



FARRAGUT MUNICIPAL PLANNING COMMISSION

AGENDA

December 15, 2022

Farragut Town Hall - Board Room

7:00 p.m.

For questions, please e-mail Mark Shipley at mshipley@townoffarragut.org or Bart Hose at bhose@townoffarragut.org.

- 1. Approval of agenda**
- 2. Approval of minutes – November 17, 2022**
- 3. Discussion and public hearing on the installation of underground fiber optic cable for Comcast from Kingston Pike along the east side of Concord Road and under Concord Road to the Town Center at Biddle Farms access along Concord Road to service 170 Brooklawn Street (Comcast, Applicant)**
- 4. Discussion and public hearing on the installation of underground fiber optic cable for AT&T from Kingston Pike along the southwest side of S. Campbell Station Road and under S. Campbell Station Road along the northwest side of Brooklawn Street to service 241 Brooklawn Street (AT&T, Applicant)**
- 5. Discussion and public hearing on the installation of underground fiber optic cable for Zayo along the south side of Outlet Drive from the western Town limits across the frontage of 11220 Outlet Drive with termination to the east in the City of Knoxville (Apex Advanced Technology, Applicant)**
- 6. Discussion and public hearing on a request to amend the final plat of Lots 2 and 3 of the Mary E. Smith Property concerning the requirement to construct a pedestrian facility during home construction across the frontages of 300 and 310 Boring Road. Instead, the applicant is proposing to provide a 20-foot pedestrian facility easement along the lot frontages and a covenant to be approved by the Town Attorney that would be recorded and bind all future property owners of 300 and 310 Boring Road to pay for the installation of a pedestrian facility across their frontages when it would be associated with a larger project that would extend a pedestrian facility to the west along Boring Road. The two lots total to 2.8 Acres and are Zoned R-2 (Benchmark Associates, Applicant)**
- 7. Discussion and public hearing on a revised preliminary plat for the Bridgemore Subdivision, Phases 3B and 4, Parcel 025.03, Tax Map 152, 70.28 Acres, 102 Lots, Zoned R-1/OSR (Carter McCall – Ardurra, Applicant)**

**11408 MUNICIPAL CENTER DRIVE | FARRAGUT, TN 37934 | 865.966.7057 |
WWW.TOWNOFFARRAGUT.ORG**

It is the policy of the Town of Farragut not to discriminate on the basis of race, color, natural origin, gender, gender identity, sexual orientation, age, religion, disability or veteran status pursuant to Title VI of the Civil Rights Act of 1964, Public Law 93-112 and 101-336 in its hiring, employment practices and programs. To request accommodations due to disabilities, please call 865-966-7057 in advance of the meeting



8. Discussion and public hearing on a site plan for a new fieldhouse and athletic field improvements at First Baptist Church of Concord, 11704 Kingston Pike, Zoned R-3 and R-1-S-A (Izic Jeffers - MBI Companies, Applicant)
9. Discussion and public hearing on a site plan for JPMorgan Chase Bank, 11242 Kingston Pike, 1.32 Acres, Zoned PCD (Nicholas Bender – JPMorgan Chase, Applicant)
10. Discussion and public hearing on a site plan for parking lot modifications and display/storage area associated with Current Watersports in a portion of the old Outlet Mall building at 11221 Outlet Drive, Zoned C-2-R/W (Savannah Greco – R2R Studio, LLC., Applicant)
11. Discussion on a concept site plan for Planning Commission feedback on parking and vehicular connectivity associated with an envisioned Japanese restaurant on Parcel 184.03, Tax Map 130, adjacent to Hampton Inn and Suites, 1.04 Acres, Zoned C-2 (Anna Katherine Kittrell – R2R Studio, LLC., Applicant)
12. Discussion on a zoning map amendment request for a portion of Parcel 069, Tax Map 142, north of the Ingles, from Office (O-1), General Single-Family Residential (R-2), and Rural Single-Family Residential (R-1) to Community Service (S-1), 10 acres (Joe Conver – Farragut IL – AL Investors, LLC)
13. Discussion on a future land use map amendment request for a portion of Parcel 069, Tax Map 142, north of the Ingles, from Office/Light Industrial and Medium Density Residential to Civic/Institutional (Joe Conver – Farragut IL – AL Investors, LLC)
14. Consideration of appointment of a representative from the Planning Commission to assist Town staff in design related questions that may arise for individual tenants specific to the Mixed-Use Town Center planning area portion of the Town
15. Approval of utilities
16. Citizen forum

Public Comment Protocol

The Planning Commission welcomes and invites Farragut residents to participate in public meetings. At the end of each business meeting, there will be time reserved for public comment under the Citizen Forum agenda item. If you are interested in speaking, please fill out a blue comment card and turn it in to the Planning Director or other designated staff member. This time is set aside specifically for comments on items that are not on the Planning Commission regular agenda for the meeting. Each speaker will be given five (5) minutes to speak on his/her topic.

During the regular agenda portion of the meeting there may be an allowance for public comment for each agenda item. The Chairman may recognize individuals for public comment based on the following guidelines.

1. The Chairman shall maintain and control the meeting to provide a professional and objective environment;

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2. Any Farragut resident, property owner, or business owner interested in speaking should fill out a blue comment card stating which agenda item they would like to comment on and turn in to the Planning Director or other designated staff member;
3. Speakers shall come to the podium and identify themselves by name and street address;
4. Public comment shall be limited to five (5) minutes per individual. Time for public comment may be amended at the discretion of the Chairman. Time is not transferable to other speakers;
5. Speakers should strive to avoid redundancy; each speaker should have their own original viewpoint;
6. Comments shall address issues, not individuals or personalities;
7. Comments may support or oppose issues or measures, but the motives of those with differing views shall not be questioned or attacked;
8. Personal attacks and malicious comments shall not be tolerated;
9. An applicant, and/or their representative(s), for an item on the regular agenda shall be afforded the time necessary to present their request and respond to questions. The five (5) minute limitation shall not apply. However, the Chairman may ask an applicant to stay on point in order to facilitate the efficiency of the meeting.

Each speaker will be asked if they can agree to abide by the Comment Protocol. If so, please be prepared to speak when your name is called.



**MINUTES
FARRAGUT MUNICIPAL PLANNING COMMISSION**

November 17, 2022

MEMBERS PRESENT

Rita Holladay, Chairman
Ed St. Clair, Vice-Chairman
Scott Russ, Secretary
Ron Williams, Mayor
Louise Povlin, Vice Mayor
Ron Pinchok
Jon Greene
Shannon Preston
Noah Myers
Hayley Sims, Youth Representative

MEMBERS ABSENT

Staff Representative: Mark Shipley, Community Development Director
David Smoak, Town Administrator
Tom Hale, Town Attorney
Bart Hose, Assistant Community Development Director

1. Approval of agenda

Staff recommended approval of the agenda as submitted.

A motion was made by Vice Mayor Povlin to follow staffs' recommendation. Motion was seconded by Commissioner St. Clair and was approved unanimously.

2. Approval of minutes – October 20, 2022

Staff recommended approval of the minutes as submitted.

A motion was made by Vice Mayor Povlin to follow staffs' recommendation. Motion was seconded by Mayor Williams and was approved unanimously except for Commissioner Russ who abstained due to being absent.

3. Discussion and public hearing on a request to amend the Future Land Use Map in the Comprehensive Land Use Plan Update 2012 for 11500 Kingston Pike, 68.31 Acres, from Mixed Use Town Center, Medium Density Residential, Low Density Residential, and Open Space to Commercial, Parks and Recreation, Low Density Residential, and Very Low Density Residential (John Brehm, Hy-Vee, Applicant)

Staff noted that they were informed just prior to the meeting that the applicant would like to postpone action until they could revise their concept. The applicant and their attorney spoke regarding their desire to only discuss their request and take no action. Staff explained that the action to be taken was up to the Planning Commission but the more significant question from staffs' perspective was the fundamental modification that the requested amendment to the Future Land Use Map and Zoning Map could create in relation to the community's past and

current vision of the general area as a desired town center with pedestrian scale buildings and active public and private spaces. The applicant's request would remove provisions tied to the Zoning Ordinance that control the scale of buildings and encourage the character described in the Comprehensive Land Use Plan for this portion of Town. Vice Mayor Povlin expressed agreement with staff and reviewed the Town's history regarding its desire for a town center which included the property in question. Other commissioners expressed a concern over postponing action at this point and indicated that they intended to vote on both the Future Land Use Map and Zoning Map amendment requests. The applicant and their attorney asked to withdraw both amendment requests.

A motion was made by Commissioner Greene to approve the applicant's request to withdraw their Future Land Use Map amendment. Motion was seconded by Commissioner St. Clair and was approved unanimously.

4. Discussion and public hearing on a request to amend the Farragut Zoning Map for 11500 Kingston Pike, 68.31 Acres, from C-1, O-1, B-1, and R-1 to C-1, O-S, R-4, and R-3 (John Brehm, Hy-Vee, Applicant)

As noted in the previous agenda item, the applicant requested to withdraw both their Future Land Use Map and Zoning Map amendments.

A motion was made by Commissioner Myers to approve the applicant's request to withdraw their Zoning Map amendment. Motion was seconded by Vice Mayor Povlin and was approved unanimously.

5. Discussion and public hearing on an ordinance to amend the Farragut Municipal Code, Appendix A., Zoning, Chapter 2., Definitions., to define Ballfield, and Chapter 4., General Provisions and Exceptions, Section XIII., Outdoor Site Lighting, Subsection A., to clarify street lighting provisions, establish where ballfield lighting may be provided, and prohibit lighting that would be a nuisance due to uncontrolled glare on any adjacent properties, rights-of-ways, access easements, or driveways (Farragut Neighborhood Preservation Partnership, Applicant)

Staff reviewed this item and noted that Resolution PC-22-09 recommends approval of Ordinance 22-12. The applicant spoke and indicated that they agreed with the language proposed in Ordinance 22-12. Alderman David White spoke regarding his concerns over the language in Ordinance 22-12.

A motion was made by Vice Mayor Povlin to approve Resolution PC-22-09. Motion was seconded by Commissioner St. Clair and was approved 8-1 with Commissioner Myers voting in opposition.

6. Discussion and public hearing on the installation of new small cell poles in the rights of ways adjacent to 102 Glen Abbey Boulevard, 126 West End Avenue, 100 Smith Road, 11403 Municipal Center Drive, 11509 Parkside Drive, 101 West End Avenue, 100 Brooklawn Street, and 11425 Kingston Pike (TeleCAD Wireless, Applicant)

Staff reviewed this item and noted that there were general comments that would apply to each of the eight poles and, in some cases, pole specific comments. Staff recommended approval and that the general comments be acted on first and then action taken on each pole. The general comments were as follows:

1. A letter of credit will be required to ensure that affected areas are restored to their previous condition. The dollar amount will be determined by the Town Engineer.

2. Why is proposed pole class shown as N/A on the cover sheet?
3. Please provide a document for review by the Town Attorney to cover maintenance, liability, and removal associated with each pole.
4. Please include a reference in the plans regarding compliance with all applicable federal and state health and safety standards.
5. An as-built survey will be required for each pole (fiber and pole locations).
6. A right of way permit will be required for each pole and will need to be coordinated with the Town's Engineering Department.
7. Please provide the RFDS (Radio Frequency Data Sheets) where not currently included.

The applicant spoke and indicated that they were fine with the remaining general comments. A motion was made by Commissioner Myers to require the general comments to be addressed as a condition of approval. Motion was seconded by Vice Mayor Povlin and was approved unanimously.

Staff then reviewed each individual pole and recommended approval as follows:

102 Glen Abbey Boulevard

Staff recommended approval as submitted.

A motion was made Vice Mayor Povlin to follow staffs' recommendation. Motion was seconded by Commissioner St. Clair and was approved unanimously.

126 West End Avenue

1. Please note that the pole owner will be the Town of Farragut.
2. Planning commissioners requested that this pole be painted black and include the decorative light fixture style that has been installed along the recently improved section of Concord Road.
3. Please clarify the differences between antenna 6705 and 1652. No RFDS information was provided with this pole.

A motion was made by Vice Mayor Povlin to follow staffs' recommendations. Motion was seconded by Commissioner Myers and was approved unanimously.

100 Smith Road

Staff recommended approval with the Planning Commission's request for the pole to be painted black to match new traffic signal poles.

A motion was made by Vice Mayor Povlin to follow staffs' recommendation. Motion was seconded by Commissioner St. Clair and was approved unanimously.

11403 Municipal Center Drive

1. Please clarify the differences between the two different antennae proposed. No RFDS were provided.

A motion was made by Commissioner Myers to follow staffs' recommendation. Motion was seconded by Vice Mayor Povlin and was approved unanimously.

11509 Parkside Drive

Staff recommended approval as submitted.

A motion was made by Vice Mayor Povlin to follow staffs' recommendation. Motion was seconded by Commissioner St. Clair and was approved unanimously.

101 West End Avenue

1. Please clarify the differences between the two different antennae proposed. No RFDS were provided.
2. Please include the decorative light fixture style that has been installed along the recently improved section of Concord Road.

A motion was made by Vice Mayor Povlin to follow staffs' recommendation. Motion was seconded by Commissioner St. Clair and was unanimously approved.

100 Brooklawn Street

1. Please clarify the differences between antenna 4408 and 1652. No RFDS were provided.

A motion was made by Commissioner Myers to follow staffs' recommendation. Motion was seconded by Mayor Williams and was approved unanimously.

11425 Kingston Pike

1. Please clarify the differences between antenna 4408 and 1652. No RFDS were provided.

A motion was made by Commissioner Myers to follow staffs' recommendation. Motion was seconded by Commissioner Pinchok and was approved unanimously.

7. Discussion and public hearing on the installation of underground fiber optic cable to service new small cell poles in the rights of ways adjacent to 102 Glen Abbey Boulevard, 126 West End Avenue, 100 Smith Road, 11403 Municipal Center Drive, 11509 Parkside Drive, 101 West End Avenue, 100 Brooklawn Street, and 11425 Kingston Pike (Fiberlink, Applicant)

Staff reviewed this item and recommended approval subject to the following comments being addressed:

1. Please note that the plans for right of way permits must not have blank sheets. Information should be complete for the work proposed in each location.
2. Please ensure that the address on the cover page corresponds to plan sheets included for each location.
3. A letter of credit will be required to ensure that affected areas are restored to their previous condition. The dollar amount will be determined by the Town Engineer.
4. An as-built survey will be required for each pole (fiber and pole locations).
5. A right of way permit will be required for each pole and will need to be coordinated with the Town's Engineering Department.

A motion was made by Vice Mayor Povlin to follow staffs' recommendations. Motion was seconded by Commissioner St. Clair and was approved unanimously.

8. Discussion and public hearing on a site plan for the Farragut Town Center at Biddle Farms Townhouses, Parcel 3.24, Tax Map 143, 47 Units, Zoned PCD (Budd Cullom, Applicant)

Variance Request. Staff provided an overview of the plan. Staff noted that the applicant has requested a variance from the grass strip width for the proposed local streets from six feet to three- and one-half feet. The width is required for street trees and to provide a buffer between the pedestrian and motorist. The applicant's request will need to be evaluated based on the context in relation to the overall PCD development. The applicant is providing street trees on the opposite side of the street where more space is available. On street parking, a raised crosswalk, and street curvature are shown on the plans to slow traffic speeds along the local street around the periphery where the larger grass strip buffer would be most applicable. Staff indicated that this variance would need to be acted on separately.

A motion was made by Vice Mayor Povlin to approve the variance since the street trees would be placed on the opposite side of the street where more space was available and given the proximity of the homes to the street and the desired effect of engaging the dwelling unit with the pedestrian facility. Motion was seconded by Commissioner Russ and was approved unanimously.

Plan Approval. Staff noted that since the site plan (preliminary plat) is consistent with the general layout of the concept plan that was approved for the major amendment to the PCD, staff would recommend approval of the site plan (preliminary plat) with the following comments being addressed:

1. On areas along the main local street where parking is allowed, please show striping for spaces and striping for areas where no parking is permitted. This will also aid in slowing traffic. Please also show correct fire lane markings to be approved by the Fire Marshal.
2. All sidewalks must be at least five feet in width.
3. The streetscape plan will need to be more specific and include required tree specifications. Related to one of the comments below, the trees appear to be on a different property that is within the overall PCD. The Town needs to be clear on how overlapping improvements are to be maintained and who has rights and responsibilities for the different lots that are part of the overall development.
4. Please pay the drainage fee for \$1,880.
5. Please ensure that enough space and, where applicable, easements are platted to provide for maintenance of utilities, including storm sewer. First Utility District will need to sign off on all utility sheets related to this portion of the project since they will also have to sign off on the final plat for any necessary easements and infrastructure availability.
6. Please ensure that any new land disturbing contractors sign onto the NOI.
7. The pavilion in the common area will need to be shifted away from the storm sewer. It is shown as partially over the sewer, and this is not permitted.
8. Please provide color rendering and material details for the waste enclosure. The enclosure must be architecturally compatible with the principal structures.
9. The proposed property lines need to be clearly identified on a preliminary plat (this plan set is really a preliminary plat for infrastructure) and proposed easements should be shown for all utilities, stormwater, and other cross lot elements. There needs to be a clear preliminary plat sheet that identifies everything that is going to be platted for

- this phase of the development and how it relates to what's around it. This includes proposed property lines, required and necessary easements, common areas, etc.
10. Please provide a document with corresponding exhibits to clearly show which improvements are proposed to be publicly vs. privately maintained. This will need to be approved by the Town, recorded, and referenced on the final plat.
 11. On Sheet C4.0, some text is missing on the left side of the page. Also, please correct the notes identified by the stormwater coordinator on Sheet C2.0.
 12. Please provide a long-term stormwater Maintenance and Repair Plan for staff review. The plan must include stormwater detention areas, catch basin water quality devices, biofiltration, etc. as it pertains to this site.
 13. Please provide details for EPSC measures including sediment pond/detention basin, concrete washout, outlet protection, etc.

A motion was made by Vice Mayor Povlin to follow staffs' recommendations. Motion was seconded by Commissioner Myers and was approved unanimously.

9. Discussion and public hearing on approval of a final plat for the Ivey Farms Subdivision, Phases 2 and 3, Parcel 54.01, Tax Map 151, 30.39 Acres, 101 Lots, Zoned R-1/OSR (Goodall Homes, Applicant)

Staff reviewed this item and recommended approval subject to the following comments being addressed:

1. Please complete remaining field items.
2. Please obtain required signatures.
3. Please provide a completion letter of credit for the satisfactory completion of sidewalks, seven traffic calming islands, a raised crosswalk, and pavement markings. The dollar amount will be \$330,000.
4. Please provide a two-year landscape completion and maintenance letter of credit for \$15,000.
5. Please provide a two-year maintenance letter of credit for roadways, sidewalks, walking trails, and one detention basin. The dollar amount will be \$98,000.
6. Please provide a copy of the recorded covenants and restrictions for these two phases.
7. Please provide the following stormwater-related documents for staff review and approval: (1) Maintenance and Repair Plan for permanent stormwater control measures and (2) Maintenance Agreement for permanent stormwater control measures.

A motion was made by Vice Mayor Povlin to follow staffs' recommendations. Motion was seconded by Mayor Williams and was approved unanimously.

10. Discussion and public hearing on approval of a final plat for the Grove at Boyd Station, Phase 1, Unit 2, 27.63 Acres, 66 Lots, Zoned R-1/OSMR (Lynch Surveys, LLC., Applicant)

Staff reviewed this item and recommended approval subject to the following comments being addressed:

1. Please complete remaining field items.
2. Please obtain required signatures.

3. Please provide a completion letter of credit for the satisfactory completion of sidewalks and installation of property pins. The dollar amount will be \$95,000.
4. Please provide a two-year landscape completion and maintenance letter of credit for \$15,000.
5. Please provide a two-year maintenance letter of credit for roadways, sidewalks, walking trails, and one detention basin. The dollar amount will be \$60,000.
6. Please provide a copy of the recorded covenants and restrictions for these two phases.
7. Please provide the following stormwater-related documents for staff review and approval: (1) Maintenance and Repair Plan for permanent stormwater control measures and (2) Maintenance Agreement for permanent stormwater control measures.

A motion was made by Vice Mayor Povlin to follow staffs' recommendations. Motion was seconded by Mayor Williams and was approved unanimously.

11. Discussion and public hearing on a concept plan for the Virtue View Farm Subdivision, Parcels 33.03 and 33.04, Tax Map 152 033.03 and 152 033.04, 44.09 Acres, 13 Lots, Zoned R-1 (Steve Williams, Applicant)

Staff reviewed this item and the requested variances. Staff noted that, as presented, staff would recommend denial since some of the requested variances would not be supported by staff. A discussion ensued with Planning Commissioners expressing support for most of the variances. The two variances that were not supported were the private road with a gated entry and the request for no walking trail or sidewalk connections to any adjoining property. Some options for pedestrian facilities were discussed and the applicant asked for a postponement on any action taken related to the concept plan so that the pedestrian facility options could be further evaluated.

A motion was made by Commissioner Myers to postpone action on this item per the applicant's request. Motion was seconded by Vice Mayor Povlin and was approved unanimously.

12. Discussion on updates to the Farragut Sign Ordinance (Town of Farragut, Applicant)

Bart Hose reviewed this item and Planning Commissioners expressed support for the proposed amendments. Staff will incorporate into an ordinance and present for the Planning Commission's recommendation to the Board of Mayor and Aldermen.

13. Approval of utilities

None.

14. Citizen forum

John Holztrager spoke over procedural matters regarding zoning or future land use map amendments that may adversely affect citizen participation. Mr. Holztrager commended the Commission for acting on the requested map amendments reflected in Agenda Items 3 and 4.

The meeting adjourned at 10:08 p.m.

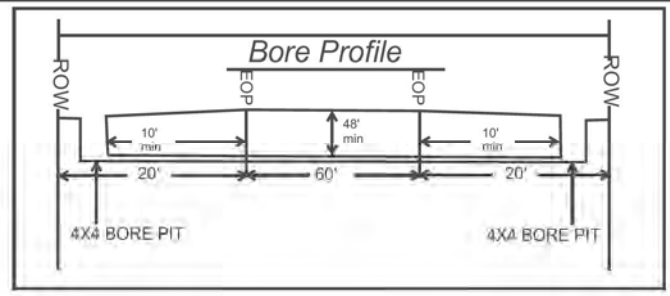
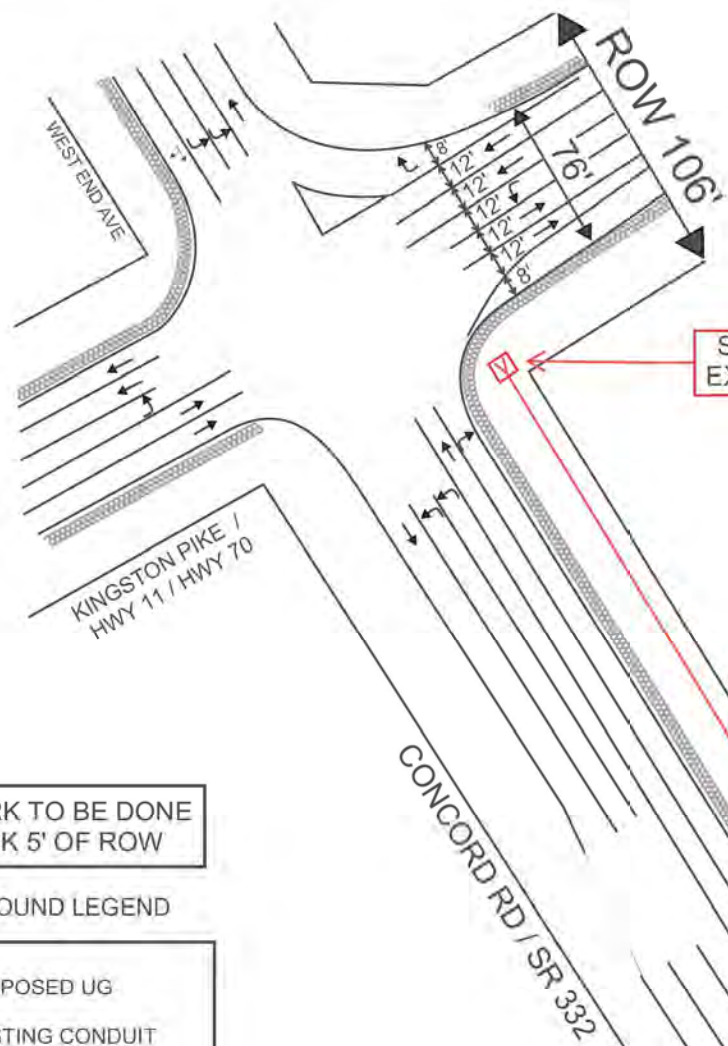
REPORT TO THE FARRAGUT MUNICIPAL PLANNING COMMISSION

PREPARED BY: Mark Shipley, Community Development Director

SUBJECT: Discussion and public hearing on the installation of underground fiber optic cable for Comcast from Kingston Pike along the east side of Concord Road and under Concord Road to the Town Center at Biddle Farms access along Concord Road to service 170 Brooklawn Street (Comcast, Applicant)

INTRODUCTION AND BACKGROUND: This item involves a request for approval for the installation of roughly 750 linear feet of underground fiber cable in new two-inch conduit in the area described above. In the near term, the fiber will provide Comcast service to the Aldi at 170 Brooklawn Street.

DISCUSSION: The information submitted as part of the right of way permit is included in the packet. In addition to obtaining the right of way permit and coordinating work with the Town's engineering department, a letter of credit will be recommended to ensure affected areas are restored to their pre-disturbance condition. The Town's engineering staff is also recommending that all work be conducted with directional boring rather than open trench installation.



SPEED
LIMIT
35
MPH



ALL WORK TO BE DONE
IN BACK 5' OF ROW

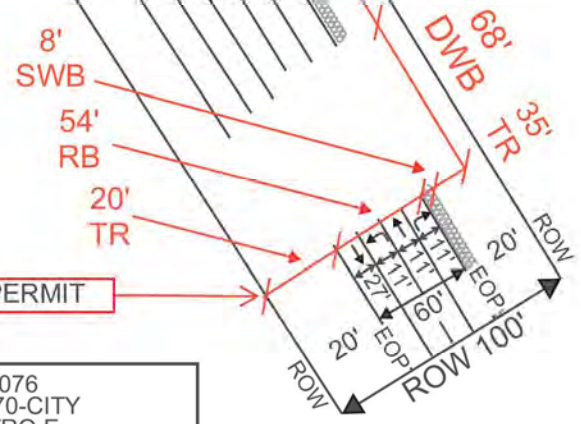
UNDERGROUND LEGEND

- PROPOSED UG
- EXISTING CONDUIT
- NUL (TRANSITION)
- PEDESTAL
- VAULT
- W - WATER
- P - POWER
- G - GAS
- A - ATT
- S - SEMC
- M - MCI
- S - SPECTRUM
- C - COMCAST
- SIDEWALK
- DWB - DRIVEWAY BORE
- RB - ROAD BORE
- SWB - SIDEWALK BORE
- TR - TRENCH

- NOTES:
- CONSTRUCTION TYPE: NEW BUILD
 - COMCAST WILL FOLLOW ALL TRAFFIC CONTROL PER THE CURRENT EDITION OF THE MUTCD
 - COMCAST WILL NOT DISTURB ANY PAVEMENT
 - TRENCH AT MINIMUM DEPTH OF 36" AND WITHIN BACK 5' OF ROW
 - ALL ROAD BORES WILL BE DIRECTIONAL BORE AT A MINIMUM DEPTH OF 48"
 - NO LANES WILL BE BLOCKED BEFORE 9 AM OR AFTER 4 PM

170

END PERMIT



DESC: COMCAST is to excavate, bore, and install a total of 749' new 24CT of .5 fiber cable in new 2" conduit, including 619' trench, 8' sidewalk bore, 54' road bore, 68' driveway bore in existing ROW, then continue construction on to private property to service 170 Brooklawn St.

JOB# JB0000932076
PERMIT#TNBS170-CITY
OPP NAME: METRO E WHOLESALE
OPP ADDRESS: 170 BROOKLAWN ST. FARRAGUT, TN 37934

Submitted by: April Blackburn
Phone: (470) 787-4272

COMCAST OF NASHVILLE
660 MAINSTREAM DR,
NASHVILLE, TN 37228

FARRAGUT CITY
PERMIT APPLICATION

Start Permit

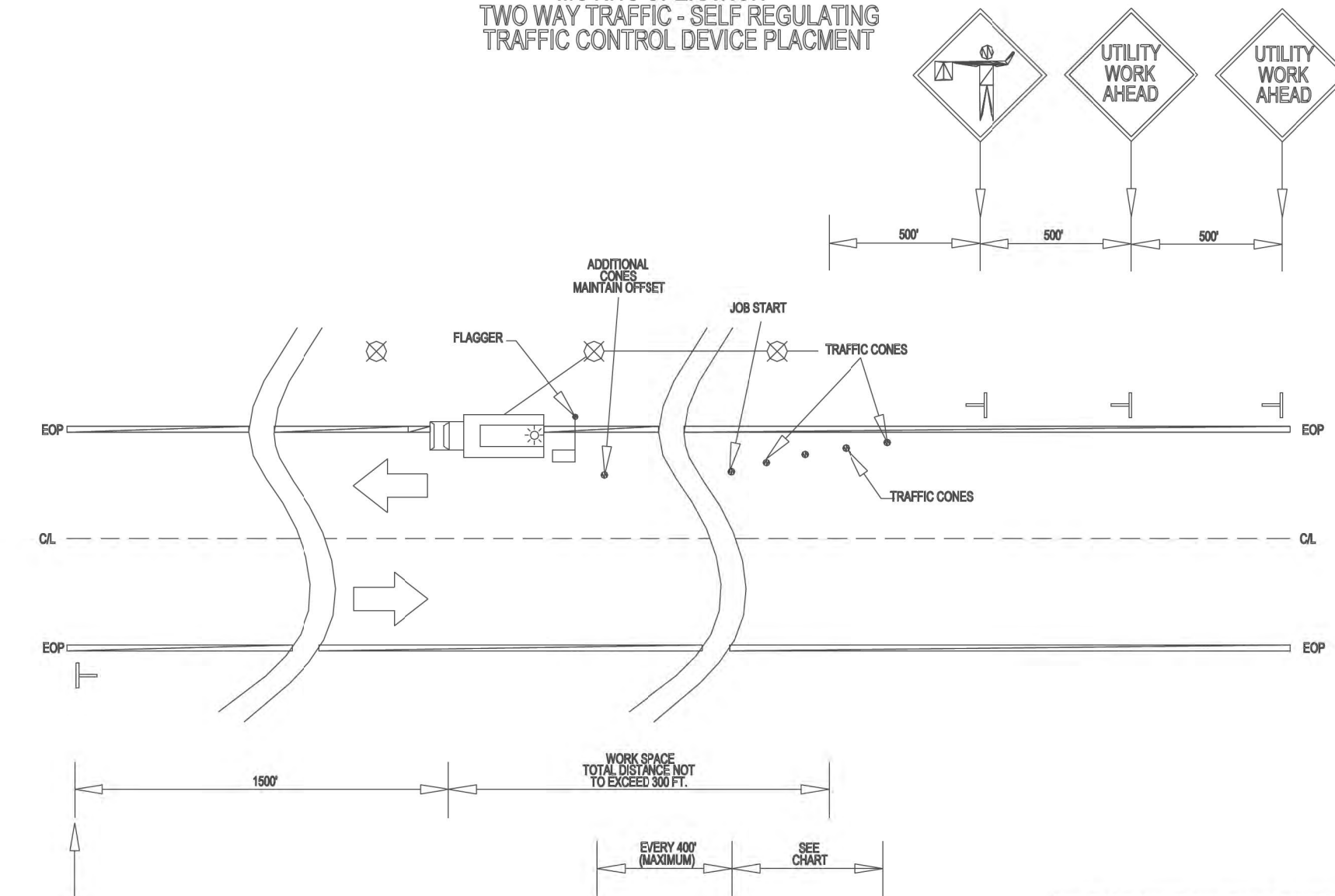
35.884359°, -84.153186°

End Permit

35.882715°, -84.152335°



MOVING OPERATION TWO WAY TRAFFIC - SELF REGULATING TRAFFIC CONTROL DEVICE PLACEMENT



- NOTES: 1. NO PARKING OF VEHICLES/EQUIPMENT ON THE ROADWAY SHOULDER OPPOSITE OF THE WORK AREA.
2. DIAGRAM SHOWN FOR SPEED LIMIT OF 55MPH; FOR OTHER SPEED LIMITS, SEE CHART
3. OPEN PORTION OF AFFECTED TRAFFIC LANE MUST BE AT LEAST TEN (10) FEET IN WIDTH.
4. WHEN AERIAL FACILITIES ARE BEING PLACED WITH EQUIPMENT PARTIALLY ON THE TRAVELED PORTION OF THE HIGHWAY PLACE WARNING DEVICES AS ILLUSTRATED
*MAY USE "LANE NARROWS"

CONE AND WARNING SIGN SPACING AND TAPER LENGTHS					
SPEED LIMIT (MPH)	CONE SPACING (FT)	TAPER LENGTH (FT)	NUMBER OF CONES REQ'D	WARNING SIGN SPACING (FT)	MINIMUM SIGN SIZE
25	25	125	6	250	36"X36"
35	35	245	8	250	36"X36"
45	45	540	13	500	48"X48"
55	55	660	13	500	48"X48"
INTERSTATE, EXPRESSWAY AND LIMITED-ACCESS ROADWAYS				1000	48"X48"
				2640	48"X48"
				5280	48"X48"

REPORT TO THE FARRAGUT MUNICIPAL PLANNING COMMISSION

PREPARED BY: Mark Shipley, Community Development Director

SUBJECT: Discussion and public hearing on the installation of underground fiber optic cable for AT&T from Kingston Pike along the southwest side of S. Campbell Station Road and under S. Campbell Station Road along the northwest side of Brooklawn Street to service 241 Brooklawn Street (AT&T, Applicant)

INTRODUCTION AND BACKGROUND: This item involves a request for approval for the installation of underground fiber cable as described above. In the near term, the fiber will provide AT&T service to the Pinnacle Bank at 241 Brooklawn Street.

RECOMMENDATION: The information submitted as part of the right of way permit is included in the packet. In addition to obtaining the right of way permit and coordinating work with the Town's engineering department, a letter of credit will be recommended to ensure affected areas are restored to their pre-disturbance condition. The Town's engineering staff is also recommending that all work be conducted with directional boring rather than open trench installation.



SCOPE OF WORK

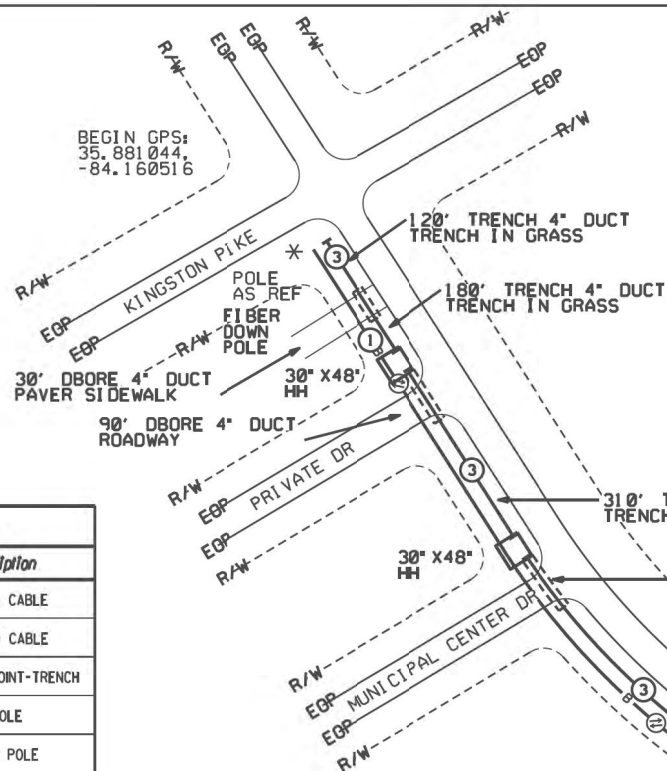
AT&T TO TRENCH/DBORE DUCT TO PLACE BURIED FIBER CABLE
ALONG S CAMPBELL STATION RD AND BROOKLAWN ST.

- ① PROPOSED 72CT BURIED FIBER CABLE
- ② PROPOSED 24CT BURIED FIBER CABLE
- ③ PROPOSED 4" PVC CONDUIT
- ④ PROPOSED 1.25" DIAMETER INNERDUCT

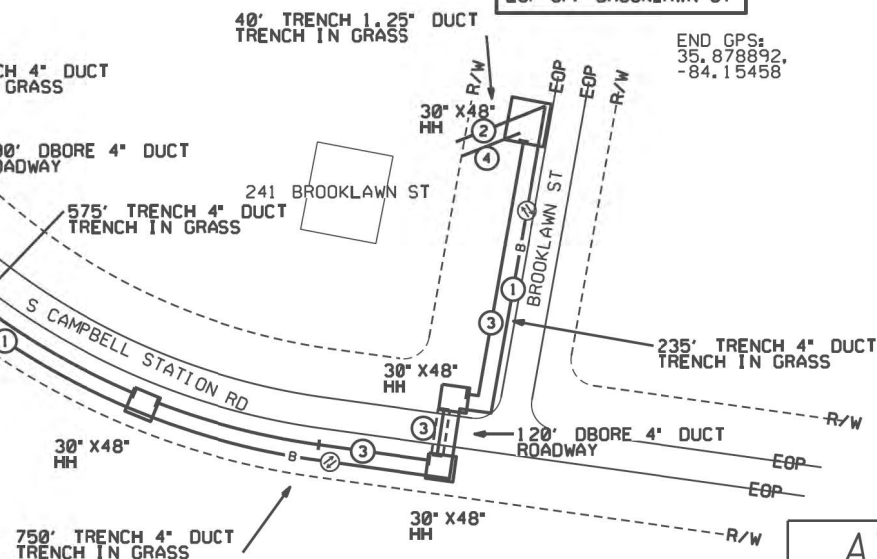
Note

PLACE NEW HH NEXT
TO EXIST CABLE PED
& PWR HH 20' FROM
EOP OFF BROOKLAWN ST

END GPS:
35.878892,
-84.15458



Note
PLACE DUCT 2' FROM
EOP @ 30" DEPTH



SYMBOL LEGEND

Proposed	Existing	Description
		AERIAL CABLE
		BURIED CABLE
		BUR JOINT-TRENCH
		BST POLE
		POWER POLE
		ANCHOR & GUY
		PUSH BRACE
		ENCLOSURE
		ENCLOSURE
		MANHOLE
		PIPE/CONDUIT
		CABLE MARKER
		AERIAL SVC WIRE
		BURIED SVC WIRE
		JOINT-TRENCH SVC
	N/A	BORE
	N/A	CUT PAVEMENT
	N/A	SPLICING PIT
200' @ (24")	N/A	TRENCH LENGTH/DEPTH

CALL BEFORE YOU DIG



DIAL
811

TWO FULL BUS DAYS BEFORE YOU DIG
IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT
UTILITY OWNERS AT LEAST 72 HOURS BEFORE ANY
CONSTRUCTION AND TO OBTAIN ALL NECESSARY
PERMITS AND TO BE RESPONSIBLE FOR THE LOCATION OF ALL UNDERGROUND
UTILITIES IN THE AREA.

