GENERAL NOTES:

- THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING SURFACE AND UNDERGROUND FACILITIES DURING ALL PHASES OF WORK. UNDERGROUND FACILITIES SHOWN ON THE DRAWINGS ARE FOR THE CONTRACTOR'S GUIDANCE ONLY. THE LOCATIONS OF ALL UNDERGROUND UTILITY FACILITIES ARE APPROXIMATE OR MAY NOT BE INDICATED IN THESE PLANS. UNDERGROUND FACILITIES, WHETHER INDICATED OR NOT, SHALL BE LOCATED AND FLAGGED BY THE UTILITIES AT THE REQUEST OF THE CONTRACTOR. THE CONTRACTOR SHALL CALL FOR THE UTILITY COMPANIES TO MARK OR FLAG THE LOCATION OF THEIR FACILITIES IN THE FIELD (1-800-331-5666 OR 811) 48 HOURS PRIOR TO DIGGING. CALL ALL APPLICABLE UTILITY COMPANIES. THE CONTRACTOR SHALL REPAIR, AT HIS EXPENSE, ANY DAMAGES TO EXISTING FACILITIES CAUSED DIRECTLY OR INDIRECTLY BY HIS OPERATIONS IN ADDITION, THE CONTRACTOR SHALL NOTE THAT THERE MAY BE EXISTING UNDERGROUND FACILITIES THAT ARE NOT SHOWN ON THE PLANS. IT IS, THEREFORE, A REQUIREMENT OF THIS CONTRACT THAT THE CONTRACTOR FULLY INVESTIGATE ALL AREAS IN WHICH EXCAVATIONS WILL BE PERFORMED AND TAKE ALL REASONABLE MEASURES NECESSARY TO LOCATE ANY FACILITIES WHICH MAY NOT BE SHOWN
- ON THE PLANS. BEFORE PROCEEDING, THE CONTRACTOR SHALL SATISFY HIMSELF THAT A CONFLICT DOES NOT EXIST AND THAT THE UNDERGROUND WORK CAN BE PERFORMED AS SHOWN ON THE PLANS. IF, IN THE OPINION OF THE CONTRACTOR, A CONFLICT DOES EXIST, HE SHALL IMMEDIATELY NOTIFY THE ENGINEER WHO WILL MAKE THE FINAL DETERMINATION FOR RESOLVING THE CONFLICT. THE CONTRACTOR WILL RECEIVE NO ADDITIONAL COMPENSATION FOR ANY DELAYS OR WORK RESULTING FROM A CONFLICT WHICH WAS NOT THOROUGHLY INVESTIGATED PRIOR TO PROCEEDING WITH HIS WORK. THE CONTRACTOR MAY REQUEST ADDITIONAL COMPENSATION FOR ANY ADDITIONAL WORK PERFORMED TO DIRECTLY RESOLVE THE CONFLICT AS DIRECTED IN WRITING BY THE ENGINEER.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL EXISTING UTILITIES, PAVEMENT AND OTHER IMPROVEMENTS NOT SCHEDULED FOR REMOVAL OR OUTSIDE THE CONSTRUCTION LIMITS. ANY DAMAGE TO EXISTING UTILITIES AND/OR PAVED STREETS CAUSED BY CONSTRUCTION OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS. THE CONTRACTOR SHALL PAY ALL PERMIT FEES, DUMP FEES AND OTHER ASSOCIATED FEES REQUIRED TO SUCCESSFULLY COMPLETE THE PROJECT AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL SATISFACTORILY CLEAN THE AREA OF ALL RUBBISH, EXCESS MATERIAL, MUD AND DEBRIS AND ALL PARTS OF THE WORK AREA SHALL BE LEFT IN A NEAT AND PRESENTABLE CONDITION. ALL DISTURBED AREAS SHALL BE RESTORED TO A LEVEL AND SMOOTH SURFACE PRIOR TO ACCEPTANCE OF THE WORK. DEBRIS, ETC. SHALL BE DISPOSED OF AT AN APPROVED FACILITY IN A
- LEGAL MANNER. THE CONTRACTOR SHALL PROPERLY DISPOSE OF ALL UNSUITABLE MATERIALS AND DEBRIS ENCOUNTERED IN/OR GENERATED BY THE REMOVAL OPERATIONS, INCLUDING CONCRETE, ASPHALT, OIL MAT, BRICK, ROCK, PIPES, ETC. NO UNSUITABLE MATERIAL, SUCH AS DETERMINED BY THE OWNERS REPRESENTATIVE, SHALL BE USED FOR BACKFILLING OR EMBANKMENT CONSTRUCTION. THE COST FOR
- DISPOSAL OF THE UNSUITABLE MATERIAL SHALL BE SUBSIDIARY TO THE PROJECT. THE CONTRACTOR SHALL FURNISH AND MAINTAIN ALL NECESSARY BARRICADES, WARNING SIGNS, LIGHTS, FLASHERS, AND FLAG PERSONS AS REQUIRED BY THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", TO PROVIDE FOR THE SAFETY OF WORKERS AND THE PUBLIC AT LARGE. TEMPORARY FENCING SHALL BE INSTALLED AROUND ANY OPEN AREAS OF THE SITE. THE COST OF TRAFFIC
- CONTROL DEVICES AND TEMPORARY FENCING SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT. THE CONTRACTOR SHALL NOT START THE WORK UNTIL ALL PERMITS HAVE BEEN OBTAINED FROM THE JURISDICTIONAL AUTHORITIES. THE ENGINEER AND THE JURISDICTIONAL AUTHORITIES SHALL BE NOTIFIED BY THE CONTRACTOR 48 HOURS BEFORE START OF CONSTRUCTION.
- WHERE ITEMS OF CONSTRUCTION ARE NOTED "IF REQUIRED" THE CONTRACTOR SHALL OBTAIN THE APPROVAL OF THE PROJECT ENGINEER BEFORE PROCEEDING WITH SUCH WORK. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY DAMAGE TO EXISTING PROPERTY, UTILITIES
- AND STRUCTURES, OUTSIDE THE SCOPE OF WORK AND REPAIR SAME AT HIS OWN EXPENSE. CONTRACTOR SHALL PROVIDE THE NAME AND PHONE NUMBER OF THEIR REPRESENTATIVE TO BE CONTACTED (AS NECESSARY) DURING WORKING AND NON-WORKING HOURS.
- A QUALIFIED SUPERINTENDENT, WHO IS ACCEPTABLE TO THE OWNER, SHALL BE PRESENT ON THE PROJECT SITE DURING CONSTRUCTION AND GIVE SUPERVISION TO THE WORK UNTIL ITS COMPLETION. THE SUPERINTENDENT SHALL HAVE FULL AUTHORITY TO ACT IN BEHALF OF THE CONTRACTOR, AND ALL DIRECTIONS GIVEN TO THE SUPERINTENDENT SHALL BE CONSIDERED GIVEN TO THE CONTRACTOR.
- THE CONTRACTOR SHALL NOT ENCROACH ON PRIVATE PROPERTY OUTSIDE THE WORK AREAS WITHOUT WRITTEN PERMISSION FROM THE AFFECTED PROPERTY OWNER.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING CONSTRUCTION STAKING. DUE TO SPACE RESTRICTIONS AND OTHER CONSTRUCTION, A CONTRACTOR STAGING AREA WILL NOT BE

AVAILABLE.

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GENERAL REMOVAL NOTES:

- STORM WATER POLLUTION PREVENTION PLAN BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED PRIOR TO ANY REMOVALS. REMOVE ALL TREES WITHIN THE CLEARING AND GRUBBING LIMITS, UNLESS OTHERWISE IDENTIFIED BY
- OWNER. TREE REMOVAL SHALL INCLUDE FULL STUMP REMOVAL. CONTRACTOR SHALL FULL DEPTH SAWCUT WITH A DIAMOND EDGE SAW BLADE ALL LOCATIONS WHERE PAVEMENT TO BE REMOVED ABUTS PAVEMENT TO REMAIN. REMOVE ALL COMBINATION CURB AND GUTTER PAVEMENT TO NEAREST JOINT EXCEPT WHERE SHOWN OTHERWISE.
- ALL DEBRIS RESULTING FROM CONSTRUCTION OPERATIONS SHALL BE HAULED OFF-SITE AND PROPERLY DISPOSED OF. THE OWNER SHALL HAVE FIRST RIGHTS TO ANY MATERIALS THAT HE DEEMS SALVAGEABLE. MISCELLANEOUS STRUCTURES, CONCRETE, RUBBLE AND OTHER ITEMS SHALL BE REMOVED COMPLETELY.
- THE CONTRACTOR SHALL LOCATE, REMOVE, AND CAP ANY EXISTING LAWN IRRIGATION VALVES, HEADS, PIPING. OR OTHER LAWN IRRIGATION APPURTENANCES THAT WILL BE AFFECTED BY CONSTRUCTION. THE CONTRACTOR SHALL CONSTRUCT ANY NEW PIPING, VALVES, OR ANY OTHER EQUIPMENT NECESSARY T MAINTAIN THE EXISTING FUNCTIONALITY OF THE LAWN SPRINKLER SYSTEM TO REMAIN. THE CONTRACTOR SHALL ALSO ADJUST ANY EXISTING SPRINKLER HEADS TO PREVENT WATER FROM BEING THROWN AT BUILDINGS OR PAVED AREAS. AS-BUILTS AND OPERATING INSTRUCTIONS OF THE NEW SYSTEM SHALL BE SUBMITTED AFTER INSTALLATION AND VERIFICATION OF PROPER OPERATION.
- WITHIN THE PROPOSED SURCHARGE AREA (SEE CD103) THE PROPOSED SANITARY SEWER PIPE (SEE CU101) AND PROPOSED ELECTRICAL LINES (SEE EC102) SHALL BE CONSTRUCTED AND ACTIVE PRIOR TO REMOVAL OF EXISTING SANITARY SEWER AND ELECTRICAL LINES. ANY INTERUPTION OF EITHER SERVICE SHALL NEED A MINIMUM OF 1 WEEK NOTICE FOR COORDINATION WITH THE OWNER.

GENERAL GRADING NOTES:

- A. TOPSOIL SHALL BE STRIPPED, STOCKPILED ON-SITE AND SPREAD AFTER GRADING OPERATIONS. OFF-SITE BORROW SOILS SHALL BE EVALUATED AND APPROVED BY THE SOILS ENGINEER PRIOR TO USE ON THE SITE. ALL PROPOSED FILL SOILS SHALL BE TESTED AND APPROVED PRIOR TO PLACEMENT.
- THE CONTRACTOR MUST COMPLY WITH ALL NOISE AND DUST CONTROL ORDINANCES OF THE CITY OF SIOUX FALLS.
- ALL DIMENSIONS OR ELEVATIONS MARKED WITH AND ASTERISK(*) SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION. NOTIFY THE ENGINEER OF ANY CONFLICTS WITH THE DRAWINGS PRIOR TO
- PROVIDE POSITIVE DRAINAGE AT ALL TIMES WITHIN THE CONSTRUCTION AREA. NO PONDING OF WATER SHALL BE ALLOWED OUTSIDE OF SPECIFICALLY DESIGNATED AREAS FOR EROSION CONTROL OR PROPOSED PONDS. MAINTAIN ALL EXISTING DRAINAGE PATTERNS UNTIL FINAL PLAN DRAINAGE PATTERNS
- THE CONTRACTOR IS RESPONSIBLE TO ENSURE ALL EXCAVATIONS ARE MADE IN ACCORDANCE WITH CURRENT OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) CONSTRUCTION STANDARDS. DETERMINATION OF ACTUAL OSHA SOIL TYPE IN THE FIELD IS THE RESPONSIBILITY OF THE CONTRACTOR. IN ADDITION, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO BE FAMILIAR WITH OSHA STANDARDS AND REGULATIONS PERTAINING TO ALL ASPECTS OF THE WORK INCLUDING ENTERING
- ALL TOPSOIL OPERATIONS, INCLUDING REMOVAL, STOCKPILING AND SPREADING SHALL BE IN ACCORDANCE WITH CITY OF SIOUX FALLS ENGINEERING DIVISION STANDARD SPECIFICATIONS. TOPSOIL STOCKPILE LOCATION SHALL BE COORDINATED WITH OWNER AND HAVE A MAXIMUM SIDE
- SLOPE OF 3:1 SLOPE. AFTER GRADING OPERATIONS ARE WITHIN 6" OF FINAL GRADE, SPREAD 6" OF TOPSOIL FROM THE STOCKPILED ACROSS ALL AREAS TO BE SODDED. IF STORED MATERIAL DOES NOT EQUAL 6" THICK OF TOPSOIL, THE CONTRACTOR WILL HAUL TOPSOIL TO THE SITE AND SPREAD IT UNTIL THE 6" TOPSOIL
- SUITABLE MATERIALS SHALL BE FREE OF ORGANIC OR OTHER DELETERIOUS MATERIALS AND SHALL HAVE A MAXIMUM PARTICLE LESS THAN 2 INCHES. IF FINE GRAINED SILT OR CLAY SOIL IS USED FOR FILL, CLOSE MOISTURE CONTROL WILL BE REQUIRED TO ACHIEVE THE RECOMMENDED COMPACTION.
- ORGANIC SOILS SHALL BE BLENDED WITH THE TOPSOIL SURFACE COVER. FINAL SUBGRADE PREPARATION BELOW PAVEMENTS AND FLOOR SLABS SHALL BE PERFORMED IMMEDIATELY PRIOR TO (WITHIN 48 HOURS BEFORE) CONCRETE OR PAVEMENT PLACEMENT. THE PAVEMENT OR FLOOR SUBGRADE SHALL BE REEVALUATED BY THE GEOTECHNICAL ENGINEER IF PRECIPITATION FALLS ON THE SITE AFTER FINAL PREPARATION IS COMPLETED. THE SITE IS INUNDATED BY ANY WATER. OR IF THE SUBGRADE IS ALLOWED TO FREEZE AFTER SUBGRADE IS PREPARED AND BEFORE SURFACE PAVEMENT OR CONCRETE IS PLACED.
- ALL FILL SHALL BE PLACED IN NEARLY LEVEL LIFTS WITH EACH LIFT PROPERLY COMPACTED BEFORE PLACEMENT OF THE SUBSEQUENT LIFT OF SOIL ABOVE. ON EXISTING SLOPES IT IS NECESSARY TO CUT LEVEL BENCHES INTO THE EXISTING SLOPE AT ABOUT 1 TO 2-FOOT INTERVALS IN ELEVATION OF THE SLOPE TO ELIMINATE A PLANE OF WEAKNESS ALONG THE CONTACT SURFACE. ONLY ONE BENCH CAN BE CUT AT ANY ONE TIME AND THE SOIL FILL PLACED TO THE TOP OF THAT BENCH IN THIN LIFTS BEFORE THE NEXT LEVEL BENCH IS CUT.
- . WHEN RUBBLE IS ENCOUNTERED, IT SHALL BE OVEREXCAVATED AND REMOVED, AND LAWFULLY DISPOSED OF. THE OVEREXCAVATED AREAS SHALL BE RE-FILLED WITH STRUCTURAL FILL. A GEOTECHNICAL ENGINEER SHALL DETERMINE THE LIMIT OF REMOVAL.
- PROPOSED CONTOURS REPRESENT TOP OF PAVEMENT IN PAVED AREAS AND TOP OF FINISHED GRADE IN LANDSCAPED AREAS. SUBTRACT PAVEMENT THICKNESS FOR SUBGRADE ELEVATIONS.

3

GENERAL UTILITY NOTES:

- ALL EXISTING UTILITIES SHOWN ARE FROM PUBLIC RECORDS AND ARE FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXACT LOCATION AND DEPTH PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL NOTIFY APPROPRIATE UTILITY COMPANIES TO COORDINATE CONNECTIONS AND RELOCATIONS. ALL CONNECTION COST, CONNECTION FEES, OR RELOCATION FEES WILL BE PAID BY THE CONTRACTOR.
- ALL WATER LINE SHALL HAVE 6' MINIMUM COVER.
- ALL VALVES, FITTINGS, AND WATER LINE DISINFECTION SHALL CONFORM TO LOCAL UTILITY COMPANY
- ALL VALVES, BENDS, FITTINGS, AND THRUST BLOCKS SHALL BE INCIDENTAL TO THE PROJECT.
- . ALL DIMENSIONS ARE FROM OUTSIDE WALL OF BUILDING. . COORDINATE LOCATION AND DEPTHS OF ALL SERVICE LINES WITH BUILDING MECHANICAL PLANS.
- . ALL STORM SEWER, WATER, GAS, AND SANITARY SEWER LINES SHALL BE CONSTRUCTED TO A POINT 5'-0" FROM THE EXTERIOR WALLS OF THE BUILDING. COORDINATE LOCATION AND DEPTHS WITH BUILDING MECHANICAL PLANS.
- ROOF DRAIN PIPE SHALL BE P.V.C. (SCHEDULE 40) PROFILE WALL DRAIN PIPE AND FITTINGS OR APPROVED EQUAL. BEDDING SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- CONSTRUCT ROOF DRAIN SYSTEM IN ACCORDANCE TO LOCAL PLUMBING CODES. SEE ARCHITECTURAL PLANS FOR SIZE AND LOCATIONS OF DOWNSPOUTS. CONTRACTOR SHALL PROVIDE ALL BENDS AND FITTINGS TO MAKE THE CONNECTION TO THE DOWNSPOUTS.
- CONTRACTOR SHALL COORDINATE THE RECONNECTION OF ALL DOWNSPOUTS TO THE ROOF DRAIN SYSTEM, SEE ARCHITECTURAL PLANS.
- SEE CITY OF SIOUX FALLS ENGINEERING DIVISION STANDARD PLATES FOR SEWER BEDDING DETAILS. M. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PRESSURE TESTING AND DISINFECTION.

WORK SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

- N. TRACER WIRE SHALL BE INSTALLED ON ALL NEW WATER MAIN. TRENCH BACKFILL SHALL BE FREE OF BRICK, STONE OR CONCRETE RUBBLE, AND ANY TRASH, DEBRIS, ORGANIC MATERIAL OR ANY OTHER MATERIAL DETERMINED BY THE ENGINEER TO BE UNSUITABLE. ALL
- THE CONTRACTOR SHALL PROVIDE, PLACE AND MAINTAIN FENCING ALONG OPEN TRENCH AREAS TO ASSURE PROTECTION OF THE GENERAL PUBLIC AND TO SECURE ALL AREAS WITHIN THE CONSTRUCTION ZONE. THE FENCING SHALL BE A MINIMUM OF 48 INCHES IN HEIGHT. IT SHALL BE PLACED AND SECURED IN SUCH A MANNER TO GUARD AGAINST THE CREATION OF ENTRY POINTS AROUND OR THROUGH BY PERSONS AWARE OF SITE CONDITIONS OR DANGERS. THE FENCING MAY BE OF WIRE/LATH CONSTRUCTION OR SYNTHETIC FABRIC (SIMILAR TO SNOW FENCING) PROVIDED IT IS FREE OR BREAKS OR BREACHES. THE FENCING SHALL BE SECURED TO STEEL POSTS SET AT A MAXIMUM

UNSUITABLE MATERIAL SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR. THE COST OF THIS

- SPACING OF 8 FEET. THE TRENCHES SHALL BE KEPT FREE OF WATER AT ALL TIMES AND THE TRENCH LIMITS SHALL BE MAINTAINED AS DETAILED BY THE PLANS. THE COST OF ALL DEWATERING AS MAY BE NECESSARY
- SHALL BE SUBSIDIARY TO THE PROJECT. TRENCHING SHALL BE PERFORMED IN SUCH A MANNER AS TO SAFELY AND EFFECTIVELY LIMIT THE TOP TRENCH WIDTH, MINIMIZING THE VOLUME OF EXCAVATED EARTH, AND PROVIDING THE MAXIMUM PROTECTION TO EXISTING PLANTINGS AND STRUCTURES. THE MAXIMUM LENGTH OF OPEN EXCAVATION ON THIS PROJECT SHALL NOT EXCEED 25 FEET DURING PIPE LAYING OPERATIONS, UNLESS APPROVED
- CONTRACTOR SHALL MAINTAIN FUNCTIONALITY OF UTILITIES TO EXISTING BUILDING AT ALL TIMES. ALL UTILITY SYSTEMS SHALL REMAIN OPERATIONAL DURING THE CONSTRUCTION OF THE PROJECT. CONTRACTOR IS RESPONSIBLE FOR ANY TEMPORARY EQUIPMENT AND/OR FACILITIES TO MAINTAIN FUNCTIONALITY, INCLUDING BYPASS PUMPING, TEMPORARY FACILITIES MUST CONFORM TO ALL APPLICABLE CODES AND STANDARDS.

GENERAL LAYOUT NOTES:

LONGITUDINAL PAVEMENT JOINTS.

- CONTRACTOR SHALL VERIFY EXISTING FINISHED FLOOR ELEVATION AT PROPOSED CORRIDOR CONNECTION PRIOR TO COMMENCING ANY WORK AND NOTIFY ENGINEER IF A DISCREPANCY EXISTS.
- PAVEMENT JOINTS SHALL BE IN ACCORDANCE WITH CITY OF SIOUX FALLS ENGINEERING DIVISION STANDARD SPECIFICATIONS AND PLATES. ALL JOINTING LAYOUTS SHALL BE SUBMITTED AS A SHOP
- DRAWING 7 DAYS PRIOR TO THE PLANNED INSTALLATION OF PAVING. CURING OF CONCRETE PAVING SHALL BE COMPLETED AS DESCRIBED WITHIN SPECIFICATION SECTION
- 320523 CEMENT AND CONCRETE FOR EXTERIOR IMPROVEMENTS. PAVING DIMENSIONS ARE AS SHOWN ON THE PLANS. ALL DIMENSIONS ARE BACK-OF-CURB TO BACK-OF-CURB OR EDGE OF PAVEMENT TO EDGE OF PAVEMENT.
- DROP CURB FOR WHEELCHAIR RAMPS AT LOCATIONS SHOWN ON PLANS IN ACCORDANCE WITH CITY OF SIOUX FALLS ENGINEERING DIVISION STANDARD SPECIFICATIONS AND PLATES. DETECTABLE WARNINGS SHALL MATCH EXISTING COLOR THROUGHOUT THE VA CAMPUS.
- THE CONTRACTOR SHALL CONSTRUCT ALL PAVEMENTS TO CONFORM WITH THE FINISHED GRADES AS INDICATED ON THE PLANS. NO PONDING OF WATER SHALL BE ALLOWED.
- PAVEMENT TESTING SHALL BE DONE IN ACCORDANCE WITH CITY OF SIOUX FALLS ENGINEERING DIVISION STANDARD SPECIFICATIONS.
- COMPACTED BACKFILL SHALL BE COMPLETED WITHIN 4 TO 7 WORKING DAYS AFTER CURB PLACEMENT. WATER-REDUCING ADMIXTURE SHALL BE ADDED TO ALL HAND-PLACED AND FINISHED CONCRETE. A DIAMOND EDGE SAW BLADE SHALL BE USED FOR CUTTING ALL REQUIRED CONTRACTION AND
- ALL 4" PAVEMENT STRIPING SHALL BE PAINTED YELLOW IN COLOR AND INSTALLED PER MANUFACTUREF SPECIFICATIONS.
- CONTRACTOR IS RESPONSIBLE FOR ALL TRAFFIC CONTROL AND ASSOCIATED SAFETY MEASURES. TWO-WAY TRAFFIC SHALL BE MAINTAINED ON STREETS AT ALL TIMES.
- M. BUILDING FOOTPRINT SHOWN IS TO THE OUTSIDE OF BUILDING. CONTRACTOR SHALL VERIFY BUILDING FOOTPRINT WITH ARCHITECTURAL PLANS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR LAYOUT OF CONCRETE PAVEMENT JOINTING, SPACING OF JOINTS, LOCATION OF EXPANSION JOINTS, CONTROL JOINTS AND CONTRACTION JOINTS. CONTRACTOR SHALL SUPPLY SHOP DRAWING OF JOINTING PLAN FOR APPROVAL 7 DAYS PRIOR TO THE PLANNED INSTALLATION OF PAVING.
- CONSTRUCT STRUCTURAL STOOP AT ALL DOOR LOCATIONS. TOP OF STRUCTURAL STOOP SHALL MATCH SLOPE OF PROPOSED PAVEMENT.

