# SITE DEVELOPMENT PLANS



FOR

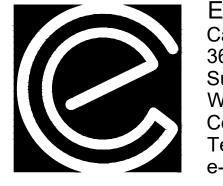
CHICK-FIL-A, INC.
3423 LAKE DISTRICT DR. W,
LAKELAND TN 38002

JANUARY 18, 2023



LOCATION MAP SCALE: N.T.S.

# DESIGN BY:



ENGINEER:
Carter Engineering Consultants, Inc. 3651 Mars Hill Road
Suite 2000
Watkinsville, Georgia 30677
Contact: Mark Campbell, P.E.
Tel.: (770) 725-1200
e-mail: mark@carterengineering.net

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**DEVELOPMENT DATA:** 

-OWNER: CHICK-FIL-A, INC.

-DEVELOPER: CHICK-FIL-A, INC.

SPECIFICATIONS, LATEST EDITION.

-ZONING: PD PLANNED DEVELOPMENT

-OWNER ADDRESS: 5200 BUFFINGTON RD., ATLANTA GA 30349

-DEVELOPER ADDRESS: 5200 BUFFINGTON RD., ATLANTA GA 30349

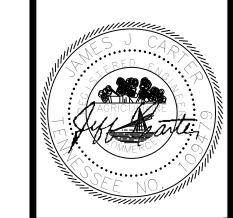
-ALL IMPROVEMENTS TO CONFORM WITH THE CITY OF LAKELAND TN

-SITE ADDRESS: 3423 LAKE DISTRICT DR. W, LAKELAND TN 38002

AND THE SHELBY COUNTY CONSTRUCTION STANDARDS AND

-SITE ACREAGE: 2.5 ACRES - DISTURBED AREA: 2.6 ACRES

-ENGINEER: CARTER ENGINEERING CONSULTANTS, Inc.



Atlanta Georgia, 30349-2998



ENGINEERING

CARTER ENGINEERING 3651 MARS HILL ROAD SUITE 2000 WATKINSVILLE, GA 30677

F: 770.725.1204 www.carterengineering.com

3423 Lake District Dr. W,

Lakeland TN 38002
SHEET TITLE

COVER

REVISION 1-2023

Job No. : <u>22036CF</u>A

Store : <u>05430</u>
Date : <u>01/16/2023</u>

Sheet

C-1.0

ANTICIPATED COMPLETE PROJECT DATE 10/31/2023

1. INSTALL EROSION CONTROL FENCE

2. DEMOLITION

3. CONSTRUCT STORM SYSTEM

4. CONSTRUCT WATER AND SEWER SYSTEM

5. FINE GRADE SITE

ANTICIPATED START PROJECT DATE 05/01/2023

6. INSTALL GRASSING AND MULCH (TEMPORARY VEGETATION)
7. CONSTRUCT BUILDING

7. CONSTRUCT BUILDING
8. INSTALL CURB AND GUTTER

CONSTRUCTION NOTES:

9. PAVE SITE

10. FINAL STABILIZATION (PERMANENT VEGETATION), CLEAN STORM DRAIN SYSTEM

11 MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES

ACTIVITY SCHEDULE									
ACTIVITI SCILEGOLE			MO	NTI	HS:	(20	23)		
		Star	t D	ate:	Ma	y 0	1, 2	023	3
TASK DESCRIPTION:	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER			
	1	2	3	4	2	9			
CONSTRUCTION EXIT AND PERIMETER SILT FENCE	X								
TEMPORARY SEDIMENT STORAGE FACILITIES	X								
CLEARING & GRUBBING									
ROUGH GRADING	X								
TEMPORARY STABILIZATION (GRASSING)		X							
CURB AND GUTTER		X	X						
GRAVEL SUBBASE FOR ROADS AND PARKING AREAS			X						
BUILDING CONSTRUCTION		X	X	X					
FINAL GRADING					X				
PAVING					X				

\*\*\*CAUTION\*\*\*

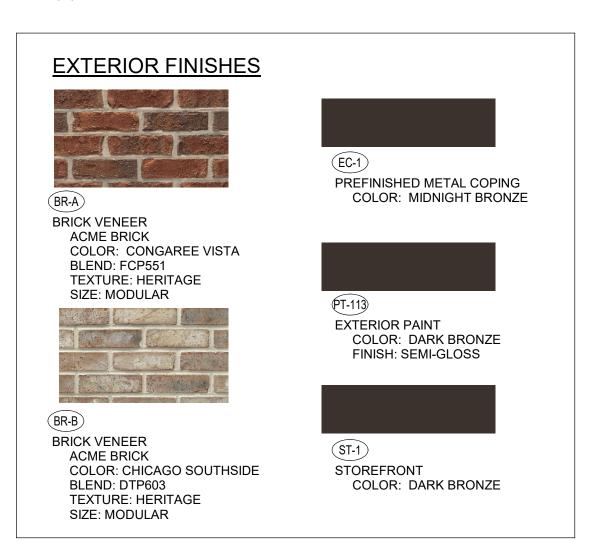
THE UTILITIES SHOWN HEREON ARE FOR THE CONTRACTORS CONVENIENCE ONLY. THERE MAY BE OTHER UTILITIES NOT SHOWN ON THESE PLANS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS SHOWN AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL UTILITIES WITHIN THE LIMITS OF THE WORK. ALL DAMAGE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





#### **EXTERIOR ELEVATION**

1" = 10'-0"







#### **EXTERIOR ELEVATION**

1" = 10'-0"



1" = 10'-0"



FRONT LEFT PERSPECTIVE VIEW



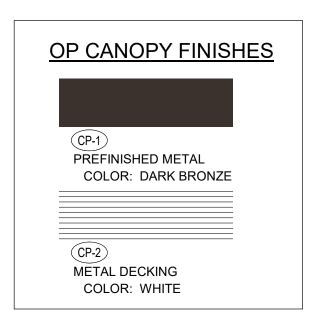
FRONT RIGHT PERSPECTIVE VIEW



REAR LEFT PERSPECTIVE VIEW



REAR RIGHT PERSPECTIVE VIEW





PERSPECTIVE VIEW





- NOTIFY THE INSPECTOR OF THE LOCAL GOVERNING AUTHORITY 24 HOURS BEFORE EVERY PHASE OF
- ALL WORK SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL CODES. ALL NECESSARY LICENSES AND PERMITS SHALL BE OBTAINED BY THE CONTRACTOR, AT HIS EXPENSE, UNLESS ALREADY OBTAINED BY THE OWNER.
- THE CONTRACTOR SHALL COORDINATE LOCATION AND INSTALLATION OF ALL UNDERGROUND UTILITIES AND APPURTENANCES TO MINIMIZE DISTURBING CURBING, PAVING, AND ALL OTHER UTILITIES. THE EXISTING UTILITIES SHOWN ARE FOR THE CONTRACTOR'S CONVENIENCE ONLY. THERE MAY BE OTHER UTILITIES NOT SHOWN ON THESE DRAWINGS. THE UTILITIES SHOWN ARE THOSE LOCATED BY THE

SURVEYOR OF RECORD. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATION OF THE

UTILITIES SHOWN. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATIONS OF ALL

UTILITIES WITHIN THE LIMITS OF WORK. ALL DAMAGE MADE TO EXISTING UTILITIES BY THE CONTRACTOR

- SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. DEVIATIONS FROM THESE PLANS AND SPECIFICATIONS WITHOUT PRIOR CONSENT OF THE ENGINEER AND THE MUNICIPALITY MAY CAUSE FOR THE WORK TO BE UNACCEPTABLE.
- ALL MATERIALS SHALL BE NEW UNLESS USED OR SALVAGED MATERIALS ARE AUTHORIZED BY THE
- 8. THE CONTRACTOR SHALL FURNISH AND MAINTAIN ALL NECESSARY BARRICADES AROUND THE WORK
- AND SHALL PROVIDE PROTECTION AGAINST WATER DAMAGE AND SOIL EROSION. ALL WORK SHALL BE PERFORMED IN A FINISHED AND WORKMANLIKE MANNER TO THE ENTIRE
- SATISFACTION OF THE OWNER, AND IN ACCORDANCE WITH THE BEST RECOGNIZED TRADE PRACTICES. . THE CONTRACTOR SHALL PROVIDE SHEETING AND SHORING FOR ALL TRENCH CONSTRUCTION IN ACCORDANCE WITH OSHA GUIDELINES.
- 11. ALL PIPE LENGTHS SHOWN ARE TO THE CENTERLINE OF THE STRUCTURES UNLESS SPECIFICALLY NOTED.
- 12. PIPES (STORM AND SANITARY SEWER) SHALL BE LAID ON SMOOTH, CONTINUOUS GRADES WITH NO VISIBLE BENDS AT THE JOINTS BEDDING REQUIREMENTS SPECIFIED HEREIN ARE TO BE CONSIDERED AS MINIMUM REQUIRED FOR
- RELATIVELY DRY STABLE EARTH CONDITIONS. ADDITIONAL BEDDING SHALL BE REQUIRED FOR ROCK TRENCHES TO PROVIDE SUCH ADDITIONAL BEDDING AS REQUIRED TO PROPERLY CONSTRUCT WORK.
- 14. ALL STORM DRAINAGE INLET STRUCTURES SHALL HAVE METAL RING AND COVER FOR ACCESS. 15. ALL ANGLES SHOWN ARE 90 DEGREES UNLESS SHOWN OTHERWISE.
- 16. ALL GRADES SHOWN ARE FINISHED GRADES. CONTRACTOR SHALL VERIFY DIMENSIONS, GRADES, AND EXISTING ELEVATIONS PRIOR TO CONSTRUCTION.
- 17. CONCRETE CURBS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAILS SHOWN ON PLANS. MATERIALS, EQUIPMENT, METHODS OF CONSTRUCTION AND WORKMANSHIP SHALL CONFORM TO STATE D.O.T. STANDARD SPECIFICATIONS.
- 18. ALL CONCRETE SHALL HAVE 3000 PSI COMPRESSIVE STRENGTH AFTER 28 DAYS, WITH A MAXIMUM SLUMP OF FOUR (4) INCHES, UNLESS SPECIFIED OTHERWISE.
- 19. ALL EXPOSED CONCRETE SHALL HAVE A FINE HAIR BROOMED FINISH.
- 0. PARKING AND DRIVEWAY BASE COURSE AND ASPHALTIC CONCRETE SURFACE AND PRIME MATERIALS, EQUIPMENT, METHODS FOR CONSTRUCTION AND WORKMANSHIP SHALL CONFORM TO STATE D.O.T.
- 21. CONTRACTOR TO FIELD VERIFY ALL STORM, SANITARY, WATER AND OTHER UTILITIES LOCATIONS AND INVERTS PRIOR TO INSTALLATION OF ANY UTILITIES. NOTIFY ENGINEER PRIOR TO PROCEEDING WITH ANY WORK IF DISCREPANCIES FOUND.
- 22. THE USE OF CONCRETE THRUST BLOCKS FOR THE INSTALLATION OF WATER MAINS IS STRICTLY PROHIBITED. PRESSURE PIPE FITTINGS AND OTHER ITEMS REQUIRING RESTRAINT SHALL BE RESTRAINED USING METHODS SPECIFIED AND APPROVED BY COUNTY/CITY TECHNICAL STANDARDS. SPECIFICATIONS AND REGULATIONS. THE PREFERRED METHOD OF RESTRAINT IS THROUGH THE USE OF "MEGA-LUGS" OR
- 23. ALL DIMENSIONS ARE MEASURED TO THE BACK OF CURB UNLESS OTHERWISE NOTED.

#### EARTHWORK SPECIFICATIONS

#### CLEARING AND GRUBBING

- CLEARING AND GRUBBING SHALL CONSIST OF CLEARING THE SURFACE OF THE GROUND OF THE DESIGNATED AREAS OF ALL TREES, LOGS, SNAGS, BRUSH, UNDERGROWTH, HEAVY GROWTH OF GRASS WEEDS, FENCE STRUCTURES, DEBRIS AND RUBBISH OF ANY NATURE, NATURAL OBSTRUCTIONS SUCH AS OBJECTIONABLE SOIL MATERIAL UNSATISFACTORY FOR FOUNDATIONS. IT SHALL ALSO CONSIST OF GRUBBING OF STUMPS, ROOTS FOUNDATIONS AND DISPOSAL OF ALL SUCH MATERIAL. ALL HOLES REMAINING AFTER THE GRUBBING OPERATION IN EMBANKMENT AREAS AND IN EXCAVATION AREAS LESS THAN TWO (2) FEET IN DEPTH, SHALL HAVE SIDES BROKEN DOWN AND LEVELED IF NECESSARY TO FLATTEN OUT SLOPES. REFILLED WITH ACCEPTABLE MATERIAL THAT IS PROPERLY COMPACTED IN LAYERS BY TAMPERS, ROLLERS OR CONSTRUCTION EQUIPMENT.
- BURNING ON SITE IS NOT PERMITTED WITHOUT WRITTEN APPROVAL OF THE LOCAL GOVERNING AUTHORITIES HAVING JURISDICTION.

#### EXISTING TREES OUTSIDE OF GRADING LIMITS LINE:

TREES AND VEGETATION TO BE SAVED SHALL BE PROTECTED FROM DAMAGE BY A FENCE BARRICADE PRIOR TO, OR DURING, CLEARING OPERATIONS. TREES TO BE REMOVED FROM THE AREA OUTSIDE THE LIMITS OF GRADING OR FROM SPECIFICALLY DESIGNATED AREAS WITHIN THE CONSTRUCTION AREAS. IF, IN THE OPINION OF THE ENGINEER, A CONTRACTOR DAMAGES A TREE NOT TO BE REMOVED, THE CONTRACTOR WILL BE FINED A PREDETERMINED AMOUNT FOR EACH DAMAGED TREE. THE CONTRACT SHALL ALSO BE RESPONSIBLE FOR ALL COSTS ASSOCIATED IN REMOVING THE DAMAGED TREE FROM THE

#### FILL:

- ALL VEGETATION SUCH AS ROOTS, BRUSH, HEAVY GROWTH OF GRASS, TOPSOIL, ALL DECAYED VEGETABLE MATTER, RUBBISH, AND OTHER UNSUITABLE MATERIAL WITHIN THE AREA UPON WHICH FILL IS TO BE PLACED SHALL BE STRIPPED OR BE OTHERWISE REMOVED BEFORE THE FILL OPERATION IS STARTED. IN NO CASE SHALL UNSUITABLE MATERIAL REMAIN IN OR UNDER THE FILL AREA. SLOPED GROUND SURFACE STEEPER THAN ON VERTICAL TO FOUR HORIZONTAL. ON WHICH FILL IS TO BE PLACED, SHALL BE PLACED, STEPPED OR BENCHED IN SUCH A MANNER THAT THE FILL TO BE PLACED SHALL BE 97 PERCENT OF THE MAXIMUM LABORATORY DRY DENSITY ACCORDING TO STANDARD PROCTOR (AASHTO T99, ASTM D-698), MOISTURE CONTENT SHALL BE WITHIN 3 PERCENT OF THE OPTIMUM MOISTURE CONTENT. PROOF ROLL THE AREAS TO BE FILLED OR ON WHICH STRUCTURES ARE TO BE PLACED. A LOADED DUMP TRUCK OR OTHER RUBBER TIRED EQUIPMENT SHALL BE USED FOR PROOF ROLLING. OVERLAPPING PASSES OF A VEHICLES SHOULD BE MADE ACROSS THE SITE IN ONE DIRECTION AND THEN PERPENDICULAR TO THE ORIGINAL DIRECTION OF ROLLING.
- 2. ANY YIELDING, PUMPING OR SOFT AREAS SHOULD BE CUT OUT AND REPLACED WITH FILL COMPACTED
- THE PROPOSED FILL SHOULD BE LIMITED TO SOILS CLASSIFIED IN ACCORDANCE WITH ASTM D-2487 AS GM, GC, SW, SM, SC, ML AND CL. SOIL CLASSIFIED AS PT, OH, OL, CH AND MH ARE NOT SATISFACTORY AS COMPACTED FILL
- FILLS AND EMBANKMENTS SHALL BE CONSTRUCTED AT THE LACTATIONS AND TO THE LINES AND GRADES INDICATED ON CONSTRUCTION PLANS. THE SLOPE SHALL NOT EXCEED 2 FOOT HORIZONTAL TO 1 FOOT VERTICAL (3 FOOT HORIZONTAL TO 1 FOOT VERTICAL IN THE PUBLIC RIGHT OF WAY). THE COMPLETED FILL SHALL CORRESPOND TO THE SHAPE OF THE TYPICAL SECTIONS INDICATED ON THE CONSTRUCTION PLANS. MATERIAL REMOVED FROM THE EXCAVATION SHALL BE USED IN FORMING THE FILL. FILL MATERIAL SHALL BE REASONABLY FREE FROM ROOTS, OTHER ORGANIC MATERIAL, TRASH AND STONES HAVING MAXIMUM DIMENSIONS GREATER THAN 6 INCHES (4 INCHES IN TRENCHES FOR UTILITIES). NO FROZEN MATERIAL WILL BE PERMITTED IN THE FILL. STONES HAVING A MAXIMUM DIMENSION OF 4 INCHES WILL NOT BE PERMITTED IN THE UPPER SIX INCHES OF FILL OR EMBANKMENT OR UTILITY TRENCH. THE MATERIAL SHALL BE PLACED IN SUCCESSIVE HORIZONTAL LAYERS NOT MORE THAN 8 INCHES THICK. UNLESS OTHERWISE NOTED. IN LOOSE DEPTH FOR THE WIDTH OF THE CROSS-SECTION AND SHALL BE COMPACTED TO AT LEAST 97 PERCENT OF THE MAXIMUM LABORATORY DRY DENSITY ACCORDING TO STANDARD PROCTOR (ASTM D-698, AASHTO T-99). MOISTURE SHALL BE WITHIN 3 PERCENT OF THE OPTIMUM MOISTURE CONTENT. THE TOP 12 INCHES OF THE PAVING, PARKING AND/OR ROADWAY SUB-GRADE SHALL BE COMPACTED TO 97 PERCENT OF THE MAXIMUM DRY DENSITY (STANDARD PROCTOR). EACH LIFT SHALL BE ROLLED WITH A VIBRATORY ROLLER, A SHEEPSFOOT ROLLER, OR A LOADED RUBBER TIRED DUMP TRUCK, SCRAPER OR LOADER. IF THE SOIL IS TOO DRY, A WATER TRUCK WITH SPREADER BAR OR SPRAY HOSE SHALL BE USED TO BRING THE SOIL TO THE PROPER MOISTURE RANGE. THE WATER SHALL BE THOROUGHLY AND PROPERLY MIXED WITH THE SOIL PRIOR TO
- STORM DRAIN PIPES SHALL BE PLACED ON FIRM BOTTOM AND HAND TAMPED TO SAFE UP THE PIPE. A CUSHION OF SOIL SHALL BE TAMPED ABOVE THE CROWN OF THE PIPE IN ACCORDANCE WITH THE PIPE MANUFACTURER'S RECOMMENDATIONS SO THAT THE HEAVIER COMPACTION EQUIPMENT CAN THEN BE USED TO BRING THE SOIL TO A DENSITY AS DESCRIBED ABOVE FOR FILL AREAS.
- IF SOILS INVESTIGATION REPORT IS PROVIDED, THEN FOLLOW THE RECOMMENDATIONS OF THE REPORT IF THEY EXCEED THE RECOMMENDATIONS OF THESE SPECIFICATIONS. TOPSOIL:
- UNLESS OTHERWISE SPECIFIED, AREAS DESIGNATED FOR GRADING OPERATIONS THAT CONTAIN A BLANKET OF TOPSOIL SHALL BE STRIPPED AND PLACED IN CONVENIENT STOCKPILES FOR LATER USE AS A TOPSOIL BLANKET ON THE NEW GRADED AREAS SPECIFIED HEREIN, OR AS DESIGNATED, TOPSOIL SHALL BE STRIPPED FROM ALL AREAS DESIGNATED TO RECEIVE FILL. THE STRIPPING OF MATERIAL FOR TOPSOIL SHALL BE CAREFULLY DETERMINED AND ONLY THE QUANTITY REQUIRED SHALL BE STOCKPILED. MATERIAL STOCKPILED SHALL BE STORED IN A SATISFACTORY MANNER TO AFFORD PROPER DRAINAGE. WHEN GRADING OPERATIONS PERMIT, INSTEAD OF STOCKPILING, THE TOPSOIL SHALL BE HAULED AND SPREAD DIRECTLY ON THE AREAS DESIGNATED TO RECEIVE TOPSOIL.

#### ROCK EXCAVATION:

1. IF ROCK IS ENCOUNTERED, CLEAR AWAY EARTH TO EXPOSE MATERIAL. NOTIFY OWNER AND RECEIVE WRITTEN INSTRUCTIONS PRIOR TO EXCAVATION, REMOVE ROCK TO A DEPTH OF 6 INCHES BELOW AND 8 INCHES ON EACH SIDE OF PIPES IN TRENCHES. A MEASUREMENT OF EXTENT OF ROCK TO BE REMOVED SHALL BE MADE. ROCK EXCAVATION SHALL BE PAID FOR IN ACCORDANCE WITH AGREEMENT WITH THE

#### DEMOLITION NOTES

#### EXISTING STRUCTURES & FACILITIES:

- 1. THE LOCATIONS OF ALL EXISTING FACILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER / LANDSCAPE ARCHITECT ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR ON-SITE LOCATIONS OF EXISTING UTILITIES.
- 2. THE CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR, SUPERVISION AND EQUIPMENT REQUIRED FOR THE ORDERLY DEMOLITION AND REMOVAL OF EXISTING STRUCTURES, PAVEMENT, AND UTILITIES AS SHOWN ON THE DRAWINGS AND DESCRIBED HEREIN.
- 3. THE CONTRACTOR IS REQUIRED TO FAMILIARIZE HIM/HERSELF WITH THE STRUCTURES TO BE DEMOLISHED. A BRIEF DESCRIPTION OF THE STRUCTURES PROPOSED TO BE INSTALLED AND DEMOLISHED ARE INCLUDED FOR THE CONTRACTOR'S CONVENIENCE ONLY.
- 4. THE FOLLOWING LIST OF STRUCTURES REQUIRING DEMOLITION IS INCLUDED FOR THE CONTRACTOR'S CONVENIENCE ONLY. THE DRAWINGS INDICATE THE SCOPE OF THE DEMOLITION WHERE DEMOLITION IS REQUIRED (SEE CORRESPONDING PLANS):
- 4.1. DEMOLITION AND REMOVAL OF EXISTING ON-SITE ASPHALT, CONCRETE, PAVING, AND CURBING TO LIMITS OF DISTURBANCE/DEMOLITION AS SHOWN ON THE CORRESPONDING PLANS. CONTRACTOR TO VERIFY AND COORDINATE ANY DISCREPANCIES AND/OR CONCERNS WITH ENGINEER/LANDSCAPE ARCHITECT ACCORDINGLY.
- 5. ALL ON-SITE UNDERGROUND STRUCTURES AND PIPING MUST BE COMPLETELY REMOVED AND OVER-EXCAVATED BY A MINIMUM OF 12" BENEATH THE STRUCTURES. CONTRACTOR SHALL USE APPROVED FILLING MATERIAL FOR FILLING THESE AREAS. FILL SHALL BE CLEAN WITH LESS THAN 50% PASSING THE #200 SIEVE, PLASTICITY INDEX LESS THAN 10, WITH MAXIMUM PARTICLE SIZE OF 1.25 INCHES, AND SHALL BE PLACED IN LOOSE LIFTS NOT EXCEEDING 8 INCHES IN THICKNESS AND COMPACTED TO AT LEAST 98% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (AASHTO T99).
- 6. ALL EXISTING STRUCTURES, PAVEMENTS, SLABS, FOUNDATIONS, STEPS AND OTHER EXISTING FEATURES INDICATED ON THE DRAWINGS TO BE REMOVED SHALL BE DEMOLISHED AND REMOVED BY THE CONTRACTOR. REMOVE NO STRUCTURE SUBSTANTIALLY AS A WHOLE. DEMOLISH COMPLETELY ON THE
- 7. ALL EXISTING SEWERS, PIPING, UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT LOCATION. OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES. CONTRACTOR SHALL GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICE LINES AND CAP ALL LINES BEFORE PROCEEDING WITH THE WORK.
- 8. CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION FOR PERSON AND PROPERTY AT ALL TIMES. HE OR SHE SHALL EXECUTE THE WORK IN A MANNER THAT AVOIDS HAZARDS TO PERSONS AND PROPERTY AND THAT PREVENTS INTERFERENCE WITH THE USE AND ACCESS TO ADJACENT PROPERTIES, BUILDINGS, AND ADJACENT STREETS, STREETS AND SIDEWALKS SHALL NOT BE BLOCKED BY DEBRIS AND
- 9. CONTRACTOR MUST STOP OPERATION AND NOTIFY THE OWNER FOR PROPER DIRECTION IF ANY ENVIRONMENTAL OR HEALTH RELATED CONTAMINATE IS ENCOUNTERED DURING THE DEMOLITION AND/OR EXCAVATION PROCESS.

#### DISPOSAL:

10. REMOVE AND LEGALLY DISPOSE OF ALL OTHER RUBBISH, RUBBLE, AND DEBRIS. ALL REFUSE AND MISCELLANEOUS ITEMS TO BE REMOVED, THAT ARE NOT TO BE STOCKPILED FOR LATER USE ON THE PROJECT OR DELIVERED TO THE OWNER. SHALL BE LEGALLY DIPOSED OF OFF-SITE BY THE CONTRACTOR IN ACCORDANCE WITH ANY AND ALL APPLICABLE LAWS, STANDARDS, AND REGULATIONS SET FORTH BY LOCAL, STATE, AND FEDERAL OFFICIALS THAT GOVERN THE DISPOSAL OF WASTE AND DEBRIS.

