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6/14/2019 12:29 PM  
ryan remillard

FLOODPLAIN NOTE

THERE IS NO FLOODPLAIN ON THIS PROPERTY FROM A WATER COURSE WITH A DRAINAGE AREA EXCEEDING 100 ACRES.

WETLAND NOTE

THERE ARE NO WETLANDS ON THIS SITE.

STORM WATER MANAGEMENT NOTE

STORM WATER MANAGEMENT FOR THIS PROJECT IS PROVIDED ON-SITE.

STATE WATERS BUFFER NOTE

THERE ARE NO STATE WATER BUFFERS ON OR WITHIN 200 FEET OF THIS PROPERTY.

WETLAND CERTIFICATE

WETLAND CERTIFICATION: THE DESIGN PROFESSIONAL, WHOSE SEAL APPEARS HEREON, CERTIFIES THE FOLLOWING: 1) THE NATIONAL WETLAND INVENTORY MAPS HAVE BEEN CONSULTED; AND, 2) THE APPROPRIATE PLAN SHEET DOES NOT INDICATE AREAS OF U.S. ARMY CORPS OF ENGINEERS JURISDICTIONAL WETLANDS AS SHOWN ON THE MAPS; AND 3) IF WETLANDS ARE INDICATED, THE LAND OWNER OR DEVELOPER HAS BEEN ADVISED THAT LAND DISTURBANCE OF PROTECTED WETLANDS SHALL NOT OCCUR UNLESS THE APPROPRIATE FEDERAL WETLANDS ALTERATION (SECTION 404) PERMIT HAS BEEN OBTAINED.

APPROVAL OF THESE PLANS DOES NOT CONSTITUTE APPROVAL BY THE CITY OF MILLEDGEVILLE OF ANY LAND DISTURBING ACTIVITIES WITHIN WETLAND AREAS. IT IS THE RESPONSIBILITY OF THE PROPERTY OWNER TO CONTACT THE APPROPRIATE REGULATORY AGENCY FOR APPROVAL OF ANY WETLAND AREA DISTURBANCE



VICINITY MAP  
N.T.S.



FIRM PANEL MAP  
#13009C0135D DATED: DECEMBER, 17 2010  
N.T.S.

# SITE DEVELOPMENT PLANS FOR McALISTER'S DELI 114 ROBERSON MILL ROAD MILLEDGEVILLE, GA LAND LOT 297 / 1ST DISTRICT / PARCEL ID M52 005A BALDWIN COUNTY

DEVELOPER  
CAPITAL GROWTH BUCHALTER, INC.  
361 SUMMIT BOULEVARD,  
SUITE 110  
BIRMINGHAM, AL 35243  
CONTACT: KIRK FARRELLY  
PHONE: (205) 263-4589

24 HOUR CONTACT  
FOR EROSION  
CONTROL  
KIRK FARRELLY  
(205) 263-4589

TOTAL AREA = 1.7 ACRES  
DISTURBED AREA = 1.41 ACRES

ZONING CC

PROJECT DESCRIPTION  
THE EXISTING SITE IS GRASSED AND HAS PREVIOUSLY BEEN PAD GRADED. THE SITE IS BOUNDED TO THE NORTH BY HWY 29 (ROBERSON MILL ROAD). TO THE EAST BY AN UNNAMED ACCESS ROAD, TO THE SOUTH BY A VACANT LOT ZONED CC, AND TO THE WEST BY AN EXISTING SHERWIN WILLIAMS STORE ZONED CC. THE PROPOSED SITE WOULD BE HOME TO A NEW McALISTERS DELI WITH ONE BUILDING AND ASSOCIATED PARKING AND UTILITIES



4145 SHACKLEFORD ROAD, SUITE 300, NORCROSS, GEORGIA 30093  
TEL: (770) 923-1600, FAX: (770) 923-4202  
CONTACT: CHRISTIE SIMS / MARK BOND  
HJA PROJECT NO.: 19-008

SITE VISIT CERTIFICATION

I CERTIFY THAT PRIOR TO THE DESIGN OF EROSION CONTROL PLANS I OR A REPRESENTATIVE UNDER MY SUPERVISION VISITED THE SITE.

05/15/2019

STEPHEN MARK BOND, P.E.  
GA #23275  
LEVEL II CERTIFIED DESIGN PROFESSIONAL #11367

DATE

DESIGN PROFESSIONAL 7-DAY VISIT CERTIFICATION

DATE OF INSPECTION \_\_\_\_\_

I CERTIFY THE SITE WAS IN COMPLIANCE WITH THE ES&PC PLAN ON THE DATE OF INSPECTION.

GSWCC LEVEL II DESIGN PROFESSIONAL

INSPECTION REVEALED THE FOLLOWING DISCREPANCIES FROM THE ES&PC PLAN.

THESE DEFICIENCIES MUST BE ADDRESSED WITHIN 2 BUSINESS DAYS AND A RE-INSPECTION SCHEDULED. WORK SHALL NOT PROCEED ON THE SITE UNTIL DESIGN PROFESSIONAL CERTIFICATION IS OBTAINED.

Sheet List Table

Sheet Number	Sheet Title
C-00	COVER
C-01	GENERAL NOTES & LEGEND
C-02	EXISTING CONDITIONS & DEMOLITION PLAN
C-03	SITE PLAN
C-04	GRADING PLAN
C-05	UTILITY PLAN
C-06	GDOT - GUPS UTILITY PLAN
C-07	PHOTOMETRIC PLAN
C-08	STORM & SANITARY PROFILES
C-09	ESPC PHASE 1
C-10	ESPC PHASE 2
C-11	ESPC PHASE 3
C-12	ESPC NOTES
C-13	LANDSCAPE PLAN
C-14	ESPC DETAIL 1
C-15	ESPC DETAIL 2
C-16	ESPC DETAIL 3
C-17	ESPC DETAIL 4
C-18	CONSTRUCTION DETAILS 1
C-19	CONSTRUCTION DETAILS 2
C-20	STORM DETAILS
C-21	WATER & SEWER DETAILS 1
C-22	WATER & SEWER DETAILS 2
C-23	POND OCS DETAILS

This document is prepared for the exclusive use of CAPITAL GROWTH BUCHALTER, INC. and shall not be relied on by any other person or entity.



Know what's below.  
Call before you dig.

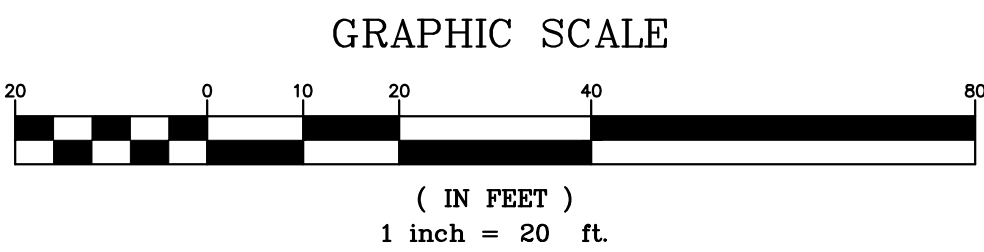




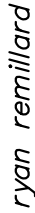




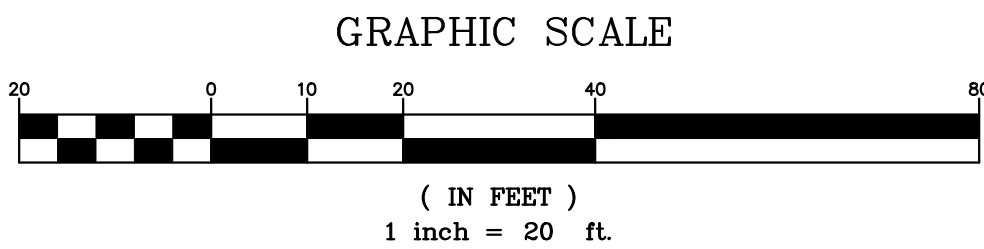








# C-04











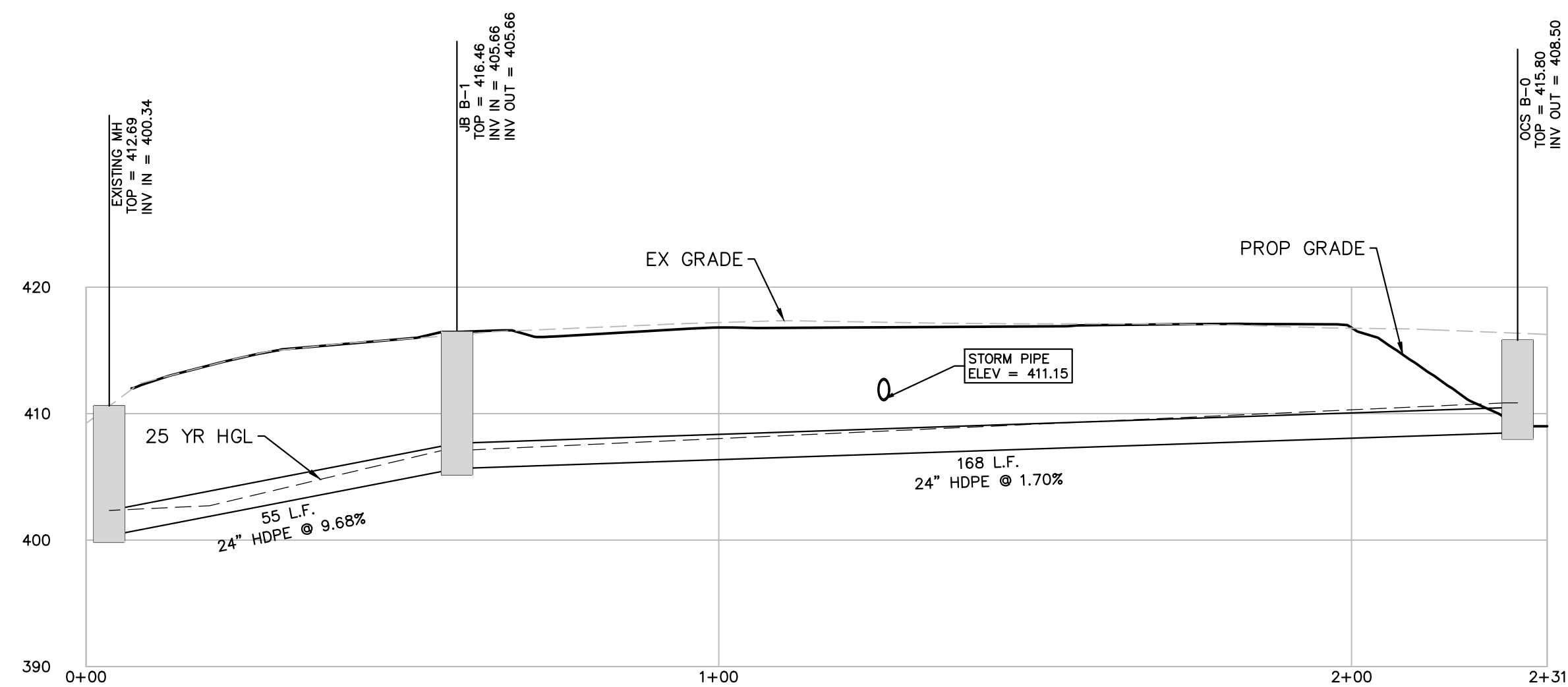
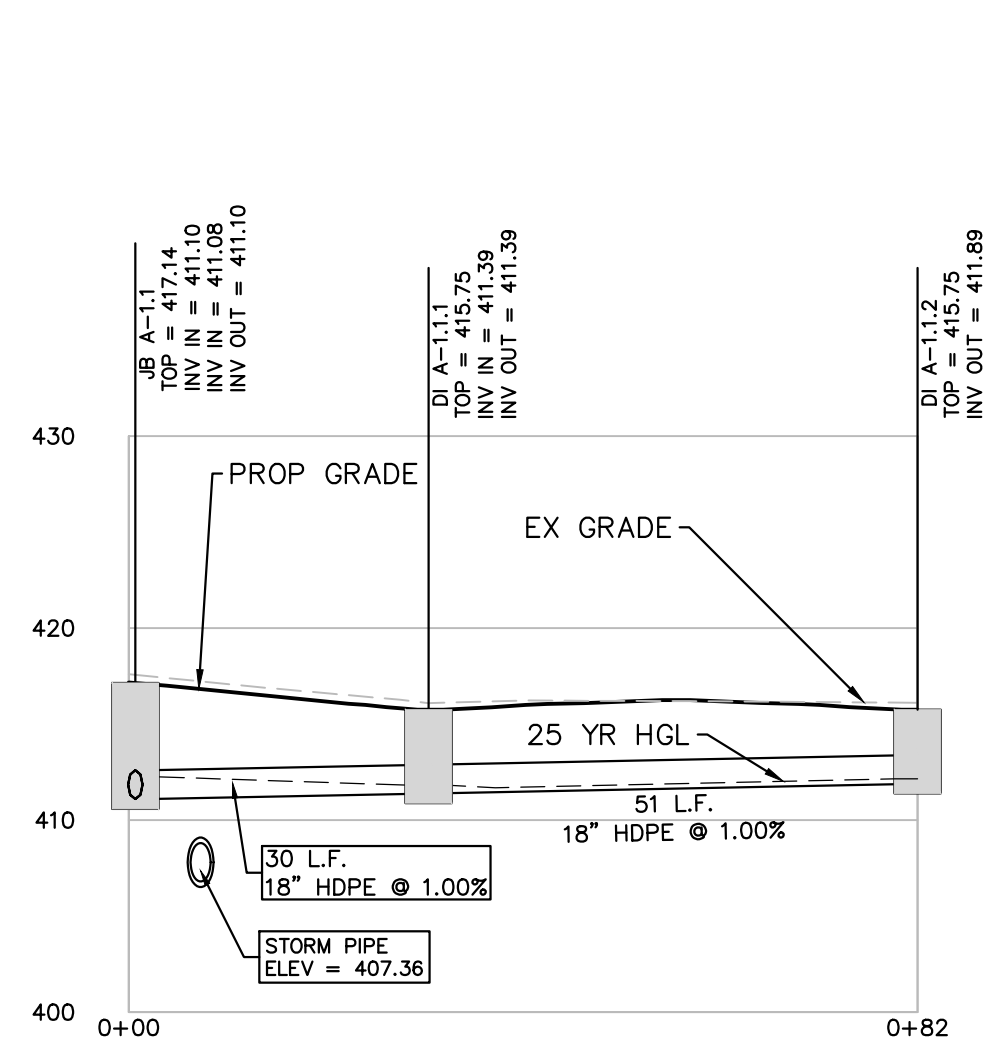
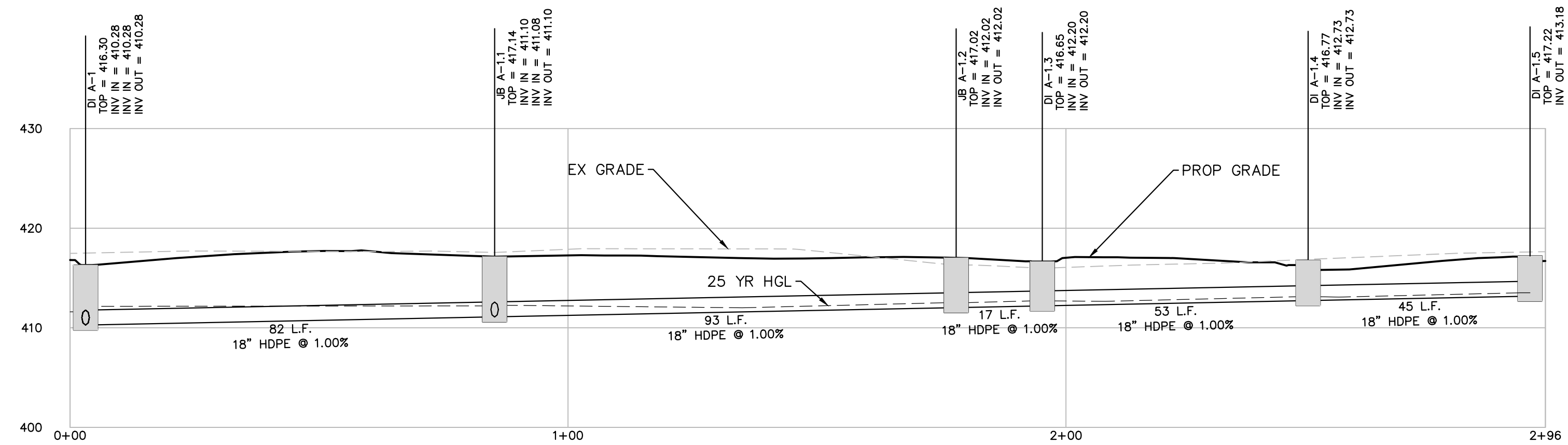
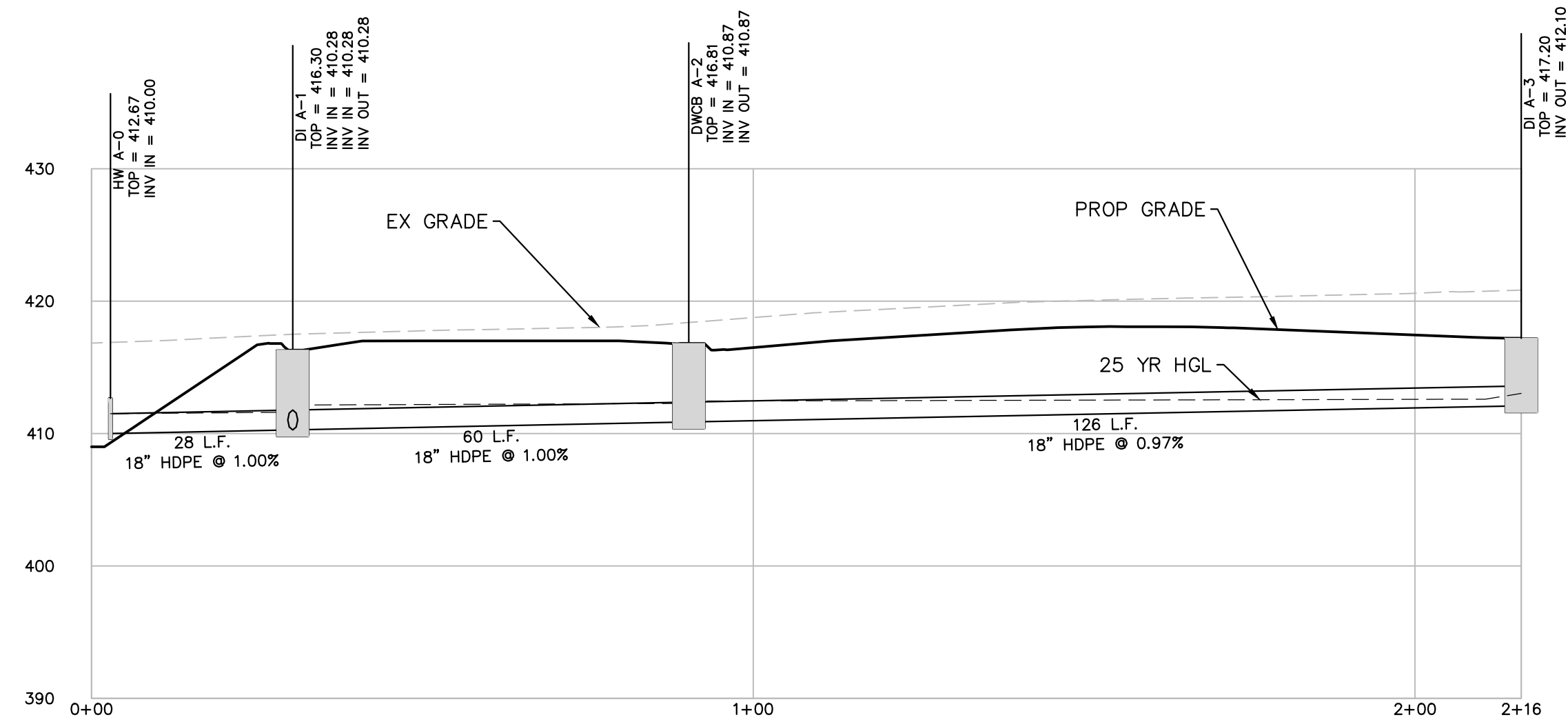