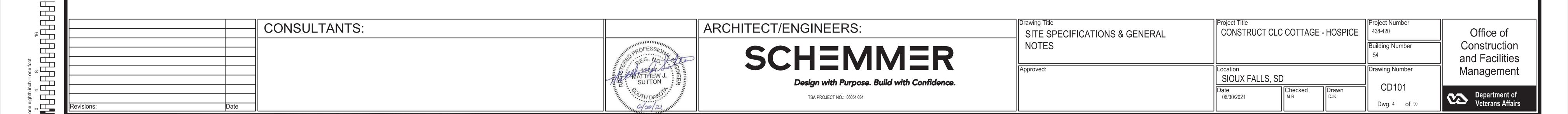
GENERAL SODDING NOTES:

- ALL SODDING, INCLUDING FERTILIZING AND EROSION CONTROL, SHALL BE IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATION SECTION 329000 PLANTING.
- THE CONTRACTOR SHALL COORDINATE HIS OPERATIONS SO THAT THE SITE CAN BE SODDED AS SOON AS POSSIBLE FOLLOWING RE-SPREAD OF TOPSOIL. AREAS DISTURBED BY CONSTRUCTION SHALL BE SODDED. SOD SHALL BE MOWED JUST BEFORE CUTTING AND SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR.
- C. THE CONTRACTOR SHALL MOW ALL NEW GRASS AREAS THROUGH 3 MOWING CYCLES.

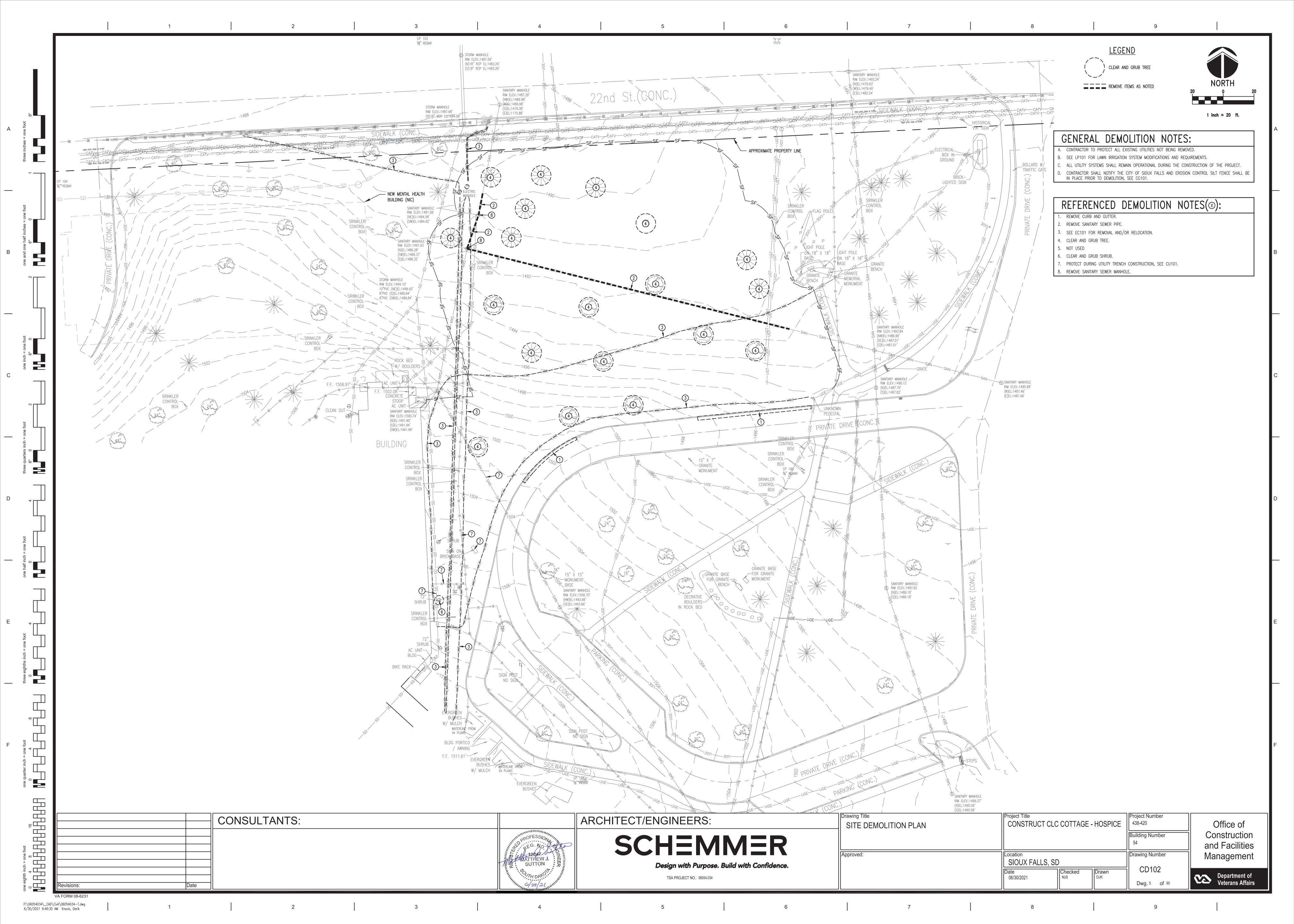
GENERAL LANDSCAPING NOTES:

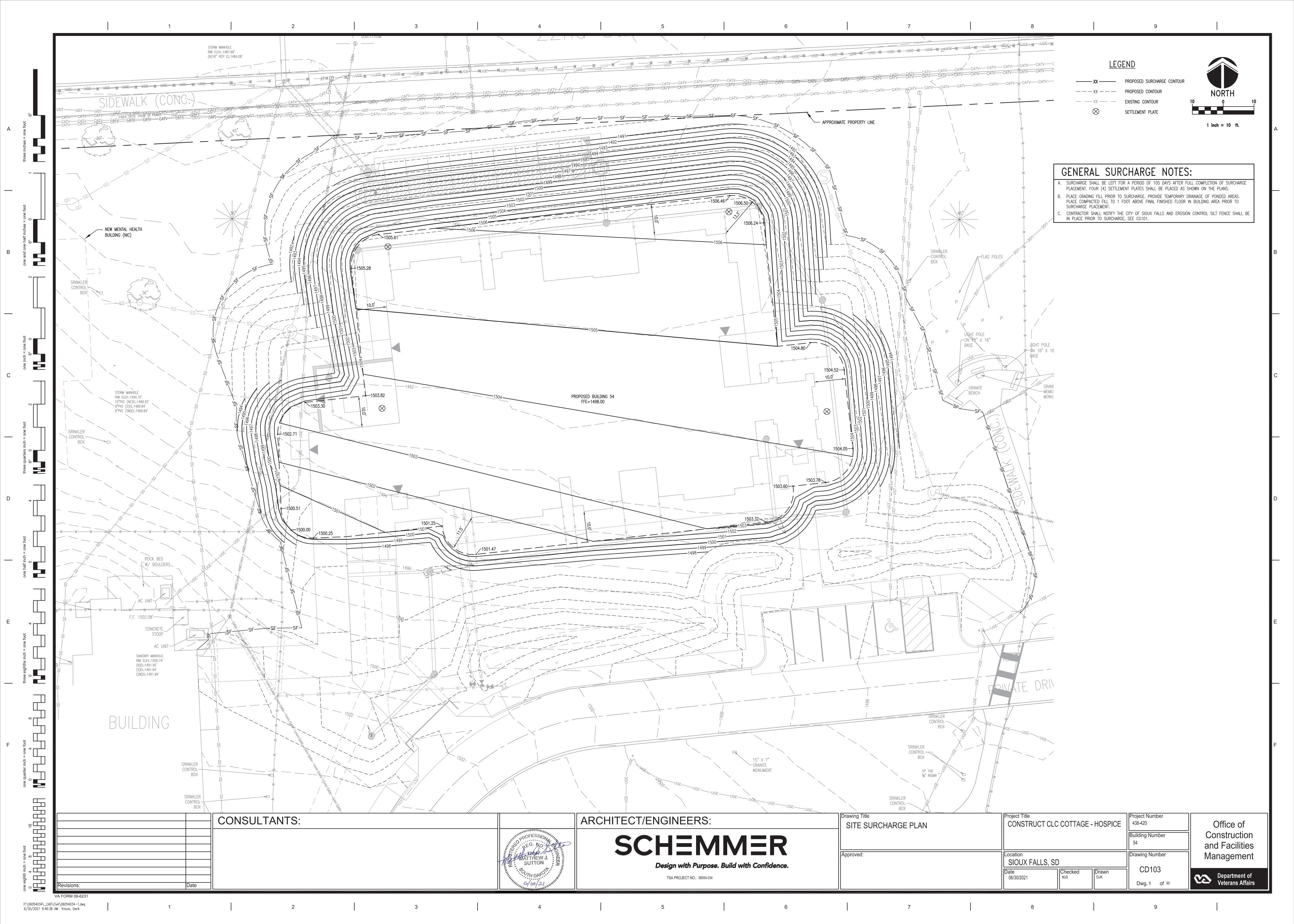
- DO NOT BEGIN WORK UNTIL ALL REQUIRED PERMITS ARE IN HAND AND APPROVED DRAWINGS REFLECTING THE REQUIREMENTS OF THE PERMITS ARE PHYSICALLY ON THE JOB SITE. REQUIRED
- PERMITS SHALL INCLUDE BUT NOT BE LIMITED TO THE LANDSCAPE PERMIT. VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO STARTING CONSTRUCTION AND IMMEDIATELY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES.
- VERIFY LOCATION OF ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION. CARE SHOULD BE TAKEN NOT
- TO DISTURB UTILITIES DURING CONSTRUCTION. ALL WORK PERFORMED ON THIS PROJECT SHALL BE IN CONFORMANCE WITH THE CONTRACT
- DOCUMENTS AND ALL APPLICABLE CODES. STANDARDS. ORDINANCES, ETC. ALL PLANTS TO BE GUARANTEED FOR ONE FULL YEAR AT FULL REPLACEMENT VALUE INCLUDING