CAUTION

Volts to Ground

301V-15KV

ATTSE

PROPOSED TELEPHONE FACILITIES
ON RIGHT OF WAY OF
CITY OF FARRAGUT

241 BROOKLAWN ST

Exchanges:

865590

Designers:

MORGAN MEADE

Phones:

865-539-8548

Authorizations:

A02FSJ7

Dwg. 1 of 1

REPORT TO THE FARRAGUT MUNICIPAL PLANNING COMMISSION

PREPARED BY: Mark Shipley, Community Development Director

SUBJECT: Discussion and public hearing on the installation of underground fiber optic cable for Zayo along the south side of Outlet Drive from the western Town limits across the frontage of 11220 Outlet Drive with termination to the east in the City of Knoxville (Apex Advanced Technology, Applicant)

INTRODUCTION AND BACKGROUND: This item involves a request for approval for the installation of mostly underground fiber cable as described above. In the near term, the fiber will provide Zayo service to the building at 627 American Glass Way in the City of Knoxville.

RECOMMENDATION: The information submitted as part of the right of way permit is included in the packet. In addition to obtaining the right of way permit and coordinating work with the Town's engineering department, a letter of credit will be recommended to ensure affected areas are restored to their pre-disturbance condition. The Town's engineering staff is also recommending that all work be conducted with directional boring rather than open trench installation.



PROJECT ID NUMBER:

COUNTY OF KNOXVILLE

11220 OUTLET DR
KNOXVILLE, TN 37932

EXISTING 288CT AERIAL FIBER WHICH RUNS FROM NORTH TO SOUTH TO ADJ. PROPOSED SPLICE CASE AT EXISTING LCUB POLE #104111, AND ADD NEW 144CT FIBER AND LEAVE 50FT OF SUE LOOP FOR SPLICE CASE.

PROPOSE TRENCH FROM EXISTING
LCUB POLE #104111 TO PROPOSED H
THROUGH PROPOSED RISER.

FROM HERE, BORE 2-1.25" HDPE
CONDUIT FROM PROPOSED HH-1 TO
PROPOSED HH-4 ALONG AND ACROSS
OUTLET DR.

FROM HERE, ZAYO WILL ADD NEW SPLICE CASE IN HH-4 FOR CABLE CHANGE FROM 144CT TO 48CT. ZAYO WILL PULL NEW 48CT FIBER THROUGH PROPOSED 1-1.25" HDPE CONDUIT FROM PROPOSED HH-4 TO PROPOSED HH-3.

FROM HERE, ZAYO WILL Y-INTERCEPT TO EXISTING 1-4" CONDUIT AND PULL NEW 48CT FIBER THROUGH EXISTING 1-4" HDPE CONDUIT AND PLACE PROPOSED FDP ON EXISTING BACK BOARD.



ROUTE

FROM
OUTLET DR

TO

OUTLET DR

DATE: 11/04/2022

ENGINEER: AAT

DRAWN BY: AAT

REVISIONS

DATE	DESCRIPTION	INITIALS
11/04/2022	INITIAL CONSTRUCTION PLAN	ALT

EXCEPT AS MAY BE OTHERWISE PROVIDED BY CONTRACT, THESE DRAWINGS AND SPECIFICATIONS SHALL REMAIN PROPERTY OF ZAYO BOTH BEING ISSUED IN STRICT CONFIDENCE AND SHALL NOT BE REPRODUCED, COPIED, USED FOR ANY PURPOSE WITHOUT SPECIFIC WRITTEN PERMISSION.

SCALE

HORIZONTAL: NTS

VERTICAL: NTS

SHEET NAME: COVER SHEET

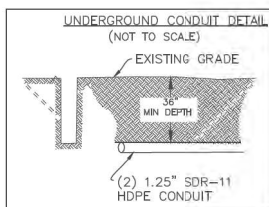
SHEET: FBA SHEET 01



Know what's below.
Call before you dig.



SITE LOCATION



CONTACT LIST AND REQUIRED PERMITS

ZAYO CONTACTS

LEANNE M. COLE
ZAYO OSP PROJECT MANAGER
KNOXVILLE & TRI-CITIES, ZAYO GROUP
6700 BAUM DR. STE-9
KNOXVILLE, TN 37919
M: 585-447-0310
Email: leanne.cole@zayo.com

CUSTOMER/END-USER:

BOOZ ALLEN HAMILTON, INC.
627 AMERICAN GLASS WAY

PRIMARY CONTACT:
LINUS BREMBY
301-825-7853

ENGINEERING CONTACT

CHRIS HALL
PROJECT ENGINEER
APEX ADVANCED TECHNOLOGY
51 CENTURY BLVD
SUITE 110
NASHVILLE, TN 37214
M: 404-604-5496
Email: chhall@Apexgrp.us

RAILROADS

CSX

MERR

**TENNESSEE ONE CALL
CALL BEFORE YOU DIG 811**

UTILITIES

ELECTRIC:

LCUB

GAS:

PIEDMONT NATURAL GAS CO

(704) 525-3882

TELEPHONE:

COMCAST

CHARTER

WATER/SEWER

CITY GOVERNMENT:

METRO PUBLIC WORKS

RIGHT-OF-WAY SUPERVISOR

STREET MAINTENANCE DIVISION

TRANSPORTATION OPERATIONS DIVISION

COUNTY GOVERNMENT:

CITY COORDINATOR

RIGHT-OF-WAY SUPERVISOR

STREET MAINTENANCE DIVISION

TRANSPORTATION OPERATIONS DIVISION

STATE GOVERNMENT

RIGHT-OF-WAY

DISTRICT ENGINEER

TENNESSEE DEPARTMENT OF PUBLIC SAFETY

FEDERAL GOVERNMENT

OTHER

CITY PERMIT SEGMENTS

REQUIRED PERMITS:

CITY PERMIT-0
COUNTY PERMIT-1
TDOT PERMIT-0
RAILROAD PERMIT-0
CEMC POLES PERMIT-0
ATT POLES PERMIT-0
NES POLES PERMIT-0
MTEM POLES PERMIT-0
RIVER/BRIDGE PERMIT-0
TTC POLE PERMIT-0
LCUB PERMIT-0



PROJECT:

PROJECT NUMBER:

PROPOSED WORK:

COUNTY OF KNOXVILLE

PROJECT SITE:

11220 OUTLET DR
KNOXVILLE, TN 37932

SCOPE OF WORK:

EXISTING 288CT AERIAL FIBER WHICH RUNS FROM NORTH TO SOUTH TO ADD PROPOSED SPLICE CASE AT EXISTING LCUB POLE #104111 AND ADD NEW 144CT FIBER AND LEAVE 50FT OF SLACK LOOP FOR SPLICE CASE.

PROPOSE TRENCH FROM EXISTING LCUB POLE #104111 TO PROPOSED HH-1 THROUGH PROPOSED NBER.

FROM HERE, BORE 2-1.25" HDPE CONDUIT FROM PROPOSED HH-1 TO PROPOSED HH-4 ALONG AND ACROSS OUTLET DR.

FROM HERE, ZAYO WILL ADD NEW SPLICE CASE IN HH-4 FOR CABLE CHANGE FROM 144CT TO 48CT. ZAYO WILL PULL NEW 48CT FIBER THROUGH PROPOSED 1-1.25" HDPE CONDUIT FROM PROPOSED HH-4 TO PROPOSED HH-5.

FROM HERE, ZAYO WILL Y-INTERCEPT TO EXISTING 1-4" CONDUIT AND PULL NEW 48CT FIBER THROUGH EXISTING 1-4" HDPE CONDUIT AND PLACE PROPOSED FDP ON EXISTING BACK BOARD.



TITLE: FIBER OPTIC CABLE ROUTE

FROM
OUTLET DR

TO
OUTLET DR

DATE: 11/04/2022

ENGINEER: AAT

DRAWN BY: AAT

REVISIONS

DATE	DESCRIPTION	INITIAL
11/04/2022	INITIAL CONSTRUCTION PLAN	AAT

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SCALE

HORIZONTAL: NTS

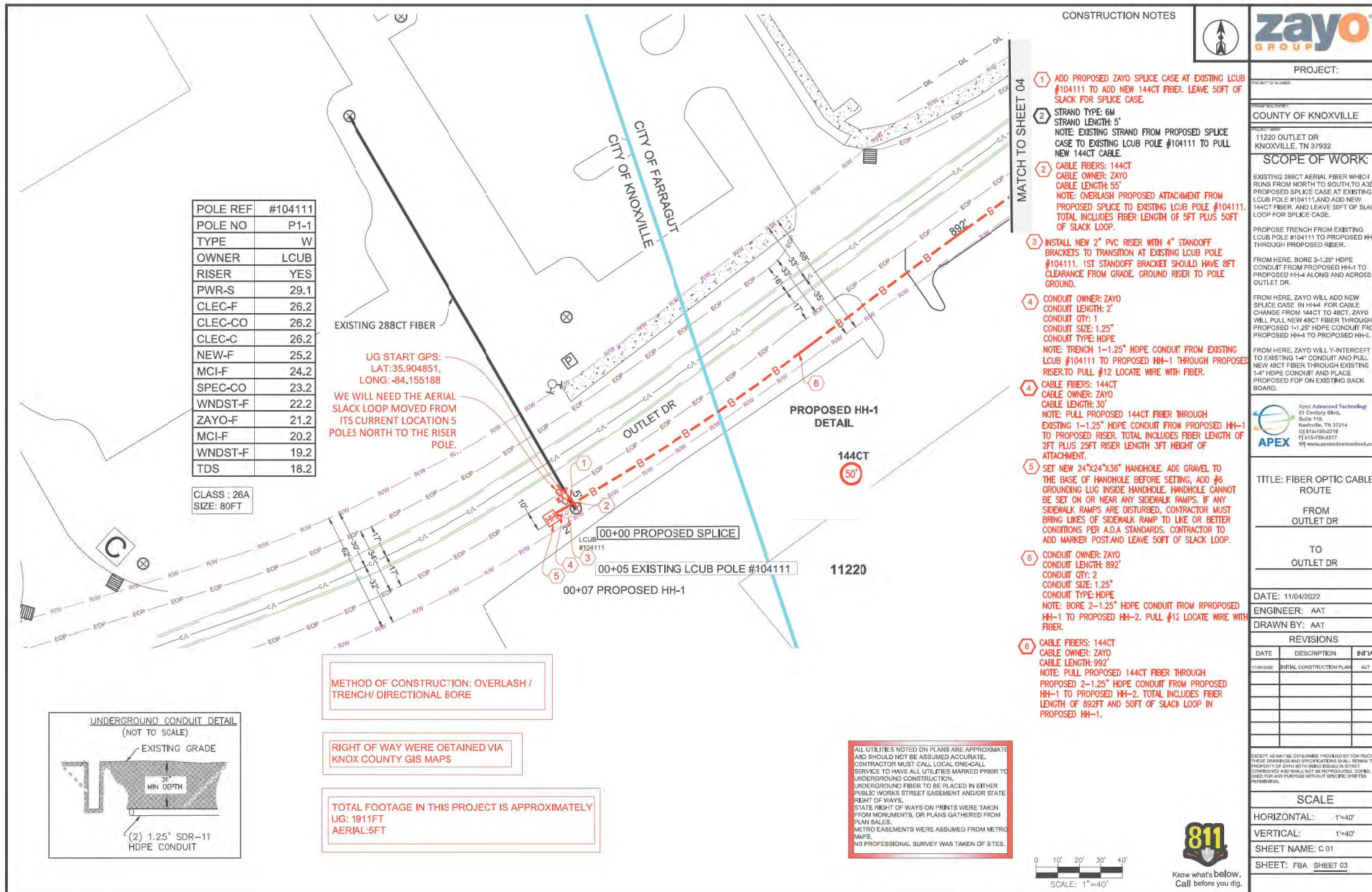
VERTICAL: NTS

SHEET NAME: CONTACTS

SHEET: FBA SHEET 02



Know what's below.
Call before you dig.



MATCH TO SHEET 05



PROJECT:

PROJECT # 11216

COUNTY OF KNOXVILLE

11220 OUTLET DR
KNOXVILLE, TN 37932

SCOPE OF WORK:

EXISTING 286CT AERIAL FIBER WHICH RUNS FROM NORTH TO SOUTH TO ADD PROPOSED SPLICE CASE AT EXISTING LCUB POLE #104111 AND ADD NEW 144CT FIBER AND LEAVE 50FT OF SLACK LOOP FOR SPLICE CASE.

PROPOSE TRENCH FROM EXISTING LCUB POLE #104111 TO PROPOSED HH-1 THROUGH PROPOSED NBER.

FROM HERE, BORE 2-1.25" HDPE CONDUIT FROM PROPOSED HH-1 TO PROPOSED HH-4 ALONG AND ACROSS OUTLET DR.

FROM HERE, ZAYO WILL ADD NEW SPLICE CASE IN HH-4 FOR CABLE CHANGE FROM 144CT TO 48CT. ZAYO WILL PULL NEW 48CT FIBER THROUGH PROPOSED 1-1.25" HDPE CONDUIT FROM PROPOSED HH-4 TO PROPOSED HH-5.

FROM HERE, ZAYO WILL Y-INTERCEPT TO EXISTING 1-4" CONDUIT AND PULL NEW 48CT FIBER THROUGH EXISTING 1-4" HDPE CONDUIT AND PLACE PROPOSED FOP ON EXISTING BACK BOARD.



TITLE: FIBER OPTIC CABLE ROUTE

FROM
OUTLET DR

TO
OUTLET DR

DATE: 11/04/2022

ENGINEER: AAT

DRAWN BY: AAT

REVISIONS

DATE	DESCRIPTION	INITIAL
11/04/2022	INITIAL CONSTRUCTION PLAN	AAT

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SCALE

HORIZONTAL: 1"=40'

VERTICAL: 1"=40'

SHEET NAME: C 02

SHEET: FBA SHEET 04



Know what's below.
Call before you dig.



SCALE: 1"=40'

FIBER FOOTAGE
NOTED ON SHEET #03

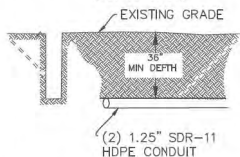
11216

METHOD OF CONSTRUCTION: DIRECTIONAL
BORE

RIGHT OF WAY WERE OBTAINED VIA
KNOX COUNTY GIS MAPS

TOTAL FOOTAGE IN THIS PROJECT IS APPROXIMATELY
UG: 1911FT
AERIAL: 5FT

UNDERGROUND CONDUIT DETAIL
(NOT TO SCALE)



MATCH TO SHEET 06

CONSTRUCTION NOTES



PROJECT:

11220 OUTLET DR
KNOXVILLE, TN 37932

COUNTY OF KNOXVILLE

SCOPE OF WORK:

EXISTING 288CT AERIAL FIBER WHICH RUNS FROM NORTH TO SOUTH TO ADD PROPOSED SPLICE CASE AT EXISTING LCUB POLE #104111 AND ADD NEW 144CT FIBER AND LEAVE 50FT OF SLACK LOOP FOR SPLICE CASE.

PROPOSE TRENCH FROM EXISTING LCUB POLE #104111 TO PROPOSED HH-1 THROUGH PROPOSED NBER.

FROM HERE, BORE 2-1.25" HDPE CONDUIT FROM PROPOSED HH-1 TO PROPOSED HH-4 ALONG AND ACROSS OUTLET DR.

FROM HERE, ZAYO WILL ADD NEW SPLICE CASE IN HH-4 FOR CABLE CHANGE FROM 144CT TO 48CT. ZAYO WILL PULL NEW 48CT FIBER THROUGH PROPOSED 1-1.25" HDPE CONDUIT FROM PROPOSED HH-4 TO PROPOSED HH-5.

FROM HERE, ZAYO WILL INTERCEPT TO EXISTING 1-4" CONDUIT AND PULL NEW 48CT FIBER THROUGH EXISTING 1-4" HDPE CONDUIT AND PLACE PROPOSED FGP ON EXISTING BACK BOARD.

Asst Advanced Technology
51 Century Blvd.
Suite 110
Knoxville, TN 37214
(615) 758-2216
(615) 758-2217
www.cpsadvancedconnect.com

TITLE: FIBER OPTIC CABLE ROUTE

FROM
OUTLET DR

TO
OUTLET DR

DATE: 11/04/2022

ENGINEER: AAT

DRAWN BY: AAT

REVISIONS

DATE	DESCRIPTION	INITIAL
11/04/2022	INITIAL CONSTRUCTION PLAN	AAT

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SCALE

HORIZONTAL: 1"=40'

VERTICAL: 1"=40'

SHEET NAME: C 03

SHEET: FBA SHEET 05



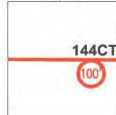
Know what's below.
Call before you dig.



SCALE: 1"=40'

- SET NEW 24"x24"x36" HANDHOLE. ADD GRAVEL TO THE BASE OF HANDHOLE BEFORE SETTING. ADD #6 GROUNDING LUG INSIDE HANDHOLE. HANDHOLE CANNOT BE SET ON OR NEAR ANY SIDEWALK RAMPS. IF ANY SIDEWALK RAMPS ARE DISTURBED, CONTRACTOR MUST BRING LINES OF SIDEWALK RAMP TO LIKE OR BETTER CONDITIONS PER A.D.A STANDARDS. CONTRACTOR TO ADD MARKER POST AND LEAVE 100FT OF SLACK LOOP.
- CONDUIT OWNER: ZAYO
CONDUIT LENGTH: 577'
CONDUIT QTY: 2
CONDUIT SIZE: 1.25"
CONDUIT TYPE: HDPE
NOTE: BORE 2-1.25" HDPE CONDUIT FROM PROPOSED HH-2 TO PROPOSED HH-3. PULL #12 LOCATE WIRE WITH FIBER.
- CABLE FIBERS: 144CT
CABLE OWNER: ZAYO
CABLE LENGTH: 677'
NOTE: PULL PROPOSED 144CT FIBER THROUGH PROPOSED 2-1.25" HDPE CONDUIT FROM PROPOSED HH-2 TO PROPOSED HH-3 THROUGH PROPOSED BOREPIT. TOTAL INCLUDES FIBER LENGTH OF 577FT AND 100FT OF SLACK LOOP IN PROPOSED HH-2.

PROPOSED HH-2 DETAIL



DO NOT CUT CABLE
AT THIS LOCATION

11215

11217

CITY OF KNOXVILLE
CITY OF FARRAGUT

08+99 PROPOSED HH-2

FIBER FOOTAGE
NOTED ON SHEET #03

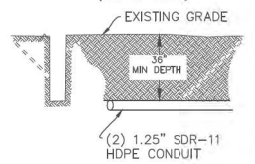
MATCH TO SHEET 04

METHOD OF CONSTRUCTION: DIRECTIONAL
BORE

RIGHT OF WAY WERE OBTAINED VIA
KNOX COUNTY GIS MAPS

TOTAL FOOTAGE IN THIS PROJECT IS APPROXIMATELY
UG: 1911FT
AERIAL: 5FT

UNDERGROUND CONDUIT DETAIL (NOT TO SCALE)



MATCH TO SHEET 07

CONSTRUCTION NOTES



PROJECT:

PROJECT ID: 11140

COUNTY OF KNOXVILLE

11220 OUTLET DR
KNOXVILLE, TN 37932

SCOPE OF WORK:

EXISTING 388CT AERIAL FIBER WHICH RUNS FROM NORTH TO SOUTH TO ADD PROPOSED SPICE CASE AT EXISTING LCUB POLE #104111 AND ADD NEW 144CT FIBER AND LEAVE 80FT OF SLACK LOOP FOR SPICE CASE.

PROPOSE TRENCH FROM EXISTING LCUB POLE #104111 TO PROPOSED HH-1 THROUGH PROPOSED FIBER.

FROM HERE, BORE 2-1.25" HDPE CONDUIT FROM PROPOSED HH-4 TO PROPOSED HH-1 ALONG AND ACROSS OUTLET DR.

FROM HERE, ZAYO WILL ADD NEW SPICE CASE IN HH-4 FOR CABLE CHANGE FROM 144CT TO 48CT. ZAYO WILL PULL NEW 48CT FIBER THROUGH PROPOSED 1-1.25" HDPE CONDUIT FROM PROPOSED HH-4 TO PROPOSED HH-5.

FROM HERE, ZAYO WILL Y-INTERCEPT TO EXISTING 1-4" CONDUIT AND PULL NEW 48CT FIBER THROUGH EXISTING 1-4" HDPE CONDUIT AND PLACE PROPOSED FIBER ON EXISTING BACK BOARD.



TITLE: FIBER OPTIC CABLE ROUTE

FROM
OUTLET DR

TO
OUTLET DR

DATE: 11/04/2022

ENGINEER: AAT

DRAWN BY: AAT

REVISIONS

DATE	DESCRIPTION	INITIAL
11/04/2022	INITIAL CONSTRUCTION PLAN	AAT

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SCALE

HORIZONTAL: 1"=40'

VERTICAL: 1"=40'

SHEET NAME: C 04

SHEET: FBA SHEET 06



- SET(2) NEW 24"x24"x36" HANDHOLE ADD GRAVEL TO THE BASE OF HANDHOLE BEFORE SETTING. ADD #6 GROUNDING LUG INSIDE HANDHOLE. HANDHOLE CANNOT BE SET ON OR NEAR ANY SIDEWALK RAMPS. IF ANY SIDEWALK RAMPS ARE DISTURBED, CONTRACTOR MUST BRING LUGS OF SIDEWALK RAMP TO LIKE OR BETTER CONDITIONS PER A.D.A STANDARDS. CONTRACTOR TO ADD MARKER POST AND LEAVE 100FT OF SLACK LOOP.
- CONDUIT OWNER: ZAYO
CONDUIT LENGTH: 67'
CONDUIT QTY: 2
CONDUIT SIZE: 1.25"
CONDUIT TYPE: HDPE
NOTE: BORE 2-1.25" HDPE CONDUIT FROM PROPOSED HH-3 TO PROPOSED HH-4. PULL #12 LOCATE WIRE WITH FIBER.
- CABLE FIBERS: 144CT
CABLE OWNER: ZAYO
CABLE LENGTH: 167'
NOTE: PULL PROPOSED 144CT FIBER THROUGH PROPOSED 2-1.25" HDPE CONDUIT FROM PROPOSED HH-3 TO PROPOSED HH-4 THROUGH PROPOSED BOREPIT. TOTAL INCLUDES FIBER LENGTH OF 67FT AND 100FT OF SLACK LOOP IN PROPOSED HH-3.
- CONDUIT OWNER: ZAYO
CONDUIT LENGTH: 264'
CONDUIT QTY: 1
CONDUIT SIZE: 1.25"
CONDUIT TYPE: HDPE
NOTE: BORE 1-1.25" HDPE CONDUIT FROM PROPOSED HH-4 TO PROPOSED HH-5. PULL #12 LOCATE WIRE WITH FIBER.
- CABLE FIBERS: 48CT
CABLE OWNER: ZAYO
CABLE LENGTH: 364'
NOTE: PULL PROPOSED 48CT FIBER THROUGH PROPOSED 1-1.25" HDPE CONDUIT FROM PROPOSED HH-4 TO PROPOSED HH-5. TOTAL INCLUDES FIBER LENGTH OF 264FT PLUS 100FT OF SLACK LOOP IN PROPOSED HH-4 TO ADD NEW 48CT FIBER. LEAVE 100FT OF SLACK FOR SPICE CASE.

14+76 PROPOSED HH-3

PROPOSED HH-3
DETAIL

144CT
100'

DO NOT CUT CABLE
AT THIS LOCATION

11140

11146

FIBER FOOTAGE
NOTED ON SHEET #05

UTILITY EASEMENT

15+43 PROPOSED HH-4

11153

PROPOSED HH-4
DETAIL

48CT

144CT

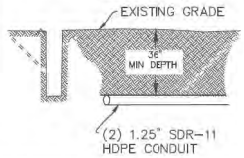
MATCH TO SHEET 05

METHOD OF CONSTRUCTION: DIRECTIONAL
BORE

RIGHT OF WAY WERE OBTAINED VIA
KNOX COUNTY GIS MAPS

TOTAL FOOTAGE IN THIS PROJECT IS APPROXIMATELY
UG: 1811FT
AERIAL: 5FT

UNDERGROUND CONDUIT DETAIL (NOT TO SCALE)



631

UG END GPS:
LAT: 35.908482,
LONG: -84.152083

19+16 BUILDING POINT OF ENTRY

BUILDING POINT OF ENTRY

18+07 PROPOSED HH-5

Y-INTERCEPT EXISTING 4" CONDUIT

FIBER FOOTAGE
NOTED ON SHEET #06

UTILITY EASEMENT

MATCH TO SHEET 06

PROPOSED HH-5
DETAIL



DO NOT CUT CABLE
AT THIS LOCATION

CONSTRUCTION NOTES



PROJECT:

PROJECT NO:

COUNTY OF KNOXVILLE

11220 OUTLET DR
KNOXVILLE, TN 37932

SCOPE OF WORK:

EXISTING 288CT AERIAL FIBER WHICH RUNS FROM NORTH TO SOUTH TO ADD PROPOSED SPLICE CASE AT EXISTING LCUB POLE #104111 AND ADD NEW 144CT FIBER AND LEAVE 50FT OF SLACK LOOP FOR SPLICE CASE.

PROPOSE TRENCH FROM EXISTING LCUB POLE #104111 TO PROPOSED HH-5 THROUGH PROPOSED NBER.

FROM HERE, BORE 2-1/2" HDPE CONDUIT FROM PROPOSED HH-4 TO PROPOSED HH-4 ALONG AND ACROSS OUTLET DR.

FROM HERE, ZAYO WILL ADD NEW SPLICE CASE IN HH-4 FOR CABLE CHANGE FROM 144CT TO 48CT. ZAYO WILL PULL NEW 48CT FIBER THROUGH PROPOSED 1-1/2" HDPE CONDUIT FROM PROPOSED HH-4 TO PROPOSED HH-5.

FROM HERE, ZAYO WILL Y-INTERCEPT TO EXISTING 1-1/2" CONDUIT AND PULL NEW 48CT FIBER THROUGH EXISTING 1-1/2" HDPE CONDUIT AND PLACE PROPOSED FDP ON EXISTING BACK BOARD.

Advanced Technology
St Century Blvd,
Suite 110
Knoxville, TN 37214
(615) 575-2216
(615) 575-2217
www.apexadvancedconnect.com

TITLE: FIBER OPTIC CABLE ROUTE

FROM OUTLET DR

TO OUTLET DR

DATE: 11/04/2022

ENGINEER: AAT

DRAWN BY: AAT

REVISIONS

DATE	DESCRIPTION	INITIAL
11/04/2022	INITIAL CONSTRUCTION PLAN	AAT

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SCALE

HORIZONTAL: 1"=40'

VERTICAL: 1"=40'

SHEET NAME: C 05

SHEET: FBA SHEET 07

ALL UTILITIES NOTED ON PLANS ARE APPROXIMATE AND SHOULD NOT BE ASSUMED ACCURATE. CONTRACTOR MUST CALL LOCAL ONE-CALL SERVICE TO HAVE ALL UTILITIES MARKED PRIOR TO UNDERGROUND CONSTRUCTION. UNDERGROUND FIBER TO BE PLACED IN EITHER PUBLIC WORKS STREET EASEMENT AND/OR STATE RIGHT OF WAYS. STATE RIGHT OF WAYS ON PRINTS WERE TAKEN FROM MONUMENTS, OR PLANS GATHERED FROM PLAN SALES. METRO EASEMENTS WERE ASSUMED FROM METRO MAPS. NO PROFESSIONAL SURVEY WAS TAKEN OF ST'S.

METHOD OF CONSTRUCTION: DIRECTIONAL BORE/ PULL FIBER.

RIGHT OF WAY WERE OBTAINED VIA KNOX COUNTY GIS MAPS

TOTAL FOOTAGE IN THIS PROJECT IS APPROXIMATELY
UG: 1911FT
AERIAL: 5FT



Know what's below.
Call before you dig.

REPORT TO THE FARRAGUT MUNICIPAL PLANNING COMMISSION

PREPARED BY: Mark Shipley, Community Development Director

SUBJECT: Discussion and public hearing on a request to amend the final plat of Lots 2 and 3 of the Mary E. Smith Property concerning the requirement to construct a pedestrian facility during home construction across the frontages of 300 and 310 Boring Road. Instead, the applicant is proposing to provide a 20-foot pedestrian facility easement along the lot frontages and a covenant to be approved by the Town Attorney that would be recorded and bind all future property owners of 300 and 310 Boring Road to pay for the installation of a pedestrian facility across their frontages when it would be associated with a larger project that would extend a pedestrian facility to the west along Boring Road. The two lots total to 2.8 Acres and are Zoned R-2 (Benchmark Associates, Applicant)

INTRODUCTION AND BACKGROUND: This agenda item involves an amendment to a final plat that was approved on February 18, 2021. This plat involved dividing a 17.82-acre tract into three lots. One large lot (Lot 1) of 15.02 acres and two smaller lots (Lots 2 and 3) each approximately 1.4 acres. As part of the Planning Commission's approval, a variance was granted to not construct a pedestrian facility along the 965 feet of frontage on Boring Road associated with the 15.02-acre lot. The requirement was not seen as roughly proportional to the lot size being created and its associated amount of road frontage. Boring Road is classified as a major collector street and a pedestrian facility is required along the frontage of such streets as part of the subdivision approval process.

A variance was not requested from this requirement for the two smaller lots and a plat note was added which stated that pedestrian facilities will be required along the frontages of Lots 2 and 3 and must be completed in consultation with the Town's engineering staff prior to issuance of a certificate of occupancy.

DISCUSSION: Though the builder and homeowners of Lots 2 and 3 were aware of the pedestrian facility requirement, they are asking at this time that the plat be amended to include a 20 foot wide pedestrian facility easement abutting the Boring Road right of way and a covenant to be sent to and approved by the Town Attorney that would require owners of Lots 2 and 3 to pay for the construction of pedestrian facilities across their frontages when it would be associated with a larger project that would extend a pedestrian facility to the west along Boring Road.

The applicant's position is that a pedestrian facility across their frontages at this time would dead end and would be easier to install, given the grades of some portions of their frontages along Boring Road, when a larger project was initiated to extend such a facility to the west. As shown on the image included in the packet, a sidewalk currently exists along the south side of Boring Road across the Baldwin Park frontage to Smith Road. At its east end, the sidewalk terminates into Boring Road where a pedestrian can cross Boring Road to access a walking trail that was constructed as part of the Country Way Subdivision. This trail goes east along the Country Way frontage of Boring Road. No other pedestrian facilities are currently constructed along the north side of Boring Road.

RECOMMENDATION: The revised plat is included in the packet. If the Planning Commission approves the amendment with the platted pedestrian facility easement and covenant, staff would recommend that the covenant be reviewed and approved by the Town Attorney as a condition of the Planning Commission's action at this time. An additional question that would need to be clearly outlined in the covenant is what will compel a future property owner of either Lot 2 or 3 to pay for the construction of a pedestrian facility across their lot frontage. In addition to the covenant, the Commission could require a letter of credit at this time. The issue would be that it is uncertain when a larger pedestrian facility project would occur on the north side of Boring Road. This would lead to an extension for such letter of credit for potentially several years with the dollar amount being adjusted for inflation. Staff would recommend that any action taken must ensure that the Town will not be responsible for paying for the construction of pedestrian facilities across the frontages of Lots 2 and 3.

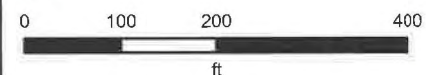


Boring Road Existing Pedestrian Facilities

Knoxville - Knox County - KUB Geographic Information System



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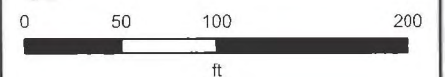


Boring Road Existing Pedestrian Facilities

Knoxville - Knox County - KUB Geographic Information System



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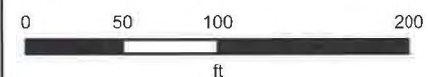


Boring Road Existing Pedestrian Facilities

Knoxville - Knox County - KUB Geographic Information System



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**MINUTES
FARRAGUT MUNICIPAL PLANNING COMMISSION**

February 18, 2021

MEMBERS PRESENT

Rita Holladay, Chairman
Ed St. Clair, Vice-Chairman
Louise Povlin
Scott Russ
Jon Greene
Betty Dick
Michael Bellamy
Noah Myers

MEMBERS ABSENT

Ron Williams, Mayor

Staff Representatives: Mark Shipley, Community Development Director
David Smoak, Town Administrator
Bart Hose, Assistant Community Development Director
Trevor Hobbs, Assistant to the Town Administrator
Sue Stuhl, Parks and Recreation Director

This meeting was conducted through a remote Webex session due to Governor Lee's orders and the Knox County Health Department's orders regarding the COVID-19 pandemic. Chairman Holladay called the meeting to order at 7 p.m. and provided background on why the meeting was being conducted through Webex and where it may be viewed.

1. Approval of agenda

Staff noted that agenda items 6 and 7 were requested for postponement by the applicant. Consequently, staff recommended that the agenda be amended to remove these items from the agenda.

A motion was made by Commissioner Povlin to follow staffs' recommendation. Motion was seconded by Commissioner St. Clair and motion passed 8-0 through a roll call vote.

2. Approval of minutes – January 21, 2021

Staff recommended approval of the minutes as submitted.

A motion was made by Commissioner Povlin to approve the minutes as submitted. Motion was seconded by Commissioner Dick and motion passed 8-0 through a roll call vote.



3. Discussion and public hearing on a final plat for the Mary E. Smith property, Parcel 79, Tax Map 142, 17.82 Acres, 3 Lots, Zoned R-2 (LeMay and Associates, Applicant)

Staff reviewed this item and noted that the applicant has requested the following variances from the Subdivision Regulations that would need to be acted on separately:

1. Not construct a pedestrian facility along Boring Road across the frontage of the proposed Lot 1 (the 15.02-acre tract).
2. Waive the 10% open space requirement.

In terms of these variances, staff recommended the following:

Pedestrian facility variance.

1. Staff recommended approval of the variance to not require a pedestrian facility at this time along the 965 feet of frontage associated with the proposed Lot 1 (the 15.02-acre tract). If this tract is further divided, the pedestrian facility requirement would be re-assessed by the Planning Commission as part of the plat review process. The variance is recommended due to the size of Lot 1 and the amount of sidewalk needed. The sidewalk requirement is not proportional to the scale of subdivision associated with Lot 1.

A motion was made by Commissioner St. Clair to follow staffs' recommendation. Motion was seconded by Commissioner Povlin and motion passed 8-0 through a roll call vote.

Open space variance.

1. Staff recommended approval of the variance from the 10% open space requirement for the re-subdivision proposed at this time with the understanding that any further division of Lot 1 would require a re-assessment from the Planning Commission as part of the plat review process. The 10% requirement is not proportional to the scale of the subdivision proposed at this time.

A motion was made by Commissioner Povlin to follow staffs' recommendation. Motion was seconded by Commissioner Dick and motion passed 8-0 through a roll call vote.

Staff noted that in terms of the plat, staff recommends approval subject to the following:

1. Plat notes, easements, etc., being added to reflect the action taken by the Planning Commission.
2. The correct setback and buffer strip information being provided for the property's zoning (R-2). This zoning district does not have a required buffer and the setbacks are different from what is listed on the plat.
3. Including in parentheses the old lot number and original acreage of the parent tract.

A motion was made by Commissioner Povlin to follow staffs' recommendation. Motion was seconded by Commissioner Russ and motion passed 8-0 through a roll call vote.

- 4. Discussion and public hearing on a site plan approval for the BlueCross Healthy Place Playground, 11408 Municipal Center Drive, Zoned O-1 (Town of Farragut, Applicant)**
Parks and Recreation Director, Sue Stuhl, reviewed this item and recommended approval.

A motion was made by Commissioner Povlin to approve the site plan. Motion was seconded by Commissioner St. Clair and motion passed 8-0 through a roll call vote.

REPORT TO THE FARRAGUT MUNICIPAL PLANNING COMMISSION

PREPARED BY: Mark Shipley, Community Development Director

SUBJECT: Discussion and public hearing on a revised preliminary plat for the Bridgemore Subdivision, Phases 3B and 4, Parcel 025.03, Tax Map 152, 70.28 Acres, 102 Lots, Zoned R-1/OSR (Carter McCall – Ardurra, Applicant)

INTRODUCTION AND BACKGROUND: At the Planning Commission meeting on October 21, 2021, conditional approval was given to a preliminary plat for the next phases of the Bridgemore Subdivision. The report and minutes from that meeting are included in the packet. One of the conditions was related to closed contours that were shown on the plans where certain road and other improvements were shown. The condition noted that design modifications will be required if any closed contours are determined to be sinkholes.

These closed contour areas were analyzed and determined to be accurate. The applicant hired GEOS Services to make this determination. At that point, the applicant discussed options with Town staff, including possible variance requests to permit improvements within sinkhole areas. The Town then asked the Chief Geologist for TDEC to review two reports from the GEOS Services findings that were typical of the site-wide investigation to evaluate the subsurface conditions near the no-build buffers. The general comments from the Chief Geologist are included in the packet and, essentially cautioned the Town on approving any variance based on the current design. This report was also sent to the applicant.

Staff met with the applicant and their clients on April 29, 2022, and the Town hired a geotechnical engineer to further evaluate the entire GEOS Services report which included twenty-three “Limited Geotechnical Exploration” reports. The twenty-three reports were similar in all regards so only a copy of one of the reports is included in the packet. This report is associated with Lot 170. A copy of the peer review from the geotechnical engineer hired by the Town is included in the packet along with a response from GEOS Services. Essentially the peer review concluded that there was not sufficient data in the GEOS Services report to conclude that the risk of sinkhole development at this site is no greater than at other sites located within similar geologic settings.

DISCUSSION: After meeting with the applicant and their client again, the applicant began working on a re-design of the roadway alignment that was within the sinkhole lip elevation along with some abutting lots that were significantly impacted by the proximity to the sinkhole lip elevation. The realignment moved the road out of the sinkhole lip elevation and resulted in the loss of six building lots. The Town’s geotechnical engineer that provided the peer review assessed this modification and concluded in a report dated September 2, 2022, that is included in the packet that, from a geotechnical standpoint, they would recommend approval of the revised plan for Bridgemore Phases 3B and 4. This conclusion was based on some changes/modifications to the original GEOS recommendations. Those changes included in Page 3 of the report.

