



Municipal Planning & Design Review Commission
Regular Meeting Agenda
Thursday, February 16, 2023, 5:30 PM
City Hall, Lakeland, Tennessee 38002

- I. CALL TO ORDER:
- II. ROLL CALL:
- III. APPROVAL OF MINUTES OF PREVIOUS MEETING:
 - 1. January 19, 2023
- IV. PUBLIC DISCUSSION:
- V. REPORTS OF OFFICERS AND COMMITTEES:
- VI. OLD BUSINESS:
 - 1. Action on a proposed amendment to The Lake District PD to add additional multi-family lots.
- VII. NEW BUSINESS:
 - 1. Action on sign plan for Lakeland Town Square.
 - 2. Action on approval of a site plan for Chick-Fil-A Restaurant located at 3423 Lake District Drive.
 - 3. Action on approval of a site plan for Dollar General Store located at 10410 US Highway 70.
 - 4. Action on amending the Lakeland Municipal Planning Commission By-laws.
- VIII. ANNOUNCEMENTS:
- IX. ADJOURNMENT:

**LAKELAND MUNICIPAL PLANNING COMMISSION
MEETING MINUTES**

THURSDAY, JANUARY 19, 2023, 5:30 PM

CITY HALL, LAKELAND, TN.

DRAFT

- I. CALL TO ORDER:** The meeting was called to order at 5:30 PM by Chairman Wyatt Bunker.

For the record: The invocation and the pledge to the flag was led by Chairman Bunker.

II. ROLL CALL BY ACTING RECORDER:

Commissioner Jim Atkinson	Present
Sal Feraci	Present
Carl Helton	Present
Adam Henry	Present
Amber Hitchcock	Present
Shawn Rowland	Present
(C) Wyatt Bunker	Present

Others present:

Michael Walker, City Manager
Paul Luker, Planning Director
Emily Harrell, City Engineer
Alex Barthol, City Planner
Will Patterson, City Attorney

III. APPROVAL OF MEETING MINUTES:

Commissioner Atkinson moved to approve the regular meeting of January 19, 2023, as written, seconded by Mr. Feraci.

For the record: Without objection the minutes were declared approved as presented.

IV. PUBLIC DISCUSSION: None

V. REPORTS OF OFFICERS AND COMMITTEES:

VI. OLD BUSINESS: None

VII. NEW BUSINESS:

1. ***Action on a proposed amendment to the Land Development Regulations as to the placement of communication towers and setback requirements.***

Mr. Feraci moved to bring this item to the floor, seconded by Commissioner Atkinson.

Discussion ensued.

**LAKELAND MUNICIPAL PLANNING COMMISSION
MEETING MINUTES
THURSDAY, JANUARY 19, 2023, 5:30 PM
CITY HALL, LAKELAND, TN.**

DRAFT

Comments were heard from the following:

Lou Katzerman, TVT II, LLC – Tower Ventures (*The applicant*)

After the discussion, Mr. Henry moved to recommend the Board of Commissioners approve the proposed amendment to the Land Development Regulations as present with the inclusion that there should be 100' setback minimum from any R.O.W. and the fall radius plus 10', seconded by Mr. Feraci.

For the record: Amendments to this motion was accepted without objection.

Motion as amended passed unanimously, voice vote, 7 in favor 0 against.

2. Action on approval of a land disturbance permit for 6435 Stewart Road.

Mr. Feraci moved to bring this item to the floor, seconded by Commissioner Atkinson.

Discussion ensued.

Comments were heard from the following:

Mr. Bobby McVay – The Applicant

Mr. Walter Gill – Pro One Construction of TN

After the discussion, Commissioner Atkinson moved to approve the land disturbance permit, seconded by Mr. Feraci, with the following conditions:

- The driveway shall be paved 50' in length from Stewart Road with a maximum width of 22' not including the flare.
- A time limit set for when the last certificate of occupancy permit is issued or not to exceed 2 years.

For the record: Amendments to this motion were accepted without objection.

Motion as amended passed unanimously, voice vote, 7 in favor 0 against.

3. Action on a proposed amendment to the Lakeland Meadows PD to revise the property boundaries and add commercial uses.

Mr. Feraci moved to bring this item to the floor, seconded by Mr. Helton.

Discussion ensued.

**LAKELAND MUNICIPAL PLANNING COMMISSION
MEETING MINUTES**

**THURSDAY, JANUARY 19, 2023, 5:30 PM
CITY HALL, LAKELAND, TN.**

DRAFT

Comments were heard from the following:

David Bray – The Bray Firm

Richard Gonzales – 5000 block of Conifer View Ln

Louis Ricci – Valley Brook Development, LLC

Ronnie Faulkner – Valley Brook Development, LLC (*Present in audience*)

Tracy Nilles – 5000 block of Adagio Ln

Julie Pereira – 5000 block of Adagio Ln

After the discussion, Commissioner Atkinson moved to recommend to approval of the amendment to the Lakeland Meadows PD to the Board of Commissioners as described in staff report and attached documents with the following conditions:

- The design standards meet if not exceed the requirements set in the Land Development Regulations.
- The area shown on the plan as commercial on the draft PD be changed to permanent common open space.

Mr. Feraci seconded the motion.

Motion passed unanimously, voice vote, 7 in favor 0 against.

4. Action on a revision to the overall sign plan for The Lake District.

Mr. Feraci moved to bring this item to the floor, seconded by Mr. Henry.

Discussion ensued.

Comments were heard from the following:

Mr. Yehuda Netanel – Lake District LLC

After the discussion, when the question was called the revision to the overall sign plan for The Lake District was approved unanimously, voice vote, 7 in favor 0 against.

5. Action on a proposed amendment to The Lake District PD to add additional multi-family lots.

Commissioner Atkinson moved to bring this item to the floor, seconded by Mr. Rowland.

Discussion ensued.

Comments were heard from the following:

Yehuda Netanel – Lake District LLC

Dexter Muller - Economic Development Consultant

Richard Gonzales – 5000 block of Conifer View Ln

Joseph Cowan – 5000 block of Purple Moor Cv

Julie Pereira – 5000 block of Adagio Ln

**LAKELAND MUNICIPAL PLANNING COMMISSION
MEETING MINUTES
THURSDAY, JANUARY 19, 2023, 5:30 PM
CITY HALL, LAKELAND, TN.**

DRAFT

Tracy Nilles – 5000 block of Adagio Ln
Thomas Stites – 10000 block of Carly Dr

After the discussion, Chairman Bunker moved to defer this item to the next meeting and request a traffic study, school impact study and updated architectural design be submitted, seconded by Commissioner Atkinson.

When the question was called the motion passed unanimously, voice vote, 6 in favor 0 against. *(Mr. Rowland out at the time of vote)*

6. Discussion on street lighting on Collector and Arterial roadways within the City of Lakeland.

Discussion only, no action was taken.

Comments were heard from the following:
Veronica Nisky – 5000 block of Moudry Run Cv
Karsen Brooks – 5000 block of Adagio Ln

7. Discussion on improvements to MLGW electrical distribution system north of Highway 70.

Discussion only, no action was taken.

Comments were heard from the following:
John McCarty – McCarty Granberry Engineering

8. Discussion and update on the Comprehensive Plan progress.

Update given by Planning Director Paul Luker.

VIII. ANNOUNCEMENTS:

IX. ADJOURNMENT:

Mr. Feraci moved to adjourn the meeting, seconded by Ms. Hitchcock.

The meeting was adjourned at 8:50 p.m. without objections.

Amber Hitchcock, *Secretary*

ATTEST:

Debra Murrell, *City Recorder*

These minutes were approved on February 16, 2023.

Meeting Date: January 19, 2023

Subject: Amendment to the Lake District Planned Development Outline Plan

LOCATION: 3423 Lake District Drive

ZONING: PD Planned Development

PROPERTY SIZE: 160 acres

Applicant: Yehuda Netanel

Staff Contact: Paul Luker, Planning Director

REQUEST

The applicant is proposing the following amendments to the Outline Plan:

1. Reduce the single-family lots from 171 to 135
2. Increase the age restricted multi-family units from 168 to 296
3. Re-design and convert 36 single-family lots to 248 multi-family units

BACKGROUND

The Lake District PD is a mixed-use development consisting of commercial, office, multi-family and single-family uses. The commercial uses include retail, restaurants and hotels. The Outline Plan was approved by the MPC/DRC on 5/19/2016 and by the BOC on 6/9/2016. A Preliminary Development Plan (PDP) was approved by MPC/DRC on 10/18/2018 and BOC on 11/8/2018. An amendment to the PDP to include townhouses was approved by MPC on 11/21/2019.

EXISTING LAND USE

As stated above, The Lake District PD currently permits multi-family development. This request would expand the multi-family area located adjacent to the conservation area on the southern boundary of the PD. (see attachments). The property adjacent to the southern boundary is zoned R-7 Multi-Family as well as the property boarding the northeast boarder of the PD.

MORATORIUM ON MULTI-FAMILY DEVELOPMENT

The City of Lakeland instituted a twenty-four-month moratorium on multi-family development in October of 2020. The moratorium expired on October 22, 2022.

SCHOOL IMPACT STUDY

A school impact study is required for any development seeking an amendment or addition to an existing development that exceeds twenty residential units. The school impact study can be waived by the Board of Commissioners if the waiver is included in the motion to the Outline Plan.

EXAMPLE MOTIONS

1. Motion to recommend the Board of Commissioners approve the proposed amendments to the Lake District Planned Development Outline Plan as presented.
2. Motion to recommend the Board of Commissioners approve the proposed amendments to the Lake District Planned Development Outline Plan with conditions
3. Motion to recommend the Board of Commissioners disapprove the proposed amendments to the Lake District Planned Development Outline Plan.
 - a. Reason for denial

From: [Yehuda Netanel](#)
To: [Paul Luker](#)
Subject: PD amendment for the multi family
Date: Sunday, January 22, 2023 1:54:49 PM
Attachments: [HR2h786Q.png](#)

Paul,

Per the meeting last Thursday the application will now be for all units to be classified as age age restricted under the HUD definition.

Also the number of total unit (including the approved 168) will be reduced from 544 to 468.

The average unit size will now increase to 1,275 sf. Perhaps the largest in Shelby county.

Normal average size is 1,000 sf or less.

The financials projected by Dexter will remain the same since the county assess tax based on cost and size, not number of units.

Please let me know If I need to amend the paperwork.

Yehuda Netanel

818-346-7700 x15

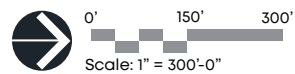
818-917-3537 (Cell)

yehuda@TheLakeDistrict.us

www.TheLakeDistrict.us



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The Lake District

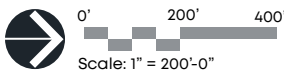
Lakeland, Tennessee | 01.16072.00 | 01.11.2023

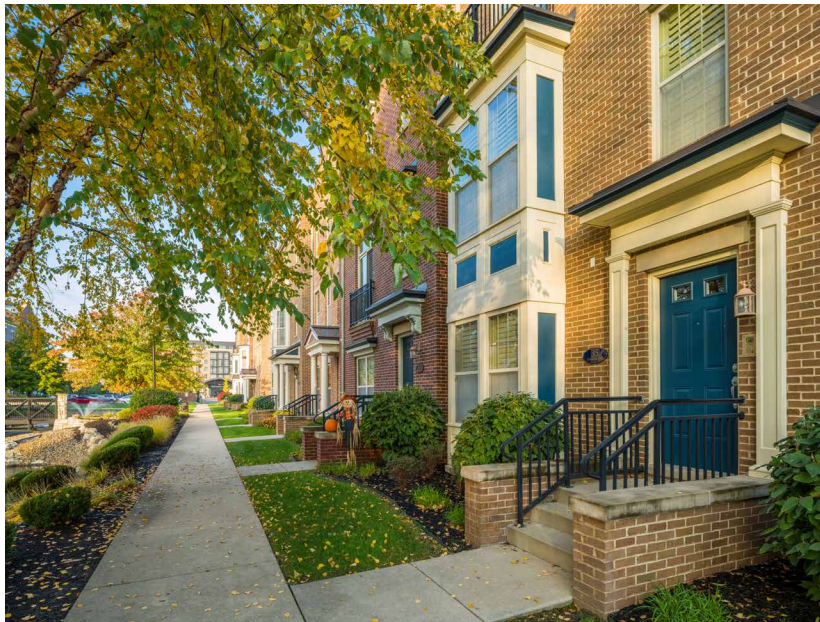
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Master Site Plan

Scale: 1" = 300'-0"







From: [Yahuda, Rebecca](#)
To: [Paul Lauder](#)
Subject: Images for the interior of the age restricted units and new multi family. Please include in the slide presentation
Date: Thursday, January 12, 2023 10:09:12 AM
Attachments: [1687676621.png](#)







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Overview

The City of Lakeland has received an amended residential development application within the city and have asked Cropper GIS Consulting (**Cropper**) to assess the potential student impact as a result. This student impact estimate is only based on the net difference of units per the developer's planned amendments to the subdivision, and is not for the entire development.

The development is referred to as The Lake District and the proposed development is shown in the image to the right.

The developer has indicated that they plan to amend the subdivision plan to remove 36 single-family units and instead, build 300 age-restricted units, as shown in the image below.

Research and Findings

A pupil-yield study was performed in early 2022 to understand how local residential developments are yielding students. The pupil-yield study serves as the primary source for yield rates of comparable homes / subdivisions in the area and is used as a component when determining the impact of a new residential subdivision on the Lakeland School System. The pupil-yield study involved mapping of Lakeland School System students, collection of subdivision, housing unit, and other pertinent GIS information from Shelby County.



The result of the pupil-yield study was a detailed inventory of developments within the city and their number of units, students, and yields for K-12 public school students.

The City of Lakeland and the developer provided the details of the proposed development, including site subdivision plan sketches, unit types per phases, anticipated build out, target price ranges, and lot sizes.

The Lake District PD was studied and other developments within the City were analyzed to determine communities of similar size, price, and type. After research was performed, the anticipated net yield of students as a result of modifying the subdivision plan to reduce 36 single-family attached development for the Lake District was established. The table below shows the anticipated yield of students for a 2-year build out of this component of the development. The table depicts an expected 14 fewer students by students from the two phases of development once the residential units are fully developed and built-out by late 2025. The K-8 district can expect 4 fewer new students per year for this specific area for the 2 years of construction to build out. The units that are replacing the 36 single-family are planned for age-restricted. Age-restricted housing typically yields few to no students. If there is any yield from the 300 age-restricted units that are planned, it will not go beyond the anticipated loss yield of students as a result of removing 36 single-family units.

The Lake District - Net change from 36 single-family to 300 age-restricted units									
Phase	Build-Out Year	Housing Type (number of units)	Yield Factor Used			Expected Yield			
		Single-Family Detached	K-4	5-8	9-12	K-4	5-8	9-12	Total
1	2024	-18	0.12	0.13	0.15	-2	-2	-3	-7
2	2025	-18				-2	-2	-3	-7
Total		-36				-4	-5	-5	-14

Note: The 36 single-family units are planned to be replaced with 300 age restricted units, which typically yield little to no students. Totals may not add up due to rounding.



Mr. Yehuda Netanel
The Lake District, LLC
5959 Topanga Canyon Blvd. #285
Woodland Hills, CA 91367-3630

Re: The Lake District, LLC
The Lake District Planned Development
Traffic Study Re-Evaluation for Proposed Land Use Change
Lakeland, TN
A2H # 15109.01

Dear Mr. Netanel,

This letter summarizes results and recommendations resulting from a February 2023 re-evaluation of the initial traffic study completed for the Lake District in September 2018. The initial traffic study is included as Attachment 1 with this letter. This analysis includes the following changes from the initial study:

- Replacement of 72 single family homes with 96 townhouses in the northeastern portion of the site. This land use has previously been approved by the City of Lakeland, but the existing traffic study had not been updated to reflect this change.
- Replacement of 36 single family houses with 385 age restricted apartments in addition to the currently approved 168 age restricted apartments in the southeastern portion of the site. This is the currently requested land use change that has initiated the revision to the existing traffic study.

Analysis for this study includes revision of the existing trip generation report; both the 2018 study (referred to hereafter as the “Base Scenario”) trip generation report and the revised 2023 “Senior Living Scenario” trip generation report are included as Attachment 2 with this letter. Using the same trip distribution estimates as the Base Scenario, traffic demand was calculated for six intersections: three intersections of Lake District Drive and Canada Road along the west side of the site, and three intersections of proposed residential streets with Monroe Road along the east side of the site. Predicted turning movements during the AM and PM peak hours were derived from these traffic demand calculations. These turning movements were added to projected background traffic for a 2029 modeling year—matching the Base Scenario study approach—to estimate peak hour demand at each approach of each intersection. Using the HCS suite of modeling software, Senior Living Scenario traffic demand was analyzed against the current layout plan for each intersection to predict the Level of Service for each intersection approach.

Note that analysis of Canada Road & Kingsridge Drive and of Canada Road & Monroe Road, which were included in the Base Scenario, have not been included in this analysis. Also, neither the 2018 study nor this analysis include any intersections internal to the site.

Overall, implementation of the proposed land use changes in the Senior Living scenario causes an increase in total daily site traffic (+153 average daily trips) versus the Base Scenario, but spreads that traffic more evenly throughout the day; both AM and PM peak hour demand are reduced (AM: -121 trips/hr, PM: -210 trips/hr). **The net result of the proposed land use change is a reduction in peak hour congestion.** Level of service and control delay for each site entrance under the proposed land use are as follows:

Intersection	Approach	Senior Living Land Use - February 2023			
		AM (LOS)	AM (Delay)	PM (LOS)	PM (Delay)
Canada @ A	SBL	C	18.1	B	12.3
	WBR	C	21.7	B	14.6
Canada @ B	SBL	C	20.8	B	12.7
	WBR	D	34.9	C	16.5
Canada @ C	SBL	B	19.1	A	6.1
	SBT	A	4.0	A	2.8
	WBR	C	30.2	C	24.4
	WBL	C	33.8	C	26.7
	NBT	B	17.8	B	10.7
	NBR	B	18.9	B	10.8
Monroe @ D	EB	A	9.4	A	9.2
	NB	A	7.5	A	7.4
Monroe @ E	NBL	A	9.3	A	9.1
	WBL	A	7.5	A	7.4
Monroe @ F	NBL	A	9.0	A	8.9
	WBR	A	7.4	A	7.4

Supporting HCS output reports are included as Attachment 3 with this letter.

Our analysis shows **no increase in traffic congestion** during peak periods on streets adjacent to the site. **All intersection approaches operate at an acceptable level of service**, with control delays less than 35 seconds during the AM peak period and less than 27 seconds for the PM peak period.

Sincerely,



Sam Jordan, Ph.D., EI
Civil Designer



David M. Smith, Ph.D., PE
Site & Infrastructure Practice Leader,
Principal, & Director of Civil Engineering

From: [Yehuda Ben-Zur](#)
To: [Paul Linder](#)
Subject: Update on the Age restricted
Date: Tuesday, January 24, 2023 8:27:24 AM
Attachments: [revised - residential package 11-26-22 cover.pdf](#)
[887976641.png](#)

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Good morning!

On p.3 you can see the new reduced number of units and the allocation per section. I will be sending this to Cropper as well. He has not contacted me yet but based on his Ashmont report I can see the information he may need to expedite his work so I will give him that info in advance.

From the beginning we've envisioned this section to be styled as manor homes architecture. What it means is three story structures with vast landscape surrounding the buildings. Of particular interest I would like to point out -that the distance between the wings in each building will exceed 250'. This will allow for amazing open space and gardens in the classic sense of manor homes.





Yehuda Netanel
818-346-7700 x15
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yehuda@TheLakeDistrict.us
www.TheLakeDistrict.us



Meeting Date: Thursday, February 16, 2023

Project: Lakeland Town Square PD - Application for Sign Plan

Applicant: Cory Brady, PLA, AICP, Integrated Land Solutions, PLLC

Staff Contact: Alex Barthol, Staff Planner

STAFF RECOMMENDATION

Staff recommends approval of the application as submitted. Over the past several weeks, staff has received applications for signs within the Lakeland Town Square PD. As it stands now, all signs within this development must conform to the City of Lakeland Sign Ordinance. Many of the applications that have been received are out of conformance simply because of the sign type being applied for and the architectural style of the development not being cohesive for standard wall/ground signs. Staff has worked with the applicant to develop a sign plan that will afford tenants the ability to properly showcase their business while also providing the characteristics that have been previously approved for other like developments.

REQUEST

The applicant is seeking the approval of a sign plan for the Lakeland Town Square Planned Development.

BACKGROUND

The Lakeland Town Square Planned Development is located on the south side of Highway 70 east of Cananda Road and west of Seed Tick Road. This development features several mixed use buildings with ground floor retail and three levels of apartments. The bulk of the businesses in this development are interior facing which has led to the need to develop a cohesive sign package to maintain the character and style originally intended.

ANALYSIS

The Lakeland Sign Ordinance was amended in 2016 to add "Sign Plan" as a package which may be used by an applicant for a larger project or Planned Development. The plan utilizes a consistent theme and materials. The DRC may approve sign plan elements that vary from the general requirements of the Sign Ordinance if the applicant can demonstrate how the varied standards are contextually appropriate and would enhance the overall project.

The Sign plan includes the following sign types:

1. Vertical Blade Signs
2. Blade Dropdown Signs
3. Wall Signs
4. Awning Signs
5. Canopy Signs

Rules and regulations regarding all proposed sign types can be found in the supplemental materials

EXAMPLE MOTIONS

1. Motion to approve the Sign Plan for the Lakeland Town Square Plan Development without conditions.
2. Motion to approve the Sign Plan for the Lakeland Town Square Plan Development subject to the following conditions:
 - a. Conditions as determined by the Planning Commission
3. Motion to deny the Sign Plan for the Lakeland Town Square Plan Development application:
 - a. Reason for denial

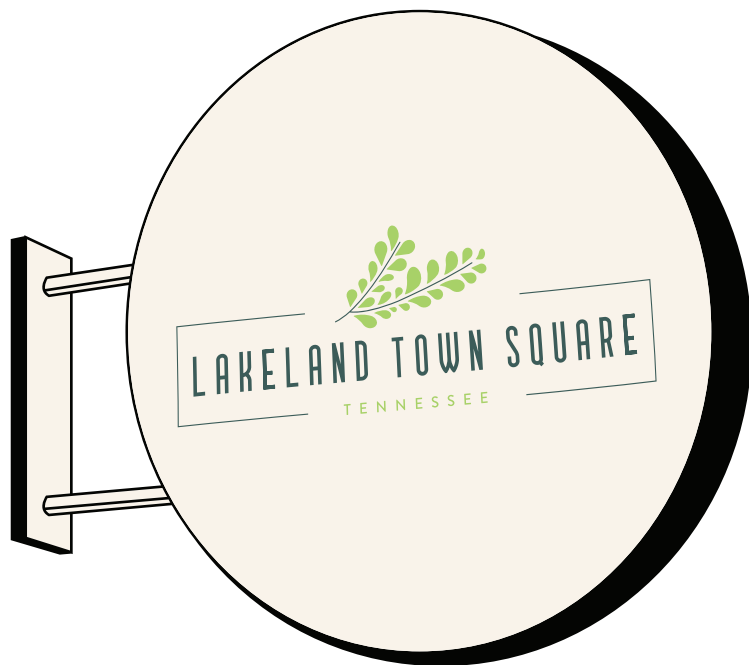


LAKE LAND TOWN SQUARE

T E N N E S S E E

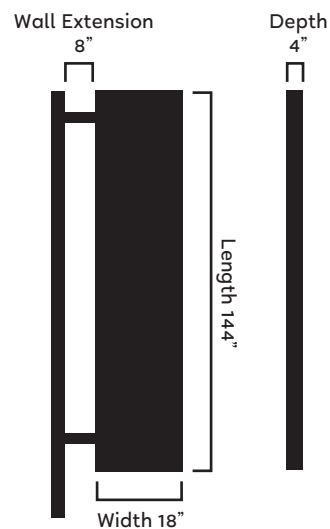
VERTICAL BLADE SIGN

VERTICAL BLADE SIGN



- **Maximum Width:** 24"
- **Maximum Length:** 25% of overall building height with a maximum of 15'
- **Maximum extension from wall:** 8"
- **Maximum Depth:** 4"

Sample Dimensions



VERTICAL BLADE SIGN

A. Definition

1. Any sign attached to a building wall extending laterally more than eighteen (18) inches from the face of such wall with a vertical message display.
2. A Vertical Blade sign may contain graphics such as a logo, crest, letters, etc.

B. Limit one (1) vertical blade sign per tenant per street or pedestrian frontage.

C. Maximum Sign Area: Vertical blade signs shall be proportionate to the scale and massing of the building upon which the sign is attached.

D. Mount Height: Minimum 9' clearance from finished floor or sidewalk elevation.

E. Materials: Cut Metal, Acrylic, (all graphics are to be dimensional (no Flat vinyl)

F. Vertical Blade Signs only allowed for Corner Tenants

BLADE DROPDOWN SIGN

BLADE DROPDOWN SIGN



BLADE DROPDOWN SIGN

A. Definition

1. Any sign attached to a building wall extending laterally more than eighteen (18) inches from the face of such wall.
2. A Horizontal Blade sign may contain graphics such as a logo, crest, letters, etc.
3. A Primary Horizontal Blade Sign shall be further defined as a single-sided, horizontal blade sign intended to serve as the tenant primary storefront signage in lieu of an awning sign, canopy sign, or wall sign. These signs are typically hanging signs, beneath balconies where the building's architectural façade does not accommodate traditional wall signs, and neither awnings nor canopies exist.
4. A Secondary Horizontal Blade Sign shall be defined as a double-sided, projecting blade sign permissible as additional pedestrian wayfinding signage.

B. Limit one (1) projecting sign/blade sign per tenant per street or pedestrian frontage.

C. Maximum Sign Area:

Primary Signs: Single Sided Sign Only: 11 square feet per side.

Secondary Signs: Double Sided Sign Only: 4.5 square feet per side.

D. Mount Height: Minimum 9' clearance from finished floor or sidewalk elevation.

E. Materials: Cut Metal, Acrylic.

F. Hanging signs to mount with two, painted 1" square tubes

WALL SIGN

WALL SIGN



WALL SIGN

A. Definition:

Any sign painted on or attached to and extending not more than 12 inches from an exterior wall in a parallel manner.

A wall sign may contain graphics such as a logo, crest, letters, etc.

B. Limit 1 wall sign per street or pedestrian frontage.

C. Maximum Sign Area: Wall signs shall be proportionate to the scale and massing of the building upon which the sign is attached.

1. Multiple Occupancy Buildings:

Maximum Area: One (1) Square Feet for each linear foot of tenant bay width.

Maximum Width: 75% of tenant bay width.

2. Single Occupancy Buildings:

1.5 Square Feet for each linear foot of building frontage along a public street or private drive.

D. Materials: Metal

1. Individual Letters, Reverse channel, back lit illumination with White 5000K LED lighting:

Reverse channel letters are to be painted metal,

All seams to be welded and ground smooth,

Letters are to have a clear polycarbonate backer,

Channel depth to be 2.5" maximum,

Letter channels to be peg mounted with 2" minimum and 2.5" maximum from face of wall,

Peg mounts are to be threaded anchor bolts with round cover sleeves and painted the color of the fascia.

Letter Colors: ????

WALL SIGN (continued)

D. Materials: Metal

2. Individual Letters, External illumination:

External illumination to be provided by separate light fixture(s) of a design that is complimentary to the overall sign design concept and building architecture,

Fixtures with arm extensions or gooseneck extensions are encouraged,

Pre-manufactured square or rectangle light bars are prohibited,

Individual letters to be a minimum 1" thickness of metal with letter thickness proportional to the height of the letter,

If peg mounted, the individual letters are to be peg mounted a minimum 1-1/2" from the face of the wall.

All proposed fixtures are subject to landlord review and approval.

AWNING SIGN

AWNING SIGN



AWNING SIGN

A. Definitions:

An awning shall be defined as any non-rigid material, such as fabric or flexible plastic that extends from the exterior wall of a building and is supported by or attached to a frame.

An awning sign may contain graphics such as a logo, crest, letters, etc.

B. Sign Placement: The name and/or logo of the tenant may be applied to the valence, and/or the sloped portion of the awning.

C. Limit 1 awning sign per tenant per street or pedestrian frontage.

D. Size: Maximum Square Footage per Awning Signage: Limit to 75% of the awning's valence width and a maximum character height of 14".

CANOPY SIGN



CANOPY SIGN

A. Definitions:

1. A Canopy shall be defined as a structural protective cover over a door, entrance, window, or outdoor service area, excluding marquees. Canopies are rigid structures typically constructed of metal or other rigid material generally supported by vertical elements rising from the ground at two or more corners.
2. A canopy sign may contain graphics such as a logo, crest, letters, etc. affixed to the canopy.

B. Sign Placement: The name and/or logo of the tenant shall be applied to the canopy with individual dimensional letters upon the face of the canopy, resting on top of the canopy, or suspended below the canopy.

C. Limit 1 canopy sign per tenant per street or pedestrian frontage.

D. Maximum Sign Area: Limit to 75% of the canopy width.

E. Maximum Sign Height: Maximum character height of 14".

F. Materials: Painted, Welded aluminum with 1/8" aluminum faces and .063 aluminum returns.

LAKELAND TOWN CENTER COMPREHENSIVE SIGN REGULATIONS

I. COMMERCIAL SIGN REQUIREMENTS:

- A. The comprehensive sign policy is intended to ensure quality of signage within the Lakeland Town Center development. The requirements contained herein are intended to provide adequate exposure for the tenant's merchandising and identification while maintaining the overall appearance critical to the success of the development.
- B. It is the intent of the Lakeland Town Center Architectural Control Committee to permit and regulate signage in general conformance of the City of Lakeland Sign Ordinance as modified herein. Where this sign policy is silent on a particular provision, the City's Sign Ordinance shall govern.
- C. The comprehensive sign policy regulates only the specific "storefront" sign types specified herein. All other allowable signs shall be permitted in the Lakeland Town Center on accordance with the governing provisions of City's Sign Ordinance.
- D. In accordance with the City of Lakeland Sign Ordinance, where a literal application of the terms of this comprehensive sign policy, due to special circumstances, would result in an unusual hardship in an individual case, the Design Review Commission may grant a variance to the number of colors, use of logos and trademarks, location, orientation, illumination, and other related design elements for permitted signs as specifically provided for in various sections of this Ordinance and pursuant to procedures set forth in City Code.
- E. To verify compliance with the design intent of this manual, the owner/landlord reserves the right to review and approve or disapprove all proposed signs and/or graphic treatment governed by the sign manual per the owner/landlord's interpretation of this manual, and to require revisions of any sign design which the owner/landlord judges to be not in compliance. Tenant shall not submit any sign drawings to the City of Lakeland without landlord's approval.
- F. The owner/landlord reserves the right to make periodic changes to this manual, subject to approval by the City, as it sees fit for the benefit of the Development.
- G. All signs must be fabricated as described herein by a sign contractor approved by owner/landlord.
- H. Sign fabrication and installation shall comply with any applicable building codes.
- I. All signage illumination shall comply with the City's Sign Ordinance.

II. ALLOWABLE TENANT STOREFRONT SIGN TYPES:

- A. Primary Signs: Awning Sign, Canopy Sign, Projecting Sign/Blade Sign, Wall Signs, Vertical Blade Sign (Corners Only).
- B. Secondary Signs: Horizontal Blade Sign

III. GENERAL SIGN CRITERIA

- A. The area computations of individual signs shall be measured in accordance with the City of Lakeland Sign Ordinance.
- B. Each tenant shall be permitted one (1) Primary Sign at each storefront bay. Where a building contains multiple bays with individual storefronts, one (1) Primary Sign shall be permitted for each individual business in direct proximity to the primary entrance. Where an individual business inhabits multiple bays, only (1) Primary Sign shall be permitted at the business' primary entrance.
- C. Corner tenants having two or more exterior frontages facing converging streets or pedestrian ways and having segregated primary and secondary entrances serving the general public shall be allowed one (1) additional Primary Sign over the business' secondary entrance.
- D. Secondary Signs are recommended to provide additional wayfinding signage for the pedestrian. The secondary projecting/blade sign shall be limited in size and mounted at a 90-degree angle to the exterior façade, along the pedestrian way.
- E. All signs, excluding projecting/ blade signs shall be internally illuminated, LED only. External illumination of any Projecting/Blade Sign is recommended.
- F. Changeable copy signs are PROHIBITED.
- G. Panel or box channel signs are PROHIBITED.

Meeting Date: Thursday, February 16, 2023

Project: Chick Fil A - Site Plan

Staff Contact: Alex Barthol, Staff Planner

PROJECT INFORMATION

Location: 3441, 3423, 3403 Lake District Drive North
Parcel ID: L0159Q A00004, L0159Q A00003, L0159Q A00002
Zoning District: General Business
(C-2)
Neighborhood: Type V
Site Area: 2.53 acres
Applicant: Mark Campbell
Representative: Mark Campbell, Carter Engineering

STAFF RECOMMENDATION

Staff Recommends approval of the application as submitted.

REQUEST

The applicant is seeking approval of a Site Plan to construct a 5,240 sq. ft. Chick Fil A Restaurant. This approval will include public improvements, civil site work, parking, ingress/egress, building elevations, signage, lighting, and landscaping.

BACKGROUND

The subject properties are a combined 2.53-acres located at 3441, 3423, and 3403 Lake District Drive North within the Lake District Planned Development. The subject properties are within the General Business (C-2) Zoning District. Adjacent property uses include Starbucks to the North and the Lake District phase 1 Area A to the northeast.

PROPERTY CHARACTERISTICS

The three properties are bounded to north by Lake Main Street North, to the west by Canada Road and to the south and east by Lake District Drive. The subject property has a combined depth of approximately 275 feet and approximately length of 565 feet of frontage on both Canada Road and Lake District Drive. The whole of the site has been cleared and is currently vacant.

ANALYSIS

Site Details

Access to the site will be from two ingress/egress points off Lake District Drive North. Parking is shown as ninety-two (92) overall spaces with four (4) handicapped spaces. The Land Development Regulations allow for a total of seventy-nine (79) spaces however the applicant did receive a variance from the Board of Appeals on 12/19/22 for the additional thirteen (13) spaces. All of the proposed parking is situated on the north, east and south sides of the building with the spaces on the south side reserved for pickup orders only. These parking spaces also feature the only permeable concrete surface on the site. A double drive thru lane wraps around the entirety of the site to allow for considerable stacking of customers before any spillover onto Lake District Drive North would occur.

Building Elevations

The proposed facades will feature a brick veneer (Acme, Congaree Vista and Acme, Chicago Southside) with a water table and soldier course. Windows mullions will be painted Dark Bronze and feature Dark Bronze canopies. Dark Bronze downspouts line the west side of the building and a Midnight Bronze prefinished metal coping caps the perimeter of the building. Two (2) Dark Bronze drive thru canopies are also proposed and will match the materials used on the main building. The dumpster enclosure will feature a brick façade (Acme, Congaree Vista) with a Midnight Bronze double gate.

Signage

The applicant is requesting a total of four (4) wall signs and one (1) ground sign as well as typically directional and menu signage. The total wall signage square footage allowed is equal to the amount of building frontage for properties within the Lake District PD. The total building frontage for this location is three hundred and thirty-nine (339) feet. The applicant is proposing a total of One hundred and forty-nine (149) square feet of wall signage and thirty-two (32) square feet of ground signage. All signage shown in the application does conform to the LDRs.

Lighting

The provided photometric plan shows eleven (11) pole mounted full cut-off parking lot lights, ten (10) under canopy lights and one (1) wall pack. The elevations show several wall sconces that surround the building however these lights are not shown in the site lighting plan. The plan shows minimal light bleed over to the adjacent properties. The lighting as proposed does conform to the LDRs.

Landscaping

The landscaping proposed will be installed primarily on the perimeter of the site. Larger plantings are equally spaced around the entire perimeter with smaller planting filling in underneath. A Landscape Island in the parking lot also features larger plantings with smaller plants installed closer to the main building. Because the drive thru for this site extends all the way around the building extensive plantings are provided around the entire perimeter. The plantings proposed are in conformance with the LDRs.

Final Plat

The Lake District Planned Development Phase 1 Final Development Plat will need to be re-recorded to show the combination of these three lots.

EXAMPLE MOTIONS

1. Motion to approve the Chick Fil A Site Plan subject to the following conditions:
 - a. Conditions as determined by the Planning Commission
 - b. Conditions listed in the Staff Report
2. Motion to approve the Chick Fil A Site Plan application without conditions.
3. Motion to deny the Chick Fil A Site Plan application:
 - a. Reason for denial

SITE DEVELOPMENT PLANS



FOR

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

- CONSTRUCTION NOTES:
ANTICIPATED START PROJECT DATE 05/01/2023
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
6. INSTALL GRASSING AND MULCH (TEMPORARY VEGETATION)
7. CONSTRUCT BUILDING
8. INSTALL CURB AND GUTTER
9. PAVE SITE
10. FINAL STABILIZATION (PERMANENT VEGETATION), CLEAN STORM DRAIN SYSTEM
11. MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES

ACTIVITY SCHEDULE											
TASK DESCRIPTION:	MONTHS: (2023)										
	Start Date: May 01, 2023										
	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER					
	1	2	3	4	5	6					
CONSTRUCTION EXIT AND PERIMETER SILT FENCE	X										
TEMPORARY SEDIMENT STORAGE FACILITIES	X										
CLEARING & GRUBBING	X										
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						

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

INDEX TO DRAWINGS

SHEET NO.	DESCRIPTION
C-1.0	COVER
C-1.1	GENERAL NOTES
C-1.2	SURVEY
C-1.3	DEMOLITION PLAN
C-2.0	OVERALL SITE PLAN
C-2.1	SITE PLAN
C-3.0	UTILITY PLAN
C-4.0	GRADING & DRAIANGE PLAN
C-4.1	PIPE PROFILES
C-4.2	SWPPP PHASE I
C-4.3	SWPPP PHASE II
C-4.4	SWPPP PHASE III
C-4.5	EROSION DETAILS
C-5.0	STANDARD DETAILS I
C-5.1	STANDARD DETAILS II
C-5.2	STANDARD DETAILS III
E-102	SITE PHOTOMETRIC PLAN
L-100	LANDSCAPE PLAN
L-101	LANDSCAPE DETAILS
L-102	LANDSCAPE MAINTENANCE SPECIFICATIONS

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 CONTRACTORS RESPONSIBILITY TO VERIFY ALL UTILITIES WITHIN THE LIMITS OF THE WORK. ALL DAMAGE MADE TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE SOLE RESPONSIBILITY OF THE CONTRACTOR.



DEVELOPMENT DATA:

- OWNER: CHICK-FIL-A, INC.
-OWNER ADDRESS: 5200 BUFFINGTON RD., ATLANTA GA 30349
-DEVELOPER: CHICK-FIL-A, INC.
-DEVELOPER ADDRESS: 5200 BUFFINGTON RD., ATLANTA GA 30349
-SITE ADDRESS: 3423 LAKE DISTRICT DR. W, LAKELAND TN 38002
-ALL IMPROVEMENTS TO CONFORM WITH THE CITY OF LAKELAND TN AND THE SHELBY COUNTY CONSTRUCTION STANDARDS AND SPECIFICATIONS, LATEST EDITION.
-ENGINEER: CARTER ENGINEERING CONSULTANTS, Inc.
-ZONING: PD PLANNED DEVELOPMENT
-SITE ACREAGE: 2.5 ACRES - DISTURBED AREA: 2.6 ACRES

5200 Buffington Rd.
Atlanta Georgia,
30349-2998

REVISION BLOCK	REVISION DATE & DESCRIPTION	1	INITIAL REVIEW	2	SITE PLAN APPLICATION	3	###	4	###	5	###	6	###	7	###	8	###
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CARTER 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

COVER

REVISION 1-2023

Job No. : 22036CFA
Store : 05430
Date : 01/16/2023

Sheet

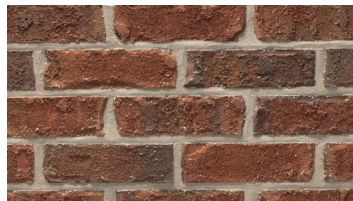
C-1.0



EXTERIOR ELEVATION

1" = 10'-0"

EXTERIOR FINISHES



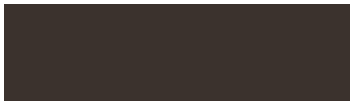
BR-A

BRICK VENEER
ACME BRICK
COLOR: CONGAREE VISTA
BLEND: FCP551
TEXTURE: HERITAGE
SIZE: MODULAR



BR-B

BRICK VENEER
ACME BRICK
COLOR: CHICAGO SOUTHSIDE
BLEND: DTP603
TEXTURE: HERITAGE
SIZE: MODULAR



EC-1

PREFINISHED METAL COPING
COLOR: MIDNIGHT BRONZE



PT-113

EXTERIOR PAINT
COLOR: DARK BRONZE
FINISH: SEMI-GLOSS



ST-1

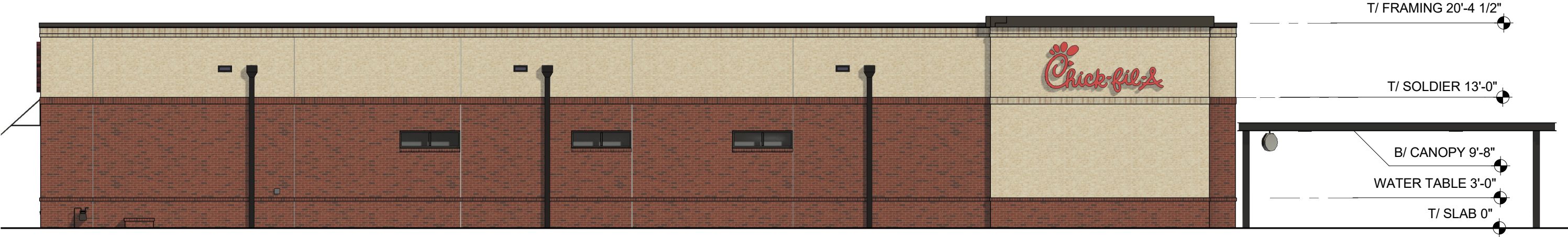
STOREFRONT
COLOR: DARK BRONZE



EXTERIOR ELEVATION

1" = 10'-0"

EXTERIOR ELEVATIONS



EXTERIOR ELEVATION
1" = 10'-0"



EXTERIOR ELEVATION
1" = 10'-0"

EXTERIOR ELEVATIONS



FRONT LEFT PERSPECTIVE VIEW



FRONT RIGHT PERSPECTIVE VIEW

COLOR RENDERINGS



REAR LEFT PERSPECTIVE VIEW



REAR RIGHT PERSPECTIVE VIEW

COLOR RENDERINGS

05430, Lakeland FSU, 3423 Lake District Drive W., Lakeland, TN 38002

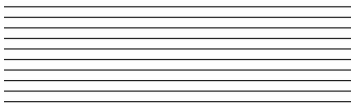
01/27/22

THE CHICK-FIL-A DESIGN DEVELOPMENT PACKAGE REPRESENTS A BRAND COMPLIANT DESIGN SOLUTION. SITE ADAPT PROFESSIONALS ARE RESPONSIBLE FOR APPLICATION OF DESIGN AND COMPLIANCE WITH ORDINANCES AND CODES.

OP CANOPY FINISHES



CP-1
PREFINISHED METAL
COLOR: DARK BRONZE



CP-2
METAL DECKING
COLOR: WHITE

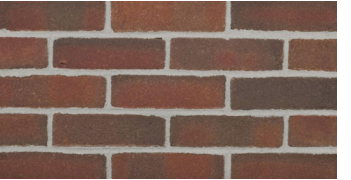


PERSPECTIVE VIEW

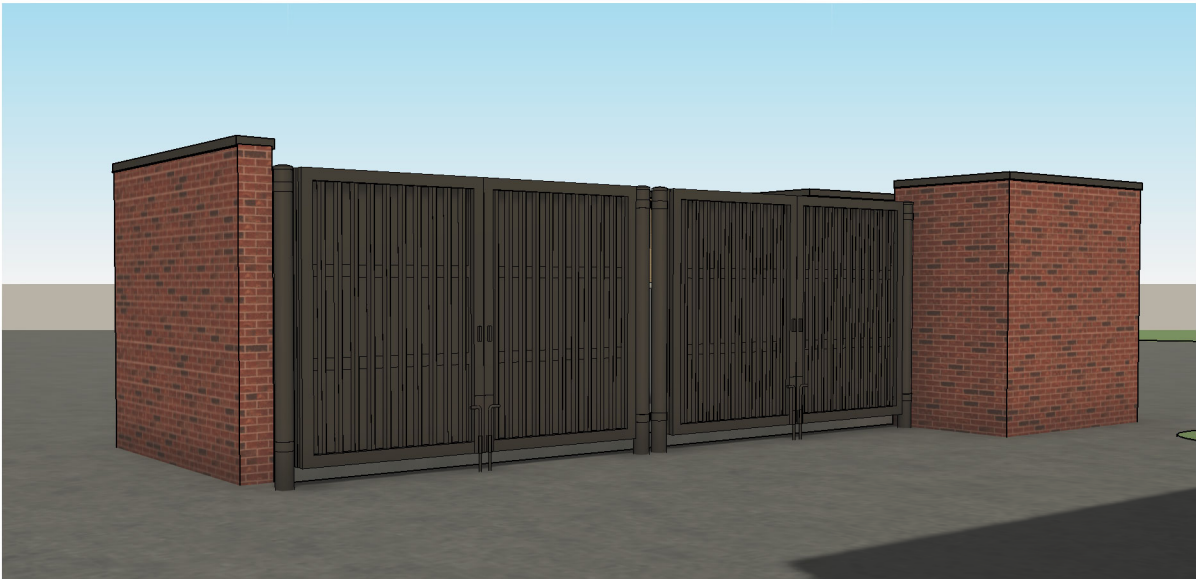
REF. ENCLOSURE FINISHES



EC-1
PREFINISHED METAL COPING
COLOR: MIDNIGHT BRONZE



BR-A
BRICK VENEER
ACME BRICK
COLOR: CONGAREE VISTA
BLEND: FCP551
TEXTURE: HERITAGE
SIZE: MODULAR



PERSPECTIVE VIEW

ORDER CANOPY AND REFUSE

CONSTRUCTION NOTES

1. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO COVER A COMPLETE PROJECT, READY TO USE, AND ALL ITEMS NECESSARY FOR A COMPLETE AND WORKABLE JOB SHALL BE FURNISHED AND INSTALLED. ANY DISCREPANCY SHALL BE IMMEDIATELY REPORTED TO THE OWNER OR HIS REPRESENTATIVE.
2. NOTIFY THE INSPECTOR OF THE LOCAL GOVERNING AUTHORITY 24 HOURS BEFORE EVERY PHASE OF CONSTRUCTION.
3. 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.
4. THE CONTRACTOR SHALL COORDINATE LOCATION AND INSTALLATION OF ALL UNDERGROUND UTILITIES AND APPURTENANCES TO MINIMIZE DISTURBING CURBING, PAVING, AND ALL OTHER UTILITIES.
5. 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.
6. DEVIATIONS FROM THESE PLANS AND SPECIFICATIONS WITHOUT PRIOR CONSENT OF THE ENGINEER AND THE MUNICIPALITY MAY CAUSE FOR THE WORK TO BE UNACCEPTABLE.
7. ALL MATERIALS SHALL BE NEW UNLESS USED OR SALVAGED MATERIALS ARE AUTHORIZED BY THE OWNER.
8. THE CONTRACTOR SHALL FURNISH AND MAINTAIN ALL NECESSARY BARRICADES AROUND THE WORK AND SHALL PROVIDE PROTECTION AGAINST WATER DAMAGE AND SOIL EROSION.
9. 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.
10. 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.
13. 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.
20. 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. STANDARD SPECIFICATIONS.
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 "MUR" DEVICES.
23. ALL DIMENSIONS ARE MEASURED TO THE BACK OF CURB UNLESS OTHERWISE NOTED.

EARTHWORK SPECIFICATIONS

CLEARING AND GRUBBING

1. 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.
2. BURNING ON SITE IS NOT PERMITTED WITHOUT WRITTEN APPROVAL OF THE LOCAL GOVERNING AUTHORITIES HAVING JURISDICTION.

EXISTING TREES OUTSIDE OF GRADING LIMITS LINE:

1. 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 SITE.

FILL:

1. 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 AS DESCRIBED HEREIN.
3. 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.
4. 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 COMPACTION.
5. 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.
6. IF SOILS INVESTIGATION REPORT IS PROVIDED, THEN FOLLOW THE RECOMMENDATIONS OF THE REPORT IF THEY EXCEED THE RECOMMENDATIONS OF THESE SPECIFICATIONS.

TOPSOIL:

1. 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 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 OWNER.

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 ENGINEER / LANDSCAPE ARCHITECT. 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 PREMISES.
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 EQUIPMENT.
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 FROM THE RESPONSIBLE AUTHORITIES AND REGULATIONS AND FULLY ACKNOWLEDGE AND COMPLY 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 AND AS REQUIRED.

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 PLANS AND/OR DESIGN FILES.
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 IS 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 (SLOP 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:

TOPOGRAPHIC DATA:	*GIS TOPO PROVIDED BY
PARCEL DATA:	*GIS PARCEL PROVIDED BY
ADDITIONAL DATA:	*ADDITIONAL GIS DATA

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

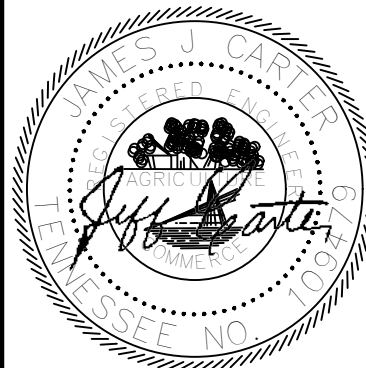
THE TOPOGRAPHIC AND ELEVATION DATA SHOWN HEREON WAS OBTAINED FROM *TOPOGRAPHIC DATA UTILIZED FOR DESIGN AND IS NOT CERTIFIED AS CORRECT BY THIS ENGINEER. USERS OF THIS DATA DO SO AT THEIR OWN RISK.



Chick-fil-A

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

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F: 770.725.1204
www.carterengineering.com

STORE # 05430

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SHEET TITLE

GENERAL
NOTES

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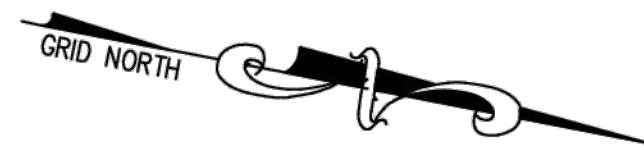
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SCALE : 1" = 30'

LEGEND

- DMH

Fiber optic line (marked)

FP

Flag pole

G

Gas line (marked)

LP

Light pole

OE

Overhead electric

PP

Power pole

R.O.W.

Right of way
- Fire hydrant

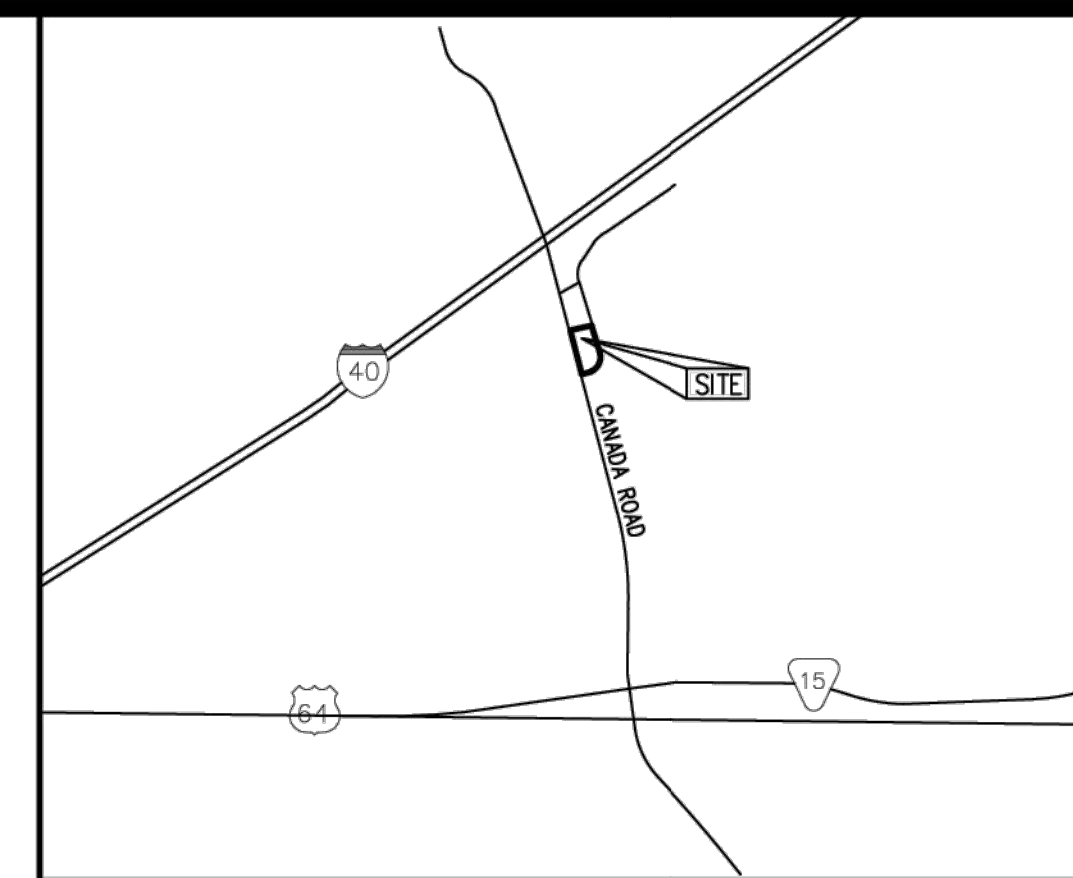
Water valve

Gas valve

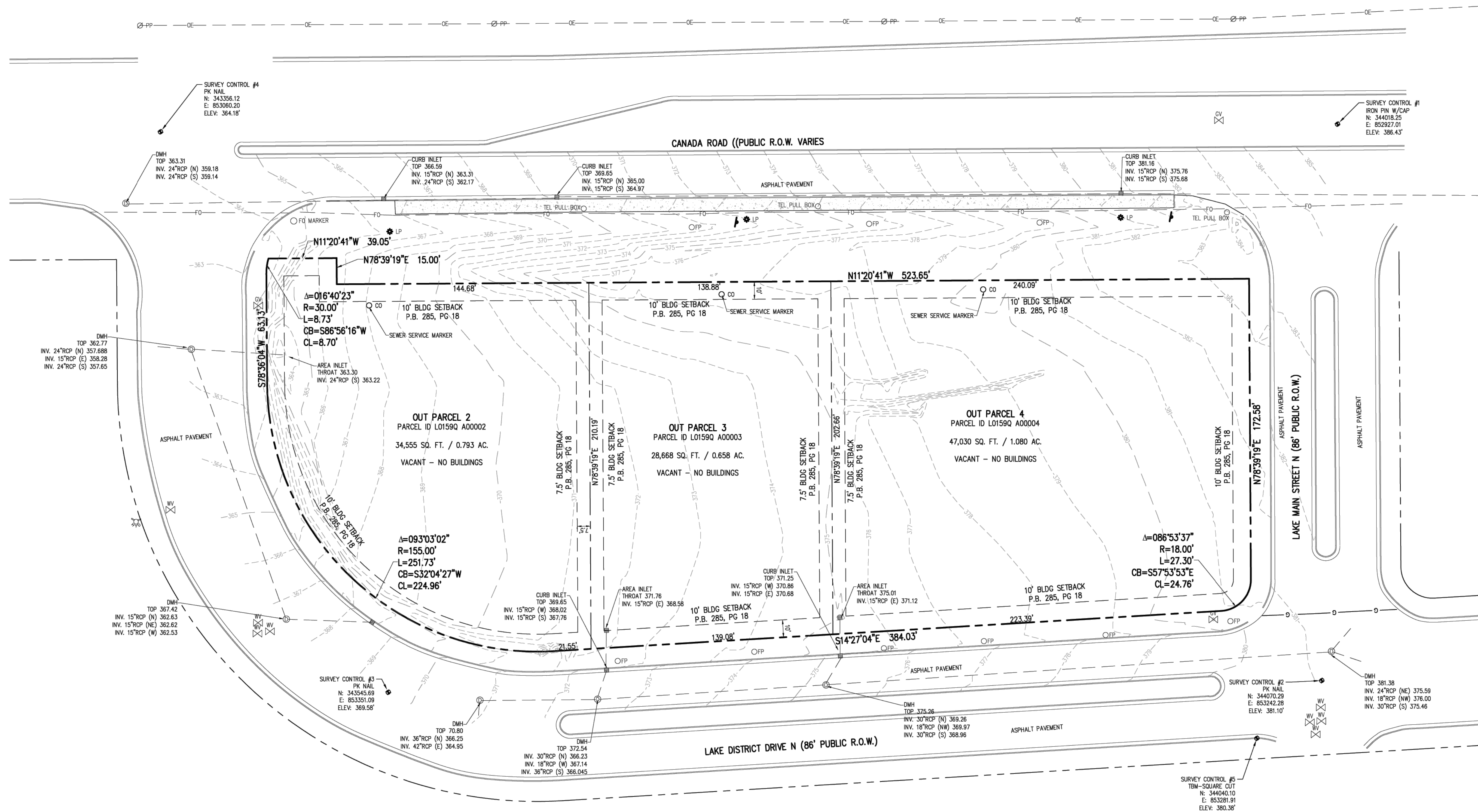
Property line

Concrete curb & gutter

Concrete



VICINITY MAP
NOT TO SCALE



GROSS AREA
110,253 SQ. FT./ 2.5318 ACRES +/-

ALTA/NSPS LAND TITLE SURVEY

OUT PARCELS 2, 3, AND 4
THE LAKE DISTRICT PLANNED DEVELOPMENT - PHASE 1
LAKELAND, SHELBY COUNTY, TENNESSEE

DR.	CHK.	DATE	DESCRIPTION
KF		11/07/2022	PRELIMINARY

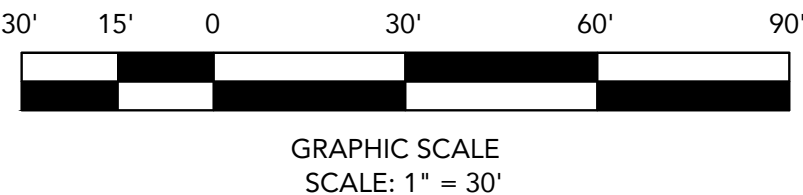
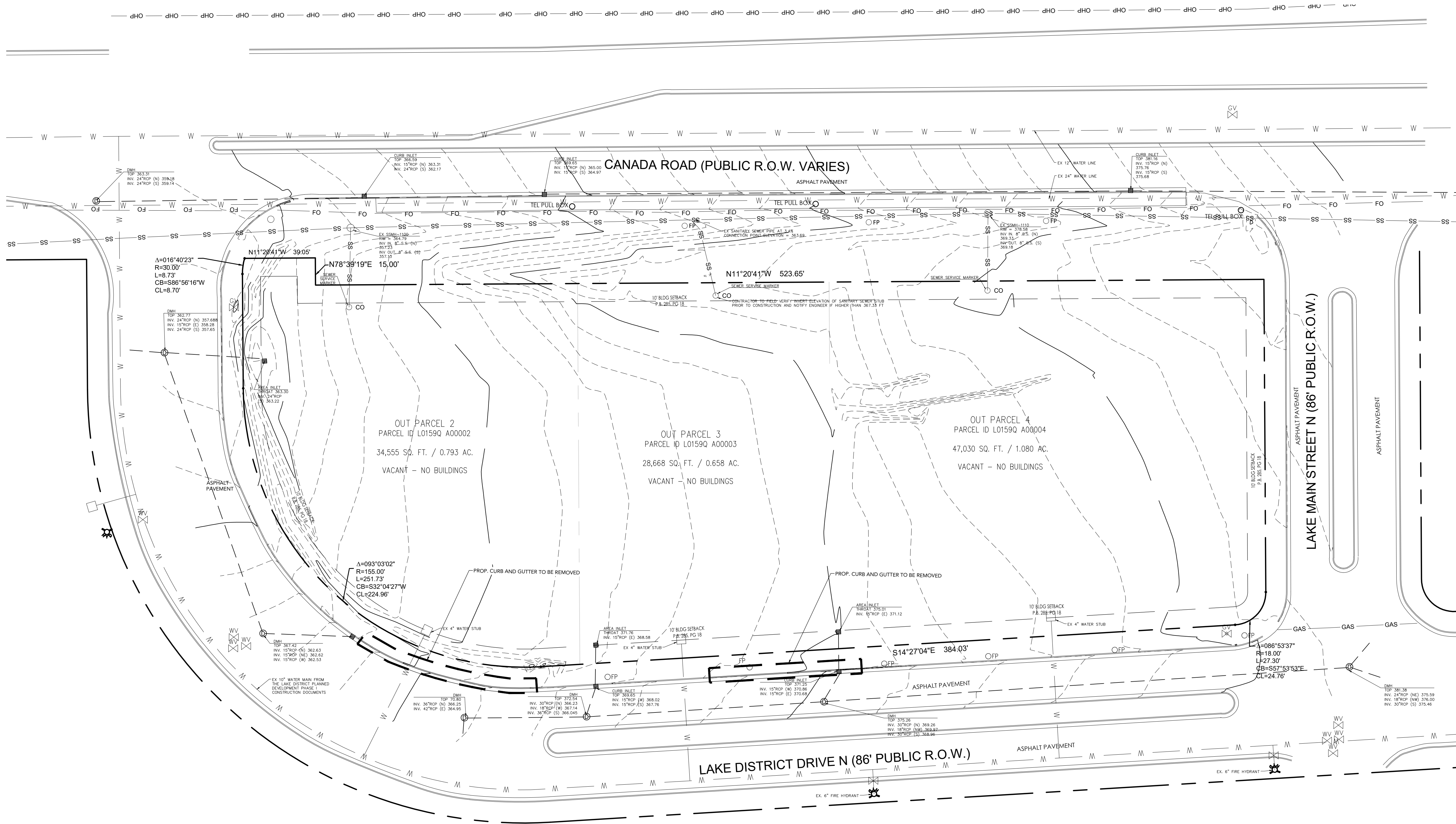
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BARGE
DESIGN SOLUTIONS

60 Germantown Court / Suite 100 / Memphis, Tennessee 38018
PHONE (901) 755-7166 // FAX (901) 755-7844



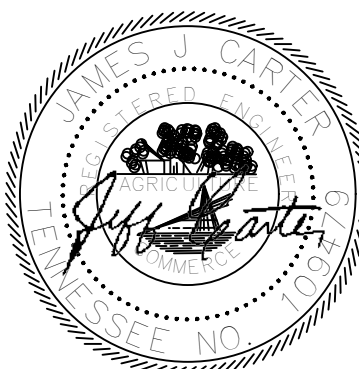
LOCATION MAP
SCALE: N.T.S.





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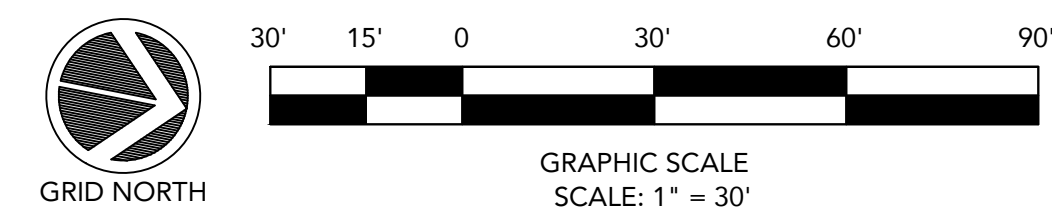
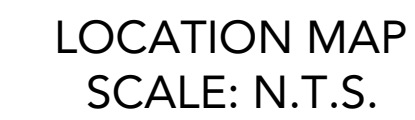
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SHEET TITLE
DEMOLITION PLAN

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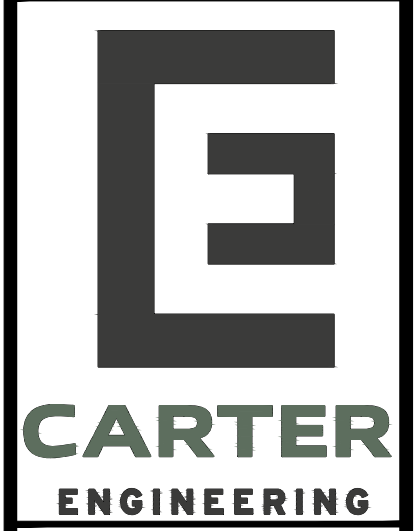
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SHEET TITLE

OVERALL
SITE PLAN

REVISION 1-2023

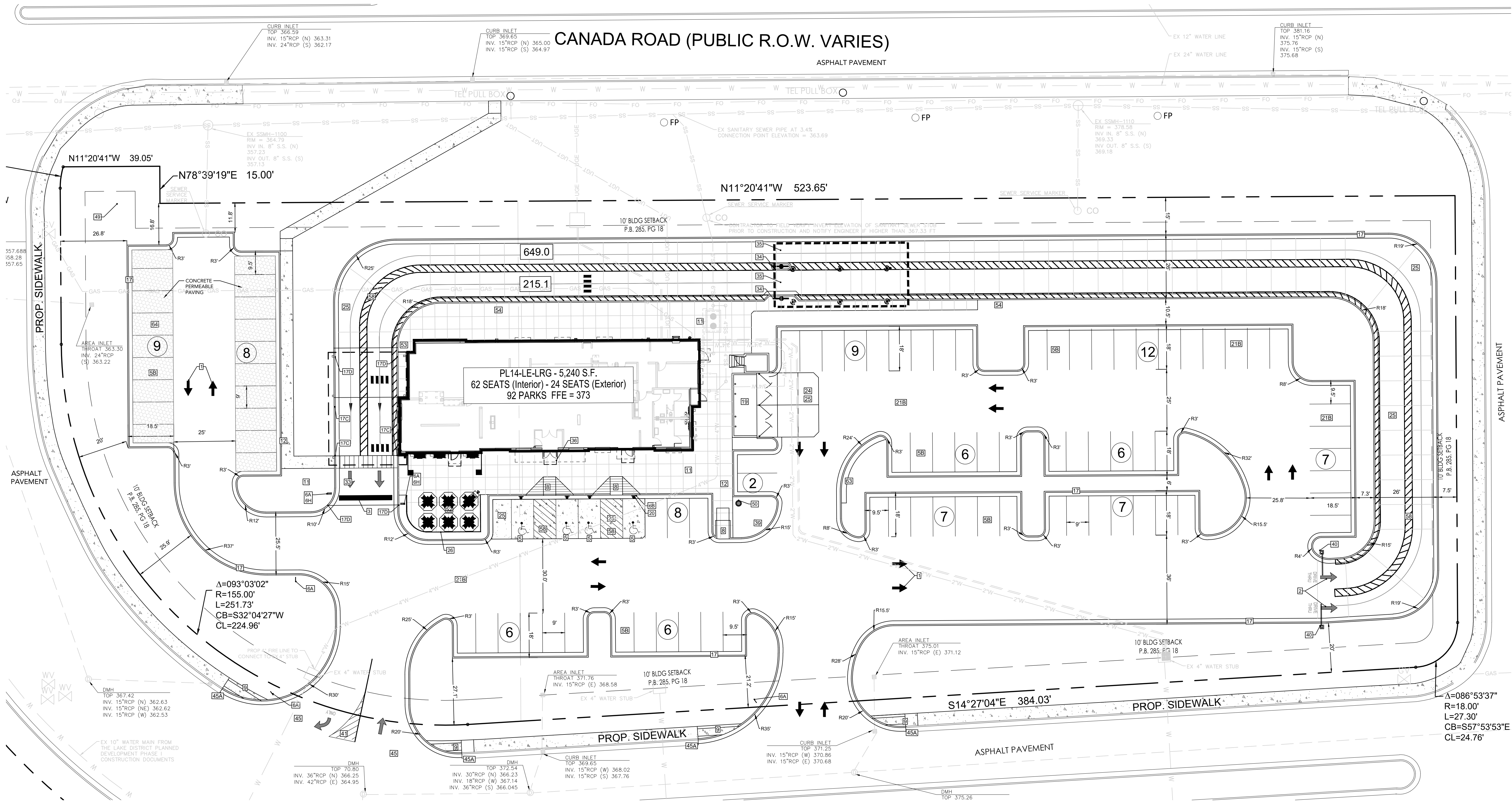
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SITE PLAN DESIGN NOTES & KEY PLAN

- 1 PAINTED DIRECTIONAL ARROW
- 2 PAINTED DRIVE-THRU GRAPHICS
- 3 PAINTED STOP LINE GRAPHIC
- 4 PAINTED HANDICAP PARKING SYMBOL
- 5 ACCESSIBLE PARKING STALL
- 5A 90° PARKING STALL @ 9' x 19' (OR 9' x 18')
- 6 BICYCLE PARKING
- 6A DIRECTIONAL SIGNAGE (SEE SIGNAGE PACKAGE)
- 6B *STOP* SIGN (SEE SIGNAGE PACKAGE)
- 6C *ACCESSIBLE PARKING* SIGN (SEE SIGNAGE PACKAGE)
- 6D *SINGLE-BUILDING DRIVE-THRU SERVICE* (SEE SIGNAGE PACKAGE)
- 6E *ROLL-OVER MOUNTAIN* SIGN (SEE SIGNAGE PACKAGE)
- 6F *ONE WAY* SIGN (USE APPLICABLE DIRECTION) (SEE SIGNAGE PACKAGE)
- 6G *PEDESTRIAN CROSSWALK* SIGN (SEE SIGNAGE PACKAGE)
- 6H *DO NOT ENTER* SIGN (SEE SIGNAGE PACKAGE)
- 6I *NO PARKING* SIGN (SEE SIGNAGE PACKAGE)
- 6J *TWO-ORDER LANE* SIGN (SEE SIGNAGE PACKAGE)
- 6K *LANE MERGE* SIGN (SEE SIGNAGE PACKAGE)
- 6L SIDEWALK ACCESSIBLE RAMP
- 6M CURB RAMP WITH FLARED SIDES
- 6N CURB RAMP WITH SHORT FLARED SIDES
- 6O RETURNED CURB ACCESSIBLE RAMP
- 6P TRUNCATED DOMES - CAST IN PLACE (ONLY IF REQUIRED)

- 11 TYPICAL CONCRETE SIDEWALK (SEE DETAIL FOR REVISIONS)
- 11A 4" THICK CONCRETE STRIP BETWEEN BUILDING AND BACK OF CURB
- 12 SIDEWALK WITH CURB & GUTTER SECTION (SEE DETAIL FOR REVISIONS)
- 13 DRIVE-THRU PLAN
- 14 DRIVE-THRU ISOMETRIC
- 15 CONCRETE WHEEL STOP
- 16 LANDSCAPE & IRRIGATION PROTECTOR
- 17 24" CONCRETE CURB & GUTTER
- 17A SPILLING 24" CONCRETE CURB & GUTTER
- 17B CATCHING 24" CONCRETE CURB & GUTTER
- 17C CURB HEIGHT TO MATCH CONC. PAVEMENT AT DRIVE-THRU DOOR
- 17D TRANSITION CURB HEIGHT W/ RAMPED CONC. PAVEMENT TO MATCH LEVEL PAVEMENT AT DRIVE-THRU DOOR
- 18 ROLL-OVER MOUNTAIN CURB
- 19 SCREENED REFUSE ENCLOSURE
- 19A SCREENED REFUSE ENCLOSURE - STAGGERED
- 19B SCREENED REFUSE ENCLOSURE - ALTERNATE DRAINAGE
- 20 CONCRETE BOLLARD
- 20A TYPICAL PAVEMENT SECTION - MEDIUM DUTY
- 20B TYPICAL PAVEMENT SECTION - HEAVY DUTY
- 21 DRIVE-THRU SERVICE
- 22 TRANSVERSE & LONGITUDINAL CONTRACTION JOINT
- 23 TRANSVERSE & LONGITUDINAL DOWELED CONSTRUCTION JOINT
- 24 CONCRETE APRON @ TRASH ENCLOSURE
- 25 CONCRETE PAVING
- 26 ALUMINUM HANDRAIL
- 27 TYPICAL ADA RAMP AND HANDRAIL

- 28 CONTRACTION JOINT
- 29 KEYED CONSTRUCTION JOINT
- 30 LONGITUDINAL BUTT JOINT
- 31 EXPANSION JOINT
- 32 MULTILANE DIRECTIONAL GRAPHICS
- 33 PAINTED CROSS WALK
- 34 MENU BOARD & CANOPY ORDERING STATION
- 35 MENU BOARD LOOP DETECTION SYSTEM
- 36 5/8" LANDING AND ENTRY DOOR FROST SLAB
- 37 GREASE TRAP (SEE UTILITY PLAN)
- 38 ROOF DOWNSPOUT (DO NOT CONNECT TO GATE DRAINAGE SYSTEM)
- 39 LANDSCAPED AREA (SEE LANDSCAPE PLAN)
- 40 CLEARANCE BAR (SEE SIGNAGE PACKAGE)
- 41 PAVEMENT STRIPING AREA
- 42 THICKENED SLAB EDGE AT PARKING CORE DRILLS
- 43 CONCRETE FLUME
- 44 EX-ASPHALT-PROP. CONCRETE INTERFACE
- 45 EX-PROP. ASPHALT INTERFACE
- 45A EX-PROP. CURB INTERFACE
- 46 EX-PROP. CONCRETE INTERFACE
- 47 SINGLE BIKE RACK
- 48 TRANSFORMER
- 49 CHICK-FIL-A PRIME SIGN (SEE SIGNAGE PACKAGE)
- 50 FLAGPOLE, 50' (SEE SIGNAGE PACKAGE)
- 51 RETAINING WALL WITH HANDRAIL ON TOP (HANDRAIL SIMILAR TO DETAIL 2004-2)
- 52 TYPICAL LOCATION FOR THREE OUTDOOR TABLES. WHEN MORE SPACE IS AVAILABLE, OUTDOOR SEATING MAY BE EXPANDED.