#### PAVEMENT REMOVAL:

- 11. WHERE EXISTING PAVEMENT IS TO BE REMOVED, CONTRACTOR SHALL SAW-CUT THE SURFACING LEAVING A UNIFORM AND STRAIGHT EDGE WITH THE MINIMAL DISTURBANCE POSSIBLE TO THE REMAINING ADJACENT SURFACING. IF CONSTRUCTION RESULTS IN RAVELING OF THE SAW-CUT SURFACE, RECUT BACK FROM THE RAVELED EDGE PRIOR TO RESTORATION.
- 12. WHERE EXISTING PAVEMENT, CURB, CURB AND GUTTER, SIDEWALK, DRIVEWAY OR VALLEY GUTTER IS TO BE REMOVED FOR THE PURPOSE OF CONSTRUCTION OR REMOVING BOX CULVERTS, PIPE, INLETS. MANHOLES, APPURTENANCES, FACILITIES OR STRUCTURES, SAID PAVEMENT, ETC., THE SAID OR PROPOSED STRUCTURE SHALL BE REPLACED AND RESTORED IN EQUAL OR BETTER CONDITION THAN THE ORIGINAL. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY LABOR, MATERIALS, EQUIPMENT, TOOLS, SUPPLIES, AND ANY OTHER NECESSARY EQUIPMENT AS REQUIRED BY PROJECT AND SITE REQUIREMENTS.

#### ACCESS:

13. CONTINUOUS ACCESS SHALL BE MAINTAINED FOR THE SURROUNDING PROPERTIES AT ALL TIMES DURING THE DEMOLITION PROCESS OF THE EXISTING FACILITIES AND SITE.

# PERMITTING:

- 14. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ANY REQUIRED PERMITTING FOR DEMOLITION WITH ALL REQUIREMENTS PRIOR TO COMMENCING OF DEMOTION WORK.
- 15. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE THE EXTENT OF DEMOLITION REQUIRED IN ORDER TO PERFORM THE CONTRACT WORK FOR THIS PROJECT. THE CONTRACTOR SHALL CONDUCT SITE VISITS AND SHALL EXAMINE ALL OF THE INFORMATION WITHIN THESE DOCUMENTS AND ALL DISCREPANCIES AND/OR OMISSIONS SHALL BE BROUGHT TO THE ATTENTION OF THE LEAD ENGINEER/ARCHITECT PRIOR TO BID SUBMITTAL.
- 16. CONTRACTOR SHALL LIMIT ALL DEMOLITION ACTIVITY TO THAT AREA DELINEATED IN THE DRAWING AND APPROVED BY OFFICIALS.
- 17. ALL OTHER EXISTING UTILITIES INCLUDING BUT NOT LIMITED TO STORM DRAINAGE, GAS, ELECTRIC, TELEPHONE, AND WATER & SEWER SHALL BE PRESERVED AND PROTECTED AT ALL TIMES AS NEEDED

#### STAKING AND SURVEYING NOTES

#### STAKING:

- 1. THE CONTRACTOR SHALL PERFORM ALL CONSTRUCTION STAKING AND CONSTRUCTION ACTIVITIES BASED ON THE LATEST APPROVED DESIGN PLANS AND/OR DESIGN FILE(S) AS PROVIDED AND AS WARRANTED BY CLIENT AND PROJECT NEEDS.
- 2. PRIOR TO COMMENCING CONSTRUCTION STAKING OR CONSTRUCTION ACTIVITIES, THE CONTRACTOR AND/OR STAKING SURVEYOR SHALL CONFIRM WITH THE PROJECT LEAD ENGINEER/ARCHITECT, WHO'S RESPONSIBLE FOR THIS PROJECT, THAT THE LATEST PLANS AND/OR DESIGN FILE(S) ARE BEING UTILIZED.
- 3. THE ENGINEER/LANDSCAPE ARCHITECT IS NOT RESPONSIBLE FOR OWNERS, CONTRACTORS OR SURVEYORS STAKING OR PERFORMING CONSTRUCTION ACTIVITIES BASED ON OUT-OF-DATE DESIGN
- 4. CONSTRUCTION STAKING SHALL ADHERE TO THE HORIZONTAL AND VERTICAL DATUM LISTED IN THIS CONSTRUCTION SET AND AS PROVIDED IN THE CORRESPONDING FILES, NOTES, AND/OR DRAWINGS.

#### TOLERANCES & DISCREPANCIES:

- 5. IF, DURING CONSTRUCTION STAKING OR CONSTRUCTION ACTIVITIES, SURVEY DISCREPANCIES ARE ENCOUNTERED WITH REGARD TO THE DESIGN PLANS OR DESIGN FILE, WORK SHOULD CEASE AND THE LEAD ENGINEER/LANDSCAPE ARCHITECT SHOULD BE NOTIFIED IMMEDIATELY TO RESOLVE THE ISSUE OR ISSUES. THE ENGINEER / LANDSCAPE ARCHITECT CAN NOT BE HELD RESPONSIBLE OR LIABLE FOR ISSUES THAT THEY HAVE NOT RECEIVED NOTIFICATION.
- 6. THE CONSTRUCTION TOLERANCES SHOWN IN THE CORRESPONDING DRAWINGS, NOTES, AND/OR FILES, IN GENERAL, REPRESENT INDUSTRY STANDARDS. HOWEVER, EXCEPTIONS CAN BE MADE IF IT DETERMINED THAT CERTAIN DEVIATED CONSTRUCTION ACTIVITIES DO NOT ADVERSELY AFFECT THE DESIGN REQUIREMENTS OR FUNCTIONALITY. THE LEAD ENGINEER/LANDSCAPE ARCHITECT WILL EVALUATE CONSTRUCTION ACTIVITIES THAT DEVIATE FROM THE DESIGN PLANS ON A CASE-BY-CASE BASIS. IF IT IS DETERMINED THAT THE CERTAIN DEVIATED CONSTRUCTION ACTIVITIES DO ADVERSELY AFFECT THE DESIGN REQUIREMENTS, FUNCTIONALITY, AND INTENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING OR REPAIRING ALL ITEMS TO THE PLANS AND SPECIFICATIONS AS DETERMINED AND REQUIRED BY DESIGN PROFESSIONAL, AT THE CONTRACTOR'S EXPENSE.

# CIVIL ENGINEERING DESIGN TOLERANCES FOR PROJECT:

GENERAL GRADING:	±0.10 FEET	RETAINING WALLS:	±0.05 FEET
ALL PIPE/CONDUITS:	±0.05 FEET	SITE FEATURES (SPOT ELEV., ETC.)	±0.05 FEET
DRAINAGE STRUCTURES:	±0.05 FEET	UTILITY ELEVATIONS:	±0.10 FEET
SANITARY SEWER STRUCTURES:	±0.05 FEET	EROSION CONTROL BMPS:	±0.05 FEET
STORMWATER POND FEATURES:	±0.05 FEET		

#### AS-BUILT & SPECIFICATIONS:

- 7. THE ENGINEER/LANDSCAPE ARCHITECT SHOULD BE PROVIDED WITH AN AS-BUILT SURVEY OF THE PROJECT FOR REVIEW AND APPROVAL AFTER THE PROJECT IS COMPLETE. CONTRACTOR IS RESPONSIBLE FOR COORDINATING EFFORTS WITH DESIGN PROFESSIONAL
- 8. SEE THE PROJECT SPECIFICATIONS FOR ADDITIONAL SITE SPECIFIC REQUIREMENTS REGARDING CONSTRUCTION, MATERIALS, TESTING, AND CERTIFICATIONS.

#### PROJECT GEOGRAPHICAL INFORMATION

#### PROJECT PROJECTION & DATUM:

HORIZONTAL DATUM: \*NAD83 GEORGIA STATE PLANES, WEST ZONE, US FOOT VERTICAL DATUM: \*NORTH AMERICAL VERTICAL DATUM OF 1988 (NAVD88)

#### BOUNDARY SURVEY:

SURVEYOR NAME: \*JOHN DOE, GA RLS #XXXXX

#### DATE OF SURVEY: \*SURVEY DATE TRACT OR PARCEL:

HORIZONTAL DATUM: \*NAD83 GEORGIA STATE PLANES, WEST ZONE, US FOOT VERTICAL DATUM: \*NORTH AMERICA VERTICAL DATUM OF 1988 (NAVD88)

#### TOPOGRAPHIC SURVEY:

SURVEYOR NAME: \*JOHN DOE, GA RLS #XXXXX

#### DATE OF SURVEY: \*SURVEY DATE

TRACT OR PARCEL: \* HORIZONTAL DATUM: \*NAD83 GEORGIA STATE PLANES, WEST ZONE, US FOOT VERTICAL DATUM: \*NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

#### GEOGRAPHICAL INFORMATION SYSTEMS (GIS) DATA UTILIZED:

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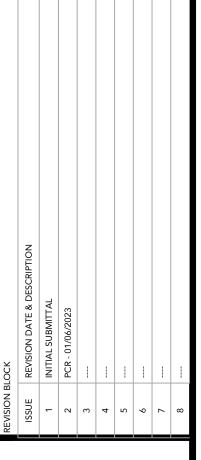
#### GEORGIA COMP. R. & REGS. R. 180-6-.09:

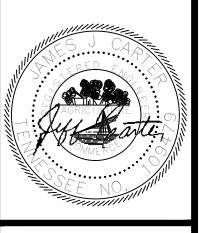
THE TOPOGRAPHIC AND ELEVATION DATA SHOWN HEREON WAS OBTAINED FROM \*TOPOGRAPHIC DATA UTILIZED FOR DESIGN AND IS NOT CERTIFIED AS CORRECT BY THIS ENGINEER. USERS OF THIS DATA DO SO AT THEIR OWN RISK.



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Atlanta Georgia 30349-2998







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STORE # 05430

www.carterengineering.com

F: 770.725.1204

3423 Lake District Dr. W, Lakeland TN 38002

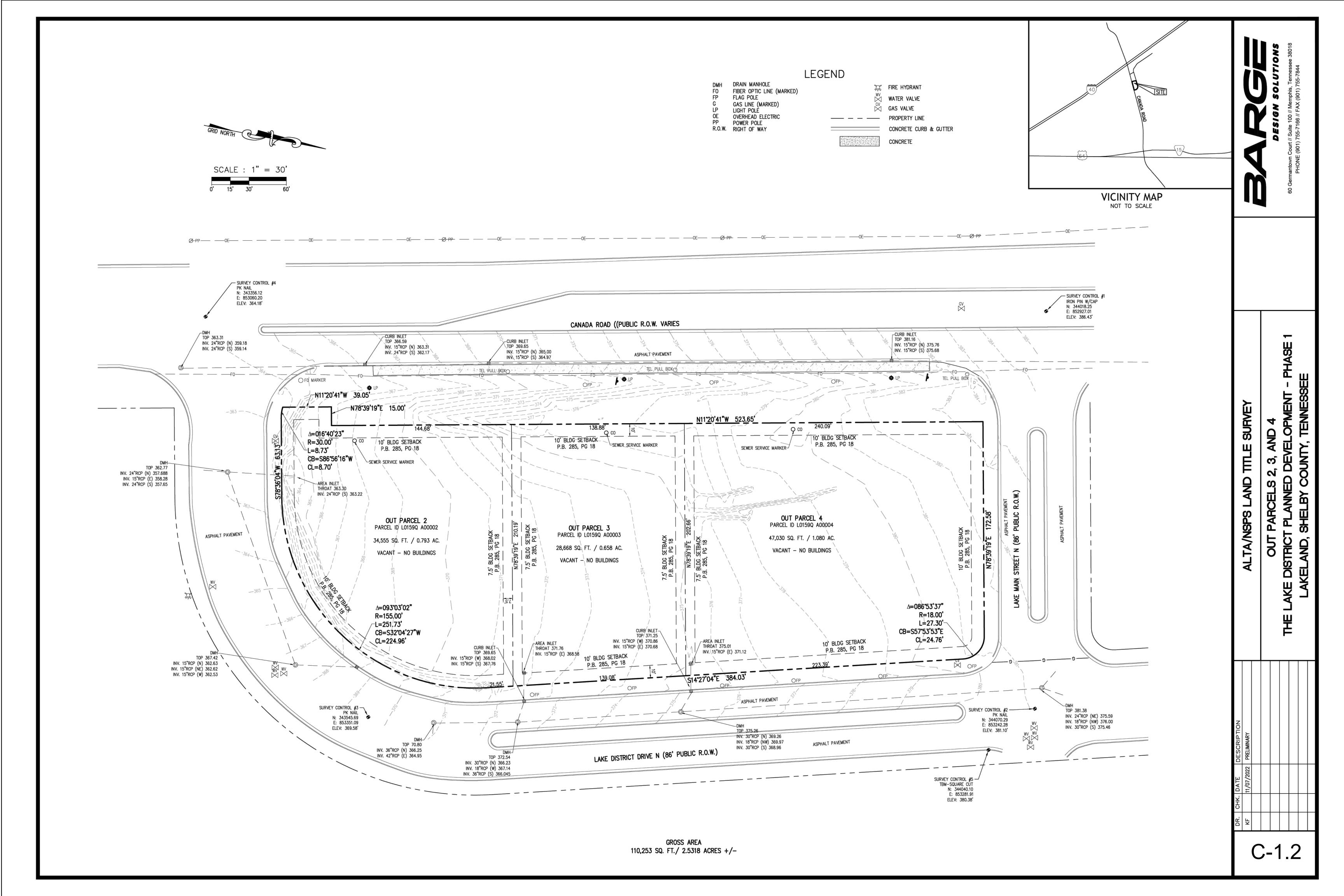
GENERAL

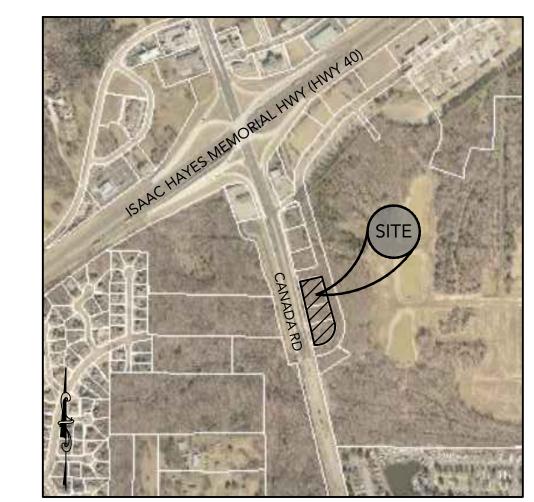
SHEET TITLE

REVISION 1-2023

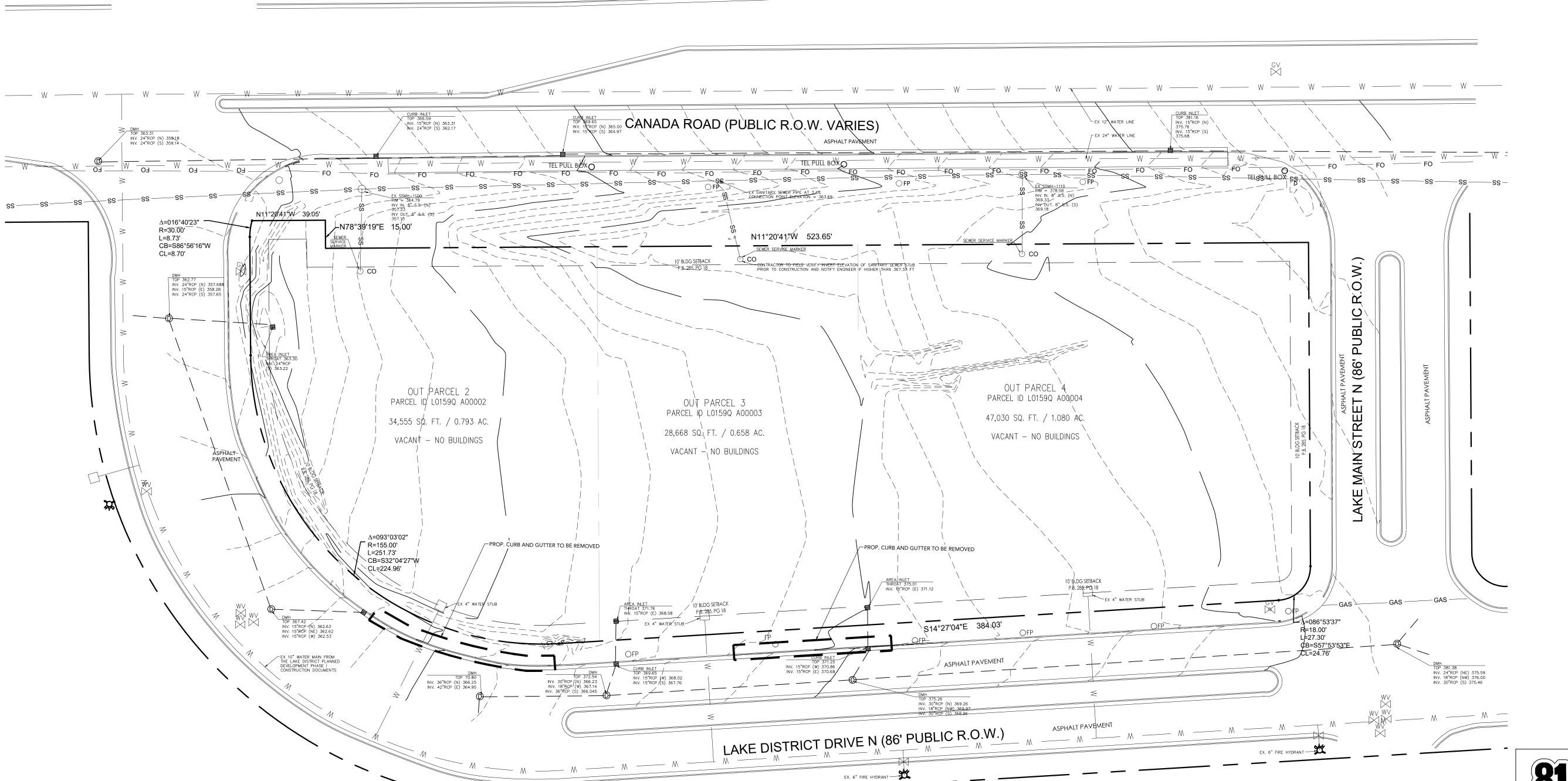
Job No. : 22036CFA

 $\cdot 01/18/2023$ 

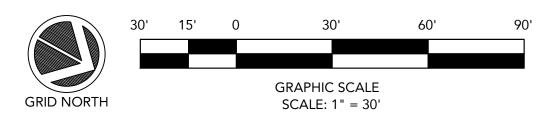




LOCATION MAP SCALE: N.T.S.

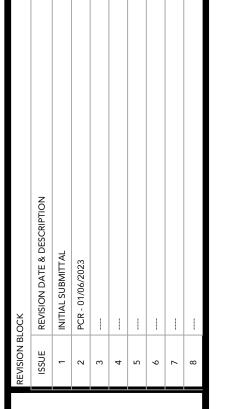


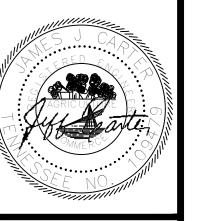






Atlanta Georgia, 30349-2998







# ENGINEERING CARTER ENGINEERING

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STORE # 05430

3423 Lake District Dr. W, Lakeland TN 38002

SHEET TITLE

DEMOLITION PLAN

REVISION 1-2023

Job No. : <u>22036CF</u>A Store : <u>05430</u>

Store : 05430 Date : 01/18/2023

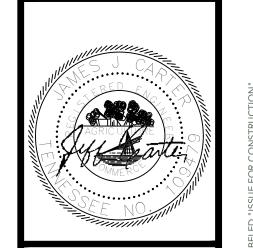
Sheet

C-1.3

SCALE: N.T.S.



**LOCATION MAP** 



Atlanta Georgia,

30349-2998



ENGINEERING

CARTER ENGINEERING 3651 MARS HILL ROAD SUITE 2000 WATKINSVILLE, GA 30677 P: 770.725.1200 F: 770.725.1204

www.carterengineering.com STORE # 05430

3423 Lake District Dr. W, Lakeland TN 38002

SHEET TITLE

SITE PLAN

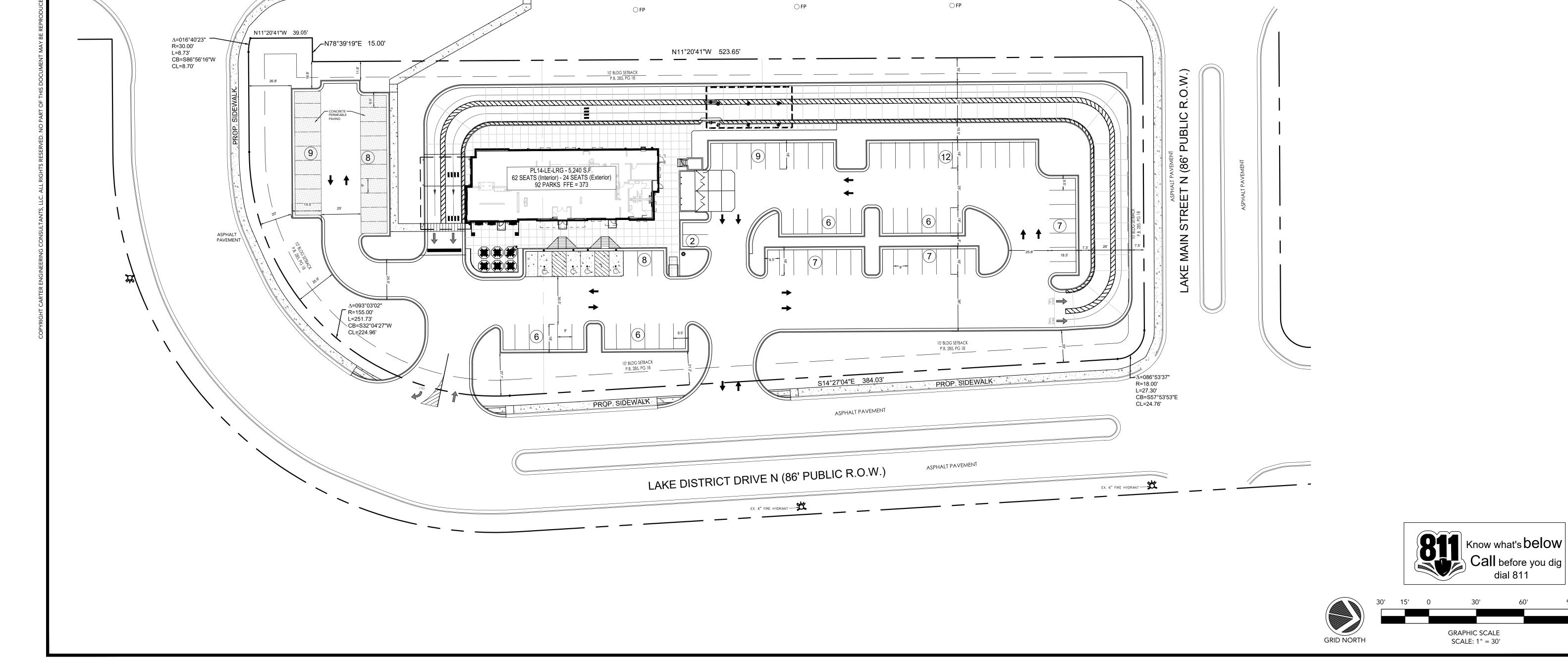
OVERALL

REVISION 1-2023

Job No. : <u>22036CF</u>A

: <u>05430</u> Store :01/18/2023

GRAPHIC SCALE SCALE: 1" = 30'



PARKING DATA:

- 0.5/ EMPLOYEE AT LARGEST SHIFT + 0.25/ SEAT OR

(No use shall provided greater than 10% over the min. parking requirement without incorporating at least 2 of the mitigation design features. One the frontage buffer shall be increased in 30% using the adjacent side and

rear buffer. Two, the interior parking lot landscaping shall be increased by 10% over the min. requirements.)

