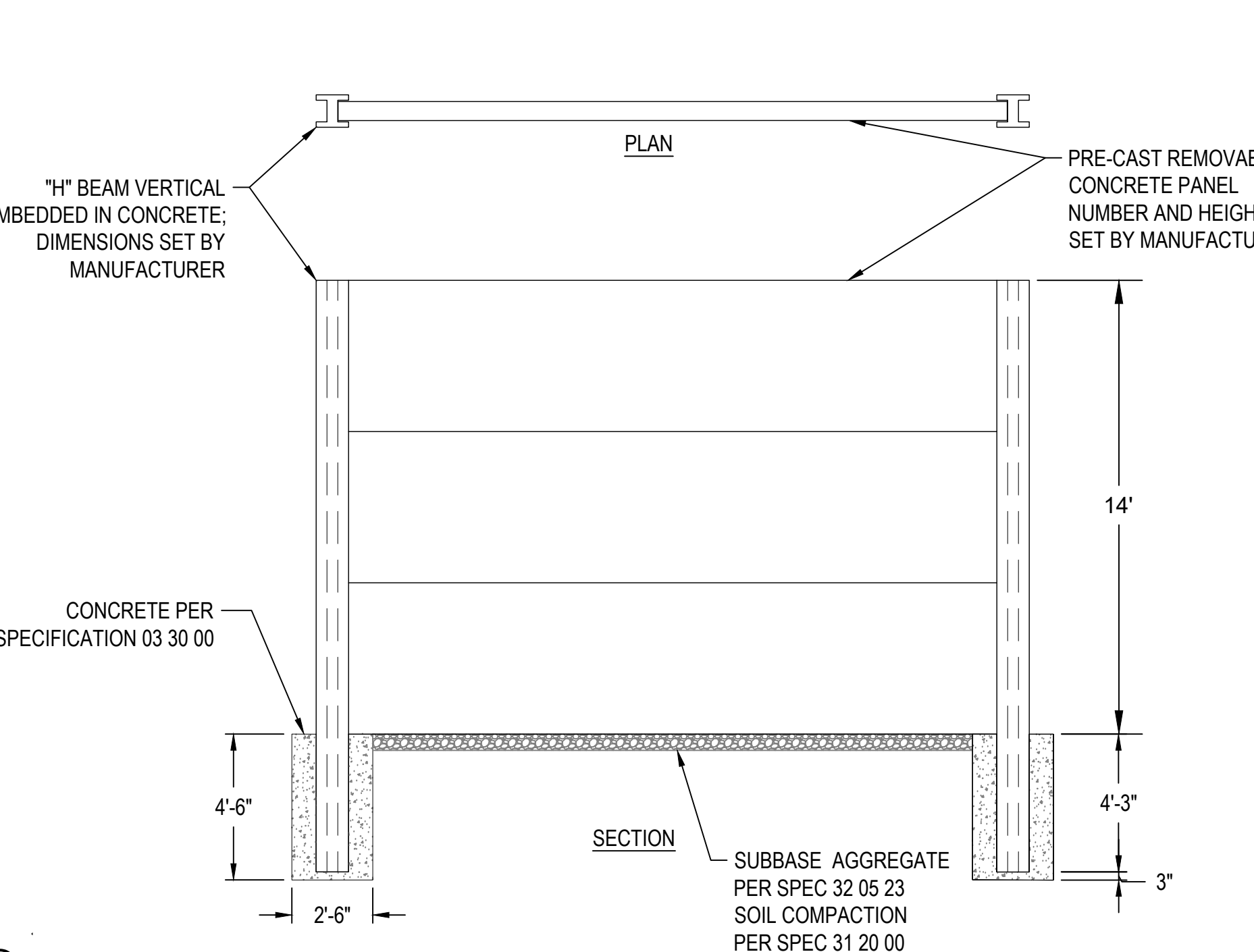
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|-----------------------------------------------------------------|-----------------------|-------------------------------------|
| Project Title BUILDING 90 REPLACE COAL BOILERS DESIGN | | Project Number 666-18-114 |
| Location VAMC SHERIDAN, WYOMING | | Building Number 90 |
| Issue Date 01/15/2020 | Checked BRD | Drawn DJD |
| | | Drawing Number CS101 |



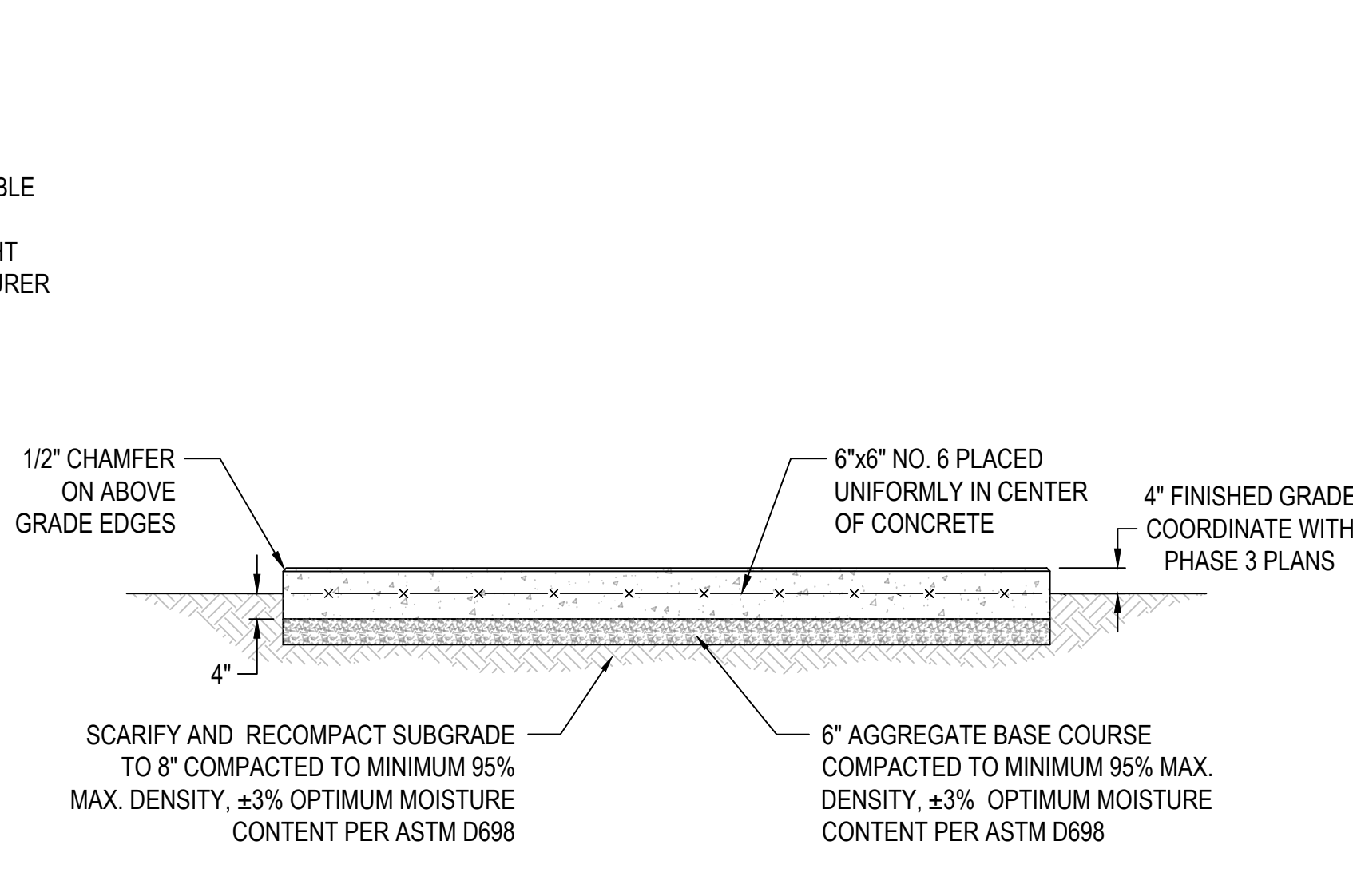
10 NEW CONCRETE COAL SLAB CONNECTION
SCALE: NO SCALE



9 ACCESS DOOR DETAIL
SCALE: NO SCALE



6 "H" PANEL CONCRETE WALL
SCALE: NO SCALE



3 CONCRETE PUMP PAD SECTION
SCALE: NO SCALE

STAKE SPACING TABLE

| SLOPE | SPACING | | STAKE LENGTH |
|---------|---------|------|--------------|
| | UP | DOWN | |
| 1V:2H | 6 | 12 | 4 ft (1.2 m) |
| 1V:2.5H | 6 | 15 | 4 ft (1.2 m) |
| 1V:3H | 12 | 18 | 4 ft (1.2 m) |
| 1V:4H | 12 | 24 | 4 ft (1.2 m) |
| 1V:5H | 12 | 30 | 4 ft (1.2 m) |
| 1V:6H | 12 | 36 | 4 ft (1.2 m) |
| 1V:8H | 12 | 48 | 4 ft (1.2 m) |
| 1V:10H | 12 | 60 | 4 ft (1.2 m) |
| 1V:12H | 12 | 72 | 4 ft (1.2 m) |
| 1V:15H | 12 | 90 | 4 ft (1.2 m) |
| 1V:20H | 12 | 120 | 4 ft (1.2 m) |
| 1V:25H | 12 | 150 | 4 ft (1.2 m) |
| 1V:30H | 12 | 180 | 4 ft (1.2 m) |
| 1V:40H | 12 | 240 | 4 ft (1.2 m) |
| 1V:50H | 12 | 300 | 4 ft (1.2 m) |
| 1V:60H | 12 | 360 | 4 ft (1.2 m) |
| 1V:75H | 12 | 450 | 4 ft (1.2 m) |
| 1V:100H | 12 | 600 | 4 ft (1.2 m) |

STAKE LENGTH
CLAY SOIL - 4 ft (1.2 m)
SANDY SOIL - 6 ft (1.8 m)

STANDARD REVET MATTRESS SIZES

| R x S x T | NO. OF CELLS (EACH UNIT) | UNIT CAPACITY (CY/UNIT) | VOLUME PER SURFACE AREA (CY/M ²) |
|--------------|--------------------------|-------------------------|----------------------------------------------|
| 6' x 3' x 3' | 2 | 2.0 | 0.11 |
| 6' x 3' x 3' | 3 | 3.0 | 0.17 |
| 6' x 3' x 3' | 4 | 4.0 | 0.22 |
| 6' x 3' x 3' | 2 | 1.0 | 0.08 |
| 6' x 3' x 3' | 3 | 1.5 | 0.11 |
| 6' x 3' x 3' | 4 | 2.0 | 0.15 |
| 6' x 3' x 3' | 3 | 1.0 | 0.08 |
| 6' x 3' x 3' | 4 | 1.5 | 0.11 |
| 6' x 3' x 3' | 2 | 0.7 | 0.05 |
| 6' x 3' x 3' | 3 | 1.0 | 0.08 |
| 6' x 3' x 3' | 4 | 1.3 | 0.10 |

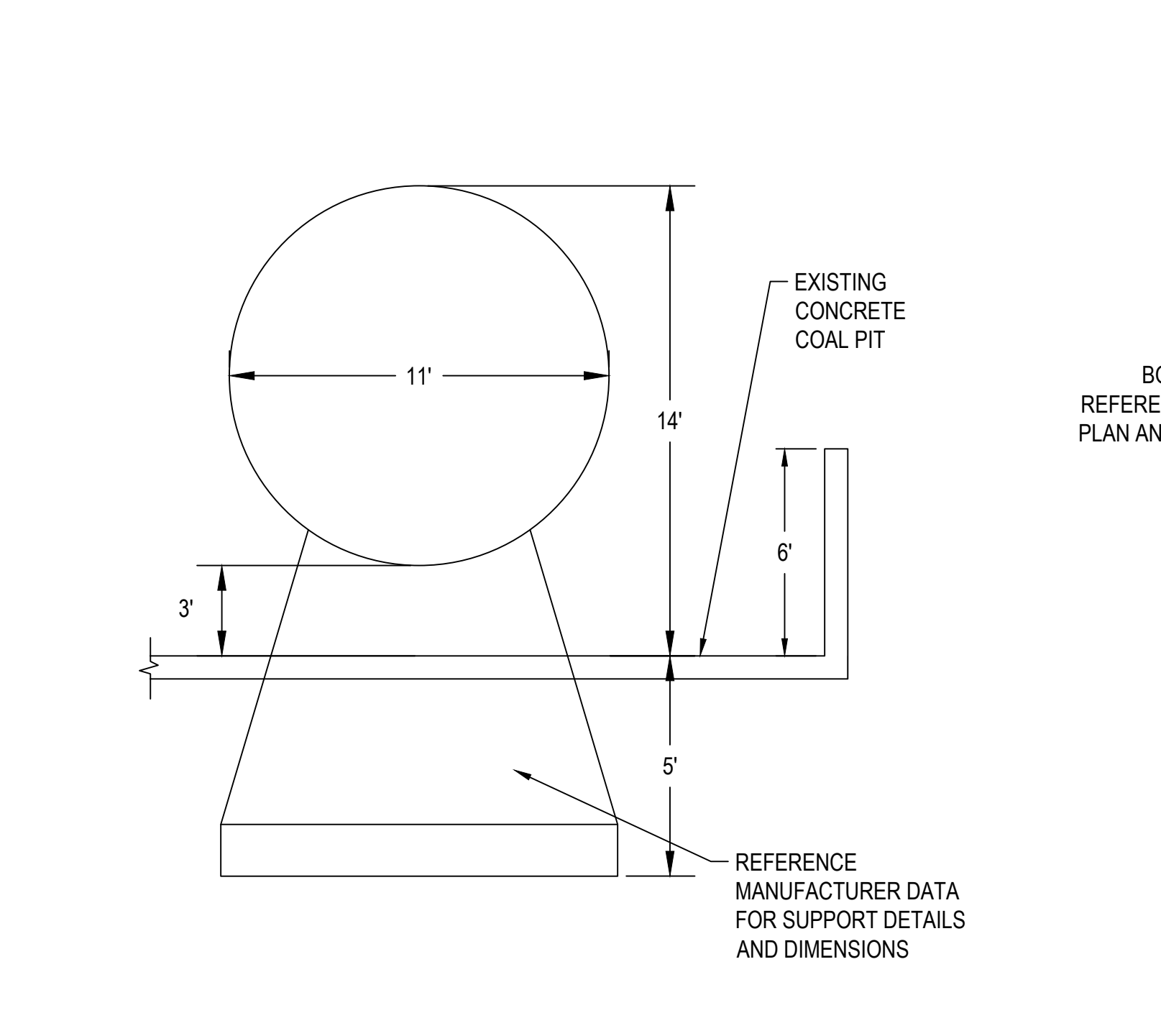
STANDARD GABION SIZES

| R x S x T | NO. OF CELLS (EACH UNIT) | UNIT CAPACITY (CY/UNIT) | VOLUME PER SURFACE AREA (CY/M ²) |
|--------------|--------------------------|-------------------------|----------------------------------------------|
| 6' x 3' x 3' | 2 | 2.0 | 0.11 |
| 6' x 3' x 3' | 3 | 3.0 | 0.17 |
| 6' x 3' x 3' | 4 | 4.0 | 0.22 |
| 6' x 3' x 3' | 2 | 1.0 | 0.08 |
| 6' x 3' x 3' | 3 | 1.5 | 0.11 |
| 6' x 3' x 3' | 4 | 2.0 | 0.15 |
| 6' x 3' x 3' | 2 | 0.7 | 0.05 |
| 6' x 3' x 3' | 3 | 1.0 | 0.08 |
| 6' x 3' x 3' | 4 | 1.3 | 0.10 |

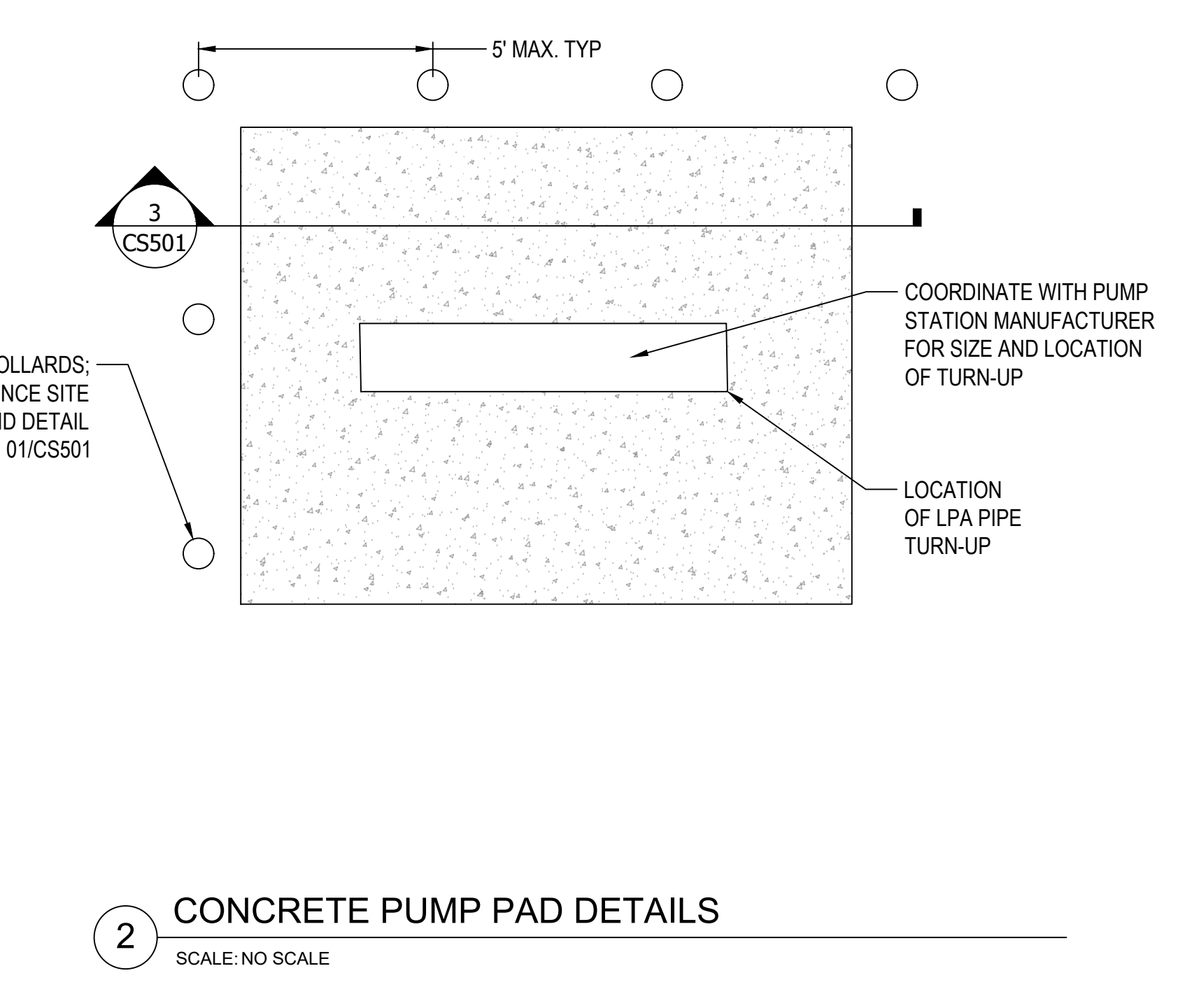
Gabion and Revet Mattress Construction
Place riprap in gabions in lifts not to exceed 1 ft (0.3 m) or the height of each horizontal stiffener wire level, whichever is less. Install horizontal tie wires and proceed to the next lift. Continue until gabions are full. Lace lid or top to sides and diaphragms and tie to other units.
1 ft (0.3 m) Gabions and Revet mattresses do not require horizontal stiffener wires.
NOTE: SEE SPECIFICATION 31 20 00 EARTHWORK FOR SIZES OF ROCKS TO BE USED IN GABION UNITS.

PLACING AND FASTENING ADJACENT BASKETS

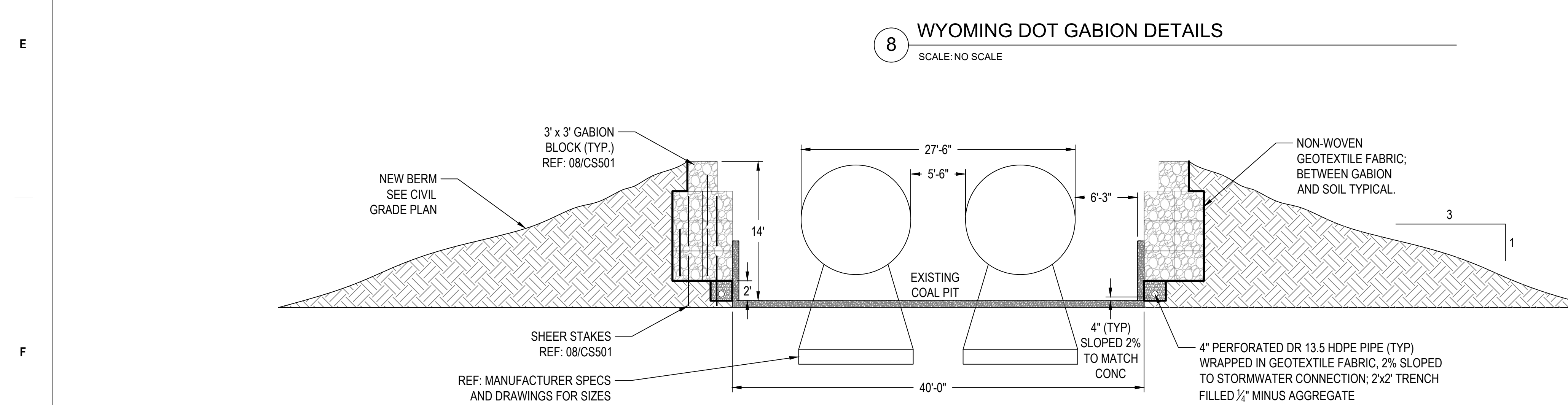
WYOMING DOT GABION DETAILS
SCALE: NO SCALE



