DEVELOPMENT / CONSTRUCTION PLANS FOR:

ENGINEER GSWCC# 0000020715

Freddy Teems Office Warehouse

Porter Street

Located in Land Lot 339, 4th District, 3rd Section City of Cartersville Bartow County, GA

OWNER / DEVELOPER:

Freddy Teems
24 Hour Contact: Freddy Teems
30 Amberidge Drive
Cartersville, Ga 30121
Phone: (770) 382-8166

VARIANCE NOTE

V07-01	PORTER STREET NEAR GILMER ST FREDDY TEEMS (TY MITCHAM, rep.)	0.60	APPROVED 1-22-07
	Allow for new light industrial development by eliminating buffer along Porter St. reduce buffer and setback to 20 ft.		
	in rear yard, reduce buffer and setback to 15 ft. in both side yards		

***** BUFFER REQUIREMENTS *****

ANY BUFFER ENCROACHMENT DURING CONSTRUCTION THAT IS NOT SHOWN ON THE APPROVED SITE PLANS, LIKE UTILITY INSTALLATION, REQUIRES THAT REVISED PLANS BE SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL PRIOR TO PROCEEDING WITH THE ENCROACHMENT ACTIVITY.

Accepted plans and subsequent accepted revisions must be on-site at all times.

Accepted of these Plans by the CITY does not relieve permit holder from meeting all requirements of the 'CITY OF CARTERSVILLE ZONING ORDINANCE', 'FLOOD DAMAGE PREVENTION ORDINANCE', 'SOIL EROSION AND SEDIMENTATION CONTROL ORDINANCE' THE RULES AND REGULATIONS OF THE BARTOW COUNTY HEALTH DEPARTMENT, THE US ARMY CORPS OF ENGINEERS AND ANY OTHER LOCAL, STATE, OR FEDERAL LAW OR REGULATIONS as it relates to development in THE CITY OF CARTERSVILLE.

The location of erosion and sediment control devices may have to be altered from that shown on the accepted plans due to changes in drainage patterns created during construction. It is the owner/developer's responsibility to accomplish erosion and sediment control for all drainage patterns created at various stages during construction. Any difficulty in controlling erosion or sediment during any phase of construction shall be reported to the project engineer immediately. FAILURE TO PROPERLY INSTALL, OPERATE OR MAINTAIN ALL EROSION AND SEDIMENTATION CONTROL MEASURES MAY RESULT IN ALL CONSTRUCTION BEING STOPPED UNTIL SUCH MEASURES ARE CORRECTED TO THE SATISFACTION OF THE CITY OF CARTERSVILLE INSPECTOR.

Owner agrees by implementation of these plans that all land clearing, construction, development and drainage activities will be done according to these accepted plans or previously accepted revisions. Owner acknowledges that acceptance of plans by the City in no way relieves owner of responsibility not to adversely impact downstream property regarding any land disturbing activity, erosion and sediment control measure and or stormwater management activity during or after construction. Owner acknowledges that the acceptance of these plans and the issuance of the Land Disturbance Permit does not in any way suggest that all other requirements for the legal or appropriate operations for this activity, which may require additional permitting, have been met. The onus is on the owner/developer to discover what additional permitting or approvals may be necessary if any to operate from his point in an appropriate and legal manner. Plan acceptance or permit issuance does not absolve the applicant laws, policies, standards or other permits which may be required for this project.

Any and all land disturbance permits may be revoked at anytime if the construction of project is not in strict accordance with accepted plans.

If actual site conditions vary from accepted plans, it is the owner/developers responsibility to inform the engineer of record and the city zoning administrator for assessment of condition. Project construction may be delayed during assessment period.

Acceptance and/or subsequent acceptance of these plans does not constitute approval by THE CITY OF CARTERSVILLE of any land disturbing activities within wetland areas, Jurisdictional Water of the State, areas of threatened/endangered species, or areas of Historical Significance. It is the owner's responsibility to contact the appropriate regulatory agency for any required approvals.

Developer shall furnish, install and maintain all necessary traffic barricades and warning signage to the satisfaction of the Public Works Department while roadway frontage improvements are made.
Owner/Developer is responsible for maintaining control of silt on-site at all times. Developer is also responsible for control of silt that is tracked onto County R/W or subdivision streets by builders, contractors, subcontractors, utility companies or any other during construction until street has been accepted by City Public Works Department.

Maintain a minimum of 2' of cover over storm pipes. All corrugated metal pipe to be maintained by county shall be fully asphalt coated. Paved inverts are required in perennial streams. Pipe gage determined based on depth of cover and loading conditions.

The burying of construction debris, cleared trees and shrubs, and similar by-products of development is strictly prohibited. All solid waste, demolition debris and construction debris generated from construction must be properly disposed of in the Bartow County Landfill.
Storm water detention facility(ies) shall remain in place as approved and as-built certified in perpetuity and shall not be encroached upon for any reason.

Detention facility(ies) shall be inspected on a semi-annual basis by owner. Any accumulated trash, sediment, or debris shall be removed and disposed of in an approved manner.

Owner/Developer shall accept full liability for the safety of all persons in or around the detention facility(ies) at all times.

Owner/Developer shall indemnify county against all suits brought about by the existnece of the detention facility(ies).

Owner/Developer shall provide that obligations be transferred to all successors and assigns of property, and shall accept responsibility for informing such successors and assigns of said obligations.

All existing and proposed storm drainage features affecting this development have been evaluated and/or designed in accordance with current CITY OF CARTERSVILLE requirements and will not adversely impact any proposed on-site improvements or upstream or downstream property.

***** STREET SIGNS *****

DEVELOPER TO PROVIDE ALL SIGNAGE TO MUTCD STANDARDS

***** WASTE MATERIALS *****

WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.

***** OFF-STREET PARKING *****

OFF-STREET PARKING MUST BE PROVIDED AND MAINTAINED THOUGHTOUT CONSTRUCTION

***** LAND DISTURBING ACTIVITIES *****

LAND DISTURBING ACTIVITIES UNDER THE PERMIT MUST BEGIN WITHIN 120 DAYS AFTER ISSUANCE OF THE LAND DISTURBANCE PERMIT

CONSTRUCTION SCHEDULE

Note: Construction schedule is a general timeline from date the land disturbance permit is issued.

ACTIVITY	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
COMMENCEMENT OF CONSTRUCTION						
INITIAL EROSION CONTROL BMP INTSALLATION						
CLEARING GRUBBING & GRADING						
INTERMEDIATE EROSION CONTROL BMP'S						
GRASSING						
MAINTAIN SEDIMENT CONTROL MEASURES						
INSTALL UNDERGROUND UTILITIES						
INSTALL PAVING						
BUILDING CONSTRUCTION						
FINAL LANDSCAPING						
FINAL PHASE OF ERO. AND SED. CONTROL PLAN						
COMPLETION OF CONSTRUCTION						

DATE	REVISION
9-18-18	REVISED PER CITY OF CARTERSVILLE COMMENTS
10-2-18	REVISED PER CITY OF CARTERSVILLE COMMENTS

*****WATER & SEWER NOTE*****

THE OWNER/DEVELOPER SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH ESTABLISHING WATER AND SEWER SERVICE TO THE DEVELOPMENT. ADJUSTMENTS AND ADDITIONS TO THE WATER AND SEWER PIPING SHOWN ON THESE PLANS MAY BE NECESSARY TO ACCOMMODATE DIFFERENCES IN EXISTING UTILITIES ENCOUNTERED IN THE FIELD OR DUE TO NEEDED MODIFICATIONS DETERMINED AT THE TIME OF CONSTRUCTION. THE OWNER/DEVELOPER SHALL BE RESPONSIBLE FOR ANY NECESSARY RELOCATIONS, REPAIRS, OR IMPROVEMENTS TO THE EXISTING WATER AND SEWER UTILITIES MADE NECESSARY BY THE CONSTRUCTION OF THIS PROJECT WHETHER IDENTIFIED ON THE PLANS OR NOT.

***** U.S. ARMY CORPS OF ENGINEERS*****

IT IS THE DEVELOPER'S RESPONSIBILITY TO ADDRESS ANY WETLANDS ISSUES TO THE SATISFACTION OF THE U.S. ARMY CORPS OF ENGINEERS.

***** U.S. FISH & WILDLIFE SERVICE *****

IT IS THE DEVELOPER'S RESPONSIBILITY TO ADDRESS ANY ENDANGERED SPECIES ISSUES TO THE SATISFACTION OF THE U.S. FISH AND WILDLIFE SERVICE.

***** NPDES PERMIT REQUIREMENTS *****

IT IS THE DEVELOPER'S RESPONSIBILITY TO ABIDE BY ALL THE RULES AND REGULATIONS PERTAINING TO THE STATE OF GEORGIA'S NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT REQUIREMENTS.

SITE NOTES

1. ALL WORK WILL COMPLY WITH APPLICABLE STATE, FEDERAL, AND LOCAL CODES SPECIFICATIONS AND REQUIREMENTS. ALL NECESSARY LICENSES AND PERMITS SHALL BE OBTAINED BY THE CONTRACTOR AT HIS EXPENSE.
2. DEVIATIONS FROM THESE PLANS AND NOTES WITHOUT PRIOR CONSENT OF THE OWNER, HIS REPRESENTATIVE, OR THE ENGINEER MAY CAUSE THE WORK TO BE UNACCEPTABLE.
3. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO COVER A COMPLETE PROJECT, READY TO USE. ALL ITEMS NECESSARY FOR A COMPLETE AND WORKABLE JOB SHALL BE FURNISHED AND INSTALLED. THIS WILL INCLUDE ALL STRIPING AND PARKING LOT SIGNAGE.
4. CONTRACTOR SHALL FURNISH AND MAINTAIN ANY AND ALL NECESSARY BARRICADES AROUND THE WORK AND PROVIDE PROTECTION AGAINST WATER DAMAGE AND SOIL EROSION.
5. BOUNDARY INFORMATION SHOWN ON THIS PLAN WAS TAKEN FROM SMITH AND SMITH LAND SURVEYORS.
6. ALL BUILDING DIMENSIONS SHALL BE CHECKED AND COORDINATED WITH THE ARCHITECTURAL PLANS.
7. FOR OTHER CONSTRUCTION DETAILS, SEE DETAIL SHEETS.
8. ALL SITE DIMENSIONS ARE TO THE FACE OF CURB/EDGE OF PAVEMENT EXCEPT WHERE NOTED.
9. ALL WORK ON SITE MUST CONFORM TO THE CITY OF CARTERSVILLE STANDARDS.
10. SEE DETAILS FOR PAVING SECTIONS.
11. PAVEMENT MARKINGS, INCLUDING STANDARD HANDICAP SYMBOLS, PARKING STRIPING AND TRAFFIC ARROWS, SHALL BE PAINTED ON PAVEMENT AT LOCATIONS SHOWN. SEE PAVEMENT MARKING DETAIL.
12. SITE CONTRACTOR TO VERIFY EXISTING TOPOGRAPHIC AND UTILITY DATA PRIOR TO ANY CONSTRUCTION.
13. PROVIDE BOLLARDS AT LOCATIONS SHOWN, AND AROUND TRANSFORMERS, GAS METERS, AND OTHER UTILITIES IN VULNERABLE TRUCK AREAS.
14. WARRANTY: THIS SUBCONTRACTOR SHALL WARRANT ALL ASPHALT AGAINST ALL DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF TWO (2) YEARS.

WETLANDS:

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

2. THERE ARE NO WETLANDS LOCATED ON-SITE. THEREFORE, NO PERMITS ARE REQUIRED.

ADDITIONAL SITE NOTES

1. ALL WORK AND MATERIALS SHALL COMPLY WITH THE CITY OF CARTERSVILLE REGULATIONS, CODES AND O.S.H.A. STANDARDS.
2. SITE BOUNDARY AND TOPOGRAPHIC INFORMATION WAS TAKEN FROM A SURVEY BY SMITH AND SMITH LAND SURVEYORS. ALL TOPOGRAPHY, UTILITY LOCATIONS AND ROAD INFORMATION WAS PROVIDED BY SMITH AND SMITH LAND SURVEYORS. STEPHENSON ENGINEERING, INC. ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THIS INFORMATION.
3. EXISTING STRUCTURES WITHIN CONSTRUCTION LIMITS ARE TO BE ABANDONED, REMOVED, OR RELOCATED AS NECESSARY.
4. CONTRACTOR SHALL OBTAIN ALL PERMITS BEFORE CONSTRUCTION BEGINS.
5. BUILDING DIMENSIONS SHOWN ON THIS PLAN ARE 'LEASE' DIMENSIONS. FOR ACTUAL DIMENSIONS SEE ARCHITECTURAL PLANS.
6. SITE CONTRACTOR SHALL FURNISH 'AS-BUILT' DRAWINGS INDICATING ALL CHANGES AND DEVIATIONS.
7. SITE WORK CONTRACTOR IS RESPONSIBLE FOR WORK TO WITHIN 5'-0" OF THE BUILDING.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATION INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, TRAFFIC SIGNALS & POLES, ETC., AS REQUIRED FOR CONSTRUCTION.
9. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COST SHALL BE INCLUDED IN BASE BID.
10. ALL PROPRIETARY DEVICES MUST HAVE MANUFACTURER'S AND ENGINEERS DESIGN SPECIFICATIONS, AND INSTALLATION REQUIREMENTS INCLUDED IN BOTH THE HYDROLOGY STUDY AND PLANS.

GRADING NOTES

1. ALL AREAS TO RECEIVE PAVEMENT, STRUCTURES OR FILL MATERIAL SHALL BE STRIPPED OF ORGANIC MATERIAL, TOPSOIL, AND DEBRIS PRIOR TO CONSTRUCTION.
2. ONCE STRIPPING HAS BEEN COMPLETED, ALL AREAS TO RECEIVE FILL SHOULD BE PROOF-ROLLED IN THE PRESENCE OF A REPRESENTATIVE OF THE SOILS ENGINEER. SOFT AREAS ENCOUNTERED DURING PROOF-ROLLING SHALL BE STABILIZED BY COMPACTION OR UNDERCUT.
3. ALL FILL MATERIALS SHOULD BE FREE OF ORGANIC OR OTHERWISE UNSUITABLE MATERIALS, AND COMPACTED TO A MINIMUM DRY DENSITY OF 95%, AS OBTAINED BY STANDARD PROCTOR ASTM D698. FILL SHOULD BE PLACED IN LIFTS NOT TO EXCEED 6 INCHES IN THICKNESS.
4. ALL UNDERCUT AND FILL OPERATIONS SHOULD BE MONITORED BY A REPRESENTATIVE OF THE SOILS ENGINEER. OWNER, AT HIS OPTION, MAY PERFORM DENSITY TESTS TO VERIFY THAT SPECIFIC COMPACTION IS OBTAINED.
5. THE UPPER FOOT OF FILL BENEATH PAVING SHALL BE COMPACTED TO 98% OF MAXIMUM DRY DENSITY PER STANDARD PROCTOR ASTM D698, AT A MOISTURE CONTENT WITHIN 2% TO 3% OF OPTIMUM.
6. MAXIMUM CUT OR FILL SLOPES IS 2H:1V.
7. IF ACTUAL SITE CONDITIONS VARY FROM ACCEPTED PLANS, IT IS THE OWNER/DEVELOPER'S RESPONSIBILITY TO INFORM THE ENGINEER OF RECORD AND THE CITY ENGINEER FOR ASSESSMENT OF THE CONDITION. PROJECT CONSTRUCTION MAY BE DELAYED DURING ASSESSMENT PERIOD.
8. ACCEPTANCE OF THESE PLANS DOES NOT CONSTITUTE APPROVAL BY THE CITY OF ANY LAND DISTURBING ACTIVITIES WITHIN WETLAND AREAS. IT IS THE OWNER/DEVELOPER'S RESPONSIBILITY TO CONTACT THE APPROPRIATE REGULATORY AGENCY FOR APPROVAL OF ANY WETLAND AREA DISTURBANCE.
9. IT IS THE OWNER/DEVELOPER'S RESPONSIBILITY TO ENSURE THAT THE PROJECT SITE HAS SUFFICIENT GRADE AND ADEQUATE DRAINAGE TO PREVENT FLOODING OF PROPOSED STRUCTURES AND MAINTAIN POSITIVE DRAINAGE THROUGHOUT THE SITE.
10. DEBRIS FILLS ARE STRICTLY PROHIBITED AT ALL CONSTRUCTION SITES OR WITHIN ANY DEVELOPMENT. ALL WASTE AND CONSTRUCTION DEBRIS SHALL BE PROPERLY DISPOSED OF IN THE LOCAL LANDFILL.
11. THE OWNER/DEVELOPER SHALL ACCEPT FULL LIABILITY FOR THE SAFETY OF ALL PERSONS IN OR AROUND THE STORMWATER MANAGEMENT FACILITY AT ALL TIMES.

MATERIAL NOTES

1. SANITARY SEWER SHALL BE AS INDICATED:
   EITHER PVC, SDR 26 PER ASTM D3034; OR
   DUCTILE IRON PIPE PER AWWA C150.
2. 6" OR 8" WATER LINE SHALL BE DUCTILE IRON PIPE PER AWWA C151.
3. WATER LINES SMALLER THAN 6" SHALL BE EITHER COPPER TUBE TYPE 'K' (SOFT) PER ANSI B16.22 OR PVC, 200 P.S.I., PER ASTM D1784 AND D2241.
4. STORM SEWER LINE SHALL BE AS FOLLOWS:
   CMP, FULLY COATED PER ASTM A444 OR ALUMINIZED TYPE II WITH REROLLED ENDS & BANDS.
   RCP, CLASS III PER AASHTO M170 IN RIGHT-OF-WAY.
   HDPE (HIGH-DENSITY POLYETHYLENE)
5. PRECAST STRUCTURES MAY BE USED AT THE CONTRACTOR'S OPTION.
6. ALL CONCRETE TO HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 P.S.I.

THE GPS LOCATION OF THE CONSTRUCTION EXIT FOR THE SITE. LATITUDE AND LONGITUDE IN DECIMAL DEGREES N34.1789, W84.7992

City of Cartersville Site Plan Approval

In accordance to the City of Cartersville Development Regulations and the City's Zoning Ordinance, all requirements of approval have been fulfilled; These Site Plans were given final approval by the following City personnel on behalf of the City of Cartersville:

Gas System	Date
Electric System	Date
Fibercomm	Date
Fire Department	Date
Planning and Development	Date
Public Works	Date
Water Department	Date

UTILITY NOTES

1. ANCHOR COLLARS SHALL BE PROVIDED ON STORM AND SANITARY SEWER LINES WHOSE SLOPE EXCEED 25%.
2. WATER METER AND WATER TAP SHALL BE RAISED AS NECESSARY TO BE FLUSH WITH NEW FINISH GRADES.
3. TOPS OF EXISTING MANHOLES SHALL BE RAISED AS NECESSARY TO BE FLUSH WITH NEW FINISH GRADES.
4. CONTRACTOR IS TO COORDINATE INSTALLATION OF GAS LINES WITH LOCAL GAS COMPANY. CONTRACTOR SHALL COORDINATE THE TYING IN OF INDIVIDUAL GAS METERS TO THE MAIN. CONTRACTOR IN CONJUNCTION WITH THE GAS COMPANY SHALL DETERMINE THE AMOUNT OF GAS LINE HE IS TO PROVIDE OUTSIDE THE GAS COMPANY'S ALLOWANCE.
5. REFER TO INTERIOR PLUMBING DRAWINGS FOR TIE-IN OF ALL UTILITIES.
6. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW PIPE LINES.
7. THRUST BLOCKS SHALL BE LOCATED AT ALL WATER PIPE VALVES, VERTICAL BENDS, AND VERTICAL ELBOWS AND TEES, HORIZONTAL ELBOWS AND TEES. FIRE HYDRANTS SHALL BE SIZED AND INSTALLED IN ACCORDANCE WITH NFPA BULLETIN NO. 24, SECTION 96, PARAGRAPHS 9605, 9606, AND TABLE 9605
8. SANITARY SEWER LINE SHALL BE OF DUCTILE IRON PIPE AT ALL LOCATIONS WHERE SANITARY LINE CROSSES ABOVE OR BELOW A STORM SEWER LINE.
9. WHERE WATER PIPING CROSSES THE SANITARY SEWER LINE, THE WATER SERVICE WITHIN TEN FEET OF THE POINT OF CROSSING SHALL BE AT LEAST 12 INCHES ABOVE THE TOP OF THE SEWER LINE. THE SEWER LINE SHALL BE OF DUCTILE IRON WITH MECHANICAL JOINTS AT LEAST 10 FEET ON BOTH SIDES OF THE CROSSING.
10. LINES UNDERGROUND SHALL BE INSTALLED, TESTED AND APPROVED BEFORE BACKFILLING.
11. EXISTING DRAINAGE STRUCTURES TO BE INSPECTED AND REPAIRED AS NEEDED AND EXISTING PIPES TO BE CLEANED OUT TO REMOVE ALL SILT AND DEBRIS.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY NECESSARY RELOCATION OF EXISTING UTILITIES SUCH AS POWER AND TELEPHONE POLES AND THE COORDINATION OF SUCH WITH THE PROPER UTILITY OWNER.

BEST MANAGEMENT PRACTICES NOTES

1. CONTRACTOR IS TO ADHERE TO THE CITY OF CARTERSVILLE AND THE STATE OF GEORGIA EROSION AND SEDIMENT CONTROL REGULATIONS.
2. BEST MANAGEMENT PRACTICES FACILITIES, STORM DRAINAGE FACILITIES AND RETENTION BASINS SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION.
3. ALL GRADED AREAS SHALL BE STABILIZED IMMEDIATELY WITH A TEMPORARY FAST-GROWING COVER AND/OR MULCH.
4. CONTRACTOR SHALL BE RESPONSIBLE DURING CONSTRUCTION FOR THE CONTINUOUS MAINTENANCE OF BEST MANAGEMENT PRACTICES MEASURES AS CALLED FOR ON THE DRAWINGS AND IN THE SPECIFICATIONS.
5. BEST MANAGEMENT PRACTICES SHALL NOT BE REMOVED UNTIL ALL CONSTRUCTION IS COMPLETE AND UNTIL A PERMANENT GROUND COVER HAS BEEN ESTABLISHED.
6. ALL OPEN DRAINAGE SWALES SHALL BE GRASSED AND RIPRAP SHALL BE PLACED AS REQUIRED TO CONTROL EROSION.
7. A MINIMUM OF 10 SQUARE YARDS OF 50 POUND STONE SHALL BE PLACED AT ALL DOWNSTREAM HEADWALLS.
8. SILT FENCES SHALL BE LOCATED ON SITE TO PREVENT SEDIMENT AND EROSION FROM LEAVING THE PROPERTY LIMITS.
9. SOILS ENGINEER SHALL CERTIFY THAT ALL FILL AREAS ARE TO A MINIMUM 95% COMPACTION.
10. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE USED AS REQUIRED.
11. SILT FENCE SHALL BE CLEANED OR REPLACED WHEN SILT BUILDS UP TO WITHIN 1/2 OF TOP OF SILT FENCE.
12. MAXIMUM EMBANKMENT SLOPES ARE TO BE AS FOLLOWS:
    CUT AREAS - 2:1, FILL AREAS - 2:1.
13. DURING AND AFTER CONSTRUCTION, DETENTION PONDS AND DETENTION POND OUTLET STRUCTURES SHALL BE CLEANED OF ALL DEBRIS AND EXCESS SEDIMENT. BOTTOM OF PONDS SHALL BE BROUGHT TO ELEVATION AND SHAPE AS SHOWN ON SITE GRADING PLAN.
14. SEEDS FOR GRASSED SLOPED AREAS USE BOTH TALL FESCUE GRASS AT 30-40 LBS./AC. AND CLEAN, COMBINE-RUN VIRGATA OR SERICEA LESPEDEZA AT 60-75 LBS./AC.
15. ALL CUT AND FILL SLOPES MUST BE SURFACE ROUGHED AND VEGETATED WITHIN SEVEN (7) DAYS OF THEIR CONSTRUCTION.
16. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL MEASURES SHALL BE IMPLEMENTED AS NECESSARY.
17. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION CONTROL MEASURES AND PRACTICES, PRIOR TO, OR CONCURRENT WITH, ANY LAND DISTURBING ACTIVITY.

COMMERCIAL/INDUSTRIAL PROJECT NOTES

1. STORM WATER DETENTION FACILITY(IES) SHALL REMAIN IN PLACE AS APPROVED AND AS-BUILT CERTIFIED IN PERPETUITY AND SHALL NOT BE ENCROACHED UPON FOR ANY REASON.
2. DETENTION FACILITY(IES) SHALL BE INSPECTED ON A SEMI-ANNUAL BASIS BY OWNER. ANY ACCUMULATED TRASH, SEDIMENT, OR DEBRIS SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.
3. OWNER/DEVELOPER SHALL ACCEPT FULL LIABILITY FOR THE SAFETY OF ALL PERSONS IN OR AROUND THE DETENTION FACILITY(IES) AT ALL TIMES.
4. OWNER/DEVELOPER SHALL INDEMNIFY CITY AGAINST ALL SUITS BROUGHT ABOUT BY THE EXISTENCE OF THE DETENTION FACILITY(IES).
5. OWNER/DEVELOPER SHALL PROVIDE THAT OBLIGATIONS BE TRANSFERRED TO ALL SUCCESSORS AND ASSIGNS OF PROPERTY, AND SHALL ACCEPT RESPONSIBILITY FOR INFORMING SUCH SUCCESSORS AND ASSIGNS OF SAID OBLIGATIONS.
6. ALL EXISTING AND PROPOSED STORM DRAINAGE FEATURES AFFECTING THIS DEVELOPMENT HAVE BEEN EVALUATED AND/OR DESIGNED IN ACCORDANCE WITH CURRENT REQUIREMENTS AND WILL NOT ADVERSELY IMPACT ANY PROPOSED ON-SITE IMPROVEMENTS OR UPSTREAM OR DOWNSTREAM PROPERTY.

SITE DATA:

OWNER/DEVELOPER:	FREDDY TEEMS 24 HOUR CONTACT: FREDDY TEEMS 30 AMBERIDGE DRIVE CARTERSVILLE, GA 30121 PHONE: (770) 382-8166
ENGINEER:	STEPHENSON ENGINEERING, INC. P.O. BOX 2010088 CARTERSVILLE, GEORGIA 30120 PHONE: (770) 382-7877 FAX: (770) 382-3742
BOUNDARY TOPOGRAPHIC (SITE) SURVEYOR:	SMITH AND SMITH LAND SURVEYORS 2 SOUTH AVENUE CARTERSVILLE, GEORGIA 30120 PHONE: (770) 382-0457 FAX: (770) 387-0543
TOPOGRAPHIC (OFFSITE):	B.E.I. AERIAL MAPPING 60 EASTBROOK BEND PEACHTREE CITY, GEORGIA 30269 PHONE: (770) 631-1123
SITE AREA:	0.60 ACRES
DISTURBED AREA:	0.48 ACRES
IMPERVIOUS SURFACE:	IMPERVIOUS AREA = 0.22 AC. = 9,583 SF 0.22 AC./0.60 AC. = 36.67% OF TOTAL SITE
PROPOSED USE:	LIGHT INDUSTRIAL
ZONING:	I-1
FLOOD NOTE:	THIS TRACT OF LAND DOES NOT LIE WITHIN THE 100 YEAR FLOOD INTERMEDIATE FLOOD ZONE AS PER FEMA COMMUNITY PANEL #13015C0266 G, LAST REVISED SEPTEMBER 28, 2007.

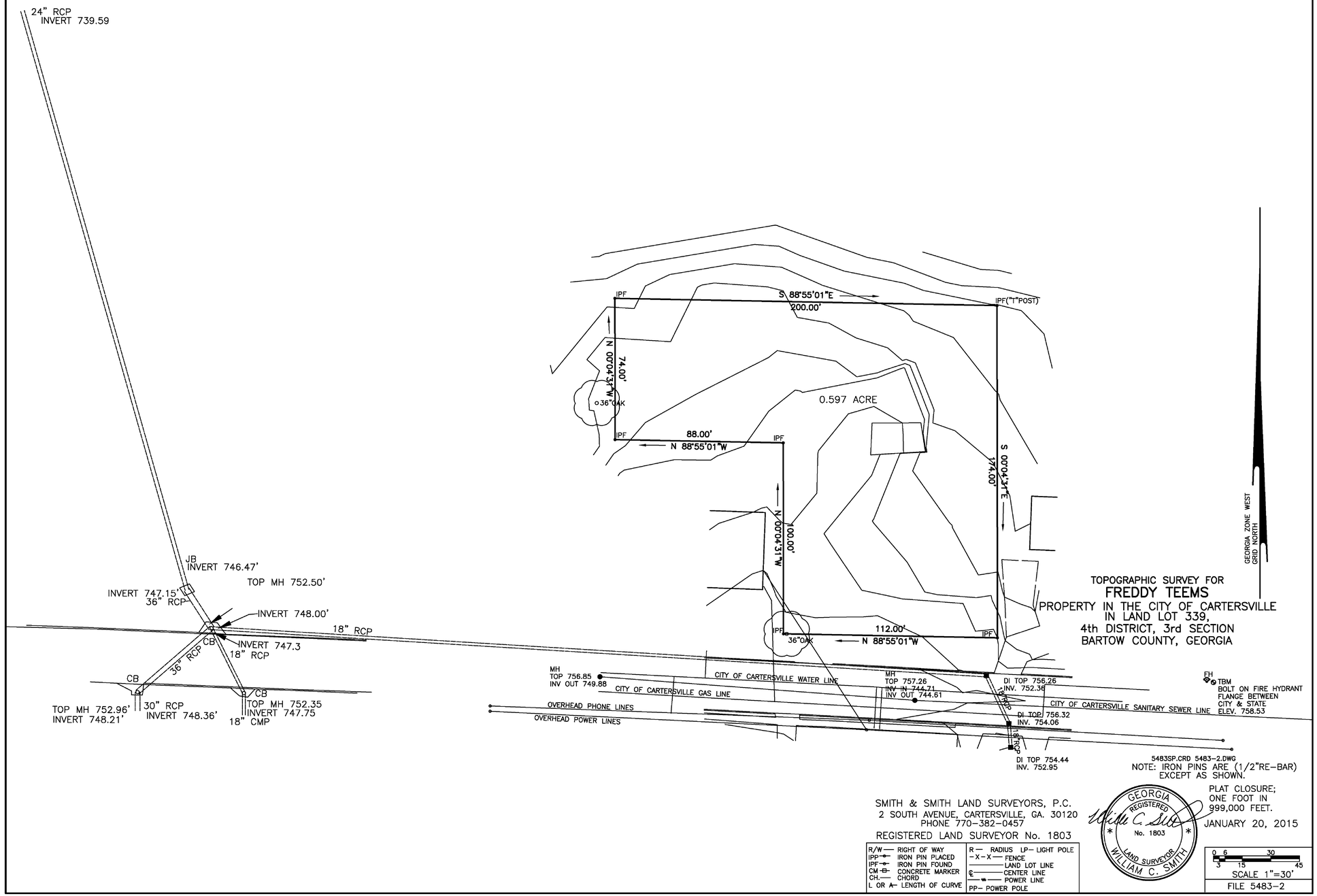
DEVELOPMENT STANDARDS:

MINIMUM LOT FRONTAGE:	110 FEET
MINIMUM FRONT YARD:	20 FEET
MINIMUM SIDE YARD:	15 FEET
MINIMUM REAR YARD:	20 FEET
MAXIMUM HEIGHT:	BUILDINGS SHALL BE NO HIGHER THAN 45 FEET.
PARKING SPACES REQUIRED:	ONE (1) PARKING SPACE FOR EACH ONE THOUSAND (1,000) SQUARE FEET OF GROSS FLOOR AREA. 3,200 SF/1,000 = 3.2 SPACES
PARKING SPACES PROVIDED:	4 TOTAL SPACES 1 HANDICAP SPACE & 3 REGULAR SPACES

LOCATION MAP

SHEET INDEX

STEPHENSON ENGINEERING, INC.
CIVIL ENGINEERING, LAND PLANNING & DEVELOPMENT CONSULTING
P.O. BOX 2010088
1130 N. TENNESSEE ST., SUITE D
CARTERSVILLE, GEORGIA 30120
EMAIL: STEPHENSONENGI@YAHOO.COM
PHONE: (770) 382-7877
FAX: (770) 382-3742



NOT TO SCALE
BOUNDARY SURVEY SHOWN FOR REFERENCE ONLY

STEPHENSON ENGINEERING, INC.
CIVIL ENGINEERING,
LAND PLANNING &
DEVELOPMENT CONSULTING
P.O. BOX 200088
1130 N. TENNESSEE ST., SUITE D
CARTERSVILLE, GEORGIA 30120
EMAIL: STEPHENSONENG@YAHOO.COM
PHONE - (770) 382-7977
FAX: (770) 382- 3742

REVISION

DATE

OWNER/DEVELOPER:
Freddy Teems
24 Hour Contact: Freddy Teems
30 Amberidge Drive
Cartersville, Ga 30121
Phone: (770) 382-8166

Freddy Teems - Office Warehouse

Located in Land Lot 339, 4th District, 3rd Section
City of Cartersville,
Bartow County, Georgia

PROJECT# 15-004

DATE 8-21-18

SHEET TITLE
Boundary Survey

SHEET NO.
B1

Utilities Protection Center, Inc.

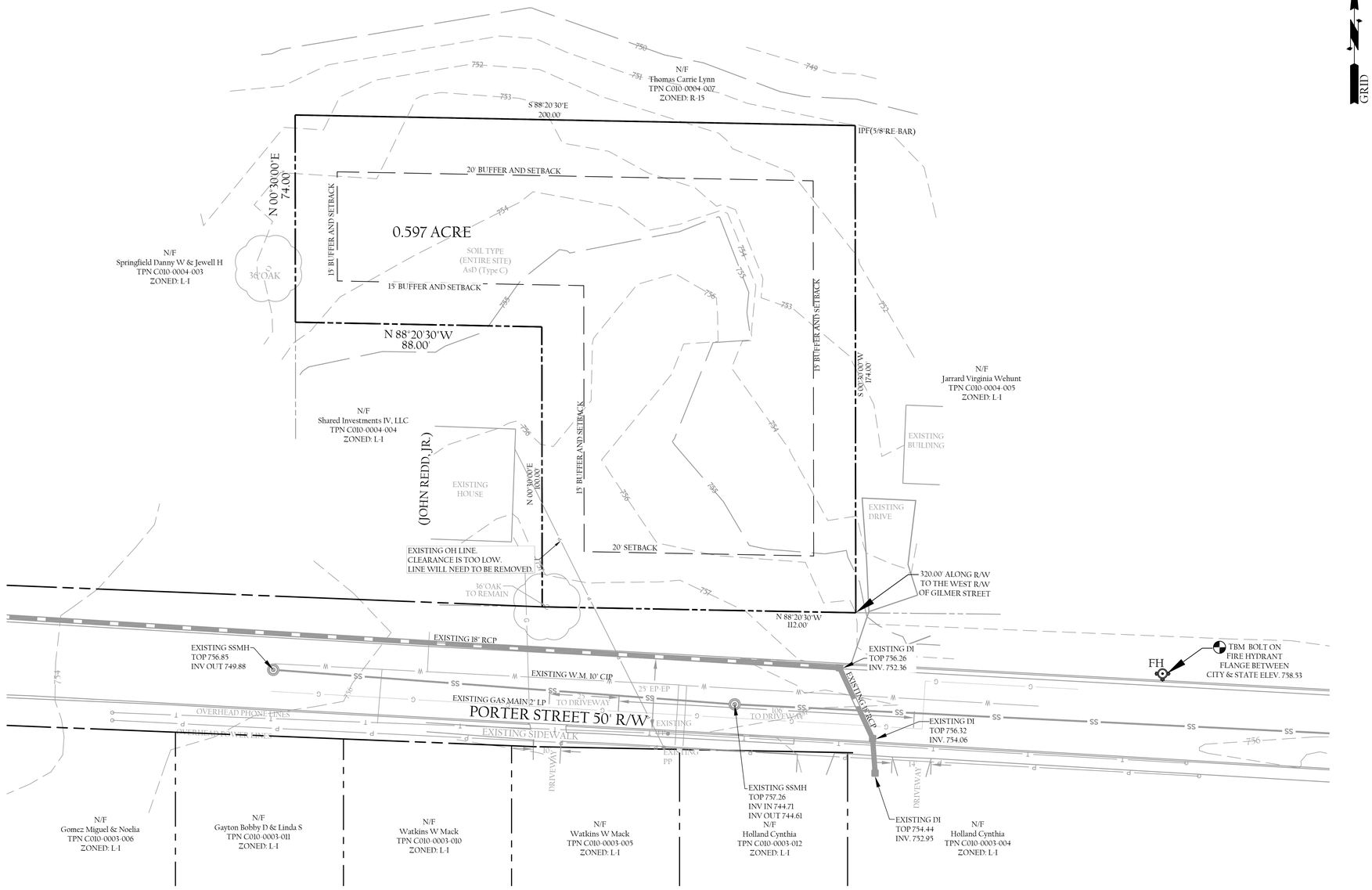
IF YOU DIG GEORGIA
CALL US FIRST !
1-800-282-7411
It's The Law !