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1. Calculation at grade.
2. Based on 27.5' AFG including 2.5' AFG bases.

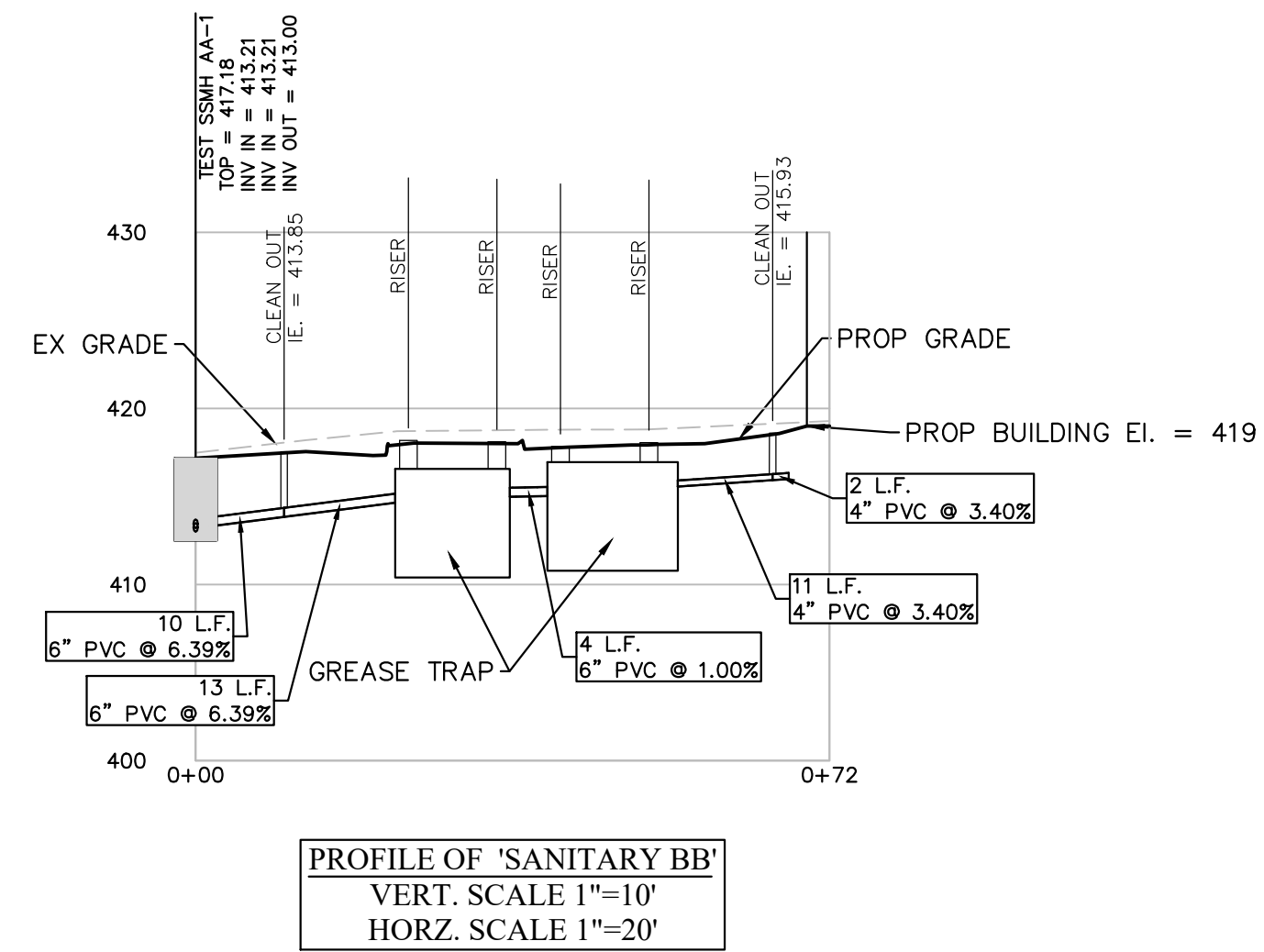
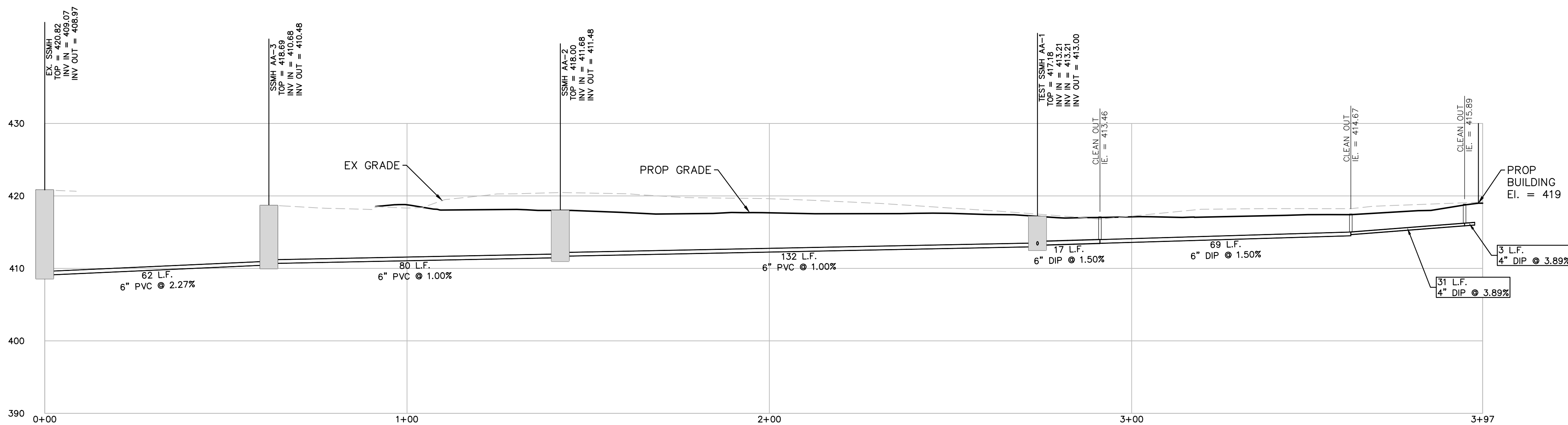
- DUE TO CHANGING LIGHTING ORDINANCES IT IS THE CONTRACTORS RESPONSIBILITY TO SUBMIT THE SITE PHOTOMETRICS AND LUMINAIRE SPECS TO THE LOCAL INSPECTOR BEFORE ORDERING TO ENSURE THIS PLAN COMPLIES WITH LOCAL LIGHTING ORDINANCES.
- THIS LIGHTING DESIGN IS BASED ON INFORMATION SUPPLIED BY OTHERS. CHANGES IN ELECTRICAL SUPPLY, AREA GEOMETRY AND OBJECTS WITHIN THE LIGHTED AREA MAY PRODUCE ILLUMINATION VALUES DIFFERENT FROM THE PREDICTED RESULTS SHOWN ON THIS LAYOUT.
- THIS LAYOUT IS BASED ON .IES FILES THAT WERE LAB TESTED OR COMPUTER GENERATED. ACTUAL RESULTS MAY VARY.





LineNo.	InletID	Inlet Basin	TotalArea (ac)	RunoffCoeff (C)	TotalRunoff (cfs)	LineLength (ft)	LineSize (in)	LineSlope (%)	*GutterSpread (ft)	VelAve (ft/s)	HGLUp (ft)	HGLDn (ft)
1	DI A-1	0.1	1.27	0.95	7.57	27.54	18	1.02	6.23	4.45	411.59	411.5
2	JB A-1.1	0	0.47	0	2.82	82.14	18	1	....	1.89	412.13	412.09
3	JB A-1.2	0	0.28	0	1.78	92.68	18	0.99	....	2.36	412.52	412.19
4	DI A-1.3	0.11	0.28	0.91	1.79	17.31	18	1.04	6.41	3.46	412.7	412.52
5	DI A-1.4	0.05	0.17	0.85	1.1	53.38	18	0.99	4.25	2.56	413.12	412.7
6	DI A-1.5	0.12	0.12	0.83	0.82	44.56	18	1.01	6.4	2.5	413.52	413.12
7	DWCB A-2	0.48	0.7	0.94	4.54	59.94	18	0.98	10.01	2.68	412.18	412.09
8	DI A-3	0.22	0.22	0.72	1.31	122.29	18	1.01	....	1.95	412.53	412.34
9	DI A-1.1.1	0.12	0.19	0.88	1.18	30.47	18	1.02	6.61	1.95	411.8	412.19
10	DI A-1.1.2	0.07	0.07	0.79	0.46	50.92	18	0.98	4.67	1.78	412.14	411.8

\* = 10 YEAR STORM



Hayes James

ENGINEERS, PLANNERS &amp; SURVEYORS

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**Contact: KIRK FARRELLY**  
**(205) 263-4589**



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**PRELIMINARY**  
NOT TO BE RELEASED FOR CONSTRUCTION

Project Title

**McALISTER'S DELI**

Project Location	
Address	114 ROBERSON MILL ROAD
City, State Zip	MILLEDGEVILLE, GA
Land Lot	297
District-Section	1ST
County	BALDWIN

Project No.	19-008
Drawn By:	BT
Checked By:	MB
Initial Issue Date:	05-24-2019

Sheet Title

## STORM & SANITARY PROFILES

Sheet Number

**C-08**



9. MAINTENANCE OF ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES, WHETHER TEMPORARY OR PERMANENT, SHALL BE AT ALL TIMES THE RESPONSIBILITY OF THE CONTRACTOR.
10. SEDIMENT STORAGE MAINTENANCE INDICATORS MUST BE INSTALLED IN STORAGE STRUCTURES, INDICATING THE  $\frac{3}{4}$  FULL VOLUME (CLEAN OUT LEVEL).
11. DETENTION POND, DETENTION OUTLET STRUCTURES AND TEMPORARY SEDIMENT POND FEATURES ARE TO BE CONSTRUCTED AND FULLY OPERATIONAL PRIOR TO ANY OTHER CONSTRUCTION GRADING.
12. ALL FILL SLOPES SHALL HAVE SILT FENCE PLACED AT THE SLOPE'S TOE.
13. CONCENTRATED FLOW AREAS AND ALL SLOPES GREATER THAN 2.5:1 WITH A HEIGHT OF 10 FEET OR GREATER SHALL BE STABILIZED WITH THE APPROPRIATE EROSION CONTROL MATTING OR BLANKET.
14. THERE ARE NO WETLANDS ON THE PROPOSED PROJECT. THERE ARE NO STATE WATERS WITHIN 200 FEET OF THE PROPOSED PROJECT.
15. SOLID WASTE DISPOSAL TO BE OFF-SITE AS DESCRIBED IN THE SOLID WASTE MANAGEMENT AFFIDAVIT. NOT DISCHARGE TO WATERS OF THE STATE EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.
16. THIS SITE DOES DISCHARGE WITHIN 1 MILE OF AN IMPAIRED STREAM BUT DISCHARGES TO A SEPARATE BASIN

1. THE CONTRACTOR IS RESPONSIBLE FOR THE FILING BOTH A NOTICE OF INTENT AND A NOTICE OF TERMINATION (NO/NOT) WITH THE GEORGIA E.P.D.
2. SEDIMENT AND EROSION CONTROL MEASURES AND PRACTICES TO BE INSPECTED DAILY.
3. DISTURBED AREAS ARE TO BE GRASSED AS SOON AS CONSTRUCTION PHASES PERMIT.
4. INSPECTIONS BY QUALIFIED PERSONNEL PROVIDED BY THE PRIMARY PERMITTEE AND THE ASSOCIATED RECORDS SHALL BE KEPT ON SITE IN COMPLIANCE WITH GAR. 100001.
5. STORAGE LOCATION AND DISPOSAL PROCEDURES FOR CONCRETE TRUCK OR MIXER WASH OUT. CONCRETE TRUCKS SHALL BE REQUIRED TO HAVE A TEMPORARY TRUCK WASH AREA LOCATED IN AN AREA DESIGNATED BY THE CONTRACTOR. WASH OUT SHALL BE CONTAINED WITHIN A PIT OR TRENCH WITH NO MATERIAL LEAVING THE SITE OR IMPACTING VEGETATED AREAS SHOWN TO BE AFFECTED ON THE DISTURBED AREAS. EXCESS WATER/EFFLUENT BE EITHER THE BREAKING OF MATERIAL INTO ACCEPTABLE PIECES AND PLACEMENT WITHIN UNCLASSIFIED FILL AREAS AS DIRECTED BY THE ONSITE GEOTECHNICAL ENGINEER.
6. PAINT AND/OR OTHER CHEMICALS SHALL BE STORED IN SECURED FACILITIES WITH RESTRICTED ACCESS TO EMPLOYEES ONLY. CLEAN UP AND DISPOSAL OF THIS MATERIAL SHALL BE IN ACCORDANCE WITH ALL RECOGNIZED LOCAL AND FEDERAL REQUIREMENTS. ALL DISPOSAL SHALL BE APPROVED BY THE ONSITE GEOTECHNICAL ENGINEER.
7. EMERGENCY PROCEDURES FOR SPILL OR REPORTABLE QUALITY OF PETROLEUM PRODUCTS: ALL PETROLEUM PRODUCTS SHALL BE STORED AND USED IN AN AREAS THAT PROVIDES A SECONDARY CONTAINMENT FEATURE. TYPICALLY THIS WILL CONSIST OF AN EARTHEN BERM CONSTRUCTED AROUND 3 SIDES OF THE STORAGE AREA. EMERGENCY PROCEDURES FOR SPILLS SHALL BE KEPT ON SITE AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE CONTRACTOR SHALL LOCATED STORAGE FACILITIES IN AREAS WITH THE LEAST FORESEEABLE IMPACT IF A CATASTROPHIC EVENT SHOULD OCCUR.
8. PORTAJOHNS SHALL BE LOCATED ONSITE AND USED DURING CONSTRUCTION.

