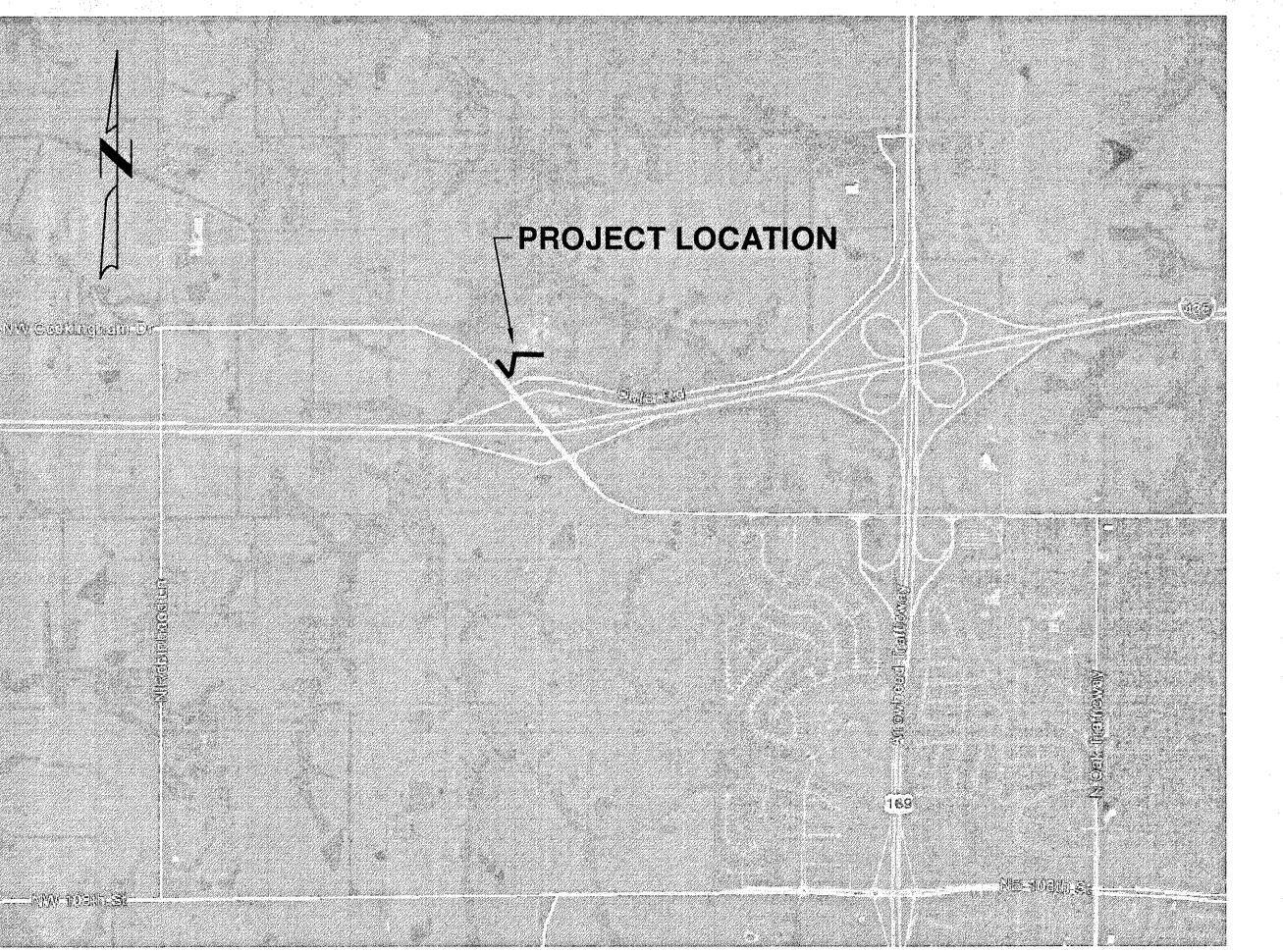
PLANS FOR NASHUA MODOT MAINTENANCE FACILITY SANITARY SEWER SYSTEM KANSAS CITY, MISSOURI 2015

NOTES:

- SPECIFICATIONS AND SPECIAL CONDITIONS OF THE CONTRACT DOCUMENTS, PRIOR TO BEGINNING CONSTRUCTION ON THIS PROJECT
- 5. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY OF THE PLANS (APPROVED BY THE
- MAINTAINING ALL TRAFFIC SIGNAGE DURING THE PROGRESS OF THE PROJECT. SIGNS THA ARE IN CONFLICT WITH THE PROPOSED IMPROVEMENTS SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR IN CONFORMANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL
- 7. SILTATION AND EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO THE DISTURBANCE OF THE GROUND.
- 8. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING BERMS, SILT FENCES, STRAW BALES, OR OTHER MEANS TO PREVENT EROSION FROM REACHING THE PUBLIC RIGHT-OF-WAY. IN THE EVENT THE PREVENTION MEASURES ARE NOT EFFECTIVE, THE CONTRACTOR SHALL REMOVE ANY DEBRIS AND EROSION AND RESTORE THE RIGHT-OF-WAY TO ORIGINAL OR BETTER CONDITION.
- 9. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL AREAS THAT THEY OR THEIR SUBCONTRACTORS DISTURB, BOTH WITHIN AND BEYOND THE PROJECT LIMITS. THESE AREAS SHALL BE RESTORED. RESEEDED. OR RESODDED TO A STATE THAT IS EQUAL TO OR BETTER THAN THE PRIOR CONDITION. THE CONTRACTOR SHALL BEAR THE RELATED EXPENSES, UNLESS DENOTED OTHERWISE WITHIN THE CONTRACT DOCUMENTS. ALL DISTURBED AREAS WITHIN THE PROJECT LIMITS WILL BE SEEDED AND MULCHED.
- 10. ALL TREES, SHRUBS, BUSHES, AND BRUSH, WITHIN THE GRADING LIMITS MARKED WITH AN "X" ON THE PLANS, MAY BE REMOVED BY THE CONTRACTOR. LARGE TREES, WITHIN THE CONSTRUCTION EASEMENTS THAT ARE NOT SHOWN ON THE PLANS, SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO DISTURBANCE. EXCEPTIONALLY GOOD TREES SHALL BE SPARED BY ADJUSTING GRADING DURING CONSTRUCTION, AS DIRECTED BY THE ENGINEER. ALL TREES, WITHIN THE CONSTRUCTION LIMITS, TO BE SAVED SHALL HAVE THEIR TRUNKS PHYSICALLY PROTECTED, PRIOR TO CONSTRUCTION OPERATIONS, BY METHODS APPROVED BY THE ENGINEER.
- 11. NO GEOLOGICAL INFORMATION IS SHOWN ON THESE PLANS.
- 12. ALL EXCAVATION SHALL BE UNCLASSIFIED. NO SEPARATE PAYMENT WILL BE MADE FOR ROCK
- 13. PROPERTY PINS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED BY A LICENSED SURVEYOR AT CONTRACTOR EXPENSE.
- 14. ALL PUBLIC OR PRIVATE PROPERTY SUCH AS UTILITIES, ROADS, DRIVES, MAIL BOXES, FENCES, POLES, ETC., DAMAGED AS A RESULT OF CONSTRUCTION SHALL BE RESTORED TO ORIGINAL
- 15. THE COMPLETED PUMP STATIONS AND LOW PRESSURE SEWER SHALL BE OWNED AND OPERATED BY THE MISSOURI DEPARTMENT OF TRANSPORTATION.
- 16. SITE CLEAN-UP SHALL OCCUR DAILY.
- 17. ALL EXCAVATIONS SHALL BE PROTECTED.