24 Hr Emergency Contact:

Freddy Teems
770-382-8166

** SOIL TYPES ONSITE **

AsD - Aragon-Urban land complex, 0 to 15 percent slopes



GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

STEPHENSON ENGINEERING, INC.

CIVIL ENGINEERING,
LAND PLANNING &
DEVELOPMENT CONSULTING

P.O. BOX 200188
1130 N. TENNESSEE ST., SUITE D
CARTERSVILLE, GEORGIA 30120
EMAIL: STEPHENSONENG@YAHOO.COM
PHONE - (770) 382-7977
FAX: (770) 382- 3742

REVISION

DATE

GEORGIA REGISTERED No. 29[illegible] PROFESSIONAL ENGINEER KEVIN T. STEPHENSON

ENGINEER GSWCC.# 0000020715

OWNER/DEVELOPER:

Freddy Teems
24 Hour Contact: Freddy Teems
30 Amberidge Drive
Cartersville, Ga 30121
Phone: (770) 382-8166

Freddy Teems - Office Warehouse

Located in Land Lot 339, 4th District, 3rd Section
City of Cartersville,
Bartow County Georgia

PROJECT# 15-004

DATE 8-21-18

SHEET TITLE
Existing Conditions

SHEET NO.
C1

*** CAUTION ***

THE UTILITIES SHOWN HEREON ARE FOR THE CONTRACTORS CONVENIENCE ONLY. THERE MAY BE OTHER UTILITIES NOT SHOWN ON THESE PLANS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS SHOWN AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL UTILITIES WITHIN THE LIMITS OF THE WORK. IF THERE ARE ANY DISCREPANCIES THE ENGINEER MUST BE NOTIFIED. ALL DAMAGE MADE TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

Utilities Protection Center, Inc.

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1-800-282-7411

It's The Law !

*** MAINTENANCE STATEMENT ***

EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED ACCORDING TO THE 'MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEROGIA'.

24 Hr Emergency Contact:

Freddy Teems
770-382-8166

*** HVAC DESIGN STANDARD ***

AIR CONDITIONING UNITS AND HVAC SYSTEMS SHALL BE THOROUGHLY SCREENED FROM VIEW FROM THE PUBLIC RIGHT-OF-WAY AND FROM ADJACENT PROPERTIES BY USING WALLS, FENCING, ROOF ELEMENTS, OR LANDSCAPING ON NONRESIDENTIAL PROPERTIES (ZONING ORDINANCE SECTION 14.2-B)

*** LIGHTING NOTE ***

PARKING LOT OUTDOOR LIGHTING SHALL BE DIRECTED AWAY AND SHIELDED FROM ABUTTING RESIDENTIAL DISTRICTS (ZONING ORDINANCE SECTION 4.22)

*** ELEVATION NOTE ***

TOPOGRAPHIC INFORMATION IS BASED ON A FIELD RUN TOPOGRAPHIC MAP PROVIDED BY SMITH AND SMITH LAND SURVEYORS AND AERIAL TOPOGRAPHY. IT IS CONTRACTORS RESPONSIBILITY TO FIELD VERIFY ALL EXISTING AND PROPOSED ELEVATIONS AND GRADES ON STREET, STORM DRAINS, AND UTILITIES PRIOR TO CONSTRUCTION. IF AN DISCREPANCY IS FOUND THEN IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER.

*** OFF-STREET PARKING ***

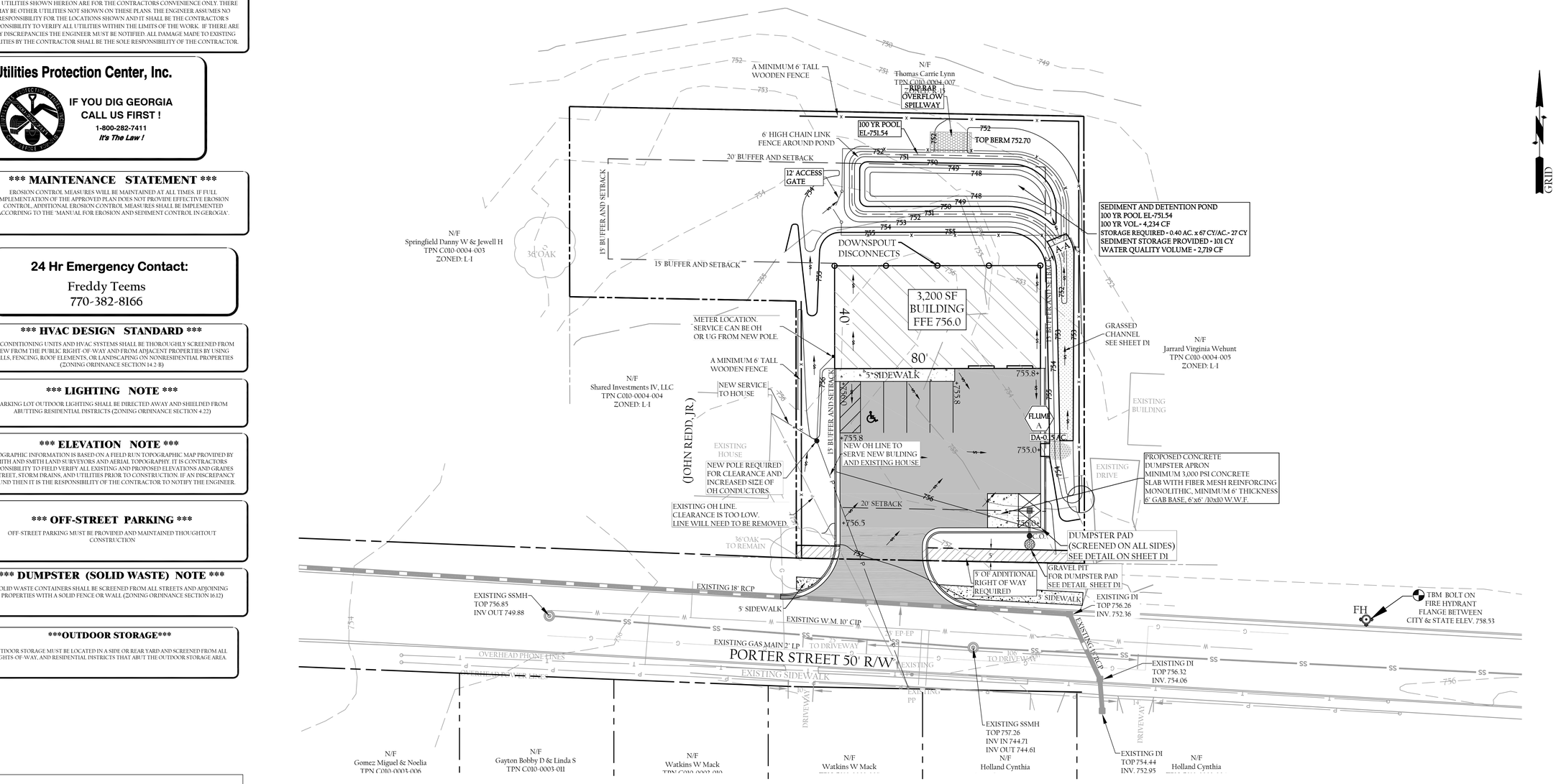
OFF-STREET PARKING MUST BE PROVIDED AND MAINTAINED THOUGHTOUT CONSTRUCTION

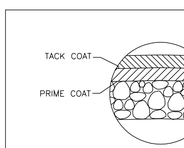
*** DUMPSTER (SOLID WASTE) NOTE ***

SOLID WASTE CONTAINERS SHALL BE SCREENED FROM ALL STREETS AND ADJOINING PROPERTIES WITH A SOLID FENCE OR WALL (ZONING ORDINANCE SECTION 16.12)

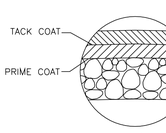
OUTDOOR STORAGE

OUTDOOR STORAGE MUST BE LOCATED IN A SIDE OR REAR YARD AND SCREENED FROM ALL RIGHTS-OF-WAY, AND RESIDENTIAL DISTRICTS THAT ABUT THE OUTDOOR STORAGE AREA

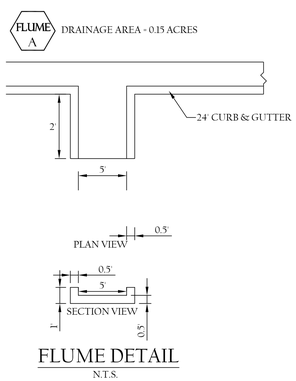




HEAVY DUTY PAVEMENT DETAIL
FOR WITHIN RIGHT-OF-WAY



PAVEMENT DETAIL - SITE PARKING AREAS



FLUME DETAIL
N.T.S.

5' WIDE CONCRETE FLUME

2 YEAR STORM

Channel Calculator

Given Input Data:

Shape	Rectangular
Solving for	Depth of Flow
Flowrate	0.6000 cfs
Slope	0.0100 ft/ft
Manning's n	0.0130
Height	6.0000 in
Bottom width	60.0000 in

Computed Results:

Depth	0.7877 in
Velocity	1.8282 fps
Full Flowrate	15.9419 cfs
Flow area	0.3282 ft2
Flow perimeter	61.5753 in
Hydraulic radius	0.7675 in
Top width	60.0000 in
Area	2.5000 ft2
Perimeter	72.0000 in
Percent full	13.1279 %

5' WIDE CONCRETE FLUME

25 YEAR STORM

Channel Calculator

Given Input Data:

Shape	Rectangular
Solving for	Depth of Flow
Flowrate	0.8700 cfs
Slope	0.0100 ft/ft
Manning's n	0.0130
Height	6.0000 in
Bottom width	60.0000 in

Computed Results:

Depth	0.9869 in
Velocity	2.1156 fps
Full Flowrate	15.9419 cfs
Flow area	0.4112 ft2
Flow perimeter	61.9739 in
Hydraulic radius	0.9555 in
Top width	60.0000 in
Area	2.5000 ft2
Perimeter	72.0000 in
Percent full	16.4489 %

ELECTRICAL SERVICE NOTE

ELECTRICAL SERVICE DETAILS AND ROUTING ARE SUBJECT TO CHANGE BASED ON ACTUAL LOAD REQUIREMENTS.

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

STEPHENSON ENGINEERING, INC.

CIVIL ENGINEERING, LAND PLANNING & DEVELOPMENT CONSULTING

P.O. BOX 209088
1130 N. TENNESSEE ST., SUITE D
CARTERSVILLE, GEORGIA 30120
EMAIL: STEPHENSONENG@YAHOO.COM
PHONE - (770) 382-7977
FAX: (770) 382- 3742

REVISION

DATE

GEORGIA REGISTERED No. 27466 PROFESSIONAL ENGINEER KEVIN T. STEPHENSON

ENGINEER GSWCC# 0000020715

OWNER/DEVELOPER:

Freddy Teems
24 Hour Contact: Freddy Teems
30 Amberidge Drive
Cartersville, Ga 30121
Phone: (770) 382-8166

Freddy Teems - Office Warehouse

Located in Land Lot 359, 4th District, 3rd Section
City of Cartersville,
Bartow County Georgia

PROJECT# 15-004

DATE 8-21-18

SHEET TITLE
Site & Grading Plan

SHEET NO.
C2

Utilities Protection Center, Inc.

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24 Hr Emergency Contact:
Freddy Teems
770-382-8166

*** ELEVATION NOTE ***

TOPOGRAPHIC INFORMATION PROVIDED BY BARTOW COUNTY GIS. IT IS CONTRACTORS RESPONSIBILITY TO FIELD VERIFY ALL EXISTING AND PROPOSED ELEVATIONS AND GRADES ON STREET, STORM DRAINS, AND UTILITIES PRIOR TO CONSTRUCTION. IF AN DISCREPANCY IS FOUND THEN IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER.

*** CAUTION ***

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*** AS-BUILT NOTE ***

A STORMWATER MANAGEMENT AS-BUILT MUST BE PROVIDED PRIOR TO CERTIFICATE OF OCCUPANCY.

*** CARTERSVILLE FIRE DEPT ***
*** REQUIREMENTS ***

Plan Requirements for Cartersville Fire Department

(1) Fire hydrants are to be not more than 500ft. apart with additional hydrants located as necessary to permit all portions of buildings to be reached by hose lays of not more than 300 feet in length. All fire hydrants should be shown on all plans in accordance with Cartersville Development Regulations section 5.3.3. GENERAL COMMERCIAL zoning requires 300 ft. separation.

(2) All new fire hydrants shall be flow tested in accordance with approved practices of I.S.O., AWWA, and the N.F.P.A to determine the GPM flow for that hydrant. Hydrants will then be color coded in the following fashion in accordance with N.F.P.A 291 and Cartersville ordinance 9-34 Fire Hydrant Testing, Maintenance and Identification:

a) Barrels: Safety Yellow
b) Bonnets and Caps: GPM flow 0 to 499- Safety Red*; GPM flow 500 to 999- Safety Orange*; GPM flow1000 to 1499- Safety Green*; GPM flow 1500 + - Safety Blue*

** Color coding is only descriptive of the GPM flow at the time of the last documented test.*

c) Trim of bonnet: Silver or White Reflective
d) Out of service hydrants shall be solid yellow with no reflective stripe until placed in service or removed.
e) All Private hydrants are to be painted solid red, barrels, bonnets, and caps

(3) Buildings needing sprinkler systems per Sec. 9-29 must have a fire hydrant within 50 ft. of the sprinkler vault and FDC. The vault, FDC, PIV, and the hydrant must be shown on plans. PIV's must be electronically supervised and padlocked.

(4) Separate sprinkler and fire alarm plans, if required, must also be submitted for approval.

(5) Fire Department connections shall be located a minimum of 50 ft. or 1½ times the height of the structure, whichever is greater, from the building.

(6) In addition to a hard copy, a copy of all CAD files on buildings and subdivisions in DWG, DXF, or CZD format shall be provided. Micro station and AutoCAD have specialized entities that cannot be read into other programs. Within these programs, if the drawing is exploded three times all should be removed. Most, if not all of the drawing, will be read into our FHSketch CAD program. If we could get a floor and plot plan, we can add the other information to our pre-fire plans. Any information that you have will be appreciated. All files should be emailed to MHathaway@cityofcartersville.org or brought on disc, flash drive, or other form of portable media storage device.

(7) Engineers should follow the latest code editions as adopted by the Georgia Department of Community Affairs O.C.G.A 8-2-20(9)(B). Currently this is 2012 International Fire Code, 2012 NFPA 101 Life Safety Code, and 2010 Edition of ADA, all with State Fire Marshal revisions per the state minimum fire code O.C.G.A 120-3-3.
a) All life safety items should be shown on building plans... example; fire extinguishers, emergency lights, exit signs.
b) Alarm information, if alarm system is required, should be shown on plans.
c) Any state fire marshal approved plans must also be submitted to CFD for review after stamped for approval by the state fire marshal office.

(8) A stamped copy of all applicable plans (site, building, sprinkler, fire alarm, etc.) must be kept on job site at all times.

(9) Any new building or renovation over 50% will be required to purchase a Knox Box per Sec. 9-31. This is an emergency key box that is mounted to the building between 6 and 12 feet from the ground. We are not responsible for mounting the box, you are. Order forms can be picked up at Fire Station 1.

(10) A minimum 20 foot fire lane in accordance with IFC Appendix D should be maintained around all buildings.

PARKING-OUTDOOR LIGHTING

PARKING LOT OUTDOOR LIGHTING SHALL HAVE A MAXIMUM HEIGHT OF FORTY-FIVE (45) FEET AND SHALL BE DIRECTED AWAY AND SHIELDED FROM ABUTTING RESIDENTIAL DISTRICTS.

OUTDOOR STORAGE

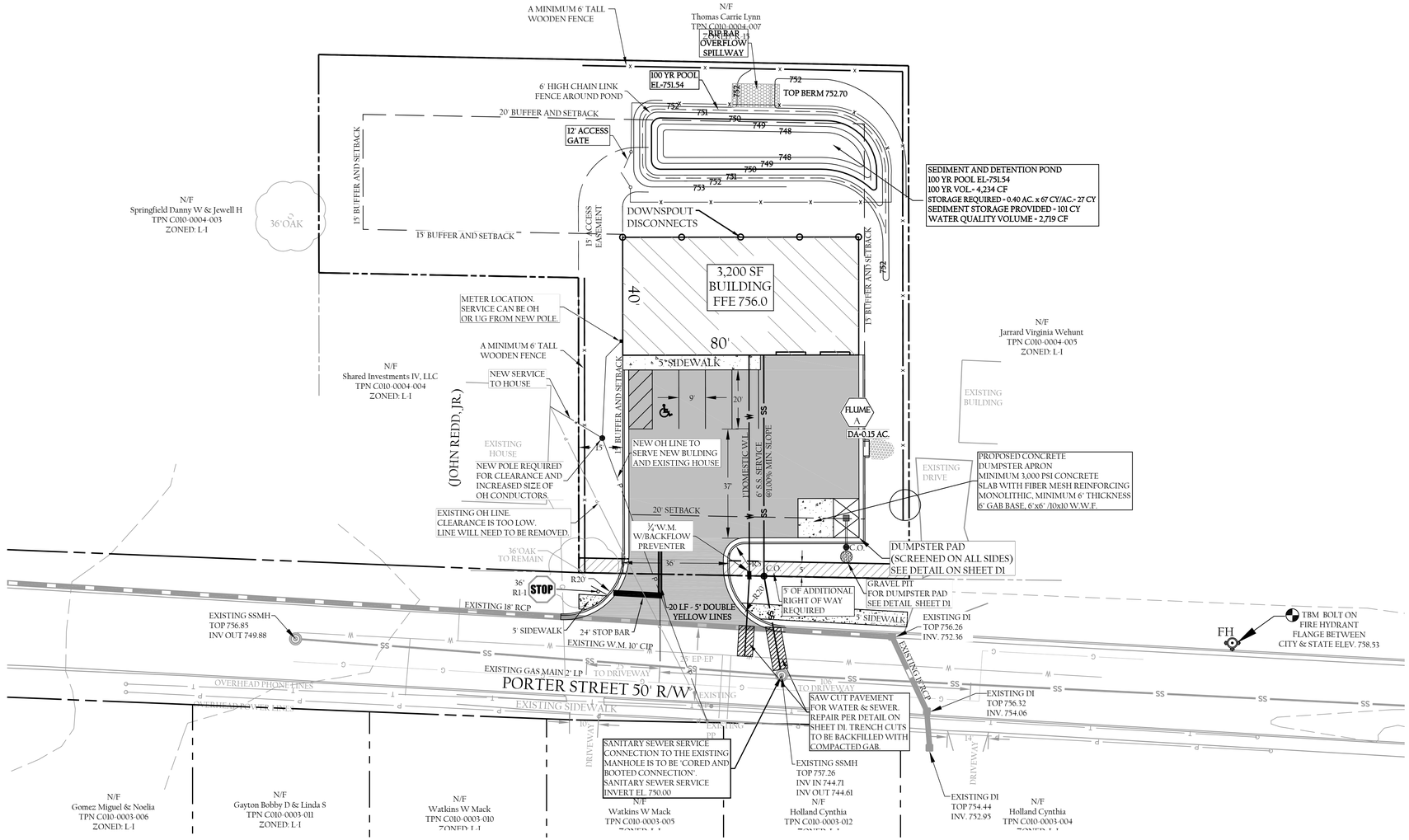
IN G-C AND L-I DISTRICTS, OUTDOOR STORAGE MUST BE LOCATED IN A SIDE OR REAR YARD AND SCREENED FROM ALL RIGHTS-OF-WAY, AND RESIDENTIAL DISTRICTS THAT ABUT THE OUTDOOR STORAGE AREA. SUCH STORAGE SHALL BE SCREENED IN ACCORDANCE WITH THE REQUIREMENTS UNDER ZONING ORDINANCE SECTION 4.23.

DUMPSTER LOCATION & REQUIREMENTS

SOLID WASTE CONTAINERS SHALL BE SCREENED FROM ALL STREETS AND ADJOINING PROPERTIES WITH A SOLID, OPAQUE FENCE OR WALL WHICH SHALL BE AT LEAST SIX (6) INCHES TALLER THAN THE CONTAINER.

*** CARTERSVILLE GAS NOTE ***

GAS SERVICE IS NOT BEING AFFECTED AT THIS TIME DURING CONSTRUCTION.
NO GAS SERVICE PROPOSED FOR THIS SITE



*** CARTERSVILLE ELECTRIC SYSTEM ***

1. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE ELECTRICAL SERVICE PRIOR TO CONSTRUCTION (770-387-5631)
2. ANY CUTTING OR TRENCHING OF THE EXISTING CONCRETE OR ASPHALT SHALL BE REPAIRED BY THE CONTRACTOR. CES WILL COMPACT AND BACKFILL THEIR TRENCHES. THE CONTRACTOR SHALL REPAIR OR REPLACE CONCRETE OR ASPHALT SURFACES AS REQUIRED.
3. THE ELECTRICAL CONTRACTOR SHALL REFER TO THE CONTRACTOR'S MANUAL FOR CES CONSTRUCTION SPECIFICATIONS.
4. SERVICE VOLTAGE AND CAPACITY FOR SITE TO BE DETERMINED ONCE A COMPLETED REQUEST FOR SERVICE FORM HAS BEEN SUBMITTED TO THE CARTERSVILLE ELECTRIC SYSTEM.
5. ELECTRICAL SERVICE CONDUIT SHALL BE FURNISHED AND INSTALLED BY CUSTOMER.

OUTDOOR STORAGE

OUTDOOR STORAGE MUST BE LOCATED IN A SIDE OR REAR YARD AND SCREENED FROM ALL RIGHTS OF WAY, AND RESIDENTIAL DISTRICTS THAT ABUT THE OUTDOOR STORAGE AREA.

*** CITY OF CARTERSVILLE WATER NOTES ***

1. CONTACT TERRY JORDAN, (770) 387-5657, FOR DETERMINATION OF WATER AND SEWER TAP FEES AND CAPACITY FEES.
2. SPECIFICATION AND TESTING OF ALL BACKFLOW PREVENTION DEVICES IS TO BE COORDINATED WITH THE CITY OF CARTERSVILLE WATER DEPARTMENT BACKFLOW PREVENTION COORDINATOR, CHATTIE AGAN - (770) 607-6291. cbrown@cityofcartersville.org
3. THE SEWER SERVICE CONNECTION TO THE EXISTING MANHOLE IS TO BE A 'CORED AND BOOTED CONNECTION'.
4. TRENCH CUTS IN THE STREET ARE TO BE BACKFILLED WITH COMPACTED GRADED AGGREGATE BASE CRUSHED STONE (GAB).

ELECTRICAL SERVICE NOTE

ELECTRICAL SERVICE DETAILS AND ROUTING ARE SUBJECT TO CHANGE BASED ON ACTUAL LOAD REQUIREMENTS.

GRID

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

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CARTERSVILLE, GEORGIA 30120
EMAIL: STEPHENSONENG@YAHOO.COM
PHONE - (770) 382-7977
FAX: (770) 382- 3742

DATE	REVISION
9-10-18	REVISED PER CITY OF CARTERSVILLE COMMENTS
9-20-18	REVISED PER CITY OF CARTERSVILLE COMMENTS

GEORGIA REGISTERED No. 29466 PROFESSIONAL ENGINEER KEVIN T. STEPHENSON

ENGINEER GSWCC# 0000020715

OWNER/DEVELOPER:
Freddy Teems
24 Hour Contact: Freddy Teems
30 Amberidge Drive
Cartersville, Ga 30121
Phone: (770) 382-8166

Freddy Teems - Office Warehouse

Located in Land Lot 539, 4th District, 3rd Section
City of Cartersville,
Bartow County, Georgia

PROJECT# 15-004
DATE 8-21-18

SHEET TITLE
Staking & Utility Plan

SHEET NO.
C3

Utilities Protection Center, Inc.

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FSA

FUEL STAGING AREA is used for remediation of all petroleum spills and leaks as appropriate.

1. THE APPLICABLE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN CHECKLIST ESTABLISHED BY THE COMMISSION AS OF JANUARY 1 OF THE YEAR IN WHICH THE LAND-DISTURBING ACTIVITY WAS PERMITTED. CHECKLIST HAS BEEN SUBMITTED WITH ES&PC PLAN

2. SIGNATURE, SEAL AND GSWCC LEVEL II CERTIFICATION NUMBER OF THE QUALIFIED DESIGN PROFESSIONAL:
THE PLAN INCLUDES THE SIGNATURE, SEAL AND GSWCC LEVEL II CERTIFICATION NUMBER OF THE QUALIFIED DESIGN PROFESSIONAL ON EACH SHEET OF AND PERTAINING TO THE ES & PC PLAN.

ENGINEER GSWCC# 0000020715

3. LIMIT OF DISTURBANCE SHALL BE NO GREATER THAN 50 ACRES AT ANY ONE TIME WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE EPD DISTRICT OFFICE. IF EPD APPROVES THE REQUEST TO DISTURB 50 ACRES OR MORE AT ANY ONE TIME, THE PLAN MUST INCLUDE AT LEAST 4 OF THE BMPs LISTED IN APPENDIX 1 OF THIS CHECKLIST.

4. NAME AND PHONE NUMBER OF 24-HOUR LOCAL CONTACT RESPONSIBLE FOR EROSION, SEDIMENTATION AND POLLUTION CONTROLS.

24 Hr Emergency Contact:
Freddy Teems
770-382-8166

5. PROVIDE NAME, ADDRESS AND PHONE NUMBER OF PRIMARY PERMITTEE

OWNER/DEVELOPER:
Freddy Teems Office Warehouse
24 Hour Contact: Freddy Teems
30 Amberidge Drive
Cartersville, Ga 30120
Phone: (770) 382-8166
Fax: (770) 607-9341

6. NOTE TOTAL AND DISTURBED ACREAGE OF THE PROJECT OR PHASE UNDER CONSTRUCTION.

TOTAL DISTURBED AREA
= 0.44 ACRES
TOTAL AREA = +/- 0.60 ACRES

7. PROVIDE THE GPS LOCATION OF THE CONSTRUCTION EXIT FOR THE SITE. GIVE THE LATITUDE AND LONGITUDE IN DECIMAL DEGREES.

N34.1789, W84.7992

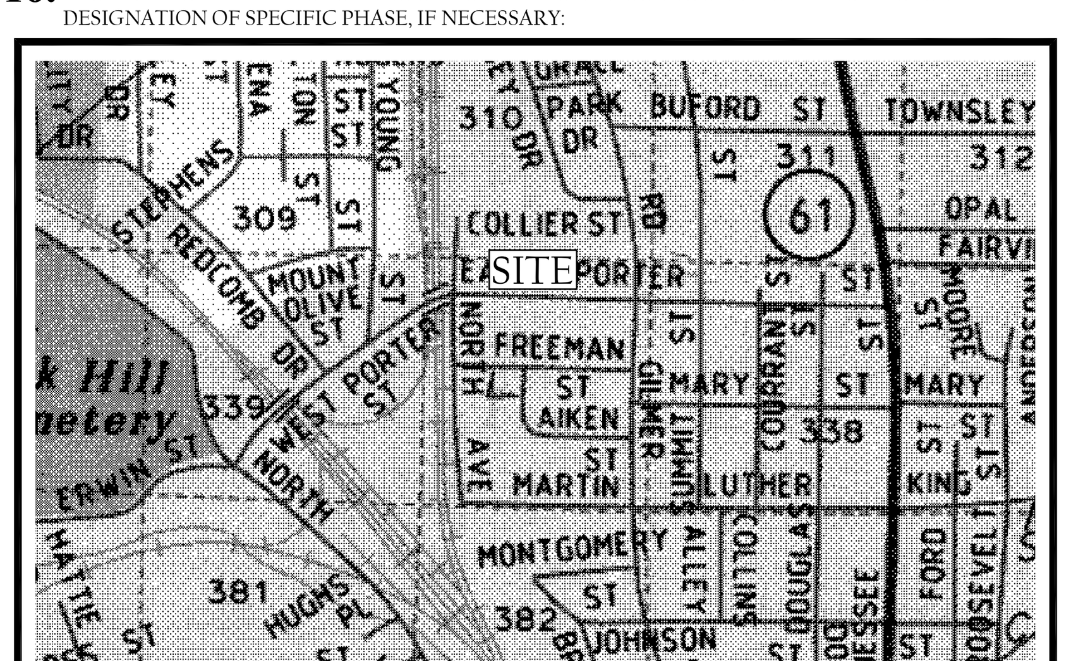
8. INITIAL DATE OF THE PLAN AND DATES OF ANY REVISIONS MADE TO THE PLAN INCLUDING THE ENTITY WHO REQUESTED THE REVISIONS.

PLEASE SEE THE TITLE BLOCK ON SHEETS FOR INITIAL DATE OF PLAN AND NOTED REVISIONS.

9. DESCRIPTION OF THE NATURE OF CONSTRUCTION ACTIVITY:

THE 0.60+/- ACRE SITE IS CURRENTLY UNDEVELOPED PROPERTY. THE 0.44 ACRES OF DISTURBANCE IS PLANNED TO BE DEVELOPED FOR LIGHT INDUSTRIAL USE.

10. PROVIDE VICINITY MAP SHOWING SITE'S RELATION TO SURROUNDING AREAS. INCLUDE DESIGNATION OF SPECIFIC PHASE, IF NECESSARY:



LOCATION MAP

11. IDENTIFY THE PROJECT RECEIVING WATERS AND DESCRIBE ALL SENSITIVE ADJACENT AREAS INCLUDING STREAMS, LAKES, RESIDENTIAL AREAS, WETLANDS, ETC. WHICH MAY BE AFFECTED.

*** RECEIVING WATERS AND ADJACENT SENSITIVE AREAS NOTE***

THE 0.60 ACRES+/- ACRE SITE IS CURRENTLY UNDEVELOPED PROPERTY. THE 0.48 ACRES OF DISTURBANCE IS PLANNED TO BE DEVELOPED FOR LIGHT INDUSTRIAL USE .

IMPACT ON DOWNSTREAM PROPERTIES SHOULD BE MINIMAL DUE TO B.M.P.'S SUCH AS SILT FENCE, PERMANENT DETENTION POND AND PERMANENT GRASSING. THE PERMANENT DETENTION POND WILL BE USED FOR THE 67 CU YD OF STORAGE NECESSARY FOR THIS SITE. SEE DETAIL WITH SEDIMENT STORAGE CALCULATIONS.

STORM WATER LEAVES THE SITE AT ONE LOCATION. SEDIMENTATION IN THIS AREA WILL BE CONTROLLED BY SILT FENCE, PERMANENT DETENTION POND & PERMANENT GRASSING.

THE RECEIVING WATER FOR THIS SITE IS SATTERFIELD BRANCH.

12. DESIGN PROFESSIONAL'S CERTIFICATION STATEMENT AND SIGNATURE THAT THE SITE WAS VISITED PRIOR TO DEVELOPMENT OF THE ES&PC PLAN AS STATED ON PAGE 18 OF THE PERMIT:

"I CERTIFY UNDER PENALTY OF LAW THAT THIS PLAN WAS PREPARED AFTER A SITE VISIT TO THE LOCATIONS DESCRIBED HERE IN BY MYSELF OR MY AUTHORIZED AGENT, UNDER MY DIRECT SUPERVISION."

SIGNATURE

13. DESIGN PROFESSIONAL'S CERTIFICATION STATEMENT AND SIGNATURE THAT THE PERMITTEE'S ES & PC PLAN PROVIDES FOR AN APPROPRIATE AND COMPREHENSIVE SYSTEM OF BMP'S AND SAMPLING TO MEET PERMIT REQUIREMENTS:

CERTIFICATION
"I CERTIFY THAT THE PERMITTEE'S EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN PROVIDES FOR AN APPROPRIATE AND COMPREHENSIVE SYSTEM OF BEST MANAGEMENT PRACTICES REQUIRED BY THE GEORGIA WATER QUALITY CONTROL ACT AND THE DOCUMENT "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA," (MANUAL)PUBLISHED BY THE STATE SOIL AND WATER CONSERVATION COMMISSION AS OF JANUARY 1 OF THE YEAR IN WHICH THE LAND-DISTURBING ACTIVITY WAS PERMITTED, PROVIDES FOR THE SAMPLING OF THE RECEIVING WATER(S) OR THE SAMPLING OF THE STORM WATER OUTFALLS AND THAT THE DESIGNED SYSTEM OF BEST MANAGEMENT PRACTICES MEETS THE DESIGN REQUIREMENTS CONTAINED IN THE GENERAL NPDES PERMIT NO. GAR 100001.

CERTIFIED BY

14. "THE DESIGN PROFESSIONAL WHO PREPARED THE ES&PC PLAN IS TO INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPs WITHIN 7 DAYS AFTER INSTALLATION."

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 CERTIFICATION #

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

THESE DECENCIES MUST BE ADDRESSED IMMEDIATELY AND A RE-INSPECTION SCHEDULED. WORK SHALL NOT PROCEED ON THE SITE UNTIL DESIGN PROFESSIONAL CERTIFICATION IS OBTAINED.

15. "NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION, OR WITHIN 25-FEET OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE, WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS."

16. PROVIDE A DESCRIPTION OF ANY BUFFER ECNROACHMENTS AND INDICATE WHETHER A BUFFER VARIANCE IS REQUIRED. N/A

17. "AMENDMENTS/REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMPs WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL."

18. "WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT."

19. "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."

20. "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."

21. "ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 7 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING."

22. "ANY CONSTRUCTION ACTIVITY WHICH DISCHARGES STORM WATER INTO AN IMPAIRED STREAM SEGMENT OR WITHIN 1 LINEAR MILE UPSTREAM OF AND WITHIN THE SAME WATERSHED AS, ANY PORTION OF AN BIOTA IMPAIRED STREAM SEGMENT MUST COMPLY WITH PART III. C. OF THE PERMIT. INCLUDE THE COMPLETED APPENDIX 1 LISTING ALL THE BMPs THAT WILL BE USED FOR THOSE AREAS OF THE SITE WHICH DISCHARGE TO THE IMPAIRED STREAM SEGMENT."