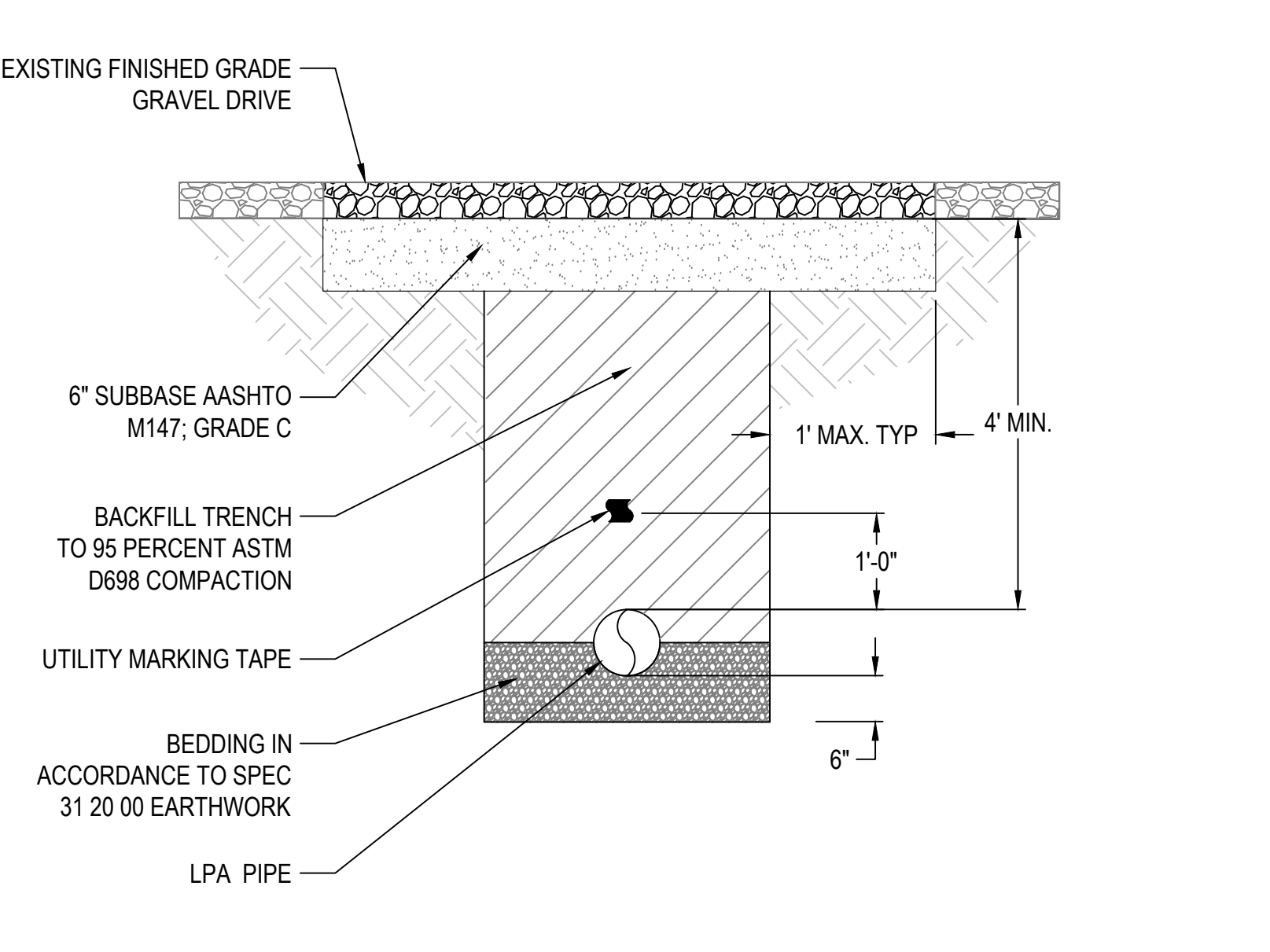
5 PARTIALLY BURIED TANK
SCALE: NO SCALE



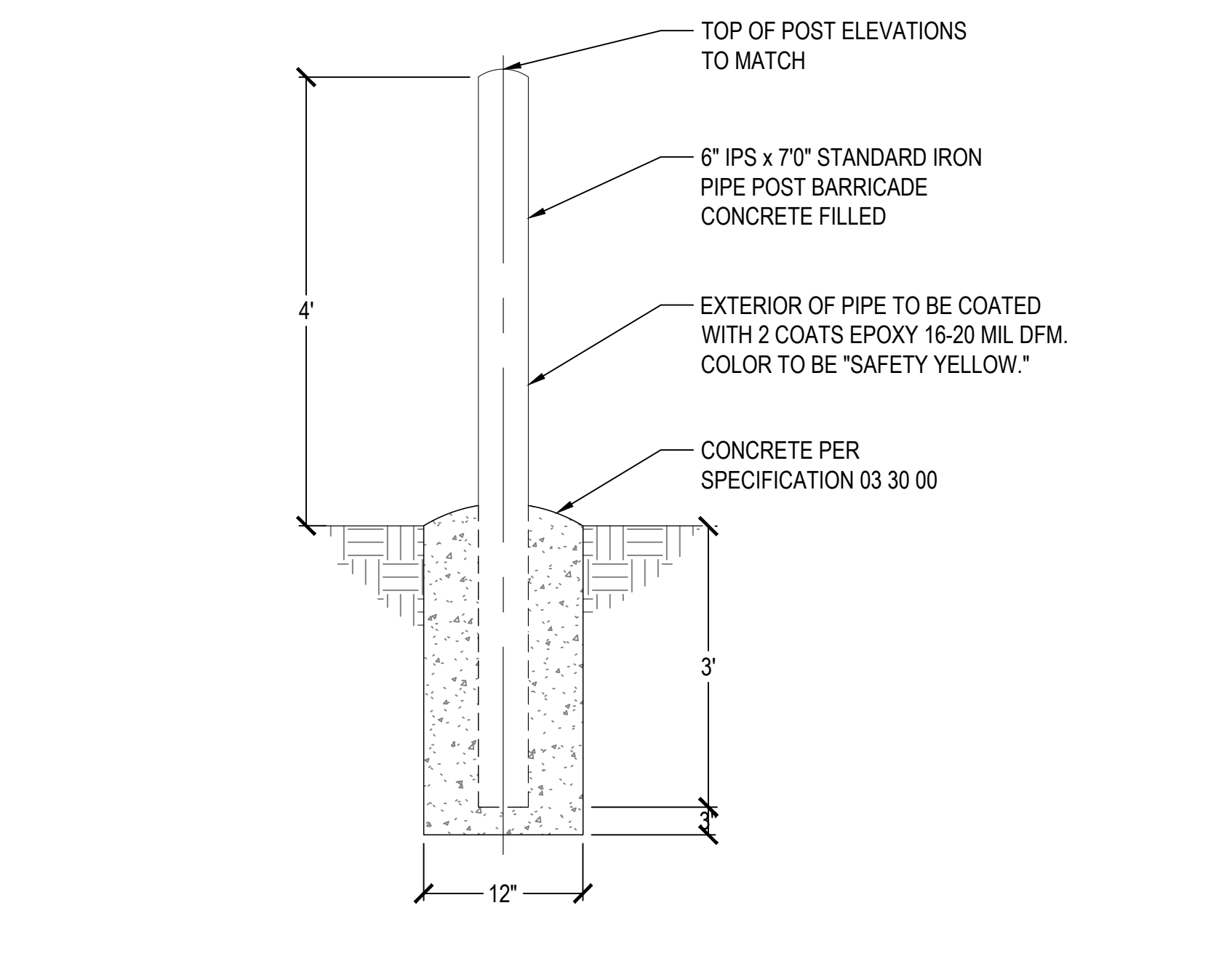
2 CONCRETE PUMP PAD DETAILS
SCALE: NO SCALE



7 TANK BERM SECTION DETAIL
SCALE: NO SCALE



4 UTILITY TRENCH DETAIL
SCALE: NO SCALE



1 BOLLARD DETAIL
SCALE: NO SCALE

| | | | | | | |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------------------------------------------------------------------------|--------------------------------------------------------|----------------------------------------------------------------------------|-----------------------------------------|
| <p>CONSULTANTS:</p> | <p>ARCHITECT/ENGINEERS:</p> <p>VALHALLA ENGINEERING GROUP, LLC</p> <p>750 W HAMPTDEN AVE SUITE #300 ENGLISWOOD, CO 80110 (720) 550-6307 WWW.VALHALLAENGINEERING.COM</p> | <p>STAMP:</p> | <p>Drawing Title</p> <p>CIVIL SITE DETAILS</p> <p>Approved: Project Director</p> | <p>Phase</p> <p>100% CONSTRUCTION DOCUMENTS</p> | <p>Project Title</p> <p>BUILDING 90 REPLACE COAL BOILERS DESIGN</p> | <p>Project Number</p> <p>666-18-114</p> |
| | | | | | | |

VA FORM 08-6231



- GENERAL NOTES**
1. GRADING PLAN INDICATES FINISHED GRADES. PROPOSED CONTOURS AND SPOT ELEVATIONS ARE TO FINISHED GRADE. SLOPES SHOWN ARE HORIZONTAL:VERTICAL (H:V).
 2. ANY CONSTRUCTION DEBRIS OR MUD TRACKING IN THE VA RIGHT-OF-WAY RESULTING FROM THIS DEVELOPMENT SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR.
 3. SEE SHEET LP101 AND SPECIFICATION 32 90 00 FOR PLANTING DETAILS.
 4. ALL EROSION CONTROL WILL BE DONE IN CONFORMANCE WITH SPECIFICATION 01 57 19 TEMPORARY ENVIRONMENTAL CONTROLS.
 5. SPOT ELEVATIONS ARE SHOWN TO TOP OF FINISHED CONCRETE. FINISHED ELEVATION HAS A TOLERANCE OF +/- 1".

- KEYNOTES**
1. INSTALL SILT FENCE PRIOR TO CONSTRUCTION; REFERENCE CG501
 2. EXTEND STORM DRAIN AT DESIGNATED SLOPE UNTIL IT MEETS EXISTING GRADE AT DRAINAGE SWALE.
 3. CONCRETE PUMP PAD 4 INCHES ABOVE PARKING LOT GRADE. SLOPED 2%. COORDINATE WITH PHASE 3 PLANS FOR FINISHED ELEVATIONS OF NEW DRIVE. PUMP PAD TO BE 4" ABOVE FINISHED GRADE.
 4. MATCH NEW GRADE TO EXISTING (TYPICAL).
 5. BERM TO BE SEEDED AND STABILIZED; REFERENCE LP101.
 6. COORDINATE WITH PHASE 3 PLANS FOR LIMITS AND ELEVATIONS OF NEW DRIVE.
 7. INSTALL NEW STORM WATER DRAINAGE PIPE; REFERENCE DETAIL 07/501. STORM DRAIN TO SLOPE 2% UNDERNEATH GABION WALL.
 8. AT PIPE CHANGE OF DIRECTION, SLOPE NEW STORM LINE TO MEET CONNECTION AT EXISTING STORM DRAIN.

LEGEND

| | |
|--|-------------------------------|
| | NEW CONTOUR LINE - MAJOR |
| | NEW CONTOUR LINE - MINOR |
| | EXISTING CONTOUR LINE - MAJOR |
| | EXISTING CONTOUR LINE - MINOR |
| | SILT FENCE |
| | EXISTING STORM SEWER |
| | STORM SEWER EXTENSION |
| | LIMITS OF EXISTING DRIVE |
| | SPOT ELEVATION |

1 CIVIL GRADING AND EROSION CONTROL PLAN
 SCALE: 1" = 10'

| | |
|---------|-------|
| Issued: | Date: |
| | |

CONSULTANTS:

ARCHITECT/ENGINEERS:

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STAMP:



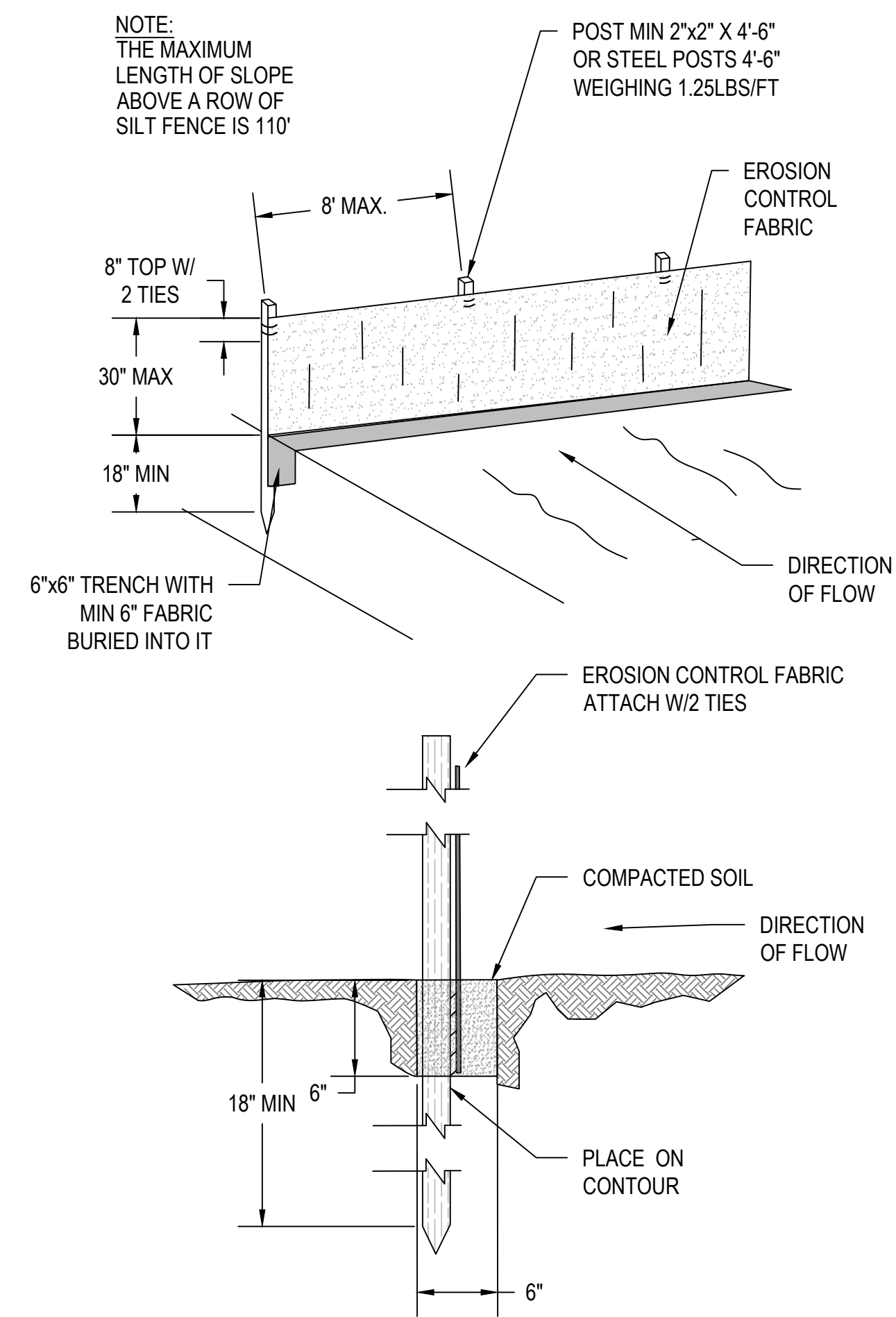
Drawing Title
CIVIL GRADING AND EROSION CONTROL PLAN
 Approved: Project Director

Phase
 100% CONSTRUCTION DOCUMENTS

| | | | |
|----------------------------------------------------------|----------------|------------------------------|-------------------------|
| Project Title BUILDING 90 REPLACE COAL BOILERS DESIGN | | Project Number 666-18-114 | |
| Location VAMC SHERIDAN, WYOMING | | Building Number 90 | |
| Issue Date 01/15/2021 | Checked BRD | Drawn DJD | Drawing Number CG101 |

EROSION CONTROL NOTES:

EROSION CONTROL DETAILS ARE FROM THE WYOMING DEPARTMENT OF TRANSPORTATION POLLUTION CONTROLS AND BMP FOR STORM WATER DURING CONSTRUCTION. CONFIRM SELECTION FROM FIELD GUIDE WITH VHA COR BEFORE IMPLEMENTATION. ADDITIONAL REQUIREMENTS MAY BE REQUIRED BASED ON SITE CONDITIONS AND AT REQUEST OF THE VHA COR.



SILT FENCE NOTES

1. SILT FENCE SHOULD BE LIMITED TO SITUATIONS IN WHICH ONLY SHEET FLOW IS EXPECTED
2. SILT FENCE SHOULD BE INSTALLED PRIOR TO MAJOR SOIL DISTURBANCE.
3. SILT FENCE SHOULD BE PLACED ACROSS THE BOTTOM OF A SLOPE ALONG A LINE OF UNIFORM ELEVATION PERPENDICULAR TO THE DIRECTION OF FLOW.
4. SYNTHETIC FILTER FABRIC SHALL BE A PERVIOUS SHEET OF PROPYLENE, NYLON, POLYESTER OR ETHYLENE YARN AND SHALL BE CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE REQUIREMENTS NOTED IN WY DOT DOH SPECIFICATIONS OR APPROVAL OF THE VHA COR.
5. IF STEEL POSTS (STANDARD "U" OR "T" SECTION) ARE UTILIZED FOR SILT FENCE CONSTRUCTION, THEY MUST HAVE A MINIMUM WEIGHT OF 1.25 POUNDS PER LINEAR FOOT AND SHOULD HAVE A MINIMUM LENGTH OF 5 FEET.

MAINTENANCE

1. SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL OF 0.5 INCH OR GREATER. ANY REQUIRED REPAIRS OR MAINTENANCE SHALL BE MADE IMMEDIATELY.
2. SHOULD THE FABRIC ON A SILT FENCE DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL IS NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER.

1 SILT FENCE DETAIL

SCALE: NO SCALE

| | | | | | | | | | | |
|----------------------------------------------|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|-------------------------------------|------------------------------------------------|--------------------------------------|----------------------------------------------------------|------------------------------|--------------|-------------------------|
| Issued: _____ Date: _____ VA FORM 05-6231 | CONSULTANTS: | ARCHITECT/ENGINEERS: VALHALLA ENGINEERING GROUP, LLC 750 W HAMPTDEN AVE SUITE #600 ENGLEWOOD CO 80110 (720) 550-4307 WWW.VALHALLAENGINEERING.COM | STAMP: 33554 1/15/21 ERIC P. ... | U.S. Department of Veterans Affairs | Drawing Title CIVIL EROSION CONTROL DETAILS | Phase 100% CONSTRUCTION DOCUMENTS | Project Title BUILDING 90 REPLACE COAL BOILERS DESIGN | Project Number 666-18-114 | | |
| | | | VEG 20.07 | Approved: Project Director | | Location VAMC SHERIDAN, WYOMING | Issue Date 01/15/2020 | Checked BRD | Drawn DJD | Building Number 502C |



GENERAL NOTES

- A. AREA DISTURBED DURING CONSTRUCTION IS TO BE SEEDED WITH NATIVE GRASSES. SEE SPECIFICATION SECTION 32 90 00 PLANTING FOR DETAILS.
- B. AFTER SEEDING, AREA IS TO BE PROTECTED WITH EXTENDED TERM EROSION CONTROL BLANKETS. SEE SPECIFICATION SECTION 32 90 00 PLANTING FOR DETAILS.

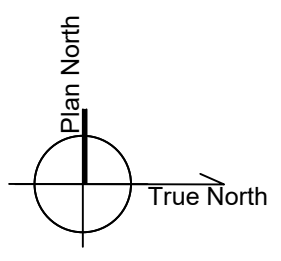
KEYNOTES

1. STORM DRAIN EXTENSION TO DAYLIGHT AT NEWLY GRADED SLOPE.
2. 14' HIGH GABION WALL. SEE CIVIL SHEETS FOR CONSTRUCTABILITY.
3. NEW CONCRETE PAD WITH CONCRETE PANEL ENCLOSURE.

LEGEND

| | |
|--|---------------------------|
| | NATIVE GRASS SEED |
| | NEW CONTOURS - MAJOR |
| | NEW CONTOURS - MINOR |
| | EXISTING CONTOURS - MAJOR |
| | EXISTING CONTOURS - MINOR |
| | SILT FENCE |
| | EXISTING STORM SEWER |
| | STORM SEWER EXTENSION |

1 PLANTING PLAN
SCALE: 1" = 10'
0 2' 4' 6' 8' 10' 20' 30' 40'



| | |
|---------|-------|
| Issued: | Date: |
| | |

CONSULTANTS:

ARCHITECT/ENGINEERS:

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 VEG 20.07

STAMP:



Drawing Title
PLANTING PLAN
 Approved: Project Director

Phase
 100% CONSTRUCTION DOCUMENTS

| | | |
|----------------------------------------------------------|----------------|------------------------------|
| Project Title BUILDING 90 REPLACE COAL BOILERS DESIGN | | Project Number 666-18-114 |
| Location VAMC SHERIDAN, WYOMING | | Building Number 90 |
| Issue Date 01/15/2021 | Checked RAG | Drawn MLH |
| Drawing Number LP101 | | |

GENERAL

- 1. ALL WORK SHALL CONFORM WITH THE REQUIREMENTS OF THE PROJECT SPECIFICATIONS.
2. NOTES AND DETAILS ON THE PLANS SHALL TAKE PRECEDENCE OVER GENERAL NOTES, TYPICAL DETAILS.
3. CONTRACTOR SHALL COMPARE ALL DISCREPANCIES ON DRAWINGS AT THE SITE.
4. USE STRUCTURAL DRAWINGS IN CONJUNCTION WITH ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS.
5. ENGINEER OF RECORD'S APPROVAL MUST BE SECURED FOR ALL SUBSTITUTIONS.
6. VERIFY ALL OPENINGS THROUGH FLOOR, ROOF AND WALLS WITH MECHANICAL AND ELECTRICAL CONTRACTORS.
7. ALL DIMENSIONS AND EXISTING CONDITIONS SHOWN SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
8. DURING ERECTION OF THE STRUCTURES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY BRACING TO WITHSTAND ALL LOADS TO WHICH THE STRUCTURE MAY BE SUBJECTED.
9. DO NOT REPRODUCE CONTRACT DOCUMENTS, COPY STANDARD PRINTED INFORMATION, OR USE ELECTRONIC CAD FILES AS THE BASIS FOR SHOP DRAWINGS.
10. THE ENGINEER OF RECORD DOES NOT PROVIDE INSPECTIONS OF CONSTRUCTION.
11. SEE PROJECT SPECIFICATIONS FOR INSPECTION SCHEDULE.
12. SIGNIFICANT PERMANENT EQUIPMENT SIZES, WEIGHTS AND LOCATIONS ARE INDICATED ON THE DRAWINGS AS PROVIDED TO THE ENGINEER DURING DESIGN.
13. EXISTING BUILDING:
13.1. 1947 ORIGINAL CONSTRUCTION.
13.2. 1973 REMODEL: SOUTH MASONRY-ENCLOSED GAS-FIRED BOILER ENCLOSURE, AUXILIARY GENERATOR ROOM AND EQUIPMENT MEZZANINE.
13.3. 1984 REMODEL: REPLACEMENT OF EQUIPMENT MEZZANINE WITH STEEL FRAMING, STEEL DECK AND CONCRETE SLAB.
13.4. 2011 REMODEL: REPLACE THREE BOILERS (ONE GAS FIRED, TWO COAL FIRED) AND OTHER RELATED EQUIPMENT.

STRUCTURAL DESIGN CRITERIA

- 1. ALL WORK IS DESIGNED AND SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE PROJECT SPECIFICATIONS.
2. LOADING CONDITIONS
2.1. DEAD LOAD..... 10 PSF
2.2. LIVE LOAD..... 40 PSF
2.3. NOTIONAL LOAD..... 1% OF TOTAL GRAVITY
2.4. SOIL BEARING PRESSURE..... 1500 PSF

ABBREVIATIONS

Table with 2 columns: Abbreviation and Full Name. Includes entries like AB ANCHOR BOLT, ADDL ADDITIONAL, AFF ABOVE FINISH FLOOR, etc.

CONCRETE

- 1. ALL CONCRETE MATERIALS SHALL COMPLY WITH THE STANDARDS REFERENCED IN THE PROJECT SPECIFICATIONS.
2. WORKABILITY ADMIXTURES MAY BE USED, PROVIDED THAT BATCH PROPORTIONS ARE DETERMINED AS PRESCRIBED IN THE SPECIFICATIONS.
3. ANY CONCRETE THAT FAILS TO MEET SPECIFICATIONS SHALL BE REMOVED & REPLACED AT THE EXPENSE OF THE CONTRACTOR.
4. REINFORCEMENT & DETAILING: ALL REINFORCING INCLUDING WWF SHALL BE DETAILED, BOLSTERED, & SUPPORTED TO COMPLY WITH ACI 315, "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCING CONCRETE STRUCTURES" & CRSI RECOMMENDATIONS.