As presented and reviewed during the staff developer meeting on November 29, the amended preliminary plat for Bridgemore Phases 3B and 4 shows that the only improvements still located within the sinkhole

lip elevation are some walking trail sections mostly in the far western portion of the subdivision. There are also three house lots, Lots 170, 246, and 247, that are impacted by the 50-foot building setback from the edge of the sinkhole lip elevation. The sinkhole ordinance provides for the limited filling of sinkholes only under very strict conditions that are outlined in Section 107-68 of the Sinkhole Ordinance. In evaluating these conditions as it would apply to the walking trail sections within the sinkhole lip elevation, a question would be whether those could be constructed without any fill and basically clip off the surface and compact to match existing grade. The trail sections should also be modified to avoid to the greatest extent possible being within the sinkhole lip elevation. These trail sections are critical connections that would tie Bridgemore to the Montgomery Trail, which is also partly within a sinkhole lip elevation.

In terms of the building lots that would be impacted by the 50-foot building setback, Section 107-68, Subsection 6 addresses the parameters that would guide the Planning Commission's decision on such a matter. Clearly, if the building lots are permitted to remain as currently shown, specific recommendations, including those noted by the Town's consultant, would be required along with a process for verification at the different stages of construction. The Town may also require additional measures depending on the circumstances of each building lot location.

Another approval condition from the October 21, 2021, Planning Commission meeting dealt with the requirement in the Fire Code and Subdivision Regulations for a secondary access. The concept plan approved for Bridgemore in 2004 included a secondary access to Allen Kirby Road. The Fire Marshal has relied on this concept to not require the houses to be sprinklered. However, as mentioned at the October 2021 meeting, the proposed phases would add over 100 lots to the Bridgemore Subdivision and be situated within the far western portion of the development making it more remote from the only access at this time at McFee Road.

Consequently, one of the approval conditions was to provide a letter of credit in an amount provided by the Town Engineer to ensure that the connector road to Allen Kirby Road and improvements to Allen Kirby Road will occur in accordance with the Subdivision Regulations. Such an assurance will also be part of the staffs' recommendation at this time. The Fire Marshal is also recommending that, as part of these phases, a secondary fire apparatus access as described in 2018 International Fire Code D107.1& D107.2., fire apparatus, be provided. This would most logically follow the right of way for the connector street to Allen Kirby Road. Since this fire apparatus road would have to be constructed prior to final platting of Phases 3B and 4, staff will recommend that the right of way for the connector road and the remainder of the Allen Kirby Road required right of way be platted when the final plat is submitted for Phases 3B and 4.

Given the items to discuss, staff (including the Town Attorney) will be meeting with the applicant and their client prior to the Planning Commission meeting to review any final recommendations.



REPORT TO THE FARRAGUT MUNICIPAL PLANNING COMMISSION

PREPARED BY: Mark Shipley, Community Development Director

SUBJECT: Discussion and public hearing on a preliminary plat for Bridgemore Phase 3B and 4, Parcel 025.03, Tax Map 152, 70.28 Acres, 108 Lots, Zoned R-1/OSR (Fulghum, MacIndoe & Associates, Applicant)

INTRODUCTION AND BACKGROUND: This agenda item includes a preliminary plat for the next two phases of the Bridgemore Subdivision. This is the same portion of the Bridgemore Subdivision where a requested amendment to the approved concept plan was presented to the Planning Commission at the June meeting. As noted at the June workshop discussion, the original concept plan included more loop streets and a semi-gridded street layout in this portion of Bridgemore. The proposed changes to the concept plan retained one larger loop but created an additional cul-de-sac and removed the gridded street layout with the alley accesses. The Planning Commission favored the changes to the concept plan due to the inherent topography of the area.

A variance from the length of the cul-de-sac labeled as Road G is being requested as part of the approval of the preliminary plat. The variance would provide for an additional 120 feet of road length. Without a variance the maximum permitted length of a cul-de-sac is 500 feet. The applicant has stated topography as the rationale for the variance.

DISCUSSION: The preliminary plat presented at this time includes 108 lots and involves land situated in the northwest portion of Bridgemore. These phases will provide for a walking trail connection from the Montgomery Trail into and through a sizable portion of the Bridgemore Subdivision.

As discussed during the staff/developer meeting on October 5, given the proximity of these phases to the existing entrance at McFee Road, the requirement in the Fire Code and Subdivision Regulations for a secondary access, and the relatively small number (likely between 40-45 lots) of lots remaining in the last phase, measures need to be taken at this time regarding a public street connection to Allen Kirby Road and improvements to Allen Kirby Road.

When the original concept plan for Bridgemore was approved in 2004, it included an eventual access to Allen Kirby Road and improvements to Allen Kirby Road along the Bridgemore frontage. The Town's fire marshal has relied on the approved concept plan to ensure that the secondary access will be provided and access a street that meets Town standards.

To help address the concerns that were raised during the staff/developer meeting, staff is recommending at this time that the right of way for the connector street to Allen Kirby Road be platted and a letter of credit provided to pro-rate the construction of the connector street and improvements to Allen Kirby Road based on the number of lots that remain unplatted in Bridgemore. The dollar amount for this letter of credit would be established by the Town Engineer.

RECOMMENDATION: Included in the packet is the revised preliminary plat and comment response letter associated with the initial staff comments. Staff will make a recommendation at the meeting based on whether the staffs' comments have been addressed. Staff would note that a quick review of some of the revised preliminary plat sheets indicates that pending geotechnical reports will be needed prior to the Planning Commission acting on this preliminary plat. The revised plat includes better contour line labeling (which was one of the staffs' initial comments). Some lines are currently noted as closed contours. If these areas are determined to be sinkholes, this will significantly impact the proposed layout. Staff will report on this at the meeting and in the staff recommendations that will be send out before the meeting.

- 6) The walking trail easement should be 10 feet from the centerline of the trail as constructed. This will have to be platted along with the access easement and other easements prior to the issuance of a CO.
- 7) Will there be a BMP for sediment control at the bottom of the slope to prevent runoff onto Kingston Pike?
- 8) Please correct Note 8 on Sheet C1.3 to indicate that the maximum slope permitted is 2.5:1 not 2:1.
- 9) A tree preservation/removal plan will be required. If staff determines the plan should modify some element of the design this may need to go back to the Planning Commission for their consideration. Staff understands that the property is narrow and has limited opportunities for tree protection, but this will need to be evaluated in relation to the tree preservation/removal plan.
- 10) Where does the concrete paver underdrain daylight?
- 11) On Sheet C2.2, for the dewatering device detail, please note that weir should remain blocked and watertight until conversion to detention basin. For clarity to contractors and Town staff, all details of the riser/dewatering device should be included on this detail as well, even though some are included on the pond riser detail.
- 12) The landscape plan is a separate review and approval. If it is included in the site plan set, please ensure it is the approved version.
- 13) Please include cut sheets for all exterior lighting and provide a photometric plot to verify footcandle compliance. The lighting plan must be included in the site plan set.
- 14) Please submit irrevocable letter of credit for erosion control for \$7,000.
- 15) Please submit drainage fee of \$560.
- 16) Please submit copy of TDOT permit for entrance and working on right of way.

A motion was made by Vice Mayor Povlin to follow staffs' recommendation. Motion was seconded by Commissioner St. Clair and motion passed unanimously.

6. Discussion and public hearing on a preliminary plat for Bridgemore Phase 3B and 4, Parcel 025.03, Tax Map 152, 70.28 Acres, 108 Lots, Zoned R-1/OSR (Fulghum, MacIndoe & Associates, Applicant)

Staff provided an overview of this item and noted that the revised preliminary plat includes areas where closed contour lines are labeled that may indicate the location of sinkholes. Proposed roads, trails, and house lots are included within these areas. Staff noted that geotechnical studies of these areas are currently being conducted but not complete. If the Planning Commission is comfortable moving forward with the plat presented at this time, any approvals would need to be conditioned on the understanding that modifications to the design that may occur in relation to the geotechnical findings will have to come back to the Planning Commission. No grading permit could be issued until all geotechnical studies have been completed and the preliminary plat is compliant with all Town requirements.

Commissioners discussed this and were okay proceeding with this understanding. Staff indicated that, as presented, the cul-de-sac labeled as "Road G" will require a variance from the maximum permitted length of a cul-de-sac. The maximum permitted length is 500 feet. The applicant is proposing a cul-de-sac of 620 feet in length. The request is based on topography. A loop road would require crossing a very large drainage area that would be better left as open space consistent with the OSR Zoning District. Staff supported the variance for this reason.

Vice Mayor Povlin moved to approve the variance based on topography. The motion was seconded by Commissioner Myers and motion passed unanimously.

In terms of the preliminary plat, the remaining staff comments were as follows:

- 1) Design modifications will be required if any closed contours are determined to be sinkholes. These modifications will have to be approved by the Planning Commission.
- 2) Given the location of the lots in these phases in relation to the existing entrance to McFee Road, the requirement in the Fire Code and Subdivision Regulations for a secondary access, the Concept Plan approved for Bridgemore, and the relatively small number of lots remaining in the last phase, a letter of credit in an amount provided by the Town Engineer will be required. This letter of credit will ensure that the connector road to Allen Kirby Road and improvements to Allen Kirby Road will occur in accordance with the Subdivision Regulations.
- 3) A landscape plan prepared by a landscape professional is required for landscaping of detention basins. This must be approved by the VRRB prior to the issuance of a grading permit.
- 4) For maintenance purposes, please extend the walking trails to tie into the street with bollards and compliant handicap ramps.
- 5) FUD must sign off on water and sewer plans for the final stamped approved set of preliminary plat sheets.
- 6) Please include a streetscape plan prepared by a landscape architect or qualifying landscape professional. This would include a plan for street trees.
- 7) The tree preservation/removal plan must be prepared in accordance with the Tree Protection Ordinance, including who can prepare such plan.
- 8) Lighting must comply with all provisions of the Residential Subdivision Street Lighting provisions in the Subdivision Regulations.
- 9) Please show street light fixtures as frosted so that the bulb (light source) is not visible.
- 10) Please submit irrevocable letter of credit for erosion control for \$360,000.
- 11) A drainage permit fee will be required. The dollar amount will be provided by the Town Engineer.

The project engineer, Billy Fulghum, spoke on behalf of the applicant. Staff indicated that, with regards to the letter of credit for improvements to Allen Kirby Road, the Town Engineer prepared an initial estimate forecast to 2026 and the dollar amount was \$2.51 million. This included the entire improvement (both sides of the road) along the Bridgemore frontage of Allen Kirby Road.

Some discussion proceeded and a motion was made by Commissioner Myers to follow staffs' recommendation. Motion was seconded by Vice Mayor Povlin and motion passed unanimously. Commissioner St. Clair asked that he be provided a copy of the geotechnical report on the closed contours when the report is available.

- 7. Discussion on a request to amend the Farragut Municipal Code, Appendix A – Zoning, Chapter 4., Section XIII. – Outdoor site lighting, to allow for ballfield lighting that is custom designed not to affect neighboring properties (Jeff Jordan, Applicant)**
Requested for removal from the agenda.



STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
KNOXVILLE ENVIRONMENTAL FIELD OFFICE
TENNESSEE GEOLOGICAL SURVEY
3711 MIDDLEBROOK PIKE
KNOXVILLE, TENNESSEE 37921-6538
PHONE (865) 594-6035 STATEWIDE 1-888-891-8332 FAX (865) 594-6105

February 4, 2022

Dear Mr. Shipley:

My purpose here is to provide some general comments about the proposed Phase 3B and 4 expansion of the Bridgmore Subdivision in an area of well-developed karst terrain in west Knox County. My comments are based on a review of the *City of Farragut Sinkhole Ordinance*, the subdivision plan maps, and the GEOServices Project No. 21-211354 reports.

- As shown on the *U.S. Geological Survey Concord Quadrangle 7.5-minute Topographic Map*, there are numerous closed topographic depressions (natural sinkholes) in the area (Figure 1).
- The density of natural sinkholes in the area compared to other parts of Knox County is clearly highlighted on the *U.S. Geological Survey Areas with Abundant Sinkholes in Knox County Map* (Figure 2).
- All the natural sinkholes depicted on the map shown in Figure 1 appear to have experienced little to no modification due to changes in recent land use (Figure 3).
- The detailed topographic map provided on the KGIS website was also examined and clearly documents the characteristics of these and other topographic depressions in more detail. However, I was not able to compile a map using that data.
- The Phase 3B and 4 expansion plans show the location of four closed topographic depressions (natural sinkholes) that would be impacted by the current design.
- Figures 1 and 3 show the approximate position of the 50 ft no build buffer (red lines) around those sinkholes based on the Phase 3B and 4 expansion plans.
- It appears that the 50 ft no build buffers extend across portions of proposed roads and approximately 20 out of the 108 properties shown on the Phase 3B and 4 design plans.
- I reviewed two reports that represented the typical results of the site-wide investigation to evaluate the subsurface conditions near the no build buffers.
- Each report described the results of a single boring on two different properties (B-248 and B-258; GEOServices Project No. 21-211354).
- Although the investigation was well done, the application of the results can be summed up by the following quote (from the same page in both reports):

Page 5: “Information on actual subsurface conditions exists only at the specific boring location and is relevant only to the time that this exploration was performed. Variations may occur and should be expected at the site.”

- The preceding quote clearly recognizes that the current subsurface conditions in a karst setting can change dramatically over a short distance (feet).
- The reports also state:

Page 6: “In our professional opinion, the proposed dwelling located as shown on the provided drawing will have no greater risk of sinkhole development than in other areas at the site.”

- This conclusion is based on the current conditions, but the results of the subsurface investigation cannot predict how construction related modifications to the area may alter the current hydrogeologic setting.
- The main concern here is that a change in the current hydrogeologic setting may lead to an increase in the potential for post-construction sinkhole development anywhere on and adjacent to the site.
- In the GEOServices reports, the *Conclusions and Recommendations* (Section 4) and *Construction Considerations* (Section 5) provide an excellent summary of the potential risks associated with building on a karst terrain and how best to address them.
- The Sinkhole Ordinance is intended to minimize construction related disturbance to the landscape around a known sinkhole, because such modifications may lead to increased or renewed ground motion in and around the sinkhole.
- The Sinkhole Ordinance does not require that builders follow the recommended construction practices outlined in the report.
- It is therefore ill-advised to approve a variance to the requirements of the Sinkhole Ordinance if there are no mechanisms in place to monitor and approve that proper construction practices as outlined in the report are being used.
- Furthermore, even if a foundation can be designed and constructed to withstand ground movement within the no build sinkhole buffer, the development of sinkholes anywhere on a property post construction can require costly remediation and the requirement to acknowledge the repair to future buyers, which affects a home’s resale value.
- Another objective of the Sinkhole Ordinance 50 ft buffer is to maintain the drainage characteristics of pre-existing sinkholes.
- The goal in part is to prevent flooding within a pre-existing sinkhole that once drained well and/or the overflow of stormwater runoff from a sinkhole onto adjacent properties.
- According to the GEOServices reports,

Page 4: “The closed depressions are internally drained, meaning surface water within the highest closed contour interval of the depression flows to the bottom of the depression where it infiltrates into the subsurface.”

- This does appear to be the case based on a review of all the historical aerials photographs (snapshots in time) available on the KGIS website.
- As stated, water may flow to the bottom of a depression and infiltrate, but the most permeable infiltration pathways may not be at the lowest elevation in every sinkhole. In other words, during a significant runoff event water may pond in a depression until reaching a level where drainage pathways have developed over time that can keep pace with the rate of filling. Subsequently the remaining water drains more slowly over time through the bottom of the depression.
- Because the location of the “primary” drainage pathways are not known, the risk of sinkhole related flooding is lowered by preventing any ground disturbance within the no build 50 ft buffer.

In summary, natural sinkholes occur throughout the undeveloped landscape and are a manifestation of the close interaction of surface and subsurface hydrologic processes in a karst setting. Human induced modifications to the landscape associated with “living on karst” can trigger, in an unpredictable way, changes in hydrologic processes that pose a threat to human health and safety. The *City of Farragut Sinkhole Ordinance* clearly outlines the potential societal and environmental impacts associated with building in karst terrain. The land use constraints imposed by the Sinkhole Ordinance is an effort to minimize the risk that current and future sinkhole activity pose to all residents.

Sincerely,

A handwritten signature in black ink, appearing to read "Peter J. Lemiszki". The signature is fluid and cursive, with the first name "Peter" and last name "Lemiszki" clearly distinguishable.

Peter J. Lemiszki, PhD
Chief Geologist
Tennessee Geological Survey
Knoxville Environmental Field Office
Tennessee Department of Environment and Conservation

November 10, 2021

Placemakers No. 2 Partnership
11800 Kingston Pike
Knoxville, Tennessee 37934

ATTN: Ms. Susie Lash
Susielash@tds.net

Subject: **REPORT OF LIMITED GEOTECHNICAL EXPLORATION**
Lot 170
Bridgemore Subdivision Phase 3B & 4
Farragut, Tennessee
GEOServices Project No. 21-211354

Dear Ms. Lash:

We are submitting the results of the geotechnical exploration performed for the subject project. The geotechnical exploration was performed in accordance with our Proposal Number 11-21566, dated August 26, 2021. The following report presents our findings and recommendations for the subject lot. Should you have any questions regarding this report, or if we can be of any further assistance, please contact us at your convenience.

Sincerely,
GEOServices, LLC



Matthew B. Haston, P.E.
Senior Geotechnical Engineer
TN 109,269

MBH/WRK:mbh

A handwritten signature in black ink, appearing to read "W. Ros Kingery III".

W. Ros Kingery III, P.E.
Vice President



REPORT OF GEOTECHNICAL EXPLORATION

**Bridgemore Subdivision Phase 3B & 4
Farragut, Tennessee**

GEOServices Project No. 21-211354

Submitted to:

Placemakers No. 2 Partnership
11800 Kingston Pike
Knoxville, Tennessee 37934

Submitted by:

GEOServices, LLC
2561 Willow Point Way
Knoxville, TN 37931

Phone (865) 539-8242
Fax (865) 539-8252



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1.0 INTRODUCTION

1.1 PURPOSE

The purpose of our limited geotechnical exploration was to explore the subsurface conditions and to provide geotechnical recommendations relative to foundation support and construction within the area of the Knoxville, Knox County, KUB Geographic Information System (KGIS) mapped closed contour depression at the subject lot.

1.2 PROJECT AND SITE DESCRIPTION

Project information was provided in email correspondence with Mr. Hayden Jordan, E.I., of Fulghum, MacIndoe & Associates, Inc., dating from August 17, 2021. Included with the email correspondence were drawings showing Bridgemore Subdivision Phases 3B & 4 in relation to four closed contour depressions which were identified using topographic mapping from the KGIS.

We have assumed the proposed residence will consist of a two-story, wood-framed structure supported using a system of shallow foundations and concrete slabs-on-grade. The maximum individual column and continuous wall foundation loads for the structure are anticipated to be less than about 20 kips and 2 kips per linear foot, respectively.

We have assumed maximum earthwork cuts and fills of less than about 10 feet within the individual lot area. Site ground cover presently consists of former pastures, underbrush and woodland.

1.3 SCOPE OF STUDY

This geotechnical exploration involved a site reconnaissance, field drilling, and engineering analysis. The following sections of this report present discussions of the field exploration, site conditions, and conclusions and recommendations. Following the text of this report, Appendix A presents figures and the test boring record.

The scope of our geotechnical engineering services did not include an environmental assessment for determining the presence or absence of wetlands, or hazardous or toxic materials in the soil, bedrock, surface

water, groundwater, or air, on, or below, or around this site. Any statements in this report or on the boring logs regarding odors, colors, and unusual or suspicious items or conditions are strictly for informational purposes.

2.0 EXPLORATION AND TESTING PROGRAMS

2.1 FIELD EXPLORATION

The subsurface conditions were explored by drilling one (1) soil test boring at the subject lot. The boring was located in the field by GEOservices personnel using the provided site plan and a handheld GPS unit. Clearing to access the borings in the underbrush and wooded areas was performed by our subcontractor. The boring on the subject lot was drilled on October 29, 2021 by our subcontractor.

The boring was advanced using 2¼-inch inside diameter hollow stem augers (HSA) with a Geoprobe® track-mounted drill rig. The depths in this report reference the ground surface at the site that existed at the time of the exploration. The approximate location of the soil test boring is shown on Figure 2. Detailed logs for the soil test boring can be found in Appendix A of this report.

Within the soil test boring, Standard Penetration Testing (SPT) and split-spoon sampling were performed at 2½-foot intervals in the upper 10 feet and at 5-foot intervals thereafter. The drilling was performed in accordance with ASTM D 6151 (hollow stem auger drilling). SPT and split-spoon sampling were performed in accordance with ASTM D 1586.

In split-spoon sampling, a standard 2-inch O.D. split-spoon sampler is driven into the bottom of the boring with a 140-pound hammer falling a distance of 30 inches. The number of blows required to advance the sampler the last 12 inches of the standard 18 inches of total penetration is recorded as the SPT (N-value). These N-values are indicated on the boring log at the test depth and provide an indication of the consistency of the cohesive soils.

2.2 SOIL CLASSIFICATION

After completion of the field drilling and sampling phase of this project, the soil samples were returned to our laboratory where they were visually classified in general accordance with the Unified Soil Classification System (USCS – ASTM D 2487) by a GEOServices staff member. Laboratory testing of select samples included moisture content (ASTM D 2216) and organic content (ASTM D 2974) tests. The laboratory testing was ongoing as of this writing and the results will be submitted under transmittal cover letter once completed.

3.0 SUBSURFACE CONDITIONS

3.1 GEOLOGIC CONDITIONS

The project site lies within the Appalachian Valley and Ridge Physiographic Province. The Province is characterized by elongated, northeasterly-trending ridges formed on highly resistant sandstone and shale. Between ridges, broad valleys and rolling hills are formed primarily on less resistant limestone, dolomite, and shale.

Published geologic information indicates the project site is underlain by bedrock of the Copper Ridge Dolomite Formation of the Knox Group. This formation is composed of gray, coarse to medium-grained, knotty dolomite in the upper zone and dark-gray crystalline dolomite in the lower zone. This formation typically weathers to produce a thick silty clay residual soil with dark iron stains. Silica in the form of chert is resistant to weathering and scattered in various quantities throughout the residuum.

Since the bedrock underlying this site contains carbonate rock (i.e. limestone/dolomite), the site is susceptible to the typical carbonate hazards of irregular weathering, cave and cavern conditions, and overburden sinkholes. Carbonate rock, while appearing very hard and resistant, is soluble in slightly acidic water. This characteristic, plus differential weathering of the bedrock mass is responsible for the hazards. Of these hazards, the occurrence of sinkholes is potentially the most damaging to overlying soil-supported structures. Sinkholes occur primarily due to differential weathering of the bedrock and flushing or raveling of overburden soils into the cavities in the bedrock. The loss of solids creates a cavity or dome in the

overburden. Growth of the dome over time or excavation over the dome can create a condition in which rapid, local subsidence or collapse of the roof of the dome occurs. Such a feature is termed a sinkhole.

The process of bedrock solutioning including the formation of bedrock pinnacles, slots, fissures, caves, and sinkholes has been occurring for a long period of time. The result of this solutioning is evidenced by the undulating topography of present day East Tennessee. Such topography is often referred to as “Karst” topography which is a term used to describe landforms, geologic features, and subsurface conditions resulting from the solutioning of carbonate bedrock. Some of the features associated with karst topography include internally drained depressions (closed depressions), springs, sinking creeks, caves, and underground springs.

Closed depressions are sinkholes which formed during the geologic past and have subsequently filled naturally with soil by the processes of running water or gravity. The process of solution weathering and raveling of soil is ongoing and the present day closed depressions may have undergone several iterations of sinkhole formation and refilling. Closed depressions may be recognized as having a saucer or bowl-shaped bottom with no open hole at the bottom. For comparison, a sinkhole is an active feature with an open hole at the bottom of the depressed area, often exposing the underlying bedrock. **Active sinkholes were not observed during the site reconnaissance performed as part of this project.**

The closed depressions are internally drained, meaning surface water within the highest closed contour interval of the depression flows to the bottom of the depression where it infiltrates into the subsurface. Closed depressions are indicated on United States Geologic Survey (USGS) topographic maps by a hatched contour interval. We observed several closed depressions on the published USGS (Concord, Tennessee Quadrangle) topographic map within the immediate vicinity of this site. Figure 1 in Appendix A shows a section of the USGS topographic map in the site vicinity. We also note that four closed depressions were shown on the provided topographic drawing within the site boundary.

Indications of karst activity can also be identified in the subsurface conditions revealed by the soil test boring drilled as part of this exploration. A common indicator of karst activity in soil test borings is the presence of a thick, continuous zone of soft soil overlying bedrock. This zone of soft soil above the bedrock surface and between pinnacles in the bedrock is commonly referred to as “epikarst”. While an upper zone

of soft fill soil was encountered, we did not observe thick, soft soil zones overlying bedrock which would be indicative of the epikarst.

Based the results of this exploration, it is our opinion that the risk of sinkhole development at this site is no greater than at other sites located within similar geologic settings which have been developed successfully. The risk of sinkhole development can be reduced by following the recommendations provided in the *Sinkhole Risk Reduction and Corrective Actions* section of this report.

3.2 SUBSURFACE CONDITIONS

The following subsurface description is of a generalized nature to highlight the subsurface stratification features and material characteristics at the boring location. The boring log included in Appendix A of this report should be reviewed for specific information at the test location. Information on actual subsurface conditions exists only at the specific boring location and is relevant only to the time that this exploration was performed. Variations may occur and should be expected at the site.

Surficial

Boring B-170 encountered a surficial layer of topsoil that was 6 inches thick. We note that the clearing for access could have removed some of the upper topsoil and it is recommended that the contractor determine the topsoil depth for bidding and construction purposes.

Fill Soil

The boring encountered fill soil to a depth of about 3 feet below the existing ground surface. Fill soils have been transported and placed by the activities of man and machine. The fill was manually classified as reddish brown fat (high plasticity) clay soil.

The SPT N-value in the fill soil interval was 3 blows per foot (bpf), indicating a soil consistency of soft.

Residual Soil

Residual soil was encountered underlying the fill. Residual soils are formed from the in-place weathering of the parent bedrock. The residual soil was manually classified reddish brown and yellowish brown fat clay soil with varying amounts of chert fragments.

The SPT N-values used to evaluate the consistency of the residual soil ranged from 7 to 27 bpf. These N-values correspond to soil consistencies of firm to very stiff. The SPT values of greater than about 25 bpf were likely inflated by the presence of chert fragments.

Weathered Rock

Boring B-170 encountered weathered dolomite at a depth of about 32 feet below the ground surface. The weathered dolomite was sampled as dark brown rock fragments. The N-value within the weathered dolomite was 50 blows for 3 inches of penetration.

Auger Refusal

Boring B-170 encountered refusal at a depth of approximately 37.8 feet below the ground surface. Auger refusal is a designation applied to materials that cannot be penetrated by the power auger used to drill the boring. Auger refusal, when encountered, may indicate the presence of rock boulders or ledges, or the top of continuous bedrock.

Ground Water

Ground water was not encountered in the boring at the completion of drilling. The boring was backfilled upon completion in consideration of safety. Ground water levels may fluctuate due to seasonal changes in precipitation amounts, construction activities in the area, and/or the level of nearby water features. The ground water information presented in this report is the information that was collected at the time of our field activities.

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 SITE ASSESSMENT

Based on the results of the geotechnical exploration, the subject lot appears suitable for development of the proposed residential structure. The boring drilled within Lot 170 did not encounter subsurface conditions which would indicate an elevated risk of sinkhole development. In our professional opinion, the proposed dwelling located as shown on the provided drawing will have no greater risk of sinkhole development than in other areas at the site. Additional recommendations for site design and construction to reduce the potential for sinkhole development are provided herein.

Soft fill soils were encountered to a depth of about 3 feet below the existing ground surface in boring B-170. The soft fill is not likely suitable for foundation and subgrade support of the proposed residence, and we recommend the fill be undercut from the area of the proposed structure and the excavation backfilled using structural soil fill. The undercutting should extend at least 5 feet beyond the footprint of the structure.

Given the presence of the soft fill, we recommend observation and testing of the soils exposed in foundation and slab subgrades at the time of construction to confirm the materials are consistent with those of this report.

The soil encountered in the boring was primarily classified as fat clay. Therefore, we anticipate these materials will be encountered during construction activities. Typically, these materials are marginally suitable for foundation or slab support and may impede site grading activities as they are susceptible to moisture changes. We have provided recommendations pertaining to the fat clayey soils in this report.

4.2 SITE PREPARATION

4.2.1 Subgrade

Site stripping within the proposed construction areas should include the removal of vegetation, topsoil, existing fill, rock fragments greater than 6 inches, gravel, and other debris. The existing fill should be undercut from within the footprint of the proposed residence and extending at least 5 feet beyond the footprint of the structure. The stripping operations should extend a minimum of 5 feet beyond the limits of proposed pavement areas and 10 feet beyond building footprints.

After the completion of stripping operations and excavation to reach the planned subgrade elevation, we recommend that the subgrade be proofrolled with a fully-loaded, tandem-axle dump truck or other pneumatic-tired construction equipment of similar weight. The geotechnical engineer or his representative should observe proofrolling. Areas judged to perform unsatisfactorily (e.g., pumping and/or rutting) by the engineer should be undercut and replaced with structural soil fill or remediated at the geotechnical engineer's recommendation. Areas to receive structural soil fill should also be proofrolled prior to the placement of new fill.

4.2.2 Structural Soil Fill

Material considered suitable for use as structural fill should be clean soil free of organics, trash, and other deleterious material, containing no rock fragments greater than 6 inches in dimension. Preferably, structural soil fill material should have a standard Proctor maximum dry density of 90 pcf or greater and a plasticity index (PI) of 35 percent or less. The material to be used as structural fill should be tested by the geotechnical engineer to confirm that it meets the project requirements before being placed.

Structural fill should be placed in loose, horizontal lifts not exceeding 8 inches in thickness. Each lift should be compacted to at least 98 percent of the soil's maximum dry density per the standard Proctor method (ASTM D 698) and within the range of minus (-) 2 percent to plus (+) 3 percent of the optimum moisture content. Each lift should be tested by geotechnical personnel to confirm that the contractors' method is capable of achieving the project requirements before placing subsequent lifts. Areas which have become soft or frozen should be removed before additional structural fill is placed.

4.3 SHALLOW FOUNDATIONS

4.3.1 Shallow Foundations

Foundations for the proposed dwelling are expected to bear in structural soil fill or firm, or better, residual soils which have been tested and approved as recommended. The recommended allowable soil bearing capacity for design of the foundations is 2,000 pounds per square foot (psf). Undercutting and replacement of existing fill soils will be required where encountered at the foundation bearing elevation.

We recommend that continuous foundations be a minimum of 18 inches wide and isolated spread footings be a minimum of 24 inches wide to reduce the possibility of a localized punching shear failure. Exterior foundations should be designed to bear at least 18 inches below finished exterior grade to develop the design bearing pressure and to protect against frost heave.

A geotechnical representative should be retained to perform foundation subgrade tests to confirm that the recommendations provided in this report are consistent with the site conditions encountered. Some undercutting of unsuitable soils during foundation excavation should be anticipated. A dynamic cone penetrometer (DCP) is commonly utilized to provide information that is compared to the data obtained in the

geotechnical report. Where unacceptable materials are encountered, the material should be excavated to the underlying suitable soils or remediated at the geotechnical engineer's direction.

4.3.2 Slabs-on-Grade

For slab-on-grade construction, the site should be prepared as previously described. We recommend that the subgrade be topped with a minimum 4-inch layer of crushed stone to act as a capillary moisture block. The subgrade should be proofrolled and approved prior to the placement of the crushed stone. Based on the conditions encountered on this site, we recommend that the floor slabs be designed using a subgrade modulus of 100 pounds per cubic inch (pci). This modulus is appropriate for small diameter loads (i.e. a 1ft x 1ft plate) and should be adjusted for wider loads.

5.0 CONSTRUCTION CONSIDERATIONS

5.1 FOUNDATION CONSTRUCTION

Foundation excavations should be opened, the subgrade evaluated, remedial work performed (if required), and concrete placed in an expeditious manner. Exposure to weather often reduces foundation support capabilities, thus necessitating remedial measures prior to concrete placement. It is also important that proper surface drainage be maintained both during construction (particularly in terms of maintaining dry footing trenches) and after construction. Soil backfill for footings should be placed in accordance with the recommendations for structural fill presented herein.

5.2 EXCAVATIONS

Auger refusal was encountered in the boring B-170 at a depth of about 37.8 feet below the existing ground surface. The depth where refusal was encountered is thought to be below the general site earthwork depths and excavation difficulty is not expected to be a significant project concern.

Auger refusal conditions generally correspond to materials which require hoe-ramming and/or blasting for removal. Typically, soils penetrated by augers can be removed with conventional earthmoving equipment. However, excavation equipment varies, and field refusal conditions may vary. Generally, the weathering process is erratic and variations in the rock profile can occur in small lateral distances. It is, therefore, possible

that some partially weathered rock, rock boulders, pinnacles or ledges requiring difficult excavation techniques may be encountered at more shallow depths at locations away from the boring.

Excavations should be sloped or shored in accordance with local, state, and federal regulations, including OSHA (29 CFR Part 1926) excavation trench safety standards. The contractor is usually solely responsible for site safety. This information is provided only as a service, and under no circumstances should GEOServices be assumed responsible for construction site safety.

5.3 HIGH PLASTICITY SOIL CONSIDERATIONS

Based on our experience in the East Tennessee area, soils with plasticity indices (PI) less than 30 percent have a slight potential for volume changes with changes in moisture content, and soils with a PI greater than 50 percent are highly susceptible to volume changes. Between these values, we consider the soils to be moderately susceptible to volume changes.

Plastic soils have the potential to shrink or swell with significant changes in moisture content. Unlike other areas of the country where high plasticity soils cause considerable foundation problems, East Tennessee does not typically endure long periods of severe drought or wet weather. However, in recent years drought conditions have been sufficient to cause soil shrinkage and related structural distress of buildings, floor slabs and pavements at sites underlain by high plasticity soils.

At sites that have high plasticity soils, certain precautions should be considered to minimize or eliminate the potential for volume changes. The most effective way to eliminate the potential for volume changes is to remove highly plastic soils and replace them with compacted fill of non-expansive material. Testing and recommendations for the required depth of removal can be provided, if needed. If removal of the highly plastic soils is not desirable, then measures should be taken to protect the soils from excessive amounts of wetting or drying. In addition, modification of the soils by lime or cement treatment can be utilized to reduce the soil plasticity.

Several construction considerations may reduce the potential for volume changes in the subgrade soils. Foundations should be excavated, checked, and concreted in the same day to prevent excessive wetting or drying of the foundation soils. The floor subgrade should be protected from excessive drying and

wetting by covering the subgrade prior to slab construction. The site should be graded in order to drain surface water away from the building both during and after construction. Installing moisture barriers around the perimeter of the slab will help limit the moisture variation of the soil and reduce the potential for shrinking or swelling. In addition, roof drains should discharge water away from the building area and foundations. Trees and large shrubs can draw large amounts of moisture from the soil during dry weather and should be kept well away from the building to prevent excessive drying of the foundation soils. Watering of lawns or landscaped areas should be performed to maintain moisture levels during dry weather.

5.4 MOISTURE SENSITIVE SOILS

The plastic fine-grained soils encountered at this site will be sensitive to disturbances caused by construction traffic and changes in moisture content. During wet weather periods, increases in the moisture content of the soil can cause significant reduction in the soil strength and support capabilities. Construction traffic patterns should be varied to prevent the degradation of previously stable subgrade. In addition, the soils at this site which become wet may be slow to dry and thus significantly retard the progress of grading and compaction activities. We caution if site grading is performed during the wet weather season; increases in the undercut volumes should be expected.

Further for site fills, methods such as discing and allowing the material to dry will be required to meet the required compaction recommendations. It will, therefore, be advantageous to perform earthwork and foundation construction activities during dry weather. However, November through March is typically the difficult grading period due to the limited drying conditions which exist.

5.5 DRAINAGE AND GROUNDWATER CONCERNS

To reduce the potential for undercutting and construction induced sinkholes, water should not be allowed to collect in the foundation excavation, on floor slab areas, or on prepared subgrades of the construction area either during or after construction. Excavated areas should be sloped toward one corner to facilitate removal of collected rainwater, groundwater, or surface runoff. Positive site surface drainage should be provided to reduce infiltration of surface water. The grades should be sloped away from the building and surface drainage should be collected and discharged such that water is not permitted to infiltrate the subgrade.

5.6 SINKHOLE RISK REDUCTION AND CORRECTIVE ACTIONS

Based on our experience, corrective actions can be performed to reduce the potential for sinkhole development at this site. These corrective actions would decrease but not eliminate the potential for sinkhole development. Much can be accomplished to decrease the potential of future sinkhole activity by proper grade selection and through the establishment of positive site drainage.

In general, the portions of a site that are excavated to achieve the desired grades will have a higher risk of sinkhole development than the areas that are filled, because of the exposure of relic fractures in the soil to rainfall and runoff. On the other hand, those portions of a site that receive a modest amount of fill (or that have been filled in the past) will have a decreased risk of sinkhole development caused by rainfall or runoff because the placement of a cohesive soil fill over these areas effectively caps the area with a relatively impervious "blanket" of remolded soil. Therefore, the recommendations that follow incorporate a modest remedial treatment program designed to make the surface of the soil in excavated areas less permeable.

Although it is our opinion that the risk of ground subsidence associated with sinkhole formation cannot be eliminated, however, we have found that several measures are useful in site design and development to reduce this potential risk. These measures include:

- Maintaining positive site drainage to route surface waters well away from structural areas both during construction and for the life of the structure.
- The scarification and re-compaction of the upper 6 to 10 inches of soil in earthwork cut areas.
- Verifying that subsurface piping beneath structures is carefully constructed and pressure tested prior to its placement in service.
- The use of pavement or geosynthetic clay-lined ditches, particularly in cut areas, to collect and transport surface water to areas away from structures.

Considerations when building within a sinkhole prone area are to provide positive surface drainage away from proposed building or parking areas both during and after construction. Backfill in utility trenches or other excavations should consist of compacted, well-graded material such as dense graded aggregate or compacted on site soils. The use of an open graded stone (such as No. 57 stone) is not recommended unless the stone backfill is provided an exit path and not allowed to pond. If sinkhole conditions are observed, the type of corrective action is most appropriately determined by a geotechnical engineer on a

case by case basis.

6.0 LIMITATIONS

This report has been prepared in accordance with generally accepted geotechnical engineering practice for specific application to this project. This report is for our geotechnical work only, and no environmental assessment efforts have been performed. The conclusions and recommendations contained in this report are based upon applicable standards of our practice in this geographic area at the time this report was prepared. No other warranty, express or implied, is made.

The analyses and recommendations submitted herein are based, in part, upon the data obtained from the exploration. The nature and extent of variations away from the boring will not become evident until construction. If variations appear evident, then we will re-evaluate the recommendations of this report. In the event that any changes in the nature, design, or location of the structures are planned, the conclusions and recommendations contained in this report will not be considered valid unless the changes are reviewed, and conclusions modified or verified in writing.