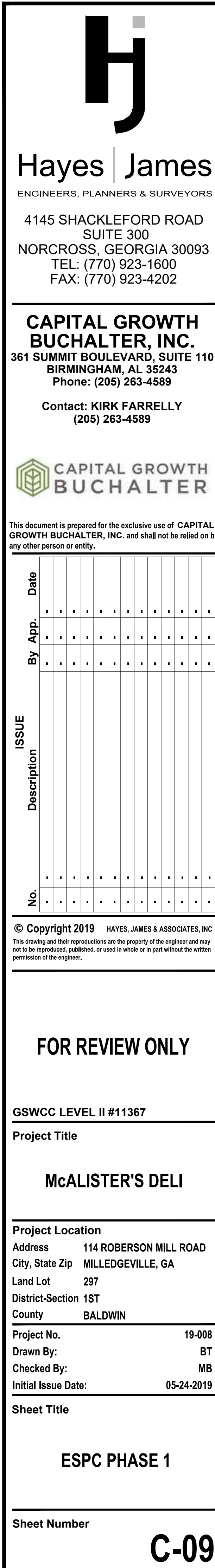
1. PRIOR TO ANY OTHER CONSTRUCTION, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT EACH ENTRY TO OR EXIT FROM THE SITE.
2. THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH STONE, AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEAN-OUT OF ANY STRUCTURES USED TO TRAP SOLIDS SUCH AS SILLED, DROPPED, WASHED OR TRACKED FROM THE VEHICLES ONTO PUBLIC ROADWAY OR INTO STORM DRAIN MUST BE REMOVED.
3. PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, THE LIMITS OF LAND DISTURBANCE SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE SHALL OCCUR WITHIN THE APPROVED LIMITS INDICATED ON THE APPROVED PLANS.
4. IMMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION ENTRANCES/EXISTS, ALL PERIMETER EROSION CONTROL DEVICES AND STORM WATER MANAGEMENT DEVICES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION.
5. THE CONTRACTOR SHALL FURNISH AND MAINTAIN ALL NECESSARY BARRICADES WHILE ROADWAY FRONTAGE IMPROVEMENTS ARE BEING MADE.
6. THE CONSTRUCTION OF THE SITE WILL INITIATE WITH THE INSTALLATION OF EROSION CONTROL MEASURES SUFFICIENT TO CONTROL SEDIMENT DEPOSITS AND EROSION. ALL SEDIMENT CONTROL WILL BE MAINTAINED UNTIL ALL UPSTREAM GROUND WITHIN THE CONSTRUCTION AREA HAS BEEN COMPLETELY STABILIZED WITH PERMANENT VEGETATION AND ALL ROADS/DRIVEWAYS HAVE BEEN PAVED.
7. FAILURE TO INSTALL, OPERATE OR MAINTAIN ALL THE EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB SITE UNTIL SUCH MEASURES ARE CORRECTED BACK TO GEORGIA STANDARDS.
8. A COPY OF THE APPROVED LAND DISTURBANCE PLAN AND PERMIT SHALL BE PRESENT ON THE SITE WHENEVER LAND DISTURBANCE ACTIVITY IS IN PROGRESS.

1. EXISTING ROADS
- 1.1. DIVERSION DITCHES AND/OR A DOUBLE ROW OF SILT FENCE SHALL BE INSTALLED ALONG EXISTING EDGE OF PAVEMENT TO PREVENT SEDIMENT FROM ESCAPING.
- 1.2. EXISTING INLETS SHALL BE PROTECTED W/ S42-E OR S42-P AS SHOWN TO PREVENT CLOGGING OF EXISTING STORM PIPE. EXISTING PIPE SYSTEMS SHALL BE INSPECTED AND CLEANED AFTER EVERY RAINFALL.
2. THERE IS AN EXISTING LAKE WITHIN A MILE DOWNSTREAM OF THE SITE. SEDIMENT BASINS AND SILT FENCE WILL BE INSTALLED TO PROTECT THE LAKE FROM SILTATION.
3. THERE ARE STEEP SLOPES WITHIN THE PROJECT AREA: THESE SLOPES WILL BE STABILIZED WITH THE APPROPRIATE VEGETATION. DIVERSION DITCHES SHALL DIRECT RUNOFF TO THE APPROPRIATE DOWNDRAIN STRUCTURE.

PHASE 1 EROSION CONTROL CONSISTS OF INITIAL PERIMETER CONTROLS, AND INSTALLATION OF SEDIMENT STORAGE BMPs.

PHASE 2 EROSION CONTROL CONSISTS OF MAINTENANCE OF THE PERIMETER CONTROLS AND SEDIMENT STORAGE BMPs INSTALLED IN PHASE 1. PHASE 2 ALSO INCLUDES CLEARING, GRADING AND EXCAVATION ACTIVITIES, STABILIZATION OF DISTURBED AREAS AND INSTALLATION OF BMPs TO PREVENT ESCAPE OF POLLUTANTS INTRODUCED BY CLEARING AND GRADING ACTIVITIES.

PHASE 3 EROSION CONTROL CONSISTS OF MAINTENANCE OF BMPs INSTALLED IN PHASES 1 & 2 AND FINAL STABILIZATION OF THE SITE AND REMOVAL OF ALL TEMPORARY EROSION CONTROL MEASURES ONCE THE SITE IS STABILIZED.





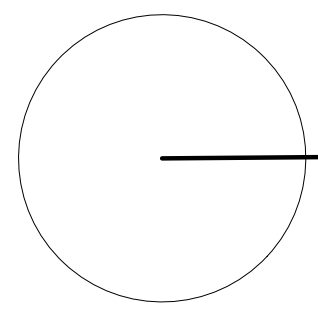
1. THE EXISTING LAND IS CURRENTLY GRASSED. THERE ARE NO EXISTING BUILDINGS WITHIN THE SITE.
2. THE PROPOSED USE OF THE LAND IS A 3,318 SFT COMMERCIAL BUILDING AND ASSOCIATED PARKING AND DRIVES.
3. PROJECT ACREAGE = 1.71 ACRES
4. DISTURBED AREA = 1.41 ACRES
5. A 25-FOOT UNDISTURBED BUFFER AND A 75-FOOT IMPERVIOUS SETBACK IS TO MAINTAINED ADJACENT TO ALL STREAMS, OR THERE ARE NO STREAM BUFFERS ON THE PROJECT.
6. MAINTENANCE OF ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES, WHETHER TEMPORARY OR PERMANENT, SHALL BE AT ALL TIMES THE RESPONSIBILITY OF THE CONTRACTOR.
7. SEDIMENT STORAGE MAINTENANCE INDICATORS MUST BE INSTALLED IN STORAGE STRUCTURES, INDICATING THE  $\frac{1}{2}$  FULL VOLUME (CLEAN OUT LEVEL).
8. ALL FILL SLOPES SHALL HAVE SILT FENCE LOCATED AT THE SLOPE'S TOE.
9. CONCENTRATED FLOW AREAS AND FLOW AREAS GREATER THAN 2.5:1 WITH A HEIGHT OF 10 FEET OR GREATER SHALL BE STABILIZED WITH THE APPROPRIATE EROSION CONTROL MATTING OR BLANKET.
10. THERE ARE NO WETLANDS ON THE PROPOSED PROJECT. THERE ARE NO STATE WATERS WITHIN 200 FEET OF THE PROPOSED PROJECT.
11. SOLID WASTE DISPOSAL TO BE OFF-SITE AS DESCRIBED IN THE SOLID WASTE MANAGEMENT ACTION PLAN. NOT DISCHARGE TO WATERS OF THE STATE EXCEPT AS AUTHORIZED BY A SECTION 40 PERMIT.

1. SEDIMENT AND EROSION CONTROL MEASURES AND PRACTICES TO BE INSPECTED DAILY.
2. DISTURBED AREAS ARE TO BE GRASSED AS SOON AS CONSTRUCTION PHASES PERMIT.
3. INSPECTIONS BY QUALIFIED PERSONNEL PROVIDED BY THE PRIMARY PERMITTEE AND THE ASSOCIATED RECORDS SHALL BE KEPT ON SITE IN COMPLIANCE WITH GAR. 10001.
4. STORAGE LOCATION AND DISPOSAL PROCEDURES FOR CONCRETE TRUCK OR MIXER WASH OUT: CONCRETE TRUCK OR MIXER WASH OUT SHALL BE A TEMPORARY TRUCK WASH AREA LOCATED IN AN AREA DESIGNATED BY THE CONTRACTOR. CONCRETE TRUCK WASH OUT SHALL BE CONTAINED WITHIN A PIT OR TRENCH WITH NO MATERIAL LEAVING THE SITE OR IMPACTING VEGETATED AREAS SHOWN TO BE SENSITIVE TO THE SPILL. SPILL DISPOSAL AND WASHING EMERGENCY PROCEDURES SHALL BE INCLUDED IN THE CONTRACTOR SHALL LOCATED STORAGE FACILITIES IN AREAS WITH THE LEAST FORESEEABLE IMPACT IF A CATASTROPHIC EVENT SHOULD OCCUR.
5. PAINT AND/OR OTHER CHEMICALS SHALL BE STORED IN SECURED FACILITIES WITH RESTRICTED ACCESS TO EMPLOYEES ONLY. CLEAN UP AND DISPOSAL OF THIS MATERIAL SHALL BE IN ACCORDANCE WITH ALL RECOGNIZED LOCAL AND FEDERAL REQUIREMENTS. ALL DISPOSAL SHALL BE APPROVED OFF-SITE WASTEWATER TREATMENT TO ADEQUATELY TREAT MATERIAL.
6. EMERGENCY PROCEDURES FOR SPILL OR REPORTABLE QUANTITY OF PETROLEUM PRODUCTS: ALL PERMITTEES SHALL PROVIDE STORAGE AND DISPOSAL IN AREAS THAT PROVIDE A SECONDARY CONTAINMENT FEATURE. TYPICALLY THIS WILL CONSIST OF AN EARTHEN BERM CONSTRUCTED AROUND 3 SIDES OF THE STORAGE AREA. EMERGENCY PROCEDURES FOR SPILLS SHALL BE KEPT ON SITE AND INCLUDED IN THE EMERGENCY RESPONSE PLAN. THE CONTRACTOR SHALL LOCATED STORAGE FACILITIES IN AREAS WITH THE LEAST FORESEEABLE IMPACT IF A CATASTROPHIC EVENT SHOULD OCCUR.
7. PORTAJOHNS SHALL BE LOCATED ONSITE AND USED DURING CONSTRUCTION.

1. 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 TOP DRESSING WITH STONE, AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEAN-OUT OF ANY STRUCTURES USED TO TRAP SEDIMENT. SPILLED, DROPPED, OR WASHED OR TRACKED FROM THE VEHICLES ONTO PUBLIC ROADWAY OR INTO STORM DRAIN MUST BE REMOVED.
2. THE CONTRACTOR SHALL FURNISH AND MAINTAIN ALL NECESSARY BARRICADES WHILE ROADWAY FRONTAGE IMPROVEMENTS ARE BEING MADE.
3. THE CONSTRUCTION OF THE SITE WILL INITIATE WITH THE INSTALLATION OF EROSION CONTROL MEASURES SUFFICIENT TO CONTROL SEDIMENT DEPOSITS AND EROSION. ALL SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL ALL STREAM BEDS WITHIN THE CONSTRUCTION AREA HAVE BEEN COMPLETELY STABILIZED WITH PERMANENT VEGETATION AND ALL ROADS/DRIVEWAYS HAVE BEEN PAVED.
4. FAILURE TO INSTALL, OPERATE OR MAINTAIN ALL THE EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB SITE UNTIL SUCH MEASURES ARE CORRECTED BACK TO GEORGIA STANDARDS.
5. A COPY OF THE APPROVED LAND DISTURBANCE PLAN AND PERMIT SHALL BE PRESENT ON THE SITE WHENEVER LAND DISTURBANCE ACTIVITY IS IN PROGRESS.

		SURFACE WATER DRAINAGE AREA, SQUARE MILES			
		0-4.99	5.0-9.99	10-24.99	25-49.99
SITE SIZE (ACRES)	1.0-10	(75)	150	200	400
	10.01-25	50	100	100	200
	25.01-50	50	50	100	100
	50.01-100	50	50	50	50

**SAMPLE OUTFALLS:**  
**STUDY PT #1 - JB B-1**



HALPERN PROPERTIES, LLC  
DB:1029 PAGE:43  
PARCEL ID#:M52 011

CONTRACTOR SHALL REFERENCE THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR THE CONSTRUCTION, MAINTENANCE AND DISPOSAL OF ALL EROSION AND SEDIMENT CONTROL MEASURES.

GPS COORDINATES  
N 33.107392  
W 83.255967

N/F  
HALPERN PROPERTIES, LLC  
DB:1029 PAGE:43  
PARCEL ID#:M52 011

4145 SHACKLEFORD ROAD  
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**FOR REVIEW ONLY**

**GSWCC LEVEL II #11367**

**Project Title**

## McALISTER'S DELI

Project Location	
Address	114 ROBERSON MILL ROAD
City, State Zip	MILLEDGEVILLE, GA
Land Lot	297
District-Section	1ST
County	BALDWIN

Project No.	19-008
Drawn By:	BT
Checked By:	MB
Initial Issue Date:	05-24-2019

## Sheet Title

## ESPC PHASE 2

Sheet Number

# C-10



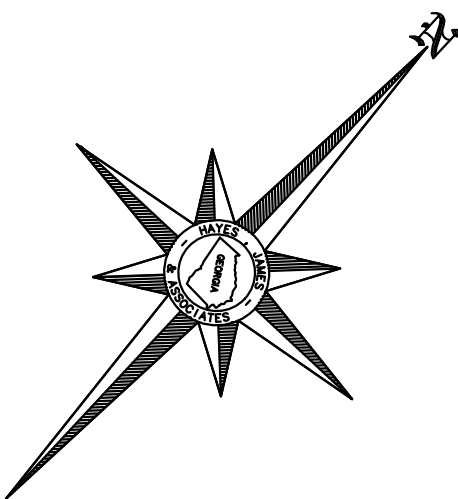








( IN FEET )  
1 inch = 20 ft.





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ryan remillard

# GEORGIA UNIFORM CODING SYSTEM FOR SOIL EROSION AND SEDIMENT CONTROL PRACTICES

## GEORGIA SOIL AND WATER CONSERVATION COMMISSION

### STRUCTURAL PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Cd	CHECKDAM			A small temporary barrier or dam constructed across a swale, drainage ditch or area of concentrated flow.
Ch	CHANNEL STABILIZATION			Improving, constructing or stabilizing an open channel, existing stream, or ditch.
Co	CONSTRUCTION EXIT			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			A travelpad 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			A temporary channel constructed to convey flow around a construction site while a permanent structure is being constructed.
Di	DIVERSION			An earth channel or dike located above, below or across a slope to divert runoff. This may be a temporary or permanent structure.
Dn1	TEMPORARY DOWNDRAIN STRUCTURE			A flexible conduit of heavy-duty fabric or other material designed to safely conduct surface runoff down a slope. This is temporary and inexpensive.
Dn2	PERMANENT DOWNDRAIN STRUCTURE			A paved chute, pipe, sectional conduit or similar material designed to safely conduct surface runoff down a slope.
Fr	FILTER RING			A temporary stone barrier constructed at storm drain inlets and pond outlets.
Ga	GABION			Rock filter baskets which are hand-placed into position forming soil stabilizing structures.
Gr	GRADE STABILIZATION STRUCTURE			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 of water into less erosive sheet flow. This should be constructed only on undisturbed soils.
Rd	ROCK FILTER DAM			A permanent or temporary stone filter dam installed across small streams or drainageways.
Re	RETAINING WALL			A wall installed to stabilize cut and fill slopes where maximum permissible slopes are not obtainable. Each situation will require special design.
Rt	RETRO FITTING			A device or structure placed in front of a permanent stormwater detention pond outlet structure to serve as a temporary sediment filter.
Sd1	SEDIMENT BARRIER			A barrier to prevent sediment from leaving the construction site. It may be sandbags, bales of straw or hay, brush, logs and poles, grove, or a silt fence.
Sd2	INLET SEDIMENT TRAP			An impounding area created by excavating around a storm drain drop inlet. The excavated area will be filled and stabilized on completion of construction activities.
Sd3	TEMPORARY SEDIMENT BASIN			A basin created by excavation or a dam across a waterway. The surface water runoff is temporarily stored allowing the bulk of the sediment to drop out.
Sd4	TEMPORARY SEDIMENT TRAP			A small temporary pond that drains a disturbed area so that sediment can settle out. The principle feature distinguishing a temporary sediment trap from a temporary sediment basin is the lack of a pipe or riser.
Sk	FLOATING SURFACE SKIMMER			A buoyant device that releases/drains water from the surface of sediment ponds, traps, or basins at a controlled rate of flow.
Spb	SEEP BERM			Linear control device constructed as a diversion perpendicular to the direction of runoff to enhance dissipation and infiltration, while creating multiple sedimentation chambers with the employment of intermediate dikes.

