

REGION

CHARLTON

CAMDEN

(26)

BROOKS

DECATUR

minimizer in interstate highway number

CLINCH

**GENERAL NOTES:** Project Name: GPC NOAH'S ARK OPERATING Location: CLAYTON COUNTY LATITUDE: 33.493167°, LONGITUDE: -84.335316°

A. Project Description: Construction at the operating headquarters includes installation of gravity sanitary sewer pipe, pavement replacement and any associated minor

B. Owner Information Georgia Power Company (GPC) 205 Southfield Parkway Forest Park, GA 30297 CONTACT: Greg Gilreath

C. Operator & 24-hour Local Erosion and **Sedimentation Control Contact:** Bryan Harris (Georgia Power Company

D. Total Acreage / Disturbed Acreage Total Site Area: 12.6 Acres Total Disturbed Area: 0.97 Acres

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SEWER NOTES

**CONNECTIONS** 

1. NO UNAUTHORIZED PERSON(S) SHALL UNCOVER, MAKE ANY DOWNSPOUTS, FOUNDATION DRAINS, AREAWAY DRAINS, OR OTHER SOURCES OF SURFACE RUNOFF OR GROUNDWATER TO A BUILDING INDIRECTLY TO THE PUBLIC SANITARY SEWER UNLESS SUCH A CONNECTION IS APPROVED BY CCWA.

2. A SEPARATE AND INDEPENDENT BUILDING SEWER AND CONNECTION SHALL BE PROVIDED FOR EVERY BUILDING UNLESS OTHERWISE APPROVED. A SEPARATE AND INDEPENDENT BUILDING SEWER SHALL BE PROVIDED FOR EACH RESIDENTIAL UNIT OF MULTI-UNIT

DAMAGE THAT MAY BE DIRECTLY OR INDIRECTLY OCCASIONED BY THE INSTALLATION OF THE BUILDING SEWER.

ALL BUILDING SEWERS AND CONNECTIONS SHALL BE THE RESPONSIBILITY AND PROPERTY OF THE LANDOWNER; AND CCWA SHALL HAVE NO OWNERSHIP IN THE SAME AND NO RESPONSIBILITY FOR MAINTENANCE OF THE SAME.

5. ALL SUCH CONNECTIONS SHALL BE GAS-TIGHT AND WATERTIGHT.

### **BUILDING SEWER PERMITS**

THERE SHALL BE TWO (2) CLASSES OF BUILDING SEWER PERMITS: ONE SERVICE TO ESTABLISHMENTS PRODUCING INDUSTRIAL WASTES. IN A SPECIAL FORM FURNISHED BY THE CLAYTON COUNTY WATER AND TESTING SHALL BE MADE UNDER THE SUPERVISION OF THE BUILDING INSPECTOR OR HIS REPRESENTATIVE. WATER AND SEWER SERVICE SHALL NOT BE INSTITUTED UNTIL ALL FEES LEVIED BY CCWA

### APPLICABLE CODES

1. THE SIZE, MATERIALS OF CONSTRUCTION, METHODS OF CONSTRUCTION, SLOPE, AND ALIGNMENT OF ALL WATER AND WASTEWATER FACILITIES CONSTRUCTION SHALL CONFORM TO THE EXTENT THAT ANY CONFLICTING PROVISIONS EXIST IN THE

COUNTY OR THE PLUMBING CODE IN EFFECT IN CLAYTON COUNTY AS IT PRESENTLY EXISTS OR MAY BE AMENDED.

3. STANDARD BUILDING CODE IF IN EFFECT IN CLAYTON COUNTY OR THE BUILDINGCODE IN EFFECT IN CLAYTON COUNTY AS IT PRESENTLY EXISTS OR AS IT MAY BE AMENDED.

4. ONE AND TWO FAMILY DWELLING CODE IF IN EFFECT IN CLAYTON COUNTY OR THE DWELLING CODE IN EFFECT IN CLAYTON COUNTY AS IT PRESENTLY EXISTS OR AS IT MAY BE AMENDED.

5. THE CURRENT STANDARDS FOR RESIDENTIAL AND COMMERCIAL DEVELOPMENT IN CLAYTON COUNTY AS IT PRESENTLY EXISTS OR AS IT MAY BE AMENDED.

6. CLAYTON COUNTY CROSS-CONNECTION OR BACKFLOW PREVENTION PROGRAM IF IN EFFECT IN CLAYTON COUNTY AS IT PRESENTLY EXISTS OR AS IT MAY BE AMENDED.

7. WATER POLLUTION CONTROL FEDERATION MANUAL OF PRACTICE NO. 9, LATEST EDITION (FOR WASTEWATER SYSTEM CONSTRUCTION).

8. AMERICAN WATER WORKS ASSOCIATION STANDARD SPECIFICATIONS C-100 THROUGH C-900, LATEST EDITIONS (FOR WATER SYSTEM CONSTRUCTION) .

# ADDITIONAL NOTES:

AEC JOB # 18-4190.20

1. THE WATER DISTRIBUTION SYSTEM AND/OR SANITARY SEWER SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS CONTAINED WITHIN THE CCWA DOCUMENT TITLED, STANDARD SPECIFICATIONS FOR WATER DISTRIBUTION SYSTEMS AND SANITARY SEWER SYSTEMS, DATED 01 JUNE 2001.

2. DETECTION TAPE OR WIRE SHALL BE INSTALLED ABOVE ALL NON-FERROUS PIPE AND ALL FERROUS PIPE HAVING A BURY DEPTH OF SIX (6) FEET OR MORE. MYLAR DETECTION TAPE OR FERROUS WIRE SHALL BE INSTALLED TWO (2) FEET BELOW FINISHED GRADE SUCH THAT SEWER AND/OR LATERAL CAN BE DETECTED AFTER BURIAL.

Know what's below. Call before you dig. Dial 811 or Call 1-800-282-7411

CONTINUE ON TARA BLVD.

TURN LEFT ONTO AMERICAN LEGION WAY.

1704 NOAH'S ARK ROAD IS LOCATED ON THE LEFT.

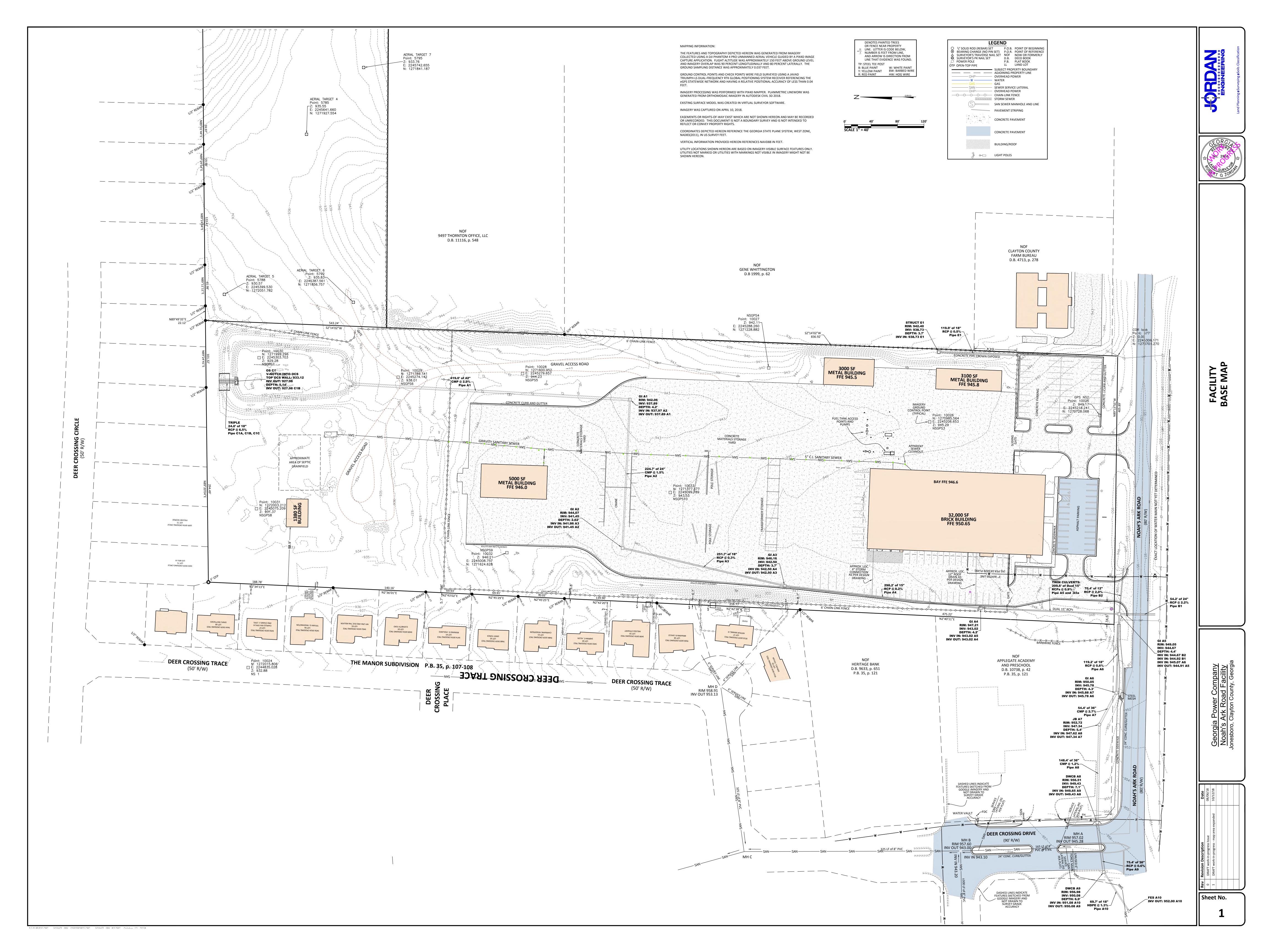
 TURN RIGHT ONTO SOUTH MAIN STREET. TURN LEFT ONTO NOAH'S ARK ROAD.