(VARIANCE REQUIRED FOR MORE THAN APPROXIMATELY
64 PARKING SPACES) III.Zoning Regulation Sec.6-Parking,
Loading, Access part B-2.C.d (VARIANCE APPROVED 12/19/22)

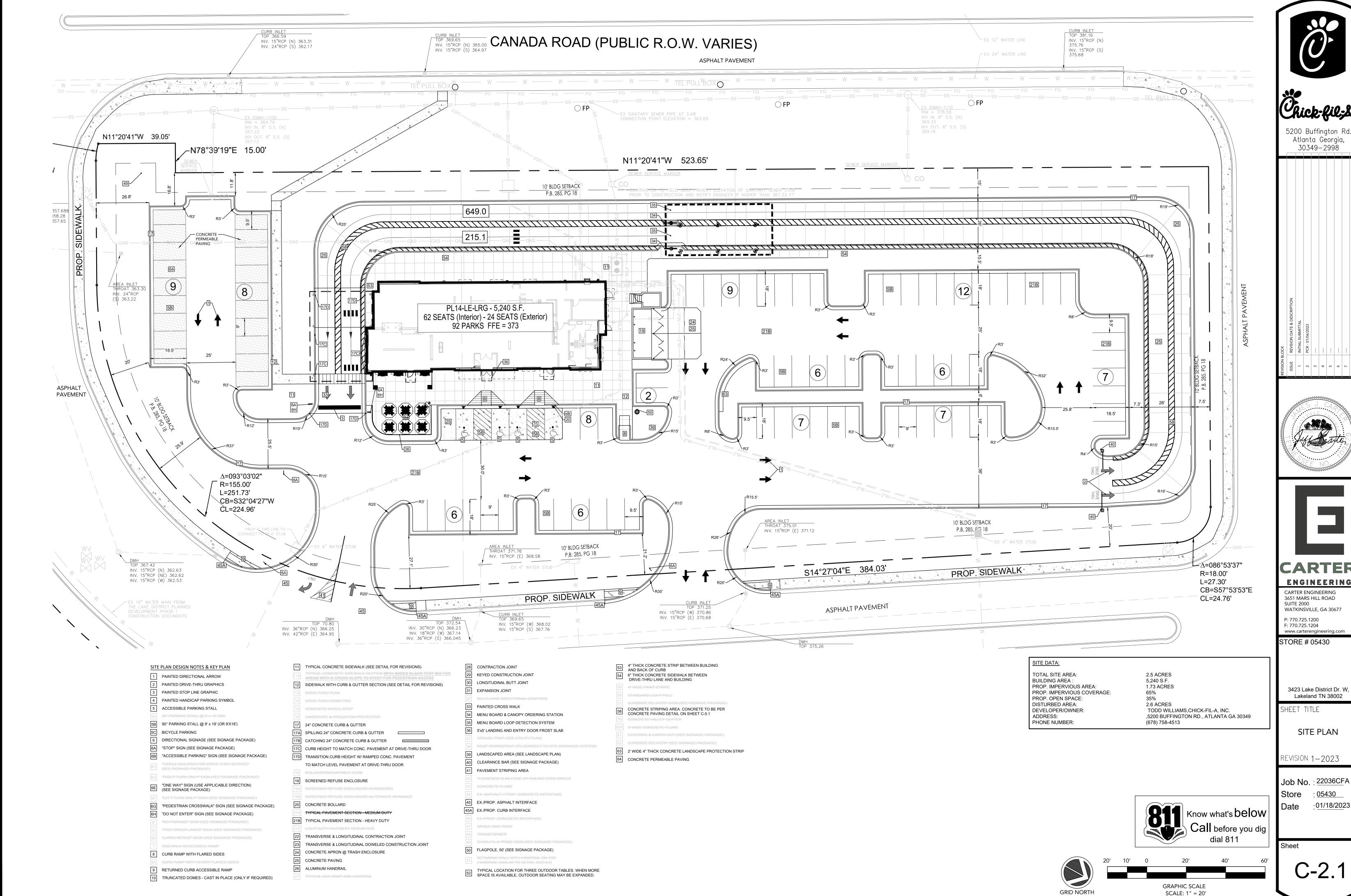
-147 BUILDING / 4 PLUS 24 EMPLOYEES / 2 = 49 MIN. REQUIRED - 30% X 49 = 15 ADDITIONAL SPACES = 64 SPACES REQUIRED

BUILDING CAPACITY, WHICHEVER IS LARGER.

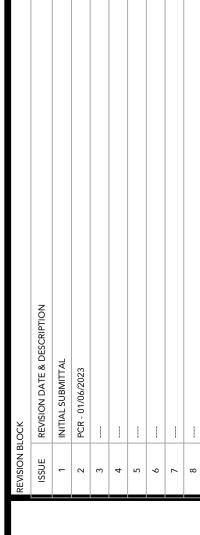
- PROPOSED 92 SPACES TOTAL

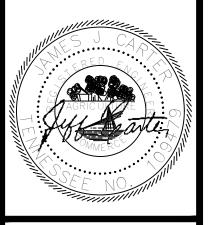
CANADA ROAD (PUBLIC R.O.W. VARIES)

(88 REGULAR, 4 ADA)



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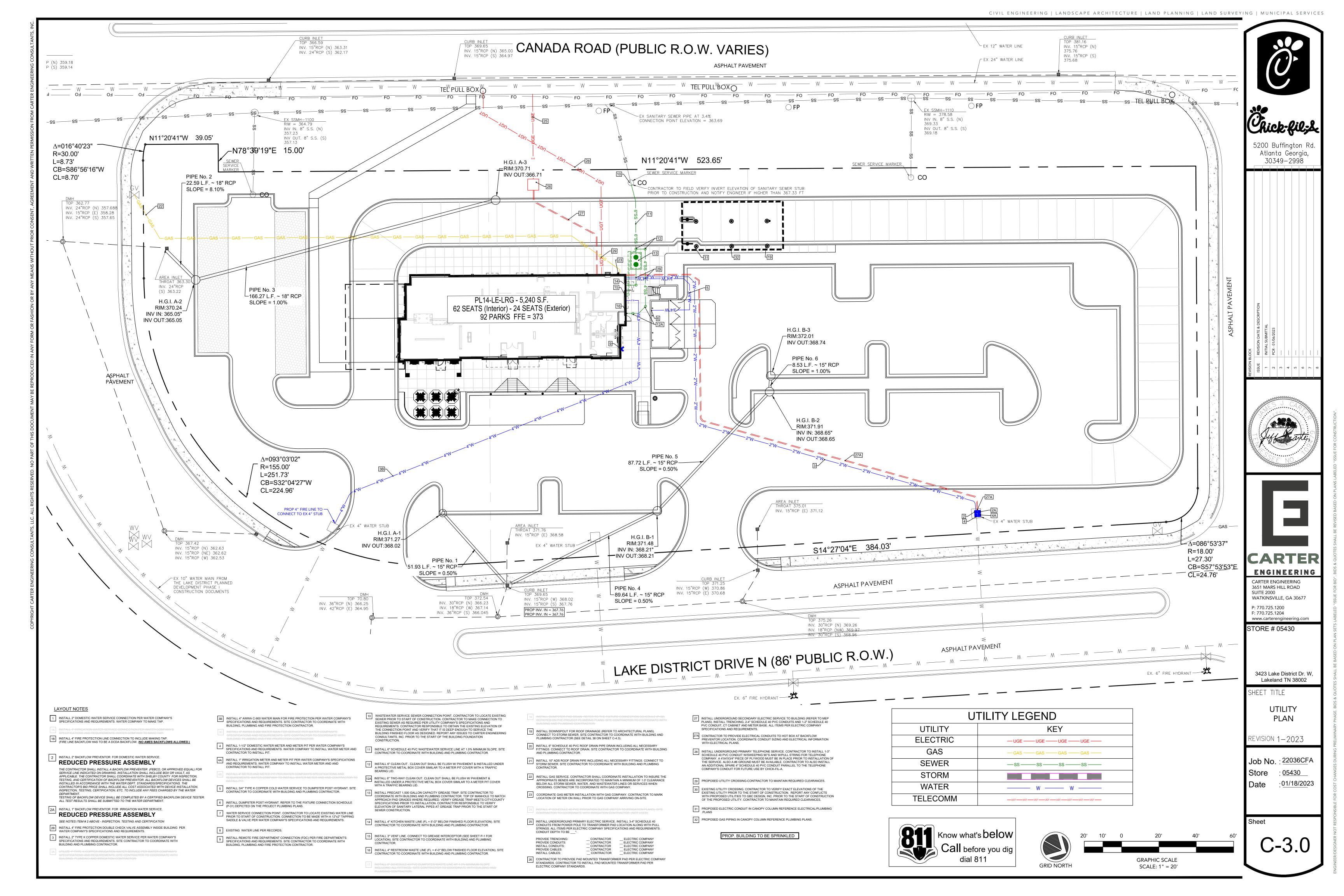
ENGINEERING **CARTER ENGINEERING** 3651 MARS HILL ROAD

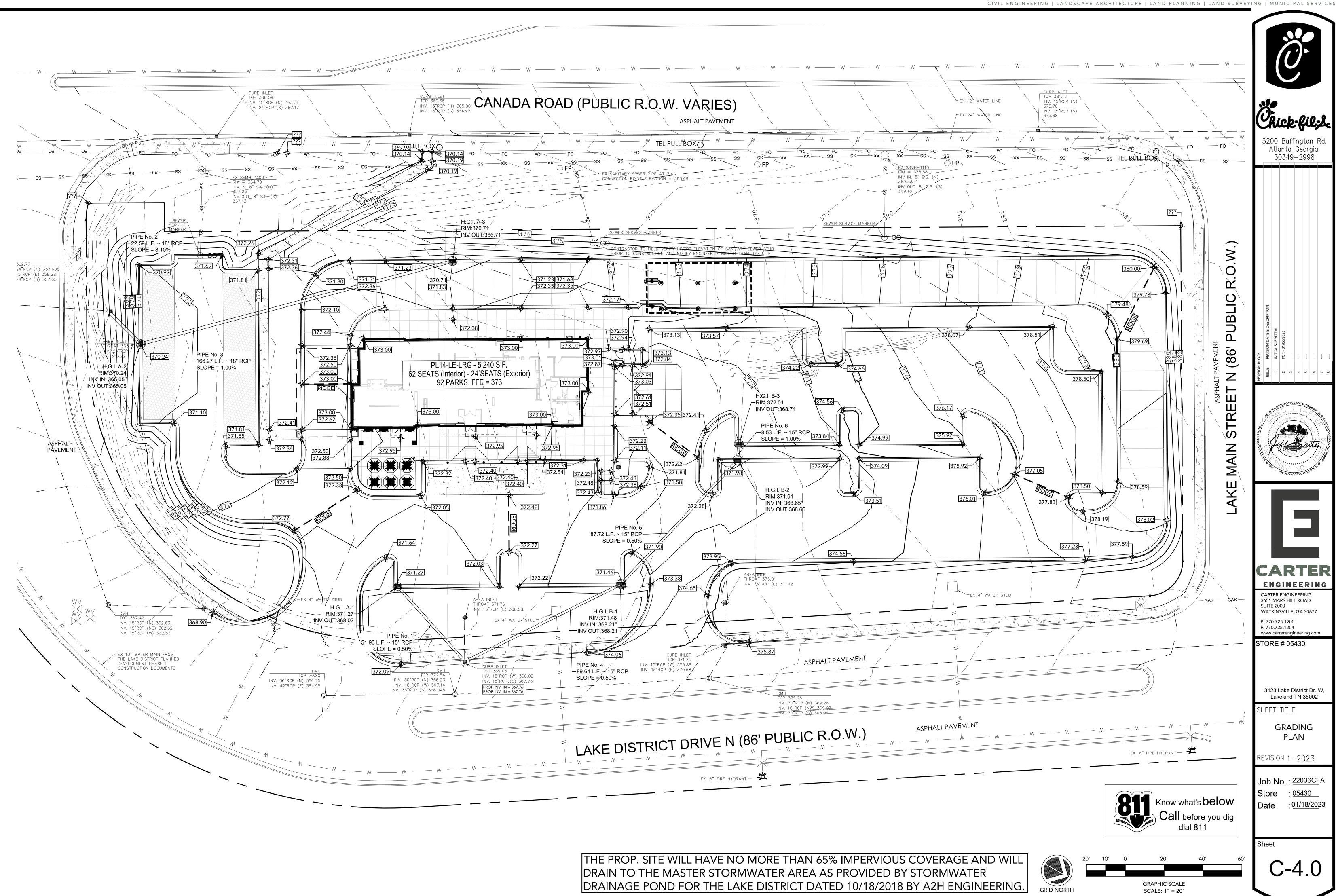
WATKINSVILLE, GA 30677 www.carterengineering.com

STORE # 05430

3423 Lake District Dr. W, Lakeland TN 38002

Job No. : <u>22036CF</u>A





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ENGINEERING CARTER ENGINEERING 3651 MARS HILL ROAD

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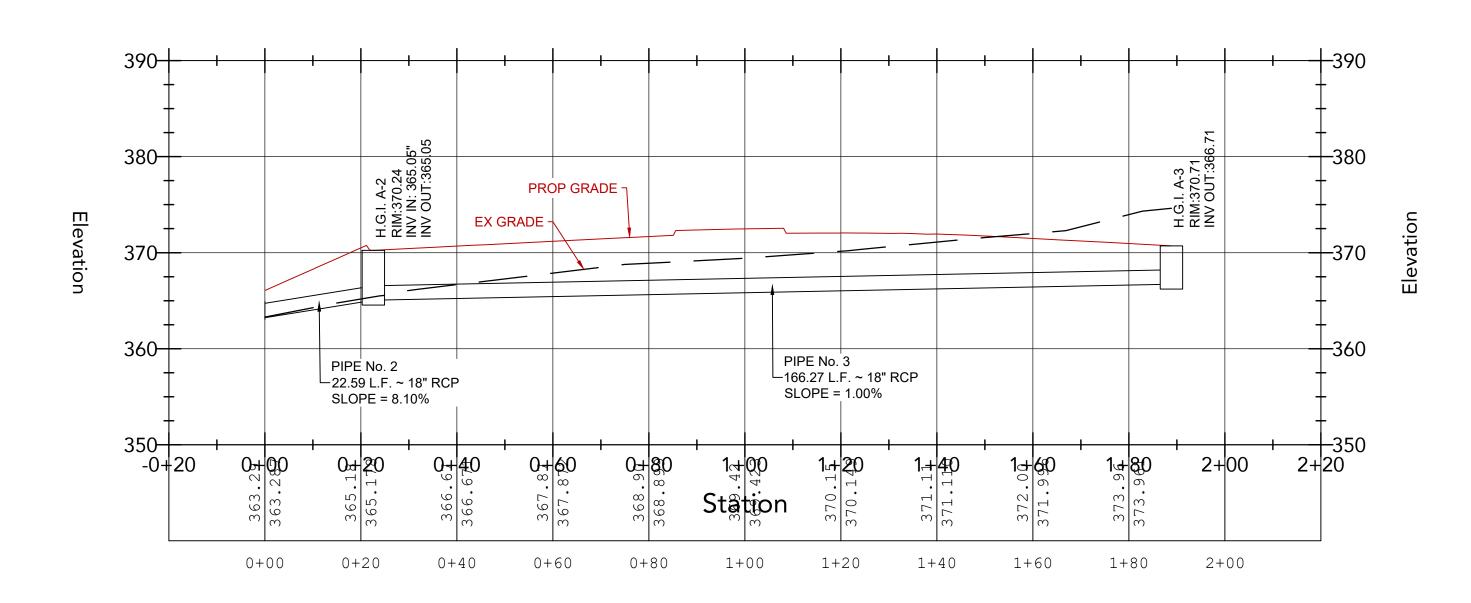
GRADING PLAN

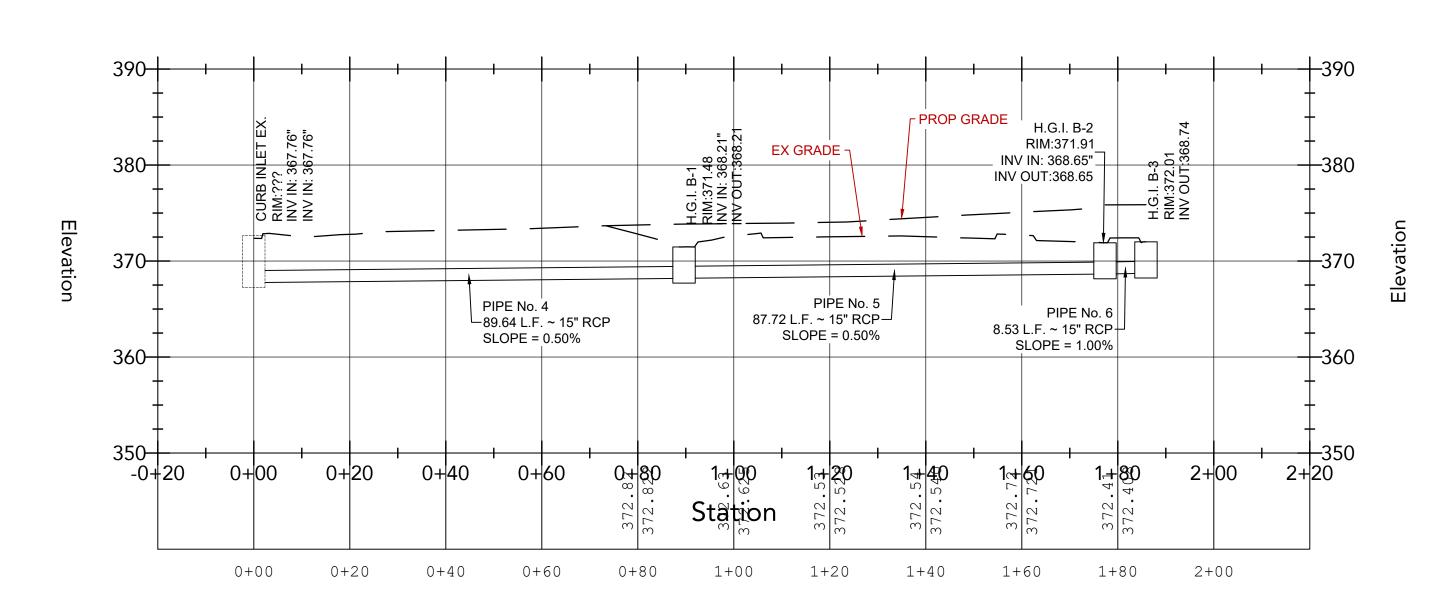
REVISION 1-2023

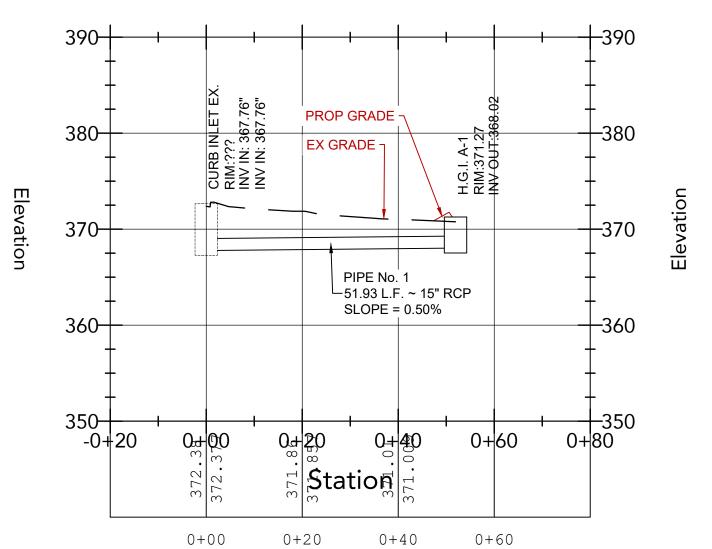
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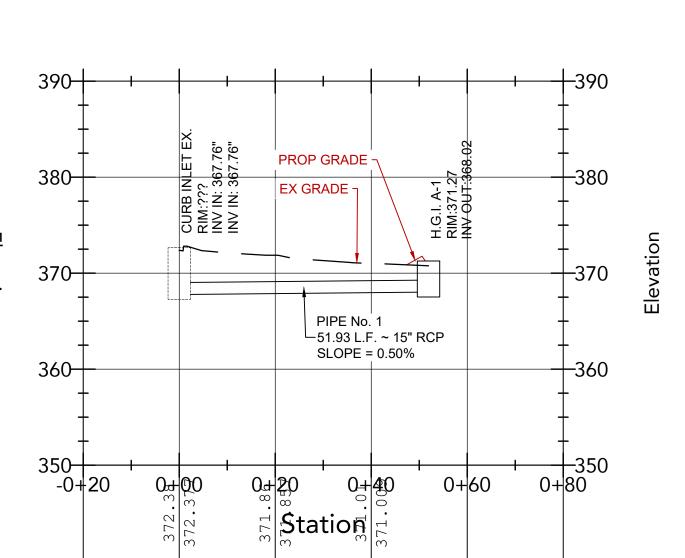
Store : <u>05430</u> :01/18/2023

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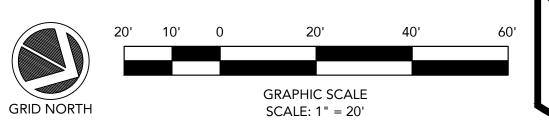




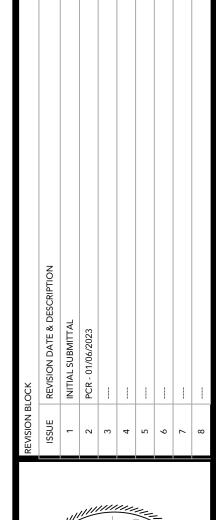


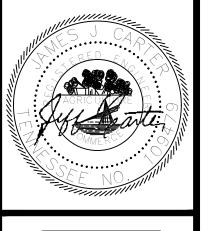














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SHEET TITLE

PIPE PROFILES

REVISION 1-2023

Job No. : 22036CFA

Store :01/18/2023



TEMPORARY SEDIMENT TRAP A				
	Contour	Calculated		
Elevation	Area	Storage		
	(s.f.)	(c.y.)		
367.00	1,282	0.00		
368.0	1,769	56.50		
369.00	2,312	132.07		
369.5	2,605	177.60		

CB=S32°04'27"W

DMH TOP 367.42 INV. 15"RCP (N) 362.63 INV. 15"RCP (NE) 362.62 INV. 15"RCP (W) 362.53

EMPORAI	RY SEDIME	NT TRAP B		Phase I Inlet	Sediment Trap	Calculations		
	Contour	Calculated	Structure ID				Ex. Curb Inlet 371.25	
Elevation	Area	Storage	Drainage Area (acres)	0.09	0.10	0.46	0.19	
	(s.f.)	(c.y.)	Volume Required (cu. Ft.)	170	177	840	344	
366.00	1,242	0.00	Excavated Depth (ft.)	1.5	1.5	2.5	1.5	
367.0	1,705	54.57	Required Excav. Diameter (ft.)	13.0	13.0	21.0	18.0	TOTAL
368.00	2,224	127.33	Volume Provided (cu. Ft.)	199	199	866		1646 C.F
369.0	2,800	220.37	Volume i Tovided (od. i t.)	100	100	000	302	60.96 C.YD
369.50	3,110	275.09						00.00 0.10

EROSION CONTROL NOTES:

DEVELOPER/OWNER: TODD WILLIAMS, CHICK-FIL-A, INC., 5200 BUFFINGTON RD., ATLANTA GA 30349 . NAME AND PHONE NUMBER OF THE 24-HOUR CONTACT PERSON FOR EROSION, SEDIMENTATION AND POLLUTION CONTROLS

IS: TODD WILLIAMS (678) 758-4513 TOTAL PROJECT AREA = 2.5 ACRES . TOTAL DISTURBED AREA = 2.6 ACRES

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. EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES SHALL BE MAINTAINED AT ALL TIMES. IF FULL

IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION AND SEDIMENT CONTROL, SEDIMENT STORAGE MAINTENANCE INDICATORS MUST BE INSTALLED IN SEDIMENT STORAGE STRUCTURES, INDICATING THE

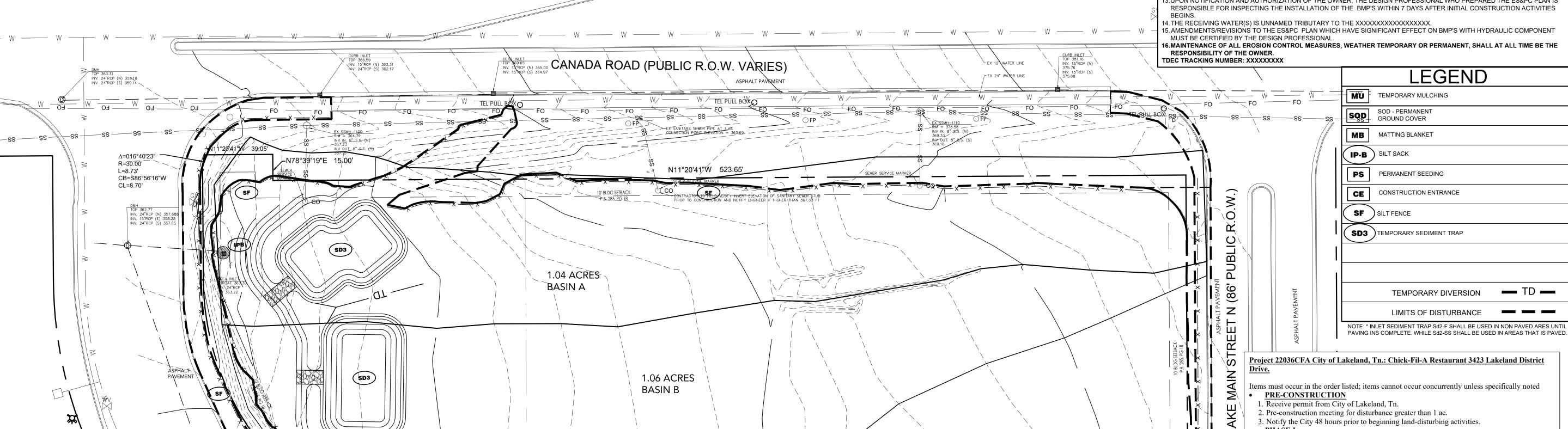
FULL VOLUME. . MAINTENANCE OF ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES, WHETHER TEMPORARY OR PERMANENT, SHALL AT ALL TIMES BE THE RESPONSIBILITY OF THE PROPERTY OWNER.

. ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.

10. ALL FILL SLOPES SHALL HAVE SILT FENCE PLACED AT THE SLOPE'S TOE. I1.CONCENTRATED FLOW AREAS AND ALL SLOPES STEEPER THAN 2.5:1 WITH A HEIGHT OF TEN FEET OR GREATER SHALL BE STABILIZED WITH APPROPRIATE EROSION CONTROL MATTING OR BLANKET.

2.THE PROFESSIONAL WHO SEALS THIS PLAN CERTIFIES UNDER PENALTY OF LAW THAT THIS PLAN WAS PREPARED AFTER A SITE VISIT TO THE LOCATIONS DESCRIBED HEREIN BY THE PROFESSIONAL OR THE PROFESSIONAL'S AUTHORIZED AGENT, UNDER THE PROFESSIONAL'S DIRECT SUPERVISION.

I3.UPON NOTIFICATION AND AUTHORIZATION OF THE OWNER, THE DESIGN PROFESSIONAL WHO PREPARED THE ES&PC PLAN IS BEGINS.



LAKE DISTRICT DRIVE N. (86' PUBLIC R.O.W.)

PHASE I 1. Installation of construction entrance.