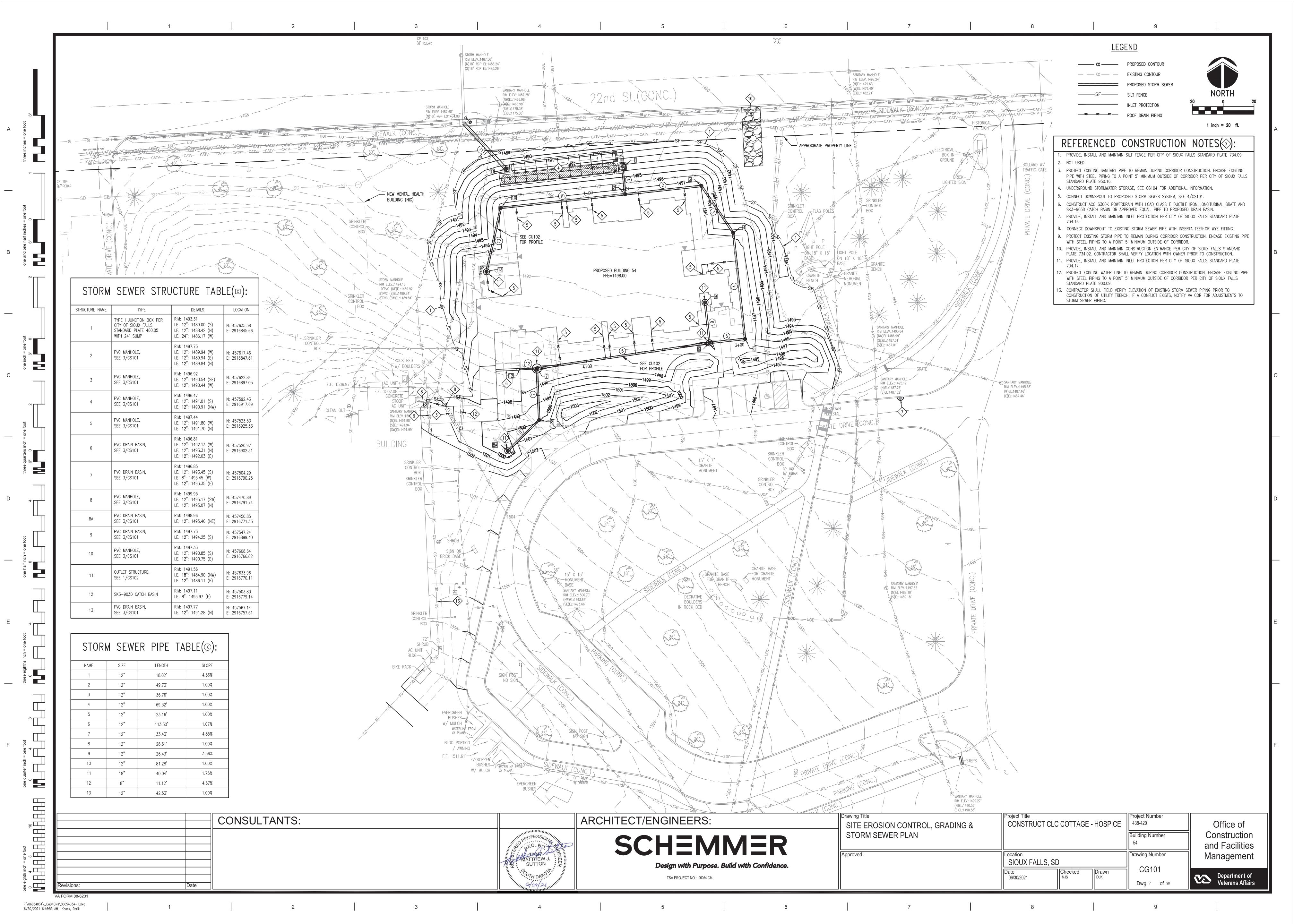
- ALL DEBRIS FROM CONSTRUCTION SHALL BE LAWFULLY DISPOSED OF OFF SITE.
- G. ALL AREAS SEEDED, SODDED OR LANDSCAPED SHALL BE IRRIGATED. H. ALL PLANTING AREAS MUST BE FREE OF ALL WEEDS AND DEBRIS BEFORE BEGINNING WORK.
- PROVIDE AND INSTALL A LOCALLY AVAILABLE WASHED RIVER ROCK IN ALL LANDSCAPED AREAS. SHAPE EXISTING SOIL LEVELS WITHIN PLANTING BEDS SO THAT THE 2"-3" THICKNESS OF RIVER ROCK DOES NOT EXCEED THE ELEVATION OF THE SIDEWALK, CURB OR NATURALLY DUG EDGING. ALL ROCKED AREAS SHALL BE COVERED WITH A COMMERCIAL GRADE LANDSCAPE FABRIC BEFORE INSTALLING RIVER
- INSTALL STEEL EDGING PER SPECIFICATIONS.
- ALL PLANT MATERIAL SHALL BE OF GOOD QUALITY AND SIZES SHALL MEET REQUIRED SIZES SPECIFIED ALL PLANTS SHALL BE APPROVED BY THE COR.
- ALL GRADING AND BERMING SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR.
- . THE CONTRACTOR SHALL LOCATE, REMOVE, AND CAP ANY EXISTING LAWN IRRIGATION VALVES, HEADS, PIPING, OR OTHER LAWN IRRIGATION APPURTENANCES THAT WILL BE AFFECTED BY CONSTRUCTION. THE CONTRACTOR SHALL CONSTRUCT ANY NEW PIPING, VALVES, OR ANY OTHER EQUIPMENT NECESSARY TO MAINTAIN THE EXISTING FUNCTIONALITY OF THE LAWN SPRINKLER SYSTEM TO REMAIN. THE CONTRACTOR SHALL ALSO ADJUST ANY EXISTING SPRINKLER HEADS TO PREVENT WATER FROM BEING THROWN AT BUILDINGS OR PAVED AREAS. AS-BUILTS AND OPERATING INSTRUCTIONS OF THE NEW SYSTEM SHALL BE SUBMITTED AFTER INSTALLATION AND VERIFICATION OF PROPER OPERATION.

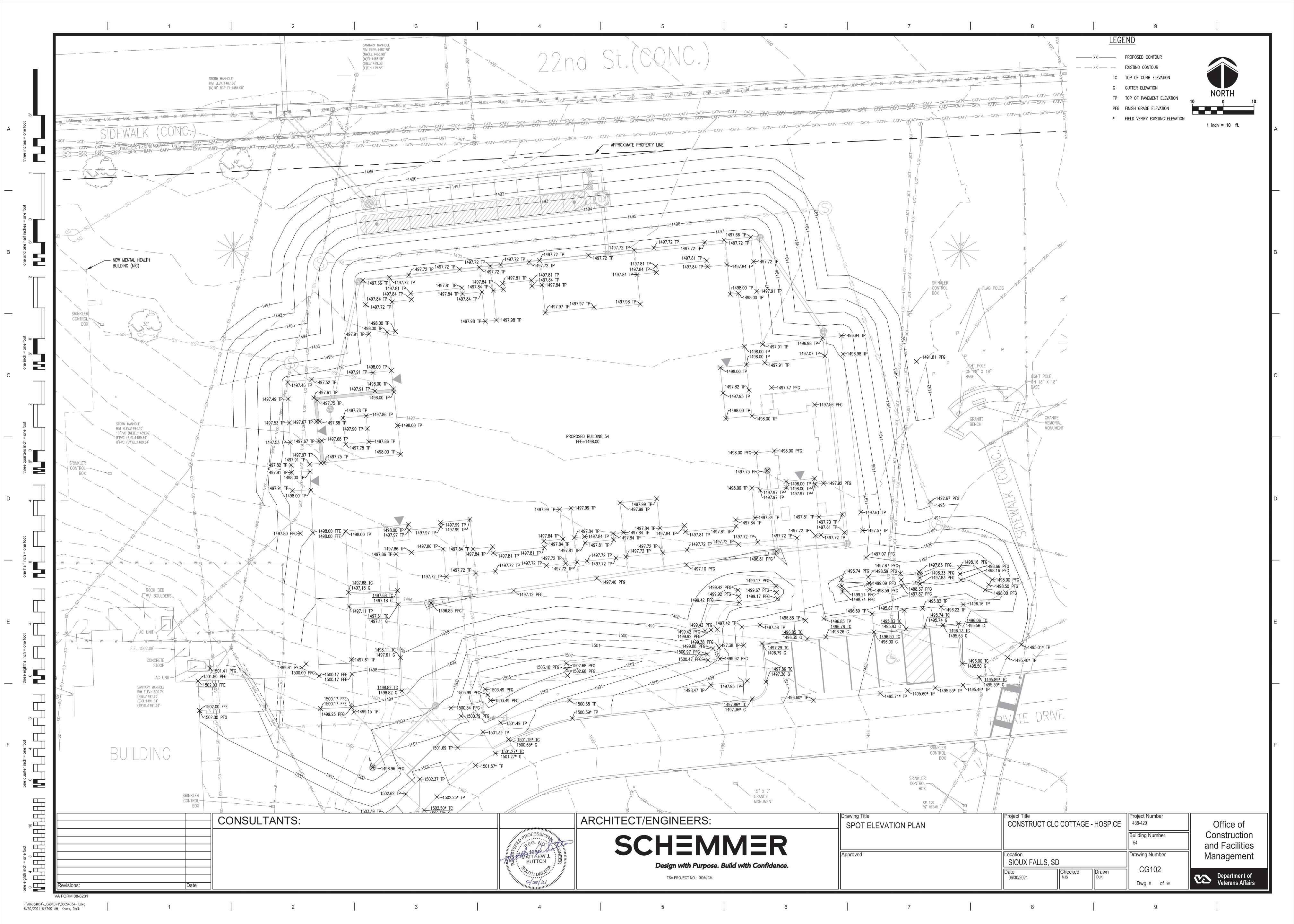


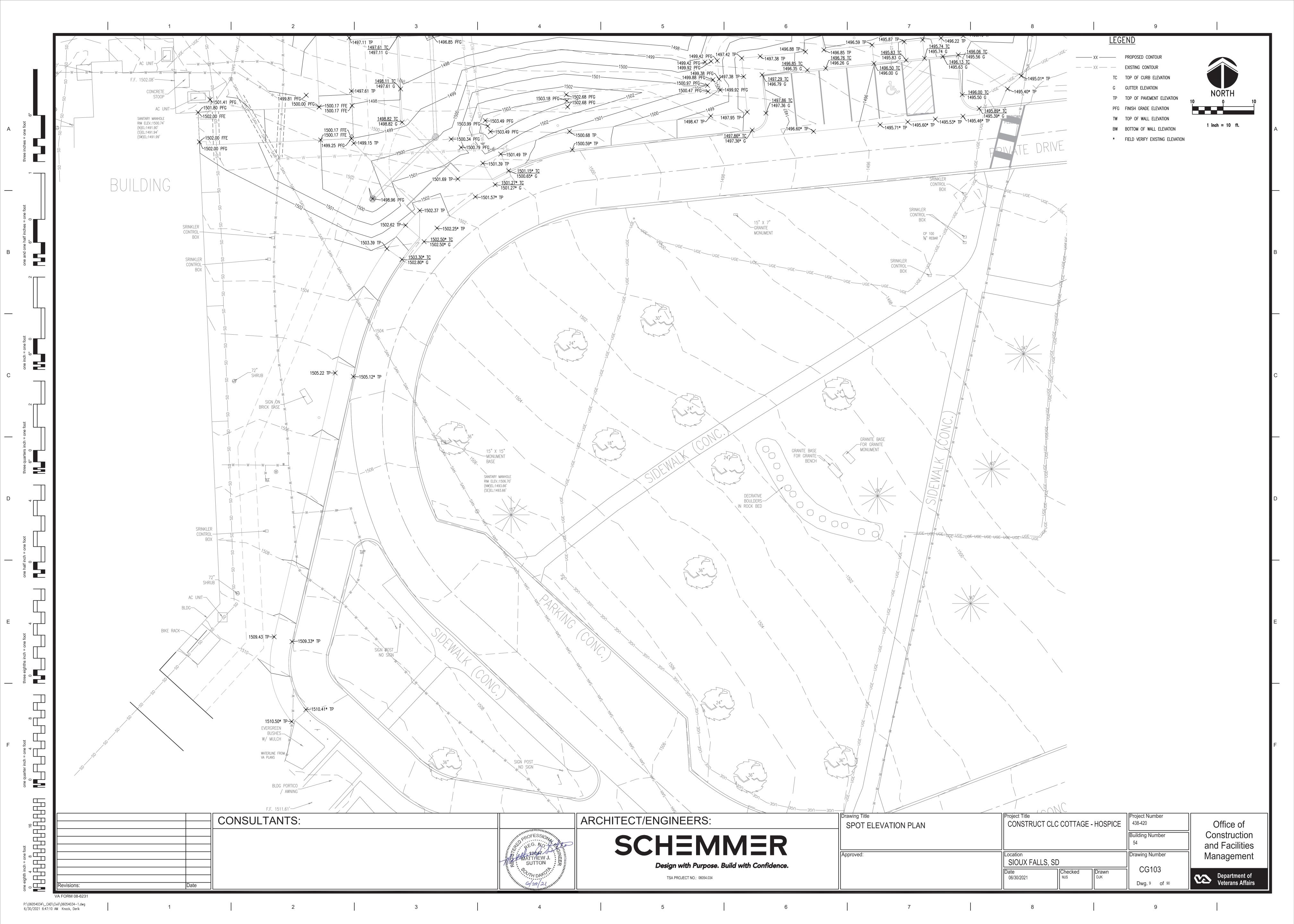
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IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-3500 CHAMBER SYSTEM MC-3500 STORMTECH CHAMBER SPECIFICATIONS

CHAMBERS SHALL BE STORMTECH MC-3500.

REFLECTIVE GOLD OR YELLOW COLORS.

- 2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP)
- CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD
- IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION. THE STRUCTURAL DESIGN OF THE CHAMBERS. THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1)
- LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787,
- "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
- REQUIREMENTS FOR HANDLING AND INSTALLATION: TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING
- TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 500 LBS/IN/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE

COVER PIPE CONNECTION TO END CAP WITH ADS -

CATCH BASIN

MANHOLE

A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG

A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)

A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY

A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS

2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY

ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE

B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS

B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.