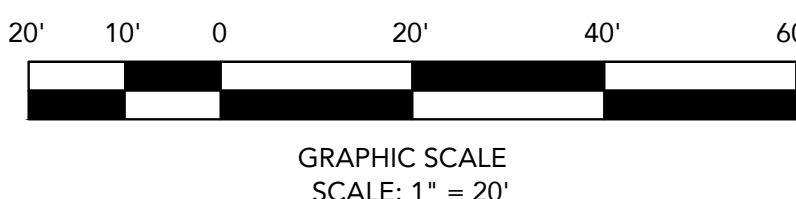
- 53 4" THICK CONCRETE STRIP BETWEEN BUILDING AND BACK OF CURB
- 54 6" THICK CONCRETE SIDEWALK BETWEEN DRIVE-THRU LANE AND BUILDING
- 55 4" WIDE PAINT STRIPE
- 56 STANDARD LIGHT POLE
- 57 OUTDOOR SOLAR LIGHT SIGN (SEE SIGNAGE PACKAGE)
- 58 CONCRETE STRIPING AREA. CONCRETE TO BE PER CONCRETE PAVING DETAIL ON SHEET C-5.1
- 59 CONCRETE VALLEY GUTTER
- 60 3" WIDE CONCRETE FLUME
- 61 GATERING & GARRY-OUT (SEE SIGNAGE PACKAGE)
- 62 OUTSIDE DELIVERY (SEE SIGNAGE PACKAGE)
- 63 2" WIDE 4" THICK CONCRETE LANDSCAPE PROTECTION STRIP
- 64 CONCRETE PERMEABLE PAVING

SITE DATA:

TOTAL SITE AREA: 2.5 ACRES
BUILDING AREA: 5,240 S.F.
PROP. IMPERVIOUS AREA: 1.73 ACRES
PROP. IMPERVIOUS COVERAGE: 65%
PROP. OPEN SPACE: 35%
DISTURBED AREA: 2.6 ACRES
DEVELOPER/OWNER: TODD WILLIAMS, CHICK-FIL-A, INC.
ADDRESS: 5200 BUFFINGTON RD., ATLANTA GA 30349
PHONE NUMBER: (678) 758-4513



Know what's below
Call before you dig
dial 811

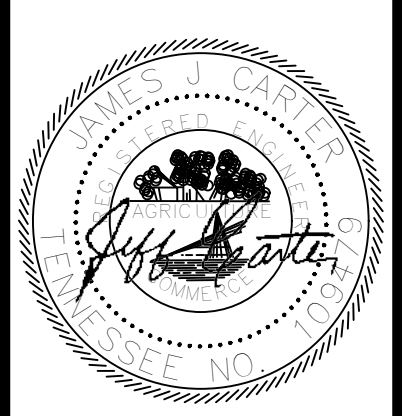


GRAPHIC SCALE
SCALE: 1" = 20'



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SHEET TITLE

SITE PLAN

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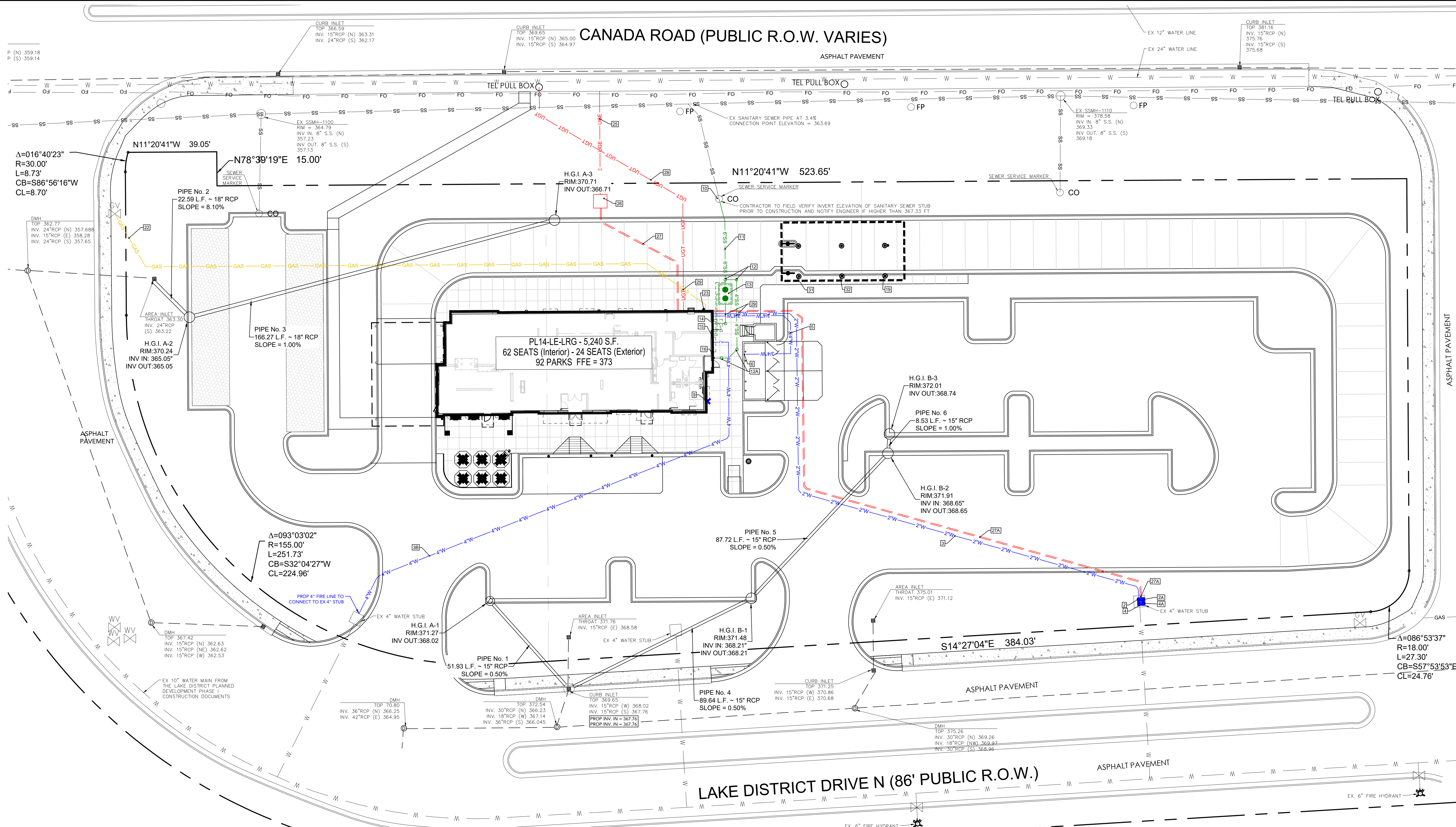
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ENGINEER/DESIGNER NOT RESPONSIBLE FOR COST CHANGES DURING PRELIMINARY PHASE. BIDS & QUOTES SHALL BE BASED ON PLAN SETS LABELED "ISSUE FOR CONSTRUCTION".

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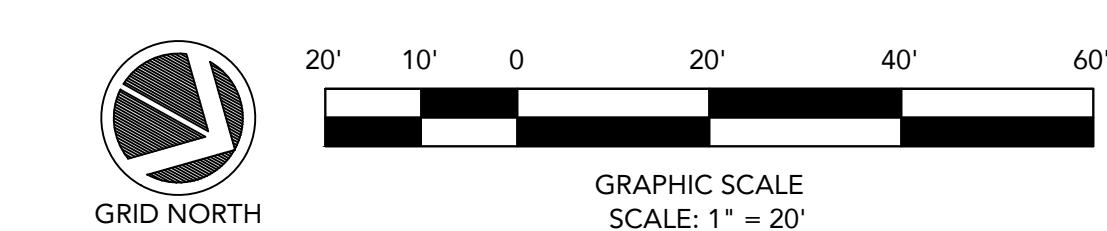


LAYOUT NOTES

1. INSTALL 2" DOMESTIC WATER SERVICE CONNECTION PER WATER COMPANY'S SPECIFICATIONS AND REQUIREMENTS. WATER COMPANY TO MAKE TAP.
2. INSTALL 1" BACKFLOW PREVENTOR FOR DOMESTIC WATER SERVICE. **REDUCED PRESSURE ASSEMBLY**
THE CONTRACTOR SHALL INSTALL A BACKFLOW PREVENTOR (FEECO, OR APPROVED EQUAL) FOR SERVICE LINE INDICATED ON DRAWING. INSTALLATION SHALL INCLUDE BOX OR VAULT, AS APPLICABLE. THE CONTRACTOR SHALL COORDINATE WITH SHELBY COUNTY FOR INSPECTION, TESTING, AND CERTIFICATION OF BACKFLOW PREVENTOR. ALL BACKFLOW DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE WATER DEPT. STANDARD SPECIFICATIONS. THE CONTRACTOR'S BID PRICE SHALL INCLUDE ALL COST ASSOCIATED WITH DEVICE INSTALLATION, INSPECTION, TESTING, CERTIFICATION, ETC. TO INCLUDE ANY FEES CHARGED BY THE WATER DEPARTMENT. TESTING OF BACKFLOW DEVICE SHALL BE COMPLETED BY A CERTIFIED BACKFLOW DEVICE TESTER. ALL TEST RESULTS SHALL BE SUBMITTED TO THE WATER DEPARTMENT.
- 2A. INSTALL 1" BACKFLOW PREVENTOR FOR IRRIGATION WATER SERVICE. **REDUCED PRESSURE ASSEMBLY**
SEE NOTES ITEM # 2 ABOVE - INSPECTION, TESTING AND CERTIFICATION
3. INSTALL 4" FIRE PROTECTION DOUBLE CHECK VALVE ASSEMBLY INSIDE BUILDING PER WATER COMPANY'S SPECIFICATIONS AND REQUIREMENTS.
- 3A. INSTALL 2" TYPE K COLD WATER SERVICE TO DUMPSTER POST HYDRANT. SITE CONTRACTOR TO COORDINATE WITH BUILDING AND PLUMBING CONTRACTOR.
- 3B. INSTALL 2" TYPE K COLD WATER SERVICE TO DUMPSTER POST HYDRANT. SITE CONTRACTOR TO COORDINATE WITH BUILDING AND PLUMBING CONTRACTOR.
- 3C. INSTALL 2" TYPE K COLD WATER SERVICE TO DUMPSTER POST HYDRANT. SITE CONTRACTOR TO COORDINATE WITH BUILDING AND PLUMBING CONTRACTOR.
- 3D. INSTALL 2" TYPE K COLD WATER SERVICE TO DUMPSTER POST HYDRANT. SITE CONTRACTOR TO COORDINATE WITH BUILDING AND PLUMBING CONTRACTOR.
- 3E. INSTALL 2" TYPE K COLD WATER SERVICE TO DUMPSTER POST HYDRANT. SITE CONTRACTOR TO COORDINATE WITH BUILDING AND PLUMBING CONTRACTOR.
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- 3G. INSTALL 2" TYPE K COLD WATER SERVICE TO DUMPSTER POST HYDRANT. SITE CONTRACTOR TO COORDINATE WITH BUILDING AND PLUMBING CONTRACTOR.
- 3H. INSTALL 2" TYPE K COLD WATER SERVICE TO DUMPSTER POST HYDRANT. SITE CONTRACTOR TO COORDINATE WITH BUILDING AND PLUMBING CONTRACTOR.
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UTILITY LEGEND	
UTILITY	KEY
ELECTRIC	— UGE — UGE — UGE — UGE —
GAS	— GAS — GAS — GAS — GAS —
SEWER	— SS — SS — SS — SS —
STORM	— W — W — W — W —
WATER	— W — W — W — W —
TELECOMM	— W — W — W — W —

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WATKINSVILLE, GA 30677
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REVISION BLOCK

REVISION	DATE	DESCRIPTION
1	INITIAL SUBMITTAL	
2	PCF 01/18/2023	
3		
4		
5		
6		
7		
8		

Job No. : 22036CFA
Store : 05430
Date : 01/18/2023

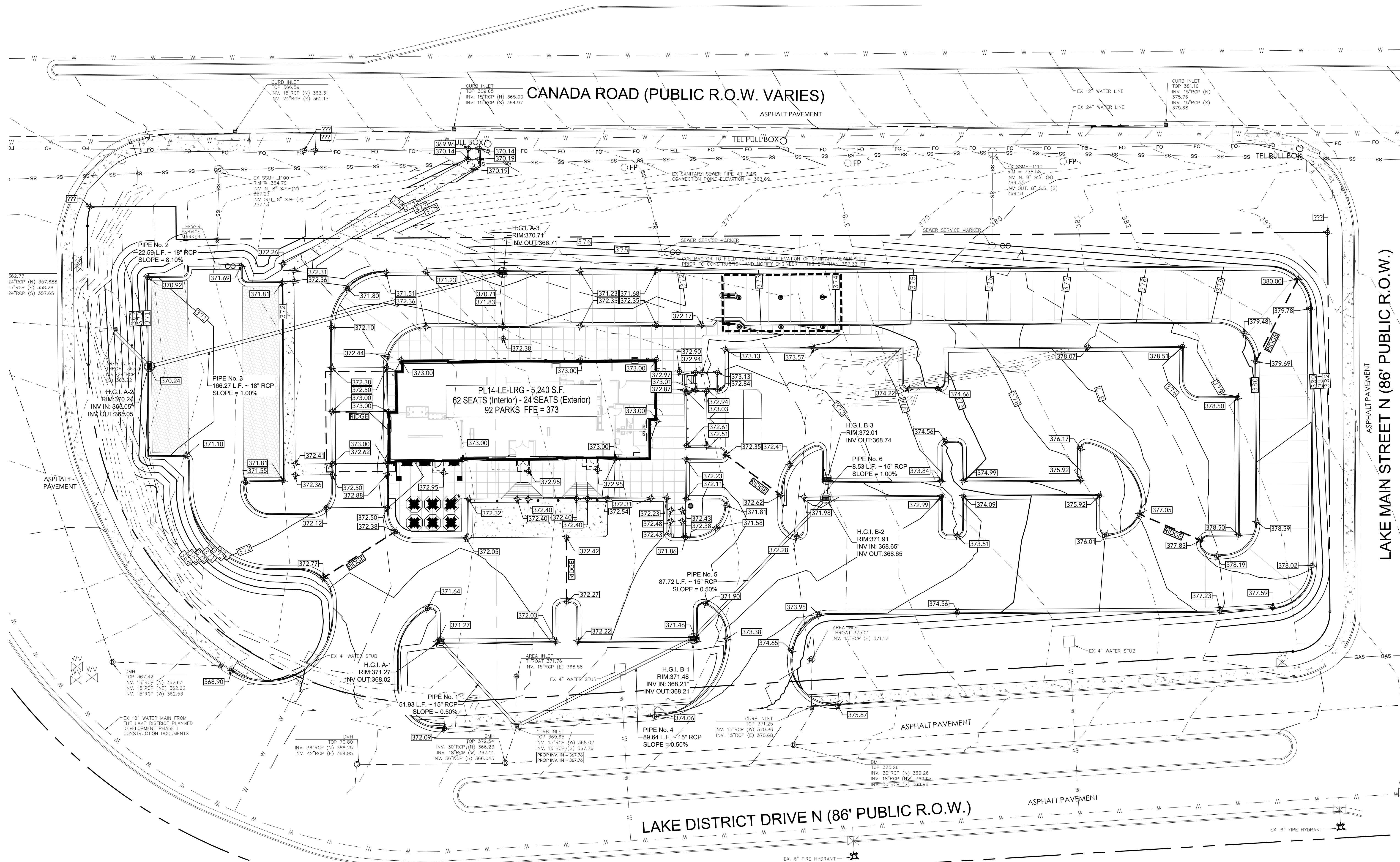
3423 Lake District Dr. W.
Lakeland TN 38002

SHEET TITLE
UTILITY PLAN
REVISION 1-2023

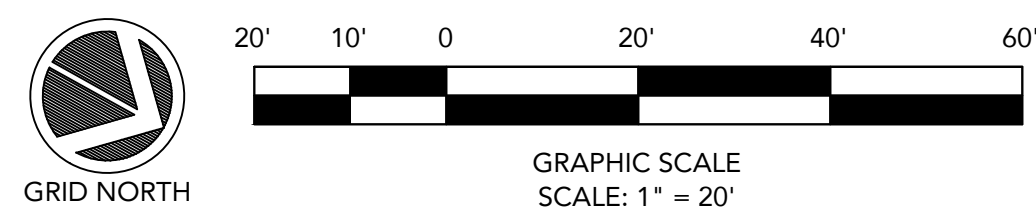
Store # 05430

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THE PROP. SITE WILL HAVE NO MORE THAN 65% IMPERVIOUS COVERAGE AND WILL DRAIN TO THE MASTER STORMWATER AREA AS PROVIDED BY STORMWATER DRAINAGE POND FOR THE LAKE DISTRICT DATED 10/18/2018 BY A2H ENGINEERING.





Chick-fil-A

5200 Buffington Rd.
Atlanta Georgia,
30349-2998

REVISION BLOCK	ISSUE	REVISION DATE & DESCRIPTION
1	INITIAL SUBMITTAL	PCF 01/06/2023
2		
3		
4		
5		
6		
7		
8		



CARTER
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STORE # 05430

3423 Lake District Dr. W,
Lakeland TN 38002

SHEET TITLE

GRADING
PLAN

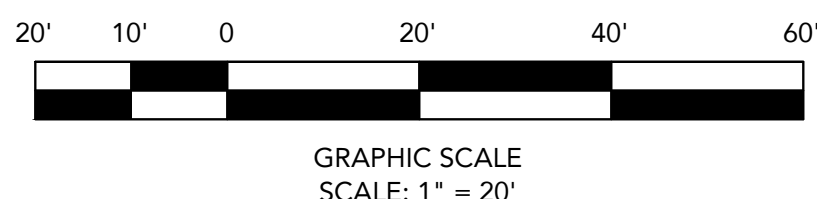
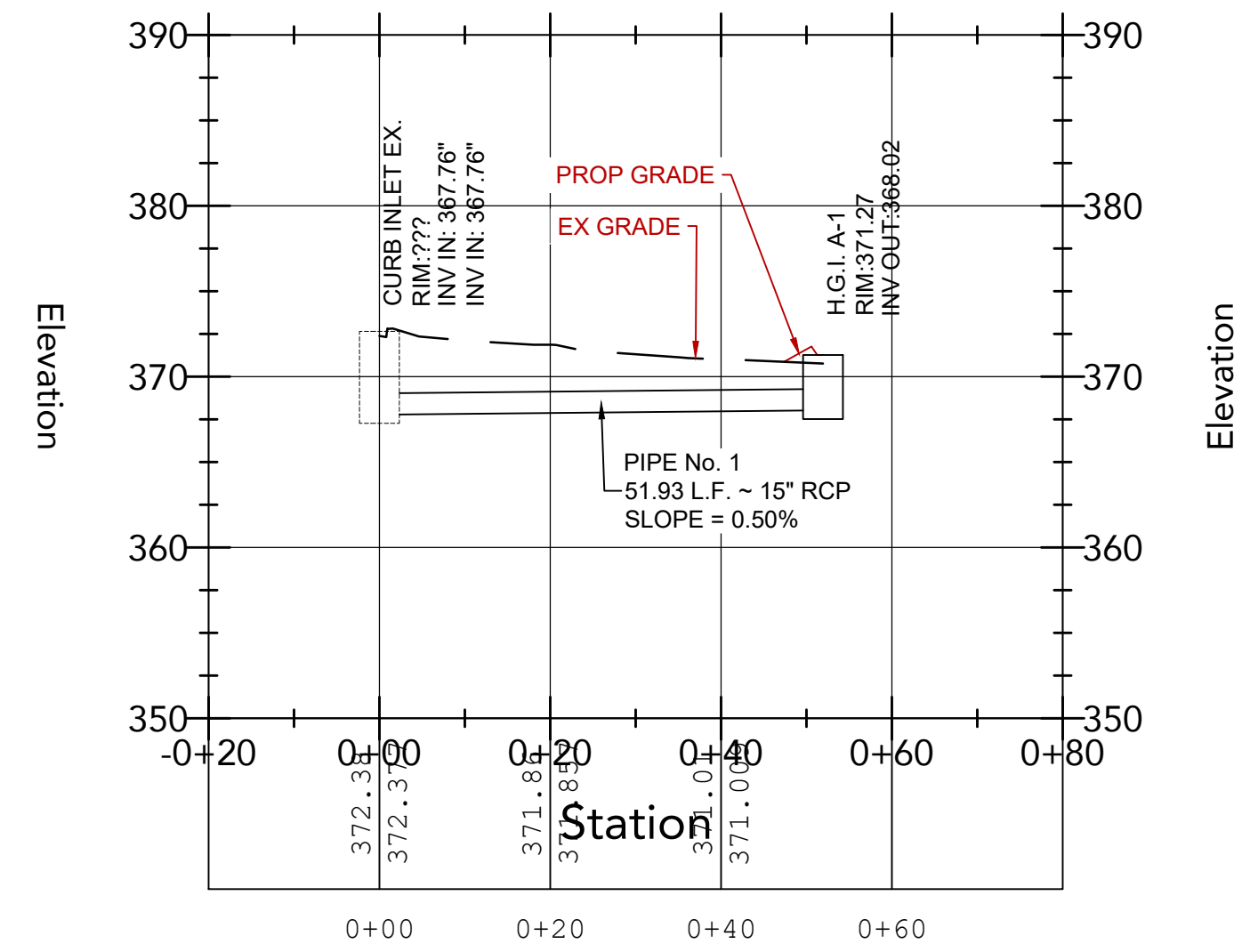
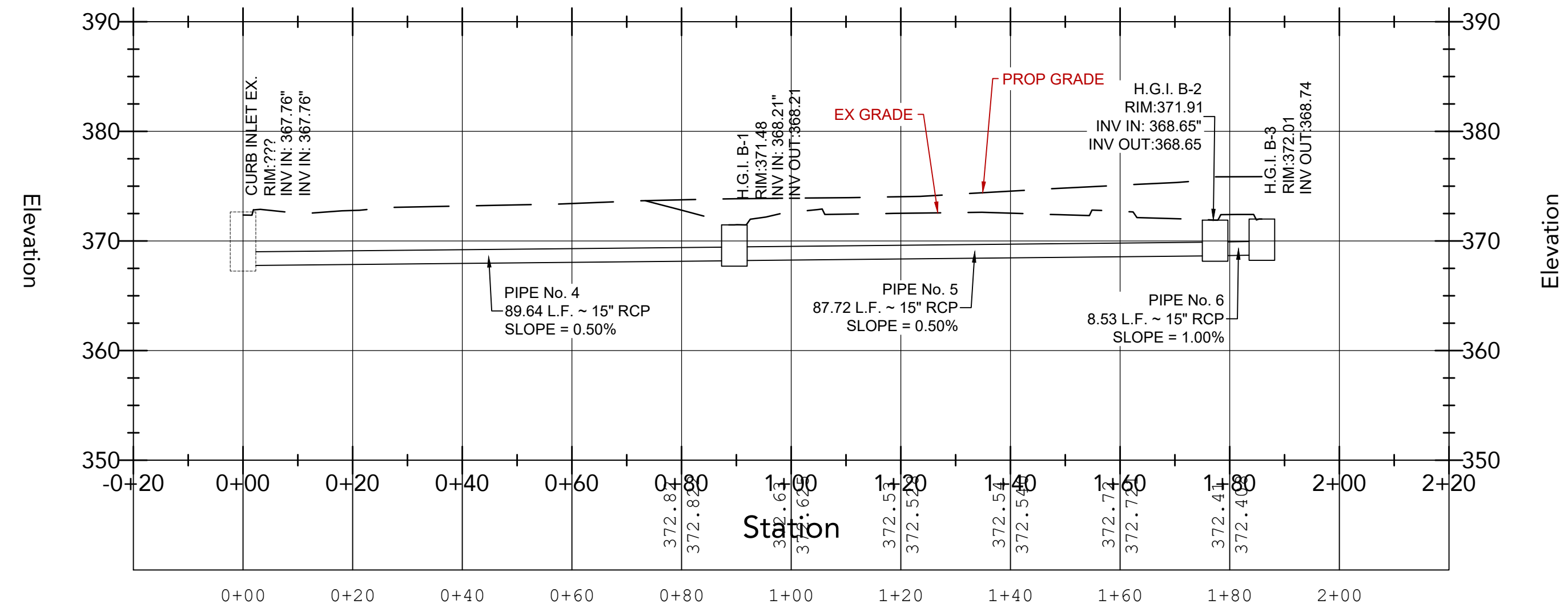
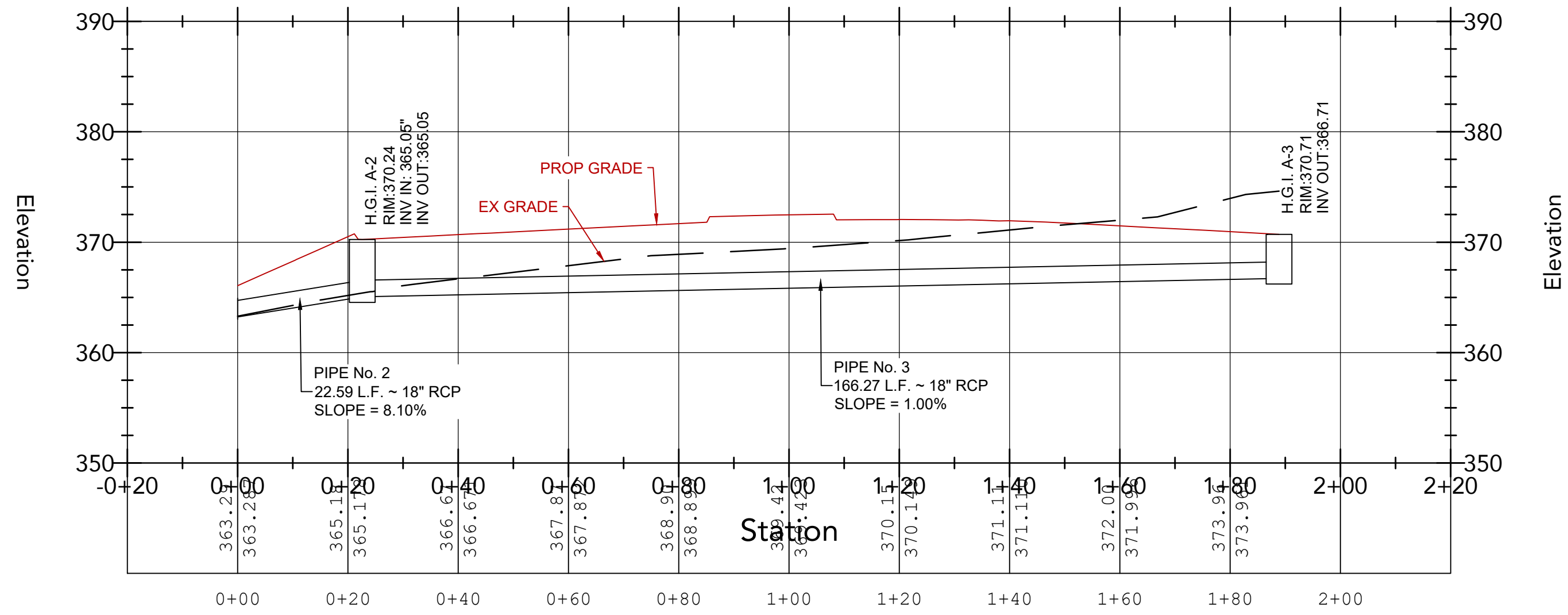
REVISION 1-2023

Job No. : 22036CFA
Store : 05430
Date : 01/18/2023

Sheet

C-4.0

ENGINEER/DESIGNER NOT RESPONSIBLE FOR COST CHANGES DURING PRELIMINARY PHASE. BIDS & QUOTES SHALL BE BASED ON PLANS SETS LABELED "ISSUE FOR BID". BIDS & QUOTES SHALL BE REVISED BASED ON PLANS LABELED "ISSUE FOR CONSTRUCTION".



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SHEET TITLE

PIPE PROFILES

REVISION 1-2023

Job No. : 22036CFA
Store : 05430
Date : 01/18/2023

Sheet

C-4.1

REVISION BLOCK	
ISSUE	REVISION DATE & DESCRIPTION
1	INITIAL SUBMITTAL
2	PCR: 01/06/2023
3	
4	
5	
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5200 Buffington Rd.
Atlanta Georgia,
30349-2998



5200 Buffington Rd.
Atlanta Georgia,
30349-2998

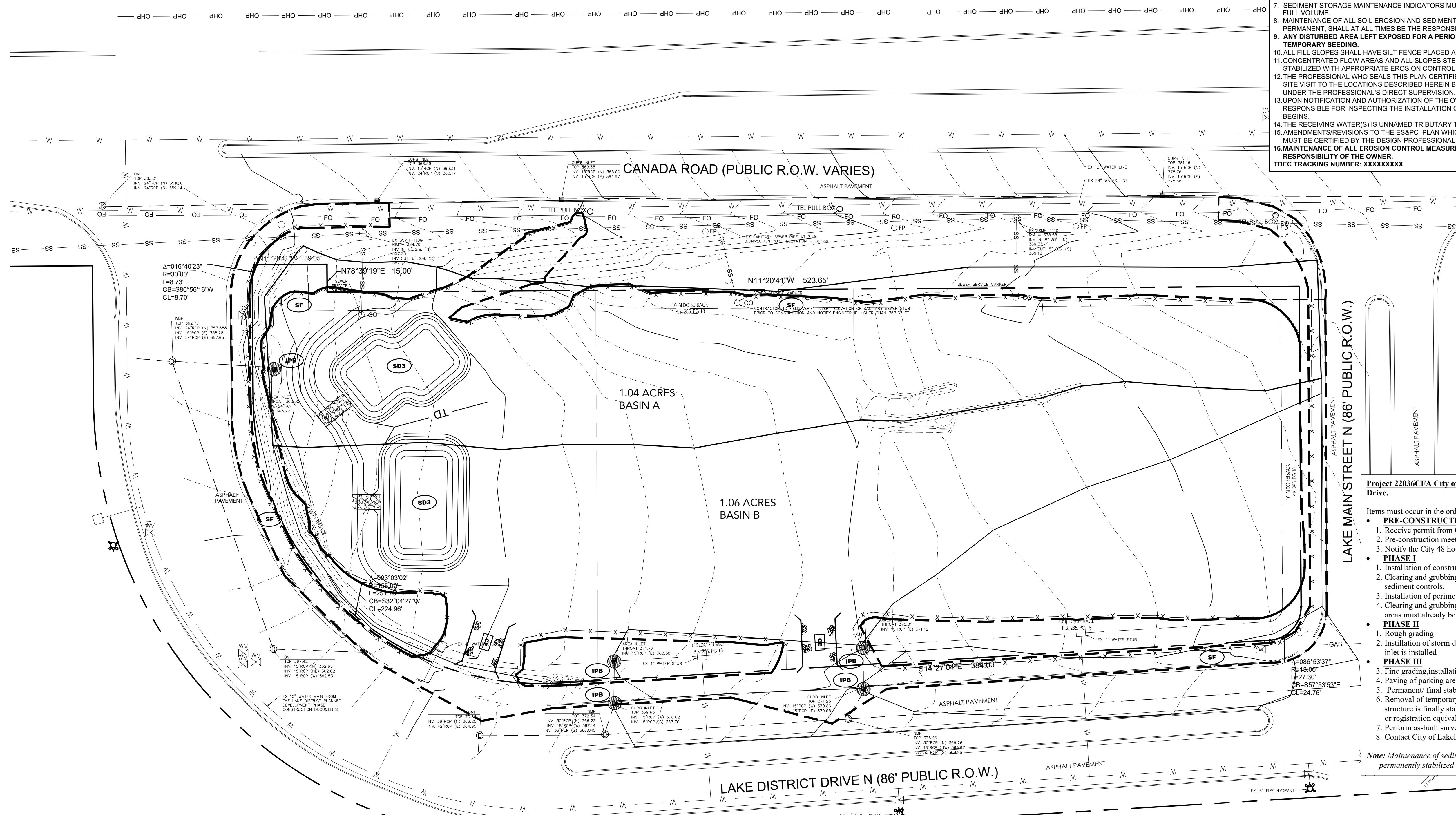


TEMPORARY SEDIMENT TRAP A		
Elevation	Contour	Calculated
	Area	Storage
	(s.f.)	(c.y.)
367.00	1,282	0.00
368.0	1,769	56.50
369.00	2,312	132.07
369.5	2,605	177.60

TEMPORARY SEDIMENT TRAP B		
Elevation	Contour	Calculated
	Area	Storage
	(s.f.)	(c.y.)
366.00	1,242	0.00
367.0	1,705	54.57
368.00	2,224	127.33
369.0	2,800	220.37
369.50	3,110	275.09

Phase I Inlet Sediment Trap Calculations					
Structure ID	Ex. Area Inlet 371.76	Ex. Curb Inlet 369.65	Ex. Area Inlet 375.01	Ex. Curb Inlet 371.25	
Drainage Area (acres)	0.09	0.10	0.46	0.19	
Volume Required (cu. Ft.)	170	177	840	344	
Excavated Depth (ft.)	1.5	1.5	2.5	1.5	
Required Excav. Diameter (ft.)	13.0	13.0	21.0	18.0	TOTAL
Volume Provided (cu. Ft.)	199	199	866	382	1646 C.F.
					60.96 C.Y.D.

- EROSION CONTROL NOTES:**
1. DEVELOPER/OWNER: TODD WILLIAMS CHICK-FIL-A, INC. 5200 BUFFINGTON RD., ATLANTA GA 30349
 2. NAME AND PHONE NUMBER OF THE 24-HOUR CONTACT PERSON FOR EROSION, SEDIMENTATION AND POLLUTION CONTROLS IS: TODD WILLIAMS (678) 758-4513
 3. TOTAL PROJECT AREA = 2.5 ACRES
 4. TOTAL DISTURBED AREA = 2.5 ACRES
 5. 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.
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 7. SEDIMENT STORAGE MAINTENANCE INDICATORS MUST BE INSTALLED IN SEDIMENT STORAGE STRUCTURES, INDICATING THE 1/2 FULL VOLUME.
 8. 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.
 9. 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.
 11. 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.
 12. 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.
 13. 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.
 14. THE RECEIVING WATER(S) IS UNNAMED TRIBUTARY TO THE XXXXXXXXXXXXXXXXXXXX.
 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: XXXXXXXX



LEGEND

MU	TEMPORARY MULCHING
SDP	SOD - PERMANENT GROUND COVER
MB	MATTING BLANKET
IP-B	SILT SACK
PS	PERMANENT SEEDING
CE	CONSTRUCTION ENTRANCE
SF	SILT FENCE
SD3	TEMPORARY SEDIMENT TRAP
TEMPORARY DIVERSION — TD —	
LIMITS OF DISTURBANCE - - - -	

NOTE: * INLET SEDIMENT TRAP S42-F SHALL BE USED IN NON PAVED AREAS UNTIL PAVING INS COMPLETE. WHILE S42-SS SHALL BE USED IN AREAS THAT IS PAVED.

Project 22036CFA City of Lakeland, Tn.: Chick-Fil-A Restaurant 3423 Lakeland District Drive.

Items must occur in the order listed; items cannot occur concurrently unless specifically noted

- **PRE-CONSTRUCTION**
 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 installation 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. Installation 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.)
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 8. Contact City of Lakeland for Final inspection.

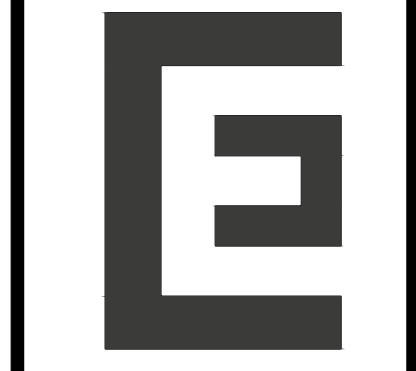
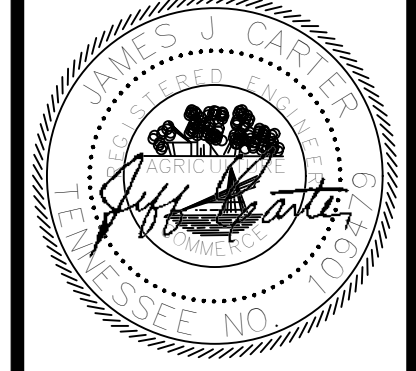
Note: Maintenance of sediment and erosion control measures must continue until the site is permanently stabilized and the controls are removed.

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GRID NORTH

GRAPHIC SCALE
SCALE: 1" = 30'

30' 15' 0 30' 60' 90'



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STORE # 05430

3423 Lake District Dr. W.
Lakeland TN 38002

SHEET TITLE

SWPPP
PHASE I

REVISION 1-2023

Job No. : 22036CFA

Store : 05430

Date : 01/18/2023

Sheet

C-4.2



Chick-fil-A

5200 Buffington Rd.
Atlanta Georgia,
30349-2998

Phase II & III Inlet Sediment Trap Calculations					
Structure ID	H.G.I. A-2	H.G.I. A-3	H.G.I. B-1	H.G.I. B-2	H.G.I. B-3
Drainage Area (acres)	0.23	0.53	0.10	0.36	0.27
Volume Required (cu. Ft.)	409	955	182	651	482
Excavated Depth (ft.)	1.5	2.5	1.5	2.5	2.0
Required Excav. Diameter (ft.)	19.0	23.0	13.0	19.0	18.0
Volume Provided (cu. Ft.)	425	1039	199	709	509
					2881 C.F.
					106.7 C.YD.

EROSION CONTROL NOTES:

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LEGEND

MU	TEMPORARY MULCHING
SQP	SOD - PERMANENT GROUND COVER
MB	MATTING BLANKET
IP-B	SILT SACK
PS	PERMANENT SEEDING
CE	CONSTRUCTION ENTRANCE
SF	SILT FENCE
SD3	TEMPORARY SEDIMENT TRAP

TEMPORARY DIVERSION TD

LIMITS OF DISTURBANCE

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Project 22036CFA City of Lakeland, Tn.: Chick-Fil-A Restaurant 3423 Lakeland District Drive.

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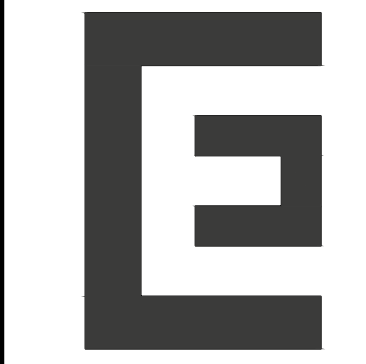
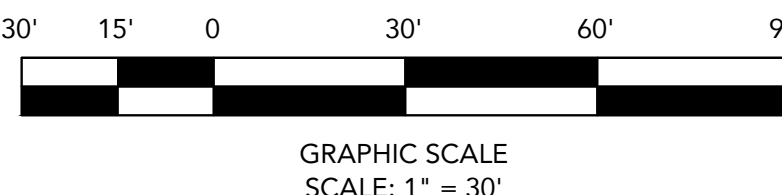
PHASE III

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www.carterengineering.com

STORE # 05430

3423 Lake District Dr. W.
Lakeland TN 38002

SHEET TITLE

SWPPP
PHASE II

REVISION 1-2023

Job No. : 22036CFA

Store : 05430

Date : 01/18/2023

Sheet

C-4.2



Chick-fil-A

5200 Buffington Rd.
Atlanta Georgia,
30349-2998

Phase II & III Inlet Sediment Trap Calculations					
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SQP	SOD - PERMANENT GROUND COVER
MB	MATTING BLANKET
IP-B	SILT SACK
PS	PERMANENT SEEDING
CE	CONSTRUCTION ENTRANCE
SF	SILT FENCE
SD3	TEMPORARY SEDIMENT TRAP

TEMPORARY DIVERSION TD

LIMITS OF DISTURBANCE

NOTE: * INLET SEDIMENT TRAP S42-F SHALL BE USED IN NON PAVED AREAS UNTIL PAVING INS COMPLETE. WHILE S42-SS SHALL BE USED IN AREAS THAT IS PAVED.

Project 22036CFA City of Lakeland, Tn.: Chick-Fil-A Restaurant 3423 Lakeland District Drive.

Items must occur in the order listed; items cannot occur concurrently unless specifically noted

PRE-CONSTRUCTION

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 installation 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. Installation of storm drain and placement of inlet protection and skimmer inserts as each new inlet is installed

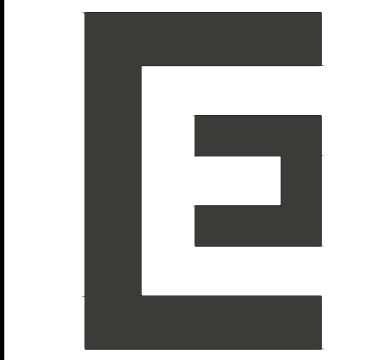
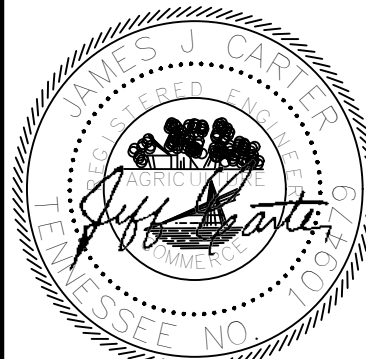
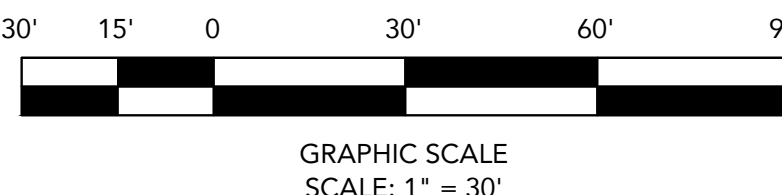
PHASE III

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 by 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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SWPPP
PHASE III

REVISION 1-2023

Job No. : 22036CFA

Store : 05430

Date : 01/18/2023

Sheet

C-4.2

PS Permanent Cover Seeding Mixtures

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

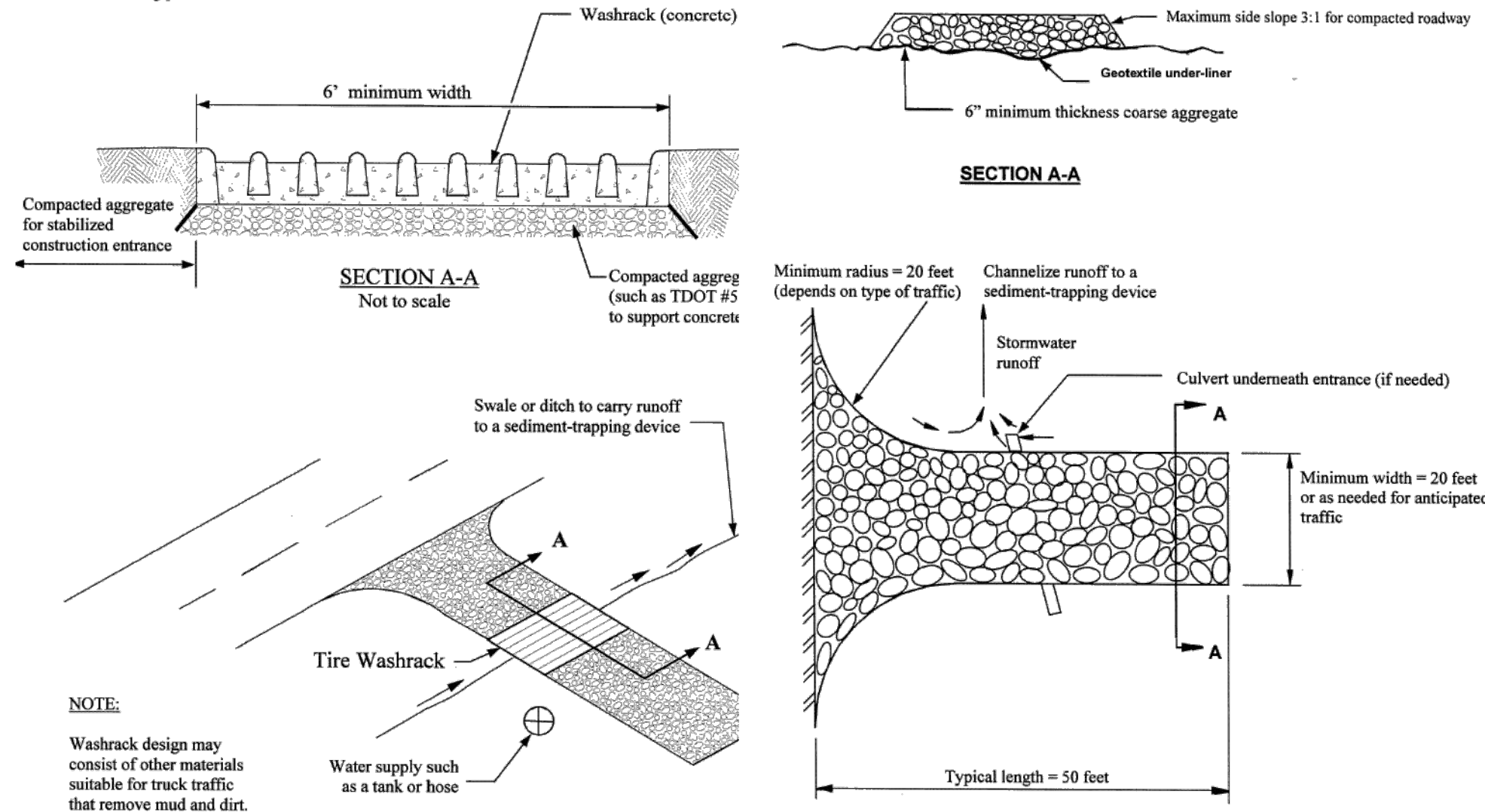
Topsoil should be handled only when it is dry enough to work without damaging soil structure. A uniform application of 5 inches (unsettled) is recommended, but may be adjusted at the discretion of the engineer or landscape architect. See Table 2 for additional information about the volume of topsoil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

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

Typical Washrack for Construction Exit

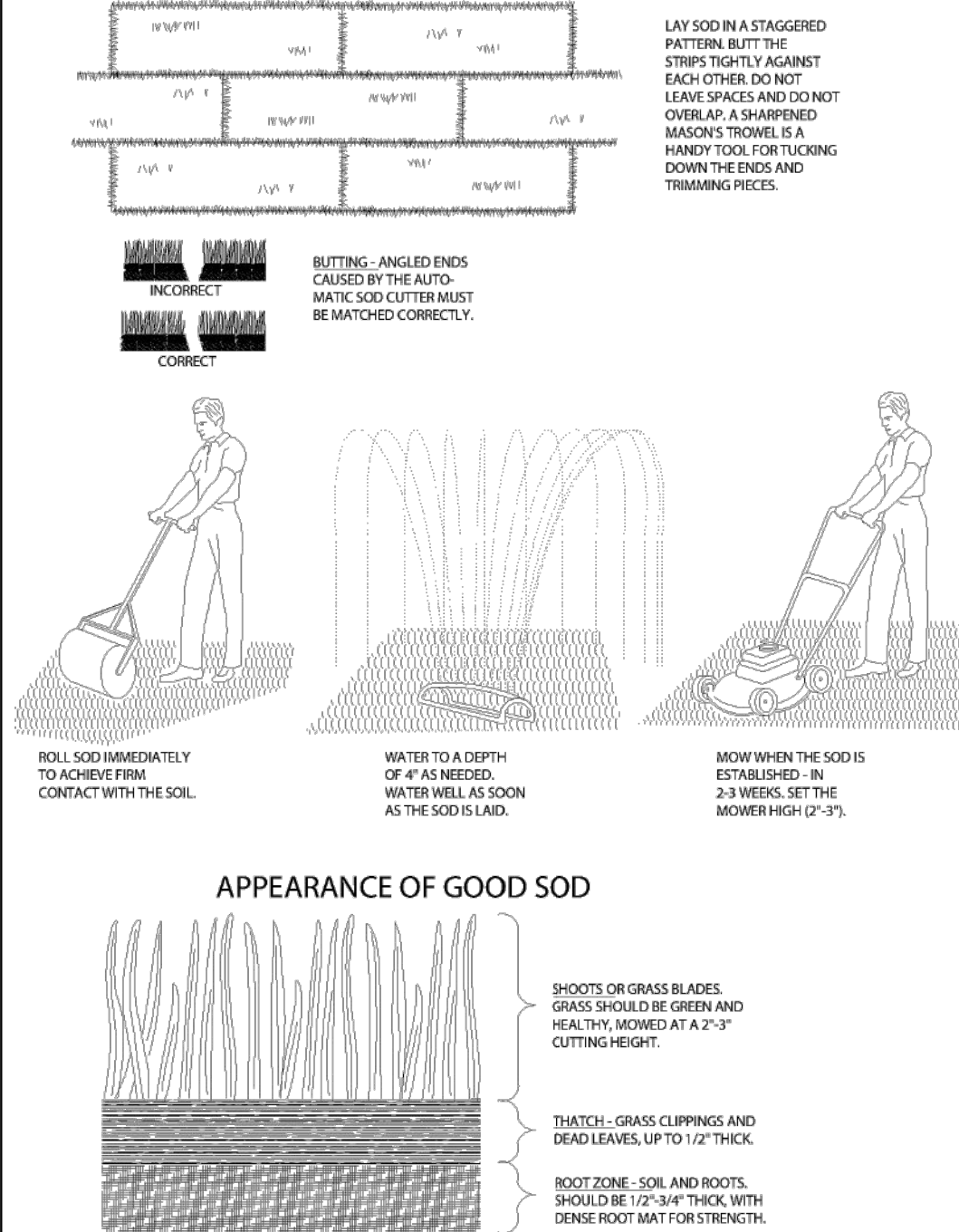


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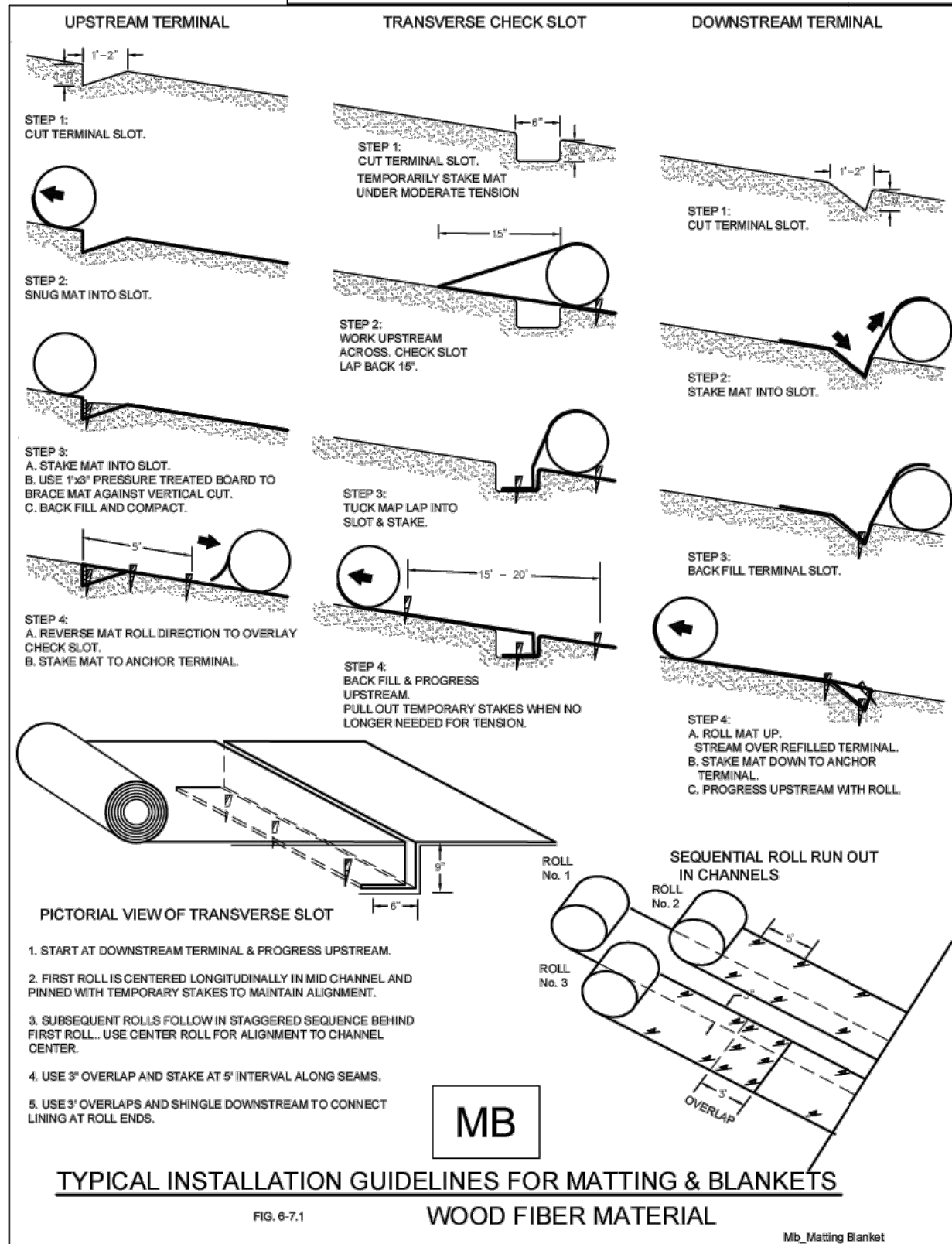
Construction Exit

SECTION A-A

SOD SODDING



TS



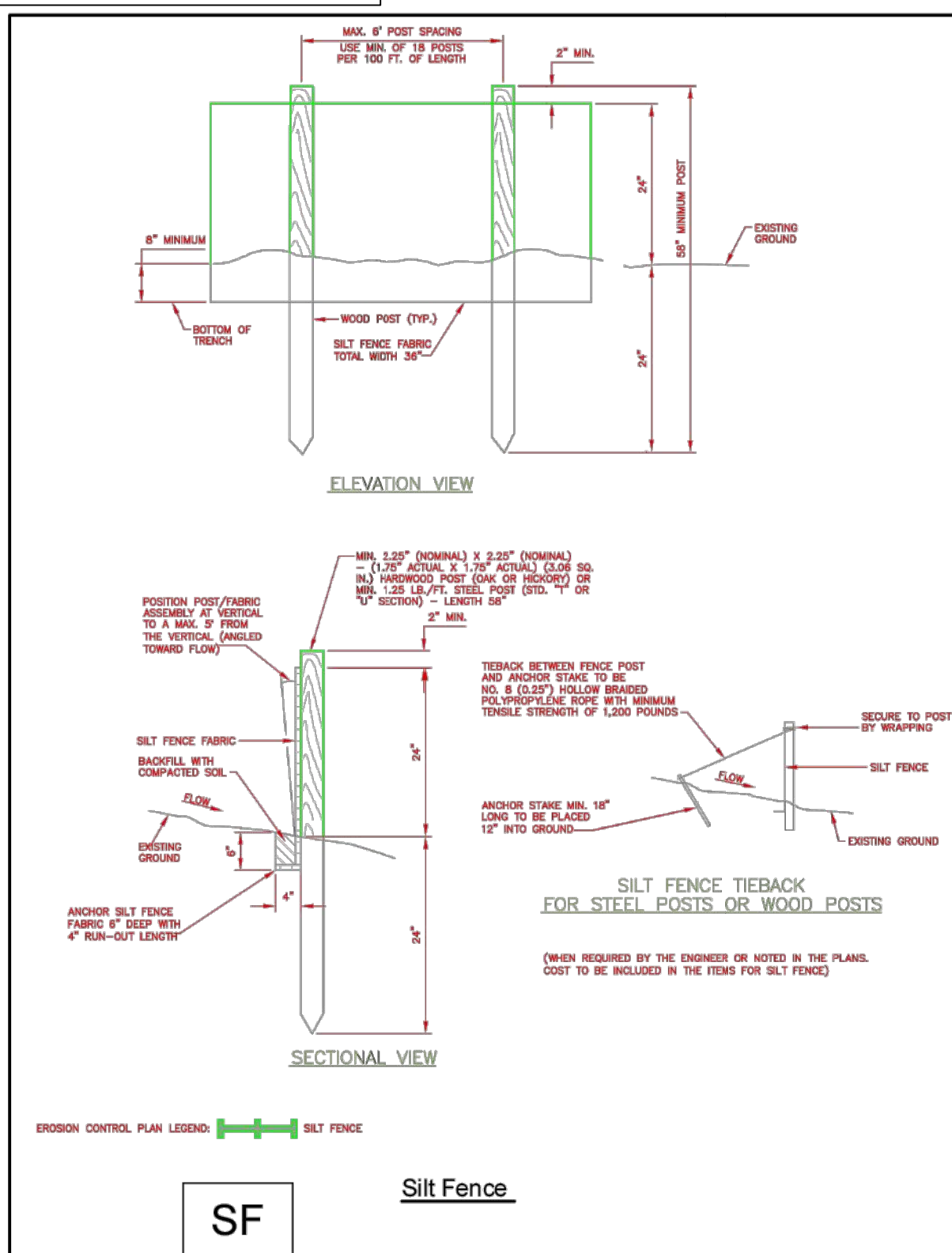
MB

TYPICAL INSTALLATION GUIDELINES FOR MATTING & BLANKETS

FIG. 6-7.1

WOOD FIBER MATERIAL

Mo. Matting Blanket



SF

Silt Fence

Chapter 7

Management Practices

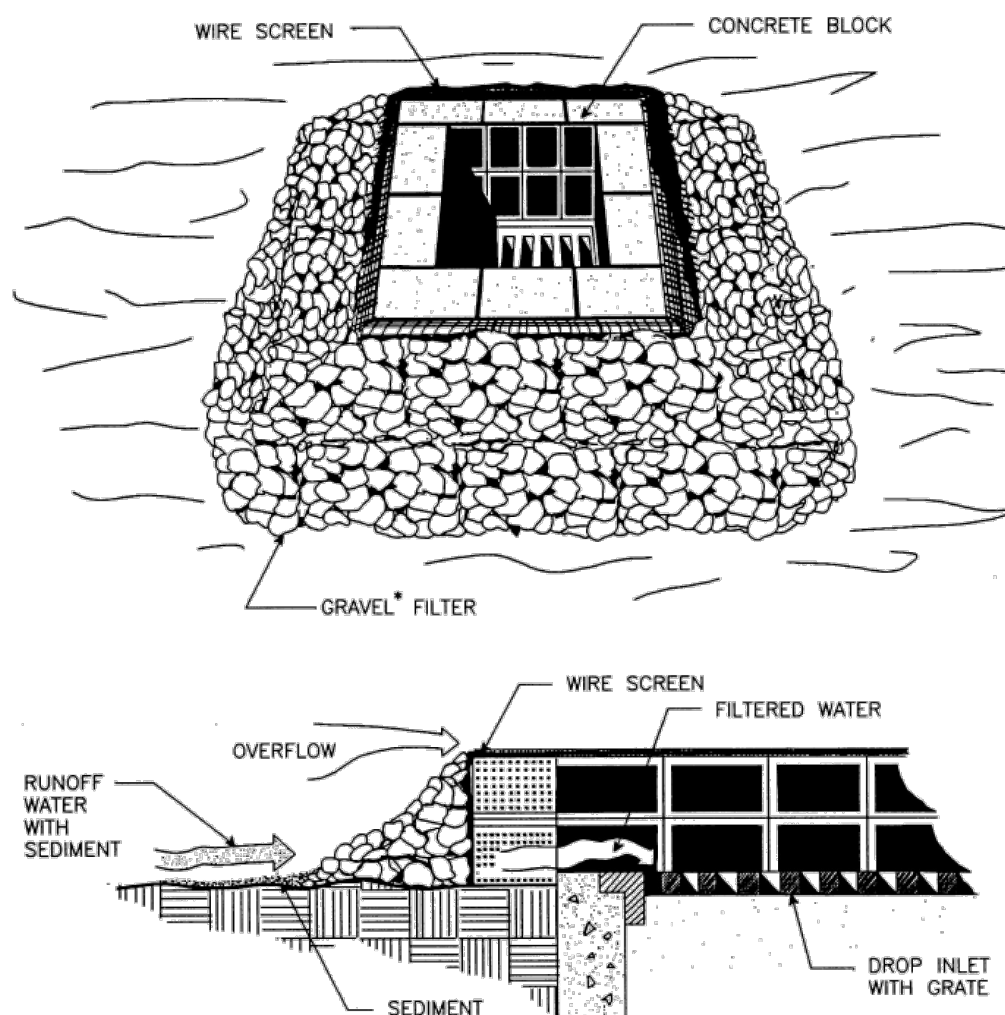
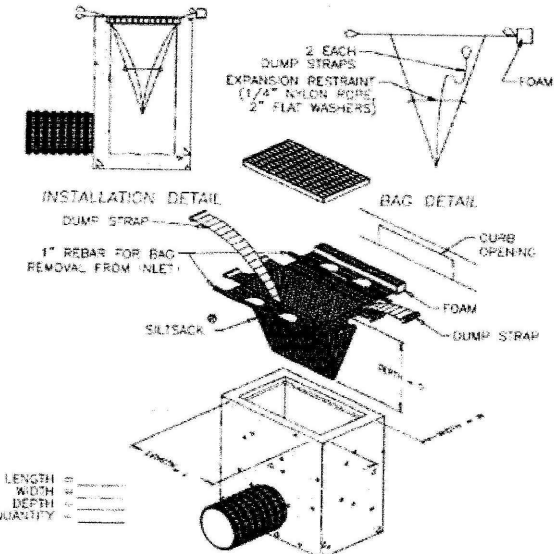


Figure 7.35-3 Block and Gravel Inlet Protection (Source: VA DSWC)

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800 625-0888 215 927-6000 FAX: 215 927-0368
CUSTOMER SERVICE LINE

#14925 SILT SACK



Regular Flow	Test Method	Test Method	
	ASTM D-6532	165.0 Bx./ft	
Regular Flow			
Property	Test Method	Units	Test Results
Grab Tensile	ASTM D-4684	Brs.	315x/100
Grab Elongation	ASTM D-4632	%	12x/5
Puncture	ASTM D-4833	Brs.	125
Mullen Burst	ASTM D-2786	P.S.I.	600
Trapezoid Tear	ASTM D-4533	Brs.	120x/50
UV Resistance	ASTM D-4355	%	90
Apparent Opening	ASTM D-4751	US Sieve	40
Flow Rate	ASTM D-4491	gal/min/ft ²	40
Permeability	ASTM D-4491	sec ⁻¹	0.55