2. Clearing and grubbing only as necessary for instillation of perimeter controls and initial sediment controls.

3. Installation of perimeter controls. (e.g., silt fence, barriers) 4. Clearing and grubbing of site or demolition (sediment & erosion control measure for these

areas must already be installed) PHASE II

1. Rough grading 2. Instillation of storm drain and placement of inlet protection and skimmer inserts as each new inlet is installed PHASE III

3. Fine grading, installation of curb and gutter

L**/**=27.30'

B=S<u>57°5</u>3'5<u>3"E</u> CL=24.76'

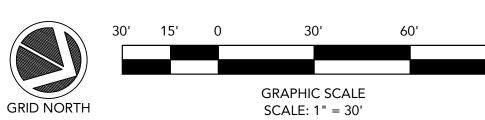
4. Paving of parking areas and drive isles.5. Permanent/ final stabilization with trees and landscaping

6. Removal of temporary sediment & erosion control structures after entire area draining to the structure is finally stabilized (The project owner/operator should have the SWPPP Preparer or registration equivalent approve the removal of temporary structures.)

7. Perform as-built surveys as required the City of Lakeland.8. Contact City of Lakeland for Final inspection.

Note: Maintenance of sediment and erosion control measures must continue until the site is permanently stabilized and the controls are removed.







Atlanta Georgia, 30349-2998

CARTER

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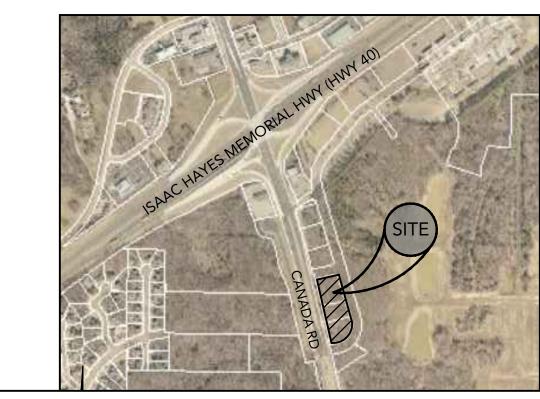
Lakeland TN 38002 SHEET TITLE

> SWPPP PHASE I

REVISION 1-2023

Job No. : <u>22036CFA</u>

: 05430 Store 01/18/2023 Date



Phase II & III Inlet Sediment Trap Calculations H.G.I. A-2 H.G.I. B-2 H.G.I. B-3 Structure ID 0.36 Drainage Area (acres) 482 Volume Required (cu. Ft.) Excavated Depth (ft.) Required Excav. Diameter (ft.) 425 2881 C.F Volume Provided (cu. Ft.) 106.7 C.YD.

EROSION CONTROL NOTES:

DEVELOPER/OWNER: TODD WILLIAMS, CHICK-FIL-A, INC., 5200 BUFFINGTON RD., ATLANTA GA 30349

. NAME AND PHONE NUMBER OF THE 24-HOUR CONTACT PERSON FOR EROSION, SEDIMENTATION AND POLLUTION CONTROLS IS: TODD WILLIAMS (678) 758-4513 TOTAL PROJECT AREA = 2.5 ACRES

TOTAL DISTURBED AREA = 2.6 ACRES . 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.

EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES SHALL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION AND SEDIMENT CONTROL,

SEDIMENT STORAGE MAINTENANCE INDICATORS MUST BE INSTALLED IN SEDIMENT STORAGE STRUCTURES, INDICATING THE FULL VOLUME.

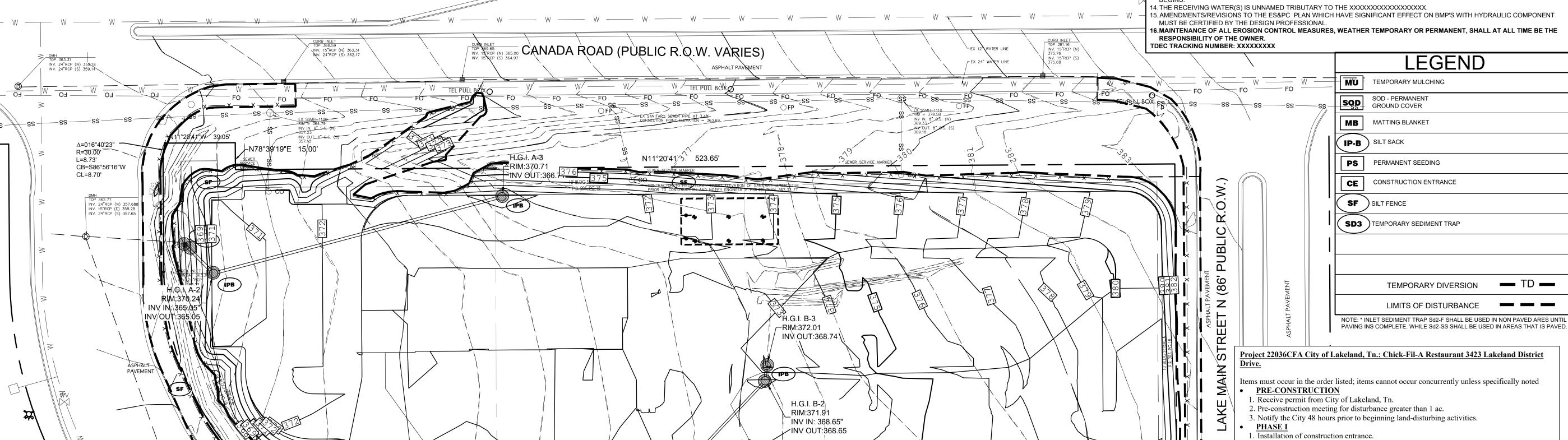
. MAINTENANCE OF ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES, WHETHER TEMPORARY OR PERMANENT, SHALL AT ALL TIMES BE THE RESPONSIBILITY OF THE PROPERTY OWNER. . ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR

TEMPORARY SEEDING. 0. ALL FILL SLOPES SHALL HAVE SILT FENCE PLACED AT THE SLOPE'S TOE.

I1.CONCENTRATED FLOW AREAS AND ALL SLOPES STEEPER THAN 2.5:1 WITH A HEIGHT OF TEN FEET OR GREATER SHALL BE STABILIZED WITH APPROPRIATE EROSION CONTROL MATTING OR BLANKET.

2.THE PROFESSIONAL WHO SEALS THIS PLAN CERTIFIES UNDER PENALTY OF LAW THAT THIS PLAN WAS PREPARED AFTER A SITE VISIT TO THE LOCATIONS DESCRIBED HEREIN BY THE PROFESSIONAL OR THE PROFESSIONAL'S AUTHORIZED AGENT, UNDER THE PROFESSIONAL'S DIRECT SUPERVISION. I3.UPON NOTIFICATION AND AUTHORIZATION OF THE OWNER, THE DESIGN PROFESSIONAL WHO PREPARED THE ES&PC PLAN IS

RESPONSIBLE FOR INSPECTING THE INSTALLATION OF THE BMP'S WITHIN 7 DAYS AFTER INITIAL CONSTRUCTION ACTIVITIES BEGINS.



LAKE DISTRICT DRIVE N. (86' PUBLIC R.O.W.)

H.G.I. B-1 RIM:371.48

CB=S32°04'27"W

DMH TOP 367.42 INV. 15"RCP (N) 362.63 INV. 15"RCP (NE) 362.62 INV. 15"RCP (W) 362.53

2. Clearing and grubbing only as necessary for instillation of perimeter controls and initial sediment controls.

3. Installation of perimeter controls. (e.g., silt fence, barriers) 4. Clearing and grubbing of site or demolition (sediment & erosion control measure for these

areas must already be installed) PHASE II

R=18.00'

¢B=S<u>57°5</u>3'5<u>3"E</u> CL=24.76'

1. Rough grading 2. Instillation of storm drain and placement of inlet protection and skimmer inserts as each new

inlet is installed PHASE III

3. Fine grading, installation of curb and gutter

4. Paving of parking areas and drive isles.5. Permanent/ final stabilization with trees and landscaping

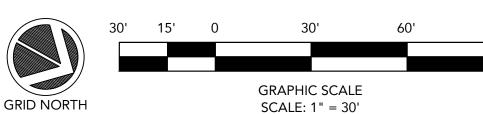
6. Removal of temporary sediment & erosion control structures after entire area draining to the

structure is finally stabilized (The project owner/operator should have the SWPPP Preparer or registration equivalent approve the removal of temporary structures.) 7. Perform as-built surveys as required the City of Lakeland.

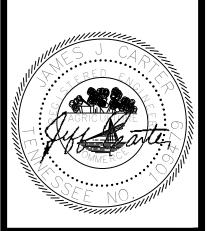
8. Contact City of Lakeland for Final inspection.

Note: Maintenance of sediment and erosion control measures must continue until the site is permanently stabilized and the controls are removed.











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F: 770.725.1204

3423 Lake District Dr. W,

Lakeland TN 38002 SHEET TITLE

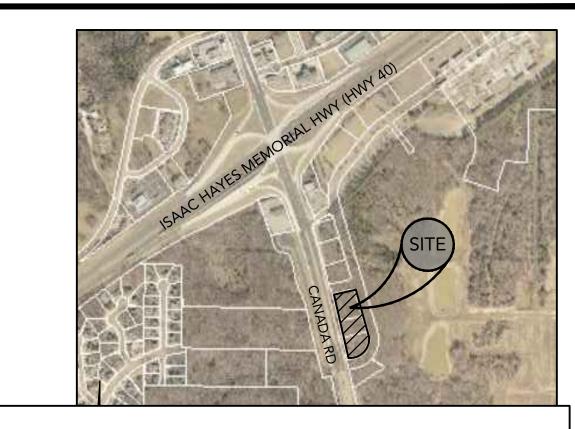
SWPPP

PHASE II

REVISION 1-2023

Job No. : 22036CFA

Store : 05430 01/18/2023 Date



Phase II & III Inlet Sediment Trap Calculations H.G.I. B-3 Structure ID 0.27 Drainage Area (acres) Volume Required (cu. Ft.) 409 Excavated Depth (ft.) Required Excav. Diameter (ft.) 2881 C.F Volume Provided (cu. Ft.) 106.7 C.YD.

ROAD (PUBLIC R.Q.W. VARIES)

PL14-LE-LRG - 5,240 S.F. 62 SEATS (Interior) - 24 SEATS (Exterior)

92 PARKS FFE = 373

CB=S32°04'27"W

DMH TOP 367.42 INV. 15"RCP (N) 362.63 INV. 15"RCP (NE) 362.62 INV. 15"RCP (W) 362.53

Λ=016°40'23" R=30.00'

CB=S86°56'16"W CL=8.70'

L=8.73'

TEL PULL BOX

N11°20'41/つ` 523.65'

(IPB)

LAKE DISTRICT DRIVE N (86' PUBLIC R.O.W.)

EROSION CONTROL NOTES:

TOTAL PROJECT AREA = 2.5 ACRES

. TOTAL DISTURBED AREA = 2.6 ACRES

DEVELOPER/OWNER: TODD WILLIAMS, CHICK-FIL-A, INC., 5200 BUFFINGTON RD., ATLANTA GA 30349

. NAME AND PHONE NUMBER OF THE 24-HOUR CONTACT PERSON FOR EROSION, SEDIMENTATION AND POLLUTION CONTROLS IS: TODD WILLIAMS (678) 758-4513

. 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.

EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES SHALL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION AND SEDIMENT CONTROL,

SEDIMENT STORAGE MAINTENANCE INDICATORS MUST BE INSTALLED IN SEDIMENT STORAGE STRUCTURES, INDICATING THE FULL VOLUME. . MAINTENANCE OF ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES, WHETHER TEMPORARY OR

PERMANENT, SHALL AT ALL TIMES BE THE RESPONSIBILITY OF THE PROPERTY OWNER. . ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.

0. ALL FILL SLOPES SHALL HAVE SILT FENCE PLACED AT THE SLOPE'S TOE. I1.CONCENTRATED FLOW AREAS AND ALL SLOPES STEEPER THAN 2.5:1 WITH A HEIGHT OF TEN FEET OR GREATER SHALL BE

STABILIZED WITH APPROPRIATE EROSION CONTROL MATTING OR BLANKET. 2.THE PROFESSIONAL WHO SEALS THIS PLAN CERTIFIES UNDER PENALTY OF LAW THAT THIS PLAN WAS PREPARED AFTER A SITE VISIT TO THE LOCATIONS DESCRIBED HEREIN BY THE PROFESSIONAL OR THE PROFESSIONAL'S AUTHORIZED AGENT,

UNDER THE PROFESSIONAL'S DIRECT SUPERVISION. I3.UPON NOTIFICATION AND AUTHORIZATION OF THE OWNER, THE DESIGN PROFESSIONAL WHO PREPARED THE ES&PC PLAN IS RESPONSIBLE FOR INSPECTING THE INSTALLATION OF THE BMP'S WITHIN 7 DAYS AFTER INITIAL CONSTRUCTION ACTIVITIES

14. THE RECEIVING WATER(S) IS UNNAMED TRIBUTARY TO THE XXXXXXXXXXXXXXXXXXX

15. AMENDMENTS/REVISIONS TO THE ES&PC PLAN WHICH HAVE SIGNIFICANT EFFECT ON BMP'S WITH HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.

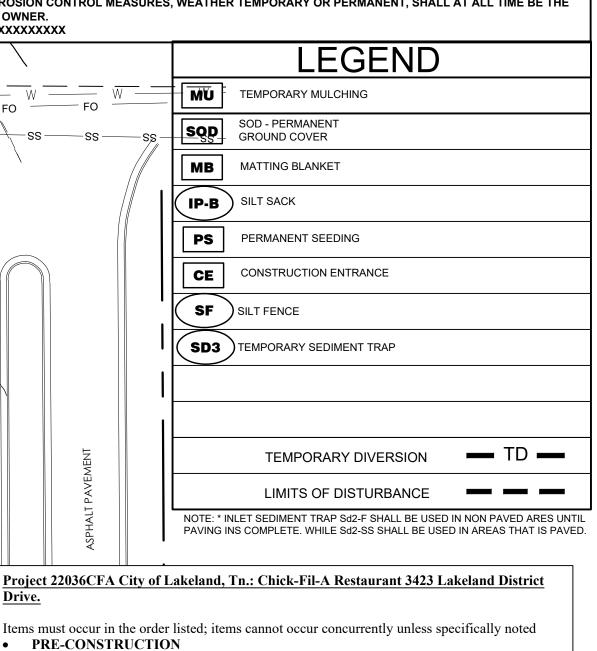
16.MAINTENANCE OF ALL EROSION CONTROL MEASURES, WEATHER TEMPORARY OR PERMANENT, SHALL AT ALL TIME BE THE RESPONSIBILITY OF THE OWNER.

TDEC TRACKING NUMBER: XXXXXXXXX

(86'

R=18.00'

¢B=S<u>57°5</u>3'5<u>3"E</u> CL=24.76'



1. Receive permit from City of Lakeland, Tn.

2. Pre-construction meeting for disturbance greater than 1 ac. 3. Notify the City 48 hours prior to beginning land-disturbing activities.

PHASE I 1. Installation of construction entrance.

2. Clearing and grubbing only as necessary for instillation of perimeter controls and initial sediment controls.

3. Installation of perimeter controls. (e.g., silt fence, barriers) 4. Clearing and grubbing of site or demolition (sediment & erosion control measure for these

areas must already be installed) PHASE II

1. Rough grading 2. Instillation of storm drain and placement of inlet protection and skimmer inserts as each new

inlet is installed

PHASE III 3. Fine grading, installation of curb and gutter

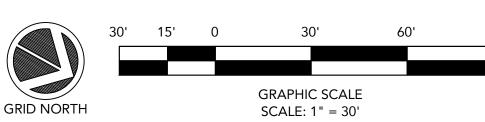
4. Paving of parking areas and drive isles.5. Permanent/ final stabilization with trees and landscaping

6. Removal of temporary sediment & erosion control structures after entire area draining to the structure is finally stabilized (The project owner/operator should have the SWPPP Preparer or registration equivalent approve the removal of temporary structures.)

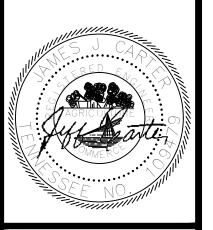
7. Perform as-built surveys as required the City of Lakeland.8. Contact City of Lakeland for Final inspection.

Note: Maintenance of sediment and erosion control measures must continue until the site is permanently stabilized and the controls are removed.











ENGINEERING

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3423 Lake District Dr. W,

Lakeland TN 38002 SHEET TITLE

SWPPP

PHASE III

REVISION 1-2023

Job No. : 22036CFA

Store : 05430 01/18/2023



Seeding Dates	Grass Seed	Percentages
	Kentucky 31 Fescue	80%
February 1 to July 1	Korean Lespedeza	15%
	English Rye	5%
	Kentucky 31 Fescue	55%
lung 1 to August 15	English Rye	20%
June 1 to August 15	Korean Lespedeza	15%
	German Millet	10%
April 15 to August 15	Bermudagrass (hulled)	70%
	Annual Lespedeza	30%
	Kentucky 31 Fescue	70%
August 1 to December 1	English Rye	20%
	White Clover	10%
	Kentucky 31 Fescue	70%
February 1 to December 1	Crown Vetch	25%
	English Rye	5%

Source: TDOT Standard Specifications Table 1

Topsoil: Topsoil should be friable and loamy, free of debris, objectionable weeds and stones, and contain no toxic substances that may be narmful to plant growth. When replacing topsoil on disturbed areas, maintain needed erosion and sediment control practices such as diversions, berms, sediment basins, etc. Grades containing these structures should be maintained after the topsoil is applied.

Topsoil should be handled only when it is dry enough to work without damaging soil structure. A uniform application of 5 inches (unsettled) is recommended, but may be adjusted at the discretion of the engineer or landscape architect. See Table 2 for additional information about the volume of topsoil to achieve various

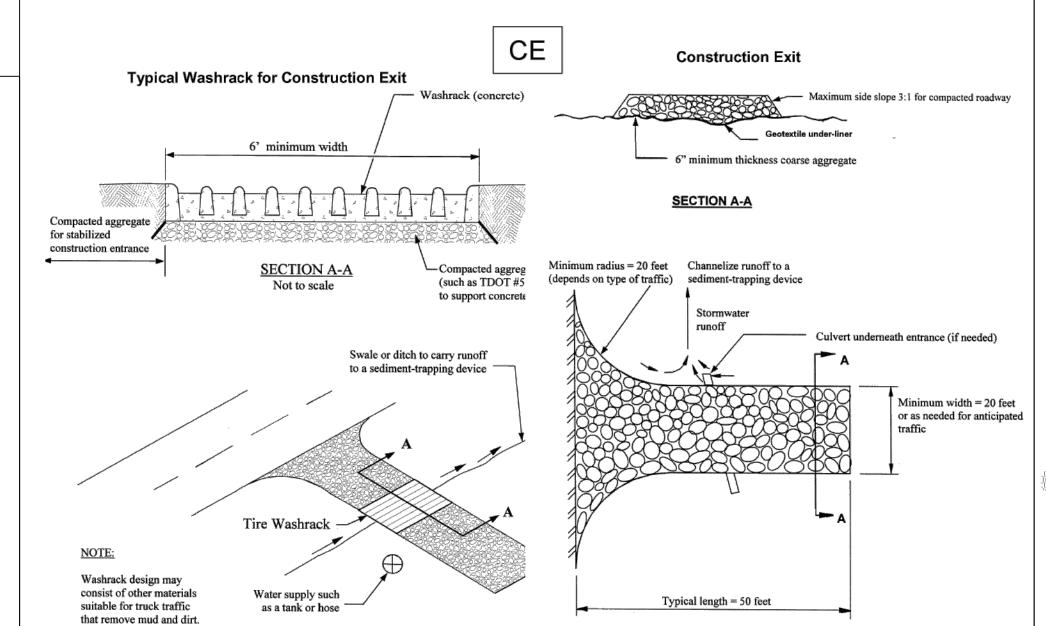
Seedbed Preparation: When conventional seeding is to be used, topsoil should be applied to any area where the disturbance results in subsoil being the final grade surface.

#### Broadcast plantings

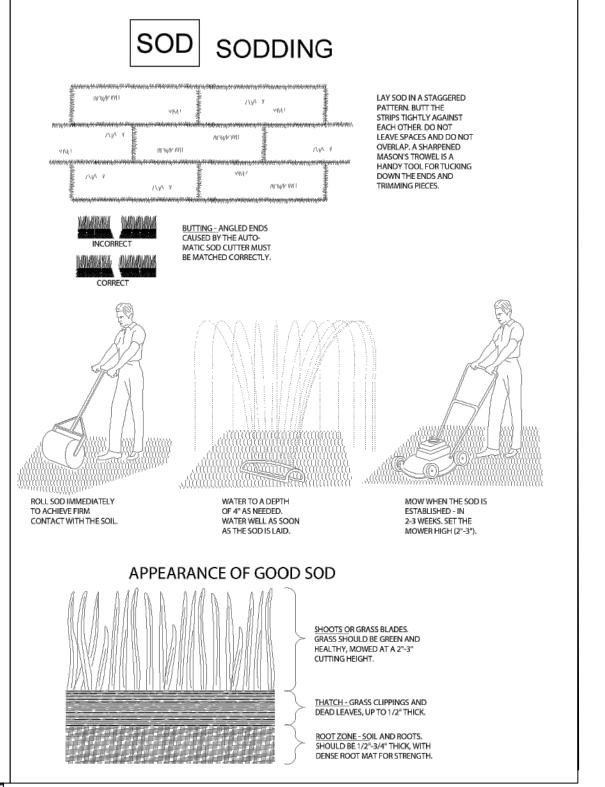
- Seedbed preparation may not be required where hydraulic seeding
- equipment is to be used. Tillage, at a minimum, shall adequately loosen the soil to a depth of 4 to 6 inches; alleviate compaction; incorporate topsoil, lime, and fertilizer; smooth and firm the soil; allow for the proper placement of seed, sprigs, or plants; and allow for the anchoring of straw or hay mulch if a crimper is to be
- Tillage may be done with any suitable equipment.