B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE

GEOSYNTHETICS 601T NON-WOVEN GEOTEXTILE

CONTRACTOR SHALL PROVIDE FLEXSTORM

INSERTS IN ANY UPSTREAM STRUCTURES WITH OPEN GRATES DURING CONSTRUCTION

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT

B. ALL ISOLATOR PLUS ROWS

24" SUMP DEPTH AS NOTED ON

PLANS, SEE CG101

REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN

STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS

VACUUM STRUCTURE SUMP AS REQUIRED

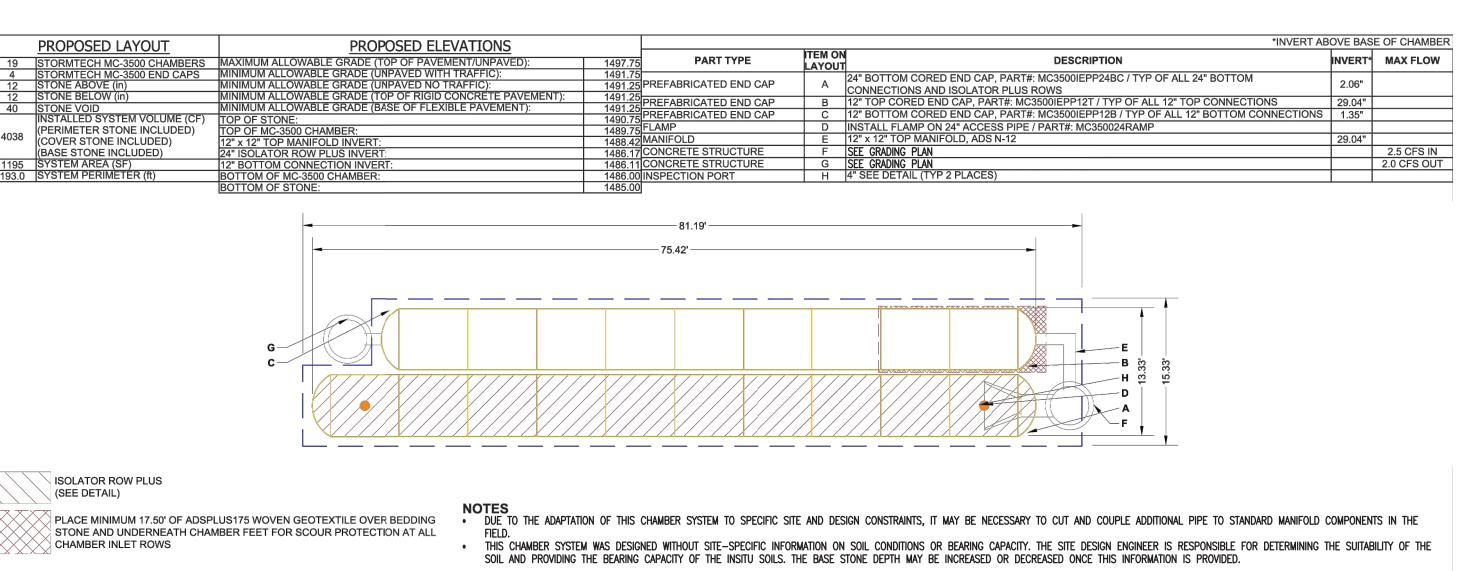
A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED

- DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS: • THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER. THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR
- DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE. THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN
- EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN. 9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

- STORMTECH MC-3500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- 2. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
- 3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS: STONESHOOTER LOCATED OFF THE CHAMBER BED
- BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE. BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
- 4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- 5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
- 6. MAINTAIN MINIMUM 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS. 7. INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
- EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M43 DESIGNATION OF #3
- 9. STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
- 10. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER. 11. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE
- STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF. NOTES FOR CONSTRUCTION EQUIPMENT
- 1. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
- THE USE OF EQUIPMENT OVER MC-3500 CHAMBERS IS LIMITED: NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS. NO RUBBER TIRED LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
- WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE". 3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD

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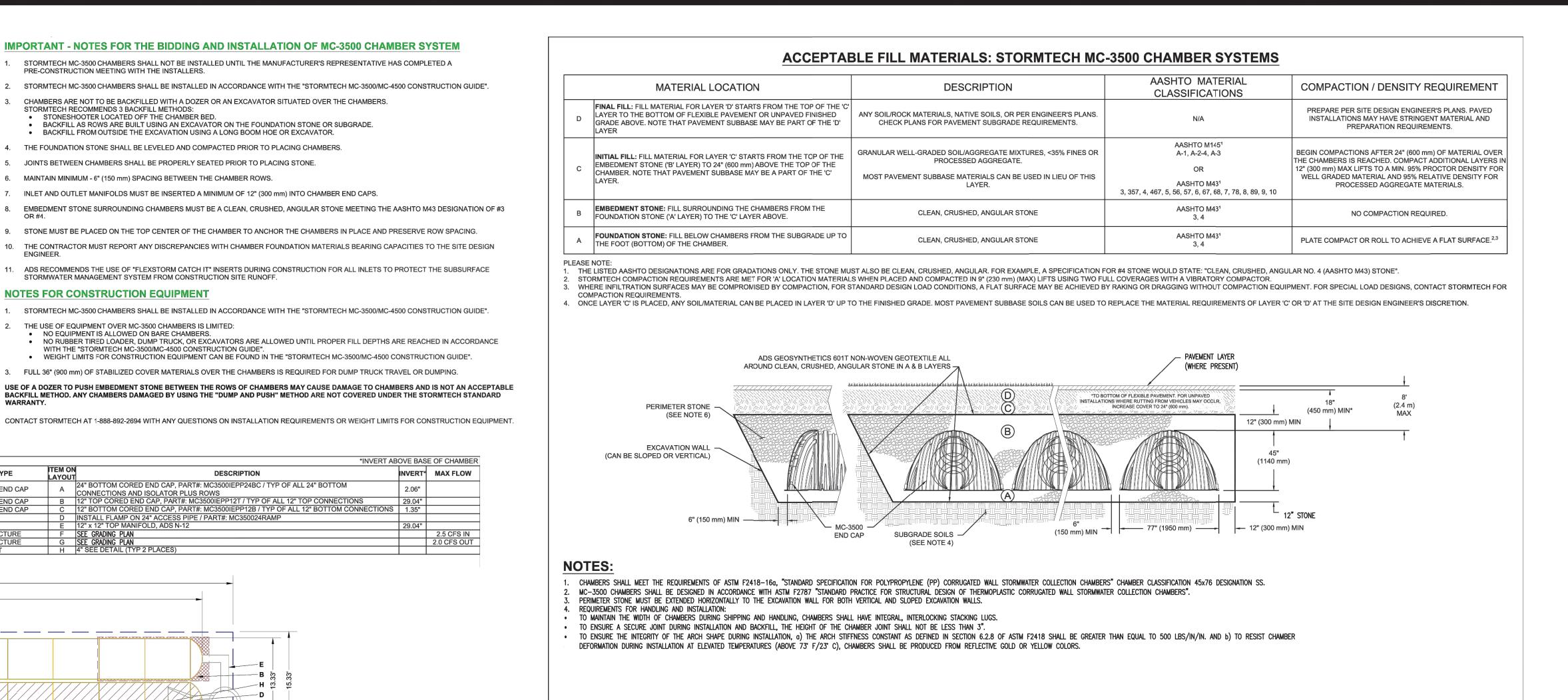


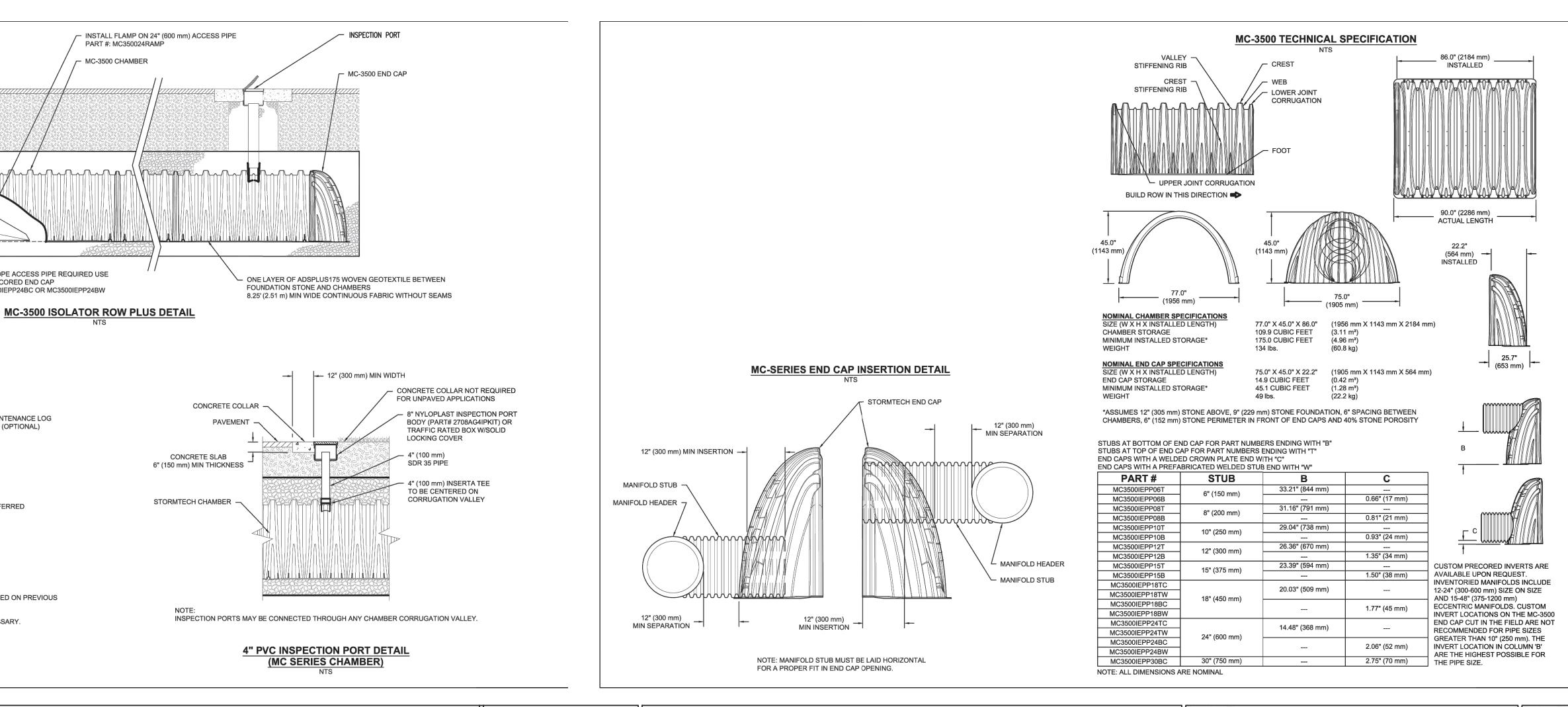
· 24" (600 mm) HDPE ACCESS PIPE REQUIRED USE

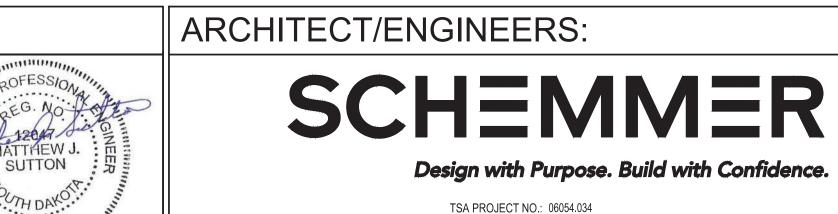
PART #: MC3500IEPP24BC OR MC3500IEPP24BW

FACTORY PRE-CORED END CAP

CONSULTANTS:



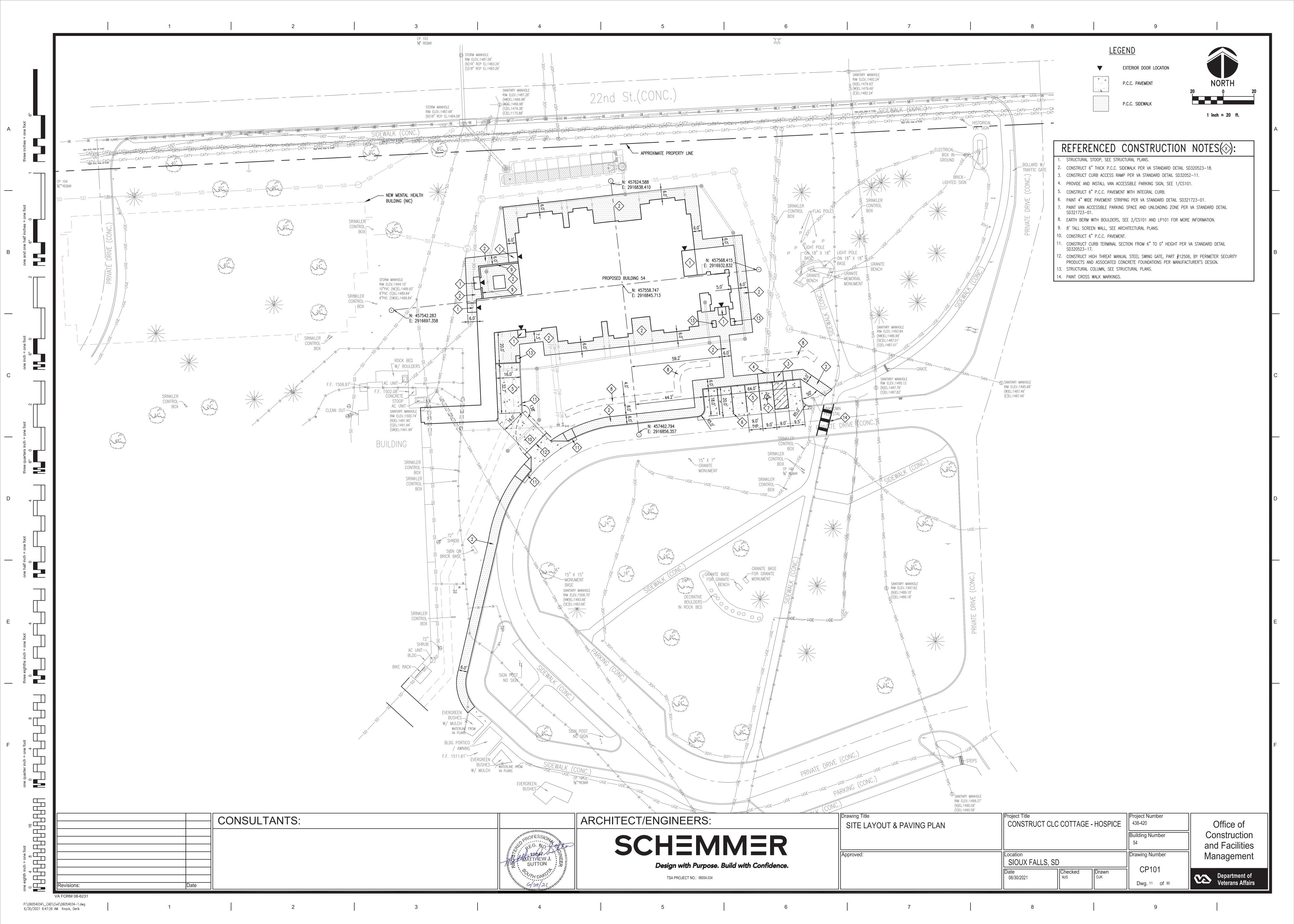


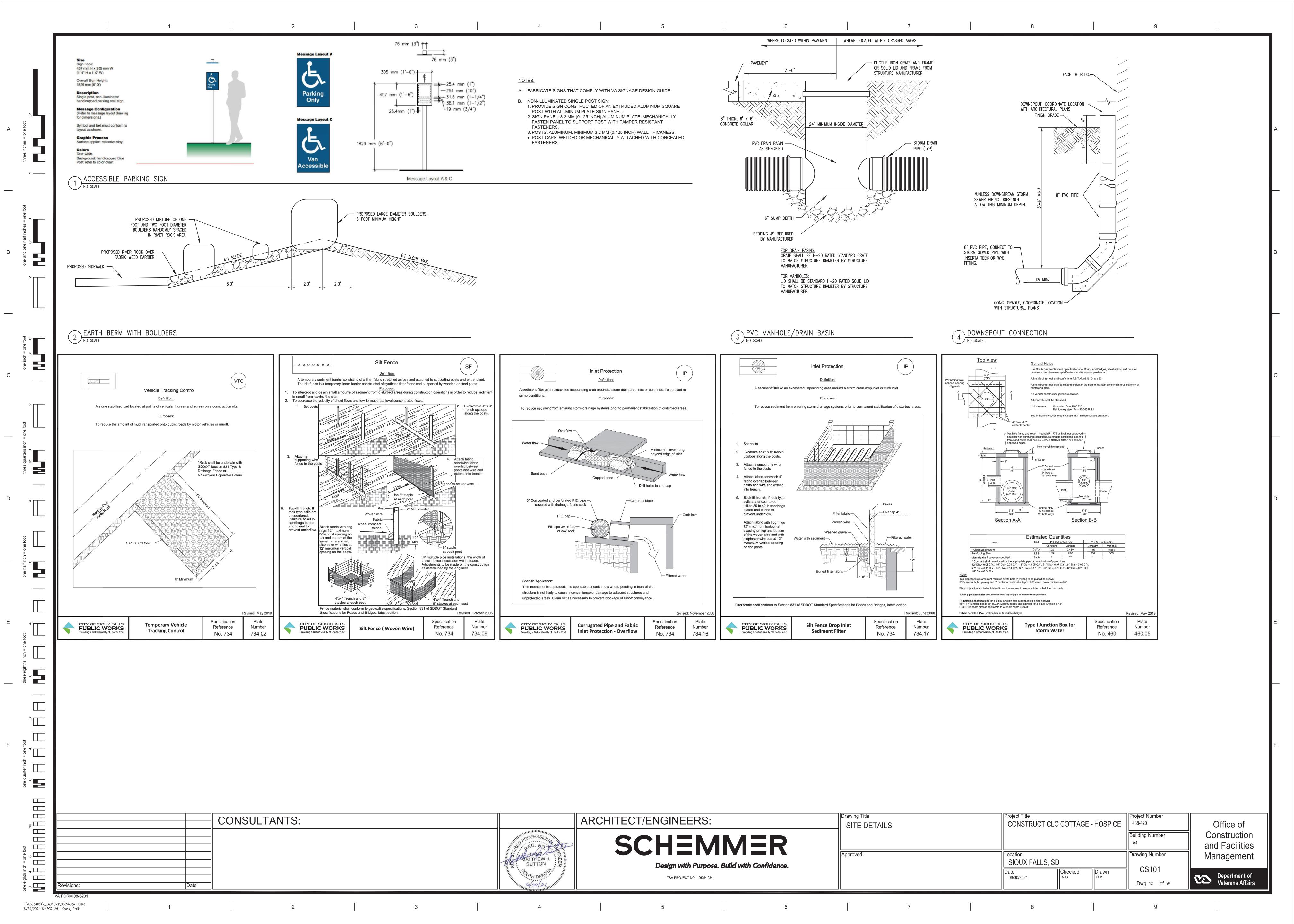


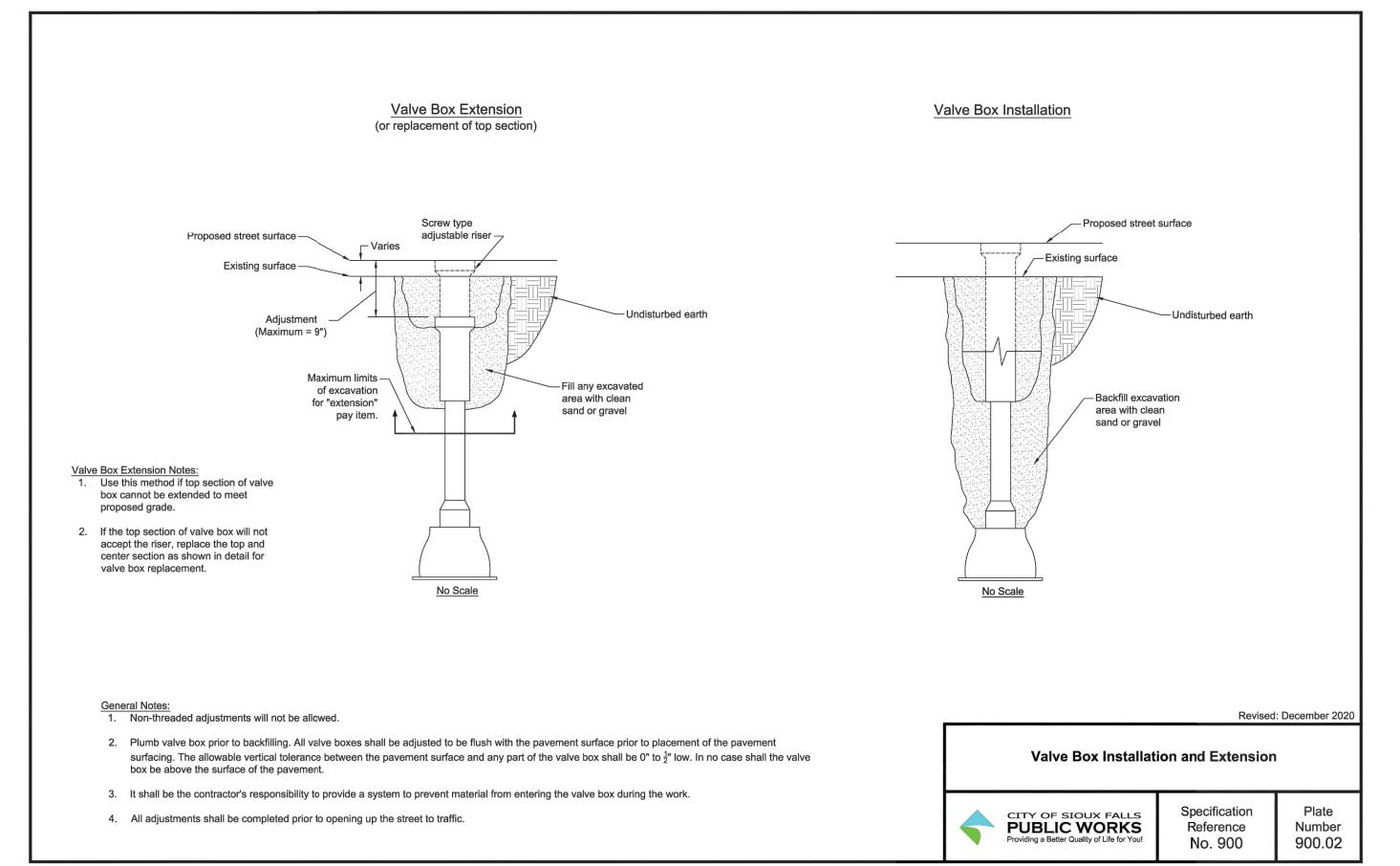
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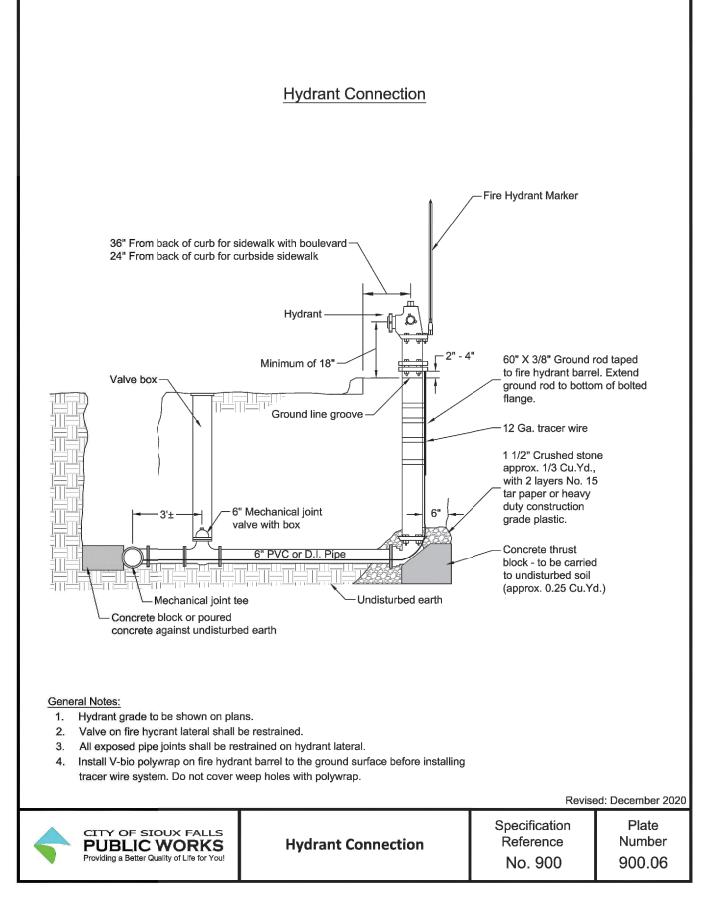
CONSTRUCT CLC COTTAGE - HOSPICE **UNDERGROUND STORMWATER** STORAGE **Building Number** Approved: Drawing Number SIOUX FALLS, SD CG104 Checked 06/30/2021 Dwg. 10 of 90