T52N, R33W, S15,16,21,22

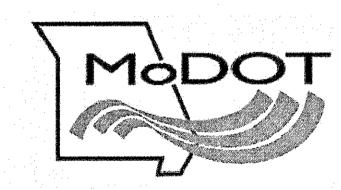


NOT TO SCALE

DRAWING INDEX

CIVIL	
C-1	TITLE SHEET
C-2	SITE LAYOUT SHEET
C-3	SEWER PLAN & PROFILE
C-4	SEWER PLAN & PROFILE
C-5	SEWER DETAILS I
C-6	SEWER DETAILS II
C-7	EROSION CONTROL DETAILS
EL ECTRICAL	

· . · · · · · · · · · · · · · · · · · ·	ELECTRICAL		
	E-1	SITE POWER PLAN	





150258-010 SHEET NO.

ARREN, 66219–1392

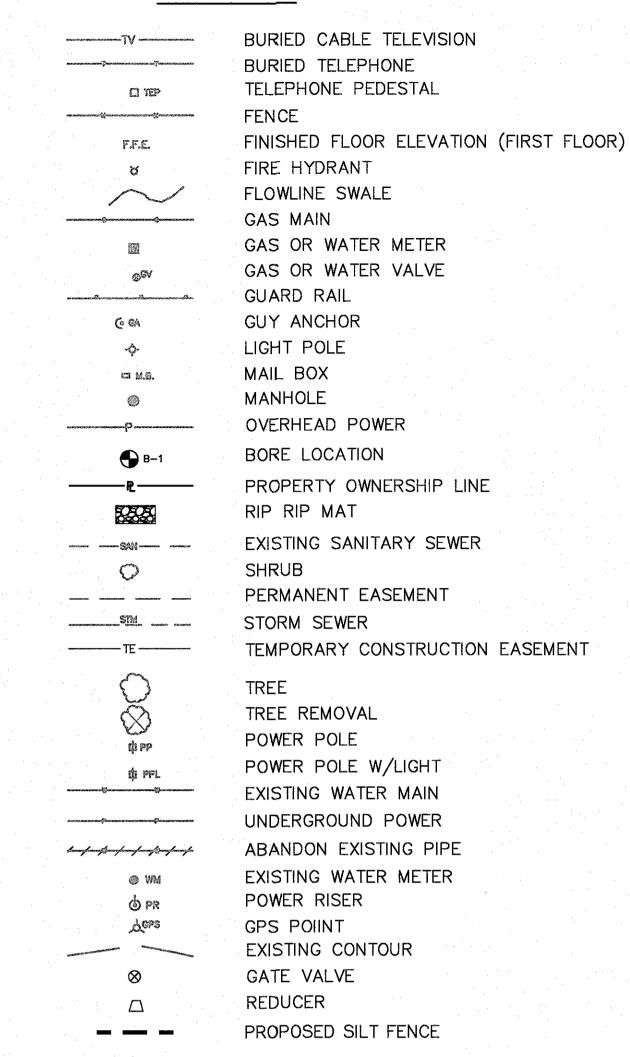
LOCATION MAP

一个一种,但是是一个一致有些特殊证据。这种知识是

SITE LAYOUT NOT TO SCALE

EXISTING SEPTIC TANKS AND LATERAL FIELDS SHALL BE ABANDONED IN PLACE. SEE SECTION 13330, WASTE HOLDING TANK AND SEPTIC TANK DECOMMISSIONING TO ABANDON THE SEPTIC TANKS IN PLACE.

LEGEND



BENCHMARKS

BENCHMARK #1
SOUTHWEST CORNER OF CONCRETE PAD AT TRUCK WASH. N=1144692.17 E=2759773.76 ELEV = 969.40

BENCHMARK #2
100D NAIL NEAR RIGHT OF WAY MARKER N=1144428.17 E=2759515.07 ELEV = 970.98

PROJECT SUMMARY:

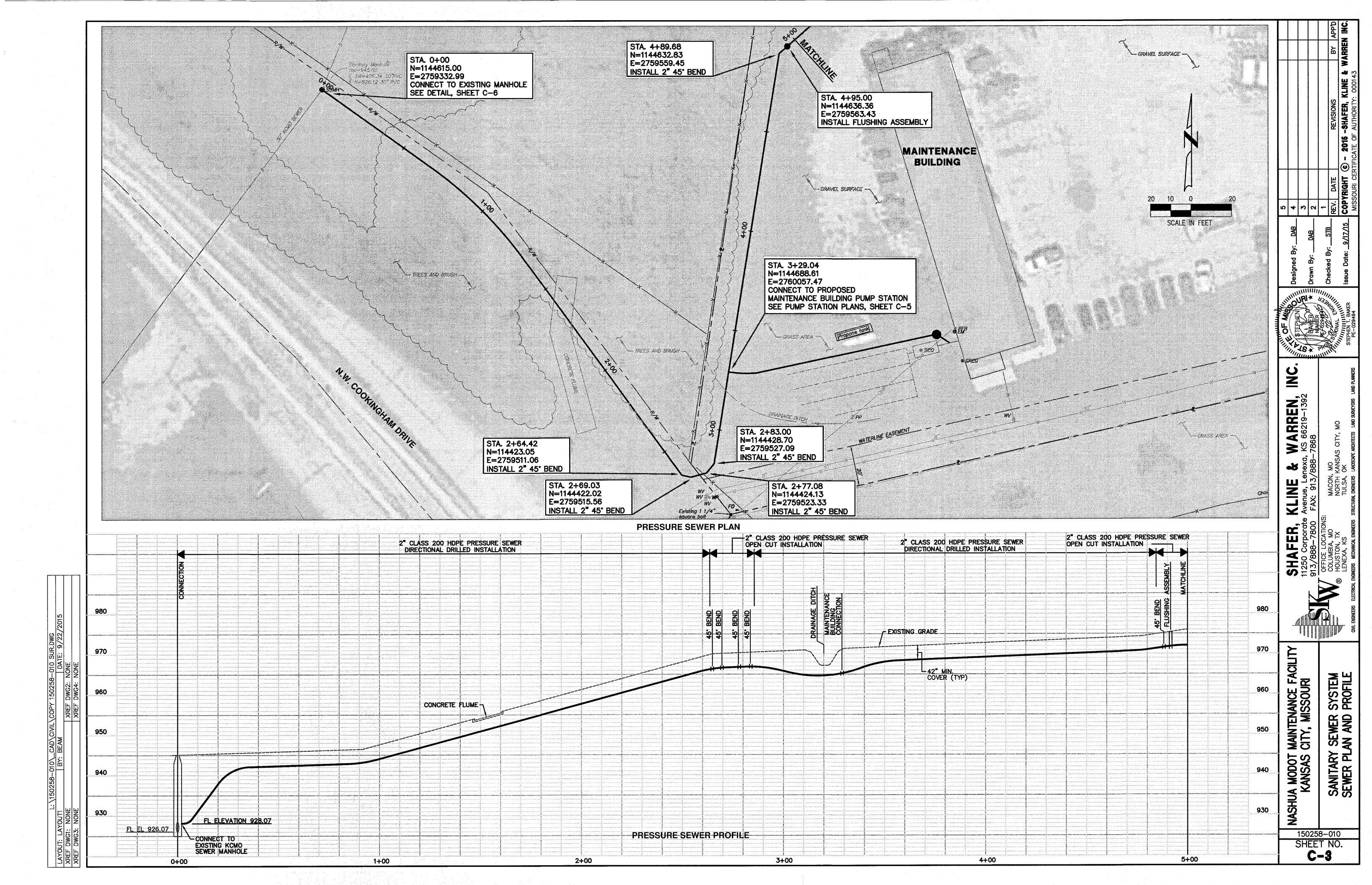
THE PROJECT CONSISTS OF THE INSTALLATION OF THREE (3) SIMPLEX, GRINDER PUMP STATIONS WITH A COMMON 2-INCH FORCE MAIN THAT WILL DISCHARGE WASTEWATER INTO AN EXISTING MANHOLE OF THE KCMO SECOND CREEK INTERCEPTOR SEWER. EACH GRINDER PUMP STATION WILL INCLUDE A 1 HP MOTOR AND PUMP (WITH 1 PUMP PROVIDED FOR FUTURE USE) WITH A RATED CAPACITY AS SPECIFIED; INSTALLED INTO A 40 GALLON WETWELL, AS SPECIFIED AND RECOMMENDED BY THE PUMP MANUFACTURER. ALL THE NECESSARY APPURTENANCES SHALL BE FURNISHED AND INSTALLED TO PROVIDE A COMPLETE AND FUNCTIONAL PRESSURE SEWER SYSTEM. THE TWO EXISTING SEPTIC TANKS AND PUMP STATION WILL BE REMOVED FROM SERVICE IN ACCORDANCE WITH THE PROJECT DOCUMENTS.