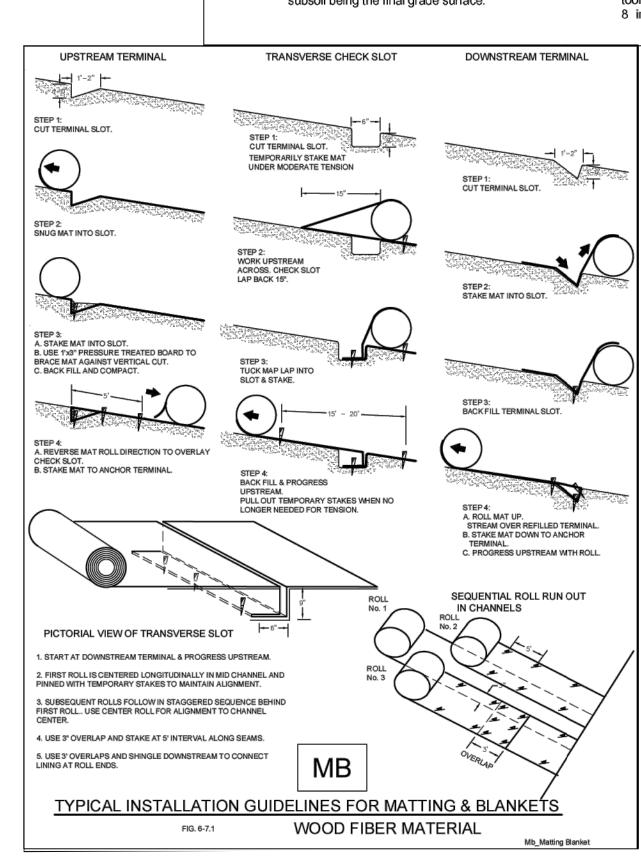
4. Tillage should be done parallel to the

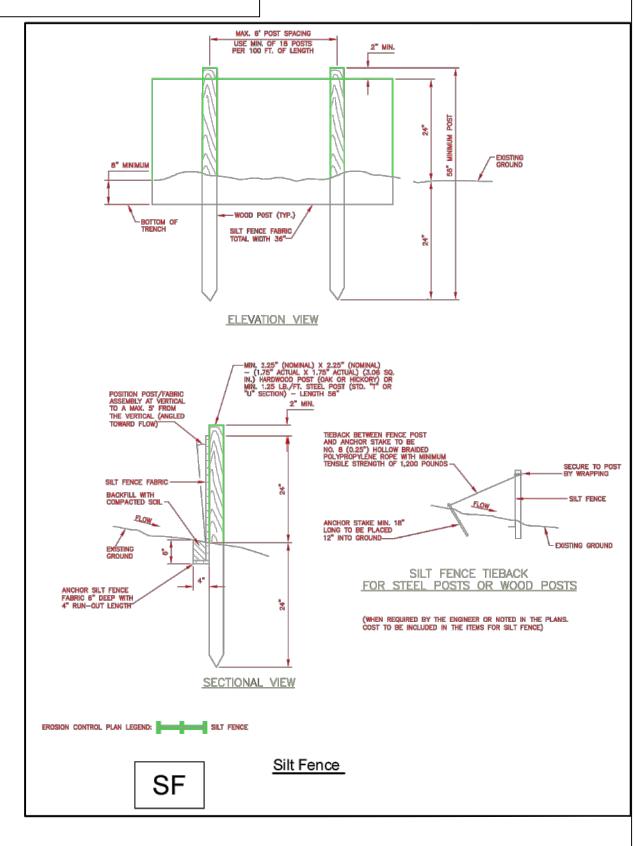
- contour where feasible. 5. On slopes too steep for the safe operation of tillage equipment, the soil
- surface shall be pitted or trenched across the slope with appropriate hand tools to provide consecutive beds, 6 to 8 inches apart, in which seed may

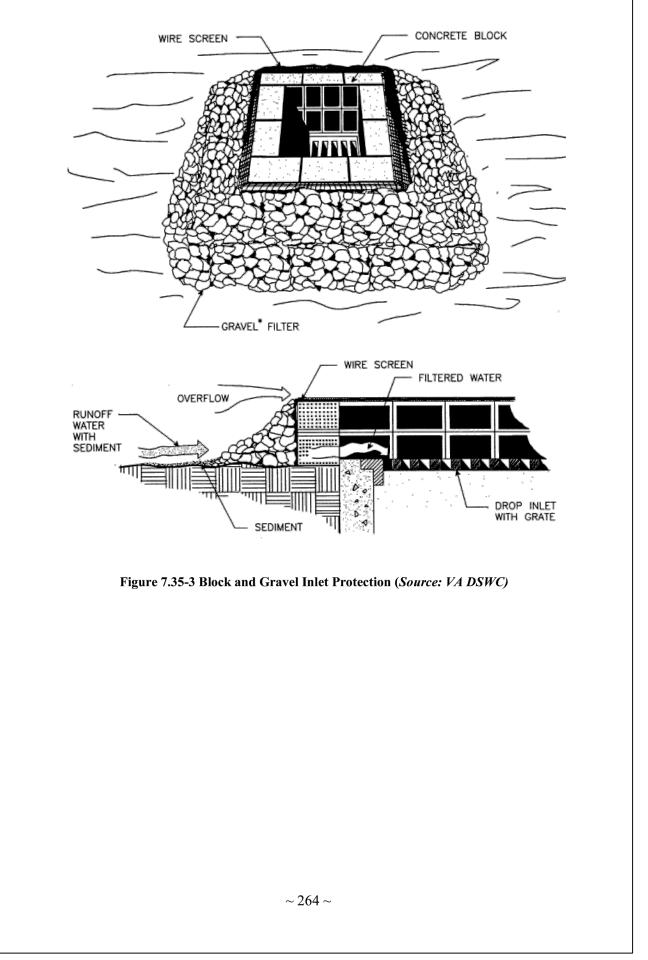


Chapter 7

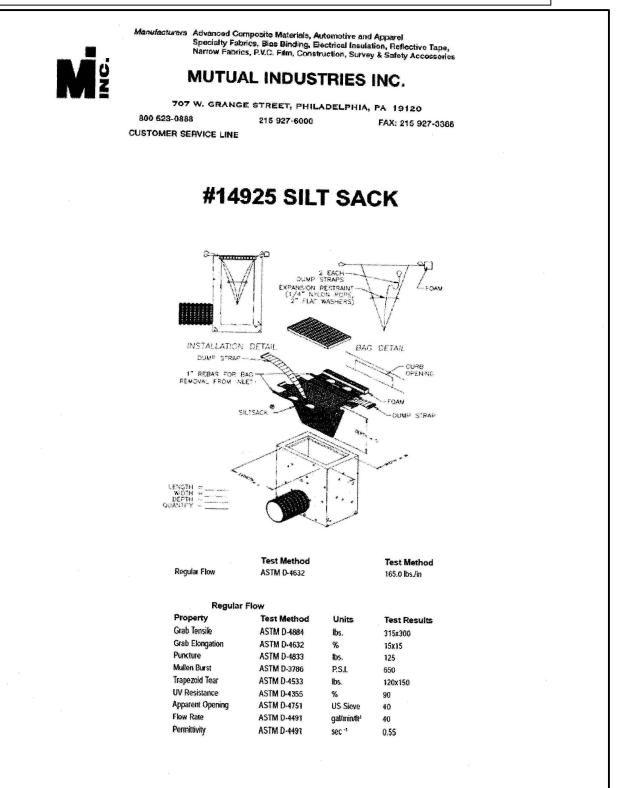






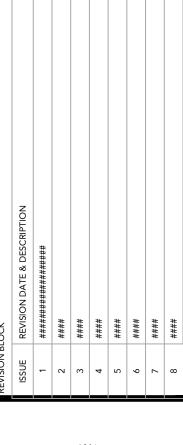


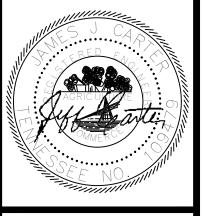
Management Practices

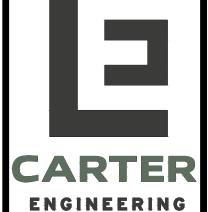




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STORE # 05430

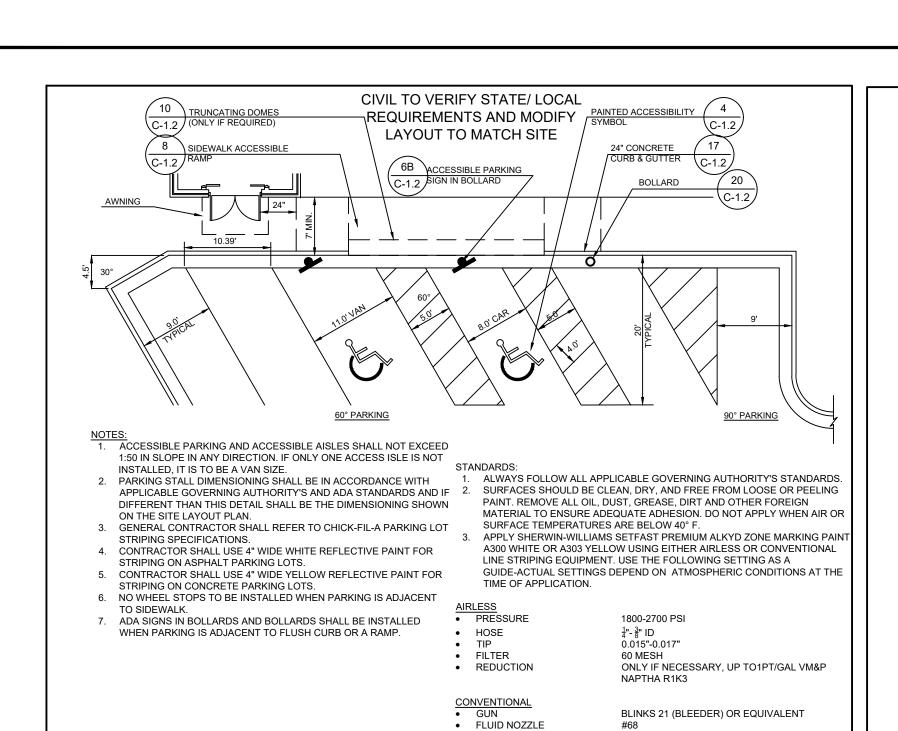
3423 Lake District Dr. W, Lakeland TN 38002

SHEET TITLE **EROSION** 

**DETAILS** 

REVISION 1-2022

Job No. : <u>22036CF</u>A : <u>05430</u> :11/11/2022



AIR NOZZLE

REDUCTION

1 DIRECTIONAL ARROW

NOT TO SCALE

SPECIFICATIONS, SEE DETAIL

CONTRACTOR SHALL USE WHITE

3 STOP LINE GRAPHIC

NOTES:

1. GENERAL CONTRACTOR SHALL REFER TO

CHICK-FIL-A PARKING LOT STRIPING

REFLECTIVE PAINT ON ASPHALT AND

B. IF STOP SIGN IS PROPOSED, STOP LINE

YELLOW REFLECTIVE PAINT ON CONCRETE.

SPECIFICATIONS, SEE DETAIL

CONTRACTOR SHALL USE WHITE

NOTES:

1. GENERAL CONTRACTOR SHALL REFER TO

CHICK-FIL-A PARKING LOT STRIPING

REFLECTIVE PAINT ON ASPHALT AND

YELLOW REFLECTIVE PAINT ON CONCRETE.

5B STANDARD PARKING STALL

NOT TO SCALE

FLUID PRESSURE

ATOMIZATION PRESSURE

TRAFFIC PICKUP AFTER 20 MINUTES.

INTERNAL MIX. #709

VM&P NAPTHA R1K3

ONLY IF NECESSARY, UP TO 1 PT/GAL

MATCH SIDEWALK WIDTH

(3' MIN> RAMP

<sup>2</sup> DRIVE THRU GRAPHICS

NOT TO SCALE

NOTES:

1. GENERAL CONTRACTOR SHALL REFER TO

CHICK-FIL-A PARKING LOT STRIPING

REFLECTIVE PAINT ON ASPHALT AND

NOT TO SCALE

ASPHALT AND YELLOW REFLECTIVE PAINT ON

CONCRETE, UNLESS UPON VERIFICATION BY THE

GENERAL CONTRACTOR IT IS DETERMINED THAT

LOCAL, STATE OR ADA CODES DIFER, IN WHICH THESE

YELLOW REFLECTIVE PAINT ON CONCRETE.

SPECIFICATIONS, SEE DETAIL

2. CONTRACTOR SHALL USE WHITE

4" PAINTED LINE (TYP.)

45-80 PSI

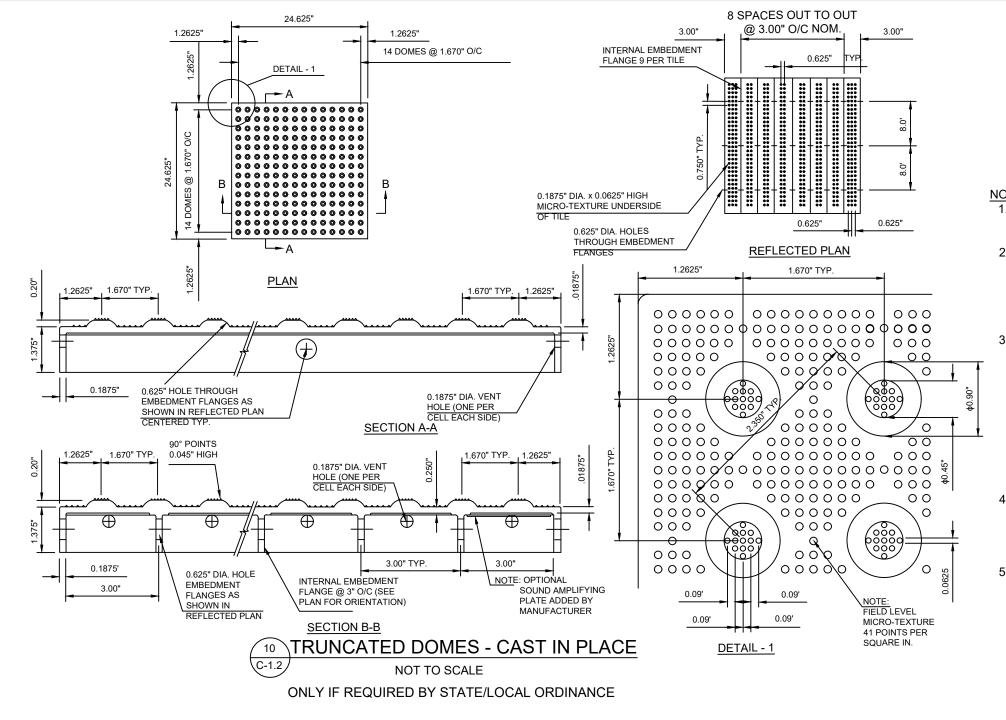
40-70 PSI

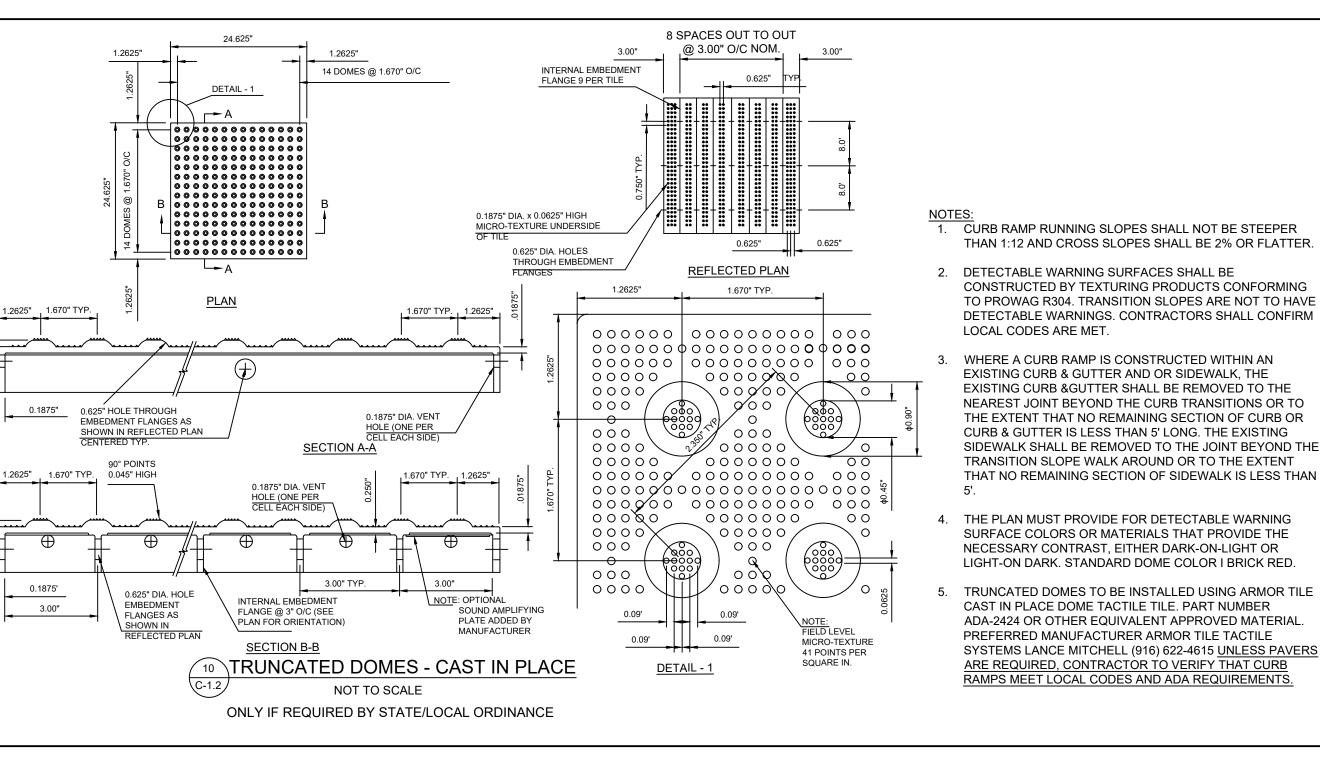
MIX PAINT THOROUGHLY BY BOXING, STIRRING, OR POWER AGITATION

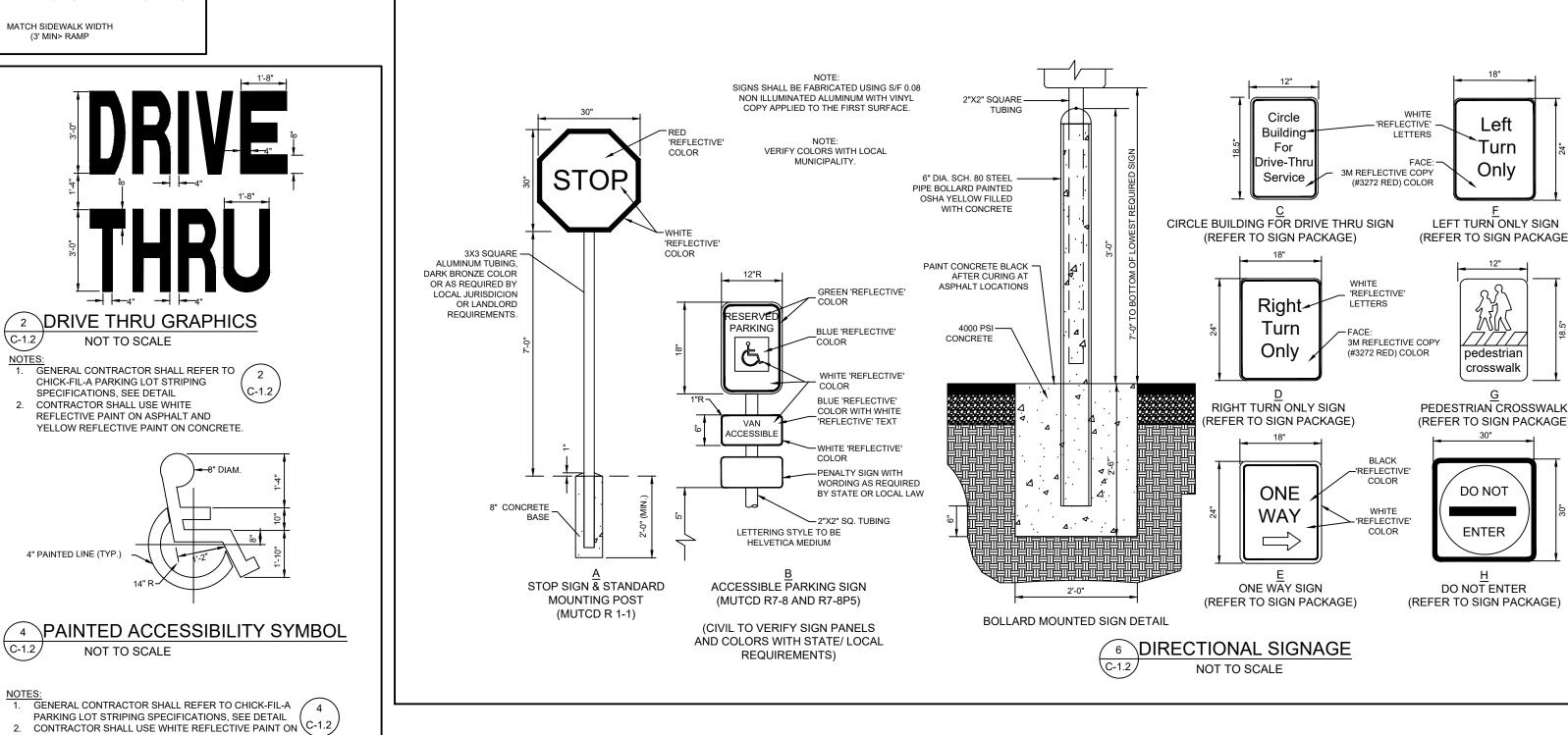
BEFORE USE. APPLY 15 MILS WET TO ACHIEVE A SPEED RATE OF 400-500 LINEAL FEET OF STANDARD 4' STRIPE PER GALLON. APPLIED AT THIS RATE AT

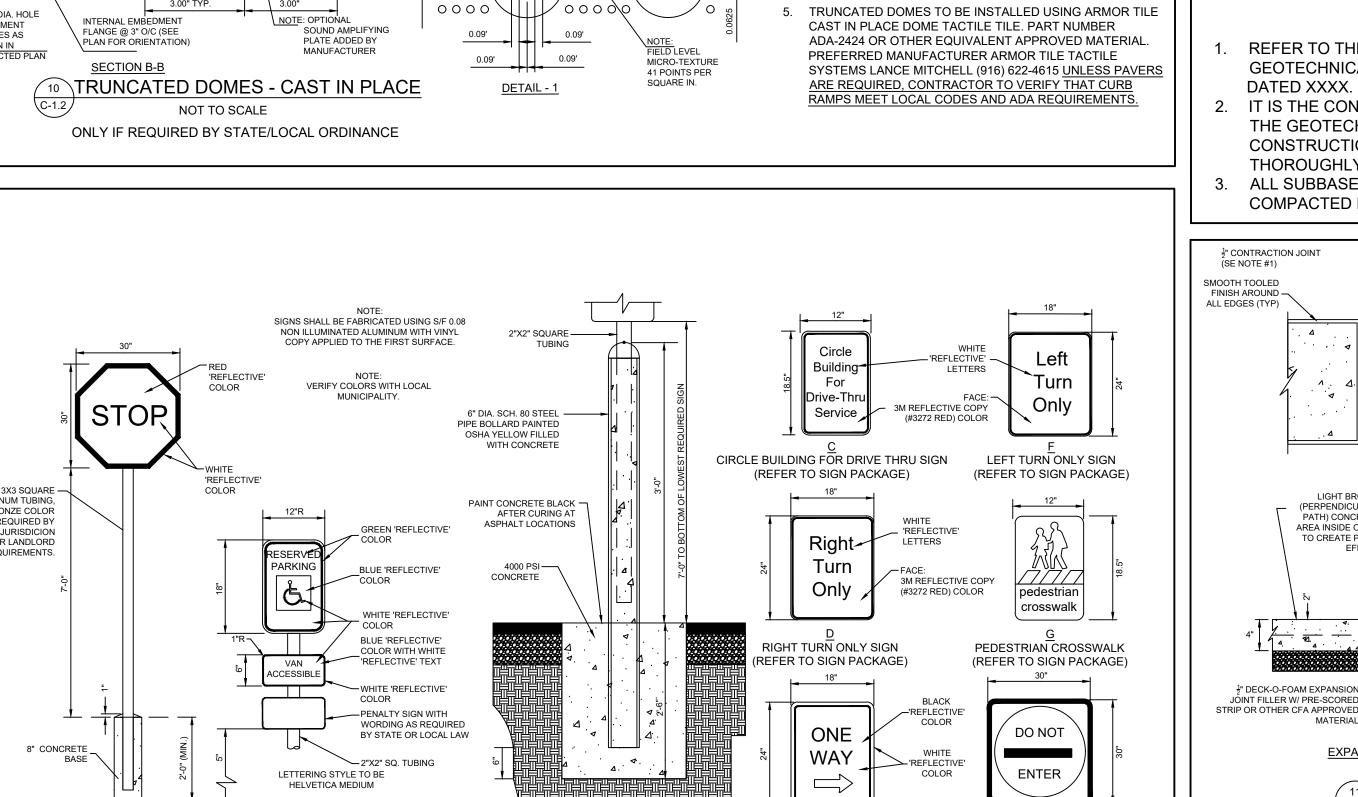
70 DEGREES F AND 50% RELATIVE HUMIDITY, PAINT WILL DRY WITH NO

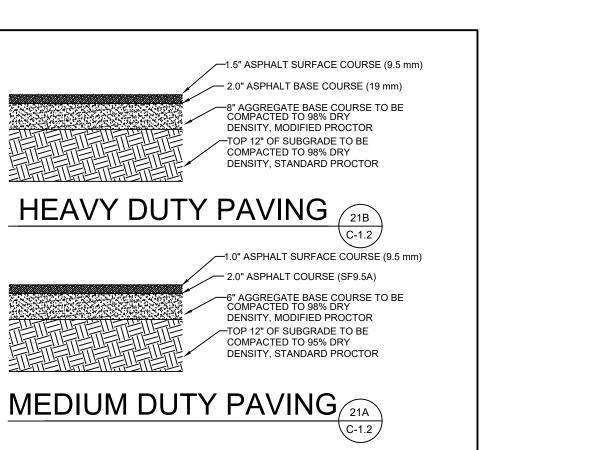
• GENERAL CONTRACTOR TO RE-STRIPE THE LOT 45 DAYS AFTER OPENING.













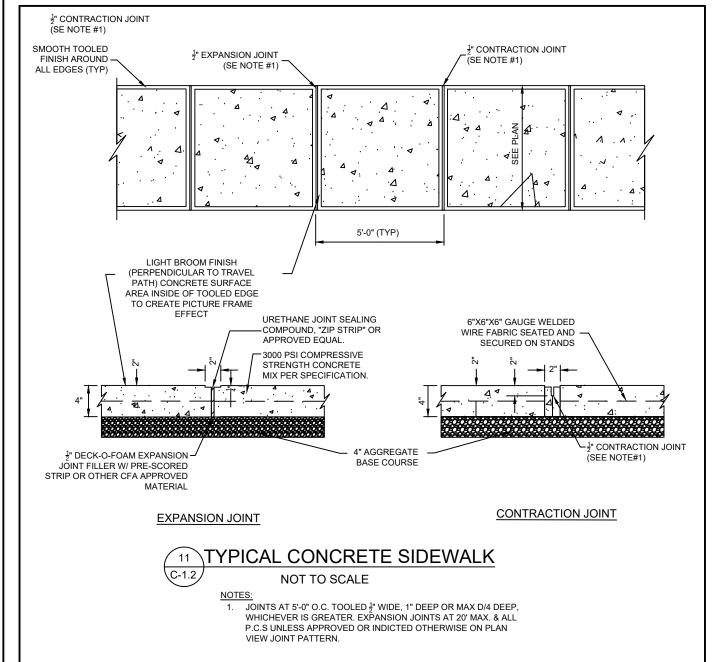
- 4" AGGREGATE BASE COURSE COMPACTED TO 98% DRY DENSITY, STANDARD PROCTOR TOP 12" OF SUBGRADE TO BE COMPACTED TO 95% DRY DENSITY, STANDARD PROCTOR

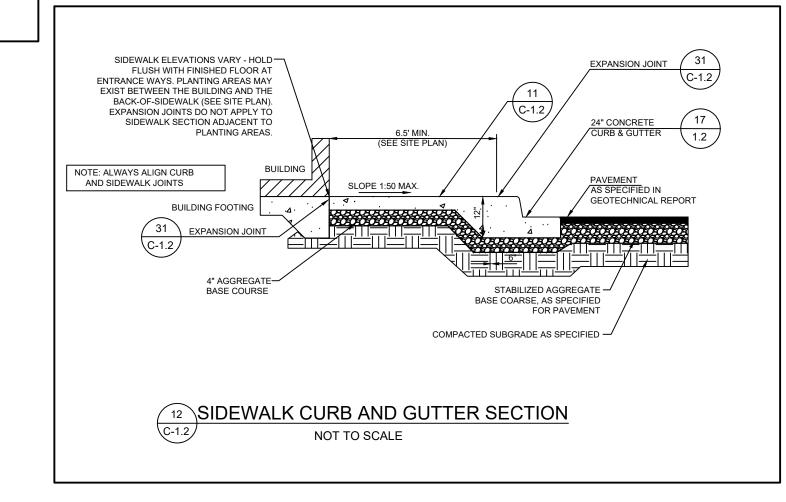
6" - 4500 PSI PORTLAND CEMENT

# CONCRETE PAVEMENT (24) (25)



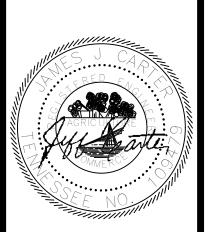
- 2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN A COPY OF THE GEOTECHNICAL REPORT FROM THE OWNER PRIOR TO CONSTRUCTION AND REVIEW THE RECOMMENDATIONS THOROUGHLY.
- ALL SUBBASE, CRUSHED STONE, AND ASPHALTIC LAYERS TO BE COMPACTED PER GDOT STANDARDS.