REINFORCING STEEL

- 1. DEFORMED REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60. REINFORCING TO BE WELDED OR FIELD BENT SHALL BE ASTM A706, GRADE 60. EPOXY COATED REINFORCING SHALL CONFORM TO ASTM A775 AND SHALL BE COATED PRIOR TO FABRICATION.
2. WELDED WIRE REINFORCING (WWR) SHALL CONFORM TO ASTM A185, GRADE 65. WWR MUST LAP ONE FULL MESH AND SHALL BE WIRED TOGETHER. WWR SHALL BE PLACED IN THE CENTER OF SLABS ON GRADE.
3. WELDING OF REINFORCING SHALL CONFORM TO AWS D1.4, USING PROPER LOW HYDROGEN ELECTRODES.
4. DETAIL BARS IN ACCORDANCE WITH THE CURRENT ACI DETAILING MANUAL AND ACI BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE.
5. DETAIL BARS IN ACCORDANCE WITH THE CURRENT ACI 530 FOR CONCRETE MASONRY BLOCK.
6. ALL REINFORCING BAR BENDS SHALL BE MADE COLD WITH A BAR BENDER ACCORDING TO ACI 350 BAR BEND RADIUS.
7. LAP ALL HORIZONTAL BARS AT CORNERS, INTERSECTIONS AND SPLICES.
8. AT LOCATIONS WHERE ALL REINFORCING WITHIN A STRUCTURAL ELEMENT WILL BE SPLICED, THE SPLICES MUST BE STAGGERED.
9. DOWELS FOR WALL AND COLUMNS SHALL BE THE SAME SIZE AND SPACING AS THE WALL OR COLUMN REINFORCING, UNO.
10. AT ENDS OF BEAMS, SLABS, JOINS, WALLS AND GRADE BEAMS, TERMINATE TOP REINFORCING WITH STANDARD HOOKS UNLESS SHOWN OTHERWISE ON THE CONSTRUCTION DOCUMENTS.
11. PROVIDE ALL ACCESSORIES NECESSARY TO SUPPORT REINFORCING AT POSITIONS SHOWN ON THE PLANS.

STRUCTURAL STEEL

- 1. STRUCTURAL STEEL MINIMUM YIELD STRENGTH:
TUBE STEEL: A500 GRADE B STEEL (Fy = 46 KSI)
WIDE FLANGE SECTIONS: A992 STEEL (Fy = 50 KSI)
CHANNELS AND ANGLES: A36 STEEL (Fy = 36 KSI)
PLATES: A36 STEEL (Fy = 36 KSI)
BOLTS: FOR STEEL, USE A325
ANCHOR BOLTS: A307 OR A36
2. CONTRACTOR SHALL MEET OSHA REQUIREMENTS AND PROJECT SPECIFICATIONS.
3. ALL STRUCTURAL STEEL AND STRUCTURAL STEEL WORK SHALL COMPLY WITH "SPECIFICATIONS FOR THE DESIGN, FABRICATIONS, AND ERECTIONS OF STRUCTURAL STEEL FOR BUILDINGS OF THE A.I.S.C. CODE OF STANDARD PRACTICE" AND PROJECT SPECIFICATIONS.
4. ALL WELDS AND WELDING SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS OF THE "THE AMERICAN WELDING SOCIETY."
5. WELDING ELECTRODES SHALL BE ASTM E70XX. THE MINIMUM FILLET WELD SIZE SHALL BE 3/16".
6. A CERTIFIED WELDER IN ACCORDANCE WITH AWS SHALL PERFORM ALL WELDING.
7. SHOP DRAWINGS FOR ALL STEEL INDICATED ON THE STRUCTURAL DRAWINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION.
8. ALL STRUCTURAL STEEL EXPOSED TO WEATHER SHALL BE GALVANIZED OR PAINTED WITH A HIGH-PERFORMANCE PAINT SYSTEM PER PROJECT SPECIFICATIONS.
9. ALL MEMBERS SHALL BE ERECTED WITH NATURAL MILL CAMBER OR INDUCED CAMBER UP, UNO.
10. NO CUTTING OR BURNING OF STRUCTURAL STEEL IS ALLOWED WITHOUT WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER.
11. NO HOLES OTHER THAN THOSE SPECIFICALLY DETAILED ARE ALLOWED IN THE STRUCTURAL STEEL.
12. EXISTING BUILDING
12.1. 1947 BASE BUILDING IS MOST LIKELY A7
12.2. 1973 AND 1984 ADDITIONS ARE A36

STRUCTURAL STEEL CONNECTIONS

- 1. WELDED CONNECTIONS
1.1. ALL WELDING SHALL CONFORM TO ANSIAWS D1.1, LATEST EDITION.
1.2. FILLET WELDS WITH NO SIZE SPECIFIED SHALL BE 3/16 INCH OR MINIMUM SIZE REQUIRED BY AISC, WHICHEVER IS LARGER.
2. BOLTED CONNECTIONS
2.1. UNLESS OTHERWISE NOTED ON THE STRUCTURAL DRAWINGS, BOLTS SHALL BE 3/4" DIAMETER AND CONFORM TO ASTM A325. BOLTS SHALL BE DESIGNED USING VALUES FOR BEARING TYPE BOLTS WITH THREAD ALLOWED IN THE SHEAR PLANE.
2.2. BOLTS SHALL BE TIGHTENED TO "SNUG TIGHT" AS DEFINED BY AISC, UNO.
3. STRUCTURAL STEEL CONNECTIONS NOT SPECIFICALLY DETAILED ON THE STRUCTURAL DRAWINGS SHALL BE DESIGNED AND DETAILED BY THE CONTRACTOR UNDER THE DIRECT SUPERVISION OF A PROFESSIONAL ENGINEER LICENSED IN THE STATE HAVING JURISDICTION AT THE PROJECT SITE. SEALED CALCULATIONS FOR ALL CONNECTIONS DESIGNED BY THE CONTRACTOR SHALL BE SUBMITTED FOR THE ARCHITECT'S FILES.
4. MOMENT CONNECTIONS
4.1. WHERE INDICATED, MOMENT CONNECTIONS SHALL BE DESIGNED FOR THE SCHEDULED MOMENT ENVELOPE. THE MOMENT IS INDICATED ON THE STRUCTURAL DRAWINGS AS "(M-)" THE SHEAR IS INDICATED ON THE STRUCTURAL DRAWINGS AS "(R-)".
4.2. IF NOT INDICATED ON THE STRUCTURAL DRAWINGS, MOMENT CONNECTIONS SHALL BE WELDED TO DEVELOP THE FULL CAPACITY OF THE MEMBER.
5. ALL BEAM SHEARS, REACTIONS, MEMBER FORCES, MOMENTS, ETC, SHOWN ON THE STRUCTURAL DRAWINGS ARE LRFD LOADS.
5.1. ANCHOR RODS ARE TO BE ASTM F1554 36 KSI, UNLESS NOTED OTHERWISE.

REBAR LAP SCHEDULE table with columns for BAR SIZE, TENSION BARS 'Ld', and sub-columns for Fc = 3000 psi, 4000 psi, 5000 psi with REG and TOP labels.

- NOTES
1. THE SCHEDULE SHOWN APPLIES TO REGULAR WEIGHT CONCRETE WITH 60ksi GRADE REINFORCING BARS.
2. TOP BARS ARE HORIZONTAL BARS WITH 12" (OR MORE), OF FRESH CAST BELOW THE BARS.
3. CLASS "A" SPLICES SHALL BE USED WHEN 50% (OR LESS) OF BARS SPLICED WITHIN LAP.
4. CLASS "B" SPLICES SHALL BE USED FOR ALL ELSE, TYPICALLY WITH SHEARWALLS, COLUMNS, BEAMS, AND SLABS.
5. FOR EPOXY COATED BARS, INCREASE LAP LENGTHS AS FOLLOWS: TOP BARS - Ld x 1.7, REGULAR BARS - Ld x 1.5
6. FOR BUNDLED BARS, INCREASE LAP LENGTHS AS FOLLOWS: BUNDLED BARS THREE OR LESS - Ld x 1.2, BUNDLED BARS FOUR OR MORE - Ld x 1.33. INDIVIDUAL BAR SPLICES WITHIN A BUNDLE SHALL NOT OVERLAP.
7. LAP SPLICES ARE NOT ALLOWED FOR TIES AND STIRRUPS.

SOILS

- 1. SPREAD FOOTINGS SHALL BEAR ENTIRELY UPON SUITABLE NATURAL SOILS OR GRANULAR STRUCTURAL FILL EXTENDING TO SUITABLE NATURAL SOILS, AS DETERMINED BY THE GEOTECHNICAL ENGINEER OF RECORD. SEE DESIGN CRITERIA FOR SOIL BEARING INFORMATION.
2. BOTTOM OF FOOTING SHALL BE 66 INCHES BELOW LOWEST ADJACENT FINAL GRADE. SEE FOUNDATION PLAN FOR TOP OF FOOTING ELEVATIONS. NOTE THAT ALL TOP OF FOOTING ELEVATIONS ARE ESTIMATES BASED ON ARCHITECTURAL AND CIVIL DRAWINGS. CONTRACTOR SHALL FIELD VERIFY ALL TOP OF FOOTING ELEVATIONS WITH EXPECTED FINISH GRADE TO ENSURE ADEQUATE FROST PROTECTION.
3. ALL WATER SHALL BE REMOVED FROM EXCAVATION PRIOR TO PLACING CONCRETE. DO NOT PLACE CONCRETE UNDER WATER OR ON FROZEN GROUND. CONTRACTOR IS RESPONSIBLE FOR PROTECTING FOOTINGS AND SURROUNDING SOILS AGAINST FROST DURING CONSTRUCTION. ALL FILL AND BACKFILL SHALL BE COMPACTED ACCORDING TO THE REQUIREMENTS SET FORTH IN THE GEOTECHNICAL REPORT.
4. ANY UNUSUAL SOIL CONDITIONS (WATER, SOFT LAYERS, ROCK OUTCROPPINGS, EXISTING STRUCTURES, ETC.) ENCOUNTERED DURING EXCAVATION FOR FOOTINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE VHA COR, STRUCTURAL ENGINEER, AND GEOTECHNICAL ENGINEER PRIOR TO PROCEEDING.

Project information block containing fields for CONSULTANTS, ARCHITECT/ENGINEERS (VALHALLA ENGINEERING GROUP, LLC), STAMP, Drawing Title (STRUCTURAL GENERAL NOTES), Phase (100% CONSTRUCTION DOCUMENTS), Project Title (BUILDING 90 REPLACE COAL BOILERS DESIGN), Project Number (666-18-114), Location (VAMC SHERIDAN, WYOMING), Issue Date (01/15/2021), Checked (BRD), Drawn (CEK), and Drawing Number (S-001).

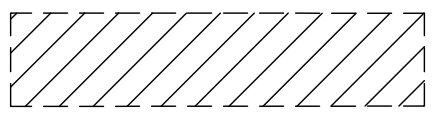
GENERAL STRUCTURAL NOTES:

- A. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES TO THE VHA COR BEFORE PROCEEDING WITH WORK.
- B. COORDINATE ALL FLOOR AND ROOF PENETRATIONS WITH FLOOR AND ROOF STRUCTURE. REFER TO STRUCTURAL DRAWINGS.
- C. TOP OF SLAB ELEVATION = 52'-0" UNLESS NOTED OTHERWISE
- D. PADS ARE 4" THICK HOUSEKEEPING PADS REINFORCED WITH ONE LAYER W.W.F. 6X6-W2.9XW2.9 UNLESS NOTED OTHERWISE
- E. REFERENCE ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR LOCATIONS, DIMENSIONS AND ELEVATIONS OF MAJOR EQUIPMENT AND FOR COORDINATION WITH SUPPORTING STRUCTURAL ELEMENTS SHOWN HERE.


KEY NOTES:

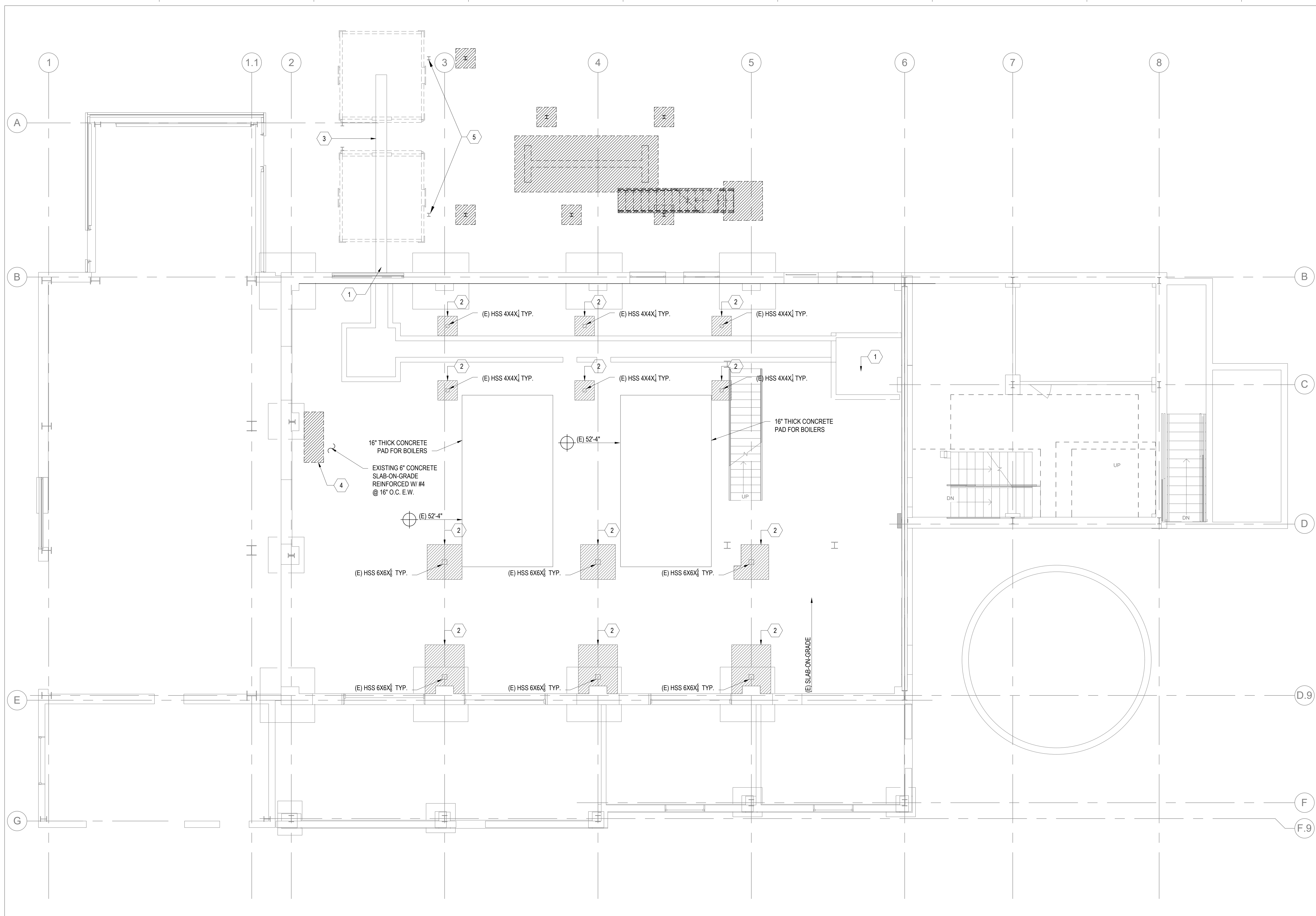
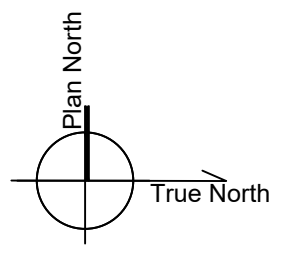
- 1. PATCH & REPAIR PENETRATION.
- 2. PATCH AND REPAIR EXISTING CONCRETE PADS
- 3. DEMOLISH EXTERIOR TRENCH COVER AND AUGER.
- 4. SAW-CUT AND REMOVE CONCRETE SLAB ON GRADE FOR NEW CONCRETE COLUMN FOOTERS. REFERENCE 02/S-501 FOR PATCH BACK.
- 5. CUT AND GRIND ALL STRUCTURAL MEMBERS AND MATERIALS THAT ARE REMOVED, FLUSH WITH EXISTING SLAB (TYPICAL THROUGHOUT).

LEGEND:

REMOVE EXISTING FOUNDATION 

1 STRUCTURAL FOUNDATION DEMO PLAN

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




CONSULTANTS:

ARCHITECT/ENGINEERS:

**VALHALLA
ENGINEERING
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 SUITE #300
 ENGLEWOOD CO 80110
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STAMP:



Drawing Title
STRUCTURAL FOUNDATION DEMO PLAN

Approved: Project Director

Phase
 100% CONSTRUCTION DOCUMENTS

Project Title
 BUILDING 90 REPLACE COAL BOILERS DESIGN

Project Number
 666-18-114
 Building Number
 90

Location
 VAMC SHERIDAN, WYOMING

Issue Date
 01/15/2021

Checked
 BRD

Drawn
 CEK

Drawing Number
 SD101

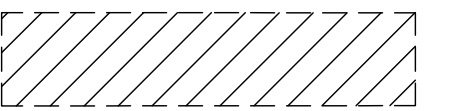

GENERAL STRUCTURAL NOTES:

- A. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES TO THE VHA COR BEFORE PROCEEDING WITH WORK.
- B. COORDINATE ALL FLOOR AND ROOF PENETRATIONS WITH FLOOR AND ROOF STRUCTURE. REFER TO STRUCTURAL DRAWINGS.

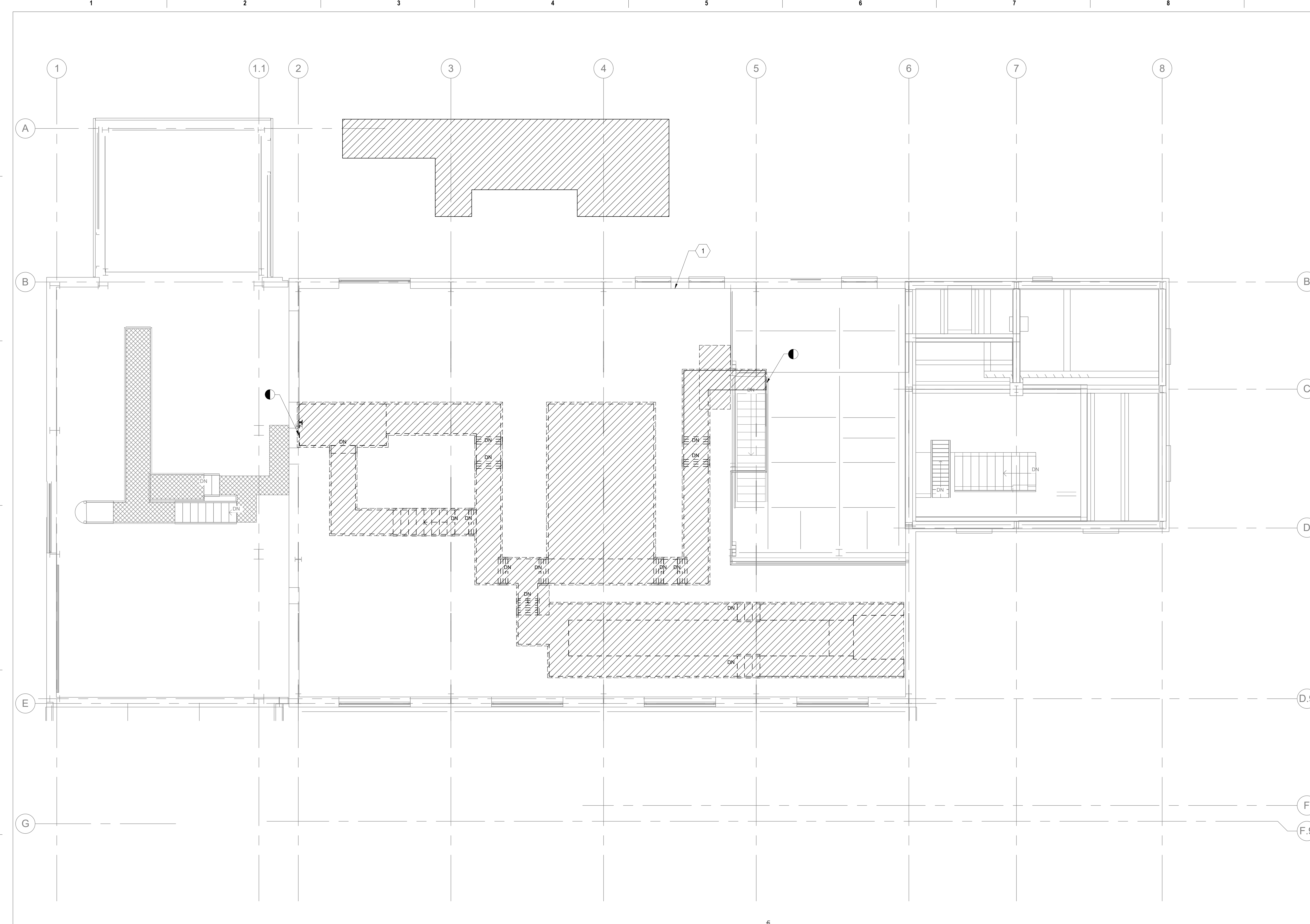
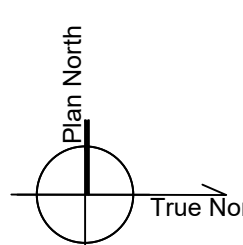
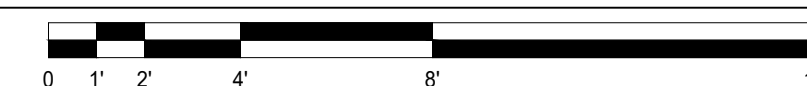
KEY NOTES:

- 1. DEMO REFERENCE MECHANICAL DRAWINGS

LEGEND:


- REMOVE EXISTING CATWALK 
- CATWALK TO REMAIN 


1 STRUCTURAL FRAMING DEMO PLAN
SCALE: 1/4" = 1'-0"



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| Issued: | Date: |
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CONSULTANTS:

ARCHITECT/ENGINEERS:

 VALHALLA
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Drawing Title
STRUCTURAL FRAMING DEMO PLAN
 Approved: Project Director

Phase
 100% CONSTRUCTION DOCUMENTS

Project Title
 BUILDING 90 REPLACE COAL BOILERS DESIGN
 Location
 VAMC SHERIDAN, WYOMING
 Issue Date
 01/15/2021
 Checked
 BRD
 Drawn
 CEK

Project Number
 666-18-114
 Building Number
 90
 Drawing Number
 SD102

GENERAL STRUCTURAL NOTES:

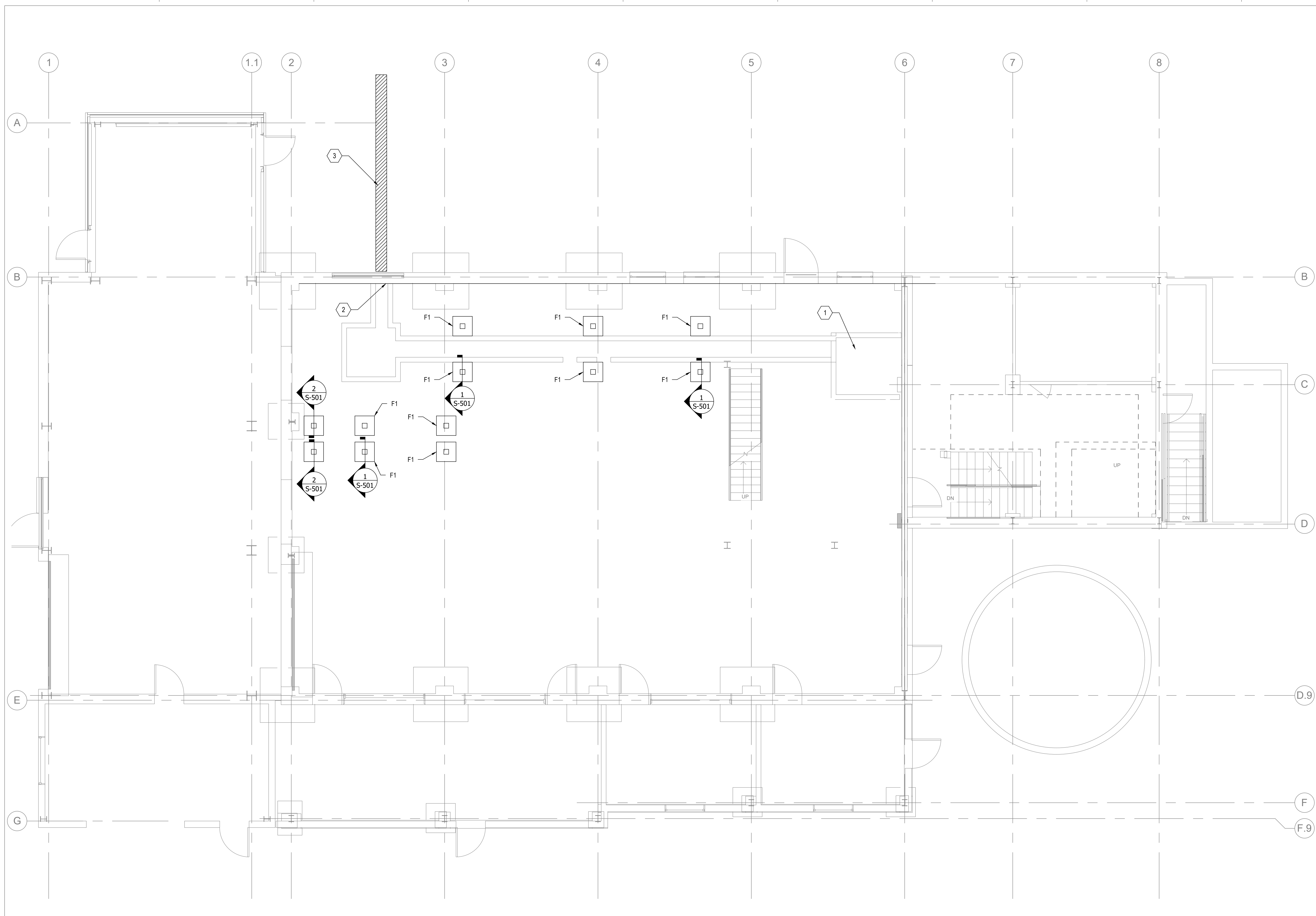
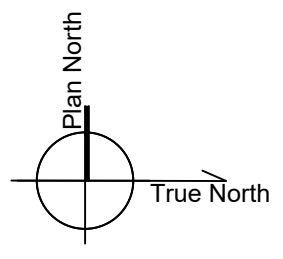
- A. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES TO THE VHA COR BEFORE PROCEEDING WITH WORK.
- B. COORDINATE ALL FLOOR AND ROOF PENETRATIONS WITH FLOOR STRUCTURE. REFER TO STRUCTURAL DRAWINGS.
- C. TOP OF SLAB ELEVATION = 0'-0" UNLESS NOTED OTHERWISE
- D. PADS ARE 4" THICK HOUSEKEEPING PADS REINFORCED WITH ONE LAYER W.W.F. 6X6-W2.9XW2.9 UNLESS NOTED OTHERWISE
- E. REFERENCE MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR LOCATIONS, DIMENSIONS AND ELEVATIONS OF MAJOR EQUIPMENT AND FOR COORDINATION WITH SUPPORTING STRUCTURAL ELEMENTS SHOWN HERE.