THERE ARE NO IMPAIRED STREAMS LOCATED ON OR WITHIN ONE MILE OF THIS SITE.

23. IF A TMDL IMPLEMENTATION PLAN FOR SEDIMENT HAS BEEN FINALIZED FOR THE IMPAIRED STREAM SEGMENT (IDENTIFIED IN ITEM 22 ABOVE) AT LEAST SIX MONTHS PRIOR TO SUBMITTAL OF NOI, THE ES&PC PLAN MUST ADDRESS ANY SITE-SPECIFIC CONDITIONS OR REQUIREMENTS INCLUDED IN THE TMDL IMPLEMENTATION PLAN.

THERE ARE NO IMPAIRED STREAMS LOCATED ON OR WITHIN ONE MILE OF THIS SITE.

24. BMP'S FOR CONCRETE WASHDOWN OF TOOLS, CONCRETE MIXER CHUTES, HOPPERS AND THE REAR OF THE VEHICLES. WASHOUT OF THE DRUM AT THE CONSTRUCTION SITE IS PROHIBITED.

SEE DETAIL SHEET FOR WASHOUT AREA DETAIL

25. PROVIDE BMP'S FOR REMEDIATION OF ALL PETROLEUM SPILLS AND LEAKS.

SPILL CLEANUP AND CONTROL PRACTICES
* LOCAL, STATE AND MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND PROCEDURES WILL BE MADE AVAILABLE TO SITE PERSONNEL.
* MATERIAL AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREAS. TYPICAL MATERIALS AND EQUIPMENT INCLUDES, BUT IS NOT LIMITED TO, BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, CAT LITTER, SAND, SAWDUST AND PROPERLY LABELED PLASTIC AND METAL WASTE CONTAINERS.
* SPILL PREVENTION PRACTICES AND PROCEDURES WILL BE REVIEWED AFTER A SPILL AND ADJUSTED AS NECESSARY TO PREVENT FUTURE SPILLS.
*ALL SPILLS WILL BE CLEANED UP IMMEDIATELY UPON DISCOVERY. ALL SPILLS WILL BE REPORTED AS REQUIRED BY LOCAL, STATE AND FEDERAL REGULATIONS.
*FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEEN ON SURFACE WATER). THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-426-2675.
* FOR SPILLS OF AN UNKNOWN AMOUNT, THE NATIONAL CENTER (NRC) WILL BE CONTACTED WITH 24 HOURS AT 1-800-426-2675.
*FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE GEORGIA EPD WILL BE CONTACTED WITHIN 24 HOURS.
* FOR SPILLS LESS THAT 25 GALLONS AND NO SURFACE WATER IMPACTS, THE SPILL WILL BE CLEANED UP AND LOCAL AGENCIES WILL BE CONTACTED AS REQUIRED.

THE CONTRACTOR SHALL NOTIFY THE LICENSED PROFESSIONAL WHO PREPARED THIS PLAN IF MORE THAN 1320 GALLONS OF PETROLEUM IS STORED ONSITE (THIS INCLUDES CAPACITIES OF EQUIPMENT) OR IF ANY ONE PIECE OF EQUIPMENT HAS A CAPACITY GREATER THAN 560 GALLONS. THE CONTRACTOR WILL NEED A SPILL PREVENTION CONTAINMENT AND COUNTERMEASURES PLAN PREPARED BY THAT LICENSED PROFESSIONAL.

26. DESCRIPTION OF THE MEASURES THAT WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS TO CONTROL POLLUTANTS IN STORM WATER THAT WILL OCCUR AFTER CONSTRUCTION OPERATIONS HAVE BEEN COMPLETED.
PLAN DESCRIBES PRACTICES USED TO REDUCE THE POLLUTANTS IN STORM WATER DISCHARGES:

STORMWATER DETENTION & WATER QUALITY
A PERMANENT STORMWATER DETENTION POND WILL BE CONSTRUCTED WITH AN OULTET CONTROL STRUCTURE TO PROVIDE STORMWATER DETENTION AND WATER QUALITY. ALL AREAS OF THE SITE WILL BE STABILIZED WITH PERMANENT GRASSING AND TREES FOR LANDSCAPING.

PRODUCT SPECIFIC PRACTICES
PETROLEUM BASED PRODUCTS - CONTAINERS FOR PRODUCTS SUCH AS FUELS, LUBRICANTS AND TARS WILL BE INSPECTED DAILY FOR LEAKS AND SPILLS. THIS INCLUDES ON-SITE VEHICLE AND MACHINERY DAILY INSPECTIONS AND REGULAR PREVENTATIVE MAINTENANCE OF SUCH EQUIPMENT. EQUIPMENT MAINTENANCE AREAS WILL BE LOCATED AWAY FROM STATE WATER, NATURAL DRAINS AND STORM WATER DRAINAGE INLETS. IN ADDITION, TEMPORARY FUELING TANKS SHALL HAVE A SECONDARY CONTAINMENT LINER TO PREVENT/MINIMIZE SITE CONTAMINATION. DISCHARGE OF OILS, FUELS AND LUBRICANTS IS PROHIBITED. PROPER DISPOSAL METHODS WILL INCLUDE COLLECTION IN A SUITABLE CONTAINER AND DISPOSAL AS REQUIRED BY LOCAL AND STATE REGULATIONS.

PAINTS/FINISHES/SOVENTS - ALL PRODUCTS WILL BE STORED IN TIGHTLY SEALED ORIGINAL CONTAINERS WHEN NOT IN USE. EXCESS PRODUCT WILL NOT BE DISCHARGED TO THE STORM WATER COLLECTION SYSTEM. EXCESS PRODUCT, MATERIALS USED WITH THESE PRODUCTS AND PRODUCT CONTAINERS WILL BE DISPOSED OF ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.

CONCRETE TRUCK WASHING - NO CONCRETE TRUCKS WILL BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ONSITE.

FERTILIZER/HERBICIES – THESE PRODUCTS WILL BE APPLIED AT RATES THAT DO NOT EXCEED THE MANUFACTURER'S SPECIFICATIONS OR ABOVE THE GUIDELINES SET FORTH IN THE CROP ESTABLISHMENT OR IN THE GSWCC MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA. ANY STORAGE OF THESE MATERIALS WILL BE UNDER ROOF IN SEALED CONTAINERS.

BUILDING MATERIALS - NO BUILDING OR CONSTRUCTION MATERIALS WILL BE BURIED OR DISPOSED OF ONSITE. ALL SUCH MATERIAL WILL BE DISPOSED OF IN PROPER WASTER DISPOSAL PROCEDURES.

27. DESCRIPTION OF THE PRACTICES THAT WILL BE USED TO REDUCE THE POLLUTANTS IN STORM WATER DISCHARGES:
PLAN DESCRIBES PRACTICES USED TO REDUCE THE POLLUTANTS IN STORM WATER DISCHARGES:

PRODUCT SPECIFIC PRACTICES
PETROLEUM BASED PRODUCTS - CONTAINERS FOR PRODUCTS SUCH AS FUELS, LUBRICANTS AND TARS WILL BE INSPECTED DAILY FOR LEAKS AND SPILLS. THIS INCLUDES ON-SITE VEHICLE AND MACHINERY DAILY INSPECTIONS AND REGULAR PREVENTATIVE MAINTENANCE OF SUCH EQUIPMENT. EQUIPMENT MAINTENANCE AREAS WILL BE LOCATED AWAY FROM STATE WATER, NATURAL DRAINS AND STORM WATER DRAINAGE INLETS. IN ADDITION, TEMPORARY FUELING TANKS SHALL HAVE A SECONDARY CONTAINMENT LINER TO PREVENT/MINIMIZE SITE CONTAMINATION. DISCHARGE OF OILS, FUELS AND LUBRICANTS IS PROHIBITED. PROPER DISPOSAL METHODS WILL INCLUDE COLLECTION IN A SUITABLE CONTAINER AND DISPOSAL AS REQUIRED BY LOCAL AND STATE REGULATIONS.

PAINTS/FINISHES/SOVENTS - ALL PRODUCTS WILL BE STORED IN TIGHTLY SEALED ORIGINAL CONTAINERS WHEN NOT IN USE. EXCESS PRODUCT WILL NOT BE DISCHARGED TO THE STORM WATER COLLECTION SYSTEM. EXCESS PRODUCT, MATERIALS USED WITH THESE PRODUCTS AND PRODUCT CONTAINERS WILL BE DISPOSED OF ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.

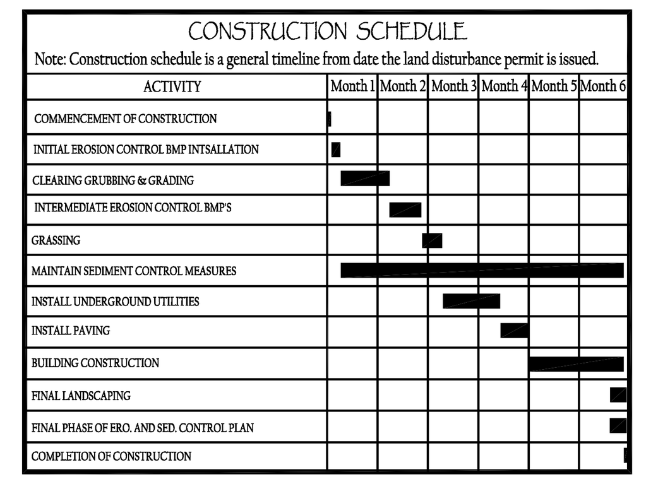
CONCRETE TRUCK WASHING - NO CONCRETE TRUCKS WILL BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ONSITE.

FERTILIZER/HERBICIES – THESE PRODUCTS WILL BE APPLIED AT RATES THAT DO NOT EXCEED THE MANUFACTURER'S SPECIFICATIONS OR ABOVE THE GUIDELINES SET FORTH IN THE CROP ESTABLISHMENT OR IN THE GSWCC MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA. ANY STORAGE OF THESE MATERIALS WILL BE UNDER ROOF IN SEALED CONTAINERS.

BUILDING MATERIALS - NO BUILDING OR CONSTRUCTION MATERIALS WILL BE BURIED OR DISPOSED OF ONSITE. ALL SUCH MATERIAL WILL BE DISPOSED OF IN PROPER WASTER DISPOSAL PROCEDURES.

28. DESCRIPTION AND CHART OR TIMELINE OF THE INTENDED SEQUENCE OF MAJOR ACTIVITIES WHICH DISTURB SOILS FOR THE MAJOR PORTIONS OF THE SITE (I.E., INITIAL PERIMETER AND SEDIMENT STORAGE BMPM'S, CLEARING AND GRUBBING ACTIVITIES, EXCAVATION ACTIVITIES, UTILITY ACTIVITIES, TEMPORARY AND FINAL STABILIZATION).

NOTE: INITIAL BMP'S MUST BE IMPLEMENTED PRIOR TO COMMENCEMENT OF CONSTRUCTION



29. PROVIDE COMPLETE REQUIREMENTS OF INSPECTIONS AND RECORD KEEPING BY PRIMARY PERMITTEE.

4. INSPECTIONS.
A. PERMITTEE REQUIREMENTS.

(1). EACH DAY WHEN ANY TYPE OF CONSTRUCTION ACTIVITY HAS TAKEN PLACE AT A PRIMARY PERMITTEE'S SITE, CERTIFIED PERSONNEL PROVIDED BY THE PRIMARY PERMITTEE SHALL INSPECT: (A) ALL AREAS AT THE PRIMARY PERMITTEE'S SITE WHERE PETROLEUM PRODUCTS ARE STORED, USED, OR HANDLED FOR SPILLS AND LEAKS FROM VEHICLES AND EQUIPMENT AND (B) ALL LOCATIONS AT THE PRIMARY PERMITTEE'S SITE WHERE VEHICLES ENTER OR EXIT THE SITE FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING.. THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.

(2). MEASURE RAINFALL ONCE EVERY 24 HOURS EXCEPT ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY AND NON-WORKING FEDERAL HOLIDAY UNTIL A NOTICE OF TERMINATION IS SUBMITTED. MEASUREMENT OF RAINFALL MAY BE SUSPENDED IF ALL AREAS OF THE SITE HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED
A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION.

(3). CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT THE FOLLOWING AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES RAINFALL OR GREATER (UNLESS SUCH STORM ENDS AFTER 5:00 PM ON ANY FRIDAY OR ON ANY NON-WORKING
SATURDAY, NON-WORKING SUNDAY OR ANY NON-WORKING FEDERAL HOLIDAY IN WHICH CASE THE INSPECTION SHALL BE COMPLETED BY THE END OF THE NEXT BUSINESS DAY AND/OR WORKING DAY, WHICHEVER OCCURS FIRST): (A) DISTURBED AREAS OF THE PRIMARY PERMITTEE'S CONSTRUCTION SITE ; (B) AREAS USED BY THE
PRIMARY PERMITTEE FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION ; AND (C) STRUCTURAL CONTROL MEASURES. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN APPLICABLE TO THE PRIMARY PERMITTEE'S SITE SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE
DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S). FOR AREAS OF A SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION, THE PERMITTEE MUST COMPLY WITH PART IV.D.4.A.(4). THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.

(4). CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT AT LEAST ONCE PER MONTH DURING THE TERM OF THIS PERMIT (I.E., UNTIL A NOTICE OF TERMINATION IS RECEIVED BY EPD) THE AREAS OF THE SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION. THESE AREAS SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM AND THE RECEIVING WATER(S). EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO
ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S).

(5). BASED ON THE RESULTS OF EACH INSPECTION, THE SITE DESCRIPTION AND THE POLLUTION PREVENTION AND CONTROL MEASURES IDENTIFIED IN THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, THE PLAN SHALL BE REVISED AS APPROPRIATE NOT LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION. IMPLEMENTATION OF SUCH CHANGES SHALL BE MADE AS SOON AS PRACTICAL BUT IN NO CASE LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION.

(6). A REPORT OF EACH INSPECTION THAT INCLUDES THE NAME(S) OF CERTIFIED PERSONNEL MAKING EACH INSPECTION, THE DATE(S) OF EACH INSPECTION, CONSTRUCTION PHASE (IE., INITIAL, INTERMEDIATE OR FINAL), MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE EROSIONI, SEDIMENTATION AND POLLUTION CONTROL PLAN, AND ACTIONS TAKEN IN ACCORDANCE WITH PART IV.D.4.a(5). OF THE PERMIT SHALL BE MADE AND RETAINED AT THE SITE OR BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION UNTIL THE ENTIRE SITE OR THAT PORTION OF CONSTRUCTION PROJECT THAT HAS BEEN PHASED HAS UNDERGONE FINAL STABILIZATION AND A NOTICE OF TERMINATION IS SUBMITTED TO EPD. SUCH REPORTS SHALL BE READILY AVAILABLE BY END OF THE SECOND BUSINESS DAY AND/OR WORKING DAY AND SHALL IDENTIFY ALL INCIDENTS OF BEST MANAGEMENT PRACTICES THAT HAVE NOT BEEN PROPERLY INSTALLED AND/OR MAINTAINED AS DESCRIBED IN THE PLAN. WHERE THE REPORT DOES NOT IDENTIFY ANY INCIDENTS, THE INSPECTION REPORT SHALL CONTAIN A CERTIFICATION THAT THE BEST MANAGEMENT PRACTICES ARE IN COMPLIANCE WITH THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN. THE REPORT SHALL BE SIGNED IN ACCORDANCE WITH PART V.G.2. OF THIS PERMIT.

30. PROVIDE COMPLETE REQUIREMENTS OF SAMPLING FREQUENCY AND REPORTING OF SAMPLING RESULTS.
SAMPLING FREQUENCY
1) THE PRIMARY PERMITTEE MUST SAMPLE IN ACCORDANCE WITH THE PLAN AT LEAST ONCE FOR EACH RAINFALL EVENT DESCRIBED BELOW. FOR A QUALIFYING EVENT, THE PERMITTEE SHALL SAMPLE AT THE BEGINING OF ANY STORM WATER DISCHARGE TO A MONITORED RECEIVING WATER AND/OR FROM A MONITORED OUTFALL LOCATION WITHIN FORTY-FIVE (45) MINUTES OR AS SOON AS POSSIBLE.

2) HOWEVER, WHERE MANUAL AND AUTOMATIC SAMPLING ARE IMPOSSIBLE (AS DEFINED IN THIS PERMIT), OR ARE BEYOND THE PERMITTEE'S CONTROL, THE PERMITTEE SHALL TAKE SAMPLES AS SOON AS POSSIBLE, BUT IN NO CASE MORE THAN TWELVE (12) HOURS AFTER THE BEGINNING OF THE STORM WATER DISCHARGE.

3) SAMPLING BY THE PERMITTEE SHALL OCCUR FOR THE FOLLOWING QUALIFYING EVENTS:

(A) FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH WITH A STORM WATER DISCHARGE THAT OCCURS DURING NORMAL BUSINESS HOURS AS DEFINED IN THIS PERMIT AFTER ALL CLEARING AND GRUBBING OPERATIONS HAVE BEEN COMPLETED, BUT PRIOR TO COMPLETION OF MASS GRADING OPERATIONS, IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE SAMPLING LOCATION.
(B) IN ADDITION TO (A) ABOVE, FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH WITH A STORM WATER DISCHARGE THAT OCCURS DURING NORMAL BUSINESS HOURS AS DEFINED IN THIS PERMIT EITHER 90 DAYS AFTER THE FIRST SAMPLING EVENT OR AFTER ALL MASS GRADING OPERATIONS HAVE BEEN COMPLETED IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE SAMPLING LOCATION, WHICHEVER COMES FIRST;
(C) AT THE TIME OF SAMPLING PERFORMED PURSUANT TO (A) AND (B) ABOVE, IF BMPS IN ANY AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL ARE NOT PROPERLY DESIGNED, INSTALLED AND MAINTAINED, CORRECTIVE ACTION SHALL BE DEFINED AND IMPLEMENTED WITHIN TWO (2) BUSINESS DAYS, AND TURBIDITY SAMPLES SHALL BE TAKEN FROM DISCHARGES FROM THAT AREA OF THE SITE FOR EACH SUBSEQUENT RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH DURING NORMAL BUSINESS HOURS* UNTIL THE SELECTED TURBIDITY STANDARD IS ATTAINED, OR UNTIL POST-STORM EVENT INSPECTIONS DETERMINE THAT BMPS ARE PROPERLY DESIGNED, INSTALLED AND MAINTAINED;
(D) WHERE SAMPLING PURSUANT TO (a), (b) or (c) ABOVE IS REQUIRED BUT NOT POSSIBLE (OR NOT REQUIRED BECAUSE THERE WAS NO DISCHARGE), THE PERMITTEE, IN ACCORDANCE WITH PART IV.D.4(6), MUST INCLUDE A WRITER JUSTIFICATION IN THE INSPECTION REPORT OF WHY SAMPLING WAS NOT PERFORMED. PROVIDING THIS JUSTIFICATION DOES NOT RELIEVE THE PERMITTEE OF ANY SUBSEQUENT SAMPLING OBLIGATIONS UNDER (A), (B) OR (C) ABOVE; AND
(E) EXISTING CONSTRUCTION ACTIVITIES, I.E., THOSE THAT ARE OCCURRING ON OR BEFORE THE EFFECTIVE DATE OF THIS PERMIT, THAT HAVE MET THE SAMPLING REQUIRED BY (a) ABOVE SHALL SAMPLE IN ACCORDANCE WITH (b). THOSE EXISTING CONSTRUCTION ACTIVITIES THAT HAVE MET THE SAMPLING REQUIRED BY (b) ABOVE SHALL NOT BE REQUIRED TO CONDUCT ADDITIONAL SAMPLING OTHER TAN AS REQUIRED BY (c) ABOVE.

*NOTE THAT THE PERMITTEE MAY CHOOSE TO MEET THE REQUIREMENTS OF (a) AND (b) ABOVE BY COLLECTING TURBIDITY SAMPLES FROM ANY RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR SAMPLING AT ANY TIME OF THE DAY OR WEEK.

31. PROVIDE COMPLETE DETAILS FOR RETENTION OF RECORDS AS PER PART IV.F. OF THE PERMIT.
THE PRIMARY PERMITTEE SHALL RETAIN THE FOLLOWING RECORDS AT THE CONSTRUCTION SITE OR THE RECORDS SHALL BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI:
a. A COPY OF ALL NOTICES OF INTENT SUBMITTED TO EPD:
b. A COPY OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN REQUIRED BY THIS PERMIT;
c. THE DESIGN PROFESSIONAL'S REPORT OF THE RESULTS OF THE INSPECTION CONDUCTED IN ACCORDANCE WITH PART IV.A5. OF THIS PERMIT;
d. A COPY OF ALL MONITORING INFORMATION, RESULTS, AND REPORTS REQUIRED BY THIS PERMIT;
e. A COPY OF ALL INSPECTION REPORTS GENERATED IN ACCORDANCE WITH PART IV.D.4.a. OF THIS PERMIT
f. A COPY OF ALL VIOLATION SUMMARIES AND VIOLATION SUMMARY REPORTS GENERATED IN ACCORDANCE WITH PART III.D.2. OF THIS PERMIT; AND
g. DAILY RAINFALL INFORMATION COLLECTED IN ACCORDANCE WITH PART IV.D.4.a.(1)(c)

2. COPIES OF ALL NOTICES OF INTENT, NOTICES OF TERMINATION, REPORTS, PLANS, MONITORING REPORTS, MONITORING INFORMATION, INCLUDING ALL CALIBRATION AND MAINTENANCE RECORDS AND ALL ORIGINAL STRIP CHART RECORDINGS FOR CONTINUOUS MONITORING INSTRUMENTATION, EROSION , SEDIMENTATION AND POLLUTION CONTROL PLANS, RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT TO BE COVERED BY THIS PERMIT AND ALL OTHER RECORDS REQUIRED BY THIS PERMIT SHALL BE RETAINED BY THE PERMITTEE WHO EITHER PRODUCED OR USED IT FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE THAT THE NOT IS SUBMITTED IN ACCORDANCE WITH PART VI OF THIS PERMIT. THESE RECORDS MUST BE MAINTAINED AT THE PERMITTEE'S PRIMARY PLACE OF BUSINESS OR AT A DESIGNATED ALTERNATIVE LOCATION ONCE THE CONSTRUCTION ACTIVITY HAS CEASED AT THE PERMITTED SITE. THIS PERIOD MAY BE EXTENDED BY REQUEST OF THE EPD AT ANY TIME UPON WRITTEN NOTIFICATION TO THE PERMITTEE.

32. DESCRIPTION OF ANALYTICAL METHODS TO BE USED TO COLLECT AND ANALYZE THE SAMPLES FROM EACH LOCATION.

B. SAMPLE TYPE. ALL SAMPLING SHALL BE COLLECTD BY "GRAB SAMPLES" AND THE ANALYSIS OF THESE SAMPLES MUST BE CONDUCTED IN ACCORDANCE WITH METHODOLOGY AND TEST PROCEDURES ESTABLISHED BY 40 CFR PART 136 (UNLESS OTHER TEST PROCEDURES HAVE BEEN APPROVED); THE GUIDANCE DOCUMENT TITLED "NPDES STORM WATER SAMPLING GUIDANCE DOCUMENT, EPA 833-B-92-001" AND GUIDANCE DOCUMENTS THAT MAY BE PREPARED BY THE EPD.
1. SAMPLE CONTAINERS SHOULD BE LABELED PRIOR TO COLLECTING THE SAMPLES.
2. SAMPLES SHOULD BE WELL MIXED BEFORE TRANSFERRING TO A SECONDARY CONTAINER.
3. LARGE MOUTH, WELL CLEANED AND RINSED GLASS OR PLASTIC JARS SHOULD BE USED FOR COLLECTING SAMPLES. THE JARS SHOULD BE CLEANED THOROUGHLY TO AVOID CONTAMINATION.
4. MANUAL, AUTOMATIC OR RISING STAGE SAMPLING MAY BE UTILIZED. SAMPLES REQUIRED BY THE PERMIT SHOULD BE ANALYZED IMMEDIATELY, BUT IN NO CASE LATER THAN 48 HOURS AFTER COLLECTION. HOWEVER, SAMPLES FROM AUTOMATIC SAMPLERS MUST COLLECTED NO LATER THAN THE NEXT BUSINESS DAY AFTER THEIR ACCUMULATION. UNLESS FLOW THROUGH AUTOMATED ANALYSIS IS UTILIZED. IF AUTOMATIC SAMPLING IS UTILIZED AND THE AUTOMATIC SAMPLER IS NOT ACTIVATED DURING THE QUALIFYING EVENT, THE PERMITTEE MUST UTILIZE MANUAL SAMPLING OR RISING STAGE SAMPLING DURING THE NEXT QUALIFYING EVENT. DILUTION OF SAMPLES IS NOT REQUIRED. SAMPLES MAY BE ANALYZED DIRECTLY WITH A PROPERLY CALIBRATED TURBIDIMETER. SAMPLES ARE NOT REQUIRED TO BE COOLED.
5. SAMPLING ANALYSIS OF THE RECEIVING WATER(S) OR OUTFALLS BEYOND THE MINIMUM FREQUENCY STATED IN THIS PERMIT MUST BE REPORTED TO EPD AS SPECIFIED IN PART IV.E.

33. APPENDIX B RATIONALE FOR OUTFALL SAMPLING POINTS WHERE APPLICABLE.

WARM WATER (SUPPORTING WARM WATER FISHERIES)
SURFACE WATER DRAINAGE AREA, SQUARE MILES

	0-4.99	5-0.50+/-	10-24.99	25-40.50+/-	50-90.50+/-	100-240.50+/-	250-490.50+/-	500+
1.00-10	(75)	150	200	400	750	750	750	750
10.01-25	50	100	100	200	300	500	750	750
25.01-50	50	50	100	100	200	300	750	750
50.01-100	50	50	50	100	100	150	300	600
100.01+	50	50	50	50	50	100	200	100

TO USE THESE TABLES, SELECT THE SIZE (ACRES) OF THE FACILITY OR COMMON DEVELOPMENT.
THEN, SELECT THE SURFACE WATER DRAINAGE AREA (SQUARE MILES).

34. DELINEATE SAMPLING LOCATIONS, PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES INTO WHICH STORM WATER IS DISCHARGED: SAMPLING LOCATION SHOWN ON SHEETS C4.2-C.4.4.

35. A DESCRIPTION OF APPROPRIATE CONTROLS AND MEASURES THAT WILL BE IMPLEMENTED AT THE CONSTRUCTION SITE INCLUDING: (1) INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMP'S, (2) INTERMEDIATE GRADING AND DRAINAGE BMP'S, AND (3) FINAL BMP'S.

ALL INITIAL, INTERMEDIATE AND FINAL BMP'S ARE SHOWN ON THE ES&PC PHASED EROSION CONTROL PLANS:
PHASE I - PERIMETER CONTROL, CONSTRUCTION ENTRANCE AND SEDIMENT STORAGE
PHASE II - INTERMEDIATE GRADING, DRAINAGE BMP'S AND TEMP. GRASSING
PHASE III - FINAL GRADING, GRASSING AND FINAL BMP'S

SEDIMENT STORAGE: ATTAINED FROM INTIAL PHASE TO THE INTERMEDIATE PHASE OF PROJECT
THE INTIAL AND INTERMEDIATE EROSION & SEDIMENTATION CONTROL PLAN FOR THIS PROJECT INCLUDES THE INSTALLATION OF A PERMANENT DETENTION POND. THE PERMANENT DETENTION POND WILL PROVIDE THE REQUIRED SEDIMENT STORAGE. THERE IS NO STORMWATER RELEASE UNTIL ELEVATION 751.50 (3.5' FROM BOTTOM POND ELEVATION 748.00), WHICH IS THE OVERFLOW SPILLWAY FOR THE POND.

THE FINAL EROSION EROSION & SEDIMENTATION CONTROL PLAN WILL INCLUDE THE REMOVAL OF ALL TEMPORARY MEASURES AFTER DISTURBED AREAS HAVE BEEN FULLY STABILIZED WITH PERMANENT GRASSING. THE WATER QUALITY DEVICE WILL BE INSTALLED ON THE DETENTION POND OUTLET STRUCTURE AFTER THE SITE HAS BEEN FULLY STABILIZED.

36. GRAPHIC SCALE AND NORTH ARROW:
ALL SCALES AND NORTH ARROWS ARE PROVIDED ON PLAN SHEETS.

37. EXISTING AND PROPOSED CONTOUR LINES WITH CONTOUR LINES DRAWN AT AN INTERVAL IN ACCORDANCE WITH THE FOLLOWING:
PLANS INCLUDE AN EXISTING SITE PLAN SHEET WITH CONTOURS AT CORRECT INTERVALS. THE INITIAL, INTERMEDIATE AND FINAL PHASE SHEETS OF THE PLAN SHOW THE PROPOSED GRADES IN BOLD CONTOUR LINES WITH THE CORRECT INTERVALS OVERLAYING THE ORIGINAL CONTOUR LINES. ELEVATIONS OF BOTH THE EXISTING AND PROPOSED CONTOUR LINES ARE SHOWN. CONTOURS FOR INFRASTRUCTURE PROJECTS ARE SHOWN USING CRITERIA FROM INFRASTRUCTURE CHECKLIST.

38. USE OF ALTERNATIVE BMP'S WHOSE PERFORMANCE HAS BEEN DOCUMENTED TO BE EQUIVALENT TO OR SUPERIOR TO CONVENTIONAL BMP'S AS CERTIFIED BY A DESIGN PROFESSIONAL (UNLESS DISAPPROVED BY EPD OR THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION):

BMP'S FOR ALL PHASES OF THE PLAN ARE CONSISTENT WITH THE MANUAL AND SHOW UNIFORM CODING SYMBOLS FROM THE MANUAL. THE UNIFORM CODING SYMBOLS LEGEND FROM THE MANUAL IS INCLUDED. THE PLANS ARE SHOWN IN THREE PHASES WITH EACH PHASE SHOWN ON A SEPARATE SHEET.

39. USE OF ALTERNATIVE BMP FOR APPLICATION TO THE EQUIVALENT BMP LIST. PLEASE REFER TO APPENDIX A-2 OF THE MANUAL FOR EROSION & SEDIMENT CONTROL IN GEORGIA 2016 EDITION. N/A

40. DELINEATION OF 25-FOOT UNDISTURBED BUFFERS OF STATE WATERS AND 50-FOOT UNDISTURBED BUFFERS ALONG DESIGNATED TROUT STREAMS. CLEARLY NOTE AND DELINEATE ALL AREAS OF IMPACT:

*** GEORGIA WATERS NOTE ***
THERE ARE NOT STATE WATERS AND BUFFERS LOCATED WITHIN 200 FEET OF THIS SITE.

41. DELINEATION OF ON-SITE WETLANDS AND ALL STATE WATERS LOCATED ON AND WITHIN 200 FEET OF THE PROJECT SITE:
ALL STATE WATERS, IF ANY, LOCATED ON AND WITHIN 200 FEET OF THE PROJECT SITE HAVE BEEN DELINEATED ON ALL PHASES OF THE PLAN.

*** GEORGIA WATERS NOTE ***
THERE ARE NOT STATE WATERS AND BUFFERS LOCATED WITHIN 200 FEET OF THIS SITE.

42. DELINEATION AND ACREAGE OF CONTRIBUTING DRAINAGE BASINS ON THE PROJECT SITE:
THE DRAINAGE BASIN TO THE DETENTION POND IS SHOWN ON SHEET C7.

43. PROVIDE HYDROLOGY STUDY AND MAPS OF DRAINAGE BASINS FOR BOTH THE PRE- AND POST-DEVELOPED CONDITIONS:
SEPARATE HYDROLOGY STUDY ATTACHED. PRE DEVELOPED AND POST DEVELOPED DRAINAGE BASIN MAPS FOR THE SITE ARE SHOWN ON SHEETS C6 & C7.

44. AN ESTIMATE OF RUNOFF COEFFICIENT OR PEAK DISCHARGE FLOW OF THE SITE PRIOR TO AND AFTER CONSTRUCTION ACTIVITIES ARE COMPLETED.

***** ESTIMATED RUNOFF COEFFICIENT *****
EXISTING CN = 55
PROPOSED CN = 73

45. STORM-DRAIN PIPE AND WEIR VELOCITIES WITH APPROPRIATE OUTLET PROTECTION TO ACCOMMODATE DISCHARGES WITHOUT EROSION:

OUTLET PROTECTION (St) TABLE

ST	Length	WIDTH	Width	Downstream Width	Avg. Stone Dia.	Stone Depth	Q(2YR)	Velocity	Q(25YR)	Velocity
(STRUCTURE)	(La) (FT)	(FT)	(W1) (FT)	(W2) (FT)	(d50) (FT)	(D) (FT)	(cfs)	(fps)	(cfs)	(fps)
SPILLWAY	10	10.0	10.0	20.0	0.5	1.13	NONE	N/A	0.08	0.64
FLUME "A"	10	5.0	15.0	20.0	0.5	1.13	0.60	1.83	0.87	2.12

46. SOIL SERIES AND THEIR DELINEATION:
THE HIGHEST LEVEL OF SOIL SURVEY REQUIRED FOR THE PROJECT SITE, SUCH AS A LEVEL THREE OR LEVEL FOUR SURVEY FOR PROJECTS THAT WILL BE USING SEPTIC SYSTEMS, MUST BE DELINEATED ON THE PLAN. THE SOIL SERIES DELINEATION SHOULD IS SHOWN ON THE EXISTING SITE PLAN AND/OR THE INITIAL PHASE PLAN. A CHART LISTING THE SOILS LOCATED ON THE PROJECT SITE IS SHOWN ON THE SHEET WITH THEIR DELINEATION.

SOILS ON SITE ARE LISTED BELOW:

AsD - Aragon-Urban land complex, 0 to 15 percent slopes

47. LIMITS OF DISTURBANCE FOR EACH PHASE OF CONSTRUCTION:
THE LIMITS OF DISTURBANCE FOR THE INITIAL PHASE DELINEATES ONLY THE AREA REQUIRED TO BE DISTURBED FOR THE INSTALLATION OF PERIMETER CONTROL AND INITIAL SEDIMENT STORAGE. THE INTERMEDIATE PHASE DELINEATES THE ENTIRE AREA TO BE DISTURBED FOR THAT PHASE, SUCH AS GRADING, DRAINAGE, UTILITIES, ETC. THE FINAL PHASE DELINEATES ANY ADDITIONAL AREAS TO BE DISTURBED SUCH AS INDIVIDUAL LTS, ETC.

48. PROVIDE A MINIMUM OF 67 YARDS OF SEDIMENT STORAGE PER ACRE DRAINED USING A TEMPORARY SEDIMENT BASIN, RETROFITTED DETENTION POND, AND/OR EXCAVATED INLET SEDIMENT TRAPS FOR EACH COMMON DRAINAGE LOCATION. SEDIMENT STORAGE VOLUME MUST BE IN PLACE PRIOR TO AND DURING LAND DISTURBANCE ACTIVITIES UNTIL FINAL STABILIZATION OF THE SITE HAS BEEN ACHIEVED. A WRITTEN RATIONALE EXPLAINING THE DECISION NOT TO USE A SEDIMENT BASIN MUST BE INCLUDED IN THE PLAN FOR EACH COMMON DRAINAGE LOCATION IN WHICH A SEDIMENT BASIN IS NOT PROVIDED.