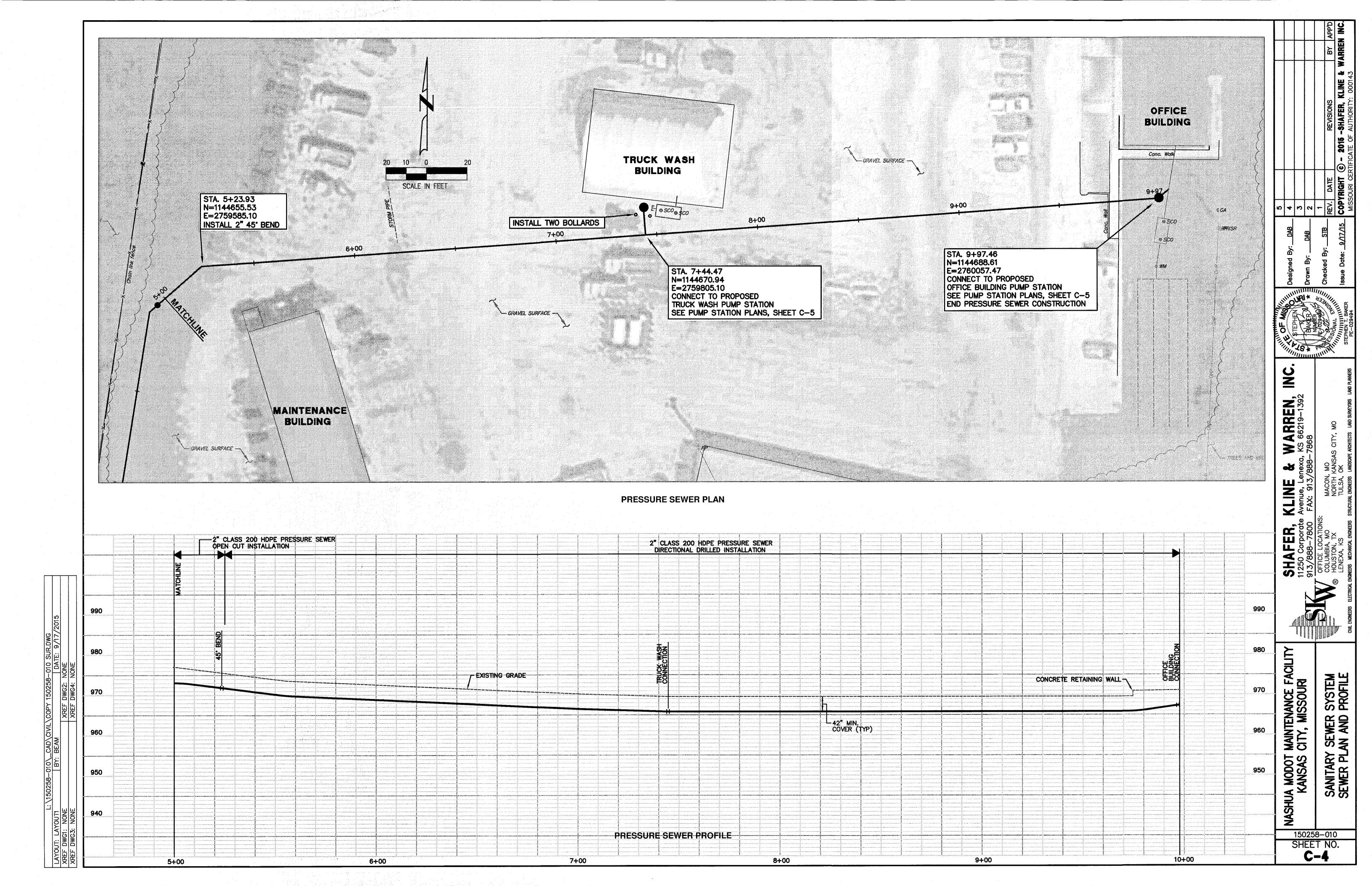
C ARREN,

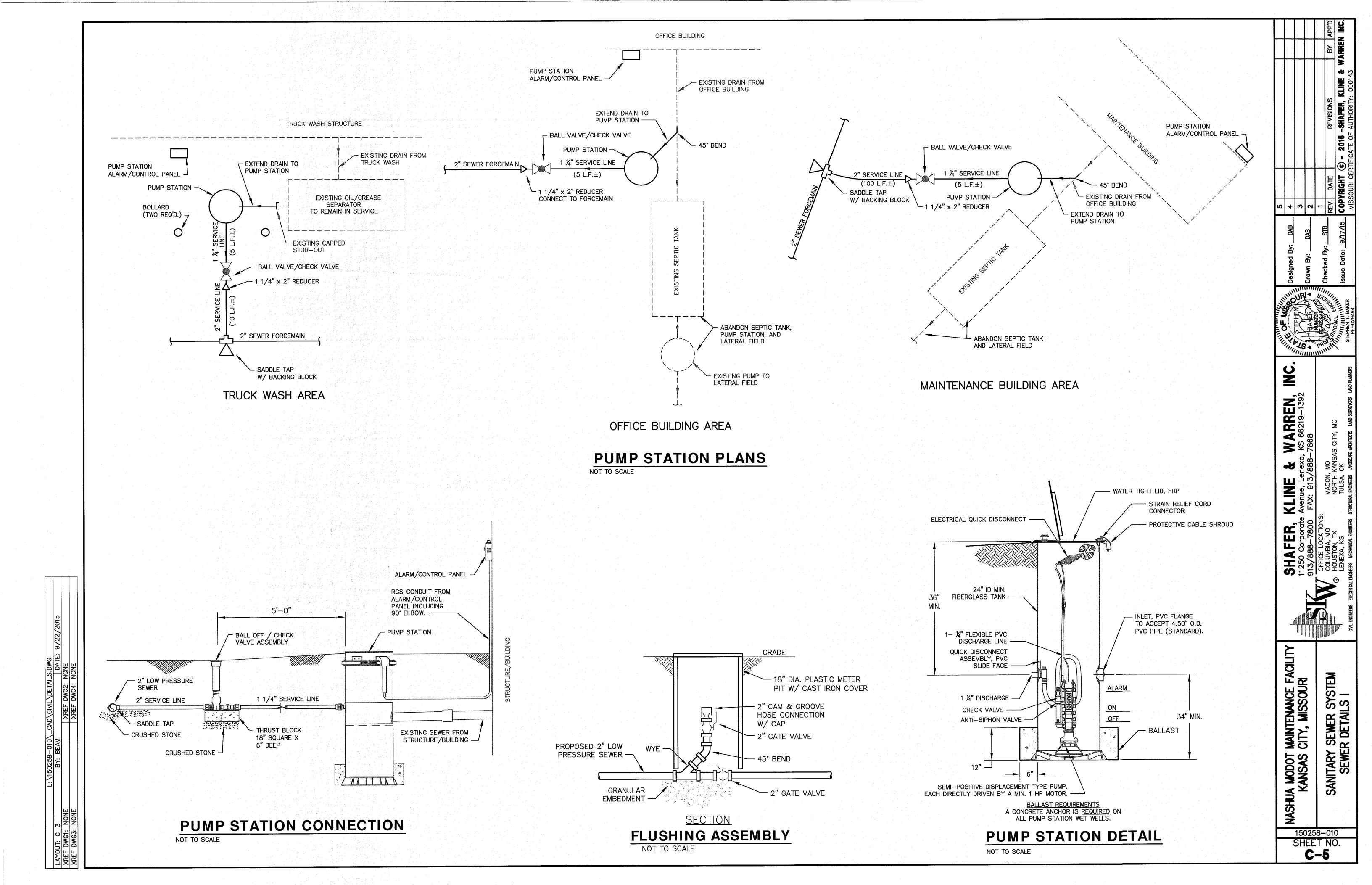
NASHUA MODOT MAINTENANCE FACILITY KANSAS CITY, MISSOURI SANITARY SEWER SYSTEM SITE LAYOUT SHEET