### STRUCTURAL PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Sr	TEMPORARY STREAM CROSSING			A temporary bridge or culvert-type structure protecting a stream or watercourse from damage by crossing construction equipment.
St	STORMDRAIN OUTLET PROTECTION			A paved or short section of riprap channel at the outlet of a storm drain system preventing erosion from the concentrated runoff.
Su	SURFACE ROUGHENING			A rough soil surface with horizontal depressions on a contour or slopes left in a roughened condition after grading.
Tc	TURBIDITY CURTAIN			A floating or staked barrier installed within the water (it may also be referred to as a floating boom, silt barrier, or silt curtain).
Tp	TOPSOILING			The practice of stripping off the more fertile soil, storing it, then spreading it over the disturbed area after completion of construction activities.
Tt	TREE PROTECTION			To protect desirable trees from injury during construction activity.
Wt	VEGETATED WATERWAY OR STORMWATER CONVEYANCE CHANNEL			Paved or vegetative water outlets for diversions, terraces, berms, dikes or similar structures.

### VEGETATIVE PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Bf	BUFFER ZONE			Strip of undisturbed original vegetation, enhanced or restored existing vegetation or the reestablishment of vegetation surrounding an area of disturbance or bordering streams.
Cs	COASTAL DUNE STABILIZATION (WITH VEGETATION)			Planting vegetation on dunes that are denuded artificially constructed, or re-nourished.
Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)			Establishing temporary protection for disturbed areas where seedlings may not have a suitable growing season to produce an erosion retarding cover.
Ds2	DISTURBED AREA STABILIZATION (WITH TOP SEEDING)			Establishing a temporary vegetative cover with fast growing seedlings on disturbed areas.
Ds3	DISTURBED AREA STABILIZATION (WITH PERM SEEDING)			Establishing a permanent vegetative cover such as trees, shrubs, vines, grasses, or legumes on disturbed areas.
Ds4	DISTURBED AREA STABILIZATION (SODDING)			A permanent vegetative cover using sods on highly erodible or critically eroded lands.
Du	DUST CONTROL ON DISTURBED AREAS			Controlling surface and air movement of dust on construction site, roadways and similar sites.
Fl-Co	FLOCCULANTS AND COAGULANTS			Substance formulated to assist in the solids/liquid separation of suspended particles in solution.
Sb	STREAMBANK STABILIZATION (USING PERM VEGETATION)			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			A protective covering used to prevent erosion and establish temporary or permanent vegetation on steep slopes, shore lines, or channels.
Tac	TACKIFIERS AND BINDERS			Substance used to anchor straw or hay mulch by causing the organic material to bind together.

### DEFINITION

THE ESTABLISHMENT OF TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDINGS FOR SEASONAL PROTECTION ON DISTURBED OR DENUDED AREAS.

### REQUIREMENT FOR REGULATORY COMPLIANCE

MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 14 DAYS OF DISTURBANCE. TEMPORARY GRASSING, INSTEAD OF MULCH, CAN BE APPLIED TO ROUGH GRADED AREAS THAT WILL BE EXPOSED FOR LESS THAN SIX MONTHS. IF AN AREA IS EXPECTED TO BE UNDISTURBED FOR LONGER THAN SIX MONTHS, PERMANENT PERENNIAL VEGETATION SHALL BE USED. IF OPTIMUM PLANTING CONDITIONS FOR TEMPORARY GRASSING ARE LACKING, MULCH CAN BE USED AS A SINGULAR EROSION CONTROL DEVICE FOR UP TO SIX MONTHS BUT IT SHALL BE APPLIED AT THE APPROPRIATE DEPTH, ANCHORED, AND HAVE A CONTINUOUS 90% COVER OR GREATER OF THE SOIL SURFACE. REFER TO SPECIFICATION Ds1-DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING).

### SPECIFICATIONS

#### GRADING AND SHAPING

EXCESSIVE WATER RUN-OFF SHALL BE REDUCED BY PROPERLY DESIGNED AND INSTALLED EROSION CONTROL PRACTICES SUCH AS CLOSED DRAINS, DITCHES, DIKES, DIVERSIONS, SEDIMENT BARRIERS AND OTHERS.

NO SHAPING OR GRADING IS REQUIRED IF SLOPES CAN BE STABILIZED BY HAND-SEEDED VEGETATION OR IF HYDRAULIC SEEDING EQUIPMENT IS TO BE USED.

WHEN A HYDRAULIC SEEDER IS USED, SEEDBED PREPARATION IS NOT REQUIRED. WHEN USING CONVENTIONAL OR HANDSEEDING, SEEDBED PREPARATION IS NOT REQUIRED IF THE SOIL MATERIAL IS LOOSE AND NOT SEALED BY RAINFALL.

WHEN SOIL HAS BEEN SEALED BY RAINFALL OR CONSISTS OF SMOOTH CUT SLOPES, THE SOIL SHALL BE PITTED, TRENCHED OR OTHERWISE SCARIFIED TO PROVIDE A PLACE FOR SEED TO LODGE AND GERMINATE.

#### LIME AND FERTILIZER

AGRICULTURAL LIME IS REQUIRED UNLESS SOIL TESTS INDICATE OTHERWISE. APPLY AGRICULTURAL LIME AT A RATE OF ONE TON PER ACRE. GRADED AREAS REQUIRE LIME APPLICATION. SOILS CAN BE TESTED TO DETERMINE IF FERTILIZER IS NEEDED. ON REASONABLY FERTILE SOILS OR SOIL MATERIAL, FERTILIZER IS NOT REQUIRED. FOR SOILS WITH VERY LOW FERTILITY, 500 TO 700 POUNDS OF 10-10-10 FERTILIZER OR THE EQUIVALENT PER ACRE (12-16 LBS/ 1,000 S.F.) SHALL BE APPLIED. FERTILIZER SHOULD BE APPLIED BEFORE LAND PREPARATION AND INCORPORATED WITH A DISK, RIPPER OR CHISEL.

#### SEEDING

SELECT A GRASS OR GRASS-LEGUME MIXTURE SUITABLE TO THE AREA AND SEASON OF THE YEAR. SEED SHALL BE APPLIED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULT-PAKER-SEEDER, OR HYDRAULIC SEEDER (SURRY INCLUDING SEED AND FERTILIZER). DRILL OR CULTPACER SEEDERS SHOULD NORMALLY PLACE SEED ONE-QUARTER TO ONE-HALF INCH DEEP. APPROPRIATE DEPTH OF PLANTING IS TEN TIMES THE SEED DIAMETER. SOIL SHOULD BE "RAKED" LIGHTLY TO COVER SEED WITH SOIL IF SEDED BY HAND.

#### MULCHING

TEMPORARY VEGETATION CAN, IN MOST CASES, BE ESTABLISHED WITHOUT THE USE OF MULCH. MULCH WITHOUT SEEDING SHOULD BE CONSIDERED FOR SHORT TERM PROTECTION. REFER TO Ds1 - DISTURBED AREA STABILIZATION (WITH MULCHING ONLY).

#### IRRIGATION

DURING TIMES OF DROUGHT, WATER SHALL BE APPLIED AT A RATE NOT CAUSING RUNOFF AND EROSION. THE SOIL SHALL BE THOROUGHLY WETTED TO A DEPTH THAT WILL INSURE GERMINATION OF THE SEED. SUBSEQUENT APPLICATIONS SHOULD BE MADE WHEN NEEDED.

Ds-2 DISTURBED AREA STABILIZATION w/ TEMPORARY SEEDING  
N.T.S.

SPECIES	BROADCAST RATES 2/ PER ACRE PER 1000 S.F.	RESOURCE AREA 4/	PLANTING DATES												REMARKS
			J	F	M	A	M	J	J	A	S	O	N	D	
BARLEY (Hordeum vulgare) ALONE IN MIXTURES	144 LBS. 24 LBS.	3.3 LBS. 0.6 LBS.	M-L P C												14,000 SEED PER POUND. WINTERHARDY. USE ON PRODUCTIVE SOILS.
LESPEDEZA, ANNUAL (Lespedeza bicolor) ALONE IN MIXTURES	40 LBS. 10 LBS.	0.9 LBS. 0.2 LBS.	M-L P C												200,000 SEED PER POUND. MAY OUTLENDER FOR SEVERAL YEARS. USE INOCULANT EL.
LOVEGRASS, WEeping (Eragrostis curvula) ALONE IN MIXTURES	4 LBS. 2 LBS.	0.1 LBS. 0.05 LBS.	M-L P C												1,500,000 SEED PER POUND. MAY LAST FOR SEVERAL YEARS. MIX WITH LESPEDEZA.
MILLET, BROWNIPTOP (Panicum fasciculatum) ALONE IN MIXTURES	40 LBS. 10 LBS.	0.9 LBS. 0.2 LBS.	M-L P C												137,000 SEED PER POUND. QUICK DENSE COVER. WILL PROVIDE TOO MUCH COMPETITION IN MIXTURES IF SEED AT HIGH RATES.
RYE (Secale cereale) ALONE IN MIXTURES	168 LBS. 28 LBS.	3.9 LBS. 0.6 LBS.	M-L P C												18,000 SEED PER POUND. QUICK COVER. DROUGHT TOLERANT AND WINTERHARDY.
RYEGRASS, ANNUAL (Lolium temulentum) ALONE	40 LBS.	0.9 LBS.	M-L P C												227,000 SEED PER POUND. DENSE COVER. VERY COMPETITIVE AND IS NOT TO BE USED IN MIXTURES.
MILLET, PEARL (Panicum glaucum) ALONE	50 LBS.	1.1 LBS.	M-L P C												88,000 SEED PER POUND. QUICK, DENSE COVER. MAY REACH 5 FEET IN HEIGHT. NOT RECOMMENDED FOR MIXTURES.
OATS (Avena sativa) ALONE IN MIXTURES	128 LBS. 32 LBS.	2.9 LBS. 0.7 LBS.	M-L P C												13,000 SEED PER POUND. USE ON PRODUCTIVE SOILS NOT AS WINTERHARDY AS RYE OR BARLEY.
SUDAN GRASS (Sorghum sudanense) ALONE	60 LBS.	1.4 LBS.	M-L P C												55,000 SEED PER POUND. GOOD NOT ON DROUGHT SITES. RECOMMENDED FOR MIXTURES.
TRITICALE (X-Triticosecal) ALONE IN MIXTURES	144 LBS. 24 LBS.	3.3 LBS. 0.6 LBS.	C												USE ON LOWER PART OF SOUTHERN COASTAL PLAIN AND IN ATLANTIC COASTAL PLAINWOODS ONLY.
WHEAT (Triticum aestivum) ALONE IN MIXTURES	180 LBS. 30 LBS.	4.1 LBS. 0.7 LBS.	M-L P C												15,000 SEED PER POUND. WINTERHARDY.

1/ TEMPORARY COVER CROPS ARE VERY COMPETITIVE AND WILL CROWN OUT PERENNIALS IF SEEDING TOO HEAVILY.  
2/ REDUCE SEEDING RATES BY 50% WHEN DRILLED.  
3/ PLS IS AN ABBREVIATION FOR PURE LIME  
4/ M-L REPRESENTS TO MOUNTAIN; BLUE RIDGE; AND RIDGES AND VALLEYS MIRA'S  
P REPRESENTS THE SOUTHERN PIEDMONT MIRA  
C REPRESENTS THE SOUTHERN COASTAL PLAIN; SAND HILLS; BLACK LANDS; AND ATLANTIC COAST FLATWOODS MIRA'S

### DEFINITION

A PERMANENT VEGETATIVE COVER USING SODS ON HIGHLY ERODIBLE OR CRITICALLY ERODED LANDS.

### CONDITIONS

THIS APPLICATION IS APPROPRIATE FOR AREAS WHICH REQUIRE IMMEDIATE VEGETATIVE COVERS, DROP INLETS, GRASS SWALES, AND WATERWAYS WITH INTERMITTENT FLOW.

### PLANNING CONSIDERATIONS

SODDING CAN INITIALLY BE MORE COSTLY THAN SEEDING, BUT THE ADVANTAGES JUSTIFY THE INCREASED INITIAL COSTS.

1. IMMEDIATE EROSION CONTROL, GREEN SURFACE, AND QUICK USE.
2. REDUCED FAILURE AS COMPARED TO SEED AS WELL AS THE LACK OF WEEDS
3. CAN BE ESTABLISHED NEARLY YEAR-ROUND.

SODDING IS PREFERABLE TO SEED IN WATERWAYS AND SWALES BECAUSE OF THE IMMEDIATE PROTECTION OF THE CHANNEL AFTER APPLICATION. SODDING MUST BE STAKED IN CONCENTRATED FLOW AREAS (SEE FIGURE 6-6.1) CONSIDER USING SOD FRAMED AROUND DROP INLETS TO REDUCE SEDIMENTS AND MAINTAINING THE GRADE.

### CONSTRUCTION SPECIFICATIONS INSTALLATION SOIL PREPARATION

BRING SOIL SURFACE TO FINAL GRADE. CLEAR SURFACE OF TRASH, WOODY DEBRIS, STONES AND CLODS LARGER THAN 1". APPLY SOD TO SOIL SURFACES ONLY AND NOT FROZEN SURFACES, OR GRAVEL TYPE SOILS. TOPSOIL PROPERLY APPLIED WILL HELP GUARANTEE A STAND. DON'T USE TOPSOIL RECENTLY TREATED WITH HERBICIDES OR SOIL STERILANTS. MIX FERTILIZER INTO SOIL SURFACE. FERTILIZE BASED ON SOIL TESTS OR TABLE 6-6.1.

#### INSTALLATION

LAY SOD WITH TIGHT JOINTS AND IN STRAIGHT LINES. DON'T OVERLAP JOINTS. STAGGER JOINTS AND DO NOT STRETCH SOD (SEE FIGURE 6-6.2) ON SLOPES STEEPER THAN 3:1. SOD SHOULD BE ANCHORED WITH PINS OR OTHER APPROVED METHODS. INSTALLED SOD SHOULD BE ROLLED OR TAMPED TO PROVIDE GOOD CONTACT BETWEEN SOD AND SOIL. IRRIGATE SOD AND SOIL TO A DEPTH OF 4" IMMEDIATELY AFTER INSTALLATION. SOD SHOULD NOT BE CUT OR SPREAD IN EXTREMELY WET OR DRY WEATHER. IRRIGATION SHOULD BE USED TO SUPPLEMENT RAINFALL FOR A MINIMUM OF 2-3 WEEKS.

#### MATERIALS

SOD SELECTED SHOULD BE CERTIFIED. SOD GROWN IN THE GENERAL AREA OF THE PROJECT IS DESIRABLE.

1. SOD SHOULD BE MACHINE CUT AND CONTAIN 3/4" (+ or - 1/4") OF SOIL, NOT INCLUDING SHOOTS OR THATCH.
2. SOD SHOULD BE CUT TO THE DESIRED SIZE WITHIN + or - 5% TORN OR UNEVEN PADS SHOULD BE REJECTED.
3. SOD SHOULD BE CUT AND INSTALLED WITHIN 36 HOURS OF DIGGING.
4. AVOID PLANTING WHEN SUBJECT TO FROST HEAVE OR HOT WEATHER IF IRRIGATION IS NOT AVAILABLE.
5. THE SOD TYPE SHOULD BE SHOWN ON THE PLANS OR INSTALLED ACCORDING TO TABLE 6-6.2. SEE FIGURE 6-4.1 FOR YOUR RESOURCE AREA.