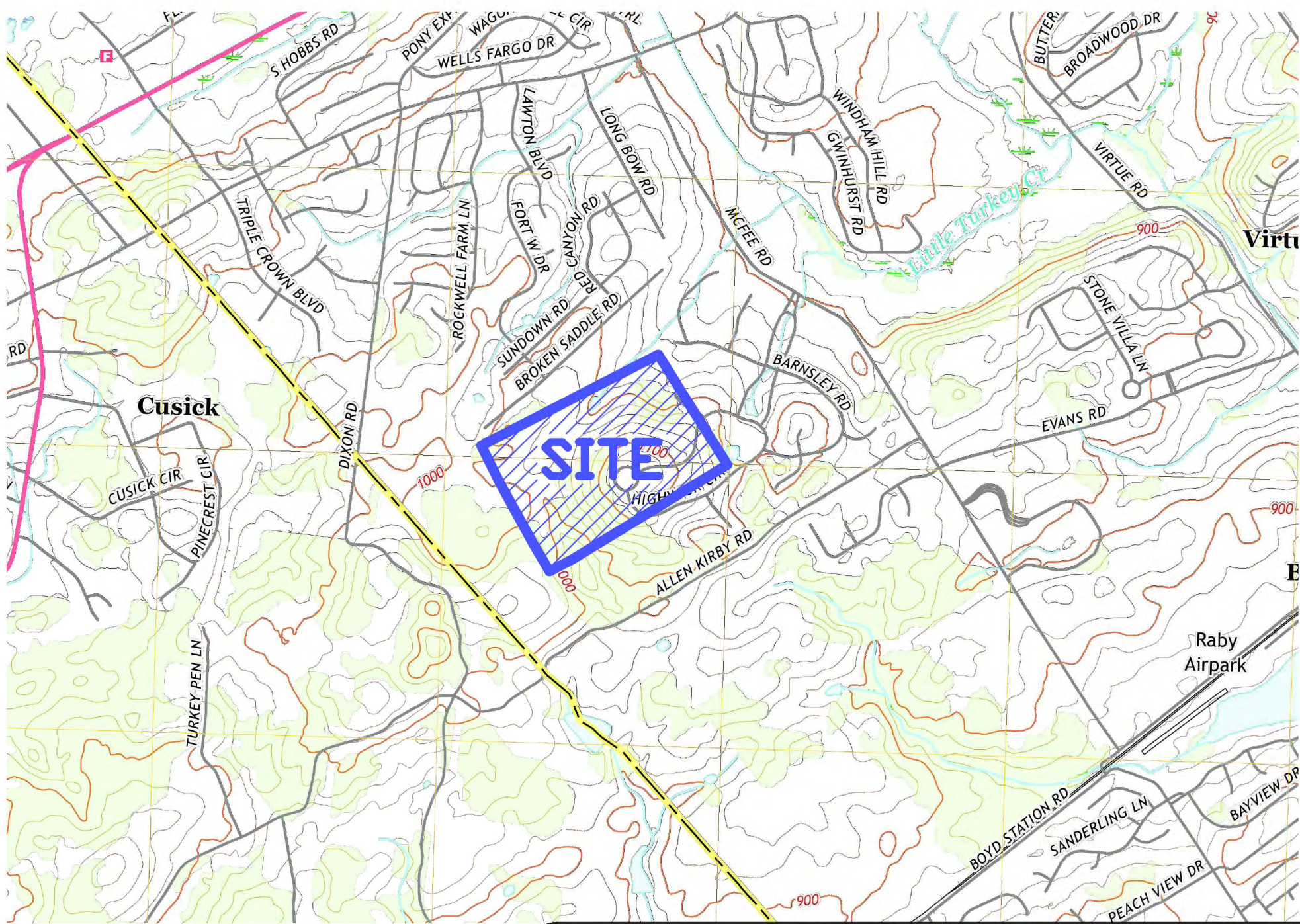


GEOWorld
GEOservices, LLC, Geotechnical and Materials Engineers



APPENDIX A





NOTES:

1.) BASE MAP: USGS QUADRANGLE (CONCORD, TENNESSEE)



2561 Willow Point Way
Knoxville, Tennessee 37931

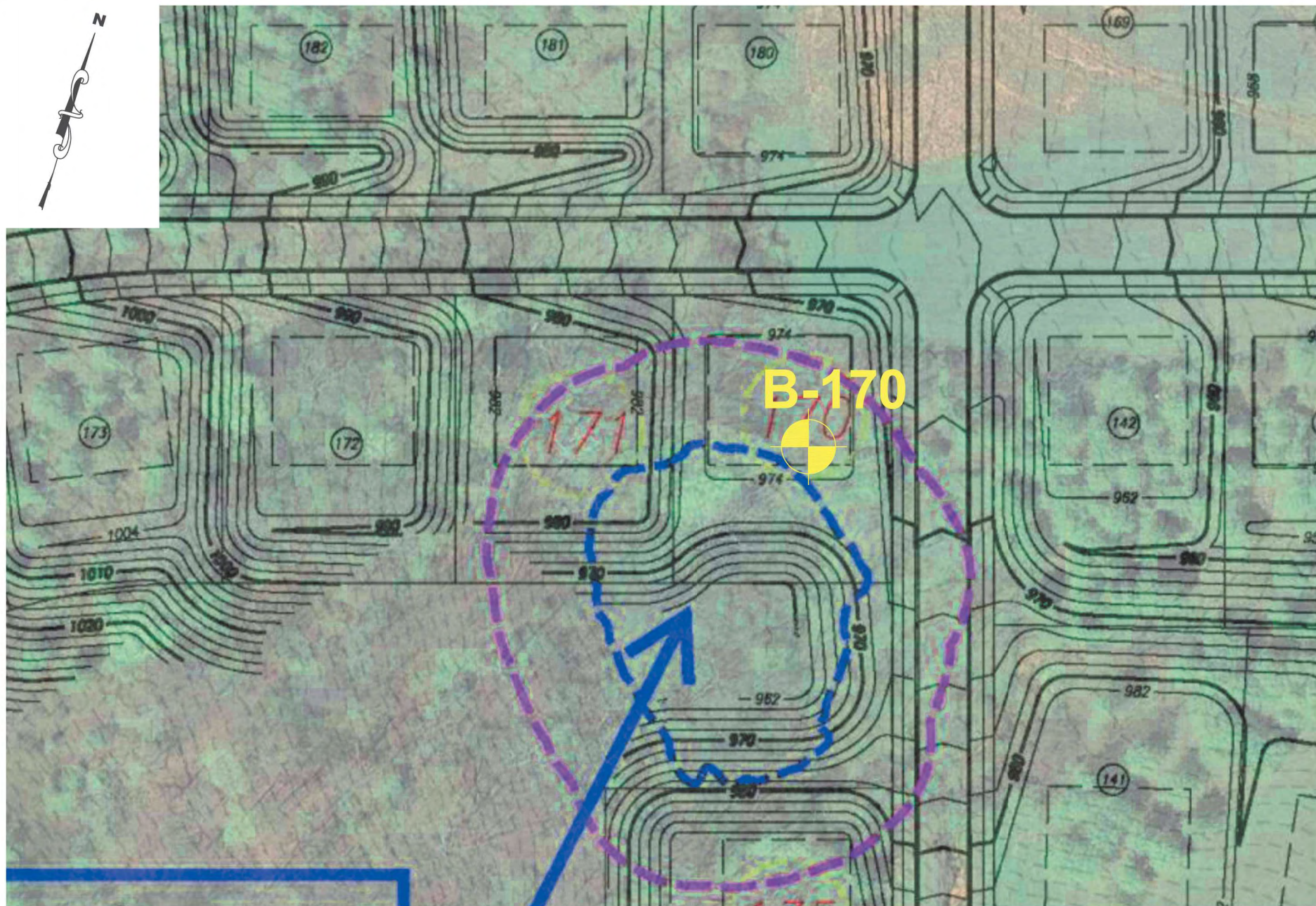
Office: 865-539-8242
Fax: 865-539-8252

SITE VICINITY MAP
BRIDGEMORE SUBDIVISION
PHASE 3B & 4
FARRAGUT, TENNESSEE

DRAWN BY: KSR
APPROVED BY: MBH
SCALE: N.T.S.
JOB NO.: 21-211354
DATE: 11/8/21

FIGURE

1



NOTES:
 1.) BORING LOCATIONS ARE SHOWN IN GENERAL ARRANGEMENT ONLY.
 2.) DO NOT USE BORING LOCATIONS FOR DETERMINATIONS OF DISTANCES OR QUANTITIES.
 3.) BASE MAP PROVIDED BY: Fulghum, MacLodde & Associates

**SOIL TEST BORING
 LOCATION PLAN**
 BRIDGEMORE SUBDIVISION
 PHASE 3B & 4
 FARRAGUT, TENNESSEE

DRAWN BY: KSR
 APPROVED BY: MBH
 SCALE: N.T.S.
 JOB NO.: 21-211354
 DATE: 11/8/21

GEOS
 GEOServices, LLC, Geotechnical and Materials Engineers
 2551 Highway 20 East, Suite 200
 Knoxville, Tennessee 37931
 OFFICE: 865-538-8222
 FAX: 865-538-8222

Figure 2

LITHOLOGIC SYMBOLS
(Unified Soil Classification System)

	ASPHALT: Asphalt
	CH: USCS High Plasticity Clay
	CL: USCS Low Plasticity Clay
	CL-ML: USCS Low Plasticity Silty Clay
	CONCRETE: Concrete
	DOLOMITE: Dolomite
	GRAVEL: Gravel / Basestone
	LIMESTONE: Limestone
	SANDSTONE: Sandstone
	SC-SM: USCS Silty Clayey Sand
	SHALE: Shale
	SM: USCS Silty Sand
	SW: USCS Well-graded Sand
	TOPSOIL: Topsoil
	WEATHERED ROCK: Bedrock

SAMPLE SYMBOLS

	Grab Sample
	No Recovery
	Rock Core
	Shelby Tube
	Split Spoon
	AUGER: Auger Probe

COLOR CODES FOR LITHOLOGIC SYMBOLS

	RED: Fill
	GREEN: Cultivated
	BLUE: Residuum
	PURPLE: Alluvium
	PINK: Colluvium
	LIGHT GRAY: Weathered Rock
	DARK GRAY: Rock Core
	YELLOW: Void

ABBREVIATIONS

LL	- LIQUID LIMIT (%)
PI	- PLASTIC INDEX (%)
W	- MOISTURE CONTENT (%)
DD	- DRY DENSITY (PCF)
NP	- NON PLASTIC
-200	- PERCENT PASSING NO. 200 SIEVE
PP	- POCKET PENETROMETER (TSF)

TV	- TORVANE
PID	- PHOTOIONIZATION DETECTOR
UC	- UNCONFINED COMPRESSION
ppm	- PARTS PER MILLION
	Water Level at Time Drilling, or as Shown
	Water Level at End of Drilling, or as Shown
	Water Level After 24 Hours, or as Shown

GENERAL NOTES

FINE AND COARSE GRAINED SOIL PROPERTIES

PARTICLE SIZE

BOULDERS:	GREATER THAN 300 mm
COBBLES:	75 mm to 300 mm
GRAVEL:	4.74 mm to 75 mm
COARSE SAND:	2 mm to 4.74 mm
MEDIUM SAND:	0.425 mm to 2 mm
FINE SAND:	0.075 mm to 0.425 mm
SILTS & CLAYS:	LESS THAN 0.075 mm

COARSE GRAINED SOILS (SANDS & GRAVELS)

N-VALUE	RELATIVE DENSITY
0 - 4	VERY LOOSE
5 - 10	LOOSE
11 - 30	MEDIUM DENSE
31 - 50	DENSE
OVER 50	VERY DENSE

FINE GRAINED SOILS (SILTS & CLAYS)

N-VALUE	CONSISTENCY	Qu, PSF
0 - 2	VERY SOFT	0-500
3 - 4	SOFT	500 - 1000
5 - 8	FIRM	1000 - 2000
9 - 15	STIFF	2000 - 4000
16 - 30	VERY STIFF	4000 - 8000
OVER 31	HARD	8000 +

STANDARD PENETRATION TEST (ASTM D1586)

THE STANDARD PENETRATION TEST AS DEFINED BY ASTM D1586 IS A METHOD TO OBTAIN A DISTURBED SOIL SAMPLE FOR EXAMINATION AND TESTING AND TO OBTAIN RELATIVE DENSITY AND CONSISTENCY INFORMATION. THE 1.4 INCH I.D./2.0 INCH O.D. SAMPLER IS DRIVEN 3-SIX INCH INCREMENTS WITH A 140-LB. HAMMER FALLING 30 INCHES. THE BLOW COUNTS REQUIRED TO DRIVE THE SAMPLER THE FINAL 2 INCREMENTS ARE ADDED TOGETHER AND DESIGNATED THE N-VALUE. AT TIMES, THE SAMPLER CAN NOT BE DRIVEN THE FULL 18 INCHES. THE FOLLOWING REPRESENTS OUR INTERPRETATION OF THE STANDARD PENETRATION TEST WITH VARIATIONS.

BLOWS/FOOT (N-VALUE)

DESCRIPTION

25	25 BLOWS DROVE SAMPLER 12" AFTER INITIAL 6" SEATING
75/10"	75 BLOWS DROVE SAMPLER 10" AFTER INITIAL 6" SEATING
50/PR	PENETRATION REFUSAL OF SAMPLER AFTER INITIAL 6" SEATING

SAMPLING SYMBOLS

ST:	UNDISTURBED SAMPLE
SS:	SPLIT SPOON SAMPLE
CORE:	ROCK CORE SAMPLE
AU:	AUGER OR BAG SAMPLE

SOIL PROPERTY SYMBOLS

N:	STANDARD PENETRATION, BPF
M:	MOISTURE CONTENT %
LL:	LIQUID LIMIT %
PI:	PLASTICITY INDEX %
Qp:	POCKET PENETROMETER VALUE, TSF
Qu:	UNCONFINED COMPRESSIVE STRENGTH, TSF
DUW:	DRY UNIT WEIGHT, PCF

ROCK PROPERTIES

ROCK HARDNESS

ROCK QUALITY DESIGNATION (RQD)

PERCENT	QUALITY
90 TO 100	EXCELLENT
75 TO 90	GOOD
50 TO 75	FAIR
25 TO 50	POOR
0 TO 25	VERY POOR

VERY SOFT:	ROCK DISINTEGRATES OR EASILY COMPRESSES TO TOUCH: CAN BE HARD TO VERY HARD SOIL.
SOFT:	ROCK IS COHERANT BUT BREAKS EASILY TO THUMB PRESSURE AT SHARP EDGES AND IT CRUMBLES WITH FIRM HAND PRESSURE.
MODERATELY HARD:	SMALL PIECES CAN BE BROKEN OFF ALONG SHARP EDGES BY CONSIDERABLE HARD THUMB PRESSURE: CAN BE BROKEN BY LIGHT HAMMER BLOWS.
HARD:	ROCK CAN NOT BE BROKEN BY THUMB PRESSURE, BUT CAN BE BROKEN BY MODERATE HAMMER BLOWS.
VERY HARD:	ROCK CAN BE BROKEN BY HEAVY HAMMER BLOWS.

PROJECT NAME Bridgemore Subdivision Phase 3B & 4

GEOServices PROJECT# 21-211354

DATE 10/29/21

PROJECT LOCATION Farragut, Tennessee

DRILLING CONTRACTOR M&W Drilling

LOGGED BY KSR

ON-SITE REP. ---

DRILLING METHOD Geoprobe 7822

LATITUDE / LONGITUDE ---

GROUND ELEVATION --- PROPOSED FFE ---

NORTHING / EASTING ---

REFUSAL Depth 37.8 ft

TOP OF ROCK ---

GROUND WATER LEVELS:

BEGAN CORING ---

AT END OF DRILLING --- Dry

FOOTAGE CORED (LF) ---

AFTER 1 HOUR --- Backfilled

BOTTOM OF HOLE Depth 37.8 ft

AFTER 24 HOURS --- Backfilled

DEPTH (ft)	ELEVATION (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	MOISTURE CONTENT (%)	ATTERBERG LIMITS	
								LIQUID LIMIT	PLASTICITY INDEX
0			Topsoil (6 Inches)						
			(CH) Fat CLAY - with silt - reddish brown - very moist (FILL)						
				SS 1		1-1-2 (3)			
			(CH) Fat CLAY - with chert fragments - reddish brown and yellowish brown - moist to very moist - firm to very stiff (RESIDUUM)						
				SS 2		4-5-7 (12)			
5				SS 3		5-7-10 (17)			
				SS 4		6-12-15 (27)			
10									
				SS 5		15-7-9 (16)			
15									
				SS 6		5-5-6 (11)			
20									

NOTES:

PROJECT NAME Bridgemore Subdivision Phase 3B & 4

GEOServices PROJECT# 21-211354

DATE 10/29/21

PROJECT LOCATION Farragut, Tennessee

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LATITUDE / LONGITUDE ---

GROUND ELEVATION --- PROPOSED FFE ---

NORTHING / EASTING ---

REFUSAL Depth 37.8 ft

TOP OF ROCK ---

GROUND WATER LEVELS:

BEGAN CORING ---

AT END OF DRILLING --- Dry

FOOTAGE CORED (LF) ---

AFTER 1 HOUR --- Backfilled

BOTTOM OF HOLE Depth 37.8 ft

AFTER 24 HOURS --- Backfilled

DEPTH (ft)	ELEVATION (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	MOISTURE CONTENT (%)	ATTERBERG LIMITS	
								LIQUID LIMIT	PLASTICITY INDEX
20			(CH) Fat CLAY - with chert fragments - reddish brown and yellowish brown - moist to very moist - firm to very stiff (RESIDUUM) <i>(continued)</i>						
25				SS 7		3-4-3 (7)			
30				SS 8		2-3-5 (8)			
35			Weathered ROCK - dolomite - dark brown - dry - hard (RESIDUUM)	SS 9		15-30- 50/3"			

Refusal at 37.8 feet.
Bottom of borehole at 37.8 feet.

NOTES:

July 1, 2022

Mr. Mark Shipley
Town of Farragut
Community Development Director
11408 Municipal Center Drive
Farragut, Tennessee 37934

Email: mshipley@townoffarragut.org

RE: Bridgmore Subdivision Phase 3B And 4
Peer Review of Geotechnical Exploration Reports
Development Within Sinkhole 50-Foot Setback
McFee Road
Farragut, Tennessee
FSE Project No. 322125

Dear Mr. Shipley:

Per your authorization, we have completed a Peer Review of twenty-three *Limited Geotechnical Exploration* reports completed by GEOServices, LLC, for the above-referenced project.

Please give us a call if you have any questions concerning our report review or if we may be of further service. It has been a pleasure to be of service on this project.

Sincerely,
Foundation Systems Engineering, P.C.



Jack F. Llewellyn, Jr.
Senior Geotechnical Engineer
Tennessee No. 19187

JFL/
Enclosures



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1.0 EXECUTIVE SUMMARY

Bridgemore Subdivision is located off of Bridgemore Boulevard on the south side of McFee Road, approximately 0.6 miles southeast of the intersection of Old Stage Road and McFee Road in Farragut, Tennessee.

Placemakers No. 2 Partnership is in the process of developing Phases 3B & 4 of the Bridgemore Subdivision.

Bridgemore Subdivision is an up-scale development with numerous desirable amenities. The availability of empty lots for residential construction is limited, and it is desirable for property developers and designers to maximize the area available.

Due to the potential for sudden and dramatic collapse of the soil overburden into a sinkhole as well as insidious ground surface settlement due to sinkhole activity, the Town of Farragut has developed regulations guiding construction/development around a sinkhole. The *GEOS Limited Geotechnical Exploration* reports were performed on Subdivision Lots located adjacent to areas designated as a sinkhole, where Bridgemore Developers have asked permission to encroach into the 50-foot development buffer.

Each of the GEOS reports states the following: *"Based on the results of this exploration, it is our opinion that the risk of sinkhole development at this site is no greater than at other sites located within similar geologic settings, which have been developed successfully. The risk of sinkhole development can be reduced by following the recommendations provided in the Sinkhole Risk Reduction and Corrective Actions section of this report."*

Given the consequences of sinkhole activity beneath a residence, roadway, utility lines, etc., FSE has been asked to Peer Review the GEOS reports relative to development within the 50-foot sinkhole Buffer Zone.

Our Peer Review has considered the information contained within the GEOS reports, as well other certain other published data that is referenced in this report.



2.0 SINKHOLE ACTIVITY - REPORT PEER REVIEW

Published Geologic mapping indicates that Bridgemore Subdivision is underlain by the Copper Ridge Dolomite. The Copper Ridge dolomite is a member of the Upper Cambrian aged Knox Group. An *irregular, pinnacled top of rock, with cavities and sinkholes common*, is the weathering Characteristic given in the publication entitled *Geology of Knox County (Tennessee Division of Geology Bulletin 70)*. The following excerpt is from Bulletin 70: *"Three formations, the Holston Formation, the Knox group (particularly the **Copper Ridge** (emphasis added) and Mascot or Newala formation of Cattermole), and the Maryville Limestone, are responsible for much of the cavern development in Knox County... The caves developed in the formations of the Knox Group, the Copper Ridge (lower Knox) Mascot, and Newala Formations (upper Knox) follow both bedding planes and joints. ... Where caves are in moderate to steeply dipping lower Knox dolostones, solution channels are parallel to both bedding planes and vertical joints."*

While the underlying geologic unit is well described in the GEOS report, little is presented with regard to the geologic structure at the site. Published Concord Geologic Quadrangle mapping indicates the following:

- An Anticline Axial Trace is mapped to cross the site. Bedrock dip readings collected along nearby Little Turkey Creek indicate a steep rock dip of 80 +/- degrees (with overturned beds) on the northwest side of the anticline and rock dip reading of approximately 58 degrees to 85 degrees to the southeast on the south side of the anticline.
- A splinter thrust fault parallels the north side of the site, along the contact between the Kingsport and Chepultepec formations and the Copper Ridge. A second splinter thrust fault is mapped to traverse the property near the middle of the site.

While seismic activity along the thrust faults is not anticipated, the presence of these splinter faults and the anticline does speak to the steeply dipping, folded, broken nature of the bedrock and believed extensive weathering along bedding planes and joints.

Based on the above discussion, we are not in complete agreement with the following GEOS statements: *"Based on the results of this exploration, it is our opinion that the risk of sinkhole development at this site is no greater than at other sites located within similar geologic settings which have been developed successfully. The risk of sinkhole development can be reduced by following the recommendations provided in the Sinkhole Risk Reduction and Corrective Actions section of this report."*



While this site may be at no greater risk of sinkhole development than other sites located within a similar geologic setting (the Copper Ridge is one of three units in Knox County noted for sinkholes and caves), in our opinion, the presence of the anticline and two splinter thrust faults severely limits the number of comparable sites.

As an example, sites located to the northwest and southeast (adjacent to) Bridgemore do not have this same unique geology and are therefore not comparable, similar to much of Knox County. Comparable development would be located across McFee Road in the narrow belt of the Copper Ridge, where thrust faults and anticlines exist.

The GEOS report includes the following statement: *"Indications of karst activity can also be identified in the subsurface conditions revealed by the soil test boring drilled as part of this exploration. A common indicator of karst activity in soil test borings is the presence of a thick, continuous zone of soft soil overlying bedrock. This zone of soft soil above the bedrock surface and between pinnacles in the bedrock is commonly referred to as "epikarst". While some upper zones of soft soils were encountered, we did not observe thick, soft soil zones overlying bedrock, which would be indicative of the epikarst."*

GEOS termed their report a *Limited Geotechnical Exploration*: *"The purpose of our limited geotechnical exploration(s) was to explore the subsurface conditions and to provide geotechnical recommendations relative to foundation support and construction within the area of the Knoxville, Knox County, KUB Geographic Information System (KGIS) mapped closed contour depression at the subject lot(s)."*

We agree with their report characterization and would add that, in our professional opinion, the completed studies are not carbonate rock investigation reports. Such detailed reports would typically include characterization of the carbonate rock aquifer, soil test borings, and rock core drilling. Bedrock Collapses, as well as Regolith Collapses, should have been investigated. We do not believe that widely spaced borings and observation of split-spoon samples for indications of epikarst are sufficient data to make any conclusion with regard to the risk of encroaching into the 50-foot sinkhole buffer zone.

In an effort to evaluate the potential for future sinkhole activity, as well as existing karst/epikarst features at Bridgemore, we have consulted the 1964 publication by Russian author Igor Dmitrievich Savinskii entitled *Probability Tables for Locating Elliptical Underground Masses with a Rectangular Grid*. The procedure is also applicable for circular masses, and while developed for the mining community, it is also applicable for sinkholes.



The result of the probability analysis answers the question, "what is the probability that borings spaced at various grid spacings will find an underground mass of a certain size." As an example, if the assumption is made that a building area contains a sinkhole collapse dome/cavity, that the size of the collapse is 25 feet in diameter, and that borings are spaced using a rectangular grid of 50 feet by 50 feet, then there is an 80.4 percent chance that **none** of the borings would encounter the collapse area (only a 19.6 percent chance that the borings would find such a collapse area). As such, the probability of finding an 8-to-10-foot diameter collapse area when exploring a site with borings placed on a 25-foot or 50-foot grid spacing is minimal. The probability of finding such a feature when using a 100-foot grid boring spacing or when using widely scattered boring is minuscule.

From the above example, it is clear that if any of the widely spaced borings had encountered epikarst, there would be a very high probability that cavities/seams/voids within the rock would be well developed beneath the property and that features such as epikarst and sinkhole collapse domes would be a common occurrence throughout the entire property.

The use of borings to reduce the probability of not finding such a feature is not realistic due to the number of borings required, and, as such, no reasonable number of borings can provide an owner, developer, or regulatory authority with an 80% or greater probability that such features would not be found beneath the proposed building areas.

Since exploration of the underlying bedrock unit was not performed, no conclusions are possible with regard to open, and filled cavities, weathering, etc., other than that published geologic mapping does indicate the presence of sinkholes on the property.



3.0 SUMMARY

In our opinion, the GEOS report describes Geologic Conditions and Subsurface Conditions very well. A cultivated soil depth of up to 6 feet deep in one area is puzzling, and we would interpret such a depth of material differently (possible filled depression consistent with sinkhole activity) as opposed to farming.

GEOS discussions regarding sinkhole development, risk, etc., are real and should be taken very seriously by developers/designers/owners, etc.

We do not agree with the GEOS *Site Assessment*. In our opinion, there is not sufficient data available to make such an assessment. A sinkhole study was not performed. Their risk factor is based on the presence of epikarst detected during Standard Penetration Testing. In our opinion, until additional exploration is performed (soil and rock), there is not sufficient data available to conclude that development within the 50-foot buffer zone would not result in a greater risk of future sinkhole activity.

By default, it is generally believed that there is a greater risk of sinkhole activity adjacent to a known sinkhole than in areas where there is no indication of a ground surface depression (sinkhole activity). This fact and the desire to protect the waters of the State of Tennessee from possible contamination are the driving force behind limiting development proximity to a sinkhole.



We are in general agreement with GEOS *Recommendations for Site Preparation and Shallow Foundations*. In our professional opinion, some changes/modifications should be made to the GEOS Recommendations that are very important and should be incorporated into the project plans and specifications.

The following additional recommendations would be appropriate if a decision is made to allow the development of the subject Lots:

- The upper 12-inches of in-place material at finished subgrade elevation in cut areas and the upper 12-inches of in-place material in proposed "fill" areas should be scarified, reworked, and recompact to a minimum of 100% Standard Proctor Density.
- Isolated spread footings should be avoided. Continuous and continuous combined footings should be used. The footings should use top and bottom reinforcing and should be designed to span a 5-foot-wide dropout.
- Open-graded stone should not be used as backfill around underground utilities.
- If ditches are lined with pavement, the pavement lining should be asphalt, not concrete.



4.0 REPORT LIMITATIONS

Our GEOS report peer review has been prepared in accordance with generally accepted geotechnical engineering practice for specific application to this project. The conclusions and recommendations contained in this report are based upon applicable standards of our practice in this geographic area at the time this report was prepared. No other warranty, express or implied, is made.

The opinions and recommendations submitted herein are based, in part, upon the data contained within the GEOS report, as well as other documents we have referenced. The report Limitations as outlined in the GEOS reports are incorporated by reference into this Peer Review report.

July 14, 2022

Placemakers No. 2 Partnership
11800 Kingston Pike
Knoxville, Tennessee 37934

ATTN: Ms. Susie Lash
Susielash@tds.net

Reference: **PEER REVIEW REPORT COMMENTS**
Bridgemore Subdivision Phase 3B & 4
Farragut, Tennessee
GEOservices Project No. 21-211354

Dear Ms. Lash:

We are submitting this letter report which provides our comments regarding a peer review report prepared by Foundation Systems Engineering, P.C (FSE) for the subject project. Our services have been performed in accordance with our Proposal Number 11-21566, dated August 26, 2021.

GEOservices (GEOS) performed geotechnical exploration services in the areas of Lots 231 through 234, 240, 241, 245 through 252, 263, 285, 286, 257 through 259 and 135, 170 and 171 which are located in Phase 3B and 4 of Bridgemore Subdivision. Our exploration was performed with regards to the potential for sinkhole development in these lots, some of which were located within 50 feet of closed contour depressions at the site. Reports for each of the above lots were issued in November of 2021.

Since completion of the GEOS reports, discussions between the owner and the Town of Farragut (Farragut) have been ongoing with respect to development in the subject lots. Subsequently, Farragut retained FSE to perform a peer review of the reports which was summarized in a report titled *Bridgemore Subdivision Phase 3B and 4*, dated July 1, 2022. We have performed a review of the FSE report and offer the following comments:

- Page 4 of the FSE report suggests rock coring to explore for the potential of bedrock collapse. GEOS does not agree that rock coring would add significant value to the investigation for typical sinkhole

type activity. GEOServices has been involved with the exploration and repair of over 2,600 sinkholes in the Knox County, Tennessee area. None of these sinkholes were the result of bedrock collapse which resulted in surface collapse. In our professional experience, the sinkholes which form in Knox County are mainly (99.9%) cover collapse sinkholes which do not involve bedrock collapse. Soil test borings without rock coring are sufficient for identification of thick zones of epikarst which is commonly associated with a greater risk for cover collapse sinkholes. We also note soil test borings without rock coring are the standard practice for the exploration of sinkhole activity in this region. The addition of rock coring may become necessary if heavily loaded construction is planned, but is not the norm or standard of care for the type of development planned.

- Page 4 of the report also discusses the 50-foot buffer zone which was established by ordinance around the depressions at the site. We note that the use of 50 feet for the buffer is an arbitrary value. We are unaware of any geological or engineering consideration whereby the risk of sinkhole development is more or less at a distance of 50 feet away from a depression. This distance is really meaningless and the standard of care for construction near existing sinkholes should strictly be geotechnical explorations (whether subsurface exploration or geophysical).
- Page 7 of the report provides additional recommendations for construction measures which may be implemented to help reduce the risk of sinkhole formation. We agree with the additional construction considerations presented on Page 7 and recommend that these be incorporated into the project plans and specifications for this project.

It should be noted that sinkhole risk is something that everyone must accept for any type of development in most of the Middle to East Tennessee geology. The state of the art of geotechnical engineering cannot find and predict every sinkhole. What we can do as geotechnical engineers is determine if areas of the geology are more at risk than other areas. Based on our exploration and experience, GEOServices (which has the largest number of geotechnical professionals in the state of Tennessee) is more than confident that the area explored does not portray an area that has an increased risk and that normal construction practices combined with the added recommendations are more than adequate for this area of the development.

We appreciate the opportunity to have been of service to you on this project. Please contact us with any questions you may have regarding this information.

Sincerely,
GEOservices, LLC

A handwritten signature in black ink, appearing to read 'MH', with a stylized, flowing script.

Matthew B. Haston, P.E.
Senior Geotechnical Engineer

A handwritten signature in black ink, appearing to read 'D. Huckaba', with a stylized, flowing script.

Dennis A. Huckaba, P.E.
Principal



Foundation Systems Engineering, P.C.

Geotechnical Engineering and Consulting

September 2, 2022

Mr. Mark Shipley
Town of Farragut
Community Development Director
11408 Municipal Center Drive
Farragut, Tennessee 37934

Email: mshipley@townoffarragut.org

RE: Bridgemore Subdivision Phase 3B And 4
Revised Site Plan - Ardurra
Development Within Sinkhole 50-Foot Setback
McFee Road
Farragut, Tennessee
FSE Project No. 322125A

Dear Mr. Shipley:

Per your authorization, we have spoken with Mr. William (Billy) Fulghum with Ardurra, the civil site designer for the above-referenced Bridgemore project. Mr. Fulghum was provided a copy of our July 1, 2022, Geotechnical Exploration peer review report and made changes to roadway alignment at the far southern end of this Phase of the Bridgemore Subdivision. Based on the proposed changes, we offer the following comments.

Please give us a call if you have any questions concerning our review or if we may be of further service. It has been a pleasure to be of service on this project.

Sincerely,
Foundation Systems Engineering, P.C.


Jack F. Llewellyn Jr.
Senior Geotechnical Engineer
Tennessee

JFL/
Enclosures



SUMMARY

Bridgemore Subdivision is located off Bridgemore Boulevard on the south side of McFee Road, approximately 0.6 miles southeast of the intersection of Old Stage Road and McFee Road in Farragut, Tennessee. Placemakers No. 2 Partnership is in the process of developing Phases 3B & 4 of the Bridgemore Subdivision. This new Phase of development is located near the northwest corner of the property.

We indicated in our previous July 1, 2022 report (FSE Project No. 322125) that we were not in complete agreement with the GEOS *Site Assessment* regarding sinkhole activity. We did not believe that there was sufficient geotechnical data available to make an assessment regarding the potential for future sinkhole activity within the development sinkhole *Buffer* zone. A sinkhole study was not performed. The GEOS risk factor was based solely on the presence of epikarst detected during Standard Penetration Testing. It was our engineering opinion there was not sufficient data available to conclude that development within the 50-foot buffer zone would not result in a greater risk of future sinkhole activity. However, a geotechnical exploration with recommendations for construction was provided for the explored Lots. From this standpoint, we believe that the GEOS reports were generally thorough (even though they were termed *Limited*).

Mr. William (Billy) Fulghum with Ardurra, civil site designer for the Bridgemore project, was provided a copy of our July 1, 2022, Geotechnical Exploration peer review report. Based on report comments, Mr. Fulghum made changes to roadway alignment. In general, the section of roadway encroaching into the sinkhole buffer was shifted to the northeast, away from the sinkhole area. Unfortunately, this did result in the loss of several Bridgemore Lots.

Our thinking was that additional data in the form of soil test borings with rock core drilling would be performed to augment the existing GEOS reports. Based on our review of the proposed new Bridgemore Phase, in our opinion, four borings with a minimum 10-foot rock core from each boring, within the area where Mr. Fulghum has adjusted the roadway alignment, would be sufficient to determine if the original alignment/design was located within an area where karst activity was apparent. We did not provide this recommendation in our Peer review since Mr. Haston with GEOS would want to collect the data that he believed would be necessary for his sinkhole assessment (not where FSE selected). The assessment would typically be based on open and filled cavities within the upper 10 feet of rock. We do not believe that additional study is planned as of this date.

The alternate case was/is to adjust roadway alignment back away from the Buffer zone, as has been done by Mr. Fulghum.



In general, much of the area proposed for new development consists of the flank of the Highwick Circle hilltop. The approximate northwest, west, and southwest hillside slopes downward toward the closed contour (sinkhole) areas; however, the eastern edge of the buffer appears to have been formed as a result of erosion of the hillside material during the geologic past.

In his publication entitled *Building On Sinkholes*, the late professor George F Sowers provided an estimate of the potential size of a sinkhole ground surface collapse based on the depth of soil overburden. Professor Sowers estimated the potential sinkhole diameter to be approximately 2/3 of the depth of soil overburden. Based on the maximum depth of soil overburden encountered at the site at boring locations placed by GEOS, a potential size of 42 feet in diameter could be expected. A rough measure of the closed contour area of the large sinkhole located to the west of the proposed development was over 300 feet in width and 1000 feet in length. As stated, while this area may have multiple throats, we believe erosional forces are at play with regard to the size of the closed contour area.

In lieu of additional geotechnical study, in our professional engineering opinion, the realignment of the roadway as detailed on the drawing submitted to FSE by Mr. William Fulghum meets the intent of the sinkhole Buffer requirements. From a geotechnical standpoint, we recommend approval of the revised plan for Bridgemore Phases 3B & 4.

As indicated above, provided that additional geotechnical exploration did not reveal significant open and filled cavities within the upper bedrock, it is our opinion that the original design would meet the intent of the Buffer requirement.

We do not agree with the first two GEOS bullet points in their *Peer Review Report Comments*. Regarding the *arbitrary* 50-foot buffer zone, we would reference the above-quoted Sowers publication. The depth of soil overburden in the area is typically less than 75 feet ($2/3 \times 75\text{-foot-thick overburden} = 50\text{-foot buffer}$). Regarding the lack of engineering value for rock core drilling, the Sowers publication also provides numerous examples of why rock core drilling is important regarding a sinkhole study, i.e., cover-collapse and cover-subsidence sinkholes, both related to loss of soil fines at the surface into cavities within the rock.

As we previously reported, we are in general agreement with GEOS *Recommendations for Site Preparation and Shallow Foundations*. In our professional opinion, some changes/modifications should be made to the original GEOS Recommendations that are very important and should be incorporated into the project plans and specifications.

The following additional recommendations are recommended:



- The upper 12-inches of in-place material at finished subgrade elevation in cut areas and the upper 12-inches of in-place material in proposed "fill" areas should be scarified, reworked, and recompact to a minimum of 100% Standard Proctor Density.
- Isolated spread footings should be avoided. Continuous and continuous combined footings should be used. The footings should use top and bottom reinforcing and should be designed to span a 5-foot-wide dropout.
- Open-graded stone should not be used as backfill.
- If ditches are lined with pavement, the pavement lining should be asphalt, not concrete.

REPORT LIMITATIONS

Our report has been prepared in accordance with generally accepted geotechnical engineering practice for specific application to this project. The conclusions and recommendations contained in this report are based upon applicable standards of our practice in this geographic area at the time this report was prepared. No other warranty, express or implied, is made.

The opinions and recommendations submitted herein are based, in part, upon the data contained within the GEOS report, the revised site mapping provided by Mr. Fulghum, as well as other documents we have referenced. The report Limitations as outlined in the GEOS reports are incorporated by reference into this report.



December 5, 2022

Mr. Mark Shipley, AICP
Community Development Director
Town of Farragut
11408 Municipal Center Drive
Farragut, TN 37934

Re: Comment Responses Bridgemore Preliminary Plat Phase 3B and 4 Sinkhole Revision

Dear Mr. Shipley:

The following are our responses to your comments received on November 22, 2022 for the Bridgemore Subdivision Phase 3B and 4 Sinkhole Revision.

Comment 1: Please coordinate easement width requirements with the Town's Eng. where applicable and ensure that they do not affect building sites;

Response 1: Complete. Please refer to sheets C22-C25.