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3423 Lake District Dr. W,

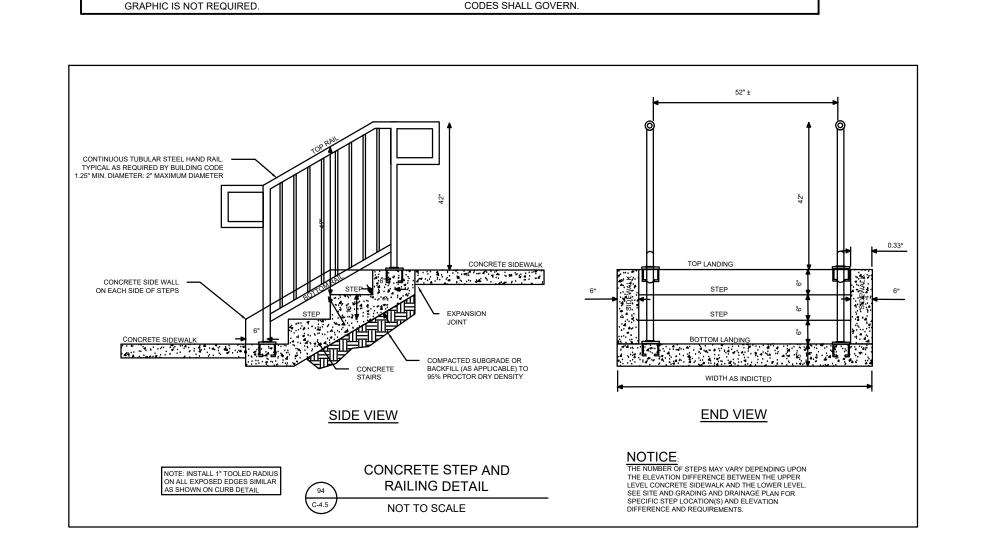
Lakeland TN 38002 SHEET TITLE

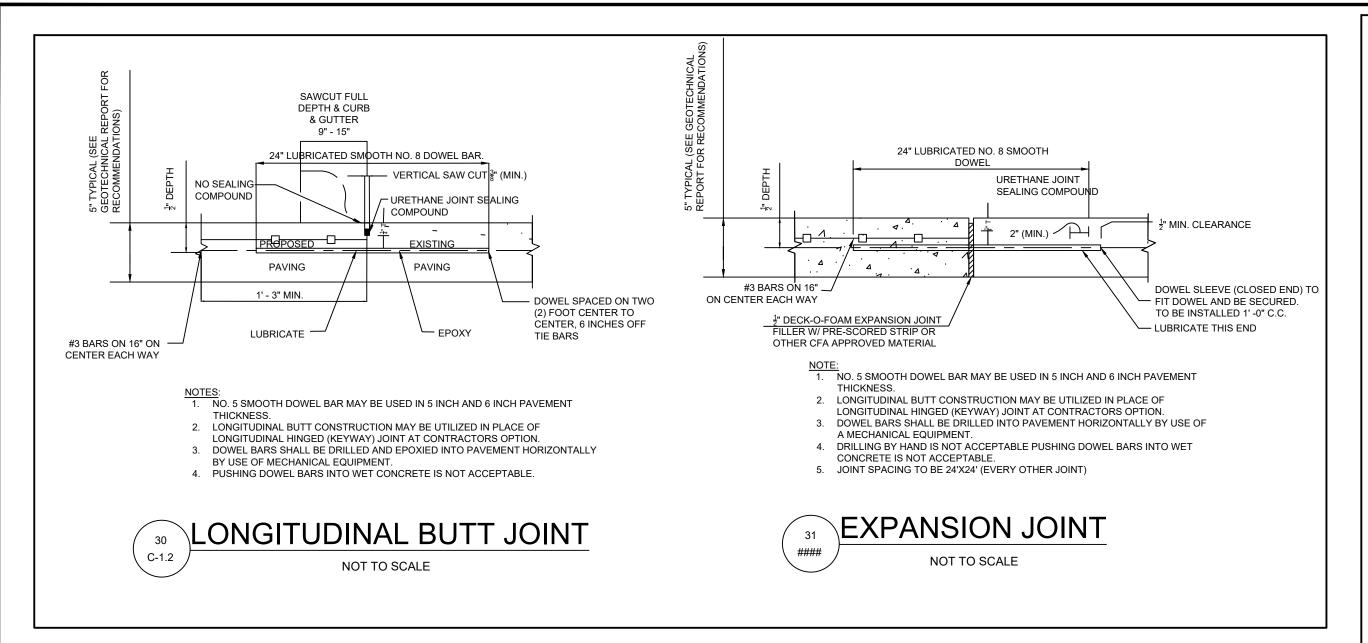
STANDARD **DETAILS I** 

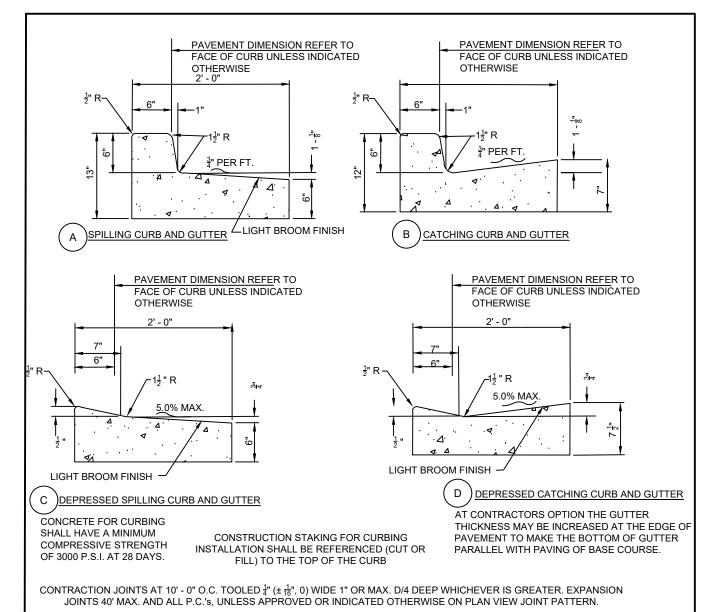
REVISION 1-2022

Job No. : <u>22036C</u>FA : 05430 ·11/11/2022

Sheet

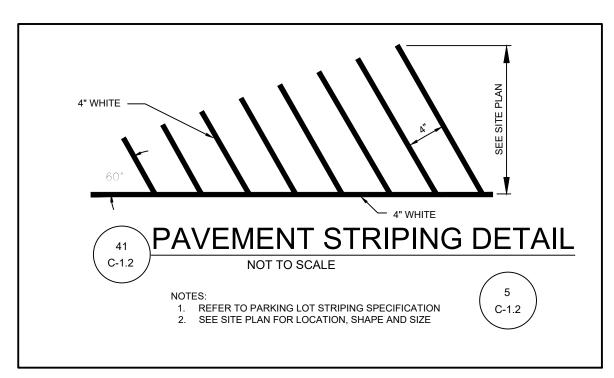


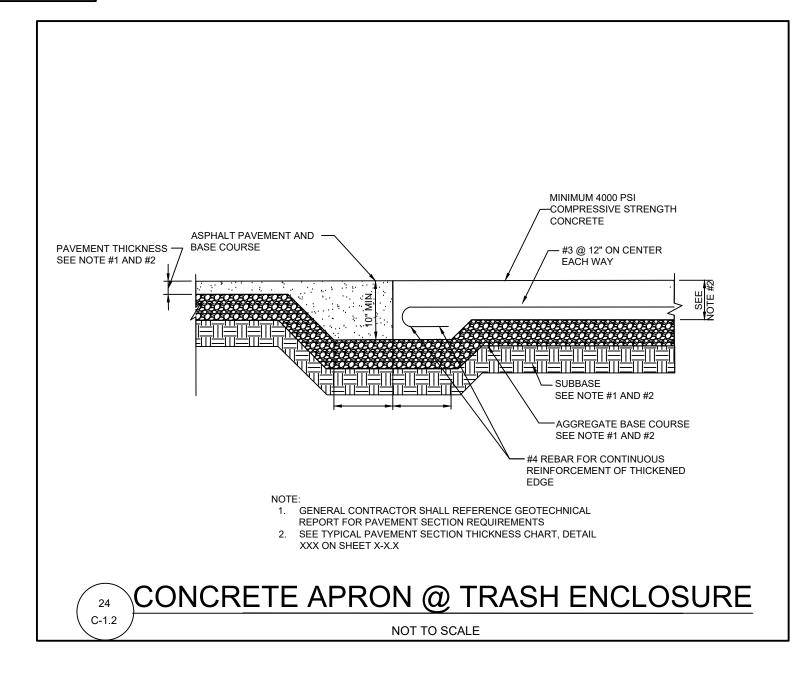


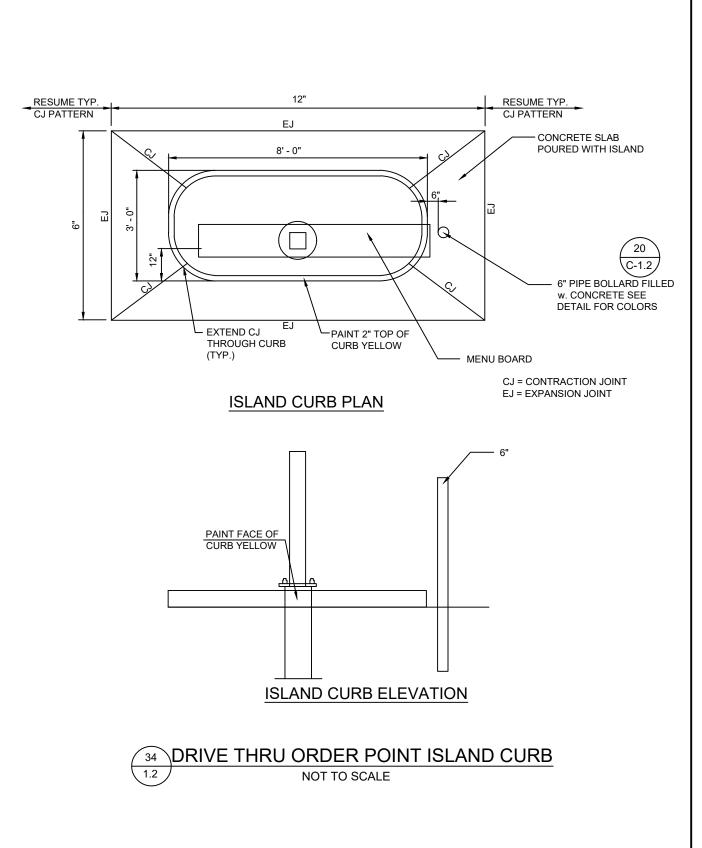


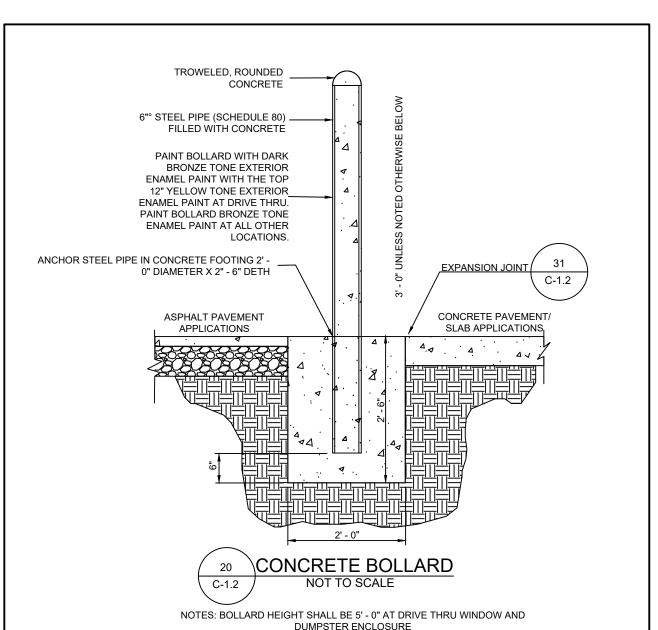
17 24" CONCRETE CURB AND GUTTER

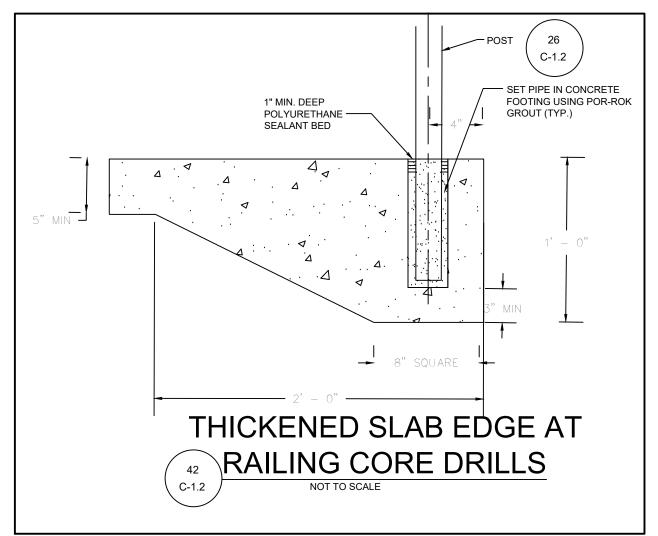
NOT TO SCALE

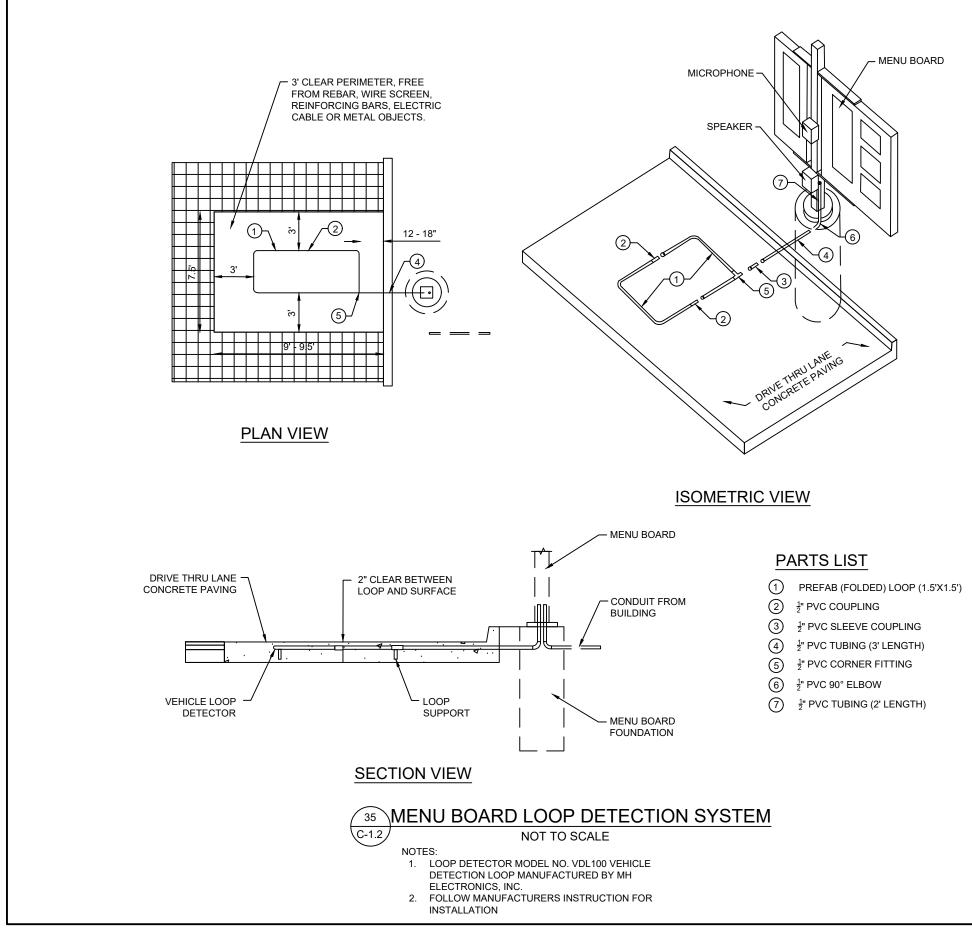


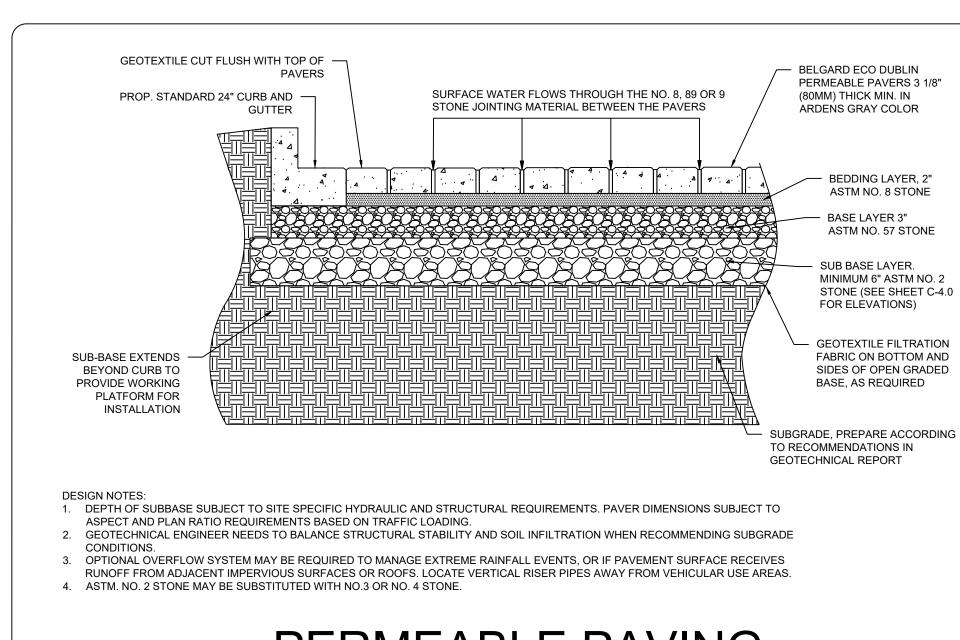












# PERMEABLE PAVING DETAIL

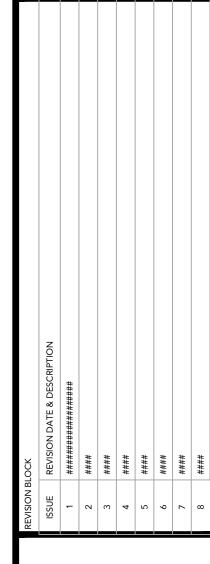
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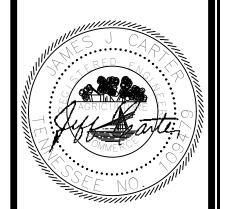


Rick-fil: L

Atlanta Georgia,

30349-2998







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3423 Lake District Dr. W,

Lakeland TN 38002

SHEET TITLE

STANDARD DETAILS II

REVISION 1-2022

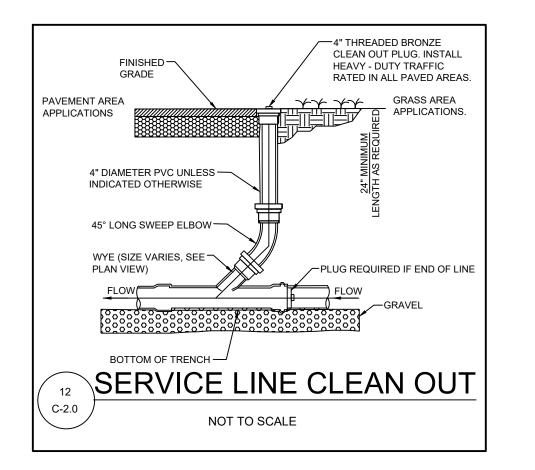
Job No. : 22036CFA
Store : 05430
Date : 11/11/2022

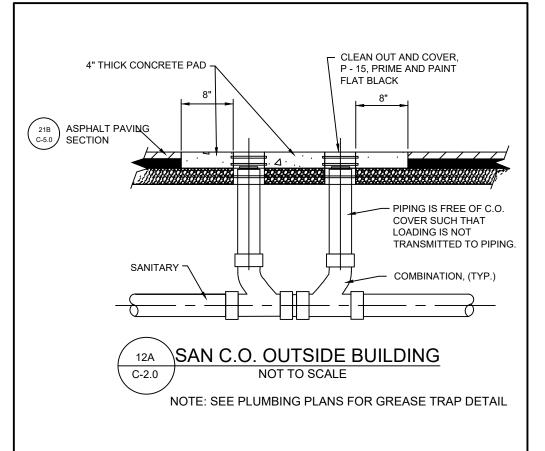
Sheet

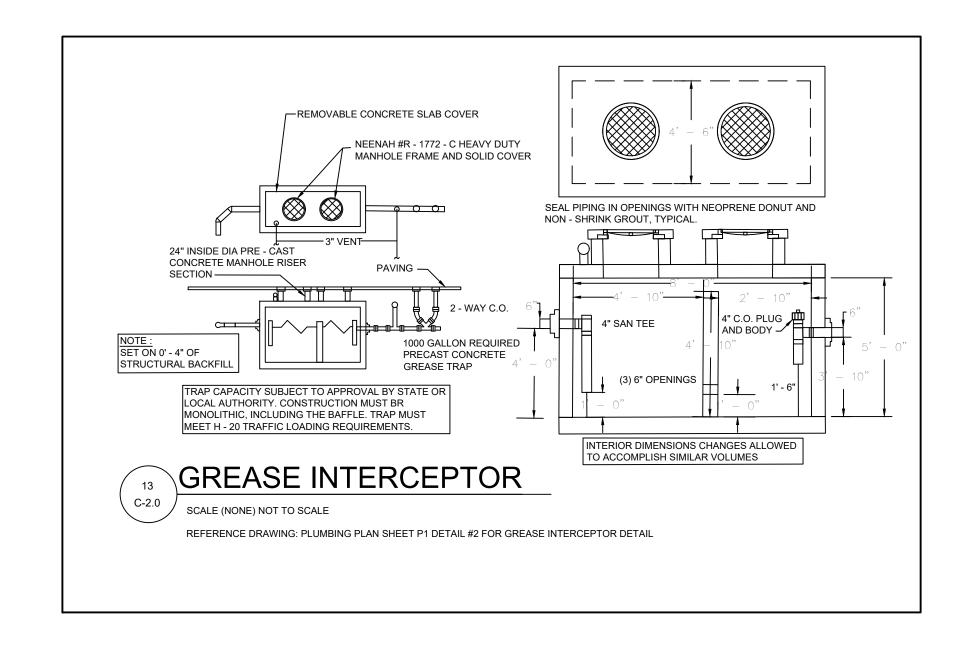
C-5 1

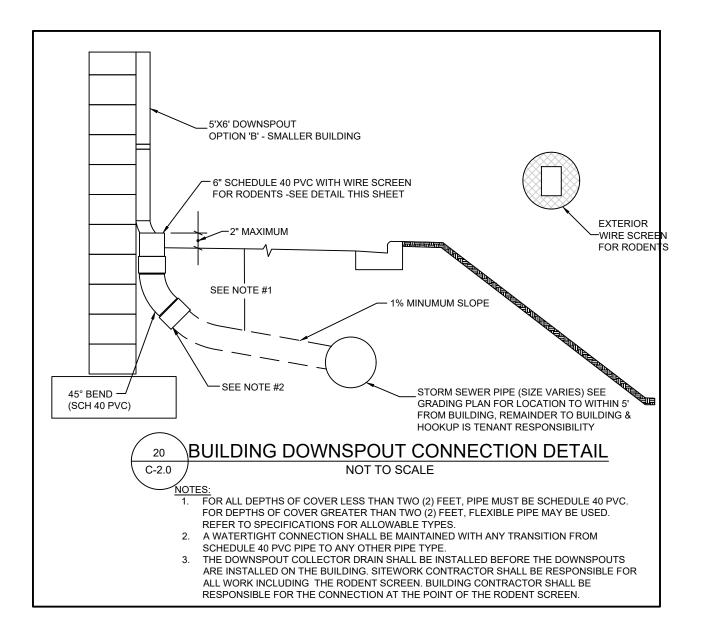
# 2-1/2" SQ. RAILING \_\_\_ 2-1/2" SQ. POST POST EMBEDDED 5" 5" DIA. CORE ~ FINISHED CONCRETE - <sup>1</sup>/<sub>4</sub>" DIA. WEEP HOLE $\frac{3}{4}$ " - 1" OF SELF LEVELING -6" TALL SOLID POLYURETHANE SEALANT REINFORCEMENT BAR EPOXIED IN PLACE. POR - ROK GROUT FIELD EMBEDMENT DETAIL EMBEDDED POST DETAIL WEEP HOLE NOTE ALL POSTS GROUTED INTO CONCRETE MUST HAVE A 4\* DIAMETER WEEP HOLE LOCATED JUST ABOVE THE MOUNTING SURFACE AND ALONG THE PLANE OF THE RAIL. WEEP HOLES WILL NEED TO BE DRILLED AFTER RAILS HAVE BEEN INSTALLED. 1 ¼" X 1 ¼" CHANNEL 0.062" TOP WALL 0.078" SIDEWALL $\frac{3}{4}$ " X $\frac{3}{4}$ " X 0.050 PICKET **BOTTOM RAILS** 1 ¼" X 1 ¼" CHANNEL 0.062" TOP WALL 0.078" SIDEWALL 1" MIN. DEEP POLYURETHANE SEALANT BED ✓ CONCRETE SIDEWALK - SET PIPE IN CONCRETE FOOTING USING SUPER POR-ROK GROUT (TYP.) **ALUMINUM HANDRAIL** NOT TO SCALE USE ONLY COMMERCIAL GRADE ALUMINUM FENCING WITH DARK BRONZE POWDER COAT FINISH