SEDIMENT STORAGE REQUIRED & PROVIDED

SEDIMENT STORAGE WILL BE PROVIDED WITHIN THE PERMANENT DETENTION POND:

SEDIMENT STORAGE DESIGN CALCULATIONS TABLE
AREA = 0.60 ACRES
VOLUME REQUIRED = 67 CY/ACRE X 0.40 ACRES = 27 CY = 729 CF
VOLUME REQ. = 958 CF
VOLUME PROVIDED = 100.7 CY = 2,719 CF

49. LOCATION OF BEST MANAGEMENT PRACTICES THAT ARE CONSISTENT WITH AND NO LESS STRINGENT THAN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.USE UNIFORM CODING AND SYMBOLS FROM THE MANUAL:
BMP'S FOR THE PLAN ARE CONSISTENT WITH THE MANUAL AND SHOW UNIFORM CODING SYMBOLS FROM THE MANUAL. THE UNIFORM CODING SYMBOLS LEGEND FROM THE MANUAL IS INCLUDED. A THREE PHASE EROSION CONTROL PLAN IS NOT REQUIRED FOR THIS LOT DUE TO THE MINIMUM AMOUNT OF DISTURBED AREA. EROSION CONTROL MEASURES FOR TEMPORARY GRASSING AND DUST CONTROL ARE SHOWN ON THIS PLAN, ALONG WITH SILT FENCE AND A CONSTRUCTION ENTRANCE WHICH WILL BE IMPLEMENTED AND MAINTAINED UNTIL PERMANENT GRASSING IS IMPLEMENTED.

50. PROVIDE DETAILED DRAWINGS FOR ALL STRUCTURAL PRACTICES. SPECIFICATIONS MUST, AT A MINIMUM, MEET THE GUIDELINES SET FORTH IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.
SEE DETAIL SHEETS FOR ALL EROSION & STRUCTURAL DETAILS.

51. PROVIDE VEGETATIVE PLAN, NOTING ALL TEMPORARY AND PERMANENT VEGETATIVE PRACTICES. INCLUDE SPECIES, PLANTING DATES AND SEEDING, FERTILIZER, LIME AND MULCHING RATES. VEGETATIVE PLAN SHALL BE SITE SPECIFIC AND APPROPRIATE OF YEAR OF THAT SEEDING WILL TAKE PLACE AND FOR THE APPROPRIATE GEOGRAPHIC REGION OF GEORGIA.
SEE DETAIL SHEETS.

*** TEMPORARY***
BMP'S NOTE
ALL TEMPORARY BMP'S ARE TO BE REMOVED PRIOR TO FILING A N.O.T.
(NOTICE OF TERMINATION)
ALSO, CERTAIN TEMPORARY BMP'S WILL REMAIN IN PLACE UNTIL ALL REQUIREMENTS HAVE BEEN MET TO FILE FOR THE NOTICE OF TERMINATION.

BEST MANAGEMENT PRACTICES TO MINIMIZE OFF-SITE TRACKING OF SEDIMENTS AND THE GENERATION OF DUST:

OFFSITE VEHICLE TRACKING
A STABILIZED CONSTRUCTION EXIT HAS BEEN PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENT. SEE INITIAL AND INTERMEDIATE EROSION CONTROL SHEETS FOR CONSTRUCTION EXIT LOCATION AND SEE DETAIL SHEET FOR SPECIFIC DETAILS. THE PAVED STREET ADJACENT TO THE SITE EXIT WILL BE INSPECTED DAILY FOR TRACKING OF MUD, DIRT OR ROCK. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A TARPOULIN.

Co

WATER TRUCKS TO BE USED WHEN NECESSARY FOR DUST CONTROL. Du

CERTIFICATION AND SIGNATURE IN ACCORDANCE WITH SECTION V.G.2.d. OF THE PERMIT:

"I CERTIFY UNDER THE PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONAL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED UPON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS."

OWNER/DEVELOPER

STEPHENSON ENGINEERING, INC.
CIVIL ENGINEERING, LAND PLANNING & DEVELOPMENT CONSULTING
P.O. BOX 201088
1130 N. TENNESSEE ST., SUITE D
CARTERSVILLE, GEORGIA 30120
EMAIL: STEPHENSONENG@YAHOO.COM
PHONE : (770)382-7877
FAX: (770)382-3742

REVISION

DATE

GEORGIA REGISTERED No. 27429 PROFESSIONAL ENGINEER KEVIN T. STEPHENSON

ENGINEER GSWCC# 0000020715

OWNER/DEVELOPER:
Freddy Teems
24 Hour Contact: Freddy Teems
30 Amberidge Drive
Cartersville, Ga 30121
Phone: (770) 382-8166

Freddy Teems - Office Warehouse

Located in Land Lot 339, 4thDistrict, 3rd Section
City of Cartersville,
Bartow County, Georgia

PROJECT# 15-004

DATE 8-21-18

SHEET TITLE
Procedures

SHEET NO.
C4.1

Utilities Protection Center, Inc.

IF YOU DIG GEORGIA
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*** STABILIZATION STATEMENT ***

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*** CLEARING STATEMENT ***

MINIMIZE CLEARING TO THAT AMOUNT OF LAND MINIMALLY NECESSARY FOR THE FOOTPRINT OF THE STRUCTURE, RIGHT-OF-WAY, REQUIRED DRAINAGE OR REQUIRED PARKING.

*** ESTIMATED RUNOFF COEFFICIENT ***

EXISTING C.N = 55
PROPOSED C.N = 73

*** BUFFER ACTIVITY STATEMENT ***

NO ACTIVITIES SHALL BE CONDUCTED WITHIN THE 25 FOOT STREAM BUFFER ALONG THE BANKS OF ALL STATE WATERS.

*** SEDIMENT STATEMENT ***

THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND-DISTURBING ACTIVITIES.

EROSION CONTROL NOTES

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*** EROSION AMENDMENT NOTE ***

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*** TYPICAL LOT PLAN ***

THERE IS NO TYPICAL LOT FOR THIS PROJECT. THE WHOLE SITE IS THE ONLY LOT LOCATED ON SITE.

ENGINEER GSWCC# 0000020715

CONSTRUCTION SCHEDULE

Note: Construction schedule is a general timeline from date the land disturbance permit is issued.

ACTIVITY	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
COMMENCEMENT OF CONSTRUCTION						
INITIAL EROSION CONTROL BMP INTSALLATION						
CLEARING GRUBBING & GRADING						
INTERMEDIATE EROSION CONTROL BMPS						
GRASSING						
MAINTAIN SEDIMENT CONTROL MEASURES						
INSTALL UNDERGROUND UTILITIES						
INSTALL PAVING						
BUILDING CONSTRUCTION						
FINAL LANDSCAPING						
FINAL PHASE OF ERO. AND SED. CONTROL PLAN						
COMPLETION OF CONSTRUCTION						

*** STATE WATERS NOTE ***

THERE ARE NO STATE WATERS AND/OR BUFFERS LOCATED WITHIN 200 FEET OF THIS SITE.

*** RECEIVING WATERS AND ADJACENT SENSITIVE AREAS NOTE ***

THE 0.60 ACRES+/- ACRE SITE IS CURRENTLY UNDEVELOPED PROPERTY. THE 0.48 ACRES OF DISTURBANCE IS PLANNED TO BE DEVELOPED FOR LIGHT INDUSTRIAL USE.

IMPACT ON DOWNSTREAM PROPERTIES SHOULD BE MINIMAL DUE TO B.M.P.'S SUCH AS SILT FENCE, PERMANENT DETENTION POND AND PERMANENT GRASSING. THE PERMANENT DETENTION POND WILL BE USED FOR THE 67 CU. YDS OF STORAGE NECESSARY FOR THIS SITE. SEE DETAIL WITH SEDIMENT STORAGE CALCULATIONS.

STORM WATER LEAVES THE SITE AT ONE LOCATION. SEDIMENTATION IN THIS AREA WILL BE CONTROLLED BY SILT FENCE, PERMANENT DETENTION POND & PERMANENT GRASSING.

THE RECEIVING WATER FOR THIS SITE IS SATTERFIELD BRANCH.

** SOIL TYPES ONSITE **

AsD - Aragon-Urban land complex, 0 to 15 percent slopes

FSA — FUEL STAGING AREA is used for remediation of all petroleum spills and leaks as appropriate.

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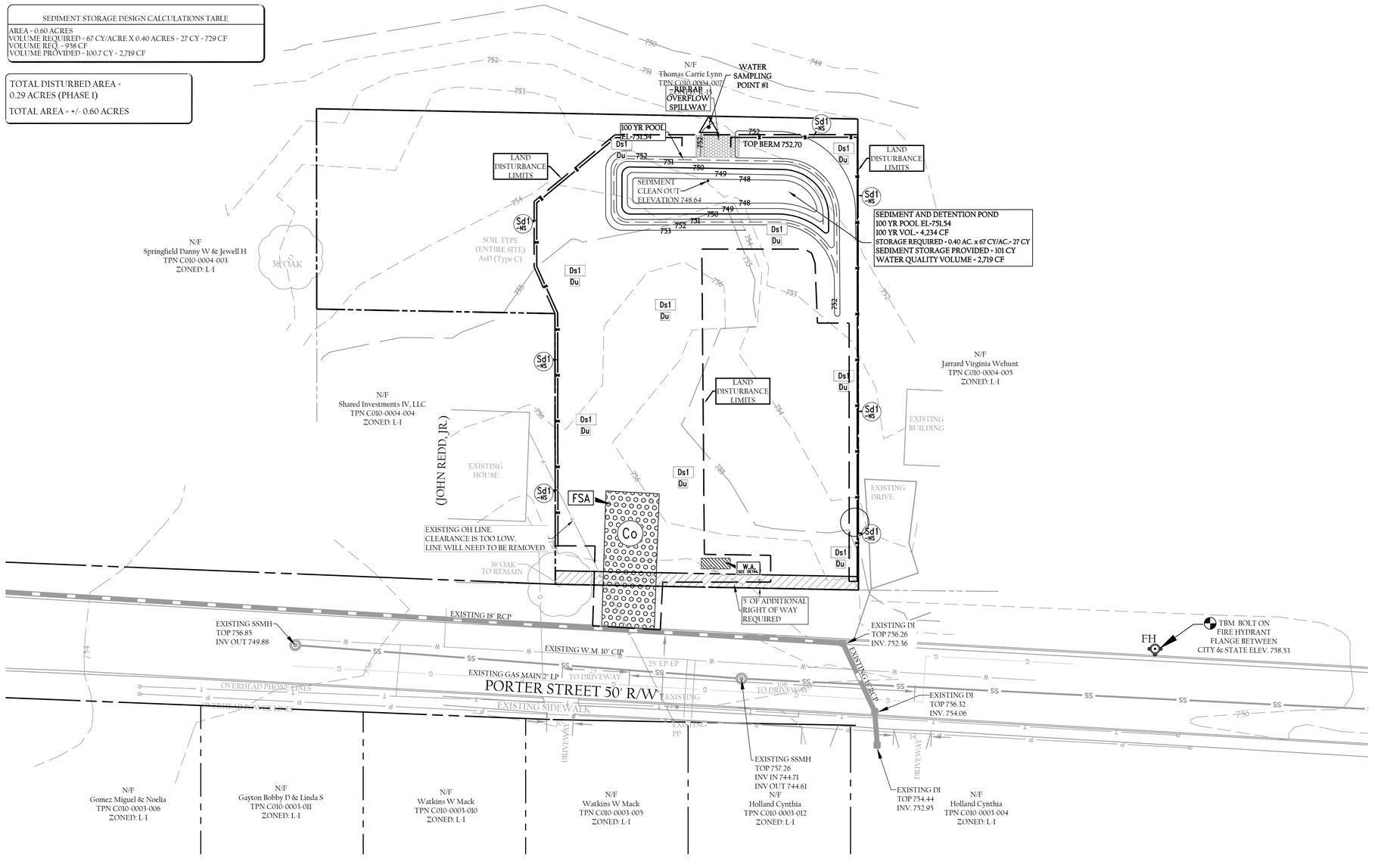
VOLUME REQUIRED = 67 CY/ACRE X 0.40 ACRES = 27 CY = 729 CF
VOLUME REQ. = 958 CF
VOLUME PROVIDED = 100.7 CY = 2,719 CF

TOTAL DISTURBED AREA = 0.29 ACRES (PHASE 1)

TOTAL AREA = +/- 0.60 ACRES



GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

GRID

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REVISION | DATE

GEORGIA REGISTERED PROFESSIONAL ENGINEER No. 27429 KEVIN T. STEPHENSON

ENGINEER GSWCC# 0000020715

OWNER/DEVELOPER:
Freddy Teems
24 Hour Contact: Freddy Teems
30 Ambenidge Drive
Cartersville, Ga 30121
Phone: (770) 382-8166

Freddy Teems - Office Warehouse

Located in Land Lot 339, 4th District, 3rd Section
City of Cartersville,
Bartow County Georgia

PROJECT# 15-004

DATE 8-21-18

SHEET TITLE
Initial Erosion Control

SHEET NO.
C4.2

Utilities Protection Center, Inc.

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*** ESTIMATED RUNOFF COEFFICIENT ***

EXISTING CN - 55
PROPOSED CN - 73

*** BUFFER ACTIVITY STATEMENT ***

NO ACTIVITIES SHALL BE CONDUCTED WITHIN THE 25 FOOT STREAM BUFFER ALONG THE BANKS OF ALL STATE WATERS.

*** SEDIMENT STATEMENT ***

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*** TYPICAL LOT PLAN ***

THERE IS NO TYPICAL LOT FOR THIS PROJECT. THE WHOLE SITE IS THE ONLY LOT LOCATED ON SITE.

ENGINEER GSWCC# 0000020715

CONSTRUCTION SCHEDULE

Note: Construction schedule is a general timeline from date the land disturbance permit is issued.

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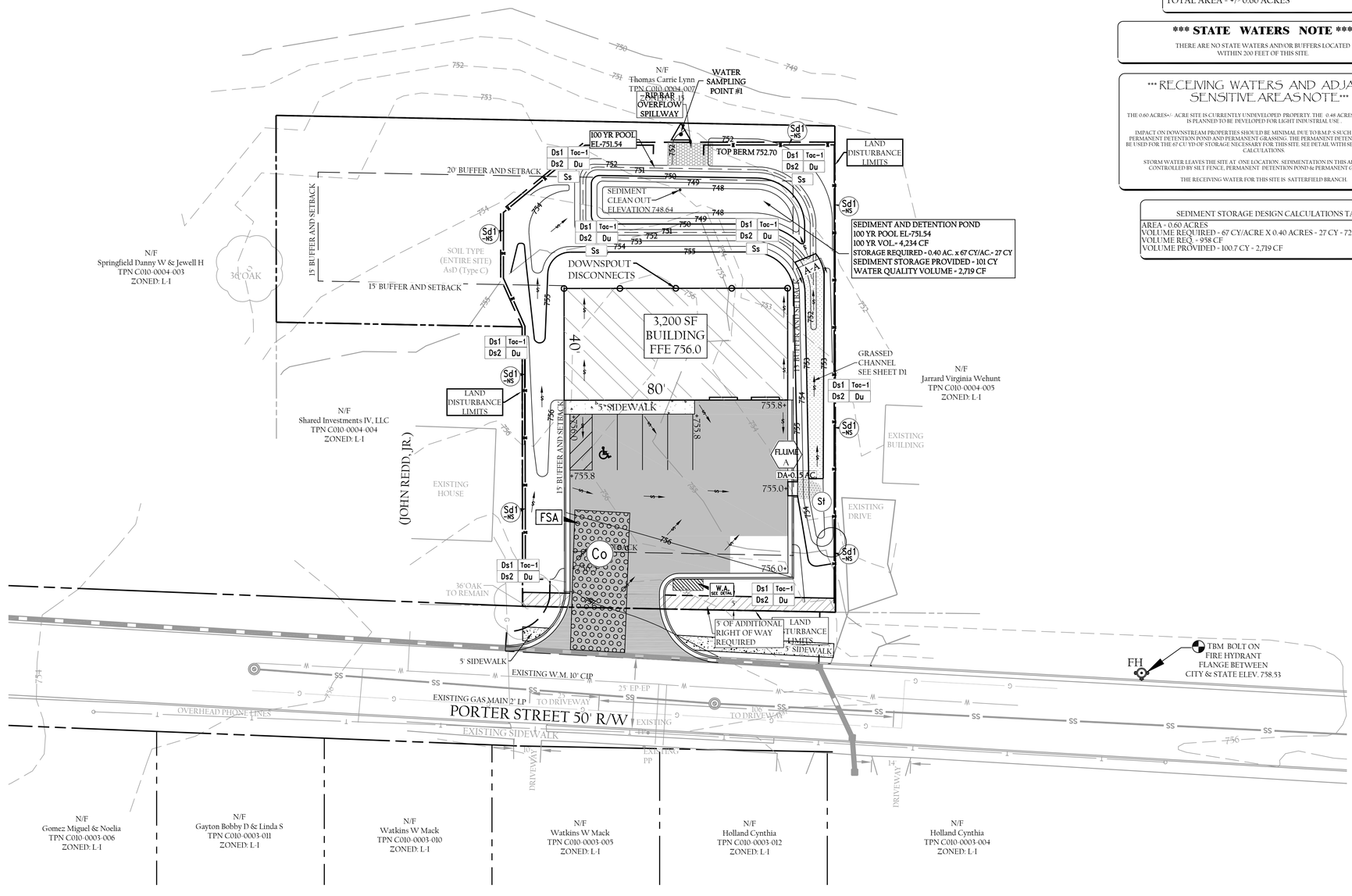
COMMENCEMENT OF CONSTRUCTION						
INITIAL EROSION CONTROL BMP INTSALLATION						
CLEARING GRUBBING & GRADING						
INTERMEDIATE EROSION CONTROL BMP'S						
GRASSING						
MAINTAIN SEDIMENT CONTROL MEASURES						
INSTALL UNDERGROUND UTILITIES						
INSTALL PAVING						
BUILDING CONSTRUCTION						
FINAL LANDSCAPING						
FINAL PHASE OF ERO. AND SED. CONTROL PLAN						
COMPLETION OF CONSTRUCTION						



GRID

TOTAL DISTURBED AREA =
0.48 ACRES (PHASE 2)

TOTAL AREA = +/- 0.60 ACRES

*** STATE WATERS NOTE ***

THERE ARE NO STATE WATERS AND/OR BUFFERS LOCATED WITHIN 200 FEET OF THIS SITE.

*** RECEIVING WATERS AND ADJACENT SENSITIVE AREAS NOTE.***

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20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

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REVISION

DATE

GEORGIA REGISTERED PROFESSIONAL No. 27423 ENGINEER KEVIN T. STEPHENSON

ENGINEER GSWCC# 0000020715

OWNER/DEVELOPER:
Freddy Teems
24 Hour Contact: Freddy Teems
30 Amberidge Drive
Cartersville, Ga 30121
Phone: (770) 382-8166

Freddy Teems - Office Warehouse

Located in Land Lot 359, 4th District, 3rd Section
City of Cartersville,
Bartow County, Georgia

PROJECT# 15-004

DATE 8-21-18

SHEET TITLE
Intermediate Erosion Control

SHEET NO.
C4.3

Utilities Protection Center, Inc.

IF YOU DIG GEORGIA
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ENGINEER GSWCC# 0000020715

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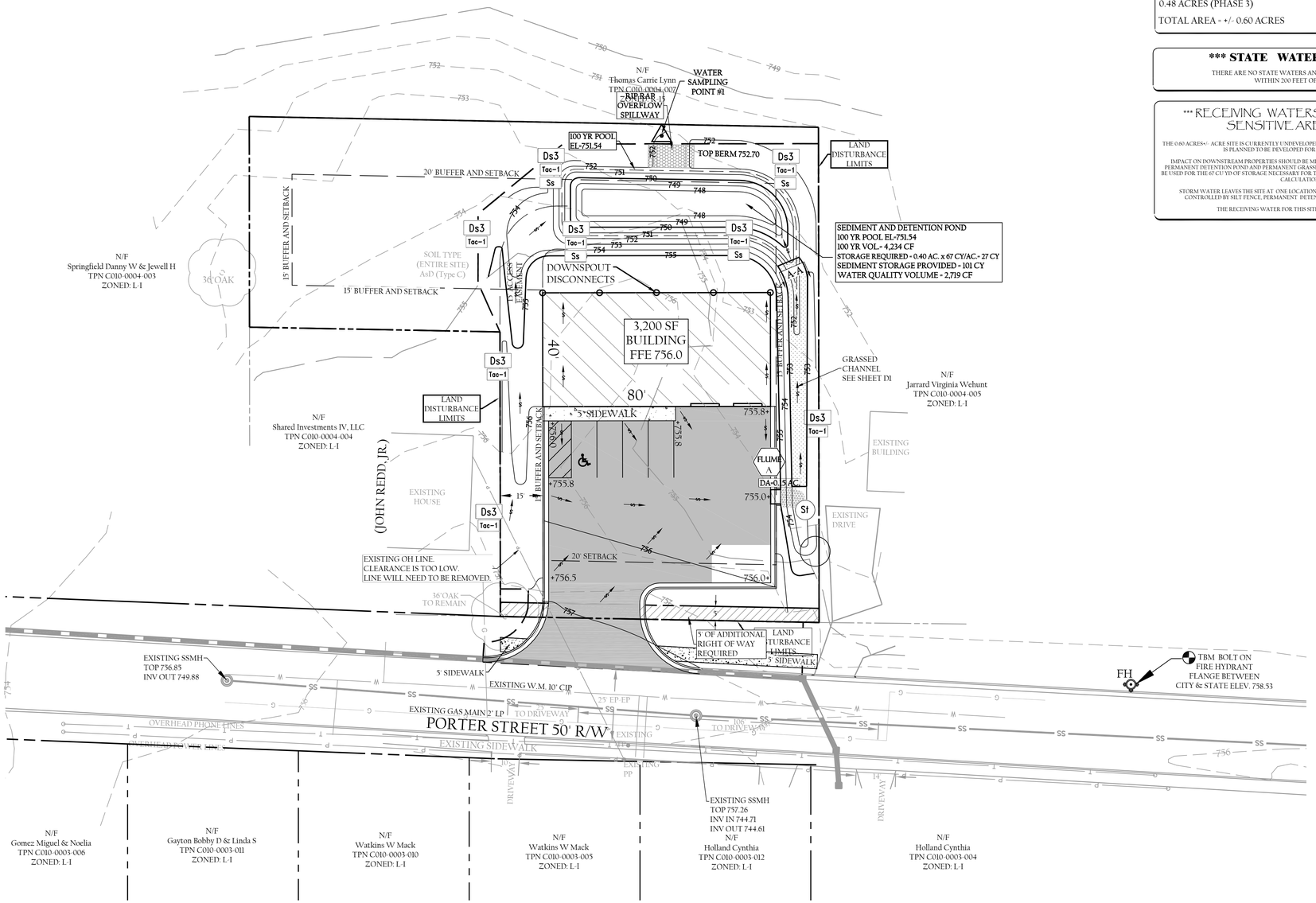
INSTALL UNDERGROUND UTILITIES						
INSTALL PAVING						
BUILDING CONSTRUCTION						
FINAL LANDSCAPING						
FINAL PHASE OF ERO. AND SED. CONTROL PLAN						
COMPLETION OF CONSTRUCTION						



GRID

TOTAL DISTURBED AREA =
0.48 ACRES (PHASE 3)

TOTAL AREA = +/- 0.60 ACRES

*** STATE WATERS NOTE ***

THERE ARE NO STATE WATERS AND/OR BUFFERS LOCATED WITHIN 200 FEET OF THIS SITE.

*** RECEIVING WATERS AND ADJACENT SENSITIVE AREAS NOTE ***

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GRAPHIC SCALE

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(IN FEET)
1 inch = 20 ft.

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REVISION

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Bartow County, Georgia

PROJECT# 15-004

DATE 8-21-18

SHEET TITLE
Final Erosion Control

SHEET NO.
C4.4

Utilities Protection Center, Inc.

IF YOU DIG GEORGIA
CALL US FIRST !
1-800-282-7411
It's The Law !

24 Hr Emergency Contact:

Freddy Teems
770-382-8166

*** CAUTION ***

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***** LANDSCAPE NOTES *****

* BUILDING PERIMETER 5' LANDSCAPE STRIP OR SIDEWALK REQUIRED. SOD OR MULCH LANDSCAPE STRIP.

* BORDER LANDSCAPING 10' WIDE LANDSCAPE STRIP @ ROW & 5' WIDE ALONG ANY VEHICULAR USAGE AREA THAT ABUTS ASJOINING PROPERTY.

***** PARKING LANDSCAPE NOTE *****

PARKING LANDSCAPE ISLANDS IN PARKING LOT REQUIRED EVERY 12 SPACES AND AT THE END OF EACH SINGLE & DOUBLE ROW. 320 SQFT FOR DOUBLE ROWS & 2 TREES MINIMUM. SOD OR MULCH TO BE USED IN ISLANDS. SINGLE ROWS 160 SQFT & 1 TREE MINIMUM.

COORDINATE ANY TREE PLANTINGS WITH ALL UTILITY COMPANIES PRIOR TO INSTALLATION.

***** TREE STATEMENT *****

A MINIMUM OF 1 TREE FOR EACH 30 LINEAL FEET OF R.O.W. FRONTAGE. ALL TREES SHALL HAVE A MINIMUM HEIGHT WHEN PLANTED OF EIGHT (8) FEET AND A MATURATION HEIGHT OF AT LEAST 15'.

A MINIMUM OF 1 TREE FOR EACH 75 LINEAL FEET OF BORDER AREA IN SIDES AND REAR. ALL TREES SHALL HAVE A MINIMUM HEIGHT WHEN PLANTED OF EIGHT (8) FEET AND A MATURATION HEIGHT OF AT LEAST 15'.

TREES MUST HAVE A MATURATION HEIGHT OF AT LEAST 15'

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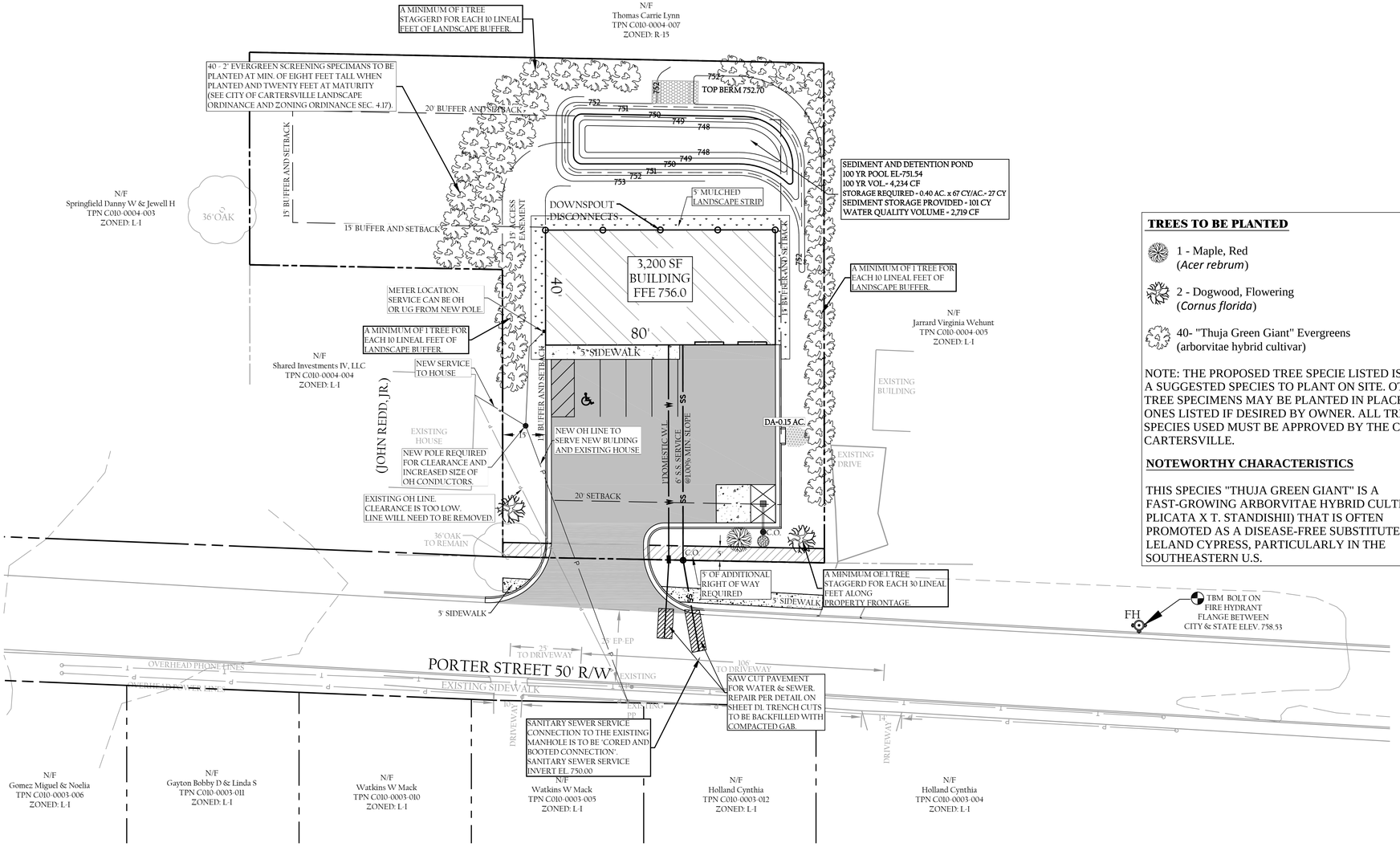
***** MAINTENANCE STATEMENT *****

EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED ACCORING TO THE 'MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEROGIA'.

***** TREE SPECIES NOTE *****

ONWER/DEVELOPER IS TO PLANT A MINIMUM OF THREE (3) TREE SPECIES ON SITE FROM THE APPROVED CITY OF CARTERSVILLE TREE LIST. NO MORE THAN THIRTY-FIVE (35) PERCENT OF ONE (1) SPECIES OF TREE SHALL BE USED FOR A NEW DEVELOPMENT. FOR ANY QUESTIONS CALL THE CITY OF CARTERSVILLE PLANNING AND DEVELOPMENT DEPARTMENT AT 770-387-5600.



TREES TO BE PLANTED

1 - Maple, Red
(*Acer rebrum*)

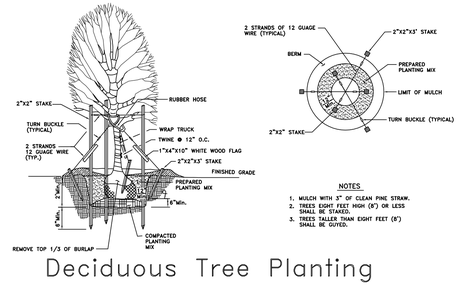
2 - Dogwood, Flowering
(*Cornus florida*)

40- "Thuja Green Giant" Evergreens
(arborvitae hybrid cultivar)

NOTE: THE PROPOSED TREE SPECIE LISTED IS ONLY A SUGGESTED SPECIES TO PLANT ON SITE. OTHER TREE SPECIMENS MAY BE PLANTED IN PLACE OF ONES LISTED IF DESIRED BY OWNER. ALL TREES SPECIES USED MUST BE APPROVED BY THE CITY OF CARTERSVILLE.

NOTEWORTHY CHARACTERISTICS

THIS SPECIES "THUJA GREEN GIANT" IS A FAST-GROWING ARBORVITAE HYBRID CULTIVAR (T. PLICATA X T. STANDISHII) THAT IS OFTEN PROMOTED AS A DISEASE-FREE SUBSTITUTE FOR LELAND CYPRESS, PARTICULARLY IN THE SOUTHEASTERN U.S.



NOTES

1. MULCH WITH 3" OF CLEAN PINE STRAW.
2. TREES EIGHT FEET HIGH (8') OR LESS SHALL BE STAKED.
3. TREES TALLER THAN EIGHT FEET (8') SHALL BE GUYED.

Deciduous Tree Planting

Sec. 17-73 Small trees.

Common name (Botanical name)	Texture	Form	Height/ Spread	Growth rate	Group	Remarks
Crabapple, southern (malus angustifolia)	Medium	Horizontal branching	15–25'/ 15–15'	Medium	Deciduous	Flowers fragrant, pink/ish-white
Dogwood, flowering (cornus florida)	Medium	Horizontal branching	15–25'/ 15–20'	Slow	Deciduous	Specimen or masses
Fringe tree or Graybeard, fancy (chionanthus virginicus)	Coarse	Irregular	10–20'/ 10–15'	Slow to Medium	Deciduous	White flowers
Holly, american (Ilex opaca)	Coarse	Pyramidal	20–50'/ 15–30'	Medium	Broadleaved evergreen	Dark green foliage; specimen; screening
Holly, yaupon (Ilex vomitoria)	Fine	Pyramidal	10–20'/ 8–10'	Fast	Broadleaved evergreen	Screening, hedge
Magnolia, sweetbay (magnolia virginiana)	Coarse	Upright	15–20'/ 10–20'	Slow	Semi-evergreen	White flowers
Myrtle, crape (lagerstroemia indica)	Fine	Upright	20–30'/ 10–15'	Fast	Deciduous	White, pink, or red flowers
Redbud or Judas tree (cercis canadensis)	Medium	Oval	25–30'/ 18–20'	Medium	Deciduous	Spring flowering
Silverbell (halesia carolina)	Medium	Spreading	20–30'/ 15–20'	Medium	Deciduous	White flowers
Sourwood (oxydendrum arboretum)	Medium to coarse	Upright	10–41'/ 15–20'	Medium	Deciduous	Red fall color

11

Sec. 17-74 Large trees.

Common name (Botanical name)	Texture	Form	Height/ Spread	Growth rate	Group	Remarks
Ash, white (fraxinus americana)	Fine to medium	Spreading	60–70'/ 50–60'	Fast	Deciduous	Shade
Beech, american (fagus grandifolia)	Coarse	Rounded	60–80'/ 35–45'	Medium to fast	Deciduous	Shade
Birch, river (betula nigra)	Medium	Oval	50–60'/ 40–50'	Fast	Deciduous	Specimen
Cypress, leyland (cupressocyparis leylandii)	Fine	Pyramidal	50–60'/ 20–30'	Fast	Conifer	Specimen; screening
Hackberry, sugar (celtis laevigata)	Medium	Upright to rounded	60–80'/ 25–35'	Medium	Deciduous	Streets; shade
Magnolia, southern (magnolia grandiflora)	Coarse	Horizontal branching, pyramidal	60–80'/ 40–50'	Slow to medium	Broadleaf evergreen	Specimen; large white flowers
Maple, florida or southern sugar (acer floridanum)	Medium	Oval	40–50'/ 25–35'	Medium to fast	Deciduous	Shade; orange to red fall color
Maple, red (acer rubrum)	Medium	Rounded	40–50'/ 25–35'	Medium	Deciduous	Shade; red fall color
Maple, sugar (acer saccharum)	Medium	Oval	60–80'/ 25–40'	Medium to fast	Deciduous	Yellow to reddish fall color; shade
Oak, laurel or darlington (quercus hemisphaerica)	Medium	Rounded	60–80'/ 40–60'	Medium	Semi-evergreen	Drought-tolerant; street tree
Oak, pin (quercus palustris)	Medium	Pyramidal	50–60'/ 25–40'	Medium	Deciduous	Shade; specimen
Oak, sawtooth (quercus acutissima)	Medium	Pyramidal	50–60'/ 30–60'	Fast	Deciduous	Shade; specimen
Oak, scarlet (quercus coccinea)	Medium	Rounded	60–80'/ 50–60'	Medium	Deciduous	Scarlet fall color; shade
Oak, shumard (quercus shumardii)	Medium	Rounded to oval	60–80'/ 50–60'	Medium	Deciduous	Scarlet fall color; good street tree

12

Sec. 17-74 Large trees.