#### MAINTENANCE

RE-SOD AREAS WHERE AN ADEQUATE STAND OF SOD IS NOT OBTAINED. NEW SOD SHOULD BE MOWED SPARINGLY. GRASS HEIGHT SHOULD NOT BE CUT LESS THAN 2"-3" OR AS SPECIFIED (SEE FIGURE 6-6.2). APPLY ONE TON OF AGRICULTURAL LIME AS INDICATED BY SOIL TESTS. BERM 4-6 YEARS. FERTILIZE GRASSES IN ACCORDANCE WITH SOIL TESTS OR TABLE 6-6.3

#### FERTILIZER REQUIREMENTS FOR SOD

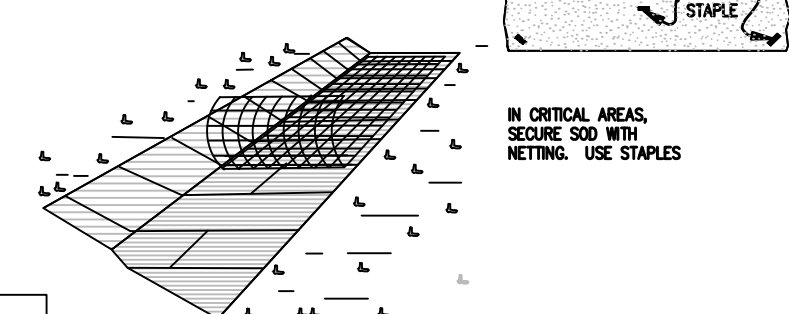
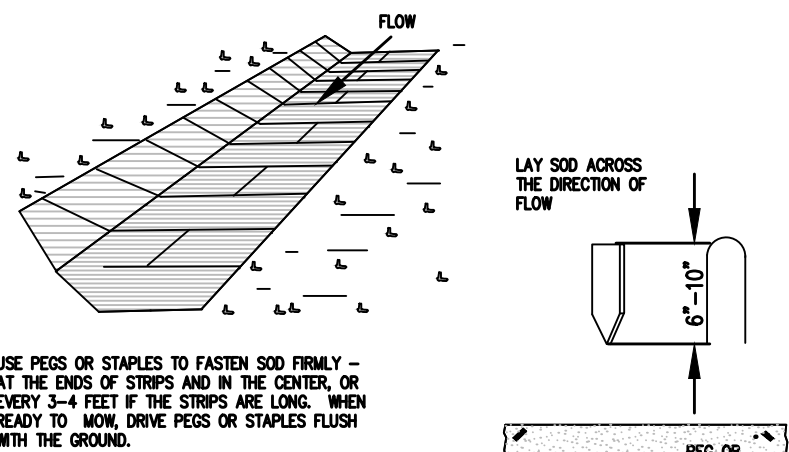
TYPES OF SPECIES	PLANTING YEAR	FERTILIZER (N-P-K)	RATE (lbs./acre)	NITROGEN TOP DRESSING RATE (lbs./acre)
COOL SEASON GRASSES	FIRST	6-12-12	1500	50-100
	SECOND	6-12-12	1000	---
	MAINTENANCE	10-10-10	400	30
WARM SEASON GRASSES	FIRST	6-12-12	1500	50-100
	SECOND	6-12-12	800	50-100
	MAINTENANCE	10-10-10	400	30

Ds-4 DISTURBED AREA STABILIZATION w/ SODDING  
N.T.S.

#### FERTILIZER REQUIREMENTS FOR SOIL SURFACE APPLICATION

FERTILIZER TYPE	FERTILIZER RATE (lbs/acre)	FERTILIZER RATE (lbs/sq ft)	SEASON
10-10-10	1000	.025	FALL

AGRICULTURAL LIME SHOULD BE APPLIED BASED ON SOIL TESTS OR AT A RATE OF 1 TO 2 TONS PER ACRE.





THE PLANTING OF PERENNIAL VEGETATION SUCH AS TREES, SHRUBS, VINES, GRASSES, OR LEGUMES ON EXPOSED AREAS FOR FINAL PERMANENT STABILIZATION, PERMANENT PERENNIAL VEGETATION SHALL BE USED TO ACHIEVE FINAL STABILIZATION.

INSTRUCTIONS

THIS PRACTICE SHALL BE APPLIED IMMEDIATELY TO ROUGH GRADED AREAS THAT WILL BE UNDISTURBED FOR LONGER THAN SIX MONTHS. THIS PRACTICE OR SOODING SHALL BE APPLIED IMMEDIATELY TO ALL AREAS AT FINAL GRADE. FINAL STABILIZATION MEANS THAT ALL SOIL DISTURBING ACTIVITIES AT THE SITE HAVE BEEN COMPLETED, AND THAT FOR UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES, AT LEAST 70% OF THE SOIL SURFACE IS UNFORMALLY COVERED IN PERMANENT VEGETATION OR EQUIVALENT PERMANENT STABILIZATION MEASURES (SUCH AS THE USE OF RIP RAP, GABIONS, PERMANENT MULCHES OR GEOTEXTILES) HAVE BEEN EMPLOYED. PERMANENT VEGETATION SHALL CONSIST OF: PLANTED TREES, SHRUBS, PERENNIAL VINES, A CROP OF PERENNIAL VEGETATION APPROPRIATE FOR THE REGION, SUCH THAT WITHIN THE GROWING SEASON A 70% COVERAGE BY PERENNIAL VEGETATION SHALL BE ACHIEVED. FINAL STABILIZATION APPLIES TO EACH PHASE OF CONSTRUCTION, FOR LINEAR CONSTRUCTION PROJECTS ON LAND USED FOR AGRICULTURAL OR SILVICULTURAL PURPOSES, FINAL STABILIZATION MAY BE ACCOMPLISHED BY STABILIZING THE DISTURBED LAND FOR ITS AGRICULTURAL OR SILVICULTURAL USE, UNTIL THIS STANDARD IS SATISFIED AND PERMANENT CONTROL MEASURES AND FACILITIES ARE OPERATIONAL, INTERIM STABILIZATION MEASURES AND TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES SHALL NOT BE REMOVED.

PLANNING CONSIDERATIONS

1. USE CONVENTIONAL PLANTING METHODS WHERE POSSIBLE.
2. WHEN MIXED PLANTINGS ARE DONE DURING MARGINAL PLANTING PERIODS, COMPANION CROPS SHALL BE USED.
3. NO-TILL PLANTING IS EFFECTIVE WHEN PLANTING IS DONE FOLLOWING A SUMMER OR WINTER ANNUAL COVER CROP.
4. BLOCK SOD PROVIDES IMMEDIATE COVER. IT IS ESPECIALLY EFFECTIVE IN CONTROLLING EROSION ADJACENT TO CONCRETE FLUMES AND OTHER STRUCTURES. REFER TO Ds-4 DISTURBED AREA STABILIZATION (WITH SOODING).
5. IRRIGATION SHOULD BE USED WHEN THE SOIL IS DRY OR WHEN SUMMER PLANTINGS ARE DONE.
6. LOW MAINTENANCE PLANTS, AS WELL AS NATIVES, SHOULD BE USED TO ENSURE LONG LASTING EROSION CONTROL.
7. MOWING SHOULD NOT BE PERFORMED DURING THE QUAL NESTING SEASON (MAY TO SEPT.). MULCHING PLANTINGS SHOULD BE INCLUDED IN CRITICAL AREA PLANTINGS. SEE MANUAL FOR PLANT LIST.

GRADING & SHAPING

GRADING AND SHAPING MAY NOT BE REQUIRED WHERE HYDRAULIC SEEDING AND FERTILIZING EQUIPMENT IS TO BE USED. VERTICAL BANKS SHALL BE SLOPED TO ENABLE PLANT ESTABLISHMENT. WHEN CONVENTIONAL SEEDING AND FERTILIZING ARE TO BE DONE, GRADE AND SHAPE WHERE FEASIBLE AND PRACTICAL SO THAT EQUIPMENT CAN BE USED SAFELY AND EFFICIENTLY DURING SEEDBED PREPARATION, SEEDING, MULCHING AND MAINTENANCE OF THE VEGETATION. CONCENTRATIONS OF WATER THAT WILL CAUSE EXCESSIVE SOIL EROSION SHALL BE DIVERTED TO A SAFE OUTLET. DIVERSIONS AND OTHER TREATMENT PRACTICES SHALL CONFORM WITH THE APPROPRIATE STANDARDS AND SPECIFICATIONS.

LIME AND FERTILIZER APPLICATION

WHEN HYDRAULIC SEEDING EQUIPMENT IS USED, THE INITIAL FERTILIZER SHALL BE MIXED WITH SEED, INOCULANT (IF NEEDED), AND WOOD CELLULOSE OR WOOD PULP FIBER MULCH AND APPLIED IN A SLURRY. THE INOCULANT, IF NEEDED, SHALL BE MIXED WITH THE SEED PRIOR TO BEING PLACED INTO THE HYDRAULIC SEEDER. THE SLURRY MIXTURE WILL BE AGITATED DURING APPLICATION TO KEEP THE INGREDIENTS THOROUGHLY MIXED. THE MIXTURE WILL BE SPREAD UNIFORMLY OVER THE AREA WITHIN ONE HOUR AFTER BEING PLACED IN THE HYDROSEEDER.

FINELY GROUND LIMESTONE WILL BE MIXED WITH WATER AND APPLIED IMMEDIATELY AFTER MULCHING IS COMPLETED OR IN COMBINATION WITH THE TOP DRESSING, WHEN CONVENTIONAL PLANTING IS TO BE DONE. LIME AND FERTILIZER SHALL BE APPLIED UNIFORMLY IN ONE OF THE FOLLOWING WAYS:

1. APPLY BEFORE LAND PREPARATION SO THAT IT WILL BE MIXED WITH THE SOIL DURING SEEDBED PREPARATION.
2. MIX WITH THE SOIL USED TO FILL THE HOLES, DISTRIBUTE IN FURROWS.
3. BROADCAST AFTER STEEP SURFACES ARE SCARIFIED, PITTED OR TRENCHED.
4. A FERTILIZER PELLET SHALL BE PLACED AT ROOT DEPTH IN THE CLOSING HOLE BESIDE EACH TREE SEEDLING.

LIME AND FERTILIZER RATES AND ANALYSIS

AGRICULTURAL LIME IS REQUIRED AT A RATE OF ONE TO TWO TONS PER ACRE UNLESS SOIL TESTS INDICATE OTHERWISE. GRADED AREAS REQUIRE LIME APPLICATION. IF LIME IS APPLIED WITHIN SIX MONTHS OF PLANTING PERMANENT PERENNIAL VEGETATION, ADDITIONAL LIME IS NOT REQUIRED. AGRICULTURAL LIME SHALL BE WITHIN THE SPECIFICATIONS OF THE GEORGIA DEPARTMENT OF AGRICULTURE.

LIME SPREAD BY CONVENTIONAL EQUIPMENT SHALL BE "GROUND LIMESTONE." GROUND LIMESTONE IS CALCIC OR DOLOMITIC GROUND SO THAT 98% OF THE MATERIAL WILL PASS THROUGH A 20-MESH SIEVE AND NOT LESS THAN 50% WILL PASS THROUGH A 10-MESH SIEVE AND NOT LESS THAN 25 PERCENT WILL PASS THROUGH A 100-MESH SIEVE.

LIME AND FERTILIZER RATES AND ANALYSIS CONT

AGRICULTURAL LIME SPREAD BY HYDRAULIC SEEDING EQUIPMENT SHALL BE "FINELY GROUND LIMESTONE." FINELY GROUND LIMESTONE IS CALCIC OR DOLOMITIC LIMESTONE GROUND SO THAT 98% OF THE MATERIAL WILL PASS THROUGH A 20-MESH SIEVE AND NOT LESS THAN 70% WILL PASS THROUGH A 100-MESH SIEVE.

IT IS DESIRABLE TO USE DOLOMITIC LIMESTONE IN THE SAND HILLS, SOUTHERN COASTAL PLAIN AND ATLANTIC COAST PLAINWOODS MURA'S. (SEE MANUAL). AGRICULTURAL LIME IS GENERALLY NOT REQUIRED WHERE ONLY TREES ARE PLANTED. INITIAL FERTILIZATION, NITROGEN, TOPDRESSING, AND MAINTENANCE FERTILIZER REQUIREMENTS FOR EACH SPECIES OR COMBINATION OF SPECIES ARE LISTED IN TABLE 6-5.1.

PLANT SELECTION

REFER TO TABLE BELOW FOR APPROVED SPECIES. SPECIES NOT LISTED SHALL BE APPROVED BY THE OWNER AND THE STATE RESOURCE CONSERVATION SERVICE. THE NATURAL RESOURCE CONSERVATION SERVICE BEFORE THEY ARE USED. PLANTS SHALL BE SELECTED ON THE BASIS OF SPECIES CHARACTERISTICS, SITE AND SOIL CONDITIONS, PLANNED USE AND MAINTENANCE OF THE AREA, TIME OF YEAR OF PLANTING, METHOD OF PLANTING, AND THE NEEDS AND DESIRES OF THE LAND USER. SOME PERENNIAL SPECIES ARE EASILY ESTABLISHED AND CAN BE PLANTED ALONE. EXAMPLES OF THESE ARE COMMON BERMUDA, TALL FESCUE AND WEEPING LOVEGRASS. THE ADDITIONAL SPECIES WILL PROVIDE QUICK COVER AND AMPLE SOIL PROTECTION UNTIL THE TARGET PERENNIAL SPECIES BECOME ESTABLISHED. FOR EXAMPLE: WEEDING LOVEGRASS WITH SERICEA LESPEDEZA (SCARIFIED) AND TALL FESCUE WITH SERICEA LESPEDEZA (UNSCARIFIED).

PLANT SELECTION MAY ALSO INCLUDE ANNUAL COMPANION CROPS. ANNUAL COMPANION CROPS SHOULD BE USED ONLY WHEN THE PERENNIAL SPECIES ARE NOT PLANTED DURING THEIR OPTIMUM PLANTING PERIOD. A COMMON MIXTURE IS BROWN TOP MILLET WITH COMMON BERMUDA IN MID-SUMMER. CARE SHOULD BE TAKEN IN SELECTING COMPANION CROP SPECIES AND SEEDING RATES BECAUSE ANNUAL CROPS WILL COMPETE WITH PERENNIAL SPECIES FOR WATER, NUTRIENTS AND GROWING SPACE. A HIGH SEEDING RATE OF THE COMPANION CROP MAY PREVENT THE ESTABLISHMENT OF PERENNIAL SPECIES. RYEGRASS SHALL NOT BE IN ANY SEEDING MIXTURES CONTAINING PERENNIAL SPECIES DUE TO ITS ABILITY TO OUT-COMPETE DESIRED SPECIES CHOSEN FOR PERMANENT PERENNIAL COVER.

SEED QUALITY

THE TERM "PURE LIVE SEED" IS USED TO EXPRESS THE QUALITY OF SEED AND IS NOT SHOWN ON THE LABEL. PURE LIVE SEED, PLS, IS EXPRESSED AS A PERCENTAGE OF THE SEEDS THAT ARE PURE AND WILL GERMINATE. INFORMATION ON PERCENT GERMINATION AND PURITY CAN BE FOUND ON SEED TAGS. PLS IS DETERMINED BY MULTIPLYING THE PERCENT OF PURE SEED WITH THE PERCENT OF GERMINATION; I.E., PLS = % GERMINATION x % PURITY

THE PERCENT OF PLS HELPS YOU DETERMINE THE AMOUNT OF SEED YOU NEED. FOR EXAMPLE IF THE SEEDING RATE IS 10 POUNDS PLS / ACRE AND THE BULK SEED IS 56% PLS,

THE BULK SEEDING RATE IS: 10 LBS. OF PLS / ACRE = 17.9 LBS / ACRE 56% PLS

YOU WOULD NEED TO PLANT 17.9 LBS/ACRE TO PROVIDE 10 LBS/ACRE OF PURE LIVE SEED.

SEEDBED PREPARATION

SEEDBED PREPARATION MAY NOT BE REQUIRED WHERE HYDRAULIC SEEDING AND FERTILIZING EQUIPMENT IS TO BE USED. WHEN CONVENTIONAL SEEDING IS TO BE USED, SEEDBED PREPARATION WILL BE DONE AS FOLLOWS:

BROADCAST PLANTINGS:

1. TILLAGE AT A MINIMUM, SHALL ADEQUATELY LOOSEN THE SOIL TO A DEPTH OF 4 TO 6 IN. ALLEVATE COMPACTION, INCORPORATE LIME AND FERTILIZER, SMOOTH AND FIRM THE SOIL, ALLOW FOR THE PROPER PLACEMENT OF SEED, SPRIGS, OR PLANTS; AND ALLOW FOR THE ANCHORING OF STRAW OR HAY MULCH IF A DISK IS TO BE USED.
2. TILLAGE MAY BE DONE WITH ANY SUITABLE EQUIPMENT.
3. TILLAGE SHOULD BE DONE ON THE CONTOUR, WHERE FEASIBLE.
4. ON SLOPES TOO STEEP FOR THE SAFE OPERATION OF TILLAGE EQUIPMENT, THE SOIL SURFACE SHALL BE PITTED OR TRENCHED ACROSS THE SLOPE WITH APPROPRIATE HAND TOOLS TO PROVIDE TWO PLACES 6 TO 8 IN. APART IN WHICH SEED MAY LODGE AND GERMINATE. HYDRAULIC SEEDING MAY ALSO BE USED.

INDIVIDUAL PLANTS

1. WHERE INDIVIDUAL PLANTS ARE TO BE SET, THE SOIL SHALL BE PREPARED BY EXCAVATING HOLES, OPENING FURROWS, OR TRENCHING.
2. FOR NURSERY STOCK PLANTS, HOLES SHALL BE LARGE ENOUGH TO ACCOMMODATE ROOTS WITHOUT CROWDING.
3. WHERE PINE SEEDLINGS ARE TO BE PLANTED, SUBSOIL UNDER THE ROW 36 INCHES DEEP ON THE CONTOUR FOUR TO SIX MONTHS PRIOR TO PLANTING. SUBSOILING SHOULD BE DONE WHEN THE SOIL IS DRY, PREFERABLY IN AUGUST OR SEPTEMBER.