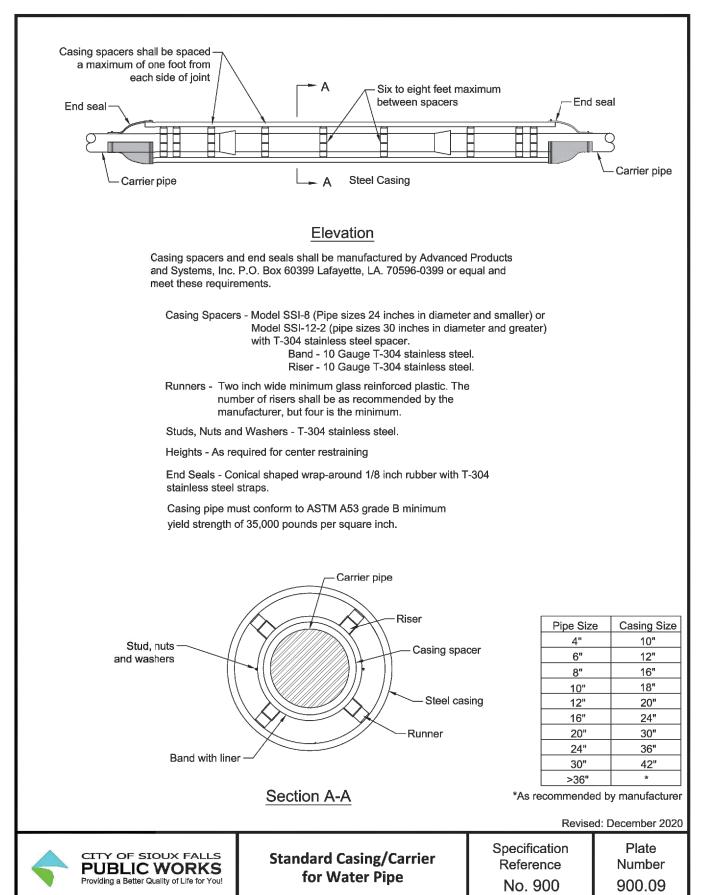
Office of Construction and Facilities Management Department of Veterans Affairs Department of