# UTILITY STANDARD DETAILS



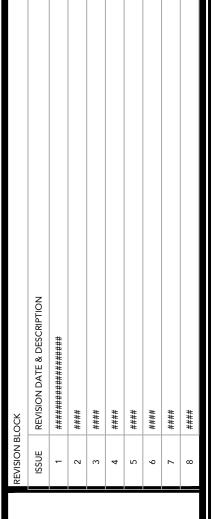


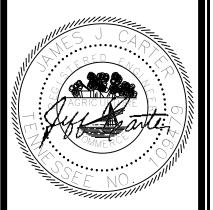






5200 Buffington Rd. Atlanta Georgia, 30349—2998







CARTER ENGINEERING
3651 MARS HILL ROAD
SUITE 2000
WATKINSVILLE, GA 30677
P: 770.725.1200
F: 770.725.1204

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3423 Lake District Dr. W, Lakeland TN 38002

SHEET TITLE

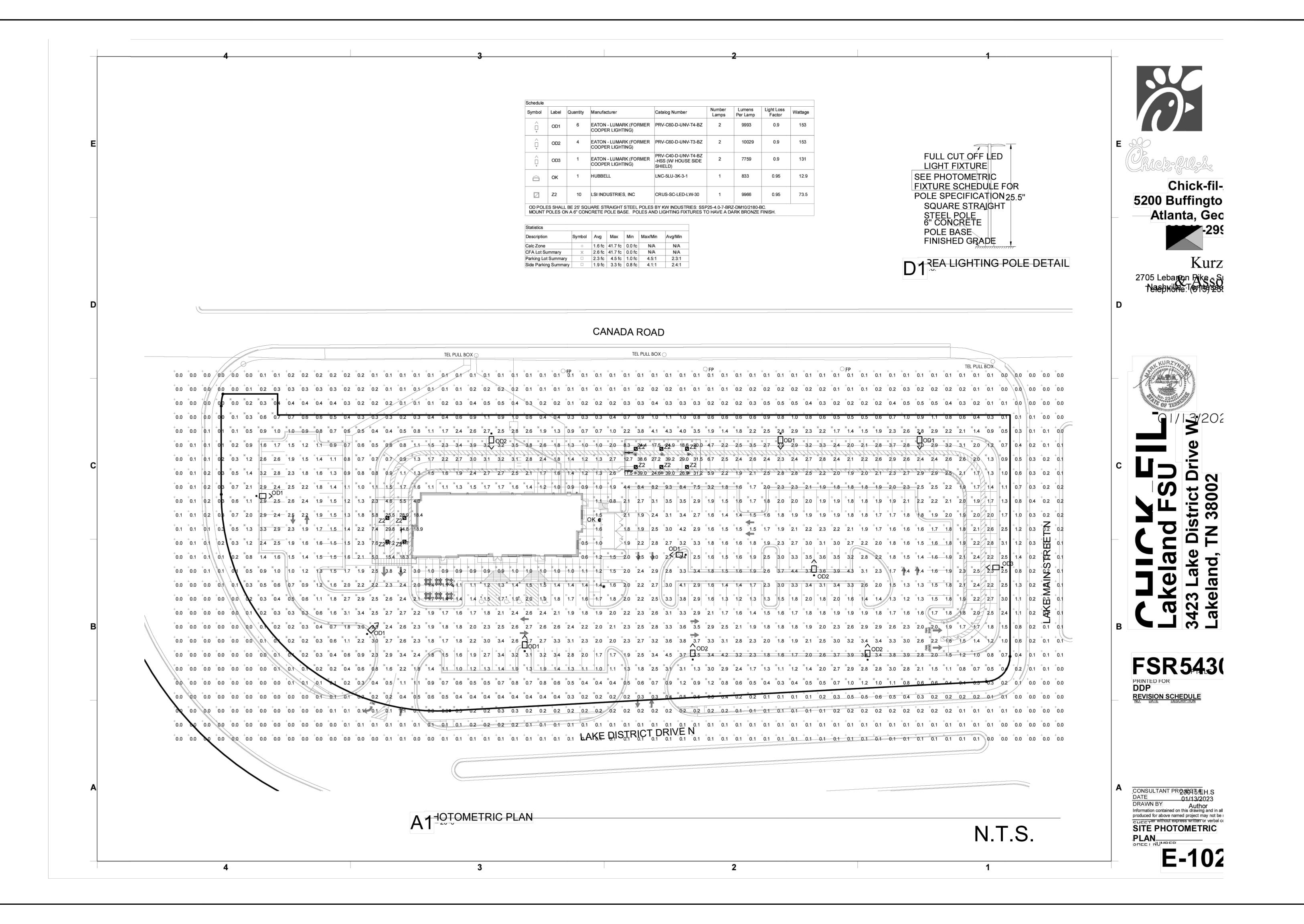
STANDARD DETAILS III

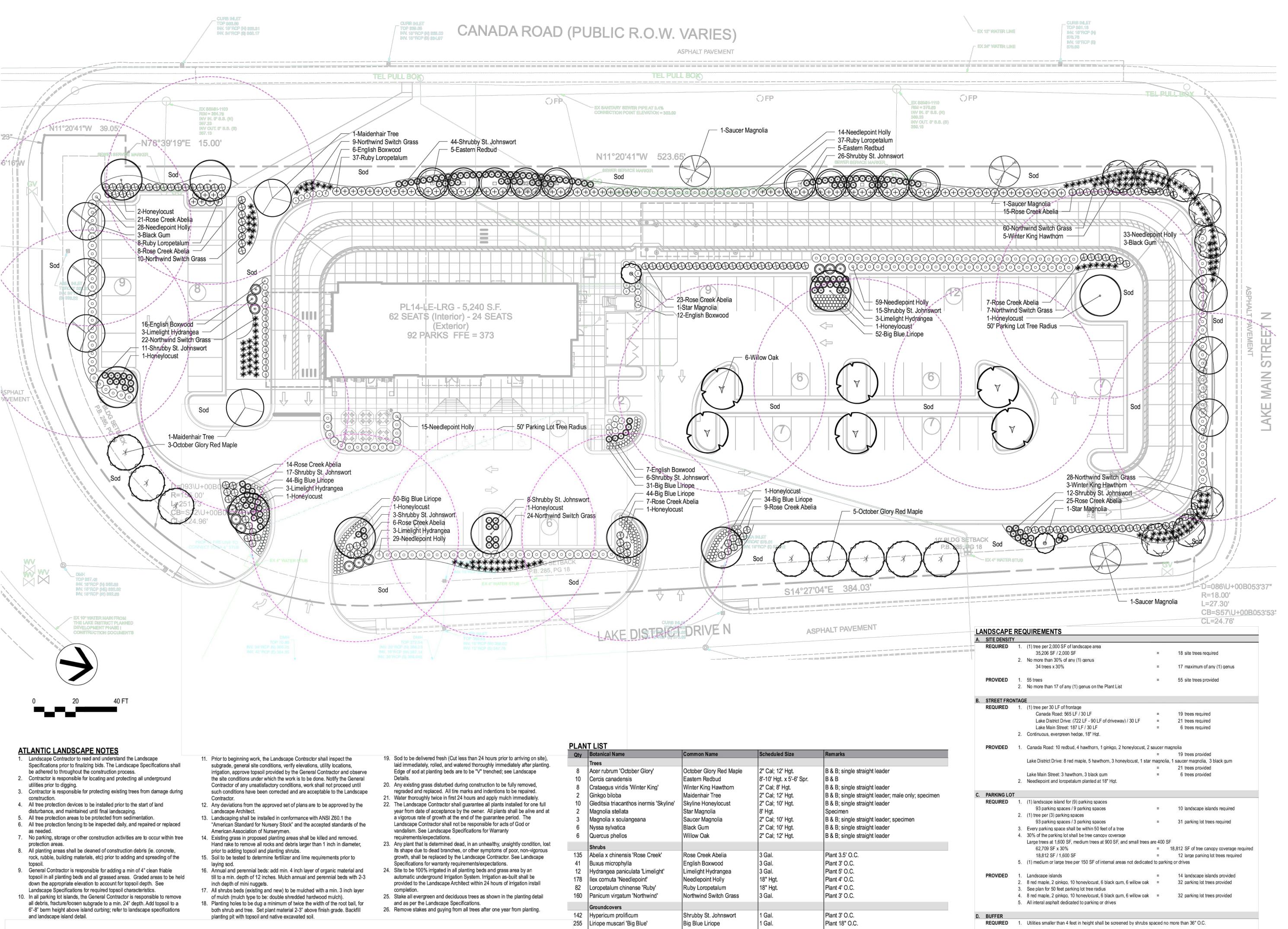
REVISION 1-2022

Job No. : <u>22036CFA</u>
Store : <u>05430</u>
Date : <u>11/11/2022</u>

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C-5.2









Manley Land Design, Inc. 51 Old Canton Street Alpharetta, Georgia 30009 770.442.8171 tel



# DIS $\Box$

FSU# 05430

REVISION SCHEDULE NO. DATE BY DESCRIPTION

LD PROJECT#	2022334
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ATE	01.18.23

KCN

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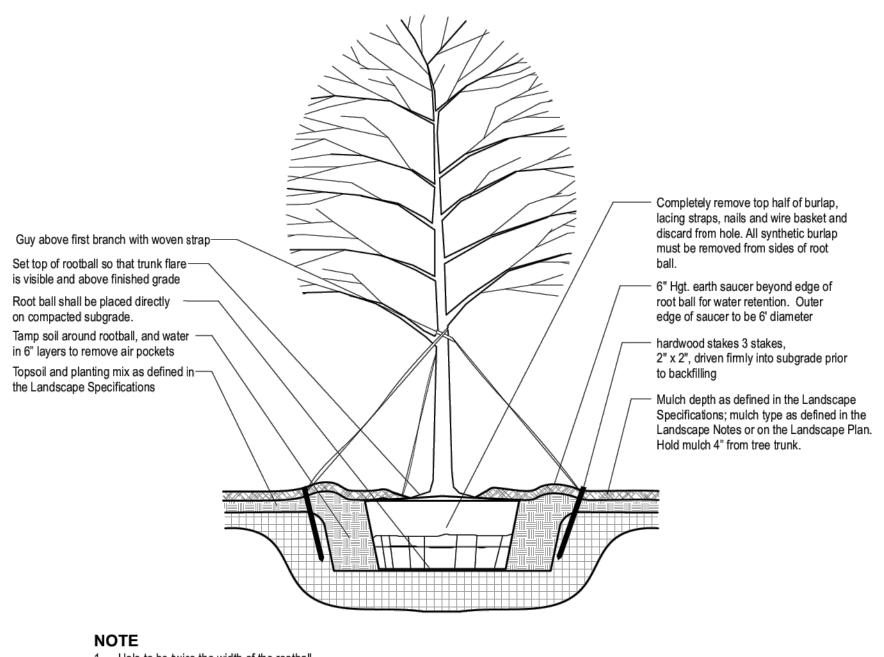
uthorized project representatives.

₋andscape Plan

DRAWN BY

PROVIDED 1. TBD

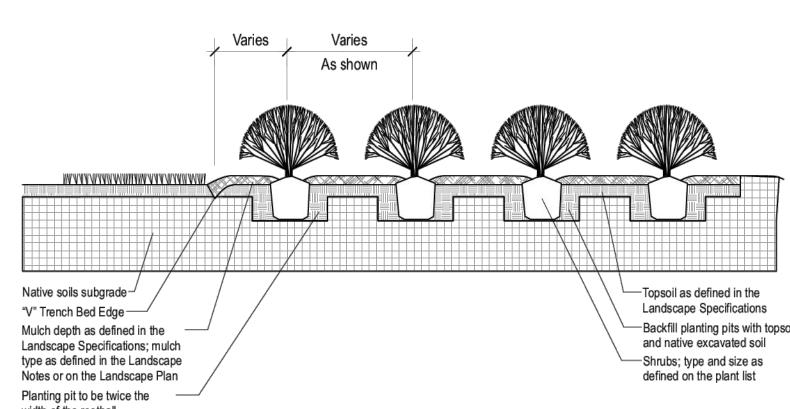
SHEET NUMBER

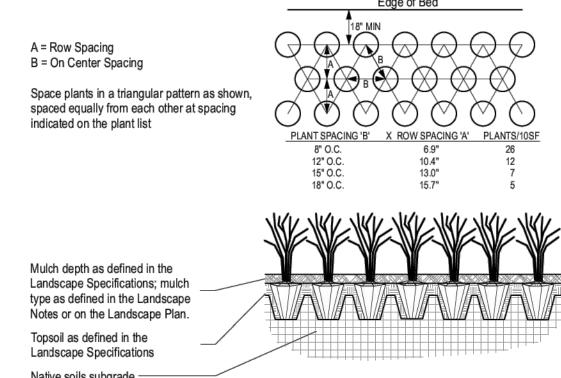


Hole to be twice the width of the rootball.

TREE PLANTING & STAKING SCALE: NTS

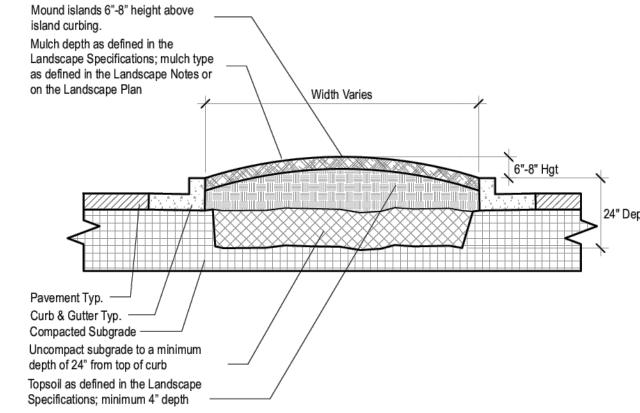
- 2. Do not heavily prune tree at planting. Prune only crossover limbs, broken or dead branches; Do not remove the terminal buds of branches that extend to the edge of the crown.
- 3. Each tree must be planted such that the trunk flare is visible at the top of the rootball. Trees where the trunk flare is not visible shall
- be rejected. Do not cover the top of the rootball with soil. Mulch to be held back 4" away from trunk. Remove Guy Wires and Staking when warranty period has expired (after one year).





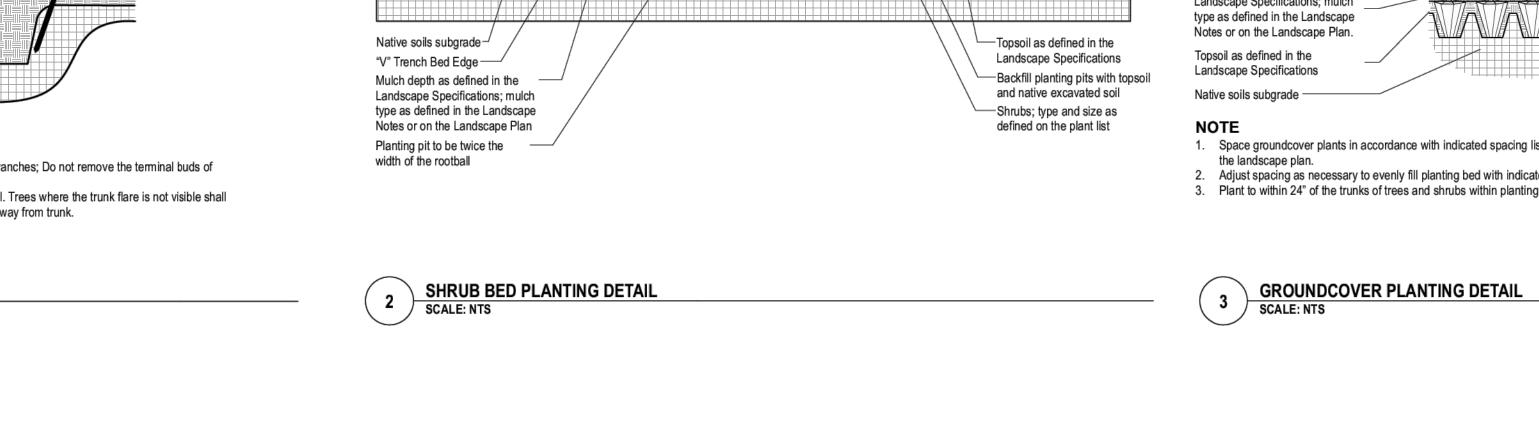
- 1. Space groundcover plants in accordance with indicated spacing listed on the plant list, or as shown on
- 2. Adjust spacing as necessary to evenly fill planting bed with indicated quantity of plants.
- 3. Plant to within 24" of the trunks of trees and shrubs within planting bed and to within 18" of edge of bed.

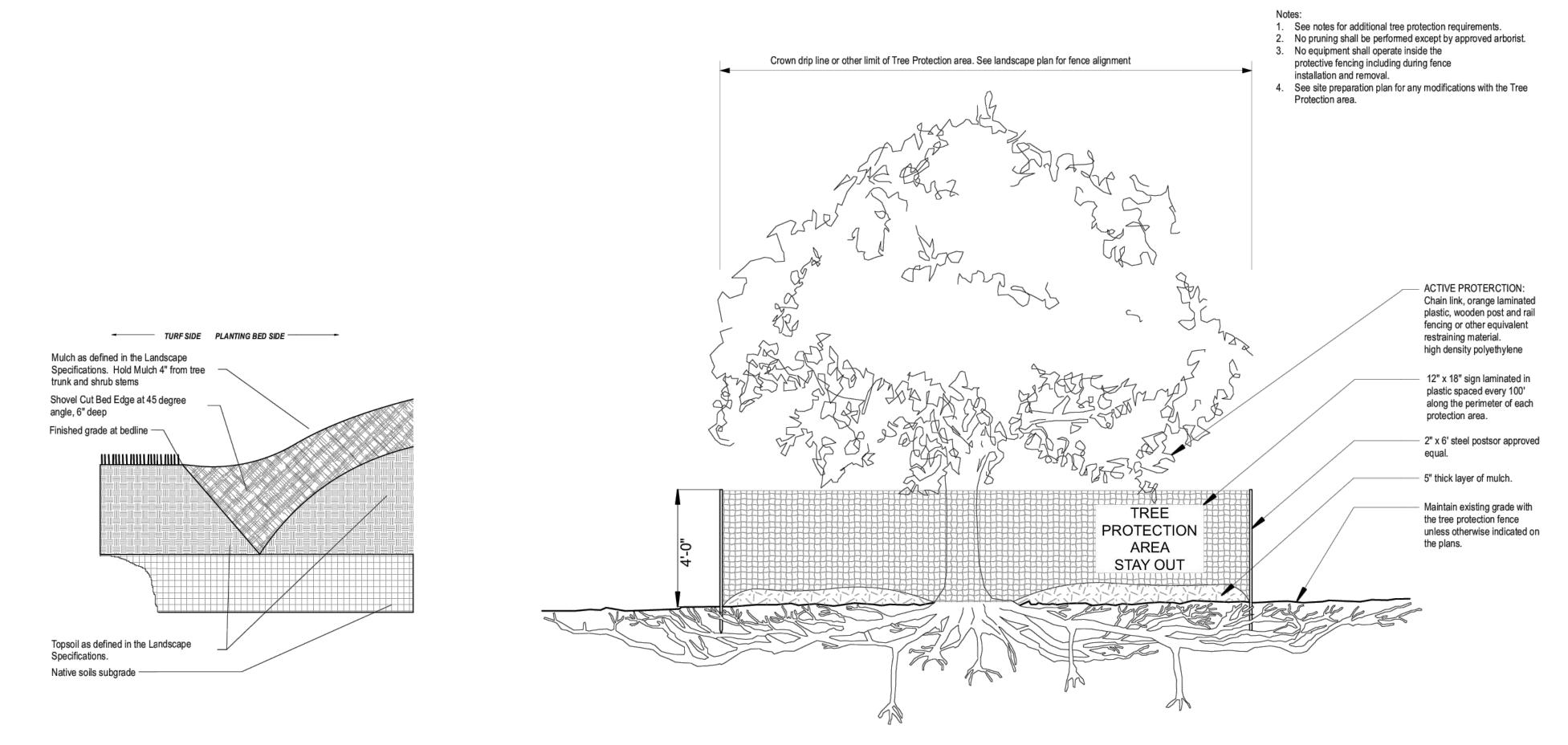




- 1. Clean construction debris from within landscape island areas (ie. concrete, rocks, rubble, building materials, ect), prior to installing topsoil and plant material.
- 2. Fracture/loosen existing subgrade to a minimum 24" depth. Remove and replace any subgrade unsuitable for planting. Once subgrade is clean of debris and loosened, add topsoil to a minimum bermed 6"-8" height above island curbing.
- 3. Island plant material as per the Landscape Plan. 4. Install plant material as per tree, shrub and ground cover planting details, and as defined in the
- Landsacpe Specifications. 5. Install mulch or sod as specified on the Landscape Plan, and as defined in the Landscape Specifications.







"V" TRENCH BED EDGING



5200 Buffington Road

Atlanta, Georgia 30349-2998

LAND DESIGN

Landscape Architecture

Manley Land Design, Inc.

51 Old Canton Street

Alpharetta, Georgia 30009

770.442.8171 tel

FSU# 05430

REVISION SCHEDULE

NO. DATE BY DESCRIPTION

MLD PROJECT #	2022334
PRINTED FOR	PERMIT
DATE	01.18.23

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Landscape Details

L-101

#### LANDSCAPE SPECIFICATIONS

#### PART 1 - GENERAL

#### DESCRIPTION

Provide trees, shrubs, ground covers, sod, and annuals/perennials as shown and specified on the landscape plan. The work includes:

- Soil preparation.
- Trees, shrubs, ground covers, and annuals/perennials.
- Planting mixes. 4. Top Soil, Mulch and Planting accessories.
- Maintenance.
- Decorative stone.

#### Related Work: Irrigation System.

#### **QUALITY ASSURANCE**

Plant names indicated; comply with "Standardized Plant Names" as adopted by the latest edition of the American Joint Committee of Horticultural Nomenclature. Names of varieties not listed conform generally with names accepted by the nursery trade. Provide stock true to botanical name and legibly tagged.

Comply with sizing and grading standards of the latest edition of "American Standard for Nursery Stock". A plant shall be dimensioned as it stands in its natural position.

All plants shall be nursery grown under climatic conditions similar to those in the locality of the project for a minimum of 2 years.

Nursery Stock furnished shall be at least the minimum size indicated. Larger stock is acceptable, at no additional cost, and providing that the larger plants will not be cut back to size indicated. Provide plants indicated by two measurements so that only a maximum of 25% are of the minimum size indicated and 75% are of the maximum size indicated.

Before submitting a bid, the Contractor shall have investigated the sources of supply and be satisfied that they can supply the listed plants in the size, variety and quality as specified. Failure to take this precaution will not relieve the Contractor from their responsibility for furnishing and installing all plant materials in strict accordance with the Contract Documents without additional cost to the Owner. The Landscape Architect shall approve any substitutes of plant material, or changes in plant material size, prior to the Landscape Contractor submitting a bid.

#### DELIVER, STORAGE AND HANDLING

Take all precautions customary in good trade practice in preparing plants for moving. Workmanship that fails to meet the highest standards will be rejected. Spray deciduous plants in foliage with an approved "Anti-Desiccant" immediately after digging to prevent dehydration. Dig, pack, transport, and handle plants with care to ensure protection against injury. Inspection certificates required by law shall accompany each shipment invoice or order to stock. Protect all plants from drying out. If plants cannot be planted immediately upon delivery, properly protect them with soil, wet peat moss, or in a manner acceptable to the Landscape Architect. Water heeled-in plantings daily. No plant shall be bound with rope or wire in a manner that could damage or break the branches. Cover plants transported on open vehicles with a protective covering to prevent wind burn.

Protect existing utilities, paving, and other facilities from damage caused by landscape operations.

A complete list of plants, including a schedule of sizes, quantities, and other requirements are shown on the drawings. In the event that quantity discrepancies or material omissions occur in the plant materials list, the planting plans shall govern.

The irrigation system will be installed prior to planting. Locate, protect and maintain the irrigation system during planting operations. Repair irrigation system components damaged during planting operations; at the Contractor's expense. Refer to the irrigation specifications, irrigation plan and irrigation details.

Do not begin landscape accessory work before completion of final grading or surfacing.

Warrant plant material to remain alive, be healthy and in a vigorous condition for a period of 1 year after completion and final acceptance of entire project.

Replace, in accordance with the drawings and specifications, all plants that are dead or, are in an unhealthy, or unsightly condition, and have lost their natural shape due to dead branches, or other causes due to the Contractor's negligence. The cost of such replacement(s) is at the Contractor's expense. Warrant all replacement plants for 1 year after installation.

Warranty shall not include damage, loss of trees, plants, or ground covers caused by fires, floods, freezing rains, lightning storms, winds over 75 miles per hour, winter kill caused by extreme cold, severe winter conditions not typical of planting area, and/or acts of vandalism or negligence on a part of the Owner.

Remove and immediately replace all plants, found to be unsatisfactory during the initial planting

Maintain and protect plant material, lawns, and irrigation until final acceptance is made.