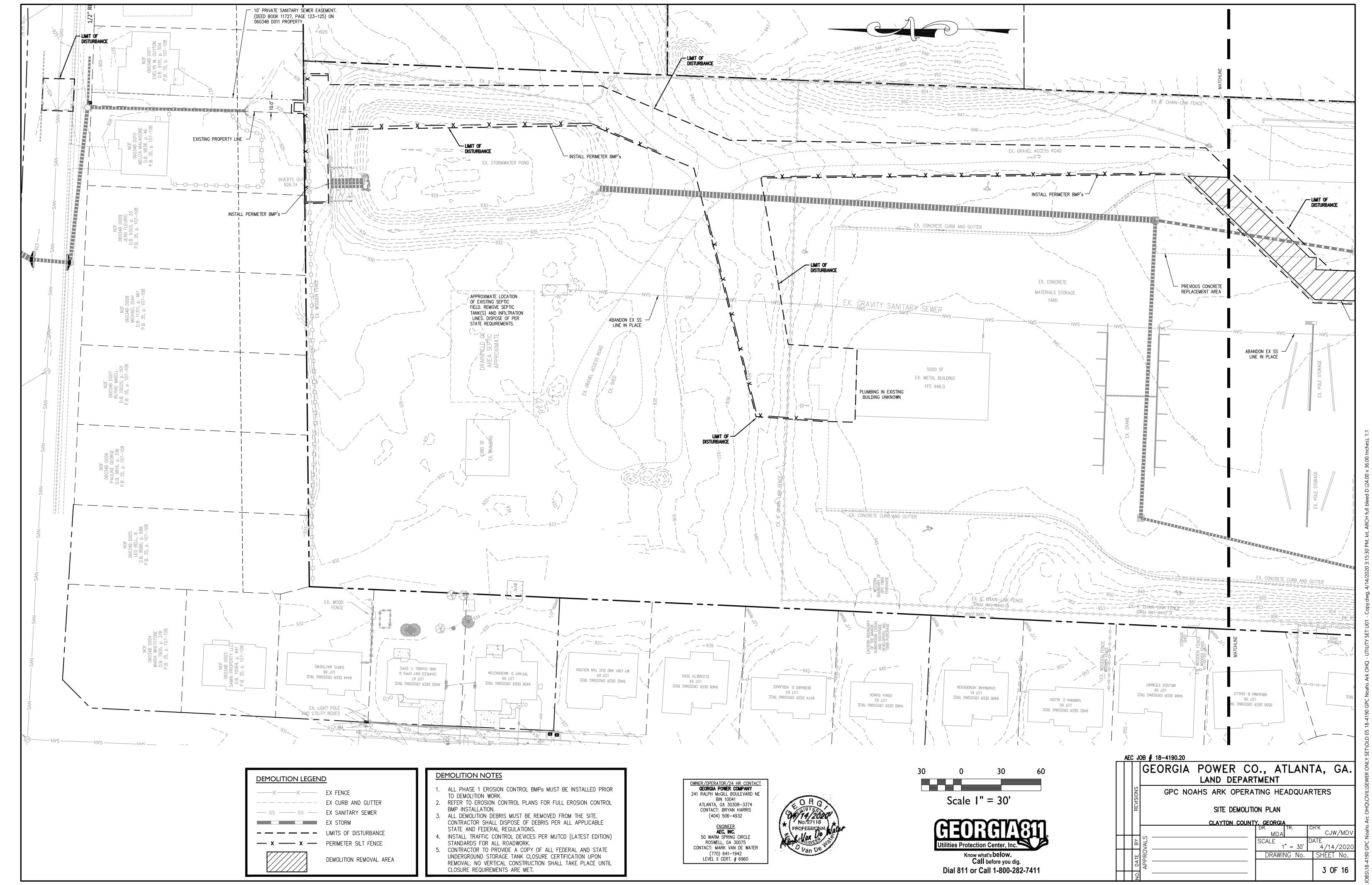


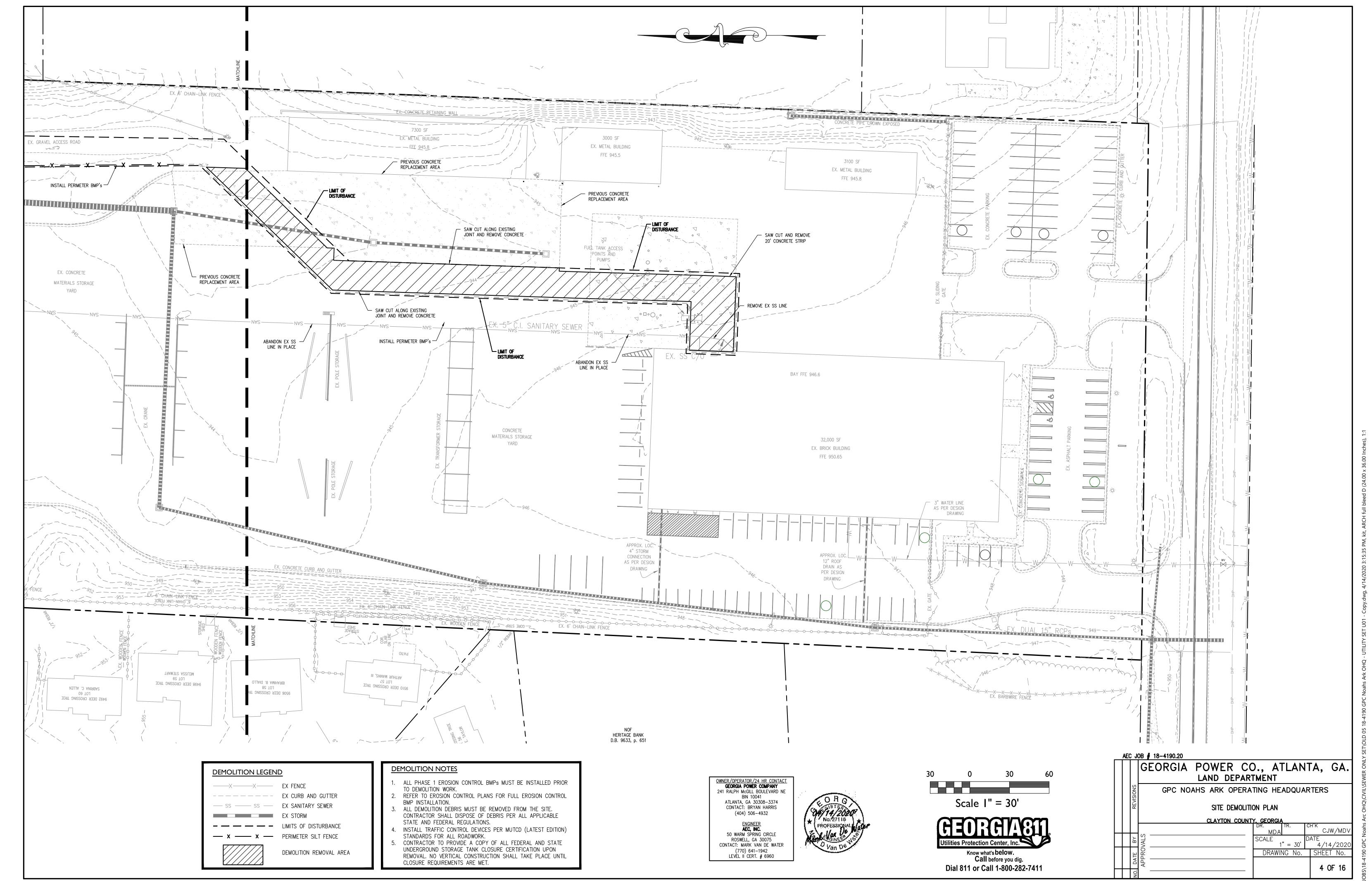


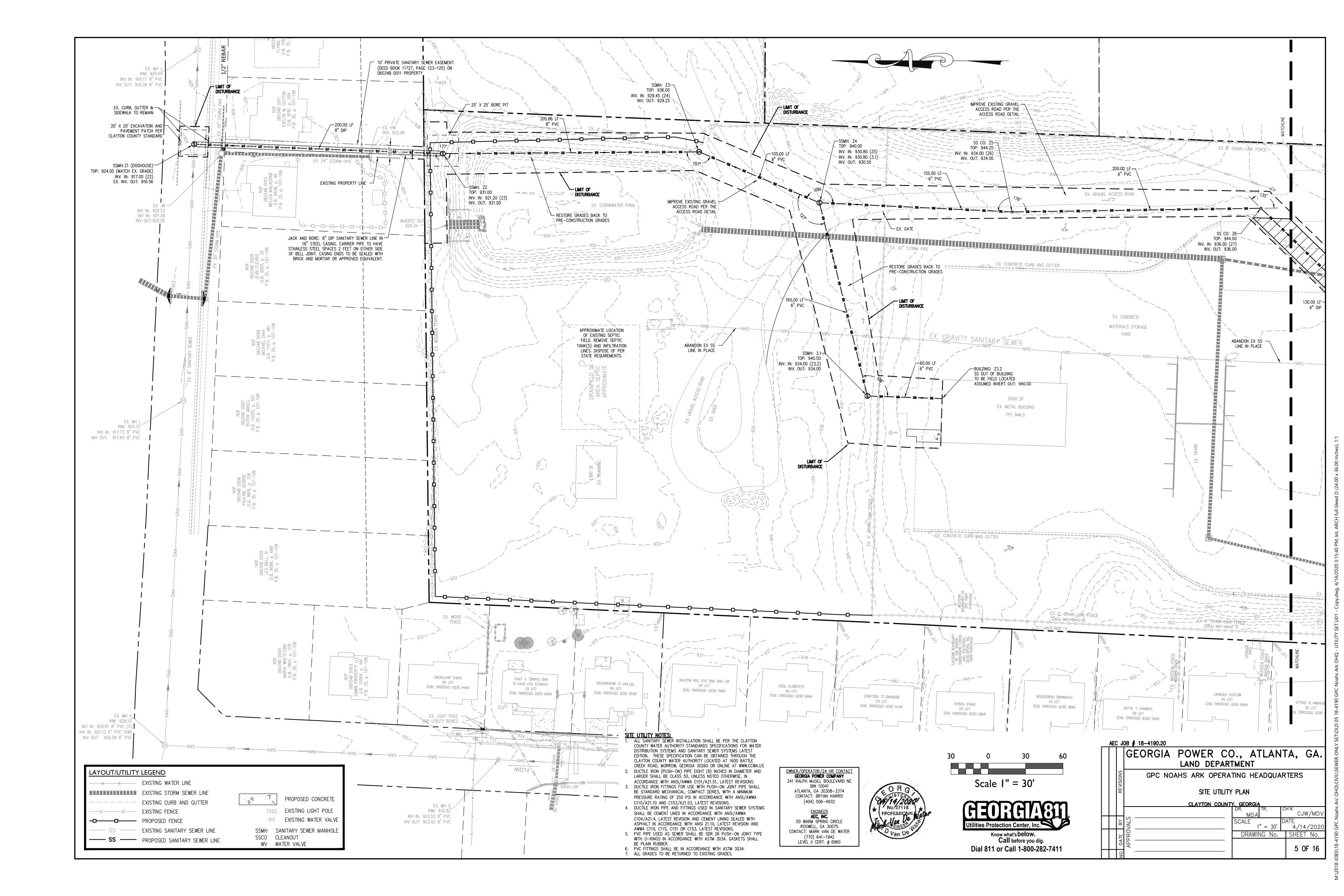
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IONS	GPC NOAHS ARK OPERATING HEADQUARTERS							
REVISIONS	COVER							
	CLAYTON COUNTY, GEORGIA							
	DR. TR. CH'K CJW/MDV							
Β	SCALE DATE NTS 4/14/2020							
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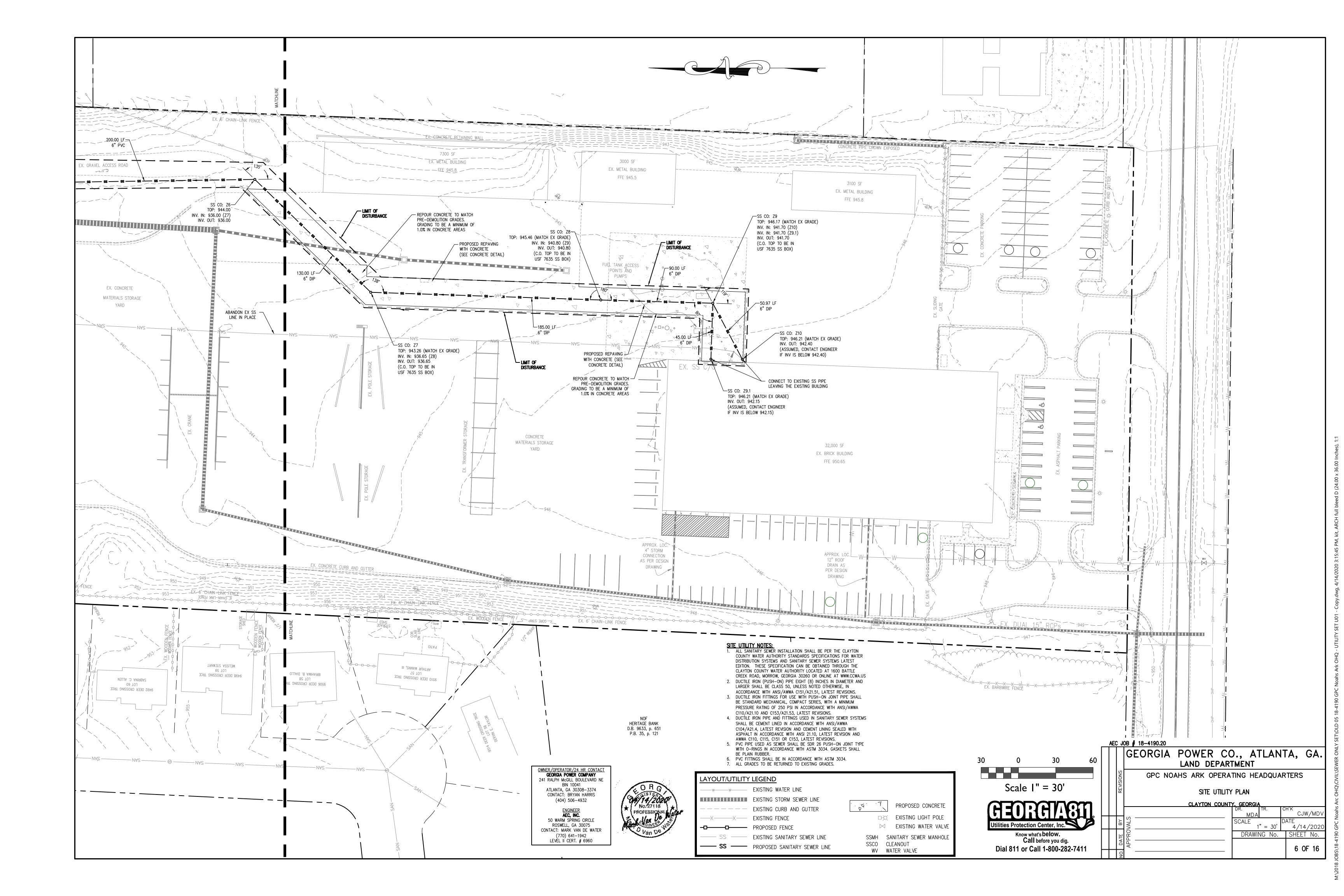
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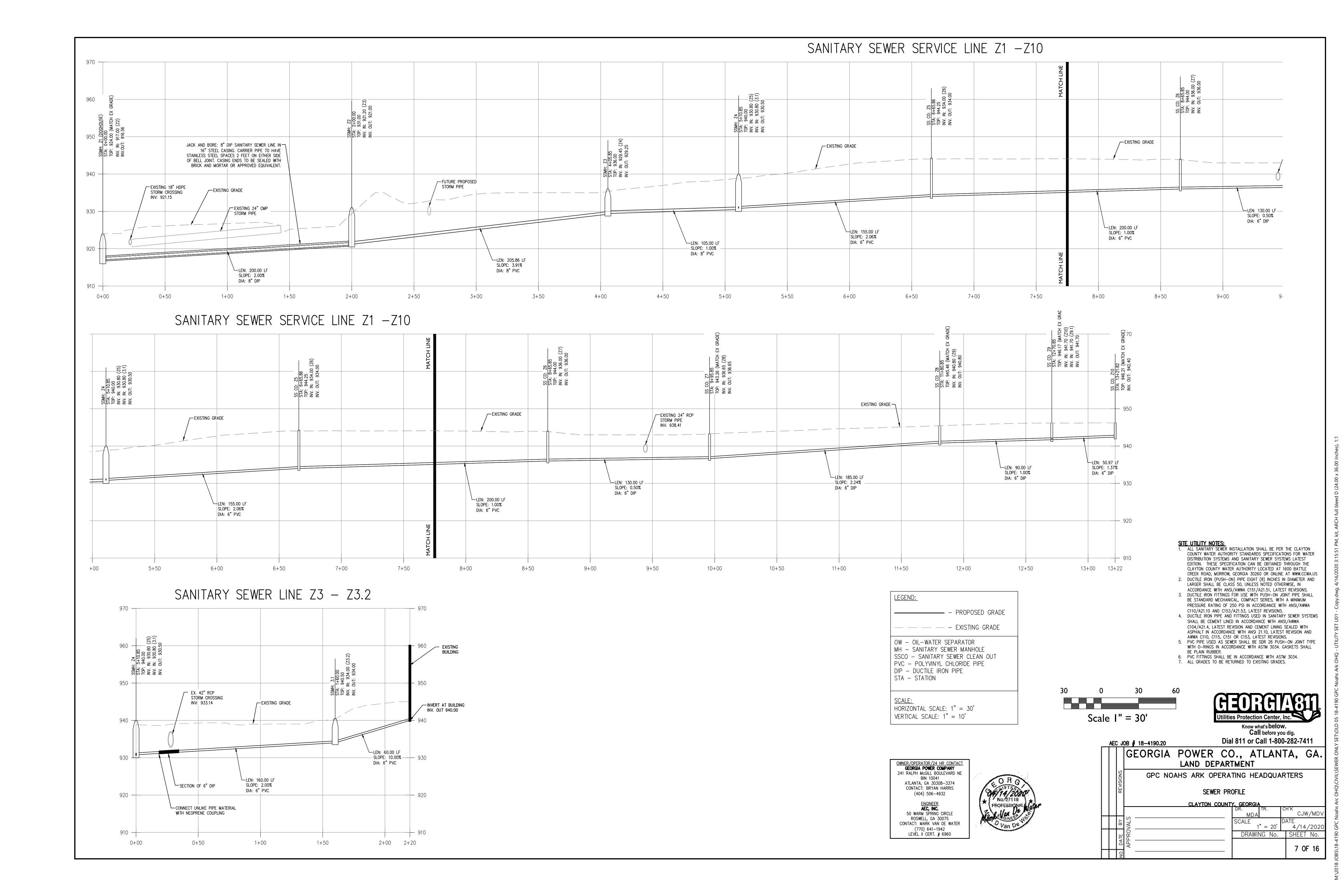