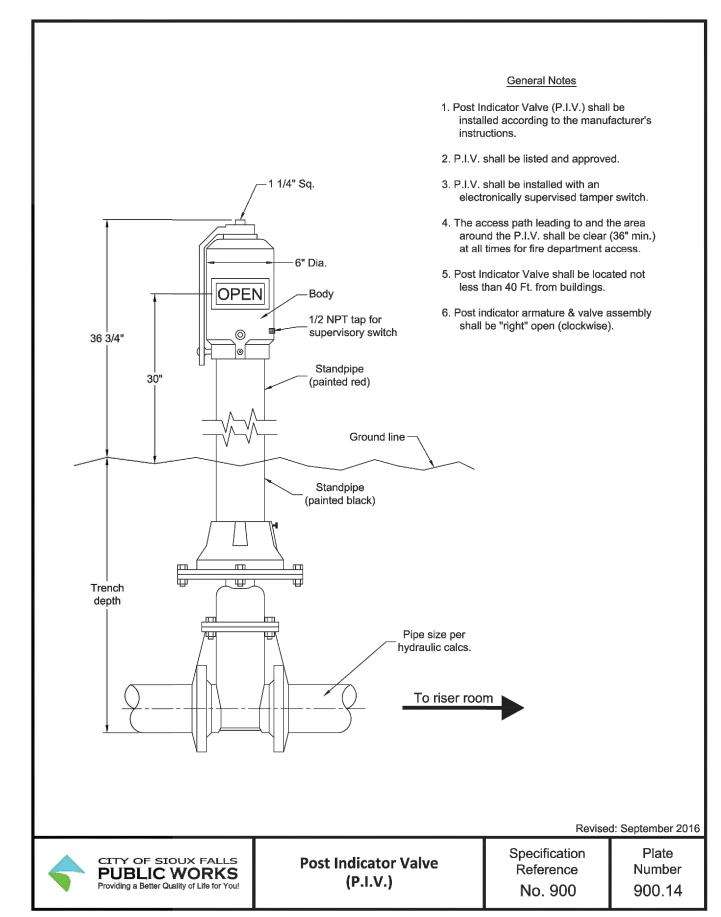


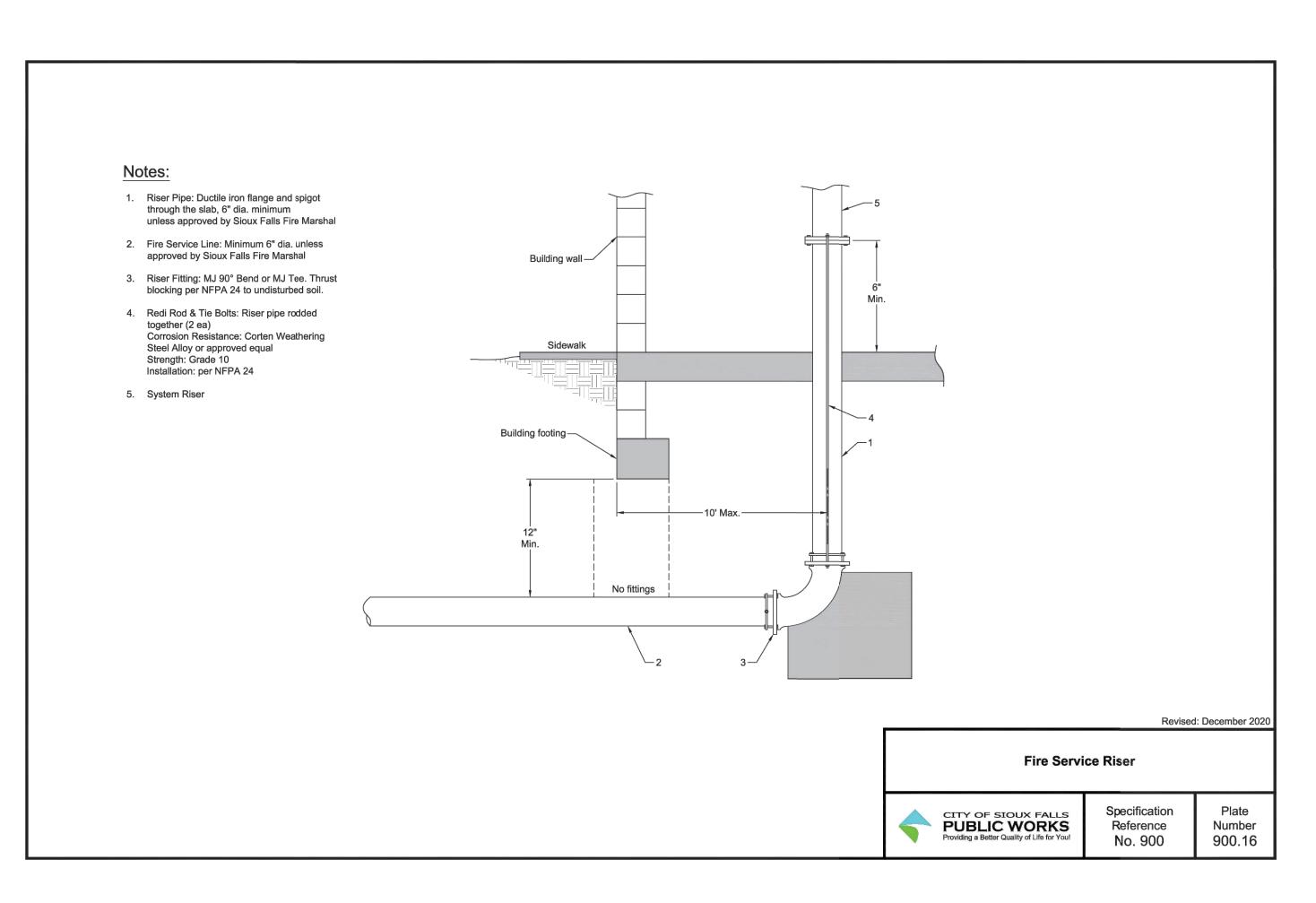






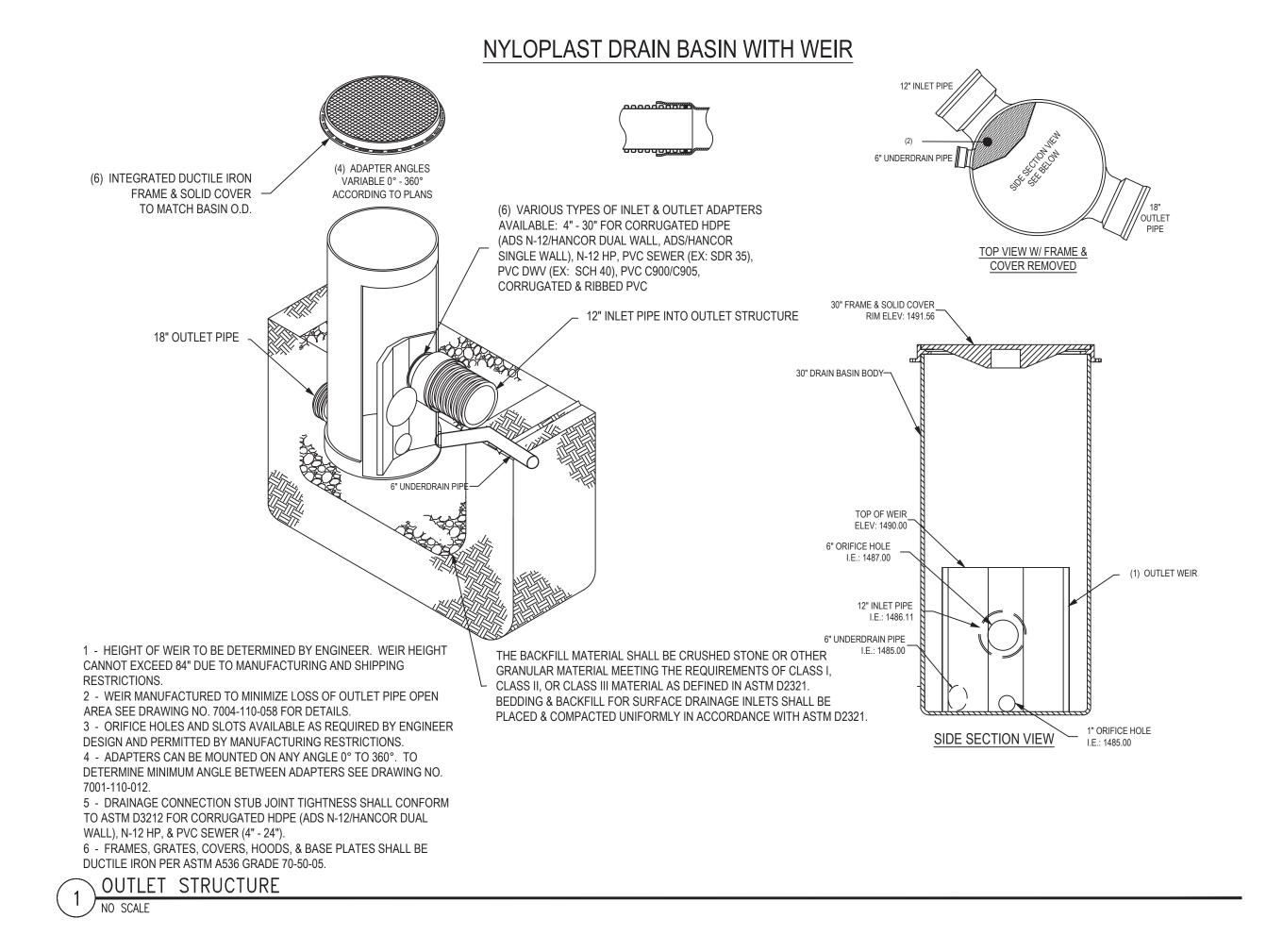




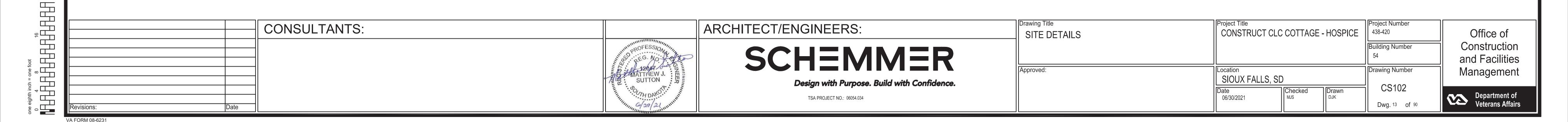


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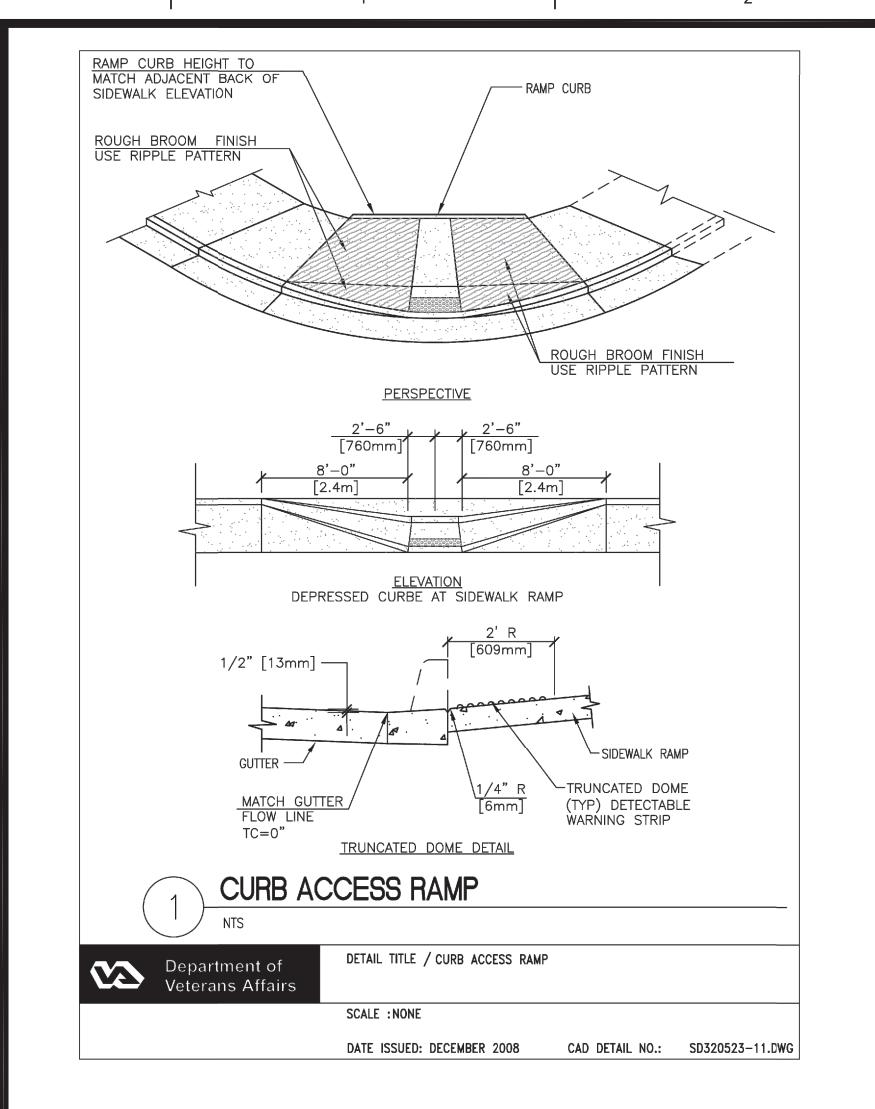
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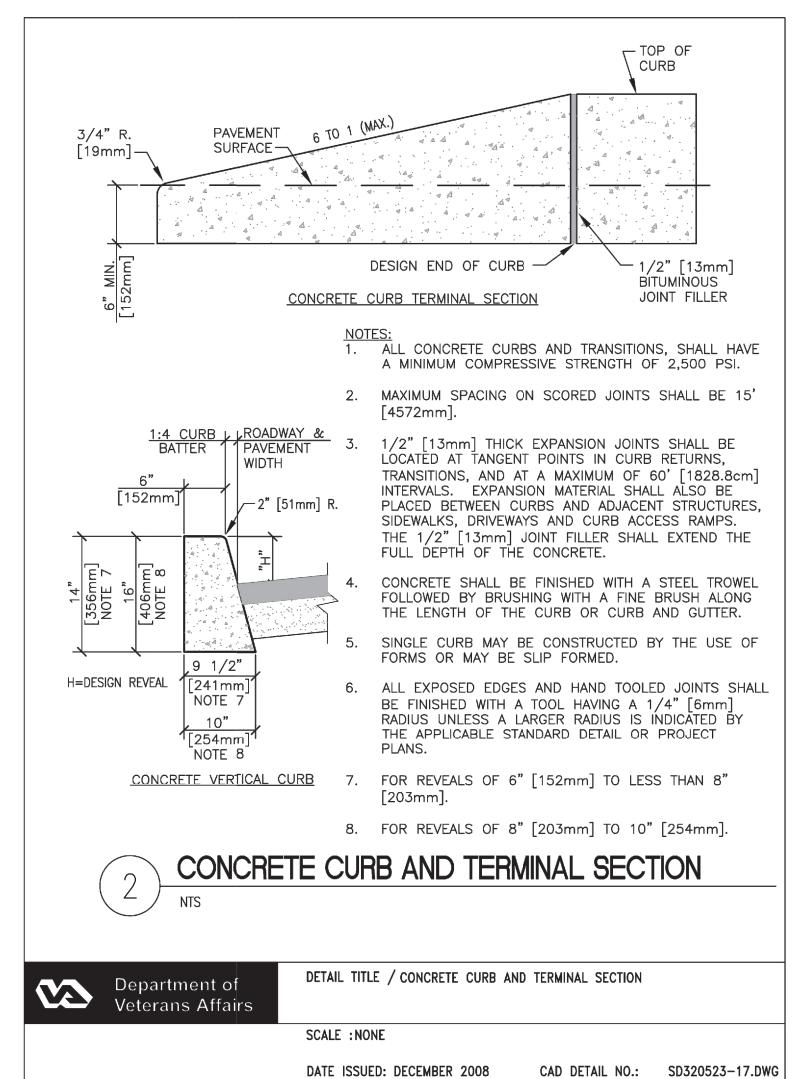


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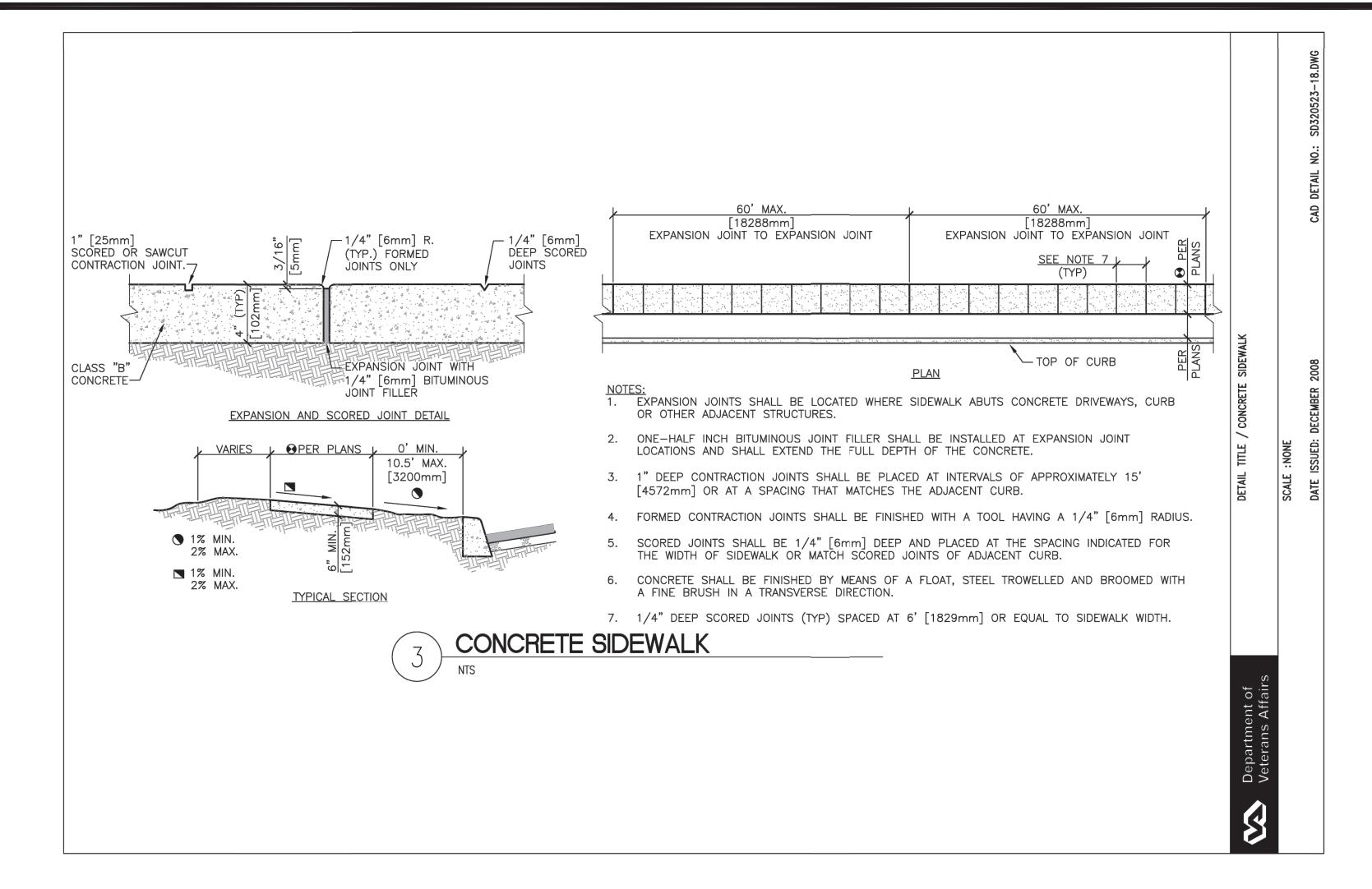


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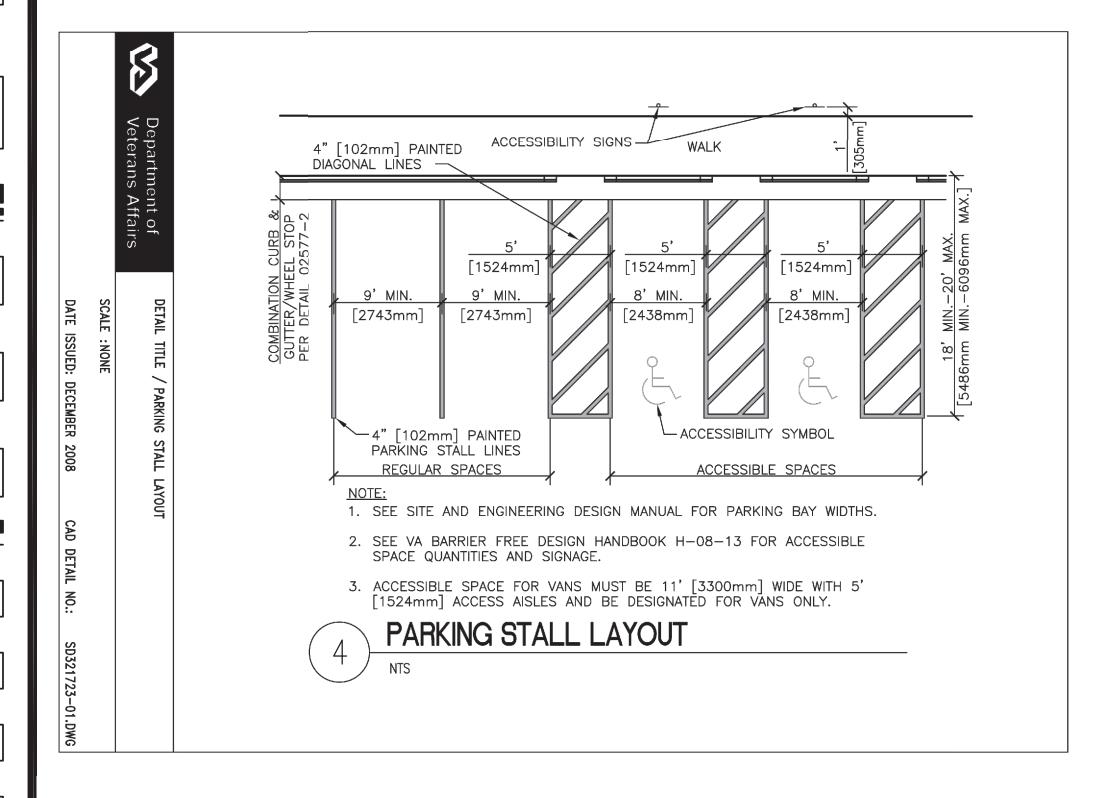




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