Chick-fil-A

5200 Buffington Rd.
Atlanta Georgia,
30349-2998

REVISION BLOCK	REVISION DATE & DESCRIPTION
1	#####
2	####
3	####
4	####
5	####
6	####
7	####
8	####



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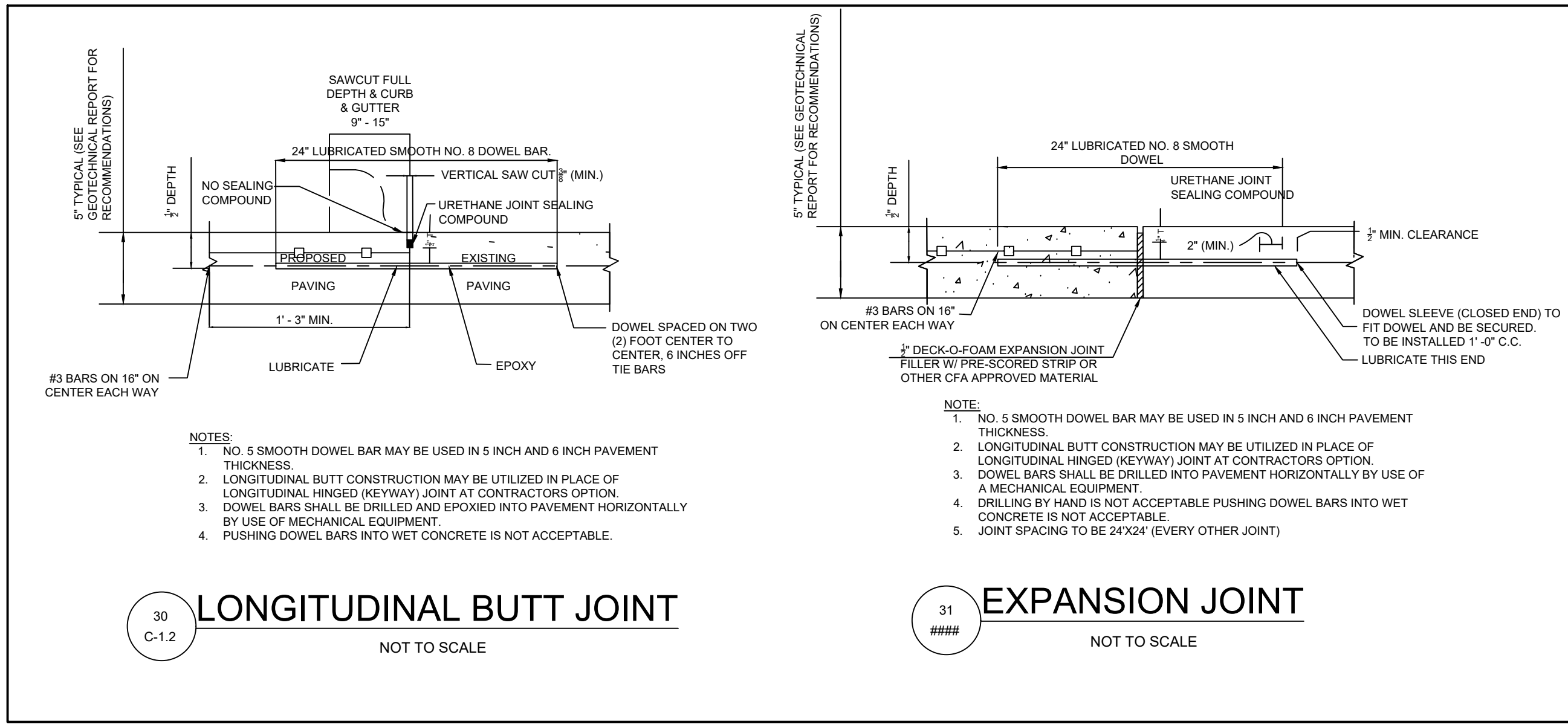
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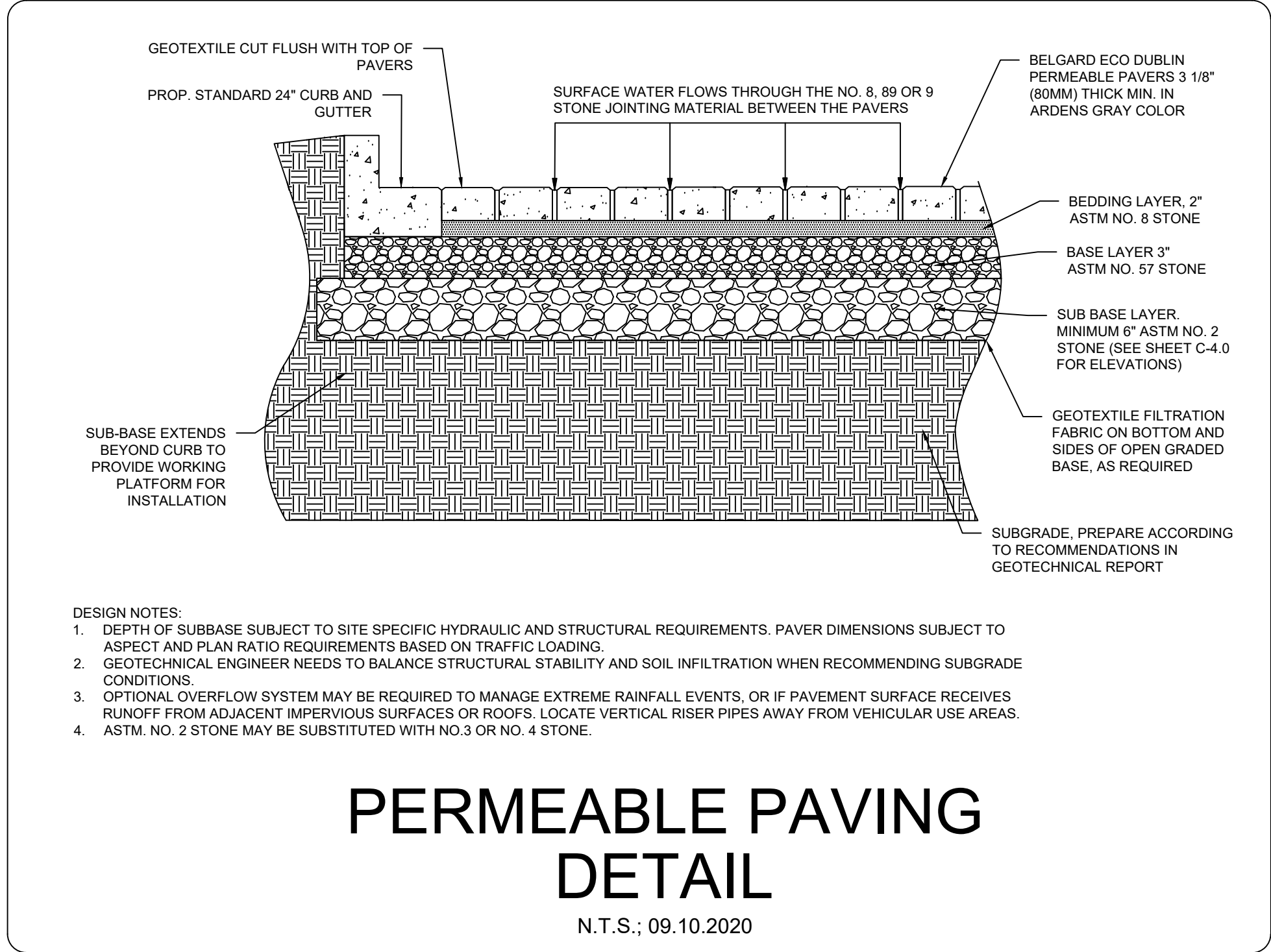
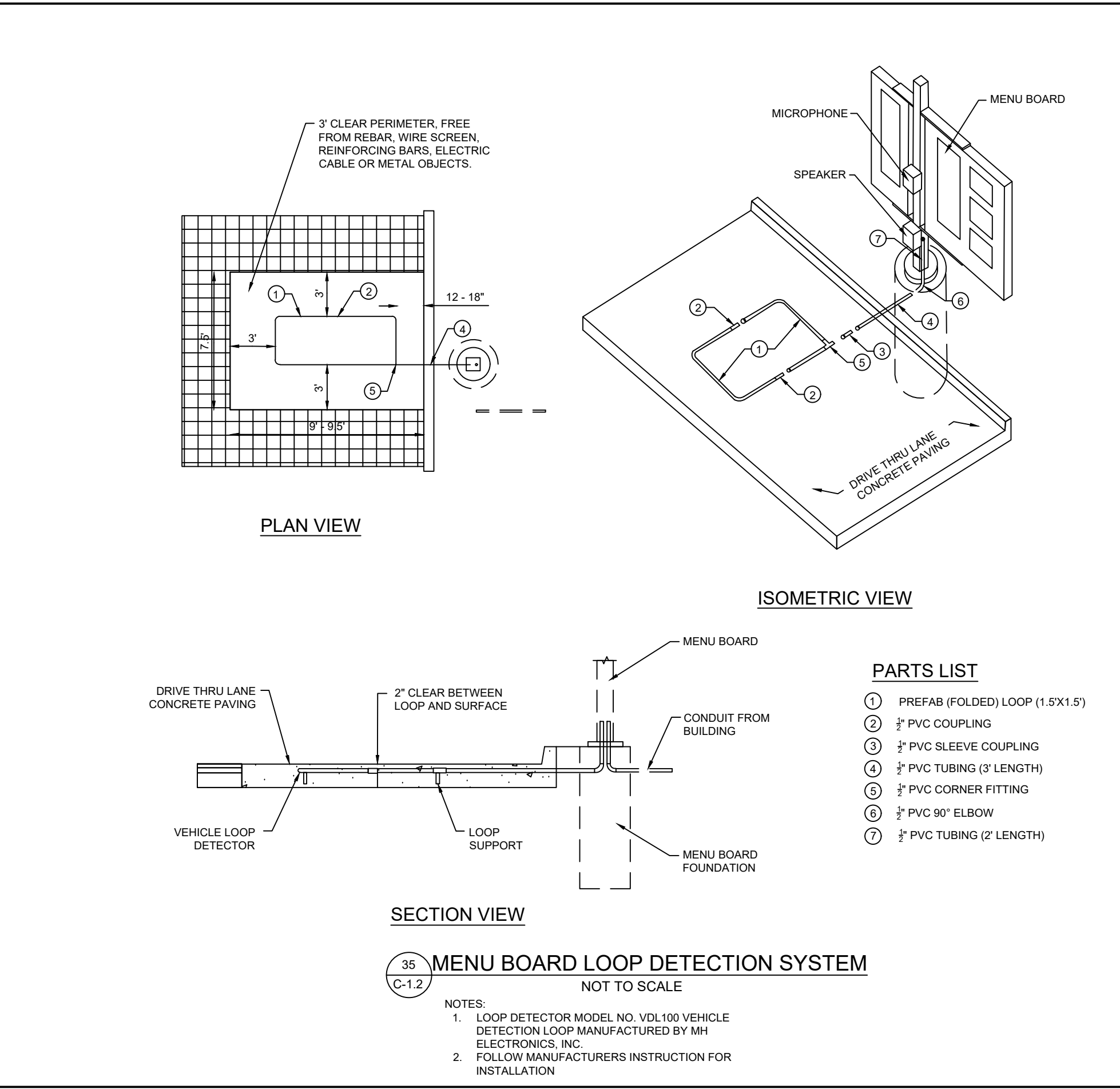
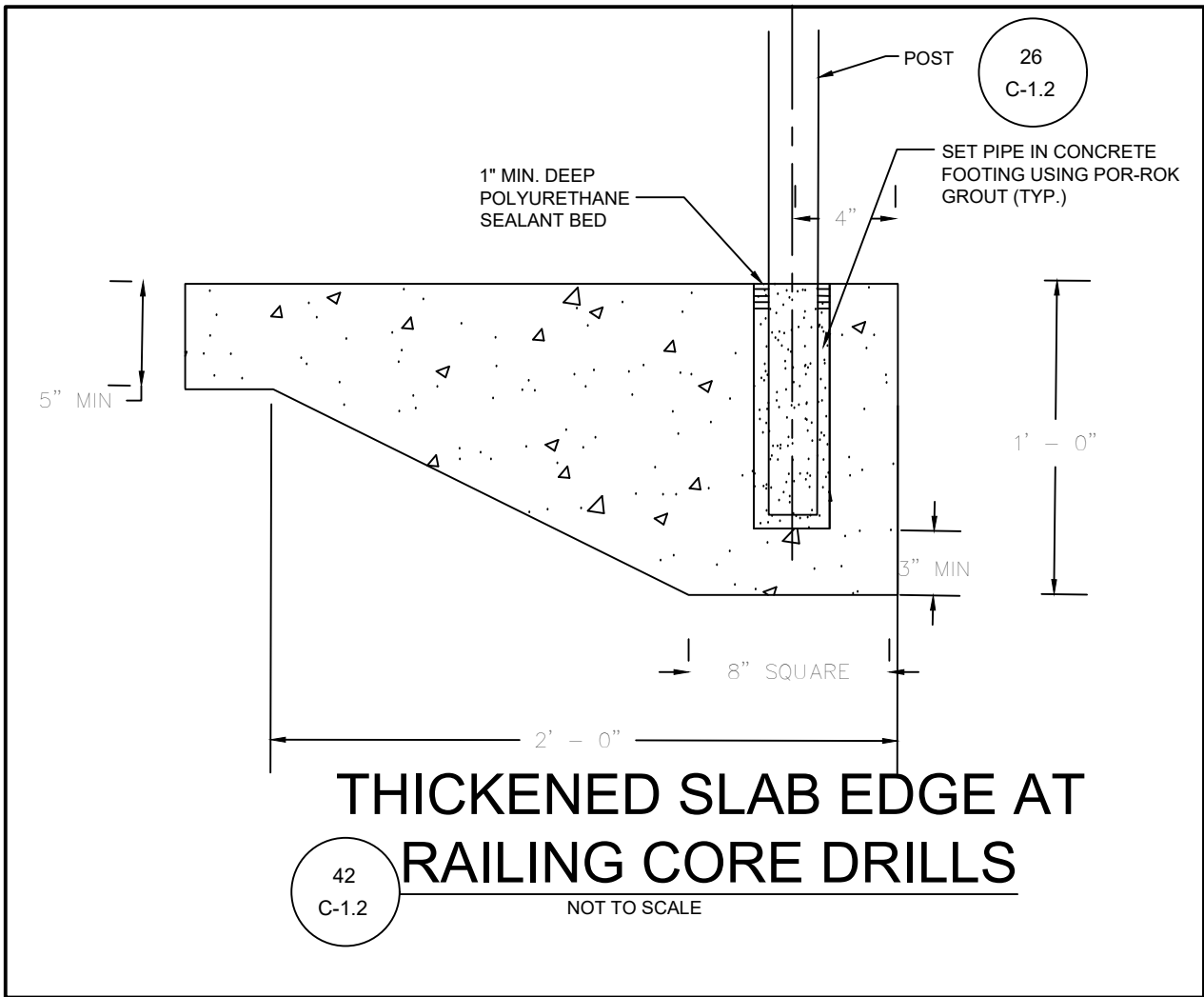
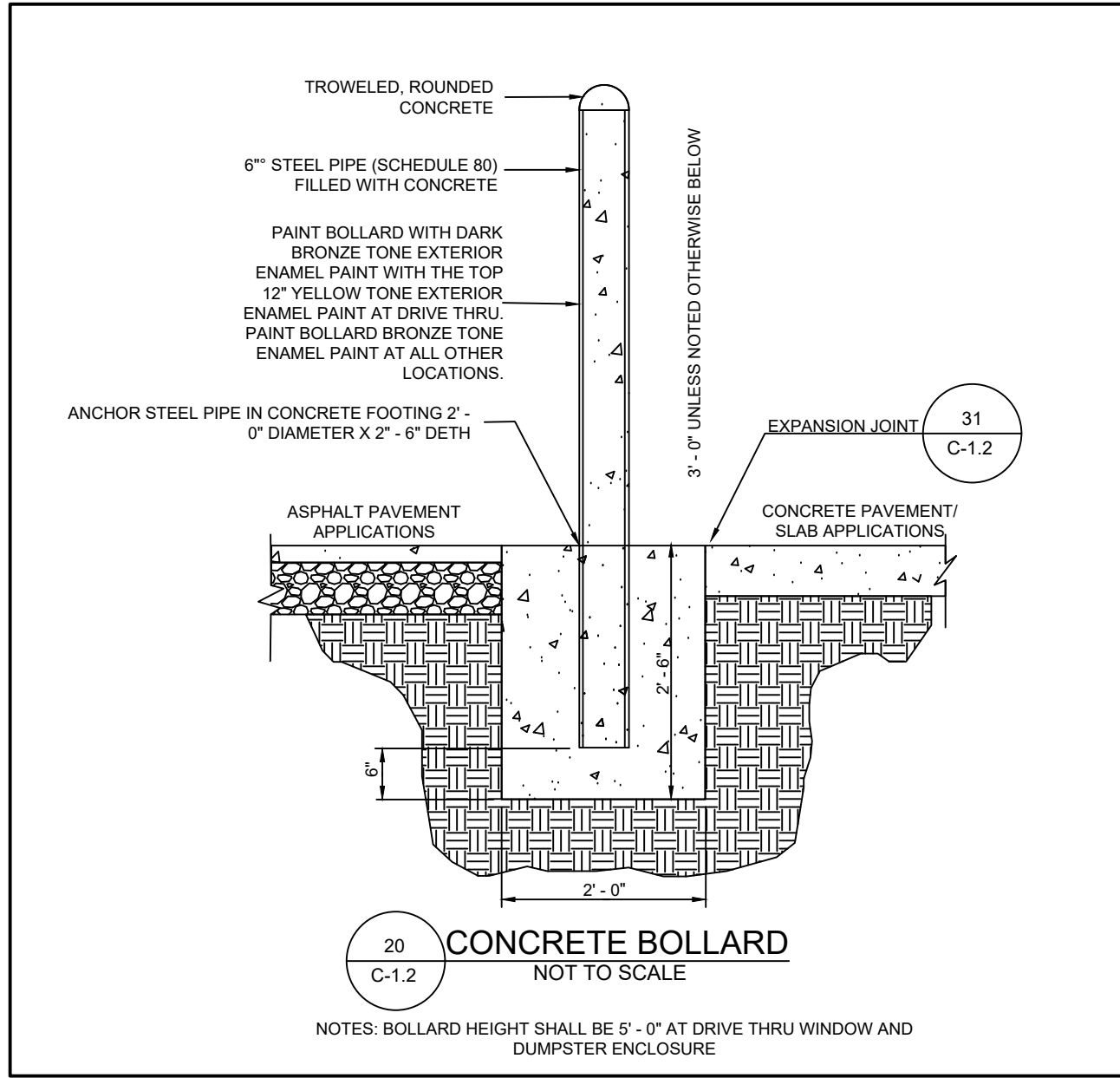
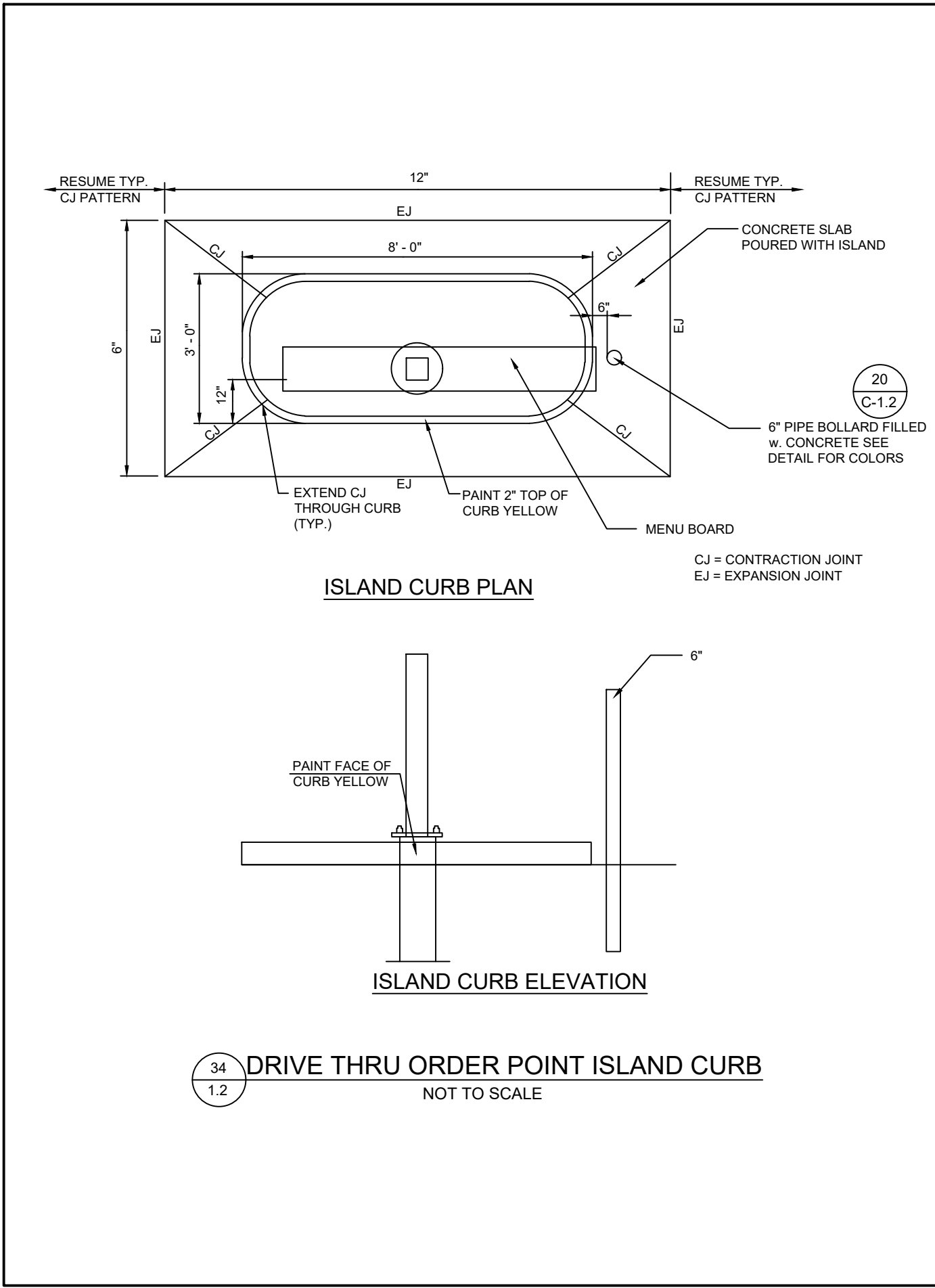
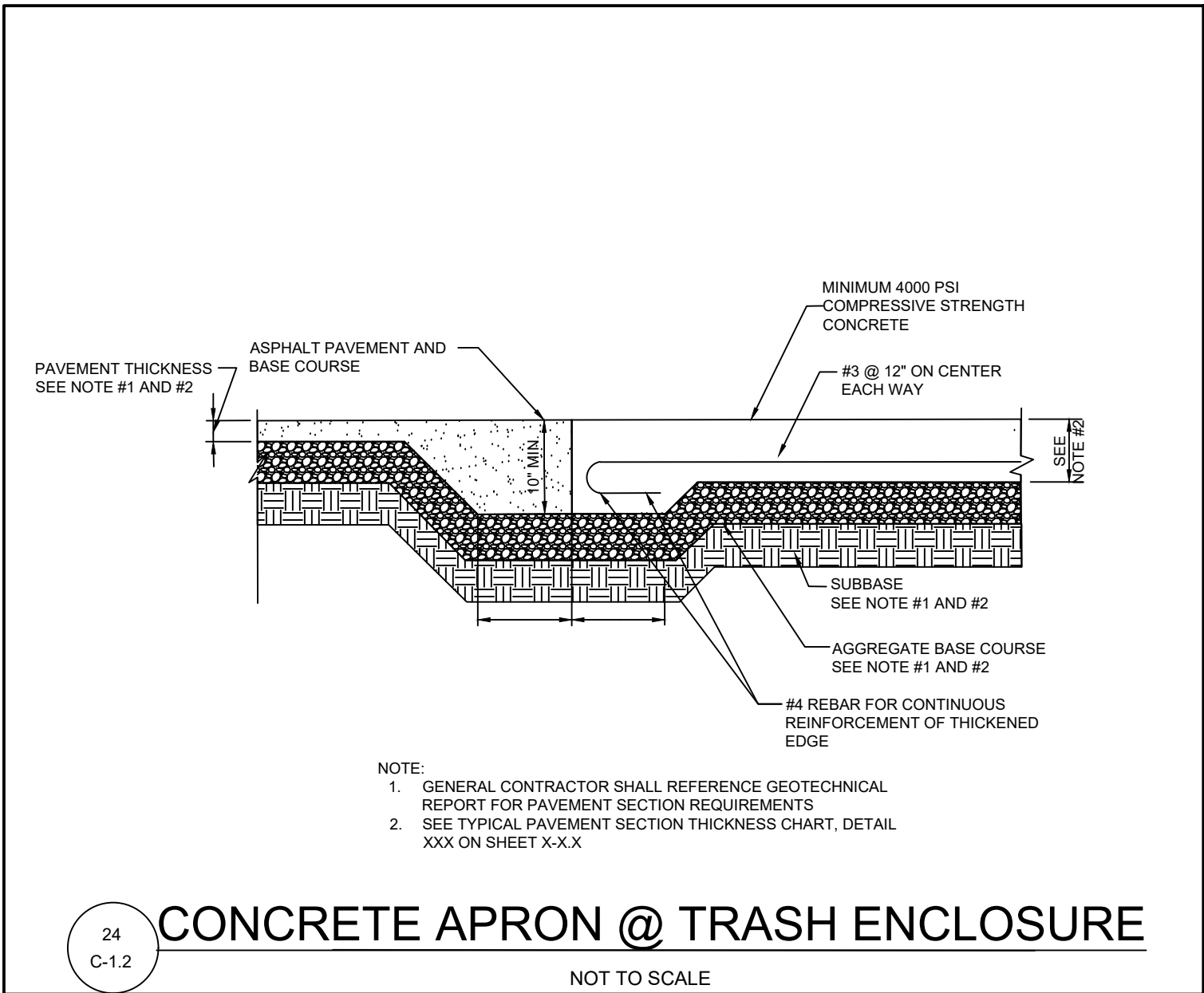
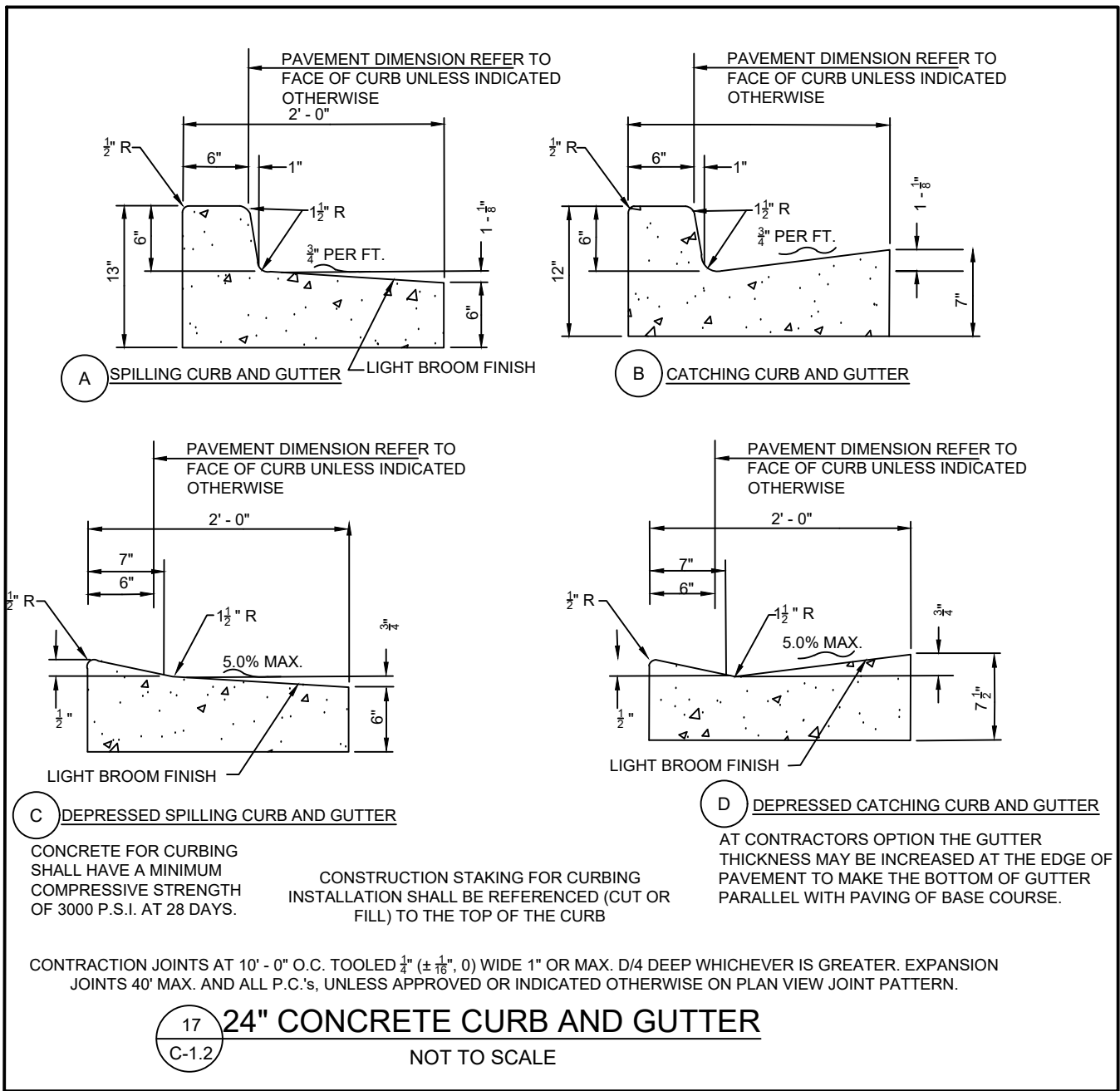
C-4.5



31

EXPANSION JOINT

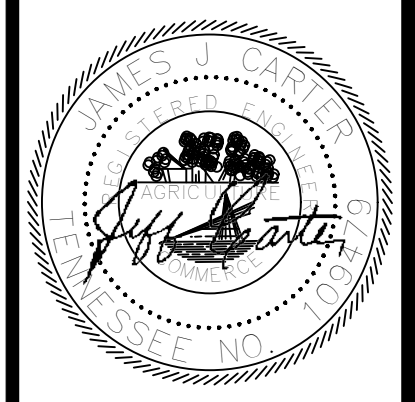
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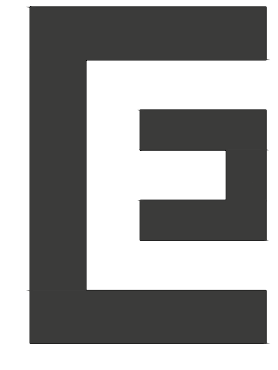




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STANDARD DETAILS II

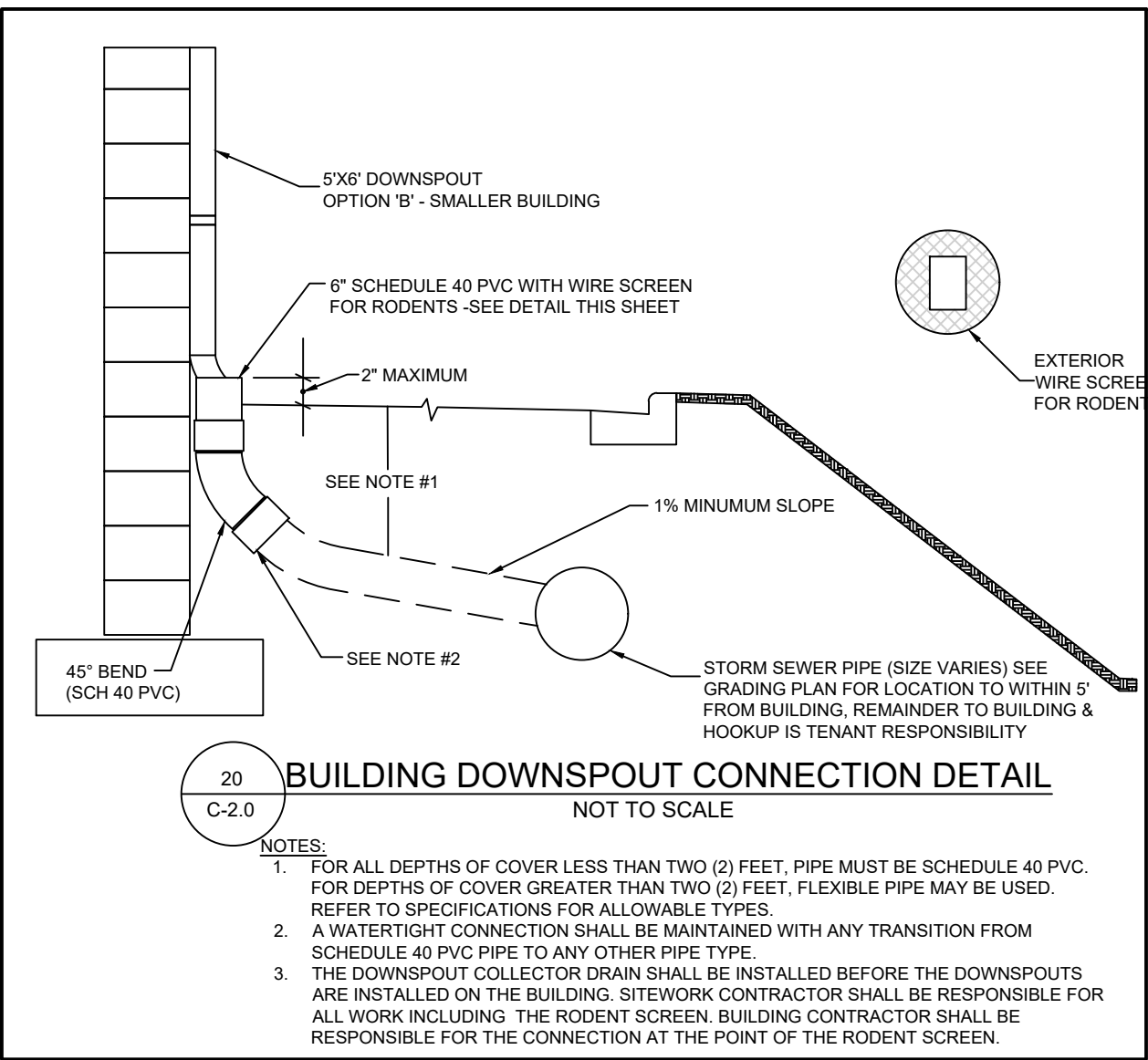
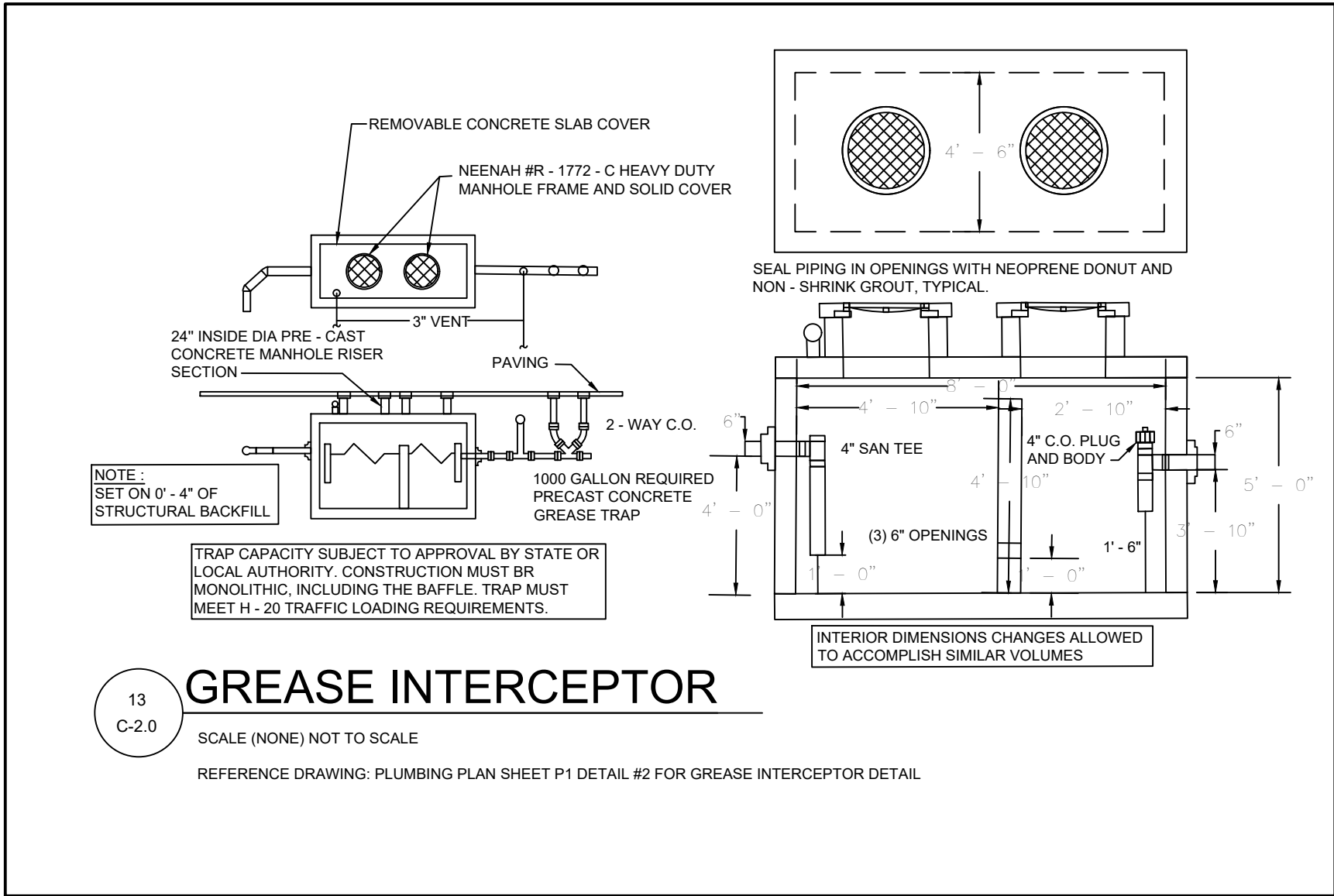
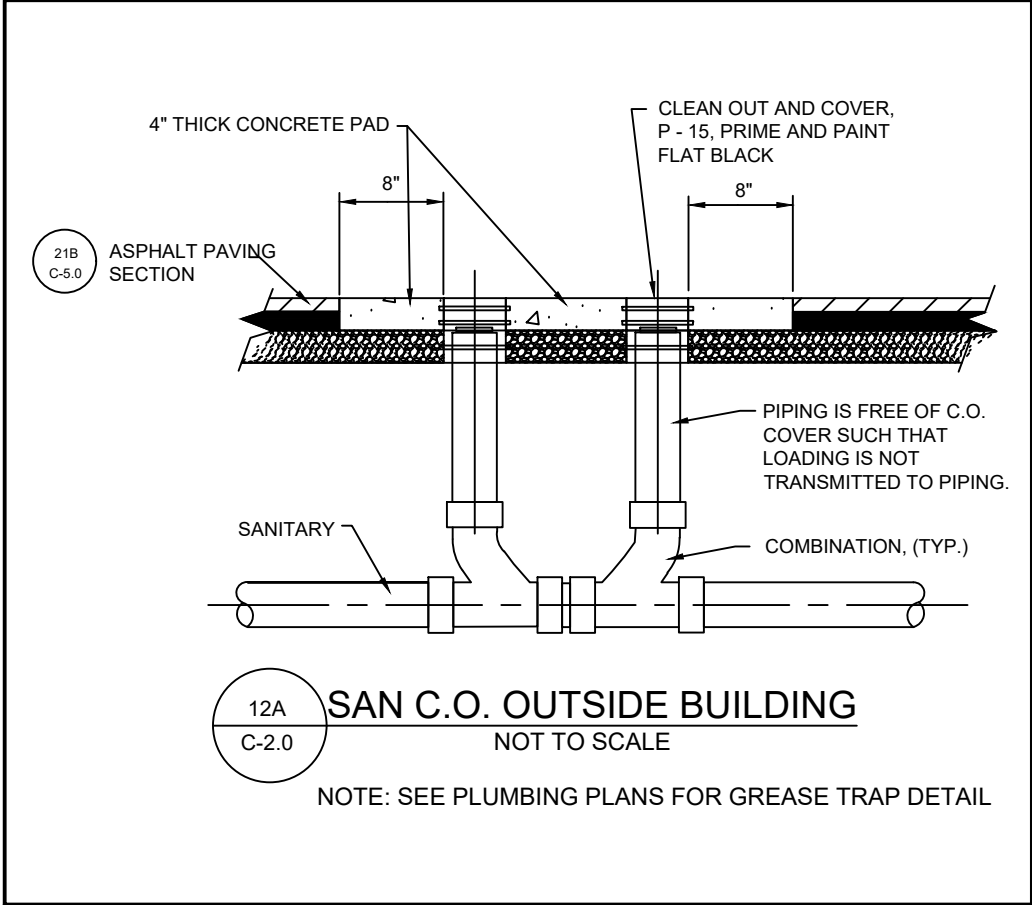
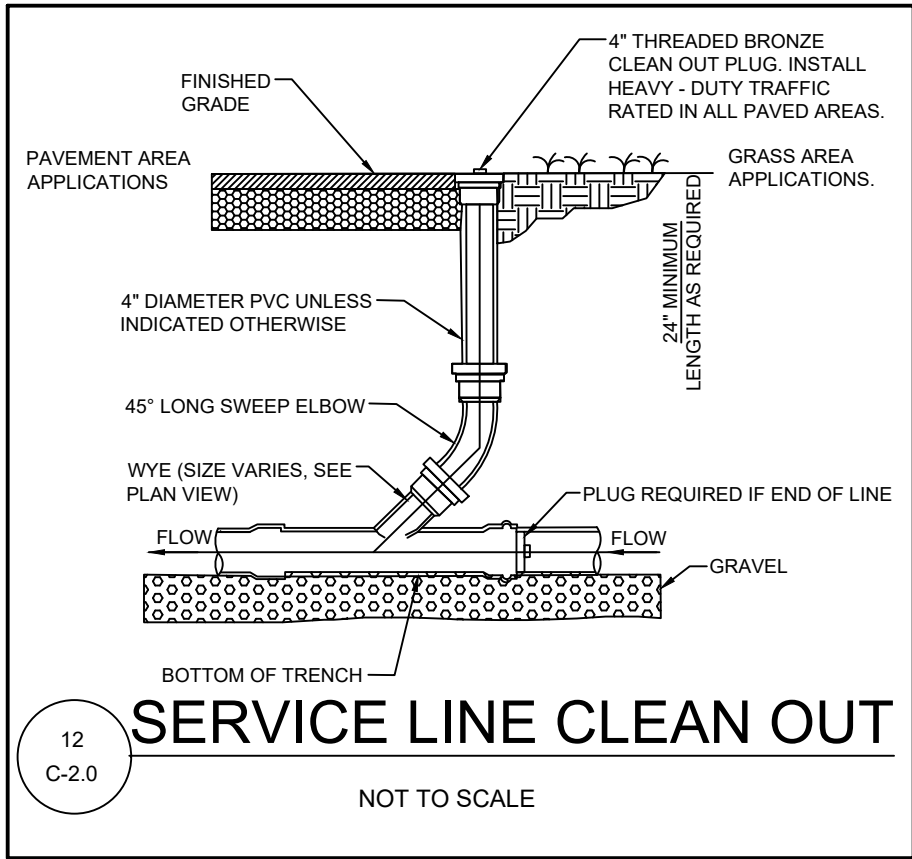
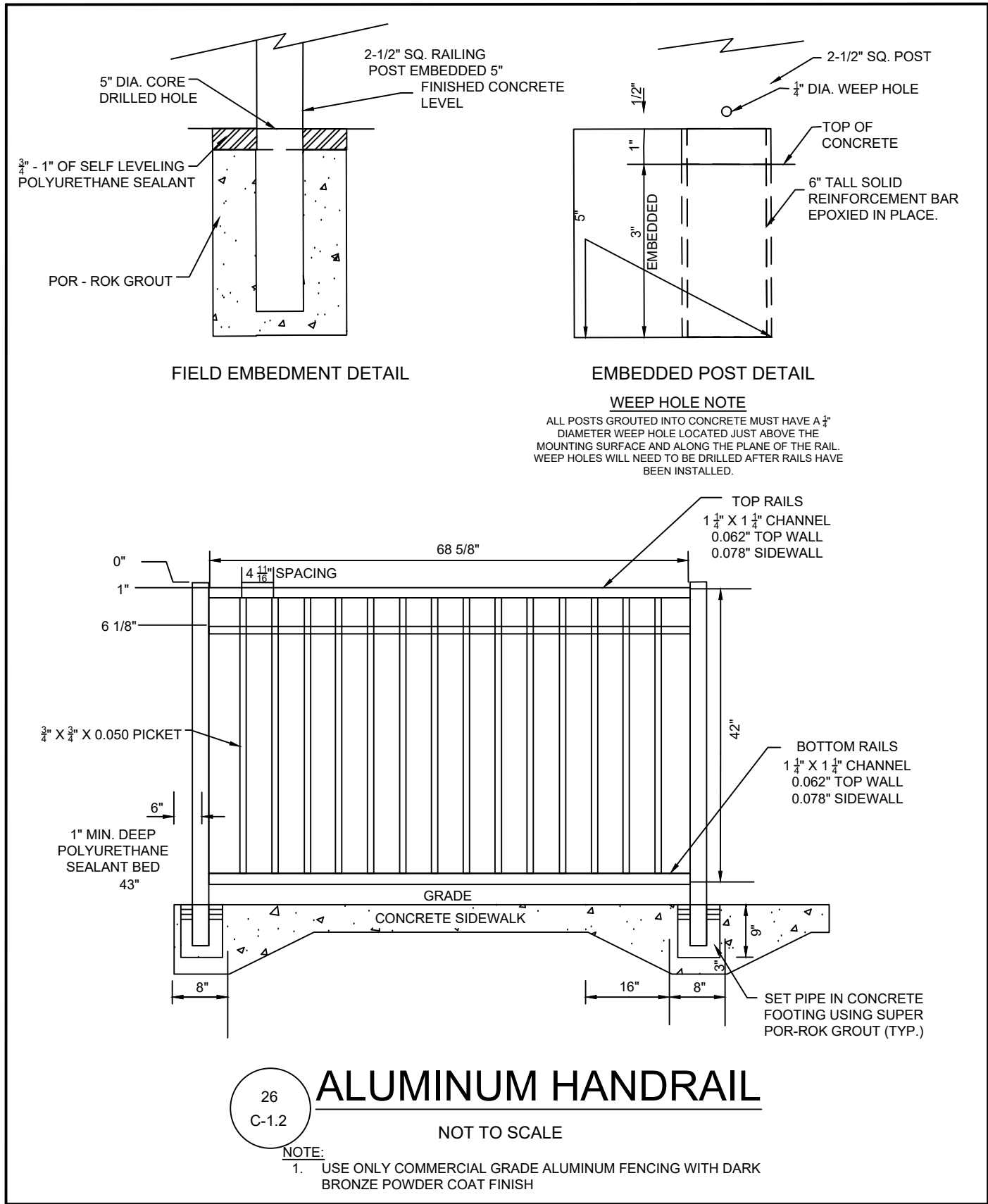
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C-5.1

UTILITY STANDARD DETAILS



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**STANDARD
DETAILS III**

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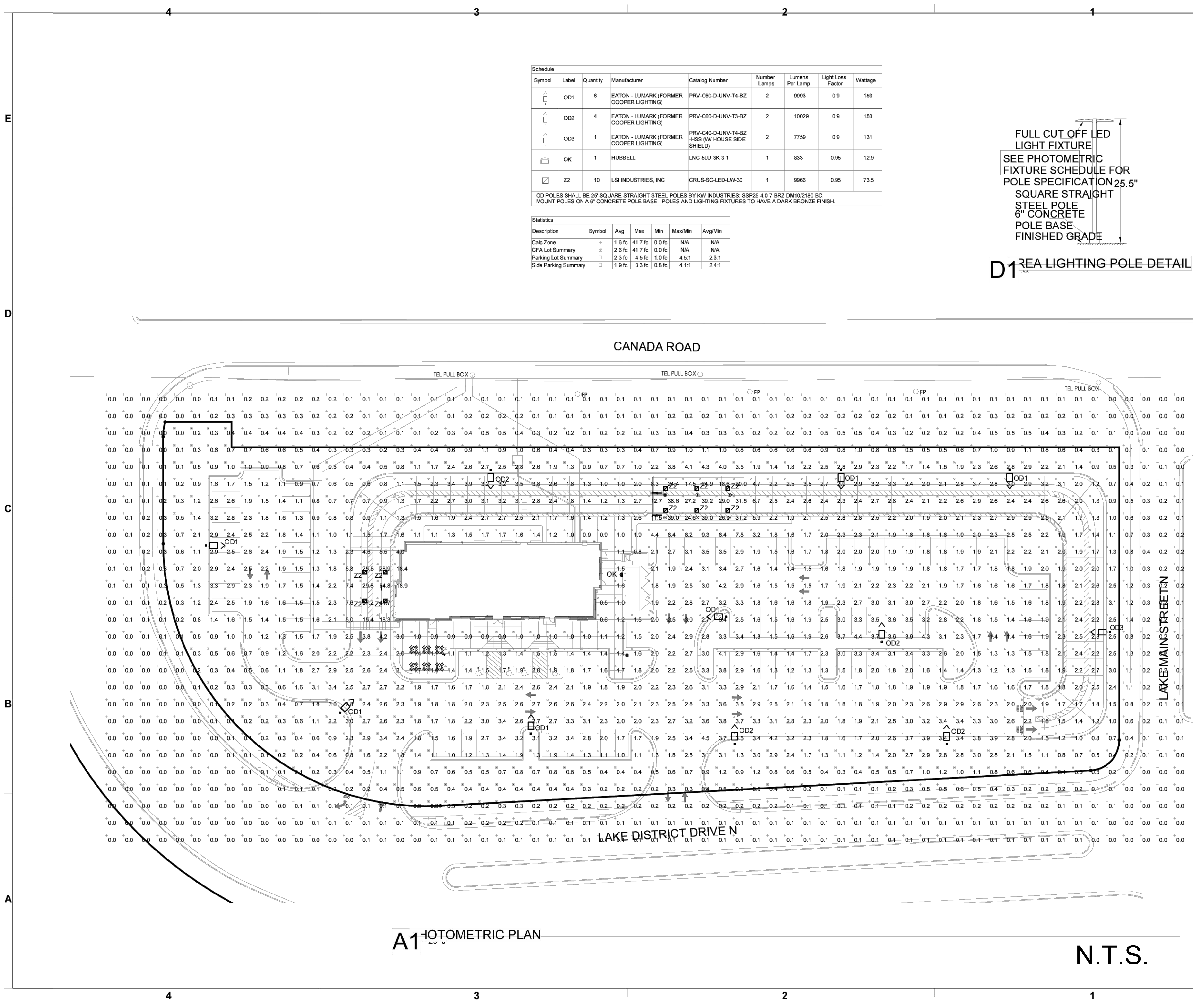
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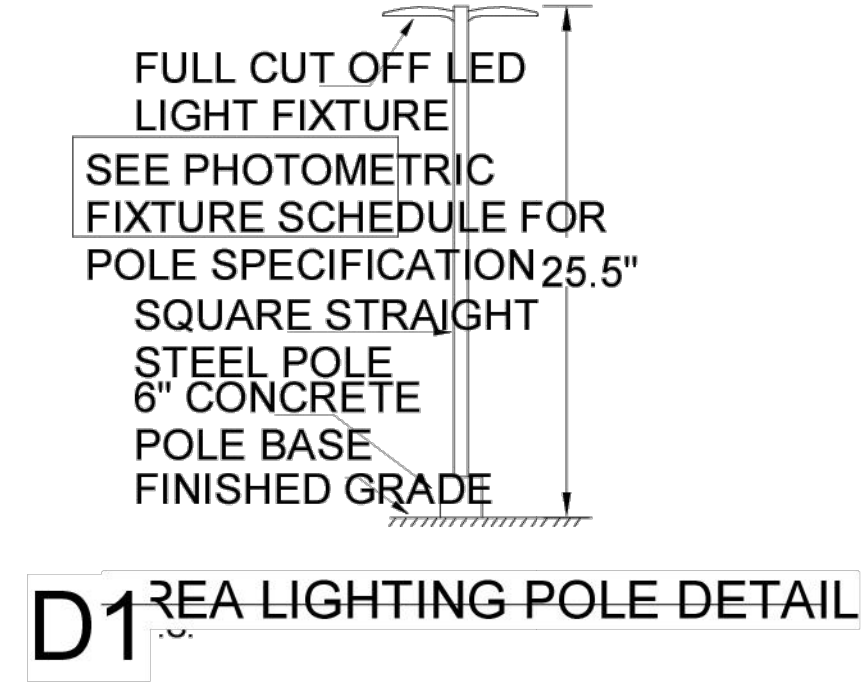
C-5.2



Schedule							
Symbol	Label	Quantity	Manufacturer	Catalog Number	Number Lamps	Lumens Per Lamp	Light Loss Factor
	OD1	6	EATON - LUMARK (FORMER COOPER LIGHTING)	PRV-C60-D-UNV-T4-BZ	2	9993	0.9
	OD2	4	EATON - LUMARK (FORMER COOPER LIGHTING)	PRV-C60-D-UNV-T3-BZ	2	10029	0.9
	OD3	1	EATON - LUMARK (FORMER COOPER LIGHTING)	PRV-C60-D-UNV-T4-BZ HSS (W/ HOUSE SIDE SHIELD)	2	7759	0.9
	OK	1	HUBBELL	LNC-5LU-3K-3-1	1	833	0.95
	Z2	10	LSI INDUSTRIES, INC	CRUS-SC-LED-LW-30	1	9966	0.95

OD POLES SHALL BE 25" SQUARE STRAIGHT STEEL POLES BY KW INDUSTRIES: SSP25-4.0-7-BRZ-DM10/2180-BG. MOUNT POLES ON A 6" CONCRETE POLE BASE. POLES AND LIGHTING FIXTURES TO HAVE A DARK BRONZE FINISH.

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone	+	1.6 fc	41.7 fc	0.0 fc	N/A	N/A
CFA Lot Summary	x	2.6 fc	41.7 fc	0.0 fc	N/A	N/A
Parking Lot Summary	□	2.3 fc	4.5 fc	1.0 fc	4.5:1	2.3:1
Side Parking Summary	□	1.9 fc	3.3 fc	0.8 fc	4.1:1	2.4:1



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Kurz
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Nashville, TN 37214
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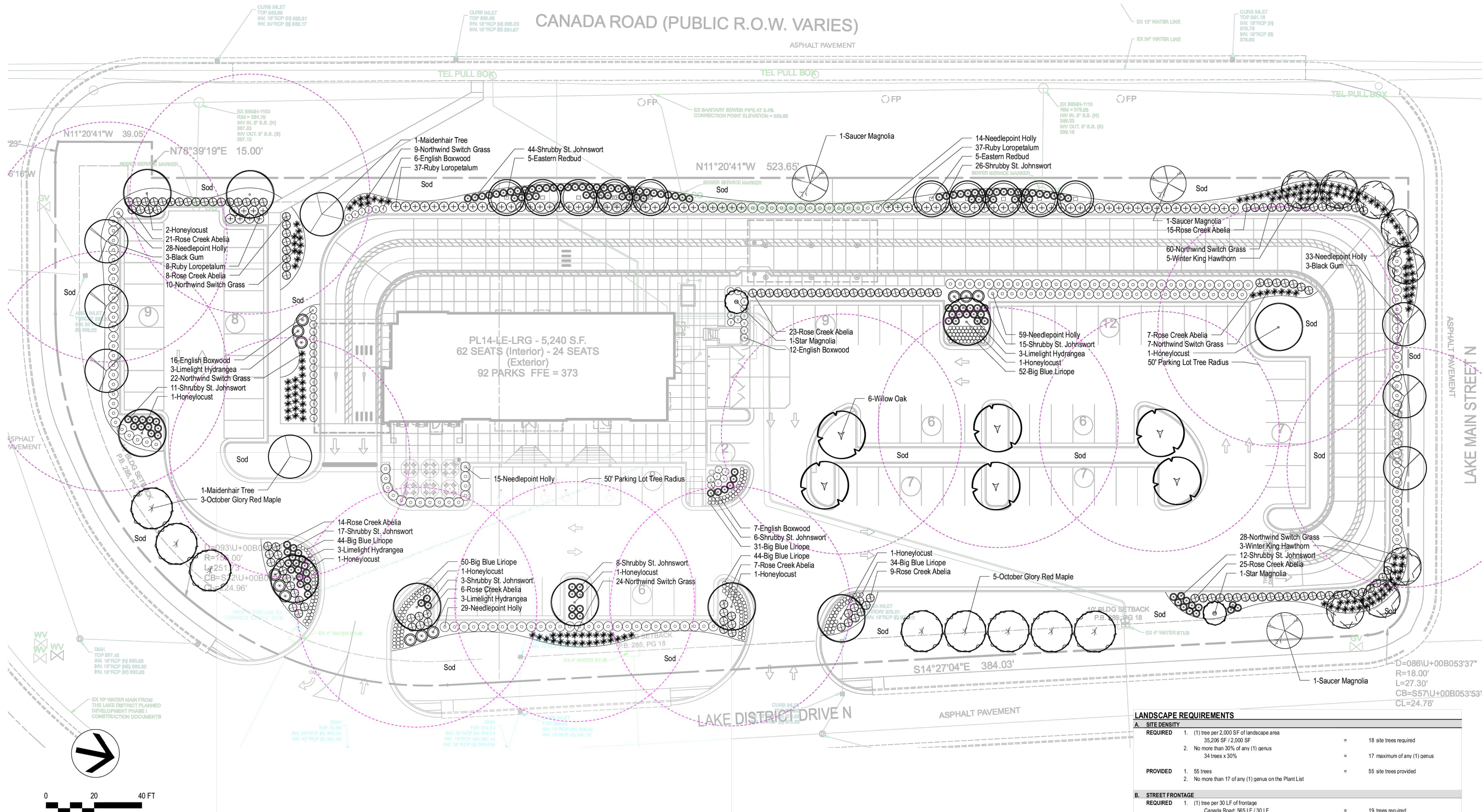
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SITE PHOTOMETRIC PLAN
SHEET NUMBER
E-102



ATLANTIC LANDSCAPE NOTES

- Landscape Contractor to read and understand the Landscape Specifications prior to finalizing bids. The Landscape Specifications shall be adhered to throughout the construction process.
- Contractor is responsible for locating and protecting all underground utilities prior to digging.
- Contractor is responsible for protecting existing trees from damage during construction.
- All tree protection devices to be installed prior to the start of land disturbance, and maintained until final landscaping.
- All tree protection areas to be protected from sedimentation.
- All tree protection fencing to be inspected daily, and repaired or replaced as needed.
- No parking, storage or other construction activities are to occur within tree protection areas.
- All planting areas shall be cleaned of construction debris (i.e. concrete, rock, rubble, building materials, etc) prior to adding and spreading of the topsoil.
- General Contractor is responsible for adding a min of 4" clean friable topsoil in all planting beds and all grassed areas. Graded areas to be held down the appropriate elevation to account for topsoil depth. See Landscape Specifications for required topsoil characteristics.
- In all parking lot islands, the General Contractor is responsible to remove all debris, fracture/loosen subgrade to a min. 24" depth. Add topsoil to a 6"-8" berm height above island curbing; refer to landscape specifications and landscape island detail.
- Prior to beginning work, the Landscape Contractor shall inspect the subgrade, general site conditions, verify elevations, utility locations, irrigation, approve topsoil 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, work shall not proceed until such conditions have been corrected and are acceptable to the Landscape Architect.
- Any deviations from the approved set of plans are to be approved by the Landscape Architect.
- Landscape shall be installed in conformance with ANSI Z60.1 the "American Standard for Nursery Stock" and the accepted standards of the American Association of Nurserymen.
- Existing grass in proposed planting areas shall be killed and removed. Hand rake to remove all rocks and debris larger than 1 inch in diameter, prior to adding topsoil and planting shrubs.
- Soil to be tested to determine fertilizer and lime requirements prior to laying sod.
- Annual and perennial beds: add min. 4 inch layer of organic material and till to a min. depth of 12 inches. Mulch annual and perennial beds with 2-3 inch depth of mini nuggets.
- All shrubs beds (existing and new) to be mulched with a min. 3 inch layer of mulch (mulch type to be: double shredded hardwood mulch).
- Planting holes to be dug a minimum of twice the width of the root ball, for both shrub and tree. Set plant material 2-3" above finish grade. Backfill planting pit with topsoil and native excavated soil.
- Sod to be delivered fresh (Cut less than 24 hours prior to arriving on site), laid immediately, rolled, and watered thoroughly immediately after planting. Edge of sod at planting beds are to be "V" trenched; see Landscape Details.
- Any existing grass disturbed during construction to be fully removed, regraded and replaced. All tire marks and indentations to be repaired.
- Water thoroughly twice in first 24 hours and apply mulch immediately.
- The Landscape Contractor shall guarantee all plants installed for one full year from date of acceptance by the owner. All plants shall be alive and at a vigorous rate of growth at the end of the guarantee period. The Landscape Contractor shall not be responsible for acts of God or vandalism. See Landscape Specifications for Warranty requirements/expectations.
- Any plant that is determined dead, in an unhealthy, unsightly condition, lost its shape due to dead branches, or other symptoms of poor, non-vigorous growth, shall be replaced by the Landscape Contractor. See Landscape Specifications for warranty requirements/expectations.
- Site to be 100% irrigated in all planting beds and grass area by an automatic underground Irrigation System. Irrigation as-built shall be provided to the Landscape Architect within 24 hours of irrigation install completion.
- Stake all evergreen and deciduous trees as shown in the planting detail and as per the Landscape Specifications.
- Remove stakes and guying from all trees after one year from planting.

PLANT LIST

Qty	Botanical Name	Common Name	Scheduled Size	Remarks
Trees				
8	Acer rubrum 'October Glory'	October Glory Red Maple	2" Cal; 12' Hgt.	B & B; single straight leader
10	Cercis canadensis	Eastern Redbud	8'-10' Hgt. x 5'-6" Spr.	B & B
8	Crataegus viridis 'Winter King'	Winter King Hawthorn	2" Cal; 8' Hgt.	B & B; single straight leader
2	Ginkgo biloba	Maidenhair Tree	2" Cal; 12' Hgt.	B & B; single straight leader; male only; specimen
10	Gleditsia triacanthos inermis 'Skyline'	Skyline Honeylocust	2" Cal; 10' Hgt.	B & B; single straight leader
2	Magnolia stellata	Star Magnolia	8' Hgt.	Specimen
3	Magnolia x soulangeana	Saucer Magnolia	2" Cal; 10' Hgt.	B & B; single straight leader; specimen
6	Nyssa sylvatica	Black Gum	2" Cal; 10' Hgt.	B & B; single straight leader
6	Quercus phellos	Willow Oak	2" Cal; 12' Hgt.	B & B; single straight leader
Shrubs				
135	Abelia x chinensis 'Rose Creek'	Rose Creek Abelia	3 Gal.	Plant 3.5" O.C.
41	Buxus microphylla	English Boxwood	3 Gal.	Plant 3" O.C.
12	Hydrangea paniculata 'Limelight'	Limelight Hydrangea	3 Gal.	Plant 5" O.C.
178	Ilex cornuta 'Needlepoint'	Needlepoint Holly	18" Hgt.	Plant 4" O.C.
82	Loropetalum chinense 'Ruby'	Ruby Loropetalum	18" Hgt.	Plant 4" O.C.
160	Panicum virgatum 'Northwind'	Northwind Switch Grass	3 Gal.	Plant 3" O.C.
Groundcovers				
142	Hypericum prolificum	Shrubby St. Johnswort	1 Gal.	Plant 3" O.C.
255	Liriope muscarum 'Big Blue'	Big Blue Liriope	1 Gal.	Plant 18" O.C.
Other				

LANDSCAPE REQUIREMENTS

A. SITE DENSITY			
REQUIRED	1. (1) tree per 2,000 SF of landscape area 35,206 SF / 2,000 SF	=	18 site trees required
	2. No more than 30% of any (1) genus 34 trees x 30%	=	17 maximum of any (1) genus
PROVIDED	1. 55 trees	=	55 site trees provided
	2. No more than 17 of any (1) genus on the Plant List	=	
B. STREET FRONTAGE			
REQUIRED	1. (1) tree per 30 LF of frontage Canada Road: 565 LF / 30 LF Lake District Drive: 722 LF - 90 LF of driveway / 30 LF Lake Main Street: 187 LF / 30 LF	=	19 trees required 21 trees provided 6 trees required
	2. Continuous, evergreen hedge, 18" Hgt.	=	
PROVIDED	1. Canada Road: 10 redbud, 4 hawthorn, 1 ginkgo, 2 honeylocust, 2 saucer magnolia Lake District Drive: 8 red maple, 5 hawthorn, 3 honeylocust, 1 star magnolia, 1 saucer magnolia, 3 black gum Lake Main Street: 3 hawthorn, 3 black gum 2. Needlepoint and loropetalum planted at 18" Hgt.	=	19 trees provided 21 trees provided 6 trees provided
C. PARKING LOT			
REQUIRED	1. (1) landscape island for (9) parking spaces 93 parking spaces / 9 parking spaces	=	10 landscape islands required
	2. (1) tree per (3) parking spaces 93 parking spaces / 3 parking spaces	=	31 parking lot trees required
	3. Every parking space shall be within 50 feet of a tree 30% of the parking lot shall be tree canopy coverage Large trees at 1,600 SF, medium trees at 900 SF, and small trees are 400 SF 62,709 SF x 30% = 18,812 SF of tree canopy coverage required 18,812 SF / 1,600 SF = 12 large parking lot trees required	=	12 large parking lot trees required
	5. (1) medium or large tree per 150 SF of internal areas not dedicated to parking or drives	=	
PROVIDED	1. Landscape islands 2. 8 red maple, 2 ginkgo, 10 honeylocust, 6 black gum, 6 willow oak 3. See plan for 50' foot parking lot tree radius 4. 8 red maple, 2 ginkgo, 10 honeylocust, 6 black gum, 6 willow oak 5. All internal asphalt dedicated to parking or drives	=	14 landscape islands provided 32 parking lot trees provided 32 parking lot trees provided
D. BUFFER			
REQUIRED	1. Utilities smaller than 4 feet in height shall be screened by shrubs spaced no more than 36" O.C.	=	
PROVIDED	1. TBD	=	

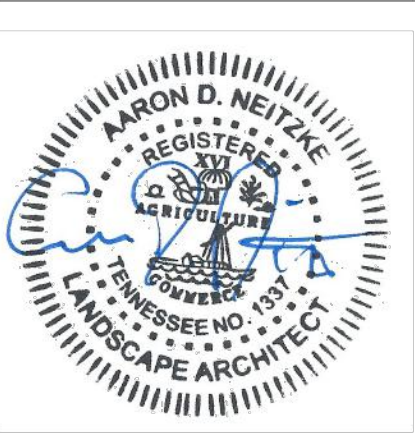


Chick-fil-A

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia 30349-2998



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



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THE LAKE DISTRICT FSU
3423 LAKE DISTRICT DR W
LAKELAND, TN 38002

FSU# 05430

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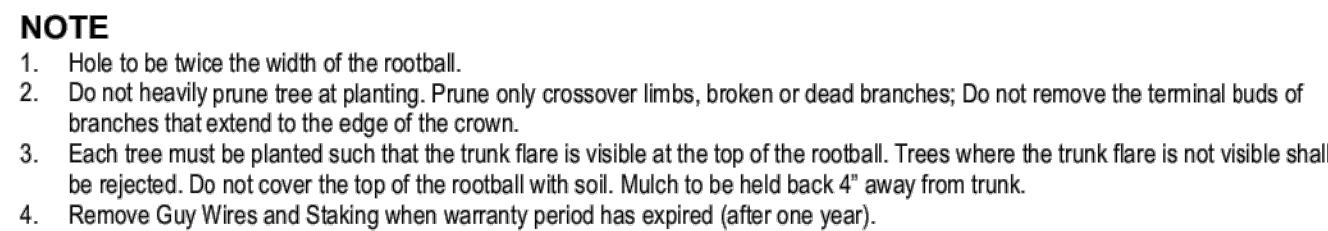
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SHEET

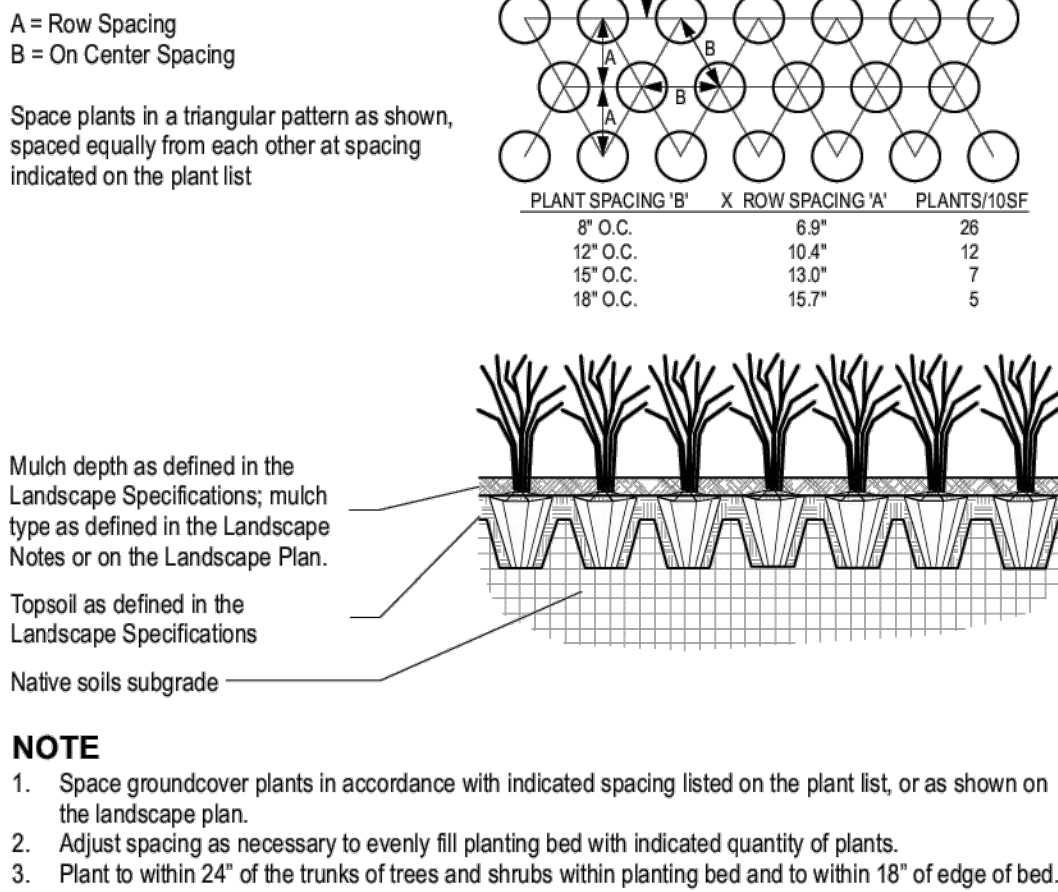
PERMIT Landscape Plan

SHEET NUMBER

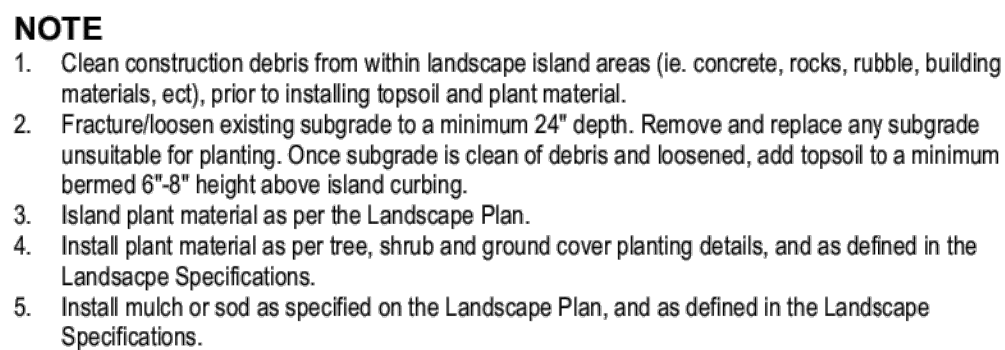
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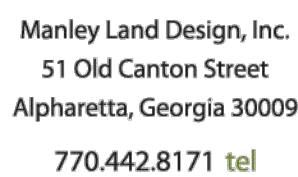
1 TREE PLANTING & STAKING
SCALE: NTS



2 SHRUB BED PLANTING DETAIL
SCALE: NTS



4 **PARKING ISLAND DETAIL**
SCALE: NTS



FSU# 05430

REVISION SCHEDULE
NO. DATE BY DESCRIPTION

MLD PROJECT #	2022334
PRINTED FOR	PERMIT
DATE	01.18.23
DRAWN BY	KCM

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SHEET

MIT Landscape Details

SHEET NUMBER

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:

1. Soil preparation.
2. Trees, shrubs, ground covers, and annuals/perennials.
3. Planting mixes.
4. Top Soil, Mulch and Planting accessories.
5. Maintenance.
6. Decorative stone.

Related Work:

1. 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.

PROJECT CONDITIONS

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.

WARRANTY

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 installation.

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

ACCEPTANCE

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.
 - a. If the use of larger plants is acceptable, increase the spread of roots or root ball in 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 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 list.
 - 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.
 - b. 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 the ground.
 - d. Plants shall be in a moist, vigorous condition, free from dead wood, bruises, or other root or branch injuries.

ACCESSORIES

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 1/2" 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 injuring the plants. Gently brush the mulch off the plants.

Guying/Staking:

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

Tree Wrap: Tree wrappings 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

INSPECTION

Prior to beginning work, the Landscape Contractor shall inspect the subgrade, general site conditions, vertical 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 of 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.

Mulching:

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.
2. Place stone without damaging weed barrier.
3. Arrange stones for best appearance and to cover all weed barrier fabric.

Wrapping, guying, staking:

1. Inspect trees for injury to trunks, evidence of insect infestation, and improper pruning before wrapping.
2. Wrapping:
 - 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 1/2 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.
 - d. Wrap the trees in the fall and leave the wrap in place throughout the winter and early spring.
 - e. Tree wraps are temporary and no longer needed once the trees develop corky bark.
3. 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.
 1. 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 guy wire.
4. **Remove all guying and staking after one year from planting.**

Pruning:

1. 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.

Maintenance shall include mowing, fertilizing, mulching, pruning, cultivation, weeding, watering, 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 material and remove dead material.
2. repair guy wires and stakes as required. Remove all stakes and guy 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 design.

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.

APPROVALS

Any work performed in addition to that which is outlined in the contract shall only be done upon written approval by the Owner's Representative (General Manager of the restaurant).

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

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.

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 in soil; not to exceed 1400 ppm/2.5 mmhos/cm in high organic mix	Not to exceed 750ppm/0.75 mmhos/cm in soil; not to exceed 2000 ppm/2.0 mmhos/cm in high organic mix
Conductivity		

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

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

WORKMANSHIP

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 trash receptacles.

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 owner.

TURF

GENERAL CLEAN UP

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

MOWING

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

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

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

PRUNING

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 and viburnums.
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.
7. Conifers shall be pruned, if required, according to their genus.
 - 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.
 - 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, forsythia, deutzia, spiraea, etc.

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

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 work.

SPRING CLEANUP

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.

FERTILIZING

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.

WEEDING

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 plant pathogenic diseases, two references are suggested: *Scouting and Controlling Woody Ornamental Diseases in Landscapes and Nurseries*, authored 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.

TRASH REMOVAL

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

LEAF REMOVAL

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

1. After flowering, cut off spent flower heads.
2. Allow leaves of daffodils and hyacinths to remain for six weeks after flowers have faded. Cut off at base.
3. 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.