KEY NOTES:

- 1. EXTEND TRENCH COVER TO COVER BUCKET ELEVATOR.
- 2. PATCH AND SEAL AUGER TRENCH WALL PENETRATION THROUGH FOUNDATION WALL.
- 3. INFILL EXTERIOR TRENCH WITH CONCRETE UNTIL FLUSH WITH EXISTING PAD. FINISH PER SPECS.

1 STRUCTURAL FOUNDATION PLAN

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



CONSULTANTS:

ARCHITECT/ENGINEERS:

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STAMP:



Drawing Title
STRUCTURAL FOUNDATION PLAN

Approved: Project Director

Phase
100% CONSTRUCTION DOCUMENTS

Project Title
BUILDING 90 REPLACE COAL BOILERS DESIGN

Location
VAMC SHERIDAN, WYOMING

Project Number
666-18-114

Building Number
90

Issue Date
01/15/2021

Checked
BRD

Drawn
CEK

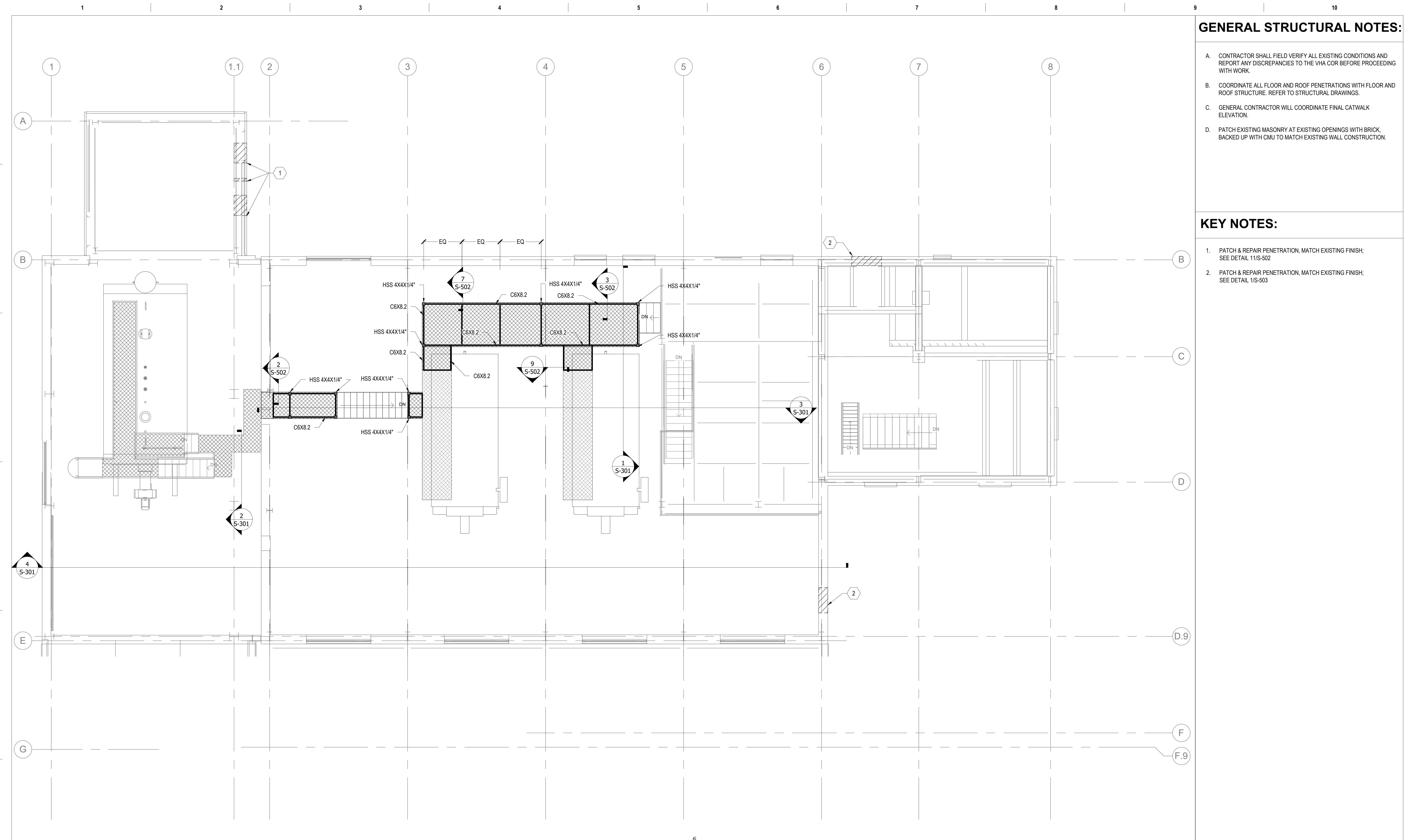
Drawing Number
S-101

GENERAL STRUCTURAL NOTES:

- A. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES TO THE VHA COR BEFORE PROCEEDING WITH WORK.
- B. COORDINATE ALL FLOOR AND ROOF PENETRATIONS WITH FLOOR AND ROOF STRUCTURE. REFER TO STRUCTURAL DRAWINGS.
- C. GENERAL CONTRACTOR WILL COORDINATE FINAL CATWALK ELEVATION.
- D. PATCH EXISTING MASONRY AT EXISTING OPENINGS WITH BRICK, BACKED UP WITH CMU TO MATCH EXISTING WALL CONSTRUCTION.

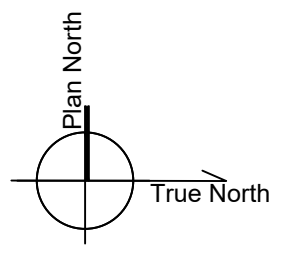
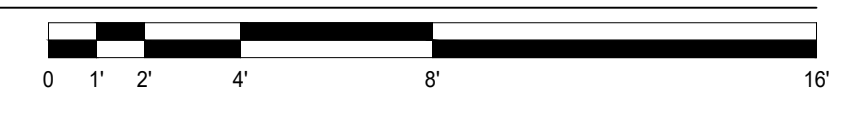
KEY NOTES:

- 1. PATCH & REPAIR PENETRATION, MATCH EXISTING FINISH; SEE DETAIL 11/S-502
- 2. PATCH & REPAIR PENETRATION, MATCH EXISTING FINISH; SEE DETAIL 1/S-503



1 STRUCTURAL FRAMING PLAN

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



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CONSULTANTS:

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STAMP:
 PROFESSIONAL ENGINEER
 STATE OF WYOMING
 No. 12345
 DATE: 01/15/2021



Drawing Title
STRUCTURAL FRAMING PLAN
 Approved: Project Director

Phase
 100% CONSTRUCTION DOCUMENTS

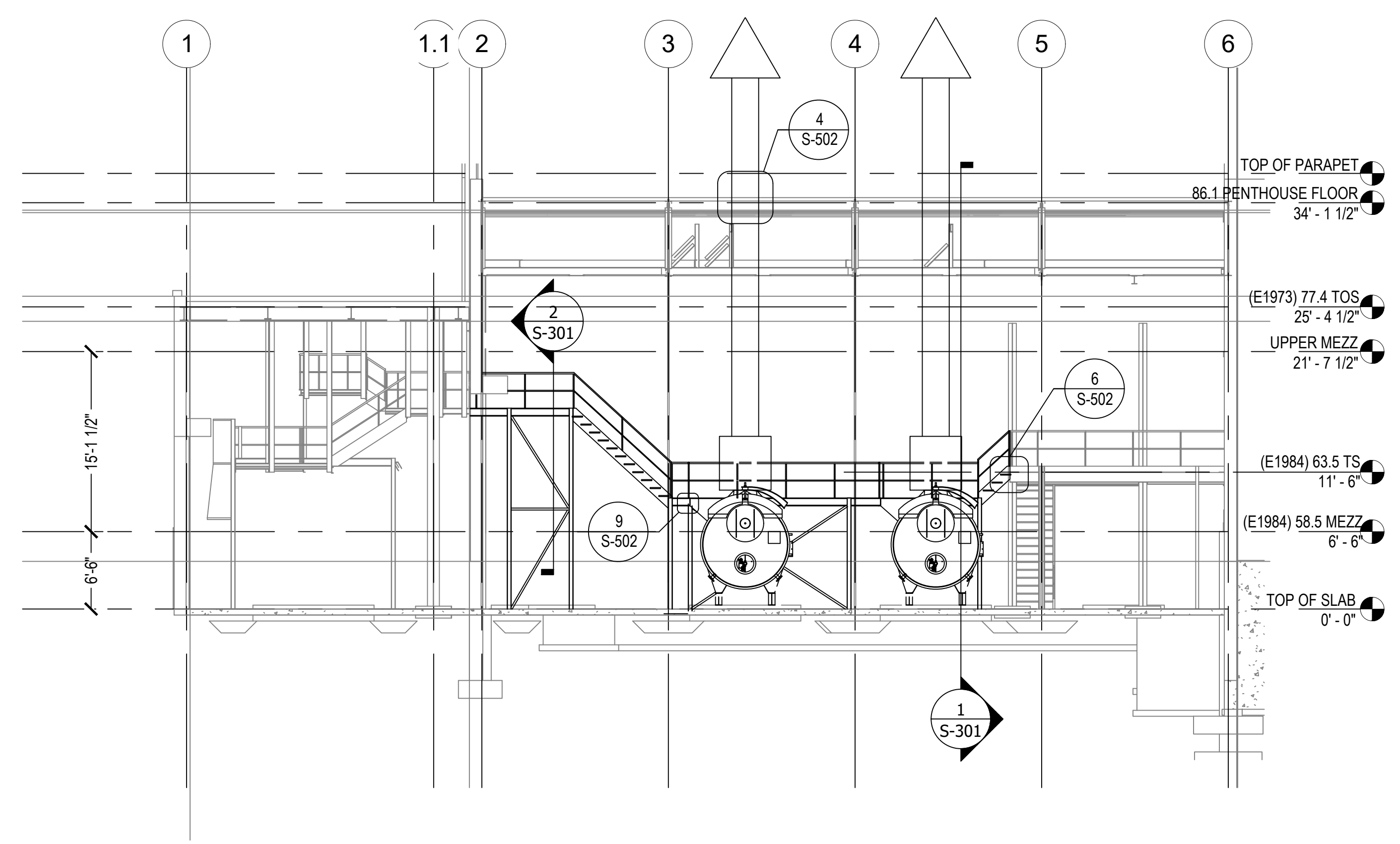
Project Title
BUILDING 90 REPLACE COAL BOILERS DESIGN
 Location
 VAMC SHERIDAN, WYOMING
 Issue Date
 01/15/2021
 Checked
 BRD
 Drawn
 RT

Project Number
 666-18-114
 Building Number
 90
 Drawing Number
S-102

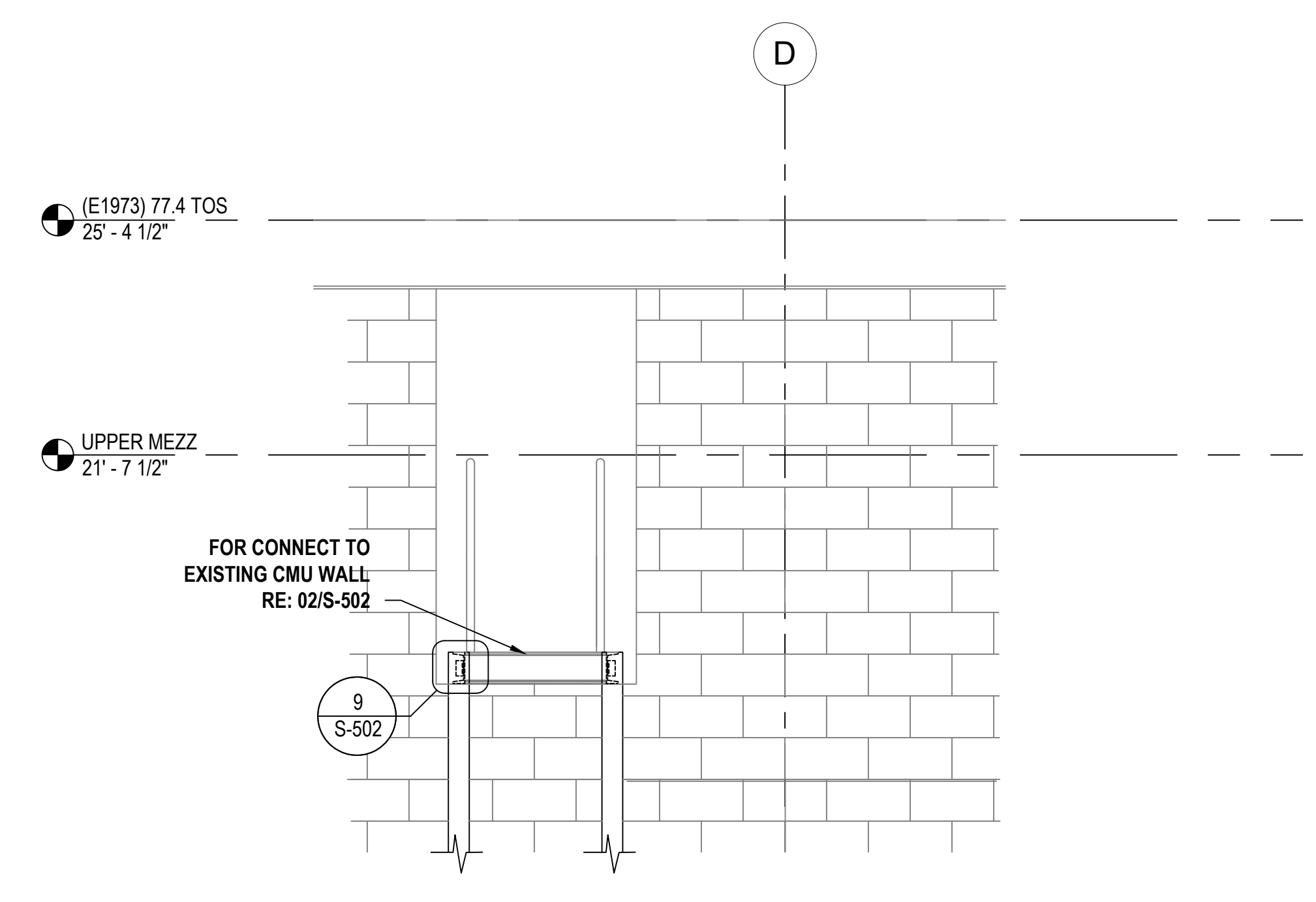
GENERAL STRUCTURAL NOTES:

- A. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES TO THE VHA COR BEFORE PROCEEDING WITH WORK.
- B. COORDINATE ALL FLOOR AND ROOF PENETRATIONS WITH FLOOR AND ROOF STRUCTURE. REFER TO STRUCTURAL DRAWINGS.
- C. CG WILL COORDINATE FINAL CATWALK ELEVATION.
- D. PATCH EXISTING MASONRY AT EXISTING OPENINGS WITH BRICK, BACKED UP WITH CMU TO MATCH EXISTING WALL CONSTRUCTION.

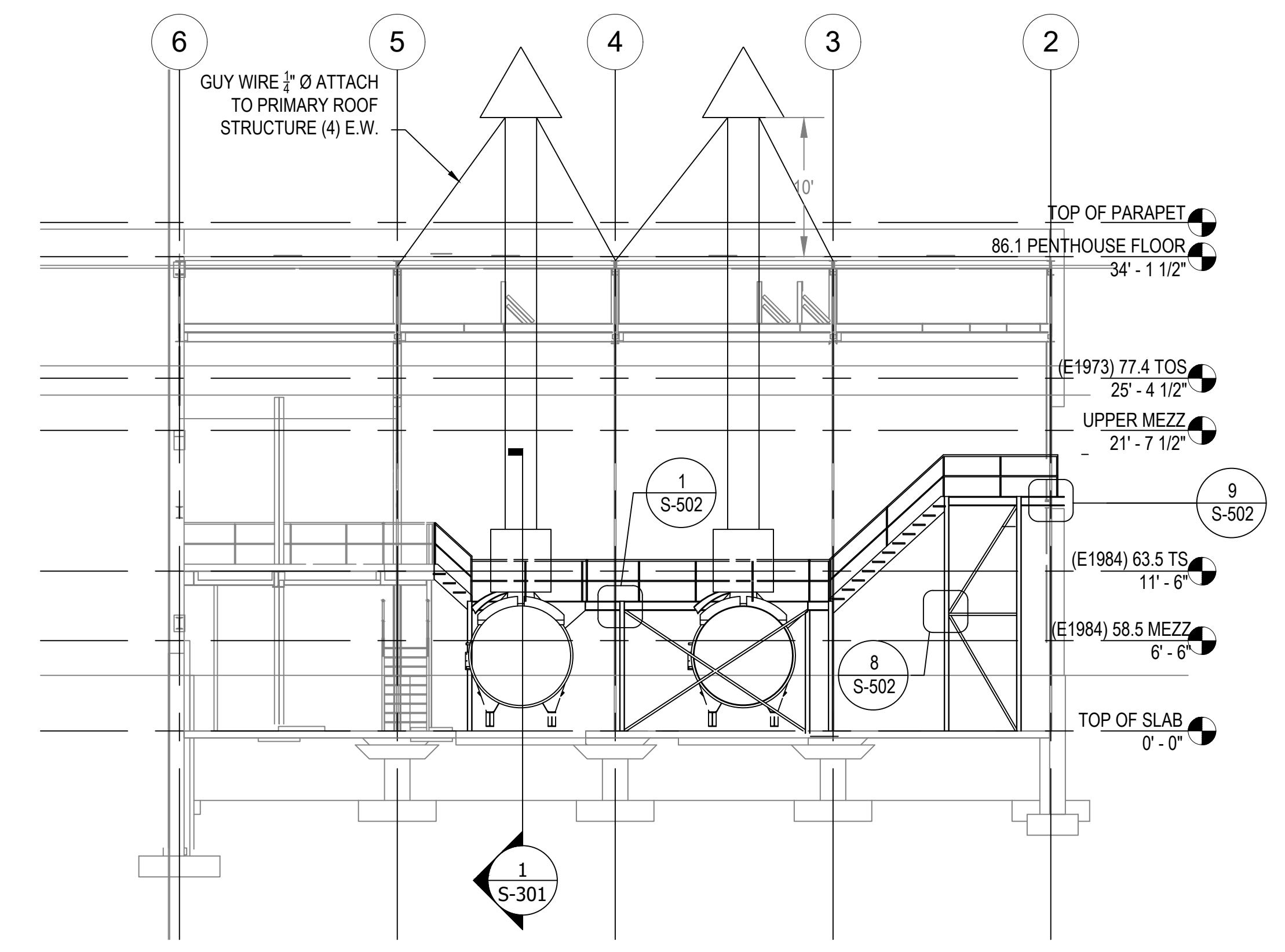
KEY NOTES:



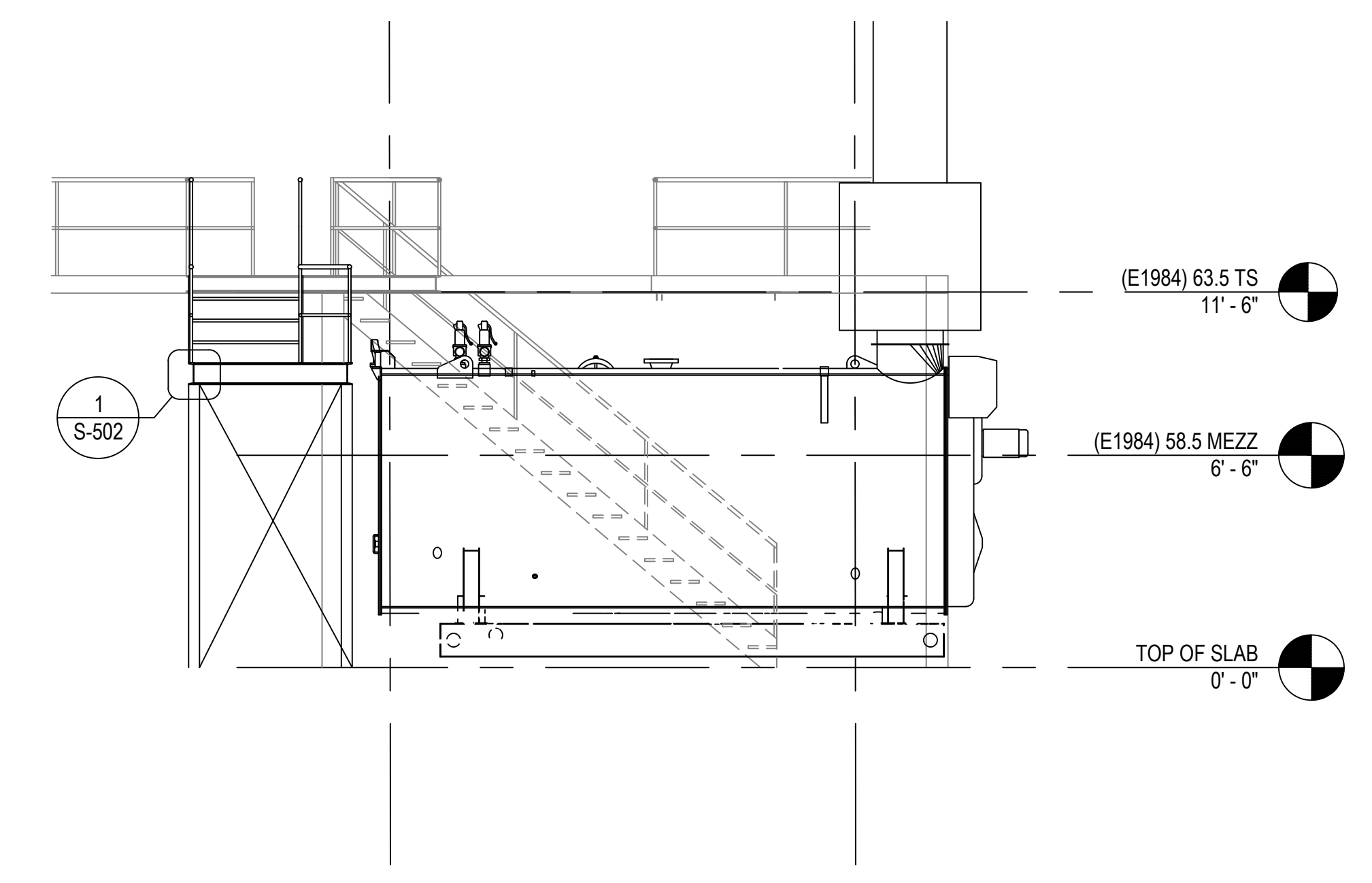
4 CATWALK SECTION D
SCALE: 1/8" = 1'-0"
0 2 4 8 16 32