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12

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

STEPHENSON ENGINEERING, INC.
CIVIL ENGINEERING, LAND PLANNING & DEVELOPMENT CONSULTING
P.O. BOX 201088
1130 N. TENNESSEE ST., SUITE D
CARTERSVILLE, GEORGIA 30120
EMAIL: STEPHENSONENG@YAHOO.COM
PHONE: (770)382-7877
FAX: (770)382-3742

DATE	REVISION
9-20-18	REVISED PER CITY OF CARTERSVILLE COMMENTS

GEORGIA REGISTERED No. 27429 PROFESSIONAL ENGINEER KEVIN T. STEPHENSON

ENGINEER GSWCC# 0000020715

OWNER/DEVELOPER:
Freddy Teems
24 Hour Contact: Freddy Teems
30 Amberidge Drive
Cartersville, Ga 30121
Phone: (770) 382-8166

Freddy Teems - Office Warehouse

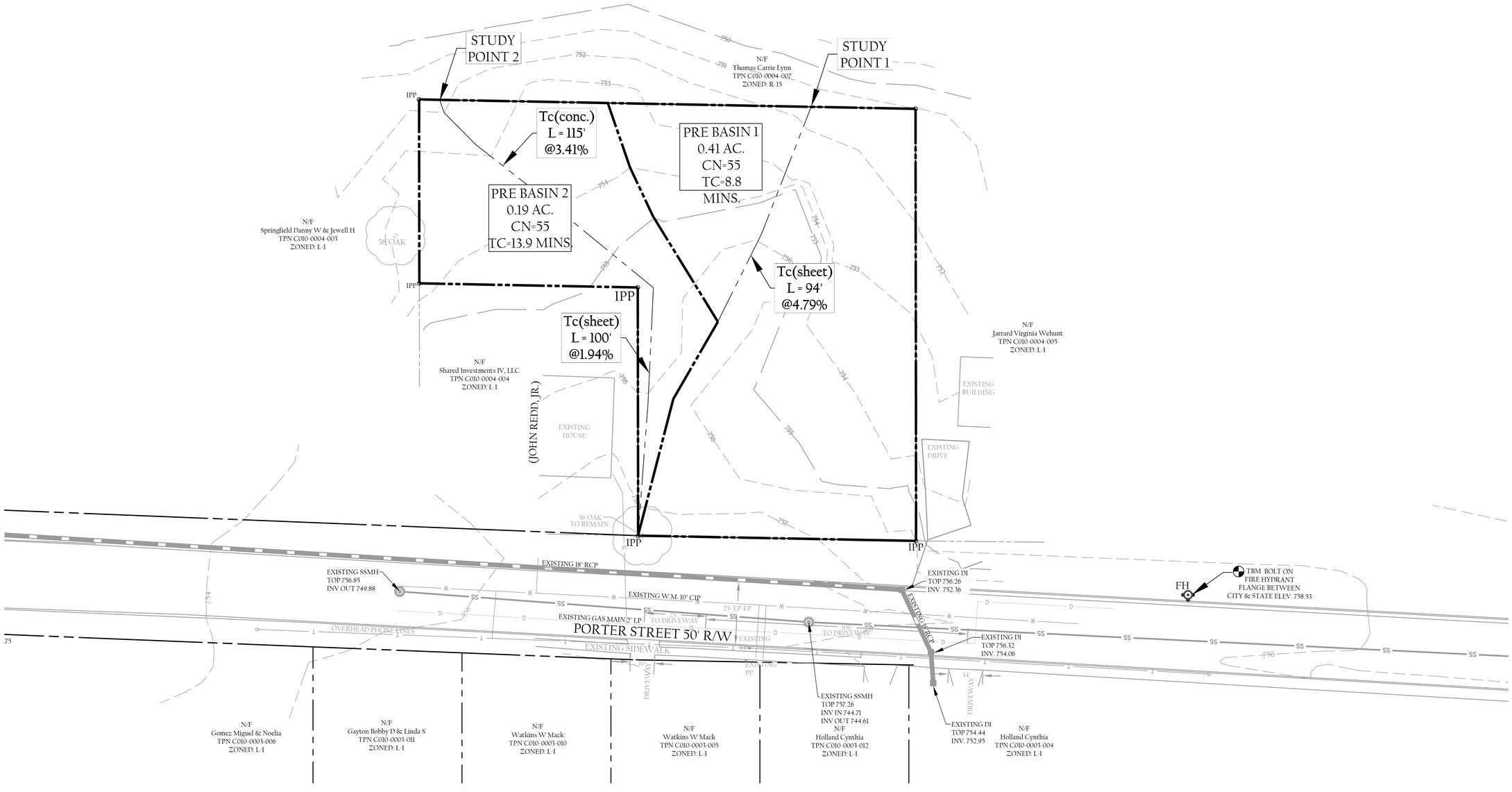
Located in Land Lot 559, 4th District, 3rd Section
City of Cartersville,
Bartow County, Georgia

PROJECT# 15-004

DATE 8-21-18

SHEET TITLE
Landscape Plan

SHEET NO.
C5



GRID

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

1 inch = 20 ft.

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PHONE : (770)382-7877
FAX: (770)382-3742

REVISION

DATE

GEORGIA REGISTERED No. 27429 PROFESSIONAL ENGINEER KEVIN T. STEPHENSON

ENGINEER GSWCC# 0000020715

OWNER/DEVELOPER:

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24 Hour Contact: Freddy Teems
30 Ambridge Drive
Cartersville, Ga 30121
Phone: (770) 382-8166

Freddy Teems - Office Warehouse

Located in Land Lot 359, 4th District, 3rd Section
City of Cartersville,
Bartow County, Georgia

PROJECT# 15-004

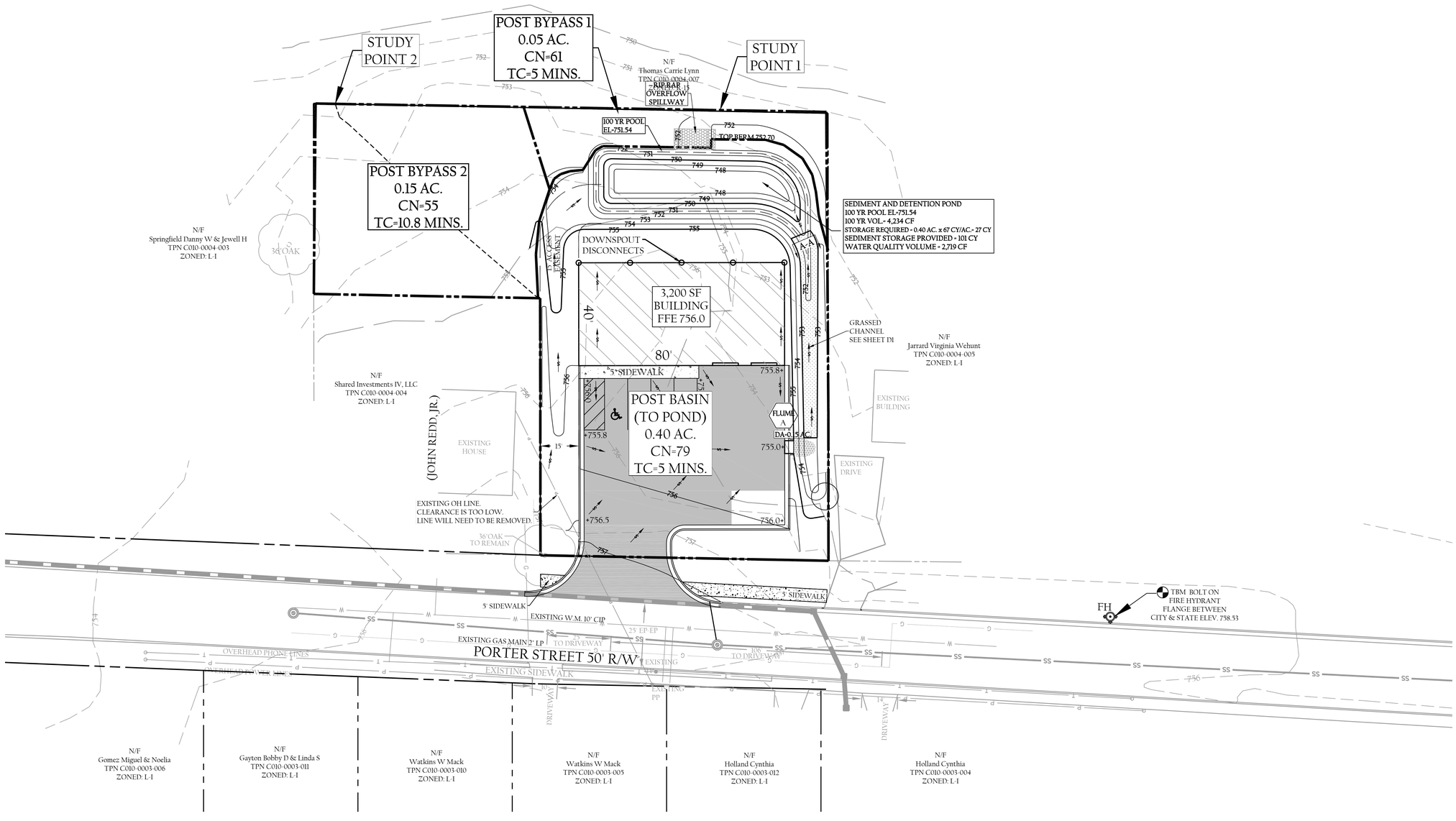
DATE 8-21-18

SHEET TITLE

Predevloped Site

SHEET NO.

C6



GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

GRID

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REVISION

DATE

GEORGIA REGISTERED No. 27423 PROFESSIONAL ENGINEER KEVIN T. STEPHENSON

ENGINEER GSWCC# 0000020715

OWNER/DEVELOPER:
Freddy Teems
24 Hour Contact: Freddy Teems
50 Ambridge Drive
Cartersville, Ga 30121
Phone: (770) 382-8166

Freddy Teems - Office Warehouse

Located in Land Lot 359, 4th District, 3rd Section
City of Cartersville,
Bartow County, Georgia

PROJECT# 15-004

DATE 8-21-18

SHEET TITLE
Post Developed Site

SHEET NO.
C7

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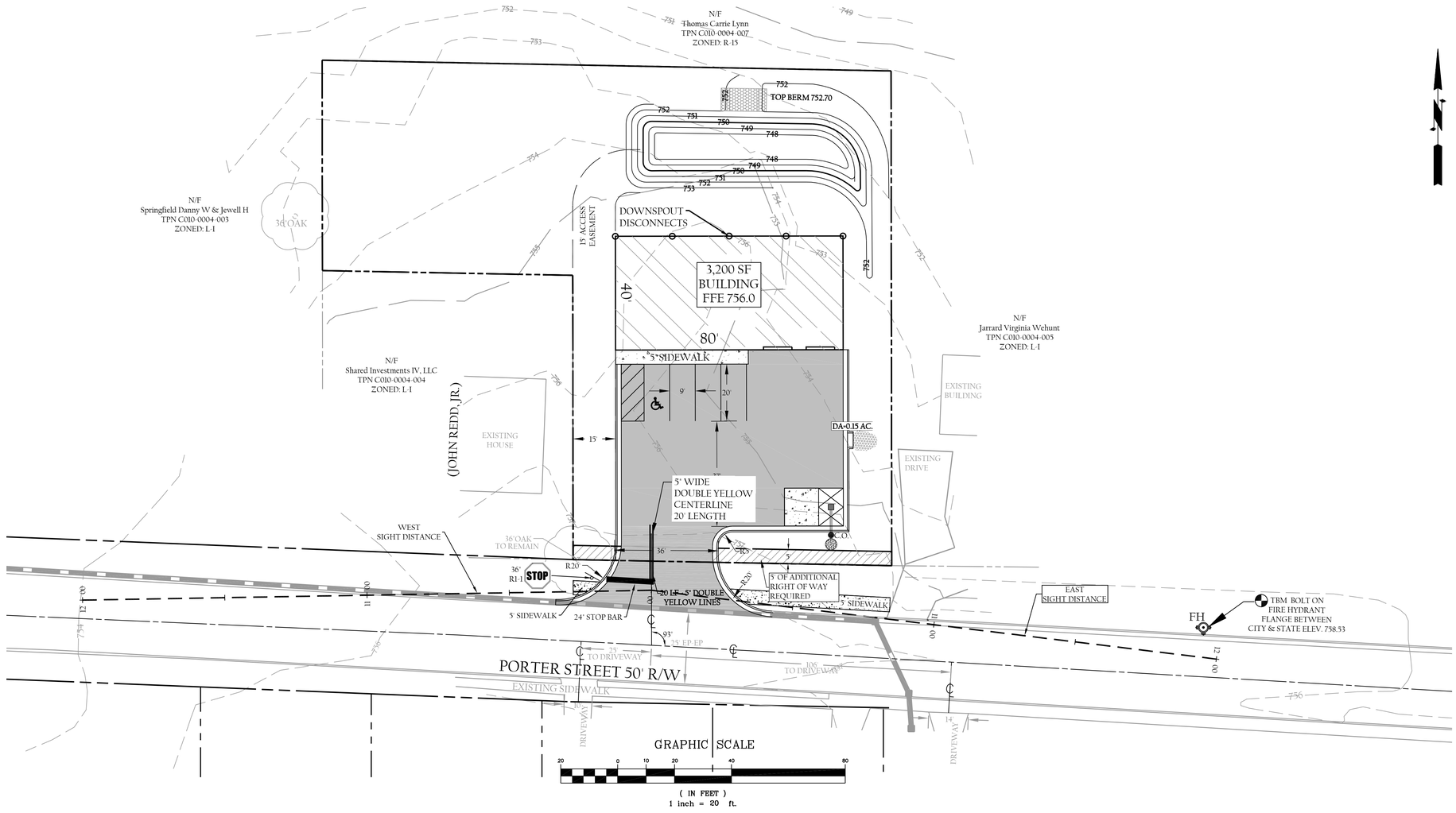
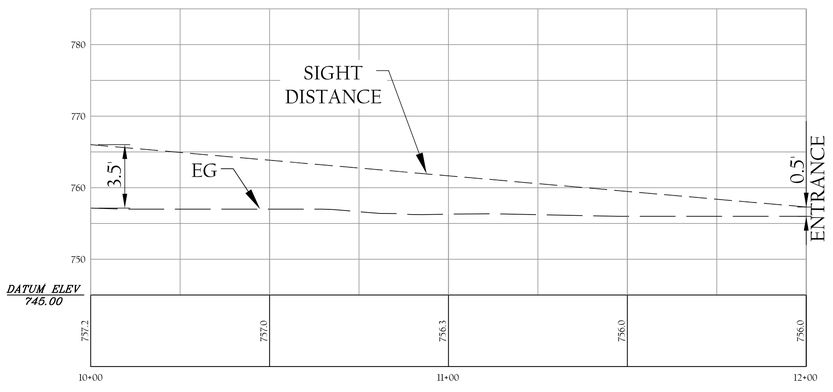
SIGHT DISTANCE REQUIRED

200 FEET OF SIGHT DISTANCE IS REQUIRED FOR THE SPEED LIMIT OF 30 M.P.H.

SPEED LIMIT 30

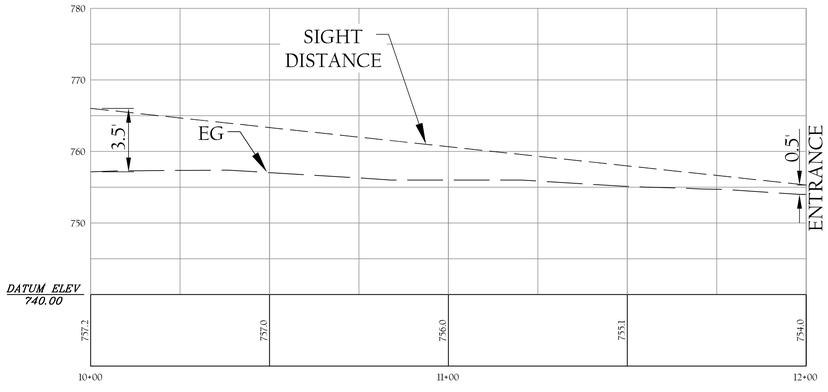
PORTER STREET





SIGHT DISTANCE - EAST

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=10'



SIGHT DISTANCE - WEST

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=10'

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REVISION

DATE

GEORGIA REGISTERED No. 29405 PROFESSIONAL ENGINEER KEVIN T. STEPHENSON

ENGINEER GSWCC# 0000020715

OWNER/DEVELOPER:

Freddy Teems
24 Hour Contact: Freddy Teems
30 Amberidge Drive
Cartersville, Ga 30121
Phone: (770) 382-8166

Freddy Teems - Office Warehouse

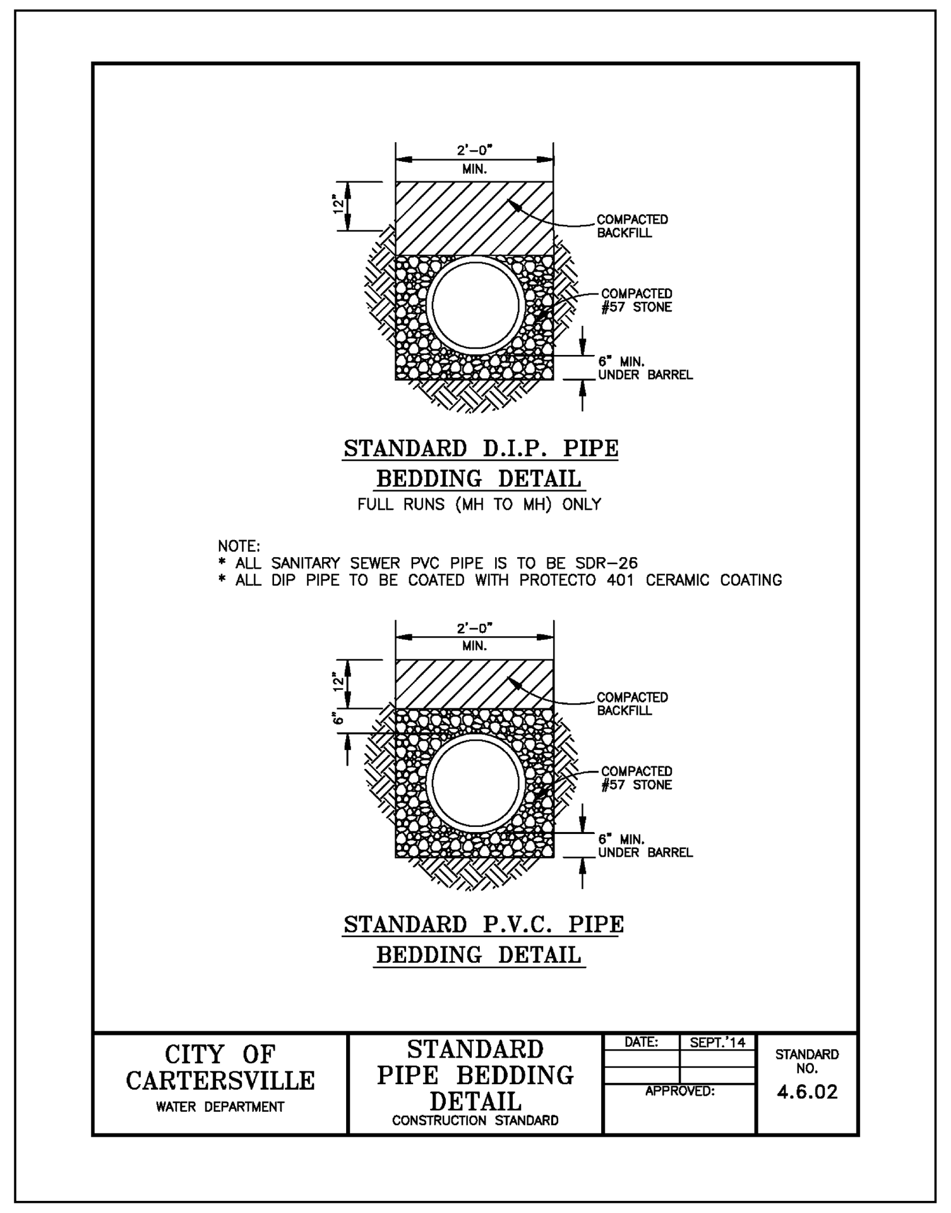
Located in Land Lot 359, 4th District, 3rd Section
City of Cartersville,
Bartow County, Georgia

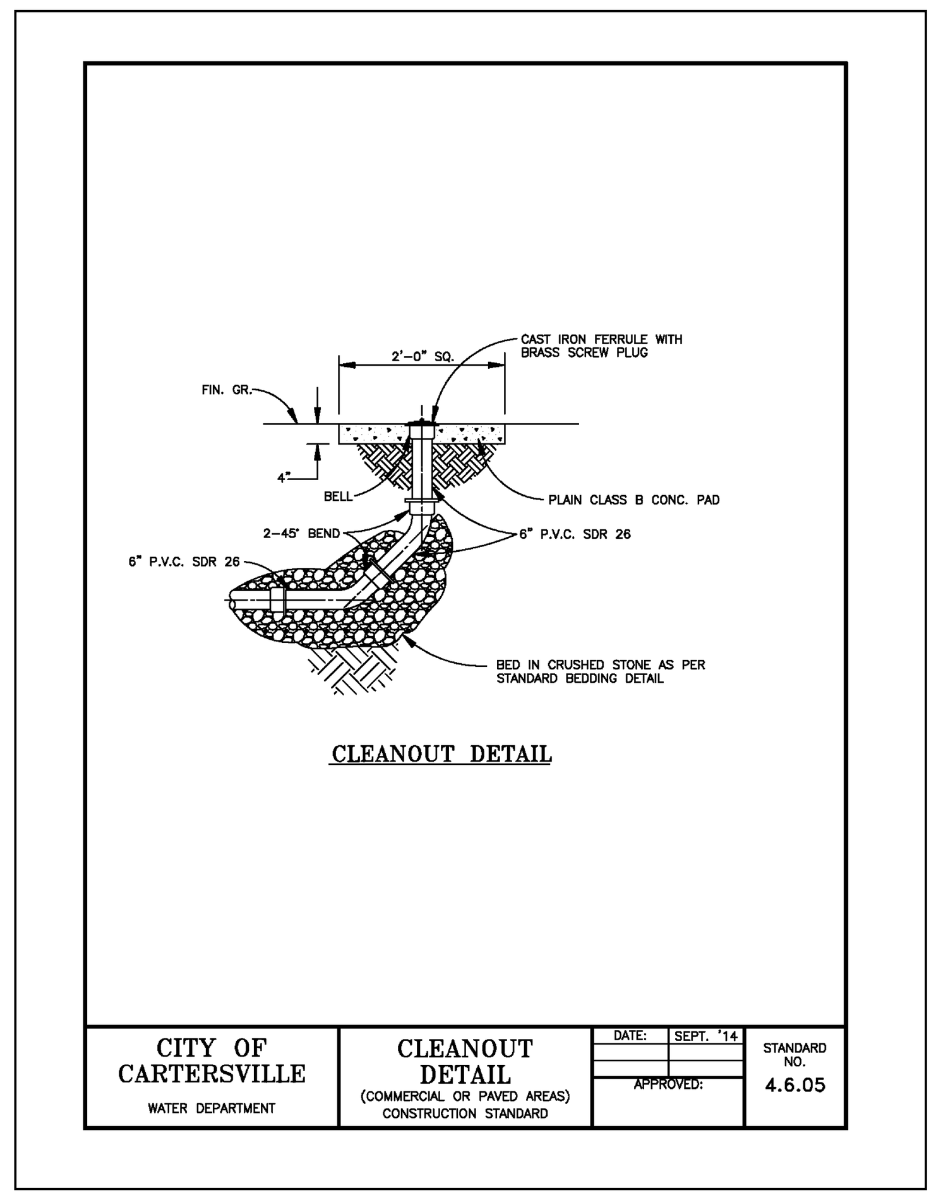
PROJECT# 15-004

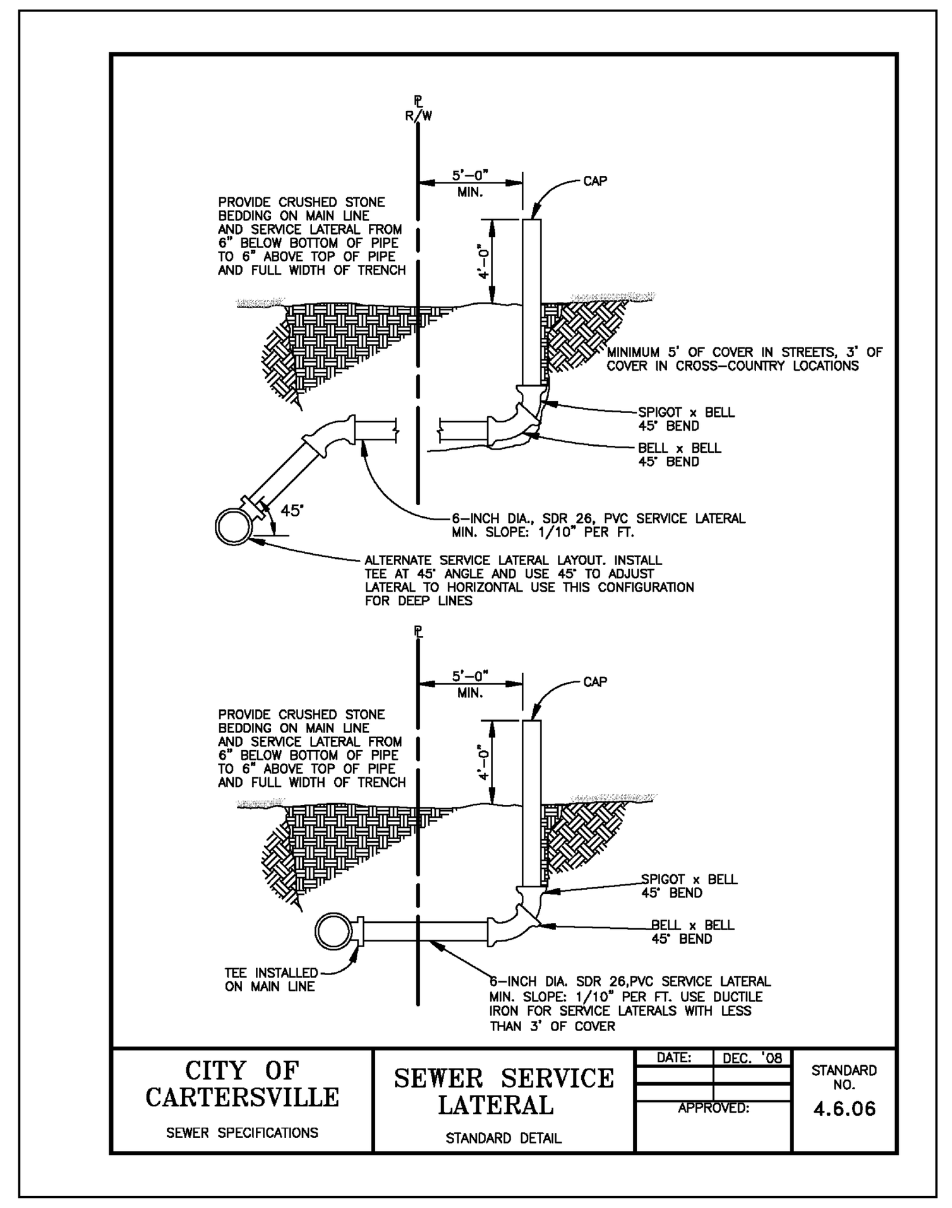
DATE 8-21-18

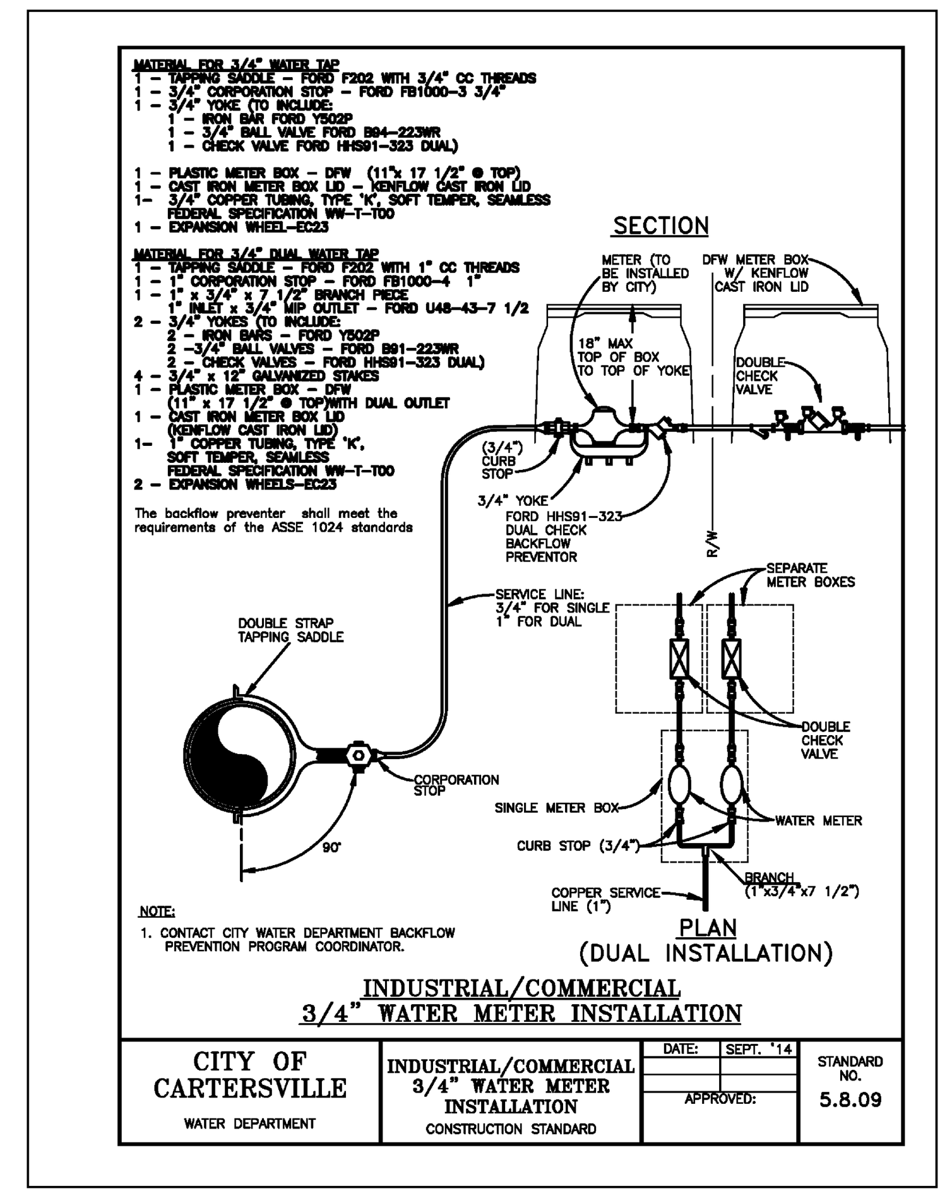
SHEET TITLE
Site Distance Plan & Profile