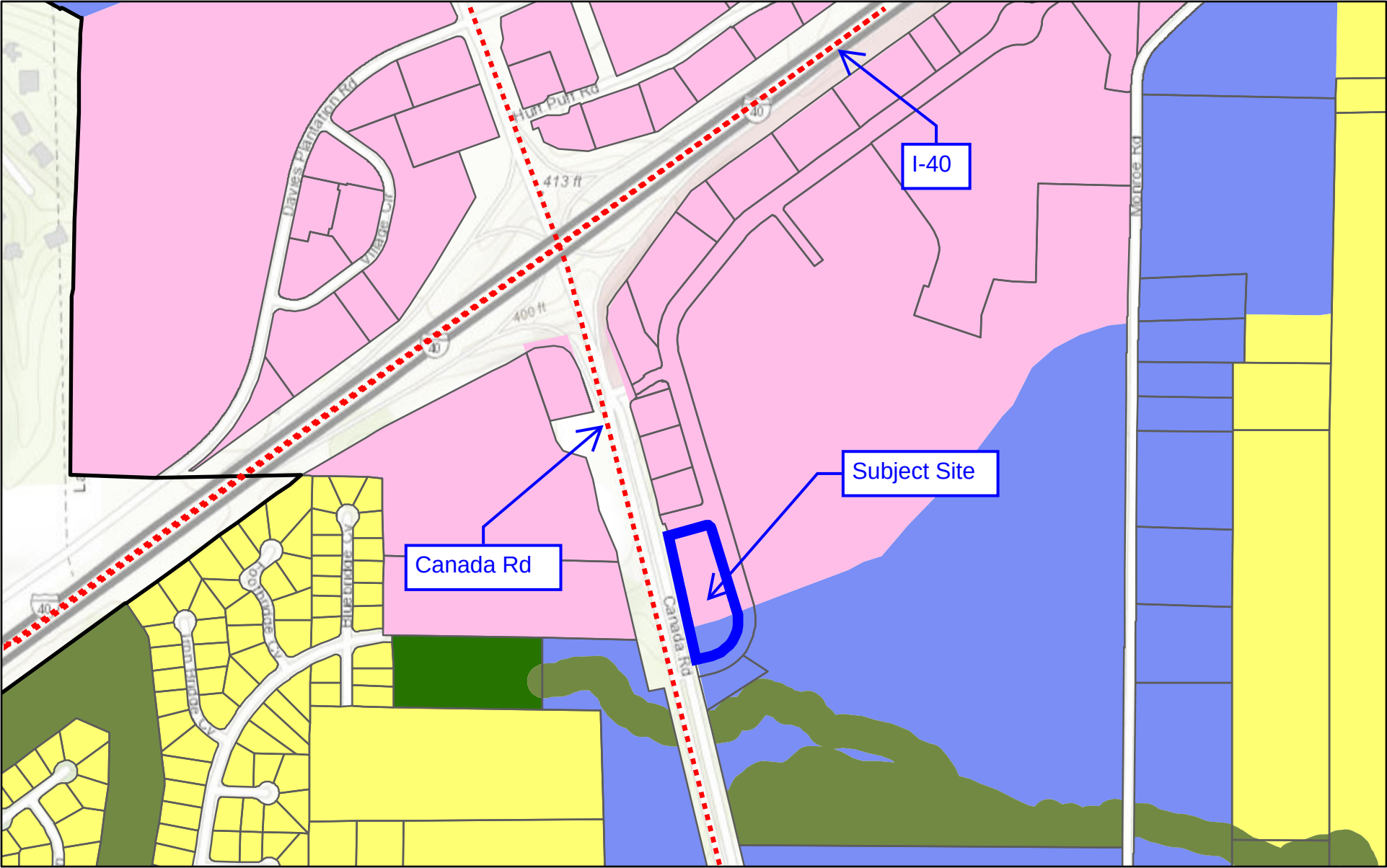
Flower Rotation:

1. Bulbs: Remove the entire plant and bulb after flowers have faded or at the direction of the owner, and install new plants if included in contract.
2. Summer Annuals or Fall Plants:
 - a. Dead heading: Pinch and remove dead flowers on annuals as necessary.
 - b. Fertilizing Summer Annuals: Fertilize using one or two methods: Apply a slow-release fertilizer in May following manufacturer's recommendations. A booster 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.

Perennials:

1. After initial installation, if a time-released fertilizer has been incorporated during plant installation

Chick Fil A Proposed Land Use



- | | | |
|---------------|------------------------------|----------------------------|
| City Boundary | Land Use - Proposed Land Use | Open Space |
| Parcel | Existing Public Parks | Residential Support Center |
| | Mixed Use Center | Suburban Neighborhood |

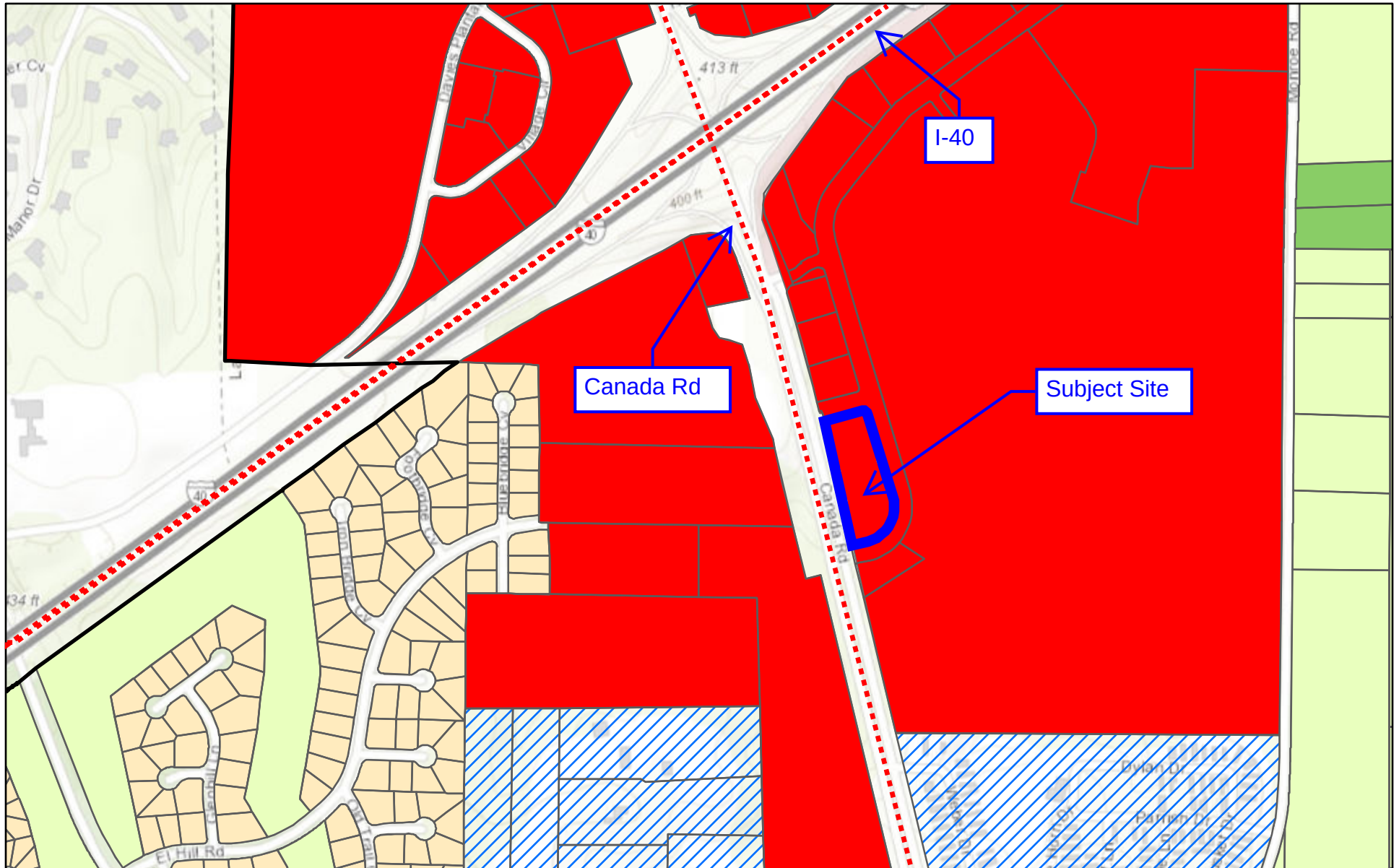
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County of Shelby, Esri, HERE, Garmin, INCREMENT P, Intermap, USGS, METI/NASA, EPA, USDA

Chick Fil A Zoning



- | | | |
|-----------------------|-------------------------------|---------------------------------|
| City Boundary | Zoning District | R-2: Medium Density Residential |
| Parcel | AG: Agriculture | E-R: Estate Residential |
| C-2: General Business | M-R: Multiple Family Dwelling | |

1:9,028
 0 0.05 0.1 0.2 mi
 0 0.1 0.2 0.4 km
 County of Shelby, Esri, HERE, Garmin, INCREMENT P, Intermap, USGS, METI/NASA, EPA, USDA

Meeting Date: Thursday, February 16, 2023

Project: Dollar General Site Plan

Staff Contact: Paul Luker, Planning Director

PROJECT INFORMATION

Location: 104410 US Highway 70

Parcel ID: L0151 00003

Zoning District: Neighborhood Commercial (NC)

Neighborhood: Type IV

Site Area: 1.65 acres

Applicant: Jerrod Pedigo

Representative: Tim McCaskill, The Reaves Firm, Inc.

STAFF RECOMMENDATION

City staff cannot recommend approval due to the 12-month moratorium on commercial development along the Highway 70 corridor (see attached resolution: R-12-2023). The moratorium was put in place to allow for the completion of the Comprehensive Plan update.

Lakeland PULSE

“Lakeland P.U.L.S.E.” is the title of Lakeland’s comprehensive plan update. The stated goal of the plan is to “provide a vision for the future of the community along with the steps needed to make that vision a reality. The plan will place a strong emphasis on implementation to guide the City’s near-and long-term decision-making investment.” Additionally, “the City of Lakeland is dedicated to engage and involve the community in formulating a plan and implement their values.”

Moratorium

One of the focus areas for the PULSE plan is developing a vision for the Highway 70 corridor. The moratorium was put in place by the Board of Commissioners “to allow the City an opportunity to study, research, analyze and/or assess the likely impacts and nature of any future commercial development along Highway 70, including, without limitation and as the City deems appropriate, development and demographic trends, aesthetic qualities, burdens upon and access to City

services, resources, infrastructure, utilities, traffic congestion, public safety, and neighborhood characteristics. Furthermore, so the City can develop and implement new zoning amendments in accordance with this study.”

BACKGROUND

The applicant seeks approval of a Site Plan to construct a 10,542 sq. ft. Dollar General retail store with surface parking and landscaping. The subject property is a 1.65-acre parcel located at 10410 U.S. Highway 70 and is within a Neighborhood Commercial (NC) Zoning District. Adjacent property uses include Bartlett Gutter Company, Shelter Insurance and 70 Self Storage facility located on the parcel to the west in the NC zoning district; vacant undeveloped property to the east in the NC zoning district; and single-family residential to the north in the Evergreen Hills Planned Development. (See attached zoning map)

PROPERTY CHARACTERISTICS

The subject property has a triangular shape, having a width of approximately 667 feet along the U.S. Highway 70 frontage; a depth of approximately 295 feet on the west boundary; a width of 590 feet on the northern boundary; and comes to point on the eastern boundary. The site slopes from the northeast to the south and west; the gradient change is approximately 5 percent with the highest elevation being 301 feet and the lowest elevation being 285 feet. The western half of the subject property is heavily wooded.

ANALYSIS

Staff has reviewed the Site Plan and has determined the revised Site Plan generally conforms to the City’s current Land Use Regulations with the following exceptions:

1. A subdivision plat is needed to provide for ROW dedication and utility easements.
2. More architectural details are need as to the placement and screening of mechanical units.
3. The Site Plan does not provide for cross-access to adjoining properties.
4. Signage location and details were not provided.
5. Provide sewer easement agreement. Additionally, Board of Sewerage Commission approval is required for public sewer extension.
6. Provide an updated landscape plan to reflect revised Site Plan building and parking locations.
7. Provide a photometric plan showing conformance with Land Development Regulations.
8. Access should be revised to one curb-cut with a maximum width of twenty-two feet.

EXAMPLE MOTIONS

1. Motion to approve the Dollar General Site Plan subject to the following conditions:
 - a. Conditions as determined by the Planning Commission
 - b. Conditions listed in the Staff Report
2. Motion to approve the Dollar General Site Plan application without conditions.
3. Motion to deny the Dollar General Site Plan application:
 - a. Reason for denial

RESOLUTION R-12-2023

APPROVING A MORATORIUM ON NEW COMMERCIAL DEVELOPMENT
ALONG HIGHWAY 70 IN THE CITY OF LAKELAND, TENNESSEE,
FOR A PERIOD OF ONE YEAR (TWELVE MONTHS)

- WHEREAS,** the City of Lakeland, Tennessee ("City"), a Tennessee municipal corporation, has been vested with substantial power to regulate the use and zoning of real property for the purposes of maintaining the health, morals, safety, security, peace, and general public welfare of the City and its residents, which includes the governmental purpose of implementing moratoria for the reasons stated herein; and,
- WHEREAS,** the Board of Commissioners for the City of Lakeland, Tennessee ("Board") considers it paramount that land use regulation continues in the most orderly and predictable fashion with the least amount of disturbance to landowners and City residents; and,
- WHEREAS,** the concept of general public welfare is broad and inclusive and it is within the power and prerogative of the Board to determine and ensure that development be implemented in the best interests of the City as whole; and,
- WHEREAS,** the Board, accordingly, established the Lakeland PULSE Comprehensive Plan Advisory Committee to engage Lakeland residents and formulate an updated Comprehensive Plan that recognizes the Board's vision for the future of Lakeland and establishes steps necessary to implement that vision; and,
- WHEREAS,** the Lakeland PULSE Comprehensive Plan Advisory Committee, with the assistance of Kimley Horn, will review and make recommendations to update land use strategies related to economic development, housing, natural resources, public health, education, parks, recreation, open space, public services, utilities, transportation, and mobility; and,
- WHEREAS,** the Lakeland PULSE Comprehensive Plan Advisory Committee first met in June 2022 and expects the Comprehensive Plan process to last approximately 15 months; and,
- WHEREAS,** the Board has expressed interest in taking steps to revise the current Zoning Ordinances to align new commercial development along Highway 70 with the results of the Lakeland PULSE Comprehensive Plan update; and,
- WHEREAS,** the Board has determined it to be in the best interests of the City and its residents to impose a twelve (12) month moratorium, as set forth in more detail below, temporarily halting the acceptance of new applications for commercial development along Highway 70 as well as the consideration of any pending application for new commercial development along Highway 70. Excepted from the moratorium are any commercial uses that are located within a previously approved planned development; and,

RESOLUTION R-12-2023

APPROVING A MORATORIUM ON NEW COMMERCIAL DEVELOPMENT
ALONG HIGHWAY 70 IN THE CITY OF LAKELAND, TENNESSEE,
FOR A PERIOD OF ONE YEAR (TWELVE MONTHS)

WHEREAS, the purpose of the temporary moratorium is to allow the City an opportunity to study, research, analyze and/or assess the likely impacts and nature of any future commercial development along Highway 70, including, without limitation and as the City deems appropriate, development and demographic trends, aesthetic qualities, burdens upon and access to City services, resources, infrastructure, utilities, traffic congestion, public safety, and neighborhood characteristics. Furthermore, so the City can develop and implement new zoning amendments in accordance with this study; and,

WHEREAS, said moratorium is in the best interests of the health, welfare, and safety of the City and its residents, and also wholly consistent with the police and other powers vested in the City.

NOW, THEREFORE, BE IT RESOLVED by the Board of Commissioners of the City of Lakeland, Tennessee, that, except as otherwise provided herein, a twelve (12) month moratorium is hereby imposed, effective upon the adoption of this resolution, to temporarily halt the acceptance of new applications for commercial development along Highway 70 as well as the consideration of any pending application for new commercial development along Highway 70. Excepted from the moratorium are any commercial uses that are located within a planned development that was approved prior to the date of this Resolution.

BE IT FURTHER RESOLVED, that, notwithstanding the foregoing, this moratorium shall not apply to any commercial development located within a planned development that was approved prior to the date of this Resolution. However, said commercial development remains subject to all existing approval requirements of the City.

BE IT FURTHER RESOLVED, that, unless further extended, this moratorium shall expire on January 24, 2024, and that this Resolution shall become effective immediately upon its adoption, the public welfare requiring it.

APPROVED AND ADOPTED by the Board of Commissioners of the City of Lakeland, Tennessee this 24th day of January 2023, the public welfare requiring it.



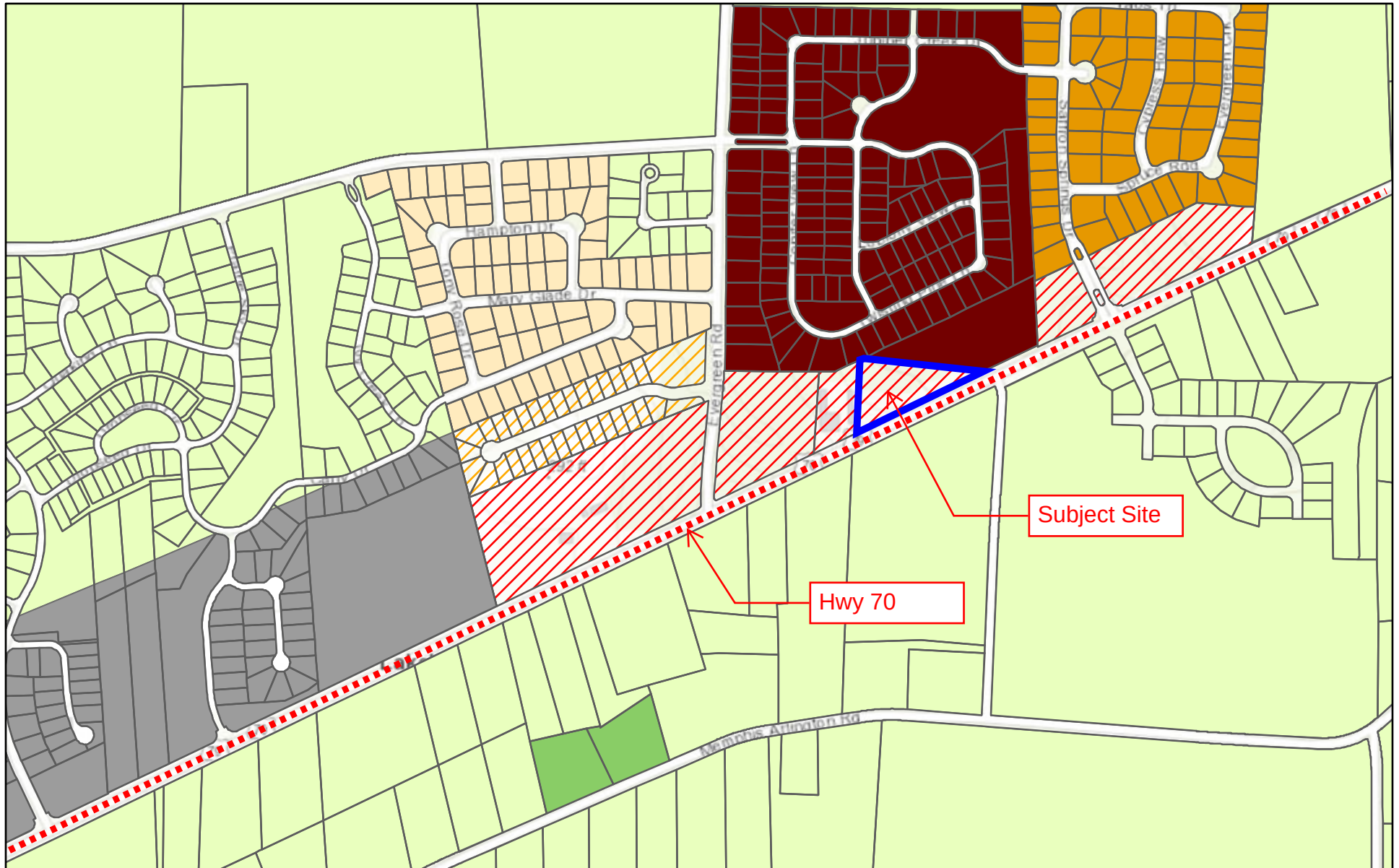
Josh Roman, Mayor

ATTEST:



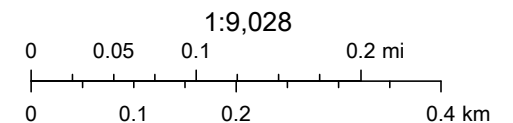
Debra Murrell
City Recorder

Dollar General



2/7/2023, 1:16:28 PM

- | | | |
|----------------------------|---|--|
| City Boundary | Zoning District | R-1 (PRD): Planned Low Density Residential |
| Parcel | AG: Agriculture | R-2: Medium Density Residential |
| C-1: Neighborhood Business | R-2 (PRD): Planned Medium Density Residential | |



County of Shelby, Esri, HERE, Garmin, INCREMENT P, Intermap, USGS, METI/NASA, EPA, USDA

ArcGIS Web AppBuilder

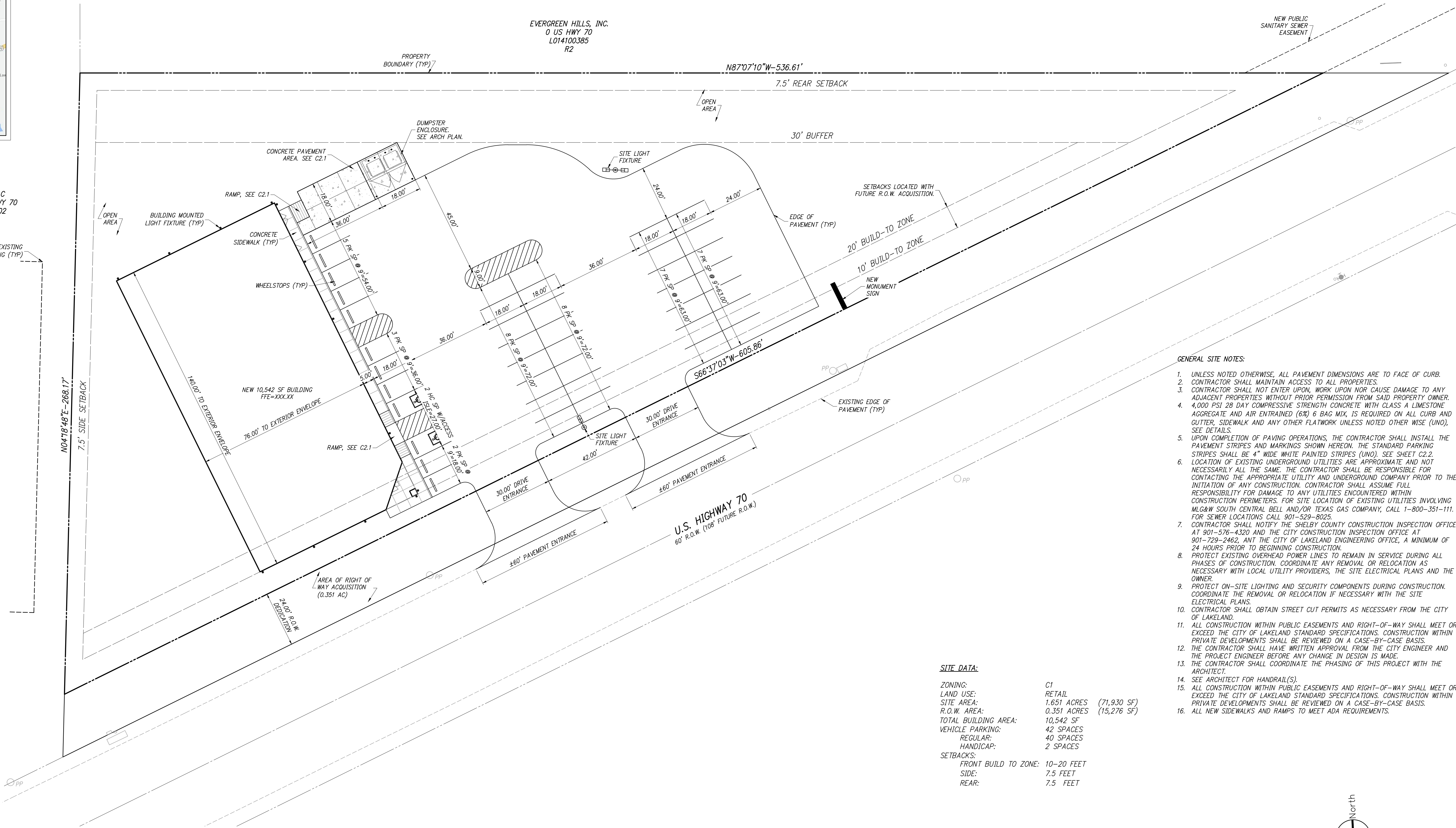


VICINITY MAP
NTS

REYCO LLC
10360 US HWY 70
LO15100002
C1

EXISTING
BUILDING (TYP)

N04°18'48"E-268.17'
7.5' SIDE SETBACK



GENERAL SITE NOTES:

- UNLESS NOTED OTHERWISE, ALL PAVEMENT DIMENSIONS ARE TO FACE OF CURB.
- CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES.
- CONTRACTOR SHALL NOT ENTER UPON, WORK UPON NOR CAUSE DAMAGE TO ANY ADJACENT PROPERTIES WITHOUT PRIOR PERMISSION FROM SAID PROPERTY OWNER.
- 4,000 PSI 28 DAY COMPRESSIVE STRENGTH CONCRETE WITH CLASS A LIMESTONE AGGREGATE AND AIR ENTRAINED (6%) 6 BAG MIX, IS REQUIRED ON ALL CURB AND GUTTER, SIDEWALK AND ANY OTHER FLATWORK UNLESS NOTED OTHER WISE (UNO), SEE DETAILS.
- UPON COMPLETION OF PAVING OPERATIONS, THE CONTRACTOR SHALL INSTALL THE PAVEMENT STRIPES AND MARKINGS SHOWN HEREON. THE STANDARD PARKING STRIPES SHALL BE 4" WIDE WHITE PAINTED STRIPES (UNO). SEE SHEET C2.2.
- LOCATION OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND NOT NECESSARILY ALL THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE APPROPRIATE UTILITY AND UNDERGROUND COMPANY PRIOR TO THE INITIATION OF ANY CONSTRUCTION. CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR DAMAGE TO ANY UTILITIES ENCOUNTERED WITHIN CONSTRUCTION PERIMETERS. FOR SITE LOCATION OF EXISTING UTILITIES INVOLVING MLG&W SOUTH CENTRAL BELL AND/OR TEXAS GAS COMPANY, CALL 1-800-351-111. FOR SEWER LOCATIONS CALL 901-529-8025.
- CONTRACTOR SHALL NOTIFY THE SHELBY COUNTY CONSTRUCTION INSPECTION OFFICE AT 901-576-4320 AND THE CITY CONSTRUCTION INSPECTION OFFICE AT 901-729-2462, ANT THE CITY OF LAKELAND ENGINEERING OFFICE, A MINIMUM OF 24 HOURS PRIOR TO BEGINNING CONSTRUCTION.
- PROTECT EXISTING OVERHEAD POWER LINES TO REMAIN IN SERVICE DURING ALL PHASES OF CONSTRUCTION. COORDINATE ANY REMOVAL OR RELOCATION AS NECESSARY WITH LOCAL UTILITY PROVIDERS, THE SITE ELECTRICAL PLANS AND THE OWNER.
- PROTECT ON-SITE LIGHTING AND SECURITY COMPONENTS DURING CONSTRUCTION. COORDINATE THE REMOVAL OR RELOCATION IF NECESSARY WITH THE SITE ELECTRICAL PLANS.
- CONTRACTOR SHALL OBTAIN STREET CUT PERMITS AS NECESSARY FROM THE CITY OF LAKELAND.
- ALL CONSTRUCTION WITHIN PUBLIC EASEMENTS AND RIGHT-OF-WAY SHALL MEET OR EXCEED THE CITY OF LAKELAND STANDARD SPECIFICATIONS. CONSTRUCTION WITHIN PRIVATE DEVELOPMENTS SHALL BE REVIEWED ON A CASE-BY-CASE BASIS.
- THE CONTRACTOR SHALL HAVE WRITTEN APPROVAL FROM THE CITY ENGINEER AND THE PROJECT ENGINEER BEFORE ANY CHANGE IN DESIGN IS MADE.
- THE CONTRACTOR SHALL COORDINATE THE PHASING OF THIS PROJECT WITH THE ARCHITECT.
- SEE ARCHITECT FOR HANDRAIL(S).
- ALL CONSTRUCTION WITHIN PUBLIC EASEMENTS AND RIGHT-OF-WAY SHALL MEET OR EXCEED THE CITY OF LAKELAND STANDARD SPECIFICATIONS. CONSTRUCTION WITHIN PRIVATE DEVELOPMENTS SHALL BE REVIEWED ON A CASE-BY-CASE BASIS.
- ALL NEW SIDEWALKS AND RAMPS TO MEET ADA REQUIREMENTS.

SITE DATA:

ZONING: C1
LAND USE: RETAIL
SITE AREA: 1.651 ACRES (71,930 SF)
R.O.W. AREA: 0.351 ACRES (15,276 SF)
TOTAL BUILDING AREA: 10,542 SF
VEHICLE PARKING: 42 SPACES
REGULAR: 40 SPACES
HANDICAP: 2 SPACES
SETBACKS:
FRONT BUILD TO ZONE: 10-20 FEET
SIDE: 7.5 FEET
REAR: 7.5 FEET

THIS SITE LIES WITHIN THE LS-9 SEWER BASIN
THIS SITE LIES WITHIN THE CLEAR CREEK 8-W DRAINAGE BASIN

REVISION		
ITEM NO.	DESCRIPTION of CHANGE	APPROVAL DATE



DOLLAR GENERAL

DEVELOPER: PEDIGO CONSTRUCTION, LLC
ENGINEER: THE REAVES FIRM, INC.

NOT FOR CONSTRUCTION
FOR CITY REVIEW ONLY

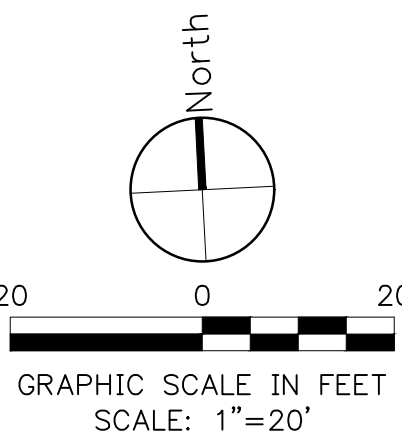
DIVISION OF ENGINEERING

SITE PLAN

10410 US HIGHWAY 70
LAKELAND, TENNESSEE

SURVEY TRF., INC. DATE 12/22 BOOK
DESIGN BY TRF., INC. DATE 02/23 SCALE 1"=20'
REVIEWED

CITY ENGINEER DATE



C2.0

CONTRACTOR TO VERIFY SITE CONDITIONS
AND EXISTING ELEMENTS PRIOR TO
CONSTRUCTION. IF ANY DISCREPANCIES EXIST,
NOTIFY THE ENGINEER OF RECORD PRIOR TO
PROCEEDING WITH DEMOLITION/CONSTRUCTION.

SEE ARCH PLAN FOR BUILDING
LAYOUT AND DIMENSION.
VERIFY DOOR/ENTRY LOCATIONS
AND ELEVATIONS WITH ARCH
PLAN PRIOR TO CONSTRUCTION.

100-YEAR FLOODZONE INFORMATION:
NO PORTION OF THIS PROPERTY LIES WITHIN THE
100-YEAR FLOODPLAIN OR FLOODWAY AS SHOWN
ON FEMA MAP NUMBER 47157C0215G DATED
FEBRUARY 06, 2013 FOR SHELBY COUNTY, TN.
BASE FLOOD ELEVATION=±267.50



The
Reaves
Firm
Engineering
Planning
Landscape Architecture
Land Surveying
6800 Poplar Avenue, Suite 101 Memphis, TN 38138
901.761.2016 Fax: 901.763.2847
www.ReavesFirm.com



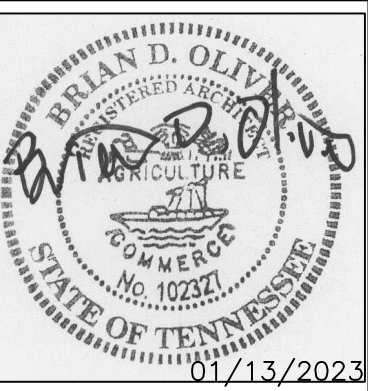
REVISIONS:	

OLIVER ARCHITECTURE
2700 OVERHILL CIRCLE
NASHVILLE, TENNESSEE 37214
phone: (615) 491-3365
BRIAN@OLIVERARCHITECTURE.COM

STORE #TBD
U.S. HIGHWAY 70
LAKELAND, TN

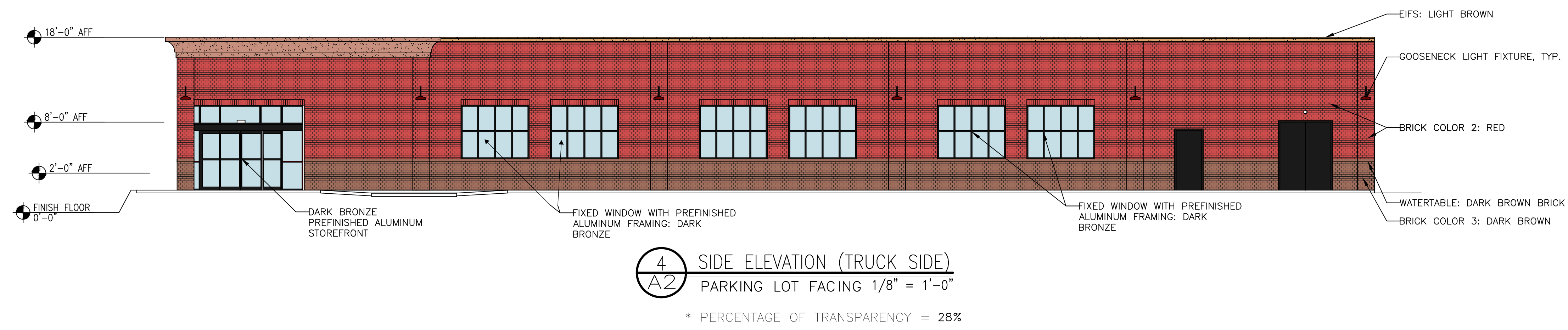
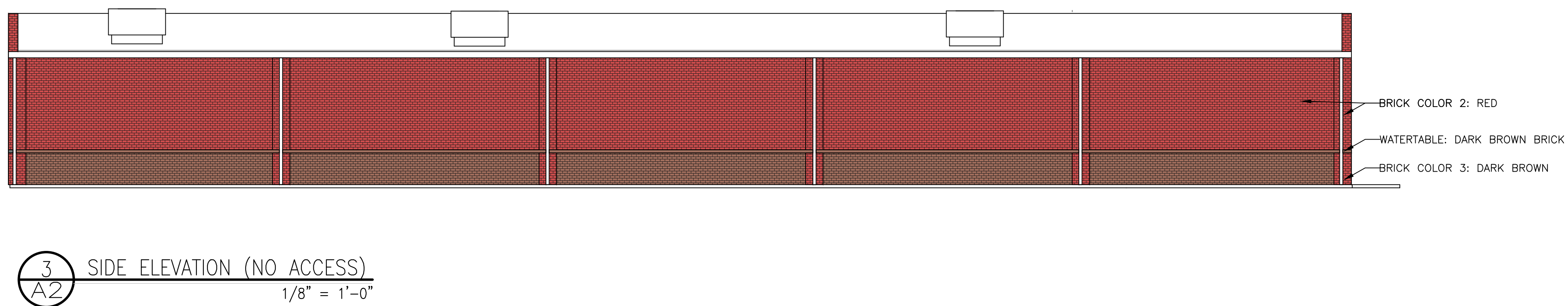
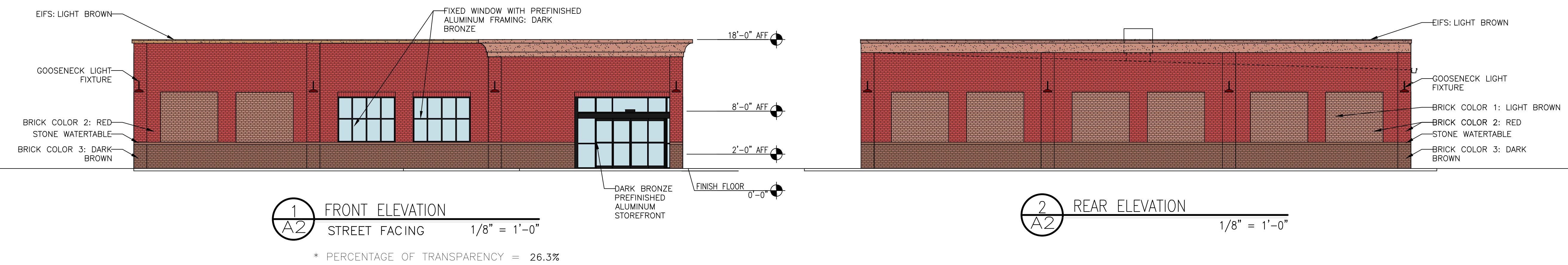
DOLLAR GENERAL®

ARCHITECTURAL AND ENGINEERING DEPARTMENT (615) 855-4753
BISPLANS@DOLLARGENERAL.COM



DATE:	JANUARY 13, 2023
DRAWING TITLE	EXTERIOR ELEVATIONS
DRAWN BY - CHECKED BY	1/8" = 1'-0"
SHEET NO.	

A2



DOLLAR GENERAL - HIGHWAY 70

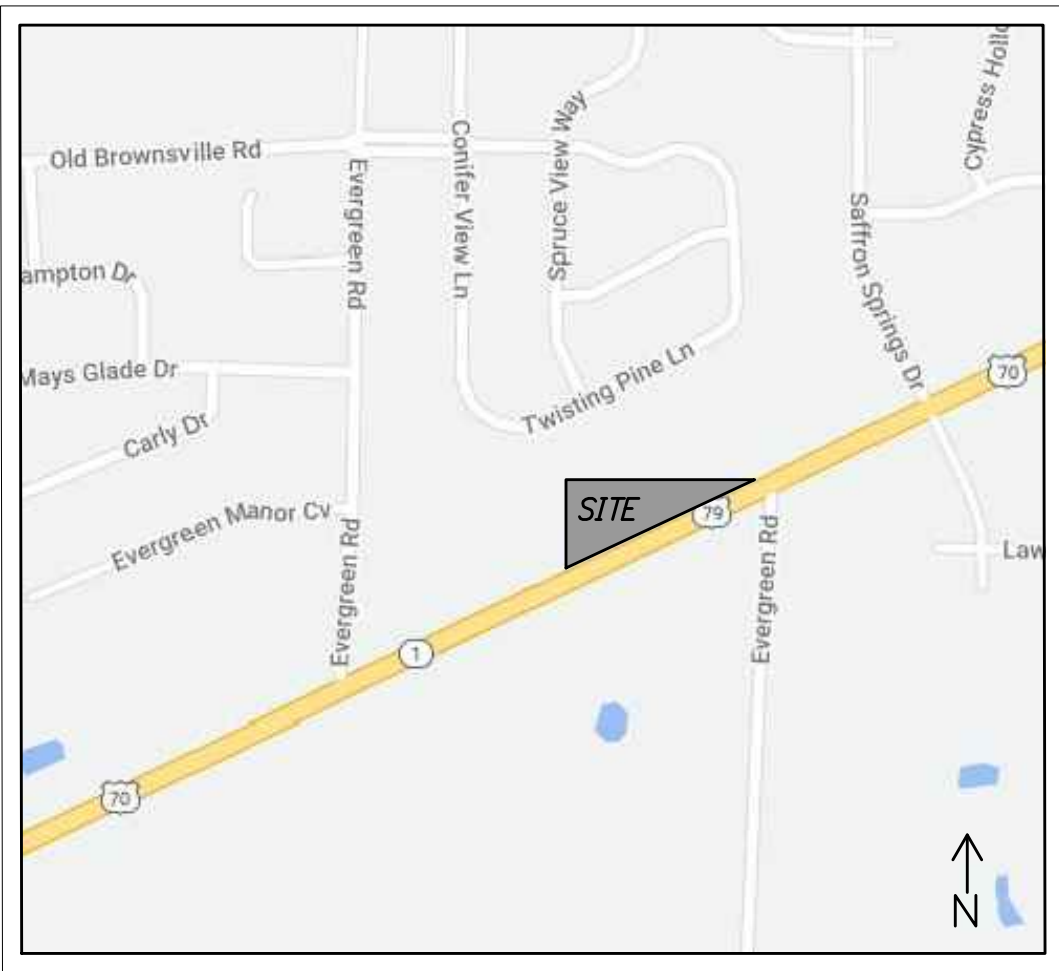
CIVIL & LANDSCAPE PLANS

10410 US HIGHWAY 70

LAKELAND, TENNESSEE

SHEET INDEX

ID	TITLE
C1.0	COVER SHEET
C1.1	EXISTING CONDITIONS & DEMOLITION PLAN
C2.0	SITE PLAN
C2.1	PAVING PLAN
C2.2	STRIPING PLAN
C2.3	DIMENSIONAL SITE PLAN
C2.4	SITE DETAILS
C3.0	GRADING AND DRAINAGE PLAN
C3.1	DRAINAGE DETAILS
C3.2	DRAINAGE DETAILS
C3.3	SPOT PLAN
C4.0	SITE SANITARY SEWER PLAN
C4.1	OFFSTREET SANITARY SEWER PLAN & PROFILE STA 0+00 TO 7+19
C4.2	SANITARY SEWER DETAILS
C4.3	WATER DISTRIBUTION PLAN
C4.4	WATER DISTRIBUTION DETAILS
C4.5	OVERALL UTILITY PLAN
C5.0	EROSION CONTROL PLAN PHASE 1
C5.1	EROSION CONTROL PLAN PHASE 2
C5.2	EROSION CONTROL DETAILS
LA1.0	EXISTING TREE PLAN
LA1.1	LANDSCAPE PLANTING PLAN



VICINITY MAP
NTS

THIS SITE LIES WITHIN THE LS-9 SEWER BASIN
THIS SITE LIES WITHIN THE CLEAR CREEK 8-W DRAINAGE BASIN

ITEM NO.	REVISION DESCRIPTION of CHANGE	APPROVAL DATE

NOT FOR CONSTRUCTION
FOR CITY REVIEW ONLY

C1.0

DIVISION OF ENGINEERING

COVER SHEET

10410 US HIGHWAY 70
LAKELAND, TENNESSEE

SURVEY TRF., INC. DATE 12/22 BOOK
DESIGN BY TRF., INC. DATE 01/23 SCALE NONE
REVIEWED

CITY ENGINEER DATE

PLEASE NOTE THAT A BUILDING PERMIT ISSUED BY THE LAKELAND/SHELBY COUNTY OFFICE OF CONSTRUCTION CODE ENFORCEMENT DOES NOT ALLOW FOR ALTERING AND/OR IMPROVEMENTS TO ANY RIGHT-OF-WAY (ROW) MAINTAINED BY THE CITY OF LAKELAND. ALTERATIONS AND/OR IMPROVEMENTS TO THE SHELBY COUNTY ROW INCLUDE BUT ARE NOT LIMITED TO WORK PERFORMED ON SIDEWALKS, CURB AND GUTTER, DRIVE APRONS AND UTILITY TIE-INS. ROW PERMITS MUST BE OBTAINED FROM THE SHELBY COUNTY ENGINEERS OFFICE AT (901) 222-7705.

100-YEAR FLOODZONE INFORMATION:
NO PORTION OF THIS PROPERTY LIES WITHIN THE 100-YEAR FLOODPLAIN OR FLOODWAY AS SHOWN ON FEMA MAP NUMBER 47157C0215G DATED FEBRUARY 06, 2013 FOR SHELBY COUNTY, TN. BASE FLOOD ELEVATION=±267.50

The Reaves Firm
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Landscape Architecture
Land Surveying
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www.ReavesFirm.com

DOLLAR GENERAL

DEVELOPER: PEDIGO CONSTRUCTION, LLC
ENGINEER: THE REAVES FIRM, INC.



CONTRACTOR TO VERIFY SITE CONDITIONS AND EXISTING ELEMENTS PRIOR TO CONSTRUCTION. IF ANY DISCREPANCIES EXIST, NOTIFY THE ENGINEER OF RECORD PRIOR TO PROCEEDING WITH DEMOLITION/CONSTRUCTION.



VICINITY MAP

NTS

REYCO LLC
10360 US HWY 70
LO15100002

EXISTING
BUILDING (TYP)

N04°18'48"E-266.17'

7.5' SIDE SETBACK

APPROXIMATE LIMITS
OF DISTURBANCE (TYP)

PROPERTY
BOUNDARY (TYP)

EVERGREEN HILLS, INC.
0 US HWY 70
LO14100385

N87°07'10"W-536.61'

7.5' SIDE SETBACK

U.S. HIGHWAY 70
60' R.O.W. (108' FUTURE R.O.W.)

EDGE OF
PAVEMENT (TYP)

AREA OF RIGHT OF
WAY ACQUISITION
(0.351 AC)

50' BUILDING SETBACK

20' PARKING SETBACK

S66°37'03"W-605.86'

DEMOLITION NOTES:

- LIMITS OF CONSTRUCTION ARE WITHIN THE EXISTING PROPERTY BOUNDARIES.
- THE CONTRACTOR SHALL RAISE, REMOVE, AND DISPOSE OF ALL PAVING, CURB, GUTTERS, SIDEWALKS, FOUNDATIONS AND OTHER IMPROVEMENTS AS DIRECTED BY THE CONSTRUCTION PLAN SET AND/OR CONTRACT SPECIFICATIONS. DEMOLITION WILL BE DONE IN ACCORDANCE WITH ALL APPLICABLE SECTIONS OF THE CITY/COUNTY BUILDING CODE.
- DISPOSAL OF EXISTING IMPROVEMENTS BEING REMOVED WILL BE OFFSITE AND IN A LAWFUL MANNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO SECURE ANY PERMITS NECESSARY FOR THE DISPOSAL.
- DO NOT BURN REMOVED MATERIALS ON PROJECT SITE UNLESS APPROVED BY FIRE MARSHAL AND PROPER PERMITS ARE ACQUIRED.
- ANY OPERATIONS NECESSARY FOR THE REMOVAL OF AN EXISTING STRUCTURE OR OBSTRUCTION WHICH MAY DAMAGE NEW WORK SHALL BE COMPLETED PRIOR TO COMMENCING THE NEW WORK.
- THE DEMOLITION CONTRACTOR IS RESPONSIBLE FOR CONFIRMING WITH EACH UTILITY THE PORTION OF THEIR FACILITIES WHICH MAY BE REMOVED AND/OR ABANDONED, AND WILL DO BEFORE COMMENCING ANY WORK THAT MAY AFFECT THE OPERATION OR ABILITY TO OPERATE EXISTING FACILITIES.
- LOCATION OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND NOT NECESSARILY ALL OF SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE APPROPRIATE UTILITY COMPANY TO DETERMINE THE EXACT LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES PRIOR TO THE INITIATION OF ANY CONSTRUCTION. CONTRACTOR SHALL ALSO ASSUME FULL RESPONSIBILITY FOR DAMAGE TO ANY UTILITIES ENCOUNTERED WITHIN CONSTRUCTION PERIMETERS. FOR SITE LOCATION OF EXISTING UTILITIES INVOLVING CITY OF MEMPHIS/SHELBY COUNTY, ML&W, SOUTH CENTRAL BELL, AND/OR TEXAS GAS COMPANY, PLEASE CALL 1-800-351-1111. FOR SEWER LOCATIONS CALL (901) 576-6710.
- ALL PAVEMENTS, BASE COURSES, SIDEWALKS, CURBS, GUTTERS, AND OTHER IMPROVEMENTS DESIGNATED FOR REMOVAL SHALL BE REMOVED AND THE MATERIAL DISPOSED.
- ARRANGE WITH UTILITY COMPANIES TO SHUT-OFF EXISTING UTILITIES AS REQUIRED.
- IDENTIFY LOCATION OF CAPPED UTILITIES ON PROJECT RECORD DOCUMENTS.
- USE OF EXPLOSIVES WILL NOT BE PERMITTED UNLESS WRITTEN APPROVAL FROM THE OWNER.
- USE WATER SPRINKLING, AND OTHER SUITABLE METHODS TO LIMIT THE

- SPREAD OF DUST AND DIRT.
- COMPLY WITH GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
- DO NOT USE WATER WHEN IT MAY CREATE HAZARDOUS OR OBJECTIONABLE CONDITIONS SUCH AS ICE, FLOODING, OR POLLUTION.
- CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS, REMOVING DUST, DIRT, AND DEBRIS CAUSED BY DEMOLITION OPERATIONS. RETURN ADJACENT AREAS TO CONDITIONS WHICH EXISTED PRIOR TO THE START OF WORK.
- PROVIDE ENGINEERING CERTIFICATE FOR COMPACTION OF ALL BACKFILL MATERIAL.
- GRADE TOP PERIMETER OF EXCAVATING TO PREVENT SURFACE WATER FROM DRAINING INTO EXCAVATIONS. THE NEW ROADWAY SHALL BE GRADED IN ACCORDANCE WITH THE GRADING AND DRAINAGE PLAN CONTAINED IN THE CONTRACT DOCUMENTS.
- BACKFILL MATERIAL: EXCAVATED AND REUSED MATERIAL. GRADED, FREE OF LUMPS LARGER THAN 3 INCHES, ROCKS LARGER THAN 1-1/2 INCHES AND DEBRIS, AND HAVE A MAXIMUM LIQUID LIMIT OF 45 AND PLASTICITY INDEX NO MORE THAN 20.
- TRANSPORT MATERIALS RESULTING FROM DEMOLITION OPERATIONS AND LEGALLY DISPOSE OF OFF-SITE.
- PROVIDE DUST CONTROL DURING ALL PHASES OF CONSTRUCTION.
- PROTECT OVERHEAD POWER AND UTILITY LINES.
- DISCONNECT EXISTING UTILITIES AND CAP AS REQUIRED FROM BUILDINGS BEING DEMOLISHED. PROVIDE UTILITY MARKERS TO LOCATE FOR FUTURE CONNECTION.
- PROVIDE A CONSTRUCTION SAFETY FENCE IN ALL AREAS OF CONSTRUCTION/DEMOLITION. PLACE SAFETY FENCE 24 HOURS PRIOR TO AREAS OF CONSTRUCTION/DEMOLITION. THE CONSTRUCTION SAFETY FENCE SHALL ENCOMPASS THE ENTIRE AREA OF ACTIVE CONSTRUCTION/DEMOLITION AND SHALL NOT BE REMOVED UNTIL ALL CONSTRUCTION/DEMOLITION ACTIVITIES WITHIN THAT AREA ARE COMPLETE.
- PROTECT EXISTING VALVE COVERS, METER BOXES, CLEANOUTS, INLET TOPS, ETC. THROUGHOUT CONSTRUCTION.
- THE CONTRACTOR SHALL COORDINATE THE PHASING OF THIS PROJECT WITH THE OWNER.
- UTILITY SERVICE SHALL BE UNINTERRUPTED TO ALL OF THE EXISTING FACILITIES REMAINING THROUGHOUT THE ENTIRE CONSTRUCTION PERIOD.
- PRIOR TO DEMOLITION, THE CONTRACTOR SHALL COORDINATE WITH ML&W AND ANY OTHER UTILITY ENTITY THE REMOVAL/RELOCATION/ABANDONMENT OF ANY EXISTING UTILITIES (ELEC., GAS, WATER, PHONE, TELECOM., ETC.).

- CONTRACTOR TO REMOVE TRASH, DEBRIS, DEADWOOD, ETC. FROM CONSTRUCTION AREAS PRIOR TO SITE CLEARING.
- COORDINATE METER REMOVAL(S) AND SHUTOFF(S) WITH ML&W/SHELBY COUNTY. CAP AND MARK AS REQUIRED BY SHELBY COUNTY.
- PROVIDE TREE PROTECTION AS REQUIRED.
- RELOCATION, REMOVAL, OR DEMOLITION OF EXISTING UTILITIES SHALL BE DONE BY ML&W/CITY OF MEMPHIS/SHELBY COUNTY AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR MUST IMPLEMENT TEMPORARY TRAFFIC CONTROL AS SHOWN WITHIN THIS PLAN SET PRIOR TO COMMENCING WORK WITHIN THE RIGHT OF WAY.
- CONTRACTOR TO FIELD VERIFY EXISTING POWER POLES AND ASSOCIATED WIRES HAVE ADEQUATE CLEARANCE (14'-6" MIN.) FOR ANTICIPATED TRAFFIC AT EACH NEW DRIVE ENTRANCE/EXIT (INCLUDING FIRE DEPARTMENT TRAFFIC) WITH SHELBY COUNTY AND THE MEMPHIS/SHELBY COUNTY FIRE DEPARTMENT. NOTIFY E.O.R. AND OWNER IF THERE ARE ANY CLEARANCE ISSUES.
- ANY EXISTING PIPES (STORM DRAINAGE, SANITARY SEWER, WATER, ETC.) TO BE ABANDONED SHALL EITHER BE REMOVED ENTIRELY OR COMPLETELY FILLED WITH FLOWABLE FILL.
- PROVIDE SECURITY FENCING AND GATES AS REQUIRED.
- THE CONTRACTOR SHALL REFER TO THE REQUIREMENTS OF OSHA TECHNICAL MANUAL SECTION V: CHAPTER 2-EXCAVATIONS: HAZARD RECOGNITION IN TRENCHING AND SHORING AS WELL AS OSHA CFR 29-1926 SUBPART P-EXCAVATIONS FOR ALL EXCAVATIONS/TRENCHES IN RELATION TO THIS PROJECT.
- PROVIDE EROSION CONTROL MEASURES IN ACCORDANCE WITH TDEC. SEE SHEET C5.0.
- ALL CLIPPINGS/STRIPPINGS/TOPSOIL DEEMED NOT SUITABLE FOR FILL BY THE SOILS ENGINEER SHALL BE REMOVED FROM THE SITE AT THE DISCRETION OF THE OWNER.
- SEED/SOD OPEN AREAS DISTURBED BY CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH THE LANDSCAPE PLANS.
- ALL FILL MATERIAL WITHIN SITE IS INTENDED TO BE UTILIZED THROUGHOUT THE PROJECT SITE. REFER TO THE GEOTECHNICAL REPORT FOR ADDITIONAL GUIDANCE FOR ENGINEERED FILL AND SUITABLE MATERIAL. IT IS RECOMMENDED THAT THE DEVELOPER/CONTRACTOR UTILIZE A SOILS ENGINEER THROUGHOUT THE PROJECT TO ENSURE PROPER PLACEMENT OF SUITABLE FILL MATERIAL IS ACHIEVED.
- FIELD VERIFY ALL EXISTING UTILITY, STORM AND SANITARY SEWER STRUCTURE ELEVATION/DEPTH AND FLOWLINES PRIOR TO CONSTRUCTION. NOTIFY THE ENGINEER OF RECORD OF ANY MAJOR DISCREPANCIES.

100-YEAR FLOODZONE INFORMATION:

NO PORTION OF THIS PROPERTY LIES WITHIN THE 100-YEAR FLOODPLAIN OR FLOODWAY AS SHOWN ON FEMA MAP NUMBER 47157C0215G DATED FEBRUARY 06, 2013 FOR SHELBY COUNTY, TN. BASE FLOOD ELEVATION=±267.50

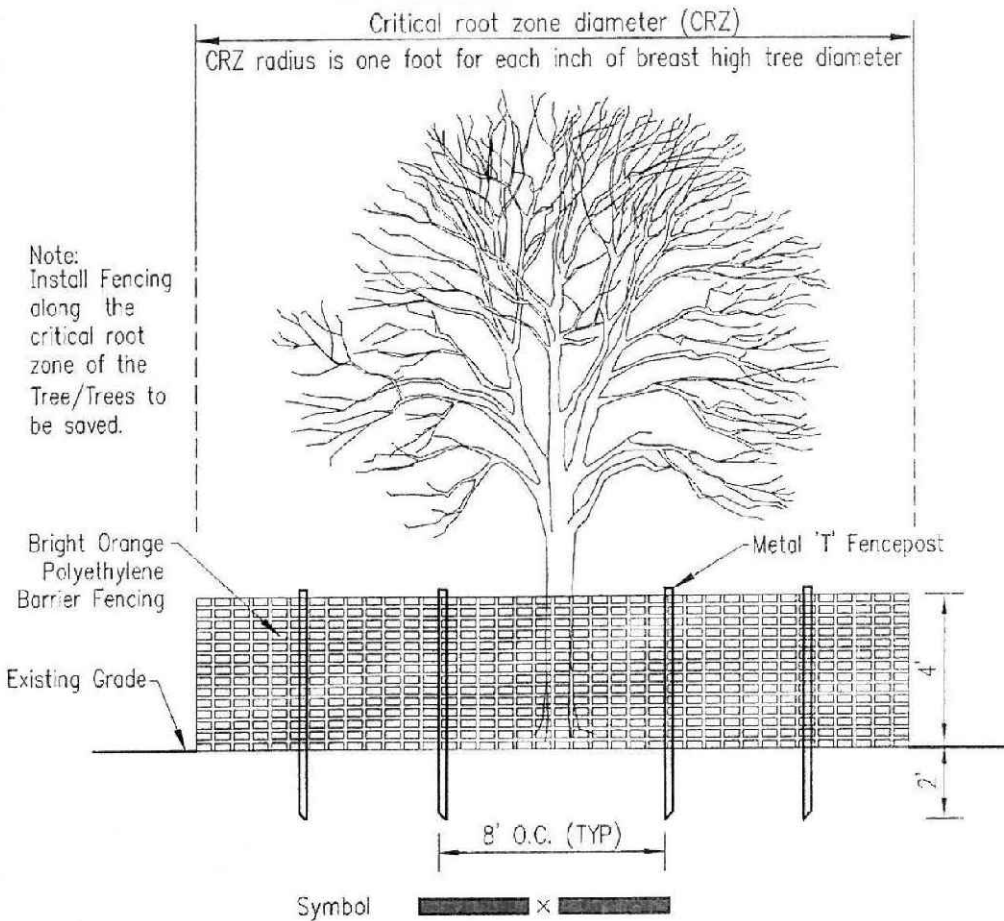


The
Reaves
Firm
Engineering
Planning
Landscape Architecture
Land Surveying
6800 Poplar Avenue, Suite 101 Memphis, TN 38138
901.741.2016 Fax: 901.743.2847
www.ReavesFirm.com



DOLLAR GENERAL

DEVELOPER: PEDIGO CONSTRUCTION, LLC
ENGINEER: THE REAVES FIRM, INC.



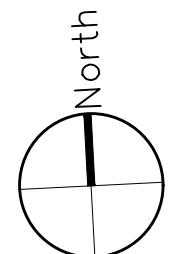
Tree Notes:

- Tree that are indicated to remain must be protected with construction fence at the CRZ. All fencing must be in place prior to any clearing, grading, or construction.
- Verify all tree locations along property line.
- The critical root zone radius is determined by providing one foot for each inch of breast high tree diameter.
- It is not necessary that the tree protection fencing be circular as long as the fencing does not encroach into the CRZ.
- More than one tree may be within the tree protection fencing as long as the fencing does not encroach into any of the trees' CRZ.

TREE PROTECTION DETAIL

NOT TO SCALE

CITY OF LAKELAND ENGINEERING DIVISION		
TREE PROTECTION DETAIL		
REV.	DESCRIPTION	DATE
1	ORIGINAL ISSUE	2/20



20 0 20
GRAPHIC SCALE IN FEET
SCALE: 1"=20'

THIS SITE LIES WITHIN THE LS-9 SEWER BASIN

THIS SITE LIES WITHIN THE CLEAR CREEK 8-W DRAINAGE BASIN

REVISION		
ITEM NO.	DESCRIPTION of CHANGE	APPROVAL DATE

NOT FOR CONSTRUCTION
FOR CITY REVIEW ONLY

DIVISION OF ENGINEERING

EXISTING CONDITIONS & DEMOLITION PLAN

10410 US HIGHWAY 70
LAKELAND, TENNESSEE

SURVEY TRF., INC. DATE 12/22 BOOK
DESIGN BY TRF., INC. DATE 01/23 SCALE 1"=20'
REVIEWED

CITY ENGINEER DATE



CONTRACTOR TO VERIFY SITE CONDITIONS
AND EXISTING ELEMENTS PRIOR TO
CONSTRUCTION. IF ANY DISCREPANCIES EXIST,
NOTIFY THE ENGINEER OF RECORD PRIOR TO
PROCEEDING WITH DEMOLITION/CONSTRUCTION.



REYCO LLC
10360 US HWY 70
L015100002
C1

EXISTING
BUILDING (TYP)

EVERGREEN HILLS, INC.
0 US HWY 70
L014100385
R2

N87°07'10"W-536.61'

7.5' SIDE SETBACK

NEW PUBLIC
SANITARY SEWER-
EASEMENT

GENERAL SITE NOTES:

- UNLESS NOTED OTHERWISE, ALL PAVEMENT DIMENSIONS ARE TO FACE OF CURB.
- CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES.
- CONTRACTOR SHALL NOT ENTER UPON, WORK UPON NOR CAUSE DAMAGE TO ANY ADJACENT PROPERTIES WITHOUT PRIOR PERMISSION FROM SAID PROPERTY OWNER.
4. 4000 PSI 28 DAY COMPRESSIVE STRENGTH CONCRETE WITH CLASS A LIMESTONE AGGREGATE AND AIR ENTRAINED (6%) 6 BAG MIX, IS REQUIRED ON ALL CURB AND GUTTER, SIDEWALK AND ANY OTHER FLATWORK UNLESS NOTED OTHER WISE (UNO), SEE DETAILS.
5. UPON COMPLETION OF PAVING OPERATIONS, THE CONTRACTOR SHALL INSTALL THE PAVEMENT STRIPES AND MARKINGS SHOWN HEREON. THE STANDARD PARKING STRIPES SHALL BE 4" WIDE WHITE PAINTED STRIPES (UNO), SEE SHEET C2.2.
6. LOCATION OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND NOT NECESSARILY ALL THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE APPROPRIATE UTILITY AND UNDERGROUND COMPANY PRIOR TO THE INITIATION OF ANY CONSTRUCTION. CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR DAMAGE TO ANY UTILITIES ENCOUNTERED WITHIN CONSTRUCTION PERIMETERS. FOR SITE LOCATION OF EXISTING UTILITIES INVOLVING MCGRAW SOUTH CENTRAL BELL AND/OR TEXAS GAS COMPANY, CALL 1-800-351-1171. FOR SEWER LOCATIONS CALL 901-529-8025.
7. CONTRACTOR SHALL NOTIFY THE SHELBY COUNTY CONSTRUCTION INSPECTION OFFICE AT 901-576-4320 AND THE CITY OF LAKELAND INSPECTION OFFICE AT 901-729-2462, ANT THE CITY OF LAKELAND ENGINEERING OFFICE, A MINIMUM OF 24 HOURS PRIOR TO BEGINNING CONSTRUCTION.
8. PROTECT EXISTING OVERHEAD POWER LINES TO REMAIN IN SERVICE DURING ALL PHASES OF CONSTRUCTION. COORDINATE ANY REMOVAL OR RELOCATION AS NECESSARY WITH LOCAL UTILITY PROVIDERS, THE SITE ELECTRICAL PLANS AND THE OWNER.
9. PROTECT ON-SITE LIGHTING AND SECURITY COMPONENTS DURING CONSTRUCTION. COORDINATE ANY REMOVAL OR RELOCATION IF NECESSARY WITH THE SITE ELECTRICAL PLANS.
10. CONTRACTOR SHALL OBTAIN STREET CUT PERMITS AS NECESSARY FROM THE CITY OF LAKELAND.
11. ALL CONSTRUCTION WITHIN PUBLIC EASEMENTS AND RIGHT-OF-WAY SHALL MEET OR EXCEED THE CITY OF LAKELAND STANDARD SPECIFICATIONS. CONSTRUCTION WITHIN PRIVATE DEVELOPMENTS SHALL BE REVIEWED ON A CASE-BY-CASE BASIS.
12. THE CONTRACTOR SHALL HAVE WRITTEN APPROVAL FROM THE CITY ENGINEER AND THE PROJECT ENGINEER BEFORE ANY CHANGE IN DESIGN IS MADE.
13. THE CONTRACTOR SHALL COORDINATE THE PHASING OF THIS PROJECT WITH THE ARCHITECT.
14. SEE ARCHITECT FOR HANDRAIL(S).
15. ALL CONSTRUCTION WITHIN PUBLIC EASEMENTS AND RIGHT-OF-WAY SHALL MEET OR EXCEED THE CITY OF LAKELAND STANDARD SPECIFICATIONS. CONSTRUCTION WITHIN PRIVATE DEVELOPMENTS SHALL BE REVIEWED ON A CASE-BY-CASE BASIS.
16. ALL NEW SIDEWALKS AND RAMPS TO MEET ADA REQUIREMENTS.

SITE DATA:

ZONING:	C1	
LAND USE:	RETAIL	
SITE AREA:	1.651 ACRES	(71,930 SF)
R.O.W. AREA:	0.351 ACRES	(15,276 SF)
TOTAL BUILDING AREA:	10,542 SF	
VEHICLE PARKING:	45 SPACES	
REGULAR:	43 SPACES	
HANDICAP:	2 SPACES	
SETBACKS:		
FRONT (BUILDING):	50 FEET	
FRONT (PARKING):	20 FEET	
SIDE:	7.5 FEET	
REAR:	7.5 FEET	

THIS SITE LIES WITHIN THE LS-9 SEWER BASIN

THIS SITE LIES WITHIN THE CLEAR CREEK 8-W DRAINAGE BASIN

[illegible]

NOT FOR CONSTRUCTION
FOR CITY REVIEW ONLY

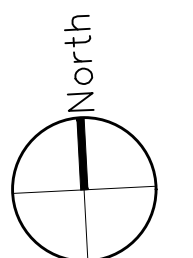
DIVISION OF ENGINEERING

SITE PLAN

10410 US HIGHWAY 70
LAKELAND, TENNESSEE

SURVEY TRF, INC. DATE 12/22 BOOK _____
 DESIGN BY TRF, INC. DATE 01/23 SCALE 1"=20'
 REVIEWED _____

CITY ENGINEER _____ DATE _____



20 0 20



GRAPHIC SCALE IN FEET
SCALE: 1"=20'

C2.0



CONTRACTOR TO VERIFY SITE CONDITIONS
AND EXISTING ELEMENTS PRIOR TO
CONSTRUCTION. IF ANY DISCREPANCIES EXIST,
NOTIFY THE ENGINEER OF RECORD PRIOR TO
PROCEEDING WITH DEMOLITION/CONSTRUCTION.

SEE ARCH PLAN FOR BUILDING
LAYOUT AND DIMENSION.
VERIFY DOOR/ENTRY LOCATIONS
AND ELEVATIONS WITH ARCH
PLAN PRIOR TO CONSTRUCTION.

100-YEAR FLOODZONE INFORMATION:
NO PORTION OF THIS PROPERTY LIES WITHIN THE
100-YEAR FLOODPLAIN OR FLOODWAY AS SHOWN
ON FEMA MAP NUMBER 47157C0215G DATED
FEBRUARY 06, 2013 FOR SHELBY COUNTY, TN.
BASE FLOOD ELEVATION=+267.50



The Reaves Firm | Engineering
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Landscape Architecture
Land Surveying

6800 Poplar Avenue, Suite 101 Memphis, TN 38138
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www.ReavesFirm.com

DOLLAR GENERAL

DEVELOPER: PEDIGO CONSTRUCTION, LLC
ENGINEER: THE REAVES FIRM, INC.



VICINITY MAP

NTS

REYCO LLC
10360 US HWY 70
LO15100002

EXISTING
BUILDING (TYP)

N04°18'48"E-268.17'

NEW 10,542 SF BUILDING
FFE=292.75

CONCRETE
SIDEWALK (TYP)

PROPERTY
BOUNDARY (TYP)

RETAINING WALL
DESIGN BY OTHERS

RAMP, SEE C2.1

DUMPSTER
ENCLOSURE
SEE ARCH PLAN.

CONCRETE PAVEMENT
AREA, SEE C2.1

4"x18" SSWL

4"x36" SSWL

4"x63" SSWL

4"x18" SSWL

9'x18' PARKING
SPACE (TYP)

4"x18" SSWL

HC SPACE W/ACCESS
ISLE, SEE DETAILS

VAN

6"x63" SSWL
BORDER W/4" SSWL
DIAGONAL @ 2' O.C.

AREA OF RIGHT OF
WAY ACQUISITION
(0.351 AC)

EXISTING EDGE OF
PAVEMENT (TYP)

U.S. HIGHWAY 70
60' R.O.W. (108' FUTURE R.O.W.)

NOTE:
UPON COMPLETION OF PAVING OPERATIONS, THE
CONTRACTOR SHALL INSTALL THE PAVEMENT
STRIPES AND MARKINGS SHOWN HEREON. THE
STANDARD PARKING STRIPES SHALL BE 4" WIDE
WHITE PAINTED STRIPES (UNO). HANDICAP
STALLS SHALL BE PAINTED AND SIGNED PER
FEDERAL ADA REGULATIONS. SEE DETAILS.