2 CATWALK SECTION B
SCALE: 1/4" = 1'-0"
0 1 2 4 8 16



3 CATWALK SECTION C
SCALE: 1/8" = 1'-0"
0 2 4 8 16 32



1 CATWALK SECTION A
SCALE: 1/4" = 1'-0"
0 1 2 4 8 16

CONSULTANTS:

ARCHITECT/ENGINEERS:



VEG 20.07

STAMP:



Drawing Title
STRUCTURAL SECTIONS

Approved: Project Director

Phase
100% CONSTRUCTION DOCUMENTS

Project Title
BUILDING 90 REPLACE COAL BOILERS DESIGN

Location
VAMC SHERIDAN, WYOMING

Issue Date
01/15/2021

Checked
BRD

Drawn
RT

Project Number
666-18-114

Building Number
90

Drawing Number
S-301

A

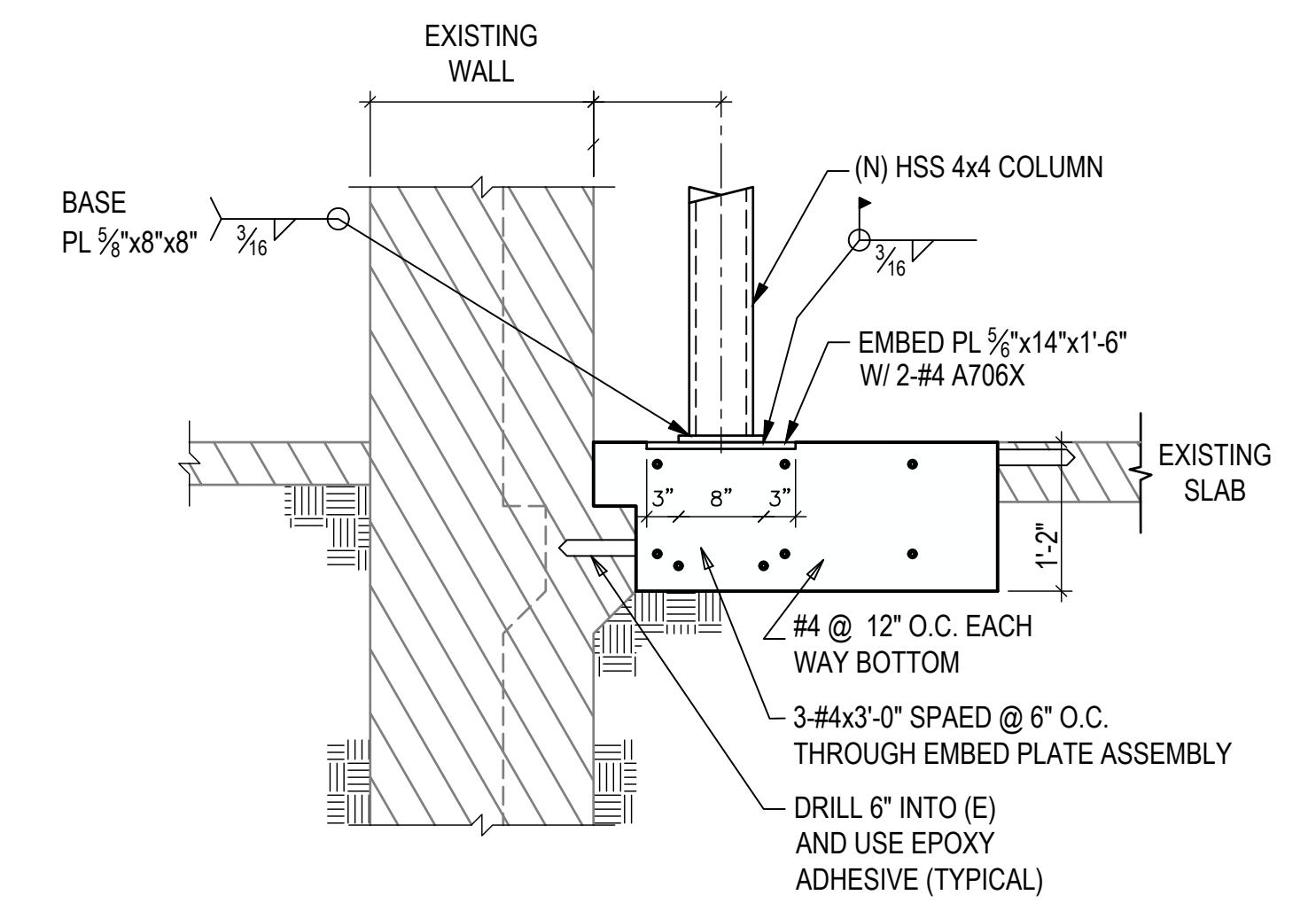
B

C

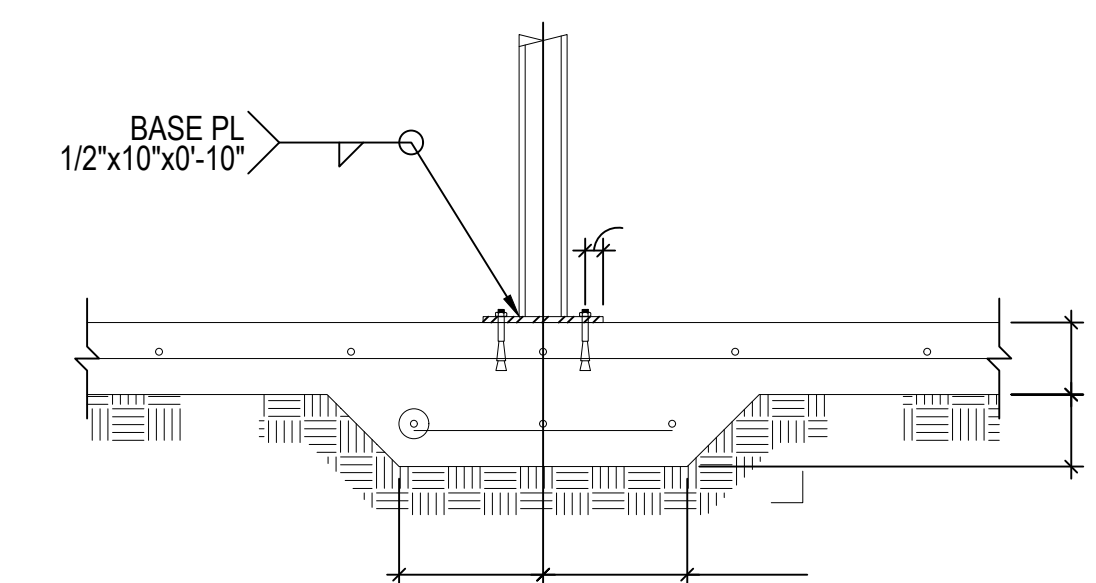
D

E




F

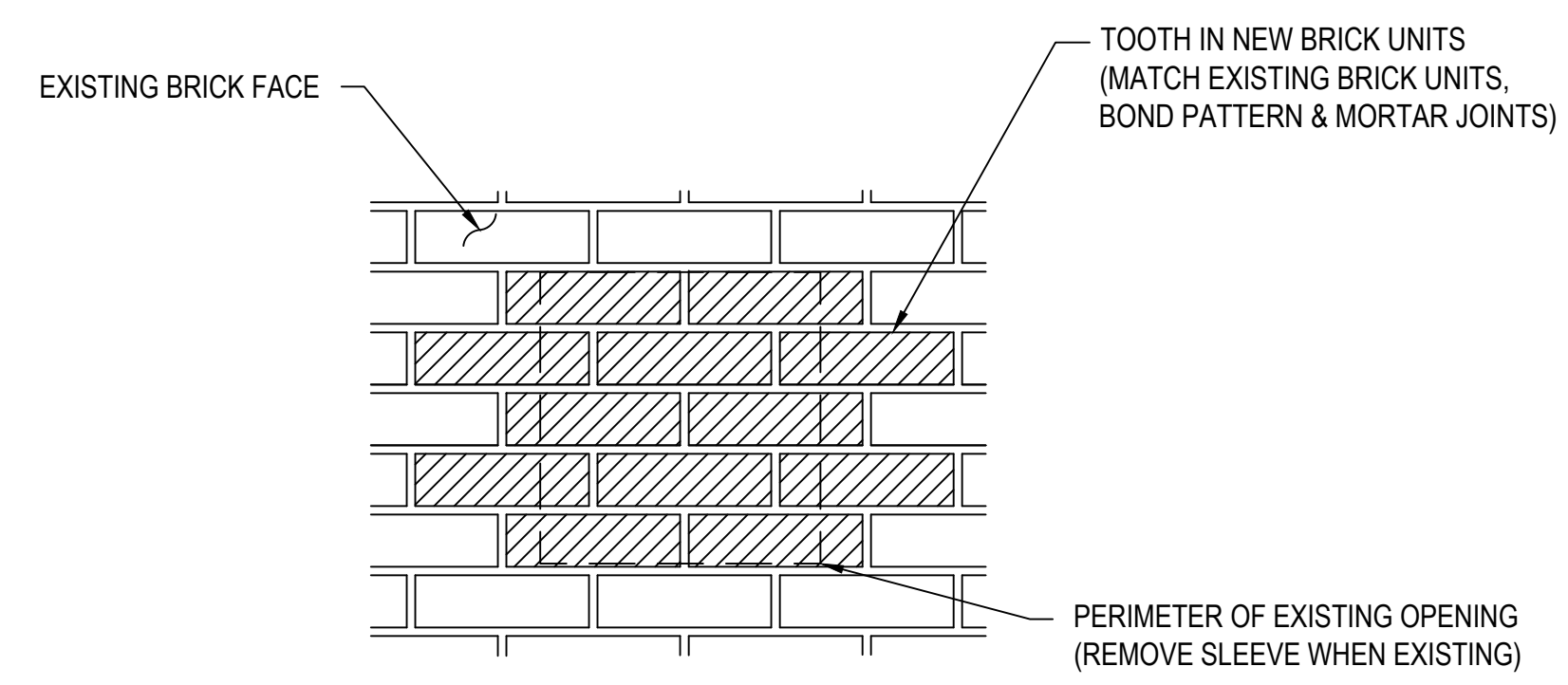


2 FOUNDATION INTERFACE WITH EXISTING
SCALE: NO SCALE



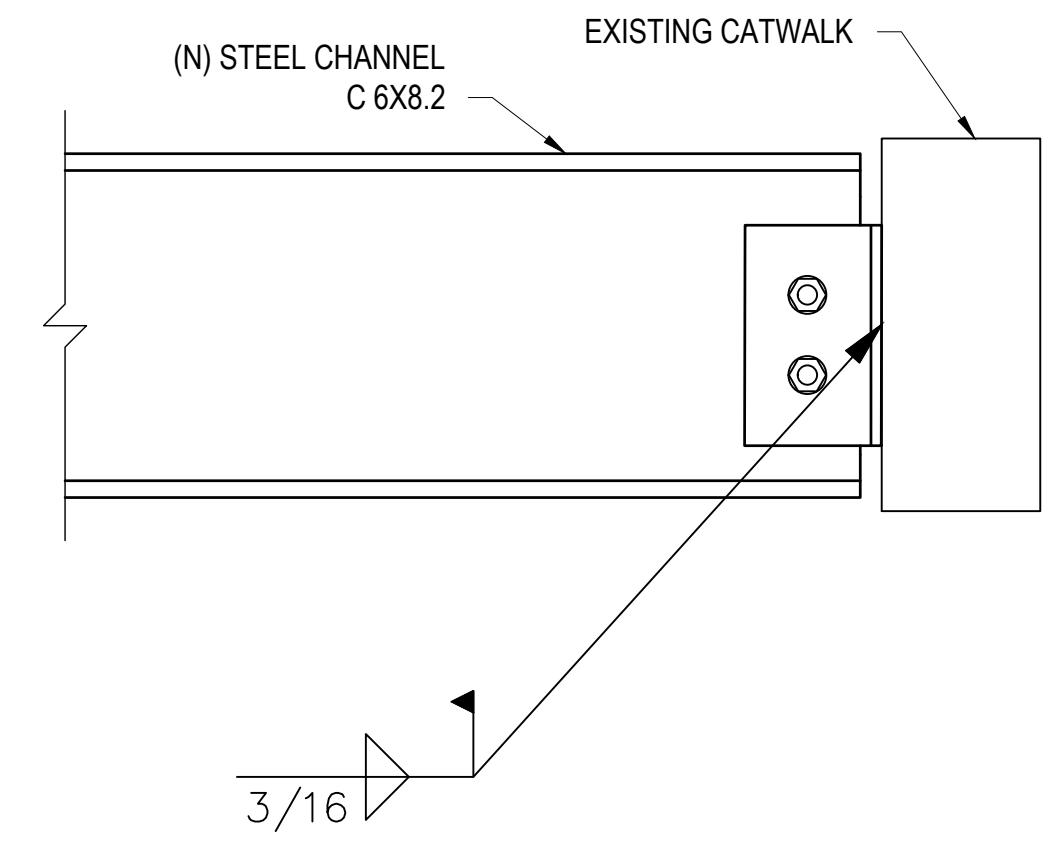
1 FOUNDATION DETAIL - F1
SCALE: NO SCALE

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|----------------------------------------------|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|-----------------------------------------|-------------------------------------------------------------|------------------------------|
| Issued: _____ Date: _____ VA FORM 08-6231 | CONSULTANTS: | ARCHITECT/ENGINEERS:  750 W HAMPDEN AVE SUITE #300 ENGLEWOOD CO 80110 (720) 550-6307 WWW.VALHALLAENGINEERING.COM | STAMP:  |  U.S. Department of Veterans Affairs | Drawing Title STRUCTURAL FOUNDATION DETAILS | Phase 100% CONSTRUCTION DOCUMENTS | Project Title BUILDING 90 REPLACE COAL BOILERS DESIGN | Project Number 666-18-114 |
| | Approved: Project Director | Location VAMC SHERIDAN, WYOMING | Issue Date 01/15/2020 | Checked BRD | Drawn RT | Building Number 90 | Drawing Number S-501 | |

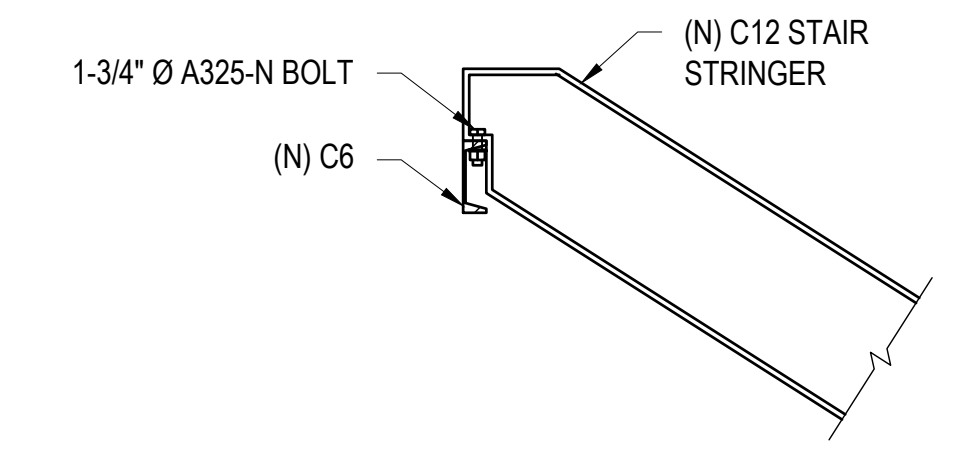


- MASONRY PATCHING NOTES**
1. PROVIDE DOCUMENTED 5-YEARS EXPERIENCE IN COMPLETION OF WORK, SIMILAR IN DESIGN, MATERIAL, AND EXTENT SPECIFIED FOR APPROVAL BY COR.
 2. CLOSE (PATCH) EXISTING MASONRY OPENING(S) TO MATCH EXISTING ADJACENT MASONRY WHERE DEMOLITION OPERATIONS RESULTS IN AN UNUSED OPENING.
 3. OPENING SIZES VARY. DETAIL INDICATES GENERAL INTENT & NOT LIMITS OF PATCH BRICK WORK. PROVIDE MASONRY PATCH WORK TO COVER THE ENTIRE EXTENTS OF ANY OPENING NOT USED DUE TO PROJECT DEMOLITION & CONSTRUCTION WORK.
 4. PREPARE MOCKUP IN SIZE AND LOCATION DIRECTED BY COR. DEMONSTRATING QUALITY AND AESTHETICS OF TUCK POINTING, MASONRY UNIT REPLACEMENT, AND CLEANING FOR APPROVAL BY COR. APPROVED MOCKUP SHALL SET THE STANDARD FOR WORK AT OTHER PROJECT LOCATIONS. MOCKUP MAY BECOME A PERMANENT PART OF THE WORK WHEN APPROVED BY THE COR OTHERWISE DISPOSE OF MOCKUP WHEN DIRECTED BY COR.
 5. BRICK FACING (VENEER) CONFORMING TO ASTM C216, SHALL MATCH ADJACENT EXISTING BRICK FACING SIZE, SHAPE, COLOR, AND TEXTURE AND SHALL BE ACCEPTABLE TO THE COR.
 6. CONCRETE MASONRY UNITS (CMU) SHALL MATCH ADJACENT EXISTING CMU SIZE, SHAPE, COLOR, AND TEXTURE AND SHALL BE ACCEPTABLE TO THE COR.
 7. JOINT MORTAR SHALL MATCH EXISTING ADJACENT JOINT MORTAR COLOR AND TEXTURE. RECOMMEND MORTAR MIX COMPATIBLE WITH EXISTING AND MORTAR MATERIAL SOURCES REQUIRED TO MATCH EXISTING COLOR AND TEXTURE.
 8. LAY UP MASONRY UNITS IN THE SAME BOND AND COURSE PATTERN AS THE EXISTING ADJACENT MASONRY. TOOTH IN THE MASONRY UNITS TO BLEND IN THE WALL, UNLESS OTHERWISE APPROVED BY THE COR. MAXIMUM OUT OF PLANE TOLERANCE SHALL BE 1/4-INCH CUMULATIVE TOTAL.
 9. TOOL EXPOSED JOINTS (EXTERIOR AND INTERIOR) TO MATCH ADJACENT EXISTING MASONRY JOINTS. JOINT TOOLING SHALL BE ACCEPTABLE TO THE COR.
 10. KEEP FINISH WORK FREE FROM MORTAR SMEARS OR SPATTERS AND LEAVE NEAT AND CLEAN.
 11. BEFORE CONNECTING NEW MASONRY WITH EXISTING MASONRY, REMOVE EXISTING LOOSENED MASONRY OR MORTAR, AND CLEAN AND WET WORK IN PLACE. TUCK AND POINT EXISTING ADJACENT MASONRY UP TO 2-FEET BEYOND PATCH WORK.
 12. TEST AND WET BRICK ACCORDING TO BIA TN 11B. 2. DO NOT WET CONCRETE MASONRY UNITS BEFORE LAYING.
 13. COMPLY WITH THE REQUIREMENTS STATED IN TMS 602 FOR HOT AND COLD WEATHER CONSTRUCTION. WHEN TEMPERATURES EXCEED 100 OR 90 WITH WIND VELOCITY > 8 MPH IMPLEMENT HOT WEATHER REQUIREMENTS OR WHEN TEMPERATURES ARE BELOW 40 IMPLEMENT COLD WEATHER REQUIREMENTS.