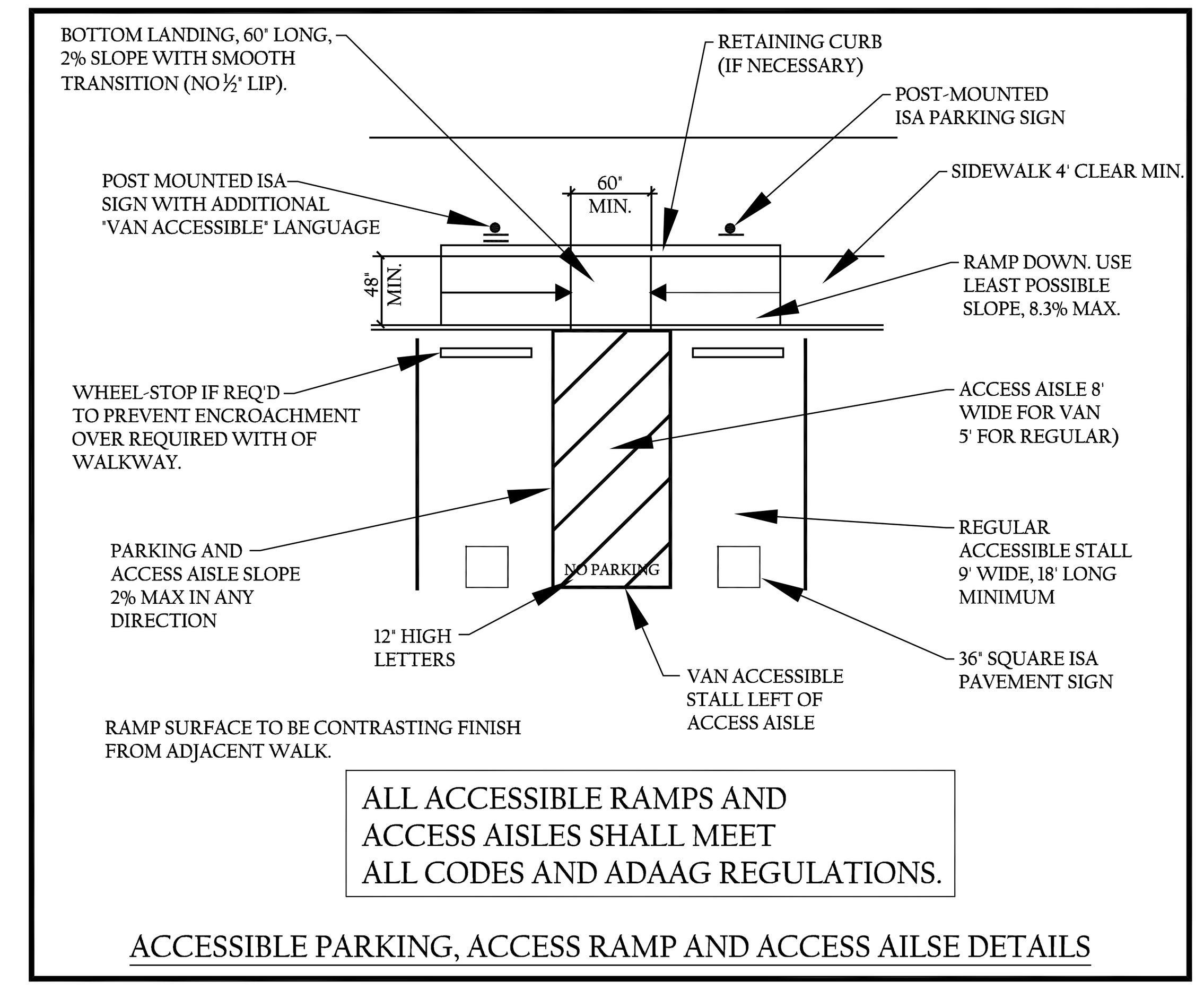
SHEET NO.
C8



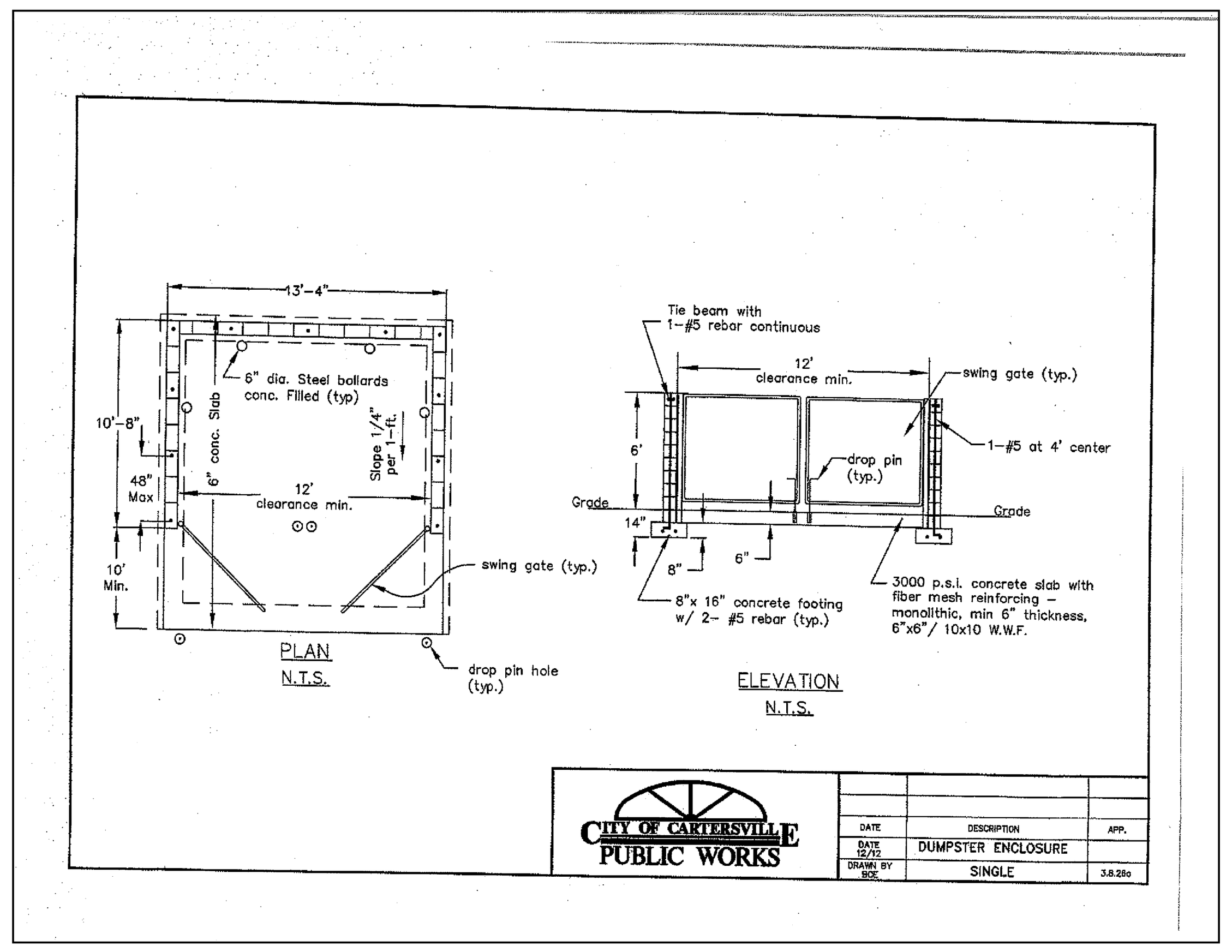


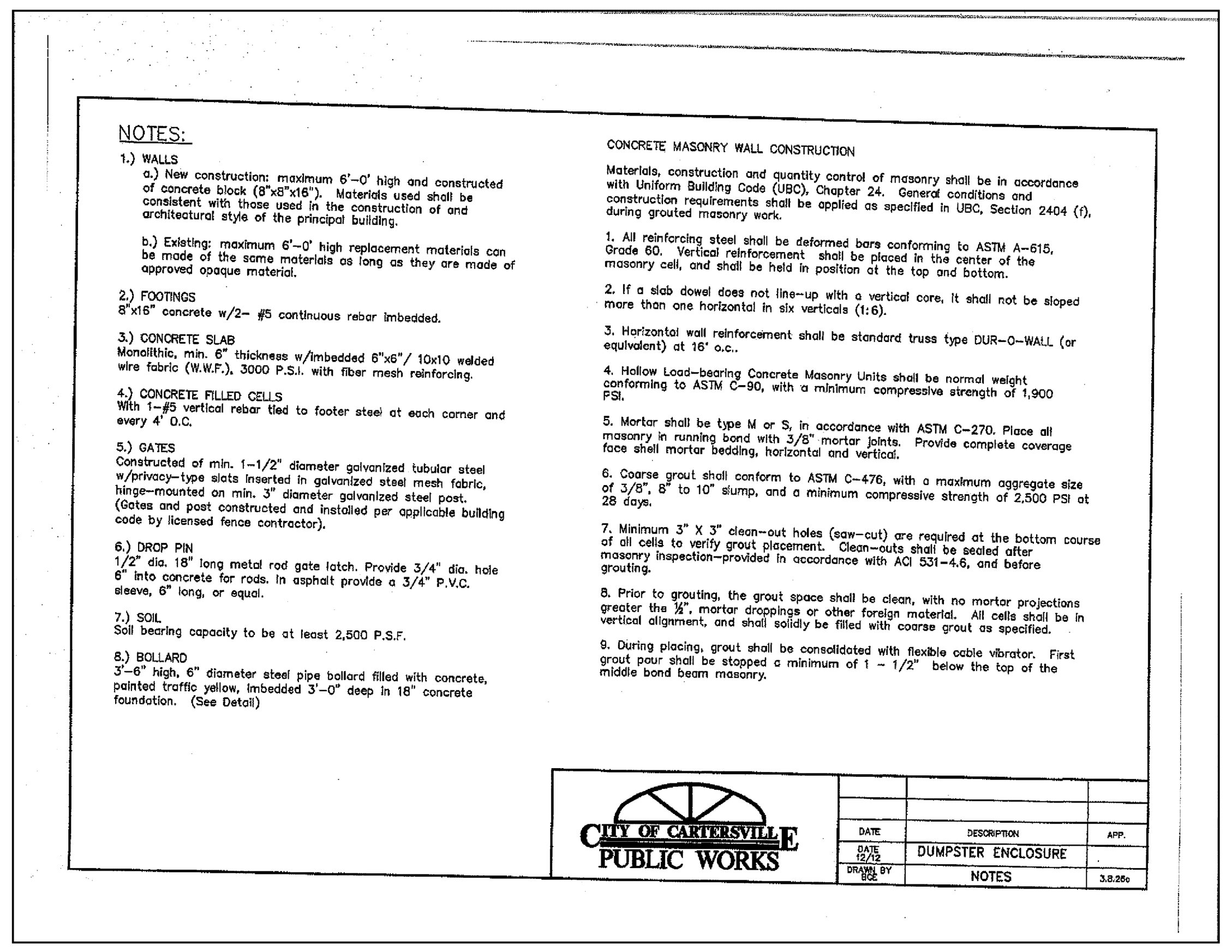


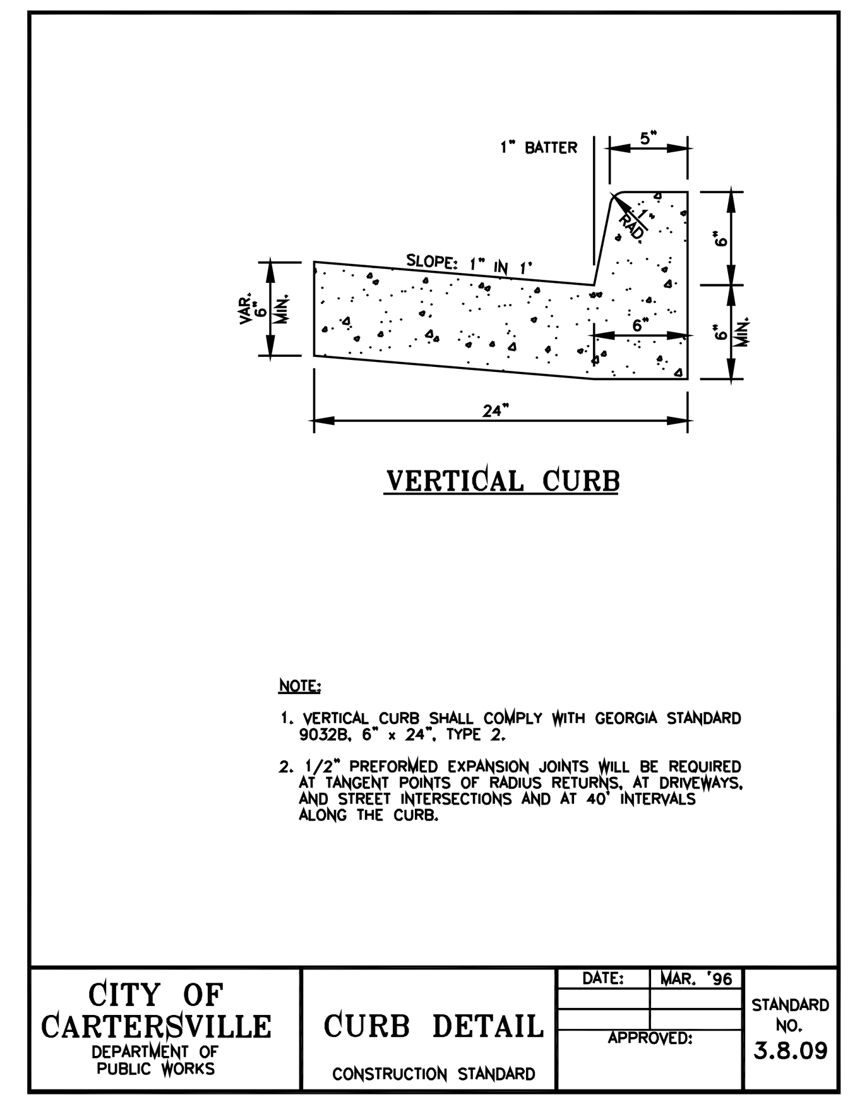


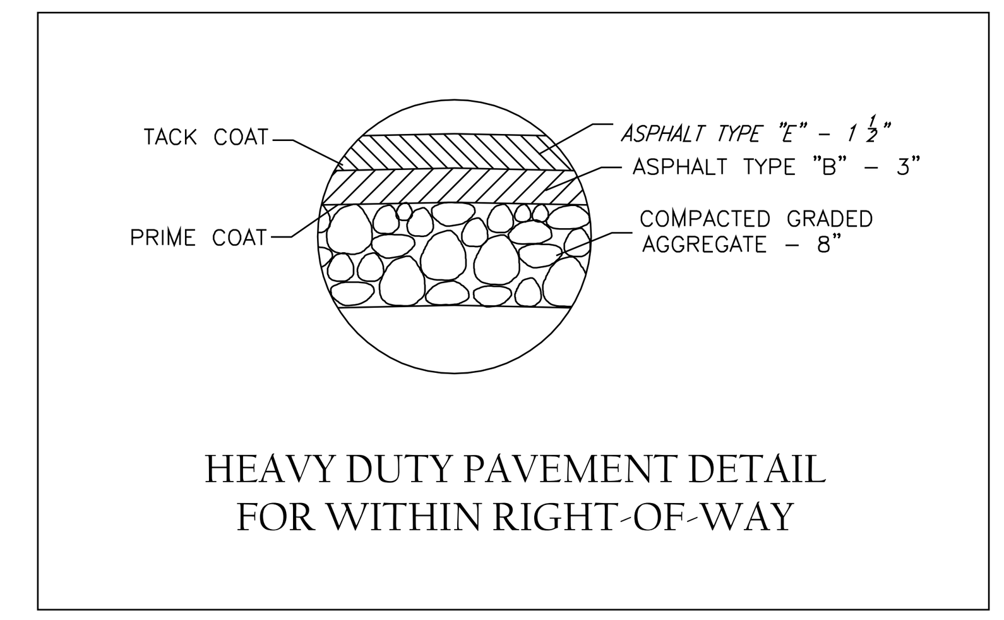


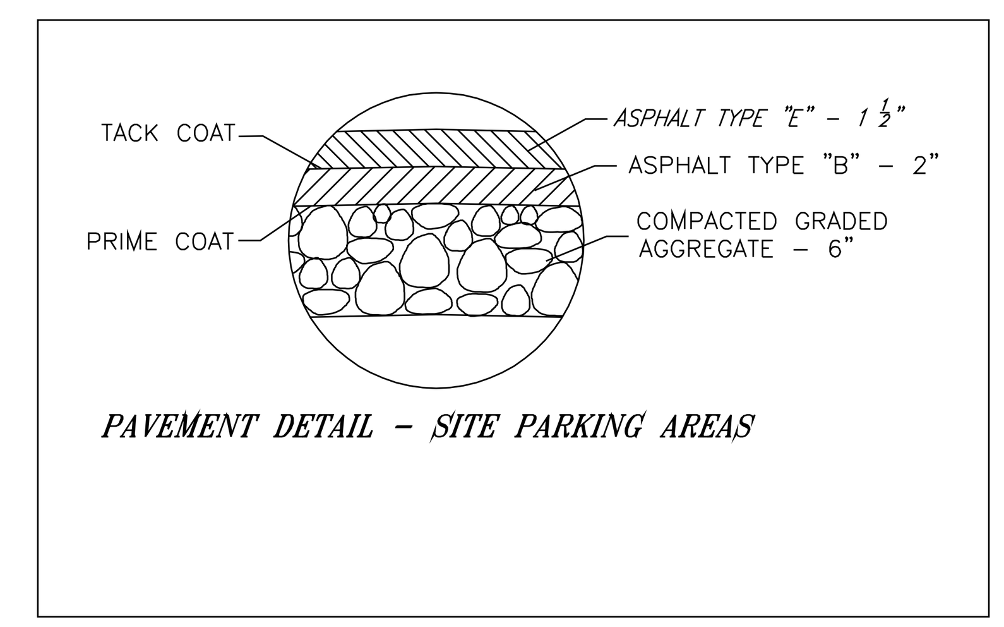
BOTTOM LANDING, 60" LONG, 2% SLOPE WITH SMOOTH TRANSITION (NO ½" LIP).
RETAINING CURB (IF NECESSARY)
POST-MOUNTED ISA PARKING SIGN
POST MOUNTED ISA SIGN WITH ADDITIONAL "VAN ACCESSIBLE" LANGUAGE
60" MIN.
SIDEWALK 4' CLEAR MIN.
48" MIN.
RAMP DOWN. USE LEAST POSSIBLE SLOPE, 8.3% MAX.
WHEEL-STOP IF REQ'D TO PREVENT ENCROACHMENT OVER REQUIRED WITH OF WALKWAY.
ACCESS AISLE 8' WIDE FOR VAN 5' FOR REGULAR)
PARKING AND ACCESS AISLE SLOPE 2% MAX IN ANY DIRECTION
NO PARKING
REGULAR ACCESSIBLE STALL 9' WIDE, 18' LONG MINIMUM
12" HIGH LETTERS
VAN ACCESSIBLE STALL LEFT OF ACCESS AISLE
36" SQUARE ISA PAVEMENT SIGN
RAMP SURFACE TO BE CONTRASTING FINISH FROM ADJACENT WALK.
ALL ACCESSIBLE RAMPS AND ACCESS AISLES SHALL MEET ALL CODES AND ADAAG REGULATIONS.
ACCESSIBLE PARKING, ACCESS RAMP AND ACCESS AILSE DETAILS

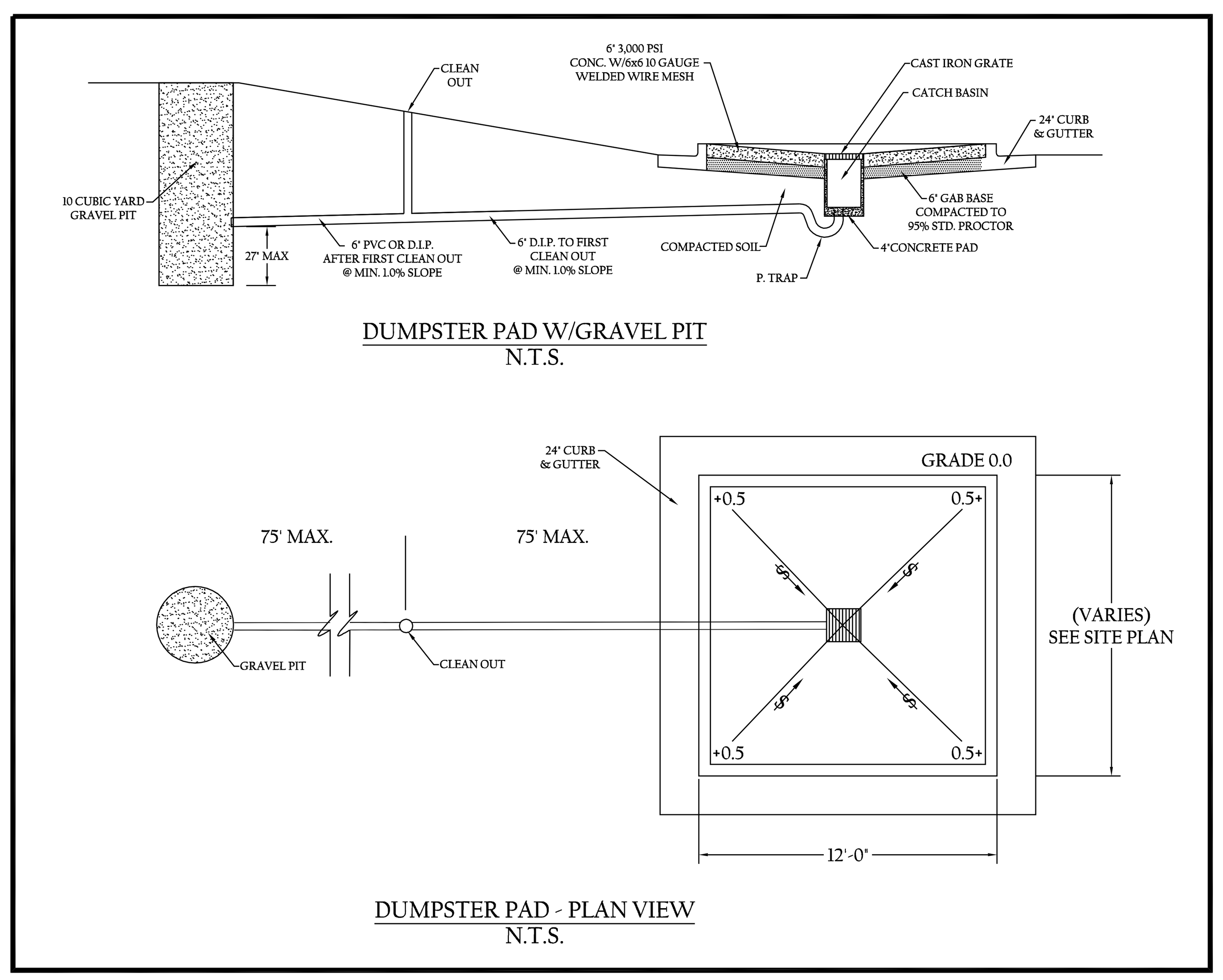




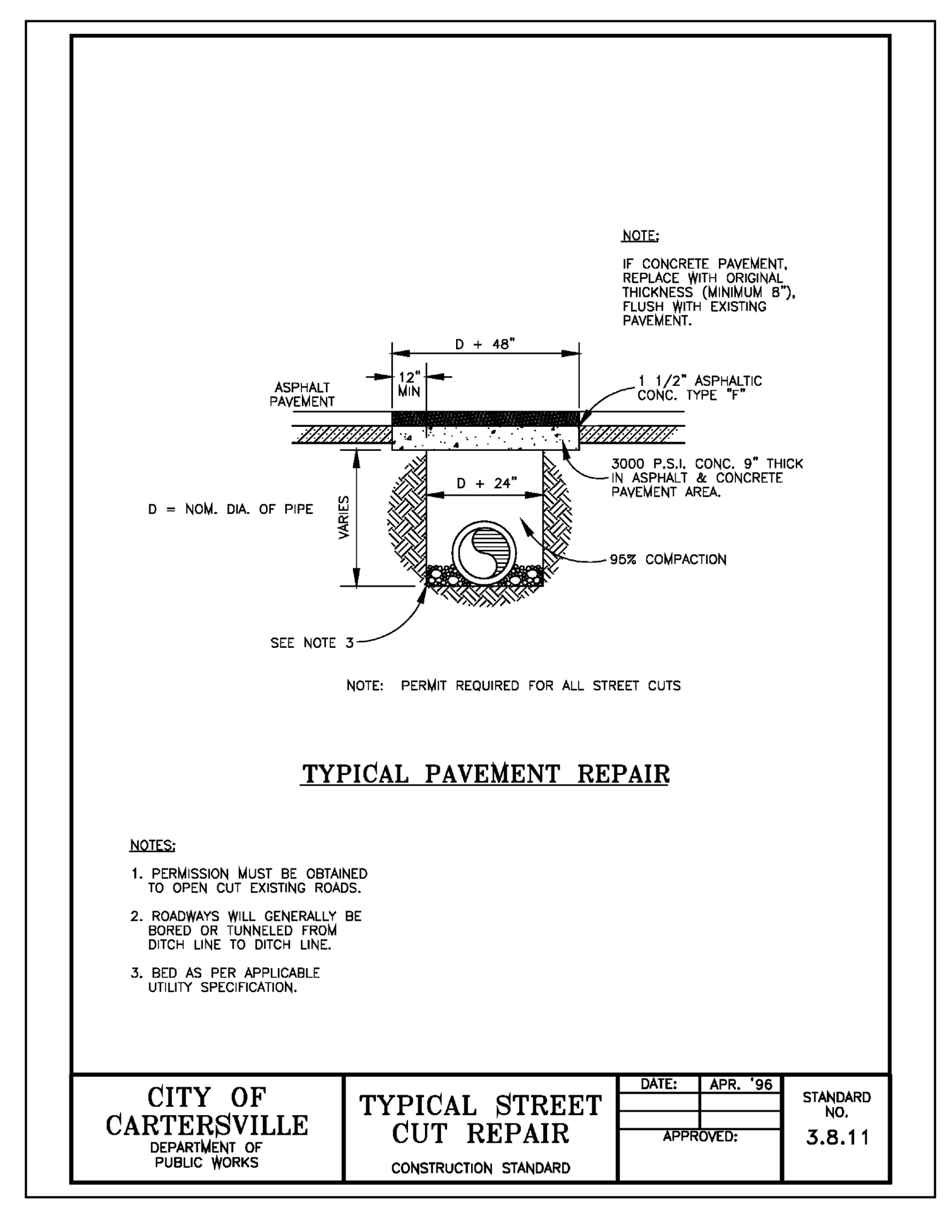








CLEAN OUT
6" 3,000 PSI CONC. W/6x6 10 GAUGE WELDED WIRE MESH
CAST IRON GRATE
CATCH BASIN
24" CURB & GUTTER
10 CUBIC YARD GRAVEL PIT
27" MAX
6" PVC OR D.I.P. AFTER FIRST CLEAN OUT @ MIN. 1.0% SLOPE
6" D.I.P. TO FIRST CLEAN OUT @ MIN. 1.0% SLOPE
COMPACTED SOIL
P. TRAP
6" GAB BASE COMPACTED TO 95% STD. PROCTOR
4" CONCRETE PAD
DUMPSTER PAD W/GRAVEL PIT
N.T.S.
24" CURB & GUTTER
GRADE 0.0
75' MAX.
75' MAX.
GRAVEL PIT
CLEAN OUT
(VARIES) SEE SITE PLAN
12'-0"
DUMPSTER PAD - PLAN VIEW
N.T.S.



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PHONE : (770)382-7877
FAX: (770)382-3742

REVISION

DATE

GEORGIA REGISTERED No. 27429 PROFESSIONAL ENGINEER KEVIN T. STEPHENSON

ENGINEER GSWCC# 0000020715

OWNER/DEVELOPER:
Freddy Teems
24 Hour Contact: Freddy Teems
30 Amberidge Drive
Cartersville, Ga 30121
Phone: (770) 382-8166

Freddy Teems - Office Warehouse
Located in Land Lots 339, 4th District, 3rd Section
City of Cartersville, Bartow County, Georgia

PROJECT# 15-004
DATE 8-21-18

SHEET TITLE
Details

SHEET NO.
D1

Utilities Protection Center, Inc.

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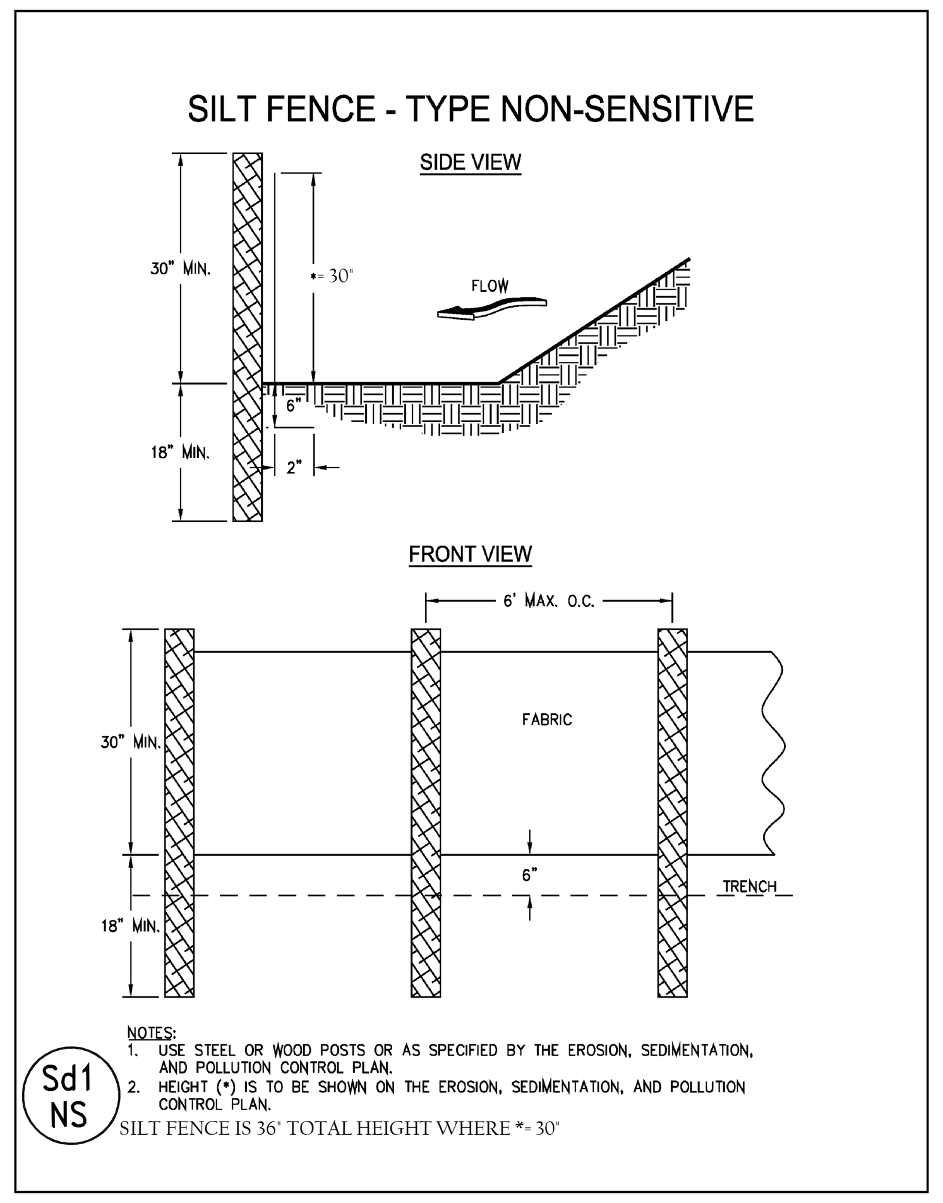
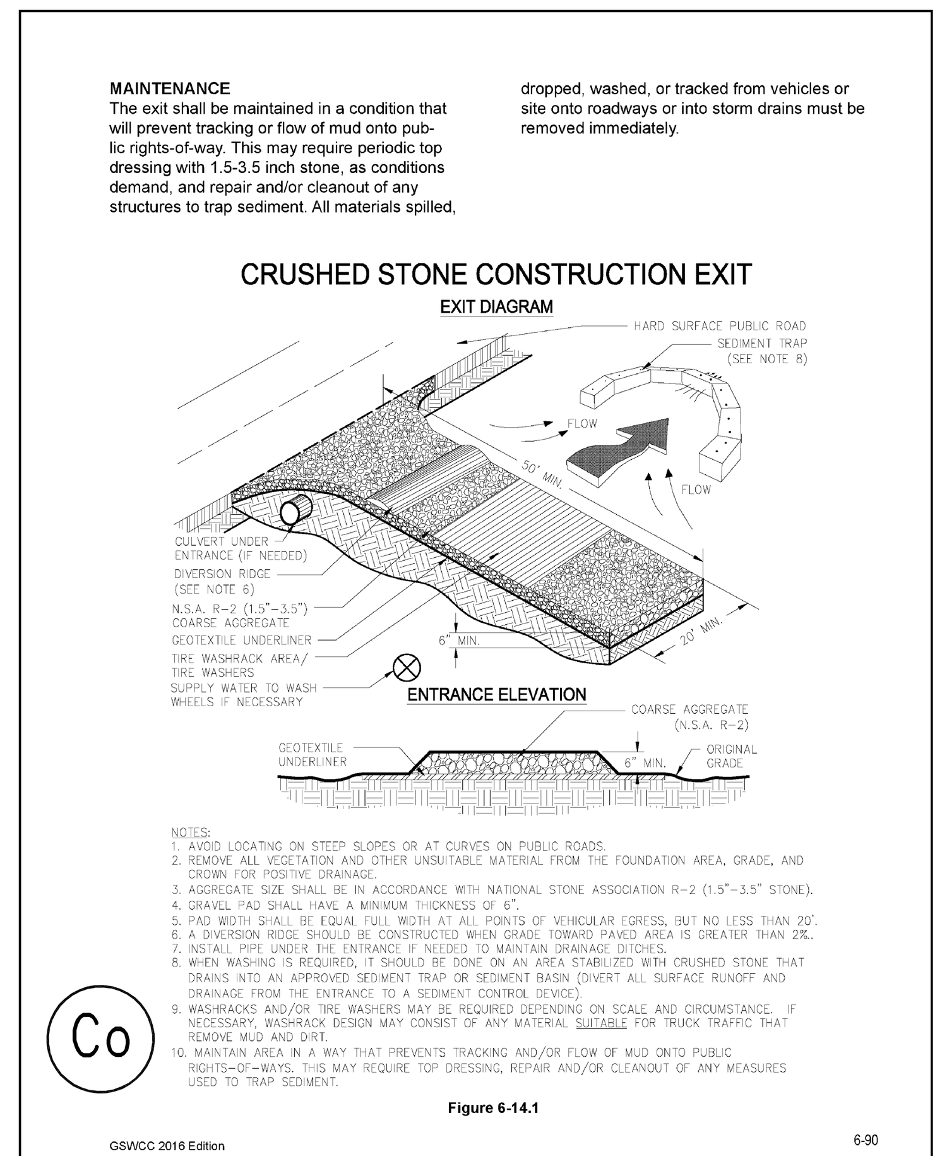
It's The Law !

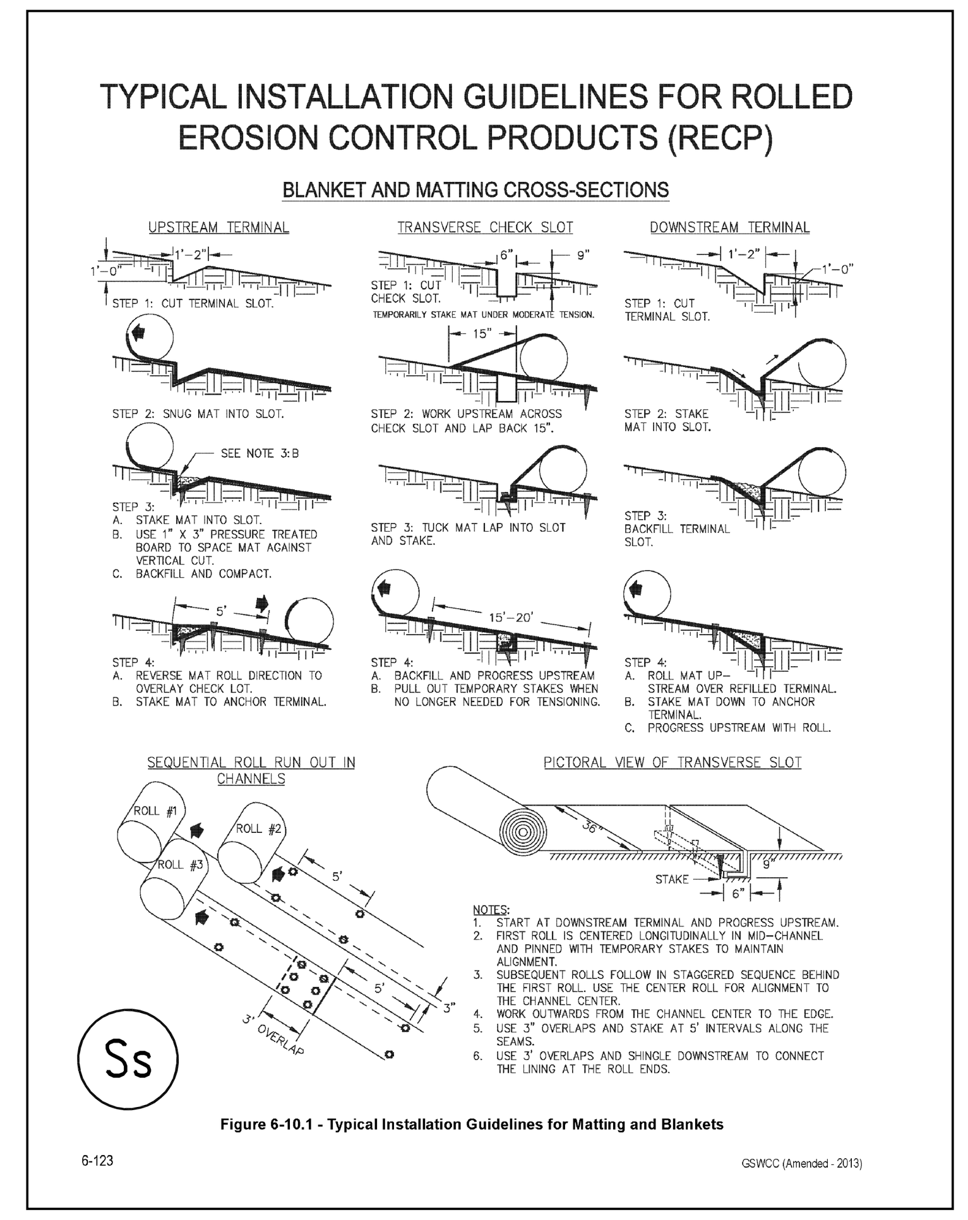
24 Hr Emergency Contact:
Freddy Teems
770-382-8166

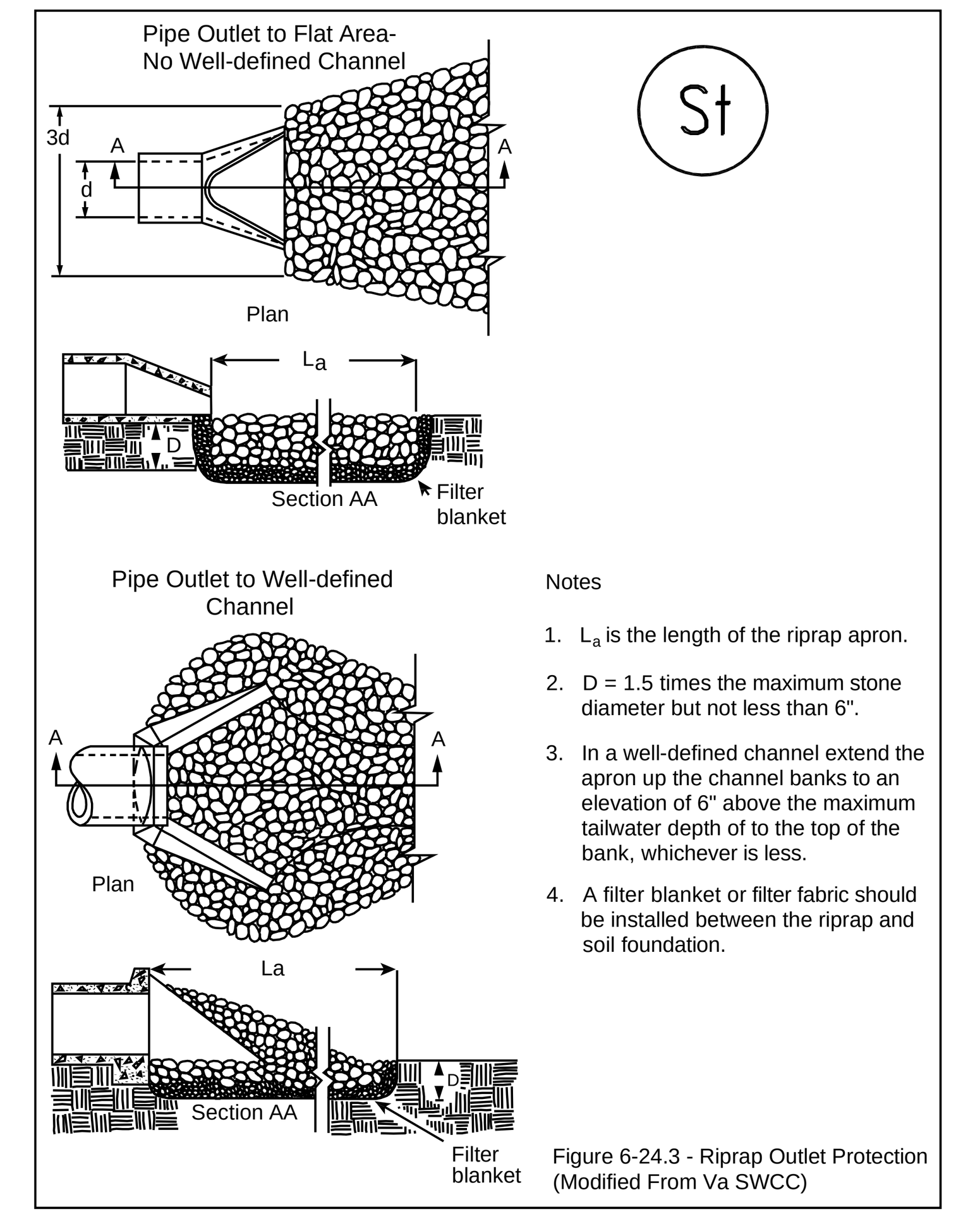
Du — WATER TRUCKS TO BE USED WHEN NECESSARY FOR DUST CONTROL. SITE IS TO BE SPRINKLED WITH WATER UNTIL THE SURFACE IS WET. REPEAT AS NEEDED.