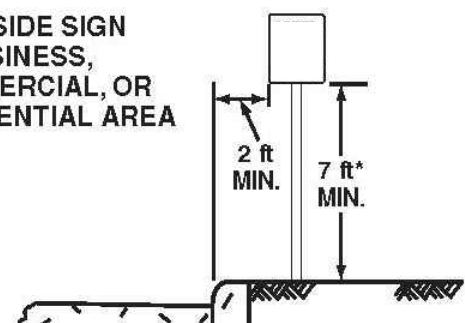
MARKING ABBREVIATIONS

SSWL = 4" SINGLE SOLID WHITE LINE

PAVEMENT MARKING NOTES:

- REFERENCES
A. ALL WORK SHALL CONFORM TO TDOT - "TENNESSEE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION"; TENNESSEE DEPARTMENT OF TRANSPORTATION, 2006 EDITION.
- SUBMITTALS
B. SUBMIT MANUFACTURER'S PRODUCT DATA AND LABORATORY TESTED PHYSICAL PROPERTIES OF PAINT MIX PROPOSED.
- SUBMIT DATA VERIFYING COMPLIANCE WITH TENNESSEE DEPARTMENT OF TRANSPORTATION.
- TRAFFIC MARKING PAINT
A. PREFORMED PLASTIC PAVEMENT MARKINGS: COMPLY WITH TDOT SECTION 918.08.
B. TEMPORARY PAVEMENT MARKING MATERIAL FOR CONSTRUCTION ZONES: COMPLY WITH TDOT SECTION 918.08 - PAVEMENT MARKING MATERIALS, RETRO-REFLECTIVE MATERIALS ON CONFORMABLE BACKING WITH RELEASING ADHESIVES. (DO NOT USE THERMOPLASTIC STRIP FOR TEMPORARY MARKINGS)
- COLOR: WHITE UNLESS OTHERWISE NOTED ON DRAWINGS.
- EXAMINATION
A. VERIFY THAT PAVEMENT IS SUITABLE TO RECEIVE MARKINGS.
- PREPARATION
A. CLEAN SURFACES TO RECEIVE PAVEMENT MARKING; ALLOW PAVEMENT TO CURE ENOUGH TO ACHIEVE OPTIMUM RESULTS.
- MARKINGS & SYMBOLS
A. APPLY TRAFFIC STRIPING, MARKING, AND SYMBOLS AS SHOWN ON THE PLANS
B. PARKING STRIPES: 4" WIDE, FULLY OPAQUE, AND APPLIED WITH COMMERCIAL TYPE STRIPING MACHINE. GLASS BEADS ARE NOT REQUIRED IN PARKING LOTS.
C. LANE MARKINGS (ROADWAYS): 4" WIDE UNLESS NOTED OTHERWISE TO BE APPLIED WITH COMMERCIAL TYPE STRIPING MACHINE IN ACCORDANCE WITH TDOT SECTION 716. ALTERNATIVELY, APPLY COLD PLASTIC PAVEMENT MARKINGS IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS AND TDOT SECTION 716.
D. PREFORMED PAVEMENT MARKINGS FOR CONSTRUCTION ZONES:
1. MARKING TYPES AND LOCATIONS ARE TO BE AS REQUIRED FOR DRAWINGS.
2. MARKINGS ARE TO BE APPLIED IN ACCORDANCE WITH TDOT SECTION 716 AND THE MANUFACTURER REQUIREMENTS.
3. REMOVE MARKINGS MANUALLY OR BY WITH A ROLL-UP DEVICE WITH USE OF SMALL AMOUNT OF CONTROLLED HEAT TO PREVENT DAMAGE TO PAVEMENT.
- DIRECTIONAL MARKINGS AND SYMBOLS:
1. ALL MARKING AND SYMBOLS ON ROADWAYS SHALL BE REFLECTIVE PAINT OR REFLECTIVE PREFORMED PLASTIC PAVEMENT MARKINGS.
2. USE TEMPLATES WITH SHARP, EVEN EDGES
- REMOVAL OF PAINTED MARKINGS:
A. REMOVE CONFLICTING PAVEMENT MARKINGS USING ONE OF THE FOLLOWING METHODS:
B. SAND BLASTING USING AIR OR WATER
C. HIGH PRESSURE WATER
D. STEAM OR SUPERHEATED WATER
E. MECHANICAL DEVICE SUCH AS GRINDERS
F. SOLVENTS AND CHEMICALS
8. REMOVAL OF EXISTING MARKINGS BY PAINTING OVER WITH BLACK PAINT IS NOT ACCEPTABLE.
9. REMOVE ACCUMULATION OF RESIDUE CREATED BY THE REMOVAL PROCESS.
10. THE REMOVAL OF EXISTING MARKINGS SHALL CAUSE THE LEAST POSSIBLE DAMAGE TO THE PAVEMENT. REPAIRS TO THE PAVEMENT SHALL BE MADE AT THE CONTRACTOR'S EXPENSE.
G. REMOVE TEMPORARY PREFORMED PAVEMENT MARKINGS FOR CONSTRUCTION ZONES: REMOVE IN LARGE PIECES, EITHER MANUALLY OR WITH A ROLL-UP DEVICE.
H. THE METHOD OF PAVEMENT MARKING REMOVAL SHALL CAUSE THE LEAST POSSIBLE DAMAGE TO THE PAVEMENT. ANY DAMAGED SHALL BE REPAIRED AS DIRECTED BY THE ENGINEER.

C - ROADSIDE SIGN IN BUSINESS COMMERCIAL, OR RESIDENTIAL AREA



*Where parking or pedestrian movements are likely to occur

SIGN PLACEMENT

FIGURE 2A-2C SECTION 2A-16 FROM THE
"MANUAL UNIFORM ON TRAFFIC CONTROL DEVICES
FOR STREETS AND HIGHWAYS" 2009 EDITION



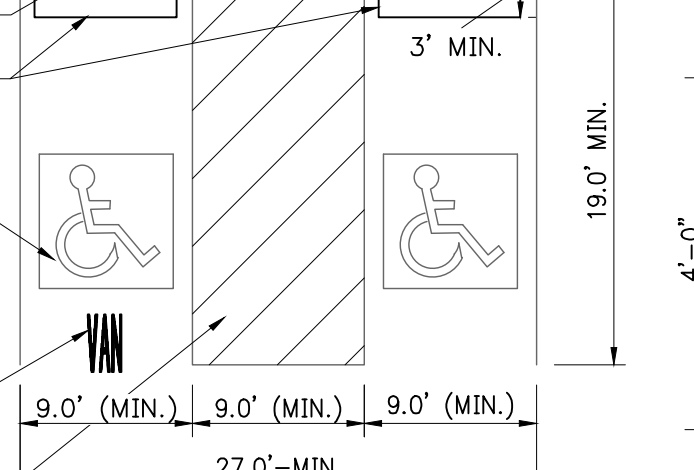
FRONT: 30"x30"
WHITE LETTERS WITH RED
BACKGROUND AND 1/2"
WHITE BORDER AROUND
PERIMETER OF SIGN
BACK: BLACK
SIGNS TO BE MOUNTED
ON POST, SEE DETAIL

H.C. SIGN
WHEEL STOP (NOT
SHOWN ON PLAN)
4" BORDER AND
WHITE SYMBOL ON
BLUE BACKGROUND,
SEE DETAIL (TYP)

36"x33" "VAN" LETTERING,
SEE OWNER FOR PLACEMENT

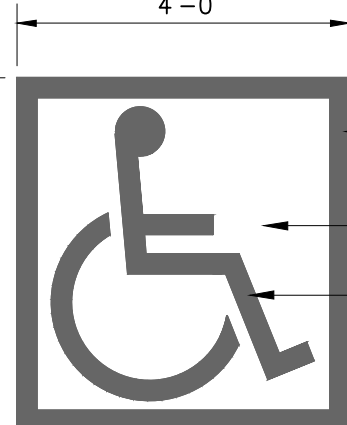
6" SOLID WHITE LINE
BORDER W/ 4" SOLID
WHITE DIAGONAL LINES
AT 2' CENTERS

NOTE:
ALL GRADING SHALL BE NO MORE
THAN A 2.0% CROSS-SLOPE WITHIN
ANY ADA ACCESSIBLE AREA.



TYPICAL H/C SPACE

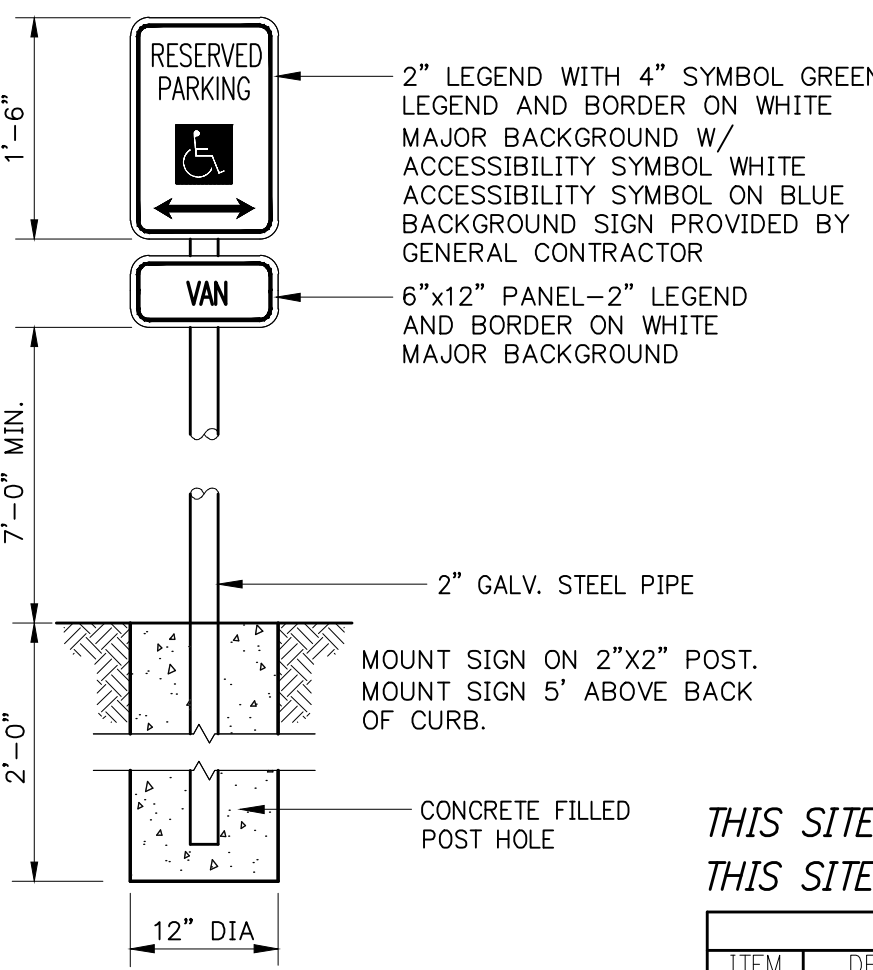
(N.T.S.) SEE PLAN FOR HC
VAN LOCATIONS



HANDICAP SYMBOL

(N.T.S.)

100-YEAR FLOODZONE INFORMATION:
NO PORTION OF THIS PROPERTY LIES WITHIN THE
100-YEAR FLOODPLAIN OR FLOODWAY AS SHOWN
ON FEMA MAP NUMBER 47157C0215G DATED
FEBRUARY 06, 2013 FOR SHELBY COUNTY, TN.
BASE FLOOD ELEVATION=±267.50



HANDICAP SIGN

(N.T.S.)

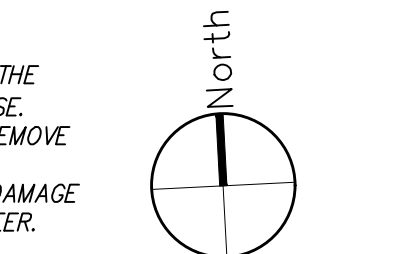
THIS SITE LIES WITHIN THE LS-9 SEWER BASIN
THIS SITE LIES WITHIN THE CLEAR CREEK 8-W DRAINAGE BASIN

REVISION	DESCRIPTION of	APPROVAL
ITEM	CHANGE	DATE
NO.		



DOLLAR GENERAL

DEVELOPER: PEDIGO CONSTRUCTION, LLC
ENGINEER: THE REAVES FIRM, INC.



NOT FOR CONSTRUCTION
FOR CITY REVIEW ONLY

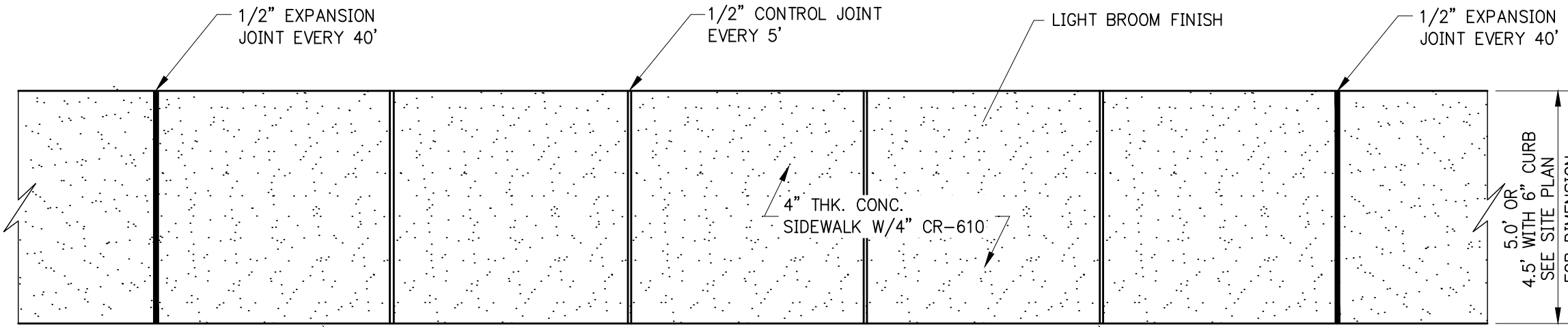
STRIPING PLAN

10410 US HIGHWAY 70
LAKELAND, TENNESSEE

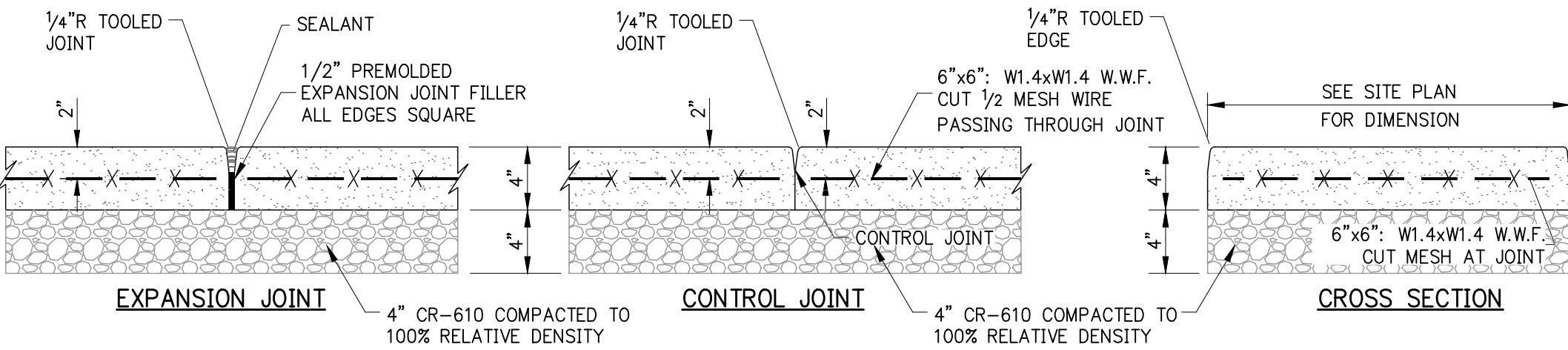
SURVEY TRF., INC. DATE 12/22 BOOK
DESIGN BY TRF., INC. DATE 01/23 SCALE 1"=20'
REVIEWED

CITY ENGINEER DATE

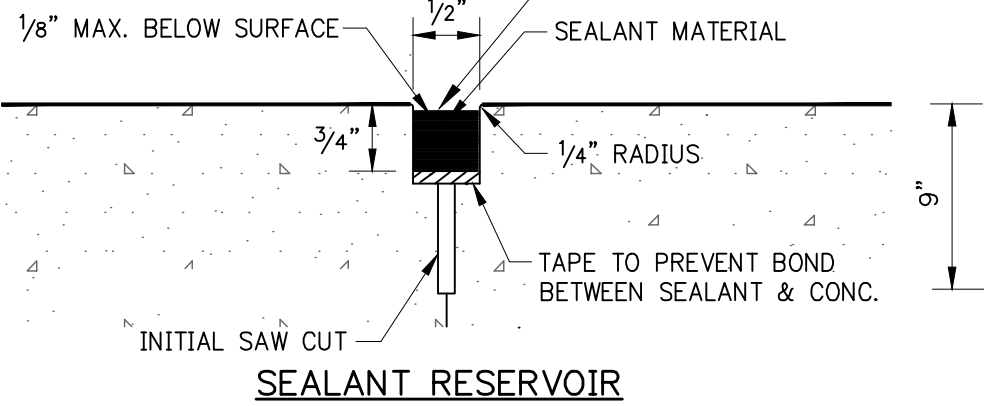
C2.2



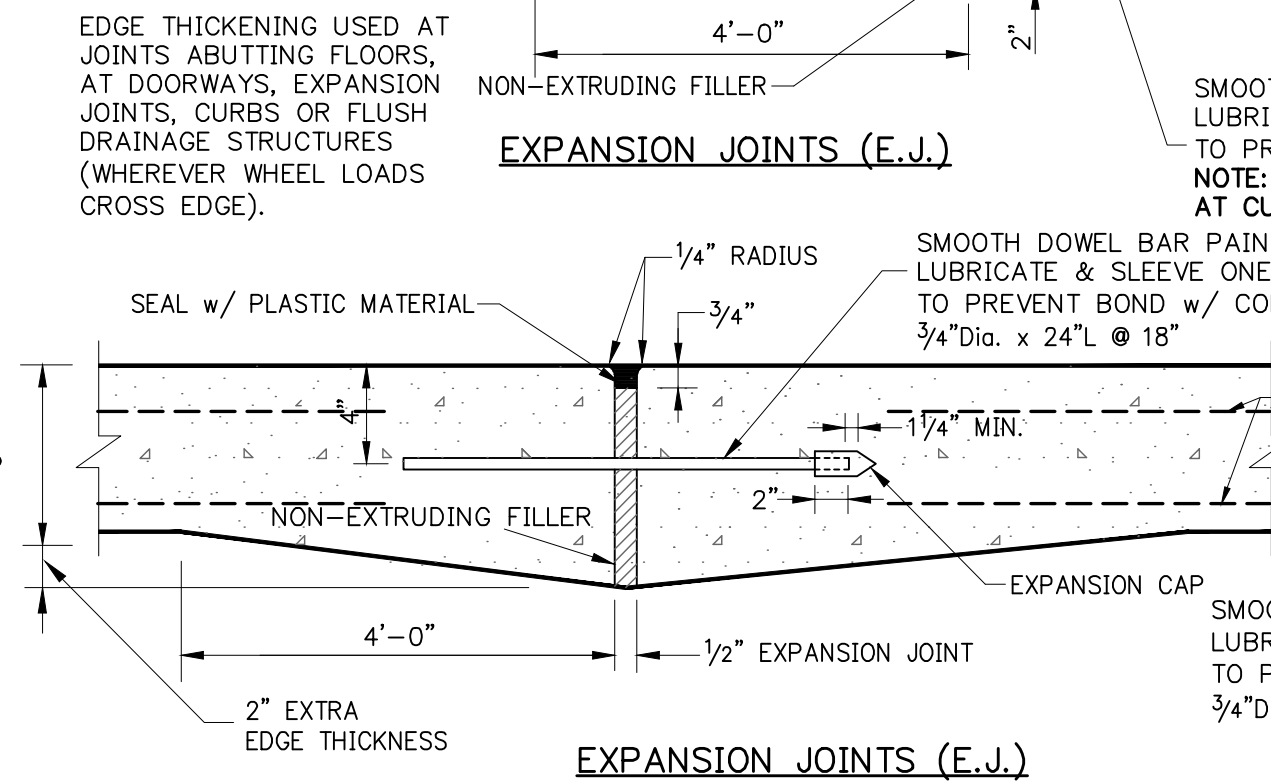
TYPICAL SIDEWALK SECTION
(N.T.S.)



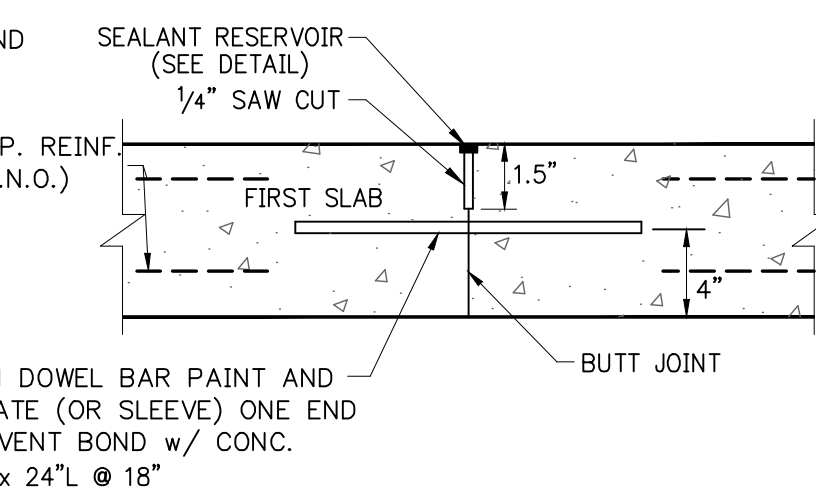
CONTRACTION OR CONTROL JOINT (CJ)



SEALANT RESERVOIR

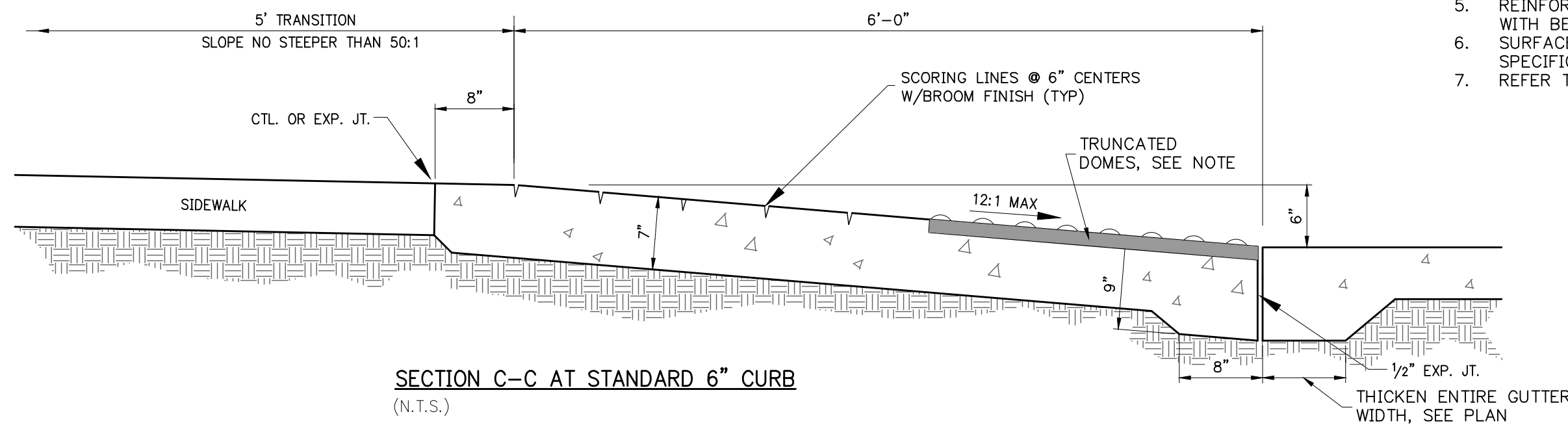


EXPANSION JOINTS (E.J.)

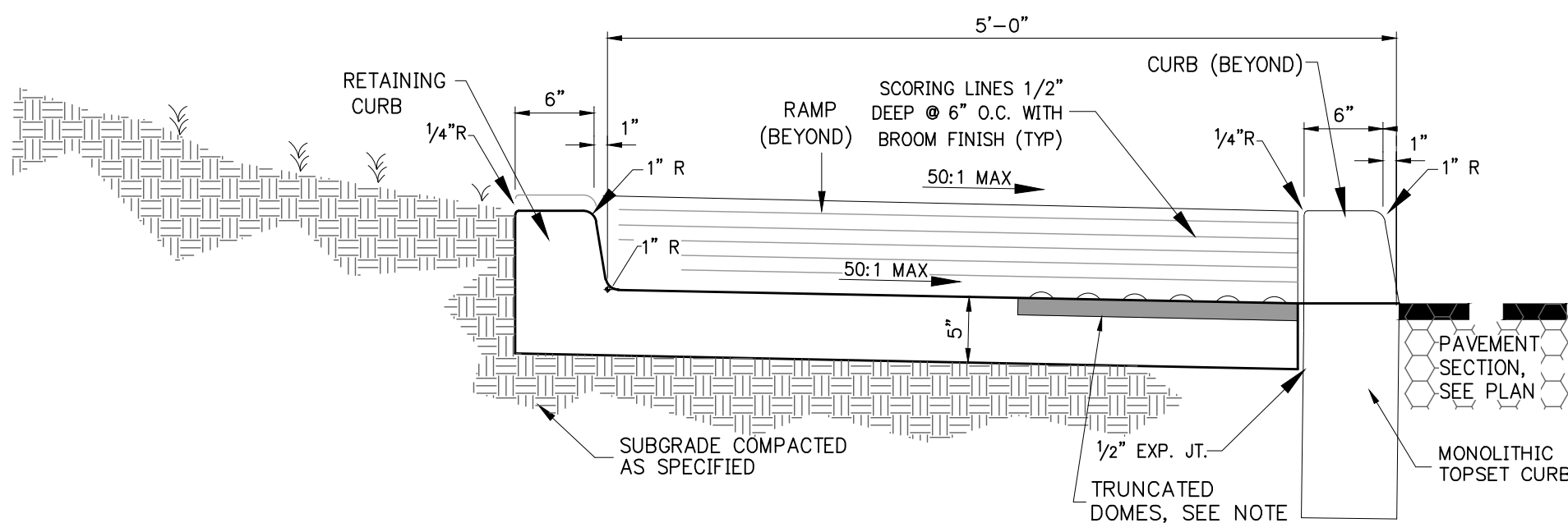


CONSTRUCTION JOINTS (CNST J)

9" CONCRETE PAVING
(N.T.S.)

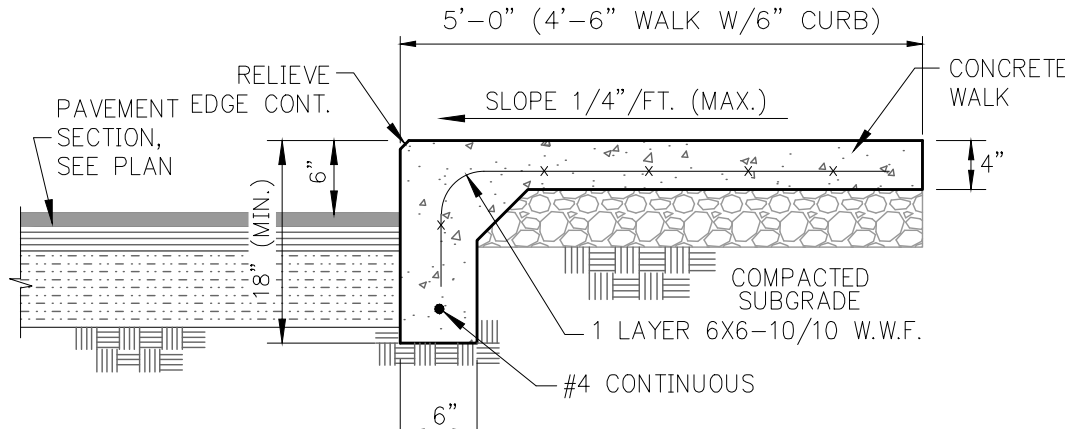


SECTION C-C AT STANDARD 6" CURB
(N.T.S.)



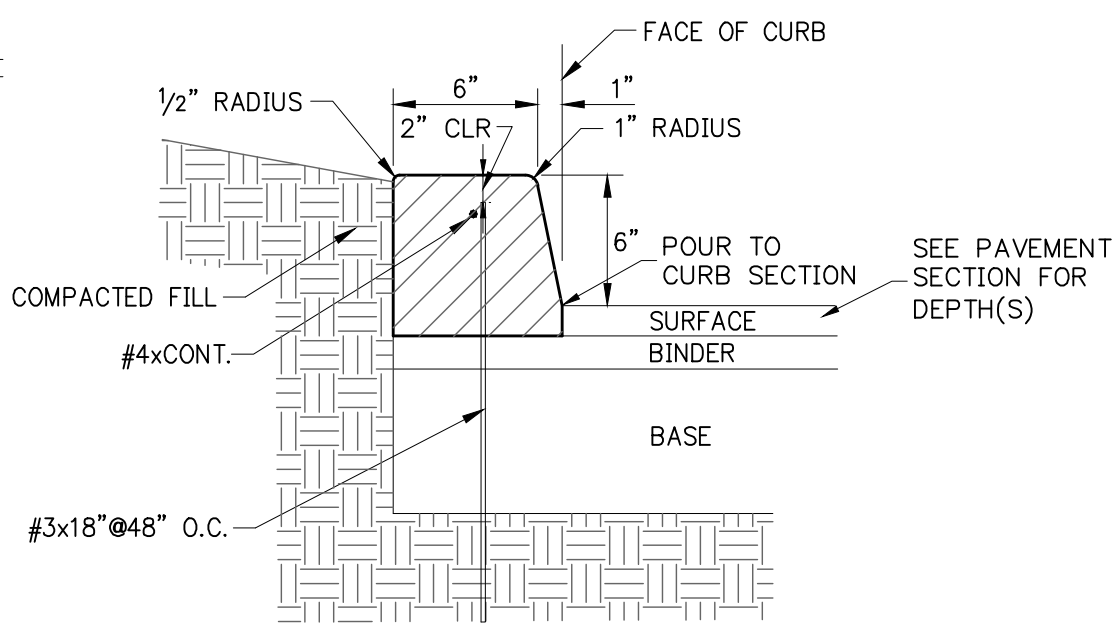
SECTION B-B AT STANDARD 6" CURB
(N.T.S.)

- NOTES:**
1. CONCRETE SHALL HAVE 4,000 PSI 28 DAY COMPRESSIVE STRENGTH W/ 6% AIR ENTRAINMENT LESTONE AGGREGATE
 2. EXPANSION JOINTS AT 40' O.C MAX (5' WALK)
 3. CONTRACTION JOINTS AT 5' O.C. (5' WALK)
 4. SIDEWALK GRADIENT SHALL NOT EXCEED THE FOLLOWING:
RAMP: 1:12 MAXIMUM (HANDRAIL REQUIRED)
SIDEWALKS: 1:20 MAXIMUM
CROSS SLOPES: 1:200 MINIMUM / 1:50 MAXIMUM
 5. SEE ADA NOTES



MONOLITHIC TOPSET CURB AND SIDEWALK SECTION
(N.T.S.)-WITHIN SITE-PRIVATE

THE GRADES INDICATED ON THE PLANS ARE BASED ON AVAILABLE SURVEY INFORMATION. DURING LAYOUT, THE CONTRACTOR SHALL VERIFY THE SIDEWALK GRADIENT. NOTIFY THE ARCHITECT PRIOR TO PLACEMENT IF FIELD CONDITION PRODUCE GRADIENT STEEPER THAN THOSE LISTED ABOVE

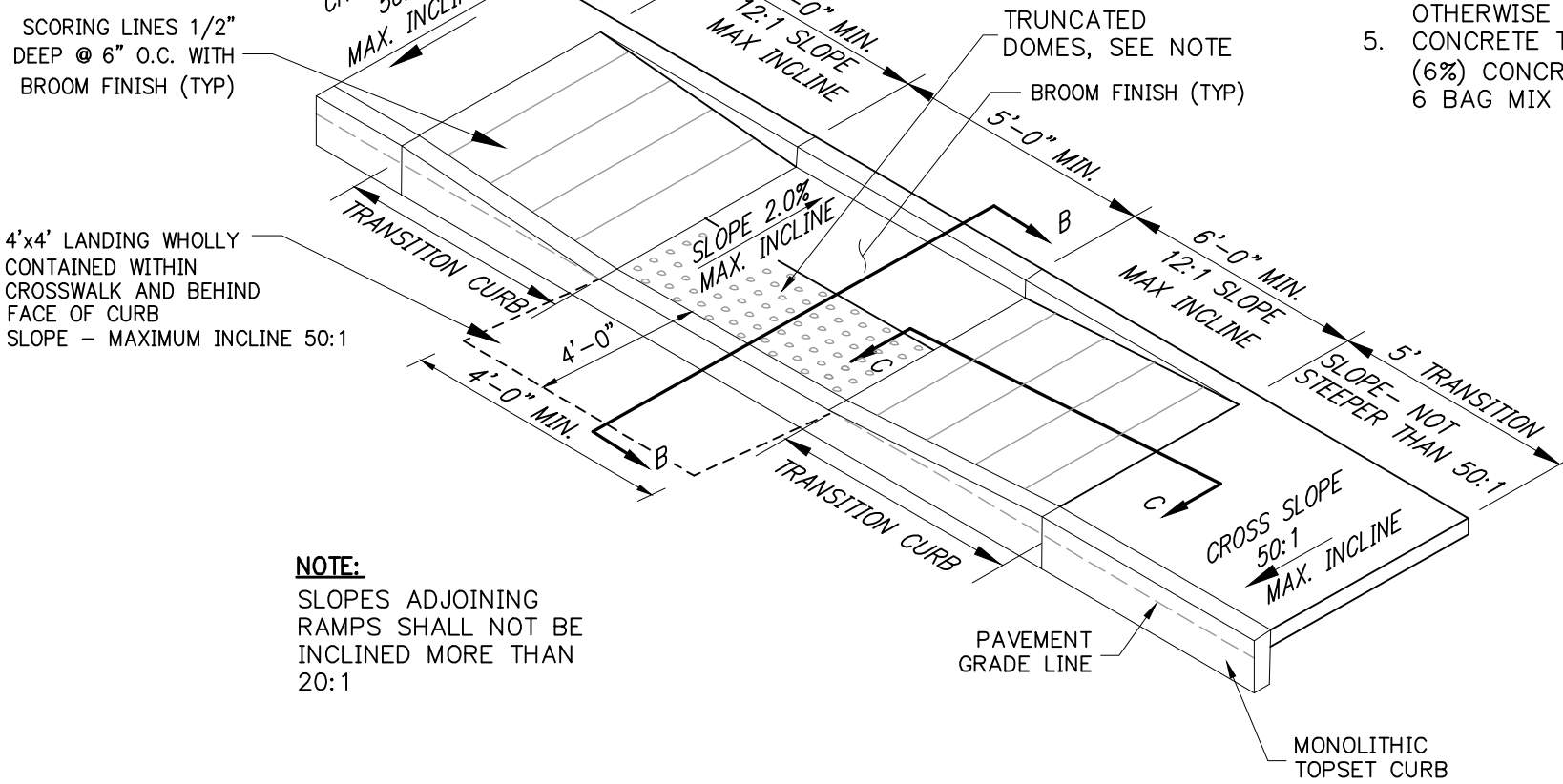


TOPSET CURB
(N.T.S.)

NOTE:
CLEAN, DRY AND PRIME ASPHALT PRIOR TO CURB PLACEMENT TO ENSURE BOND WITH ASPHALT PAVEMENT. SEE CURB AND GUTTER NOTES FOR ADDITIONAL SPECIFICATIONS.

NOTES

1. PRE-CUT EXPANSION JOINT MATERIAL SHALL BE USED IN ALL EXPANSION JOINTS.
2. DUMMY JOINTS SHALL BE INSTALLED AT 10 ft. INTERVALS, MAXIMUM.
3. INSTALL EXPANSION JOINTS EVERY 40 ft., MAXIMUM, AT ENDS OF RADIUS, AND A MINIMUM OF 5 ft. FROM INLET STRUCTURES.
4. WHEN CURB AND GUTTER IS USED ON THE HIGH SIDE OF ROADWAY, THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT UNLESS OTHERWISE INDICATED ON PLANS.
5. CONCRETE TO BE 4,000 P.S.I. AIR ENTRAINED (6%) CONCRETE WITH LESTONE AGGREGATE, 6 BAG MIX



NOTE:
SLOPES ADJOINING RAMP SHALL NOT BE INCLINED MORE THAN 20:1

WHEELCHAIR ACCESS CURB RAMP - TYPE C

TYPICAL CONCRETE PAVEMENT SECTION

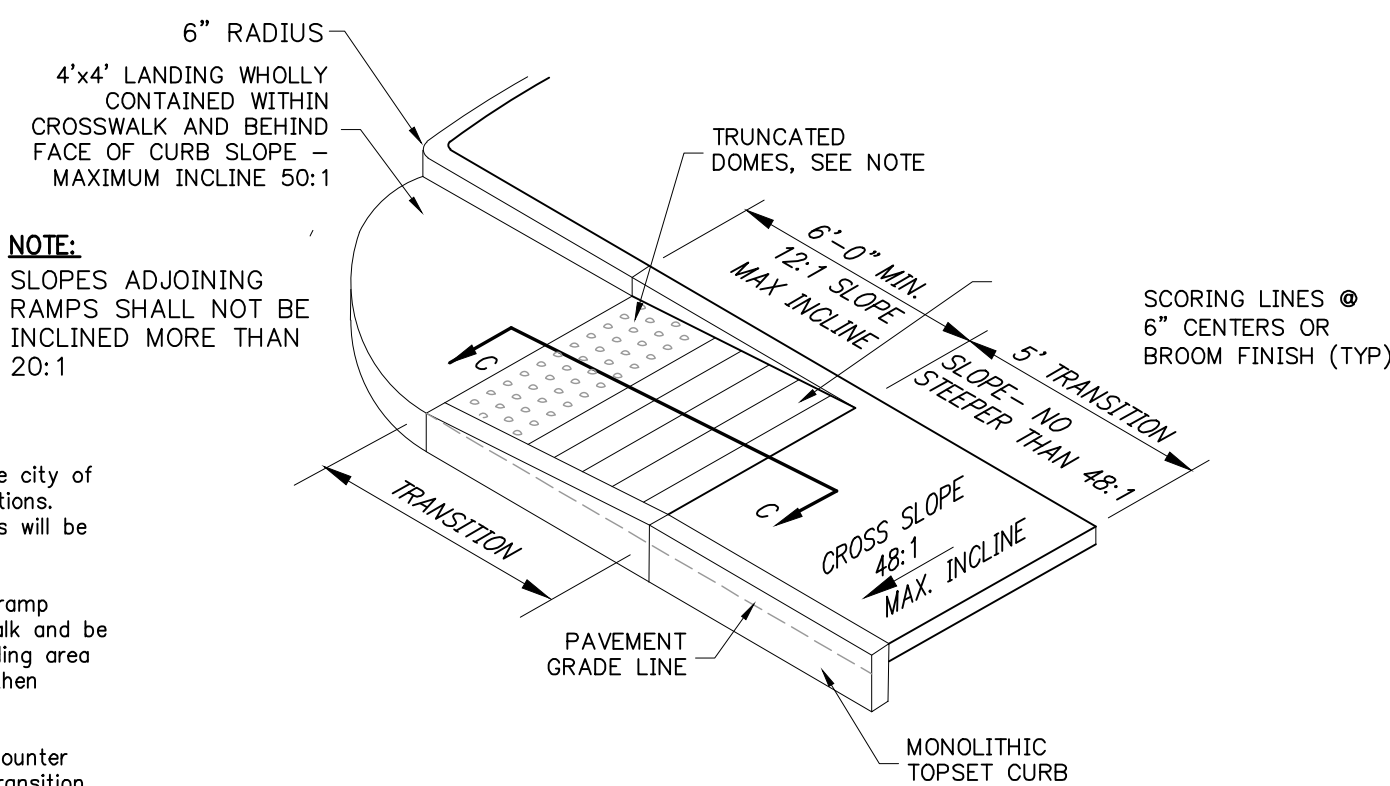
- CONC. PAVEMENT NOTES:**
1. UNLESS NOTED OTHERWISE EXPANSION JOINTS SHALL BE AT 50' O.C.
 2. UNLESS NOTED OTHERWISE CONTROL JOINTS SHALL BE 12.5' (OR 15') O.C. (CONSTRUCTION JOINTS CAN TAKE THE PLACE OF CONTROL JOINTS).
 3. CONCRETE SHALL BE 4,000 P.S.I., 28 DAY COMPRESSIVE STRENGTH AIR ENTRAINED (6%) W/ LESTONE AGGREGATE, 6 BAG MIX.
 4. FLY ASH WILL NOT BE ACCEPTED AS A SUBSTITUTE FOR CEMENT.
 5. REINFORCEMENT TO BE SUPPORTED WITH CHAIRS AND SLAB BOLSTERS WITH BEARING PLATES.
 6. SURFACE SHALL HAVE A BURLAP DRAG FINISH. SEE PROJECT SPECIFICATIONS.
 7. REFER TO GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION.

CONCRETE - 4,000 PSI (LESTONE AGG.)
6" AGGREGATE BASE COURSE - TYP. SECTION 903.05, CLASS A GRADING D, COMPACT TO 100% MAXIMUM DRY DENSITY (ASTM D698).
MIRAFI 500X FILTER FABRIC
COMPACTED SUBGRADE 98% STANDARD PROCTOR PROOF ROLL (ASTM D-698)

NOTE:
TRUNCATED DOMES SHALL BE PLACED AT THE BASE OF ALL HANDICAP RAMP SPANNING THE ENTIRE WIDTH OF THE RAMP AS SHOWN IN DETAILS. USE ACCESS TILE TACTILE SYSTEMS INTELLIGENT DESIGN CAST IN PLACE REPLACEABLE TRUNCATED DOME, DETECTABLE WARNING TACTILE SURFACE (PART NUMBER ACC-R-2x5). AT RAMP WITH A WIDTH GREATER THAN 5' WIDE, USE MULTIPLE 2x2 PANELS (PART NUMBER ACC-R-2x5) SPANNING THE ENTIRE WITH OF THE RAMP WITH NO SPACES. COLOR SHALL BE FEDERAL YELLOW. PLACE IN ACCORDANCE WITH MANUFACTURES SPECIFICATIONS.

NOTES:

1. Curb Ramps are to be located as shown on the plans or as directed by the Architect.
2. Surface texture of the ramp shall be truncated domes conforming to 28 CFR Part 36, App. A, 4.29.2., and ANSI A 117.1, 705 detectable warnings. See note for placement and type.
3. Care shall be taken to assure a uniform grade on the ramps, free of sags, short or abrupt grade changes. No slope shall incline or decline steeper than 12:1.
4. The length of the side flares shall be determined by the 12:1 slope and the height of the curb with a minimum length of 6'-0" and a maximum length of 16'-0". Adjoining walks shall not have cross slopes steeper than 50:1.
5. Scored lines shall be spaced at 6" centers parallel to the ramp on the side slopes and broomed transverse to the slope. Curb lines shall be scored parallel to the face of the curb with no wavy score marks. All score joints shall be struck straight and true.
6. Drainage structures shall not be placed in line with ramps nor hinder pedestrian traffic at road or drive intersections.
7. The curb ramp shall conform with the city of Memphis standard construction specifications. No variations, deviations, or substitutions will be permitted.
8. The landing area at the foot of the ramp must be wholly contained within crosswalk and be behind the projected curb lines. If landing area encroaches into vehicular traffic lanes, then two ramps shall be required.
9. Through the area of the ramp, the counter slope of the gutter shall be 20:1 and transition to match the standard gutter line profile on both sides of the ramp.
10. Pavement ramps shall conform to City of Memphis Standards. Scoring lines shall be 1/2" deep @ 6" o.c. with broom finish on all flares and for the first 24" of the ramp from the street. Concrete at ramp shall be colored.
11. Provide handrail were indicated on plans. See ARCH plans for handrail detail.



ACCESS CURB RAMP - TYPE D

NOTE: FOR SEC A-A AND SEC B-B SEE WHEELCHAIR ACCESS CURB RAMP THIS SHEET

The Reaves Firm
Engineering
Planning
Landscape Architecture
Land Surveying
6800 Poplar Avenue, Suite 101 Memphis, TN 38138
901.761.2016 Fax: 901.763.2847
www.ReavesFirm.com

REVISION		
ITEM NO.	DESCRIPTION of CHANGE	APPROVAL DATE



DOLLAR GENERAL

DEVELOPER: PEDIGO CONSTRUCTION, LLC
ENGINEER: THE REAVES FIRM, INC.

NOT FOR CONSTRUCTION
FOR CITY REVIEW ONLY

DIVISION OF ENGINEERING

SITE DETAILS

10410 US HIGHWAY 70
LAKELAND, TENNESSEE

SURVEY TRF, INC. DATE 12/22 BOOK
DESIGN BY TRF, INC. DATE 01/23 SCALE AS SHOWN
REVIEWED

CITY ENGINEER DATE

C2.4



VICINITY MAP

NTS

REYCO LLC
10360 US HWY 70
LO15100002

EXISTING
BUILDING (TYP)

FINISHED FLOOR ELEVATION (FFE) NOTES:

1. FINISHED GRADE AT BUILDING PERIMETER SHALL BE A MINIMUM OF 6" BELOW FFE
2. SEE C3.3 FOR SPOT GRADES
3. SEE ARCH PLANS FOR FINAL GRADES AT BUILDING ENTRIES/PERIMETER AND WITHIN BUILDING FOOTPRINT(S)

PLACE 32 SY OF GRADE "C" RIPRAP 3.0' THICK OF FILTER FABRIC. SEE DETAILS FOR SPECIFICATION AND GRADATION.

LEGEND

- BASIN BOUNDARY
- DRAINAGE BOUNDARY
- XXX--- PROPOSED CONTOUR MAJOR
- XXX--- PROPOSED CONTOUR MINOR
- XXX--- EXISTING CONTOUR MAJOR
- XXX--- EXISTING CONTOUR MINOR
- XXX--- PROPOSED STORM DRAIN
- XXX--- PROPOSED DRAINAGE STRUCTURES
- PROPERTY LINE



CONTRACTOR TO VERIFY SITE CONDITIONS AND EXISTING ELEMENTS PRIOR TO CONSTRUCTION. IF ANY DISCREPANCIES EXIST, NOTIFY THE ENGINEER OF RECORD PRIOR TO PROCEEDING WITH DEMOLITION/CONSTRUCTION.

SEE ARCH PLAN FOR BUILDING LAYOUT AND DIMENSION. VERIFY DOOR/ENTRY LOCATIONS AND ELEVATIONS WITH ARCH PLAN PRIOR TO CONSTRUCTION.

EVERGREEN HILLS, INC.
0 US HWY 70
LO14100385

PROPERTY
BOUNDARY (TYP)

N87°07'10"W-536.61'

7.5' SIDE SETBACK

NEW PUBLIC
SANITARY SEWER
EASEMENT

RETAINING WALL
DESIGN BY OTHERS

ROOF DRAIN WITH LEADER.
VERIFY LOCATION WITH
ARCH PLAN. SEE ROOF
LEADER DETAILS. (TYP)

NEW 10,542 SF BUILDING
FFE=292.75

D140

D130

D111

D110

D100

D120

NEW
MONUMENT
SIGN

AREA OF RIGHT OF
WAY ACQUISITION
(0.351 AC)

U.S. HIGHWAY 70
60' R.O.W. (108' FUTURE R.O.W.)

POND STAGE/DISCHARGE/STORAGE

ELEV. NVGD DISCHARGE (CFS) STORAGE (AC-FT)

ELEV. NVGD	DISCHARGE (CFS)	STORAGE (AC-FT)
284.50		0.000
284.85	0.5	0.003
285.20	1.5	0.007
285.55	2.5	0.013
285.90	3.1	0.019
286.06	3.3	0.022
286.25	3.6	0.026
286.60	4.1	0.032
286.95	4.5	0.038
287.30	4.9	0.044
287.59	6.0	0.048
287.65	6.6	0.049
287.98	10.2	0.051
288.00	10.6	0.051

POND SUMMARY

DETENTION AREA ROUTED THROUGH NEW OUTLET CONTROL STRUCTURE (OCS) FOR 2, 5, 25 YEAR STORMS WITH 100-YEAR PASSIVE ROUTE THROUGH STRUCTURE, SEE OCS DETAILS

EVENT	MAX INFLOW (CFS)	STAGE STORAGE VOLUME (AC-FT)	STAGE STORAGE ELEV.	MAX DISCHARGE (CFS)
2-YEAR	4.3	0.022	286.06	3.3
5-YEAR	5.5	0.320	286.60	4.1
25-YEAR	7.6	0.048	287.59	6.0
100-YEAR	9.6	0.051	287.98	10.2

EVENT	PREDEVELOPMENT	POST DEVELOPMENT
2-YEAR	11,903	> 11,731
5-YEAR	15,687	> 15,265

LOCATION	DETAIN	BYPASS	TOTAL	PRE vs POST ANALYSIS	PREDEVELOPMENT SITE
AREA (AC)	1.029	0.625	1.651		1.651
CN	89	80			84
TC (MIN.)	7	7			10

STORM EVENT	DISCHARGE (CFS)
2-YEAR	3.3
5-YEAR	4.1
25-YEAR	6.0
100-YEAR	10.2

PIPE AND STRUCTURE TABLE SERIES 100 25-YEAR

Structure	Area	C	CA	Tc	I-25	Qinlet
TYPE 'E' HW	100					
OCS TOP=291.00	110					
ROOF DRAINAGE	111	0.24	0.98	0.24	5.0	8.06
NO 11 INLET TOP=289.44	120	0.07	0.95	0.07	5.0	8.06
NO 11 INLET TOP=291.10	130	0.24	0.90	0.21	5.0	8.06
NO 11 INLET TOP=291.40	140	0.47	0.91	0.43	5.0	8.06
Total		1.03		0.95		

Downstream	Upstream	Size	Len	Slp	n	Qcap	Q-25	Vel	Upstream	WS	DArea
From Inv	To Inv										
100 284.45	110 284.50	42"	13	0.35%	0.013	59.5	7.6	3.5	287.42	1.03	
110 287.00	111 ROOF DRAIN FROM BUILDING										
110 284.50	120 284.65	42"	77	0.20%	0.013	45.0	5.7	3.2	287.43	0.78	
120 284.65	130 284.77	42"	62	0.20%	0.013	45.0	5.2	3.1	287.43	0.71	
130 284.77	140 284.96	42"	94	0.20%	0.013	45.0	3.5	2.8	287.49	0.47	

- A. PIPE:
1. ALL NEW PIPE SHALL BE ASTM C76 CLASS III RCP TYPE B WALL WITH GASKETED JOINTS U.N.O.
 2. ALL NEW PIPE SHALL BE BED IN ACCORDANCE WITH CITY OF LAKEAND STANDARDS.
 3. FIELD VERIFY FLOWLINES OF EXISTING PIPES TO BE UTILIZED.
 4. SEE DETAILS FOR PRECAST BOX AND WINGWALL SPECIFICATIONS.
- B. DETAILS:
1. ALL STRUCTURES SHALL COMPLY WITH THE CITY OF LAKEAND STANDARDS AND SPECIFICATIONS.
 2. CONTRACTOR MAY USE NEW PRECAST STRUCTURES AND SHALL HAVE A WALL THICKNESS CONFORMING TO ASTM C-478/AASHTO M199.
 3. ALL GASKETS SHALL CONFORM TO AASHTO M198.
 4. USE 3' GEOTEXTILE AT ALL JOINTS FOR RCP.
 5. ALL NEW PIPES AND STRUCTURES ARE PRIVATE U.N.O.
 6. ALL NEW DMH ARE 5' U.N.O.

THIS SITE LIES WITHIN THE LS-9 SEWER BASIN

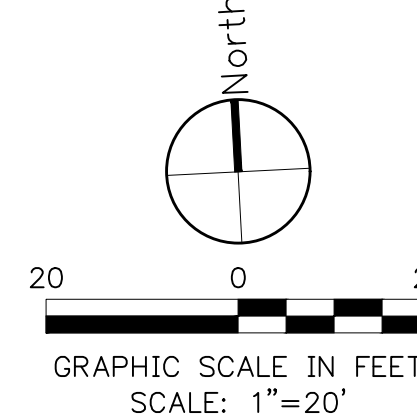
THIS SITE LIES WITHIN THE CLEAR CREEK 8-W DRAINAGE BASIN

REVISION	DESCRIPTION of CHANGE	APPROVAL DATE
ITEM NO.		



DOLLAR GENERAL

DEVELOPER: PEDIGO CONSTRUCTION, LLC
ENGINEER: THE REAVES FIRM, INC.



NOT FOR CONSTRUCTION
FOR CITY REVIEW ONLY

GRADING AND DRAINAGE PLAN

10410 US HIGHWAY 70
LAKELAND, TENNESSEE

SURVEY	TRF, INC.	DATE	12/22	BOOK	
DESIGN BY	TRF, INC.	DATE	01/23	SCALE	1"=20'
		REVIEWED			
		CITY ENGINEER			DATE

Section 2721

Engineered Surface Drainage Products

GENERAL

PVC surface drainage inlets shall include the drain basin type as indicated on the contract drawing and referenced within the contract specifications. The ductile iron grates for each of these fittings are to be considered an integral part of the surface drainage inlet and shall be furnished by the same manufacturer. The surface drainage inlets shall be as manufactured by Nyloplast a division of Advanced Drainage Systems, Inc., or prior approved equal.

MATERIALS

The drain basins required for this contract shall be manufactured from PVC pipe stock, utilizing a thermofforming process to reform the pipe stock to the specified configuration. The drainage pipe connection stubs shall be manufactured from PVC pipe stock and formed to provide a watertight connection with the specified pipe system. This joint tightness shall conform to ASTM D3212 for joints for drain and sewer plastic pipe using flexible elastomeric seals. The flexible elastomeric seals shall conform to ASTM F427. The pipe bell spool shall be joined to the main body of the drain basin or catch basin. The raw material used to manufacture the pipe stock that is used to manufacture the main body and pipe stubs of the surface drainage inlets shall conform to ASTM D1784 cell class 12454.

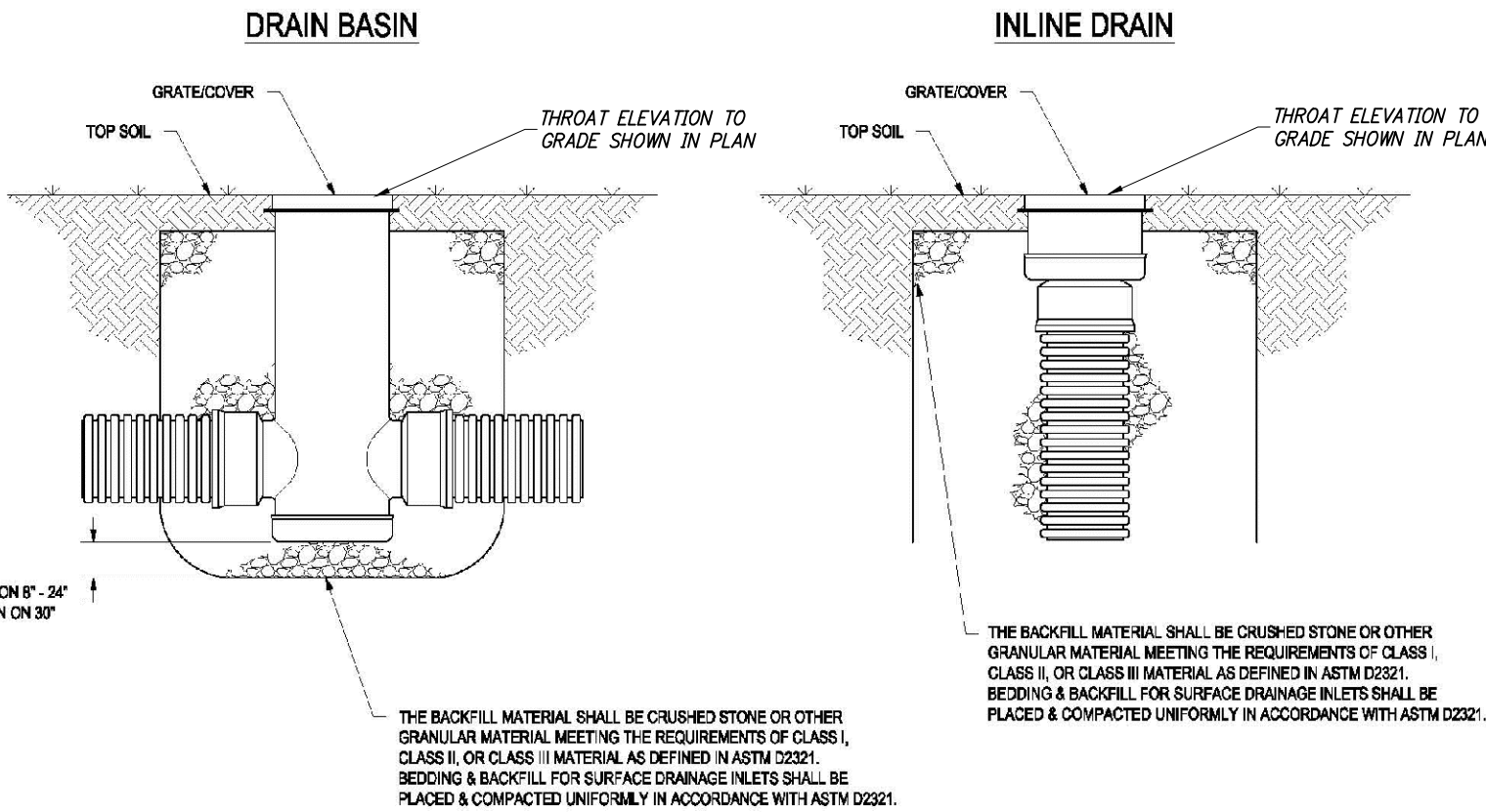
The grates and frames furnished for all surface drainage inlets shall be ductile iron for sizes 8", 10", 12", 15", 18", 24" and 30" and shall be made specifically for each basin so as to provide a round bottom flange that closely matches the diameter of the surface drainage inlet. Grates for drain basins shall be capable of supporting various wheel loads as specified by Nyloplast. 12" and 15" square grates will be hinged to the frame using pins. Ductile iron used in the manufacture of the castings shall conform to ASTM A536 grade 70-50-05. Grates and covers shall be provided painted black.

INSTALLATION

The specified PVC surface drainage inlet shall be installed using conventional flexible pipe backfill materials and procedures. The backfill material shall be crushed stone or other granular material meeting the requirements of class 1, class 2, or class 3 material as defined in ASTM D2321. Bedding and backfill for surface drainage inlets shall be well placed and compacted uniformly in accordance with ASTM D2321. The drain basin body will be cut at the time of the final grade. No brick, stone or concrete block will be required to set the grate to the final grade height. For lead rated installations, a concrete slab shall be poured under and around the grate and frame. The concrete slab must be designed taking into consideration local soil conditions, traffic loading, and other applicable design factors. For other installation considerations such as migration of fines, ground water, and soft foundations refer to ASTM D2321 guidelines.

THIS PRINT DISCLOSES SUBJECT MATTER IN WHICH NYLOPLAST HAS PROPRIETARY RIGHTS. THE RECEIPT OR POSSESSION OF THIS PRINT DOES NOT CONFER, TRANSFER, OR LICENSE THE USE OF THE DESIGN OR TECHNICAL INFORMATION SHOWN HEREIN. REPRODUCTION OF THIS PRINT OR ANY INFORMATION CONTAINED HEREIN, OR MANUFACTURE OF ANY ARTICLE HEREFROM FOR THE DISCLOSURE TO OTHERS IS FORBIDDEN EXCEPT BY SPECIFIC WRITTEN PERMISSION FROM NYLOPLAST.	DRAWN BY: CJA DATE: 9-30-99 REVISED BY: NHH DATE: 03-11-16	MATERIAL: PROJECT NO: NAME DATE: 03-11-16	310 VERNONA AVE BIRMINGHAM, GA 30018 PH: (770) 833-2440 FAX: (770) 833-2488 WWW.NYLOPLAST-USA.COM
8 IN. - 36 IN DRAIN BASIN SPECIFICATIONS	TITLE	8 IN. - 36 IN DRAIN BASIN SPECIFICATIONS	
DWG NO. 7091-110-011	SCALE 1:1	SHEET 1 OF 1	REV. H

NON TRAFFIC INSTALLATION



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8 IN. - 36 IN DRAIN BASIN SPECIFICATIONS	TITLE	8 IN. - 36 IN DRAIN BASIN SPECIFICATIONS	
DWG NO. 7091-110-011	SCALE 1:25	SHEET 1 OF 1	REV. E

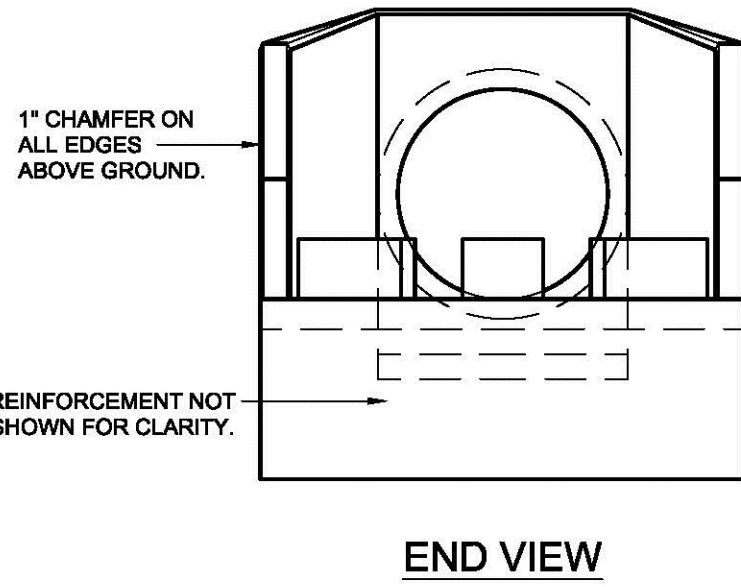
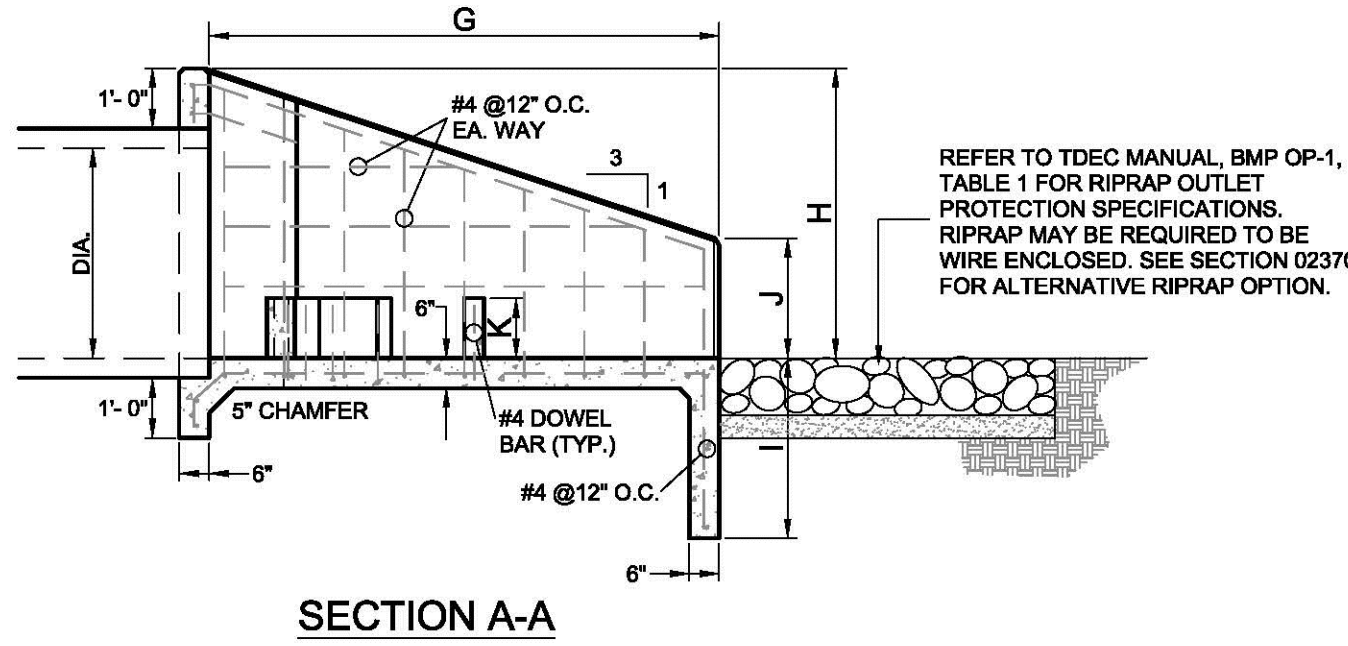


TABLE OF DIMENSIONS AND DIAMETERS

DIM	15"	18"	21"	24"	30"	36"	42"	48"	54"	60"	72"
A	5'-3"	5'-7"	5'-7"	5'-8"	5'-9"	7'-5"	9'-0"	9'-2"	10'-9"	12'-6"	15'-6"
B	1'-9"	1'-9"	1'-9"	1'-9"	1'-9"	1'-9"	1'-9"	1'-9"	1'-9"	1'-9"	1'-9"
C	3'-1"	3'-4"	3'-10"	3'-11"	4'-0"	5'-8"	7'-3"	7'-5"	9'-0"	10'-9"	13'-9"
D	2'-0"	2'-4"	2'-7"	2'-10"	3'-5"	4'-0"	4'-7"	5'-2"	5'-9"	6'-5"	7'-9"
E	5'-5"	5'-9"	6'-0"	6'-3"	6'-11"	7'-8"	8'-1"	8'-8"	9'-3"	9'-11"	11'-3"
F	2'-4"	2'-4"	2'-4"	2'-4"	2'-6"	2'-6"	2'-6"	2'-6"	2'-6"	2'-6"	2'-6"
G	4'-8"	5'-1"	5'-1"	6'-0"	6'-3"	6'-11"	8'-6"	8'-8"	10'-3"	12'-0"	15'-0"
H	2'-5"	2'-8"	2'-11"	3'-3"	3'-9"	4'-4"	4'-10"	5'-5"	5'-11"	6'-6"	7'-6"
I	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	3'-0"	3'-0"	3'-0"	3'-0"	3'-0"	3'-0"
J	0'-10"	1'-0"	1'-3"	1'-6"	2'-0"	2'-0"	2'-0"	2'-6"	2'-6"	2'-6"	2'-6"
K	0'-8"	0'-8"	0'-8"	0'-8"	1'-0"	1'-0"	1'-0"	1'-3"	1'-3"	1'-3"	1'-6"
L	1'-5"	1'-6"	1'-7"	1'-9"	1'-11"	2'-2"	2'-5"	2'-6"	2'-9"	3'-0"	3'-6"

NOTE: PRECAST CONCRETE TO BE CLASS "AS", 4000 PSI, 28 DAY STRENGTH, MINIMUM.

TYPE "E" HEADWALL WITH WINGWALLS
NOT TO SCALE

CITY OF MEMPHIS – STANDARD CONSTRUCTION SPECIFICATION
SECTION 02370 RIP-RAP

Weight
250 lbs. to 400 lbs.
50 lbs. to 249 lbs.
30 lbs. to 49 lbs.
10 lbs. to 29 lbs.
Less than 10 lbs.

Percent
30%
20%
25%
20%
5%

C. Filter Cloth and Fasteners.

1. The filter cloth material used as a base for rip-rap shall be pervious sheets of strong, rot-proof plastic fabric meeting the following Specifications:

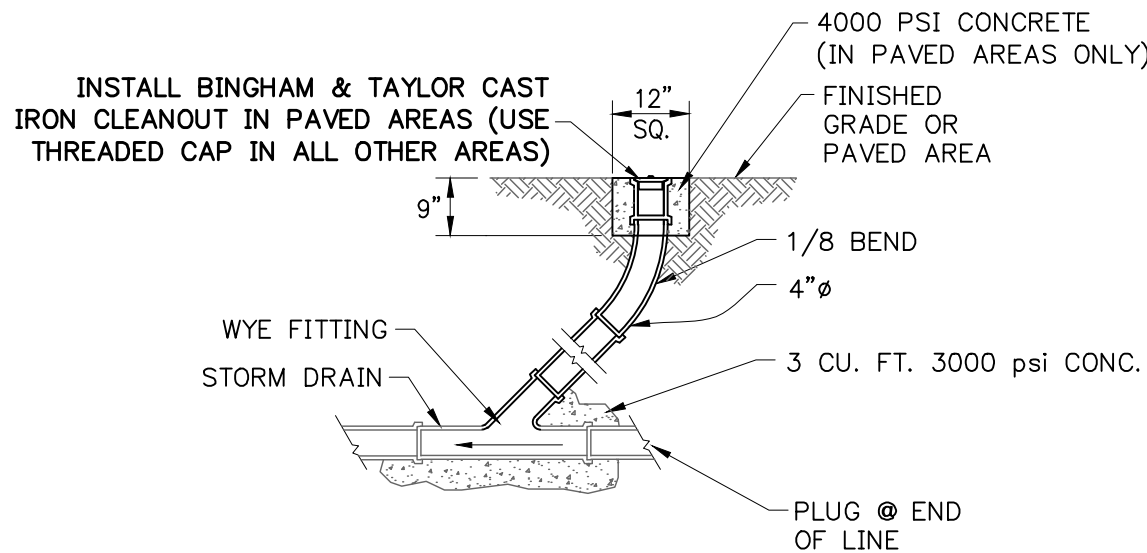
Physical Property	Test Method	Acceptable Test Results
Tensile Strength, wet, lbs	ASTM D-1682	200 (min)
Elongation, wet, %	ASTM D-1682	40 (min)
Coefficient of Water	Constant Head	.03 (min)
Permeability, cm/sec		
Puncture Strength, lbs.	ASTM D-751	100 (min)
Pore Size – EOS	Corps of Engineers	40 (max)
U.S. Standard Sieve	CW-02215	

2. The Contractor shall furnish a certified laboratory test report from an approved testing laboratory with each shipment of materials. Laboratory test reports shall include actual numerical test data obtained on this product.

3. Pins may be any commercially available pin 6 inches in length capable of retaining a washer.

4. Washers may be any commercially available washer 2 inches in diameter and compatible with the pin.

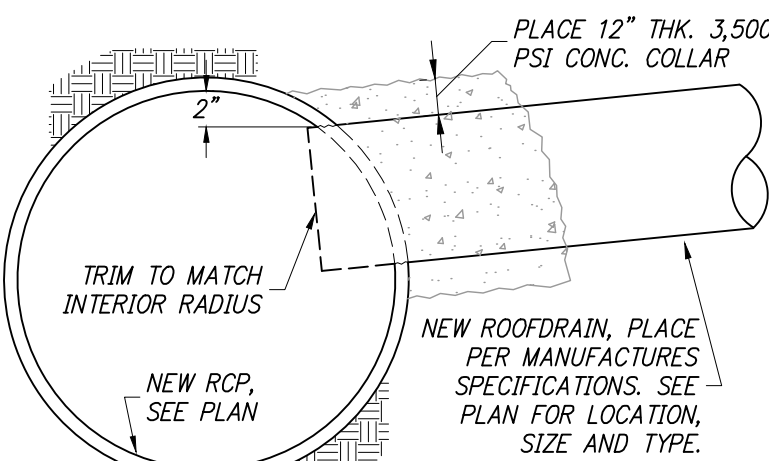
5. The pins and washers shall be manufactured from corrosion resistant metal material.



CLEANOUT THRU GRADE
(N.T.S.)