Comment 2: Please adjust so that the trail is out of the sinkhole;

Response 2: Please see response to comment 22.

Comment 3: Building on Lot 170 appears to be highly constrained. It shouldn't be platted in this way;

Response 3: The grading plans have been updated to show the closed contours and the building pad is outside the closed contour. Please see revised sheet C6.

Comment 4: Will construction of the trail within the sinkhole involve any grade work that would alter the contour or will the trail be constructed at existing elevations and only involve clipping off the surface for trail construction;

Response 4: Walking trail would likely be constructed at existing elevation.

Comment 5: Would it be helpful to move the trail closer to the top/beginning of the closed contour and try to trace along it to a greater degree;

Response 5: Please see response to comment 22.

Comment 6: This is not a developable lot;

Response 6: This has been updated accordingly. Please see revised sheet C22.

Comment 7: Minimum sidewalk width is 5 feet;

Response 7: The sidewalk width is 5ft. The 4.5-ft dimension is to the ROW.

Comment 8: Bollards must be 4 feet apart with reflective yellow tape at the upper portion of each bollard;

Response 8: Complete. Please see revised detail 41 on sheet C45.

Comment 9: Crosswalk striping is not typically required on subdivision streets (typ);

Response 9: Crosswalk striping has been removed. Please see revised layout sheets C2-C5.

Comment 10: Please remove overlapping labels on this sheet;

Response 10: Complete. Please see revised sheet C17.

Comment 11: These lots could be impacted by the 50 foot buffer and will require proper geotechnical measures if platted as buildable;

Response 11: Noted. Please refer to Note 9 Sheet C2.

Comment 12: Show j-hook locations on EPSC sheets;

Response 12: Complete. Please see revised EPSC sheets C10-C21.

Comment 13: Pre-construction meeting with town staff is required before the grading permit can be obtained. No grading can begin, including that required for sediment pond installation, until the grading permit is issued;

Response 13: Noted.

Comment 14: These plans must reflect field verified grades. This cannot be addressed when construction is proposed;

Response 14: Plans do reflect verified grades, however contractor is still responsible for checking their work. This is the point of the note.

Comment 15: Cannot use silt fence in a drainage channel;

Response 15: Note has been removed from the silt fence detail. Please see revised detail 15 on sheet C43.

Comment 16: Require 16';

Response 16: Complete. Please see revised sheet C43.

Comment 17: Sediment ponds must remain until all soil disturbing activities have been completed, which includes home construction;

Response 17: Please see revised note 8 on sheet C18.

Comment 18: Healthy non-invasive trees within the sinkhole lip elevation are not to be disturbed. Please show the sinkhole lip elevation on all tree preservation/removal sheets;

Response 18: Refer to revised sheets L1-L4.

Comment 19: When addressing the connection between these phases and Allen Kirby Road please include/discuss any topographic conditions, particularly closed contour depressions, that may impact the location of the connecting roadway;

Response 19: Noted.

Comment 20: Due to fruit mess, please substitute the sweet gum with black gum;

Response 20: The proposed sweet gum cultivar is fruitless.

Comment 21: Per the recommendation in the peer review from Foundation Systems Engineering, have there been revisions made to the original GEOS Recommendations. An updated report will be needed for Planning Commission consideration;

Response 21: Revised plans have been provided to both geotechnical engineers. Revised report will be provided when available.

Comment 22: The planning commission may permit the limited filling of a sinkhole area to facilitate the construction of a critical walkway extension to further the town's adopted connectivity goals;

Response 22: Noted. This will be discussed with the planning commission.

Comment 23: To assure compliance with the approved concept plan and satisfy the requirement for more than one access into and out of the development, please address access to Allen Kirby Road. This secondary connection is increasingly important as the size of the development increases along with the distance from the existing access at McFee Road;

Response 23: Noted.

Comment 24: On all grading sheets, please show the sinkhole lip elevation and address how any proposed grade alteration in those areas will comply with the Sinkhole Ordinance;

Response 24: Complete. Please see revised sheets C6-C9.

Comment 25: Please outline the sinkhole lip elevation on all EPSC plan sheets;

Response 25: Complete. Please see revised sheets C10-C21.

Comment 26: FUD will need to sign off on all water and sewer plan sheets;

Response 26: Noted.

Comment 27: Please submit SWPPP narrative for review;

Response 27: SWPPP has been uploaded with this submission.

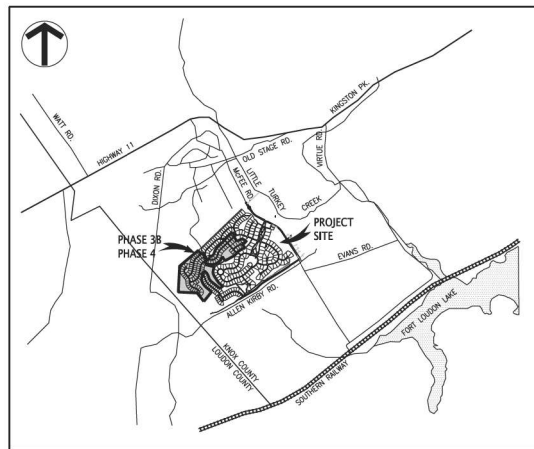
Please contact me if you have any questions.

Thank you,

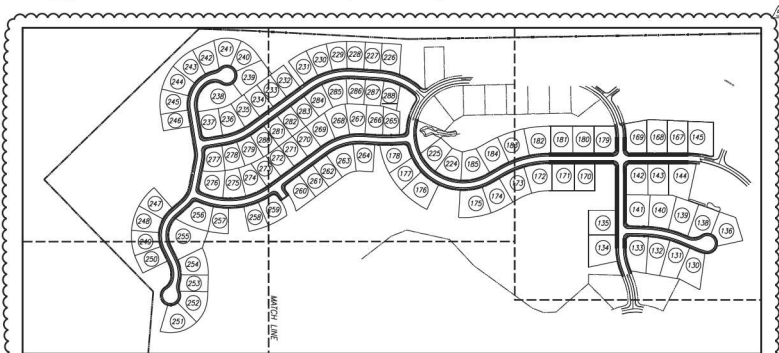


Carter McCall, P.E.

BRIDGEMORE SUBDIVISION PHASE 3B AND 4 BARNESLEY ROAD KNOX COUNTY, TENNESSEE



LOCATION MAP
(NOT TO SCALE)



OVERALL MAP
(NOT TO SCALE)

DRAWING INDEX

SHEET NO.	REV. NO.	ISSUE DATE	TITLE
C1	5	12/05/22	COVER SHEET AND INDEX
C2	3	12/05/22	LAYOUT AND PAVING PLAN
C3	4	12/05/22	LAYOUT AND PAVING PLAN
C4	4	12/05/22	LAYOUT AND PAVING PLAN
C5	4	12/05/22	LAYOUT AND PAVING PLAN
C6	2	12/05/22	GRADING PLAN
C7	2	12/05/22	GRADING PLAN
C8	3	12/05/22	GRADING PLAN
C9	2	12/05/22	GRADING PLAN
C10	1	12/05/22	EPSC PLAN - STAGE 1
C11	1	12/05/22	EPSC PLAN - STAGE 1
C12	3	12/05/22	EPSC PLAN - STAGE 1
C13	2	12/05/22	EPSC PLAN - STAGE 1
C14	3	12/05/22	EPSC PLAN - STAGE 2
C15	1	12/05/22	EPSC PLAN - STAGE 2
C16	3	12/05/22	EPSC PLAN - STAGE 2
C17	2	12/05/22	EPSC PLAN - STAGE 2
C18	3	12/05/22	EPSC PLAN - STAGE 3
C19	1	12/05/22	EPSC PLAN - STAGE 3
C20	3	12/05/22	EPSC PLAN - STAGE 3
C21	2	12/05/22	EPSC PLAN - STAGE 3
C22	1	12/05/22	STORM DRAINAGE PLAN
C23	2	12/05/22	STORM DRAINAGE PLAN
C24	2	12/05/22	STORM DRAINAGE PLAN
C25	2	12/05/22	STORM DRAINAGE PLAN
C26	3	11/07/22	WATER PLAN
C27	3	11/07/22	WATER PLAN
C28	3	11/07/22	WATER PLAN
C29	3	11/07/22	WATER PLAN
C30	1	11/07/22	WATER LINE PARTIAL PROFILES
C31	1	11/07/22	WATER LINE PARTIAL PROFILES
C32	2	11/07/22	SANITARY SEWER PLAN
C33	3	11/07/22	SANITARY SEWER PLAN
C34	3	11/07/22	SANITARY SEWER PLAN
C35	2	11/07/22	SANITARY SEWER PLAN
C36	2	11/07/22	SANITARY SEWER PROFILES
C37	2	11/07/22	SANITARY SEWER PROFILES
C38	2	11/07/22	SANITARY SEWER PROFILES
C39	1	11/07/22	ROAD PROFILES
C40	1	11/07/22	ROAD PROFILES
C41	1	11/07/22	ROAD PROFILES
C42	1	10/11/21	DETAILS
C43	2	12/05/22	DETAILS
C44	1	11/07/22	DETAILS
C45	2	12/05/22	DETAILS
C46	1	10/26/22	CONDUIT PLAN
C47	1	10/26/22	CONDUIT PLAN
C48	1	10/26/22	CONDUIT PLAN
C49	1	10/26/22	CONDUIT PLAN

DRAWING INDEX

SHEET NO.	REV. NO.	ISSUE DATE	TITLE
L0	2	12/05/22	KEY PLAN
L1	2	12/05/22	TREE PRESERVATION AND REMOVAL PLAN
L2	2	12/05/22	TREE PRESERVATION AND REMOVAL PLAN
L3	2	12/05/22	TREE PRESERVATION AND REMOVAL PLAN
L4	2	12/05/22	TREE PRESERVATION AND REMOVAL PLAN
L5	2	12/05/22	PLANTING PLAN
L6	2	12/05/22	PLANTING PLAN
L7	2	12/05/22	PLANTING PLAN
L8	2	12/05/22	PLANTING PLAN
L9	2	12/05/22	PLANTING DETAILS
LP1	1	10/26/22	LIGHTING PLAN
LP2	1	10/26/22	LIGHTING PLAN
LP3	1	10/26/22	LIGHTING PLAN
LP4	2	10/26/22	LIGHTING PLAN AND DETAILS



CURVE NO.	P.I. COORDINATES		DELTA ANGLE	RADII	TANGENT	LENGTH
	NORTHING	EASTING				
C1	557,866.8501	2,501,810.8312	20°18'42" RT	300.00	53.74	106.35
C2	558,347.3512	2,501,562.5291	13°36'04" LT	300.00	35.78	71.22
C3	558,119.1083	2,501,881.7812	21°17'57" RT	545.00	102.48	202.60
C4	558,188.6452	2,502,071.8112	7°04'19" LT	400.00	24.72	49.37
C5	558,496.5276	2,501,734.5132	8°25'49" RT	425.00	31.32	62.53
C6	557,903.9134	2,501,099.3349	29°51'54" LT	480.00	128.01	250.20



- GENERAL NOTES:**
- THE TOPOGRAPHIC INFORMATION IS BASED ON KIDS DATA. BOUNDARY INFORMATION IS PROVIDED BY BENCHMARK & ASSOCIATES, INC. DATED JULY 2004 AND BRIDGEMORE PHASE 1, UNIT 1 PLAT DATED MAY 12, 2014.
 - UNLESS NOTED OTHERWISE, DIMENSIONS ARE TAKEN FROM THE PROPERTY LINE, FACE OF CURB, OR EDGE OF PAVEMENT.
 - THE MINERAL AGGREGATE BASE AND ASPHALTIC SURFACE COURSE SHALL MEET THE MATERIALS, EQUIPMENT, CONSTRUCTION, AND TESTING REQUIREMENTS OF THESE DRAWINGS, AND THE TOWN OF FARRAGUT STANDARD SPECIFICATIONS.
 - CONCRETE CURB AND PAVEMENT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS. CONCRETE CURB AND PAVEMENT SHALL MEET THE MATERIALS, EQUIPMENT, AND CONSTRUCTION REQUIREMENTS OF THE TOWN OF FARRAGUT STANDARD SPECIFICATIONS.
 - TRAFFIC CONTROL DEVICES AND PAVEMENT MARKING SHALL CONFORM TO THE FEDERAL HIGHWAY ADMINISTRATION'S "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
 - PROPERTY CONCERNED REFLECTS PARCEL 152 02503 AS SHOWN IN KNOX COUNTY CLT MAP 152 ZONING FOR THE PROPERTY IS OSR, OPEN SPACE RESIDENTIAL OVERLAY. TOTAL AREA = 70.28 AC. LOTS = 95, OPEN SPACE = 28.50 AC. TOTAL DISTURBED AREA = 53.62 AC.
 - OWNER: PLACEMAKERS NO 2 PARTNERSHIP, LLC, 11800 KINGSTON PKE, KNOXVILLE, TN 37934.
 - BUILDING SETBACKS ARE 30'-FT. IN FRONT, 30'-FT. AT GARAGE OPENING, 10'-FT. ON SIDE, AND 25'-FT. IN REAR.
 - ACCESS TO LOTS IS RESTRICTED TO INTERNAL STREETS.
 - A FAVORABLE GEOTECHNICAL REPORT SHALL BE REQUIRED FOR LOTS LOCATED WITHIN A CLOSED CONTOUR, OR WITHIN 50 FEET OF A CLOSED CONTOUR.

- APPROVED VARIANCES:**
- VARIANCES LISTED BELOW WERE APPROVED BY THE TOWN OF FARRAGUT FOR DESIGN SPEED AND EDGE OF PAVEMENT TO EDGE OF PAVEMENT (REF SHEET C-105-1) DATED 4/21/2006 FOR MOORE FARM SUBDIVISION PHASE 1 PRELIMINARY PLAT.
 - APPROVED VARIANCE FOR ROAD "A" (FORMERLY ROAD "X") FROM 35 MPH TO 30 MPH DESIGN SPEED AND 25'-FT TO 24'-FT EDGE OF PAVEMENT TO EDGE OF PAVEMENT.
 - APPROVED VARIANCE FOR ROAD "B" (FORMERLY ROAD "Y") FROM 35 MPH TO 30 MPH DESIGN SPEED AND 25'-FT TO 24'-FT EDGE OF PAVEMENT TO EDGE OF PAVEMENT.
 - APPROVED VARIANCE FOR ROAD "C" (FORMERLY ROAD "Z") FROM 35 MPH TO 30 MPH DESIGN SPEED AND 25'-FT TO 24'-FT EDGE OF PAVEMENT TO EDGE OF PAVEMENT.
 - APPROVED VARIANCE FOR ROAD "D" (FORMERLY ROAD "W") FROM 35 MPH TO 30 MPH DESIGN SPEED AND 25'-FT TO 24'-FT EDGE OF PAVEMENT TO EDGE OF PAVEMENT.
 - APPROVED VARIANCE FOR ROAD "E" (REF ROADS "V, W, X, AND Y") FROM 35 MPH TO 25 MPH DESIGN SPEED AND 25'-FT TO 22'-FT EDGE OF PAVEMENT TO EDGE OF PAVEMENT.
 - APPROVED VARIANCE FOR ROAD "F" (REF ROADS "V, W, X, AND Y") FROM 35 MPH TO 25 MPH DESIGN SPEED AND 25'-FT TO 22'-FT EDGE OF PAVEMENT TO EDGE OF PAVEMENT.
 - APPROVED VARIANCE FOR ROAD "G" (FORMERLY ROAD "U") FROM 35 MPH TO 30 MPH DESIGN SPEED AND 25'-FT TO 24'-FT EDGE OF PAVEMENT TO EDGE OF PAVEMENT.

PHASES 3B & 4 - ACREAGE/LOT SUMMARY

THE TOTAL AREA IS 70.28 ACRES, WHICH INCLUDES:

PHASE 3B AREA IS 23.50 AC, WHICH INCLUDES:

5.43 AC (23.11%) OF OPEN SPACE WITHIN THIS PHASE.

PHASE 4 AREA IS 46.78 AC, WHICH INCLUDES:

20.17 AC (43.12%) OF OPEN SPACE WITHIN THIS PHASE.

OPEN SPACE LOT NUMBERS:

PHASE 3B RESIDENTIAL LOT NUMBERS 130-136, 138-144, 166-184, 223-226

PHASE 3B OPEN SPACE LOT NUMBERS 437, 448

PHASE 4 RESIDENTIAL LOT NUMBERS 227-297

PHASE 4 OPEN SPACE LOT NUMBERS 437, 438

LEGEND:

- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED LOT NUMBER
- EXISTING TREE LINE
- PROPERTY/ROW LINE
- EXISTING PROPERTY LINE
- ROAD CENTER LINE
- PROPERTY SETBACK
- DETAIL REF. (DETAIL NO./SHT. NO.)
- TYP

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**PRELIMINARY PLAT
PHASE 3B & 4
BRIDGEMORE SUBDIVISION
BARNESLEY ROAD
KNOXVILLE, TENNESSEE 37922**

**PLACEMAKERS NO. 2 PARTNERSHIP
11800 KINGSTON PKE
KNOXVILLE, TN 37934
CONTACT: MS. SUE LASH
TELEPHONE NO: 865.772.9191**

**LAYOUT AND
PAVING PLAN**

NO.	REVISION/ISSUE	DATE
1	ISSUED FOR CONSTRUCTION	08/20/21
2	REMOVED CROSSWALK STRIPING	12/05/22
3	REMOVED LOT & REVISED LOT NUMBERS	11/07/22
4	REVISED PER FARRAGUT STAFF COMMENTS	10/11/21

Project: 290.009

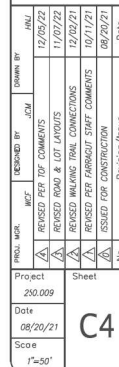
Sheet: **C2**

Date: 08/20/21

Scale: 1"=50'



CURVE NO.	P.I. COORDINATES		DELTA ANGLE	RADIUS	TANGENT	LENGTH
	NORTHING	EASTING				
C10	556,987,949	2,499,980,437	27°10'25" RT	350.00'	84.00'	165.04'
C11	557,045,6927	2,499,535,5768	102°5'33" RT	150.00'	188.46'	269.56'
C12	556,783,2673	2,499,874,8612	20°19'51" RT	150.00'	29.40'	53.23'
C13	556,598,6376	2,499,389,9998	37°27'42" RT	150.00'	50.86'	98.07'
C14	556,350,7342	2,499,666,9401	74°32'35" LT	150.00'	114.15'	195.15'
C18	556,697,1533	2,500,220,9923	61°04'14" RT	370.00'	213.70'	387.58'





MATCH LINE SHEET C7



PRELIMINARY PLAT
PHASE 3B & 4
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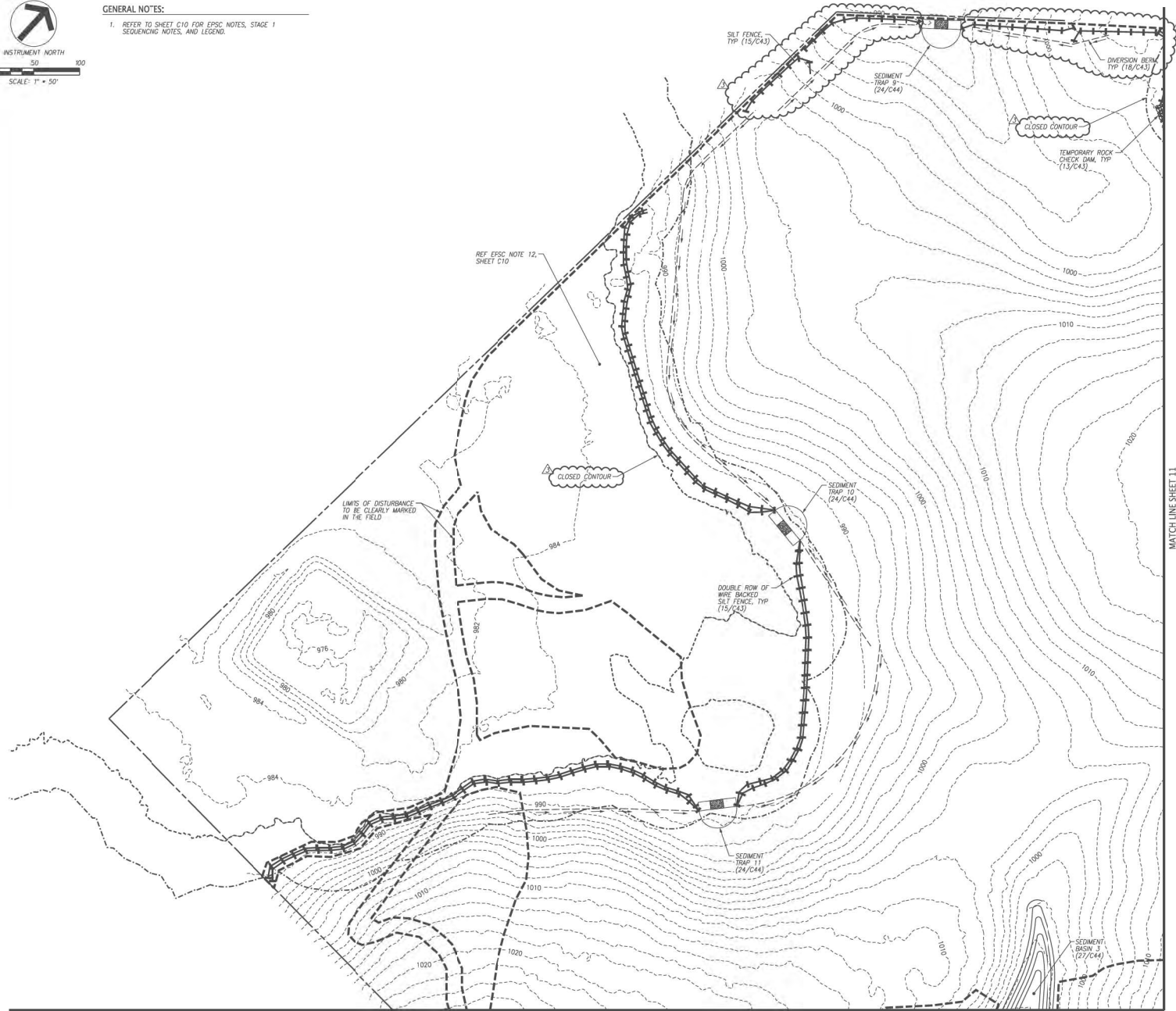
GRADING PLAN

Project		Sheet	
250.009			
Date		C8	
08/20/21			
Scale			
1"=50'			
PROJ. NO.	WBS	DESIGNED BY	DATE
		JCM	12/05/22
REVISIONS			
1 REVISED PER 10% COMMENTS 12/05/22			
2 REVISED GRADING FOR ROAD CHANGES 11/07/22			
3 REVISED CHANGES FOR TRAIL CONNECTION 10/11/21			
4 ISSUED FOR CONSTRUCTION 08/20/21			



GENERAL NOTES:

1. REFER TO SHEET C10 FOR EPSC NOTES, STAGE 1 SEQUENCING NOTES, AND LEGEND.



FILE: \\FULTON\WORK\13750\13750-000\13750-000\13750-000\13750-000.dwg
 PLOT DATE: 12/20/21

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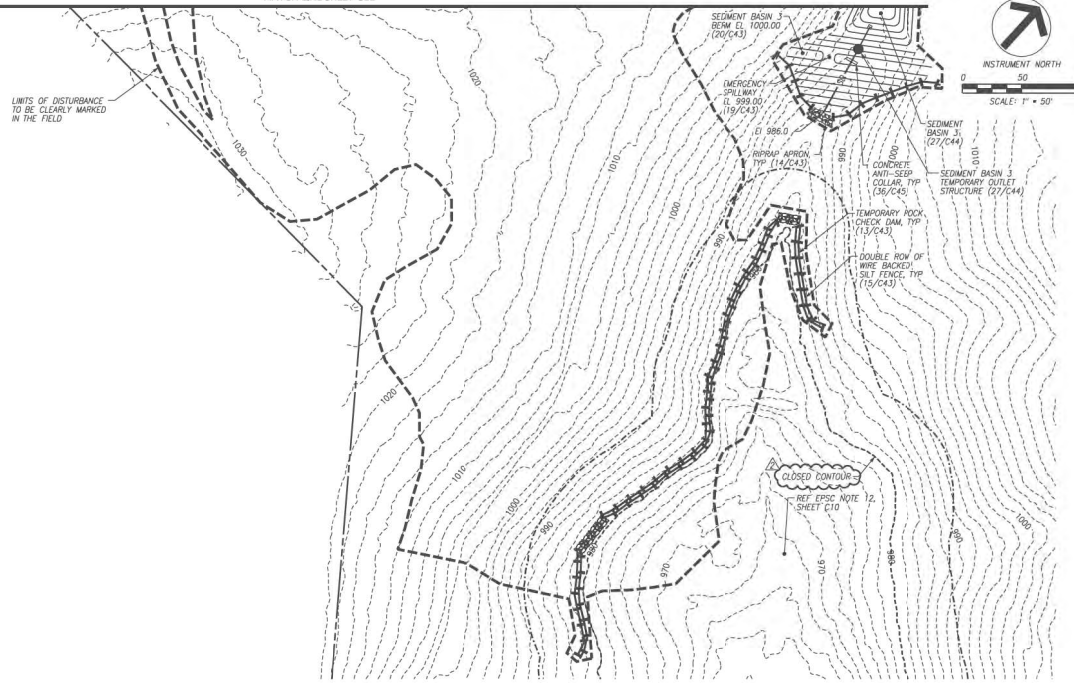
EPSC PLAN - STAGE 1

NO.	REVISION/DATE	ISSUED FOR CONSTRUCTION	DATE
1	12/05/22	REVISED PER TDP COMMENTS	12/05/22
2	11/07/22	REVISED FOR PER GRADING CHANGES	11/07/22
3	10/11/21	REVISED FOR TRAIL CONNECTION	10/11/21
4	08/20/21	ISSUED FOR CONSTRUCTION	08/20/21

Project: 290.009
 Date: 08/20/21
 Scale: 1"=50'

C12

MATCH LINE SHEET C12



GENERAL NOTES:

1. REFER TO SHEET C10 FOR EPSC NOTES, STAGE 1 SEQUENCING NOTES, AND LEGEND.



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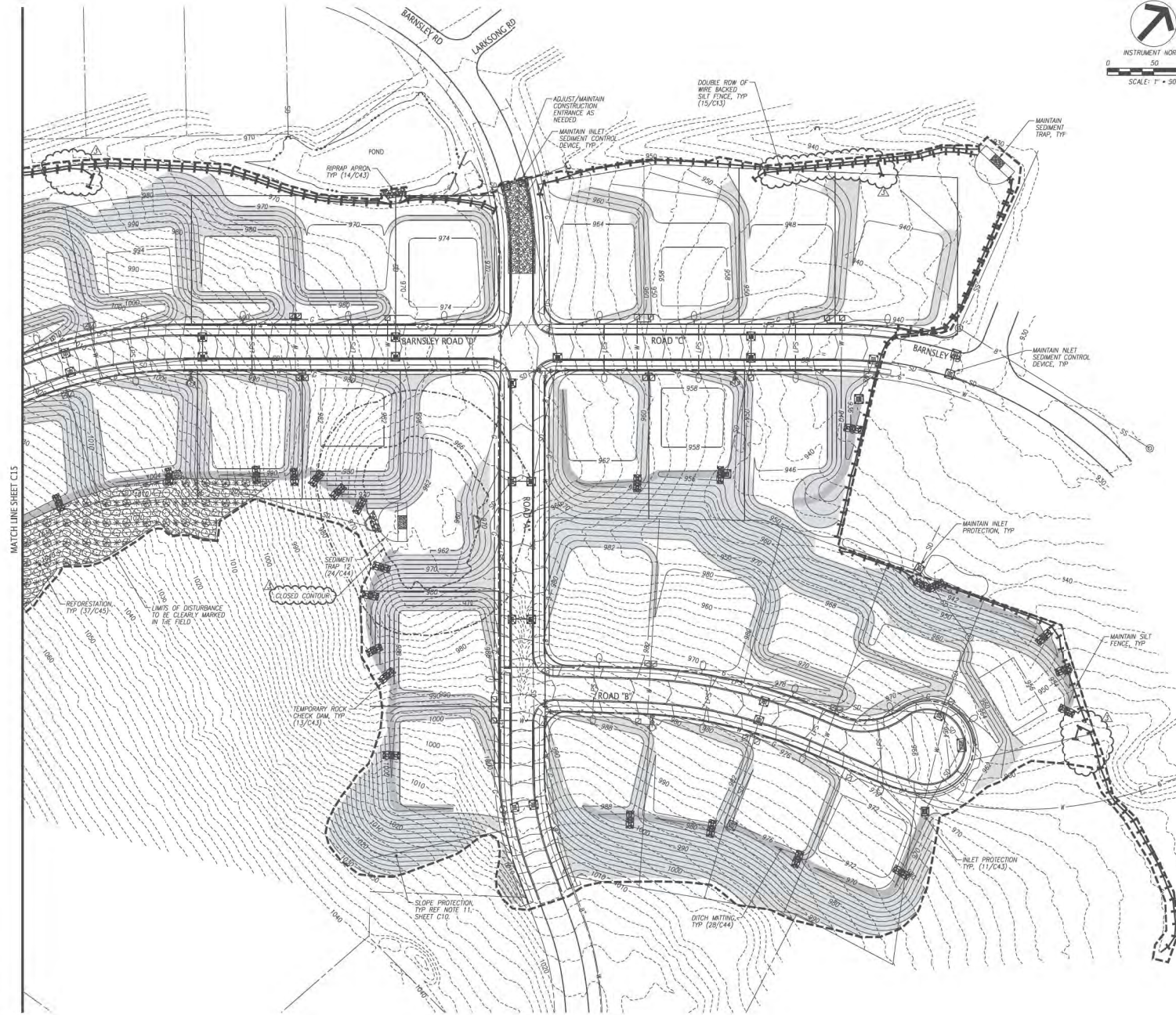
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EPSC PLAN - STAGE 1

NO.	DATE	REVISION BY	DATE	BY
1	12/05/22			JCM
2	11/07/22	REVISED PER DPT COMMENTS		JCM
3	08/20/21	REVISED PER GRADING CHANGES		JCM
4	08/20/21	ISSUED FOR CONSTRUCTION		JCM
5		Revision/Issue		

Project: 290.009
Date: 08/20/21
Scale: 1"=50'

Sheet: **C13**



EPSC NOTES:

1. REFER TO SHEET C10 FOR EPSC NOTES.

EPSC - STAGE 2 SEQUENCING NOTES:

1. MAINTAIN STAGE 1 CONSTRUCTION ENTRANCE/EXIT & OTHER EPSC DEVICES.
2. INSTALL, ADJUST, AND MAINTAIN STAGE 2 EROSION & SEDIMENT CONTROLS AS SHOWN ON THIS PLAN INCLUDING INSTALLATION OF OTHER BMP'S NEEDED TO MEET TDEC'S PERFORMANCE REQUIREMENTS. THESE BMP'S MAY INCLUDE SEDIMENT TRAPS, DIVERSION DUMPS, SLOPE DRAINS, ETC.
3. CLEAR AND GRUB THE AREA WITHIN THE LIMITS OF DISTURBANCE.
4. BEGIN MASS GRADING, STORMWATER SYSTEM, & UTILITY CONSTRUCTION.
5. INSTALL INLET PROTECTION, SLOPE DRAINS, & SLOPE PROTECTION AS DESCRIBED ON THIS PLAN.
6. ONCE SUBGRADES ARE ACHIEVED APPLY TOPSOIL, SEEDING, MULCH, OR OTHER PROTECTION TO THE DISTURBED AREAS AS SHOWN ON THIS PLAN.
7. DO NOT DISTURB MORE THAN 50 ACRES AT ANY TIME WITHOUT STABILIZING PREVIOUSLY DISTURBED AREAS.

LEGEND:

- | | |
|--|-----------------------------|
| | PROPOSED DITCH PROTECTION |
| | PROPOSED SLOPE PROTECTION |
| | PROPOSED REFORESTATION |
| | PROPOSED PROPERTY LINE |
| | PROPOSED SILT FENCE |
| | LIMITS OF DISTURBANCE |
| | TEMPORARY INLET PROTECTION |
| | TEMPORARY ROCK CHECK DAM |
| | TEMPORARY STONE FILTER RING |

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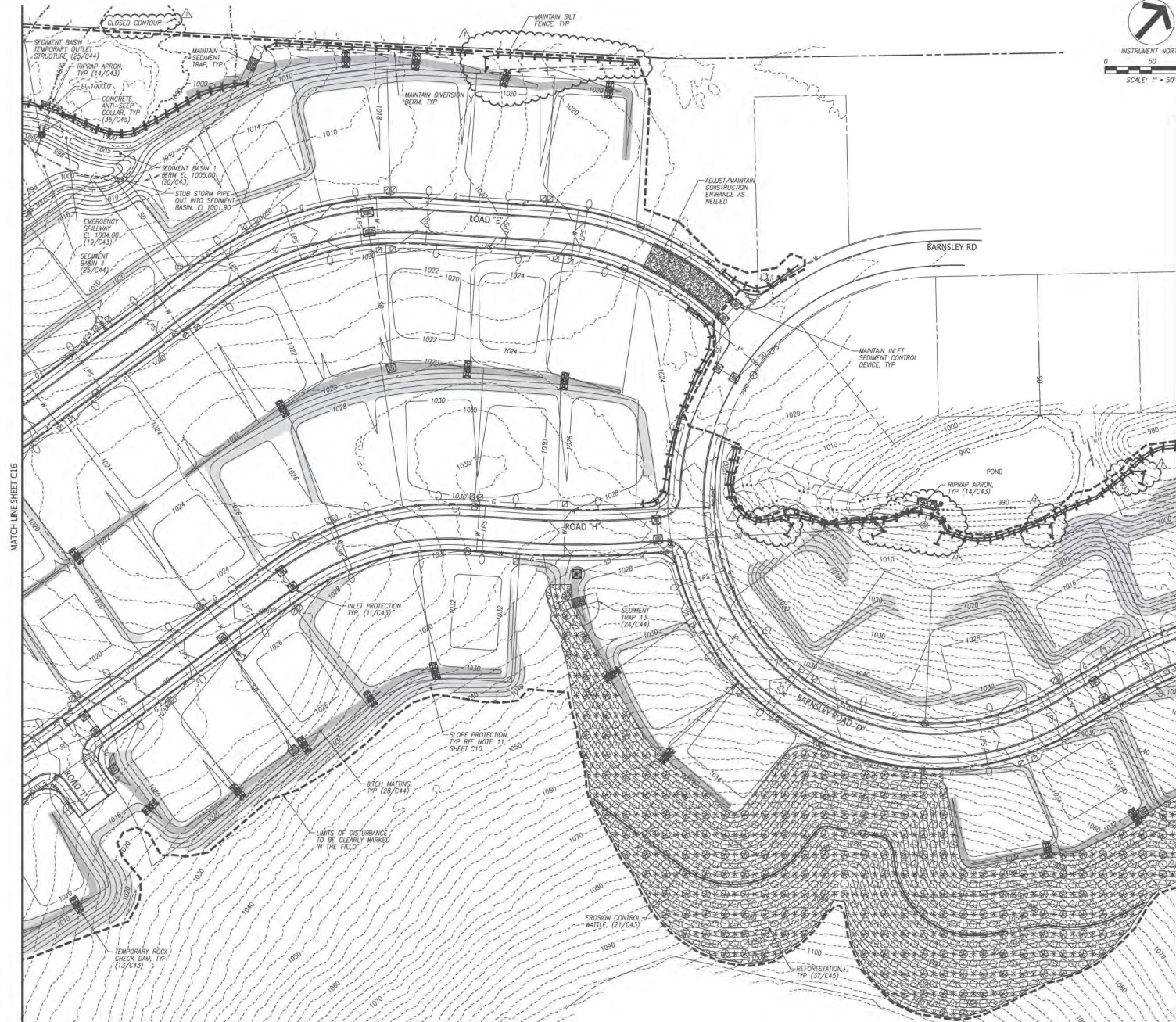
EPSC PLAN - STAGE 2

NO.	REVISION/DATE	ISSUED BY	DATE
1	12/05/22	JML	
2	11/07/22	JML	
3	10/11/21	JML	
4	08/20/21	JML	

Project	290.009
Date	08/20/21
Scale	1"=50'

C14

\\fs-secure-1\projects\2008\15\150000015.dwg
Plot Date: 12/20/21



- NOTES:
1. REFER TO SHEET C10 FOR EPSC NOTES.
 2. REFER TO SHEET C14 FOR STAGE 2 SEQUENCING NOTES AND LEGEND.

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TELEPHONE NO: 865.777.5131

EPSC PLAN - STAGE 2

PROJ. NO.	DESIGNED BY	CHECKED BY	DATE
150000015	WJT	JCM	12/20/21

REVISION	DATE	BY	REVISION/REMARKS
1	12/20/21	WJT	REVISED PER DPT COMMENTS
2	08/20/21	WJT	ISSUED FOR CONSTRUCTION

Project
290.009

Date
08/20/21

Scale
1"=50'

Sheet
C15

No.