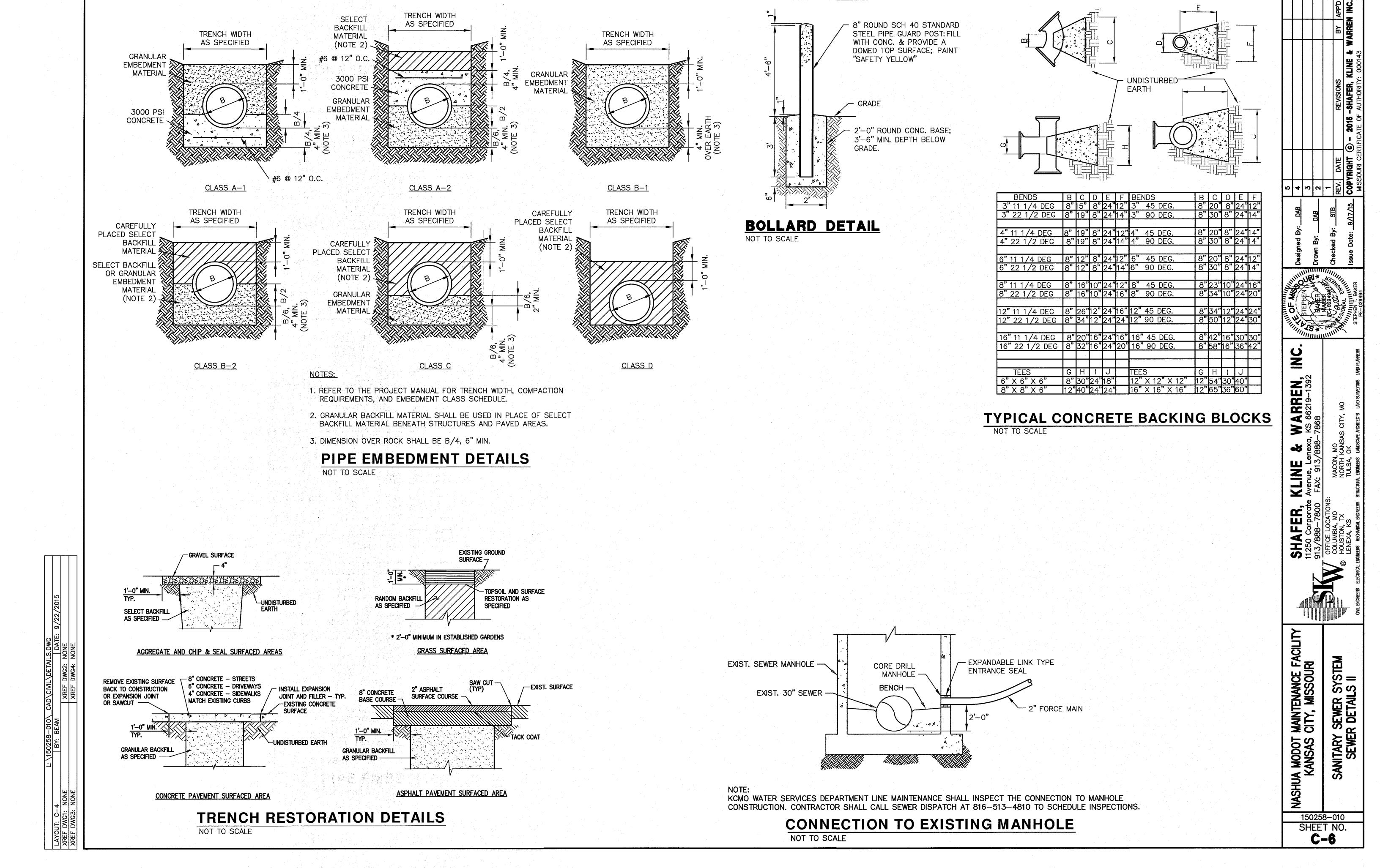
150258-010 SHEET NO.