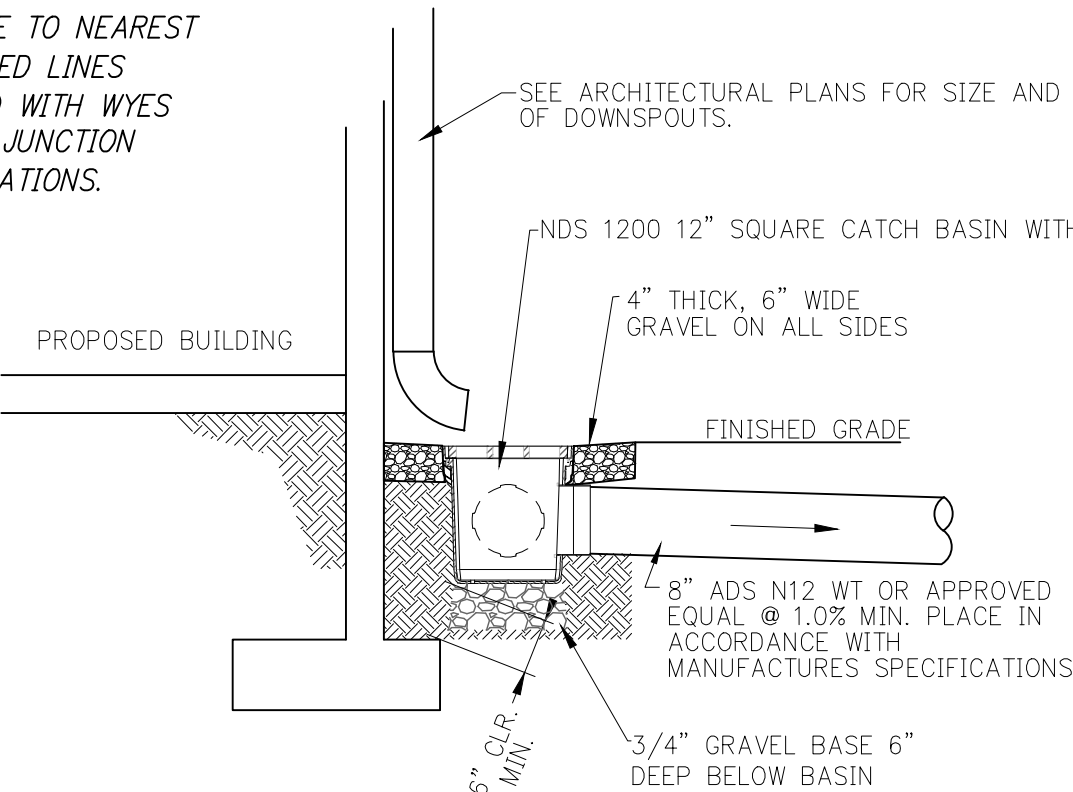
YARD INLET/ROOF DRAIN NOTES:

- USE NYLOPLAST DRAIN BASIN WITH 10" DOME INLET FOR ALL YARD INLETS U.N.O. INSTALL PER MANUFACTURES RECOMMENDATIONS.
- ALL YARD/ROOF DRAIN LINES TO BE ADS N-12 WT PIPE. INSTALL PER MANUFACTURES RECOMMENDATIONS/SPECIFICATIONS.
- ALL YARD/ROOF DRAINS AND PIPES SHALL BE INSTALLED PER THE MANUFACTURES AND CITY OF MEMPHIS REQUIREMENTS AND SPECIFICATIONS. SEE PLAN FOR LOCATIONS AND ELEVATIONS/FLOWLINES. SLOPE SHALL BE NO LESS THAN 2.0% MIN (U.N.O.), MINIMUM SIZE SHALL BE 6" U.N.O. SEE DETAILS.
- ALL PIPE SHALL BE BEDDED AND PLACED IN ACCORDANCE WITH THE MANUFACTURES SPECIFICATIONS. CONTRACTOR SHALL PROVIDE ALL BENDS, TEES, REDUCERS, CLEANOUTS, ETC. FOR PIPE LAYOUT.
- SEE ARCH PLAN FOR DOWNSPOUT LOCATION/TYPE. ROUTE TO NEAREST INLET/STRUCTURE WITH 6" MIN. DIAMETER PIPE. COMBINED LINES SHALL BE 12" MIN. DIAMETER AND SHALL BE CONNECTED WITH WYES OR APPROVED JUNCTION BOX. PROVIDE CLEANOUTS AND JUNCTION BOXES PER MANUFACTURES RECOMMENDATIONS/SPECIFICATIONS.

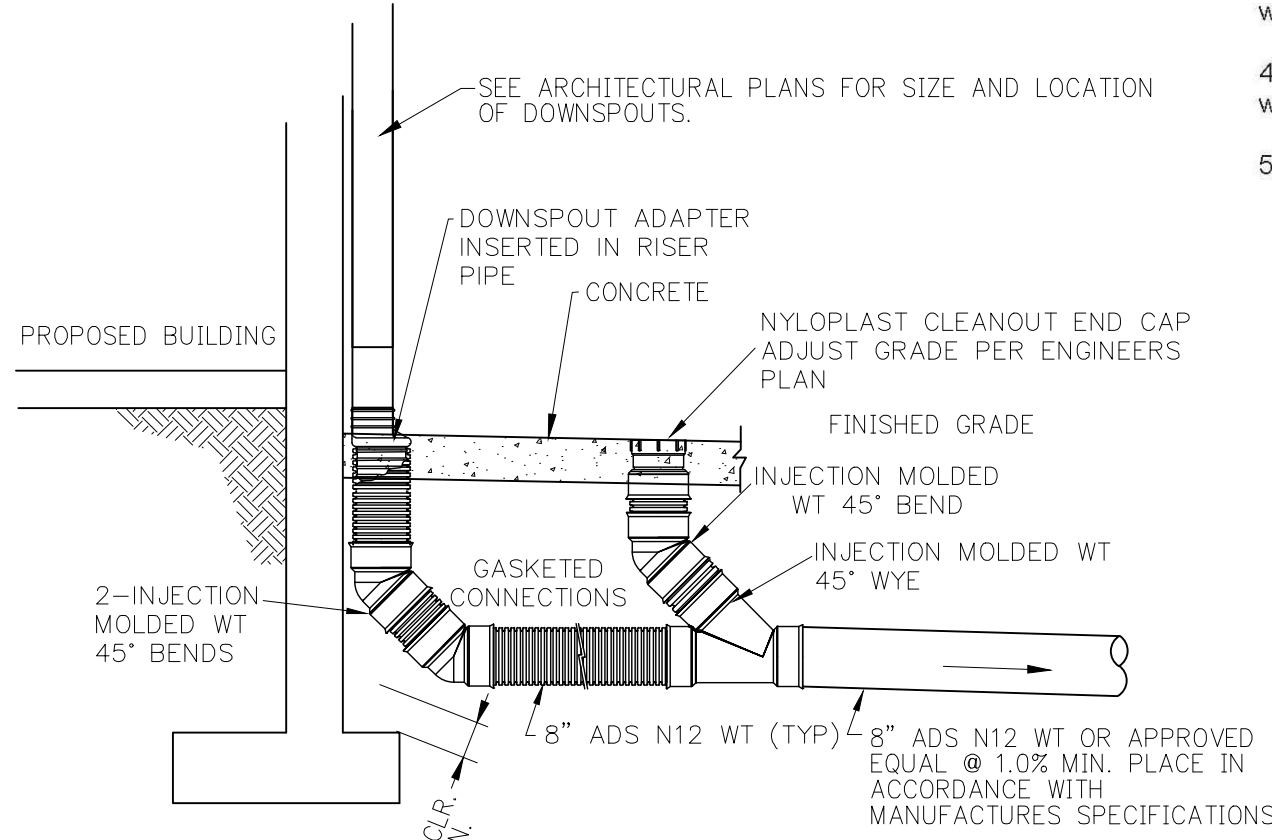


ROOF DRAIN TIE-IN

N.T.S.



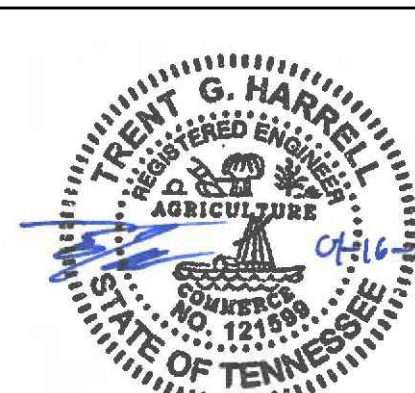
TYPICAL RAIN LEADER DETAIL
(N.T.S.)



TO BE USED WHERE A DIRECT CONNECTION TO DOWNSPOUT IS REQUIRED
RAIN LEADER DETAIL
(N.T.S.)



REVISION	DESCRIPTION of CHANGE	APPROVAL DATE
ITEM NO.		



DOLLAR GENERAL

DEVELOPER: PEDIGO CONSTRUCTION, LLC
ENGINEER: THE REAVES FIRM, INC.

NOT FOR CONSTRUCTION
FOR CITY REVIEW ONLY

DIVISION OF ENGINEERING
DRAINAGE DETAILS

10410 US HIGHWAY 70
LAKELAND, TENNESSEE

SURVEY TRF, INC. DATE 12/22 BOOK
DESIGN BY TRF, INC. DATE 01/23 SCALE AS SHOWN
REVIEWED

CITY ENGINEER DATE

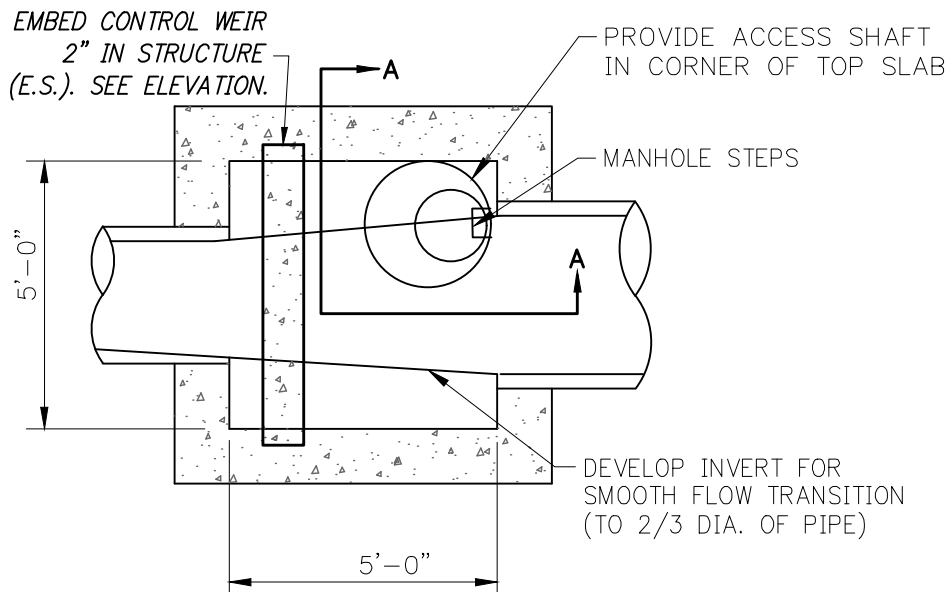
C3.1

GRADING AND DRAINAGE NOTES:

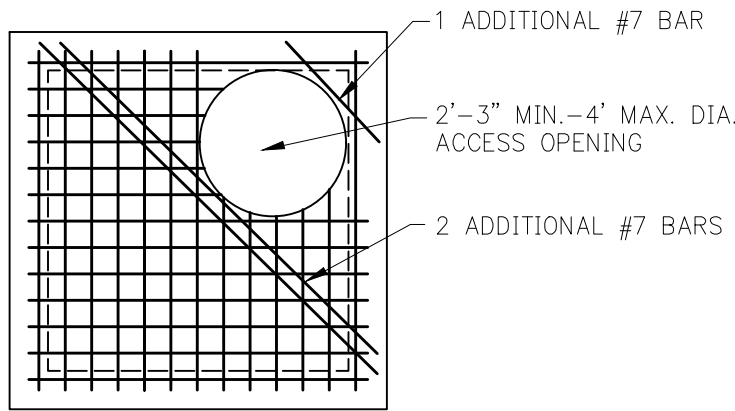
- CONTRACTOR SHALL VERIFY **ALL** PIPE INVERT ELEVATIONS AND EXISTING CONDITIONS PRIOR TO CONSTRUCTION. NOTIFY THE DESIGN ENGINEER AT (901) 761-2016 IF THERE ARE ANY VARIATIONS PRIOR TO THE COMMENCEMENT OF WORK.
- PRIOR TO THE PLACEMENT OF ANY FILL OR PAVEMENT CONSTRUCTION, ALL TOPSOIL, SURFACE VEGETATION AND ANY SOFT OR LOOSE SOILS SHALL BE COMPLETELY REMOVED FROM THE PROPOSED CONSTRUCTION AREAS. TOPSOIL OR OTHER SUCH MATERIAL CONTAINING ORGANIC MATTER SHALL NOT BE USED AS FILL, BUT MAY BE STOCKPILED AND USED FOR LANDSCAPING PURPOSES. SEE NOTE 23 FOR ADDITIONAL INFORMATION.
- IN AREAS TO BE FILLED OR PAVED, THE SURFACE OF THE STRIPPED SOIL SHOULD BE DISKED OR SCARIFIED TO A DEPTH OF 4 INCHES AND RECOMPACTED BEFORE PLACING FILL OR PAVEMENT BASE MATERIAL.
- ISOLATED SOFT OR LOOSE AREAS WHICH ARE UNDERCUT SHOULD BE BACKFILLED WITH MATERIAL COMPACTED TO THE REQUIRED DENSITY AND IN THE MANNER SPECIFIED.
- THE SITE WORK CONTRACTOR SHALL COMPLY WITH LOCAL CODES IN OBSERVING EROSION CONTROL MEASURES BOTH ON AND OFF THE SITE.
- THE MAXIMUM ALLOWABLE SLOPE ON THIS PROJECT SHALL BE **3:1** U.N.O.
- THE CONTRACTOR PERFORMING THE SITE WORK SHALL VERIFY THAT ALL UTILITY TRENCHES – EXISTING AND NEW – ARE ADEQUATELY COMPACTED TO SUPPORT THE INTENDED LOADS AS SPECIFIED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY PAVING OF TRENCH FAILURES.
- ALL FILL SOILS WITHIN BUILDING AND CONCRETE PAVING AREAS SHALL BE COMPACTED TO A MINIMUM OF 98% STANDARD PROCTOR DENSITY (ASTM D-698) WITHIN 2% OF THE OPTIMUM MOISTURE CONTENT. SEE NOTE 15 FOR ADDITIONAL COMPACTON REQUIREMENTS.
- ALL NEW STORM DRAINAGE STRUCTURES AND PIPES SHALL BE INSTALLED PER CITY OF LAKELAND STANDARDS.
- ALL EXISTING DRAINAGE STRUCTURES AND PIPES SHOWN TO BE UTILIZED SHALL BE FIELD VERIFIED AND TESTED IN ACCORDANCE WITH CITY OF LAKELAND STANDARDS AND SPECIFICATIONS. TESTING SHALL BE PERFORMED PRIOR TO CONSTRUCTION. (IF NOT ALREADY DONE). IF THE EXISTING DRAINAGE STRUCTURE OR PIPE DOES NOT MEET THE REQUIREMENTS OF SHELBY COUNTY, THEN THE EXISTING LINE SHALL EITHER BE REPAIRED OR REPLACED AT THE OWNERS EXPENSE AND DISCRETION. VERIFY WITH ENGINEER OF RECORD PRIOR TO ANY CHANGES FROM THE PROPOSED PLAN.
- ALL NEW PIPE SHALL BE BED IN ACCORDANCE WITH CITY OF LAKELAND STANDARDS.
- ALL STRUCTURES SHALL COMPLY WITH CITY OF LAKELAND STANDARDS.
- ALL NEW PIPES AND STRUCTURES ARE PRIVATE UNLESS NOTED OTHERWISE.
- ALL PIPE SHALL BE BEDDED AND PLACED IN ACCORDANCE WITH THE MANUFACTURES SPECIFICATIONS. CONTRACTOR TO PROVIDE ALL BENDS, TEES, REDUCERS, CLEANOUTS, ETC. FOR PIPE LAYOUT.
- CONTRACTOR TO COORDINATE WITH OWNER PRIOR TO CONSTRUCTION FOR A GEOTECHNICAL EXPLORATION AND RECOMMENDATIONS BY A LICENSED GEOTECHNICAL ENGINEER.
- THE CONTRACTOR SHALL COORDINATE THE PHASING OF THIS PROJECT WITH THE DEVELOPER.
- FIELD VERIFY ALL EXISTING ELEVATIONS AND FLOWLINES. NOTIFY THE ARCHITECT AND THE ENGINEER OF RECORD OF ANY MAJOR DISCREPANCIES.
- ADD $\frac{1}{2}$ " PARGING TO ALL NEW DRAINAGE STRUCTURES.
- AREAS OF FILL NOT WITHIN THE BUILDING, CONCRETE PADS, ASPHALT OR CONCRETE DRIVES AND PARKING AREAS, SIDEWALKS, ETC. SHALL BE COMPACTED TO A MINIMUM OF 92% STANDARD PROCTOR DENSITY (ASTM D-698) U.N.O.
- FIELD VERIFY FLOWLINES OF EXISTING PIPES TO BE UTILIZED.
- PLACE RIP RAP AT SIDES OF HEADWALLS AND IN DETENTION BASIN SWALE AS SPECIFIED IN TABLE.
- BANKS AND SIDESLOPES STEEPER THAN 5:1 SHALL BE SODDED IN ACCORDANCE WITH THE LANDSCAPE PLANS.
- ALL FILL MATERIAL WITHIN SITE IS INTENDED TO BE UTILIZED THROUGHOUT THE PROJECT SITE. REFER TO THE GEOTECHNICAL REPORT (NOTE 15) FOR ADDITIONAL GUIDANCE FOR ENGINEERED FILL AND SUITABLE MATERIAL. IT IS RECOMMENDED THAT THE DEVELOPER/CONTRACTOR UTILIZE A SOILS ENGINEER THROUGHOUT THE PROJECT TO ENSURE PROPER PLACEMENT OF SUITABLE FILL MATERIAL IS ACHIEVED. REFER TO THE GEOTECHNICAL REPORT FOR SUGGESTED DEPTH OF TOPSOIL TO BE REMOVED FROM AREAS OF STRUCTURAL FILL. MATERIAL NOT SUITABLE FOR STRUCTURAL FILL (AS NOTED WITHIN THE GEOTECHNICAL REPORT) MAY BE PLACED IN NON-STRUCTURALLY LOADED AREAS AS DIRECTED BY THE GEOTECHNICAL ENGINEER.
- ALL NEWLY CUT OR FILLED AREAS LACKING ADEQUATE VEGETATION, SHALL BE SEEDED, MULCHED, FERTILIZED AND/OR SODDED AS REQUIRED TO EFFECTIVELY CONTROL SOIL EROSION.
- ALL CONSTRUCTION MATERIALS AND PROCEDURES SHALL MEET OR EXCEED THE REQUIREMENTS OF SHELBY COUNTY STANDARD CONSTRUCTION SPECIFICATIONS.
- PROPERTY LINES SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION. GRADING, CLEARING AND THE ERECTION OR REMOVAL OF FENCES ALONG PROPERTY LINES SHALL BE FULLY COORDINATED WITH THE ADJACENT PROPERTY OWNERS.
- ALL GRADING WORK SHALL BE PERFORMED IN SUCH A MANNER THAT ADJACENT PROPERTIES ARE NOT DAMAGED OR ADVERSELY AFFECTED.
- LOT DRAINAGE: FINISH GRADE SHALL BE SLOPED AWAY FROM THE FOUNDATION FOR DRAINAGE. THE FINISH GRADE MUST BEGIN AT LEAST 12-INCHES BELOW THE TOP OF THE FOUNDATION WALL OR THE GRADE OF THE CONCRETE SLAB AT THE INTERIOR IN THE CASE OF AN INTEGRAL SLAB AND FOUNDATION. THE MINIMUM GRADE AWAY FROM THE FOUNDATION SHALL BE TWO PERCENT (2%) IN ALL DIRECTIONS. THE DRIVEWAY SHALL BE SLOPED DOWN AT TWO PERCENT (2%) FOR AT LEAST EIGHT FEET FROM THE STRUCTURE.
- PRIOR TO EARTHMOVING ACTIVITIES, THE CONTRACTOR SHALL PROVIDE EARTHWORK TAKEOFF QUANTITIES/CALCULATIONS WITH THE DEVELOPER AND ENGINEER OF RECORD TO DETERMINE IF THE SITE BALANCES OR IF THEIR IS A DISCREPANCY IN THE DESIGN CALCULATIONS.
- THE CONTRACTOR SHALL REFER TO THE REQUIREMENTS OF OSHA TECHNICAL MANUAL SECTION V, CHAPTER 2-EXCAVATIONS: HAZARD RECOGNITION IN TRENCHING AND SHORING AS WELL AS OSHA CFR 29-1926 SUBPART P-EXCAVATIONS FOR ALL EXCAVATIONS/TRENCHES IN RELATION TO THIS PROJECT.

NOTES:

- PROVIDE A MORTAR BED TO SET THE FIRST MANHOLE SECTION. ROUGH FINISH THE TOP OF THE SLAB IN THIS AREA TO ENSURE A GOOD BOND.
- IF THE TOP SLAB IS PRECAST, PROVIDE A MORTAR BED BETWEEN THE TOP SLAB AND THE WALLS. CAST A 2"x4" KEYWAY IN THE BOTTOM OF THE TOP SLAB AND ROUGH FINISH THE TOP OF THE WALLS. ADEQUATE MORTAR SHALL BE USED TO FULLY FILL THE KEY.
- MANHOLE STEPS TO BEGIN 18" ABOVE THE BENCH AND ONE ADDITIONAL STEP SHALL BE PLACED ON THE SIDE OPPOSITE THE LADDER NEAR THE TOP.
- THE FOUNDATION MATERIAL BELOW THE JUNCTION BOX SHALL BE ADEQUATE TO SUPPORT 2000 PSF OR SHALL BE UNDERCUT TO SUITABLE MATERIAL.
- ALL CONCRETE TO BE CLASS A CONCRETE (fc=4000 PSI @ 28 DAYS).
- DESIGN LOAD: AASHTO HS20-44 WITH 0'-5" OF COVER.
- ALL HORIZONTAL BARS TO BE DEVELOPED AROUND CORNERS WITH 16" LAPS.
- PRECAST BOX SHALL CONFORM TO ASTM C890 AND ASTM C478.

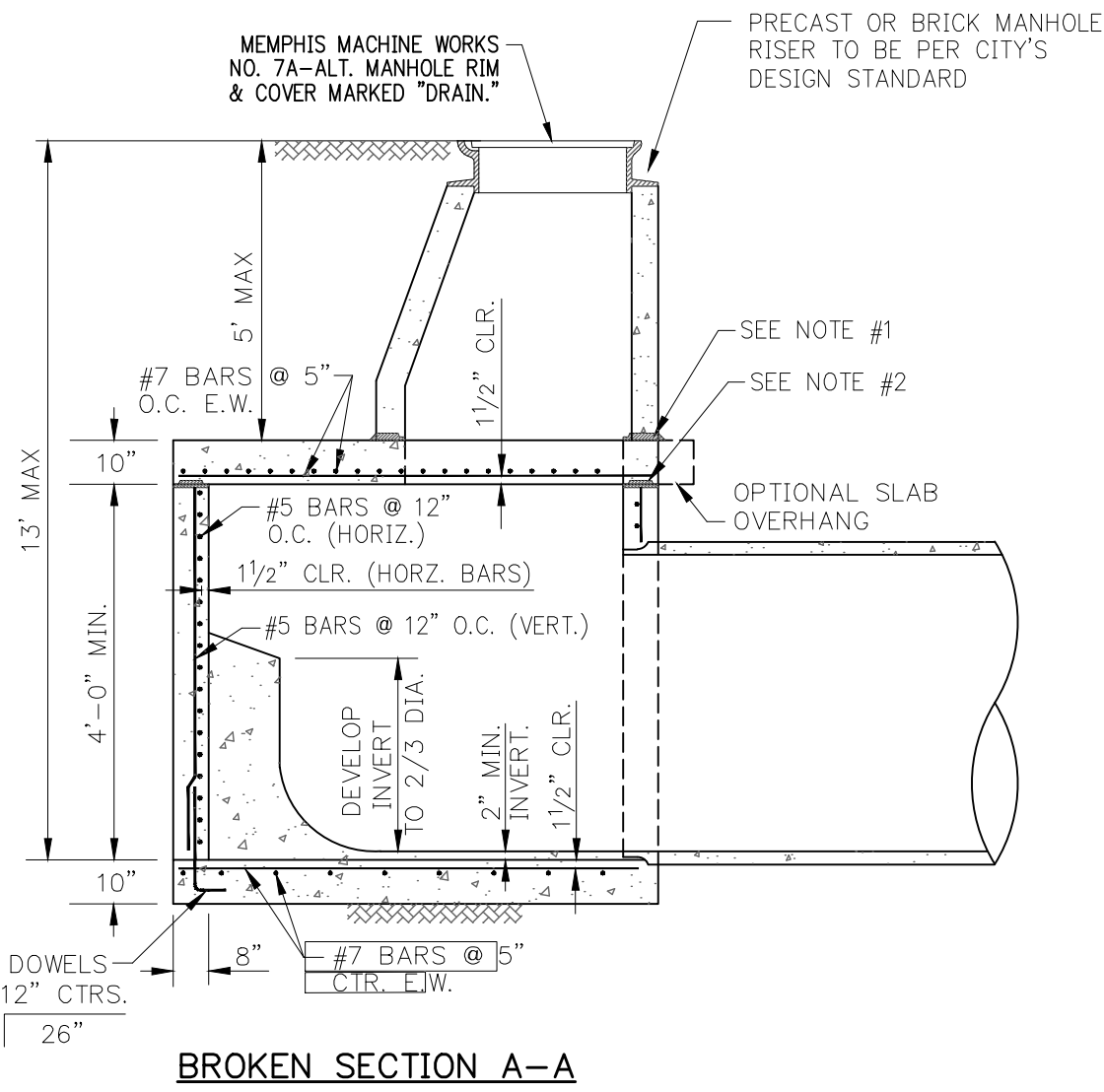


TYP. INVERT PLAN

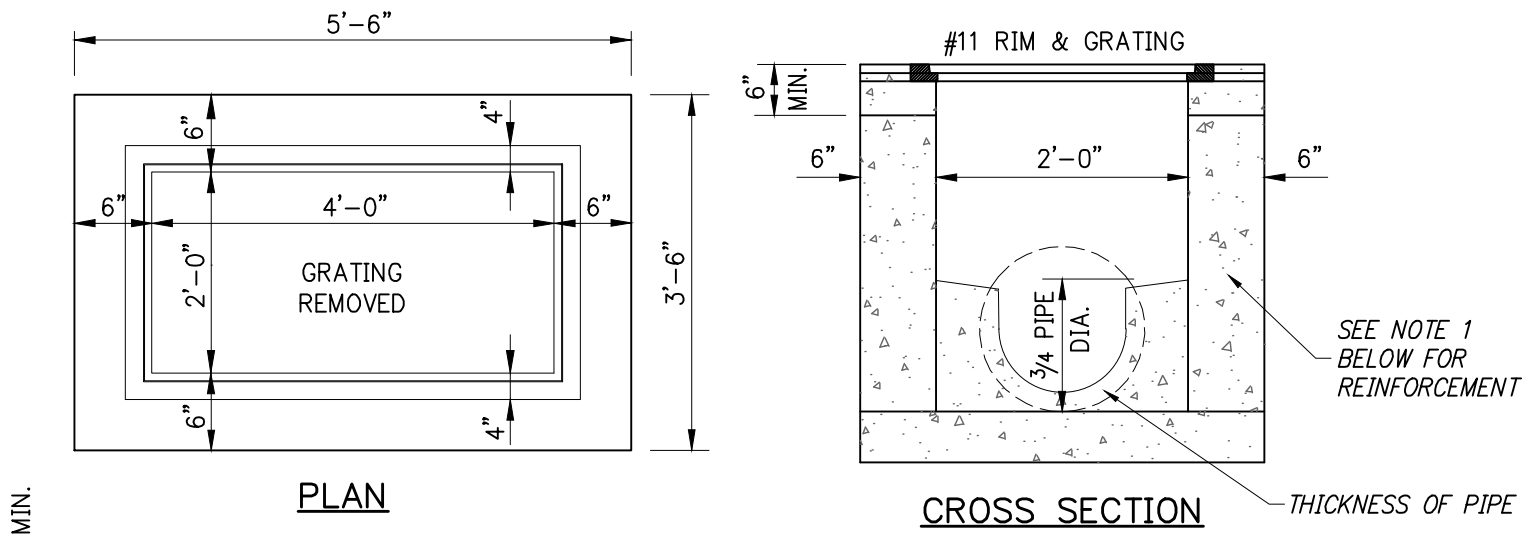


TOP SLAB REINFORCEMENT PLAN

REINFORCED CONCRETE JUNCTION BOX/OCS-D10 (N.T.S.)

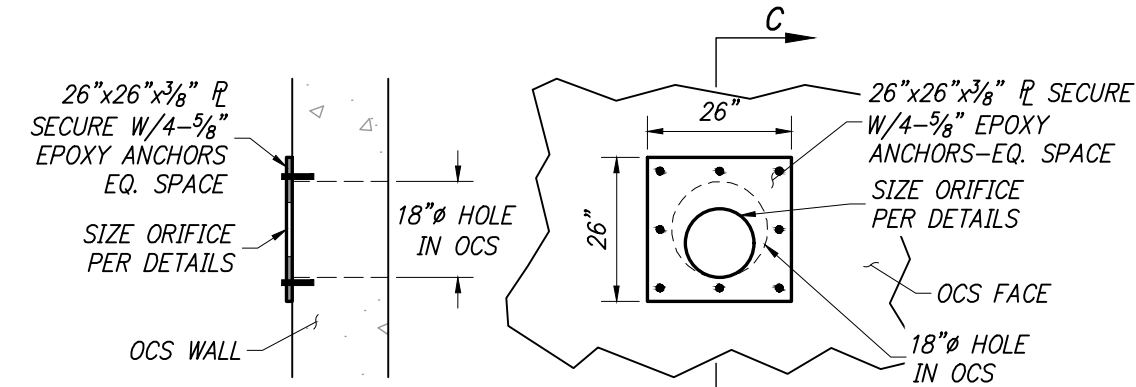


BROKEN SECTION A-A

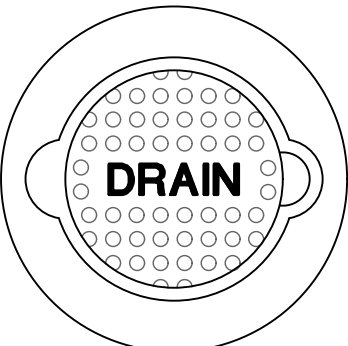


NO. 11 INLET (PRECAST) (NTS)

- NOTES
- WALLS OVER 4' IN HEIGHT SHALL BE REINFORCED WITH #3 BARS @ 16" V&H.
 - PRECAST STRUCTURES SHALL HAVE A WALL THICKNESS CONFORMING TO ASTM C-478/AASHTO M199.
 - CONCRETE TO BE CLASS A; 4000 PSI MINIMUM.
 - PIPES ENTERING AND LEAVING INLET SHALL BE SIZED AND DIRECTED AS SHOWN ON THE GRADING & DRAINAGE PLAN.
 - COMPACT SUBGRADE OF INLET STRUCTURE TO A MIN. OF 95% STANDARD PROCTOR DENSITY (ASTM D-698).

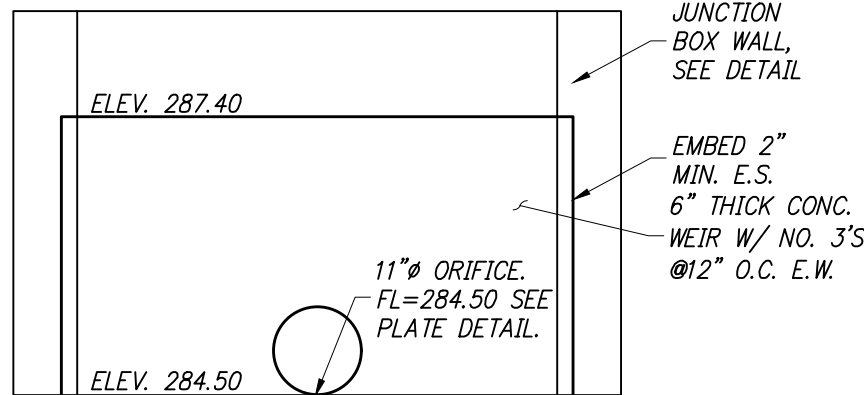


ORIFICE PLATE DETAIL (NTS)

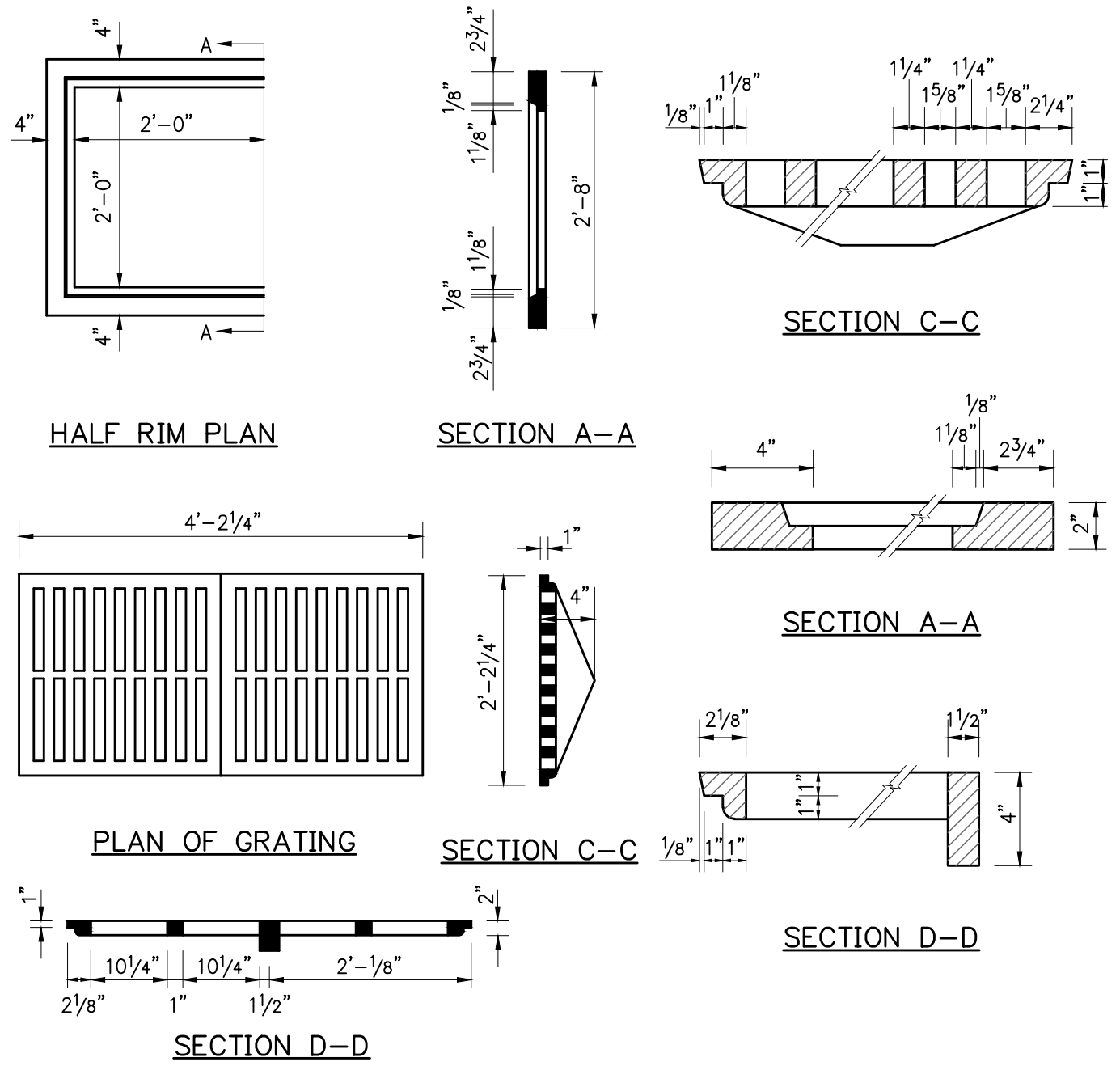


STANDARD #7A RIM AND COVER (NTS)

WEIGHT: COVER 155 lbs.

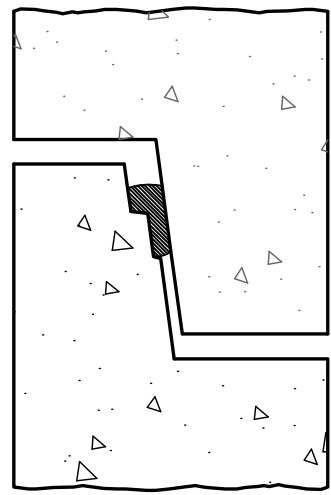


WEIR ELEVATION

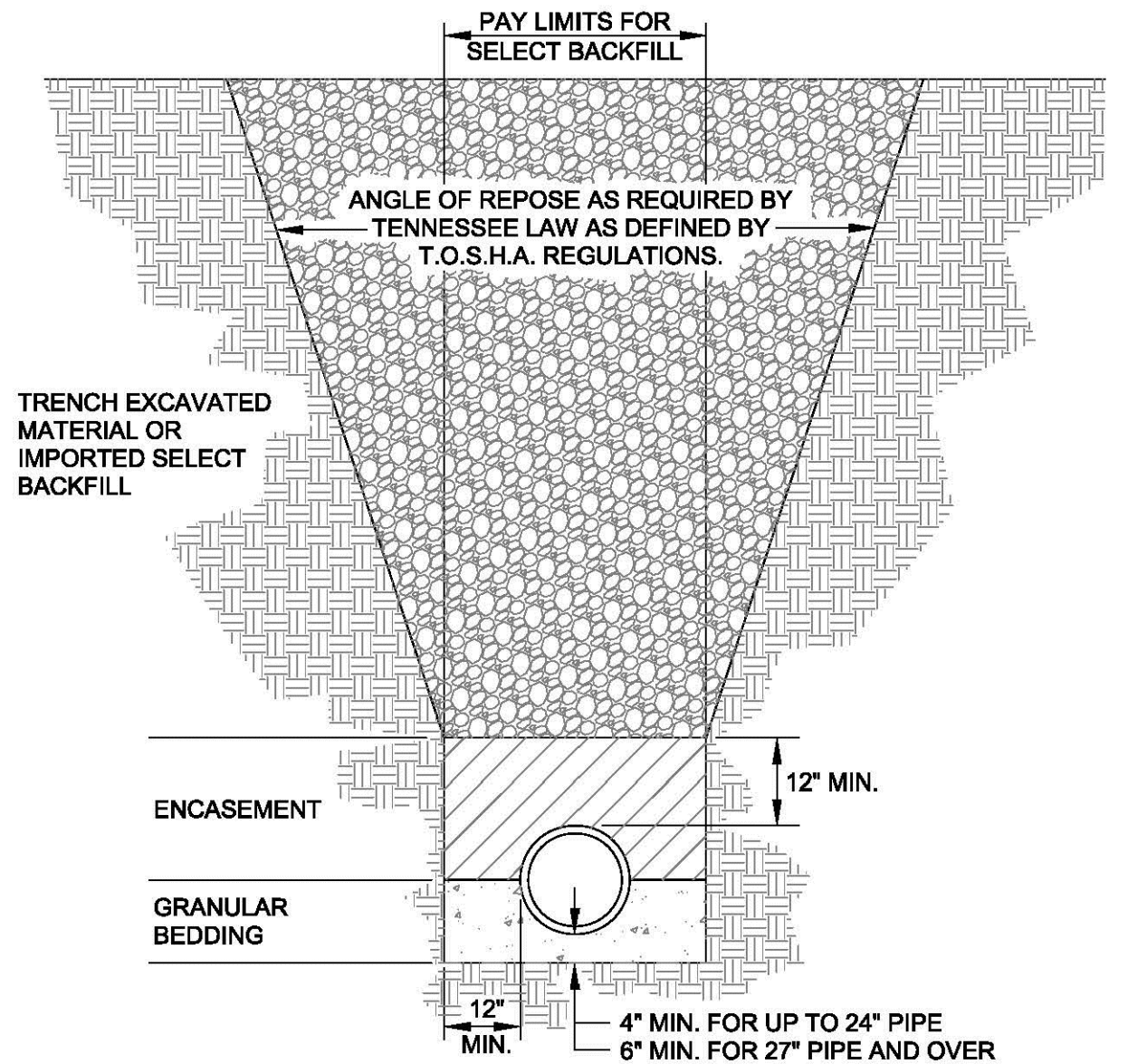


STANDARD #11 RIM AND GRATE (NTS)

- NOTE:
- ALL PRECAST SECTIONS SHALL BE REINFORCED IN ACCORDANCE WITH ASTM C478.
 - WALL THICKNESS TO CONFORM TO ASTM C-478/AASHTO M199 "PRECAST REINFORCED CONCRETE SECTIONS. GASKETS TO CONFORM TO AASHTO M198 "JOINTS FOR CONCRETE SEWER AND CULVERT PIPE USING FLEXIBLE WATERTIGHT GASKETS (TYPE A)

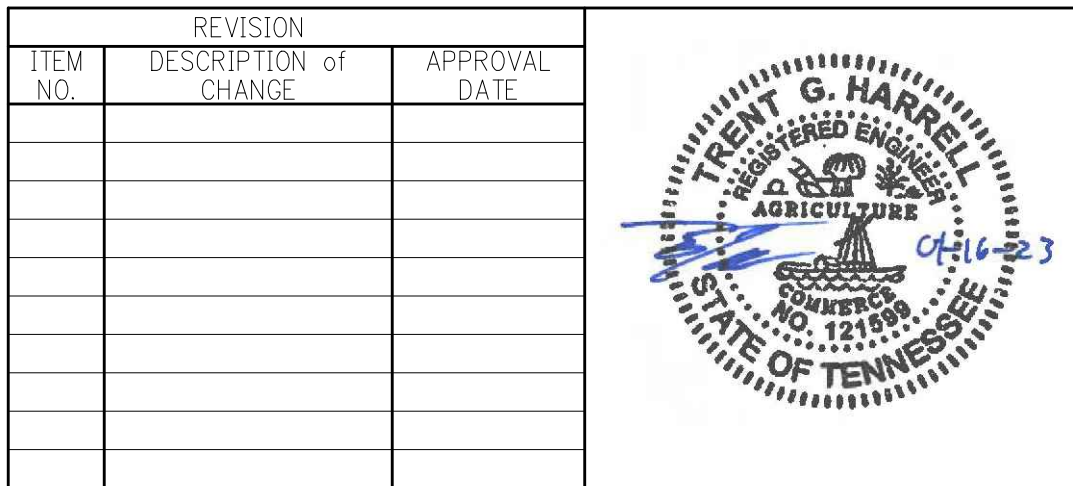


TYPICAL JOINT FOR PRECAST CONCRETE STRUCTURES (NTS)



CLASS B BEDDING NOT TO SCALE

CITY OF LAKELAND ENGINEERING DIVISION		
CLASS B BEDDING		
REV.	DESCRIPTION	DATE
1	ORIGINAL ISSUE	8/2008
2	MIN. DIM./PAY LIMITS	1/2011



REVISION		
ITEM NO.	DESCRIPTION of CHANGE	APPROVAL DATE

DOLLAR GENERAL

DEVELOPER: PEDIGO CONSTRUCTION, LLC
ENGINEER: THE REAVES FIRM, INC.

NOT FOR CONSTRUCTION
FOR CITY REVIEW ONLY

DRAINAGE DETAILS

10410 US HIGHWAY 70
LAKELAND, TENNESSEE

SURVEY	TRF., INC.	DATE	12/22	BOOK	
DESIGN BY	TRF., INC.	DATE	01/23	SCALE	AS SHOWN

CITY ENGINEER _____ DATE _____

C3.2



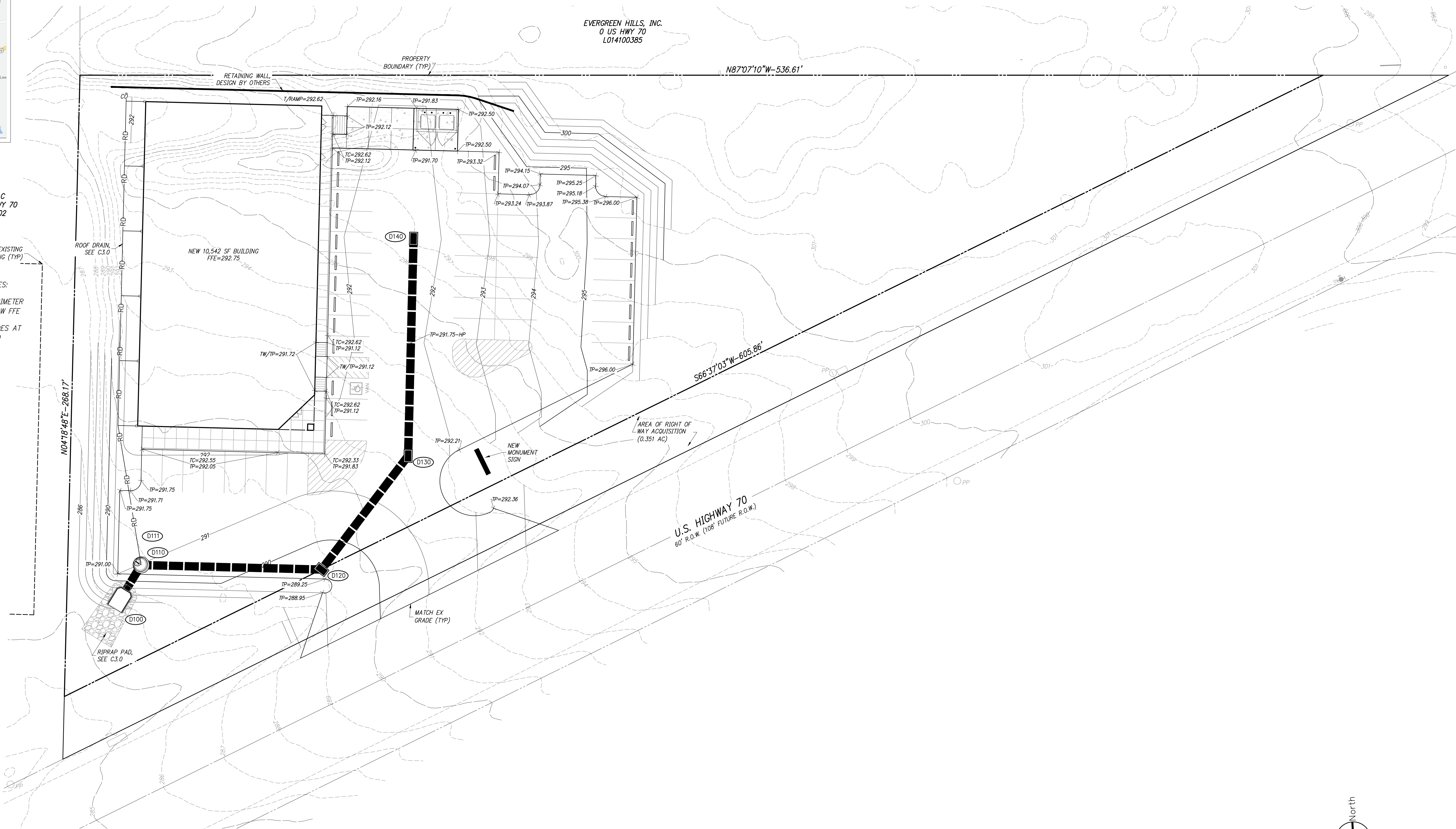
VICINITY MAP
NTS

REYCO LLC
10360 US HWY 70
LO15100002

EXISTING
BUILDING (TYP)

FINISHED FLOOR ELEVATION (FFE) NOTES:

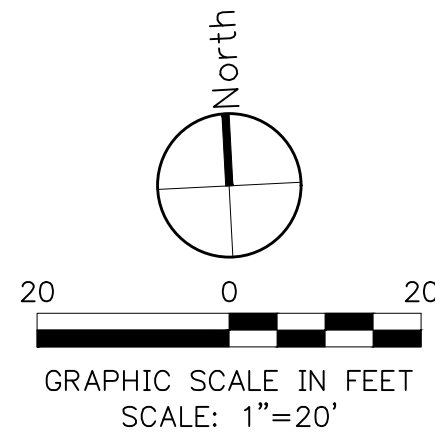
1. FINISHED GRADE AT BUILDING PERIMETER SHALL BE A MINIMUM OF 6" BELOW FFE
2. SEE C3.3 FOR SPOT GRADES
3. SEE ARCH PLANS FOR FINAL GRADES AT BUILDING ENTRIES/PERIMETER AND WITHIN BUILDING FOOTPRINT(S)



N04°18'48"E-2668.17'

N87°07'10"W-536.61'

U.S. HIGHWAY 70
60' R.O.W. (108' FUTURE R.O.W.)



THIS SITE LIES WITHIN THE LS-9 SEWER BASIN
THIS SITE LIES WITHIN THE CLEAR CREEK 8-W DRAINAGE BASIN

REVISION		
ITEM NO.	DESCRIPTION of CHANGE	APPROVAL DATE



NOT FOR CONSTRUCTION
FOR CITY REVIEW ONLY

DIVISION OF ENGINEERING

SPOT PLAN

10410 US HIGHWAY 70
LAKELAND, TENNESSEE

SURVEY BY TRF, INC. DATE 12/22 BOOK
DESIGN BY TRF, INC. DATE 01/23 SCALE 1"=20'
REVIEWED
CITY ENGINEER DATE

C3.3

EVERGREEN HILLS, INC.
0 US HWY 70
LO14100385

PROPERTY
BOUNDARY (TYP)

RETAINING WALL
DESIGN BY OTHERS

NEW 10,542 SF BUILDING
FFE=292.75

TW/TP=291.72

TC=292.62
TP=291.12

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CONTRACTOR TO VERIFY SITE CONDITIONS
AND EXISTING ELEMENTS PRIOR TO
CONSTRUCTION. IF ANY DISCREPANCIES EXIST,
NOTIFY THE ENGINEER OF RECORD PRIOR TO
PROCEEDING WITH DEMOLITION/CONSTRUCTION.

SEE ARCH PLAN FOR BUILDING
LAYOUT AND DIMENSION.
VERIFY DOOR/ENTRY LOCATIONS
AND ELEVATIONS WITH ARCH
PLAN PRIOR TO CONSTRUCTION.

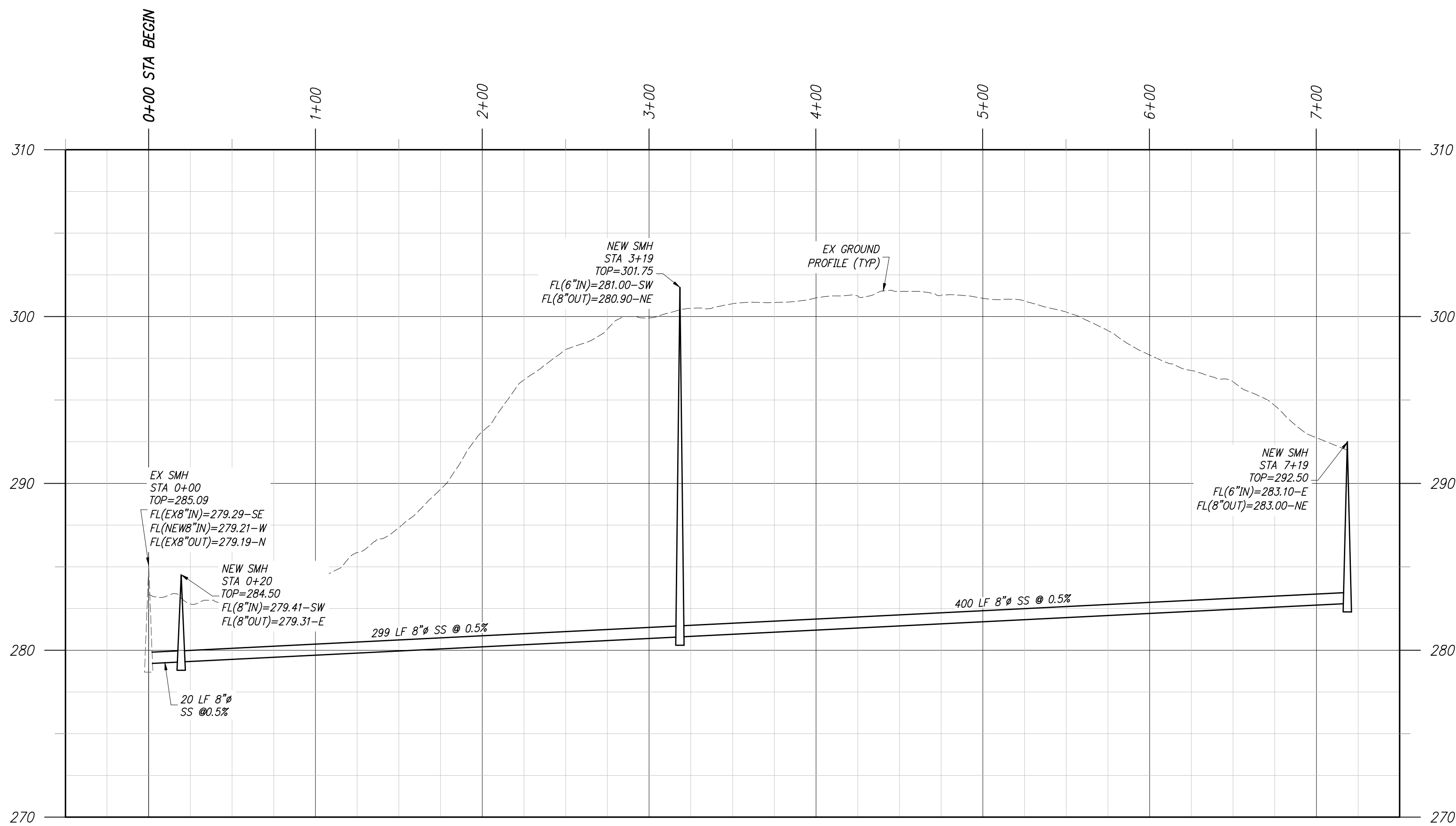
100-YEAR FLOODZONE INFORMATION:
NO PORTION OF THIS PROPERTY LIES WITHIN THE
100-YEAR FLOODPLAIN OR FLOODWAY AS SHOWN
ON FEMA MAP NUMBER 47157C0215G DATED
FEBRUARY 06, 2013 FOR SHELBY COUNTY, TN.
BASE FLOOD ELEVATION=±267.50



DOLLAR GENERAL

DEVELOPER: PEDIGO CONSTRUCTION, LLC
ENGINEER: THE REAVES FIRM, INC.





SCALE: HORIZ. 1"=50'
VERT. 1"=5'

FIELD VERIFY ALL EXISTING
SANITARY SEWER ELEVATIONS TO BE
UTILIZED PRIOR TO CONSTRUCTION

SEE ARCH PLAN FOR BUILDING
LAYOUT AND DIMENSION.
VERIFY DOOR/ENTRY LOCATIONS
AND ELEVATIONS WITH ARCH
PLAN PRIOR TO CONSTRUCTION.



**The
Reaves
Firm** | Engineering
Planning
Landscape Architecture
Land Surveying

6800 Poplar Avenue, Suite 101 Memphis, TN 38138
901.761.2016 Fax: 901.763.2847
www.ReavesFirm.com

[illegible]

SURVEY TRF, INC. DATE 12/22 BOOK _____
DESIGN BY TRF, INC. DATE 01/23 SCALE AS SHOWN
REVIEWED _____

C4.1

DEVELOPER: PEDIGO CONSTRUCTION, LLC
ENGINEER: THE REAVES FIRM, INC.



VICINITY MAP
NTS

REYCO LLC
10360 US HWY 70
L015100002

EXISTING
BUILDING (TYP)

N04°18'48"E-2668.17'

NEW 10,542 SF BUILDING
FFE=292.75

PROVIDE SHUT-OFF VALVES AND
BACKFLOW PREVENTION SYSTEM AS
APPROVED BY ML&W AND THE
TENNESSEE DEPARTMENT OF HEALTH
AT EACH TIE-IN/RISER LOCATION.
VERIFY TIE-IN LOCATION(S) WITH
ARCH PLAN AND MP&E PLANS.

P.O.S.

88 LF 4" C900 FOR
FIRE PROTECTION (FROM
FDC TO BUILDING)
80 LF 1" SCH40 PVC
FOR DOMESTIC (FROM
METER TO BUILDING)
70 LF 6" C900 FOR
FIRE PROTECTION (FROM
BACKFLOW TO BUILDING)

ALL METER AND BACKFLOW
PREVENTOR SYSTEMS SHALL BE
REVIEWED AND APPROVED BY
ML&W PRIOR TO IMPLEMENTATION

PROVIDE METER AND BACKFLOW
ASSEMBLY MEETING THE
CURRENT ML&W REQUIREMENTS
AND PROVIDE ANY ASSOCIATED
APPURTENANCES, ITEMS AND
TAP FEES SHALL BE AT THE
CONTRACTOR'S EXPENSE.

6" 22.5' BEND
22 LF 1" TYPE K
COPPER FOR DOMESTIC
(FROM TAP TO METER)

1" TAP W/
CORPORATION STOP
MUELLER 15000 OR
APPROVED EQUAL

P.I.V.
6" BACKFLOW
PREVENTION ASSEMBLY
F.H.

6" 90° BEND
16 LF 6" DIP
6"x6"x6" TEE

100 LF 6" DIP FOR
FIRE PROTECTION (FROM
TAP TO BACKFLOW)

6" TEE FOR WATER MAIN TAP BY
ML&W AT CONTRACTOR'S EXPENSE
N:361147.4617
E:859234.9309

PROPERTY
BOUNDARY (TYP)

N87°07'10"W-536.61'

EVERGREEN HILLS, INC.
0 US HWY 70
L014100385

NEW PUBLIC
SANITARY SEWER
EASEMENT

S66°37'03"W-605.86'

AREA OF RIGHT OF
WAY ACQUISITION
(0.351 AC)

U.S. HIGHWAY 70
60' R.O.W. (108' FUTURE R.O.W.)

NOTE:
IN ANY CASE WHERE A WATER LINE CROSSES OR
COMES WITHIN THE 10' ENVELOPE OF THE SANITARY
SEWER, THE SANITARY SEWER SHALL BE ENCASED
WITH A 12" THICK CONCRETE COLLAR EXTENDING 10'
IN BOTH DIRECTIONS OF THE CLEARANCE ENVELOPE
ONCE IT CLEARS THE WATER LINE.

NOTE:
"POINT OF SERVICE" IS THAT POINT AFTER WHICH THE
WATER LINE IS SOLELY DEDICATED TO FIRE PROTECTION AND
NEEDS TO BE LAID/INSTALLED BY TENNESSEE LICENSED
SPRINKLER CONTRACTOR. EACH POINT OF SERVICE INDICATES
THE FIRE PROTECTION FEED TO THE BUILDING. PROVIDE
SHUT-OFF VALVES AND BACKFLOW PREVENTORS FOR ALL LINES.
SEE PLUMBING/ARCHITECT PLANS FOR RISER(S), CONNECTION(S)
AND PUMP REQUIREMENTS TO BUILDING.

NOTE:
PROVIDE THRUST BLOCKS FOR ALL BENDS/TEES AND
CONNECTIONS AS SHOWN IN DETAILS. ALL CONNECTIONS,
JOINTS AND APPURTENANCES SHALL BE DUCTILE IRON
PIPE (DIP). SEE ML&W APPROVED PRODUCT LIST AND
WATER NOTES FOR SPECIFICATIONS AND REQUIREMENTS.

NOTE:
PROVIDE WATER METER, METER VAULT AND
ASSOCIATED APPURTENANCES REQUIRED BY THE CITY
OF LAKELAND. METER TO BE FURNISHED BY THE CITY
OF LAKELAND AT THE OWNERS EXPENSE. METER SHALL
BE INSTALLED IN ACCORDANCE WITH THE CITY OF
LAKELAND SPECIFICATIONS. PROVIDE CITY OF
LAKELAND APPROVED BACKFLOW PREVENTION SYSTEM.

NOTE:
UTILITY LAYOUT/DESIGN SUBJECT TO CHANGE BASED
ON FINAL DESIGN FROM MP&E. COORDINATE/VERIFY
TIE-IN LOCATIONS, FLOWLINES, SIZES AND DEMANDS
WITH MP&E PRIOR TO CONSTRUCTION. NOTIFY ENGINEER
OF RECORD IF THERE ARE ANY MAJOR DISCREPANCIES.

PROVIDE SHUT-OFF VALVES AND
BACKFLOW PREVENTORS FOR ALL DOMESTIC
WATER AND FIRE PROTECTION LINES TO
EACH BUILDING. SEE PLUMBING/ARCHITECT
PLANS FOR RISER(S), CONNECTION(S) AND
PUMP REQUIREMENTS TO BUILDING.

SEE DETAILS FOR
PIPE BEDDING

VERIFY ALL TIE-IN LOCATIONS WITH
ARCH PLAN. PROVIDE BACKFLOW
PREVENTORS. SEE MP&E PLANS.

NOTE:
ALL NEW FIRE PROTECTION LINES PAST THE BACKFLOW
PREVENTION/METER SYSTEMS SHALL BE C900 PVC SDR
14 CLASS 305 U.N.O. SEE BACKFLOW/METER DETAIL
FOR D.I.P. LOCATIONS. ALL PIPE AND APPURTENANCES
SHALL MEET ML&W SPECIFICATIONS.

NOTE:
UTILITY LAYOUT/DESIGN SUBJECT TO CHANGE BASED
ON FINAL DESIGN FROM MP&E. COORDINATE/VERIFY
TIE-IN LOCATIONS, FLOWLINES, SIZES AND DEMANDS
WITH MP&E PRIOR TO CONSTRUCTION. NOTIFY ENGINEER
OF RECORD IF THERE ARE ANY MAJOR DISCREPANCIES.



CONTRACTOR TO VERIFY SITE CONDITIONS
AND EXISTING ELEMENTS PRIOR TO
CONSTRUCTION. IF ANY DISCREPANCIES EXIST,
NOTIFY THE ENGINEER OF RECORD PRIOR TO
PROCEEDING WITH DEMOLITION/CONSTRUCTION.

SEE ARCH PLAN FOR BUILDING
LAYOUT AND DIMENSION.
VERIFY DOOR/ENTRY LOCATIONS
AND ELEVATIONS WITH ARCH
PLAN PRIOR TO CONSTRUCTION.

DOMESTIC WATER NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE UTILITY COMPANIES WHICH MAINTAIN ANY UTILITY LINES WITHIN THE BOUNDARIES OF THIS PROJECT OR IN THE STREETS BORDERING THIS PROJECT PRIOR TO THE INITIATION OF ANY CONSTRUCTION ON THIS PROJECT. THE CONTRACTOR SHALL ASSUME THE RESPONSIBILITY FOR ANY DAMAGE TO UTILITY LINES, WHETHER SHOWN ON THE CONSTRUCTION PLANS OR NOT, DURING THE WORK ON THIS PROJECT.
2. EXTERIOR WATER PIPING AND FITTINGS 4" AND SMALLER SHALL BE SCHEDULE 40 PVC WITH SOLVENT WELD JOINTS, INSTALLED PER CITY OF LAKELAND AND SHELBY COUNTY CONSTRUCTION CODE ENFORCEMENT OFFICE REGULATIONS.
3. EXTERIOR WATER PIPING SHALL HAVE A MINIMUM COVER OF 30" OR THE DEPTH OF THE FROSTLINE, WHICHEVER IS GREATER.
4. THE UNDERGROUND WATER AND SEWER LINES SHALL BE NOT LESS THAN 10 FEET APART HORIZONTALLY AND SHALL BE SEPARATED BY UNDISTURBED OR COMPACTED EARTH.
5. THE TESTING PRESSURE FOR WATER PIPING SHALL BE 150% OF NORMAL OPERATING PRESSURE, BUT IN NO CASE BE LESS THAN 100 P.S.I. OR PER THE CITY OF LAKELAND AND SHELBY COUNTY CONSTRUCTION CODE ENFORCEMENT OFFICE REGULATIONS (USE MOST RESTRICTIVE STANDARD).
6. ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO THE LATEST AMERICAN WATER WORKS ASSOCIATION STANDARDS AND THE CITY OF LAKELAND AND SHELBY COUNTY CONSTRUCTION CODE ENFORCEMENT OFFICE REGULATIONS.
7. CONTRACTOR SHALL INSTALL, DISINFECT AND PRESSURE TEST ALL WATER LINES, VALVES AND FITTINGS IN ACCORDANCE WITH ALL STATE AND LOCAL REQUIREMENTS.
8. ALL BENDS, TEES, ETC. SHALL BE INSTALLED WITH A PROTECTIVE THRUST BLOCK IN ACCORDANCE WITH ALL STATE AND LOCAL REQUIREMENTS.
9. THE WATER UTILITY INSTALLER'S CREDENTIALS AND WORKMANSHIP SHALL MEET WITH THE APPROVAL OF THE WATER UTILITY SUPPLIER.
10. METERS, METER BOXES AND FLANGE KIT WILL BE PROVIDED BY ML&W AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL OBTAIN THE REQUIRED PERMITS PRIOR TO INSTALLATION.
11. THE CONTRACTOR INSTALLING THE WATER SYSTEM SHALL BE APPROVED BY ML&W.
12. BENDS MUST MEET UPSTREAM SPACING PER MANUFACTURER'S REQUIREMENTS.
13. ALL DIP SHALL BE TREATED WITH PROTECTO 401 (OR APPROVED EQUIVALENT).

100-YEAR FLOODZONE INFORMATION:

NO PORTION OF THIS PROPERTY LIES WITHIN THE
100-YEAR FLOODPLAIN OR FLOODWAY AS SHOWN
ON FEMA MAP NUMBER 47157C0215G DATED
FEBRUARY 06, 2013 FOR SHELBY COUNTY, TN.
BASE FLOOD ELEVATION=±267.50



The
Reaves
Firm
Engineering
Planning
Landscape Architecture
Land Surveying
6800 Poplar Avenue, Suite 101 Memphis, TN 38138
901.761.2016 Fax: 901.763.2847
www.ReavesFirm.com

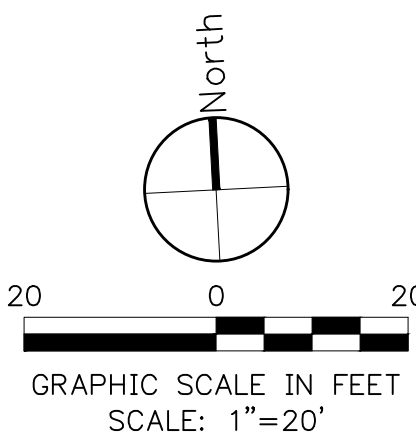
THIS SITE LIES WITHIN THE LS-9 SEWER BASIN
THIS SITE LIES WITHIN THE CLEAR CREEK 8-W DRAINAGE BASIN

REVISION		
ITEM NO.	DESCRIPTION of CHANGE	APPROVAL DATE



DOLLAR GENERAL

DEVELOPER: PEDIGO CONSTRUCTION, LLC
ENGINEER: THE REAVES FIRM, INC.



NOT FOR CONSTRUCTION
FOR CITY REVIEW ONLY

DIVISION OF ENGINEERING
WATER DISTRIBUTION PLAN

10410 US HIGHWAY 70
LAKELAND, TENNESSEE

SURVEY TRF., INC. DATE 12/22 BOOK
DESIGN BY TRF., INC. DATE 01/23 SCALE 1"=20'
REVIEWED

CITY ENGINEER DATE

MATERIAL

A. All material furnished must conform to the following standards and shall be on MLGBW, Water Division's Approved Products List:

Items	Standards	Thickness, or Pressure Class
4"-12" C900 PVC	AWWA C900	4"-12" Class 305 SDR14
4"-30" Ductile Iron Pipe Cement lined with push-on joints	ANSI A21.51	4"-16" Class 350 20" Class 300 24" Class 250 30" Class 200 (as specified for D.I.) within min. wall thickness of 0.25" at any point on pipe.
4"-12" C900 PVC	AWWA C900	4"-12" Class 305 SDR14
4"-30" C.I. or D.I. fittings	ANSI A21.10	6"-12" Class 250 16"-30" Class 150
cement lined with mechanical joint	ANSI A.21.53 AWWA C110	4"-12" Compact Class 350
4"-16" Gate valves with O-ring seals and mechanical joints	AWWA C500	Class 175 Open clockwise
4"-30" Butterfly valves with mechanical joints		Class 150-B Open clockwise

B. The material descriptions above are general and not intended to be all inclusive. No item will be accepted that is not included on the Division's Approved Products List or in accordance with MLGBW Specifications. If any questions of acceptability exist, contact the Division Engineer for clarification.

MLGBW WATER DIVISION'S APPROVED PRODUCTS LIST

A. Pipe, ductile iron cement listed with push-on joints :

U.S. American Griffin McWane

B. Fittings cast iron/ductile iron 4"-12" Class 250, 16"-24" Class 150, compact 4"-12" Class 350

Union Foundry U.S. Pipe Tyler Pipe
Clow American Cast Iron Star Pipe Products
Sigma Corp.

C. Tapping sleeve MJ/W flange connection 6x6-16X12:

U.S. Pipe #9MJ Mueller #H-613x
Tyler 5-149-Cl Mueller #H-615
MBH Valve & Fittings #74M Clow #F5202
American Valve & Hydrant AD-84 Waterous #06C6A
*May only be used on 12" x 6" tap.

D. Butterfly valves 12"-30":

Henry Pratt "Ground Hog" Mueller B-3211-20
American Darling MBH 450 [4"-12"] or
4500 [14"-24"]

E. Gate Valve 4"-10":

Clow F-6100 MBH Style 3067
U.S. Pipe Metrosael Mueller #A-2370-20

F. Retainer glands:

EBBA Iron Uniflange Model & Heavy Duty
Union Foundry Star Pipe Products

G. 6" Fire hydrant MJ inlet 4" bury 3-way (per MLGBW specs):

U.S. Pipe Waterous Co. #WB67
Clow Medallion

x Bronze upper valve plate required.