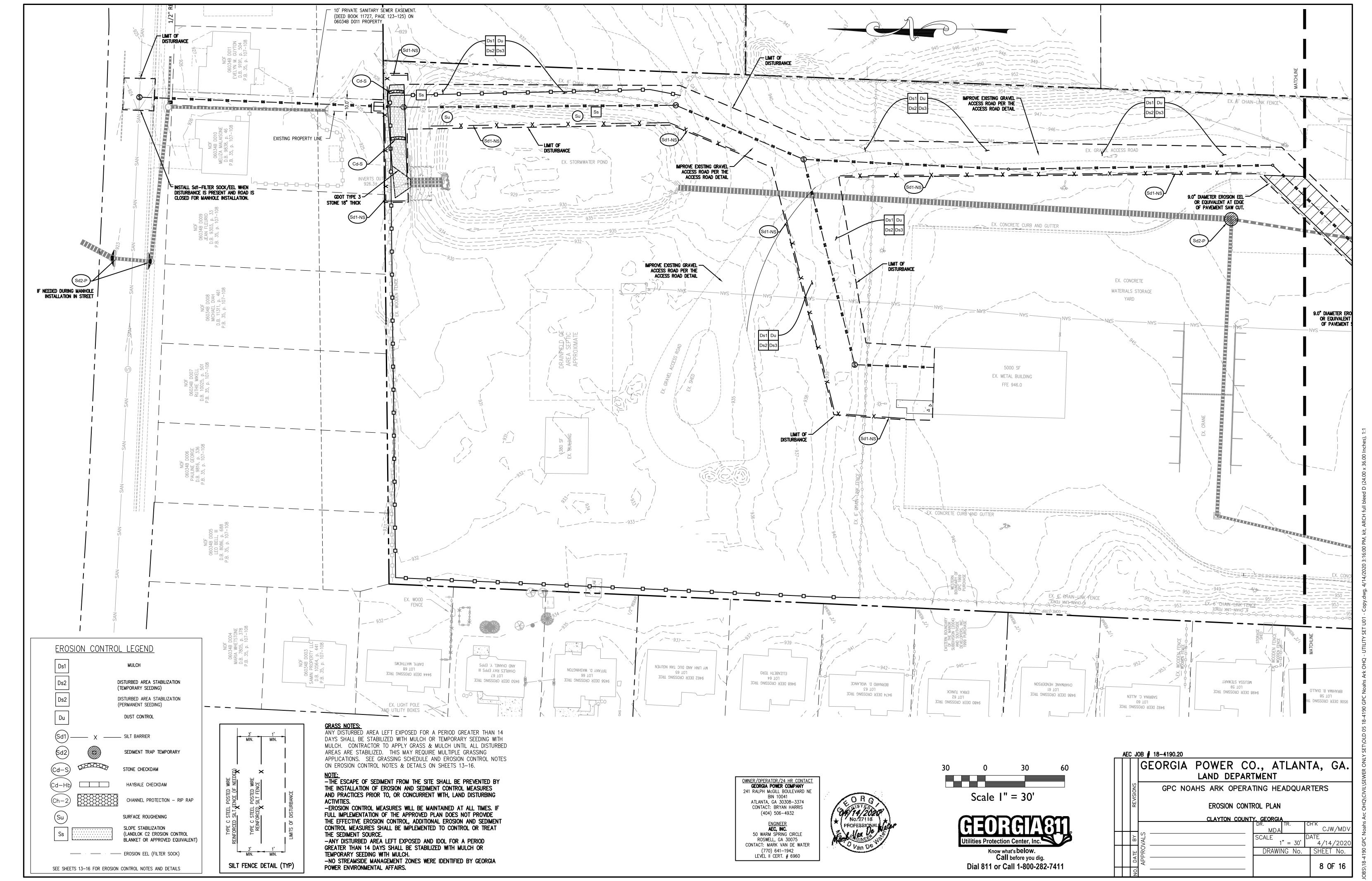


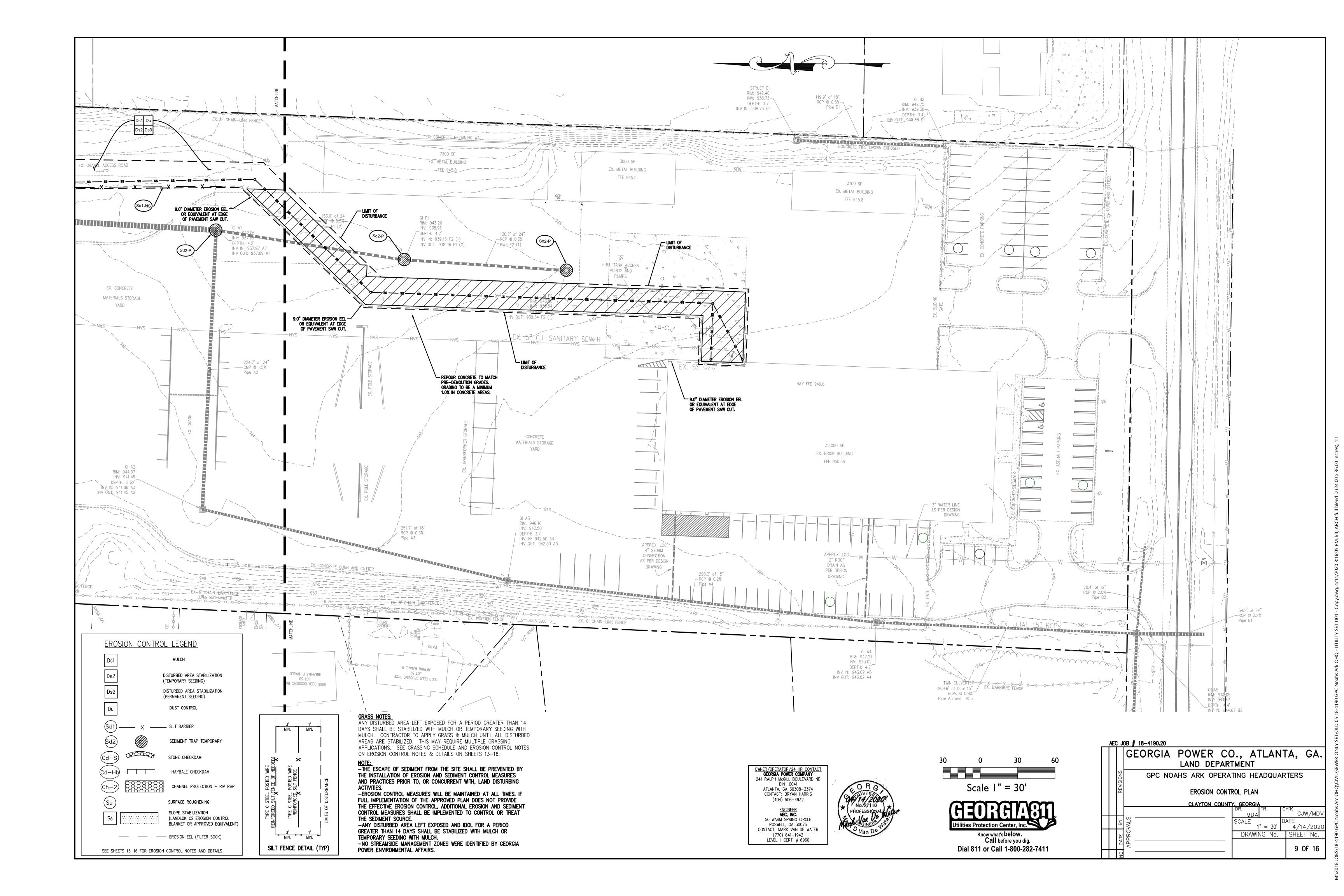


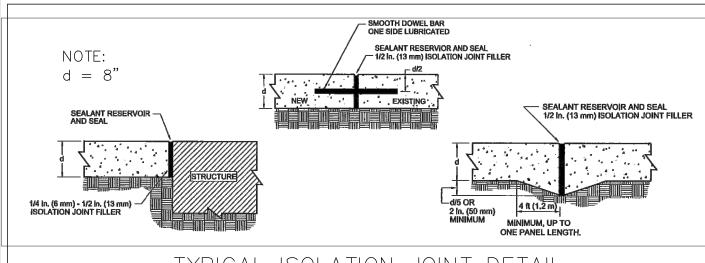




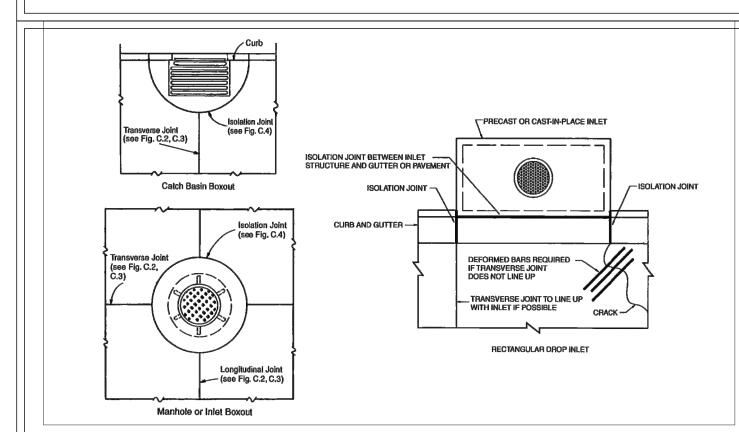






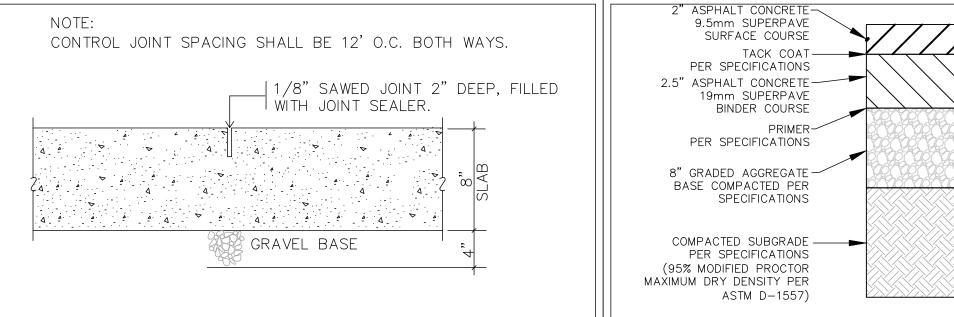


TYPICAL ISOLATION JOINT DETAIL

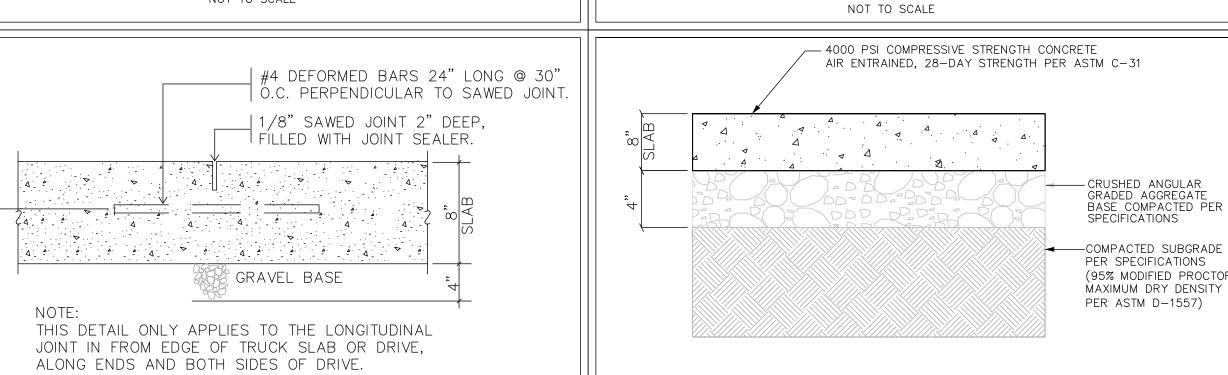


TYPICAL ISOLATION JOINT AROUND FIXTURES DETAIL

NOT TO SCALE



CONTROL JOINT (WITHOUT REBAR) DETAIL NOT TO SCALE

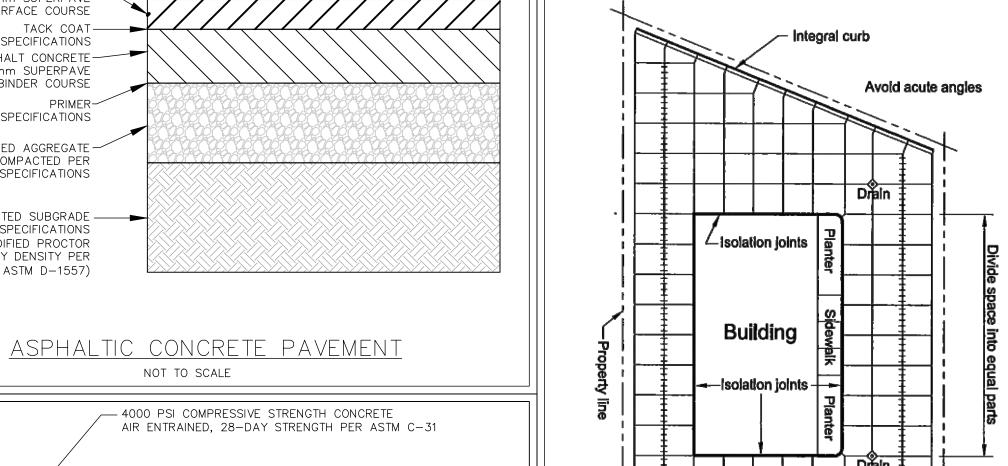




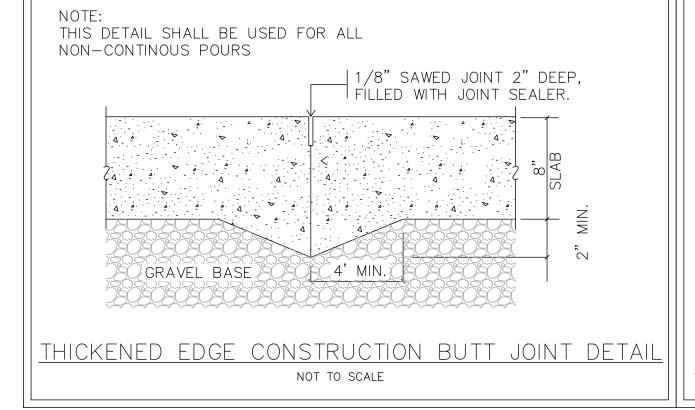
COMPACTED SUBGRADE PER SPECIFICATIONS

(95% MODIFIED PROCTOR

MAXIMUM DRY DENSITY PER ASTM D-1557)

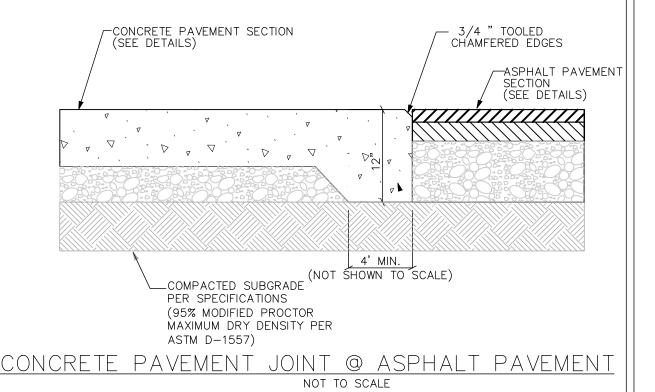


TYPICAL JOINT LAYOUT DIAGRAM



TIED BUTT JOINT DETAIL

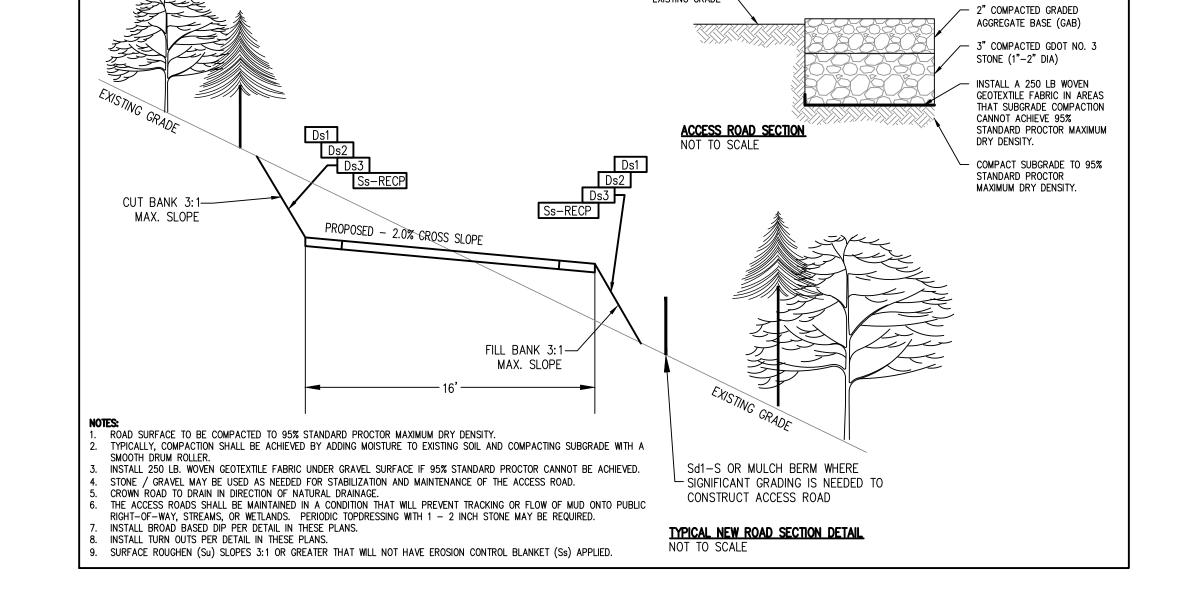
NOT TO SCALE





- . REFER TO PROJECT SPECIFICATIONS FOR ADDITIONAL NOTES, DETAILS, AND REQUIREMENTS.
- REFER TO GEOTECHNICAL ENGINEERING REPORT PREPARED FOR THIS PROJECT. 3. CONCRETE PAVEMENT DESIGN PER ACI STD. 330R-08; CBR=3, MOR=600 PSI, TRAFFIC CATEGORY D, ADTT = 700, 20-YEAR DESIGN LIFE SPAN.
- 4. CONCRETE CONTRACTION (CONTROL) JOINT SPACING SHALL BE 12' O.C. EACH WAY (TYP.).
- 5. FOR CONCRETE PAVEMENT, INSTALL TIE BARS ON THE FIRST LONGITUDINAL JOINT FROM THE PAVEMENT EDGE TO KEEP THE OUTSIDE SLAB FROM SEPARATING FROM THE PAVEMENT. TIE BARS ARE NOT REQUIRED AT INTERIOR JOINTS OR OTHER AREAS CONFINED BY SURROUNDING SLABS.
- . FOR CONCRETE PAVEMENT, INSTALL CONSTRUCTION JOINTS FOR NON-CONTINUOUS POURS. FOR CONCRETE PAVEMENT, INSTALL ISOLATION JOINTS AS REQUIRED PER TYPICAL DETAILS.
- . MOISTURE—DENSITY DETERMINATIONS SHOULD BE PERFORMED FOR EACH SOIL TYPE USED, TO PROVIDE DATA NECESSARY
- FOR QUALITY ASSURANCE TESTING. THE NATURAL MOISTURE CONTENT AT THE TIME OF COMPACTION SHOULD BE WITHIN MOISTURE CONTENT LIMITS, WHICH WILL ALLOW THE REQUIRED COMPACTION TO BE OBTAINED. THE CONTRACTOR SHOULD BE PREPARED TO INCREASE SOIL WATER CONTENT.
- 9. THE FILL SHOULD BE PLACED IN THIN LIFTS (NOT TO EXCEED 9 INCHES) AND THEN COMPACTED. THE FILL (BOTH STONE AND SOIL) SHOULD BE COMPACTED TO AT LEAST 95% OF THE MATERIAL'S MAXIMUM STANDARD PROCTOR DRY DENSITY (ASTM D-698-78). NON STRUCTURAL AREAS SHOULD BE COMPACTED TO AT LEAST 95% OF STANDARD PROCTOR MAXIMUM DRY DENSITY. GEOTECHNICAL EVALUATION SHOULD SUPERCEDE THESE MINIMUM RECOMMENDATIONS.