C-2

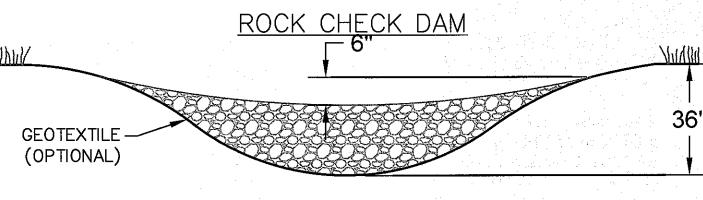




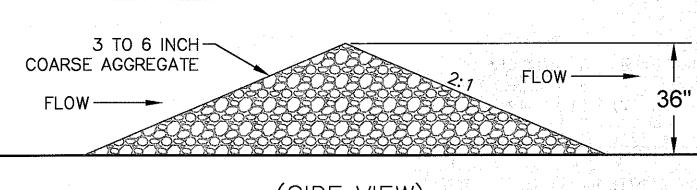




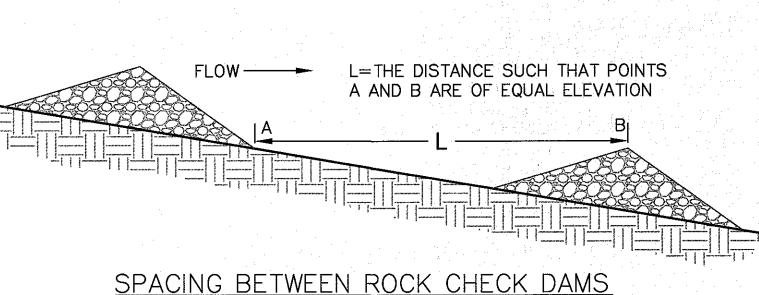
- CONSTRUCTION SPECIFICATIONS AND INSTALLATION:
- THE DRAINAGE AREA OF THE DITCH OR SWALE BEING PROTECTED SHALL NOT EXCEED 2 ACRES WHEN A COARSE AGGREGATE IS USED ALONE AND SHALL NOT EXCEED 10 ACRES WHEN A COMBINATION OF CLASS I RIPRAP AND COARSE AGGREGATE IS USED. AN EFFORT SHOULD BE MADE TO EXTEND THE STONE TO THE TOP OF CHANNEL BANKS.
- THE MAXIMUM HEIGHT OF THE DAM SHALL BE 3 FEET. THE CENTER OF THE CHECK DAM IS AT THE SAME ELEVATION AS THE TOP OF THE
- FOR ADDED STABILITY. THE BASE OF THE CHECK DAM CAN BE KEYED INTO THE SOIL APPROXIMATELY 6 INCHES.
- THE MAXIMUM SPACING BETWEEN THE DAMS SHOULD BE SUCH THAT THE TOE OF THE UPSTREAM DAM IS AT THE SAME ELEVATION AS DOWNSTREAM DAM.
- STONE SHOULD BE PLACED ACCORDING TO THE CONFIGURATION BELOW. HAND OR MECHANICAL PLACEMENT WILL BE NECESSARY TO ACHIEVE COMPLETE COVERAGE OF THE DITCH OR SWALE AND TO INSURE THAT THE CENTER OF THE DAM IS LOWER THAN THE EDGES.
- GEOTEXTILE MAY BE USED UNDER THE STONE TO PROVIDE A STABLE FOUNDATION AND TO FACILITATE REMOVAL OF THE STONE.
- INSPECTION AND MAINTENANCE:
- CHECK DAMS SHOULD BE CHECKED FOR SILT ACCUMULATION AFTER EACH STORM EVENT 1/2-INCH OR GREATER. SILT SHOULD BE REMOVED WHEN IT REACHES ONE HALF OF THE ORIGINAL HEIGHT OF THE DAM.
- REGULAR INSPECTIONS SHOULD BE MADE TO ENSURE THAT THE CENTER OF THE DAM IS LOWER THAN THE EDGES. EROSION CAUSED BY HIGH FLOWS AROUND THE EDGES OF THE DAM SHOULD BE CORRECTED.
- REMOVAL OF PRACTICE:
- UNLESS THEY ARE TO BE PERMANENT, CHECK DAMS MUST BE REMOVED WHEN THEIR USEFUL LIFE HAS BEEN COMPLETED. IN TEMPORARY DITCHES AND SWALES, CHECK DAMS SHOULD BE REMOVED WHEN A PERMANENT LINING CAN BE INSTALLED. IN THE CASE OF GRASS-LINED DITCHES, CHECK DAMS SHOULD BE REMOVED WHEN THE GRASS HAS MATURED SUFFICIENTLY TO PROTECT THE DITCH OR SWALE. THE AREA BENEATH THE CHECK DAMS SHOULD BE SEEDED AND MULCHED IMMEDIATELY AFTER THEY ARE REMOVED. THE USE OF FILTER CLOTH UNDERNEATH THE STONE WILL MAKE REMOVAL OF THE STONE EASIER.



ROCK CHECK DAM 2 ACRES OR LESS OF DRAINAGE AREA



(SIDE VIEW)



ROCK CHECK DAM NOT TO SCALE

GENERAL EROSION CONTROL NOTES:

COMPOST

COMPOST

BERM

CROSS SECTION

<u>DETAIL</u>

4-0"

1 2'-0" TO 3'-0"

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING THE STORM WATER POLLUTION PREVENTION PLAN (PPP) AT THE TIME THE PROJECT BREAKS GROUND. A COPY OF THE PPP SHALL BE AVAILABLE ON SITE AT ALL TIMES. THE PLAN SHOULD FOLLOW CLOSELY TO THE E.P.A. GUIDANCE DOCUMENT, STORM WATER MANAGEMENT FOR CONSTRUCTION ACTIVITIES - DEVELOPING POLLUTION PREVENTION PLANS AND BEST MANAGEMENT PRACTICES, U.S. E.P.A., OFFICE OF WATER, EPA 832-R-92-005 (SEPTEMBER 1992).
- THE EROSION CONTROL FEATURES, NOTES AND SPECIFICATIONS IN THE PPP REPRESENT THE MINIMUM REQUIREMENTS ACCEPTABLE. LOCATIONS ARE TYPICAL AND MAY VARY ACCORDING TO CONTRACTORS STAGING AND LIMITS OF CONSTRUCTION. THE CONTRACTOR SHALL ADJUST, MODIFY AND ADD TO THE PLAN AS NECESSARY TO CONTROL EROSION. SILTATION AND POLLUTION.
- 3. IT SHALL BE EACH CONTRACTOR'S RESPONSIBILITY TO CONTROL EROSION AND PREVENT POLLUTION FOR ALL WORK WHICH THEY ARE DIRECTLY INVOLVED.
- 4. EROSION CONTROL DEVICES ALONG THE DOWN SLOPE SIDE OF THE PROJECT SHALL BE IN PLACE PRIOR TO THE COMMENCEMENT OF ANY GRADING WORK.
- 5. WHEN POSSIBLE, WITHOUT ADVERSELY AFFECTING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL: MINIMIZE THE AMOUNT OF SURFACE AREA WHICH IS EXPOSED AT ONE TIME, LEAVE GRADED AREAS WITH A ROUGH TEXTURE, CONSTRUCT TEMPORARY TERRACES DURING GRADING OPERATIONS, AND LIMIT UNNECESSARY VEHICLE TRAFFIC IN GRADED AREAS.
- 6. THE SPILLAGE OF DEBRIS, INCLUDING THE TRACKING OF SOIL, OUTSIDE OF THE CONSTRUCTION LIMITS SHALL BE AVOIDED. THEREFORE THE CONTRACTOR SHALL PROVIDE STABILIZED DRIVES AT ALL ACCESS LOCATIONS AS NECESSARY AND SHALL REMOVE PROMPTLY ANY MATERIAL WHICH FINDS ITS WAY INTO THE PUBLIC RIGHT-OF WAY.
- STRAW BALE DIKES OR SILT FENCES SHALL BE PLACED ON A CONTOUR ELEVATION ALONG THE DOWNHILL SIDE AND FOR THE FULL EXTENT OF THE DISTURBED AREAS WITHIN THE CONSTRUCTION LIMITS. THE LAST FIVE FEET ON EACH END OF RUN OF SILT FENCE/STRAW BALE DIKE SHALL BE PLACED FACING UPHILL AT 90 DEGREES TO THE CONTOUR LINE.
- 8. THE CONTRACTOR SHALL PREVENT SILT FROM ENTERING THE STORM SEWER SYSTEM. STRAW BALE DIKES/SILT FENCE PLACED AROUND ALL STORM SEWER INLETS EXCEPT DURING CONSTRUCTION OPERATIONS WHICH REQUIRE THEIR REMOVAL IS ONE METHOD OF MEETING THE ABOVE REQUIREMENT.
- 9. EACH CONTRACTOR SHALL INSPECT THEIR EROSION CONTROL DEVICES EVERY 7 DAYS OR WITHIN 24 HOURS OF A STORM OF 0.5 INCHES OR MORE IN DEPTH. THE CONTRACTOR SHALL REPAIR DAMAGE, CLEAN OUT SILT AND ADD ADDITIONAL CONTROL DEVICES AS NEEDED AS SOON AS PRACTICABLE AFTER INSPECTION. DEFICIENCIES MUST BE CORRECTED WITHIN 7 DAYS OF INSPECTION.
- 10. ALL AREAS UPON REACHING FINAL GRADE SHALL BE BROUGHT TO FINAL PLAN CONDITION (PAVED, MULCHED AND SEEDED, SODDED, OR OTHER) AS SOON AS POSSIBLE. EROSION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL ALL SOIL DISTURBING ACTIVITIES ARE COMPLETE AND A UNIFORM PERENNIAL COVER WITH A DENSITY OF 70 % (MINIMUM) FOR UNPAVED AREAS IS ESTABLISHED.
- 11. WHERE GRADED AREAS DRAIN ONTO PAVED AREAS, SILT FENCE/STRAW BALE DIKE SHALL BE PLACED AT THE BACK OF CURB TO PREVENT SILT FROM ENTERING THE PAVED AREAS. WHEN THESE EROSION CONTROL DEVICES ARE NOT PLACED ON THE CONTOUR, THEN THEY SHALL HAVE INSTALLED AT 50' INTERVALS A 5' LENGTH PLACED AT 90 DEGREES TO THE MAIN LENGTH.