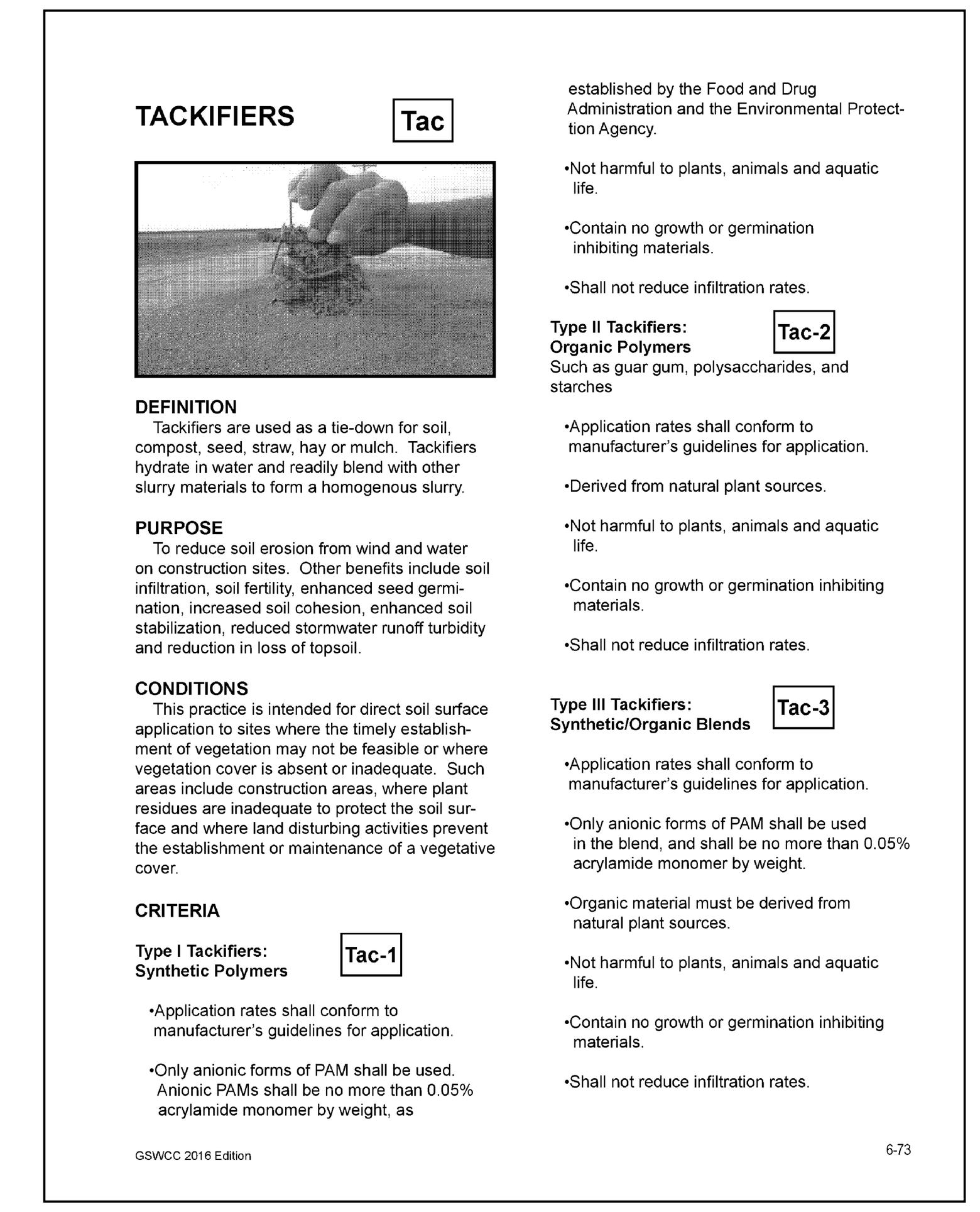
FSA — FUEL STAGING AREA is used for remediation of all petroleum spills and leaks as appropriate.

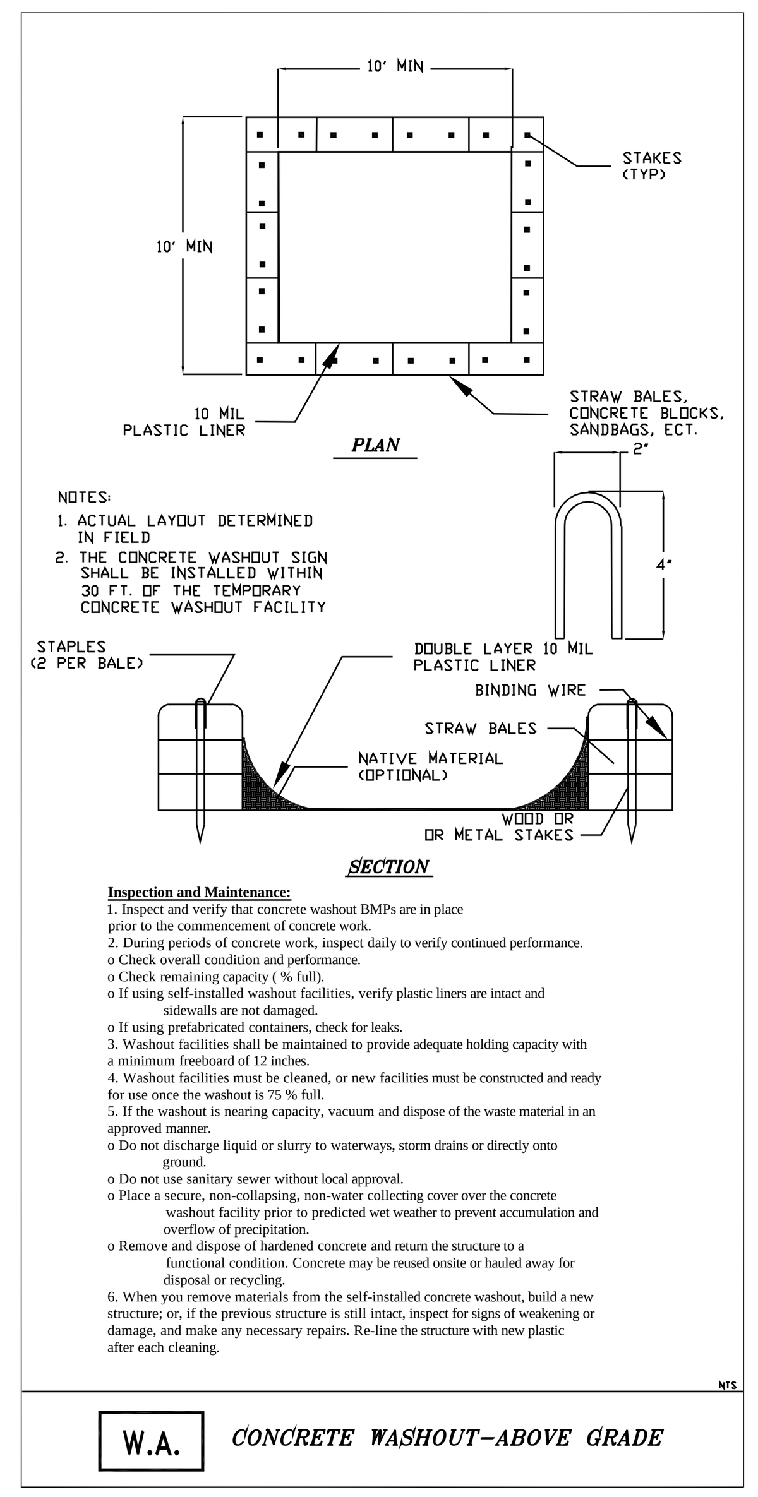












*** PESTICIDES BMP'S ***

- PESTICICES TO BE APPLIED BY REGISTERED EMPLOYEES OF LICENSED PEST CONTROL COMPANIES UNDER SUPERVISION O FCERIFIED OPERATOR
- MEET ALL REQUIREMENTS OF GEORGIA STRUCTURAL PEST CONTROL ACT (43-45-1)
- CLOSELY FOLLOW INSTRUCTIONS OF PESTICICES MANUFACTURER REGARDING STORAGE, USE AND DISPOSAL
- DO TO APPLY IN FOUNDATION DRAINS OR DRAINAGE COURSES
- USE BACKFLOW PREVENTION WHEN MIXING EMULSIONS
- DO NOT TREAT SOIL THAT IS SATURATED OR FROZEN
- DO NOT APPLY DURING RAINFALL OR A CHANCE OF RAIN
- POUR CONCRETE FOUNDATION WITHIN 24 HOURS OF TREATMENT OR COVER TRATER SOIL WITH PLASTIC SHEETING
- INSTALL WARNING FLAGS AS REQUIRED

*** NUTRIENTS BMP'S ***

- SPECIFY SOIL BE SAMPLED BY CONTRACTOR AND TESTED BY EXTENSION SERVICE
- APPLY FERTILIZER AS RECOMMENDED BY TEST OR AS SHOWN
- INITIAL FERTILIZER AND LIME SHOULD BE TILLED INTO SOIL
- SPECIFY RATE TOP DRESSING OF NITROGEN REQUIRED-DO NOT OVER APPLY
- SPECITY RATE OF ANNUAL APPLICATIONS-DO NOT OVER APPLY

*** CHLORINE BMP'S ***

- ANSI/AWWA C651-05 DESINFECTING WATER MAINS
- METHOD SPECIFIED BY MINIMYM STANDARDS FOR PUBLIC WATER SYSTEMS, MAY 2000 GA EPD
- DISINFECTION BY MINIMUM 25 PPM FREE CHLORINE FOR AT LEAST 24HOURS
  -CALCIUM HYPOCHLORITE GRANULES ADDED AS PIPE SECTIONS ARE INSTALLED
  -SODIUM HYPOCHLORITE CAN ALSO BE USED

*** CHLORINE ***

- ANSI/AWWA C651-05 DISINFECTING WATER MAINS, SECTION 4.5.2
  "The environment to which the chlorinated water is to be discharged shall be inspected. If there is any possibility that the chlorinated discharge will cause damage to the environment, a neutralizing chemical shall be applied to the water to be wasted to thoroughly neutralize the residual chlorine."
- COLLECT WATER IN POND OR PORTABLE TANK UNTIL CHLORINE DISSIPATES
- NEUTRALIZE CHLORINE WITH SODIUM THIOSULFATE
- DO NOT DISCHARGE TO STREAM UNTIL FIELD TESTS SHOW NO CHLORINE

*** PAINT WASTEWATER ***

- WASHING OF PAINT BRUSHES AND EQUIPMENT MUST BE DONE TO AS TO CAPTURE AND PROPERLY DISPOSE OF WASTEWATER
- IN NO CASE SHALL WASTEWATER OR UNUSED PAINT BE DISCHARGED INTO STATE WATERS OR ONTO SITE SOILS OR BE LEFT EXPOSED TO RAINFALL
- IF SOLVENTS OTHER THAN WATER ARE USED TO WASH BRUSHES OR EQUIPMENT, WASTE SOLVENTS WILL BE CAPTURED AND PROPERLY STORED. A LICENSED WASTE CONTRACTOR SHALL REMOVE THE CONTAINER FOR PROPER DISPOSAL. THE MATERIAL SAFETY DATA SHEET SHALL BE THE SOURCE FOR INFORMATION REGARDING PROPER STORAGE AND DISPOSAL OF THE SOLVENT

*** WASTE SOLVENTS ***

- IN NO CASE SHALL WASTE SOLVENTS OR UNUSED SOLVENTS BE DISCHARGED INTO STATE WATER OR ONTO SITE SOILS OR BE LEFT EXPOSED TO RAINFALL
- WASTE SOLVENTS MUST BE CAPTURED AND PROPERLY STORED. A LICENSED WASTE CONTRACTOR SHALL REMOVE THE CONTAINER FOR PROPER DISPOSAL.
- STORAGE CONTAINERS MUST BE PROPERLY LABELED
- CARE MUST BE TAKEN NOT TO MIX CHEMICALS THAT ARE NOT COMPATIBLE - CONSULT THE MATERIAL SAFETY DATA SHEET FOR DETAILS ON STORAGE, DISPOSAL & COMPATIBILITY

*** HYDRANT FLUSHING/LINE FLUSHING ***

- NO-STORMWATER COMPONENTS
  -CHLORINE
- POLLUTION PREVENTION MEASURES
  -NEUTRALIZE CHLORINE WITH DOSING SYSTEM THAT INJECTS SODIUM THIOSULFATE
  *LIQUID FEED *TABLET FEED

*** POTABLE WATER SOURCES ***

- NON-STORMWATER COMPONENTS
  -CHLORINE (0.2 PPM)
- EVALUATE ENVIRONMENTAL RISK
  -VOLUME OF DISCHARGE
  -VOLUME OF RECEIVIN WATERS
  -MINIMUM DILUTION OF 1:10
- POLLUTION PREVENTION MEASURES
  -NEUTRALIZE CHLORINE WITH DOSING SYSTEMS THAT INJECTS SODIUM THIOSULFATE

*** IRRIGATION DRAINAGE ***

- NON-STORMWATER COMPONENTS
  -SEDIMENT
  -NUTRIENTS

POLLUTION PREVENTION MEASURES
  -INSTALL PERIMETER SEDIMENT CONTROLS
  -IRRIGATE AT RATE THAT ALLOWS FULL INFILTRATION AND PRODUCES NO RUNOFF
  -CAPTURE RUNOFF IN TEMPORARY SEDIMENT BASINS WHERE POSSIBLE
  -MIX FERTILIZER INTO SOIL - DO NOT OVER APPLY

***AIR CONDITIONING CONDENSATE ***

- NON-STORMWATER COMPONENT
  -METALS
  -MICROBES
  -COOLANTS

POLLUTION PREVENTION MEASURES
  -INSTALL GRAVEL INFILTRATIONPIT FOR EACH AIR CONDITIONER

1. SILT FENCE MUST MEET THE REQUIREMENTS OF SECTION 171-TEMPORARY SILT FENCE OF THE DEPARTMENT OF TRANSPORTATION, STATE OF GEORGIA, STANDARD SPECIFICATION, LATEST EDITION.

2. ADDITIONAL EROSION CONTROL MEASURES WILL BE EMPLOYED WHERE DETERMINED NECESSARY BY ACTUAL SITE CONDITIONS TO PREVENT THE RELEASE OF SILT FROM THE SITE

3. PRIOR TO ANY OTHER CONSTRUCTION, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT EACH ENTRY TO OR EXIT FROM THE SITE.

4. THE CONSTRUCTION EXITS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ON TO 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. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLE OFF SITE ONTO PUBLIC ROADWAY OR INTO STORM DRAIN MUST BE REMOVED.

5. PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITIES 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 INSIDE THEAPPROVED LIMITS INDICATED ON THE APPROVED PLANS.

6. IMMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION ENTRANCES/EXITS, ALL PERIMETER EROSION CONTROL DEVICES AND STORM WATER MANAGEMENT DEVICES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION.

7. THE CONTRACTOR SHALL FURNISH AND MAINTAIN ALL NECESSARY BARRICADES WHILE ROADWAY FRONTAGE IMPROVEMENTS ARE BEING MADE.

8. THE CONSTRUCTION OF THE SITE WILL INITIATE WITH THE INSTALLATION OF EROSION CONTROL MEASURES SUFFICIENT TO CONTROL SEDIMENT DEPOSITS AND EROSION. ALL SEDIMENT CONTROLS WILL BE MAINTAINED UNTIL UPSTREAM GROUND WITHIN THE CONSTRUCTION AREA HAS BEEN COMPLETELY STABILIZED WITH PERMANENT VEGETATION AND ALL ROADS/DRIVEWAYS HAVE BEEN PAVED.

9. THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE APPROVED PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE FINAL PROPOSED DRAINAGE PATTERNS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.

10. ALL SILT BARRIERS MUST BE PLACED AS ACCESS IS OBTAINED DURING CLEARING. NO GRADING SHALL BE DONE UNTIL SILT BARRIER INSTALLATION AND DETENTION FACILITIES ARE CONSTRUCTED.

11. CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES UNTIL PERMANENT VEGETATION HAS BEEN ESTABLISHED. CONTRACTOR SHALL CLEAN OUT ALL SEDIMENT PONDS WHEN REQUIRED BY ENGINEER OR THE BARTOW COUNTY INSPECTOR. CONTRACTOR SHALL INSPECT EROSION CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.

12. THE CONTRACTOR SHALL REMOVE ACCUMULATED SILT WHEN THE SILT IS WITHIN 0.5 CAPACITY OF THE SILT FENCE UTILIZED FOR EROSION CONTROL.

13. FAILURE TO INSTALL, OPERATE OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN A POSSIBILITY OF ALL CONSTRUCTION BEING STOPPED ON JOB SITE UNTIL SUCH MEASURES ARE CORRECTED BACK TO CURRENT STDS.

14. ALL SEWER EASEMENTS DISTURBED MUST BE DRESSED AND GRASSED TO CONTROL EROSION.

15. 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 LB STONES SHALL BE PLACED AT ALL DOWNSTREAM HEAD-WALLS IMMEDIATELY UPON THE INSTALLATION OF PIPES AND DRAINAGE DITCHES.

16. SILT BARRIERS TO BE PLACE AT DOWNSTREAM OF ALL CUT AND FILL SLOPES.

17. ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAT 14 DAYS SHALL BE STABILIZED WITH TEMPORARY SEEDING.

18. WHEN CONSTRUCTION BORDERS A DRAINAGE COURSE: THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ANY BUILDING OR OTHER EXCAVATION SPOILED DIRT, CONSTRUCTION TRASH OR DEBRIS, ETC. FROM THE DRAINAGE AREAS SHOWN HEREON IN AN EXPEDITIOUS MANNER AS CONSTRUCTION PROGRESSES.

*** SPRINGS ***

NON-STORMWATER COMPONENTS
  -MINERALS
  -MICROBES
  -SEDIMENT
- POLLUTION PREVENTION MEASURES
  -NATURAL SPRINGS SHALL REMAIN UNDISTURBED WHERE POSSIBLE
  -SPRINGS CREATED BY GRADING SHALL BE DIRECTED TO TEMPORARY SEDIMENT BASIN PRIOR TO DISCHARGE INTO STREAM

*** UNCONTAMINATED GROUND WATER ***

- NON-STORMWATER COMPONENTS
  -MINERALS
  -MICROBES
  -SEDIMENT

POLLUTION PREVENTION MEASURES
  -GROUNDWATER THAT SURFACES AS RESULT OF GRADING SHALL BE DIRECTED TO TEMPORARY SEDIMENT BASIN PRIOR TO DISCHARGE INTO STREAM
  -GROUNDWATER THAT SURGACES AS A RESULT OF TRENCHING MAY BE TREATED BY CHECK DAMS

*** SPRINGS ***

- NON-STORMWATER COMPONENTS
  -MINERALS
  -MICROBES
  -SEDIMENT
- POLLUTION PREVENTION MEASURES
  -NATURAL SPRINGS SHALL REMAIN UNDISTURBED WHERE POSSIBLE
  -SPRINGS CREATED BY GRADING SHALL BE DIRECTED TO TEMPORARY SEDIMENT BASIN PRIOR TO DISCHARGE INTO STREAM

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- NON-STORMWATER COMPONENTS
  -MINERALS
  -MICROBES
  -SEDIMENT
- POLLUTION PREVENTION MEASURES
  -GROUNDWATER THAT SURFACES AS RESULT OF GRADING SHALL BE DIRECTED TO TEMPORARY SEDIMENT BASIN PRIOR TO DISCHARGE INTO STREAM
  -GROUNDWATER THAT SURGACES AS A RESULT OF TRENCHING MAY BE TREATED BY CHECK DAMS

EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST
STAND ALONE CONSTRUCTION PROJECTS

SWCD:______________________________

Project Name: Freddy Teems Office Warehouse — **Address: Porter Street**
City/County:City of Cartersville — **Date on Plans:8-21-18**
Name&email of person filling out checklist:Greg Bates, email: stephensoneng@yahoo.com

TO BE SHOWN ON ES&PC PLAN

Plan Page #	Included Y/N	Item
XXX		1 The applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Commission as of January 1 of the year in which the land-disturbing activity was permitted. (The completed Checklist must be submitted with the ES&PC Plan or the Plan will not be reviewed)
ALL		2 Level II certification number issued by the Commission, signature and seal of the certified design professional. (Signature, seal and Level II number must be on each sheet pertaining to ES&PC plan or the Plan will not be reviewed)
N/A		3 Limits of disturbance shall be no greater than 50 acres at any one time without prior written authorization from the EPD District Office. If EPD approves the request to disturb 50 acres or more at any one time, the plan must include at least 4 of the BMPs listed in Appendix 1 of this checklist.* (A copy of the written approval by EPD must be attached to the plan for the plan to be reviewed.)
ALL		4 The name and phone number of the 24-hour local contact responsible for erosion, sedimentation and pollution controls.
C4.1		5 Provide the name, address and phone number of primary permittee.
C4.1		6 Note total and disturbed acreage of the project or phase under construction.
C4.1		7 Provide the GPS location of the construction exit for the site. Give the Latitude and Longitude in decimal degrees.
ALL		8 Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions.
C4.1		9 Description of the nature of construction activity.
COVER		10 Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary.
C4.1		11 Identify the project receiving waters and describe all sensitive adjacent areas including streams, lakes, residential areas, wetlands, marshlands, etc. which may be affected.
C4.1		12 Design professional's certification statement and signature that the site was visited prior to development of the ES&PC Plan as stated on page 15 of the permit.
C4.1		13 Design professional's certification statement and signature that the permittee's ES&PC Plan provides for an appropriate and comprehensive system of BMPs and sampling to meet permit requirements as stated on page 15 of the permit.*
C4.1		14 Clearly note the statement that "The design professional who prepared the ES&PC Plan is to inspect the installation of the initial sediment storage requirements and perimeter control BMPs within 7 days after installation."*
C4.1		15 Clearly note the statement that "Non-exempt activities shall not be conducted within the 25 or 50-foot undisturbed stream buffers as measured from the point of wrested vegetation or within 25-feet of the coastal marshland buffer as measured from the Jurisdictional Determination Line without first acquiring the necessary variances and permits."
C4.1		16 Provide a description of any buffer encroachments and indicate whether a buffer variance is required.
C4.1		17 Clearly note the statement that "Amendments/revisions to the ES&PC Plan which have a significant effect on BMPs with a hydraulic component must be certified by the design professional."*
C4.1		18 Clearly note the statement that "Waste materials shall not be discharged to waters of the State, except as authorized by a section 404 permit."*
C4.1		19 Clearly note statement that "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."
C4.1		20 Clearly note statement that "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."
C4.1		21 Clearly note the statement "Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding."
N/A		22 Any construction activity which discharges storm water into an Impaired Stream Segment, or within 1 linear mile upstream of and within the same watershed as, any portion of an Biota Impaired Stream Segment must comply with Part III. C. of the Permit. Include the completed Appendix 1 listing all the BMPs that will be used for those areas of the site which discharge to the Impaired Stream Segment.*
N/A		23 If a TMDL Implementation Plan for sediment has been finalized for the Impaired Stream Segment (identified in item 22 above) at least six months prior to submittal of NOI, the ES&PC Plan must address any site-specific conditions or requirements included in the TMDL Implementation Plan.*
C4.1, D2		24 BMPs for concrete washdown of tools, concrete mixer chutes, hoppers and the rear of the vehicles. Washout of the drum at the construction site is prohibited.*
C4.1		25 Provide BMPs for the remediation of all petroleum spills and leaks.
C4.1		26 Description of the measures that will be installed during the construction process to control pollutants in storm water that will occur after construction operations have been completed.*
C4.1		27 Description of the practices that will be used to reduce the pollutants in storm water discharges.*
C4.1		28 Description and chart or timeline of the intended sequence of major activities which disturb soils for the major portions of the site (i.e., initial perimeter and sediment storage BMPs, clearing and grubbing activities, excavation activities, utility activities, temporary and final stabilization).
C4.1		29 Provide complete requirements of inspections and record keeping by the primary permittee.*
C4.1		30 Provide complete requirements of sampling frequency and reporting of sampling results.*
C4.1		31 Provide complete details for retention of records as per Part IV.F. of the permit.*
C4.1		32 Description of analytical methods to be used to collect and analyze the samples from each location.*
C4.1		33 Appendix B rationale for NTU values at all outfall sampling points where applicable.*
N/A		34 Delineate all sampling locations, perennial and intermittent streams and other water bodies into which storm water is discharged.*
C4.1		35 A description of appropriate controls and measures that will be implemented at the construction site including: (1) initial sediment storage requirements and perimeter control BMPs, (2) intermediate grading and drainage BMPs, and (3) final BMPs. For construction sites where there will be no mass grading and the initial perimeter control BMPs, intermediate grading and drainage BMPs, and final BMPs are the same, the plan may combine all of the BMPs into a single phase.*
ALL		36 Graphic scale and North arrow.
C2		37 Existing and proposed contour lines with contour lines drawn at an interval in accordance with the following:

Map Scale	Ground Slope	Contour Intervals, ft.
1 inch = 100ft or larger scale	Flat 0 - 2%	0.5 or 1
	Rolling 2 - 8%	1 or 2
	Steep 8% +	2,5 or 10

Plan Page #	Included Y/N	Item
N/A		38 Use of alternative BMPs whose performance has been documented to be equivalent to or superior to conventional BMPs as certified by a Design Professional (unless disapproved by EPD or the Georgia Soil and Water Conservation Commission). Please refer to the Alternative BMP Guidance Document found at www.gaswcc.org.
N/A		39 Use of alternative BMP for application to the Equivalent BMP List. Please refer to Appendix A-2 of the Manual for Erosion & Sediment Control in Georgia 2016 Edition.*
N/A		40 Delineation of the applicable 25-foot or 50-foot undisturbed buffers adjacent to state waters and any additional buffers required by the Local Issuing Authority. Clearly note and delineate all areas of impact.
N/A		41 Delineation of on-site wetlands and all state waters located on and within 200 feet of the project site.
C6,7		42 Delineation and acreage of contributing drainage basins on the project site.
Attached		43 Provide hydrology study and maps of drainage basins for both the pre- and post-developed conditions.*
C4.1		44 An estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities are completed.
C4.1		45 Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion. Identify/Delineate all storm water discharge points.
C4.1		46 Soil series for the project site and their delineation.
C4.2-4.4		47 The limits of disturbance for each phase of construction.
C4.1		48 Provide a minimum of 67 cubic yards of sediment storage per acre drained using a temporary sediment basin, retrofitted detention pond, and/or excavated inlet sediment traps for each common drainage location. Sediment storage volume must be in place prior to and during all land disturbance activities until final stabilization of the site has been achieved. A written justfication explaining the decision to use equivalent controls when a sediment basin is not attainable must be included in the plan for each common drainage location in which a sediment basin is not provided. A written justification as to why 67 cubic yards of storage is not attainable must also be given. Worksheets from the Manual included for structural BMPs and all calculations used by the storage design professional to obtain the required sediment when using equivalent controls. When discharging from sediment basins and impoundments, permitees are required to utilize outlet structures that withdraw water from the surface, unless infeasible. If outlet structures that withdraw water from the surface are not feasable, a written justification explaining this decision must be included in the plan.
C4.2-4.4		49 Location of Best Management Practices that are consistent with and no less stringent than the Manual for Erosion and Sediment Control in Georgia. Use uniform coding symbols from the Manual, Chapter 6, with legend.
D2		50 Provide detailed drawings for all structural practices. Specifications must, at a minimum, meet the guidelines set forth in the Manual for Erosion and Sediment Control in Georgia.
D4		51 Provide vegetative plan, noting all temporary and permanent vegetative practices. Include species, planting dates and seeding, fertilizer, lime and mulching rates. Vegetative plan shall be site specific for appropriate time of the year that seeding will take place and for the appropriate geographic region of Georgia.

*If using this checklist for a project that is less than 1 acre and not part of a common development but within 200 ft of a perennial stream the * checklist items would be N/A. **Effective January 1, 2018**

STEPHENSON ENGINEERING, INC.
CIVIL ENGINEERING, LAND PLANNING & DEVELOPMENT CONSULTING
P.O. BOX 201088
1130 N. TENNESSEE ST., SUITE D
CARTERSVILLE, GEORGIA 30120
EMAIL: STEPHENSONENG@YAHOO.COM
PHONE : (770)382-7877
FAX: (770)382-3742

REVISION | DATE

GEORGIA REGISTERED No. 27429 PROFESSIONAL ENGINEER KEVIN T. STEPHENSON

ENGINEER GSWCC# 0000020715

OWNER/DEVELOPER:
Freddy Teems
24 Hour Contact: Freddy Teems
30 Amberidge Drive
Cartersville, Ga 30121
Phone: (770) 382-8166

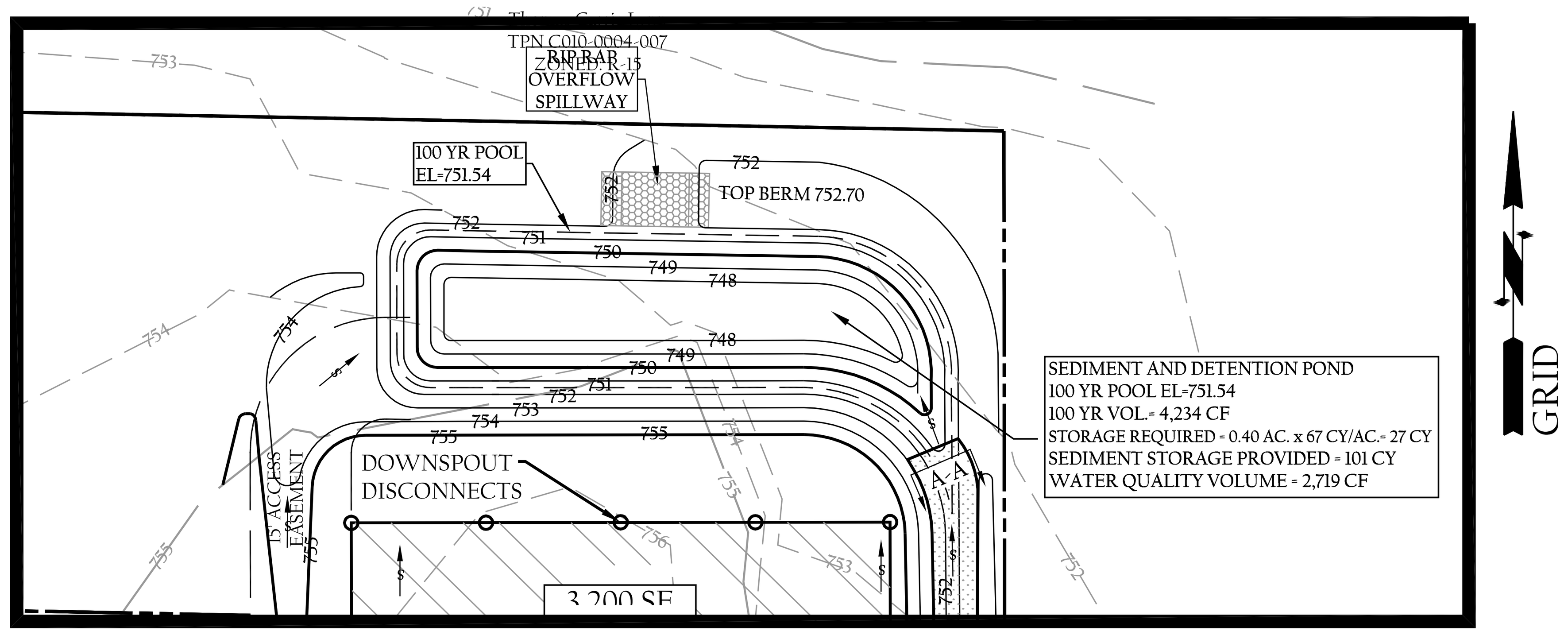
Freddy Teems - Office Warehouse

Located in Land Lots 339, 4th District, 3rd Section
City of Cartersville, Bartow County, Georgia

PROJECT# 15-004 | DATE 8-21-18

SHEET TITLE: Details

SHEET NO. D2



GRAPHIC SCALE

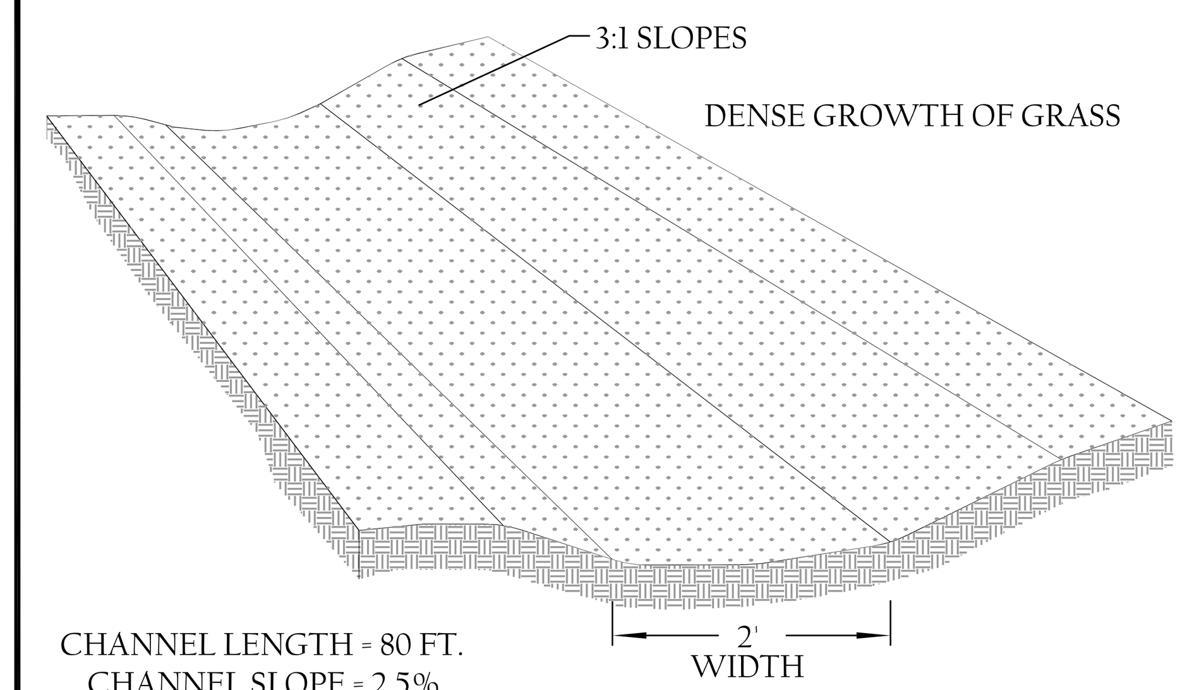
20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

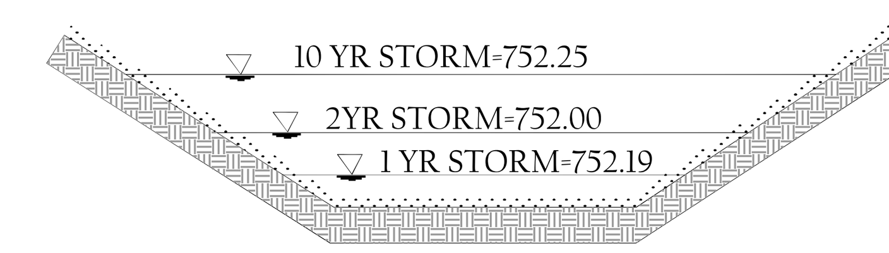
POND VOLUME		
STAGE	ELEVATION	TOTAL STORAGE
0.00	748.00	0
1.00	749.00	740
3.00	750.00	1,821
5.00	751.00	3,282
7.00	752.00	5,519

GRASSED CHANNEL

Section 4.9 - 2016 Edition of the Georgia Stormwater Management Manual Volume 2



CHANNEL LENGTH = 80 FT.
CHANNEL SLOPE = 2.5%
Q 1 YR = 0.79 cfs V= 2.01 fps
Q 2 YR = 0.86 cfs V= 2.07 fps
Q 10 YR = 1.28 cfs V= 2.38 fps



CROSS SECTION A-A
N.T.S.