Date



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PRELIMINARY PLAT
PHASE 3B & 4
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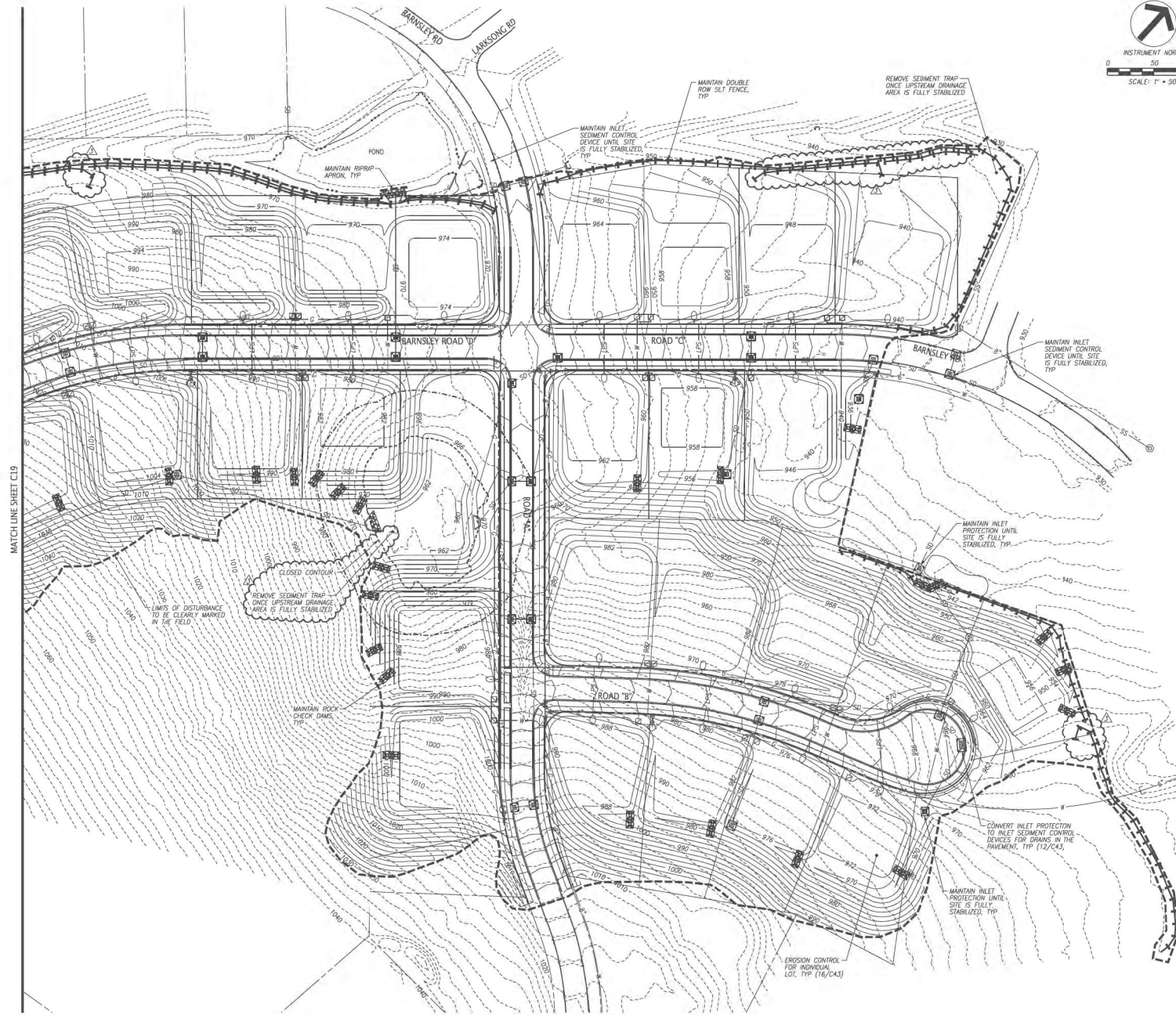
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CONTACT: MS. SUSIE LASH
TELEPHONE NO.: 865.777.9191

EPSC PLAN - STAGE 2

Project	200.009		Sheet	C16	
Scale	1"=50'		Date	08/20/21	
PROJ. NGR	WCS	DESIGNED BY	JCM	DRAWN BY	JAL
☒	☒	REVISED PER 10F COMMENTS			
☒	☒	REVISED PER GRADING & LAYOUT CHANGES			
☒	☒	REVISED LOD FOR TRAIL CONNECTION			
☒	☒	ISSUED FOR CONSTRUCTION			
No.	☒	Revision/Issue			
Date	☒	Date			

File Name: J:\250\250.009\OWCS\250009a-016.dgn

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EPSC NOTES:

1. REFER TO SHEET C10 FOR EPSC NOTES.

EPSC - STAGE 3 SEQUENCING NOTES:

1. STAGE 3 BEGINS AFTER THE PAVEMENT (OTHER COURSE, MIN.) IS INSTALLED. AT THIS STAGE THE HOUSE PADS SHOULD BE READY TO TURN OVER TO THE HOME BUILDER.
2. THE HOME BUILDER & OTHER SUB-CONTRACTORS SHALL SUBMIT A W-9 TO DEC PRIOR TO BEGINNING WORK. INDIVIDUAL LOT EROSION CONTROL SHALL BE INSTALLED IN ACCORDANCE WITH DEC (16/C43).
3. THROUGHOUT STAGE 3, ADJUST, MAINTAIN, & REPLACE SILT FENCE, ROCK CHECK DAMS, & INLET PROTECTION AS NECESSARY TO MEET DEC AND THE TOWN OF FARRAGUT'S PERFORMANCE STANDARDS.
4. INSTALL ADDITIONAL EROSION PROTECTION & SEDIMENT CONTROL DEVICES TO PREVENT EROSION AT THE PAVEMENT AND SOIL INTERFACE AND TO PREVENT SEDIMENT RUNOFF ONTO THE NEW PAVEMENT.
5. BEGIN HOUSE CONSTRUCTION & INSTALL REMAINING SITE UTILITIES.
6. AS SOON AS PRACTICAL RE-SPREAD TOPSOIL AND APPLY SEEDING & MATTING OR MULCH TO DISTURBED AREAS.
7. REMOVE AND DISPOSE OF REMAINING EROSION & SEDIMENT CONTROL DEVICES ONCE THE SITE IS FULLY STABILIZED.
8. ONCE THE SITE IS FULLY STABILIZED AND SOIL DISTURBING ACTIVITIES HAVE BEEN COMPLETED (INCLUDING HOME CONSTRUCTION) CLEAN OUT ANY ACCUMULATED SEDIMENT FROM THE SEDIMENT POND AND SEDIMENT TRAPS. PERFORM THE NECESSARY GRADING, RE-SPREADING OF TOPSOIL, AND SEEDING TO BRING THESE AREAS TO THE PROPOSED FINISHED GRADE AS SHOWN ON THE GRADING PLANS.
9. THE CONTRACTOR SHALL SUBMIT A NOTICE OF TERMINATION (NOT) AFTER THE COMPLETE INSTALLATION AND SUCCESSFUL ESTABLISHMENT OF THE FINAL STABILIZATION ACTIVITIES HAVE OCCURRED AT THE SITE.
10. DO NOT DISTURB MORE THAN 50 ACRES AT ANY TIME WITHOUT STABILIZING PREVIOUSLY DISTURBED AREAS.

LEGEND:

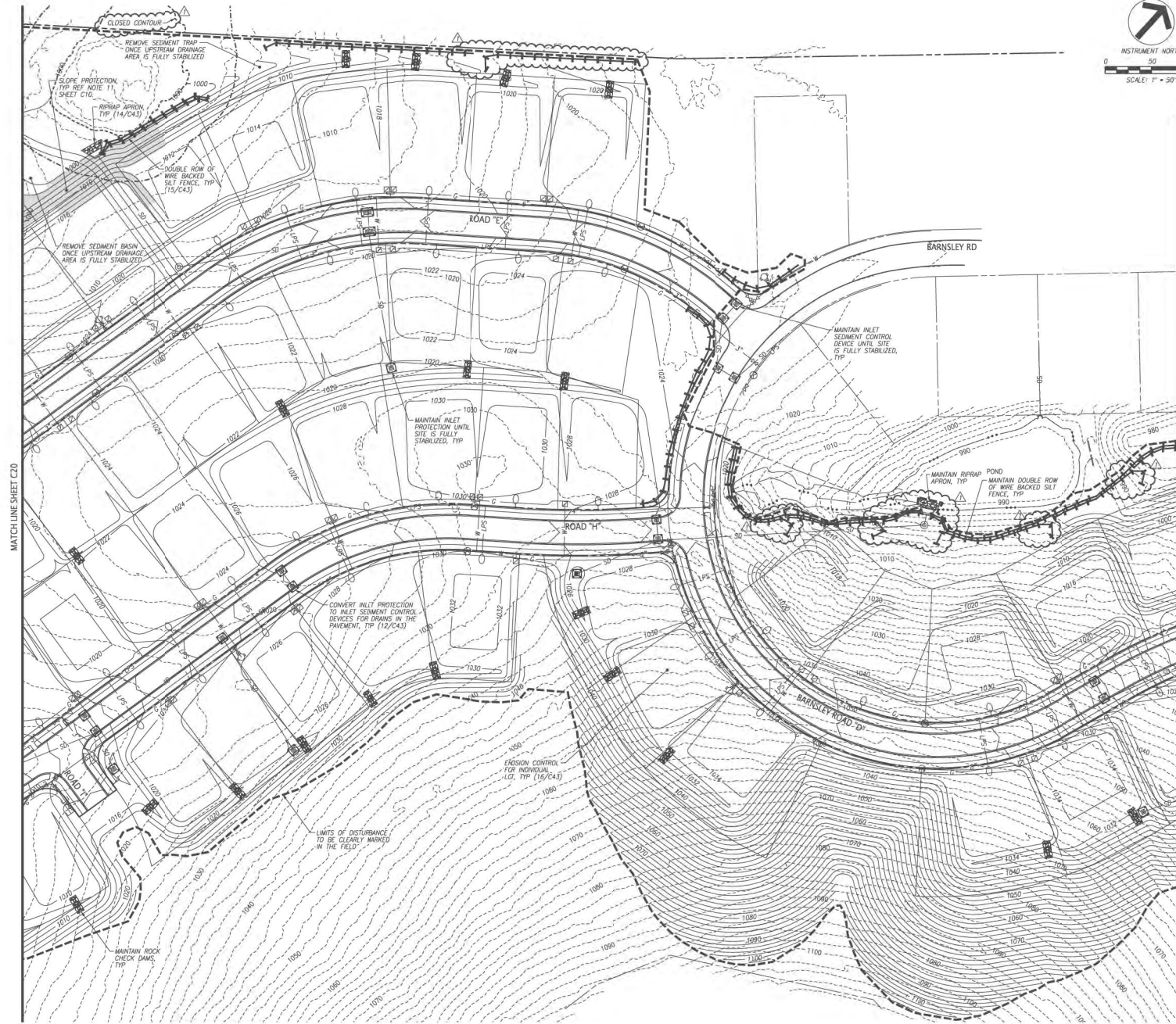
---	PROPOSED PROPERTY LINE
---	PROPOSED CONTOUR
---	EXISTING CONTOUR
---	PROPOSED SILT FENCE
---	LIMITS OF DISTURBANCE
□	TEMPORARY INLET PROTECTION
▣	TEMPORARY ROCK CHECK DAM
⊞	TEMPORARY STONE FILTER RING

NO.	REVISION/REUSE	DATE
1	ISSUED FOR CONSTRUCTION	08/20/21
2	REVISED NOTES 2 & 10	10/11/21
3	REVISED PER LAYOUT & GRADING CHANGES	11/07/22
4	REVISED PER TDF COMMENTS	12/05/22

Project: 250.009
 Date: 08/20/21
 Scale: 1"=50'

C18

File Name: 1374545000.dwg (Sheet) 12/20/2021
Plot Date: 12/2/2021



- NOTES:
1. REFER TO SHEET C10 FOR EPSC NOTES.
 2. REFER TO SHEET C18 FOR STAGE 3 SEQUENCING NOTES AND LEGEND.

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PRELIMINARY PLAT
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EPSC PLAN - STAGE 3				
PROJ. NO.	DESIGNED BY	CHECKED BY	DATE	DATE
290.009	WJT	JCM	12/05/22	
REVISION PER DTP COMMENTS			06/20/21	
ISSUED FOR CONSTRUCTION				
No.	Revision/Issue			Date

Project: 290.009
Date: 06/20/21
Scale: 1"=50'

C19



NOTES:

1. REFER TO SHEET C10 FOR EPSC NOTES.
2. REFER TO SHEET C18 FOR STAGE 3 SEQUENCING NOTES AND LEGEND.



MATCH LINE SHEET C21

MATCH LINE SHEET C19

FILE: 11880-KINGSTON-PIKE-EPSC-PLAN-STAGE-3.dwg
PLOT DATE: 12/20/21

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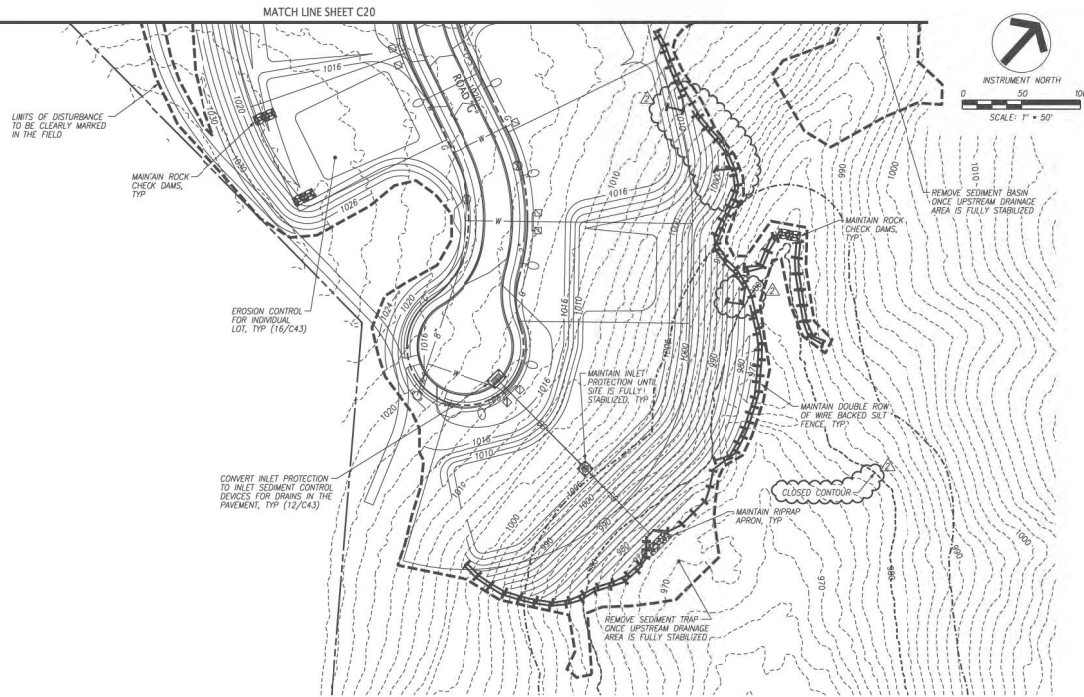


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EPSC PLAN - STAGE 3

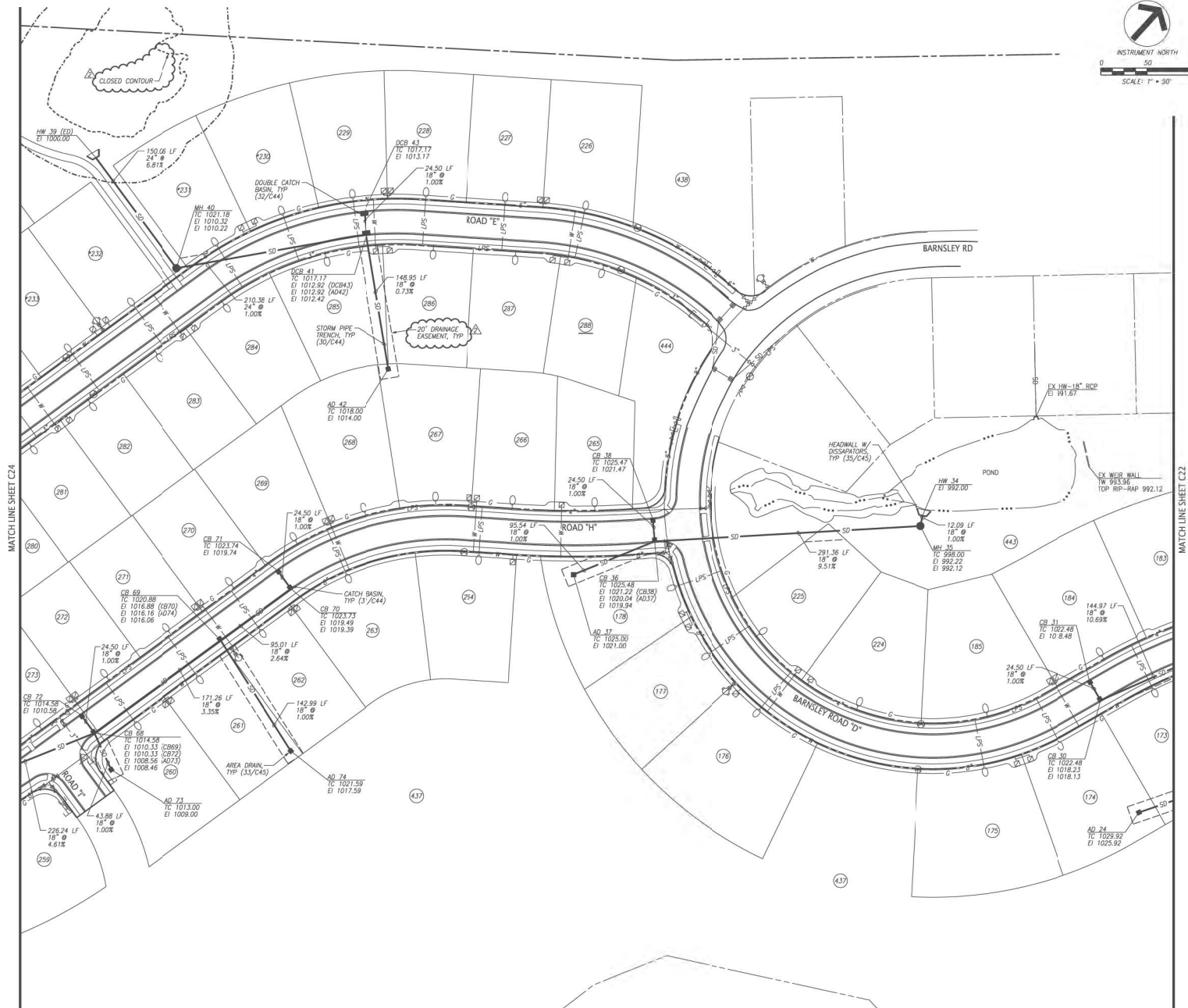
NO.	DATE	REVISION/REUSE	BY
1	12/05/22	REVISED PER TYP COMMENTS	JCM
2	11/07/22	REVISED PER GRADING & LAYOUT CHANGES	JCM
3	10/11/21	REVISED SLOPE PROTECTION & LOD	JCM
4	08/20/21	ISSUED FOR CONSTRUCTION	JCM
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NOTES:

1. REFER TO SHEET C10 FOR EPSC NOTES.
2. REFER TO SHEET C18 FOR STAGE 3 SEQUENCING NOTES AND LEGEND.

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NOTES:

1. REFER TO SHEET C22 FOR STORM PIPE NOTES AND LEGEND.

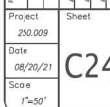


PLACEMAKERS NO. 2 PARTNERSHIP
11800 KINGSTON PIKE
KNOXVILLE, TN 37934
CONTACT: MS. SUSIE LASH
TELEPHONE NO.: 865.777.9191

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KNOXVILLE, TENNESSEE 37922

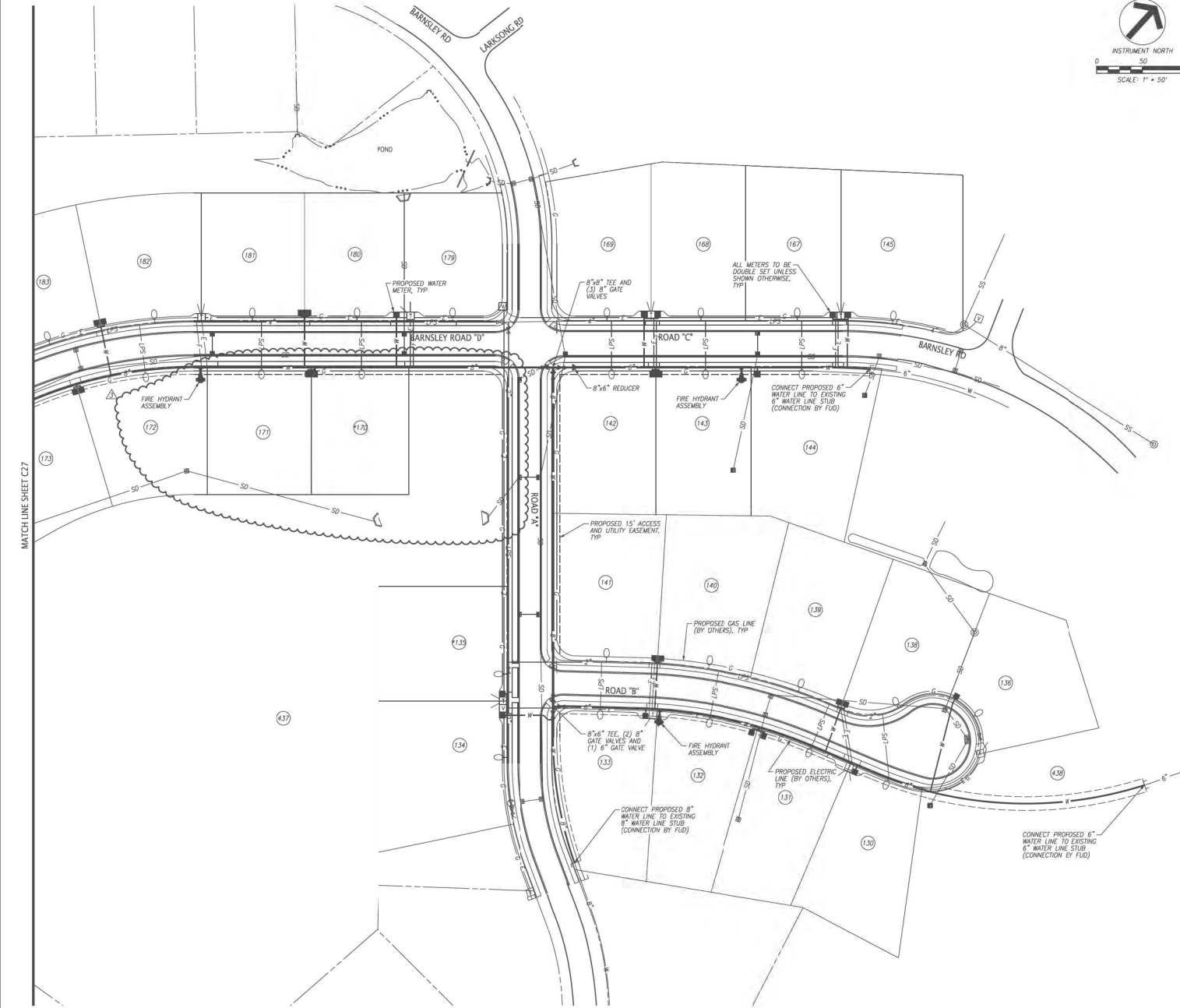
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11800 KINGSTON PIKE
KNOXVILLE, TN 37934
CONTACT: MS. SUSIE LASH
TELEPHONE NO.: 865.777.9191

STORM DRAINAGE PLAN

[illegible]

File Name: J:\250\250.009\OWCS\250009a\025.dgn
Plot Date: 12/8/2022

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WATER NOTES:

1. THE LOCATIONS OF THE EXISTING UTILITIES SHOWN ON THESE DRAWINGS ARE APPROXIMATE. THE EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD BY POtholing AND BY CONTACTING THE UTILITY COMPANIES INVOLVED.
2. PROVIDE NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING THE CONSTRUCTION OF THIS PROJECT. FURNISH ANY SPECIAL EQUIPMENT REQUIRED TO WORK OVER AND AROUND THE UTILITIES.
3. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS TO NOTIFY THEM OF WORK IN THE AREA AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY. NOTIFICATION SHALL BE GIVEN AT LEAST THREE BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY.
4. UTILITIES CAN BE LOCATED BY CALLING THE TENNESSEE ONE CALL SYSTEM, AT 1-800-301-1111.
5. TRENCH DESIGN AND SAFETY FOR PIPELINE CONSTRUCTION IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL CONFORM WITH APPLICABLE LOCAL, STATE, AND CSMA REGULATIONS.
6. THE STONE BEDDING AND BACK FILL SHALL BE DONE IN STRICT COMPLIANCE WITH THE PIPE MANUFACTURER'S RECOMMENDATIONS, BUT MUST COMPLY WITH FUD'S SPECIFICATIONS.
7. UTILITIES SHALL BE INSTALLED AFTER GRADING IS COMPLETED AND APPROVED AND BEFORE ANY PAVEMENT IS INSTALLED.
8. ALL WATER LINES AND APPURTENANCES SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH FUD'S STANDARD WATER SYSTEM SPECIFICATIONS.
9. ALL WATER LINES 4 INCHES OR LARGER SHALL BE CLASS 350 DIP. ALL LINES 3 INCHES OR SMALLER SHALL BE TYPE K COPPER.
10. FUD REQUIRES 24 INCHES OF HORIZONTAL SEPARATION AND 12 INCHES OF VERTICAL SEPARATION FROM OTHER UTILITIES IF THEY ARE INSTALLED ALONGSIDE THE WATER MAINS. IF CONFLICTS ARISE DURING CONSTRUCTION WITH INADEQUATE SEPARATION FROM THE WATER, CONSULT WITH FUD INSPECTOR AS TO THE NECESSARY FIELD CHANGES. FUD RESERVES THE RIGHT TO MODIFY THE MATERIAL OR CONSTRUCTION REQUIREMENTS IF ADEQUATE SEPARATION IS NOT AVAILABLE.
11. TO THE GREATEST EXTENT POSSIBLE, DO NOT LOCATE WATER METERS SERVICES AT THE SAME PROPERTY CORNERS AS ELECTRICAL TRANSFORMERS OR CITY/TELEPHONE PEDSTALS. IF CONFLICTS ARISE, CONSULT WITH FUD INSPECTOR AS TO NECESSARY FIELD CHANGES. FUD RESERVES THE RIGHT TO REQUIRE FIELD CHANGES IF SUCH CONFLICTS ARISE.
12. NO BUILDINGS, BUILDING FOOTERS, OR OTHER PERMANENT STRUCTURES ARE TO BE CONSTRUCTED WITHIN THE 15 FOOT WATER UTILITY EASEMENTS (7.5 FT. EA. SIDE OF INSTALLED LINE).
13. CONTRACTOR SHALL TAKE SPECIAL CARE TO BED, BACKFILL, AND COMPACT PIPE CROSSINGS WHERE A WATER MAIN CROSSES WITH STORM SEWER. CROSSING SHALL BE CONSTRUCTED WITH A WELL COMPACTED FULL STONE 6-INCH ENVELOPE SUCH THAT STORM SEWER DOES NOT BEAD DIRECTLY ON WATER MAINS.
14. HORIZONTAL SEPARATION BETWEEN WATER AND SANITARY SEWER LINES SHALL BE 10 FEET. IF 10 FEET OF SEPARATION IS NOT AVAILABLE, THE SEWER SHALL BE INSTALLED UNDERNEATH THE WATER LINE WITH A MINIMUM OF 18 INCHES OF SEPARATION BETWEEN THE OUTSIDES OF THE PIPES. IF CONFLICTS ARISE, CONSULT WITH FUD INSPECTOR BEFORE PROCEEDING FURTHER.
15. ALL WATER LINES SHALL HAVE A MINIMUM OF 36 INCHES COVER.
16. FIRE AND DOMESTIC LINES MUST BE BACKFLOW PROTECTED PER FUD POLICY (DOUBLE CHECK DETECTOR ASSEMBLY REQUIRED FOR FIRE LINES). COORDINATE WITH FUD.
17. WATER SERVICES SHOWN ON THESE DRAWINGS ARE FOR GENERAL LOCATION ONLY. CONTRACTOR TO REFERENCE PLUMBING PLANS AND COORDINATE WITH THE UTILITY OWNER TO DETERMINE THE ACTUAL FIELD LOCATION OF WATER METERS AND WATER SERVICE LINES.

(NOTES CONTD ON SHEET C27)

UTILITY OWNERS:

WATER & SEWER

FIRST UTILITY DISTRICT OF KNOX COUNTY (FUD)
 122 DUNWOOD ROAD
 KNOXVILLE, TENNESSEE 37922
 CONTACT: MR. TROY WEDEKIND
 OFFICE PHONE: (865) 966-9741

ELECTRIC

LENOIR CITY UTILITIES BOARD (LCUB)
 P.O. BOX 448
 LENOIR CITY, TENNESSEE 37771
 CONTACT: MR. MITCH LEDBETTER
 OFFICE PHONE: (865) 988-0707

GAS

KNOXVILLE UTILITIES BOARD (KUB)
 4505 MIDDLEBROOK PIKE
 P.O. BOX 59017
 KNOXVILLE, TENNESSEE 37950-0017
 CONTACT: MR. DANIEL KEMEL
 OFFICE PHONE: (865) 558-2290

TELEPHONE

TDS TELECOM (TDS)
 9737 COOKIN ROAD
 KNOXVILLE, TENNESSEE 37932
 CONTACT: MR. RALPH SCATES
 OFFICE PHONE: (865) 966-4700

CABLE T.V.

CHARTER COMMUNICATIONS (CHARTER)
 1774 HENRY G LANE STREET
 MARYVILLE, TN 37801
 CONTACT: MR. ED BATES
 OFFICE PHONE: (865) 584-1400 EXT. 501

LEGEND:

---	PROPERTY LINE
---	EXISTING WATER LINE
---	PROPOSED WATER LINE
⊕	PROPOSED WATER VALVE
⊕	PROPOSED WATER METER
⊕	PROPOSED FIRE HYDRANT
⊕	PROPOSED AIR RELEASE VALVE
⊕	TYPICAL

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PRELIMINARY PLAT
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BRIDGEMORE SUBDIVISION
 BARNESLEY ROAD
 KNOXVILLE, TENNESSEE 37922

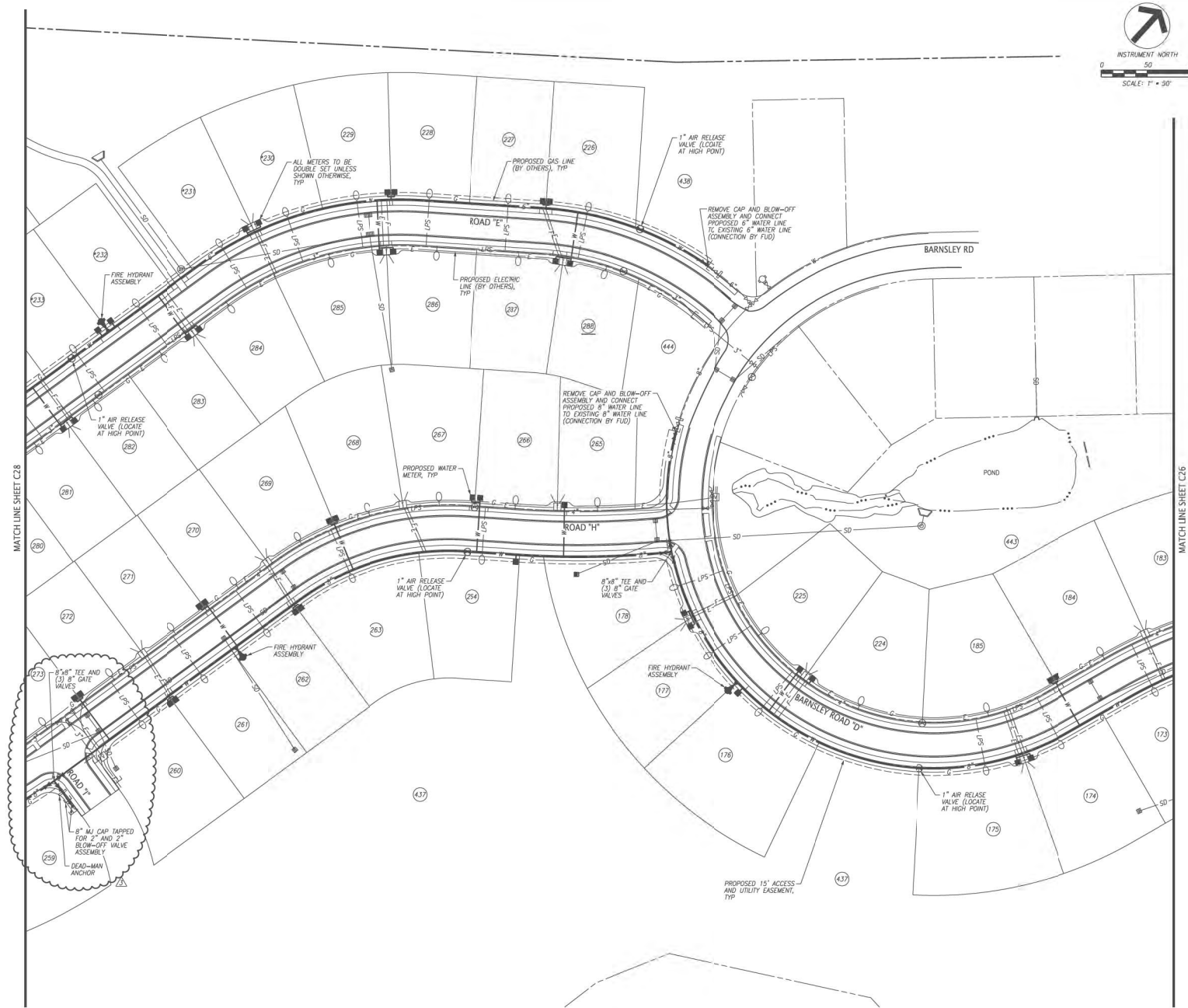
PLACEMAKERS NO. 2 PARTNERSHIP
 11800 KINGSTON PIKE
 KNOXVILLE, TN 37934
 CONTACT: MS. SUE LASH
 TELEPHONE NO: 865.777.5191

WATER PLAN

NO.	DATE	BY	CHKD BY	DATE	NO.	DATE	BY	CHKD BY	DATE
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Project: 290.009
 Date: 08/20/21
 Scale: 1"=50'

C26



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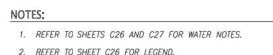
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WATER PLAN

Project 250.009	Sheet C27
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Scale 1"=50'	

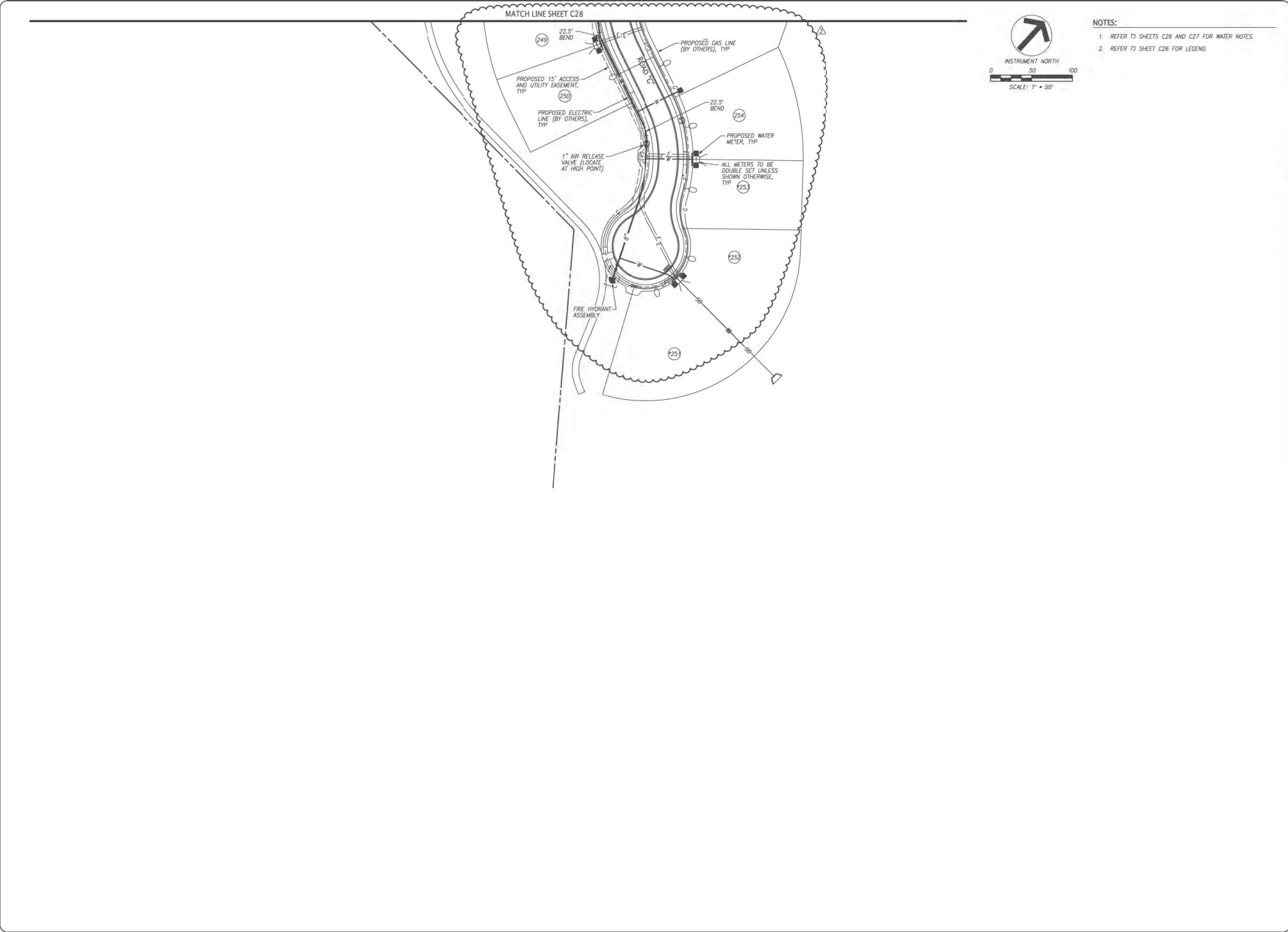


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KNOXVILLE, TN 37934
CONTACT: MS. SUSIE LASH
TELEPHONE NO.: 865.777.9191