EROSION CONTROL NOTES

COMPOST BERM MULCH NOTES: **GENERAL NOTE:**

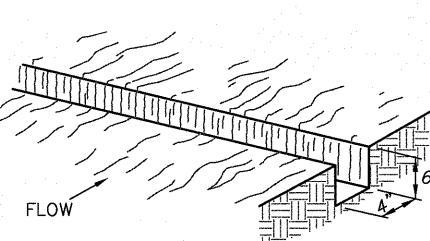
- 1. THE SILT CONTROL BERM SHALL BE PLACED UNCOMPACTED IN A WINDROW AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- 2. PARALLEL TO THE BASE OF THE SLOPE, OR AROUND THE PERIMETER OF OTHER AFFECTED AREAS, CONSTRUCT A 1 TO 1.5 FOOT HIGH BY 2.5 TO 3 FOOT HIGH TRAPEZOIDAL BERM THAT IS APPROXIMATELY 2 TO 3 FOOT WIDE AT THE TOP AND A MINIMUM OF 4 FEET WIDE AT THE BASE. IN EXTREME CONDITIONS, OR WHERE SPECIFIED BY THE ENGINEER, A SECOND BERM SHALL BE CONSTRUCTED AT THE TOP OF THE SLOPE. ENGINEER SHALL SPECIFY BERM REQUIREMENTS.
- 3. IF BERM IS TO BE LEFT AS A PERMANENT OR PART OF THE NATURAL LANDSCAPE, THE COMPOST BERM MAY BE SEEDED DURING APPLICATION FOR PERMANENT VEGETATION. THE ENGINEER/LANDSCAPE ARCHITECT SHALL SPECIFY SEED REQUIREMENTS.
- 4. DO NOT USE COMPOST BERMS IN ANY RUNOFF CHANNELS.

COMPOST BERM NOT TO SCALE

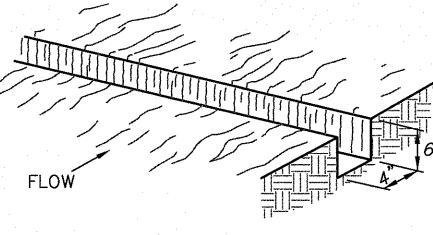
SILT FENCE NOTES:

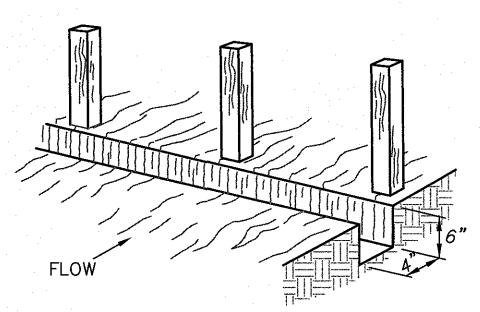
- INSTALLATION
- THE HEIGHT OF SILT FENCE SHALL BE A MINIMUM OF 16 INCHES ABOVE THE ORIGINAL GROUND SURFACE AND SHALL NOT EXCEED 34 INCHES ABOVE THE GROUND SURFACE.
- 2. THE FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE UNAVOIDABLE, FILTER CLOTH SHALL BE SECURELY SPLICED TOGETHER ONLY AT SUPPORT POSTS, WITH A MAX 6 INCH OVERLAP.
- 3. DIG A TRENCH AT LEAST 6 INCHES DEEP AND 4 INCHES WIDE ALONG THE TRENCH ALIGNMENT.
- DRIVE POSTS AT LEAST 24 INCHES INTO THE GROUND ON THE DOWNSLOPE SIDE OF THE TRENCH. SPACE POSTS A MAXIMUM OF 6 FEET APART
- 5. EXTRA-STRENGTH SEDIMENT FENCE FABRIC SHALL BE USED. POST FOR THIS TYPE OF FABRIC SHALL BE PLACED A MAXIMUM OF 6 FEET APART. THE SEDIMENT FABRIC SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING A MINIMUM OF ONE INCH LONG, HEAVY-DUTY WIRE STAPLES OR TIE-WIRES, AND EIGHT INCHES OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT BE STAPLED TO EXISTING TREES.
- 6. PLACE THE BOTTOM 1 FOOT OF FABRIC IN THE MINIMUM-OF-6-INCH DEEP TRENCH, LAPPING TOWARD THE UPSLOPE SIDE. BACKFILL WITH COMPACTED EARTH OR GRAVEL.
- 7. IF A SILT FENCE IS TO BE CONSTRUCTED ACROSS A DITCH LINE OR SWALE, IT MUST BE OF SUFFICIENT LENGTH TO ELIMINATE ENDFLOW, AND THE PLAN CONFIGURATION SHALL RESEMBLE AN ARC OR HORSESHOE, PLACED ON A CONTOUR, WITH THE ENDS ORIENTED UPSLOPE, EXTRA-STRENGTH SILT FABRIC SHALL BE USED WITH A MAXIMUM 3-FOOT SPACING OF POSTS.
- TO REDUCE MAINTENANCE, EXCAVATE A SHALLOW SILT STORAGE AREA IN THE UPSLOPE SIDE OF THE FENCE. PROVIDE GOOD ACCESS IN AREA OF HEAVY SILTATION FOR CLEAN OUT AND MAINTENANCE.
- 9. SILT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.
- TROUBLESHOOTING:
- 1. DETERMINE THE EXACT LOCATION OF UNDERGROUND UTILITIES, BEFORE FENCE INSTALLATION SO UTILITIES ARE NOT DISTURBED.
- 2. GRADE ALIGNMENT OF FENCE NEEDED TO PROVIDE A BROAD, NEARLY LEVEL AREA UPSTREAM OF FENCE TO ALLOW SILT COLLECTION AREA.
- C) INSPECTION MAINTENANCE:
- INSPECT SILT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.
- 2. SHOULD THE FABRIC OF A SILT FENCE COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.
- 3. REMOVE SILT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. AVOID DAMAGING OR UNDERMINING THE FENCE DURING CLEANOUT. SILT ACCUMULATION SHOULD NOT EXCEED 1/2 THE HEIGHT OF THE FENCE.
- REMOVE ALL FENCING MATERIALS AND UNSTABLE SILT DEPOSITS, AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY AND COMPLETELY STABILIZED