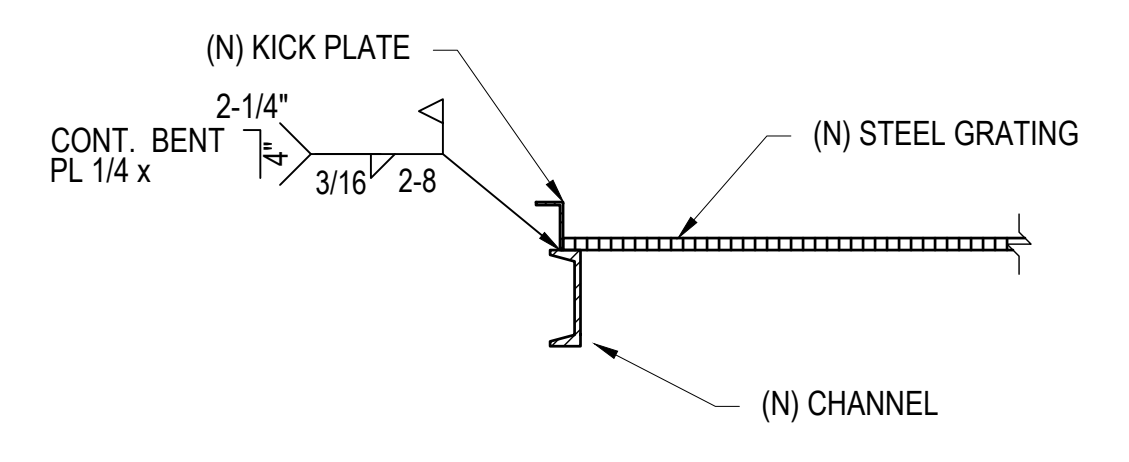
11 TYPICAL MASONRY OPENING PATCH
SCALE: NO SCALE



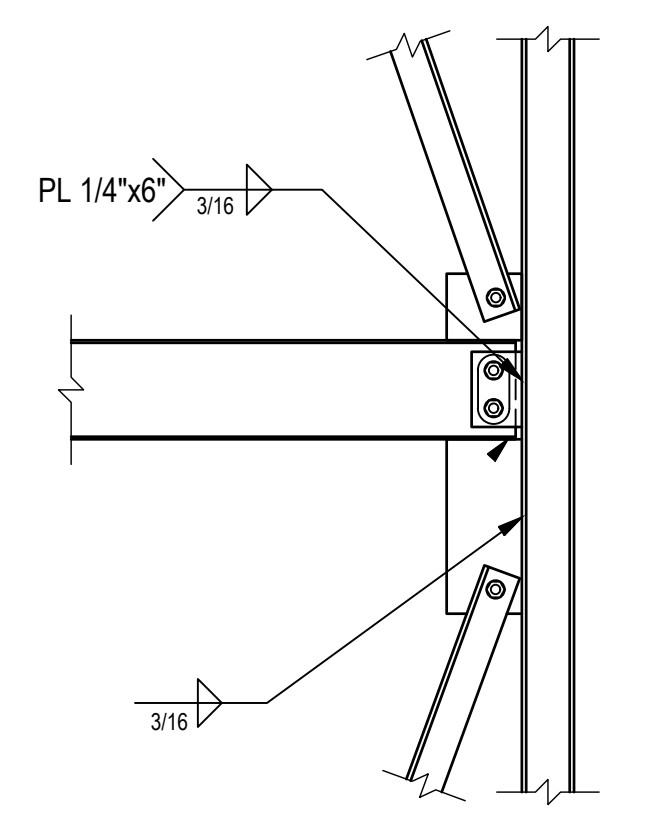
9 CATWALK CHANNEL TO EXISTING TYPICAL
SCALE: NO SCALE



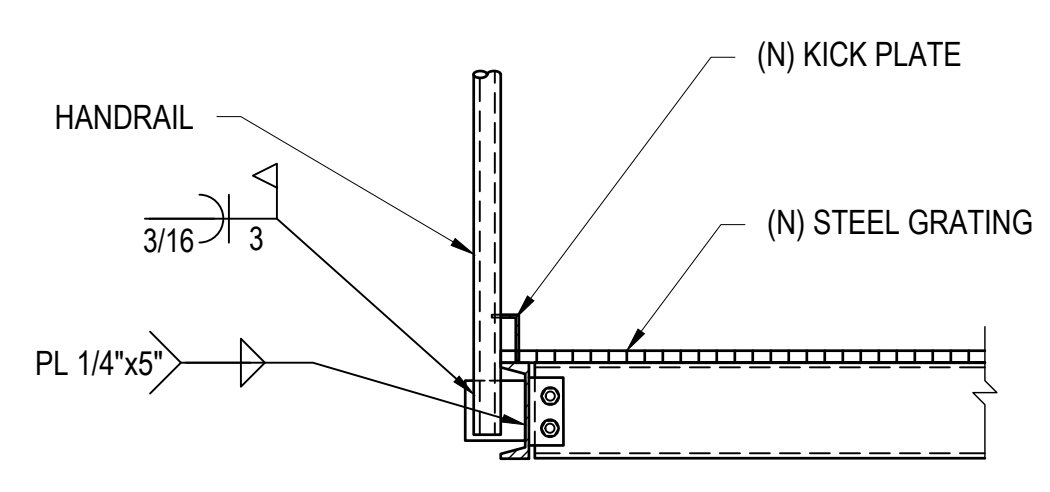
6 STAIR STRINGER DETAIL TYPICAL
SCALE: NO SCALE



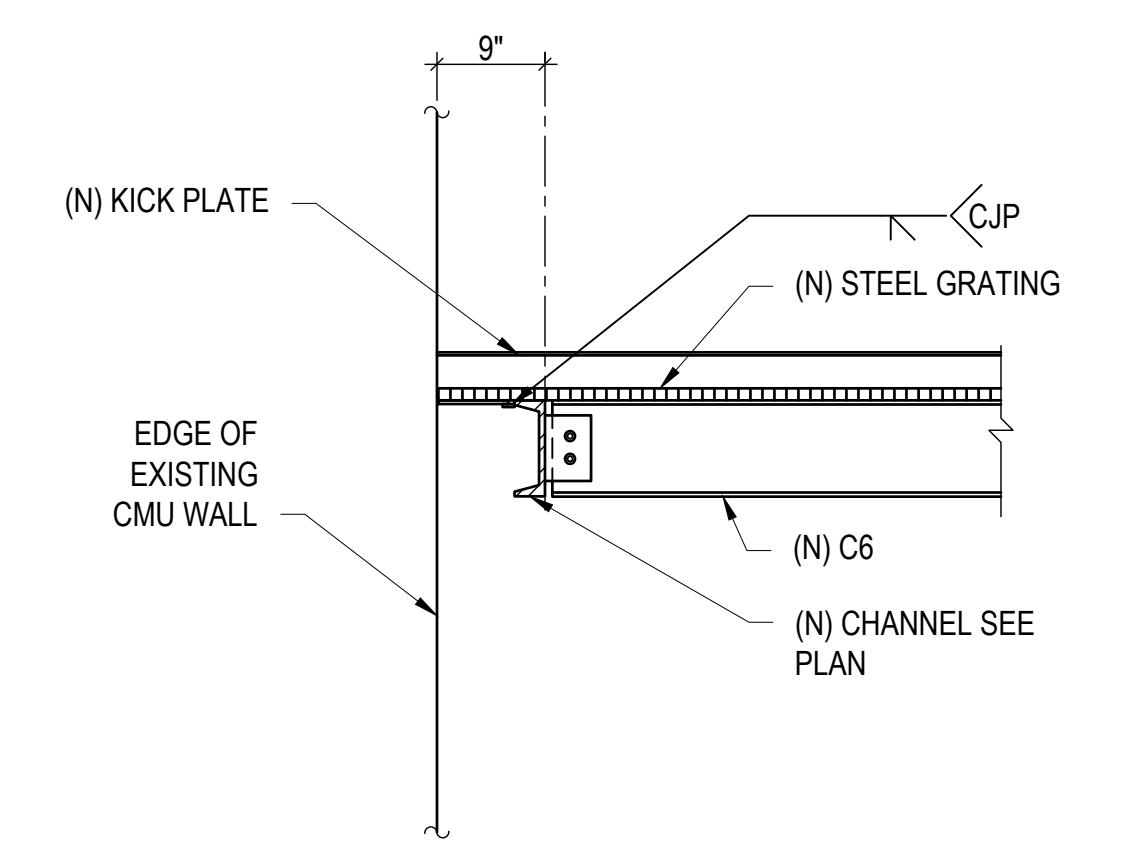
3 GRATING ATTACHMENT DETAIL A
SCALE: NO SCALE



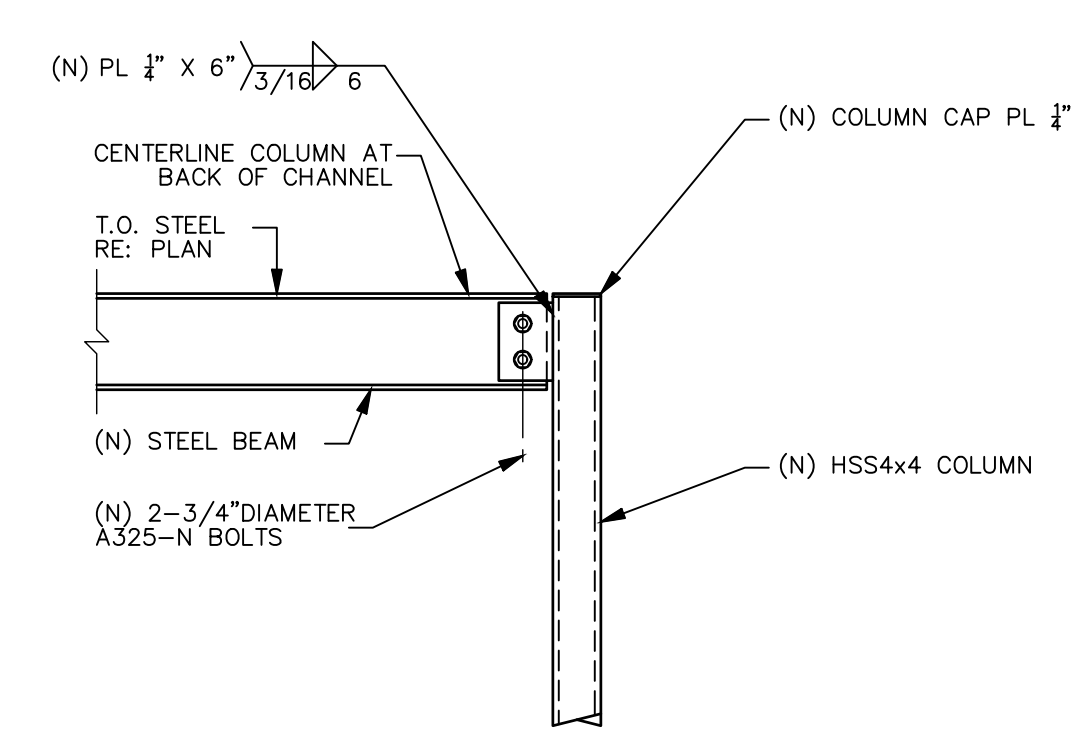
8 BRACE FRAME CONNECTION
SCALE: NO SCALE



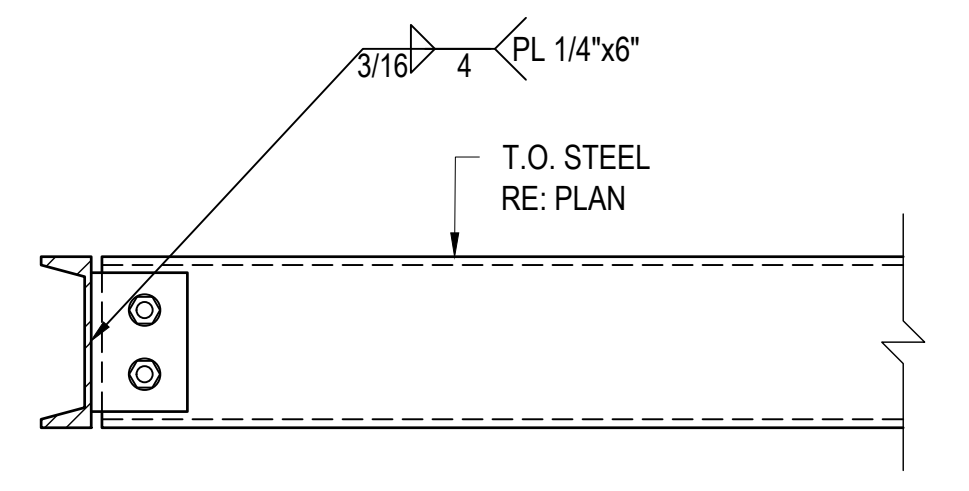
5 HANDRAIL ATTACHMENT DETAIL
SCALE: NO SCALE



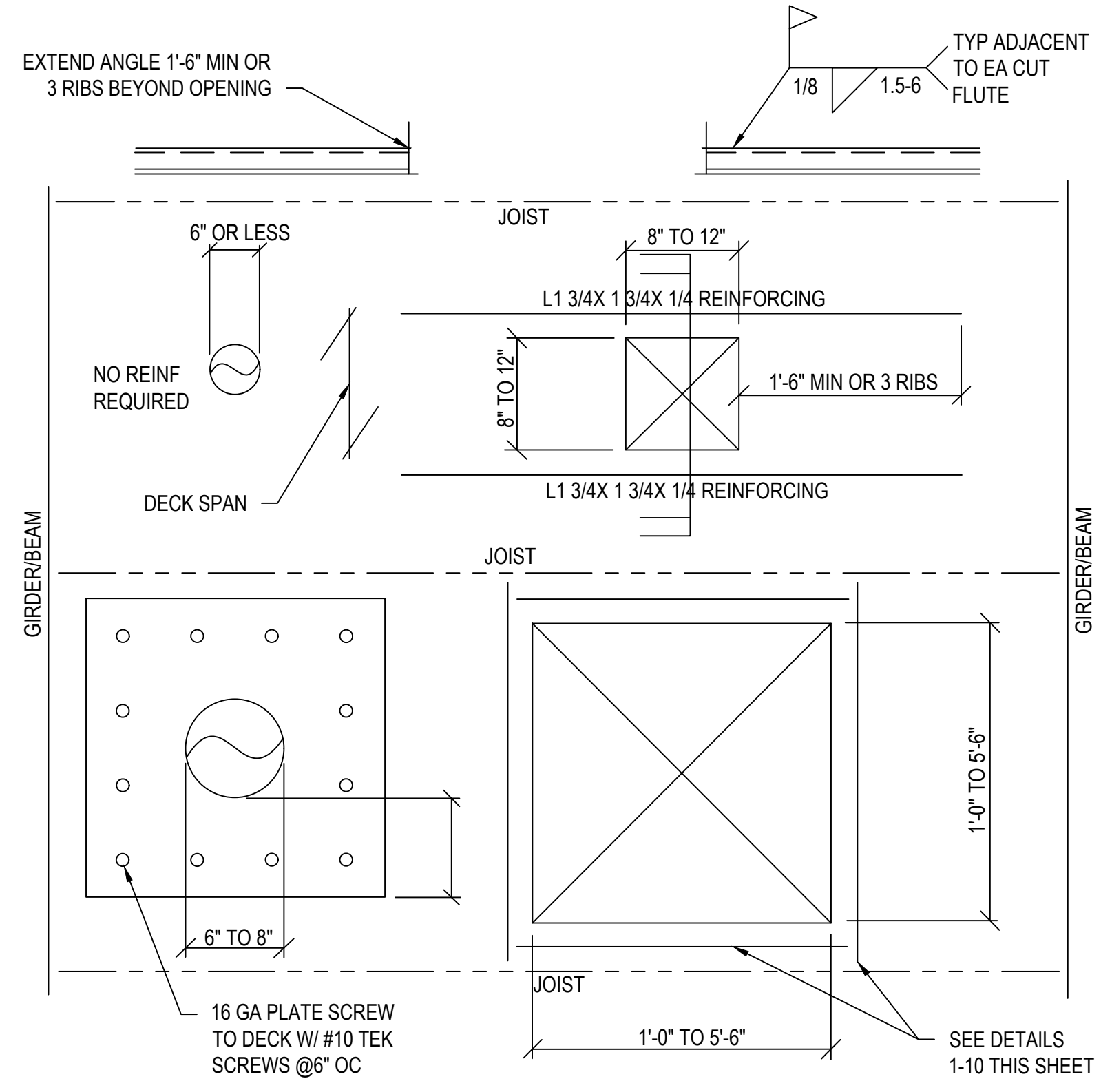
2 GRATING ATTACHMENT DETAIL B
SCALE: NO SCALE



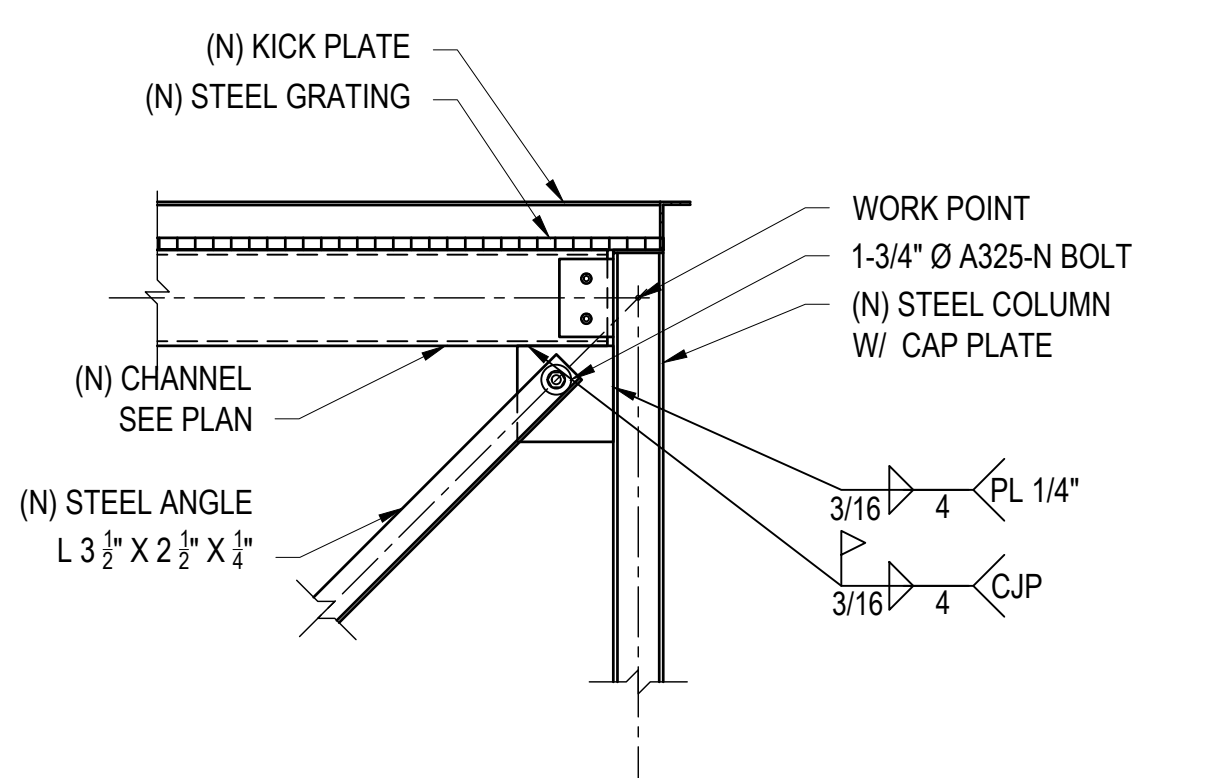
10 CATWALK POST CONNECTION
SCALE: NO SCALE



7 TYPICAL BEAM CONNECTION
SCALE: NO SCALE



4 GENERAL ROOF DECK PENETRATION REINFORCEMENT
SCALE: NO SCALE



1 COLUMN - BEAM ATTACHMENT DETAIL
SCALE: NO SCALE

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CONSULTANTS:

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 VEG 20.07

STAMP:
 PROFESSIONAL ENGINEER
 STATE OF COLORADO
 No. 12345
 EXPIRES 12/31/2025

U.S. Department of Veterans Affairs

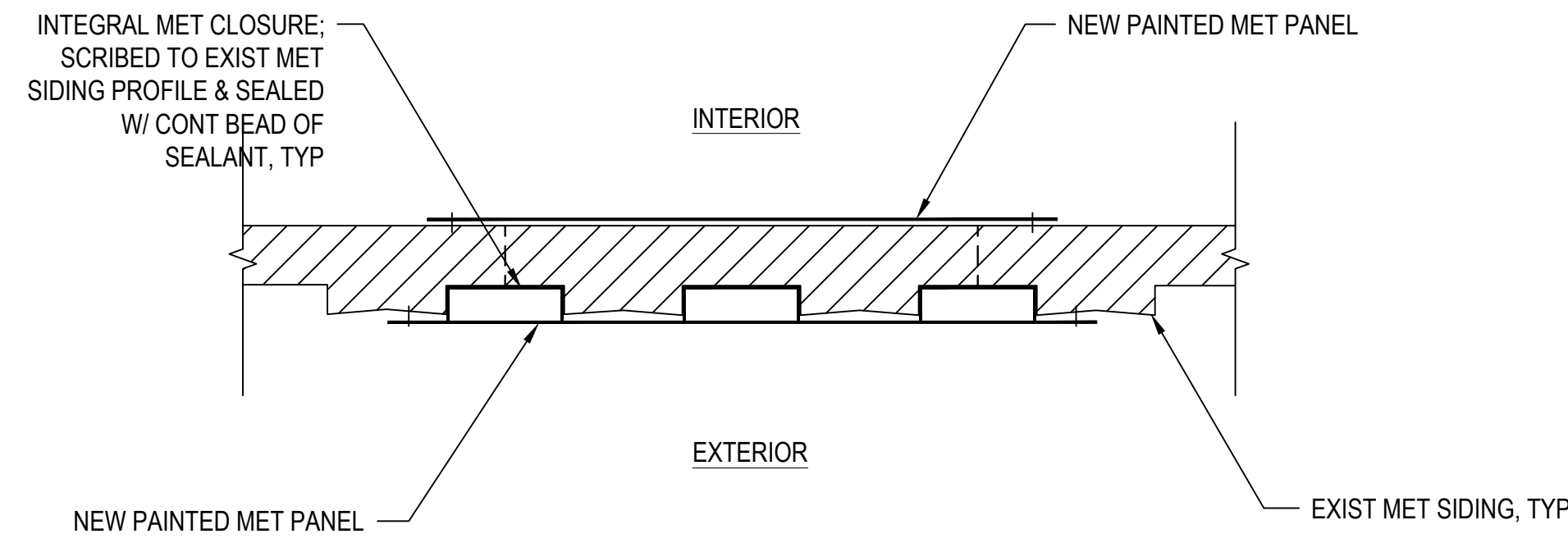
Drawing Title
STRUCTURAL FRAMING DETAILS
 Approved: Project Director

Phase
 100% CONSTRUCTION DOCUMENTS

Project Title
 BUILDING 90 REPLACE COAL BOILERS DESIGN
Project Number
 666-18-114
Building Number
 90
Location
 VAMC SHERIDAN, WYOMING
Issue Date
 01/15/2021
Checked
 BRD
Drawn
 RT
Drawing Number
 S-502

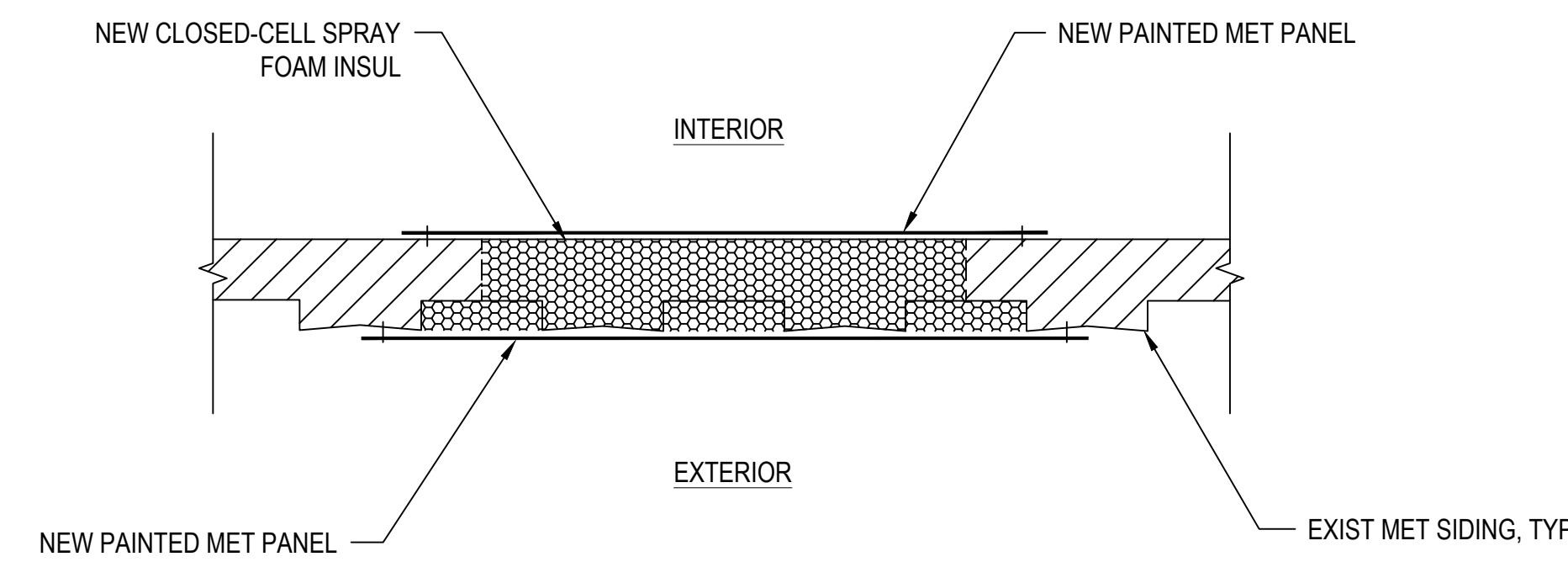
NOTE:

1. THE PURPOSE OF THE WORK IS TO PROVIDE DURABLE WEATHERTIGHT ROOF SEALS AT NEW ROOF PENETRATIONS.
2. CLEANLY CUT OPENING IN ROOFING, INSULATION, AND SUBSTRATE AS REQUIRED FOR NEW PENETRATIONS. JAGGED EDGES AT OPENING(S) WILL NOT BE ACCEPTABLE.
3. PIPE AND STACK SURFACES MUST BE FREE OF ALL DELETERIOUS MATERIAL. FOLLOW ADHESIVE MANUFACTURER'S PREPARATION REQUIREMENTS FOR BONDING. PROVIDE ADHESIVE PRIMER WHEN REQUIRED.
4. PIPE OR STACK MUST BE ANCHORED TO STRUCTURE TO ENSURE STABILITY.
5. NO WRINKLES, FOLDS, OR SECONDARY PENETRATIONS IN FLASHING UNDER CLAMPING RING ARE ALLOWED.
6. USE HOT STACK FLASHING WITH SLEEVE WHEN SERVICE LINE TEMP. EXCEEDS 160 °F (71 °C).
7. APPROPRIATE TPO BONDING ADHESIVE IS REQUIRED BETWEEN ROOF MEMBRANE AND INSULATION FOR ADHERED SYSTEMS. APPROPRIATE BONDING ADHESIVE IS REQUIRED BETWEEN INSULATION AND SUBSTRATE.
8. FASTENER AND SEAM PLATE ARE REQUIRED ONLY FOR MECHANICALLY ANCHORED SYSTEM (MAS) ROOFING.
9. HOT STACK PENETRATION SLEEVE BASE ATTACHMENT (FASTENER SIZE & TYPE) SHALL BE DESIGNED BY THE SLEEVE MANUFACTURER.
10. CAREFULLY PEEL BACK EXISTING ROOF MEMBRANE AND REMOVE EXISTING EXISTING ROOF INSULATION AS REQUIRED TO INSTALL NEW HOT STACK SLEEVE. IF EXISTING ROOF MEMBRANE IS DAMAGED BEYOND THE INDICATED NEW BASE FLASHING, EXTEND THE BASE FLASHING SIX INCHES (6") BEYOND THE DAMAGE.
11. INSTALL NEW SLEEVE FLANGES FIRMLY ON STRUCTURAL SUBSTRATE AND ANCHOR AS REQUIRED. REPLACE REMOVED INSULATION WITH MATCHING (OR OTHERWISE APPROVED) NEW INSULATION ADHERED TO SUBSTRATE AND TIGHTLY ABUTTED TO EXISTING REMAINING ROOF INSULATION. RE-ADHERE EXISTING ROOF MEMBRANE TO NEW ROOF INSULATION PRIOR TO INSTALLING NEW PENETRATION FLASHING.