AEC JOB # 18-4190.20

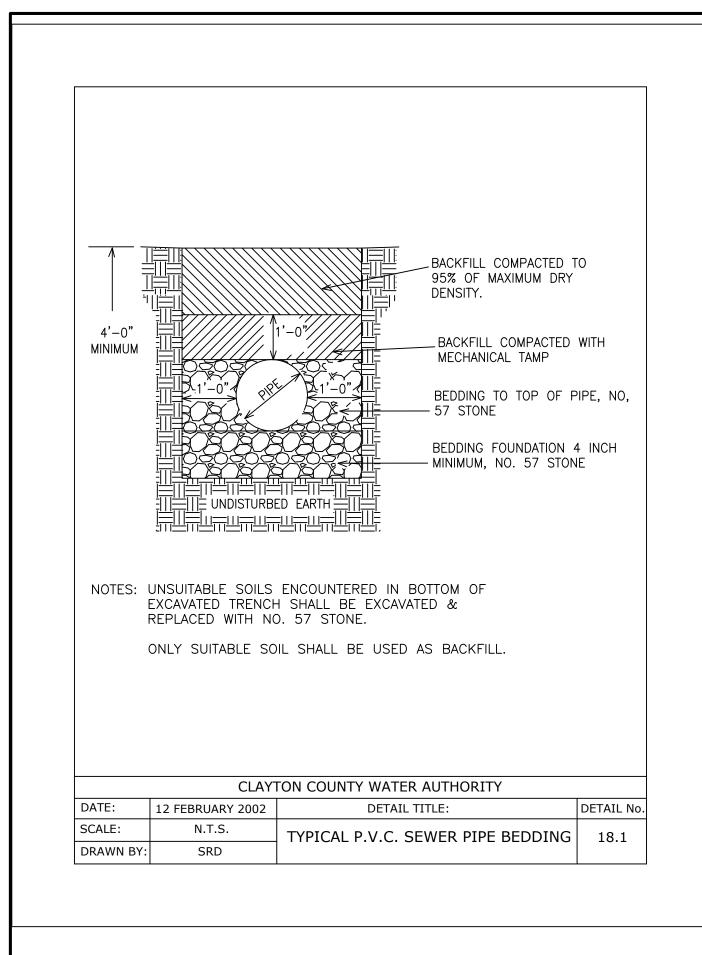


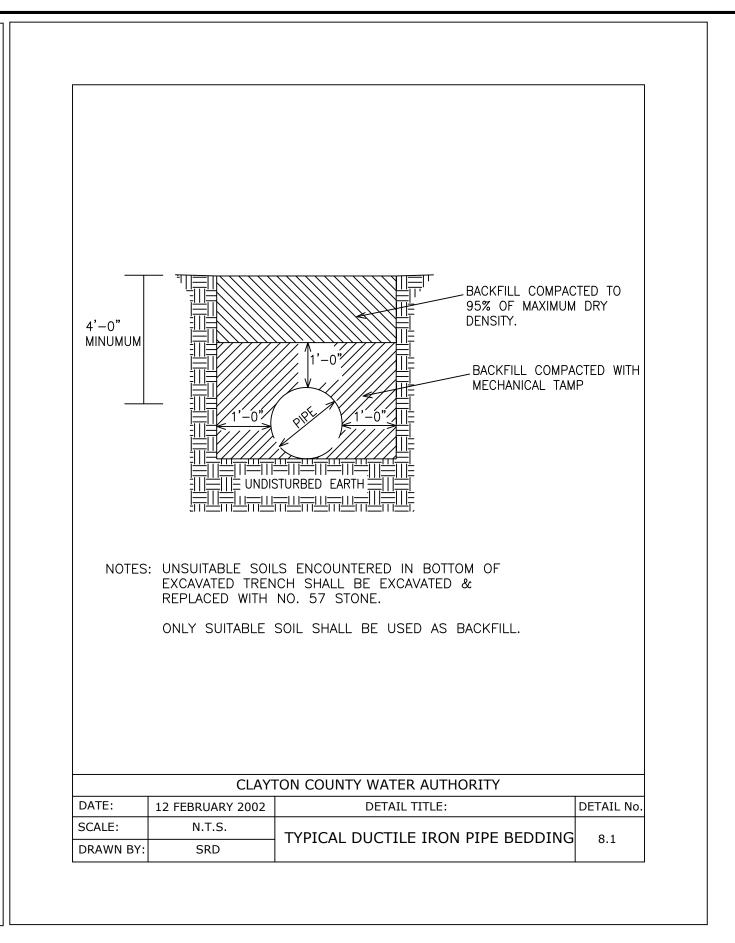


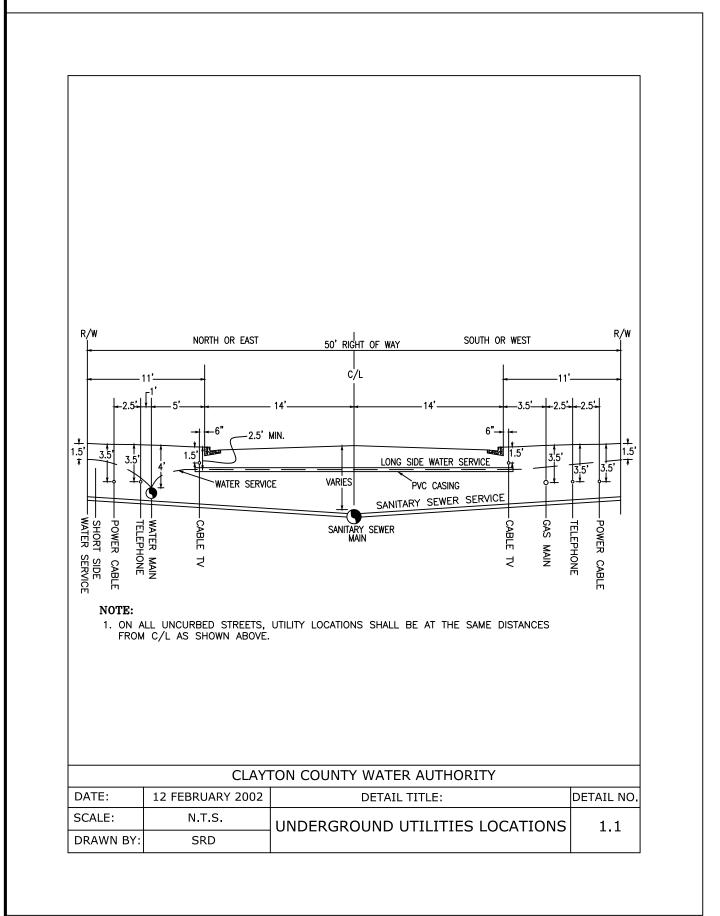


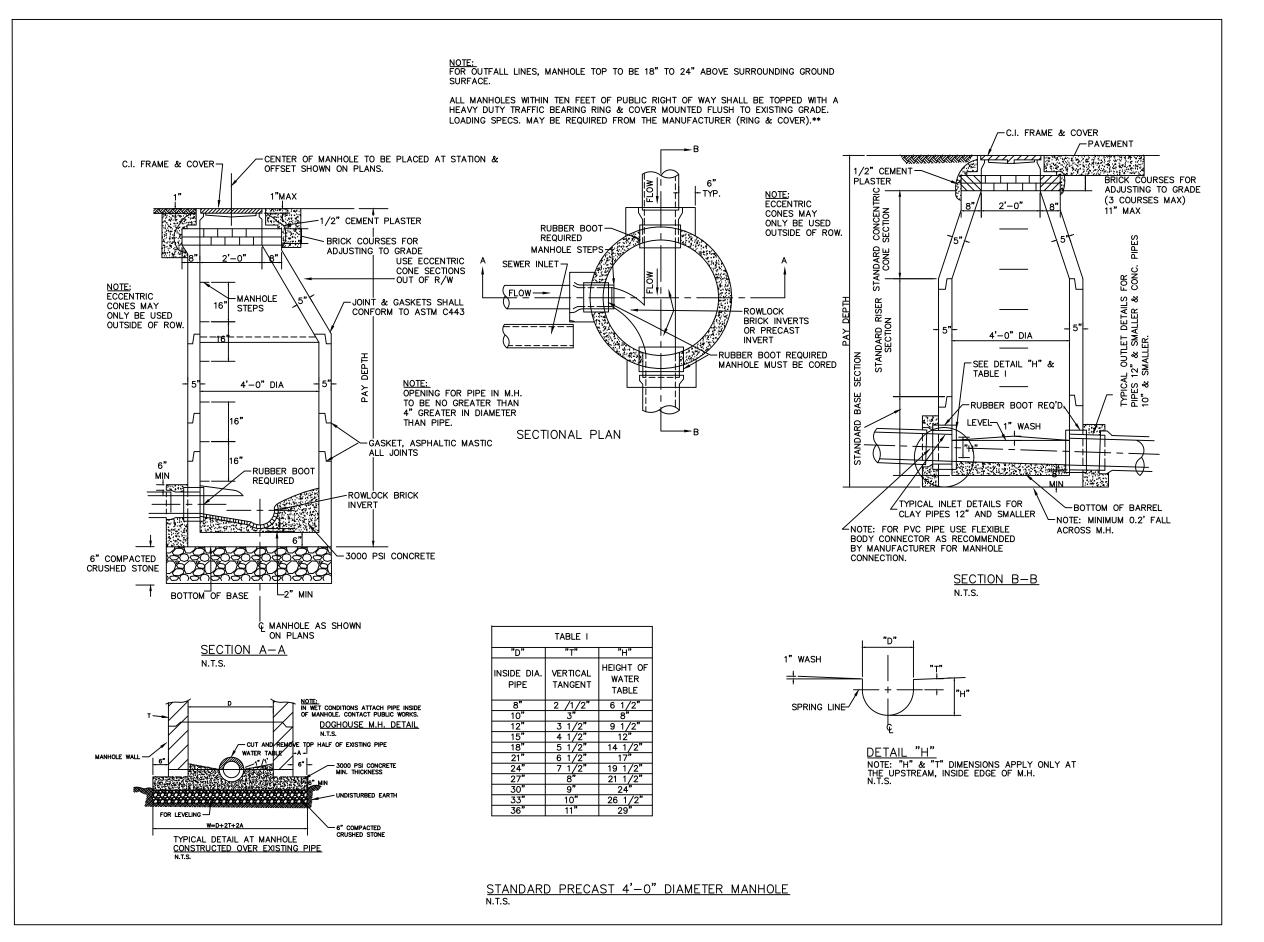


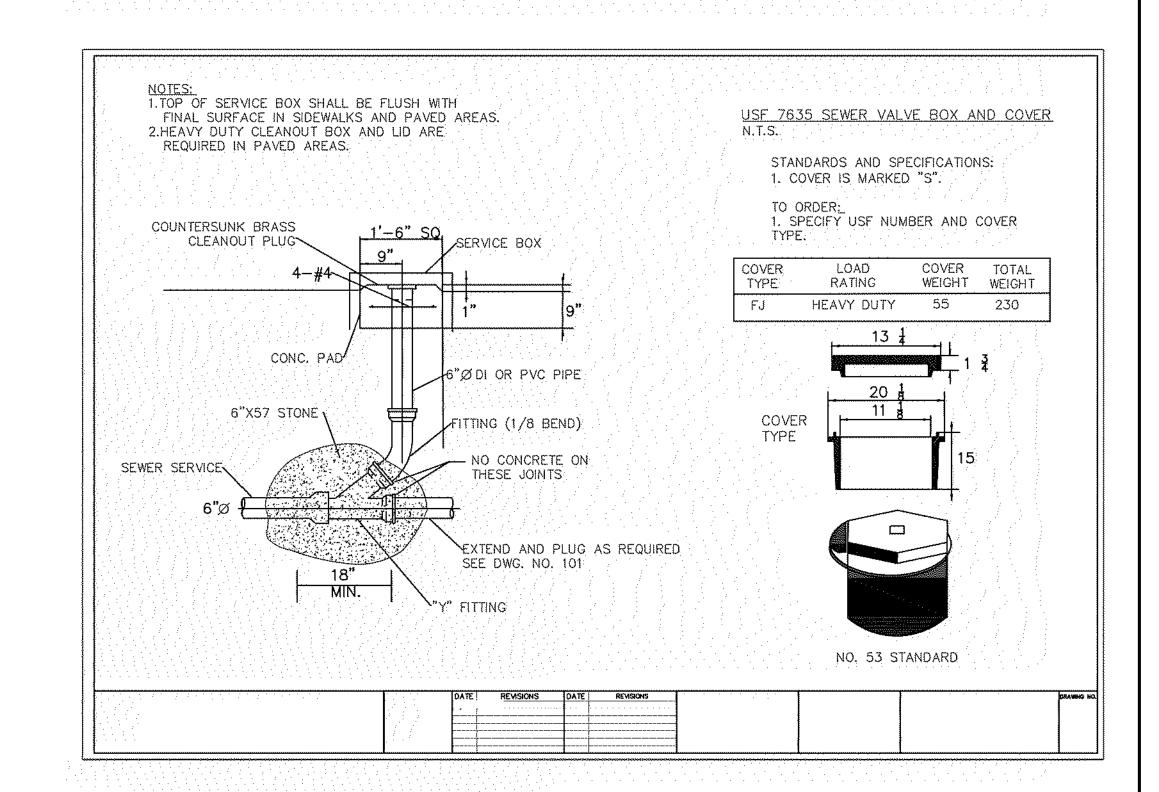
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		CLAYTON COUNTY, GEORGIA	
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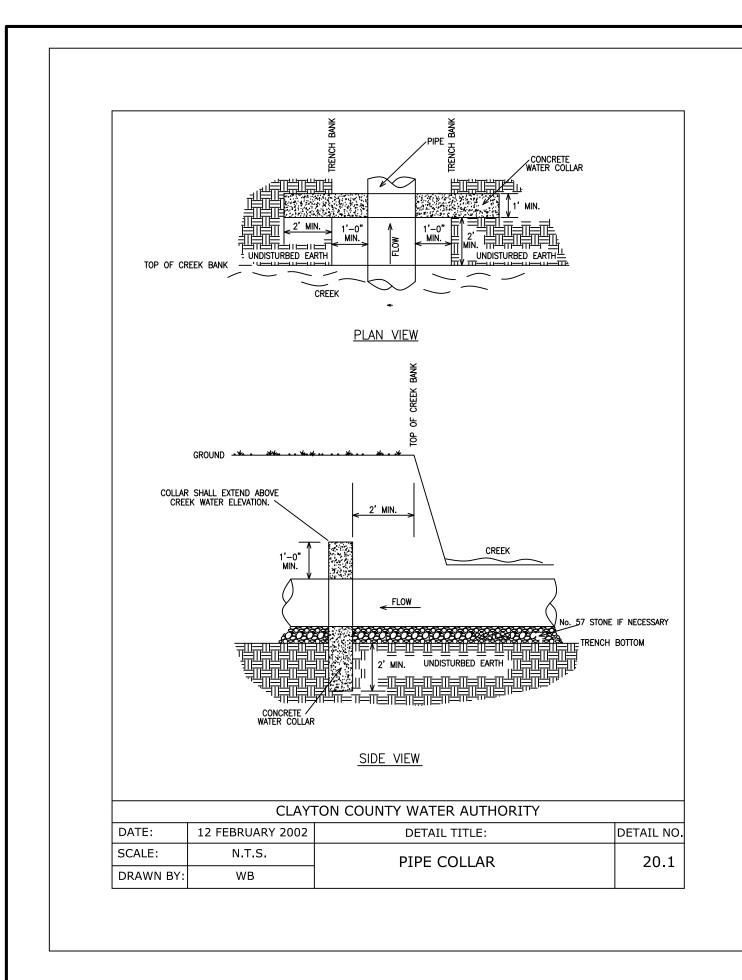
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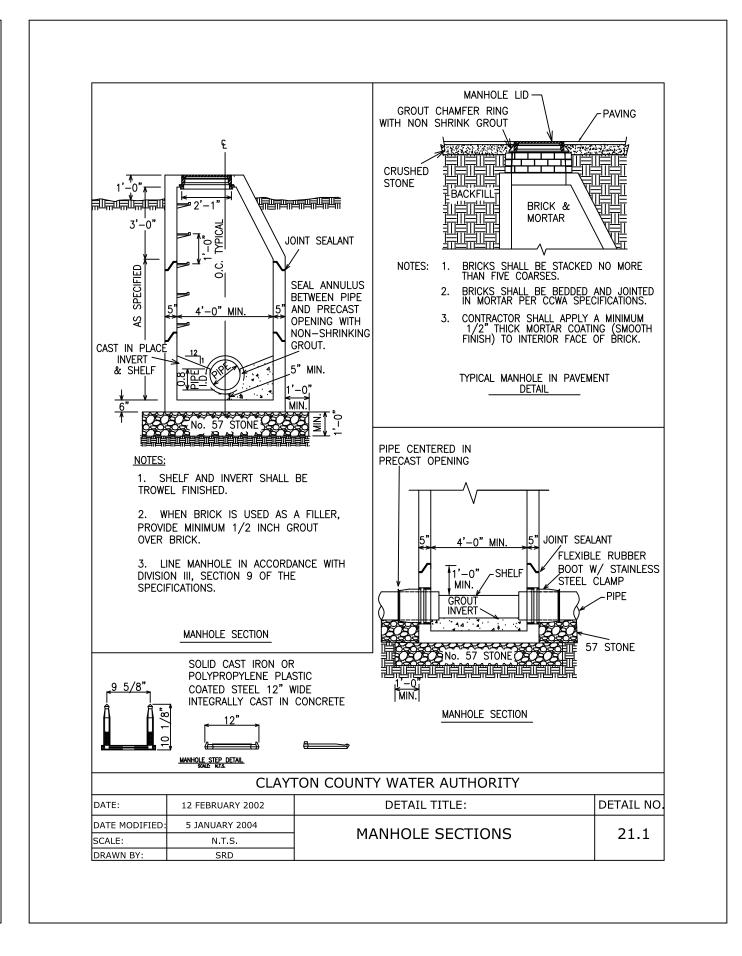


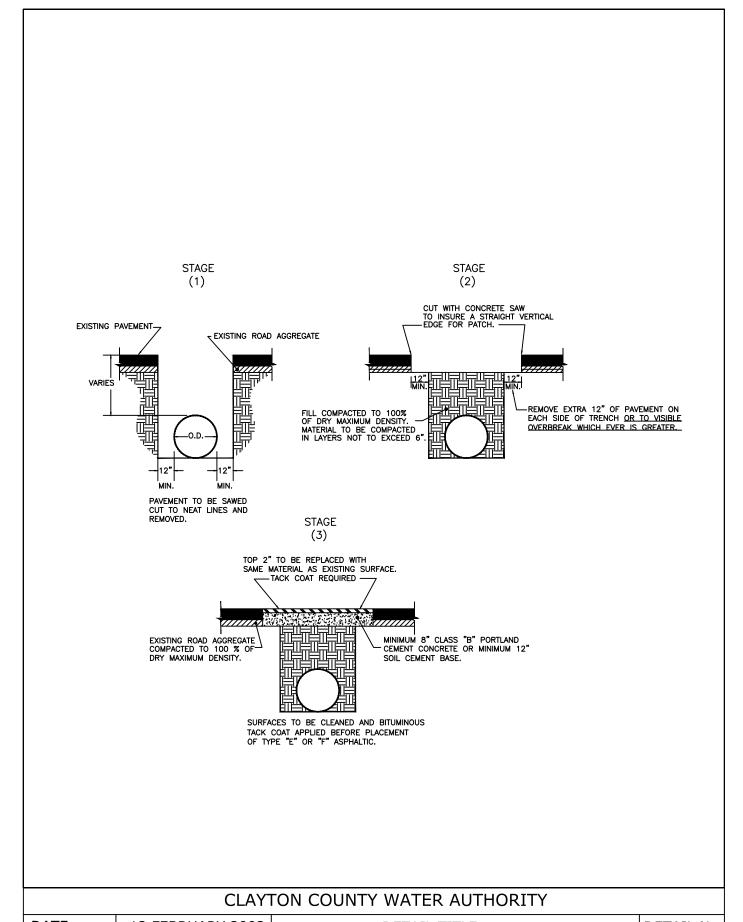


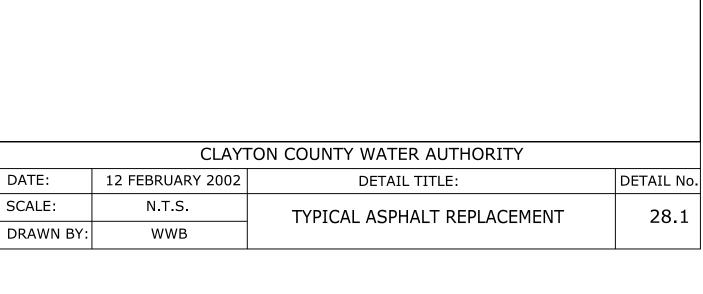
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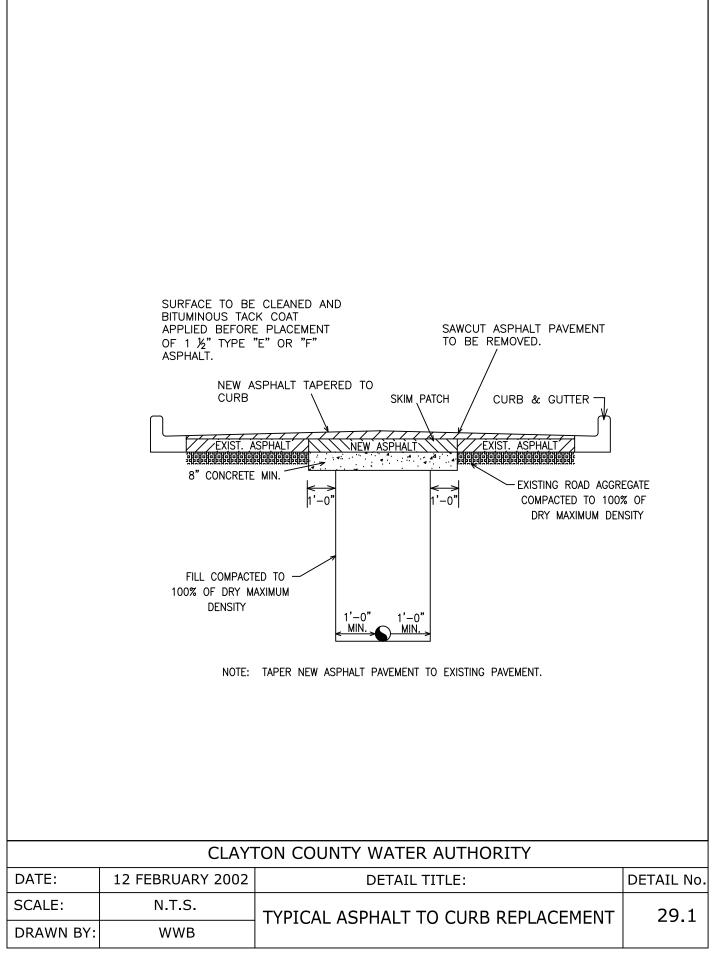
C Noahs Arc OHQ\CIVIL\SEWER ONLY SET\OLD 05 18-4190 GPC Noahs Ark OHQ - UTILITY SET U01 - Copy.dwg, 4/14/2020 3:16:14 PM, kit, ARCH full bleed D (24.00 x 36.00 Inches), 1:1

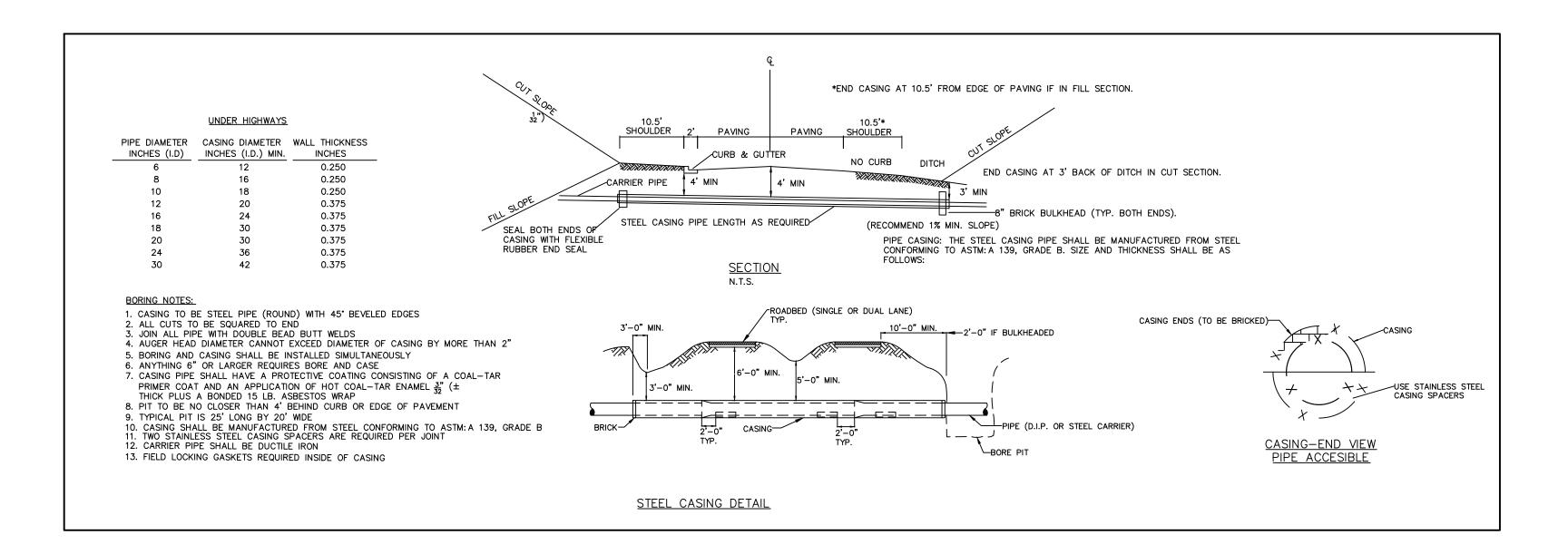














AEC JOB # 18-4190.20





Know what's below. Call before you dig. Dial 811 or Call 1-800-282-7411

GEORGIA POWER CO., ATLANTA, GA. LAND DEPARTMENT GPC NOAHS ARK OPERATING HEADQUARTERS UTILITY DETAILS

	CLAYTON COUNTY	. GEORGIA		
		DR. MDA	TR.	CJW/MDV
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# GEORGIA UNIFORM CODING SYSTEM