INNOCUANTS

ALL LEGUME SEED SHALL BE INOCULATED WITH APPROPRIATE NITROGEN-FIXING BACTERIA. THE INOCULANT SHALL BE A PURE CULTURE PREPARED SPECIALLY FOR THE SEED SPECIES AND USED WITHIN THE DATES ON THE CONTAINER. A MIXING MEDIUM RECOMMENDED BY THE MANUFACTURER SHALL BE USED TO BOND THE INOCULANT TO THE SEED. FOR CONVENTIONAL SEEDING, USE TWICE THE AMOUNT OF INOCULANT RECOMMENDED BY THE MANUFACTURER. FOR HYDRAULIC SEEDING, FOUR TIMES THE AMOUNT OF INOCULANT RECOMMENDED BY THE MANUFACTURER SHALL BE USED. ALL INOCULATED SEED SHALL BE PROTECTED FROM THE SUN AND HIGH TEMPERATURES AND SHALL BE PLANTED THE SAME DAY INOCULATED. NO INOCULATED SEED SHALL REMAIN IN THE HYDROSEEDER LONGER THAN ONE HOUR.

PLANTING

HYDRAULIC SEEDING: MIX THE SEED (INOCULATED IF NEEDED), FERTILIZER, AND WOOD CELLULOSE OR WOOD PULP FIBER MULCH WITH WATER AND APPLY IN A SLURRY UNIFORMLY OVER THE AREA TO BE TREATED. APPLY WITHIN ONE HOUR AFTER THE MIXTURE IS MADE. CONVENTIONAL SEEDING: SEEDING WILL BE DONE ON A FRESHLY PREPARED AND FIRMED SEEDBED. FOR BROADCAST PLANTING, USE A CULTIPACKER-SEEDER, DRILL, ROTARY SEEDER, OTHER MECHANICAL SEEDER, OR HAND SEEDING TO DISTRIBUTE THE SEED UNIFORMLY OVER THE AREA TO BE TREATED. COVER THE SEED LIGHTLY WITH 1/8 TO 1/4 INCH OF SOIL FOR SMALL SEED AND 1/2 TO 1 INCH FOR LARGE SEED WHEN USING A CULTIPACKER OR OTHER SUITABLE EQUIPMENT. NO-TILL SEEDING: NO-TILL SEEDING IS PERMISSIBLE INTO ANNUAL COVER CROPS WHEN PLANTING IS DONE FOLLOWING MATURITY OF THE COVER CROP OR IF THE TEMPORARY COVER STAND IS SPARSE ENOUGH TO ALLOW ADEQUATE GROWTH OF THE PERMANENT (PERENNIAL) SPECIES. NO TILL SEEDING SHALL BE DONE WITH APPROPRIATE NO-TILL SEEDING EQUIPMENT. THE SEED MUST BE UNIFORMLY DISTRIBUTED AND PLANTED AT THE PROPER DEPTH. INDIVIDUAL PLANTS: SHRUBS, VINES AND SPRIGS MAY BE PLANTED WITH APPROPRIATE PLANTERS OR HAND TOOLS. PINE TREES SHALL BE PLANTED MANUALLY IN THE SUBSOIL FURROW. EACH PLANT SHALL BE SET IN A MANNER THAT WILL AVOID CROWDING THE ROOTS. NURSERY STOCK PLANTS SHALL BE PLANTED AT THE SAME DEPTH OR SLIGHTLY DEEPER THAN THEY GREW AT THE NURSERY. THE TOPS OF VINES AND SPRIGS MUST BE AT OR SLIGHTLY ABOVE THE GROUND SURFACE. WHERE INDIVIDUAL HOLES ARE DUG, FERTILIZER SHALL BE PLACED IN THE BOTTOM OF THE HOLE. TWO INCHES OF SOIL SHALL BE ADDED AND THE PLANT SHALL BE SET IN THE HOLE.

MULCHING

MULCH IS REQUIRED FOR ALL PERMANENT VEGETATION APPLICATIONS. MULCH APPLIED TO SEEDED AREAS SHALL ACHIEVE 75% SOIL COVER. SELECT THE MULCHING MATERIAL FROM THE FOLLOWING AND APPLY AS INDICATED.

DRY STRAW OR DRY HAY OF GOOD QUALITY AND FREE OF WEED SEEDS CAN BE USED. DRY STRAW SHALL BE APPLIED AT THE RATE OF 2 TONS PER ACRE. DRY HAY SHALL BE APPLIED AT A RATE OF 2 1/2 TONS PER ACRE. WOOD CELLULOSE MULCH OR WOOD PULP FIBER SHALL BE USED WITH HYDRAULIC SEEDING. IT SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE. DRY STRAW OR DRY HAY SHALL BE APPLIED (AT THE RATE INDICATED ABOVE) AFTER THE HYDRAULIC SEEDING. ONE THOUSAND POUNDS OF WOOD CELLULOSE OR WOOD PULP FIBER, WHICH INCLUDES A TACKIFIER, MAY BE USED WITH HYDRAULIC SEEDING ON SLOPES 4:1 OR STEEPER. SERICEA LESPEDEZA HAY CONTAINING MATURE SEED SHALL BE APPLIED AT A RATE OF THREE TONS PER ACRE.

PINE STRAW OR PINE BARK SHALL BE APPLIED AT A THICKNESS OF 3 INCHES FOR BEDDING PURPOSES OTHER SUITABLE MATERIALS IN SUFFICIENT QUANTITY MAY BE USED WHERE ORNAMENTALS OR OTHER GROUND COVERS ARE PLANTED. THIS IS NOT APPROPRIATE FOR SEEDED AREAS.

WHEN USING TEMPORARY EROSION CONTROL BLANKETS OR BLOCK SOD, MULCH IS NOT REQUIRED. BITUMINOUS TREATED ROVING MAY BE APPLIED ON PLANTED AREAS ON SLOPES, IN DITCHES OR DRY WATERWAYS TO PREVENT EROSION. BITUMINOUS TREATED ROVING SHALL BE APPLIED WITHIN 24 HOURS AFTER AN AREA HAS BEEN PLANTED. APPLICATION RATES AND MATERIALS MUST MEET GEORGIA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.

WOOD CELLULOSE AND WOOD PULP FIBERS SHALL NOT CONTAIN GERMINATION OR GROWTH INHIBITING FACTORS. THEY SHALL BE EVENLY DISPERSED WHEN ADKATED IN WATER. THE FIBERS SHALL CONTAIN A DYE TO ALLOW VISUAL METERING AND AID IN UNIFORM APPLICATION DURING SEEDING.

APPLYING MULCH

STRAW OR HAY MULCH WILL BE SPREAD UNIFORMLY WITHIN 24 HOURS AFTER SEEDING AND/OR PLANTING. THE MULCH MAY BE SPREAD BY BLOWER TYPE SPREADING EQUIPMENT, OTHER SPREADING EQUIPMENT OR BY HAND. MULCH SHALL BE APPLIED TO COVER 75% OF THE SOIL SURFACE. WOOD CELLULOSE OR WOOD FIBER MULCH SHALL BE APPLIED UNIFORMLY WITH HYDRAULIC SEEDING EQUIPMENT.

ANCHORING MULCH

ANCHOR STRAW OR HAY MULCH IMMEDIATELY AFTER APPLICATION BY ONE OF THE FOLLOWING METHODS: ALLEVATE COMPACTION, INCORPORATE LIME AND FERTILIZER, SMOOTH AND FIRM THE SOIL, ALLOW FOR THE PROPER PLACEMENT OF SEED, SPRIGS, OR PLANTS; AND ALLOW FOR THE ANCHORING OF STRAW OR HAY MULCH IF A DISK IS TO BE USED. TILLAGE MAY BE DONE WITH ANY SUITABLE EQUIPMENT. TILLAGE SHOULD BE DONE ON THE CONTOUR, WHERE FEASIBLE. ON SLOPES TOO STEEP FOR THE SAFE OPERATION OF TILLAGE EQUIPMENT, THE SOIL SURFACE SHALL BE PITTED OR TRENCHED ACROSS THE SLOPE WITH APPROPRIATE HAND TOOLS TO PROVIDE TWO PLACES 6 TO 8 IN. APART IN WHICH SEED MAY LODGE AND GERMINATE. HYDRAULIC SEEDING MAY ALSO BE USED. EMULSIFIED ASPHALT CAN BE (A) SPRAYED UNIFORMLY ONTO THE MULCH AS IT IS EJECTED FROM THE BLOWER MACHINE OR (B) SPRAYED ON THE MULCH IMMEDIATELY FOLLOWING MULCH APPLICATION WHEN STRAW OR HAY IS SPREAD BY METHODS OTHER THAN SPECIAL BLOWER EQUIPMENT. THE COMBINATION OF ASPHALT EMULSION AND WATER SHALL CONSIST OF A HOMOGENEOUS MIXTURE SATISFACTORY FOR SPRAYING. THE MIXTURE SHALL CONSIST OF 100 GALLONS OF WATER PER TON OF MULCH. CARE SHALL BE TAKEN AT ALL TIMES TO PROTECT STATE WATERS, THE PUBLIC, ADJACENT PROPERTY, PAVEMENTS, CURBS, SIDEWALKS AND OTHER STRUCTURES FROM ASPHALT DISCOLORATION. 2. HAY AND STRAW MULCH SHALL BE PRESSED INTO THE SOIL IMMEDIATELY AFTER THE MULCH IS SPREAD. A SPECIAL "PACKER DISK" OR DISK HARROW WITH THE DISKS SET STRAIGHT MAY BE USED. THE DISKS MAY BE SMOOTH OR SERRATED AND SHOULD BE 20 INCHES OR MORE IN DIAMETER AND 8 TO 12 INCHES APART. THE EDGES OF THE DISKS SHALL BE DULL ENOUGH TO PRESS THE MULCH INTO THE GROUND WITHOUT CUTTING IT, LEAVING MUCH OF IT IN AN ERECT POSITION. MULCH SHALL NOT BE PLOWED INTO THE SOIL. 3. SYNTHETIC TACKIFIERS OR BINDERS APPROVED BY GOOT SHALL BE APPLIED IN CONJUNCTION WITH OR IMMEDIATELY AFTER THE MULCH IS SPREAD. SYNTHETIC TACKIFIERS SHALL BE MIXED AND APPLIED ACCORDING TO MANUFACTURER'S SPECIFICATIONS. REFER TO Td - TACKIFIERS AND BINDERS. 4. RYE OR WHEAT CAN BE INCLUDED WITH FALL AND WINTER PLANTINGS TO STABILIZE THE MULCH. THEY SHALL BE APPLIED AT A RATE OF ONE-QUARTER TO ONE-HALF BUSHEL PER ACRE. 5. PLASTIC MESH OR NETTING WITH MESH NO LARGER THAN ONE INCH BY ONE INCH MAY BE NEEDED TO ANCHOR STRAW OR HAY MULCH ON UNSTABLE SOILS AND CONCENTRATED FLOW AREAS. THESE MATERIALS SHALL BE INSTALLED AND ANCHORED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.

BEDDING MATERIAL: MULCH USED AS A BEDDING MATERIAL TO CONSERVE MOISTURE AND CONTROL WEEDS IN NURSERIES, ORNAMENTAL BEDS, AROUND SHRUBS, AND ON BARE AREAS ON LAWNS.

MATERIAL	DEPTH
GRASS STRAW	4" TO 6"
GRASS HAY	4" TO 6"
PINE NEEDLES	3" TO 5"
WOOD WASTE	4" TO 6"

IRRIGATION: IRRIGATION WILL BE APPLIED AT A RATE THAT WILL NOT CAUSE RUNOFF.

TOPDRESSING: WILL BE APPLIED ON ALL TEMPORARY AND PERMANENT (PERENNIAL) SPECIES PLANTED ALONE OR IN MIXTURES WITH OTHER SPECIES. RECOMMENDED RATES OF APPLICATION ARE LISTED IN TABLE 6-5.1.

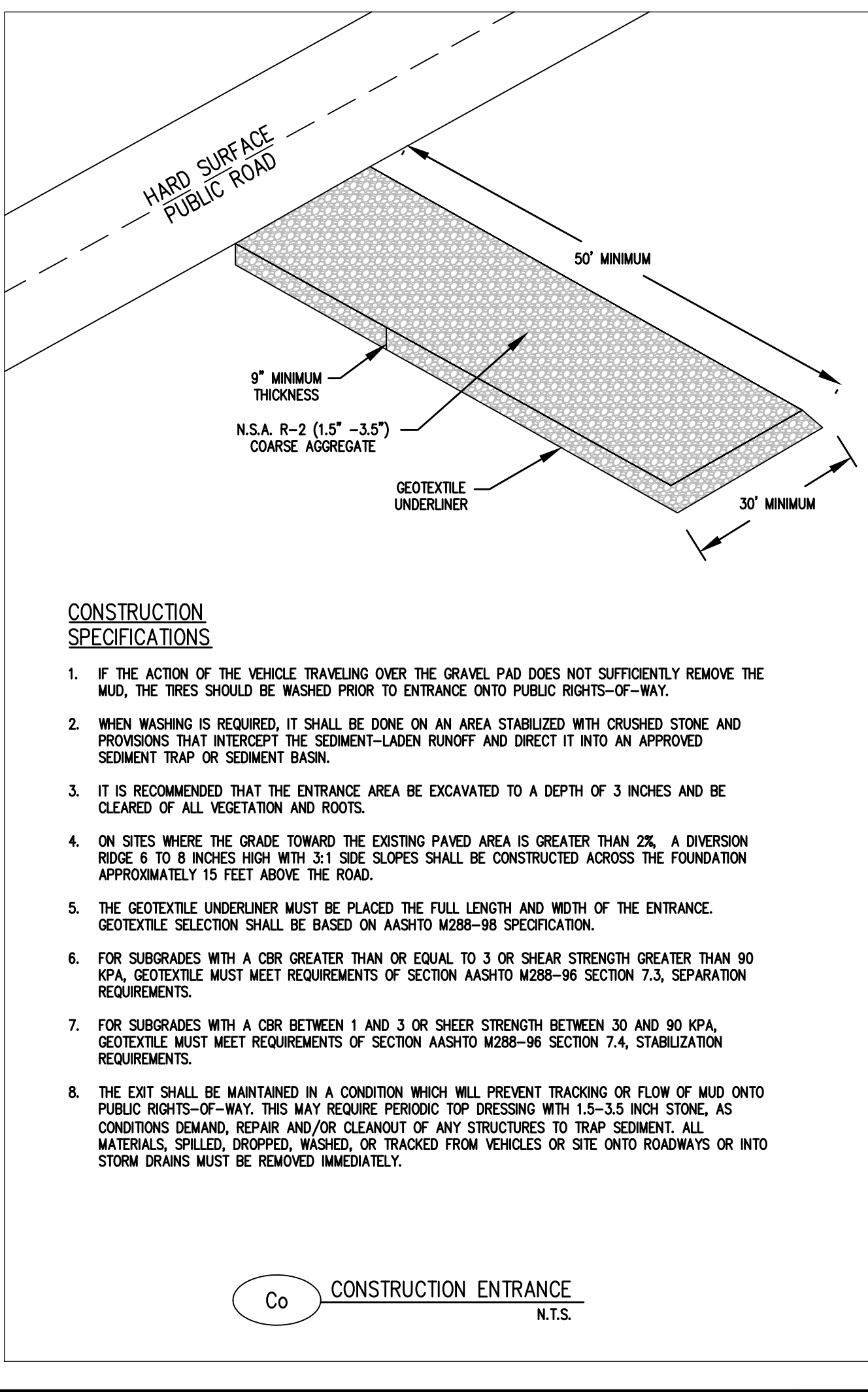
SECOND YEAR AND MAINTENANCE FERTILIZATION: SECOND YEAR FERTILIZER RATES AND MAINTENANCE FERTILIZER RATES ARE LISTED IN TABLE 6-5.1.

LIME MAINTENANCE APPLICATION: APPLY ONE TON OF AGRICULTURAL LIME EVERY 4 TO 6 YEARS OR AS INDICATED BY SOIL TESTS. SOIL TESTS CAN BE CONDUCTED TO DETERMINE MORE ACCURATE REQUIREMENTS IF DESIRED.

USE AND MANAGEMENT: MOW SERICEA LESPEDEZA ONLY AFTER FROST TO ENSURE THAT THE SEEDS ARE MATURE. MOW BETWEEN NOVEMBER AND MARCH. BERMUDAGRASS, BAHIA GRASS AND TALL FESCUE MAY BE MOWED AS DESIRED. MAINTAIN AT LEAST 6 INCHES OF TOP GROWTH UNDER ANY USE AND MANAGEMENT. MODERATE USE OF TOP GROWTH IS BENEFICIAL AFTER ESTABLISHMENT. EXCLUDE TRAFFIC UNTIL THE PLANTS ARE WELL ESTABLISHED. BECAUSE OF THE QUAL NESTING SEASON, MOWING SHOULD NOT TAKE PLACE BETWEEN MAY AND SEPTEMBER.