INTEGRAL MET CLOSURE; SEAL W/ CONT BEAD OF SEALANT, TYP

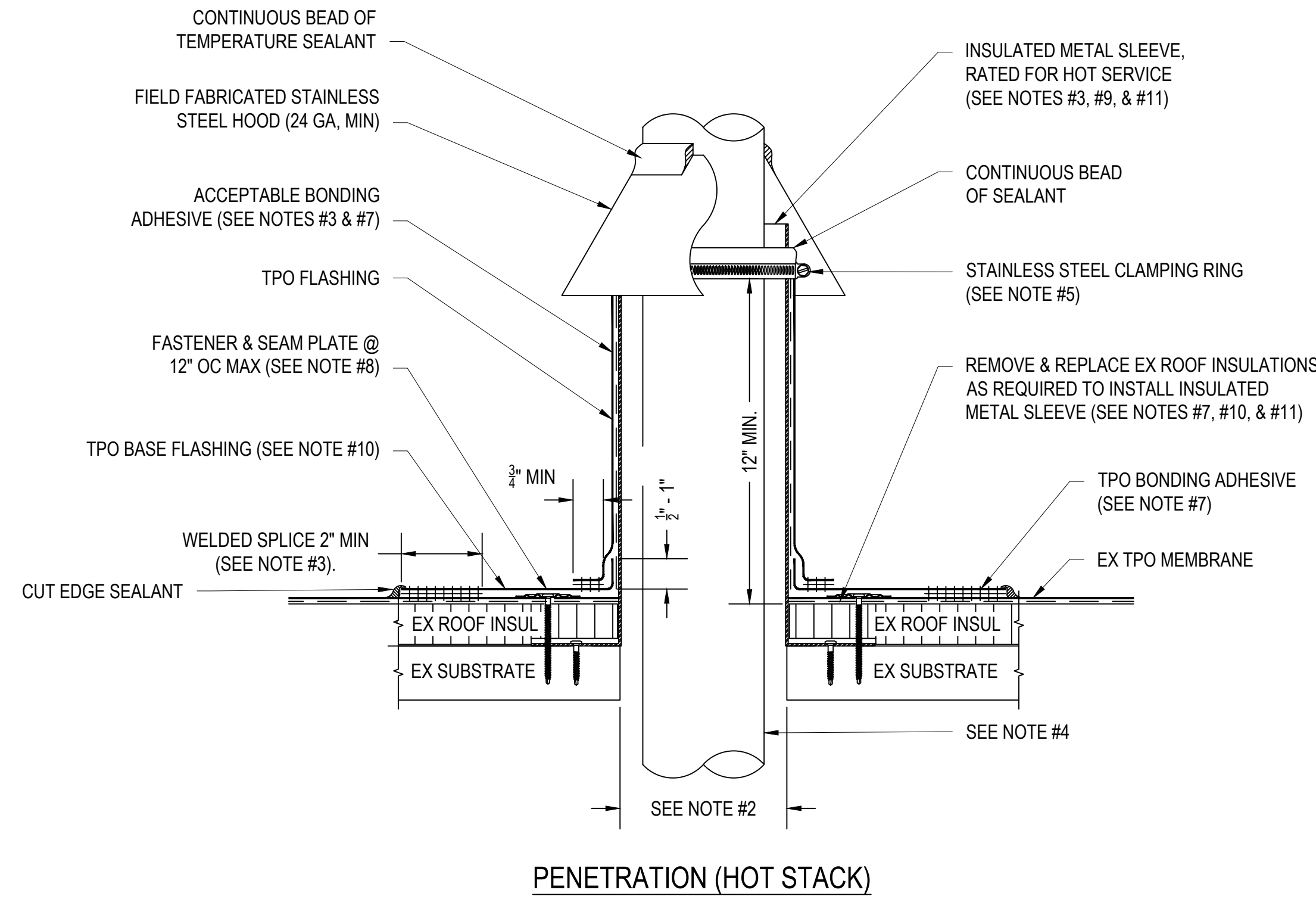
SECTION C
SCALE: NO SCALE



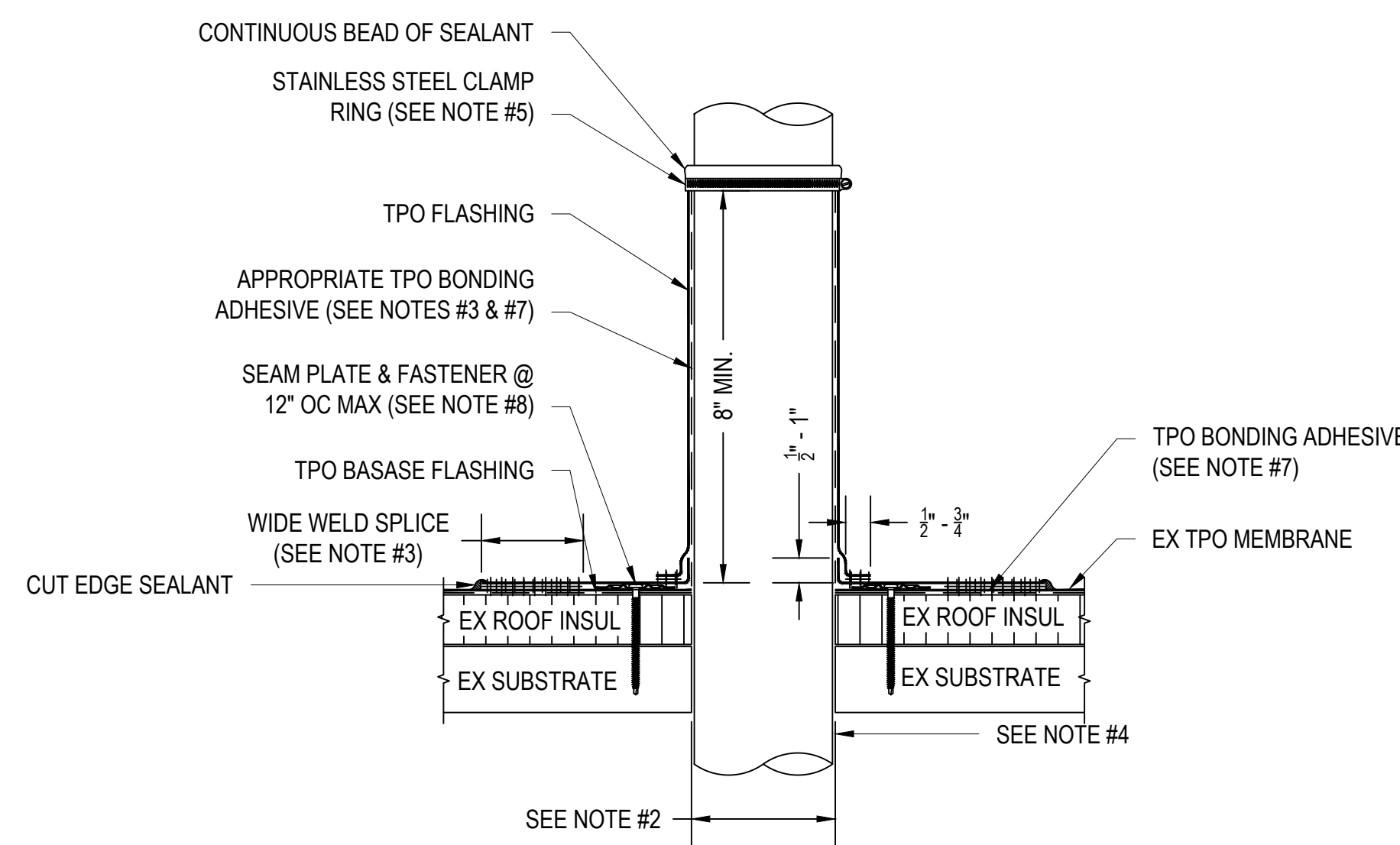
SECTION B
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NOTES:

1. METAL PANEL BASE METAL SHALL BE OF THE GAUGE INDICATED AND SHALL BE FACTORY COATED, CORROSION RESISTANT. SHEET METAL PANELS MAY BE FACTORY FINISHED OR FIELD PAINTED TO MATCH THE EXISTING SIDING. FINAL COLOR SHALL BE APPROVED BY THE COR.
2. METAL PANELS SHALL HAVE HEMMED EDGES.
3. POP RIVETS SHALL BE PAINTED TO MATCH METAL PANELS.
4. SEALANT SHALL BE POLYURETHANE TYPE, COLORED TO MATCH EXISTING SIDING OR AS OTHERWISE APPROVED BY THE COR.
5. CLOSED-CELL URETHANE SPRAY FOAM INSULATION SHALL HAVE THE FOLLOWING CHARACTERISTICS:
 - A. CORE DENSITY (ASTM D1622): 2 PCF MINIMUM
 - B. THERMAL RESISTANCE (ASTM C518): 140° F/90 DAY AGED R-VALUE=R6 / INCH
 - C. FLAME SPREAD (ASTM E84, CLASS A): 25 OR LESS
 - D. SMOKE DEVELOPED: (ASTM E84, CLASS A): 450 OR LESS
 - E. COMPRESSIVE STRENGTH: 20 PSI
 - F. CLOSED CELL CONTENT (ASTM D2856): 95% MINIMUM
 - G. WATER ABSORPTION BY COLUMN (ASTM 96): 1 PERM-INCHES (MAXIMUM)

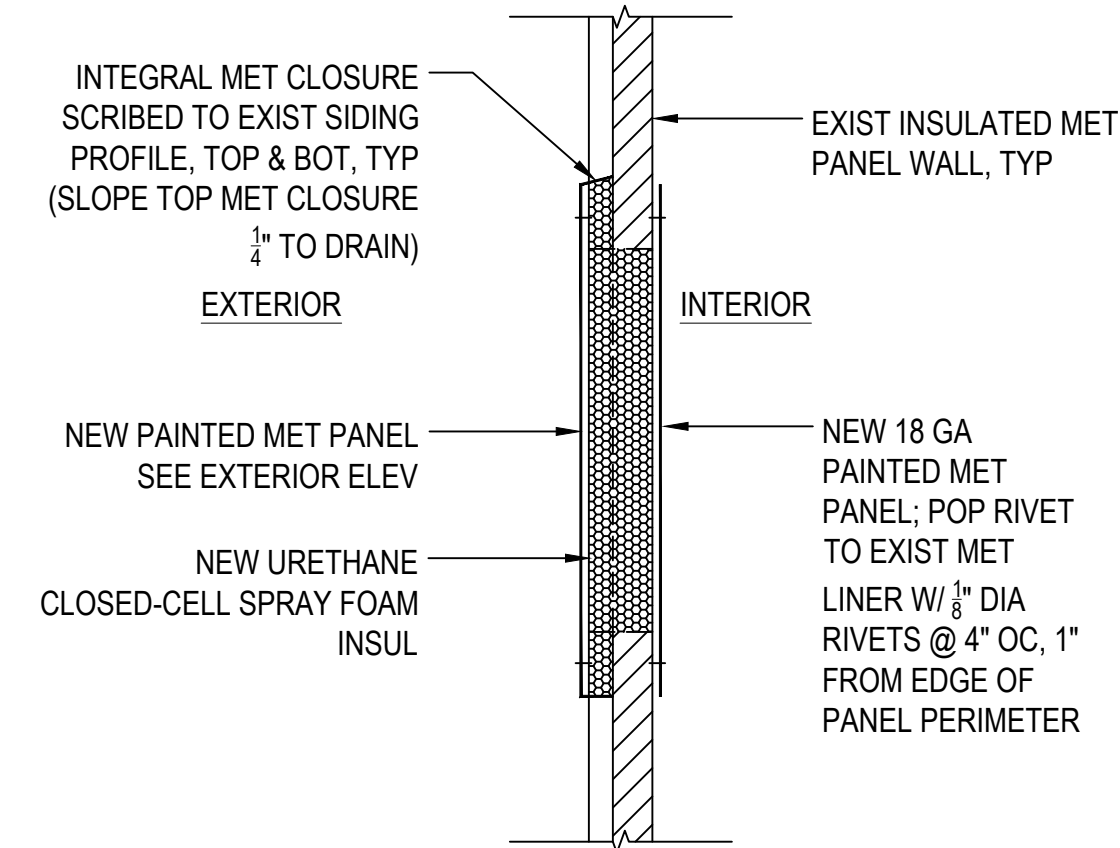


PENETRATION (HOT STACK)

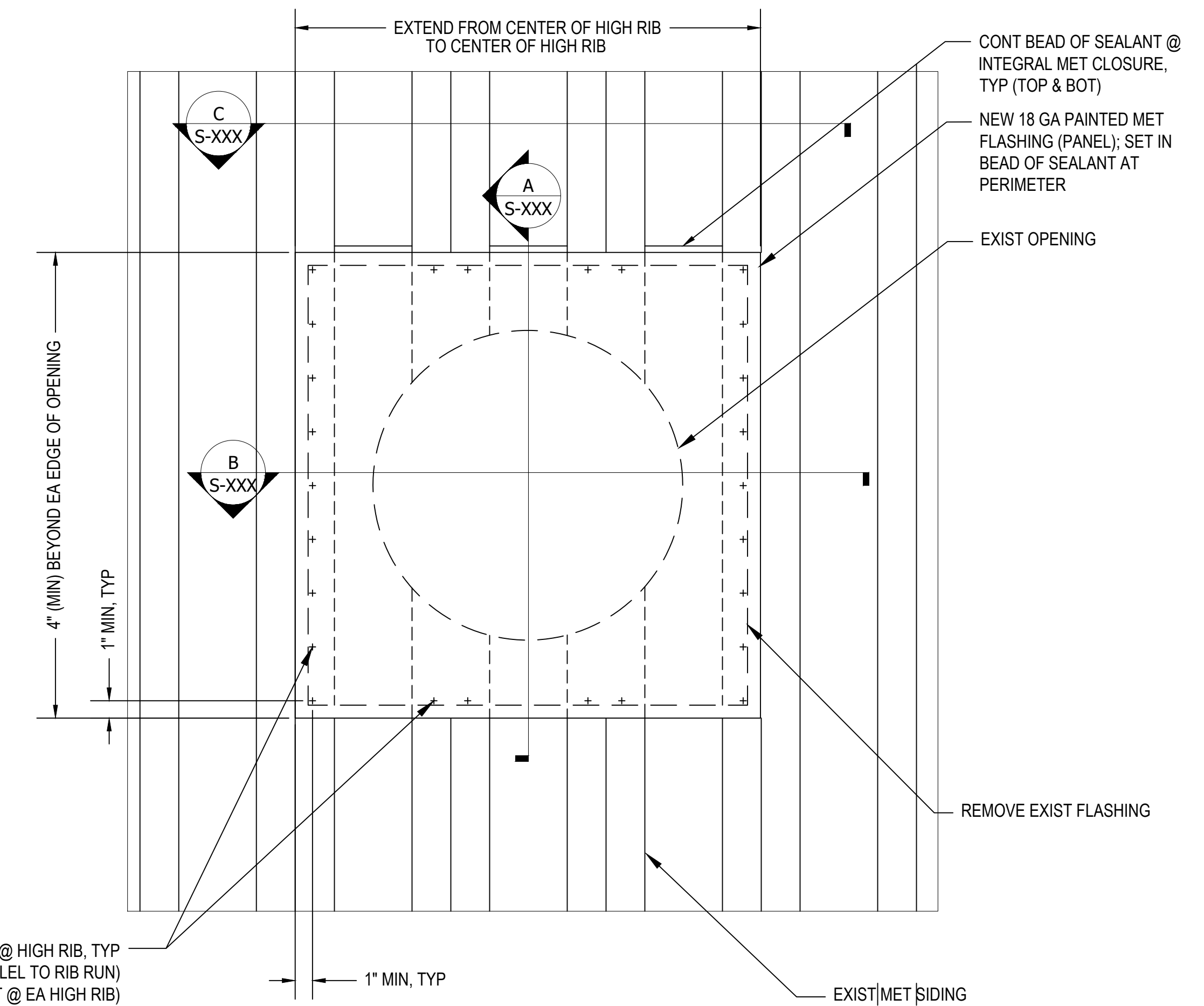


NEW PIPE VENT PENETRATION

2 ROOF PENETRATION DETAILS
SCALE: NO SCALE



SECTION A
SCALE: NO SCALE



1 ELEVATION
SCALE: NO SCALE

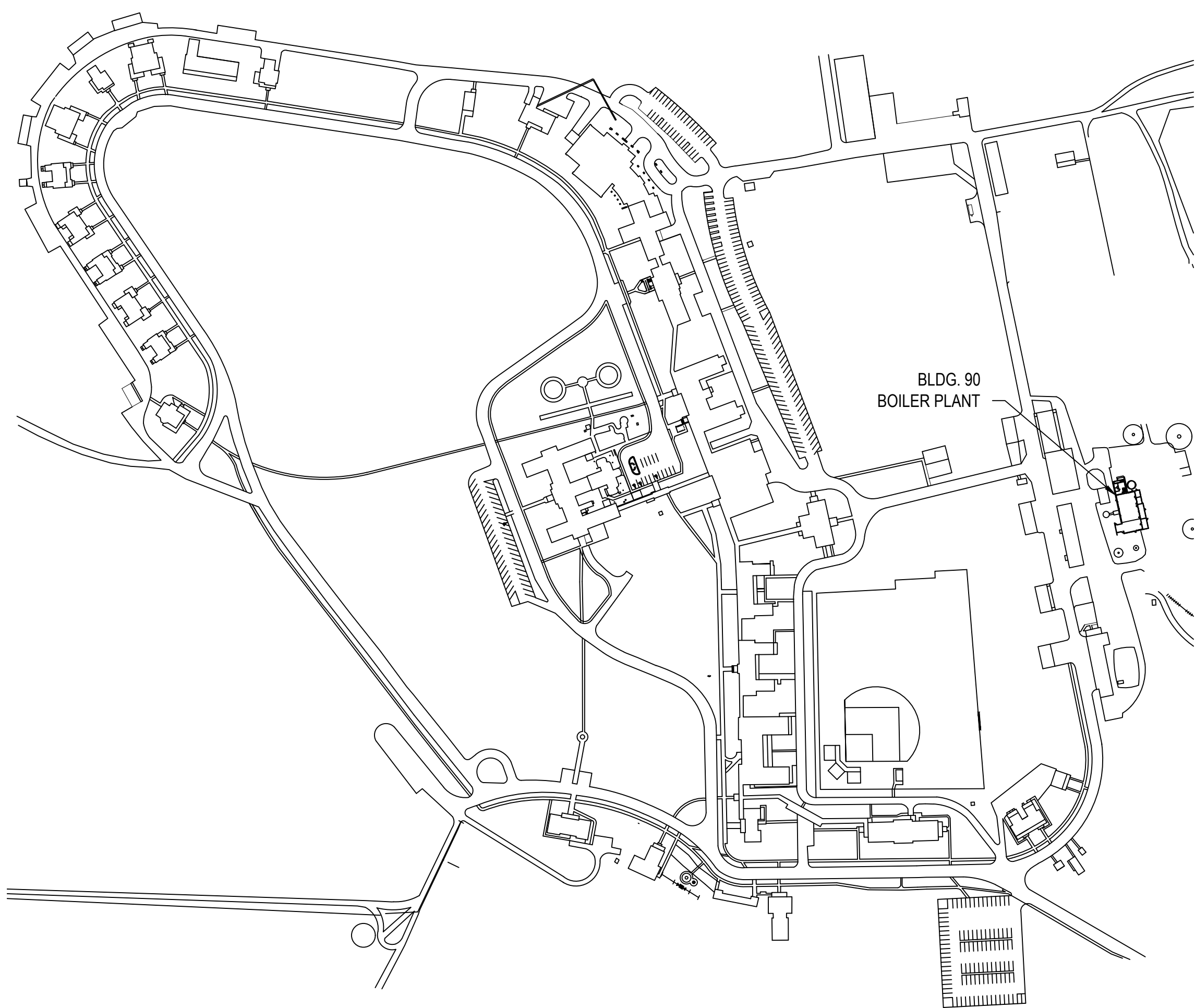
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| Issued: | Date: | CONSULTANTS: | ARCHITECT/ENGINEERS: VALHALLA ENGINEERING GROUP, LLC 750 W HAMPDEN AVE SUITE #300 ENGLEWOOD CO 80110 (720) 550-6307 WWW.VALHALLAENGINEERING.COM | STAMP: | U.S. Department of Veterans Affairs | Drawing Title | Phase | Project Title | Project Number |
| | | | | | | STRUCTURAL FRAMING DETAILS | 100% CONSTRUCTION DOCUMENTS | BUILDING 90 REPLACE COAL BOILERS DESIGN | 666-18-114 |
| Approved: Project Director | | | | | | Location | Issue Date | Checked | Drawn |
| | | | | | | VAMC SHERIDAN, WYOMING | 01/15/2021 | BRD | RT |
| | | | | | | Drawing Number | S-503 | | |

SHERIDAN VA MEDICAL CENTER SHERIDAN, WY VAMC PROJECT #: 666-18-114 BUILDING 90 REPLACE COAL BOILERS DESIGN

AREA OF WORK

RENDERED IMAGE

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CONSULTANTS:

ARCHITECT/ENGINEERS:

STAMP:

Drawing Title
COVER SHEET

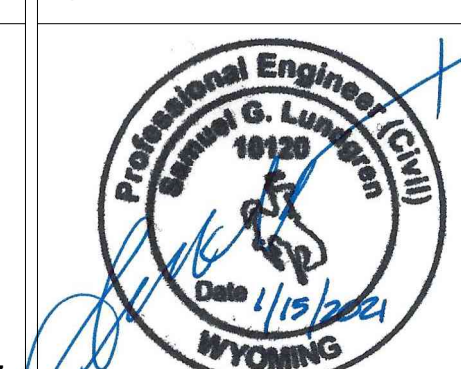
Phase
100% CONSTRUCTION DOCUMENTS

Project Title
BUILDING 90 REPLACE COAL BOILERS DESIGN

Project Number
666-18-114

Building Number
90

Drawing Number
GI001



Approved: Project Director

Location
VAMC SHERIDAN, WYOMING

Issue Date
01/15/2021

Checked
DD

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MECHANICAL ABBREVIATIONS

| | | | | | | | | | |
|--------|----------------------------------------------|--------|-----------------------------------------|-------|-----------------------------------------------|-------|----------------------------------------|-------|--------------------------------------|
| A/E | ARCHITECT / ENGINEER | DD-2 | DESIGN DEVELOPMENT SUBMISSION 2 | HSTAT | HUMIDISTAT | OA | OUTSIDE AIR | TP | TRAP |
| AAHX | AIR TO AIR HEAT EXCHANGER | DDC | DIRECT DIGITAL CONTROLS | HTM | HUMIDIFIER TERMINAL | OAG | OUTSIDE AIR GRILLE | TR | TOP REGISTER |
| AAV | AUTOMATIC AIR VENT | DEG | DEGREES | HUM | HUMIDIFIER UNIT MOUNTED | OAI | OUTSIDE AIR INTAKE | TSP | TOTAL STATIC PRESSURE |
| AB | AIR BLENDER | DF | DIFFUSER | HVD | HOISTWAY VENT DAMPER | OD | OUTER DIAMETER | TSTAT | THERMOSTAT |
| ACC | AIR COOLED CONDENSER | DI | DIGITAL INPUT | HVU | HEATING AND VENTILATING UNIT | OFM | OIL FLOWMETER | TU | TERMINAL UNIT |
| ACCH | AIR COOLED CHILLER | DIA | DIAMETER | HW | HOT WATER | OR | OPERATING ROOM | TWU | THRU-WALL UNIT |
| ACCU | AIR-COOLED CONDENSING UNIT | DIW | DEIONIZED WATER | HWC | HOT WATER COIL | OSD | OVERFLOW STORM DRAIN | | |
| ACD | AUTOMATIC CONTROL DAMPER, MODULATING | DO | DIGITAL OUTPUT | HWHC | HOT WATER HEATING COIL | | | UCT | UNDERCUT |
| ACD-TP | AUTOMATIC CONTROL DAMPER, TWO POSITION | DP | DEW POINT TEMPERATURE | HWP | HEATING WATER PUMP | P | PUMP | UC | UNIT COOLER |
| ACFM | ACTUAL CUBIC FEET PER MINUTE | DP | DIFFUSER PLATE | HWR | HEATING WATER RETURN | PA | PASCAL | UH | UNIT HEATER |
| ACU | AIR CONDITIONING UNIT | DPA | DIFFERENTIAL PRESSURE ASSEMBLY | HWS | HEATING WATER SUPPLY | PC | PUMPED CONDENSATE | UL | UNDERWRITER'S LABORATORY |
| AD | ACCESS DOOR | DPS | DIFFERENTIAL PRESSURE SENSOR | HWHU | HOT WATER UNIT HEATER | PCF | POUNDS PER CUBIC FOOT | URV | UPBLAST UNIT VENTILATOR |
| AF | AFTER FILTER | DX | DIRECT EXPANSION | HX | HEAT EXCHANGER | PD | PRESSURE DROP | | |
| AFCV | AIR FLOW CONTROL VALVE | DXCC | DIRECT EXPANSION COOLING COIL | HZ | HERTZ | PEF | PROPELLER TYPE EXHAUST FAN | V | VALVE |
| AFB | ABOVE FINISHED FLOOR | | | | | PF | PRE-FILTER | VAF | VANE-AXIAL FAN |
| AFMD | AIR FLOW MEASURING DEVICE | EA | EXHAUST AIR | I/O | INPUT/OUTPUT | PG | PRESSURE GAUGE | VAV | VARIABLE AIR VOLUME |
| AFW | AIR FOIL WHEEL (FAN) | EAT | ENTERING AIR TEMPERATURE | IAQ | INDOOR AIR QUALITY | PGW | PROPYLENE GLYCOL-WATER SOLUTION | VD | VOLUME DAMPER (MANUAL OPPOSED BLADE) |
| AHU | AIR HANDLING UNIT | EC | EVAPORATIVE COOLER | IBT | INVERTED BUCKET TRAP | PHC | PREHEAT COIL | VFD | VARIABLE FREQUENCY DRIVE |
| AI | ANALOG INPUT | ECC | ENGINEERING CONTROL CENTER | ICF | IN-LINE CENTRIFUGAL FAN | PPM | PARTS PER MILLION | VHA | VETERANS HEALTH ADMINISTRATION |
| AMP | AMPERE | ECU | EVAPORATIVE CONDENSER UNIT | ICU | INTENSIVE CARE UNIT | PRS | PRESSURE REGULATING VALVE STATION | VI | VIBRATION ISOLATOR |
| AO | ANALOG OUTPUT | EDH | ELECTRIC DUCT HEATER | ID | INSIDE DIAMETER | PRV | PRESSURE REGULATING VALVE | VIV | VARIABLE INLET VANES |
| AP | ACCESS PANEL | EER | ENERGY EFFICIENCY RATIO | IFB | INTEGRAL FACE AND BYPASS | PSI | POUNDS PER SQUARE INCH | VP | VACUUM PUMP |
| APD | AIR PRESSURE DROP | EF | EXHAUST FAN | IN | INCHES | PSIA | POUNDS PER SQUARE INCH, ABSOLUTE | VPS | VARIABLE PRIMARY SYSTEM |
| ARI | AIR CONDITIONING AND REFRIGERATION INSTITUTE | EG | EXHAUST GRILLE | IN HG | INCHES OF MERCURY | PSIG | POUNDS PER SQUARE INCH, GAGE | VR | VACUUM (STEAM CONDENSATE) RETURN |
| AS | AIR SEPARATOR | EGS | EMERGENCY GAS SHUTOFF | IN WC | INCHES OF WATER COLUMN | PSS | PRIMARY SECONDARY SYSTEM | VSD | VARIABLE SPEED DRIVE |
| ASME | AMERICAN SOCIETY OF MECHANICAL ENGINEERS | EGT | ENTERING GLYCOL TEMPERATURE | IN WG | INCHES OF WATER, GAUGE | PSV | PRESSURE SAFETY VALVE | VUH | VERTICAL UNIT HEATER |
| AV | ANALOG VARIABLE | EH | EXHAUST HOOD | IN-LB | INCH-POUND | PTAC | PACKAGED TERMINAL AIR CONDITIONER | | |
| AW | AIR WASHER | EJ | EXPANSION JOINT | IPLV | INTEGRATED PART LOAD VALUE | | | W | WASTE |
| AXF | AXIAL FLOW | EMD | END OF MAIN DRIP (STEAM) | IRH | INFRARED HEATER | R/E | RETURN OR EXHAUST | WAG | WASTE ANESTHESIA GAS |
| | | ENT | ENTERING | IS | INSECT SCREEN | RA | RETURN AIR | WB | WET BULB |
| B | BOILER | ER | EXHAUST REGISTER | IU | INDUCTION UNIT | RAD | REFRIGERANT AIR DRYER | WC | WATER COOLED |
| BA | BUILDING AUTOMATION SYSTEMS | ERC | ELECTRIC REHEAT COIL | IV | INLET VANES | RAF | RADIO FREQUENCY | WCCH | WATER COOLED CHILLER |
| BD | BUTTERFLY DAMPER | ERP | ELECTRIC RADIANT PANEL | | | RAHX | ROTARY AIR HEAT EXCHANGER | WCCU | WATER COOLED CONDENSING UNIT |
| BDD | BACKDRAFT DAMPER | ESP | EXTERNAL STATIC PRESSURE | KG | KILOGRAM | RAT | RETURN AIR TEMPERATURE | WCPU | WATER COOLED HEAT PUMPS |
| BDR | BASE BOARD RADIATOR | ET | EXPANSION TANK | KG/H | KILOGRAMS PER HOUR | RCCH | REMOTE CONDENSER CHILLER | WEF | WATER COOLED PACKAGED UNIT |
| BFP | BACKFLOW PREVENTER | ETO | ETHYLENE OXIDE | KPA | KILOPASCAL | RCU | RECIPROCATING CHILLER UNIT | WF | WATER FILTER |
| BFT | BOILER PLANT FIRE TUBE | EUH | ELECTRIC UNIT HEATER | KW | KILOWATT | RD | REFRIGERANT DISCHARGE | WFCV | WATER FLOW CONTROL VALVE |
| BG | BOTTOM GRILLE | EWC | EVAPORATIVE WATER COOLER | KWH | KILOWATT HOURS | RDS | ROOM DATA SHEETS | WFM | WATER FLOWMETER |
| BHP | BRAKE HORSEPOWER | EWT | ENTERING WATER TEMPERATURE | | | REA | RELIEF AIR | WFMD | WATER FLOW MEASURING DEVICE |
| BHW | HOT WATER HEATING BOILER | EX | EXISTING | L | LITER | RF | RETURN FAN | WG | WATER GAGE |
| BHX | BOILER BLOWDOWN HEAT EXCHANGER | | | L/H | LITERS PER HOUR | RG | RETURN GRILLE | WPD | WATER SIDE PRESSURE DROP |
| BIW | BACKWARD INCLINED WHEEN (FAN) | F | FAHRENHEIT | L/M | LITERS PER MINUTE | RH | RELATIVE HUMIDITY | YR | YEAR |
| BO | BLOW OUT | F&T | FLOAT AND THERMOSTATIC | L/S | LITERS PER SECOND | RHC | REHEAT COIL | | |
| BSC | BIOLOGICAL SAFETY CABINETS | F/SDPR | COMBINATION FIRE SMOKE DAMPER | LAT | LEAVING AIR TEMPERATURE | RHG | REFRIGERANT HOT GAS | | |
| BT | BLOWOFF TANK | FA | FREE AREA | LBH | POUND PER HOUR | RL | REFRIGERANT LIQUID LINE | | |
| BTC | BLOWOFF TANK CONTROL VALVE | FC | FLEXIBLE CONNECTION | LF | LINEAR FOOT (FEET) | RLA | RUN LOAD AMPERE | | |
| BTU | BRITISH THERMAL UNIT | FCU | FAN COIL UNIT (4 PIPE) | LG | LEAVING GLYCOL TEMPERATURE | RO | REVERSE OSMOSIS | | |
| BTUH | BRITISH THERMAL UNIT PER HOUR | FCUH | FAN COIL UNIT COOLING ONLY | LH | LATENT HEAT | RPM | REVOLUTIONS PER MINUTE | | |
| BV | BINARY VARIABLE | FCUH | FAN COIL UNIT HEATING ONLY | LLHX | LIQUID TO LIQUID HEAT EXCHANGER | RR | RETURN REGISTER | | |
| BWT | BOILER PLANT WATER TUBE | FCW | FORWARD CURVED WHEEL (FAN) | LP | LIQUID PROPANE | RS | REFRIGERANT SUCTION | | |
| | | FD | FLOOR DRAIN | LPA | LIQUID PROPANE AIR | RTU | ROOFTOP UNIT | | |
| C | CENTIGRADE (CELSIUS) | FD | FIRE DAMPER | LPG | LIQUID PROPANE GAS | RV | RELIEF VALVE | | |
| CC | COOLING COIL | FF | FINAL FILTER | LPR | LOW PRESSURE RETURN (STEAM CONDENSATE) | SA | SUPPLY AIR | | |
| CCD | COOLING COIL CONDENSATE DRAIN | FHX | FLUE GAS/FEEDWATER HEAT EXCHANGER | LPRC | LOW PRESSURE STEAM RETURN (CLEAN) | SAD | SOUND ATTENUATING DEVICE | | |
| CD | CEILING DIFFUSER | FM | FLOW METER | LPS | LOW PRESSURE STEAM | SAT | SUPPLY AIR TEMPERATURE | | |
| CD-1 | CONSTRUCTION DOCUMENTS (SUBMISSION 1) | FOHX | FUEL OIL HEAT EXCHANGER | LPSC | LOW PRESSURE STEAM (CLEAN) | SC | SHADING COEFFICIENT | | |
| CD-2 | CONSTRUCTION DOCUMENTS (SUBMISSION 2) | FOP | FUEL OIL PUMP | LS | LINEAR SLOT DIFFUSER | SCFM | STANDARD CUBIC FEET PER MINUTE | | |
| CENT | CENTRIFUGAL | FOT | FUEL OIL TANK | LTC | LOCAL TEMPERATURE CONTROL PANEL | SCR | SILICON CONTROLLED RECTIFIER | | |
| CFH | CUBIC FEET PER HOUR | FFM | FEET PER MINUTE | LVG | LEAVING | SD | SMOKE DETECTOR | | |
| CFM | CUBIC FEET PER MINUTE | FPS | FEET PER SECOND | LVR | LOUVER | SD-1 | SCHEMATIC DESIGN SUBMISSION 1 | | |
| CFP | CHEMICAL FEED PUMP | FPTU | FAN POWERED TERMINAL UNIT | LWT | LEAVING WATER TEMPERATURE | SD-2 | SCHEMATIC DESIGN SUBMISSION 2 | | |
| CFT | CUBIC FEET | FR | FLOOR REGISTER | M | METER | SDPR | SMOKE DAMPER | | |
| CG | CEILING GRILLE | FRP | FIBER REINFORCED POLYESTER | M/S | METERS PER SECOND | SDR | SMOKE DAMPER (RETURN) | | |
| CH | CHILLER | FS | FLOW SWITCH | MA | MIXED AIR | SDS | SMOKE DAMPER (SUPPLY) | | |
| CHP | CHILLED WATER PUMP | FSSTAT | FREEZE/STAT | MAT | MIXED AIR TEMPERATURE | SEN | SENSIBLE HEAT | | |
| CHR | CHILLED WATER RETURN | FT | FEET | MAU | MAKE-UP AIR UNIT | SF | SUPPLY FAN | | |
| CHS | CHILLED WATER SUPPLY | FT-LB | FOOT-POUND | MAV | MANUAL AIR VENT | SG | SUPPLY AIR GRILLE | | |
| CHW | CHILLED WATER | FTR | FINNED TUBE RADIATION | MAX | MAXIMUM | SH | STEAM HUMIDIFIER | | |
| CI | CAST IRON | FV | FACE VELOCITY | MB | MIXING BOX | SHC | STEAM HEATING COIL | | |
| CM | CARBON MONOXIDE | | | MBH | 1000 BTUH | SI | SQUARE INCHES | | |
| CM | CUBIC METER | GA | GAUGE | MCA | MINIMUM BRANCH CIRCUIT AMPACITY | SP | STATIC PRESSURE | | |
| CO2 | CARBON DIOXIDE | GAL | GALLONS | MER | MECHANICAL EQUIPMENT ROOM | SP GR | SPECIFIC GRAVITY | | |
| COMP | COMPRESSOR UNIT | GH | GRAVITY HOOD | MERV | MINIMUM EFFICIENCY REPORTING VALUE | SPD | SUPPLY PROCESS AND DISTRIBUTION | | |
| COP | COEFFICIENT OF PERFORMANCE | GPD | GALLONS PER DAY | MH | MANHOLE | SPRV | STEAM PRESSURE REDUCING VALVE | | |
| CP | CONDENSATE PUMP | GPH | GALLONS PER HOUR | MHP | MOTOR HORSEPOWER | SPS | STATIC PRESSURE SENSOR | | |
| CR | CEILING REGISTER | GPM | GALLONS PER MINUTE | MIN | MINIMUM | SQ FT | SQUARE FOOT | | |
| CS | CONDENSATE STORAGE TANK | GPR | GAS PRESSURE REGULATOR | MM | MILLIMETER | SR | SUPPLY AIR REGISTER | | |
| CSG | CLEAN STEAM GENERATOR | GS | GALVANIZED STEEL | MOV | MOTOR OPERATED VALVE | SS | STAINLESS STEEL | | |
| CT | COOLING TOWER | H | HUMIDIFIER | MPR | MEDIUM PRESSURE RETURN (STEAM CONDENSATE) | SSHX | STEAM TO STEAM HEAT EXCHANGER | | |
| CU | CONDENSING UNIT | H&CW | HOT & COLD WATER | MPS | MEDIUM PRESSURE STEAM | SSR | SOLID SEPARATOR | | |
| CUH | CABINET UNIT HEATER | HAC | HOUSEKEEPING AID CLOSET | MRI | MAGNETIC RESONANCE IMAGING UNIT | ST | STEAM TRAP | | |
| CV | CONSTANT VOLUME | HB | HOSE BIBB | MTD | MEAN TEMPERATURE DIFFERENCE | ST | STORM DRAIN | | |
| CW | COLD WATER (POTABLE) | HC | HEATING COIL | MVD | MANUAL VOLUME DAMPER | SUH | STEAM UNIT HEATER | | |
| CWCC | CHILLED WATER COOLING COIL | HD | HEAD | MZ | MULTI-ZONE | SV | STEAM PRESSURE REDUCING VALVE | | |
| CWP | CONDENSER WATER PUMP | HOA | HAND/OFF/AUTOMATIC | NA | NOT APPLICABLE | SVS | STEAM VENT SILENCER | | |
| CWR | CONDENSER WATER RETURN (TO COOLING TOWER) | HP | HEAT PUMP | NC | NORMALLY CLOSED | SWHX | STEAM TO WATER HEAT EXCHANGER | | |
| CWS | CONDENSER WATER SUPPLY (FROM COOLING TOWER) | HP | HORSEPOWER | NC | NORMALLY OPEN | | | | |
| | | HPDT | HIGH PRESSURE DRIP TRAP | NG | NATURAL GAS | T&PCV | TEMPERATURE AND PRESSURE CONTROL VALVE | | |
| D | DAMPER - AUTOMATIC | HPR | HIGH PRESSURE RETURN (STEAM CONDENSATE) | NGFM | NATURAL GAS FLOW METER | TAB | TESTING, ADJUSTING, AND BALANCING | | |
| D-1 | OUTDOOR AIR DAMPER | HPS | HIGH PRESSURE SUPPLY (STEAM) | NO | NORMALLY OPEN | TD | TEMPERATURE DIFFERENCE | | |
| D-2 | RETURN AIR DAMPER | HRC | HEAT RECOVERY COIL | NOAA | NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION | TDH | TOTAL DYNAMIC HEAD | | |
| D-3 | RELIEF AIR DAMPER | HRD | HEAT RECOVERY DEVICE | NOM | NOMINAL | TDS | TOTAL DISSOLVED SOLIDS | | |
| Db | DRY BULB TEMPERATURE | HRP | HYDRONIC RADIANT (CEILING) PANEL | NPLV | NON-STANDARD PART LOAD VALUE | TG | TRANSFER GRILLE | | |
| dB | DECIBEL | HRW | HEAT RECOVERY WHEEL | NPSH | NET POSITIVE SUCTION HEAD | | | | |
| DD-1 | DESIGN DEVELOPMENT SUBMISSION 1 | | | NTS | NOT TO SCALE | | | | |

GENERAL NOTES

- ALL ITEMS THAT REQUIRE ACCESS, SUCH AS FOR OPERATING, CLEANING, SERVICING, MAINTENANCE, AND CALIBRATION, SHALL BE EASILY AND SAFELY ACCESSIBLE BY PERSONS STANDING AT FLOOR LEVEL, OR STANDING ON PERMANENT PLATFORMS, WITHOUT THE USE OF PORTABLE LADDERS. EXAMPLES OF THESE ITEMS INCLUDE, BUT ARE NOT LIMITED TO: ALL TYPES OF VALVES, FILTERS AND STRAINERS, TRANSMITTERS, CONTROL DEVICES. PRIOR TO COMMENCING INSTALLATION WORK, REFER CONFLICTS BETWEEN THIS REQUIREMENT AND CONTRACT DOCUMENTS TO THE COR FOR RESOLUTION. FAILURE OF THE CONTRACTOR TO RESOLVE, OR POINT OUT ANY ISSUES WILL RESULT IN THE CONTRACTOR CORRECTING AT NO ADDITIONAL COST OR TIME TO THE GOVERNMENT.
- SUBMIT COMPLETE CONSOLIDATED AND COORDINATED SHOP DRAWINGS FOR ALL NEW SYSTEMS, AND FOR EXISTING SYSTEMS THAT ARE IN THE SAME AREAS. DO NOT INSTALL EQUIPMENT FOUNDATIONS, EQUIPMENT, OR PIPING UNTIL COORDINATION/SHOP DRAWINGS HAVE BEEN APPROVED.
- CONTRACTOR SHALL PROVIDE AN INFECTION CONTROL RISK ASSESSMENT BARRIER AROUND THE PROJECT AREA CONSISTENT WITH THE CONTRACTOR'S PHASING PLAN AS APPROVED BY THE VHA COR.
- IN ALL INSTANCES IN THE CONTRACT DOCUMENT, "PROVIDE" MEANS FURNISH AND INSTALL.

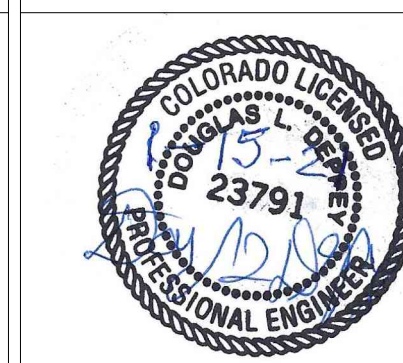
PHASING NOTES

- TEMPORARY BOILER SHALL REMAIN ON SITE AND OPERATIONAL FOR THE DURATION OF THE PROJECT.
- DEMO COAL BOILERS AND ASSOCIATED COAL EQUIPMENT AS SHOWN IN THE DEMO SHEETS. FOLLOWING EXCEPTIONS APPLY:
 - DO NOT DEMO STEAM PIPING FROM BOILER 3 TO PRVS.
 - DO NOT DEMO BOILER PLANT CONTROLS.
- INSTALL STEAM HEADER AND PIPE TO CONNECTIONS. PERFORM ALL X-RAY TESTING REQUIRED PRIOR TO CONNECTION INTO EXISTING PIPING.
- INSTALL STEAM CONNECTIONS DURING SCHEDULED PLANT SHUT DOWN. SCHEDULE WORK SO THAT THERE IS A SEAMLESS TRANSITION FROM OLD PIPING TO NEW PIPING. COMPLETE START UP OF HEADER PRIOR TO DEMO OF EXISTING STEAM PIPING.
- INSTALL NEW BOILERS. PROVIDE CONNECTIONS AS SHOWN IN DRAWINGS. DURING INSTALL, PROVIDE STEAM PIPING FROM BOILERS 1 AND 2 TO FLANGED VALVE AT HEADER.
- DEMO OLD CATWALK, PROVIDE NEW CATWALK.
- INSTALL NEW PLANT CONTROLS. TRANSITION FROM OLD CONTROLS TO NEW CONTROLS DURING SCHEDULED PLANT SHUT DOWN.
 - BOILER 3 CONTROLS AND CONTROLLER SHALL REMAIN UNLIL BOILER 1 AND 2 ARE OPERATIONAL.
- WORK THAT IS NOT SCHEDULED, BUT WILL BE SCHEDULED BY CONTRACTOR:
 - PROPANE TANKS, PIPING, AND RELATED PHYSICAL SECURITY REQUIREMENTS.
 - MAINTENANCE ON EXISTING EQUIPMENT, I.E. SAFETY DEVICES, DEAERATOR TANKS, FEEDWATER PUMPS, ETC.

CONSULTANTS:

ARCHITECT/ENGINEERS:

STAMP:



Drawing Title
MECHANICAL ABBREVIATIONS AND GENERAL NOTES

Approved: Project Director

Phase
100% CONSTRUCTION DOCUMENTS

Project Title
BUILDING 90 REPLACE COAL BOILERS DESIGN

Project Number
666-18-114

Building Number
90

Location
VAMC SHERIDAN, WYOMING

Drawing Number
M-001

Issue Date
01/15/2021

Checked
DD

Drawn
MDR