# FOR SOIL EROSION AND SEDIMENT CONTROL PRACTICES

GEORGIA SOIL AND WATER CONSERVATION COMMISSION

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Cd	CHECKDAM		J	A small temporary barrier or dam constructed across a swale, drainage ditch or area of concentrated flow.
Ch	CHANNEL STABILIZATION		<b>7</b>	Improving, constructing or stabilizing an open channel, existing stream, or ditch.
©	CONSTRUCTION EXIT		Q	A crushed stone pad located at the construction site exit to provide a place for removing mud from tires thereby protecting public streets.
	CONSTRUCTION	A second	(cr) cas	A travelway constructed as part of a construction plan including access roads,

Cd	CHECKDAM		\$	A small temporary barrier or dam constructed across a swale, drainage ditch or area of concentrated flow.
Ch	CHANNEL STABILIZATION	90	<b>7</b>	Improving, constructing or stabilizing an open channel, existing stream, or ditch.
(co)	CONSTRUCTION EXIT		Q/	A crushed stone pad located at the construction site exit to provide a place for removing mud from tires thereby protecting public streets.
Cr	CONSTRUCTION ROAD STABILIZATION		نونن	A travelway constructed as part of a construction plan including access roads, subdivision roads, parking areas and other on—site vehicle transportation routes.
Dc	STREAM DIVERSION CHANNEL	= 1	<b>*</b>	A temporary channel constructed to convey flow around a construction site while a permanent structure is being constructed.
Di	DIVERSION	· iji	EXTENSION OF THE PARTY OF THE P	An earth channel or dike located above, below or across a slope to divert runoff. This may be a temporary or permanent structure.
_			~~	A flexible conduit of heavy-duty fabric or

STRUCTURAL PRACTICES

Co	CONSTRUCTION EXIT		(S)	A crushed stone pad located at the construction site exit to provide a place removing mud from tires thereby protect public streets.
Cr	CONSTRUCTION ROAD STABILIZATION		نبنق	A travelway constructed as part of a construction plan including access roads, subdivision roads, parking areas and othe on—site vehicle transportation routes.
Dc	STREAM DIVERSION CHANNEL	=	<b>♦</b>	A temporary channel constructed to conv flow around a construction site while a permanent structure is being constructe
(Di	DIVERSION		and the same of th	An earth channel or dike located above, or across a slope to divert runoff. This r be a temporary or permanent structure.
(Dn1)	TEMPORARY DOWNDRAIN STRUCTURE		(m)	A flexible conduit of heavy—duty fabric other material designed to safely conduct surface runoff down a slope. This is tem and inexpensive.
Dn2	PERMANENT DOWNDRAIN STRUCTURE		(AMB)	A paved chute, pipe, sectional conduit or similar material designed to safely condusurface runoff down a slope.
Fr	FILTER RING	<b>U</b>		A temporary stone barrier constructed at storm drain inlets and pond outlets.
Ga	GABION		II.	Rock filter baskets which are hand—place into position forming soil stabilizing structures.
Gr	GRADE STABILIZATION STRUCTURE		(C) (S) (MAIN)	Permanent structures installed to protect channels or waterways where otherwise the slope would be sufficient for the running water to form gullies.
Lv	LEVEL SPREADER		+	A structure to convert concentrated flow water into less erosive sheet flow. This should be constructed only on undisturbe soils.
Rd	ROCK FILTER DAM		5	A permanent or temporary stone filter di installed across small streams or drainageways.
Re	RETAINING WALL			A wall installed to stabilize cut and fill s where maximum permissible slopes are no obtainable. Each situation will require spe design.
Rt	RETRO FITTING		(NEEL)	A device or structure placed in front of permanent stormwater detention pond ou structure to serve as a temporary sedim filter.
(Sd1)	SEDIMENT BARRIER	7	(DEROATE TOPS)	A barrier to prevent sediment from leaving the construction site. It may be sandbag bales of straw or hay, brush, logs and p gravel, or a silt fence.
	MUST		m	An impounding area created by excavating

Linear control device constructed as a diversion perpendicular to the direction of runoff to enhance dissipation and infiltrativabile creating multiple sedimentation chain with the employment of intermediate dikes

# STRUCTURAL PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Sr	TEMPORARY STREAM CROSSING		(S)	A temporary bridge or culvert-type structure protecting a stream or wateroffrom damage by crossing construction equipment.
St	STORMDRAIN OUTLET PROTECTION		© <b>2000</b>	A paved or short section of riprap chan at the outlet of a storm drain system preventing erosion from the concentrate runoff.
Su	SURFACE ROUGHENING		⊢®⊢	A rough soil surface with horizontal depressions on a contour or slopes left roughened condition after grading.
Tc	TURBIDITY CURTAIN		<b>P</b> (10)	A floating or staked barrier installed within the water (it may also be referred to as floating boom, silt barrier, or silt curtain)
Тр	TOPSOILING			The practice of stripping off the more fer soil, storing it, then spreading it over the disturbed area after completion of construction activities.
(Ť	TREE PROTECTION	0	(DENOTE THEE CENTERS)	To protect desirable trees from injury dur construction activity.
Wt	VEGETATED WATERWAY OR STORMWATER CONVEYANCE			Paved or vegetative water outlets for diversions, terraces, berms, dikes or simila structures.

### **VEGETATIVE PRACTICES**

V20217(11V211V(011020						
CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION		
Bf	BUFFER ZONE	4000		Strip of undisturbed original vegetation, enhanced or restored existing vegetation or the reestablishment of vegetation surroundin an area of disturbance or bordering streams		
Cs	COASTAL DUNE STABILIZATION (WITH VEGETATION)	marrane	Cs	Planting vegetation on dunes that are denud artificially constructed, or re-nourished.		
Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)		Ds1	Establishing temporary protection for disturbed areas where seedlings may not hav a suitable growing season to produce an erosion retarding cover.		
Ds2	DISTURBED AREA STABILIZATION (WITH TEMP SEEDING)		Ds2	Establishing a temporary vegetative cover with fast growing seedings on disturbed areas.		
Ds3	DISTURBED AREA STABILIZATION (WITH PERM SEEDING)	San Carlo	Ds3	Establishing a permanent vegetative cover such as trees, shrubs, vines, grasses, or legumes on disturbed areas.		
Ds4	DISTURBED AREA STABILIZATION (SODDING)		Ds4	A permanent vegetative cover using sods on highly erodable or critically eroded lands.		
Du	DUST CONTROL ON DISTURBED AREAS		Du	Controlling surface and air movement of dust on construction site, roadways and similar sites.		
FI-Co	FLOCCULANTS AND COAGULANTS		FI-Co	Substance formulated to assist in the solids/liquid separation of suspended particles in solution.		
Sb	STREAMBANK STABILIZATION (USING PERM VEGETATION)		Sb	The use of readily available native plant materials to maintain and enhance streambanks, or to prevent, or restore and repair small streambank erosion problems.		
Ss	SLOPE STABILIZATION		Ss	A protective covering used to prevent erosion and establish temporary or permanent vegetation on steep slopes, shore lines, or channels.		
Tac	TACKIFIERS AND BINDERS		Tac	Substance used to anchor straw or hay mulch by causing the organic material to bind together.		

GaSWCC (Amended - 2013)

- STRIPPING OF VEGETATION, REGRADING, AND OTHER DEVELOPMENT ACTIVITIES SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO MINIMIZE EROSION. CUT AND FILL OPERATIONS SHALL BE KEPT TO A MINIMUM. DEVELOPMENT PLANS MUST CONFORM TO TOPOGRAPHY AND SOIL TYPE, SO AS TO CREATE THE LOWEST PRACTICABLE EROSION POTENTIAL.
- WHENEVER FEASIBLE, NATURAL VEGETATION SHALL BE RETAINED, PROTECTED, AND SUPPLEMENTED. THE DISTURBED AREA AND THE DURATION OF EXPOSURE TO EROSIVE ELEMENTS SHALL BE KEPT TO A PRACTICABLE MINIMUM. DISTURBED SOIL SHALL BE STABILIZED AS QUICKLY AS PRACTICABLE.
- TEMPORARY VEGETATION OR MULCHING SHALL BE EMPLOYED TO PROTECT EXPOSED CRITICAL AREAS DURING CONSTRUCTION. PERMANENT VEGETATION AND STRUCTURAL EROSION CONTROL MEASURES SHALL BE INSTALLED AS SOON AS PRACTICABLE.
- . TO THE EXTENT NECESSARY, SEDIMENT IN RUN-OFF WATER SHALL BE TRAPPED BY THE USE OF DEBRIS BASINS, SILT TRAPS, OR SIMILAR MEASURES UNTIL THE DISTURBED AREA IS STABILIZED. 10. ADEQUATE PROVISIONS SHALL BE PROVIDED TO MINIMIZE DAMAGE FROM SURFACE WATER TO THE CUT FACE OF EXCAVATIONS OR THE SLOPING SURFACES
- 11. CUTS AND FILLS SHALL NOT ENDANGER ADJOINING PROPERTY.
- 12. FILLS SHALL NOT ENCROACH UPON NATURAL WATERCOURSES OR CONSTRUCTED CHANNELS IN A MANNER SO AS TO ADVERSELY AFFECT OTHER PROPERTY 13. GRADING EQUIPMENT SHALL CROSS FLOWING STREAMS BY THE MEANS OF TEMPORARY BRIDGES OR CULVERTS, EXCEPT WHEN SUCH METHODS ARE NOT
- FEASIBLE, PROVIDED IN ANY CASE THAT SUCH CROSSINGS SHALL BE KEPT TO A MINIMUM. 14. PROVISIONS SHALL BE PROVIDED FOR TREATMENT OR CONTROL OF ANY SOURCE OF SEDIMENTS AND ADEQUATE SEDIMENTATION CONTROL FACILITIES TO
- RETAIN SEDIMENTS ON SITE OR PRECLUDE SEDIMENTATION OF ADJACENT WATERS BEYOND THE LEVELS SPECIFIED IN THIS PERMIT.
- 15. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE MAINTAINED AT ALL TIMES. ADDITIONAL EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES SHALL BE INSTALLED IF DEEMED NECESSARY BY ONSITE INSPECTION.
- 16. MAINTENANCE OF ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES, WHETHER TEMPORARY OR PERMANENT, SHALL BE AT ALL TIMES DURING PROJECT LIFE THE RESPONSIBILITY OF GEORGIA POWER COMPANY.
- 17. ADDITIONAL EROSION CONTROL MEASURES WILL BE EMPLOYED WHERE DETERMINED NECESSARY BY ACTUAL SITE CONDITIONS. 18. PRIOR TO ANY OTHER CONSTRUCTION, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT EACH POINT OF ENTRY TO OR EXIT FROM THE
- 19. THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHT OF WAY. THIS MAY REQUIRE PERIODIC DRESSING WITH STONE, AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLE OR SITE ONTO PUBLIC ROADWAY OR INTO STORM DRAIN MUST BE REMOVED
- 20. ALL OPEN SWALES MUST BE GRASSED, AND RIP-RAP MUST BE PLACED AS REQUIRED TO CONTROL EROSION. A MINIMUM OF 4.5 SQUARE YARDS OF 50 POUND STONES SHALL BE PLACED AT ALL DOWNSTREAM HEADWALLS. THE PLACEMENT OF RIP-RAP AT THE DOWNSTREAM HEADWALLS SHALL BE PLACED IMMEDIATELY UPON INSTALLATION OF PIPES AND DRAINAGE DITCHES.
- 21. IMMEDIATELY AFTER THE ESTABLISHMENT OF THE CONSTRUCTION ENTRANCES/ EXITS, ALL PERIMETER EROSION CONTROL DEVICES AND STORMWATER MANAGEMENT DEVICES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION.
- 22. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE. 23. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND DISTURBING ACTIVITIES. EXCEPT AS REQUIRED TO INSTALL THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPS AS DESCRIBED IN PART IV.D.3., THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPS MUST BE INSTALLED AND IMPLEMENTED PRIOR TO CONDUCTING ANY OTHER
- CONSTRUCTION ACTIVITIES (E.G., CLEARING, GRUBBING AND GRADING) WITHIN THE CONSTRUCTION SITE OR WHEN APPLICABLE, WITHIN PHASED SUB-PARTS OR SEGMENTS OF THE CONSTRUCTION SITE. 24. ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.

IS DIFFICULT TO ESTABLISH VEGETATION ON SUCH SURFACES DUE TO REDUCED WATER INFILTRATION AND THE POTENTIAL FOR EROSION, ROUGH SLOPE SURFACES WITH UNEVEN SOIL AND ROCKS LEFT IN PLACE MAY APPEAR UNATTRACTIVE OR UNFINISHED AT FIRST, BUT ENCOURAGE WATER INFILTRATION, SPEED UP THE ESTABLISHMENT OF VEGETATION, AND DECREASE RUNOFF VELOCITY. ROUGH, LOOSE SOIL SURFACES GIVE LIME, FERTILIZER AND SEED SOME NATURAL COVERAGE. NICHES IN THE SURFACE PROVIDE MICROCLIMATES WHICH GENERALLY PROVIDE A COOLER AND MORE FAVORABLE MOISTURE LEVEL THAN

THERE ARE DIFFERENT METHODS OF ACHIEVING A ROUGHENED SOIL SURFACE ON A SLOPE, AND THE SELECTION OF AN APPROPRIATE METHOD DEPENDS UPON THE TYPE OF SLOPE. ROUGHENING METHODS INCLUDE STAIR-STEP GRADING, GROOVING. AND TRACKING. FACTORS TO BE CONSIDERED IN CHOOSING A METHOD ARE SLOPE STEEPNESS, MOWING REQUIREMENTS. AND WHETHER THE SLOPE IS FORMED BY CUTTING OR FILLING. 1. DISTURBED AREAS WHICH WILL NOT REQUIRE MOWING MAY BE STAIR-STEP GRADED, GROOVED, OR LEFT ROUGH AFTER

2. STAIR-STEP GRADING IS PARTICULARLY APPROPRIATE IN SOILS CONTAINING LARGE AMOUNTS OF SOFT ROCK. EACH "STEP" CATCHES MATERIAL WHICH SLOUGHS FROM ABOVE, AND PROVIDES A LEVEL SITE WHERE VEGETATION

3. AREAS WHICH WILL BE MOWED (THESE AREAS SHOULD HAVE SLOPES LESS STEEP THAN 3:1) MAY HAVE SMALL FURROWS LEFT BY DISCING, HARROWING, RAKING, OR SEED PLANTING MACHINERY OPERATED ON THE CONTOUR. 4. IT IS IMPORTANT TO AVOID EXCESSIVE COMPACTING OF THE SOIL SURFACE WHEN SCARIFYING. TRACKING WITH BULLDOZER TREADS IS PREFERABLE TO NOT ROUGHENING AT ALL, BUT IS NOT AS EFFECTIVE AS OTHER FORMS OF ROUGHENING, AS THE SOIL SURFACE IS SEVERELY COMPACTED AND RUNOFF IS INCREASED.

# CUT SLOPES STEEPER THAN 3:1:

CUT SLOPES WITH A GRADIENT STEEPER THAN 3:1 SHOULD NOT BE MOWED. THEY SHALL BE STAIR-STEP GRADED OR

- STAIR-STEP GRADING MAY BE CARRIED OUT ON ANY MATERIAL SOFT ENOUGH TO BE RIPPED WITH A BULLDOZER. SLOPES CONSISTING OF SOFT ROCK WITH SOME SUBSOIL ARE PARTICULARLY SUITED TO STAIR-STEP GRADING. THE RATIO OF THE VERTICAL CUT DISTANCE TO THE HORIZONTAL DISTANCE SHALL BE LESS THAN 1:1 AND THE HORIZONTAL PORTION OF THE "STEP" SHALL SLOPE TOWARD THE VERTICAL WALL. INDIVIDUAL VERTICAL CUTS SHALL NOT BE MORE THAN 30 INCHES ON SOFT SOIL MATERIAL AND NOT MORE THAN 40 INCHES IN ROCKY MATERIALS. GROOVING CONSISTS OF USING MACHINERY TO CREATE A SERIES OF RIDGES AND DEPRESSIONS WHICH RUN
- PERPENDICULAR TO THE SLOPE (ON THE CONTOUR). GROOVES MAY BE MADE WITH ANY APPROPRIATE IMPLEMENT WHICH CAN BE SAFFLY OPERATED ON THE SLOPE AND WHICH WILL NOT CAUSE UNDUE COMPACTION. SUGGESTED IMPLEMENTS INCLUDE DISCS, TILLERS, SPRING HARROWS, AND THE TEETH ON A FRONT-END LOADER BUCKET. SUCH GROOVES SHALL NOT BE LESS THAN 3 INCHES DEEP NOR FURTHER THAN 15 INCHES APART.

FILL SLOPES WITH A GRADIENT STEEPER THAN 3:1 SHOULD NOT BE MOWED. THEY SHALL BE GROOVED OR ALLOWED TO REMAIN ROUGH AS THEY ARE CONSTRUCTED. METHOD (1) OR (2) BELOW MAY BE USED. 1. GROOVE ACCORDING TO #2 OF "CUT SLOPES STEEPER THAN 3:1" 2. AS LIFTS OF THE FI LL ÄRE CONSTRUCTED, SOIL AND ROCK MATERIAL MAY BE ALLOWED TO FALL NATURALLY

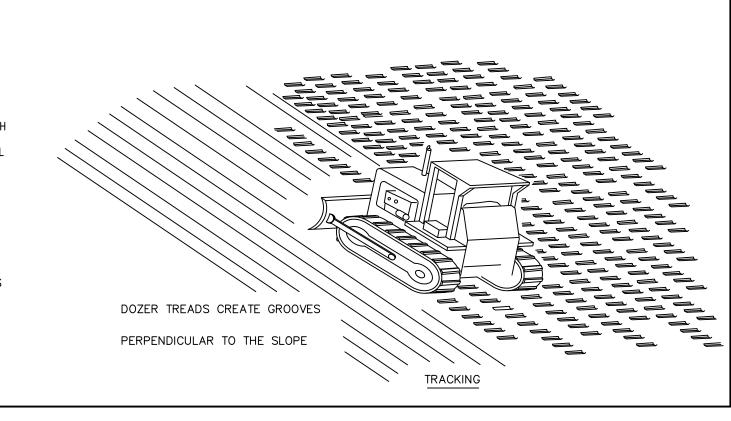
COLLUVIAL MATERIALS (SOIL DEPOSITS AT THE BASE OF SLOPES OR FROM OLD STREAM BEDS) SHALL NOT BE USED IN FILLS AS THEY FLOW WHEN SATURATED.