WATER PLAN

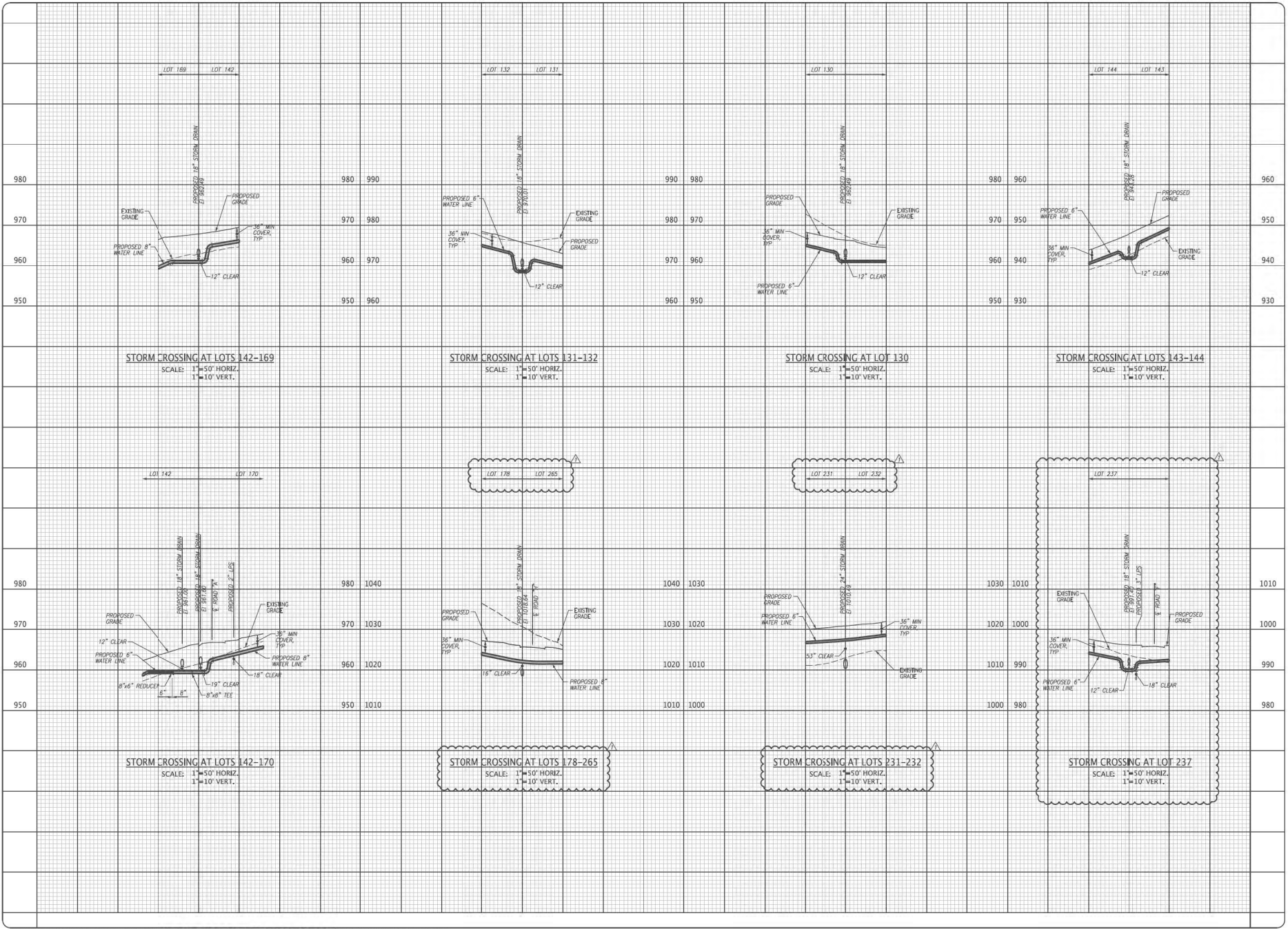
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10180 HARDEN VALLEY ROAD SUITE 201 KNOXVILLE, TN 37932 PHONE: 865.690.6419 FAX: 865.690.6449 www.fulghummacindoe.com		
PRELIMINARY PLAT PHASE 3B & 4 BRIDGEMORE SUBDIVISION BARNESLEY ROAD KNOXVILLE, TENNESSEE 37922		
PLACEMAKERS NO. 2 PARTNERSHIP 11800 KINGSTON PIKE KNOXVILLE, TN 37934 CONTACT: MS. SUE LASH TELEPHONE NO.: 865.777.5131		
WATER PLAN		
NO. 20000	DESIGNED BY JCM	DATE BY JCM
11/07/22	REVISED PER ROAD CHANGES	11/07/22
10/21/21	ADDED METER NOTE	10/21/21
10/21/21	ADDED GAS & ELECTRIC	10/21/21
08/20/21	ISSUED FOR CONSTRUCTION	08/20/21
No.	Revision/Issue	Date
Project	290.009	Sheet
Date	08/20/21	C29
Scale	1\"	

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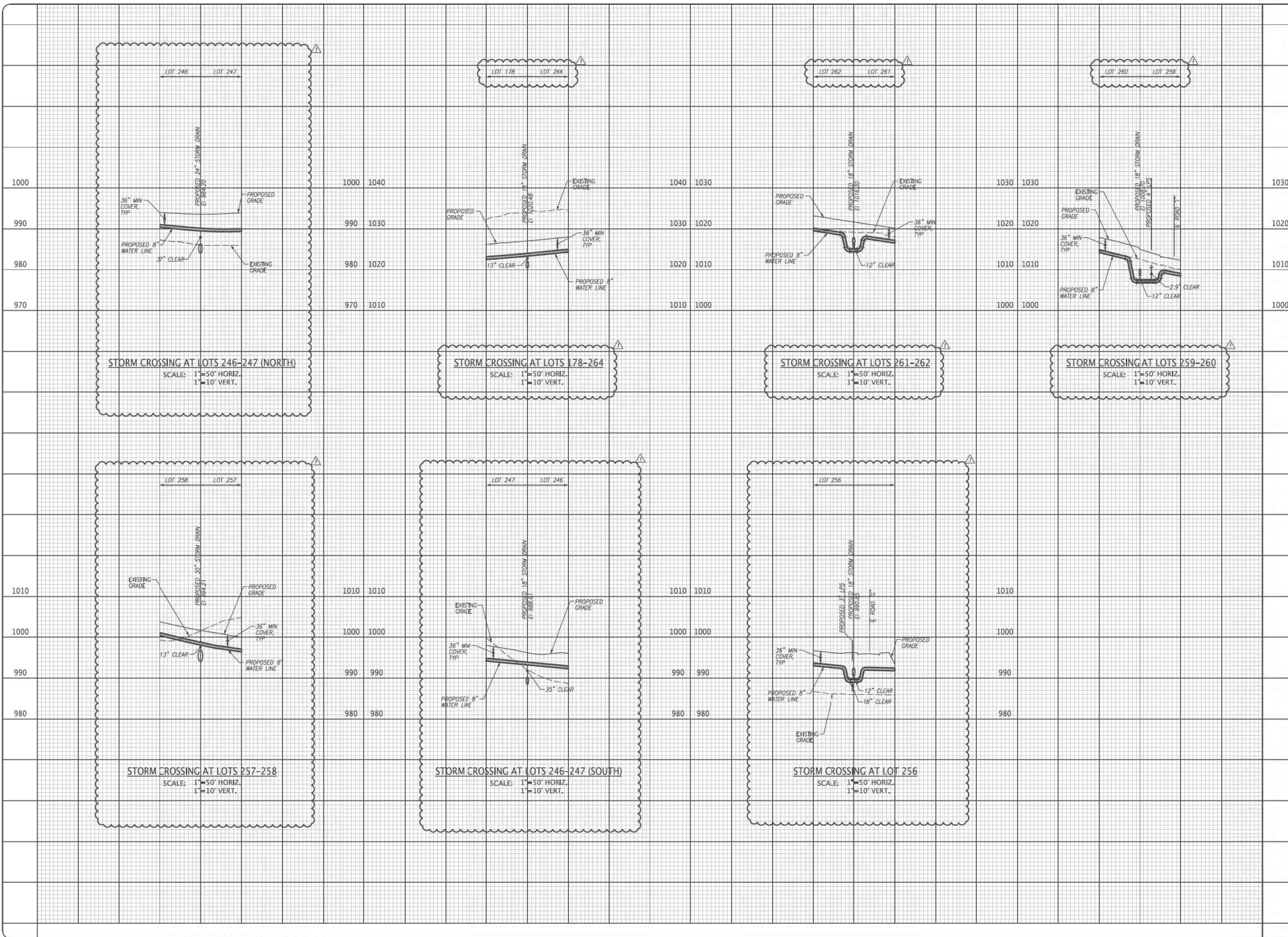
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BRIDGEMORE SUBDIVISION
BARNESLEY ROAD
KNOXVILLE, TENNESSEE 37922

PLACEMAKERS NO. 2 PARTNERSHIP
11800 KINGSTON PIKE
KNOXVILLE, TN 37934
CONTACT: MS. SUE LASH
TELEPHONE NO: 865.777.5151

WATER LINE PARTIAL PROFILES

DESIGNED BY	JCM
CHECKED BY	JCM
DATE	11/07/21
REVISION	11/07/21
ISSUED FOR CONSTRUCTION	08/20/21
REVISION/ISSUE	
No.	

Project: 200.009
Date: 08/20/21
Scale: AS NOTED
Sheet: C30



FULGHUM
MACINDOE
 ASSOCIATES, INC.

10303 HARDEN VALLEY ROAD
 SUITE 201
 KNOXVILLE, TN 37932
 PHONE: 865.690.6419
 FAX: 865.690.6449
 www.fulghummacindoe.com

PRELIMINARY PLAT
PHASE 3B & 4
BRIDGEMORE SUBDIVISION
 BARNESLEY ROAD
 KNOXVILLE, TENNESSEE 37922

PLACEMAKERS NO. 2 PARTNERSHIP
 11800 KINGSTON PIKE
 KNOXVILLE, TN 37934
 CONTACT: MS. SUE LASH
 TELEPHONE NO: 865.777.5131

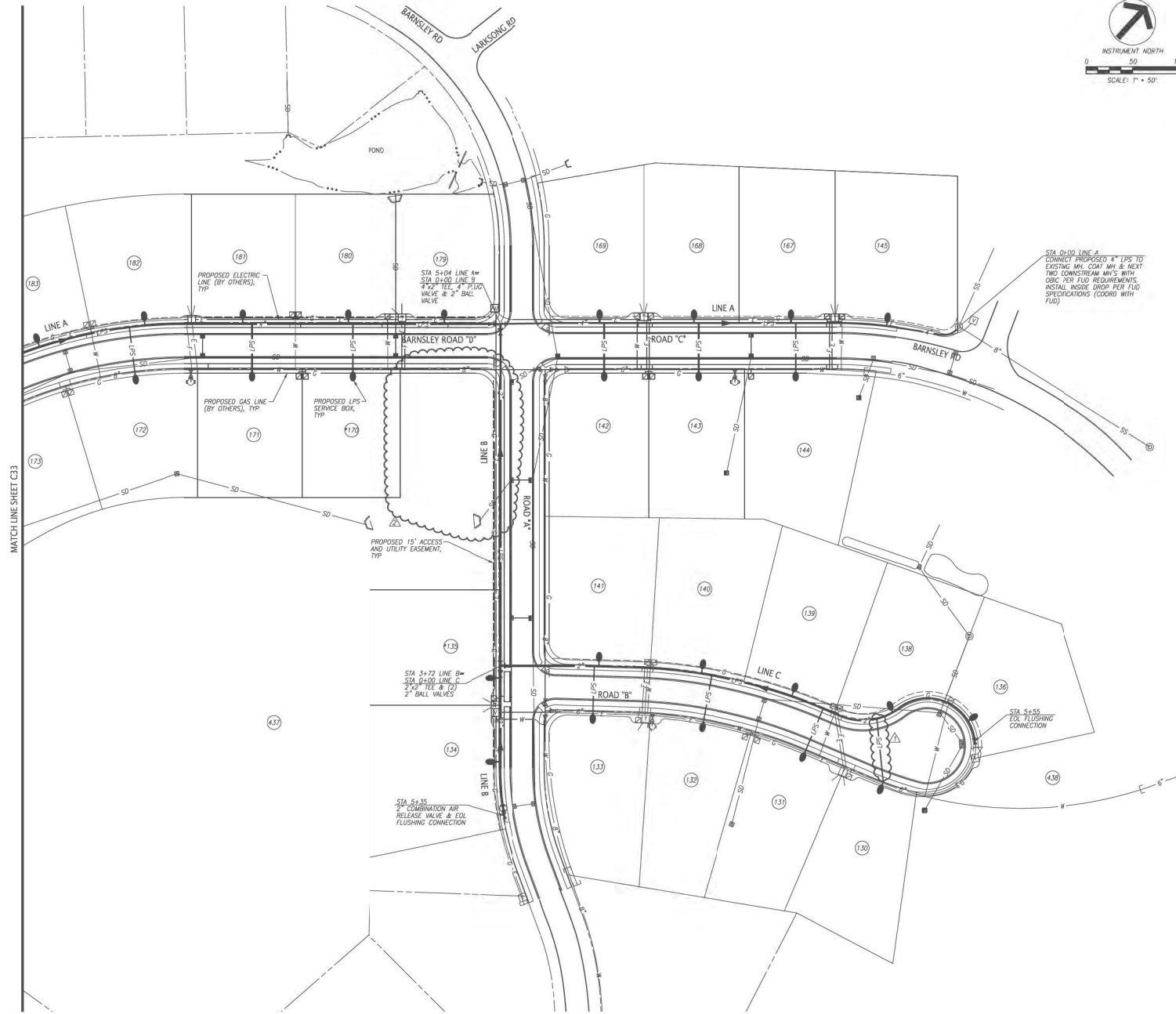
WATER LINE
PARTIAL PROFILES

DESIGNED BY: JCM
 CHECKED BY: JCM
 DATE: 11/07/22

REVISIONS
 1. REVISED PER LAYOUT & DRAINING CHANGES
 2. ISSUED FOR CONSTRUCTION
 3. REVISION/DATE

Project: 250.009
 Date: 08/20/21
 Scale: AS NOTED

Sheet: **C31**



SANITARY SEWER NOTES:

- THE LOCATIONS OF THE EXISTING UTILITIES SHOWN ON THESE DRAWINGS ARE APPROXIMATE. THE EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD BY POTHOLING AND BY CONTACTING THE UTILITY COMPANIES INVOLVED.
- PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD THE EXISTING UTILITIES FROM DAMAGE DURING THE CONSTRUCTION OF THIS PROJECT. FURNISH ANY SPECIAL EQUIPMENT REQUIRED TO WORK OVER AND AROUND THE UTILITIES.
- PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS TO NOTIFY THEM OF WORK IN THE AREA AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY. NOTIFICATION SHALL BE GIVEN AT LEAST THREE BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY.
- UTILITIES CAN BE LOCATED BY CALLING THE TENNESSEE ONE CALL SYSTEM, AT 1-800-351-1111.
- TRENCH DESIGN AND SAFETY FOR PIPELINE CONSTRUCTION IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL CONFORM WITH ALL APPLICABLE LOCAL, STATE, AND OSHA REGULATIONS.
- THE STONE BEDDING AND BACKFILL SHALL BE DONE IN STRICT COMPLIANCE WITH THE PIPE MANUFACTURER'S RECOMMENDATIONS, BUT MUST COMPLY WITH FUD'S SPECIFICATIONS.
- UTILITIES SHALL BE INSTALLED AFTER GRADING IS COMPLETED AND APPROVED AND BEFORE ANY PAVEMENT IS INSTALLED.
- ALL SANITARY SEWER LINES AND APPURTENANCES SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH FUD'S STANDARD SEWER SYSTEM SPECIFICATIONS.
- FUD REQUIRES 24 INCHES OF HORIZONTAL SEPARATION AND 12 INCHES OF VERTICAL SEPARATION FROM OTHER UTILITIES IF THEY ARE INSTALLED ALONGSIDE THE SEWER MAINS. IF CONFLICTS ARISE DURING CONSTRUCTION WITH INADEQUATE SEPARATION FROM THE SEWER, CONSULT WITH FUD INSPECTOR AS TO THE NECESSARY FIELD CHANGES. FUD RESERVES THE RIGHT TO MODIFY THE MATERIAL OR CONSTRUCTION REQUIREMENTS IF ADEQUATE SEPARATION IS NOT AVAILABLE.
- NO BUILDINGS, BUILDING FOOTERS, OR OTHER PERMANENT STRUCTURES ARE TO BE CONSTRUCTED WITHIN THE 15 FOOT SEWER UTILITY EASEMENTS (7.5 FEET EACH SIDE OF INSTALLED LINE) OR THE 20 FOOT SEWER UTILITY EASEMENTS (10 FEET EACH SIDE OF INSTALLED LINE).
- CONTRACTOR SHALL TAKE SPECIAL CARE TO BED, BACKFILL, AND COMPACT PIPE CROSSINGS WHERE A SANITARY SEWER MAIN CROSSES WITH STORM SEWERS. CROSSING SHALL BE CONSTRUCTED WITH A WELL COMPACTED FULL STONE 6-INCH ENVELOPE SUCH THAT STORM SEWER DOES NOT BEAR DIRECTLY ON SANITARY SEWER MAINS.
- HORIZONTAL SEPARATION BETWEEN WATER AND SANITARY SEWER LINES SHALL BE 10 FEET. IF 10 FEET OF SEPARATION IS NOT AVAILABLE, THE SEWER SHALL BE INSTALLED UNDERNEATH THE WATER LINE WITH A MINIMUM OF 18 INCHES OF SEPARATION BETWEEN THE OUTSIDES OF THE PIPES. IF CONFLICTS ARISE, CONSULT WITH FUD INSPECTOR BEFORE PROCEEDING FURTHER.
- ALL SANITARY SEWER LINES SHALL HAVE A MINIMUM OF 36 INCHES COVER UNDER ROADWAYS AND CROSSINGS. SEWER SHALL HAVE A MINIMUM OF 48 INCHES COVER.
- PIPE IS MEASURED IN TERMS OF HORIZONTAL LENGTH COMPLETE IN PLACE, REGARDLESS OF TYPE, DEPTH, GLASS, SHAPE, AND SIZE AS MEASURED ALONG THE CENTERLINE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE (NO DEDUCTIONS FOR STRUCTURES). ACTUAL QUANTITY OF PIPE MAY VARY. THE CONTRACTOR SHALL SUPPLY AND INSTALL THE NECESSARY QUANTITY OF PIPE TO CONSTRUCT THE COMPLETE SYSTEM AS SHOWN. INSTALLATION INCLUDES EXCAVATION, SHORING, FURNISHING, AND INSTALLATION OF PIPES, JOINT MATERIALS, COUPLINGS, AND BACKFILL.
- INSTALL FITTINGS ALONG THE PROPOSED FORCE MAIN AND SANITARY SEWER SERVICE LINES AS REQUIRED TO AVOID CONFLICTS WITH EXISTING AND PROPOSED UNDERGROUND CONFLICTS AND OBSTRUCTIONS.
- INSTALL SERVICE LATERALS ACROSS STREETS BEFORE PAVING STREETS.

UTILITY OWNERS:

WATER & SEWER

FIRST UTILITY DISTRICT OF KNOX COUNTY (FUD)
 122 DUNWOOD ROAD
 KNOXVILLE, TENNESSEE 37922
 CONTACT: MR. TROY REBERG
 OFFICE PHONE: (865) 966-9741

ELECTRIC
 KNOX CITY UTILITIES BOARD (LCUB)
 P.O. BOX 449
 KNOX CITY, TENNESSEE 37711
 CONTACT: MR. MITCH LEBERTON
 OFFICE PHONE: (865) 988-0707

GAS
 KNOXVILLE UTILITIES BOARD (KUB)
 4505 WOODBROOK PARK
 P.O. BOX 5801
 KNOXVILLE, TENNESSEE 37920-9017
 CONTACT: MR. DANIEL KEMBEL
 OFFICE PHONE: (865) 558-2290

TELEPHONE
 TDS TELECOM (TDS)
 9737 COGDRILL ROAD
 KNOXVILLE, TENNESSEE 37932
 CONTACT: MR. RALPH SCATES
 OFFICE PHONE: (865) 966-4700

CABLE T.V.
 CHARTER COMMUNICATIONS (CHARTER)
 1774 HENRY G. LANE STREET
 MARTINE, TN 37081
 CONTACT: MR. ED BARKS
 OFFICE PHONE: (865) 964-1400 EXT. 501

LEGEND:

- PROPERTY LINE
- PROPOSED SANITARY SEWER LINE
- EXISTING SANITARY SEWER LINE
- EXISTING SANITARY SEWER MANHOLE
- PROPOSED LOW PRESSURE SEWER SERVICE BOX
- DETAIL REF. (DETAIL NO./SHT. NO.)
- TYP.

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PRELIMINARY PLAT
 PHASE 3B & 4
 BRIDGEMORE SUBDIVISION
 BARNESLEY ROAD
 KNOXVILLE, TENNESSEE 37922

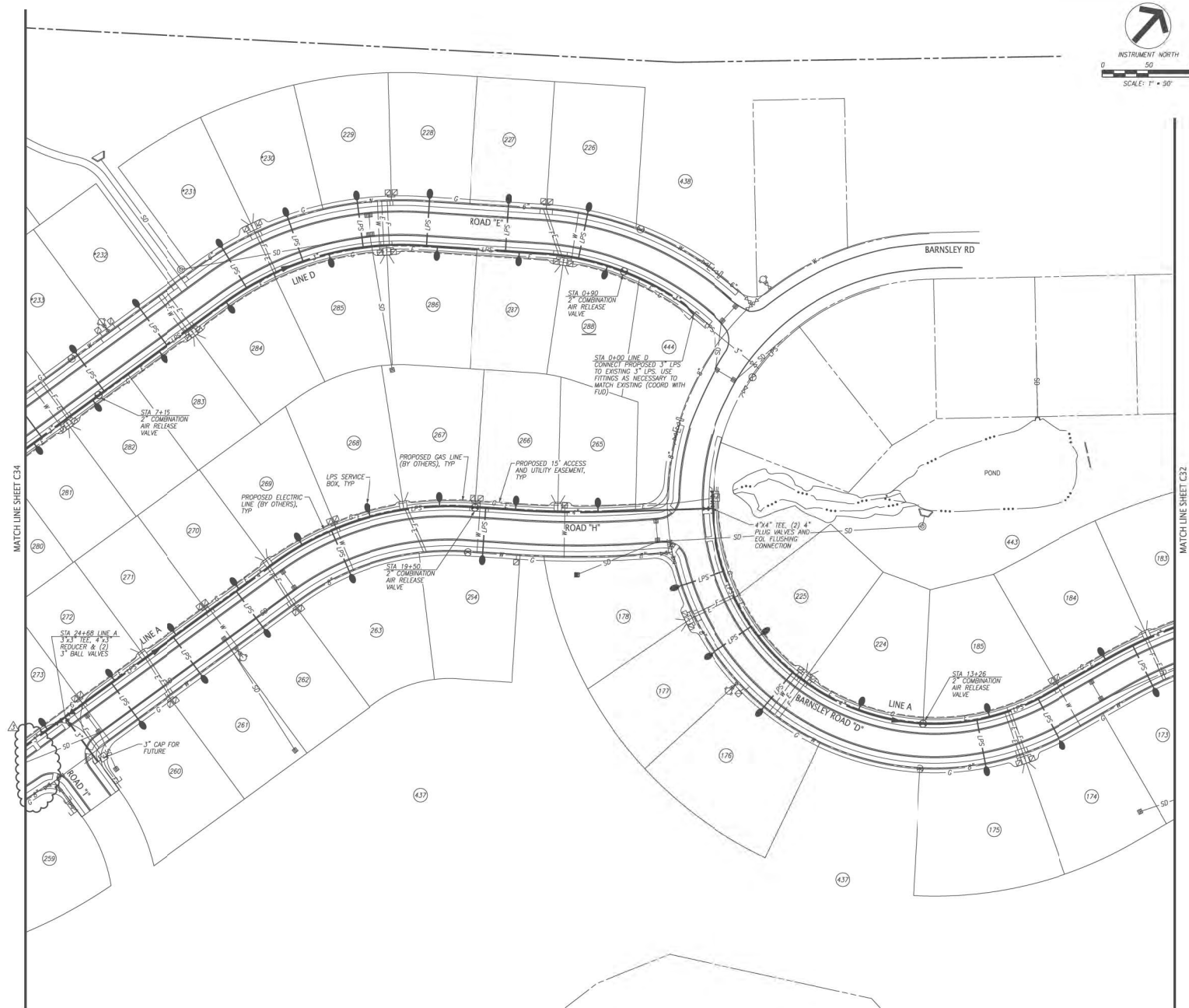
PLACEMAKERS NO. 2 PARTNERSHIP
 11800 KINGSTON PIKE
 KNOXVILLE, TN 37934
 CONTACT: MS. SIOBHA LASH
 TELEPHONE NO: 865.773.9191

SANITARY SEWER PLAN

NO.	DATE	BY	CHKD BY	REVISION
1	11/07/21	JCM	JCM	REVISED PER LOT CHANGES
2	10/11/21	JCM	JCM	FUD COMMENTS, ADDED GAS & ELECTRIC
3	08/20/21	JCM	JCM	ISSUED FOR CONSTRUCTION
4				Revised/Issue

Project: 290.009
 Date: 08/20/21
 Scale: 1"=50'

C32



NOTES:



PLACEMAKERS NO. 2 PARTNERSHIP
11800 KINGSTON PIKE
KNOXVILLE, TN 37934
CONTACT: MS. SUSIE LASH
TELEPHONE NO.: 865.777.9191

SANITARY SEWER PLAN

Project 250.009	Sheet C33
Date 08/20/21	
Scale 1"=50'	



MATCH LINE SHEET C33



PLACEMAKERS NO. 2 PARTNERSHIP
11800 KINGSTON PKE
KNOXVILLE, TN 37934
CONTACT: MS. SUSIE LASH
TELEPHONE NO.: 865.777.9191

SANITARY SEWER PLAN

Project	250.009	Sheet	C34
Date	08/20/21		
Score	1"=50'		
PROJ. MOD.	DESIGNED BY	DRAWN BY	JCM
/A	REVISED PER ROAD CHANGES	11/07/22	
/A	REVISED FOR FUD COMMENTS	10/21/21	
/A	FUD COMMENTS, ADDED GAS & ELECTRIC	10/11/21	
/A	ISSUED FOR CONSTRUCTION	08/20/21	

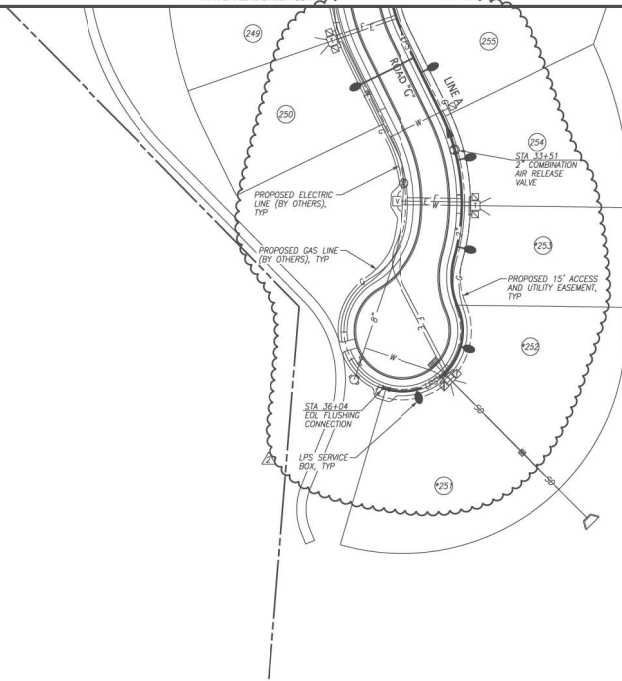
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File Name: I:\2020\2020-000\2020-000\2020-000.dwg
Plot Name: 11/07/22

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MATCH LINE SHEET C34



NOTES:
1. REFER TO C32 FOR SANITARY SEWER NOTES AND LEGEND.



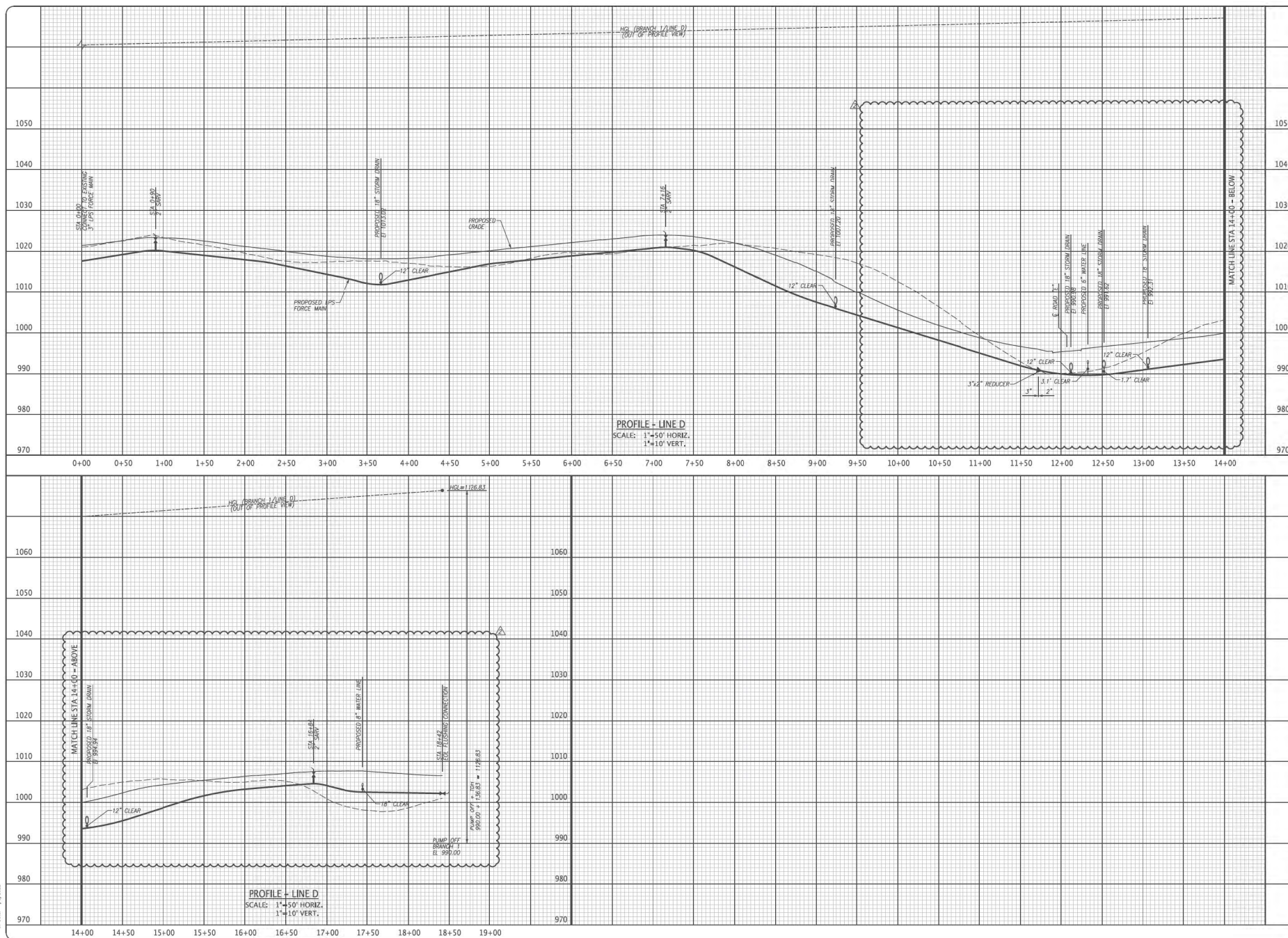
PRELIMINARY PLAT
PHASE 3B & 4
BRIDGEMORE SUBDIVISION
BARNESLEY ROAD
KNOXVILLE, TENNESSEE 37922

PLACEMAKERS NO. 2 PARTNERSHIP
11800 KINGSTON PIKE
KNOXVILLE, TN 37934
CONTACT: MS. SUE LASH
TELEPHONE NO: 865.777.5151

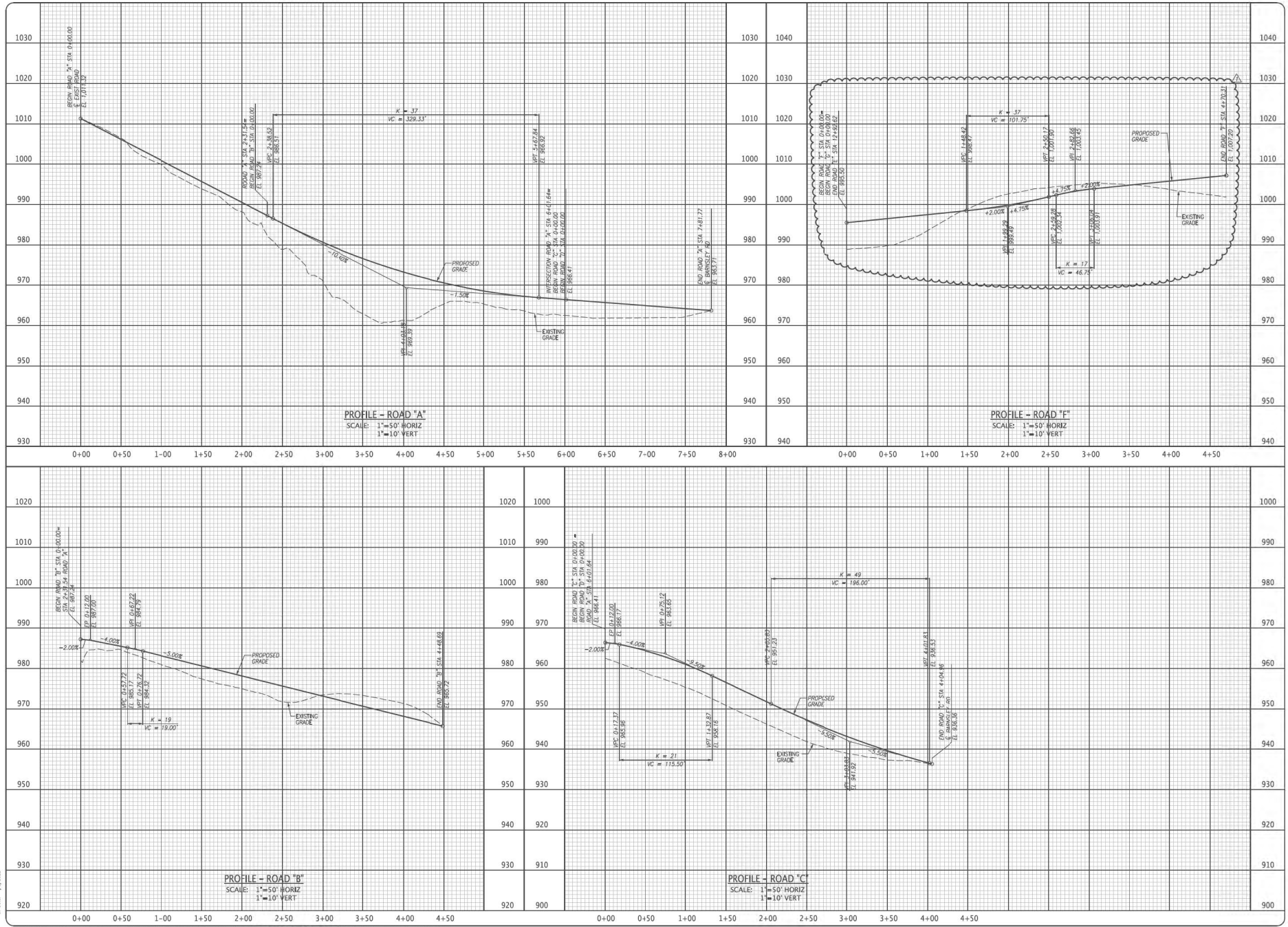
SANITARY SEWER PLAN

NO.	DESCRIPTION	DATE	BY
1	REVISED PER ROAD CHANGES	11/07/22	JCM
2	ADD COMMENTS, ADD GAS & ELECTRIC	10/11/21	JCM
3	ISSUED FOR CONSTRUCTION	08/20/21	JCM
No.	Revision/Issue	Date	

Project: 290.009
Date: 08/20/21
Scale: 1"=50'
Sheet: C35



File Name: I:\Projects\250.009\Drawings\250000000.dwg
Plot Date: 11/07/22



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PRELIMINARY PLAT
PHASE 3B & 4
BRIDGEMORE SUBDIVISION
BARNESLEY ROAD
KNOXVILLE, TENNESSEE 37922

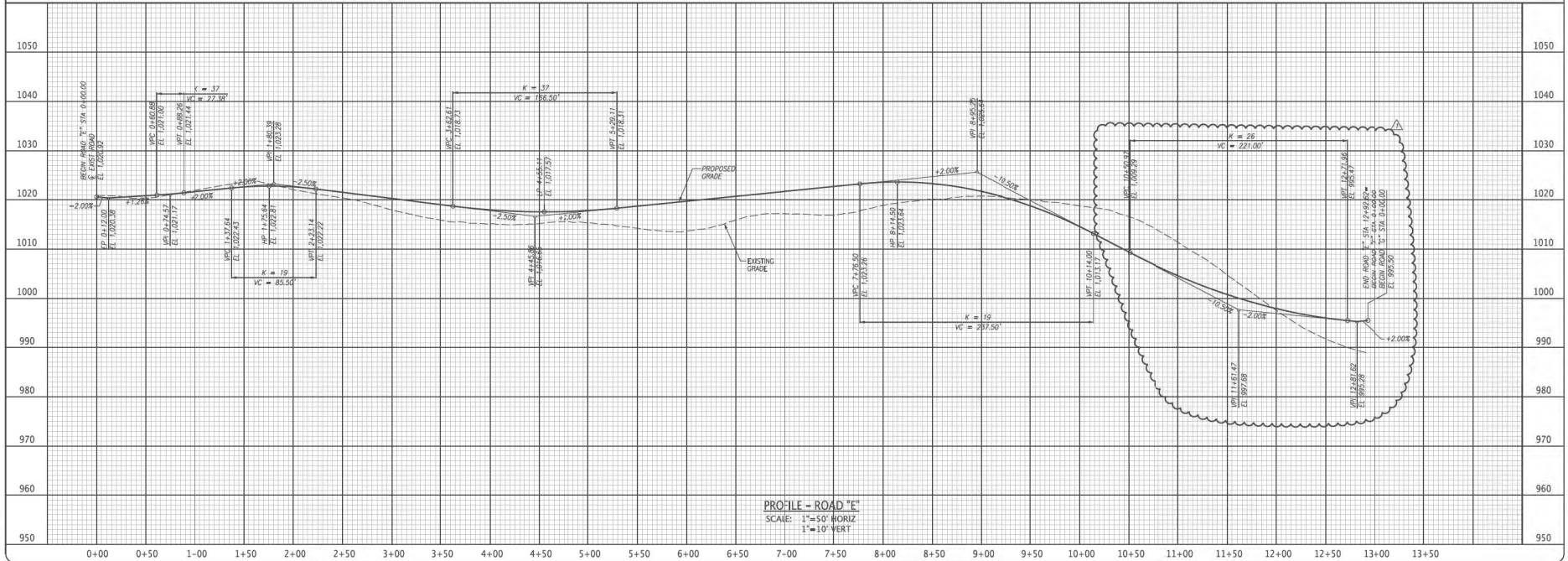
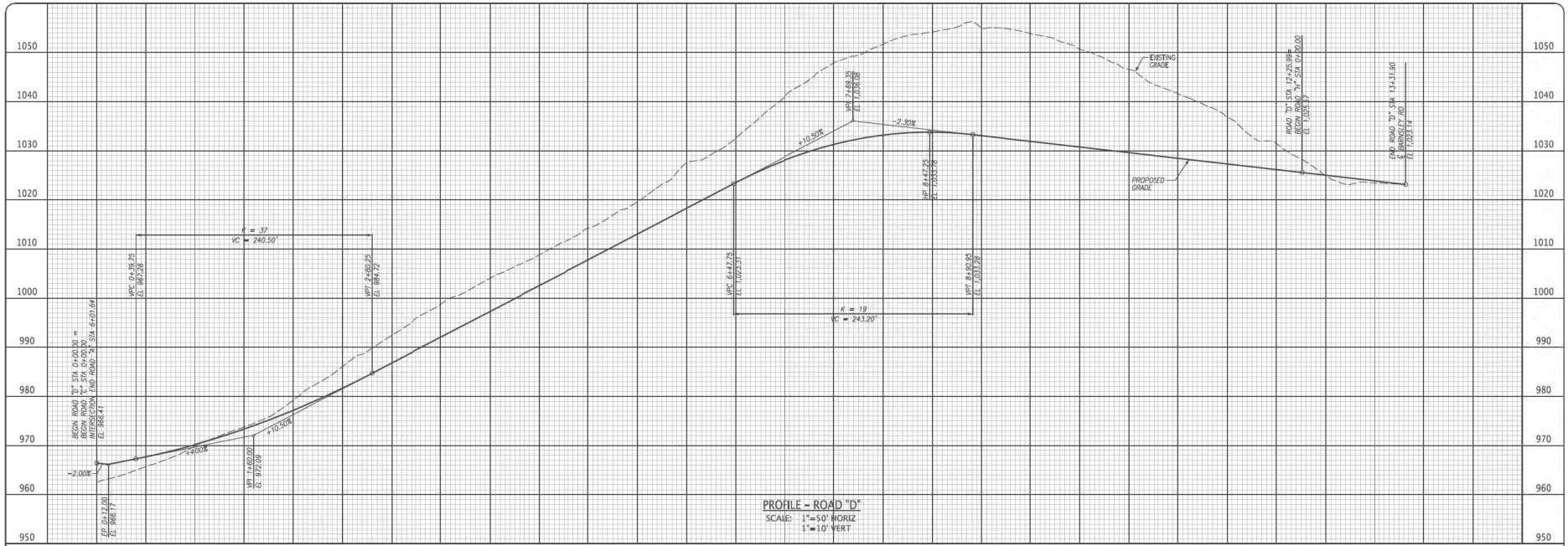
PLACEMAKERS NO. 2 PARTNERSHIP
11800 KINGSTON PIKE
KNOXVILLE, TN 37934
CONTACT: MS. SUE LASH
TELEPHONE NO: 865.777.5191