2. SET THE POSTS ALONG THE DOWN SLOPE SIDE OF THE TRENCH.

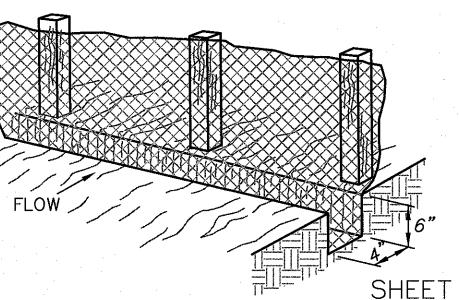


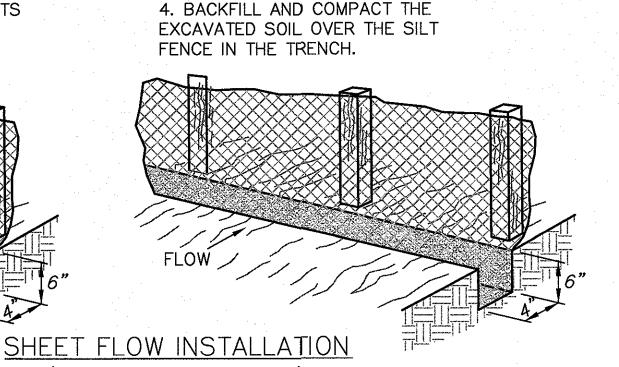
1. EXCAVATE A 6"x4" TRENCH





3. STAPLE SILT FENCE MATERIAL TO POSTS AND EXTEND IT INTO AND AROUND THE BOTTOM OF THE TRENCH.





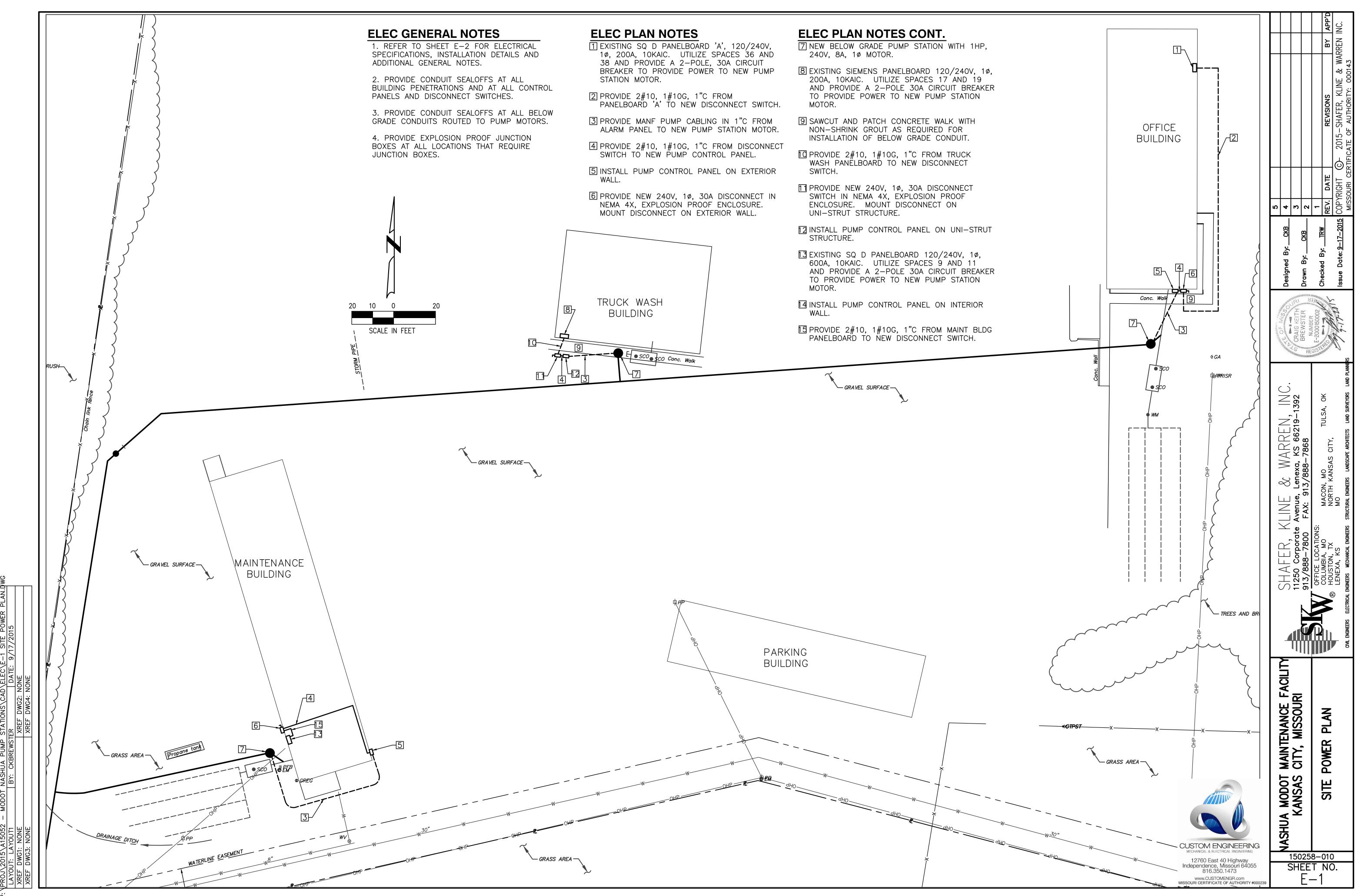
(PERSPECTIVE VIEW) SILT FENCE DETAIL

NOT TO SCALE

O

150258-010 SHEET NO.

C-7



2. CAREFULLY REVIEW CONTRACT DOCUMENTS INCLUDING DRAWINGS & PROJECT MANUAL. INFORMATION REGARDING WORK OF THE VARIOUS TRADES & SUBCONTRACTORS ARE DISPERSED THROUGHOUT THE DOCUMENTS & CANNOT BE ACCURATELY DETERMINED WITHOUT REFERENCE TO THE FULL SET OF DOCUMENTS. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES TO PROVIDE THE GREATEST POSSIBLE CLEARANCE FOR INSTALLATION OF THE MECHANICAL, PLUMBING, ETC. CONDUIT & PIPE TO BE RUN TO MAXIMIZE USE OF SPACE FOR USE BY OTHER TRADES

3. FOR ANY DISRUPTION OF THE ELECTRICAL SERVICE TO THE BUILDING, THE CONTRACTOR SHALL PROVIDE TWO WEEKS NOTICE TO THE OWNER.

4. WHERE EXISTING CIRCUITS, CONDUCTORS, CONDUITS, JUNCTION BOXES, PANELS, SWITCHES, RECEPTACLES AND OTHER EQUIPMENT CONFLICTS WITH NEW CONSTRUCTION, EXISTING EQUIPMENT SHALL BE RELOCATED TO MAINTAIN FUNCTION AND SERVICE.

5. VERIFY ALL CONDUIT INTERIORS ARE CLEAN AND FREE OF DEBRIS BEFORE PULLING CONDUCTORS.

6. AT THE CONCLUSION OF THIS PROJECT PROVIDE AN UPDATED TYPEWRITTEN, AS-BUILT DIRECTORY INSIDE EACH PANELBOARD PROPERLY IDENTIFYING EACH CIRCUIT USED & THE SPECIFIC LOAD SERVED. ALSO PROVIDE SCHEDULES ON CD DISK.

7. FIELD VERIFY EXACT LOCATION OF ALL WALL PENETRATIONS WITH OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN INSTALLATION.

8. ALL ELECTRICAL DEVICES IN PUBLIC AREAS SHALL BE MOUNTED PER A.D.A. REQUIREMENTS.

9. OPENINGS SHALL BE CUT TO THE EXACT SIZE REQUIRED IN ORDER TO MAINTAIN ANY MATERIAL RATINGS AND SEALED TO MAINTAIN RATING.

10. CONCEAL ALL ELECTRICAL WIRING AND RACEWAYS WHERE CONSTRUCTION PERMITS. EXPOSED RACEWAY SHALL BE MINIMIZED WHERE STRUCTURE IS EXPOSED TO VIEW. WHERE NECESSARY, CAREFULLY INSTALL RACEWAYS PARALLEL TO WALLS, BEAMS AND COLUMNS. EXPOSED RACEWAY SHALL BE HELD TIGHT TO STRUCTURE & LOCATED SO AS TO KEEP IT AS INCONSPICUOUS AS POSSIBLE.

11. ELECTRICAL DESIGN HAS BEEN BASED ON THE INSTALLATION OF 75 DEGREES C CONDUCTORS CONNECTED TO TERMINAL LUGS & EQUIPMENT, U.L. LISTED AND LABELED FOR A MINIMUM OF 75 DEGREES C. CONDUCTORS TERMINATED ON EQUIPMENT WITH A LOWER RATING (60 DEGREES C) OR NO RATING SHOWN, SHALL HAVE CONDUCTOR SIZE INCREASED TO CONFORM TO N.E.C. TABLE 310-16 & U.L. NO. 489 REQUIREMENTS.

12. INSTALL ANY/ALL CORD SETS SUPPLIED WITH THE EQUIPMENT.

13. ALL EXTERIOR MOUNTED ELECTRICAL DEVICES AND EQUIPMENT SHALL BE IN WEATHERPROOF ENCLOSURE AND OR APPROVED EQUAL.

14. PROVIDE FIRESTOPPING TO MAINTAIN FIRE RATINGS AT ALL PENETRATIONS OF RATED CONSTRUCTION

15. MOUNT DISCONNECT SWITCHES AND COMBINATION STARTERS AT 65" AFF. TO TOP OF ENCLOSURE UNLESS OTHERWISE INDICATED.

16. PROVIDE ALL NECESSARY WALL CUTTING/PENETRATIONS AND ALL OF THE REPATCHING NECESSARY FOR THE PROPER EXECUTION OF THIS WORK.