H. 2" PVC connection to 6" main (standard 933.5B) Bronze stop cock
2" FIP inlet 2" FIP outlet:

Hays Mfg. #4000 For Meter Box Co. #B11-777-R
A.Y. McDonald #6111 James Jones #J-1900
Mueller B20283 Mueller H-1500-L "Oriseal III"

I. Adapter Bronze 2" MIP X 2" compression for PVC:

Ford Meter Box #C87-77

J. PVC 2" SDR21 PVC 1120, Class 200, high impact ends tapered bell (blue in color):

NAPCO Quail

K. Coupling 3/4" CTS to MIP outlet:

Ford Meter Box C84-33X Hay Mfg. Co. #5605-CF
James Jones #J-2605

L. 3/4" copper future use connection standard 944.70 11" F.U. Conn. Std. 944.80)
Corporation cock 3/4" AWWA x CTS or 1" AWWA X CTS:

James Jones Co. #J-3401 Ford Meter Box #F1000
Hays Mfg. Co. #5200-CF A.Y. McDonald #4701-T
Mueller #H-15009

M. Bronze stop cock 3/4" (or 1") CTS inlet 3/4" or (or 1") FIP outlet:

Ford Meter Box Co. #B41-333R- or BM41-333R, 1" #B41-444R or #BM41-444R
Hays 4003-CF Nuseal Curb Valve James Jones #J-1921 L/S
Mueller Oriseal III Mueller 300
A.Y. McDonald 6112-22

N. Corporation cock 3/4" AWWA X 3/4" MIP (1" AEEA X 1-1/4" MIP):

James Jones #J-89 Mueller #H-10003
Hays Mfg. Co. #5240 Ford Meter Box #F-800

O. Coupling 7 bend 3/4" FIP x 3/4" CTS Corp. stop [1-1/4" FIP X 1" CTS]:

Hays Mfg. Co. #5630 CF James Jones #J2621
Ford Meter Box #L14-33, 1-1/4" x 1" #L14-54

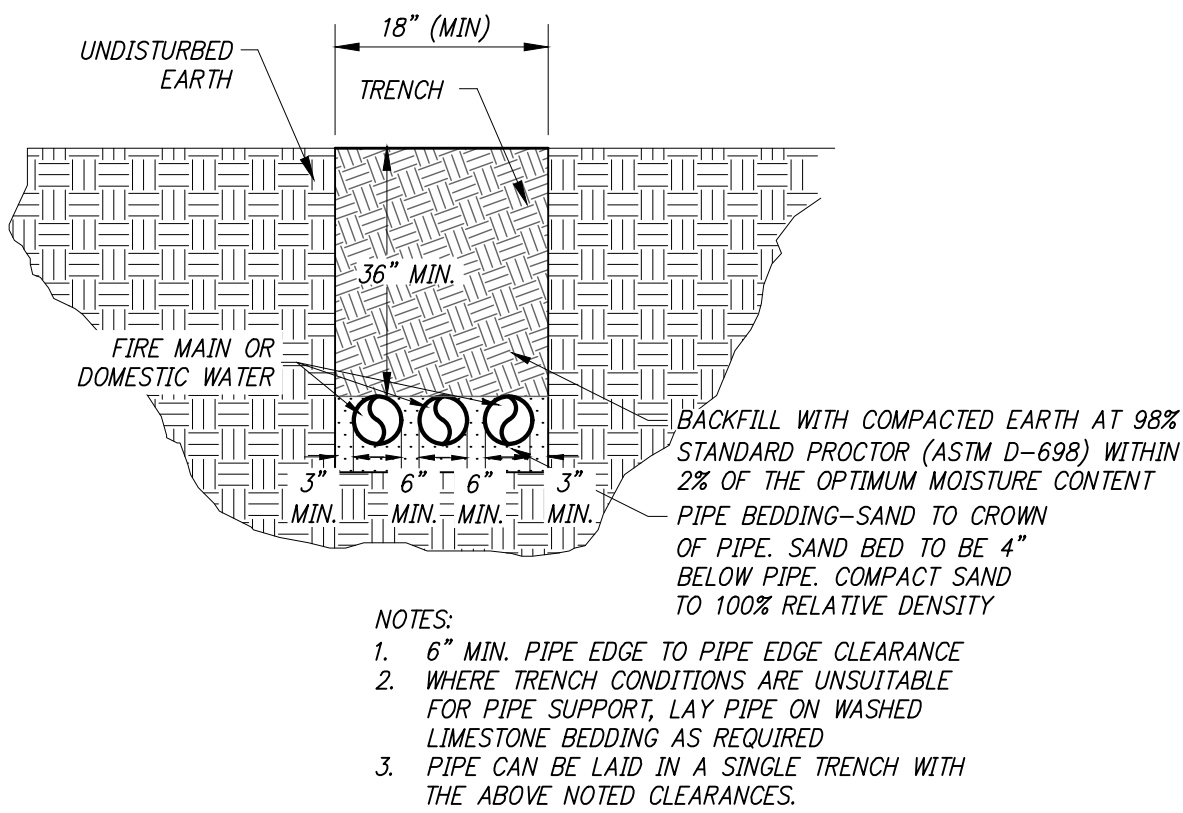
P. Tee, 2" PVC X 3/4" (or 1") CTS compression plastic valve punch saddle:

Continental Ind. #5261-17-2506, 1" #5261-17-2508

Q. Detectable tape, 3" wide:

R. Terra Tape, #1350, with Splice Kit #0570001

NOTE:
UTILITY LAYOUT/DESIGN SUBJECT TO CHANGE BASED
ON FINAL DESIGN FROM MP&E. COORDINATE/VERIFY
TIE-IN LOCATIONS, FLOWLINES, SIZES AND DEMANDS
WITH MP&E PRIOR TO CONSTRUCTION. NOTIFY ENGINEER
OF RECORD IF THERE ARE ANY MAJOR DISCREPANCIES.



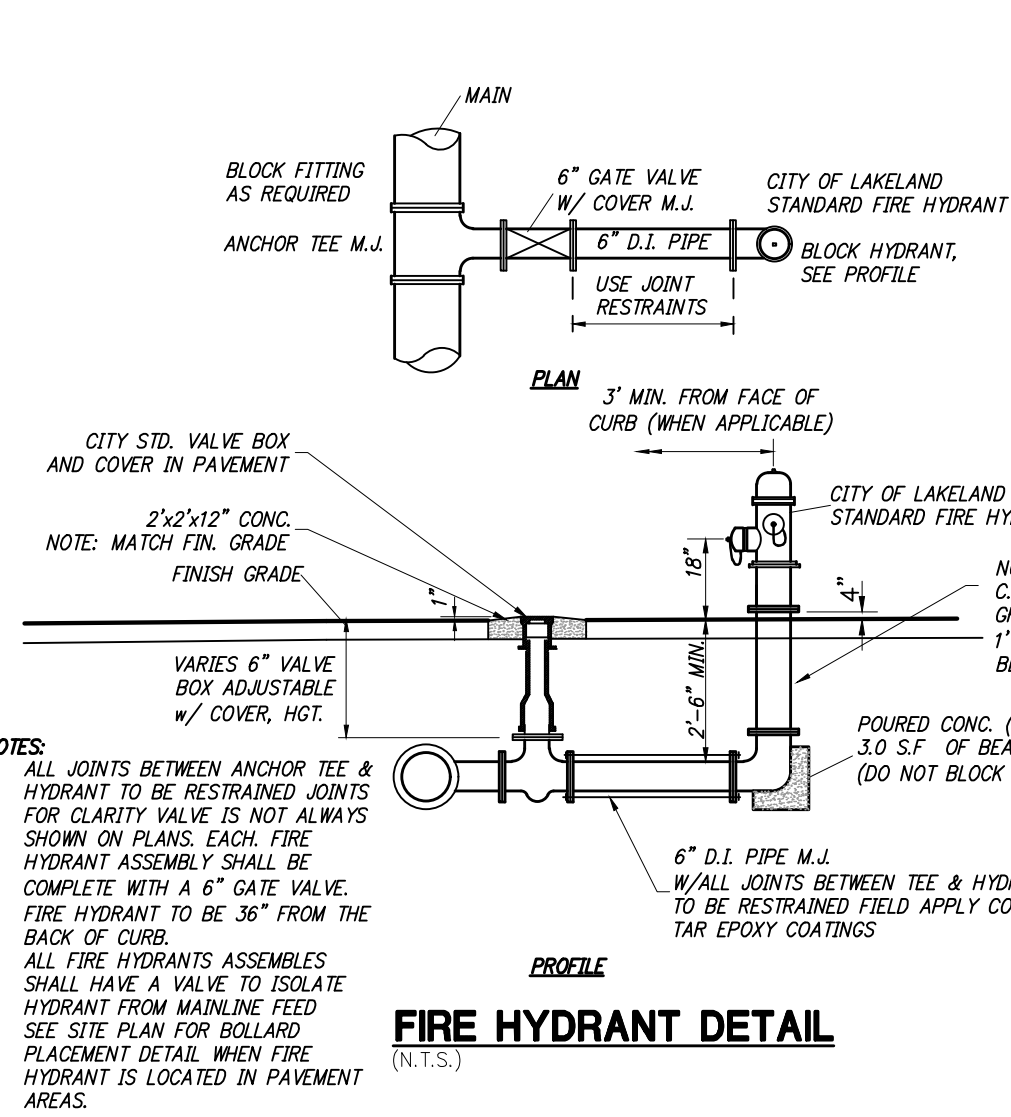
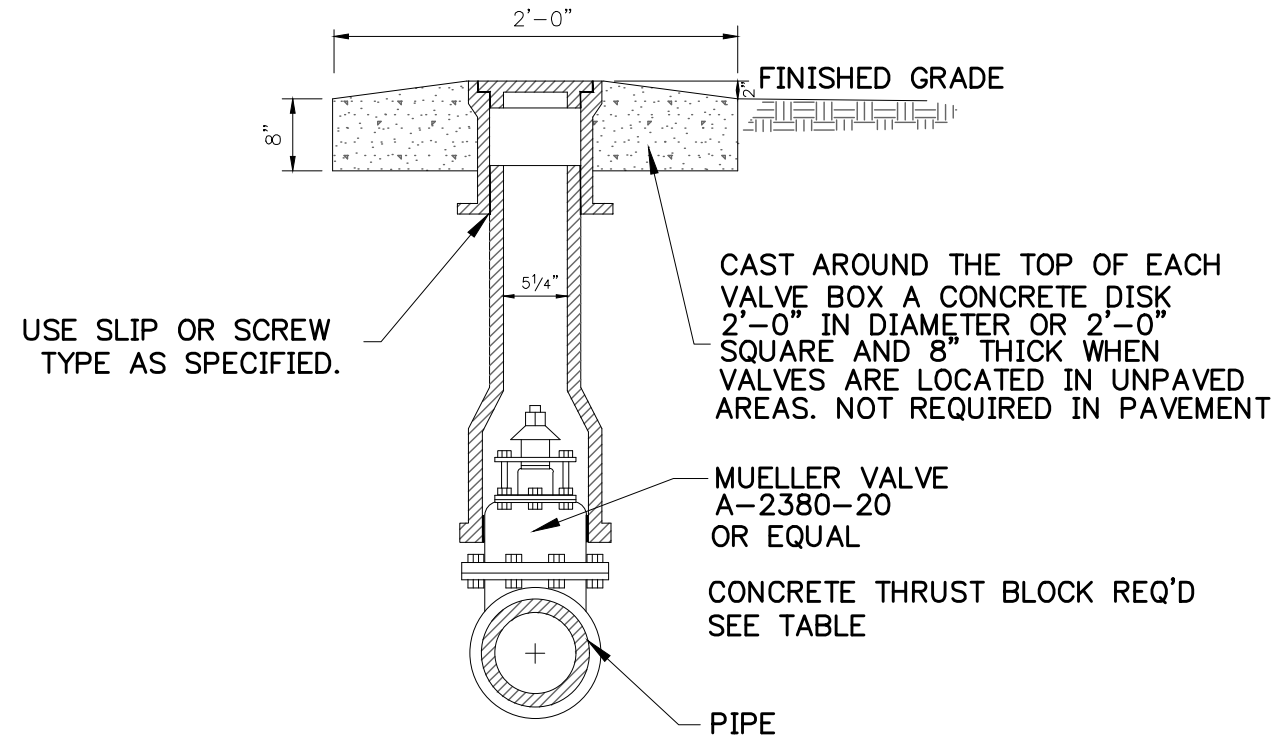
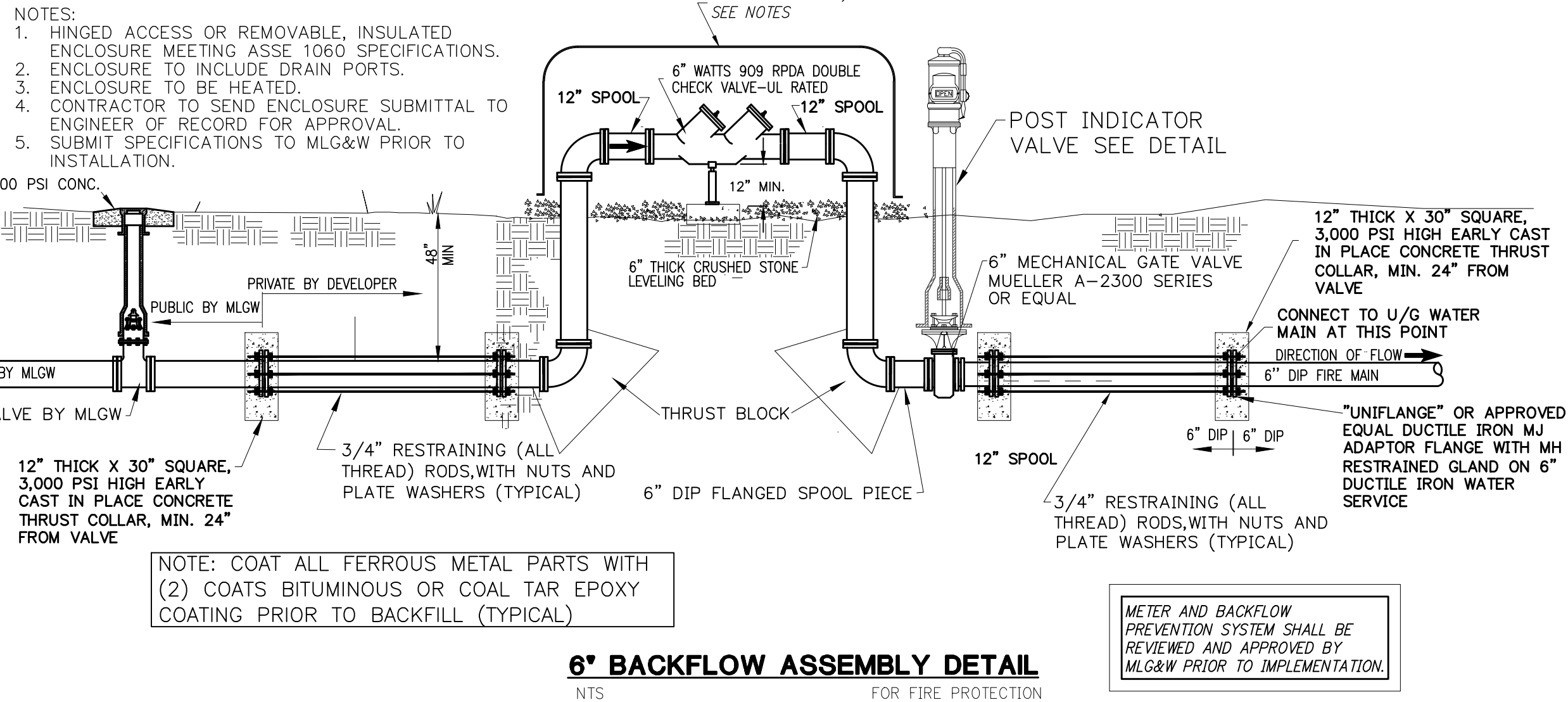
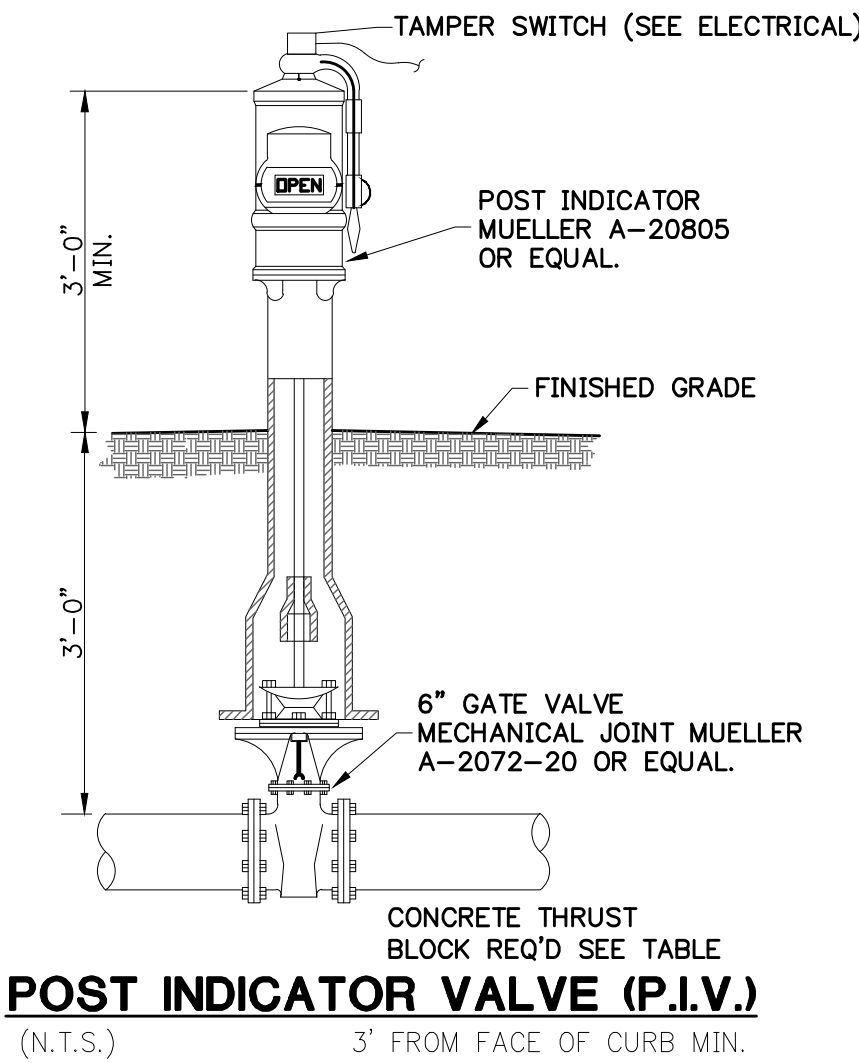
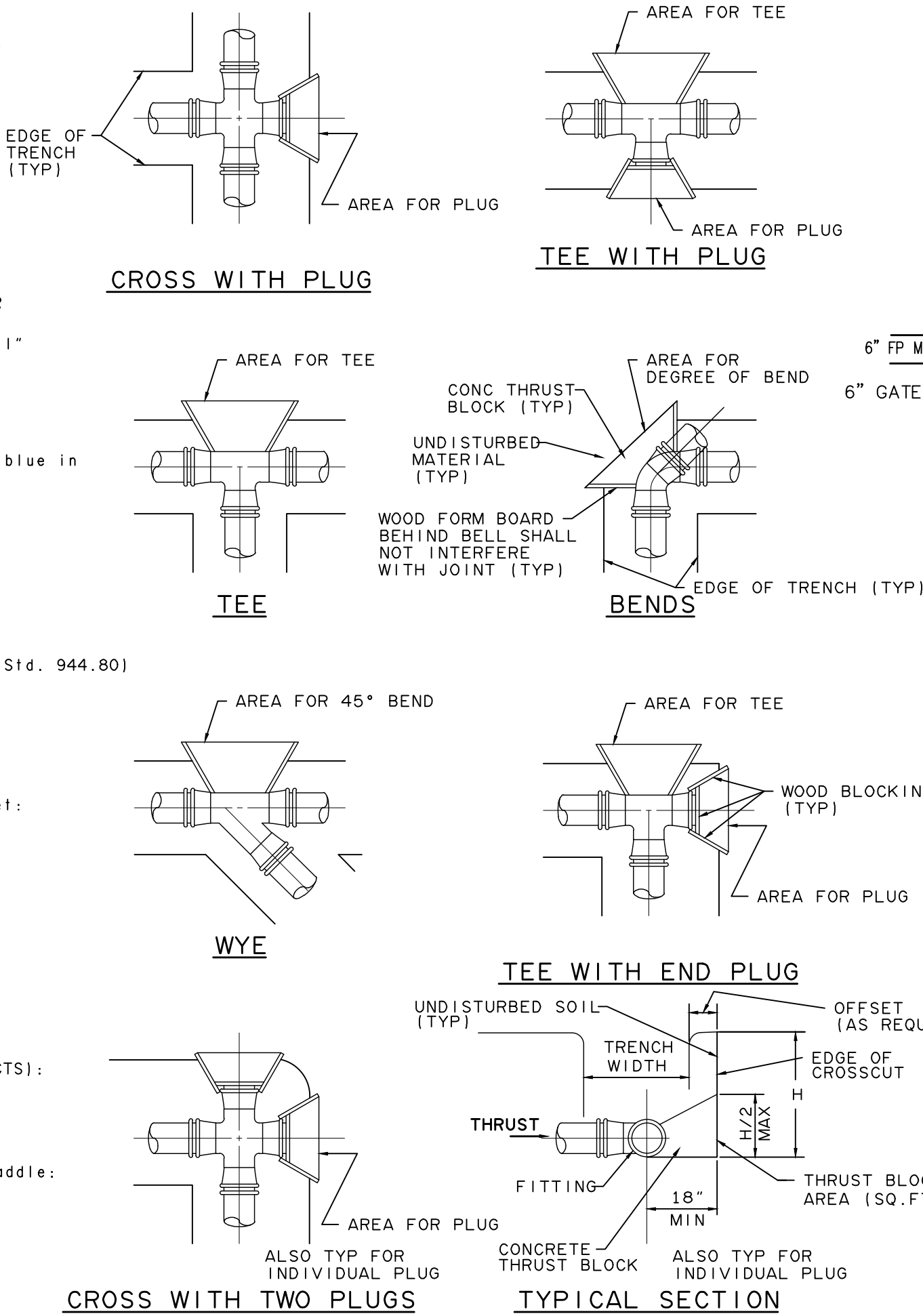
WATER DISTRIBUTION TRENCH BEDDING (N.T.S.)

PIPE SIZE (INCHES)	90° BEND (SQ FT)	45° BEND (SQ FT)	22 1/2° BEND (SQ FT)	11 1/4° BEND (SQ FT)	TEE & PLUG (SQ FT)	DESIGN PRESS (PSI)
4" AND SMALLER	0.5	0.5	0.5	0.5	0.5	100
6"	0.8	0.5	0.5	0.5	1.1	100
8"	1.4	0.8	0.5	0.5	2.0	100
10"	2.2	1.2	0.6	0.5	3.1	100
12"	3.2	1.8	0.9	0.5	4.5	100

NOTE: THRUST BLOCK AREAS COMPUTED ON BASIS OF 2500 POUNDS PER SQ. FT. SOIL RESISTANCE BEARING.

THRUST BLOCK NOTES:

- THRUST BLOCK BEARING AREAS SHALL BE POURED AGAINST UNDISTURBED MATERIAL WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE ALL LOOSE MATERIAL AND EXTEND TO UNDISTURBED MATERIAL.
- EXTEND THRUST BLOCK FULL LENGTH OF FITTINGS. PUT BOARD IN FRONT OF PLUG BEFORE POURING CONCRETE. JOINTS SHALL NOT BE COVERED BY THRUST BLOCK.
- ROUGH BLOCKING FORMS SHALL BE USED ALONG SIDES OF THRUST BLOCKS. THRUST BLOCKS SHALL BE USED IN COMBINATION, AS REQUIRED, TO SUIT THE SPECIFIC FITTING ARRANGEMENT.
- ALL CONCRETE SHALL ATTAIN A COMPRESSIVE STRENGTH OF 2,500 PSI (MIN.).



WATER NOTES

- CONTRACTOR INSTALLING PROVIDING AND INSTALLING THE WATER DISTRIBUTION FROM THE WATER MAIN TO THE POINT OF SERVICE SHALL BE LICENSED BY THE STATE OF TENNESSEE, WITH MUNICIPAL UTILITY (MU) CLASSIFICATION, AND BE APPROVED BY ML&W FOR THE INSTALLATION OF WATER SYSTEMS. FIRE PROTECTION SYSTEMS SHALL BE LICENSED BY THE STATE OF TENNESSEE FOR THE INSTALLATION OF FIRE PROTECTION SYSTEM.
- ALL METHODS AND MATERIALS USED SHALL CONFORM WITH THE STANDARD SPECIFICATIONS OF THE CITY OF LAKELAND, SHELBY COUNTY BUILDING CODES & THE STATE OF TENNESSEE REQUIREMENTS.
- ALL NEW WATER LINES MUST BE DESIGNED AND TESTED FOR BACTERIAL CONTAMINATION PER CITY OF LAKELAND STANDARDS. THE CITY WILL COLLECT THE SAMPLE, DELIVER IT TO THE TESTING LABORATORY, AND PAY FOR THE TEST. REPORT FINDING TO THE CIVIL ENGINEER OF RECORD AND ARCHITECT.
- AFTER PASSING THE BACTERIA TEST, THE NEW WATER LINES (MAINS, SERVICES AND FIRE HYDRANTS) SHALL BE PRESSURE-TESTED AT 200 PSI FOR TWO HOURS DURING WHICH TIME THE LEAKAGE SHALL NOT EXCEED THAT PERMITTED BY AWWA SPECIFICATION C600-77 FOR MECHANICAL JOINT AND PUSH-ON JOINT PIPE. OBTAIN A COPY OF AWWA SPECIFICATION C600-77, AND KEEP IT ON THE JOB IN GOOD CONDITION FOR USE IN COMPUTING THE PERMISSIBLE LEAKAGE IN EACH SECTION TO BE TESTED.
- THERE SHALL BE A MINIMUM 10-FOOT HORIZONTAL SEPARATION BETWEEN WATER SERVICE LINES AND SEWER SERVICE LINES. THERE SHALL BE A MINIMUM OF 3-FOOT SEPARATION BETWEEN FIRE PROTECTION LINES AND DOMESTIC WATER LINES. IT IS PERMISSIBLE TO LOCATE THESE LINES IN THE SAME TRENCH.
- FITTINGS FOR DUCTILE IRON PIPE SHALL BE AWWA SPECIFICATION C II O CAST IRON OR DUCTILE IRON SHORT BODY PATTERN, CLASS 250, BITUMINOUS COATED INSIDE AND OUTSIDE, WITH ENDS AS REQUIRED FOR THE TYPES OF JOINTS SPECIFIED ABOVE FOR THE VARIOUS PIPE LOCATIONS AND SERVICES.
- TEES FOR CONNECTING FIRE HYDRANTS TO MAINS SHALL BE MECHANICAL JOINT, ANCHORING TYPE, EACH WITH A 6" SPIGOT OUTLET AND A LOCKED-ON ROTATING MECHANICAL JOINT GLAND RING.
- ALL JOINTS WITHIN BORED CASING PIPES SHALL BE INSTALLED WITH "FIELD LOCK" JOINT GASKETS APPROVED BY THE CITY. GATE VALVES MUST OPEN COUNTER-CLOCKWISE AND CONFORM TO AWWA SPECIFICATION C505 WITH MANUFACTURER APPROVED BY ML&W.
- VALVE BOXES SHALL BE STANDARD CAST IRON TWO-PIECE 5-1/3" INSIDE SHAFT DIAMETER SCREW-ADJUSTABLE TYPE, EACH CONSISTING OF A COVER MARKED "WATER", AN UPPER TELESCOPING SECTION AND A LOWER SECTION. WHERE NECESSARY TO PROVIDE EXTRA DEPTH, PROVIDE CAST IRON EXTENSION PIECES AS REQUIRED.
- FIRE HYDRANTS SHALL BE MUELLER IMPROVED, "M" & "H" TRAFFIC TYPE, -STYLE 12 WATEROUS, CLOW OR U.S. PIPE CONFORMING TO AWWA SPECIFICATION C502 OR AS APPROVED BY ML&W AND THE DEPARTMENT.
- FIRE HYDRANTS SHALL BE OF THE LUBRICATED DRY TOP BREAK-AWAY TRAFFIC-TYPE, EACH COMPLETE WITH "5" VALVE OPENING; 6" AWWA SPECIFICATION CIII MECHANICAL JOINT INLET CONNECTION; 3 FOOT BURY (SEE DETAIL DRAWING); UNLESS OTHERWISE INDICATED; TWO 2-11/2" NATIONAL STANDARD FIRE HOSE THREAD NOZZLES; ONE 4" CITY OF LAKELAND, TN STANDARD PUMPER CONNECTION NOZZLE WITH 15/16" SQUARE CROSS SECTION 1-1/8" HIGH OPERATING NUT AND CLOCKWISE DIRECTION OF OPENING. PLACE HYDRANTS SO THAT THE HOSE NOZZLE CAP LUG ALIGNS WITH THE BACK OF CURB.
- WEDGE TYPE RETAINER GLANDS: THESE SHALL BE "MEGALUG" AS MANUFACTURED BY EBAA IRON, INC., EASTLAND, TEXAS, OR AS APPROVED, CONSISTING OF A SPECIFICALLY DESIGNED DUCTILE IRON MECHANICAL JOINT FOLLOWER GLAND WITH MULTIPLE WEDGING ACTION RESTRAINING MECHANISMS WITH A MINIMUM WORKING PRESSURE OF 250 PSI. GLAND SHALL BE SUITABLE FOR USE WITH A STANDARD MECHANICAL JOINT BELL AND TEE-HEAD BOLTS CONFORMING TO ANSI/AWWA A21.11. TWIST OFF NUTS SHALL BE USED TO INDICATE PROPER TORQUE OF THE RESTRAINING WEDGES. GLANDS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS WRITTEN INSTRUCTIONS AND DIRECTIONS. THIS TYPE OF ANCHORAGE MAY BE USED AT ANY LOCATION INSTEAD OF CONCRETE ANCHORAGE SUBJECT TO CITY APPROVAL, AND SHALL BE USED WHERE CONCRETE ANCHORAGE IS NOT PRACTICABLE.
- TRENCH BACKFILL: UNDER AREAS PROPOSED TO BE PAVED, EXCEPT FOR SAND BACKFILL, COMPACT FILL MATERIAL AROUND THE HAUNCHES OF THE PIPE. FILL THE TRENCHES FROM 6" ABOVE PIPE TOPS IN 8" MAXIMUM THICKNESS LOOSE LAYERS UP TO PAVING SUBGRADE. COMPACT EACH BACKFILL LAYER USING PNEUMATIC OR OTHER APPROVED MECHANICAL TAMPERS UNTIL THE BACKFILL IS COMPACTED TO 98% OF THE MATERIALS MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR COMPACTION TEST (ASTM D698). THE MATERIAL'S MOISTURE CONTENT WILL BE MAINTAINED TO WITHIN 2% OF ITS OPTIMUM MOISTURE. AT THE END OF EACH DAY'S WORK, DO NOT LEAVE MORE THAN 200 FEET OF TRENCH WITHOUT COMPACTED BACKFILL, UNLESS OTHERWISE APPROVED BY THE CITY OF LAKELAND. PUDDLING, JETTING OR WATER SETTLING WILL NOT BE PERMITTED.
- AFTER COMPLETION OF ALL WATER LINE WORK AND BEFORE THE WORK WILL BE ACCEPTED, MAKE A FINAL CHECK OF EACH VALVE INSTALLED AND HYDRANT INSTALLED OR RELOCATED, AND OF EACH EXISTING VALVE THAT HAS BEEN OPERATED IN CONNECTION WITH THE WORK UNDER THIS PROJECT. MAKE THIS FINAL VALVE CHECK IN THE PRESENCE OF THE CITY INSPECTOR. DEMONSTRATE THAT EACH VALVE IS IN FULLY OPEN POSITION AND THAT EACH FIRE HYDRANT OPERATES PROPERLY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE UTILITY COMPANIES WHICH MAINTAIN ANY UTILITY LINES WITHIN THE BOUNDARIES OF THIS PROJECT OR IN THE STREETS BORDERING THIS PROJECT PRIOR TO THE INITIATION OF ANY CONSTRUCTION ON THIS PROJECT. THE CONTRACTOR SHALL ALSO ASSUME THE RESPONSIBILITY FOR ANY DAMAGE TO UTILITY LINES, WHETHER SHOWN ON THE CONSTRUCTION PLANS OR NOT, DURING THE WORK ON THIS PROJECT.
- FOR UNDERGROUND UTILITY LOCATIONS CALL 1-800-351-1111.
- SEE ML&W APPROVED PRODUCT LIST FOR PRESSURE RATING AND CLASS REQUIREMENTS FOR ALL PIPES AND APPURTENANCES.
- SEE BEDDING DETAILS FOR MINIMUM PIPE DEPTHS.
- THE UNDERGROUND WATER AND SEWER LINES SHALL BE NOT LESS THAN 10 FEET APART HORIZONTALLY AND SHALL BE SEPARATED BY UNDISTURBED OR COMPACTED EARTH.
- THE TESTING PRESSURE FOR WATER PIPING SHALL BE 150% OF NORMAL OPERATING PRESSURE, BUT IN NO CASE BE LESS THAN 100 P.S.I. OR PER THE LAKELAND & SHELBY COUNTY CONSTRUCTION CODE ENFORCEMENT OFFICE REGULATIONS (USE MOST RESTRICTIVE STANDARD).
- ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO THE LATEST AMERICAN WATER WORKS ASSOCIATION STANDARDS AND THE LAKELAND AND SHELBY COUNTY CONSTRUCTION CODE ENFORCEMENT OFFICE REGULATIONS AND ML&W.
- ALL BENDS, TEES, ETC. SHALL BE INSTALLED WITH A PROTECTIVE THRUST BLOCK IN ACCORDANCE WITH ALL STATE AND LOCAL REQUIREMENTS.
- THE WATER UTILITY INSTALLER'S CREDENTIALS AND WORKMANSHIP SHALL MEET WITH THE APPROVAL OF THE WATER UTILITY SUPPLIER.
- WATER MAIN TAPS, METERS, METER BOXES AND ALL APPURTENANCES ASSOCIATED WITH METER(S) AND TAP (SEE DETAILS) SHALL BE PROVIDED AND INSTALLED BY ML&W (AS REQUIRED) AT THE CONTRACTORS EXPENSE.
- ALL DIP SHALL BE TREATED WITH PROTECTO 401 (OR APPROVED EQUIVALENT).
- WATER MAIN TO ENTER/EXIT THROUGH FIRE RISER ROOM. SEE PLUMBING PLANS FOR RISERS AND BOOSTER PUMPS AT BUILDING. PROVIDE AND SIZE BYPASS CHECK VALVE(S) AND BFP(S) PER PLUMBING PLANS. PUMP/VALVES AND ALL COMPONENTS TO MEET LOCAL AND STATE REQUIREMENTS.
- IN ANY CASE WHERE A WATER LINE CROSSES OR COMES WITHIN THE 10' ENVELOPE OF THE SANITARY SEWER, THE SANITARY SEWER SHALL BE ENCASED WITH A 12" THICK CONCRETE COLLAR EXTENDING 5' IN BOTH DIRECTIONS OF THE 10' CLEARANCE ENVELOPE ONCE IT CLEARS THE WATER LINE.
- WATER VALVE (WV) SYMBOL IN PLAN IS SCHEMATIC. PLACE WATER VALVE IN PAVEMENT WHENEVER POSSIBLE. ALL VALVES SHALL BE DUCTILE IRON.
- PIPE LAYOUT IN PLAN IS SCHEMATIC. PIPE LENGTHS AND JUNCTION LOCATION MAY VARY.
- VERIFY WITH ME&P ENGINEER FOR ALL PIPE LOCATIONS (VERTICAL AND HORIZONTAL), SIZES AND MATERIALS. VERIFY DEMANDS AND WATER LINE AND METER SIZING WITH ME&P ENGINEER.
- VERIFY LOCATIONS OF THE FIRE DEPARTMENT CONNECTION (FDC), POST INDICATOR VALVE (PIV) AND FIRE HYDRANT (FH) WITH THE FIRE PROTECTION CONTRACTOR.
- SEE ARCH PLAN/ME&P PLANS FOR DOMESTIC WATER LINE TIE IN LOCATION. PROVIDE BACKFLOW PREVENTOR.
- ALL EXISTING WATER LINES SHOWN TO BE UTILIZED SHALL BE FIELD VERIFIED AND TESTED IN ACCORDANCE WITH CITY OF LAKELAND STANDARDS AND SPECIFICATIONS AS WELL AS ML&W. TESTING SHALL BE PERFORMED PRIOR TO CONSTRUCTION. IF THE EXISTING WATER LINES DO NOT MEET THE REQUIREMENTS OF THE CITY OF LAKELAND AND ML&W, THE EXISTING LINE SHALL EITHER BE REPAIRED OR REPLACED AT THE OWNERS EXPENSE AND DISCRETION. VERIFY WITH THE ENGINEER OF RECORD PRIOR TO ANY CHANGES FROM THE PROPOSED PLAN.
- ALL BENDS, TEES, WYES, CROSSES, CONNECTIONS, VALVES, JOINTS ETC. TO BE DUCTILE IRON. PROVIDE THRUST BLOCKS FOR HORIZONTAL AND VERTICAL CHANGES AS SHOWN IN DETAILS.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR MUST PROVIDE AND PAY FOR A FLOW TEST FOR THE EXISTING PIPE SYSTEM BY A LICENSED FLOW TEST CONTRACTOR. RESULTS MUST BE PRESENTED TO THE OWNER, THE ENGINEER OF RECORD AND THE ARCHITECT. RESULTS MUST BE VERIFIED BY THE ARCHITECT TO DETERMINE IF FLOWS AND PRESSURES PROVIDED BY THE EXISTING FIRE PROTECTION SYSTEM ARE ADEQUATE FOR THE THIS PROPOSED DEVELOPMENT AND THAT FLOW DEMANDS FOR LOCAL AND FEDERAL CODES ARE MET.
- EXISTING WATER LINE LOCATIONS ARE APPROXIMATE. NOTIFY THE OWNER, ENGINEER OF RECORD AND ARCHITECT IF ANY MAJOR DISCREPANCIES ARE FOUND WITH THE LOCATION AND SIZE OF THE EXISTING WATER LINE. CALL 811 FOR LOCATIONS PRIOR TO CONSTRUCTION.
- VERIFY ALL WATER LINE SIZES AND TIE-IN LOCATIONS WITH ARCHITECT AND MP&E PLANS. WATER SERVICE LINES ARE TO EXTEND TO WITHIN 5' OF THE BUILDING AND SHALL BE MARKED AND CAPPED.
- PUMPS MAY BE REQUIRED FOR DOMESTIC AND FIRE FLOWS FOR ALL BUILDING TIE-IN LOCATIONS. SEE ARCH PLANS AND MP&E PLANS FOR SPECIFICATIONS AND REQUIREMENTS.



NOT FOR CONSTRUCTION
FOR CITY REVIEW ONLY

C4.4

DIVISION OF ENGINEERING
WATER DISTRIBUTION DETAILS
10410 US HIGHWAY 70
LAKELAND, TENNESSEE

SURVEY TRF, INC. DATE 12/22 BOOK
DESIGN BY TRF, INC. DATE 01/23 SCALE AS SHOWN
REVIEWED

CITY ENGINEER DATE

DOLLAR GENERAL

DEVELOPER: PEDIGO CONSTRUCTION, LLC
ENGINEER: THE REAVES FIRM, INC.

The Reaves Firm
Engineering
Planning
Landscape Architecture
Land Surveying
6800 Poplar Avenue, Suite 101 Memphis, TN 38138
901.761.2016 Fax: 901.763.2947
www.ReavesFirm.com



VICINITY MAP
NTS

REYCO LLC
10360 US HWY 70
L015100002

EXISTING
BUILDING (TYP)

N04°18'48"E-268.17'

NEW 10,542 SF BUILDING
FFE=292.75

PROPERTY
BOUNDARY (TYP)

EVERGREEN HILLS, INC.
0 US HWY 70
L014100385

N87°07'10"W-536.61'

SEE OFFSTREET
PLAN AND PROFILE
FOR CONTINUATION,
SHEET C4.1

NEW PUBLIC
SANITARY SEWER
EASEMENT

NEW SMH

SEE DETAILS FOR
PIPE BEDDING

NEW STORM DRAINAGE,
SEE C3.0 (TYP)

NEW SANITARY SEWER,
SEE C4.0 (TYP)

S66°37'03"W-605.86'

AREA OF RIGHT OF
WAY ACQUISITION
(0.351 AC)

NEW
MONUMENT
SIGN

U.S. HIGHWAY 70
60' R.O.W. (108' FUTURE R.O.W.)

SANITARY SEWER
CROSSING, SEE
SANITARY SEWER
NOTE 7, SHEET C4.0

WATER LINES,
SEE C4.2 (TYP)

FL(42"STORM)=284.74
FL(6"SEWER)=283.39

PIV

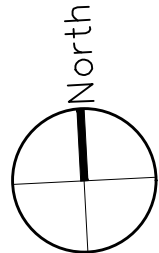
FH

WATER MAIN
TAP, SEE C4.2

EX WATER (TYP)

UTILITY NOTES:

- SANITARY SEWERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ALL APPLICABLE CITY, COUNTY AND STATE STANDARDS.
- ELECTRIC AND GAS SERVICE SHALL BE DESIGNED AND INSTALLED BY CITY UTILITIES DIVISION.
- FIRE PROTECTION SHALL BE PROVIDED IN ACCORDANCE WITH NFPA REQUIREMENTS. FIRE HYDRANT LOCATION SHALL BE SUBJECT TO THE APPROVAL OF THE FIRE DEPARTMENT.
- THE LOCATION OF ALL EXISTING UTILITIES SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION AND ALL WORK SHALL BE PERFORMED IN A MANNER THAT WILL INSURE EXISTING SERVICES ARE NOT INTERFERED WITH OR DISRUPTED.
- CONTRACTOR SHALL COORDINATE WATER, STORM DRAINAGE AND SEWER CONSTRUCTION TO INSURE THAT ADEQUATE CLEARANCES ARE MAINTAINED BOTH VERTICALLY AND HORIZONTALLY. MINIMUM HORIZONTAL CLEARANCE FOR ALL SANITARY SEWER LINES AND ALL WATER LINES (FIRE PROTECTION AND DOMESTIC) SHALL BE 10' HORIZONTAL AND 1' VERTICAL. THE SANITARY LINE SHALL BE UNDER THE WATER LINE AT ALL CROSSINGS.
- MATERIALS AND INSTALLATION OF WATER LINES SHALL CONFORM TO LAKELAND LIGHT, GAS AND WATER SPECIFICATIONS.
- WATER LINE SIZES AT EACH SIDE OF VALVE OR FITTING SHALL DICTATE THE SIZES OF ALL VALVES AND FITTINGS.
- WATER LINES, VALVES, FITTINGS, AND HYDRANTS SHALL BE INSTALLED, DISINFECTED, PRESSURE TESTED AND LEAKAGE TESTED IN ACCORDANCE WITH ALL STATE AND LOCAL REQUIREMENTS.
- BEFORE WORK BEGINS CALL THE CONSTRUCTION INSPECTION OFFICE AT 901.377-4629.
- FOR UNDERGROUND UTILITY LOCATIONS CALL 1-800-351-1111.
- PIV AND FDC LOCATIONS TO BE CONFIRMED BY FIRE PROTECTION CONTRACTOR.
- ALL EXISTING FIRE PROTECTION WATER LINES SHOWN TO BE UTILIZED SHALL BE FIELD VERIFIED FOR LOCATION AND SIZE AND TESTED IN ACCORDANCE WITH LAKELAND STANDARDS AND SPECIFICATIONS AS WELL AS ML&W. TESTING SHALL BE PERFORMED PRIOR TO CONSTRUCTION. IF THE EXISTING WATER LINES DO NOT MEET THE REQUIREMENTS OF THE CITY OF LAKELAND AND ML&W OR SHOW MAJOR DISCREPANCIES WITH THIS PLAN SET, THEN THE EXISTING LINE SHALL EITHER BE REPAIRED OR REPLACED AT THE OWNERS EXPENSE AND DISCRETION. VERIFY WITH ENGINEER OF RECORD PRIOR TO ANY CHANGES FROM THE PROPOSED PLAN. IF ANY OF THE EXISTING WATER LINES THAT WILL BE UTILIZED TO SERVICE THIS DEVELOPMENT ARE DEEMED INADEQUATE BY THE CONTRACTOR, THE OWNER, OR THE CITY OF LAKELAND, THEY MUST BE REPLACED AT THE OWNERS EXPENSE.
- ANY WATER MAIN TAPS SHALL BE COORDINATED WITH THE CITY OF LAKELAND AND ML&W AT THE CONTRACTORS EXPENSE. THE CONTRACTOR SHALL OBTAIN THE REQUIRED PERMITS PRIOR TO COMMENCING. ML&W SHALL ADMINISTER/OBSERVE AND SUPERVISE THE TAP BY THE CONTRACTOR. ALL TAPS AND TESTING WILL BE ADMINISTERED/OBSERVED BY A CITY REPRESENTATIVE. THE CONTRACTOR SHALL PROVIDE TESTING APPARATUS.
- ONLY BACKFLOW PREVENTION ASSEMBLIES APPROVED BY THE TENNESSEE STATE DEPARTMENT OF HEALTH AND SHELBY COUNTY CODE ENFORCEMENT SHALL BE INSTALLED. ALL REDUCED PRESSURE, DOUBLE CHECK-VALVE, AND PRESSURE VACUUM ASSEMBLIES SHALL BE INSTALLED IN A MANNER AND LOCATION THAT PROVIDES ADEQUATE ACCESS FOR TESTING AND REPAIR OF THE ASSEMBLY AND SHALL NOT BE INSTALLED IN A PIT OR ENCLOSURE BELOW GROUND LEVEL.
- GAS AND ELECTRIC DESIGN BY OTHERS. SEE ARCHITECT/MP&E PLANS FOR TRANSFORMER PAD LOCATION AND UTILITY TIE-IN LOCATIONS.
- CONTRACTOR TO FIELD VERIFY THAT EXISTING POWER POLES HAVE ADEQUATE CLEARANCE FOR ANTICIPATED TRAFFIC AT EACH NEW DRIVE ENTRANCE/EXIT (INCLUDING FIRE DEPARTMENT TRAFFIC) WITH ML&W AND CITY OF LAKELAND FIRE DEPARTMENT. NOTIFY E.O.R. AND OWNER IF THERE ARE ANY CLEARANCE ISSUES.



20 0 20
GRAPHIC SCALE IN FEET
SCALE: 1"=20'

NOTE:
UTILITY LAYOUT/DESIGN SUBJECT TO CHANGE BASED
ON FINAL DESIGN FROM MP&E. COORDINATE/VERIFY
TIE-IN LOCATIONS, FLOWLINES, SIZES AND DEMANDS
WITH MP&E PRIOR TO CONSTRUCTION. NOTIFY ENGINEER
OF RECORD IF THERE ARE ANY MAJOR DISCREPANCIES.

CONTRACTOR TO COORDINATE WITH
ML&W AND THE CITY OF LAKELAND
FIRE DEPARTMENT TO ENSURE THAT
ALL OVERHEAD POWER AND UTILITY
LINES TO REMAIN MEET ALL
APPLICABLE HEIGHT REQUIREMENTS

CONTRACTOR TO VERIFY SITE CONDITIONS
AND EXISTING ELEMENTS PRIOR TO
CONSTRUCTION. IF ANY DISCREPANCIES EXIST,
NOTIFY THE ENGINEER OF RECORD PRIOR TO
PROCEEDING WITH DEMOLITION/CONSTRUCTION.

SEE ARCH PLAN FOR BUILDING
LAYOUT AND DIMENSION.
VERIFY DOOR/ENTRY LOCATIONS
AND ELEVATIONS WITH ARCH
PLAN PRIOR TO CONSTRUCTION.

NOTE:
UTILITY LAYOUT/DESIGN SUBJECT TO CHANGE BASED
ON FINAL DESIGN FROM MP&E. COORDINATE/VERIFY
TIE-IN LOCATIONS, FLOWLINES, SIZES AND DEMANDS
WITH MP&E PRIOR TO CONSTRUCTION. NOTIFY ENGINEER
OF RECORD IF THERE ARE ANY MAJOR DISCREPANCIES.

100-YEAR FLOODZONE INFORMATION:
NO PORTION OF THIS PROPERTY LIES WITHIN THE
100-YEAR FLOODPLAIN OR FLOODWAY AS SHOWN
ON FEMA MAP NUMBER 47157C0215G DATED
FEBRUARY 06, 2013 FOR SHELBY COUNTY, TN.
BASE FLOOD ELEVATION=±267.50



The
Reaves
Firm
Engineering
Planning
Landscape Architecture
Land Surveying
6800 Poplar Avenue, Suite 101 Memphis, TN 38138
901.761.2016 Fax: 901.763.2847
www.ReavesFirm.com

THIS SITE LIES WITHIN THE LS-9 SEWER BASIN
THIS SITE LIES WITHIN THE CLEAR CREEK 8-W DRAINAGE BASIN

REVISION		
ITEM NO.	DESCRIPTION of CHANGE	APPROVAL DATE



DOLLAR GENERAL

DEVELOPER: PEDIGO CONSTRUCTION, LLC
ENGINEER: THE REAVES FIRM, INC.

NOT FOR CONSTRUCTION
FOR CITY REVIEW ONLY

DIVISION OF ENGINEERING
OVERALL UTILITY PLAN

10410 US HIGHWAY 70
LAKELAND, TENNESSEE

SURVEY TRF., INC. DATE 12/22 BOOK
DESIGN BY TRF., INC. DATE 01/23 SCALE 1"=20'
REVIEWED
CITY ENGINEER DATE

C4.5



VICINITY MAP
NTS

REYCO LLC
10360 US HWY 70
LO15100002

EXISTING
BUILDING (TYP)

N04°18'48"E-2668.17'

PLACE SILT
FENCE (TYP)

PLACE SILT
FENCE (TYP)

U.S. HIGHWAY 70
60' R.O.W. (108' FUTURE R.O.W.)

PLACE TREE PROTECTION
AS REQUIRED (TYP)

N87°07'10"W-536.61'

S66°37'03"W-605.86'

PLACE STABILIZED
CONSTRUCTION EXIT (SCE)

PHASE 1 - BMP INSTALLATION AND SITE WORK

1. PLACE STABILIZED CONSTRUCTION EXIT
2. PLACE SILT FENCE AS SHOWN
3. PLACE TREE PROTECTION AS REQUIRED
4. BEGIN SITE CLEARING

NOTE:
WIRE BACKED SILT FENCE ALONG THE PERIMETER OF THE SITE SHALL BE INSTALLED PRIOR TO THE START OF GRADING ACTIVITIES. SILT FENCE INTERIOR TO THE SITE SHALL BE INSTALLED IN A TIMELY MANNER DURING THE GRADING ACTIVITIES IN THAT AREA AND MAINTAINED UNTIL THE AREA IS STABILIZED. ANY SILT FENCE PLACED WITHIN THE PAVEMENT AREAS SHALL BE INSTALLED WITH A METAL POST INSTALLED IN THE SAME MANNER AS ALL OTHER SILT FENCE, SEE DETAIL.

NOTE:
PROVIDE DUST CONTROL AND PREVENT CONSTRUCTION DEBRIS FROM AFFECTING AREAS OUTSIDE OF THE PROJECT LIMITS. PHASE CONSTRUCTION ACTIVITIES IN ORDER TO HAVE MINIMAL IMPACT ON SITE TRAFFIC CIRCULATION AND DEBRIS ACCUMULATION. REMOVE EROSION CONTROL MEASURES ONCE CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED.

NOTE:
AREAS OF STABILIZATION INCLUDE AREAS THAT HAVE SOD, GRAVEL BASE, SOIL CEMENT BASE, PAVEMENT AREAS, CONCRETE PAVEMENT, BUILDINGS OR A CONCRETE SLAB.

NOTE:
REMOVE ALL TEMPORARY EROSION CONTROL MEASURES UPON PROJECT COMPLETION. ALL AREAS MUST BE STABILIZED UPON PROJECT COMPLETION.

DISTURBED AREA = 1.229 AC

REPORTING AND RECORDKEEPING REQUIREMENTS

- (A) THE PERMITTEE SHALL MAINTAIN RECORDS OF CHECKS AND REPAIRS ON SITE OR AT A NEARBY OFFICE.
- (B) RECORDS AND INFORMATION RESULTING FROM THE MONITORING ACTIVITIES REQUIRED BY THIS RULE SHALL BE RETAINED FOR A MINIMUM OF THREE (3) YEARS, OR LONGER IF REQUESTED BY THE DIVISION OF WATER POLLUTION CONTROL.
- (C) KNOWINGLY MAKING ANY FALSE STATEMENT ON ANY REPORT REQUIRED BY THIS RULE MAY RESULT IN THE IMPOSITION OF CRIMINAL PENALTIES AS PROVIDED FOR IN SECTION 309 OF THE FEDERAL WATER POLLUTION CONTROL ACT AND IN SECTION 69-3-115 OF THE TENNESSEE WATER QUALITY CONTROL ACT.

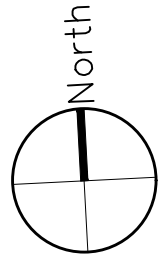
CONTRACTOR TO VERIFY SITE CONDITIONS
AND EXISTING ELEMENTS PRIOR TO
CONSTRUCTION. IF ANY DISCREPANCIES EXIST,
NOTIFY THE ENGINEER OF RECORD PRIOR TO
PROCEEDING WITH DEMOLITION/CONSTRUCTION.

100-YEAR FLOODZONE INFORMATION:
NO PORTION OF THIS PROPERTY LIES WITHIN THE
100-YEAR FLOODPLAIN OR FLOODWAY AS SHOWN
ON FEMA MAP NUMBER 47157C0215G DATED
FEBRUARY 06, 2013 FOR SHELBY COUNTY, TN.
BASE FLOOD ELEVATION=±267.50

EROSION CONTROL NOTES:

- (A) CLEARING AND GRUBBING MUST BE HELD TO THE MINIMUM NECESSARY FOR GRADING AND EQUIPMENT OPERATION.
- (B) CONSTRUCTION MUST BE SEQUENCED TO MINIMIZE THE EXPOSURE TIME OF CLEARED SURFACE AREA.
- (C) CONSTRUCTION MUST BE STAGED OR PHASED FOR LARGE PROJECTS. AREAS OF ONE PHASE MUST BE STABILIZED BEFORE ANOTHER PHASE CAN BE INITIATED. STABILIZATION SHALL BE ACCOMPLISHED BY TEMPORARILY OR PERMANENTLY PROTECTING THE DISTURBED SOIL SURFACE FROM RAINFALL IMPACTS AND RUNOFF.
- (D) EROSION AND SEDIMENT CONTROL MEASURES MUST BE IN PLACE AND FUNCTIONAL BEFORE EARTH MOVING OPERATIONS BEGIN, AND MUST BE CONSTRUCTED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. TEMPORARY MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORK DAY, BUT MUST BE REPLACED AT THE END OF THE WORK DAY.
- (E) ALL CONTROL MEASURES SHALL BE CHECKED, AND REPAIRED AS NECESSARY, WEEKLY IN DRY PERIODS AND WITHIN 24 HOURS AFTER ANY RAINFALL OF 0.5 INCHES WITHIN A 24 HOUR PERIOD. DURING PROLONGED RAINFALL, DAILY CHECKING AND REPAIRING IS NECESSARY. THE PERMITTEE SHALL MAINTAIN RECORDS OF CHECKS AND REPAIRS.
- (F) A SPECIFIC INDIVIDUAL SHALL BE DESIGNATED TO BE RESPONSIBLE FOR EROSION AND SEDIMENT CONTROLS ON EACH PROJECT SITE.
- (G) PRE-CONSTRUCTION VEGETATIVE GROUND COVER SHALL NOT BE DESTROYED, REMOVED OR DISTURBED MORE THAN 10 CALENDAR DAYS PRIOR TO GRADING OR EARTH MOVING.
- (H) TO THE EXTENT FEASIBLE, APPROPRIATE COVER SHALL BE APPLIED WITHIN SEVEN DAYS ON AREAS THAT WILL REMAIN UNFINISHED FOR MORE THAN 14 CALENDAR DAYS. EXAMPLES OF COVER ARE GRASS, SOD, STRAW, MULCH, FABRIC MATS, ETC.
- (I) PERMANENT SOIL STABILIZATION SHALL BE APPLIED UNIFORMLY AS SOON AS PRACTICABLE AFTER FINAL GRADING.
- (J) ALL SURFACE WATER FLOWING TOWARD THE CONSTRUCTION AREA SHALL BE DIVERTED BY USING BERMS, CHANNELS, OR SEDIMENT TRAPS, AS NECESSARY.
- (K) EROSION AND SEDIMENT CONTROL MEASURES SHALL BE DESIGNED ACCORDING TO THE SIZE AND SLOPE OF DISTURBED OR DRAINAGE AREAS, TO DETAIN RUNOFF AND TRAP SEDIMENT.
- (L) DISCHARGES FROM SEDIMENT BASINS AND TRAPS MUST BE THROUGH A PIPE OR LINED CHANNEL SO THAT THE DISCHARGE DOES NOT CAUSE EROSION.
- (M) MUDDY WATER TO BE PUMPED FROM EXCAVATION AND WORK AREAS

- (N) THERE SHALL BE NO DISTINCTLY VISIBLE FLOATING SCUM, OIL OR OTHER MATTER CONTAINED IN THE STORM WATER DISCHARGE.
- (O) THE STORM WATER DISCHARGE MUST RESULT IN NO MATERIALS IN CONCENTRATIONS SUFFICIENT TO BE HAZARDOUS OR OTHERWISE DETRIMENTAL TO HUMANS, LIVESTOCK, WILDLIFE, PLANT LIFE, OR FISH AND AQUATIC LIFE IN THE RECEIVING STREAM.
- (P) SILT FENCE SHALL BE PLACED AT THE TOE OF SLOPES.
- (Q) ALL SEED SHALL BE UNIFORM THROUGHOUT THE ENTIRE SITE AND SHALL MEET THE REQUIREMENTS OF THE LATEST EDITION OF THE "TENNESSEE EROSION & SEDIMENT CONTROL HANDBOOK" BY THE "TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION" (TDEC).
- (R) IN ACCORDANCE WITH THE SHELBY COUNTY MS4 PERMIT, ALL STATE/MPDES PERMITS ARE REQUIRED TO HAVE BEEN OBTAINED BEFORE START-UP OF ANY CONSTRUCTION ACTIVITY, INCLUDING BUT NOT LIMITED TO LAND AND AQUATIC RESOURCE DISTURBANCE.
- (S) EROSION CONTROL MEASURES SHALL BE MAINTAINED AT ALL TIMES AND SHALL MEET THE REQUIREMENTS OF THE LATEST EDITION OF THE "TENNESSEE EROSION & SEDIMENT CONTROL HANDBOOK" BY THE "TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION" (TDEC).
- (T) THE CONTRACTOR SHALL COORDINATE THE PHASING OF THIS PROJECT WITH THE DEVELOPER.
- (U) PROVIDE A CONCRETE WASHOUT FACILITY TO PREVENT OR REDUCE THE DISCHARGE OF POLLUTANTS TO STORMWATER FROM CONCRETE WASTE. CONCRETE WASHOUT STATION SHALL BE DESIGNED AND PLACED IN ACCORDANCE WITH THE LATEST EDITION OF THE "TENNESSEE EROSION & SEDIMENT CONTROL HANDBOOK" BY THE "TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION" (TDEC).
- (V) CONTRACTOR TO REVIEW ALL SWPPP DOCUMENTS PRIOR TO CONSTRUCTION.
- (W) SOLID SOD NEW BANKS STEEPER THAN 5:1 AND COMPACT TO A SMOOTH AND UNIFORM SURFACE FREE OF ROCKS, CLODS AND VEGETATION. PIN ALL SOD IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.



20 0 20
GRAPHIC SCALE IN FEET
SCALE: 1"=20'

THIS SITE LIES WITHIN THE **LS-9** SEWER BASIN
THIS SITE LIES WITHIN THE **CLEAR CREEK 8-W** DRAINAGE BASIN

REVISION		
ITEM NO.	DESCRIPTION of CHANGE	APPROVAL DATE



DOLLAR GENERAL

DEVELOPER: PEDIGO CONSTRUCTION, LLC
ENGINEER: THE REAVES FIRM, INC.

NOT FOR CONSTRUCTION
FOR CITY REVIEW ONLY

DIVISION OF ENGINEERING
EROSION CONTROL PLAN
PHASE 1
10410 US HIGHWAY 70
LAKELAND, TENNESSEE

SURVEY TRF, INC. DATE 12/22 BOOK
DESIGN BY TRF, INC. DATE 01/23 SCALE 1"=20'
REVIEWED

CITY ENGINEER DATE

C5.0





VICINITY MAP
NTS

REYCO LLC
10360 US HWY 70
LO15100002

EXISTING
BUILDING (TYP)

PLACE RIPRAP FOR
PERMANENT OUTLET
PROTECTION. SEE C3.0
FOR GRADATION AND
SPECIFICATION.

PLACE WATTLES REMOVE
UPON SITE STABILIZATION.

PLACE INLET PROTECTION.
REMOVE UPON SITE
STABILIZATION. (TYP)

REMOVE STABILIZED
CONSTRUCTION EXIT (SCE)

PROPERTY
BOUNDARY (TYP)

EVERGREEN HILLS, INC.
0 US HWY 70
LO14100385

REMOVE TREE
PROTECTION (TYP)

REMOVE SILT
FENCE (TYP)

U.S. HIGHWAY 70
60' R.O.W. (108' FUTURE R.O.W.)

PHASE 3 - PERMANENT STABILIZATION AND BMP REMOVAL

1. GRADE SITE AS REQUIRED ENCOURAGING FLOW THROUGH BMP'S
2. INSTALL NEW STORM DRAINAGE PIPE AND STRUCTURES WITH INLET/OUTLET PROTECTIONS AS SHOWN
3. PLACE WATTLES AND RIPRAP AS SHOWN
4. PLACE BUILDING PAD AS SHOWN
5. STABILIZE DISTURBED AREAS AS SOON AS PRACTICAL WITH SOD, GRAVEL BASE, SOIL CEMENT BASE, ASPHALT PAVEMENT, CONCRETE PAVEMENT, BUILDING OR CONCRETE SLAB
6. CONSTRUCT DRIVES, PARKING LOTS, CURB AND GUTTERS AND SIDEWALKS AS SHOWN
7. SEED/SOD/STABILIZE ALL DISTURBED AREAS WITH SEASONAL PERENNIAL VEGETATION THAT ARE NOT STABILIZED BY SOD, PAVEMENT OR BUILDING PAD
8. REMOVE INLET PROTECTION(S) AND WATTLES
9. REMOVE ALL SILT FENCE AND STABILIZED CONSTRUCTION EXIT

REPORTING AND RECORDKEEPING REQUIREMENTS

- (A) THE PERMITTEE SHALL MAINTAIN RECORDS OF CHECKS AND REPAIRS ON SITE OR AT A NEARBY OFFICE.
- (B) RECORDS AND INFORMATION RESULTING FROM THE MONITORING ACTIVITIES REQUIRED BY THIS RULE SHALL BE RETAINED FOR A MINIMUM OF THREE (3) YEARS, OR LONGER IF REQUESTED BY THE DIVISION OF WATER POLLUTION CONTROL.
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CONTRACTOR TO VERIFY SITE CONDITIONS
AND EXISTING ELEMENTS PRIOR TO
CONSTRUCTION. IF ANY DISCREPANCIES EXIST,
NOTIFY THE ENGINEER OF RECORD PRIOR TO
PROCEEDING WITH DEMOLITION/CONSTRUCTION.

NOTE:
WIRE BACKED SILT FENCE ALONG THE PERIMETER OF THE SITE
SHALL BE INSTALLED PRIOR TO THE START OF GRADING
ACTIVITIES. SILT FENCE INTERIOR TO THE SITE SHALL BE
INSTALLED IN A TIMELY MANNER DURING THE GRADING
ACTIVITIES IN THAT AREA AND MAINTAINED UNTIL THE AREA
IS STABILIZED. ANY SILT FENCE PLACED WITHIN THE PAVEMENT
AREAS SHALL BE INSTALLED WITH A METAL POST INSTALLED IN
THE SAME MANNER AS ALL OTHER SILT FENCE, SEE DETAIL.

NOTE:
PROVIDE DUST CONTROL AND PREVENT CONSTRUCTION
DEBRIS FROM AFFECTING AREAS OUTSIDE OF THE
PROJECT LIMITS. PHASE CONSTRUCTION ACTIVITIES
IN ORDER TO HAVE MINIMAL IMPACT ON SITE
TRAFFIC CIRCULATION AND DEBRIS ACCUMULATION.
REMOVE EROSION CONTROL MEASURES ONCE
CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED.

NOTE:
AREAS OF STABILIZATION INCLUDE AREAS
THAT HAVE SOD, GRAVEL BASE, SOIL CEMENT
BASE, PAVEMENT AREAS, CONCRETE
PAVEMENT, BUILDINGS OR A CONCRETE SLAB.

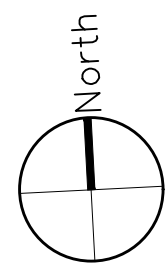
NOTE:
REMOVE ALL TEMPORARY EROSION
CONTROL MEASURES UPON PROJECT
COMPLETION. ALL AREAS MUST BE
STABILIZED UPON PROJECT COMPLETION.

DISTURBED AREA = 1.229 AC

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20 0 20
GRAPHIC SCALE IN FEET
SCALE: 1"=20'

THIS SITE LIES WITHIN THE **LS-9** SEWER BASIN
THIS SITE LIES WITHIN THE **CLEAR CREEK 8-W** DRAINAGE BASIN

REVISION		
ITEM NO.	DESCRIPTION of CHANGE	APPROVAL DATE



DOLLAR GENERAL

DEVELOPER: PEDIGO CONSTRUCTION, LLC
ENGINEER: THE REAVES FIRM, INC.