		ANALYSIS OR EQUIVALENT N-P-K		N TOP DRESSING RATE
1. COOL SEASON GRASSES	FIRST SECOND MAINTENANCE	6-12-12 6-12-12 10-10-10	1500 LBS./AC. 1000 LBS./AC. 400 LBS./AC.	50-100 LBS./AC. 1/ 2/ 30
2. COOL SEASON GRASSES AND LEGUMES	FIRST SECOND MAINTENANCE	6-12-12 6-12-12 0-10-10	1500 LBS./AC. 1000 LBS./AC. 400 LBS./AC.	0-50 LBS./AC. 1/ ---
3. GROUND COVERS	FIRST SECOND MAINTENANCE	10-10-10 10-10-10	1300 LBS./AC. 3/ 1300 LBS./AC. 3/ 1100 LBS./AC.	--- ---
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./AC. 700 LBS./AC. 4/	---
6. TEMPORARY COVER CROPS SEEDED ALONE	FIRST	10-10-10	500 LBS./AC.	30 LBS./AC. 5/
7. WARM SEASON GRASSES	FIRST SECOND MAINTENANCE	6-12-12 6-12-12 10-10-10	1500 LBS./AC. 800 LBS./AC. 400 LBS./AC.	50-100 LBS./AC. 2/ 6/ 50-100 LBS./AC. 2/ 30 LBS./AC.
8. WARM SEASON GRASSES AND LEGUMES	FIRST SECOND MAINTENANCE	6-12-12 6-12-12 0-10-10	1500 LBS./AC. 1000 LBS./AC. 400 LBS./AC.	50 LBS./AC. 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.



CONSTRUCTION SPECIFICATIONS

1. IF THE ACTION OF THE VEHICLE TRAVELING OVER THE GRAVEL PAD DOES NOT SUFFICIENTLY REMOVE THE MUD, THE TIRES SHOULD BE WASHED PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY.
2. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE AND PROVISIONS THAT INTERCEPT THE SEDIMENT-LADEN RUNOFF AND DIRECT IT INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
3. IT IS RECOMMENDED THAT THE ENTRANCE AREA BE EXCAVATED TO A DEPTH OF 3 INCHES AND BE CLEARED OF ALL VEGETATION AND ROOTS.
4. ON SITES WHERE THE GRADE TOWARD THE EXISTING PAVED AREA IS GREATER THAN 2% , A DIVERSION RIDGE 6 TO 8 INCHES HIGH WITH 3:1 SLOPE SHOULD BE CONSTRUCTED ACROSS THE FOUNDATION APPROXIMATELY 15 FEET ABOVE THE ROAD.
5. THE GEOTEXTILE UNDERLAYER MUST BE PLACED THE FULL LENGTH AND WIDTH OF THE ENTRANCE. GEOTEXTILE SELECTION SHALL BE BASED ON AASHTO M288-96 SPECIFICATION.
6. FOR SUBGRADE WITH A CBR GREATER THAN OR EQUAL TO 3 OR SHEAR STRENGTH GREATER THAN 90 KPA, GEOTEXTILE MUST MEET REQUIREMENTS OF SECTION AASHTO M288-96 SECTION 7.3, SEPARATION REQUIREMENTS.
7. FOR SUBGRADE WITH A CBR BETWEEN 1 AND 3 OR SHEAR STRENGTH BETWEEN 30 AND 90 KPA, GEOTEXTILE MUST MEET REQUIREMENTS OF SECTION AASHTO M288-96 SECTION 7.4, STABILIZATION REQUIREMENTS.
8. THE EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 1.5-3.5 INCH STONE, AS CONDITIONS DEMAND, REPAIR AND/OR CLEANOUT OF ANY STRUCTURES TO TRAP SEDIMENT. ALL MATERIALS, SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES OR SITE ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.

Co CONSTRUCTION ENTRANCE N.T.S.

SPECIFICATIONS

MULCHING WITHOUT SEEDING

THIS STANDARD APPLIES TO GRADES OR CLEARED AREAS WHERE SEEDINGS MAY NOT HAVE A SUITABLE GROWING SEASON TO PRODUCE AND EROSION RETARDANT COVER, BUT CAN BE STABILIZED WITH A MULCH COVER.

SITE PREPARATION

1. GRADE TO PERMIT THE USE OF EQUIPMENT FOR APPLYING AND ANCHORING MULCH.
2. INSTALL NEEDED EROSION CONTROL MEASURES AS REQUIRED SUCH AS Dikes, DIVERSIONS, BERMS, TERRACES AND SEDIMENT BARRIERS.
3. LOOSEN COMPACT SOIL TO A MINIMUM DEPTH OF 3 INCHES.

MULCHING MATERIALS

- SELECT ONE OF THE FOLLOWING MATERIALS AND APPLY AT THE DEPTH INDICATED:
1. DRY STRAW OR HAY SHALL BE APPLIED AT A DEPTH OF 2 TO 4 INCHES PROVIDING COMPLETE SOIL COVERAGE. ONE ADVANTAGE OF THIS MATERIAL IS EASY APPLICATION.
  2. WOOD WASTE (CHIPS, SAWDUST OR BARK) SHALL BE APPLIED AT A DEPTH OF 2 TO 3 INCHES. ORGANIC MATERIAL FROM THE CLEARING STAGE OF DEVELOPMENT SHOULD REMAIN ON SITE, BE CHIPPED AND APPLIED AS MULCH. THIS METHOD OF MULCHING CAN GREATLY REDUCE EROSION CONTROL COSTS.
  3. CUTBACK ASPHALT (SLOW CURING) SHALL BE APPLIED AT 1200 GALLONS PER ACRE (OR 1/4 GALLON PER SQUARE YARD).
  4. POLYETHYLENE FILM SHALL BE SECURED OVER BANKS OR STOCKPILED SOIL MATERIAL FOR TEMPORARY PROTECTION. THIS MATERIAL CAN BE SALVAGED AND RE-USED.

APPLYING MULCH

- WHEN MULCH IS USED WITHOUT SEEDING, MULCH SHALL BE APPLIED TO PROVIDE FULL COVERAGE OF THE EXPOSED AREA. 1. DRY STRAW OR HAY MULCH AND WOOD CHIPS SHALL BE APPLIED UNIFORMLY BY HAND OR BY MECHANICAL EQUIPMENT. 2. IF THE AREA WILL EVENTUALLY BE COVERED WITH PERENNIAL VEGETATION, 20-30 POUNDS OF NITROGEN PER ACRE IN ADDITION TO THE NORMAL AMOUNT SHALL BE APPLIED TO OFFSET THE UPTAKE OF NITROGEN CAUSED BY THE DECOMPOSITION OF THE ORGANIC MULCHES. 3. CUTBACK ASPHALT SHALL BE APPLIED UNIFORMLY. CARE SHOULD BE TAKEN IN AREAS OF PEDESTRIAN TRAFFIC DUE TO PROBLEMS OF "TRACKING IN" OR DAMAGE TO SHOES, CLOTHING, ETC. 4. APPLY POLYETHYLENE FILM ON EXPOSED AREAS.

ANCHORING MULCH

1. STRAW OR HAY MULCH CAN BE PRESSED INTO THE SOIL WITH A DISK HARROW WITH THE DISK SET STRAIGHT OR WITH A SPECIAL "PACKER DISK". DISKS MAY BE SMOOTH OR SERRATED AND SHOULD BE 20 INCHES OR MORE IN DIAMETER AND 8 TO 12 INCHES APART. THE EDGES OF THE DISK SHOULD BE DULL ENOUGH NOT TO CUT THE MULCH BUT TO PRESS IT INTO THE SOIL LEAVING MUCH OF IT IN AN ERECT POSITION. STRAW OR HAY MULCH SHALL BE ANCHORED IMMEDIATELY AFTER APPLICATION ON ALL SLOPES 3:1V OR GREATER. STRAW OR HAY MULCH SPREAD WITH SPECIAL BLOWER-TYPE EQUIPMENT MAY BE ANCHORED WITH EMULSIFIED ASPHALT (GRADE AE-5 OR SS-1). THE ASPHALT EMULSION SHALL BE SPRAYED ONTO THE MULCH AS IT IS EJECTED FROM THE MACHINE. USE 100 GALLONS OF EMULSIFIED ASPHALT AND 100 GALLONS OF WATER PER TON OF MULCH. TACKIFIERS AND BINDERS CAN BE SUBSTITUTED FOR EMULSIFIED ASPHALT. PLEASE REFER TO SPECIFICATION Td - TACKIFIERS AND BINDERS. PLASTIC MESH OR
2. NETTING WITH MESH NO LARGER THAN ONE INCH BY ONE INCH SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
3. NETTING OF THE APPROPRIATE SIZE SHALL BE USED TO ANCHOR WOOD WASTE. OPENINGS OF THE NETTING SHALL NOT BE LARGER THAN THE AVERAGE SIZE OF THE WOOD WASTE CHIPS. POLYETHYLENE FILM SHALL BE ANCHOR TRENCHED AT THE TOP AS WELL AS INCREMENTALLY AS NECESSARY.

Ds-1 DISTURBED AREA STABILIZATION w/MULCHING ONLY N.T.S.

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NORCROSS, GEORGIA 30093  
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(205) 263-4589



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Date	By	App.	Issue	Description
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FOR REVIEW ONLY

GSWCC LEVEL II #11367

Project Title

McALISTER'S DELI

Project Location

Address 114 ROBERSON MILL ROAD  
City, State Zip MILLEDGEVILLE, GA  
Land Lot 297  
District/Section 15T  
County BALDWIN

Project No. 19-008  
Drawn By: BT  
Checked By: MB  
Initial Issue Date: 05-24-2019

Sheet Title

ESPC DETAIL 2

Sheet Number

C-15







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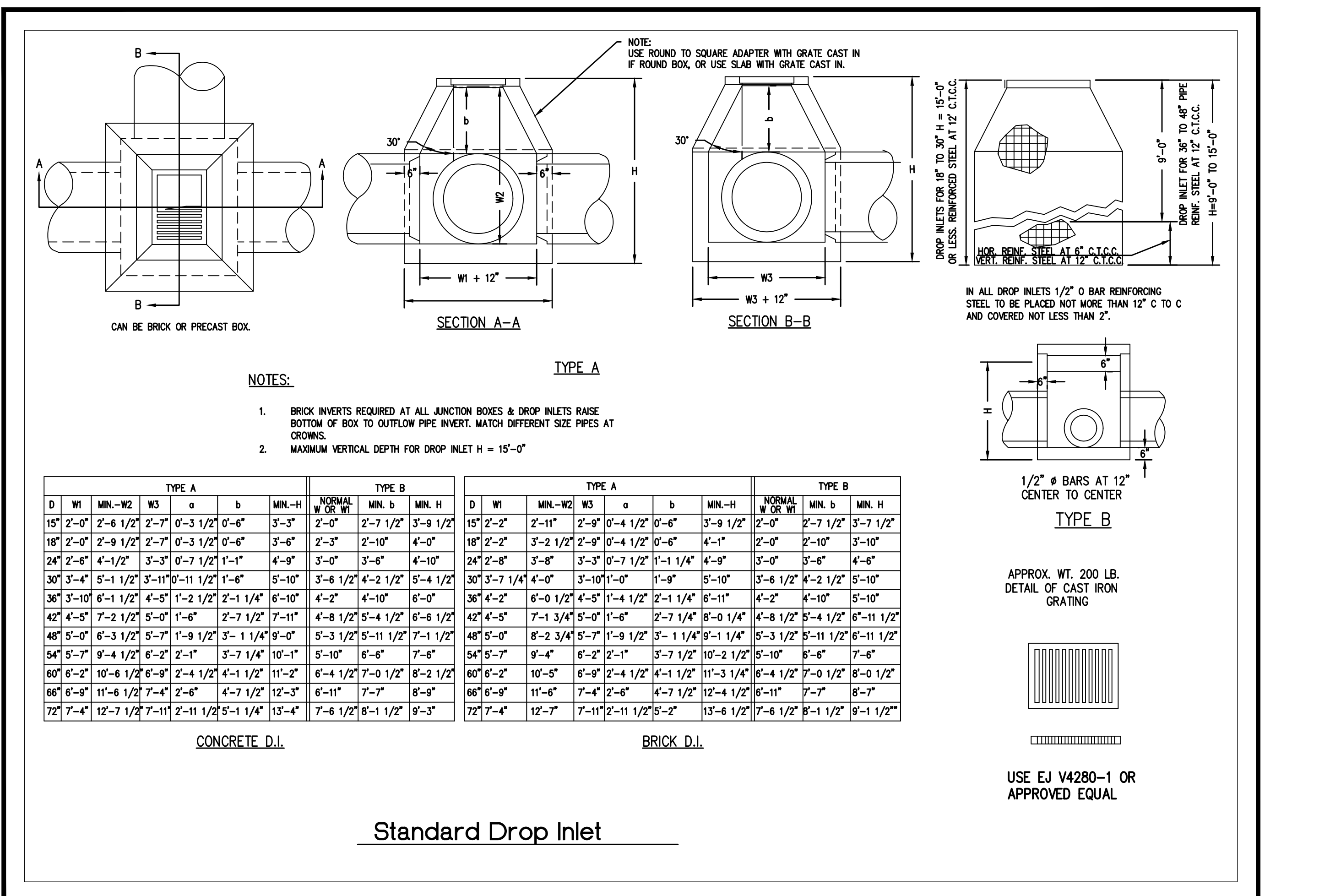
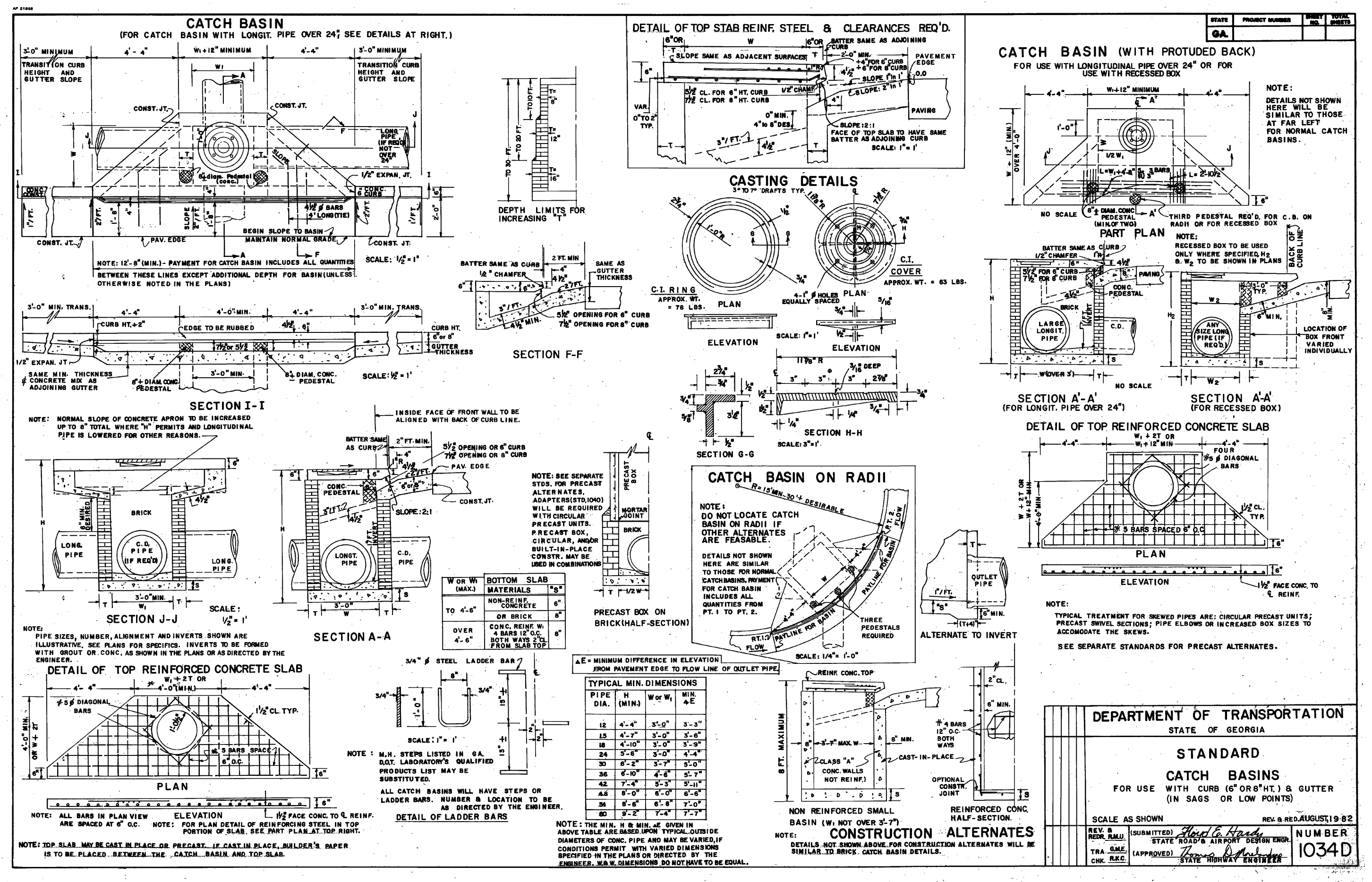