17. ALL SAFETY DISCONNECT SWITCHES SHALL BE HEAVY-DUTY GRADE, SQUARE D OR APPROVED EQUAL.

18. ALL SAFETY SWITCHES SHALL HAVE A DURABLE LABEL PERMANENTLY ATTACHED TO THE INSIDE COVER DESCRIBING TYPE, CURRENT LIMITING ABILITY AND DEVICES CONTROLLED.

19. ALL SAFETY SWITCHES SHALL HAVE A GROUNDING BAR.

20. ALL FEEDERS SHALL HAVE A SEPARATE COPPER GROUNDING CONDUCTOR INSTALLED. IN NO CASE SHALL THE CONDUIT OR RACEWAY BE USED AS THE GROUNDING CONDUCTOR.

21. CONDUCTORS SHALL BE COPPER, THHN/THWN, 75 DEG C, SOUTHWIRE OR APPROVED EQUAL.

22. BELOW GRADE CONDUIT IN GRASSY AREAS SHALL BE SCHEDULE 40, ALLIED TUBE & CONDUIT OR APPROVED

23. BELOW GRADE CONDUIT IN GRAVEL AREAS SHALL BE PVC COATED RGS WITH THREADED SEALED FITTINGS, ALLIED TUBE & CONDUIT OR APPROVED EQUAL.

24. EXTERIOR EXPOSED CONDUIT SHALL BE RGS WITH THREADED SEALED FITTINGS, ALLIED TUBE & CONDUIT OR APPROVED EQUAL.

25. INTERIOR EXPOSED CONDUIT SHALL BE EMT WITH COMPRESSION FITTINGS, ALLIED TUBE & CONDUIT OR APPROVED EQUAL.

ABBREVIATIONS

GROUNDED

KILOWATT

NON-FUSED

PANELBOARD

WEATHERPROOF

KILOVOLT AMPERE

NOT IN CONTRACT

UNLESS NOTED OTHERWISE

GND

KVA

26. CIRCUIT BREAKERS SHALL BE OF SAME MANUFACTURER AND AIC RATING AS EXISTING PANELBOARDS

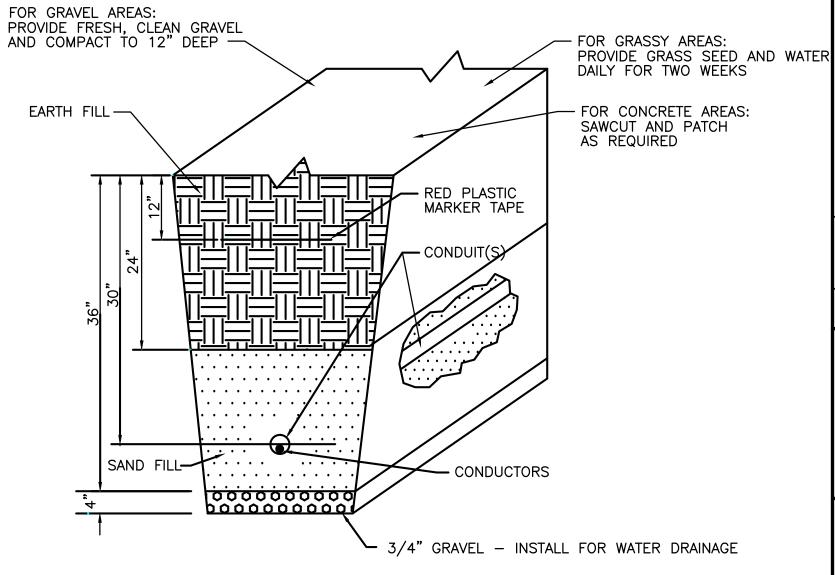
EQUIPMENT, QUANTITY AND TYPE AS INDICATED ON PLANS. -P3000 STAINLESS STEEL CHANNEL **---**----SIZE OF RACK TO BE AS REQUIRED FOR EQUIPMENT SIZE. ----____ STAINLESS STEEL CONNECTORS P3000 STAINLESS STEEL CHANNEL STAINLESS STEEL STRAP, SIZE AS REQUIRED, TYPICAL. CONCRETE, TYPICAL.

EQUIPMENT RACK MOUNTED AT GRADE DETAIL

NOTES:

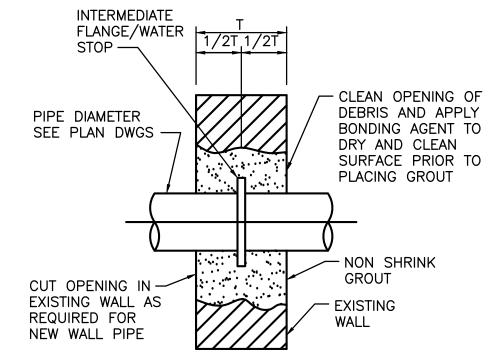
1. STRUT PRODUCT NUMBERS SHOWN ARE BY UNISTRUT

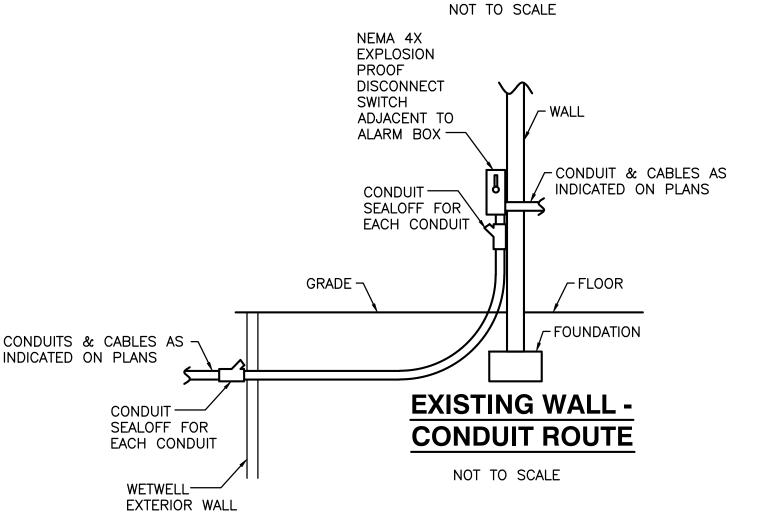
2. ALL HARDWARE AND STRUT SHALL BE STAINLESS STEEL.



DETAIL INSTALLATION OF UNDERGROUND CONDUITS NOT TO SCALE

NOTE: PROVIDE QUANTITY OF CONDUITS AND CONDUCTORS AS INDICATED ON SHEET E-1.







12760 East 40 Highway Independence, Missouri 64055 816.350.1473 www.CUSTOMENGR.com MISSOURI CERTIFICATE OF AUTHORITY #000239

EXISTING WALL-CONDUIT PENETRATION

MAINTENANCE FACILIT CITY, MISSOURI

귑

DETAIL

ELECTRIC

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Snue,

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ASHUA MODOT KANSAS

150258-010 SHEET NO. E-2

U.L. LISTED FOR WET LOCATION AND NEMA 4X LISTED AND EXPLOSION PROOF RATED. DEVICES SHALL BE APPLETON **POWER SYMBOLS**

DISCONNECT SWITCH. REFER TO PLANS FOR ADDITIONAL REQUIREMENTS.

→ XX XX

HOMERUN SYMBOL SHOWING PANEL NAME, PHASE, NEUTRAL AND GROUND CONDUCTOR. CIRCUIT SIZE AS INDICATED ON PLAN. DASHED LINE INDICATES BELOW GRADE.

EXISTING POWER PANELBOARD