1 YR STORM EVENT
Channel Calculator

Given Input Data:
Shape .... Trapezoidal
Solving for .... Depth of Flow
Flowrate .... 0.7900 cfs
Slope .... 0.0250 ft/ft
Manning's n 0.0350
Height .... 12.0000 in
Bottom width .... 24.0000 in
Left slope .... 3.0000 ft/ft (V/H)
Right slope .... 3.0000 ft/ft (V/H)

Computed Results:
Depth .... 2.2867 in
Velocity .... 2.0091 fps
Full Flowrate .... 10.7427 cfs
Flow area 0.3932 ft2
Flow perimeter .... 28.8208 in
Hydraulic radius .... 1.9647 in
Top width .... 25.5245 in
Area 2.3333 ft2
Perimeter .... 49.2982 in
Percent full .... 19.0557 %

2 YR STORM EVENT
Channel Calculator

Given Input Data:
Shape .... Trapezoidal
Solving for .... Depth of Flow
Flowrate .... 0.8600 cfs
Slope .... 0.0250 ft/ft
Manning's n 0.0350
Height .... 12.0000 in
Bottom width .... 24.0000 in
Left slope .... 3.0000 ft/ft (V/H)
Right slope .... 3.0000 ft/ft (V/H)

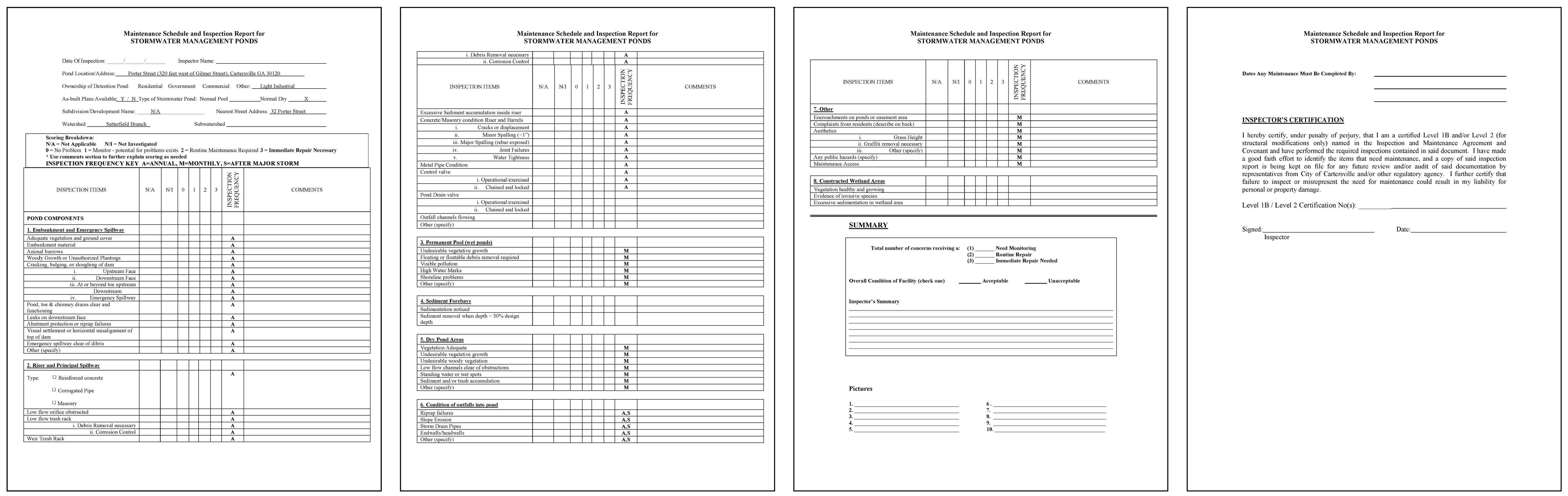
Computed Results:
Depth .... 2.4109 in
Velocity .... 2.0710 fps
Full Flowrate .... 10.7427 cfs
Flow area 0.4153 ft2
Flow perimeter .... 29.0826 in
Hydraulic radius .... 2.0562 in
Top width .... 25.6072 in
Area 2.3333 ft2
Perimeter .... 49.2982 in
Percent full .... 20.0906 %

10 YR STORM EVENT
Channel Calculator

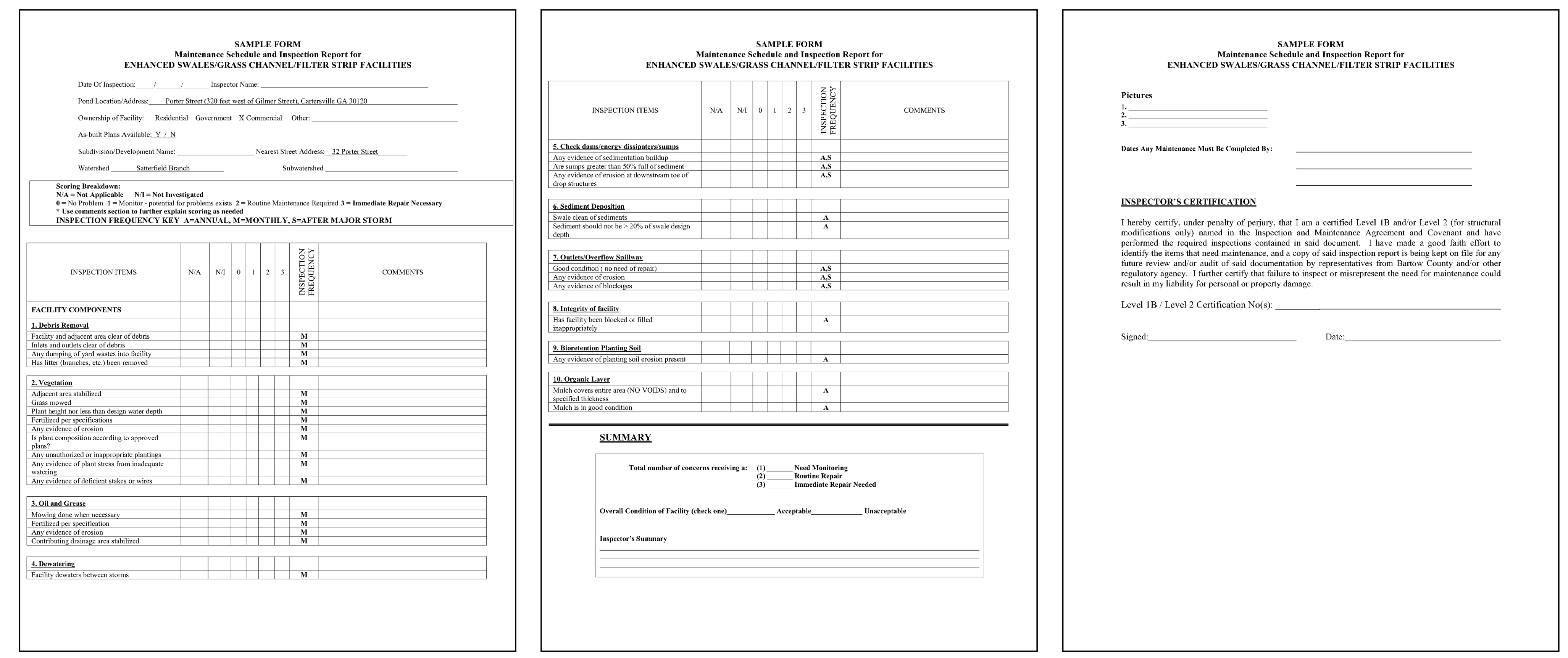
Given Input Data:
Shape .... Trapezoidal
Solving for .... Depth of Flow
Flowrate .... 1.2800 cfs
Slope .... 0.0250 ft/ft
Manning's n 0.0350
Height .... 12.0000 in
Bottom width .... 24.0000 in
Left slope .... 3.0000 ft/ft (V/H)
Right slope .... 3.0000 ft/ft (V/H)

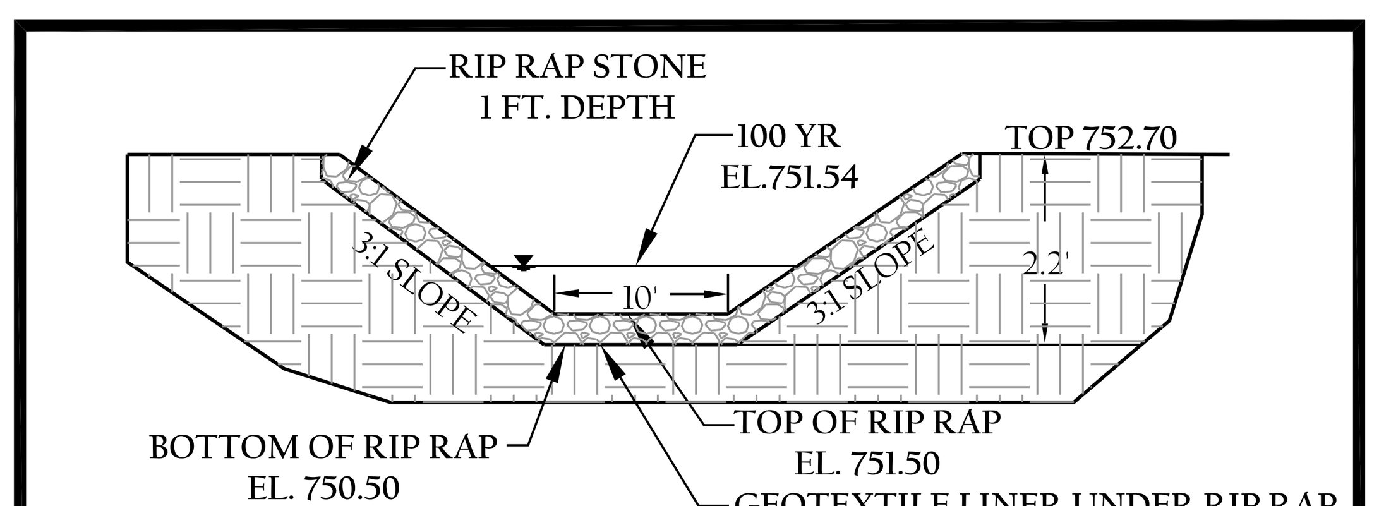
Computed Results:
Depth .... 3.0918 in
Velocity .... 2.3817 fps
Full Flowrate .... 10.7427 cfs
Flow area 0.5374 ft2
Flow perimeter .... 30.5181 in
Hydraulic radius .... 2.5359 in
Top width .... 26.0612 in
Area 2.3333 ft2
Perimeter .... 49.2982 in
Percent full .... 25.7652 %

POND MAINTENANCE SCHDULES



GRASS CHANNEL MAINTENANCE SCHDULES





RIP RAP LINING
OVERFLOW SPILLWAY
NOT TO SCALE

OVERFLOW SPILLWAY
(THERE IS NO OUTFLOW FOR THE 2 YR STORM)

25 YR STORM

Channel Calculator

Given Input Data:
Shape .... Trapezoidal
Solving for .... Depth of Flow
Flowrate .... 0.0800 cfs
Slope .... 0.0100 ft/ft
Manning's n 0.0350
Height .... 12.0000 in
Bottom width .... 24.0000 in
Left slope .... 3.0000 ft/ft (V/H)
Right slope .... 3.0000 ft/ft (V/H)

Computed Results:
Depth .... 0.7416 in
Velocity .... 0.6407 fps
Full Flowrate .... 6.7943 cfs
Flow area 0.1249 ft2
Flow perimeter .... 25.5634 in
Hydraulic radius .... 0.7034 in
Top width .... 24.4944 in
Area 2.3333 ft2
Perimeter .... 49.2982 in
Percent full .... 6.1799 %

100 YR STORM

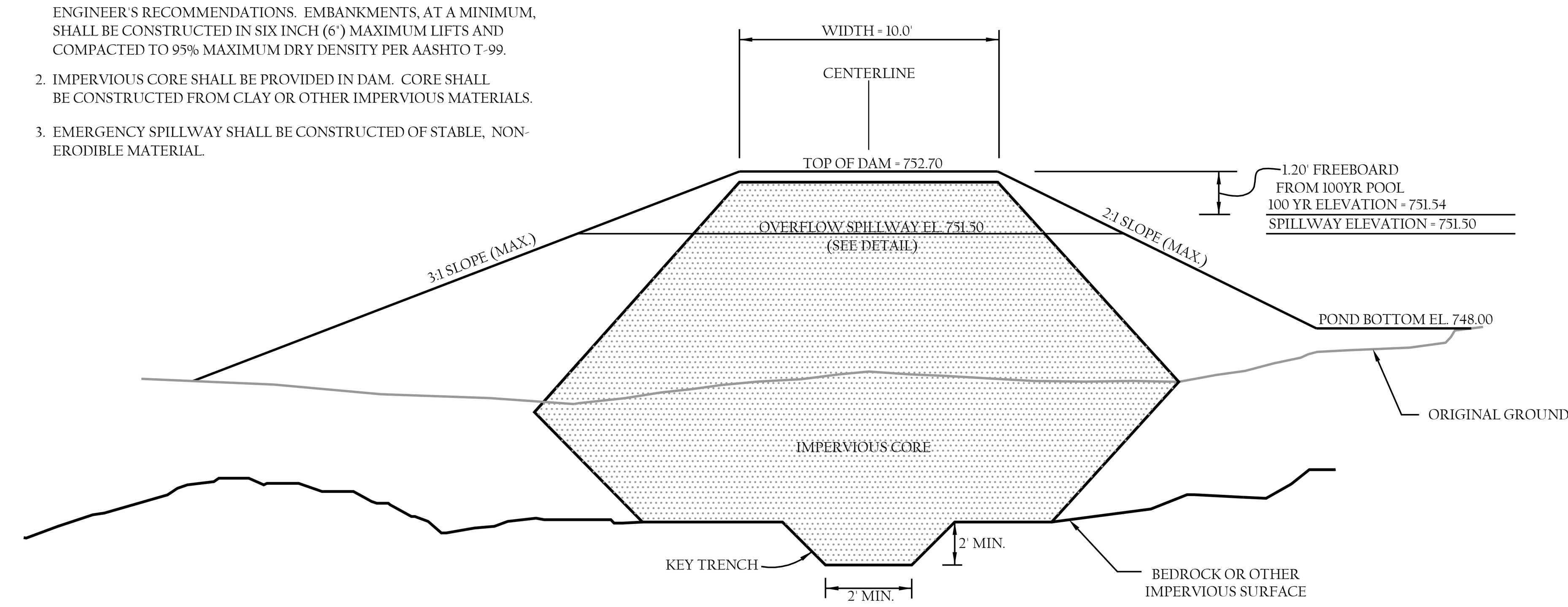
Channel Calculator

Given Input Data:
Shape .... Trapezoidal
Solving for .... Depth of Flow
Flowrate .... 0.4400 cfs
Slope .... 0.0100 ft/ft
Manning's n 0.0350
Height .... 12.0000 in
Bottom width .... 24.0000 in
Left slope .... 3.0000 ft/ft (V/H)
Right slope .... 3.0000 ft/ft (V/H)

Computed Results:
Depth .... 2.1129 in
Velocity .... 1.2138 fps
Full Flowrate .... 6.7943 cfs
Flow area 0.3625 ft2
Flow perimeter .... 28.4544 in
Hydraulic radius .... 1.8344 in
Top width .... 25.4086 in
Area 2.3333 ft2
Perimeter .... 49.2982 in
Percent full .... 17.6075 %

NOTES:

1. DAM EMBANKMENTS SHALL BE CONSTRUCTED PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS. EMBANKMENTS, AT A MINIMUM, SHALL BE CONSTRUCTED IN SIX INCH (6") MAXIMUM LIFTS AND COMPACTED TO 95% MAXIMUM DRY DENSITY PER AASHTO T-99.
2. IMPERVIOUS CORE SHALL BE PROVIDED IN DAM. CORE SHALL BE CONSTRUCTED FROM CLAY OR OTHER IMPERVIOUS MATERIALS.
3. EMERGENCY SPILLWAY SHALL BE CONSTRUCTED OF STABLE, NON-ERODIBLE MATERIAL.



POND - 1
EARTHFILL DAM DETAIL (Hmax = 10 FEET)

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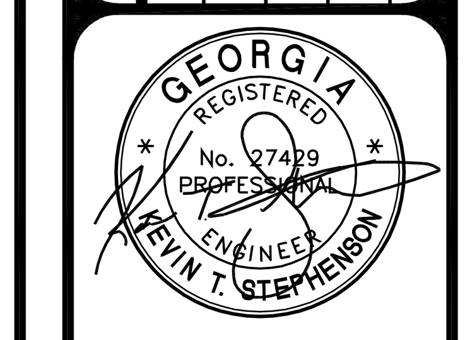
REVISION

DATE



ENGINEER GSWCC# 0000020715

OWNER/DEVELOPER:
Freddy Teems
24 Hour Contact: Freddy Teems
30 Amberidge Drive
Cartersville, Ga 30121
Phone: (770) 382-8166

Freddy Teems - Office Warehouse
Located in Land Lots 339, 4th District, 3rd Section
City of Cartersville, Bartow County, Georgia

PROJECT#
15-004

DATE
8-21-18

SHEET TITLE
Site Details

SHEET NO.
D3

SEEDING SCHEDULE

DS1 TEMPORARY STABILIZATION (MULCHING)

WHEN SEEDING WILL NOT HAVE A SUITABLE GROWING SEASON TEMPORARY STABILIZATION MAY BE ACCOMPLISHED WITH:

STRAW OR HAY TO BE APPLIED AT A DEPTH OF 2 TO 4 INCHES PROVIDING COMPLETE SOIL COVERAGE.

WOOD WASTE, BARK, SAWDUST-2-3" DEEP
(APPROX. 6-9 TONS/ACRE)

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. POLYETHYLENE FILM SHALL BE SECURED OVER BANKS OR STOCKPILED SOIL MATERIAL FOR TEMPORARY PROTECTION. THIS MATERIAL CAN BE SALVAGED AND RE-USED.

STRUCTURAL PRACTICES

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. (LABEL)
Sd1-S	SEDIMENT BARRIER	A barrier to prevent sediment from leaving the construction site. It may be sandbags,bales or straw or hay, brush,logs and poles,gravel,or a sediment fence. The barriers are usually temporary and inexpensive. TYPE (INDICATE TYPE)

VEGETATIVE MEASURES

Ds1	DISTURBED AREA STABILIZATION (MULCHING ONLY)	Establishing temporary protection for disturbed areas where seeding may not have a suitable growing season to produce an erosion retarding cover.
Ds2	DISTURBED AREA STABILIZATION (TEMPORARY SEEDING)	Establishing temporary vegetative cover with fast growing seedings on disturbed areas.
Ds3	DISTURBED AREA STABILIZATION (PERMANENT VEGETATION)	Establishing permanent vegetative cover such as trees,shrubs,vines, grasses,sod,or legumes on disturbed areas.

Ds1 NOTE: TEMPORARY STABILIZATION (MULCHING ONLY) WHEN SEEDING WILL NOT HAVE A SUITABLE GROWING SEASON MAY BE ACCOMPLISHED WITH: STRAW OR HAY-2.5 TONS/ACRE
WOOD WASTE, BARK, SAWDUST-2-3" DEEP
(APPROX. 6-9 TONS/ACRE)

DS2 TEMPORARY SEEDING

Table 6-4.1 - Temporary Cover or Companion Cover Crops
PLANT, PLANTING RATE, AND PLANTING DATE FOR TEMPORARY COVER OR COMPANION CROPS [1]

Species	Broadcast Rates: Rate Per Acre[2]	Pure Live Seed (PLS) Per 1000 sqft	Resource Area[3]	Remarks
BARLEY *Hordeum vulagre*				
alone	3 bu. (144 lbs)	3.3 lbs	M-L	14,000 seed per pound. Winter hardy. Use on productive soils.
in mixture	1/2 bu. (24lbs)	0.6 lb	P	
			C	
LESPEDEZA, ANNUAL *Lespedeza striata*				
alone	40 lbs	0.9 lb	M-L	200,000 seed per pound. May volunteer for several years. Use inoculant EL.
in mixture	10 lbs	0.2 lb	P	
			C	
LOVEGRASS, WEEPING *Eragrostis curvula*				
alone	4 lbs	0.1 lb	M-L	1,500,000 seed per pound. May last for several years. Mix with *Sericea lespedeza.*
in mixture	2 lbs	0.05 lb	P	
			C	
MILLET, BROWNTOP *Panicum fasciculatum*				
alone	40 lbs	0.9 lb	M-L	137,000 seed per pound. Quick dense cover. Will provide excessive competion in mixtures if seeded at high rate.
in mixture	10 lbs	0.2 lb	P	
			C	
MILLET, PEARL *Pennesetum glaucum*				
alone	50 lbs	1.1 lbs	M-L	88,000 seed per pound. Quick dense cover. May reach 5 feet in height. Not recommended for mixtures.
			P	
			C	
OATS *Avena sativa*				
alone	4 bu. (128 lbs)	2.9 lbs	M-L	13,000 seed per pound. Use on productive soils. Not as a winter hardy as rye or barley.
in mixture	1 bu. (32 lbs)	0.7 lb	P	
			C	
RYE *Secale cereale*				
alone	3 bu. (168 lbs)	3.9 lbs	M-L	18,000 seed per pound. Quick cover. Drought tolerant and winter hardy.
in mixture	1/2 bu. (28 lbs)	0.6 lb	P	
			C	
RYEGRASS, ANNUAL *Lolium temulentum*				
alone	40 lbs	0.9 lb	M-L	227,000 seed per pound. Dense cover. Very competitive and is not to be used in mixtures.
			P	
			C	
SUDANGRASS *Sorghum sudanese*				
alone	60 lbs	1.4 lbs	M-L	55,000 seed per pound. Good on droughty sites. Not recommended for mixtures.
			P	
			C	
TRITICALE *X-Triticosecale*				
alone	3 bu. (144 lbs)	3.3 lbs	C	Use on lower part of Southern Coastal Plain and in Atlantic Coastal Flatwoods only.
in mixture	1/2 bu. (24 lbs)	0.6 lb		
WHEAT *Triticum aestivum*				
alone	3 bu. (180 lbs)	4.1 lbs	M-L	15,000 seed per pound. Winter hardy.
in mixture	1/2 bu. (30 lbs)	0.7 lb	P	
			C	

Planting Dates by Resource Area (J F M A M J J A S O N D): Solid lines indicate optimum dates, dotted lines indicate permissible but marginal dates.

[1]Temporary cover crops are very competitive and will crowd out perennials if seeded too heavily
[2]Reduce seeding rates by 50% when drilled.
[3]M-L represents the Mountain; Blue Ridge; and Ridges and Valleys MLRAs
P represents the Southern Piedmont MLRA
C represents Southern Coastal Plan; Sand Hills; Black Lands; and Atlantic Coast Flatwoods MLRAs
(see Figure 6-4.1, p. 6-40)

DS3 PERMANENT SEEDING

Table 6-5.1. Fertilizer Requirements

TYPE OF SPECIES	YEAR	ANALYSIS OR EQUIVALENT N-P-K	RATE	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 0-10-10 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 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 0-10-10 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.

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Table 6-5.2- Permanent Cover Crops
PLANT, PLANTING RATE, AND PLANTING DATE FOR PERMANENT COVER [1]

Species	Broadcast Rates: Rate Per Acre[2]	Pure Live Seed (PLS) Per 1000 sqft	Resource Area[3]	Remarks
BAHIA, PENSACOLA *Paspalum notatum*				
alone or with temporary cover	60 lbs	1.4 lbs	P	166,000 seed per pound. Low growing. Sod forming. Slow to establish. Plant with a companion crop. Will spread nto bermuda pastures and awns. Mix with Sericea lespedeza or weeping lovegrass.
with other perennials	30 lbs	0.7 lb	C	
BAHIA, WILMINGTON *Paspalum notatum*				
alone or with temporary cover	60 lbs	1.4 lb	M-L	
with other perennials	30 lbs	0.7 lb	P	Same as above.
BERMUDA, COMMON *Cynodon dactylon*				
Hulled seed			P	
alone	10 lbs	0.2 lb	C	1,787,000 seed per pound. Quick cover. Low growing and sod forming. Full sun. Good for athletic fileds.
with other perennials	6 lbs	0.7 lb		
BERMUDA, COMMON *Cynodon dactylon*				
Unhulled seed				
with temporary cover	10 lbs	0.2 lb	P	Plant with winter annuals.
with other perennials	6 lbs	0.1 lb	C	Plant with Tall Fescue
BERMUDA SPRIGS *Cynodon dactylon*				
Coastal, Common, Midland, or Tift 44	40 cu ft or sod plugs 3' x3'	0.9 cu ft	M-L	A cubic foot contains approximately 650 sprigs. A bushel contains 1.25 cubic feet or approximately 800 springs.
Coastal, Common, of Tift 44			P C	Same as above.
Tift 78			C	Southern Coastal Plain only
CENTIPEDE *Eremochloa ophuiroides*				
	Block sod only		P C	Drought tolerant. Full sun or partial shade. Effective adjacent to concrete and in concentrated flow areas. Irrigation is needed until fully established. Do not plant near pastures. Winterhardy as far as north Athens and Atlanta
CROWNVETECH *Coronilla varia*				
with winter annuals or cool season grasses	15 lbs	0.3 lb	M-L P	100,000 seed per pound. Dense growth. Drought tolerant and fire resistant. Attractive rose, pink and white blossoms spring to late fall. Mix with 30 pounds of Tall fescue or 15 pounds of rye. Inoculate see with M inoculant. Use from North Atlanta and Northward.
FESCUE, TALL *Festuca arundinacea*				
alone	50 lbs	1.1 lb	M-L	227,000 seed per pound. Use alone only on better sites. Mix with perennial lespedezda or Crownvetch. Apply topdressing in spring following fall plantings. Not for heavy use areas or athletic fields.
with other perennials	30 lbs	0.7 lb	P	
KUDZU *Pueraria thumbergiana*				
Plants or crowns	3' - 7' apart		ALL	Rapid and vigorous growth. Excellent in gully erosion control. Will climb. Good livestock forage.
LESPEDEZA SERICEA *Lespedeza cuneata*				
scarified	60 lbs	1.4 lb	M-L P C	350,000 seed per pound. Widely adapted. Low maintenace. Mix with Weeping lovegrass, Common bermuda, bahia, or tall fescue. Takes 2 to 3 years to become fully established. Excellent on roadbanks. Inoculate seed with EL inoculant.
unscarified	75 lbs	1.7 lb	M-L P C	Mix with Tall fesue or winter annuals.
seed- bearing hay	3 tons	1338 lbs	M-L P C	Cut when seed mixture is mature, but before, it shatters. Add Tall fescue or winter annuals.
LESPEDEZA Ambro virgata *Lespedeza virgata DC* or Appalow *Lespedeza cuneata (Dumont) G. Don)*				
scarified	60 lbs	1.4 lb	M-L P C	300,000 seed per pound. Height of growth is 18 to 24 inches. Advantageous in urban areas. Spreading-type growth. New growth has bronze coloration. Mix with weeping lovegrass, common bermuda, bahia, tall fescue or winter annuals. Do not mix with Sericea lespedeza. Slow to develop solid stands. Inoculate seed with EL inoculant.
unscarified	75 lbs	1.7 lb	M-L P C	
LESPEDEZA, SHRUB *Lespedeza bicolor* *Lespedeza thumbergii*				
plants	3' x3'		M-L P C	Provide wildlife food and cover.
LOVEGRASS, WEEPING *Eragrostis curvula*				
alone	4 lbs	0.1 lb	M-L P	1,500,000 seed per pound. Quick cover. Drought tolerant. Grows well with Sericea lespedeza on roadbanks.
with other perennials	2 lbs	0.05 lb	C	
MAIDENCANE *Panicum hemitomon*				
sprigs	2' x 3' spacing	ALL		For very wet sites. May clog channels. Dig sprigs from local sources. Use along river banks and shorelines.
PANICGRASS, ATLANTIC COASTAL *Panicum amarum var amarukum*				
	20 lbs	0.5 lb	P C	Grows well on coastal sand dunes, borrow areas, and gravel pits. Provides winter cover for wildlife. Mix with Sericea lespedeza except on sand dunes.
REED CANARY GRASS *Phalaris arundinacea*				
alone	50 lbs	1.1 lb	M-L	
with other perrenials	30 lbs	0.7 lb	P	Grows similar to Tall fescue
SUNFLOWER, 'AZTEC' MAXIMILLIAN *Helianthus maximiliani*				
	10 lbs	0.2 lb	M-L P C	227,000 seed per pound. Mix with Weeping lovegrass or other low-grwoing grasses or legumes.

Planting Dates by Resource Area (J F M A M J J A S O N D): Solid lines indicate optimum dates, dotted lines indicate permissible but marginal dates.

1 Reduce seeding rates by 50% when drilled
2 PLS is an abbreviation for Pure Live Seed. Refer to Section V.E. of these specifications.
3 M-L represents to Mountain; Blue Ridge; and Ridges and Valleys MLRAs
P represents the Southern Piedmont MLRA
C represents the Souther Coastal Plain;Sand Hills;Black Lands;and Atlantic Coast Flatwoods MLRAs. See Figure 6-4.1

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CONSTRUCTION SCHEDULE

Note: Construction schedule is a general timeline from date the land disturbance permit is issued.

ACTIVITY	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
COMMENCEMENT OF CONSTRUCTION	X					
INITIAL EROSION CONTROL BMP INTSALLATION	X					
CLEARING GRUBBING & GRADING	X	X				
INTERMEDIATE EROSION CONTROL BMP'S		X				
GRASSING		X	X			
MAINTAIN SEDIMENT CONTROL MEASURES	X	X	X	X	X	X
INSTALL UNDERGROUND UTILITIES			X	X		
INSTALL PAVING				X		
BUILDING CONSTRUCTION					X	X
FINAL LANDSCAPING						X
FINAL PHASE OF ERO. AND SED. CONTROL PLAN						X
COMPLETION OF CONSTRUCTION						X

DS4 DISTURBED AREA STABILIZATION (WITH SODDING)

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 PROPERTY 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 BELOW:

FERTILIZER REQUIREMENTS

FERTILIZER TYPE	FERTILIZER RATE (LBS/ACRE)	FERTILIZER RATE (LBS/SQ. FT.)	SEASON
10-10-10	1000	0.025	FALL

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

INSTALLATION
LAY SOD WITH TIGHT JOINTS AND IN STRAIGHT LINES. DON'T OVERLAP JOINTS. STAGGER JOINTS AND DO NOT STRETCH SOD. 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" IMMEDIATLEY AFTER INSTALLTION. 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.

MULCH IS REQUIRED FOR ALL PERMANENT VEGETAION APPLICATIONS. MULCH APPLIED TO SEEDED AREAS SHALL ACHIEVE 75% SOIL COVER. SELECT THE MULCHING MATERIAL FROM THE FOLLOWING AND APPLY AS INDICATED:
1. DRY STRAW OR DRY HAY OF GOOD QUALITY ADN 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 2.5 TONS PER ACRES.
2. 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 HYDRAULIC SEDDING.
3. ONE THOUSAND POUNDS OF WEED CELLULOSE OR WOOD PULP FIBER, WHICH INCLUDES A TACKIFIER SHALL BE USED WITH HYDRAULIC SEEDING ON SLOPES 3/4:1 OR STEEPER.
4. SERICEA LESPEDEZA HAY CONTAINING MATURE SEED SHALL BE APPLIED AT A RATE OF THREE TONS PER ACRE.
5. 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.
6. WHEN USING TEMPROARY EROSION CONTROL BLANKETS OR BLOCK SOD, MULCH IS NOT REQUIRED.
7. 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.

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REVISION | DATE

GEORGIA REGISTERED PROFESSIONAL ENGINEER No. 27429 KEVIN T. STEPHENSON

ENGINEER GSWCC# 0000020715

OWNER/DEVELOPER:
Freddy Teems
24 Hour Contact: Freddy Teems
30 Amberidge Drive
Cartersville, Ga 30121
Phone: (770) 382-8166

Freddy Teems - Office Warehouse

Located in Land Lot 339, 4th District, 3rd Section
City of Cartersville,
Bartow County, Georgia

PROJECT# 15-004
DATE 8-21-18

SHEET TITLE
Details Sheet

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D4