SURFACE ROUGHENING

MOWED SLOPES SHOULD NOT BE STEEPER THAN 3:1. EXCESSIVE ROUGHNESS IS UNDESIRABLE WHERE MOWING IS PLANNED. THESE AREAS MAY BE ROUGHENED WITH SHALLOW GROOVES SUCH AS REMAIN AFTER TILLING, DISCING, HARROWING, RAKING, OR USE OF A MULTIPACKER-SEEDER. THE FINAL PASS OF ANY SUCH TILLAGE IMPLEMENT SHALL BE ON THE CONTOUR (PERPENDICULAR TO THE SLOPE). GROOVES FORMED BY SUCH IMPLEMENTS SHALL BE NOT LESS THAN ONE INCH DEEP AND NOT FURTHER THAN 12 INCHES APART. FILL SLOPES WHICH ARE LEFT ROUGH AS CONSTRUCTED MAY BE SMOOTHED WITH A DRAGLINE OR PICKCHAIN TO

ROUGHENING WITH TRACKED MACHINERY ON CLAYED SOILS IS NOT RECOMMENDED UNLESS NO ALTERNATIVES ARE AVAILABLE. UNDUE COMPACTION OF SURFACE SOIL RESULTS FROM THIS PRACTICE. SANDY SOILS DO NOT COMPACT SEVERELY AND MAY BE TRACKED. IN NO CASE IS TRACKING AS EFFECTIVE AS THE OTHER ROUGHENING METHODS DESCRIBED. WHEN TRACKING IS THE CHOSEN SURFACE ROUGHENING TECHNIQUE, IT SHALL BE DONE BY OPERATING TRACKED MACHINERY UP AND DOWN THE SLOPE TO LEAVE HORIZONTAL DEPRESSIONS IN THE SOIL. AS FEW PASSES OF THE MACHINERY AS POSSIBLE SHOULD BE MADE TO MINIMIZE COMPACTION.

ROUGHENED AREAS SHALL BE SEEDED AND MULCHED AS SOON AS POSSIBLE TO OBTAIN OPTIMUM SEED GERMINATION AND SEEDING GROWTH. REFER TO SPECIFICATIONS DS1, DS2, DS3, AND DS4 - DISTURBED AREA STABILIZATION (WITH MULCHING ONLY, TEMPORARY SEEDING, PERMANENT VEGETATION, AND SODDING), RESPECTIVELY.



# MATERIALS - HECP (HYDRAULIC EROSION CONTROL PRODUCTS)

HYDRAULIC EROSION CONTROL PRODUCTS SHALL BE PREPACKAGED FROM THE MANUFACTURER. FIELD MIXING OF PERFORMANCE ENHANCING ADDITIVES WILL NOT BE ALLOWED. FIBEROUS COMPONENTS SHOULD BE ALL NATURAL OR BIODEGRADABLE. PRODUCTS SHALL BE DETERMINED TO BE NON-TOXIC IN ACCORDANCE WITH EPA-821-R-02-012.

# MATERIALS - RECP (ROLLED EROSION CONTROL PRODUCTS)

MINIMUM DENSITY SHOULD BE 0.5 LBS PER SQUARE YARD.

BLANKETS SHALL BE NONTOXIC TO VEGETATION, SEED, OR WILDLIFE. PRODUCTS SHALL BE DETERMINED TO BE NON-TOXIC IN ACCORDANCE WITH EPA-821-R-02-012. AT MINIMUM, THE PLASTIC OR BIODEGRADABLE NETTING SHALL BE STITCHED TO THE FIBROUS MATRIX TO MAXIMIZE STRENGTH AND PROVIDE FOR EASE OF HANDLING.

# RECPS ARE CATEGORIZED AS FOLLOWS:

A. SHORT-TERM (FUNCTIONAL LONGEVITY 12 MO.) PHOTODEGRADABLE - STRAW BLANKETS WITH A TOP AND BOTTOM SIDE PHOTO DEGRADABLE NET. THE MAXIMUM SIZE OF THE MESH SHALL BE OPENINGS OF 1/2" X 1/2". THE BLANKET SS 6-122 GSWCC (AMENDED - 2013) SHOULD

#### BE SEWN TOGETHER ON 1.5" CENTERS WITH DEGRADABLE THREAD. MINIMUM THICKNESS SHOULD BE 0.35" AND MINIMUM DENSITY SHOULD BE 0.5 LBS PER SQUARE YARD. BIODEGRADABLE - STRAW BLANKET WITH A TOP AND BOTTOM SIDE BIODEGRADABLE JUTE NET. THE TOP SIDE NET SHALL CONSIST OF MACHINE DIRECTION STRANDS THAT ARE TWISTED TOGETHER AND THEN INTERWOVEN WITH CROSS DIRECTION STRANDS (LENO WEAVE). THE BOTTOM NET MAY BE LENO WEAVE OR OTHERWISE TO MEET REQUIREMENTS. THE APPROXIMATE SIZE OF THE MESH SHALL BE OPENINGS OF 0.5" X 1.0". THE BLANKET SHOULD BE SEWN TOGETHER ON 1.5" CENTERS WITH DEGRADABLE THREAD. MINIMUM THICKNESS SHOULD BE 0.25" AND

- B. EXTENDED—TERM (FUNCTIONAL LONGEVITY 24 MO.) B.1. PHOTODEGRADABLE - BLANKETS THAT CONSIST OF 70% STRAW AND 30% COCONUT WITH A TOP AND BOTTOM SIDE PHOTODEGRADABLE NET. THE TOP NET SHOULD HAVE ULTRAVIOLET ADDITIVES TO DELAY BREAKDOWN. THE MAXIMUM SIZE OF THE MESH SHALL BE OPENINGS OF 0.65" X 0.65". THE BLANKET SHOULD BE SEWN TOGETHER ON 1.5" CENTERS WITH DEGRADABLE THREAD. MINIMUM THICKNESS SHOULD BE 0.35" AND MINIMUM DENSITY
- SHOULD BE 0.6 LBS PER SQUARE YARD. B.2. BIODEGRADABLE - BLANKETS THAT CONSIST OF 70% STRAW AND 30% COCONUT WITH A TOP AND BOTTOM SIDE BIODEGRADABLE JUTE NET. THE TOP SIDE NET SHALL CONSIST OF MACHINE DIRECTION STRANDS THAT ARE TWISTED TOGETHER AND THEN INTERWOVEN WITH CROSS DIRECTION STRANDS (LENO WEAVE). THE BOTTOM NET MAY BE LENO WEAVE OR OTHERWISE TO MEET REQUIREMENTS. THE APPROXIMATE SIZE OF THE MESH SHALL BE OPENINGS OF 0.5" X 1.0". THE BLANKET SHOULD BE SEWN TOGETHER ON 1.5" CENTERS WITH DEGRADABLE THREAD. MINIMUM THICKNESS SHOULD BE 0.25" AND MINIMUM DENSITY SHOULD BE 0.65 LBS PER SQUARE YARD.
- LONG-TERM (FUNCTIONAL LONGEVITY 36 MO.) PHOTODEGRADABLE - BLANKETS THAT CONSIST OF 100% COCONUT WITH A TOP AND BOTTOM SIDE PHOTODEGRADABLE NET. EACH NET SHOULD HAVE ULTRAVIOLET ADDITIVES TO DELAY BREAKDOWN. THE MAXIMUM SIZE OF THE MESH SHALL BE OPENINGS OF 0.65" X 0.65". THE BLANKET SHOULD BE SEWN TOGETHER ON 1.5" CENTERS WITH DEGRADABLE THREAD. MINIMUM THICKNESS SHOULD BE 0.3" AND MINIMUM DENSITY SHOULD BE 0.5 LBS PER SQUARE YARD.
- BIODEGRADABLE BLANKETS THAT CONSIST OF 100% COCONUT WITH A TOP AND BOTTOM SIDE BIODEGRADABLE JUTE NET. THE TOP SIDE NET SHALL CONSIST OF MACHINE DIRECTION STRANDS THAT ARE TWISTED TOGETHER AND THEN INTERWOVEN WITH CROSS DIRECTION STRANDS (LENO WEAVE). THE BOTTOM NET MAY BE LENO WEAVE OR OTHERWISE TO MEET REQUIREMENTS. THE APPROXIMATE SIZE OF THE MESH SHALL BE OPENINGS OF 0.5" X 1.0". THE BLANKET SHOULD BE SEWN TOGETHER ON 1.5" CENTERS WITH DEGRADABLE THREAD. MINIMUM THICKNESS SHOULD BE 0.25" AND MINIMUM DENSITY SHOULD BE 0.5 LBS PER SQUARE YARD.

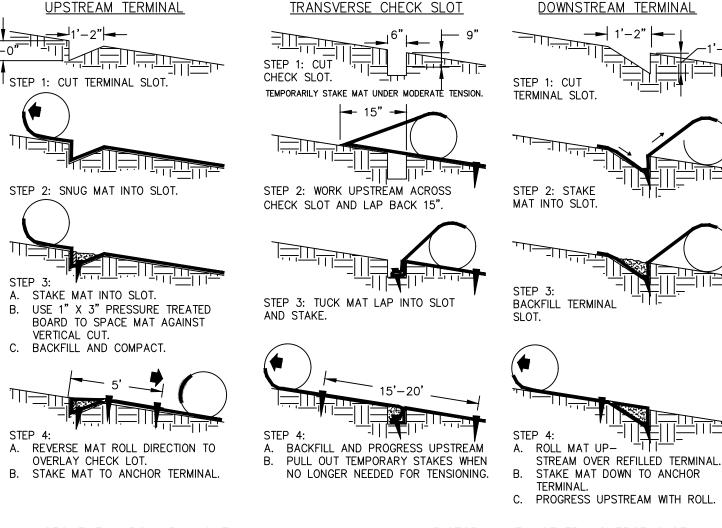
AFTER THE SITE HAS BEEN SHAPED AND GRADED TO THE APPROVED DESIGN, PREPARE A FRIABLE SEEDBED RELATIVELY FREE FROM CLODS AND ROCKS MORE THAN ONE INCH IN DIAMETER, AND ANY FOREIGN MATERIAL THAT WILL PREVENT CONTACT OF THE SOIL STABILIZATION MAT WITH THE SOIL SURFACE. SURFACE MUST BE SMOOTH TO ENSURE PROPER CONTACT OF BLANKETS OR MATTING TO THE SOIL TO THE SOIL SURFACE. IF NECESSARY, REDIRECT ANY RUNOFF FROM THE DITCH OR SLOPE DURING INSTALLATION.

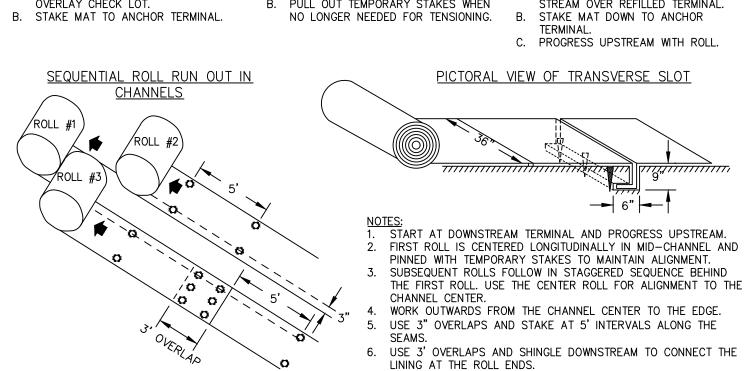
INSTALLATION AND STAPLING OF RECPS AND APPLICATION RATES FOR THE HECPS SHALL CONFORM TO MANUFACTURER'S GUIDELINES FOR APPLICATION. PRODUCTS SHALL HAVE A MAXIMUM C-FACTOR (ASTM D6459) FOR THE FOLLOWING SLOPE GRADE: 3:1 SLOPE OR GREATER (H:V), 0.080 C-FACTOR (MAX.).

ALL EROSION CONTROL BLANKETS AND MATTING SHOULD BE INSPECTED PERIODICALLY FOLLOWING INSTALLATION, PARTICULARLY AFTER RAINSTORMS TO CHECK FOR EROSION AND UNDERMINING. ANY DISLOCATION OR FAILURE SHOULD BE REPAIRED IMMEDIATELY. IF WASHOUTS OR BREAKAGE OCCURS, REINSTALL THE MATERIAL AFTER REPAIRING DAMAGE TO THE SLOPE OR DITCH. CONTINUE TO MONITOR THESE AREAS UNTIL THEY BECOME PERMANENTLY STABILIZED.

# TYPICAL INSTALLATION GUIDELINES FOR ROLLED EROSION CONTROL PRODUCTS (RECP)

# **BLANKET AND MATTING CROSS-SECTIONS**











Call before you dig. Dial 811 or Call 1-800-282-7411 AEC JOB # 18-4190.20

GEORGIA POWER CO., ATLANTA, GA. LAND DEPARTMENT GPC NOAHS ARK OPERATING HEADQUARTERS EROSION CONTROL DETAILS

CLAYTON COUNTY. GEORGIA CJW/MD 4/14/20: DRAWING No. SHEET No 13 OF 16

# MULCHING ONLY

MULCHING BY ITSELF MAY BE USED AS TEMPORARY STABILIZATION (MULCHING ONLY) WHEN SEED WILL NOT HAVE A SUITABLE GROWING SEASON. STABILIZATION MAY BE ACCOMPLISHED WITH: STRAW - 2 TONS/ACRE OR HAY-2.5 TONS/ACRE PROVIDED THAT THE APPROPRIATE DEPTH (2-4") IS ACHIEVED. ALL HAY OR STRAW SHALL BE ANCHORED WITH A TACKIFIER (Tb) (EMULSIFIED ASPHALT, GRADE AE-5 OR SS-1, AT A RATE OF 100 GAL. OF EMULSIFIED ASPHALT AND 100 GAL. OF WATER PER TON OF MULCH), AND PROVIDED THAT A CONTINUOUS COVERAGE OF 90% OR GREATER OF THE SOIL SURFACE IS MAINTAINED. OTHER ACCEPTABLE MULCHES ARE WOOD WASTE, BARK, OR SAWDUST SPREAD 2-3" DEEP. WHEN MULCH IS USED WITH SEED, FOLLOW THE SPECIFICATIONS FOR TEMPORARY SEEDING (Ds2) OR PERMANENT SEEDING (Ds3).

# TEMPORARY GRASSING

TEMPORARY GRASSING SHALL CONSIST OF SOWING A QUICK GRASS SUCH AS RYE, BROWN TOP MILLET, OR A GRASS SUITABLE TO THE AREA AND SEASON. MULCH, LIME AND FERTILIZER MAY BE OMITTED UNLESS LOCAL CONDITIONS OR SOIL TESTS INDICATE OTHERWISE. TEMPORARY VEGETATIVE MEASURES SHOULD BE COORDINATED WITH PERMANENT MEASURES TO ASSURE ECONOMICAL AND EFFECTIVE STABILIZATION. FOR ADDITIONAL OPTIONS OR IF THE AREA IS EXPECTED TO BE UNDISTURBED FOR LONGER THAN SIX MONTHS, PERMANENT PERENNIAL VEGETATION (Ds3) SHALL BE USED. REFER TO THE COMPANION PLANTING SCHEDULE UNDER PERMANENT GRASSING (Ds3).

# Ds2 GRASSING SCHEDULE

(FOR TEMPORARY)			
SPECIES	PLS RATE	DATES	LIME
RYEGRASS (ANNUAL)	40 LBS./AC.	8/15 - 4/1	1 TON/ACRE
WEEPING LOVEGRASS (PERENNIAL)	4 LBS./AC.	3/15 - 6/15	1 TON/ACRE
SUDANGRASS	60 LBS./AC.	4/1 - 8/15	1 TON/ACRE

FERTILIZER REQUIREMENTS								
	•	YPE OF SPECIES	YEAR	ANALYSIS OR EQUI- VALENT N-P-K	RATE	N TOP DRESSING RATE		
	l.	COOL SEASON GRASSES	FIRST SECOND MAINTENANCE	6-12-12 6-12-12 10-10-10	1500 LBS PER ACRE 1000 LBS PER ACRE 400 LBS PER ACRE	50-100 LBS PER ACRE 1- 2- - 30		
	2.	COOL SEASON GRASSES AND LEGUMES	FIRST SECOND MAINTENANCE	6-12-12 0-10-10 0-10-10	1500 LBS PER ACRE 1000 LBS PER ACRE 400 LBS PER ACRE	0-50 LBS PER ACRE 1- - -		
	3.	GROUND COVERS	FIRST SECOND MAINTENANCE	10-10-10 10-10-10 10-10-10	1300 LBS PER ACRE 3- 1300 LBS PER ACRE 3- 1100 LBS PER ACRE	- - -		
	4.	PINE SEEDLINGS	FIRST	20–10–5	ONE 21-GRAM PELLET PER SEEDLING PLACED IN THE CLOSING HOLE	_		
	5.	SHRUB LESPEDEZA	FIRST MAINTENANCE	0-10-10 0-10-10	700 LBS PER ACRE 700 LBS PER ACRE 4-			
	6.	TEMPORARY COVER CROPS SEEDED ALONE	FIRST	10-10-10	500 LBS PER ACRE	30 LBS PER ACRE 5-		
	7.	WARM SEASON GRASSES	FIRST SECOND MAINTENANCE	6-12-12 6-12-12 10-10-10	1500 LBS PER ACRE 800 LBS PER ACRE 400 LBS PER ACRE	50-100 LBS PER ACRE 2- 6- 50-100 LBS PER ACRE 2- 30 LBS PER ACRE		
	8.	WARM SEASON GRASSES AND LEGUMES	FIRST SECOND MAINTENANCE	6-12-12 0-10-10 0-10-10	1500 LBS PER ACRE 800 LBS PER ACRE 400 LBS PER ACRE	50 LBS/ACRE 6-		

- 1- APPLY IN SPRING FOLLOWING SEEDING.
- 2- APPLY IN SPLIT APPLICATIONS WHEN HIGH RATES ARE USED.
- 3- APPLY IN 3 SPLIT APPLICATIONS. 4- APPLY WHEN PLANTS ARE PRUNED
- 5- APPLY TO GRASS SPECIES ONLY. 6- APPLY WHEN PLANTS GROW TO A HEIGHT OF 2 TO 4 INCHES.