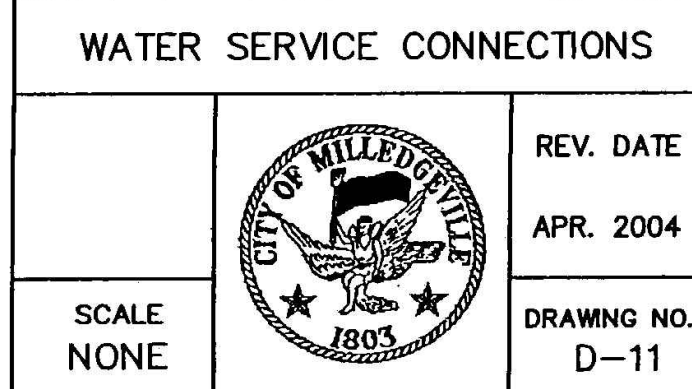
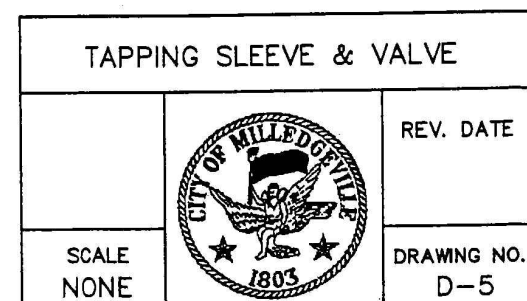




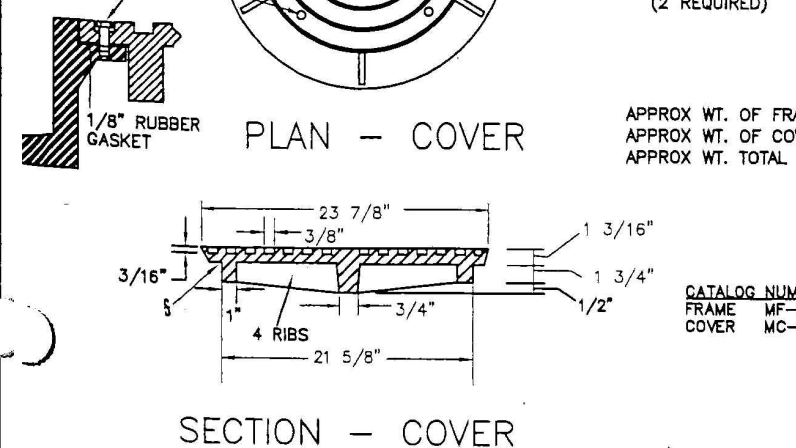
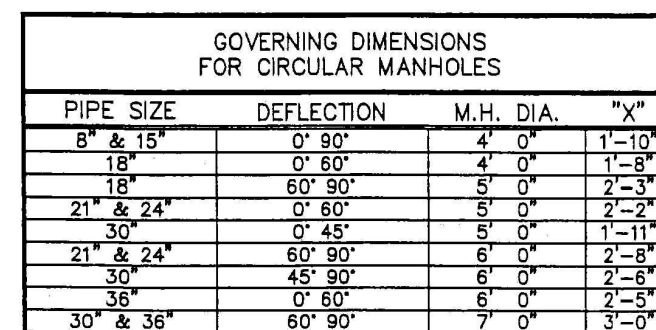
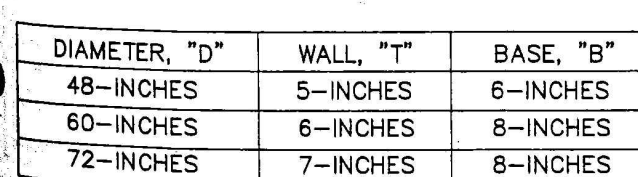


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STANDARD PVC PIPE BEDDING DETAIL		
SCALE  NONE		REV. DATE
		APR. 2004
		DRAWING NO.
		H-1





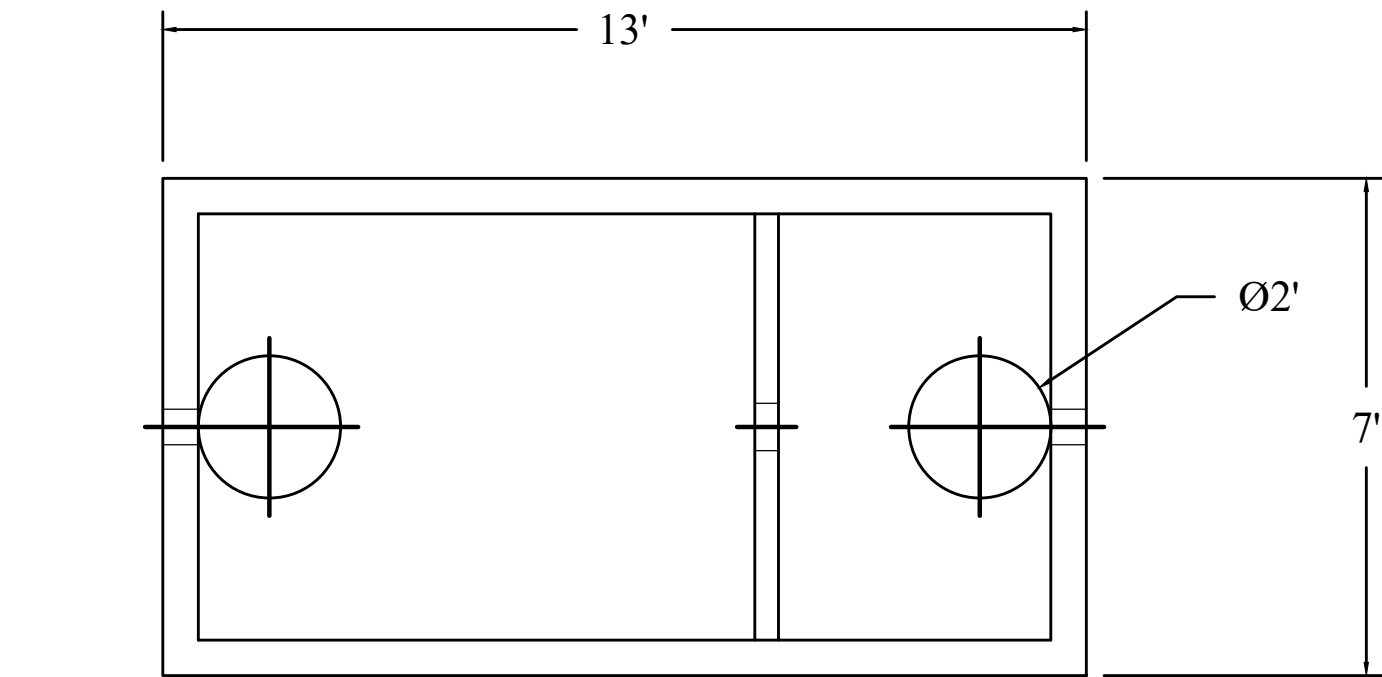
CITY OF MILLEDGEVILLE  
GREASE TRAP CALCULATIONS:

PER ORDINANCE 0-1311-013  
GREASE TRAP SIZING IS BASED ON THE LARGER OF TWO RESULTS A. AND B. BELOW:

A. INTERCEPTOR CAPACITY (GALLONS) =  
S X 25 X HR/12 = GREASE TRAP SIZE IN GALLONS  
S = SEATS OR 125  
25 = 25 GAL/SEAT  
HR = NUMBER OF HOURS OF OPERATION OR 14 HOURS MAX.  
SIZE = 125 X 25 X 1½ (1.16) OR 3,643 GALLONS

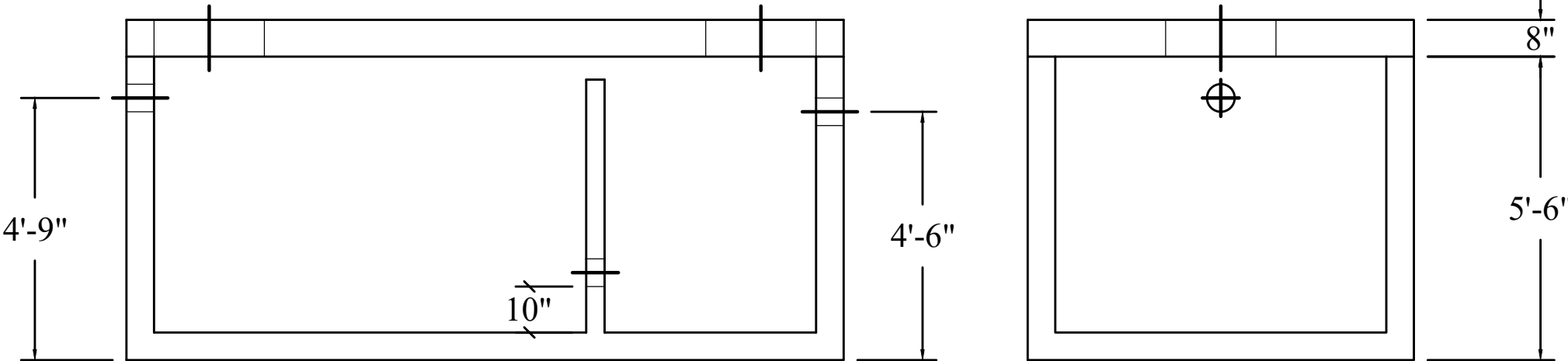
B. INTERCEPTOR CAPACITY (GALLONS) – SUM OF FIXTURE FLOWS X (20) TYPE OF FIXTURE  
RESTAURANT HAND SINK – 2 @ 15GAL = 30GAL  
PRE-RINSE SINK – 1 @ 15GAL = 15GAL  
PREP SINK – 1 @ 15GAL = 15GAL  
SINGLE COMPARTMENT SINK – 1 @ 20GAL = 20GAL  
DOUBLE COMPARTMENT SINK – 1 @25GAL = 25GAL  
MOP SINK – 1 @ 37GAL = 37GAL  
FLOOR DRAIN – 1 @ 9GAL = 9GAL  
FLOOR SINK – 1 @ 10GAL = 10 GAL  
TOTAL = 161 GALLONS  
161 X 20 = 3,220 GALLONS

(2) 2,000 GALLON GREASE TRAPS ARE USED



PRODUCT INFORMATION

- TANK = 21,170#  
LID = 8,000# BAFFLE = 1,400#
- MEETS ASTM C1613
  - RATING: A-16 (H-20), ASSUME 4' MAX EARTH COVER
  - STEEL REINFORCEMENT: MEETS ASTM A615, PLACEMENT AS REQUIRED BY DESIGN
  - INLET & OUTLET BOOT MEETS ASTM C923, ACCEPTS 4" & 6" PVC
  - BUTYL SEALANT: MEETS ASTM C900, USED ON JOINTS
  - ACCESS OPENING SUITABLE FOR 24" RISER AND/OR RING & COVER
  - CROSSOVER TO BE 6" PVC



1. GREASE TRAP TO MEET REQUIREMENTS OF MILLEDGEVILL ORDINANCE 0-1311-D13
  2. CONTRACTOR TO SUBMIT GREASE TRAP SHOP DRAWINGS TO CITY OF MILLEDGEVILLE PRIOR TO INSTALLATION.
  3. GREASE TRAPS TO MEET AASHTO H-20 LOAD RATING AND ASTM C1613 FOR ADEQUATE LOAD BEARING CAPACITY FOR TRAFFIC.
- GREASE TRAP TO BE PUMPED OUT COMPLETELY ONCE EVERY 3 MONTHS OR SOONER IF REQUIRED BY BALDWIN COUNTY HEALTH DEPARTMENT.

2,000 GAL GREASE TRAP/INTERCEPTOR

USE BARTOW PRECAST MODEL GI 2000 / 181 OR APPROVED EQUAL



Hayes James

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Contact: KIRK FARRELLY  
(205) 263-4589



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FOR REVIEW ONLY

Project Title  
  
McALISTER'S DELI

Project Location  
Address 114 ROBERSON MILL ROAD  
City, State Zip MILLEDGEVILLE, GA  
Land Lot 297  
District-Section 1ST  
County BALDWIN

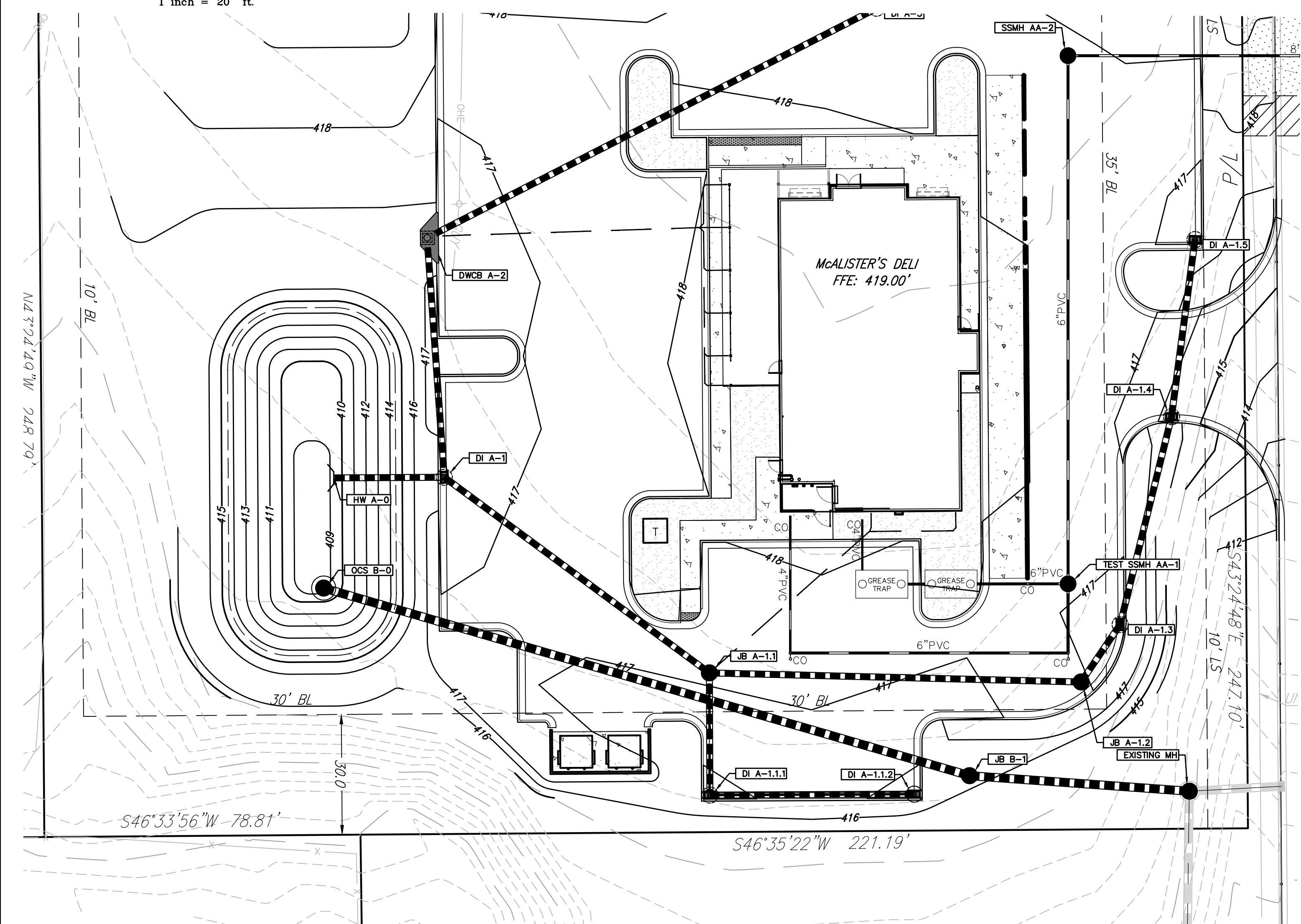
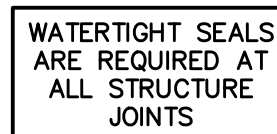
Project No. 19-008  
Drawn By: BT  
Checked By: MB  
Initial Issue Date: 05-24-2019

Sheet Title

WATER & SEWER DETAILS  
2

Sheet Number  
  
C-22





LineNo.	InletID	Inlet Basin	TotalArea	RunoffCoeff	TotalRunoff	LineLength	LineSize	LineSlope	VelAve	HGLUp	HGLDn
		(ac)	(ac)	(C)	(cfs)	(ft)	(in)	(%)	(ft/s)	(ft)	(ft)
1	JB B-1	-	-	-	4.86	54.94	24	9.68	1.55	406.44	402.34
2	OCS B-0	-	-	-	4.86	167.62	24	1.4	4.32	408.78	406.44

Sheet Number

ryan remillard