Inspection of planted areas will be made by the Owner's representative

1. Planted areas will be accepted provided all requirements, including maintenance, have been complied with and plant materials are alive and in a healthy, vigorous condition.

Upon acceptance, the Contractor shall commence the specified plant maintenance.

# CODES, PERMITS AND FEES

Obtain any necessary permits for this Section of Work and pay any fees required for permits.

The entire installation shall fully comply with all local and state laws and ordinances, and with all established codes applicable thereto; also as depicted on the landscape and irrigation construction set.

# PART 2 - PRODUCTS

#### **MATERIALS**

Plants: Provide typical of their species or variety; with normal, densely developed branches and vigorous, fibrous root systems. Provide only sound, healthy, vigorous plants free from defects, disfiguring knots, sun scald injuries, frost cracks, abrasions of the bark, plant diseases, insect eggs, borers, and all forms of infestation. All plants shall have a fully developed form without voids and open spaces. Plants held on storage will be rejected if they show signs of growth during the storage period.

- 1. Balled and plants wrapped with burlap, to have firm, natural balls of earth of sufficient diameter and depth to encompass the fibrous and feeding root system necessary for full recovery of the plant. Provide ball sizes complying with the latest edition of the "American Standard for Nursery
- Stock". Cracked or mushroomed balls, or signs of circling roots are not acceptable. 2. Container- grown stock: Grown in a container for sufficient length of time for the root system to have developed to hold its soil together, firm and whole.
- a. No plants shall be loose in the container. b. Container stock shall not be pot bound.
- 3. Plants planted in rows shall be matched in form.
- 4. Plants larger than those specified in the plant list may be used when acceptable to the Landscape Architect.
- proportion to the size of the plant. 5. The height of the trees, measured from the crown of the roots to the top of the top branch, shall

a. If the use of larger plants is acceptable, increase the spread of roots or root ball in

- not be less than the minimum size designated in the plant list.
- 6. No pruning wounds shall be present with a diameter of more than 1" and such wounds must show vigorous bark on all edges.
- 7. Evergreen trees shall be branched to the ground or as specified in plant list.
- 8. Shrubs and small plants shall meet the requirements for spread and height indicated in the plant
- a. The measurements for height shall be taken from the ground level to the height of the top
- of the plant and not the longest branch. Single stemmed or thin plants will not be accepted.
- c. Side branches shall be generous, well-twigged, and the plant as a whole well-bushed to
- d. Plants shall be in a moist, vigorous condition, free from dead wood, bruises, or other root or branch injuries.

Topsoil: Shall be Fertile, friable, natural topsoil of loamy character, without admixture of subsoil material, obtained from a well-drained arable site, reasonably free from clay, lumps, coarse sands, stones, roots, sticks, and other foreign materials, with acidity range of between pH 6.0 and 6.8.

Note: All planting areas shall be cleaned of construction debris (ie. Concrete, rubble, stones, building material, etc.) prior to adding and spreading of the top soil.

1. Sod Areas: Spread a minimum 4" layer of top soil and rake smooth. 2. Planting bed areas: Spread a minimum 4" layer of top soil and rake smooth.

- 3. Landscape Islands/Medians: Fracture/loosen existing subgrade to a minimum 24" depth. Remove and replace any subgrade unsuitable for planting. Once subgrade is clean of debris and loosened, add topsoil to a minimum berm 6"-8" height above island curbing.
- 4. Annual/Perennial bed areas: Add a minimum of 4" organic matter and till to a minimum 12" depth.

#### Mulch: Type selected dependent on region and availability; see landscape plans for type of

- much to be used. Hold mulch 4" from tree trunks and shrub stems. 1. Hardwood: (color) dark brown, 6 month old well rotted double shredded native
  - hardwood bark mulch not larger than 4" in length and ½" in width, free of wood chips and sawdust. Install minimum depth of 3".
- 2. Pine Straw: Pine straw to be fresh harvest, free of debris, bright in color. Bales to be wired and tightly bound. Needles to be dry. Install minimum depth of 3".

3. River Rock: (color) light gray to buff to dark brown, washed river rock, 1" – 3" in size.

Install in shrub beds to an even depth of 3". Weed control barrier to be installed under all rock mulch areas. Use caution during installation not to damage plant material. 4. Mini Nuggets: Install to a minimum depth of 2"-3" at all locations of annual and perennial beds. Lift the stems and leaves of the annuals and carefully spread the mulch to avoid

#### Guying/Staking:

- Arbortie: Green (or white) staking and guying material to be flat, woven, polypropylene material, 3/4" wide 900 lb. break strength. Arbortie shall be fastened to stakes in a
- manner which permits tree movement and supports the tree. Remove Guying/Staking after one year from planting.

injuring the plants. Gently brush the mulch off the plants.

Tree Wrap: Tree wraps should be used on young, newly planted thin-barked trees (Cherry, Crabapple, Honey Locust, Linden, Maple, Mountain Ash, Plum) that are most susceptible to sun scald/Sunburn. Standard waterproofed tree wrapping paper, 2-1/2" wide, made of 2 layers of crepe Draft paper weighing not less than 30 lbs, per ream, cemented together with asphalt. Wrap the tree in the fall and leave the wrap in place throughout the winter and early spring. Tree wraps are temporary and no longer needed once trees develop corky bark.

#### PART 3 – EXECUTION

Prior to beginning work, the Landscape Contractor shall inspect the subgrade, general site conditions, verify elevations, utility locations, irrigation, approve top soil provided by the General Contractor and observe the site conditions under which the work is to be done. Notify the General Contractor of any unsatisfactory conditions, and work shall not proceed until such conditions have been corrected and are acceptable to the Landscape Contractor.

#### **PREPARATION**

Planting shall be performed only by experienced workmen familiar with planting procedures under the supervision of a qualified supervisor.

Locate plants as indicated on the plans or as approved in the field after staking by the Landscape Contractor. If obstructions are encountered that are not shown on the drawings, do not proceed with planting operations until alternate plant locations have been selected and approved by the Landscape Architect; spacing of plant material shall be as shown on the landscape plan.

Excavate circular plant pits with vertical sides, except for plants specifically indicated to be planted in beds. Provide shrub pits at least 12" greater than the diameter of the root system and 24" greater for trees. Depth of pit shall accommodate the root system. Provide undisturbed sub grade to hold root ball at nursery grade as shown on the drawings.

#### INSTALLATION

Set plant material in the planting pit to proper grade and alignment. Set plants upright, plumb, and faced to give the best appearance or relationship to each other or adjacent structure. Set plant material 2" - 3" above the finish grade. No filling will be permitted around trunks or stems. Backfill the pit with topsoil mix and excavated material. Do not use frozen or muddy mixtures for backfilling. Form a ring of soil around the edge of each planting pit to retain water.

After balled and wrapped in burlap plants are set, muddle planting soil mixture around bases or

balls and fill all voids. 1. Remove all burlap, ropes, and wires from the top 1/3 of the root ball

Space ground cover plants in accordance with indicated dimensions. Adjust spacing as necessary to evenly fill planting bed with indicated quantity of plants. Plant to within 24" of the trunks of trees and shrubs within planting bed and to within 18" of edge of bed.

1. Mulch tree and shrub planting pits and shrub beds with required mulching material (see landscape plan for mulch type); depth of mulch as noted above. Hold mulch back 4" away from tree trunks and shrub stems. Thoroughly water mulched areas. After watering, rake mulch to provide a uniform finished surface.

#### Decorative Stone: (where indicated on landscape plan)

- 1. Install weed control barrier over sub-grade prior to installing stone. Lap 6" on all sides.
- Place stone without damaging weed barrier. 3. Arrange stones for best appearance and to cover all weed barrier fabric.

### Wrapping, guying, staking:

before wrapping. Wrapping:

Inspect trees for injury to trunks, evidence of insect infestation, and improper pruning

- a. Wrap trunks of all young newly planted trees known to have thin bark. Wrap spirally
- from bottom to top with specified tree wrap and secure in place. b. Overlap ½ the width of the tree wrap strip and cover the trunk from the ground to the
- height of the second branch.
- c. Secure tree wrap in place with twine wound spirally downward in the opposite direction, tied around the tree in at least 3 places in addition to the top and bottom. Wrap the trees in the fall and leave the wrap in place throughout the winter and early
- Tree wraps are temporary and no longer needed once the trees develop corky bark.
- Staking/Guying: a. Stake/guy all trees immediately after lawn sodding operations and prior to
- acceptance. b. Stake deciduous trees 2" caliper and less. Stake evergreen trees under 7'-0" tall.
- Stakes are placed in line with prevailing wind direction and driven into undisturbed soil. 2. Ties are attached to the tree, usually at the lowest branch.
- c. Guy deciduous trees over 2" caliper. Guy evergreen trees 7'-0" tall and over. 1. Guy wires to be attached to three stakes driven into undisturbed soil, with one stake placed in the direction of the prevailing wind.
- 2. Ties are attached to the tree as high as practical. 3. The axis of the stake should be at 90 degree angle to the axis on the pull of the
- 4. Remove all guying and staking after one year from planting.

#### Prune deciduous trees and evergreens only to remove broken or damaged branches.

WORKMANSHIP During landscape/irrigation installation operations, all areas shall be kept neat and clean.

Precautions shall be taken to avoid damage to existing structures. All work shall be performed in a safe manner to the operators, the occupants and any pedestrians.

Upon completion of installation operations, all excess materials, equipment, debris and waste material shall be cleaned up and removed from the site; unless provisions have been granted by the owner to use on-site trash receptacles. Sweep parking and walks clean of dirt and debris. Remove all plant tags and other debris from lawns and planting areas.

Any damage to the landscape, the structure, or the irrigation system caused by the landscape contractor shall be repaired by the landscape contractor without charge to the owner.

#### MAINTENANCE

Contractor shall provide maintenance until work has been accepted by the Owner's Representative.

and application of appropriate insecticides and fungicides necessary to maintain plants and lawns free of insects and disease. 1. Re-set settled plants to proper grade and position. Restore planting saucer and adjacent

Maintenance shall include mowing, fertilizing, mulching, pruning, cultivation, weeding, watering,

- material and remove dead material. 2. repair quy wires and stakes as required. Remove all stakes and quy wires after 1 year. 3. Correct defective work as soon as possible after deficiencies become apparent and
- weather and season permit 4. Water trees, plants and ground cover beds within the first 24 hours of initial planting, and not less than twice per week until final acceptance.

#### LANDSCAPE MAINTENANCE SPECIFICATIONS

The Contractor shall provide as a separate bid, maintenance for a period of 1 year after final acceptance of the project landscaping. The Contractor must be able to provide continued maintenance if requested by the Owner or provide the name of a reputable landscape contractor who can provide maintenance.

#### **STANDARDS**

All landscape maintenance services shall be performed by trained personnel using current, acceptable horticultural practices.

All work shall be performed in a manner that maintains the original intent of the landscape

All chemical applications shall be performed in accordance with current county, state and federal laws, using EPA registered materials and methods of application. These applications shall be performed under the supervision of a Licensed Certified applicator.

# Any work performed in addition to that which is outlined in the contract shall only be done upon

All seasonal color selections shall be approved by the General Manager prior to ordering and

written approval by the Owner's Representative (General Manager of the restaurant).

#### **SOIL TESTING**

The maintenance contractor shall perform soil tests as needed to identify imbalances or deficiencies causing plant material decline. The owner shall be notified of the recommendation for approval, and the necessary corrections made at an additional cost to the owner.

mmhos/cm in high organic mix

#### Acceptable Soil Test Results

	Landscape Trees and Shrubs	Turf
pH Range	5.0-7.0	6.0-7.0
Organic Matter	>1.5%	>2.5%
Magnesium (Mg)	100+lbs./acre	100+lbs./acre
Phosphorus (P2O5)	150+lbs./acre	150+lbs./acre
Potassium (K2O)	120+lbs./acre	120+lbs./acre
Soluble salts/	Not to exceed 900ppm/1.9 mmhos/cm	Not to exceed 750ppm/0.75 mmhos/cm
Conductivity	in soil; not to exceed 1400 ppm/2.5	in soil; not to exceed 2000 ppm/2.0

#### 3 pounds per acre 50 pounds per acre Manganese Potassium (K2O) 450 pounds per acre Sodium 20 pounds per acre

For unusual soil conditions, the following optional tests are recommended with levels not to exceed:

mmhos/cm in high organic mix

During landscape maintenance operations, all areas shall be kept neat and clean. Precautions shall be taken to avoid damage to existing structures. All work shall be performed in a safe manner to the operators, the occupants and any pedestrians.

Upon completion of maintenance operations, all debris and waste material shall be cleaned up and removed from the site, unless provisions have been granted by the owner to use on-site

Any damage to the landscape, the structure, or the irrigation system caused by the maintenance contractor, shall be repaired by the maintenance contractor without charge to the

### TURF

#### **GENERAL CLEAN UP**

Prior to mowing, all trash, sticks, and other unwanted debris shall be removed from lawns, plant beds, and paved areas.

Warm season grasses (i.e. Bermuda grass) shall be maintained at a height of 1" to 2" during

Cool season grasses, including blue grass, tall fescue, perennial ryegrass, etc., shall be maintained at a height of 2" to 3" in spring and fall. From June through September, mowing height shall be maintained at no less than 3".

The mowing operation includes trimming around all obstacles, raking excessive grass clippings and removing debris from walks, curbs, and parking areas. Caution: Weed eaters should NOT be used around trees because of potential damage to the bark.

Edging of all sidewalks, curbs and other paved areas shall be performed once every other mowing. Debris from the edging operations shall be removed and the areas swept clean. Caution shall be used to avoid flying debris.

# LIMING & FERTILIZING

A soil test shall be taken to determine whether an application of limestone in late fall is necessary. If limestone is required, the landscape contractor shall specify the rate, obtain approval from the owner and apply it at an additional cost. A unit price for liming of turf shall

#### accompany the bid based on a rate of 50 pounds per 1000 square feet. Fertilizer shall be applied in areas based on the existing turf species.

LAWN WEED CONTROL: HERBICIDES Selection and proper use of herbicides shall be the landscape contractor's responsibility. All

chemical applications shall be performed under the supervision of a Licensed Certified

# Applicator. Read the label prior to applying any chemical.

**INSECT & DISEASE CONTROL FOR TURF** The contractor shall be responsible for monitoring the site conditions on each visit to determine if any insect pest or disease problems exist. The contractor shall identify the insect pest or disease, as well as the host plant, and then consult the most current edition of the Cooperative Extension Service's "Commercial Insecticide Recommendation for Turf" for control. The licensed applicator shall be familiar with the label provided for the selected product prior to

application. Inspection and treatment to control insect pests shall be included in the contract price.

# TREES, SHRUBS, & GROUND COVER

All ornamental trees, shrubs and ground cover shall be pruned when appropriate to remove dead or damaged branches, develop the natural shapes. Do not shear trees or shrubs. If previous maintenance practice has been to shear and ball, then a natural shape will be restored gradually.

- Pruning Guidelines: 1. Prune those that flower before the end of June immediately after flowering. Flower buds develop during the previous growing season. Fall, winter or spring pruning would reduce the spring flowering display.
- 2. Prune those that flower in summer or autumn in winter or spring before new growth begins, since these plants develop flowers on new growth. 3. Delay pruning plants grown for ornamental fruits, such as cotoneasters, pyracanthas
- 4. Hollies and other evergreens may be pruned during winter in order to use their branches for seasonal decoration. However, severe pruning of evergreens should be done in early spring only. 5. Broadleaf evergreen shrubs shall be hand-pruned to maintain their natural appearance
- after the new growth hardens off. 6. Hedges or shrubs that require shearing to maintain a formal appearance shall be pruned as required. Dead wood shall be removed from sheared plants before the first shearing of the season.
- A. Yews, junipers, hemlocks, arborvitae, and false-cypress may be pruned after new growth has hardened off in late summer. If severe pruning is necessary, it must be done in early spring. B. Firs and spruces may be lightly pruned in late summer, fall, or winter after

completing growth. Leave side buds. Never cut central leader.

7. Conifers shall be pruned, if required, according to their genus.

C. Pines may be lightly pruned in early June by reducing candles. 8. Groundcover shall be edged and pruned as needed to contain it within its borders.

#### 9. Thinning: Remove branches and water sprouts by cutting them back to their point of origin on parent stems. This method results in a more open plant, without stimulating

excessive growth. Thinning is used on crepe myrtle, lilacs, viburnums, smoke bush,etc. 10. Renewal pruning: Remove oldest branches of shrub at ground, leaving the younger, more vigorous branches. Also remove weak stems. On overgrown plants, this method may be best done over a three-year period. Renewal pruning may be used on abelia,

Plants overhanging passageways and parking areas and damaged plants shall be pruned as

Shade trees that cannot be adequately pruned from the ground shall not be included in the Maintenance Contract. A certified arborist under a separate contract shall perform this type of

## SPRING CLEANUP

forsythia, deutzia, spiraea, etc.

Plant beds shall receive a general cleanup before fertilizing and mulching. Cleanup includes removing debris and trash from beds and cutting back herbaceous perennials left standing through winter, e.g. ornamental grasses, Sedum Autumn Joy.

For trees, the rate of fertilization depends on the tree species, tree vigor, area available for fertilization, and growth stage of the tree. Mature specimens benefit from fertilization every 3 to 4 years; younger trees shall be fertilized more often during rapid growth stages.

The current recommendation is based on the rate of 1000 square feet of area under the tree to be fertilized. For deciduous trees, 2 to 6 pounds of Nitrogen per 1000 square feet; for narrow-leaf evergreens, 1 to 4 pounds of Nitrogen per 1000 square feet; for broadleaf evergreens, 1 to 3 pounds of Nitrogen per 1000 square feet.

Shrubs and groundcover shall be top-dressed with compost 1" deep, or fertilized once in March with 10-6-4 analysis fertilizer at the rate of 3 pounds per 100 square feet of bed area. Ericaceous material shall be fertilized with an ericaceous fertilizer at the manufacturer's recommendation rate. If plants are growing poorly, a soil sample should be taken.

#### MULCHING

Annually, all tree and shrub beds will be prepared and mulched, to a minimum depth of 3" with quality mulch to match existing. Bed preparation shall include removing all weeds, cleaning up said bed, edging and cultivating decayed mulch into the soil. Debris from edging is to be removed from beds where applicable. If deemed necessary, a pre-emergent herbicide may be applied to the soil to inhibit the growth of future weeds.

Organically maintained gardens shall not receive any pre-emergent herbicides. Mulch in excess of 4" will be removed from the bed areas. SPECIAL CARE shall be taken in the mulching operation not to over-mulch or cover the base of trees and shrubs. This can be detrimental to the health of the plants.

All beds shall be weeded on a continuous basis throughout the growing season to maintain a neat appearance at all times.

Pre-emergent (soil-applied) and post-emergent (foliar-applied) herbicides shall be used where and when applicable and in accordance with the product's label.

#### INSECT & DISEASE CONTROL: TREES, SHRUBS & GROUNDCOVER

The maintenance contractor shall be responsible for monitoring the landscape site on a regular basis. The monitoring frequency shall be monthly except for growing season, which will be every other week. Trained personnel shall monitor for plant damaging insect activity, plant pathogenic diseases and potential cultural problems in the landscape. The pest or cultural problem will be identified under the supervision of the contractor.

For plant damaging insects and mites identified in the landscape, the contractor shall consult and follow the recommendations of the most current edition of the state Cooperative Service publication on insect control on landscape plant material.

Plant pathogenic disease problems identified by the contractor that can be resolved by pruning

or physical removal of damaged plant parts will be performed as part of the contract. For an

additional charge, plant pathogenic diseases that can be resolved through properly timed applications of fungicides shall be made when the owner authorizes it. If the contractor notes an especially insect-or disease-prone plant species in the landscape, he/she will suggest replacement with a more pest-resistant cultivar or species that is consistent

with the intent of the landscape design. NOTE: For identification of plant-damaging insects and mites, a reference textbook that can be used is Insects that feed on Trees and Shrubs by Johnson and Lyon, Comstock Publishing Associates. For plan pathogenic diseases, two references are suggested: Scouting and Controlling Woody Ornamental Diseases in Landscapes and Nurseries, authorized by Gary

Moorman, published by Penn State College of Agricultural Sciences, and Diseases of Trees

and Shrubs by Sinclair and Lyon, published by Comstock Publishing Press.

The maintenance contractor shall remove trash from all shrub and groundcover beds with each

#### requested by the owner, the maintenance contractor, at an additional cost to the owner shall perform supplemental leaf removals.

WINTER CLEAN-UP

The project shall receive a general clean-up once during each of the winter months, i.e.,

All fallen leaves shall be removed from the site in November and once in December. If

#### January, February, and March.

- Clean-up includes:
- Cleaning curbs and parking areas Removing all trash and unwanted debris

Turning mulch where necessary

Inspection of grounds

# SEASONAL COLOR: PERENNIALS, ANNUALS, AND BULBS

The installation of perennials, annuals, and bulbs, unless specified herein, shall be reviewed

# with the owner, and, if accepted, installed and billed to the owner.

#### SEASONAL COLOR MAINTENANCE Perennialization of Bulbs:

- After flowering, cut off spent flower heads. Allow leaves of daffodils and hyacinths to remain for six weeks after flowers have faded.
- Cut off at base.
- Allow leaves of other bulbs to yellow naturally and then cut off at base. 4. Apply fertilizer after flowering in spring, possibly again in fall. Apply 10-10-10 at the rate of 2 pounds per 1000 square feet, or top-dress with compost 1" deep. Fall fertilization

# with a bulb fertilizer or mulching with 1" of compost is optional.

Flower Rotation: 1. Bulbs: Remove the entire plant and bulb after flowers have faded or at the direction of

b. Fertilizing Summer Annuals: Fertilize using one or two methods: Apply a

- the owner, and install new plants if included in contract. Summer Annuals or Fall Plants: a. Dead heading: Pinch and remove dead flowers on annuals as necessary.
- such as 10-10-10 may be necessary in late summer. Or, apply liquid fertilizations of 20-20-20 water-soluble fertilizers, not to exceed 2 pounds of 20-20-20 per 100 gallons of water, monthly; or mulch with compost 1" deep. c. Removal: If fall plants are to be installed, summer annuals shall be left in the ground

until the first killing frost and then removed, unless otherwise directed by the owner.

slow-release fertilizer in May following manufacturer's recommendations. A booster

#### 1. After initial installation, if a time-released fertilizer has been incorporated during plant installation, no more fertilizer need be applied the first growing season.

- The following year:
- a. Fertilize perennials with a slow-release fertilizer or any 50% organic fertilizer, or mulch perennials with compost 1" deep.
- b. Cut all deciduous perennials flush to the ground by March 1, if this was not done the
- previous fall, to allow new growth to develop freely.
- c. Mulch the perennial bed once in early spring at 1"-2" depth. If soil is bared in late

prevented with properly timed fungicides or use of disease-resistant varieties.

- fall, re-mulch lightly after ground is frozen to protect perennials.
- d. Inspect for insect or disease problems on perennials. Monitor and control slugs on hostas and ligularias. Powdery mildew on phlox, monardas, and asters can be
- e. Weed perennial bed as specified in "WEEDING" above. f. Prune branching species to increase density. Cut only the flowering stems after
- blooming. Do not remove the foliage. 3. The following fall cut back deteriorating plant parts unless instructed to retain for winter
- interest, e.g. Sedum Autumn Joy and ornamental grasses. Long-term Care: a. Divide plants that overcrowd the space provided. Divide according to the species.
- ever, e.g. peonies, hosta, and astilbe. b. For detailed information regarding the care of specific perennials, refer to All About Perennials by Ortho; Perennials: How to Select, Grow and Enjoy by Pamela Harper and Frederick McGouty, Hp Books Publisher; Herbaceous Perennial Plants: A Treatise on their Identification, Culture and Garden Attributes by Allan Armitage,

#### SUMMARY OF MAINTENANCE

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- LAWN MAINTENANCE 1. Soil analysis performed annually to determine pH. If pH does not fall within specified
- range, adjust according to soil test recommendations. 2. Maintain proper fertility and pH levels of the soil to provide an environment conducive to
- turf vitality for cool season grasses 3. Mow warm and cool season on a regular basis and as season and weather dictates. Remove no more than the top 1/3 of leaf blade. Clippings on paved and bed areas will
- be removed. 4. Aerate warm season turf areas to maintain high standards of turf appearance.
- 5. Apply pre-emergent to turf in two applications in early February and early April to extend

4. Manual weed control to maintain clean bed appearance.

runners to maintain clean defined beds.

Apply post emergent as needed to control weeds. 7. Mechanically edge curbs and walks. 8. Apply non-selective herbicide, to mulched bed areas and pavement and remove excess

# TREE, GROUNDCOVER, AND SHRUB BED MAINTENANCE

- 1. Prune shrubs, trees and groundcover to encourage healthy growth and create a natural
- 2. Mulch to be applied in February/March with a half rate in late summer to top dress. Apply pre-emergent herbicides in February and April.

5. Apply fungicides and insecticides as needed to control insects and disease.

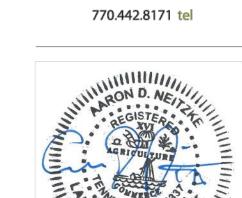
- 6. Ornamental shrubs, trees and groundcovers to be fertilized three (3) times per year with a balanced material (January/February, April/May, and October/November) 7. Edge all mulched beds.
- 8. Remove all litter and debris. GENERAL MAINTENANCE

Remove all man-made debris, blow edges.

2. Inspect grounds on a monthly basis and schedule inspection with Unit Operator.

Some need frequent dividing, e.g. asters and yarrow every two years; other rarely, if 5200 Buffington Road Atlanta, Georgia 30349-2998





Manley Land Design, Inc.

51 Old Canton Street

Alpharetta, Georgia 30009

# C

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FSU# 05430

REVISION SCHEDULE

NO. DATE BY DESCRIPTION

Maintenance **□** Specifications

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