NOT FOR CONSTRUCTION
FOR CITY REVIEW ONLY

DIVISION OF ENGINEERING
EROSION CONTROL PLAN
PHASE 2
10410 US HIGHWAY 70
LAKELAND, TENNESSEE

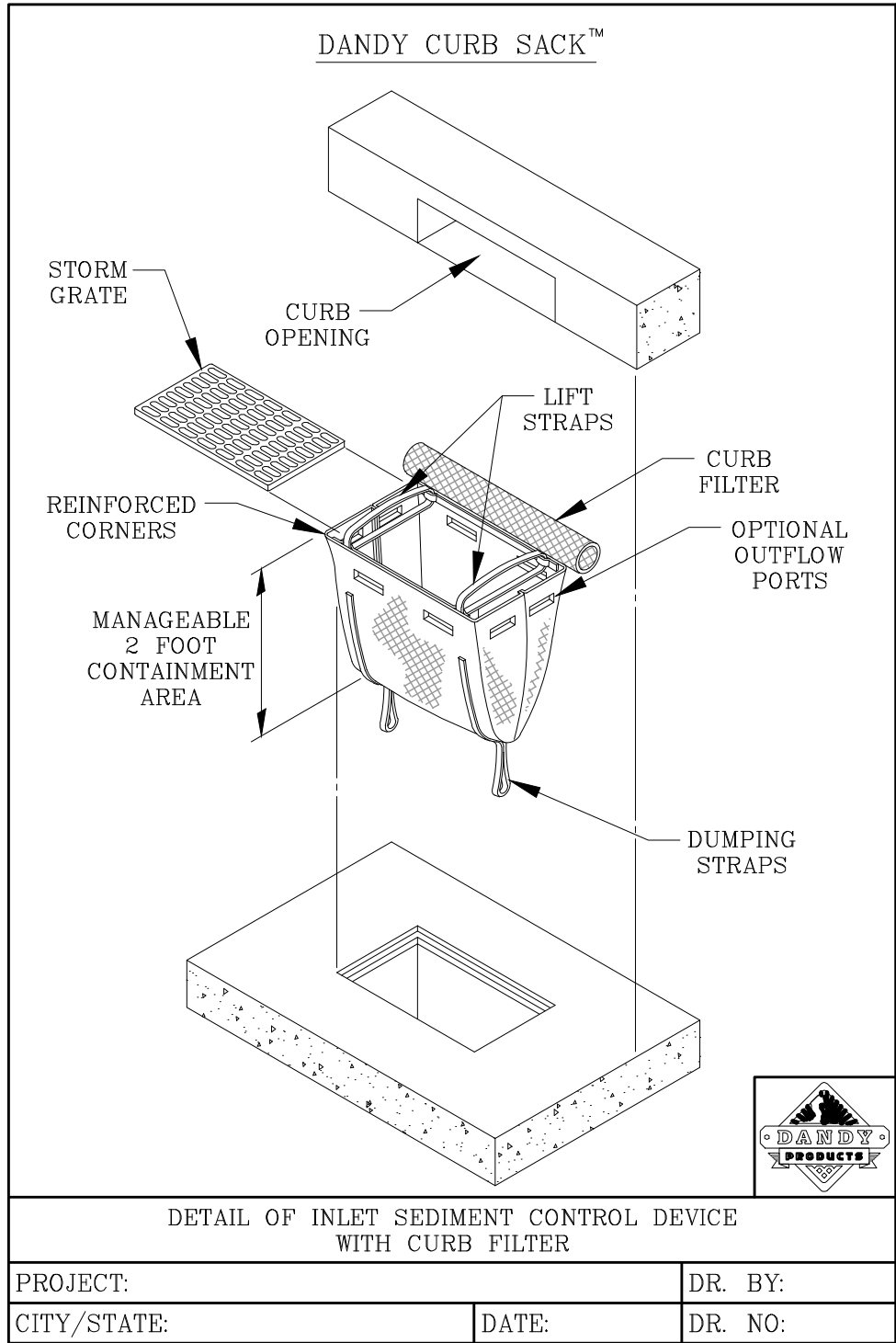
SURVEY TRF., INC. DATE 12/22 BOOK
DESIGN BY TRF., INC. DATE 01/23 SCALE 1"=20'
REVIEWED
CITY ENGINEER DATE

C5.1



The
Reaves
Firm
Engineering
Planning
Landscape Architecture
Land Surveying
6800 Poplar Avenue, Suite 101 Memphis, TN 38138
901.761.2016 Fax: 901.763.2947
www.ReavesFirm.com

100-YEAR FLOODZONE INFORMATION:
NO PORTION OF THIS PROPERTY LIES WITHIN THE
100-YEAR FLOODPLAIN OR FLOODWAY AS SHOWN
ON FEMA MAP NUMBER 47157C0215G DATED
FEBRUARY 06, 2013 FOR SHELBY COUNTY, TN.
BASE FLOOD ELEVATION=±267.50



DANDY CURB SACK™ SPECIFICATIONS				
NOTE: THE DANDY CURB SACK™ WILL BE MANUFACTURED IN THE U.S.A. FROM A WOVEN MONOFILAMENT FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS:				
REGULAR FLOW DANDY CURB SACK™ (BLACK)				
Mechanical Properties	Test Method	Units	MARV	
Grab Tensile Strength	ASTM D 4632	kN (lbs)	1.78 (400)	1.40 (315)
Grab Tensile Elongation	ASTM D 4632	%	15	15
Puncture Strength	ASTM D 4833	kN (lbs)	0.67 (150)	
Mullen Burst Strength	ASTM D 3786	kPa (psi)	6558 (950)	
Trapezoid Tear Strength	ASTM D 4533	kN (lbs)	0.67 (150) x 0.73 (165)	
UV Resistance	ASTM D 4355	%	60	
Apparent Opening Size	ASTM D 4491	mm (US Std Sieve)	0.425 (40)	
Flow Rate	ASTM D 4491	l/min/m² (gal/min/ft²)	2852 (70)	
Permittivity	ASTM D 4491	Sec⁻¹	0.90	
H-FLOW DANDY CURB SACK™ (SAFETY ORANGE)				
Mechanical Properties	Test Method	Units	MARV	
Grab Tensile Strength	ASTM D 4632	kN (lbs)	1.62 (365)	0.89 (200)
Grab Tensile Elongation	ASTM D 4632	%	24 x 10	
Puncture Strength	ASTM D 4833	kN (lbs)	0.40 (90)	
Mullen Burst Strength	ASTM D 3786	kPa (psi)	3097 (450)	
Trapezoid Tear Strength	ASTM D 4533	kN (lbs)	0.51 (115) x 0.53 (75)	
UV Resistance	ASTM D 4355	%	60	
Apparent Opening Size	ASTM D 4751	mm (US Std Sieve)	0.425 (40)	
Flow Rate	ASTM D 4491	l/min/m² (gal/min/ft²)	5927 (145)	
Permittivity	ASTM D 4491	Sec⁻¹	2.1	
*Note: All Dandy Sacks™ can be ordered with our optional oil absorbent pillows				
INLET PROTECTION IP-2 FOR 6-72 & NO. 11 INLETS				
PROJECT: DR. BY:				
CITY/STATE: DATE: DR. NO:				

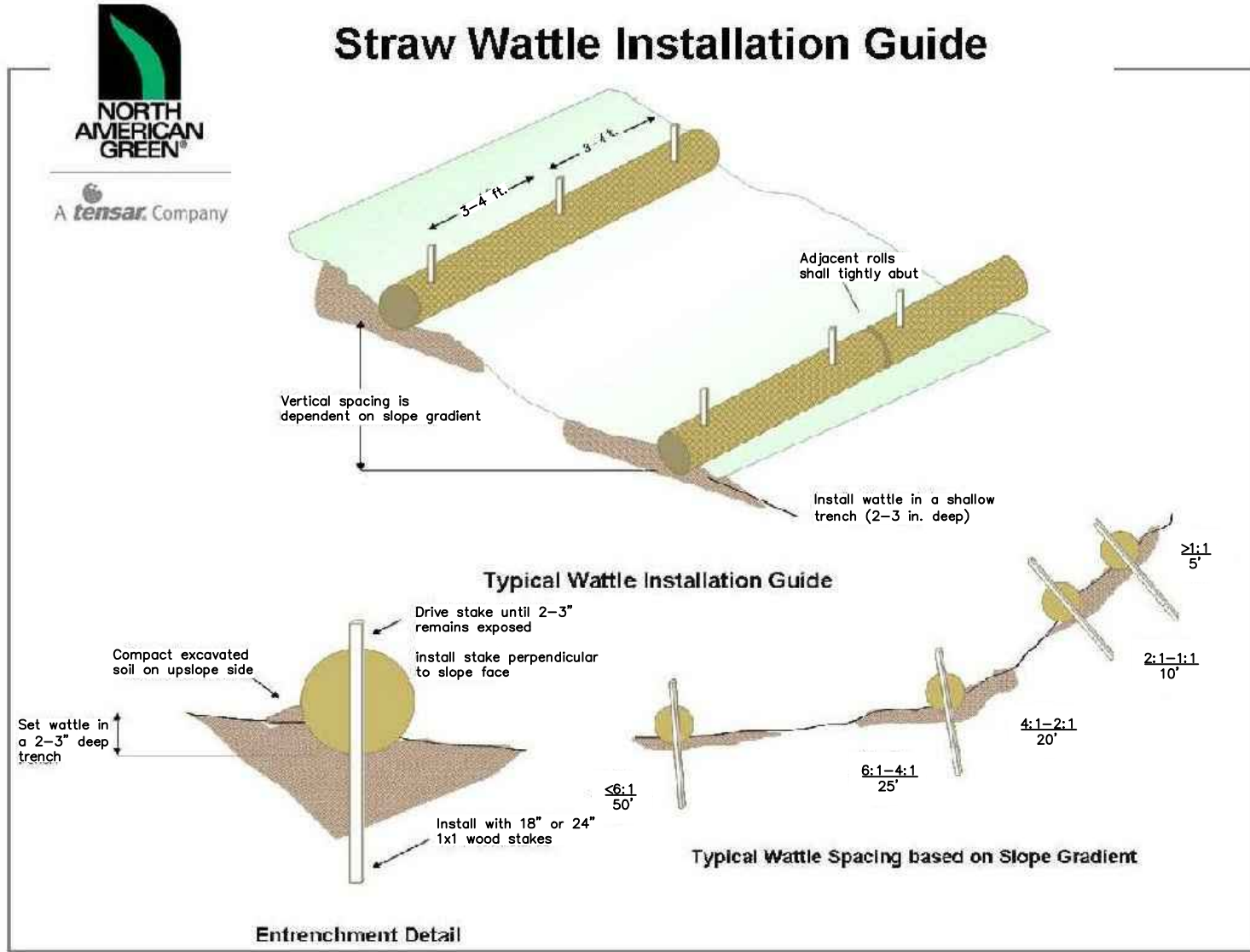


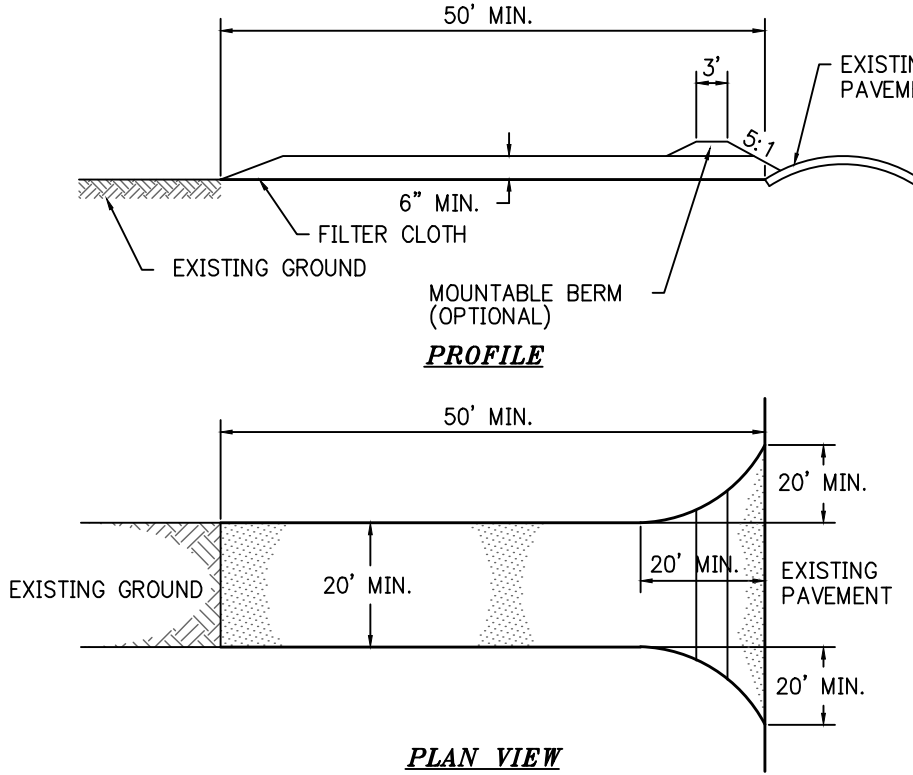
Figure 7.37-1 Wattle Stake Installation
STRAW WATTLE

CONSTRUCTION SPECIFICATIONS:

- REMOVE ALL ROCKS, CLODS, VEGETATION OR OTHER OBSTRUCTIONS SO INSTALLED WATTLES HAVE DIRECT CONTACT WITH THE UNDERLYING SOIL OR SURFACE.
- INSTALL WATTLE BY LAYING THEM FLAT ON THE GROUND. EXCAVATE A SMALL TRENCH 2"-3" IN DEPTH ON THE CONTOUR AND PERPENDICULAR TO WATER FLOW. SOIL FROM THE EXCAVATION SHOULD BE STORED CLOSE BY FOR USE AFTER THE WATTLE HAS BEEN SETTLED.
- INSTALL WATTLES SO NO GAPS EXIST BETWEEN THE SOIL AND THE BOTTOM OF THE WATTLE. LAP THE ENDS OF ADJACENT WATTLES A MINIMUM OF 6" TO PREVENT FLOW AND SEDIMENT FROM PASSING THROUGH THE FIELD JOINT.
- WOODEN STAKES SHOULD BE USED TO FASTEN THE WATTLES TO THE SOIL. DRIVE WOODEN STAKES THROUGH WATTLE AND ANGLED SLIGHTLY AGAINST THE DIRECTION OF FLOW AS SHOWN. INSTALL WOODEN STAKES AT 4' INTERVALS, UNLESS THE WATTLE MANUFACTURER SPECIFIES OTHERWISE, LEAVING LESS THAN 1"-2" OF STAKE EXPOSED ABOVE THE WATTLE. ALTERNATELY, STAKES MAY BE PLACED ON EACH SIDE OF THE WATTLE TYING ACROSS WITH A NATURAL FIBER TWINE OR STAKING IN A CROSSING MANNER ENSURING DIRECT SOIL CONTACT AT ALL TIMES.
- TERMINAL ENDS OF WATTLES MAY BE DOG LEGGED UP SLOPE TO ENSURE CONTAINMENT AND PREVENT CHANNELING OF SEDIMENTATION.
- BACKFILL THE UP-SLOPE LENGTH OF THE WATTLE WITH THE EXCAVATED SOIL AND COMPACT.
- WHERE LONG ROWS ARE REQUIRED ON A SLOPE, THE ENDS OF INDIVIDUAL TUBE SEGMENTS SHOULD BE OVERLAPPED AS SHOWN. WATTLE NETTING SHOULD BE KNITTED MATERIAL WITH 1/8" TO 3/8" OPENINGS AND MADE OF PHOTODEGRADABLE (POLYPROPYLENE, HDPE) OR BIODEGRADABLE MATERIAL.

Table 7.37-1 Wattle and Tube Spacing Table for Slope Application

Slope	Wattle and Tube Diameter				
	8"	12"	18"	20"	24"
2%	70'	100'	N/A	N/A	N/A
5%	30'	60'	100'	100'	100'
10%	20'	30'	70'	85'	100'
6:1	N/A	20'	40'	50'	55'
4:1	N/A	20'	30'	30'	30'
3:1	N/A	N/A	20'	20'	25'
2:1	N/A	N/A	20'	20'	20'



STABILIZED CONSTRUCTION EXIT (SCE)
(NTS)

CONSTRUCTION SPECIFICATIONS

- STONE SIZE - USE 2" STONE OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT, MUST CONFORM TO ASTM #1 STONE.
- LENGTH - AS REQUIRED BUT NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
- THICKNESS - NOT LESS THAN SIX (6) INCHES.
- WIDTH - TWENTY (20) FOOT BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
- FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT.
- SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
- MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
- WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- INSPECTIONS ARE REQUIRED AT LEAST TWICE A WEEK AND AT LEAST 72 HOURS APART.

NOTE:
THE LOCATION OF THE STABILIZED CONSTRUCTION EXIT (SCE) IS PLACED AT A SUGGESTED LOCATION. RELOCATION OF THE SCE IS PERMISSIBLE UPON APPROVAL BY THE ENGINEER OF RECORD.

CONSTRUCTION SPECIFICATIONS:

- SILT FENCE SHOULD BE INSTALLED SO AS TO BE CLOSE AS POSSIBLE TO THE GROUND CONTOUR.
- SILT FENCE SHOULD BE INSTALLED 5'-7' AWAY FROM THE TOE OF THE SLOPE TO ALLOW FOR EXTRA SPACE FOR THE PONDING OF WATER AND COLLECTION OF SEDIMENTS. THE EXPECTED LIFE-SPAN OF THE SILT FENCE IS 6-12 MONTHS. SILT FENCING WITHOUT BACK SHALL BE USED AND POSTS SHALL BE HARDWOOD POSTS THAT ARE 2.25"x2.25"x58". T-TYPE STEEL POSTS MAY ALSO BE USED.
- ENSURE THAT THE HEIGHT OF THE FENCE DOES NOT EXCEED 24" ABOVE THE GROUND SURFACE. PONDING WATER DEPTH SHOULD NOT EXCEED 18".
- CONSTRUCT FILTER FABRIC FROM A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID JOINTS. WHEN JOINTS ARE NECESSARY, SECURELY FASTEN THE FILTER CLOTH ONLY AT A SUPPORT POST WITH A 4" MINIMUM OVERLAP TO THE NEXT POST OR ROLL THE FABRIC TOGETHER AND FASTEN TO ONE POST TO CREATE A STRONGER JOINT. WHERE JOINTS ARE NECESSARY, PLAN THE ROLL LAYOUT SO AS NOT TO HAVE JOINTS AT LOW POINTS.
- DO NOT ATTACH FILTER FABRIC TO TREES.
- WHEN SILT FENCE IS INSTALLED ADJACENT TO STREAMS, WETLANDS AND OTHER NATURAL RESOURCES, SILT FENCE WITH BACKING SHOULD BE USED.
- INSTALL POSTS NO MORE THAN 6' APART.
- INSTALL POSTS 2' DEEP ON THE DOWNSTREAM SIDED OF SILT FENCE, AND AS CLOSE AS POSSIBLE TO THE FABRIC, ENABLING POSTS TO SUPPORT THE FABRIC FROM UPSTREAM WATER PRESSURE.
- SECURELY ATTACH THE SILT FENCE FABRIC TO THE POSTS ON THE UPSTREAM SIDE OF THE POSTS. FOR STEEL POSTS, ATTACH FABRIC TO THE POSTS USING WIRE OR PLASTIC ZIP TIES WITH A MINIMUM 50 POUND TENSILE STRENGTH, AT LEAST 5 TO A POST. 3 TIES SHOULD BE INSTALLED IN THE UPPER 8" FOR THE TOP STRENGTH. TIES SHOULD BE INSTALLED ON THE DIAGONAL, AS OPPOSED TO ON THE HORIZONTAL, TO GRAB MORE STANDS. FOR HARDWOOD POSTS, ATTACH FABRIC WITH 17 GAUGE WIRE STAPLES (9" WIDE x 12" LONG), AT LEAST 5 TO A POST. 3 STAPLES SHALL BE INSTALLED IN THE UPPER 8" FOR TOP STRENGTH.
- INSTALL J-HOOKS FOR CONFINING THE WATER BEHIND THE FENCE AS SHOWN.
- EXCAVATE A TRENCH APPROX 4" WIDE AND 6" DEEP ALONG THE PROPOSED LINE OF POSTS AND UPSLOPE FROM THE BARRIER.
- PLACE 10" OF THE FABRIC ALONG THE BOTTOM AND SIDE OF THE TRENCH. BACKFILL THE TRENCH WITH SOIL PLACED OVER THE FILTER FABRIC AND COMPACT. THOROUGH COMPACTION OF THE BACKFILL IS CRITICAL TO SILT FENCE PERFORMANCE.
- THE BASE OF BOTH END POSTS SHOULD BE AT LEAST 1' HIGHER THAN THE MIDDLE OF THE FENCE. CHECK WITH A LEVEL AS NECESSARY.
- A SLICING MACHINE CAN BE USED TO INSTALL SILT FENCE. THE METHOD OF INSTALLATION PROVIDES EXCELLENT COMPACTION AND JOINT INTEGRITY ALONG THE JOE.
- POSTS SHALL BE SET AT A MAXIMUM OF 6' APART.
- THE GEOTEXTILE FABRIC SHALL BE INSERTED IN A SLIT IN THE SOIL 8"-12" DEEP. THE SLIT SHOULD BE CREATED SUCH THAT A HORIZONTAL CHISEL POINT, AT THE BASE OF A SOIL-SLICING BLADE IN A SIMULTANEOUS OPERATION, ACHIEVING CONSISTENT PLACEMENT AND DEPTH. NO TURNING OVER OF SOIL IS ALLOWED FOR THE SLICING METHOD.

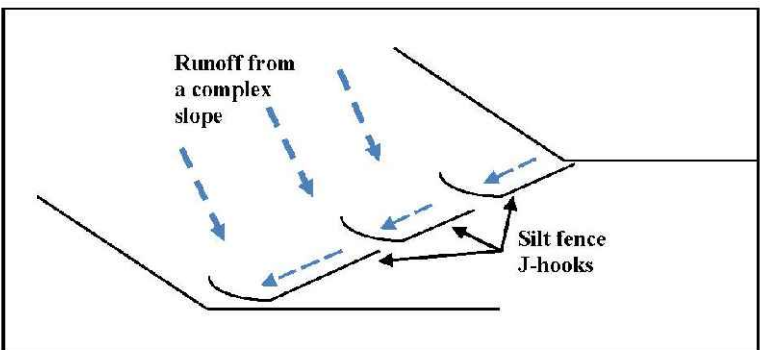


Figure 7.34-1 J-Hook Installation Example

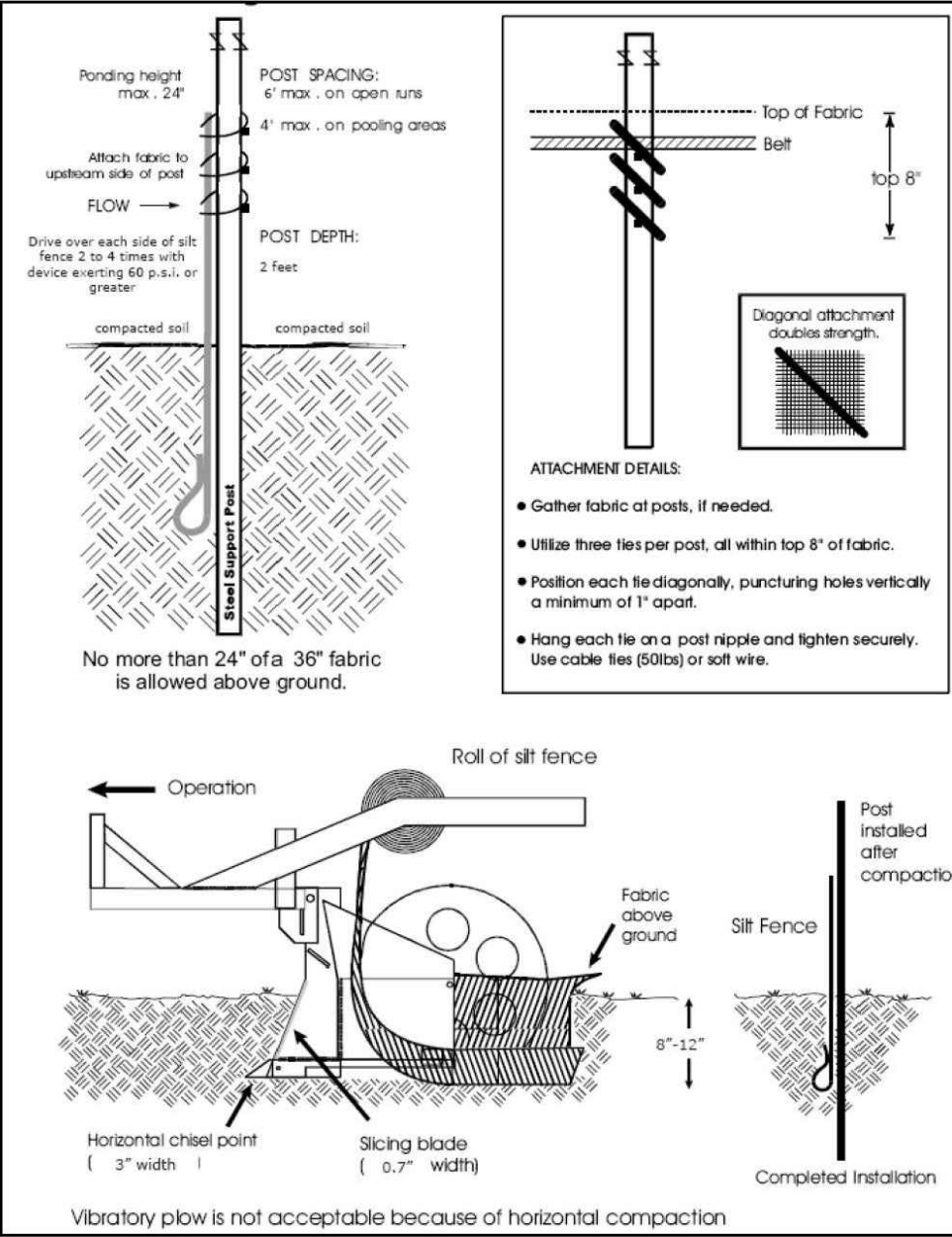


Figure 7.34-3 Silt Fence Slicer Installation Details (Adapted from Silt Fence That Works)
WIRE BACKED SILT FENCE SF

Table 7.34-1 Silt Fence Fabric Specifications

	Test Material	Without backing	With backing
Geotextile fabric type		Woven slit film	Woven monofilament
Apparent opening size	ASTM D4751	#30 to #70 standard sieve	#70 to #100 standard sieve
Water flux	ASTM D4491	≥ 4 gpm/ft²	≥ 18 gpm/ft²
Tensile strength	ASTM D4632	≥ 120 lb. (warp direction) 100 lb. (fill direction)	≥ 310 lb. (warp direction) 200 lb. (fill direction)

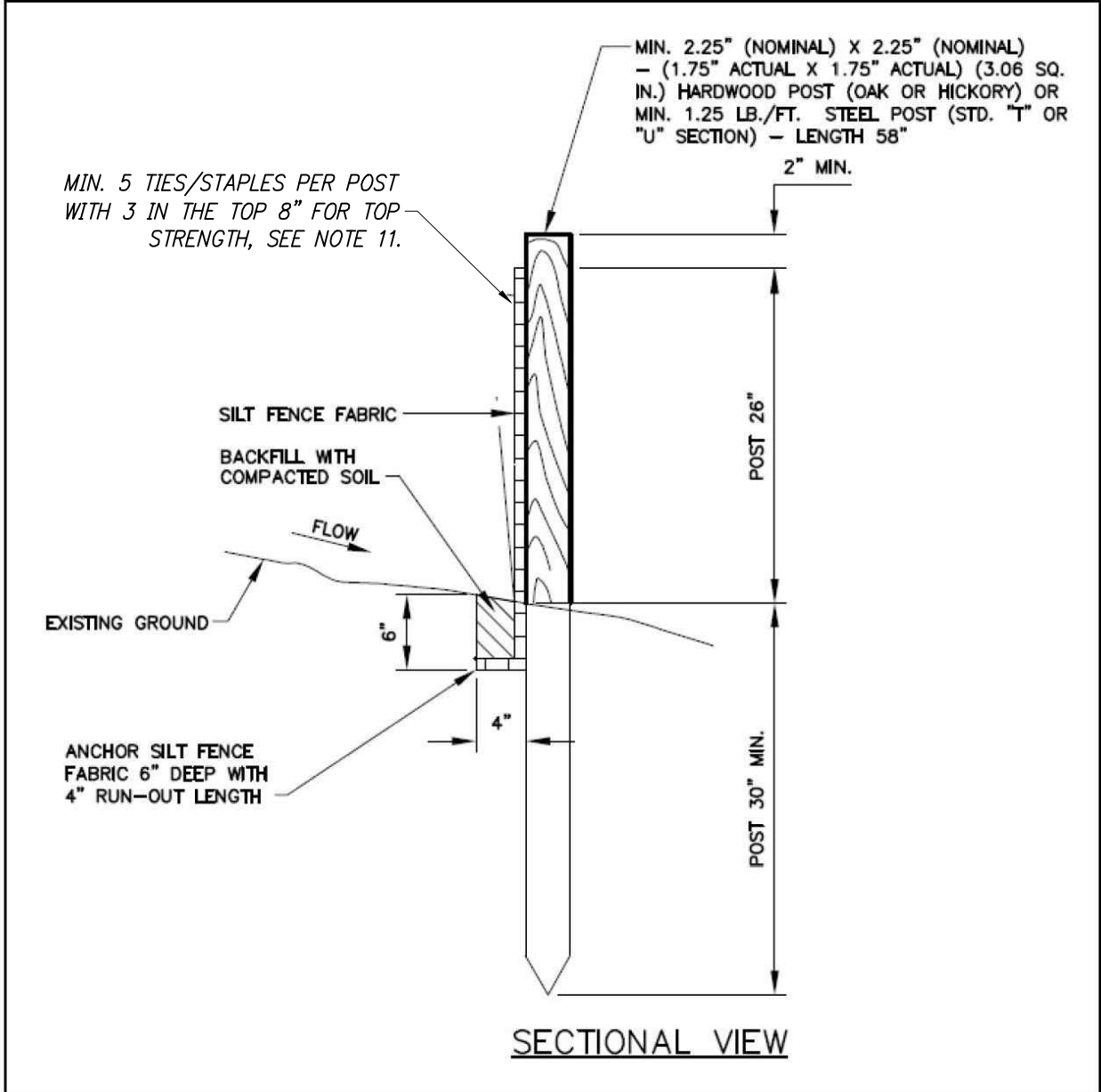


Figure 7.34-2 Silt fence details

The Reaves Firm
Engineering
Planning
Landscape Architecture
Land Surveying
6800 Poplar Avenue, Suite 101 Memphis, TN 38138
901.761.2016 Fax: 901.763.2847
www.ReavesFirm.com

REVISION			APPROVAL
ITEM NO.	DESCRIPTION of CHANGE	DATE	



DOLLAR GENERAL

DEVELOPER: PEDIGO CONSTRUCTION, LLC
ENGINEER: THE REAVES FIRM, INC.

NOT FOR CONSTRUCTION
FOR CITY REVIEW ONLY

DIVISION OF ENGINEERING
EROSION CONTROL DETAILS
10410 US HIGHWAY 70
LAKELAND, TENNESSEE

SURVEY TRF, INC. DATE 12/22 BOOK
DESIGN BY TRF, INC. DATE 01/23 SCALE AS SHOWN
REVIEWED

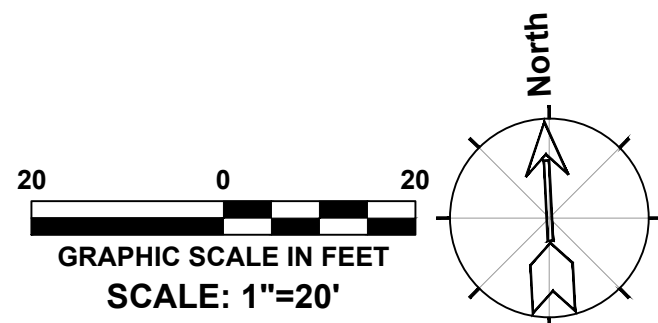
CITY ENGINEER DATE

C5.2



EXISTING
BUILDING (TYP)

N04°18'48"E-268.17'
-7.5' SIDE SETBACK



CONTRACTOR TO VERIFY SITE CONDITIONS
AND EXISTING ELEMENTS PRIOR TO
CONSTRUCTION. IF ANY DISCREPANCIES EXIST,
NOTIFY THE ENGINEER OF RECORD PRIOR TO
PROCEEDING WITH DEMOLITION/CONSTRUCTION.

SEE ARCH PLAN FOR BUILDING LAYOUT AND DIMENSION. VERIFY DOOR/ENTRY/GARAGE LOCATIONS AND ELEVATIONS WITH ARCH PLAN PRIOR TO CONSTRUCTION.

**TREE PROTECTION
— FENCING**

TYPICAL TREE TO BE SAVED

TYPICAL TREE TO BE REMOVED

**SEE SHEET C1.1 FOR CITY OF LAKE LAND
TREE PROTECTION FENCING DETAIL**

**CANOPY AREA OF TREES
TO BE REMOVED (TYPICAL)**

**TREE CANOPY REMOVED:
14,700 Sq.Ft. (0.34 Acres)**

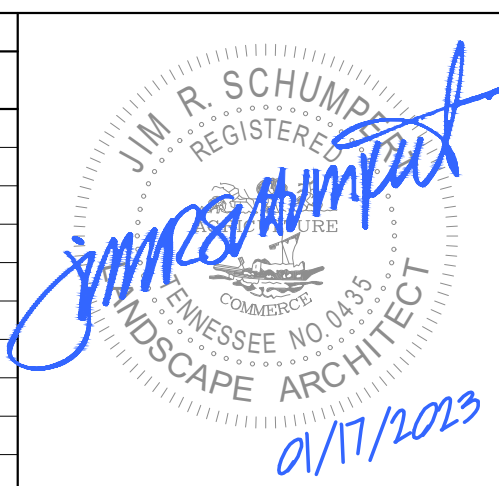
MITIGATION CAL. INCHES 235.5"

MITIGATION CAL INCHES 246.5"

TREE SUMMARY	
TOTAL TREES ON SITE:	145
TOTAL TREES SAVED:	14
TOTAL TREES REMOVED:	131
CALIPER-INCHES SAVED:	135"
CALIPER INCHES REMOVED:	1,487"
MITIGATION CALIPER INCHES:	752"
INCHES PROVIDED BY NEW PLANTING: (SEE SHEET LA1.1, LANDSCAPE PLANTING PLAN)	40.5"
NET CALIPER INCHES TO BE MITIGATED:	712"

MITIGATION 269.5"
CAL INCHES

CALIPER INCHES PROVIDED BY NEW PLANTING: (SEE SHEET LA1.1, LANDSCAPE PLANTING PLAN)	40.5"
TOTAL CALIPER INCHES TO BE MITIGATED:	712"

[illegible]

NOT FOR CONSTRUCTION
FOR CITY REVIEW ONLY

DIVISION OF ENGINEERING EXISTING TREE PLAN

10410 US HIGHWAY 70
LAKELAND, TENNESSEE

SURVEY TRF, INC. DATE 12/22 BOOK _____
DESIGN BY TRF, INC. DATE 01/23 SCALE 1"=20'
REVIEWED _____

CITY ENGINEER _____ DATE _____

DOLLAR GENERAL

DEVELOPER: PEDIGO CONSTRUCTION, LLC
ENGINEER: THE REAVES FIRM, INC.

LA1.0



VICINITY MAP
NTS

REYCO LLC
10360 US HWY 70
LO15100002

EXISTING
BUILDING (TYP)

NO4°18'48"E-268.17'
APPROX. LIMIT OF
AREA TO BE SODDED
7.5' SIDE SETBACK

NEW 10,542 SF BUILDING
FTE=292.75

RETAINING WALL,
DESIGN BY OTHERS

6'-MARY NELL' HOLLY
PROPERTY
BOUNDARY (TYP)

APPROX. LIMIT OF
AREA TO BE SODDED

EVERGREEN HILLS, INC.
0 US HWY 70
LO14100385

EXISTING TREE
(TYPICAL)

2-MAIDEN GRASS
1-BLACK GUM
6-'ROSE CREEK' ABELIA

1-'ATHENA' ELM
90-VARIEGATED LIRIOPE

5-ARROWWOOD VIBURNUM

6-WILLOW OAK

10-BURNING BUSH

1-'OCTOBER GLORY' MAPLE

9-LOROPETALUM
15-'CARISSA' HOLLY

EXISTING TREE
(TYPICAL)

U.S. HIGHWAY 70
(60' R.O.W.)

6-'SHAMROCK' INKBERRY
1-'FOREST PANSY' REDBUD

8-'SOFT TOUCH' HOLLY
26-'STELLA D'ORO' DAYLILY

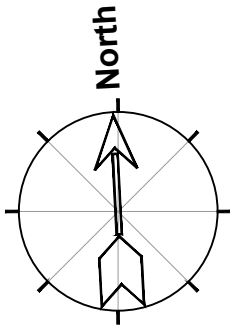
1-MAIDEN GRASS

5-'MARY NELL' HOLLY
1-MAIDEN GRASS
8-DWF. BURFORD HOLLY
3-MAIDEN GRASS
3-ARROWWOOD VIBURNUM
7-'VINTAGE JADE' DISTYLUM

1-'PERSIAN SPIRE'
PARROTIA

3-'OCTOBER GLORY'
MAPLE

20 0 20
GRAPHIC SCALE IN FEET
SCALE: 1"=20'



NOTE: THIS PROJECT WILL BE IRRIGATED
BY MEANS OF A PERMANENT AUTOMATIC
IRRIGATION SYSTEM - SYSTEM DESIGN WILL
BE PROVIDED BY THE LANDSCAPE
CONTRACTOR PRIOR TO INSTALLATION

SEE ARCH PLAN FOR BUILDING
LAYOUT AND DIMENSION. VERIFY
DOOR/ENTRY/GARAGE LOCATIONS
AND ELEVATIONS WITH ARCH
PLAN PRIOR TO CONSTRUCTION.

CONTRACTOR TO VERIFY SITE CONDITIONS
AND EXISTING ELEMENTS PRIOR TO
CONSTRUCTION. IF ANY DISCREPANCIES EXIST,
NOTIFY THE ENGINEER OF RECORD PRIOR TO
PROCEEDING WITH DEMOLITION/CONSTRUCTION.



SEE SHEET LA1.0 FOR EXISTING
TREE INFORMATION

Planting Notes

- MULCH ALL BEDS AND TREE RINGS WITH A MINIMUM DEPTH OF 3" HARDWOOD MULCH
- STAKE ALL B & B TREES PER DETAIL
- TILL TOP 6" OF SOIL IN ALL BED AREAS AND AMEND WITH SAND AND PEAT TO ASSURE PROPER DRAINAGE AND PERCOLATION
- TEST pH OF SOIL AND AMEND ALL BED AREAS WITH CHEMICALS AND FERTILIZER TO ASSURE THE BEST POSSIBLE GROWTH ENVIRONMENT FOR THE SPECIFIED PLANT MATERIAL
- APPLY PREEMERGENTS IN ALL BED AREAS PRIOR TO PLANTING TO PREVENT WEED GROWTH
- ROLL, WATER AND FERTILIZE ALL SOD AREAS TO PROVIDE A SMOOTH MOWING SURFACE FREE OF GAPS AND IRREGULAR JOINTS
- CONTRACTOR RESPONSIBLE FOR A PERMANENT STAND OF TURFGRASS WHERE SEEDING IS SPECIFIED. SEED AS NECESSARY TO ESTABLISH TURF IN ALL AREAS DAMAGED BY CONSTRUCTION.
- LANDSCAPE ARCHITECT RETAINS THE RIGHT TO REJECT ANY PLANT MATERIAL AT ANY TIME IF IT DOES NOT MEET THE SPECIFICATIONS ON THE PLANT MATERIALS LIST
- PRUNE PLANTS AFTER PLANTING TO ASSURE CONSISTENCY IN GROWTH HABIT
- CONTRACTOR TO GUARANTEE ALL PLANT MATERIAL INCLUDING SOD FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE. REPLACEMENTS WILL ALSO BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER INSTALLATION
- CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO UTILITIES DURING THE COURSE OF THE WORK. CONTRACTOR IS RESPONSIBLE FOR THE REPAIR OF ANY DAMAGE TO UTILITIES, SITE STRUCTURES, ETC. RESULTING FROM LANDSCAPE CONSTRUCTION.
- ALL PLANTS MUST BE VIGOROUS, HEALTHY MATERIAL, FREE OF PESTS AND DISEASE.
- ALL PLANTS AND TREES MUST MEET ALL REQUIREMENTS SPECIFIED IN THE PLANT MATERIALS LIST, THE DETAILS, AND SPECIFICATIONS
- ANY MATERIAL WHICH DIES, OR DEFOLIATES (PRIOR TO ACCEPTANCE OF THE WORK) WILL BE PROMPTLY REMOVED AND REPLACED.
- STANDARDS SET FORTH IN "AMERICAN STANDARD FOR NURSERY STOCK" REPRESENT GENERAL GUIDELINE SPECIFICATIONS ONLY AND WILL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIAL.
- LANDSCAPE CONTRACTOR IS TO BE RESPONSIBLE FOR MAINTAINING ALL PLANT MATERIALS UNTIL SUBSTANTIAL COMPLETION OF THE INSTALLATION.

Plant Materials List

Botanical Name	Common Name	Quantity	Height	Caliper	Spread	Notes	Cal.-Inches
ACER RUBRUM 'OCTOBER GLORY'	'OCTOBER GLORY' MAPLE	4	14-16'	3"	-	STRAIGHT, WELL-BRANCHED	12"
CERCIS CANADENSIS 'FOREST PANSY'	'FOREST PANSY' REDBUD	1	10-12'	2 1/2"	-	FULL, WELL-BRANCHED	2.5"
DISTYLUM 'VINTAGE JADE'	'VINTAGE JADE' DISTYLUM	7	-	-	-	#3 CONTAINER	
EUONYMUS ALATA	BURNING BUSH	10	-	-	-	#3 CONTAINER	
HEMEROCALLIS 'STELLA D'ORO'	'STELLA D'ORO' DAYLILY	26	-	-	-	#1 CONTAINER	
ILEX CORNUTA 'BURFORDII NANA'	DWARF BURFORD HOLLY	8	-	-	-	#3 CONTAINER	
ILEX CORNUTA 'CARISSA'	'CARISSA' HOLLY	15	-	-	-	#3 CONTAINER	
ILEX CRENATA 'SOFT TOUCH'	'SOFT TOUCH' HOLLY	8	-	-	-	#3 CONTAINER	
ILEX GLABRA 'SHAMROCK'	'SHAMROCK' INKBERRY	6	-	-	-	#3 CONTAINER	
ILEX x 'MARY NELL'	'MARY NELL' HOLLY	12	5-6'	-	2 1/2-3'	FULL TO GND.; UNIFORM SHAPE	
LINNAEA x 'ROSE CREEK'	'ROSE CREEK' ABELIA	6	-	-	-	#3 CONTAINER	
LIRIOPE MUSCARI 'VARIEGATA'	VARIEGATED LIRIOPE	90	-	-	-	4" POTS	
LOROPETALUM CHINENSE	LOROPETALUM	9	-	-	-	#3 CONTAINER	
MISCANTHUS SINENSIS GRACILLIMUS	MAIDEN GRASS	7	-	-	-	#3 CONTAINER	
NYSSA SYLVATICA	BLACK GUM	1	12-14'	3"	-	FULL, WELL-BRANCHED	3"
PARROTIA PERSICA 'PERSIAN SPIRE'	'PERSIAN SPIRE' PARROTIA	1	10-12'	2 1/2"	-	STRAIGHT, WELL-BRANCHED	2.5"
QUERCUS PHELLOS	WILLOW OAK	6	14-16'	3"	-	FULL, WELL-BRANCHED	18"
ULMUS PARVIFOLIA 'EMER I'	'ATHENA' ELM	1	10-12'	2 1/2"	-	STRAIGHT, WELL-BRANCHED	2.5"
VIBURNUM DENTATUM	ARROWWOOD VIBURNUM	8	-	-	-	#3 CONTAINER	
CYNODON DACTYLON	BERMUDA SEED						
CYNODON DACTYLON 'TIFWAY'	'TIFWAY' BERMUDA SOD						

TOTAL CALIPER INCHES: 40.5

NOTE:
TOP OF BALL TO BE AT SAME ELEVATION
AS EXISTING BED LEVEL

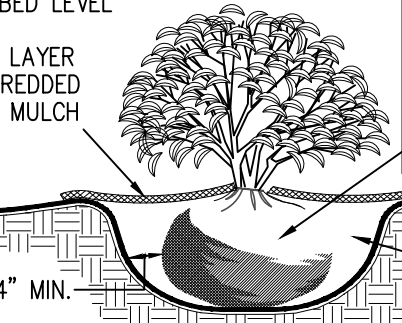
3" MINIMUM LAYER
SHREDDED
HARDWOOD MULCH

4" MIN.

ALL BINDINGS ARE TO BE REMOVED
FROM STEM SYSTEM OF PLANT

B&B MATERIAL: LOOSEN AND FOLD BACK
TOP 1/3 OF BURLAP FROM BALL
CONTAINER MATERIAL: LOOSEN PERIMETER
ROOTS ONCE PLANT IS REMOVED FROM
CONTAINER TO PREVENT ROOT-BOUND
CONDITION

PREPARED SOIL MIXTURE
PER SPECIFICATIONS



NOTE:
TOP OF BALL TO BE
AT SAME ELEVATION
AS EXISTING BED LEVEL

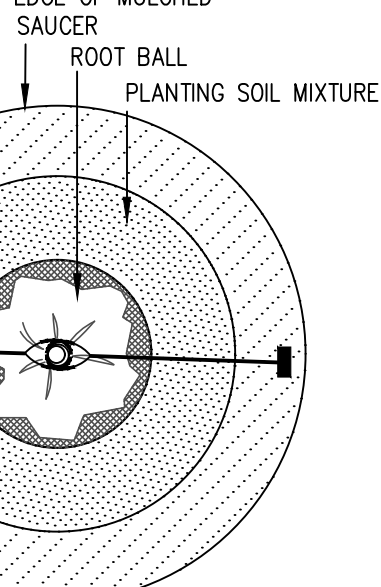
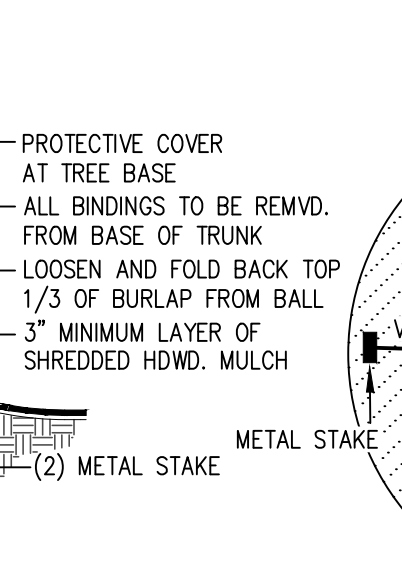
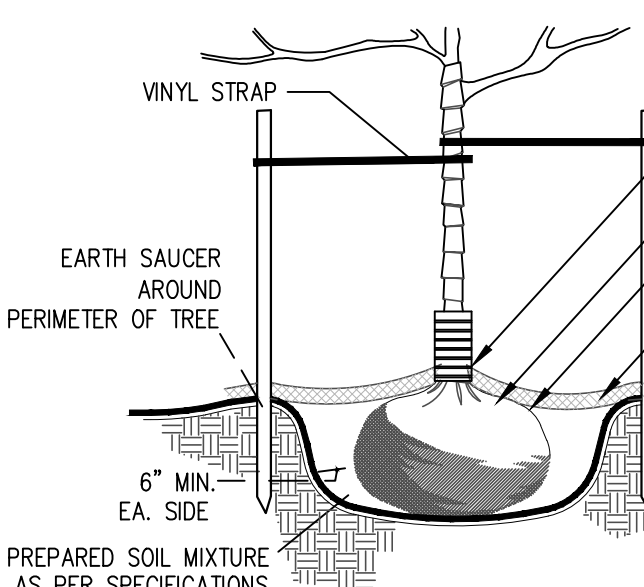
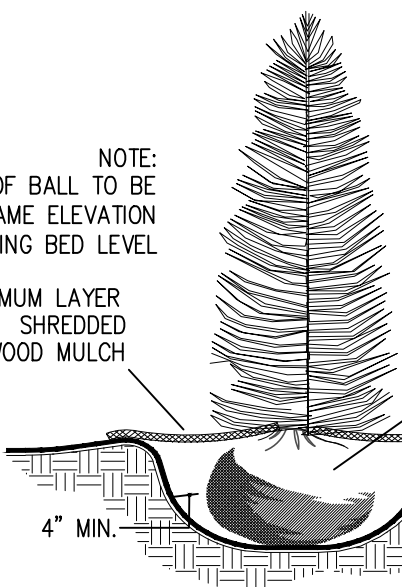
3" MINIMUM LAYER
SHREDDED
HARDWOOD MULCH

4" MIN.

ALL BINDINGS ARE TO BE REMOVED
FROM STEM SYSTEM OF PLANT

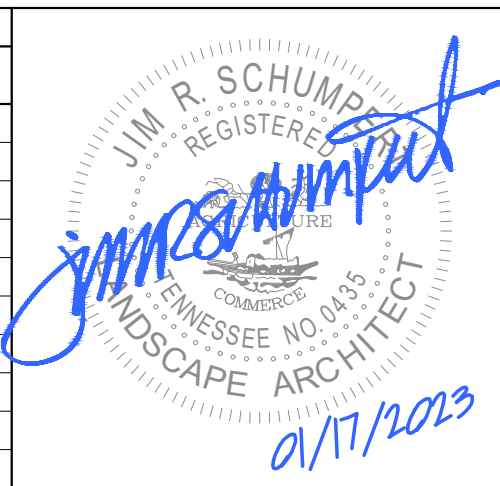
B&B MATERIAL: LOOSEN AND FOLD BACK
TOP 1/3 OF BURLAP FROM BALL
CONTAINER MATERIAL: LOOSEN PERIMETER
ROOTS ONCE PLANT IS REMOVED FROM
CONTAINER TO PREVENT ROOT-BOUND
CONDITION

PREPARED SOIL MIXTURE
PER SPECIFICATIONS



The
Reaves
Firm
INCORPORATED
Planning
Engineering
Landscape Arch
Land Surveying
6800 Poplar Avenue, Suite 101
Memphis, TN 38138
901.761.2016 Fax: 901.763.2847
www.ReavesFirm.com

REVISION	DESCRIPTION of CHANGE	APPROVAL DATE
ITEM NO.		



DOLLAR GENERAL

DEVELOPER: PEDIGO CONSTRUCTION, LLC
ENGINEER: THE REAVES FIRM, INC.

NOT FOR CONSTRUCTION
FOR CITY REVIEW ONLY

DIVISION OF ENGINEERING
LANDSCAPE PLANTING PLAN

10410 US HIGHWAY 70
LAKELAND, TENNESSEE

SURVEY TRF., INC. DATE 12/22 BOOK
DESIGN BY TRF., INC. DATE 01/23 SCALE 1"=20'
REVIEWED

CITY ENGINEER DATE

LA1.1

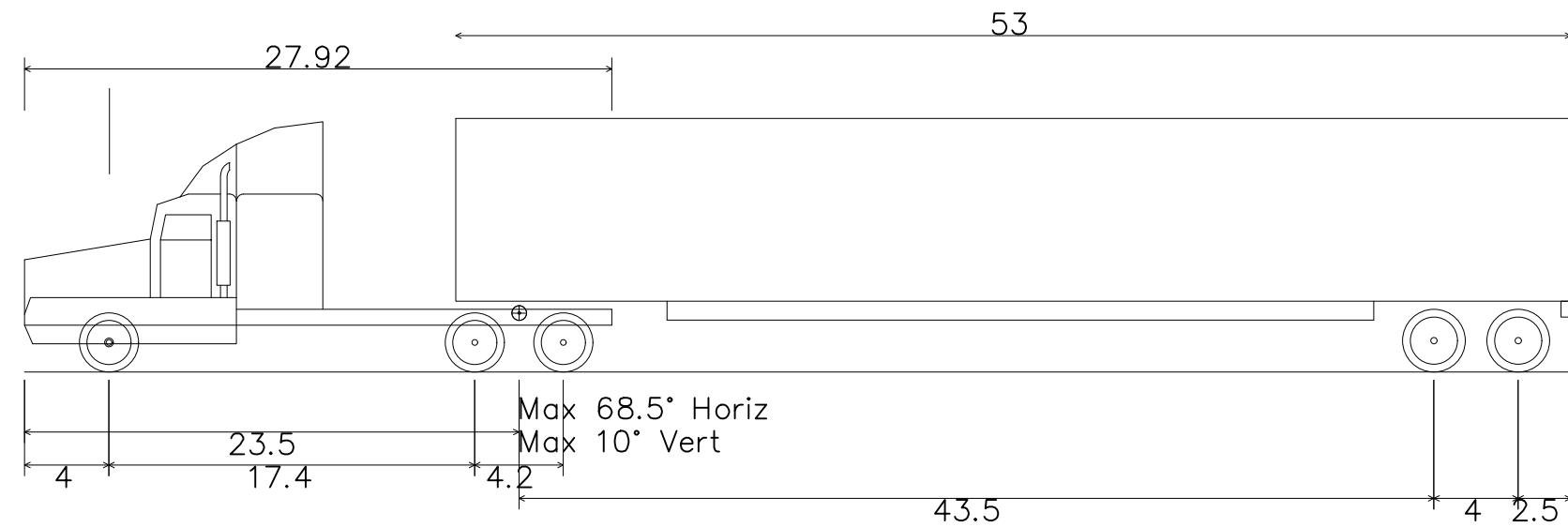
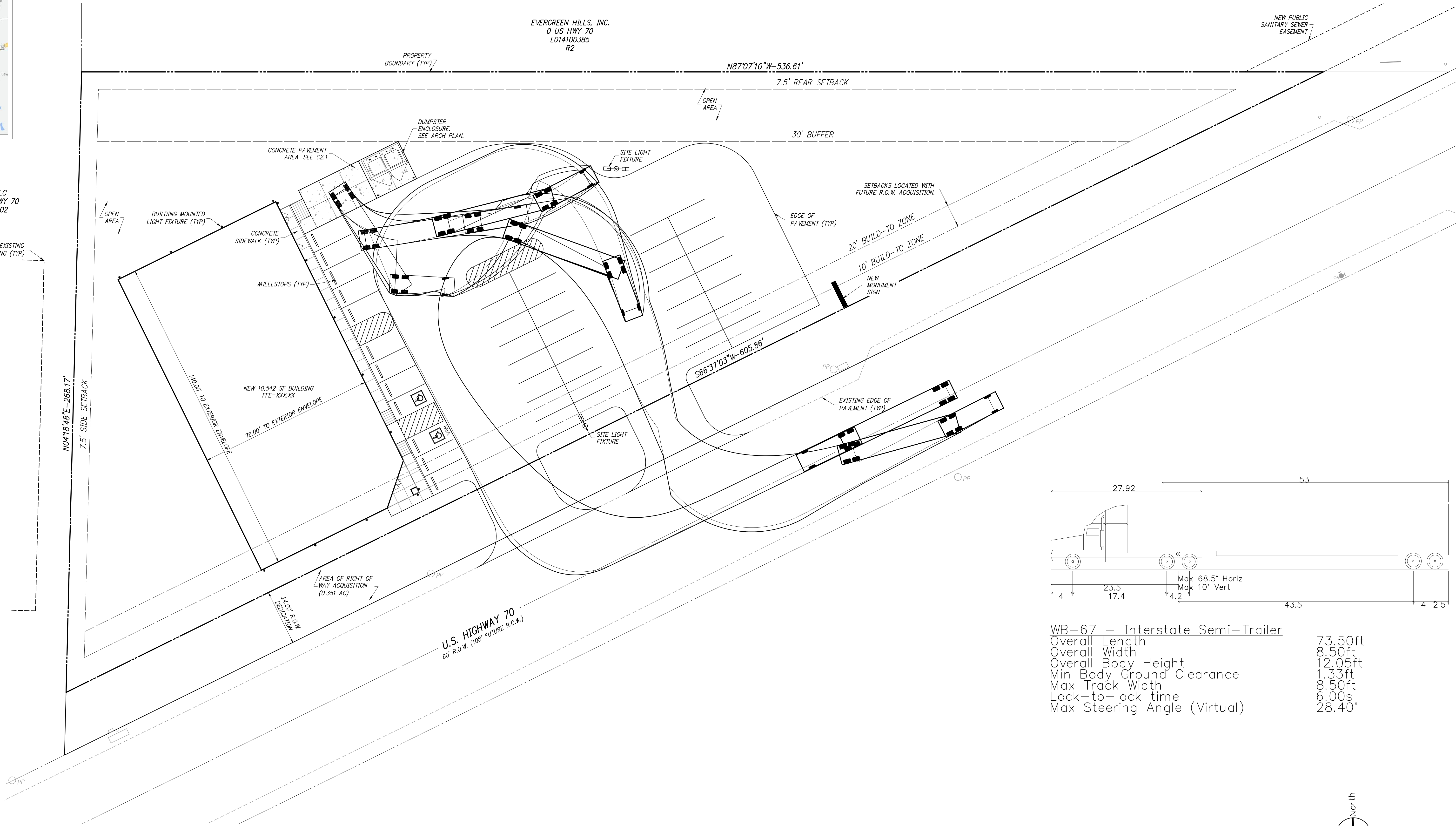


VICINITY MAP
NTS

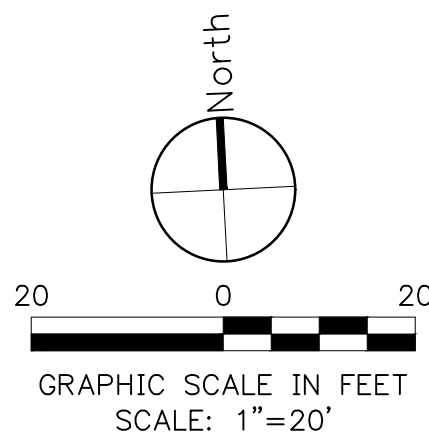
REYCO LLC
10360 US HWY 70
LO15100002
C1

EXISTING
BUILDING (TYP)

N04°18'48"E-268.17'
7.5' SIDE SETBACK



WB-67 - Interstate Semi-Trailer
Overall Length 73.50ft
Overall Width 8.50ft
Overall Body Height 12.05ft
Min Body Ground Clearance 1.33ft
Max Track Width 8.50ft
Lock-to-lock time 6.00s
Max Steering Angle (Virtual) 28.40°



THIS SITE LIES WITHIN THE LS-9 SEWER BASIN
THIS SITE LIES WITHIN THE CLEAR CREEK 8-W DRAINAGE BASIN

ITEM NO.	REVISION DESCRIPTION of CHANGE	APPROVAL DATE



DOLLAR GENERAL

DEVELOPER: PEDIGO CONSTRUCTION, LLC
ENGINEER: THE REAVES FIRM, INC.

NOT FOR CONSTRUCTION
FOR CITY REVIEW ONLY

DIVISION OF ENGINEERING
VEHICLE CIRCULATION PLAN

10410 US HIGHWAY 70
LAKELAND, TENNESSEE

SURVEY BY TRF., INC. DATE 12/22 BOOK
DESIGN BY TRF., INC. DATE 02/23 SCALE 1"=20'
REVIEWED

CITY ENGINEER DATE

C2.5



CONTRACTOR TO VERIFY SITE CONDITIONS
AND EXISTING ELEMENTS PRIOR TO
CONSTRUCTION. IF ANY DISCREPANCIES EXIST,
NOTIFY THE ENGINEER OF RECORD PRIOR TO
PROCEEDING WITH DEMOLITION/CONSTRUCTION.

SEE ARCH PLAN FOR BUILDING
LAYOUT AND DIMENSION.
VERIFY DOOR/ENTRY LOCATIONS
AND ELEVATIONS WITH ARCH
PLAN PRIOR TO CONSTRUCTION.

100-YEAR FLOODZONE INFORMATION:
NO PORTION OF THIS PROPERTY LIES WITHIN THE
100-YEAR FLOODPLAIN OR FLOODWAY AS SHOWN
ON FEMA MAP NUMBER 47157C0215G DATED
FEBRUARY 06, 2013 FOR SHELBY COUNTY, TN.
BASE FLOOD ELEVATION=±267.50



The
Reaves
Firm
Engineering
Planning
Landscape Architecture
Land Surveying
6800 Poplar Avenue, Suite 101 Memphis, TN 38138
901.761.2016 Fax: 901.763.2847
www.ReavesFirm.com

Meeting Cycle: Thursday, February 16, 2023

Subject: Action on amending the Lakeland Municipal Planning Commission By-laws.

Staff Contact: Michael Walker, City Manager

STAFF RECOMMENDATION

City Staff recommends the Lakeland Municipal Planning Commission adopt the amended By-laws presented.

BUDGET IMPACT

There is no budgetary impact to this item.

DISCUSSION

The MPC by-laws amendment accomplishes two things, as well as minor grammatical corrections:

1. Aligns the MPC's by-laws with ordinance O-3-2023 adopted by the Board of Commissioners effective 2.9.2023, allowing for the addition of two members to the MPC
2. Changes the scheduled meeting date of the MPC to the second Thursday of each month, enabling the Board of Commissioners meeting schedule to be revised

The effective date of the amended by-laws, if approved, should be established as April 1, 2023, enabling two things to occur:

1. The minutes of this action to be officially approved in March
2. The Board of Commissioners meeting schedule to be officially revised in March

**BY-LAWS
OF THE
LAKELAND MUNICIPAL PLANNING COMMISSION**

ARTICLE I

AUTHORITY

These by-laws are adopted under the authority of the ordinances of the City of Lakeland and the Tennessee Code Annotated and amendments thereto as set forth in Section 13-4-102. Each municipal planning commission shall adopt rules for the transaction of business and shall keep a record of its resolutions, transactions, findings and determination, which shall be a public record.

ARTICLE II

OBJECTIVES

The objectives and purposes of the Lakeland Municipal Planning Commission (MPC) shall be as set forth in Sections 13-4-101 through 13-7-401 of the Tennessee Code Annotated and amendments and supplements thereto, and these powers and duties delegated to the MPC by the Board of Commissioners in accordance with the aforementioned enabling law (Appendix A).

ARTICLE III

APPOINTMENT OF MEMBERS

Section 1. The MPC shall be composed of not less than seven (7) and not more than nine (9) members. (Amended by Ord. # 111 and Ord. O-3-2023)

Section 2. The composition of the Commission shall be as provided by Tennessee Statutes or Lakeland Ordinance. Currently, the provisions provide the composition of the MPC is:

1. The Mayor or designee;
2. A Commissioner designated for a specified term by the Board of Commissioners; and
3. Not less than five (5) nor more than seven (7) other Lakeland resident members appointed by the Mayor.
4. Appointments to membership on the Lakeland Municipal Planning Commission shall be for three (3) years with the membership being arranged so that the term of at least one member, but not more than two members, expires each year with the Mayor having the authority at any time without notice or statement of reason, to remove any appointed member. (TCA #13-4-101).

Section 3. All appointments and filling of vacancies, with the Mayor having the authority to fill all appointed vacancies, shall be filed with the date and length of appointment being recorded in the official records of the city. In instances of the inability to determine the date and length of appointment of a member, the mayor shall reappoint said member for a time period that ensures compliance with Section 2.4 above.

Section 4. All members shall have a voice and vote on all matters brought before the MPC.

ARTICLE IV

ABSENTEES

Section 1. In the event any citizen member of the MPC has three (3) consecutive unexcused absences from the meetings of the MPC, the MPC Chair may recommend, or the MPC by majority vote, may recommend to the Mayor that the member be removed after notice to the member and MPC.

Section 2. Members may be excused from attendance of the MPC meetings after due notice stating the reason for such absence to either the MPC Chair, Vice-Chair, City Manager or the designated staff person. Such notification shall be presented by the Chair, Vice-Chair, City Manager or the designated staff person at the meeting and noted in the minutes.

ARTICLE V

OFFICERS AND THEIR DUTIES

Section 1. The officers of the MPC shall consist of a Chair, Vice-Chair and Secretary.

Section 2. The Chair shall preside at all meetings and hearings of the MPC and have the duties normally conferred by parliamentary usage of such officers.

Section 3. The Vice-Chair shall be one of the five appointed members and, in the absence of the Chair, shall have the duties normally conferred by parliamentary usage of such officers.

Section 4. The Secretary shall be one of the five appointed members of the MPC and, in the absence of the Chair and Vice-Chair, shall have the duties normally conferred by parliamentary usage of such officers. The following duties of the Secretary shall not be assigned: The Secretary shall certify votes of the MPC including certifying and signing the minutes of the MPC, attesting that they are correct and approved, certifying and signing approved subdivision plats, and planned development site plans, attesting that they have been approved by the MPC.

Section 5. The City Manager or the designated staff person shall take the minutes and records of the MPC, and deliver promptly to the City Recorder to be kept and maintained as permanent records; prepare agendas of regular and special meetings; provide notice of meetings to the MPC members as may be directed by the City Manager; arrange proper and legal notice of hearings; attend to correspondence of the MPC; and perform such other duties as required in administrative support of the MPC.

Section 6. The Mayor or designee and Board of Commissioners representative shall not be the Chair, Vice-Chair or Secretary on the MPC but shall have nominating and voting rights for such offices.

ARTICLE VI

ELECTION OF OFFICERS

Section 1. Officers shall be elected at the annual organization meeting in January, during which time the city commission member shall act as Chair pro temp.

Section 2. The nominee for each office receiving a majority vote of the MPC shall be declared elected.

Section 3. The term of office of each officer of the MPC shall be one (1) year, or until the selection and qualification of his or her successor.

Section 4. Vacancies in offices shall be filled immediately for the un-expired term by regular election procedure.

ARTICLE VII

MEETINGS

Section 1. The regular meeting of the MPC shall be the second Thursday of each month, which shall be held at 5:30 PM at the Lakeland City Hall or such other place and time as shall be authorized in advance by the Chair.

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Section 3. Votes may be by voice or roll call as directed by the Chair and shall be recorded by the Minutes Clerk and kept in the official minutes by the City Recorder.

Section 4. Except as set forth herein, Roberts Rules of Order shall prevail as to any matters of procedure.

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Section 8. The notice of a Special Meeting shall specify the purpose of the meeting with the MPC not considering any other business. A special meeting may be called by: (1) The Chair, (2) Vice-Chair, if the Chair is not acting, (3) Any two (2) members of the MPC.

Section 9. Meeting of the Planning Commission shall be conducted in an orderly manner and all questions shall be directed to the Chair. Debate on any motion shall be limited to five (5) minutes per member unless two-thirds of members present agree to extend the time limit for the debate.

Section 10. The proponents of the proposed project presented to MPC shall be granted not more than twenty (20) minutes upon first presentation and the opponents of the same matter shall be granted not in excess of twenty (20) minutes to explain all opposition. Upon completion of the first presentations, both the proponents and opponents, in turn, shall be allowed a two (2) minute rebuttal or summation. Public discussion shall be limited to three (3) minutes per speaker.

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- (8) Announcements
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Section 12. Any person who wishes to address the MPC must sign the “Request to Speak” form prior to the meeting.

Section 13. A record shall be kept of those speaking before the MPC at regular or special call meetings stating name, address, agenda items, position for or against and any pertinent comments noted at MPC request.

ARTICLE VIII

PROCEDURES FOLLOWING COMMISSION MEETING AND ACTION

Section 1. The minutes of the meeting shall be the official record of action of the MPC and any change therefrom in any correspondence shall not be valid.

Section 2. The minutes shall be signed by the Secretary or by the Chair if the Secretary was not present at the meeting.

Section 3. The Secretary shall be the person responsible for verifying the correctness of all minutes, although the actual taking of the minutes may be delegated to other persons.

Section 4. The official copy of the minutes shall be kept by the City Recorder.

ARTICLE IX

PROCEDURE

Section 1. All matters to be presented to the MPC shall be filed on the proper form with the City Manager or the designated staff person, with the number of copies as specified by the appropriate regulations by the specified deadline. All other matters to be considered by the MPC shall have a deadline of thirty (30) days prior to the MPC meeting. No case shall be placed on the agenda without the applicant filing the proper forms and payment of any required fees. Files for the completed application forms shall be maintained by the City Manager or the designated staff person.

Section 2. An agenda of matters to be presented at the meeting shall be prepared and distributed no less than three (3) business days prior to the regular meeting of the MPC. No additions to the agenda shall be allowed except by a two-thirds majority vote. The Chair may change the order of the agenda, unless a member protests the change, in which case a vote will be required.

Section 3. All matters to be presented to the MPC shall be date-time stamped on receipt by the City of Lakeland.

Section 4 The City Manager or the designated staff person shall determine if all appropriate forms and payment of any required fees have been made. If not, the City Manager or the designated staff person will inform the applicant in writing the requirements needed to complete the filing. The matter shall be placed on the MPC agenda to confirm rejection for failure to file properly and that the thirty (30) day time limit does not apply.

Section 5. A BOC member or designee shall present to the BOC the reasons for actions taken by the Planning Commission.

ARTICLE X

PUBLIC NOTICE

Section 1. Public Notice will be provided as required by Tennessee Law, City of Lakeland Ordinances or the Subdivision Regulations.

ARTICLE XI

REPORTING TO THE BOARD OF COMMISSIONERS

Section 1. After the MPC has acted upon any matter, requiring approval of the Chief legislative body, the action of the MPC shall be delivered for action to the Board of Commissioners by the City Manager or the designated staff person.

Section 2. Upon request by the Board of Commissioners, the designated staff person will present to the Board of commissioners the reasons for the action by the MPC.

Section 3. The Chair or his or her designee shall report quarterly to the BOC on Planning Commission activities.

ARTICLE XII

HEARINGS

Section 1. The MPC shall hold public hearings only when required by state law, ordinance, or subdivision regulations.

Section 2. The City Manager or the designated staff person shall provide notice of hearings as required by State Law, Lakeland Ordinances, the Subdivision Regulations or Lakeland Development Procedures.

Section 3. The case before the MPC shall be presented by the Chair or the designated staff person and parties of interest shall have the privilege of the floor. No statement shall be recorded or sworn to as evidence of any court of law without notice to the parties.

Section 4. A record shall be kept of those speaking at a Public Hearing stating name, address, position for or against and any pertinent comments noted.

ARTICLE XIII

CONFLICT OF INTEREST STATEMENT

Section 1. Any member shall recuse himself or herself from any participation in the discussion of or voting on any matter on the meeting agenda in which he or she has a direct or indirect personal interest.

Section 2. The member shall vacate his or her seat during deliberation on any matter from which he or she has recused himself or herself. The member shall not be replaced for the vote.

Section 3. A member who is recused, shall not be counted as present for a quorum for that particular vote.

ARTICLE XIV

PROVISIONS FOR AMENDMENT

Section 1. These rules may be amended by a two-thirds majority vote of the entire membership of the MPC at any time by placing on the agenda of any regular meeting an item for their amendment or by a Special Meeting called for that purpose as set forth therein.

Planning Commission

Adopted February 16, 2023 - effective April 1, 2023

ATTEST:

Wyatt Bunker, Chair
Lakeland Municipal Planning Commission

Amber Hitchcock, Secretary
Lakeland Municipal Planning Commission

Lakeland Municipal Planning Commission By-Laws



**BY-LAWS
OF THE
LAKELAND MUNICIPAL PLANNING COMMISSION**

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ARTICLE I

AUTHORITY

These by-laws are adopted under the authority of the ordinances of the City of Lakeland and the Tennessee Code Annotated and amendments thereto as set forth in Section 13-4-102. Each municipal planning commission shall adopt rules for the transaction of business and shall keep a record of its resolutions, transactions, findings and determination, which shall be a public record.

ARTICLE II

OBJECTIVES

The objectives and purposes of the Lakeland Municipal Planning Commission (MPC) shall be as set forth in Sections 13-4-101 through 13-7-401 of the Tennessee Code Annotated and amendments and supplements thereto, and these powers and duties delegated to the MPC by the Board of Commissioners in accordance with the aforementioned enabling law (Appendix A).

ARTICLE III

APPOINTMENT OF MEMBERS

Section 1. The MPC shall be composed of not less than seven (7) and not more than nine (9) members, (Amended by Ord. # 111 and Ord. O-3-2023)

Section 2. The composition of the Commission shall be as provided by Tennessee Statutes or Lakeland Ordinance. Currently, the provisions provide the composition of the MPC is:

1. The Mayor or designee;
2. A Commissioner designated for a specified term by the Board of Commissioners; and
3. Not less than five (5) nor more than seven (7) other Lakeland resident members appointed by the Mayor.

4. Appointments to membership on the Lakeland Municipal Planning Commission shall be for three (3) years with the membership being arranged so that the term of at least one member, but not more than two members, expires each year with the Mayor having the authority at any time without notice or statement of reason, to remove any appointed member. (TCA #13-4-101).

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Section 3. All appointments and filling of vacancies, with the Mayor having the authority to fill all appointed vacancies, shall be filed with the date and length of appointment being recorded in the official records of the city. In instances of the inability to determine the date and length of appointment of a member, the mayor shall reappoint said member for a time period that ensures compliance with Section 2.4 above.

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Section 4. All members shall have a voice and vote on all matters brought before the MPC.

ARTICLE IV

ABSENTEES

Section 1. In the event any citizen member of the MPC has three (3) consecutive unexcused absences from the meetings of the MPC, the MPC Chair may recommend, or the MPC by majority vote, may recommend to the Mayor that the member be removed after notice to the member and MPC.

Section 2. Members may be excused from attendance of the MPC meetings after due notice stating the reason for such absence to either the MPC Chair, Vice-Chair, City Manager or the designated staff person. Such notification shall be presented by the Chair, Vice-Chair, City Manager or the designated staff person at the meeting and noted in the minutes.

ARTICLE V

OFFICERS AND THEIR DUTIES

Section 1. The officers of the MPC shall consist of a Chair, Vice-Chair and Secretary.

Section 2. The Chair shall preside at all meetings and hearings of the MPC and have the duties normally conferred by parliamentary usage of such officers.

Section 3. The Vice-Chair shall be one of the five appointed members and, in the absence of the Chair, shall have the duties normally conferred by parliamentary usage of such officers.

Section 4. The Secretary shall be one of the five appointed members of the MPC and, in the absence of the Chair and Vice-Chair, shall have the duties normally conferred by parliamentary usage of such officers. The following duties of the Secretary shall not be assigned: The Secretary shall certify votes of the MPC including certifying and signing the minutes of the MPC, attesting that they are correct and approved, certifying and signing approved subdivision plats, and planned development site plans, attesting that they have been approved by the MPC.

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Section 5. The City Manager or the designated staff person shall take the minutes and records of the MPC, and deliver promptly to the City Recorder to be kept and maintained as permanent records; prepare agendas of regular and special meetings; provide notice of meetings to the MPC members as may be directed by the City Manager; arrange proper and legal notice of hearings; attend to correspondence of the MPC; and perform such other duties as required in administrative support of the MPC.

Section 6. The Mayor or designee and Board of Commissioners representative shall not be the Chair, Vice-Chair or Secretary on the MPC but shall have nominating and voting rights for such offices.

ARTICLE VI

ELECTION OF OFFICERS

Section 1. Officers shall be elected at the annual organization meeting in January, during which time the city commission member shall act as Chair pro temp.

Section 2. The nominee for each office receiving a majority vote of the MPC shall be declared elected.

Section 3. The term of office of each officer of the MPC shall be one (1) year, or until the selection and qualification of his or her successor.

Section 4. Vacancies in offices shall be filled immediately for the un-expired term by regular election procedure.

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MEETINGS

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Planning Commission

Adopted on February 16, 2023

ATTEST:

Wyatt Bunker, Chair
Lakeland Municipal Planning Commission

Amber Hitchcock, Secretary
Lakeland Municipal Planning Commission

Lakeland Municipal Planning Commission By-Laws



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