DISTURBED AREA STABILIZATION

#### GUIDE SPECIFICATION FOR PERMANENT SEEDING

#### Section 02936

#### PERMANENT HYDROSEEDING

GENERAL			754.						
	Historia								
SUMMARY		H. / .							
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This section s	specifies	a seed	l mix a	pplied	to an	area	requir	ng s	ustai
vegetation.		115							
	SUMMARY This section		SUMMARY  This section specifies a seed	SUMMARY  This section specifies a seed mix a	SUMMARY  This section specifies a seed mix applied	SUMMARY  This section specifies a seed mix applied to an	SUMMARY  This section specifies a seed mix applied to an area	SUMMARY  This section specifies a seed mix applied to an area require	SUMMARY  This section specifies a seed mix applied to an area requiring s

- Product Data: Submit manufacturer's product data and installation instructions. Include required substrate preparation, list of materials, and application rate.
- DELIVERY, STORAGE, AND HANDLING

SUBMITTALS

- Deliver materials and products in factory labeled packages. Store and handle in strict compliance with manufacturer's instructions and recommendations. Protect from weather damage, excessive temperatures, rodents, and construction operations.
- PRODUCTS PART 2
- ACCEPTABLE MANUFACTURER 2.01
  - PENNINGTON SEED INC. SEED PRODUCTION 1280 ATLANTA HWY -- MADISON, GA 30650, 800-286-6100 (Fax706-342-8071)
- MATERIALS 2.02
- Mixed sustainable slope seed mixture: Slopemaster by Pennington Seed, Inc applied at a minimum rate of 50lbs (1.15lbs/1000 square feet) of the warm season mixture and 100lbs (2.25lbs/1000 square feet) of the cool season mixture with the following characteristics.
  - 1. Material: Permanent and temporary seed varieties.
  - 2. Minimum: 5% Durana White Clover. 3. Inert Material: Less than 1%.
  - 4. Other Crop Seed: Less than .5%.
  - 5. Weed Seed: Less than 1%.
  - 6. Coating: Inoculated with Germax Seed Treatment (Rhizokote XL and
  - Apron XL) and MYCO Advantage coated.
  - 7. Packaging: 25lb Seatac bags.

# GUIDE SPECIFICATION FOR PERMANENT SEEDING:

- depth of the slurry mulch taking care not to super saturate or wash away the slurry and seed.
- After seed germination has occurred and plants are visible the frequency of irrigation should be cut back with heavier application rates still making sure not to super saturate or wash away the slurry and seed.
- Repair all seed washings and erosion. Future fertilization should occur whenever applicable at the recommended rate based on soil analysis with a low Nitrogen fertilizer.
- CLEANING AND PROTECTION
  - Wash hands after seeding to remove all seed treatment or additive residue that could be remaining.
  - Advise owner or engineer of methods for protection of seeded areas.

# END OF SECTION

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### GUIDE SPECIFICATION FOR PERMANENT SEEDING

- Flexterra HP-FGM (Flexible Growth Medium) Fiber Mulch: Apply according to manufacturer recommendations. This product should be applied at a minimum rate of 3000 lbs per acre (70 lbs/1000 square feet).
- Soil Sampling: A soil sample should be obtained at a time as close to final grade as possible but at least a week prior to permanent seeding. The soil sample should be obtained by a representative of Pennington Seed, Inc. Contact Dusty Sweat 678-449-6632, 706-752-4287.
- dsweat@penningtonseed.com to schedule a site visit and soil sample. Fertilizer: A balanced professional grade fertilizer containing UMAXX, UFLEXX, or Nitroform source of Nitrogen should be applied at a rate of 350 lbs per acre (8.0 lbs/1000 square feet) or according to soil sample
- Lime: The soil amendment NeutraLime Dry should be applied hydraulically at a rate of 80 lbs per acre (1.85 lbs/1000 square feet) or according to soil sample results. Additionally, pelletized lime should be applied and incorporated into the soil at a rate of 2000 lbs per acre (46 lbs/100 square feet) during final grade or according to soil sample results.
  - The soil amendment JumpStart should be applied hydraulically at a rate of 1 gallon per acre (0.3 gal/1000 square feet) or according to soil sample results.
  - The soil amendment BioPrime should be applied hydraulically at a rate of 40 pounds per acre (0.92 lbs/1000 square feet) or according to soil sample results.
- Equipment: Equipment shall be a hydroseeding machine and shall have a built in mechanical agitation system and operating capacity sufficient to agitate, suspend, and homogeneously mix a hydraulic slurry containing not less than 44lbs or organic mulching amendment plus fertilizer, additives, and solids for each 150 gallons of water.

#### EXECUTION PART 3

### SUBSTRATE PREPARATION

Soil Amendments:

Examine substrates and conditions where material will be applied. Ensure that an adequate seedbed has been prepared. If no seedbed has been prepared notify project manager and a representative from Pennington Seed, Inc. immediately and begin seedbed preparation by disking, tilling, dozer tracking, aerating, or aerevating seedbed to produce optimal seed to soil contact. Remove rocks, sticks, straw, dead grass, etc. to ensure seedbed is free of debris and will provide an ideal seedbed. Do not

### GPC Soil Stabilization and Vegetation Establishment Material Standard Material (unless otherwise specified)

<u>Material</u>	Application Rate/Acre	<u>Total Material</u>
Slopemaster Cool Season Seed Mix (lbs)	100	25
Pelletized Lime (lbs)	2000	500
Neutralime (lbs)	80	20
19-19-19 Fertilizer (lbs)	400	100
Jumpstart (Gallons)	2.5	1
BioPrime (lbs)	40	10
Flexterra Hydraulic Mulch* (lbs)	3000	750
*Per Manufacturer Specification, depending on Flexterra Application Recommendations	slope gradient	
	Max Continuos Slope	
Condition	Length	Application Rate
3:1	75 ft.	3000 lbs.

COOL SEASON

20% Pensacola Bahia

20% Greystone Fescue

10% Rye Grain

10% Durana Clover

25lb Slopemaster Coastal Winter Mix

40% Unhulled Sahara Bermuda

Seeding Dates: Sept 15 - April 15

Seeding Rate: 100lbs/acre

# WARM SEASON

### 25lb Slopemaster Coastal Summer Mix 20% Unhulled Sahara Bermuda 20% Hulled Mohawk Bermuda 25% Pensacola Bahia 10% Durana Clover 10% Browntop Millet 15% Weeping Lovegrass Seeding Dates: April 15 - Sept 15

Seeding Rate: 50lbs/acre Coastal Mixes should be used in any areas south of the Fall Line. (Columbus, Macon, Augusta, and south)

25lb Slopemaster Summer Mix	25lb Slopemaster Reclaim Winte		
55% Sahara/Mohawk Bermudagrass	65% GreystoneTall Fescue		
20% Sericea Lespedeza	10% Mohawk Bermuda		
10% Durana Clover	10% Unhulled Sahara Bermuda		
10% Browntop Millet	10% Durana Clover		
5% Weeping Lovegrass	5% Small Grains		
Seeding Dates: April 15 - Sept 1	Seeding Dates: Sept 1 - April 15		
Seeding Rate: 50lbs/acre	Seeding Rate: 100/bs/acre		

25lb Slopemaster Reclaim Winter Mix 5% GreystoneTall Fescue 10% Mohawk Bermuda 10% Unhulled Sahara Bermuda 10% Durana Clover 5% Small Grains Seeding Dates: Sept 1 - April 15 Seeding Rate: 100/bs/acre

#### GUIDE SPECIFICATION FOR PERMANENT SEEDING

- proceed with installation until unsatisfactory conditions are corrected. Only apply product to geotechnically stable slopes that have been designed and built to divert the water shed away from the face of the slope, therefore eliminating surface flow energy from above from damaging the face slope.
- All slope gradients should be prepared to agricultural standard recommended by the Department of Agricultural within the state where the work is being performed. Agricultural Lime or pelletized lime should be added during the slope preparation stage and tracked in at the rate recommended according to soil analysis. Apply agricultural lime or pellet lime at a rate of 2000lbs per acre or according to soil test results.
- Examine related work including irrigation and grading of surface before proceeding with any work and notify the Engineer in writing on conditions which may prevent the proper execution of this work. All grading or tracking on slopes should be performed so that all cleats are running perpendicular to the flow of water down the hill.

#### 3.02 INSTALLATION

- Strictly comply with manufacturer's installation instructions and recommendations.
- B. Mix the seed, soil amendments, and professional fertilizer with a full tank rate of the Flexible Growth Medium and apply along the areas to be vegetated being sure to apply seed and amendments at the specified rates. Slopemaster warm season seed mixture should be applied during the late spring and summer months at a minimum of 50lbs per acre (1.15lbs/1000) square feet). The cool season Slopemaster seed mixture should be applied during the fall and early spring at a minimum of 100lbs per acre (2.25lbs/1000 square feet). If assistance is needed with mixing, applying, or distribution of hydraulic slurry please contact Project Manager and a representative from Pennington Seed, Inc. for additional information.
- Mix and apply the Flexible Growth Medium at a rate of 50lbs per 150 gallons of water over freshly seeded areas. Hydromulch should be applied in multiple directions so that shadowing does not occur and to insure uniformity of the application. Confirm the loading rates with equipment manufacturers. Do not leave seeded surfaces unprotected, especially if precipitation is imminent.
- D. Exercise special care to prevent any of the slurry from being sprayed onto any hardscape areas including concrete walks, fences, walls, buildings, etc. Remove all slurry sprayed onto these surfaces immediately.

#### 3.03 MAINTENANCE

A. Frequent light irrigation will need to be applied to seeded areas if no natural rain events have occurred within one week of hydroseeding. Water should be applied long enough to moisten the soil thoroughly to the

> OWNER/OPERATOR/24 HR CONTACT
> GEORGIA POWER COMPANY 241 RALPH McGILL BOULEVARD NE ATLANTA, GA 30308-3374 CONTACT: BRYAN HARRIS (404) 506-4932 50 WARM SPRING CIRCLE ROSWELL, GA 30075 CONTACT: MARK VAN DE WATER

> > (770) 641–1942

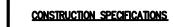
LEVÈL II CERT. # 6960





Dial 811 or Call 1-800-282-7411 AEC JOB # 18-4190.20 GEORGIA POWER CO., ATLANTA, GA. LAND DEPARTMENT GPC NOAHS ARK OPERATING HEADQUARTERS

EROSION CONTROL DETAILS CLAYTON COUNTY, GEORGIA CJW/ME 4/14/20 DRAWING No. SHEET No. 14 OF 16



TYPE NS SEDIMENT BARRIER Sd1-NS

NONSENSITIVE AREAS
SEDIMENT BARRIERS BEING USED AS TYPE NS SHALL HAVE A SUPPORT SPACING OF NO GREATER THAN 6 FEET. ON CENTER, WITH EACH DRIVEN INTO THE GROUND A MINIMUM OF 18 INCHES. TYPE NS SEDIMENT BARRIERS SHALL HAVE A P-FACTOR NO GREATER THAN 0.045.
SEDIMENT BARRIER TYPES A AND B WILL BE CLASSIFIED AS NON-SENSITIVE.

# TYPE S SEDIMENT BARRIER Sd1-S

SENSITIVE AREAS

SEDIMENT BARRIERS BEING USED AS TYPE S SHALL HAVE A SUPPORT SPACING OF NO GREATER THAN 4 FEET ON CENTER, WITH EACH DRIVEN INTO THE GROUND 18 INCHES. TYPE S SEDIMENT BARRIERS SHALL HAVE A P-FACTOR NO GREATER THAN 0.030.

SEDIMENT BARRIER TYPE C WILL BE CLASSIFIED AS SENSITIVE.

### INSTALLATION

TEMPORARY SEDIMENT BARRIERS SHALL BE INSTALLED ACCORDING TO THE FOLLOWING SPECIFICATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE DESIGN PROFESSIONAL.

# ALONG ALL STATE WATERS AND OTHER SENSITIVE AREAS, TWO ROWS OF TYPE S SEDIMENT BARRIERS SHALL BE USED. THE TWO ROWS TYPE S SHOULD BE PLACED A MINIMUM OF 36 INCHES APART.

FOR INSTALLATION OF THE BARRIERS, SEE FIGURES 6-27.1, 6-27.2, 6-27.3 AND 6-27.4, RESPECTIVELY. IT IS IMPORTANT TO REMEMBER THAT NOT ALL SEDIMENT BARRIERS NEED TO BE TRENCHED INTO THE GROUND BUT MOST TALLER SEDIMENT BARRIERS DO.

POST INSTALLATION SHALL START AT THE CENTER OF A LOW POINT (IF APPLICABLE) WITH THE REMAINING POSTS SPACED NO GREATER THAN 6 FEET APART FOR TYPE NS SEDIMENT BARRIERS AND NO GREATER THAN 4 FEET APART FOR TYPE S SEDIMENT BARRIERS. FOR POST SIZE REQUIREMENTS, SEE TABLE 6-27.2. FASTENERS FOR WOOD POSTS ARE LISTED IN TABLE 6-27.3.

### FASTENERS FOR SILT FENCE

REFER TO FIGURE 6-27.5 AND TABLES 6-27.2 AND 6-27.3.

### MAINTENANC

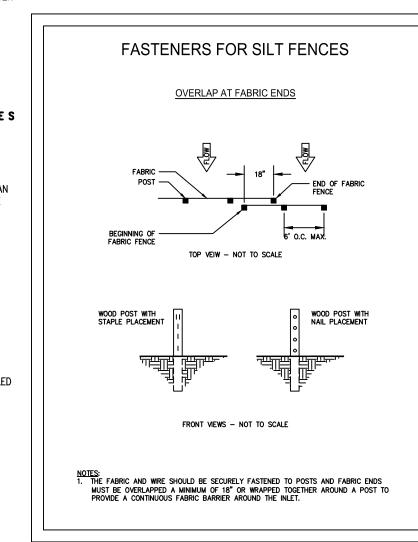
SEDIMENT SHALL BE REMOVED ONCE IT HAS ACCUMULATED TO ONE-HALF THE ORIGINAL HEIGHT OF THE BARRIER. THIS IS EXTREMELY IMPORTANT WHEN SELECTING BMPS WITH A LOWER PROFILE.

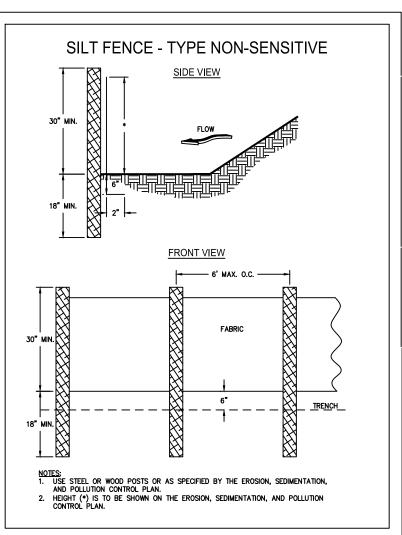
SEDIMENT BARRIERS SHALL BE REPLACED WHENEVER THEY HAVE DETERIORATED TO SUCH AN EXTENT THAT THE EFFECTIVENESS OF THE PRODUCT IS REDUCED (APPROXIMATELY SIX MONTHS) OR THE HEIGHT OF THE PRODUCT IS NOT MAINTAINING 80% OF ITS PROPERLY INSTALLED HEIGHT

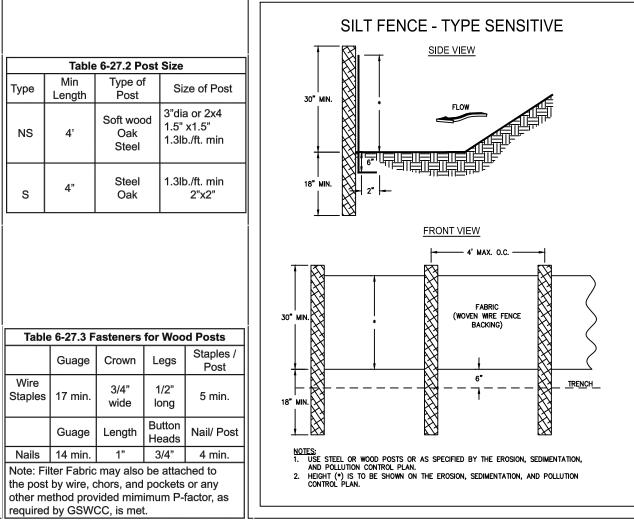
TEMPORARY SEDIMENT BARRIERS SHALL REMAIN IN PLACE UNTIL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED. ALL SEDIMENT ACCUMULATED AT THE BARRIER SHALL BE REMOVED AND PROPERLY DISPOSED OF BEFORE THE BARRIER IS REMOVED.

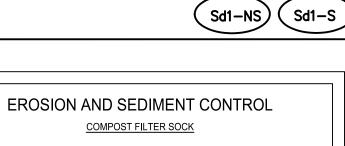
#### PRODUCTS

ALL ALLOWABLE PRODUCTS MUST BE ON THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S SEDIMENT BARRIERS APPROVED PRODUCTS LIST (APL).

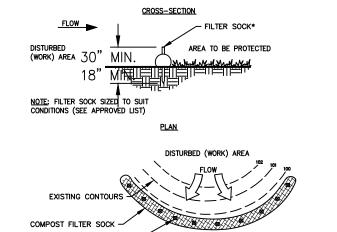




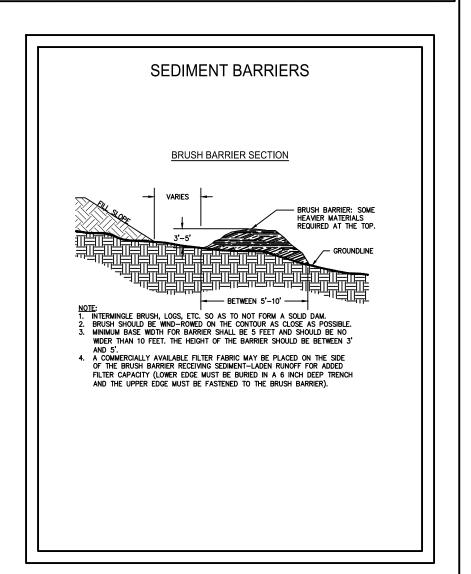


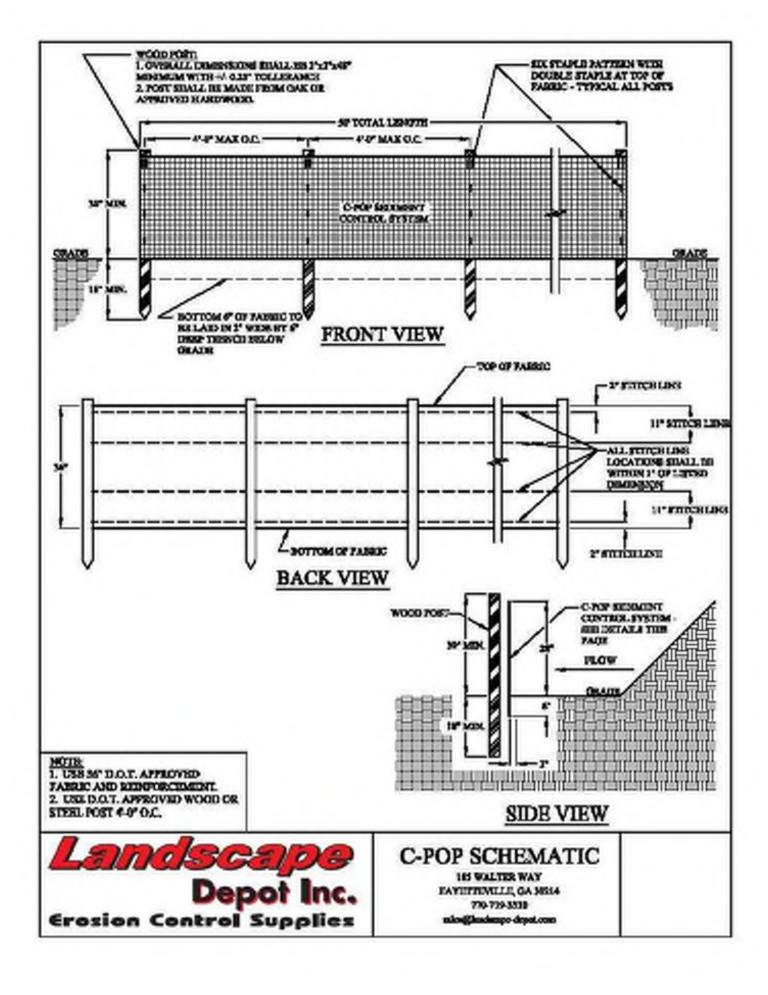


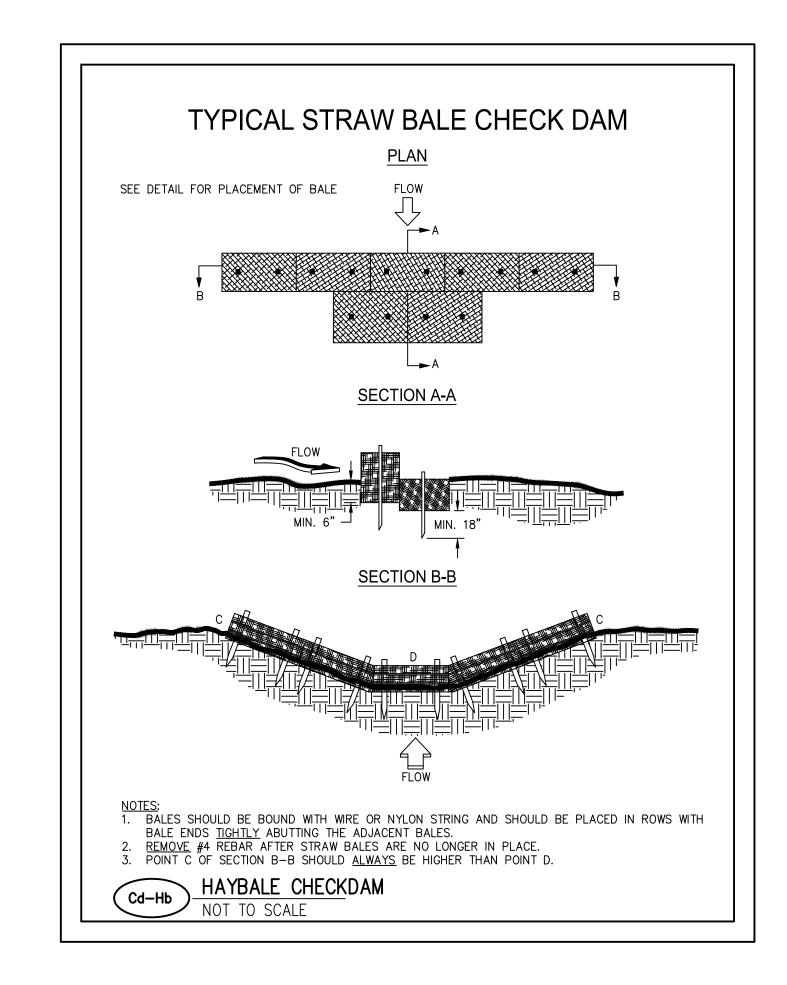
SILT FENCE SEDIMENT BARRIER
NOT TO SCALE

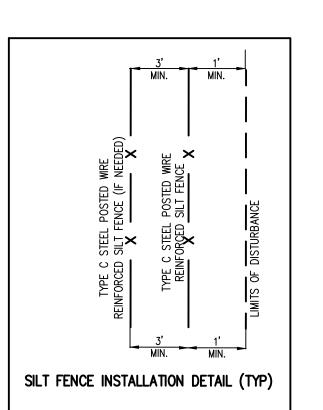


~ ADDITIONAL MEASURES ~









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GEORGIA POWER COMPANY
241 RALPH McGILL BOULEVARD NE
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(404) 506-4932

ENGINEER
AEC, INC.
50 WARM SPRING CIRCLE
ROSWELL, GA 30075
CONTACT: MARK VAN DE WATER
(770) 641-1942
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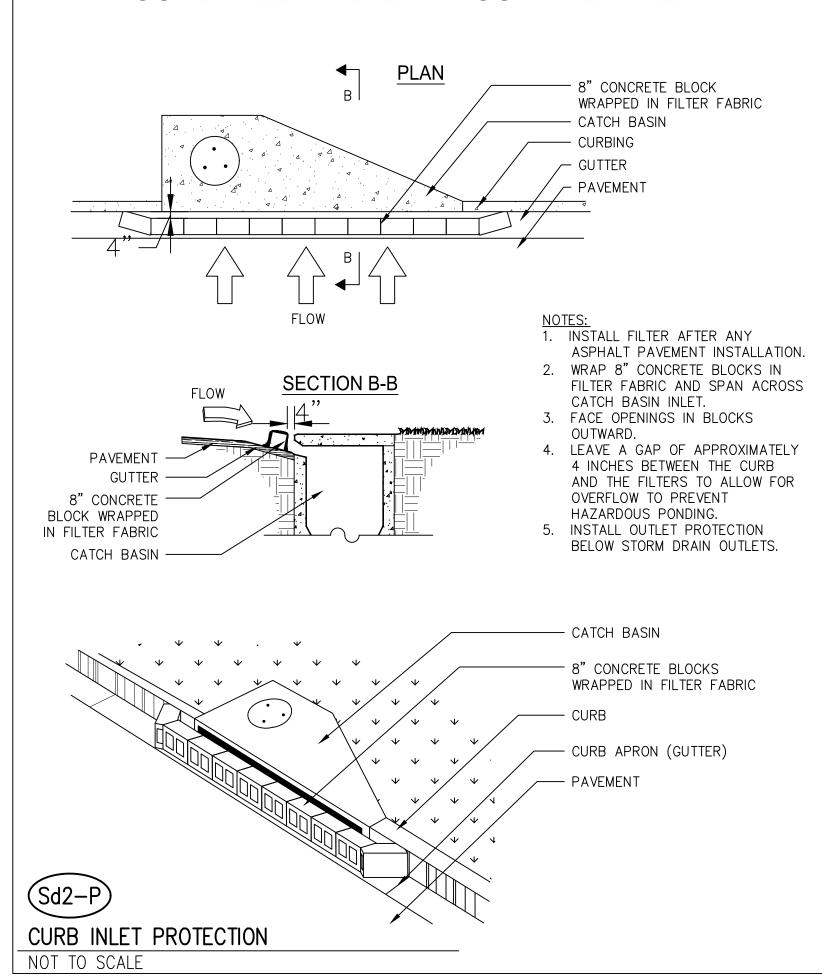
LAND DEPARTMENT

GPC NOAHS ARK OPERATING HEADQUARTERS

	EROSION CONTROL DETAILS						
		CLAYTON COUNT					
			DR. MDA	TR.	CJW/MDV		
	APPROVALS		SCALE		DATE 4/14/2020		
1	RO		DRAWII	NG No.	SHEET No.		
	APF				15 OF 16		

JOBS\18-4190 GPC Noahs Arc OHQ\CIVIL\SEWER ONLY SET\OLD 05 18-4190 GPC Noahs Ark OHQ - UTILITY SET U01 - Copy.dwg, 4/14/2020 3:16:34 PM, kit, ARCH full bleed D (24.00 x 36.00 Inches), 1:1

# **CURB INLET FILTER "PIGS IN BLANKET"**



# DESIGN CRITERIA:

THROUGH TESTING THERE ARE TWO DIFFERENT CATEGORIES (HIGH RETENTION AND HIGH FLOW) SUPPORTED. IN AREAS WHERE BMPS ARE BEING USED ON PAVED SURFACES, OR SAFETY IS A CONCERN, THE POTENTIALLY NEGATIVE EFFECTS OF PONDING SHOULD BE TAKEN INTO ACCOUNT. IN SUCH CASES, A HIGH FLOW BMP IS PREFERRED.

ON UNPAVED AREAS WHERE PONDING WILL NOT CAUSE A SAFETY HAZARD, HIGH RETENTION SHALL BE TAKEN INTO ACCOUNT. IF HIGH RETENTION IS NOT USED IN THIS SITUATION A RATIONALE SHALL BE GIVEN ON THE PLAN AND AN UNPAVED APPLICATION SHOULD

ON UNPAVED AREAS INLET SEDIMENT TRAPS SHALL MEET 90% SOIL RETENTION EFFICIENCY WITH A MINIMUM SEEPAGE EFFICIENCY OF

ON PAVED AREAS OR AREAS WHERE A SAFETY HAZARD IS A SEDIMENT TRAPS SHALL MEET 75% SOIL RETENTION EFFICIENCY WITH A MINIMUM SEEPAGE OF 85%.

SEDIMENT TRAPS MUST BE SELF-DRAINING UNLESS THEY ARE OTHERWISE PROTECTED IN AN APPROVED FASHION THAT WILL NOT PRESENT A SAFETY HAZARD. THE DRAINAGE AREA ENTERING THE INLET SEDIMENT TRAP SHALL BE NO GREATER THAN ONE ACRE.

IF RUNOFF MAY BYPASS THE PROTECTED INLET, A TEMPORARY DIKE SHOULD BE CONSTRUCTED ON THE DOWN SLOPE SIDE OF THE STRUCTURE. ALSO, A STONE FILTER RING MAY BE USED ON THE UP SLOPE SIDE OF THE INLET TO SLOW RUNOFF AND FILTER LARGER SOIL PARTICLES. REFER TO FR—STONE FILTER RING.

# CONSTRUCTION SPECIFICATIONS:

AN EXCAVATION MAY BE CREATED AROUND THE INLET SEDIMENT TRAP TO PROVIDE ADDITIONAL SEDIMENT STORAGE. THE TRAP SHALL BE SIZED TO PROVIDE A MINIMUM STORAGE CAPACITY CALCULATED AT THE RATE OF 67 CUBIC YARDS PER ACRE OF DRAINAGE AREA. A MINIMUM DEPTH OF 1.5 FEET FOR SEDIMENT STORAGE SHOULD BE PROVIDED. SIDE SLOPES SHALL NOT BE STEEPER THAN 2:1.

SEDIMENT TRAPS MAY BE CONSTRUCTED ON NATURAL GROUND SURFACE, ON AN EXCAVATED SURFACE, OR ON MACHINE COMPACTED FILL, PROVIDED THEY HAVE A NON-ERODIBLE OUTLET.

### FILTER FABRIC WITH SUPPORTING FRAME (Sd2-F)

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPE NO GREATER THAN 5%) AND SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS. SILT FENCE MATERIAL WITH WIRE REINFORCEMENT AND SUPPORTED BY STEEL POSTS SHOULD BE USED. THE STAKES SHALL BE SPACED EVENLY AROUND THE PERIMETER OF THE INLET A MAXIMUM OF 3 FEET APART, AND SECURELY DRIVEN INTO THE GROUND, APPROXIMATELY 18 INCHES DEEP. THE FABRIC SHALL BE 36 INCHES TALL AND ENTRENCHED 12 INCHES AND BACKFILLED WITH CRUSHED STONE OR COMPACTED SOIL. FABRIC AND WIRE SHALL BE SECURELY FASTENED TO THE POSTS, AND FABRIC ENDS MUST BE OVERLAPPED A MINIMUM OF 18 INCHES OR WRAPPED TOGETHER AROUND A POST TO PROVIDE A CONTINUOUS FABRIC BARRIER AROUND THE INLET.

### **MAINTENANCE:**

THE TRAP SHALL BE INSPECTED DAILY AND AFTER EACH RAIN, AND REPAIRS MADE AS NEEDED. SEDIMENT SHALL BE REMOVED WHEN THE SEDIMENT HAS ACCUMULATED TO ONE—HALF THE HEIGHT OF THE TRAP.

SEDIMENT SHALL BE REMOVED FROM CURB INLET PROTECTION IMMEDIATELY. FOR EXCAVATED INLET SEDIMENT TRAPS, SEDIMENT SHALL BE REMOVED WHEN ONE—HALF OF THE SEDIMENT STORAGE CAPACITY HAS BEEN LOST TO SEDIMENT ACCUMULATION. SOD INLET PROTECTION SHALL BE MAINTAINED AS SPECIFIED IN DS4 — DISTURBED AREA STABILIZATION (WITH SODDING).

SEDIMENT SHALL NOT BE WASHED INTO THE INLET. IT SHALL BE REMOVED FROM THE SEDIMENT TRAP, DISPOSED OF AND STABILIZED SO THAT IT WILL NOT ENTER THE INLET AGAIN.

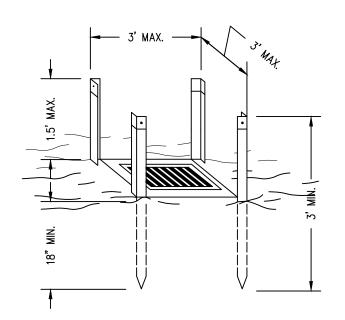
WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN PERMANENTLY STABILIZED, ALL MATERIALS AND ANY SEDIMENT SHALL BE REMOVED, AND EITHER SALVAGED OR DISPOSED OF PROPERLY. THE DISTURBED AREA SHALL BE BROUGHT TO PROPER GRADE, THEN SMOOTHED AND COMPACTED. APPROPRIATELY STABILIZE ALL DISTURBED AREAS AROUND THE INLET.

FILTER FABRIC WITH SUPPORTING FRAME

NOT TO SCALE

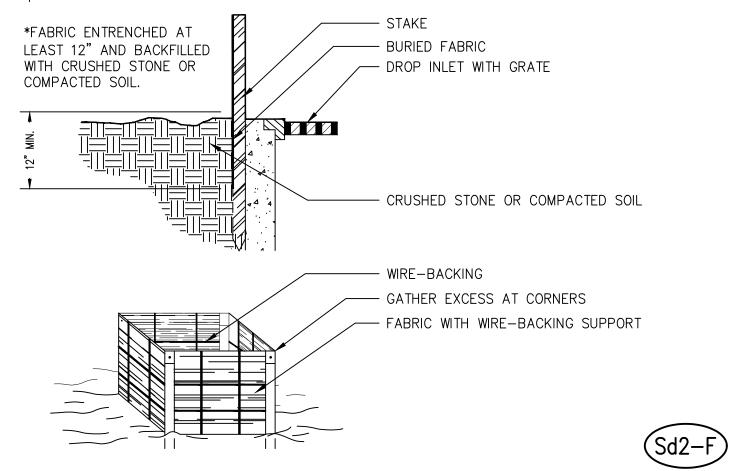
# FABRIC AND SUPPORTING FRAME FOR INLET PROTECTION

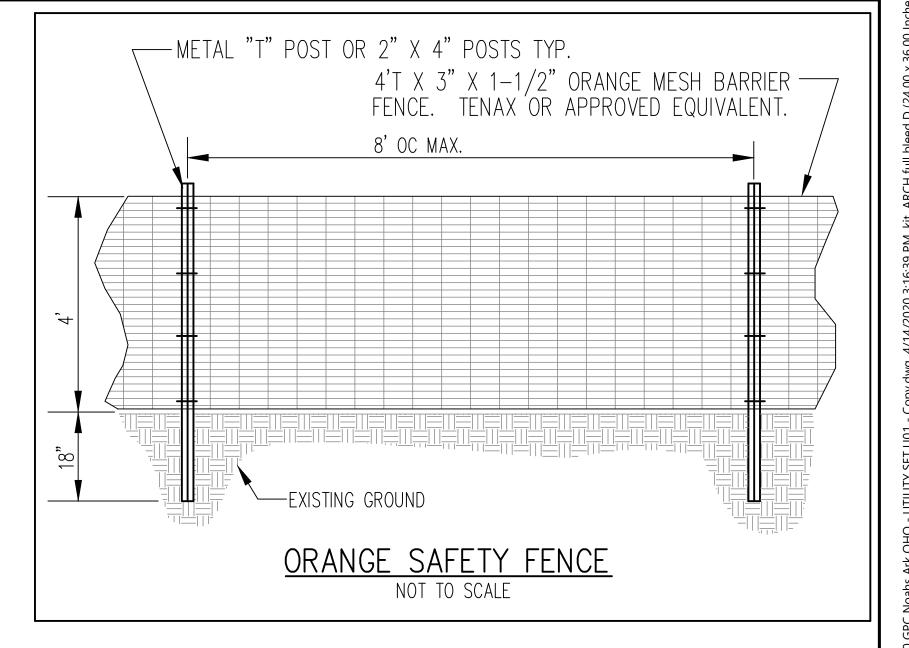
# STEEL FRAME AND TYPE C SILT FENCE INSTALLATION



1. DESIGN IS FOR SLOPES NO GREATER THAN 5% (NOT DESIGNED FOR CONCENTRATED FLOWS).

- 2. THE STEEL POSTS SUPPORTING THE SILT FENCE MATERIAL SHOULD BE SPACED EVENLY AROUND THE PERIMETER OF THE INLET (MAXIMUM OF 3' APART).
- 3. THE STEEL POSTS SHOULD BE SECURELY DRIVEN AT LEAST 18" DEEP.
- 4. THE FABRIC SHOULD BE ENTRENCHED AT LEAST 12" AND THEN BACKFILLED WITH CRUSHED STONE OR COMPACTED SOIL.











GEORGIA POWER CO., ATLANTA, GA.
LAND DEPARTMENT

GPC NOAHS ARK OPERATING HEADQUARTERS

EROSION CONTROL DETAILS

CLAYTON COUNTY. GEORGIA

DR. TR. CH'K
CJW/MDV
SCALE
DATE
4/14/2020
DRAWING No. SHEET No.

16 OF 16