ROAD PROFILES

Project	250.009	Sheet	C39	11/07/22
Date	8/20/21			08/20/21
Scale	AS NOTED			
No.				
Revision/Issue				

C39

File Name: I:\2020\2000\2000\2000\2000\2000\2000.dwg
Plot Date: 11/07/2021



10300 HARDEN VALLEY ROAD
SUITE 201
KNOXVILLE, TN 37932
202.685.6900 FAX 202.685.6901
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PRELIMINARY PLAT
PHASE SUBDIVISION
BRIDGEMORE ROAD
KNOXVILLE, TENNESSEE 37922

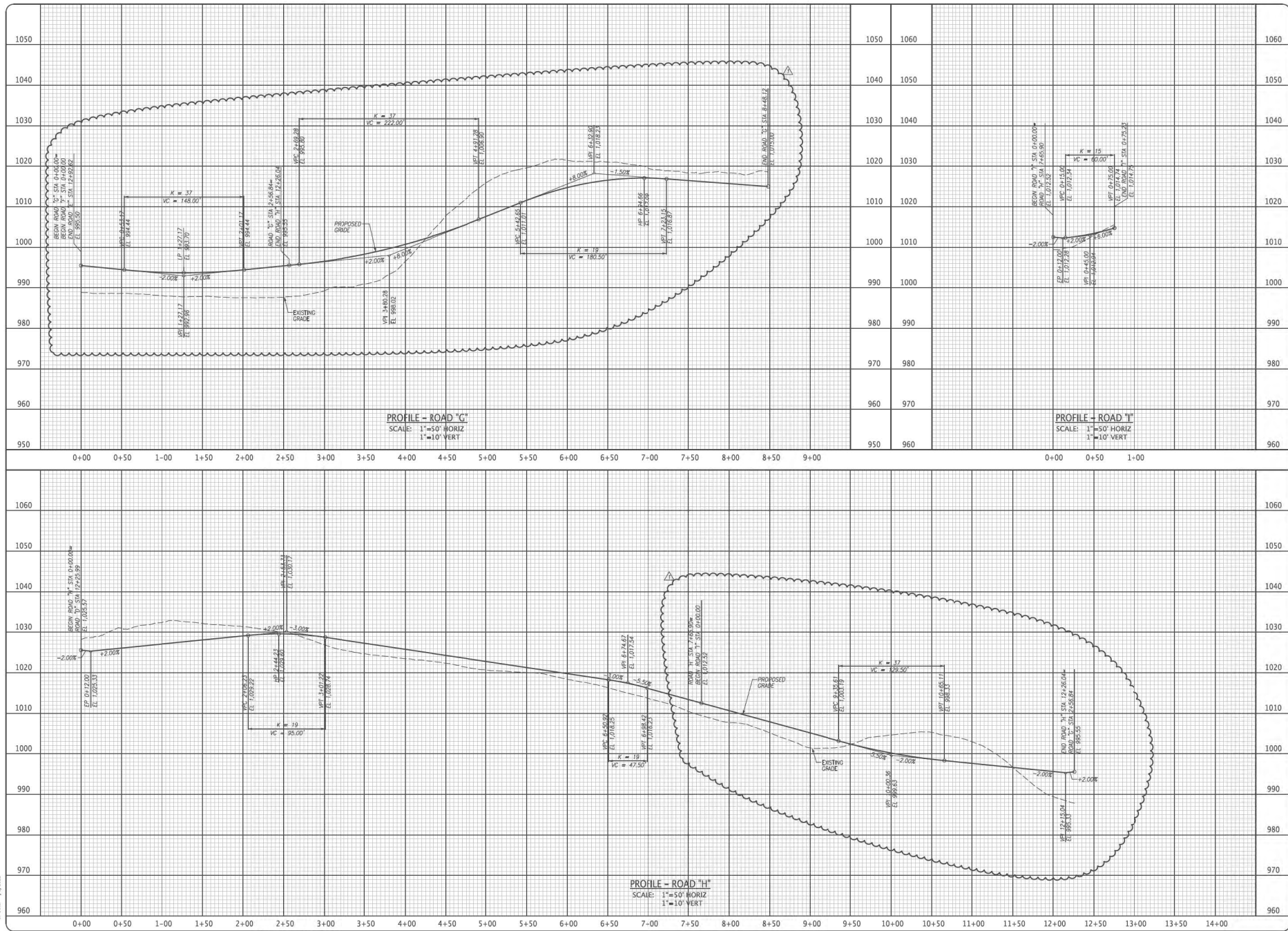
PLACEMAKERS NO. 2 PARTNERSHIP
11800 KINGSTON PIKE
KNOXVILLE, TN 37934
CONTACT: MS. SUE LASH
TELEPHONE NO: 865.773.5131

ROAD PROFILES

NO.	REVISION	DATE
1	ISSUED FOR CONSTRUCTION	08/20/21
2	REVISION	
3	REVISION	
4	REVISION	
5	REVISION	
6	REVISION	
7	REVISION	
8	REVISION	
9	REVISION	
10	REVISION	

Project 290.009
Sheet
Date 08/20/21
Scale AS NOTED
C40

File Name: I:\Projects\2020\2020\2020\2020\2020\2020.dwg
 Plot Date: 11/07/22



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PRELIMINARY PLAT
PHASE 3B & 4
BRIDGEMORE SUBDIVISION
 BARNESLEY ROAD
 KNOXVILLE, TENNESSEE 37922

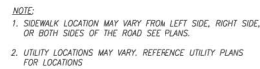
PLACEMAKERS NO. 2 PARTNERSHIP
 11800 KINGSTON PIKE
 KNOXVILLE, TN 37934
 CONTACT: MS. SUE LASH
 TELEPHONE NO: 865.777.5191

ROAD PROFILES

PROJ. NO.	DATE	BY	CHKD BY	DATE	REVISION
290.009	11/07/22				
	08/20/21				

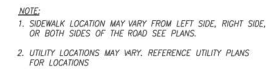
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 Date: 08/20/21
 Scale: AS NOTED

C41



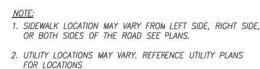
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C42

TYPICAL 22' ROAD SECTION (25 MPH DESIGN SPEED)
NTS

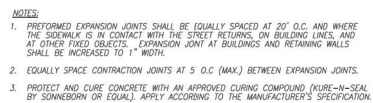


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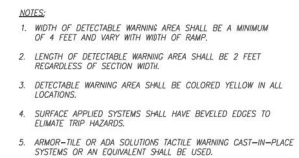
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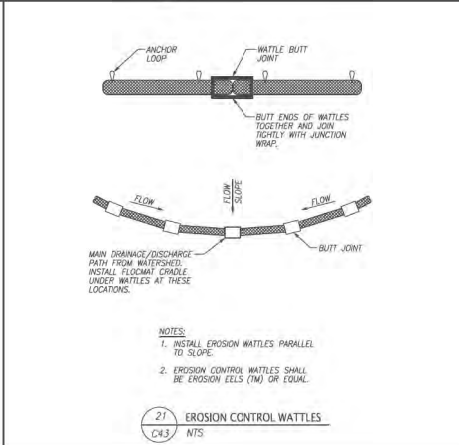
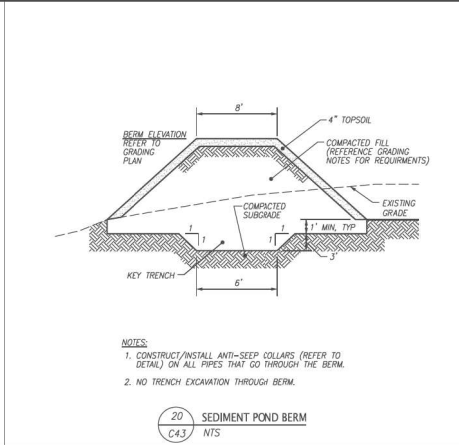
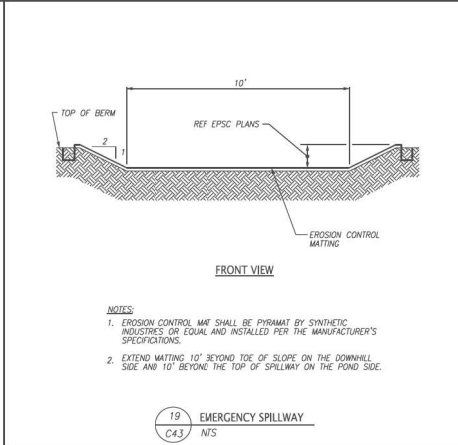
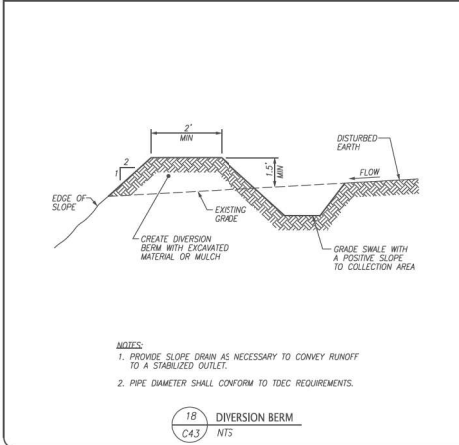
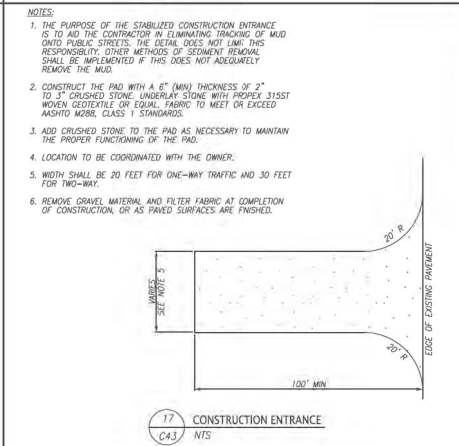
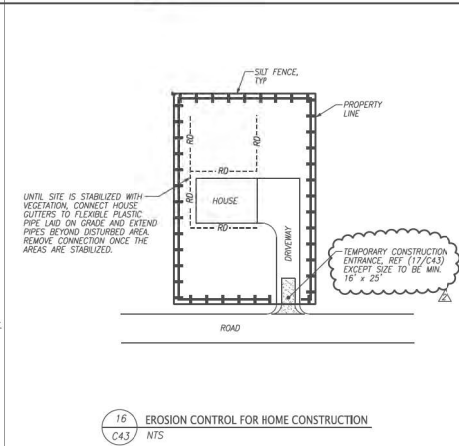
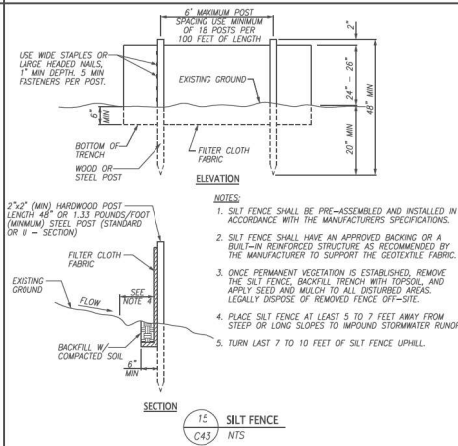
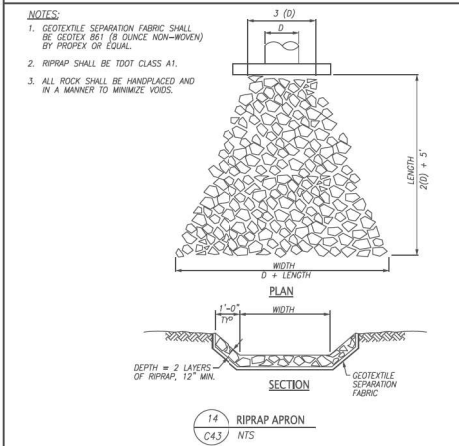
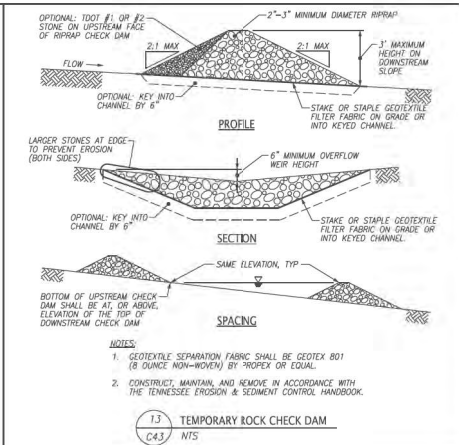
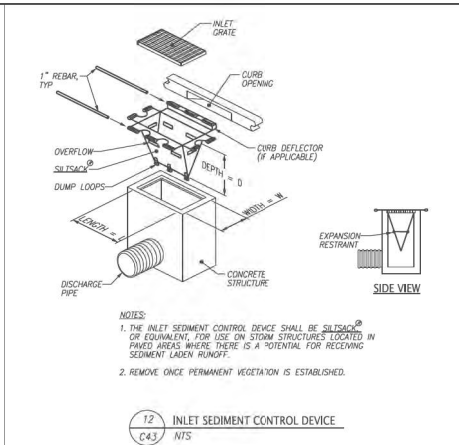
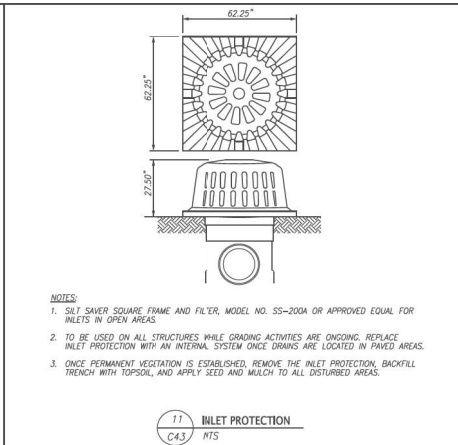
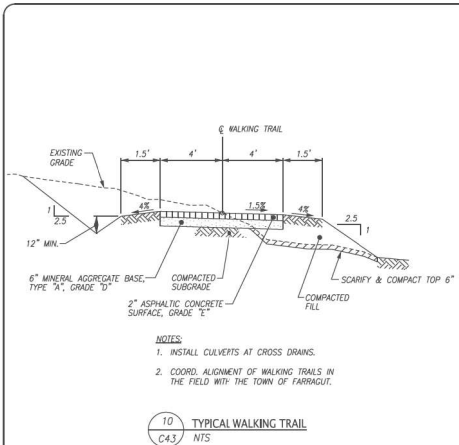
  TYPICAL 26' ROAD SECTION (35 MPH DESIGN SPEED)
NTS



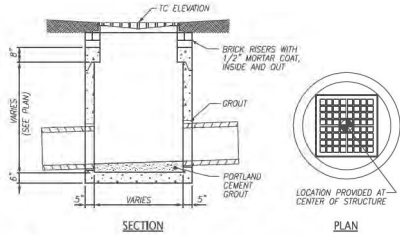
6 CONCRETE SIDEWALK
C42 NTS



9 DETECTABLE WARNING SURFACE
C42 NTS

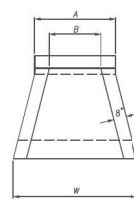


FULGHUM MACINDOE LABORATORY, INC. 10300 HAZEN VALLEY ROAD SUITE 201 KNOXVILLE, TN 37932 375.850.6419 FAX: 375.850.6448 www.fulghummacindoe.com	
PRELIMINARY PLAT PHASE 3B & 4 BRIDGEMORE SUBDIVISION BARNESLEY ROAD KNOXVILLE, TENNESSEE 37922	
PLACEMAKERS NO. 2 PARTNERSHIP 11800 KINGSTON PIKE KNOXVILLE, TN 37934 CONTACT: MS. SUE LASH TELEPHONE NO: 865.777.5191	
DETAILS	
PROJ. NO. DESIGNED BY CHECKED BY DATE	DRAWN BY DATE REVISION/DATE No.
Project 290.009 Date 08/20/21 Scale NTS	Sheet C43



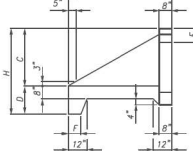
- NOTES:**
1. AREA DRAINS SHALL BE CIRCULAR OR SQUARE PRECAST CONCRETE STRUCTURE IN ACCORDANCE WITH ASTM C478 OR (LATEST EDITION). DIMENSIONS VARY DEPENDING ON PIPE SIZE AND ANGLE IN AND OUT OF STRUCTURE. THE OPENING IN THE STRUCTURE TOP SHALL NOT BE LESS THAN THE GRATE DIMENSIONS.
 2. LADDER BARS SHALL BE PROVIDED PER OSHA REGULATIONS.
 3. LOCATION AND TO ELEVATIONS GIVEN AT CENTER OF THE STRUCTURE.
 4. FRAME AND GRATE SHALL BE E.I. USA INCORPORATED MODEL NO. V-5630 OR EQUAL. GRATE IN PEDESTRIAN TRAFFIC AREAS SHALL BE 1/2" USA INCORPORATED MODEL NO. V-5630-80 ADA STYLE OR EQUAL. THE GRATE SHALL BE STAMPED WITH "DUMP NO WASTE...DRAINS TO WATERWAYS" WITH FISH IMAGE, OR EQUAL.
 5. SHIM THE FRAME TO MATCH THE CROSS SLOPE AND GUTTER LINE SLOPES OF THE PAVEMENT.

33 AREA DRAIN
C45 NTS

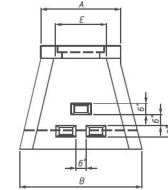


PIPE SIZE	HOLE SIZE	W	L	W	L	W	L	W	L
5"	22"	48"	30"	42"	32"	24"	26"	16"	4"
8"	22"	48"	30"	42"	32"	24"	26"	16"	4"
12"	32"	72"	44"	52"	48"	36"	16"	4"	8"
16"	55"	102"	54"	76"	80"	64"	60"	16"	5"
20"	55"	102"	54"	76"	80"	64"	60"	16"	5"

- NOTES:**
1. CONCRETE: 4500 PSI @ 28 DAYS
 2. REINFORCING: #4 BAR @ 12" EACH WAY, GRADE 60
 3. MINIMUM REBAR COVERAGE - 2"
 4. 3/4" CHAMFER ON ALL EXPOSED EDGES

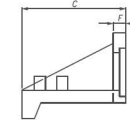


34 PRECAST CONCRETE HEADWALL
C45 NTS

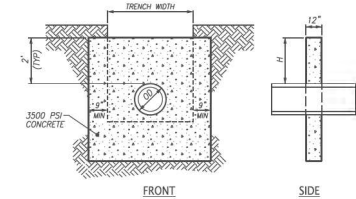


- NOTES:**
1. CONCRETE: 4500 PSI @ 28 DAYS
 2. REINFORCING: #4 BAR @ 12" EACH WAY, GRADE 60
 3. MINIMUM REBAR COVERAGE - 2"
 4. 3/4" CHAMFER ON ALL EXPOSED EDGES

SIZE	AW	DW	CW	DW
A	32"	48"	80"	99"
B	48"	72"	102"	120"
C	30"	44"	54"	56"
D	26"	36"	54"	60"
E	24"	36"	64"	83"
F	8"	8"	8"	8"
MAX OPENING	22"	32"	55"	75"

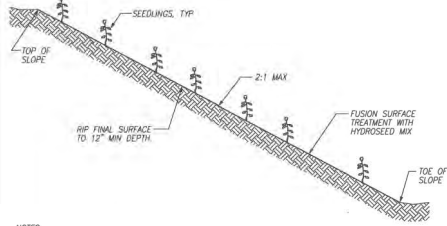


35 PRECAST CONCRETE HEADWALL W/DISSIPATORS
C45 NTS



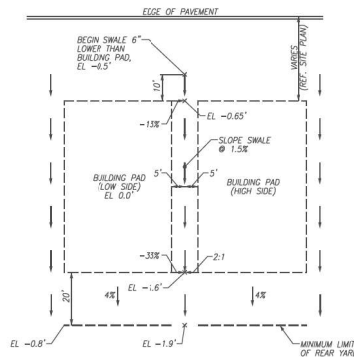
- NOTES:**
1. MAXIMUM SPACING SHALL BE 14 TIMES THE COLLAR HEIGHT (H) OR 25 FEET, WHICHEVER IS LESS. MINIMUM SPACING IS 10 FEET.
 2. PROVIDE A COLLAR AT THE HALF-WAY POINT IN THE BERM.
 3. PROVIDE A MINIMUM OF ONE COLLAR FOR BERMS LESS THAN 8 FEET HIGH AND AT LEAST TWO COLLARS FOR BERMS EQUAL TO OR GREATER THAN 8 FEET.

36 CONCRETE ANTI-SEEP COLLAR
C45 NTS

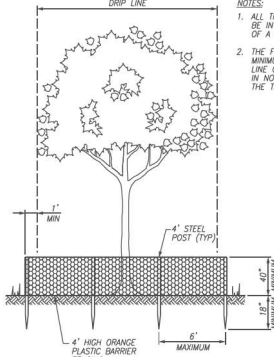


- NOTES:**
1. SEEDLINGS SHALL BE A MIX OF AT LEAST 6 OF THE FOLLOWING SPECIES: AMERICAN PLUM, BLACKGUM, NORTHERN RED OAK, TULIP POPLAR, RED MAPLE, REDBUD, SCARLET OAK, SWEETGUM, SYCAMORE, AND WHITE OAK. INSTALL ON 12" X 12" GRID OR 300 PER ACRE. PLANTING DATES RANGE FROM DECEMBER TO MID-APRIL.
 2. HYDROSED SLOPE WITH ERCTEC MIX MOUNTAINS JPL MEADOW MIX (TENNEX 303). APPLY 20 LBS/AC. ADD FERTILIZER TO THE HYDROSED MIX. USE 19-19-19 AND APPLY AT A RATE OF 400 LBS/AC. ADD ANNUAL COVER CROP TO THE HYDROSED MIX AS FOLLOWS: GRASS (JANUARY TO FEBRUARY) APPLIED AT 10 LBS/AC, BROWNSTOP WHEAT (MARCH TO AUGUST) APPLIED AT 10 LBS/AC, WINTER RYE GRASS (SEPTEMBER TO DECEMBER) APPLIED AT 30 LBS/AC.
 3. APPLY FUSION SURFACE TREATMENT (ZEN-HILL CONSTRUCTION MATERIALS) AT A RATE OF 4,500 LBS/AC ALONG WITH THE HYDROSED MIX. OBTAIN A SOI SAMPLE TO CONFIRM THE APPLICATION RATE. INSTALL PER THE MANUFACTURER'S RECOMMENDATIONS.
 4. PROTECT FINISHED SLOPE FROM BEING DISTURBED.

37 REFORESTATION
C45 NTS

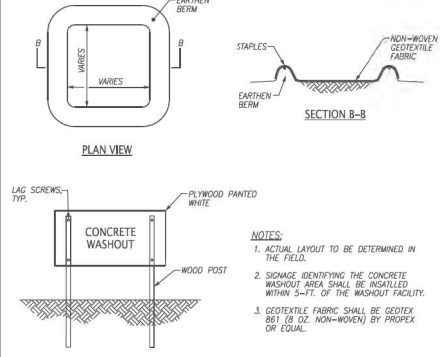


38 TYPICAL LOT PLAN
C45 NTS



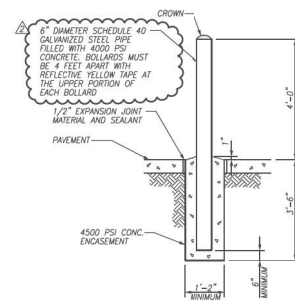
- NOTES:**
1. ALL TREE PROTECTION FENCING SHALL BE IN PLACE PRIOR TO THE ISSUANCE OF A GRADING PERMIT.
 2. THE FENCE SHALL BE LOCATED A MINIMUM OF 1 FOOT OUTSIDE THE DRIP LINE OF THE TREE TO BE SAVED AND IN NO CASE CLOSER THAN 5 FEET TO THE TRUNK OF ANY TREE.

39 TREE PROTECTION
C45 NTS



- NOTES:**
1. ACTUAL LAYOUT TO BE DETERMINED IN THE FIELD.
 2. SIGNAGE IDENTIFYING THE CONCRETE WASHOUT AREA SHALL BE INSTALLED WITHIN 5'-FT. OF THE WASHOUT FACILITY.
 3. GEOTEXTILE FABRIC SHALL BE GEOTEX 661 (8 OZ. NON-WOVEN) BY PROPER OR EQUAL.

40 CONCRETE WASHOUT AREA
C45 NTS



41 BOLLARD
C45 NTS

10180 HARDEN VALLEY ROAD
SUITE 201
KNOXVILLE, TN 37932
PHONE: 865.690.6419
FAX: 865.690.6448
www.fulghummacindoe.com

**PRELIMINARY PLAT
PHASE 3B & 4
BRIDGEMORE SUBDIVISION**
BARNESLEY ROAD
KNOXVILLE, TENNESSEE 37922

PLACEMAKERS NO. 2 PARTNERSHIP
11800 KINGSTON PIKE
KNOXVILLE, TN 37934
CONTACT: MS. SUE LASH
TELEPHONE NO.: 865.777.5131

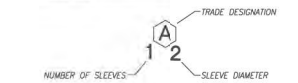
DETAILS

NO.	REVISION	DATE
1	REVISED PER DTP COMMENTS	12/05/22
2	ADDED BOLLARD DETAIL	12/02/21
3	ISSUED FOR CONSTRUCTION	08/20/21

Project: 290.009
Date: 08/20/21
Sheet: C45
Scale: NTS

MATCH LINE SHEET C47

SLEEVING DESCRIPTION



SYMBOL	DESCRIPTION	STAKE MARKING COLOR
(A)	FUTURE UTILITY SLEEVE	FLUORESCENT ORANGE
(E)	ELECTRIC SLEEVE	FLUORESCENT PURPLE

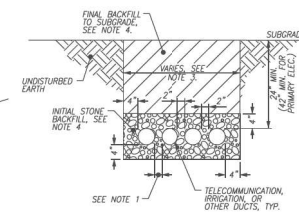


CONDUIT NOTES:

- THE LOCATIONS OF THE EXISTING UTILITIES SHOWN ON THESE DRAWINGS ARE APPROXIMATE. THE EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD BY POT-HOLING AND BY CONTACTING THE UTILITY COMPANIES INVOLVED.
- PROVIDE NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING THE CONSTRUCTION OF THIS PROJECT. FURNISH ANY SPECIAL EQUIPMENT REQUIRED TO WORK OVER AND AROUND THE UTILITIES.
- PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS TO NOTIFY THEM OF WORK IN THE AREA AND REQUEST THEM TO PROPERLY MARK THEIR RESPECTIVE UTILITY. NOTIFICATION SHALL BE GIVEN AT LEAST THREE BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY.
- UTILITIES CAN BE LOCATED BY CALLING THE TENNESSEE ONE CALL SYSTEM, AT 1-800-351-1111.
- TRENCH DESIGN AND SAFETY FOR PIPELINE CONSTRUCTION IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL CONFORM WITH APPLICABLE LOCAL, STATE, AND OSHA REGULATIONS.
- UTILITIES SHALL BE INSTALLED AFTER GRADING IS COMPLETED AND APPROVED AND BEFORE ANY PAVEMENT IS INSTALLED.
- CONTRACTOR SHALL OBTAIN THE LATEST COPY OF STANDARD DRAWINGS AND SPECIFICATIONS FROM LENDOR CITY UTILITIES BOARD (LCUB) PRIOR TO PLACING MATERIAL, ORDER OR BEGINNING ELECTRICAL WORK.
- SLEEVES SHALL BE USED ONLY FOR THE TRADE DESIGNATED ON PLANS. SUBCONTRACTORS WHO USE SLEEVES MARKED OTHERWISE SHALL BE RESPONSIBLE FOR JACKING AND BORING ADDITIONAL SLEEVES FOR THE TRADE DESIGNATED.
- ADJUSTMENTS TO THE LOCATIONS OF THE SLEEVES MAY BE MADE TO AVOID UTILITIES OR OTHER OBSTACLES.
- LCUB REQUIRES 12 INCHES OF SEPARATION FROM OTHER UTILITIES. IF CONFLICTS ARISE DURING CONSTRUCTION, CONSULT WITH LCUB INSPECTOR AS TO THE NECESSARY FIELD CHANGES. LCUB RESERVES THE RIGHT TO MODIFY THE MATERIAL OR CONSTRUCTION REQUIREMENTS IF ADEQUATE SEPARATION IS NOT AVAILABLE.
- ALL SLEEVES SHALL BE SCHEDULE 40 PVC EXCEPT WHERE OTHERWISE NOTED.
- REFERENCE SHEET C22 FOR STORM NOTES.
- REFERENCE SHEET C26 FOR WATER NOTES.
- REFERENCE SHEET C32 FOR SANITARY SEWER NOTES.
- REFERENCE SHEET C26 FOR UTILITY OWNER INFORMATION.
- REFERENCE SHEET LP1 FOR LIGHTING NOTES.

LEGEND:

— E —	PROPOSED ELECTRIC SLEEVE
— F —	PROPOSED FUTURE USE SLEEVE
■	PROPOSED TRANSFORMER PAD
■	PROPOSED ELECTRIC VAULT

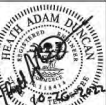


NOTES:

- MAINTAIN 12" MINIMUM SPACING BETWEEN POWER DUCTS AND OTHER DUCTS EXCEPT WHERE ALL PARTIES INVOLVED AGREE THAT SPACING MAY BE REDUCED.
- PROPOSED CONDUIT THAT CROSSES OVER OTHER UTILITIES SHALL BE INSTALLED AFTER THE DEEPER UTILITIES HAVE BEEN INSTALLED. MAINTAIN 12" MINIMUM SEPARATION BETWEEN CONDUIT AND OTHER UTILITIES.
- TRENCH WIDTH WILL VARY DEPENDING ON NUMBER AND SIZE OF REQUIRED DUCTS. INSTALL ALL DUCTS HORIZONTALLY, AS SHOWN, UNLESS PLANS SPECIFY OTHERWISE.
- REFER TO TYPICAL TRENCH DETAIL (30/C44) FOR BACKFILL REQUIREMENTS.
- INSTALL SPACERS AS REQUIRED TO MAINTAIN DUCT SEPARATION IN CONDUIT BENDS. CONDUIT BEND RADII SHALL BE GREATER THAN OR EQUAL TO THE MINIMUM BEND RADII AS SPECIFIED BY THE CONDUIT MANUFACTURER.

COORDINATE WITH UTILITY OWNER TO THE PROPOSED CONDUIT INTO EXISTING TRANSFORMER (APPROX. LOCATION SHOWN FOR REFERENCE)

COORDINATE WITH UTILITY OWNER TO THE PROPOSED CONDUIT INTO EXISTING VAULT (APPROX. LOCATION SHOWN FOR REFERENCE)



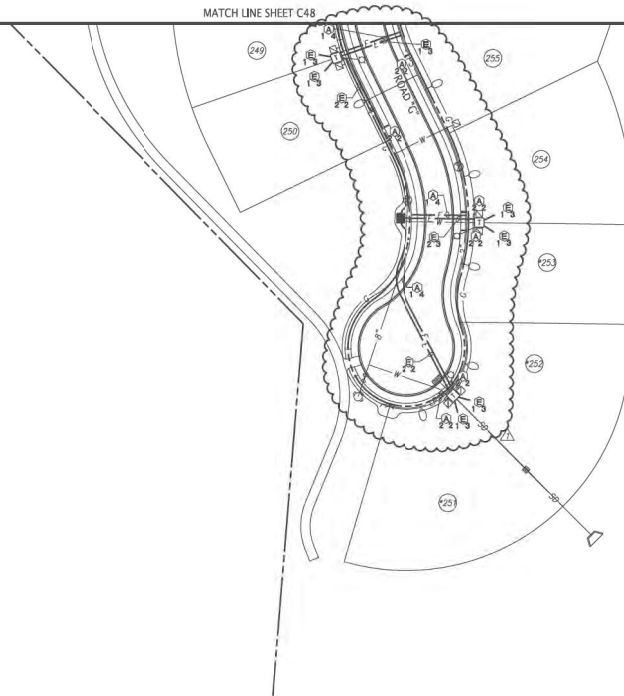
PRELIMINARY PLAT
 PHASE 3B & 4
 BRIDGEMORE SUBDIVISION
 BARNESLEY ROAD
 KNOXVILLE, TENNESSEE 37922

PLACEMAKERS NO. 2 PARTNERSHIP
 11800 KINGSTON PIKE
 KNOXVILLE, TN 37934
 CONTACT: MS. SIOB LASH
 TELEPHONE NO: 865.777.5131

CONDUIT PLAN

NO.	DATE	BY	CHKD BY	APP'D BY	REVISION/REMARKS
1	10/26/22	JCM	WBT	FWL	REVISED PER LOT CHANGES
2	10/31/21				ISSUED FOR CONSTRUCTION
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NOTES:

1. REFER TO C46 FOR CONDUIT NOTES AND LEGEND.



330 HARDIN VALLEY ROAD
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KNOXVILLE, TN 37932
OFFICE: 865.690.6419
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PRELIMINARY PLAT
PHASE 3B & 4
BRIDGEMORE SUBDIVISION
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KNOXVILLE, TENNESSEE 37922

PLACEMAKERS NO. 2 PARTNERSHIP
11800 KINGSTON PIKE
KNOXVILLE, TN 37934
CONTACT: MS. SUSIE LASH
TELEPHONE NO.: 865.777.9191

CONDUIT PLAN

	No.	Revision/Issue	Date				PAGE
	A	REVISED PER LAYOUT CHANGES	10/26/22				
	B	ISSUED FOR CONSTRUCTION	10/11/21				

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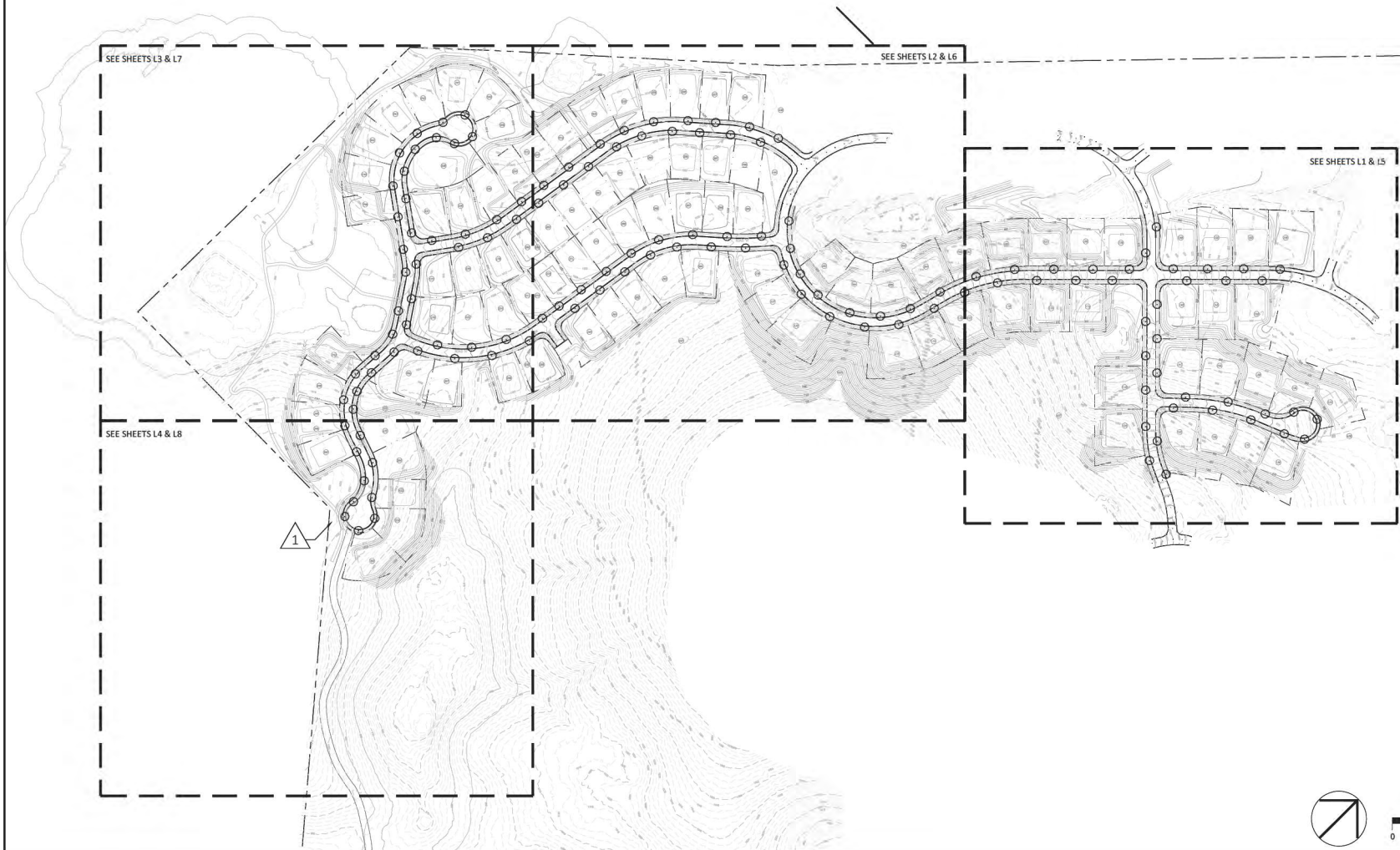
**PRELIMINARY PLAT
PHASE 3B & 4
BRIDGEMORE SUBDIVISION
BARNESLEY ROAD
KNOXVILLE, TENNESSEE 37922**

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11800 KINGSTON PIKE
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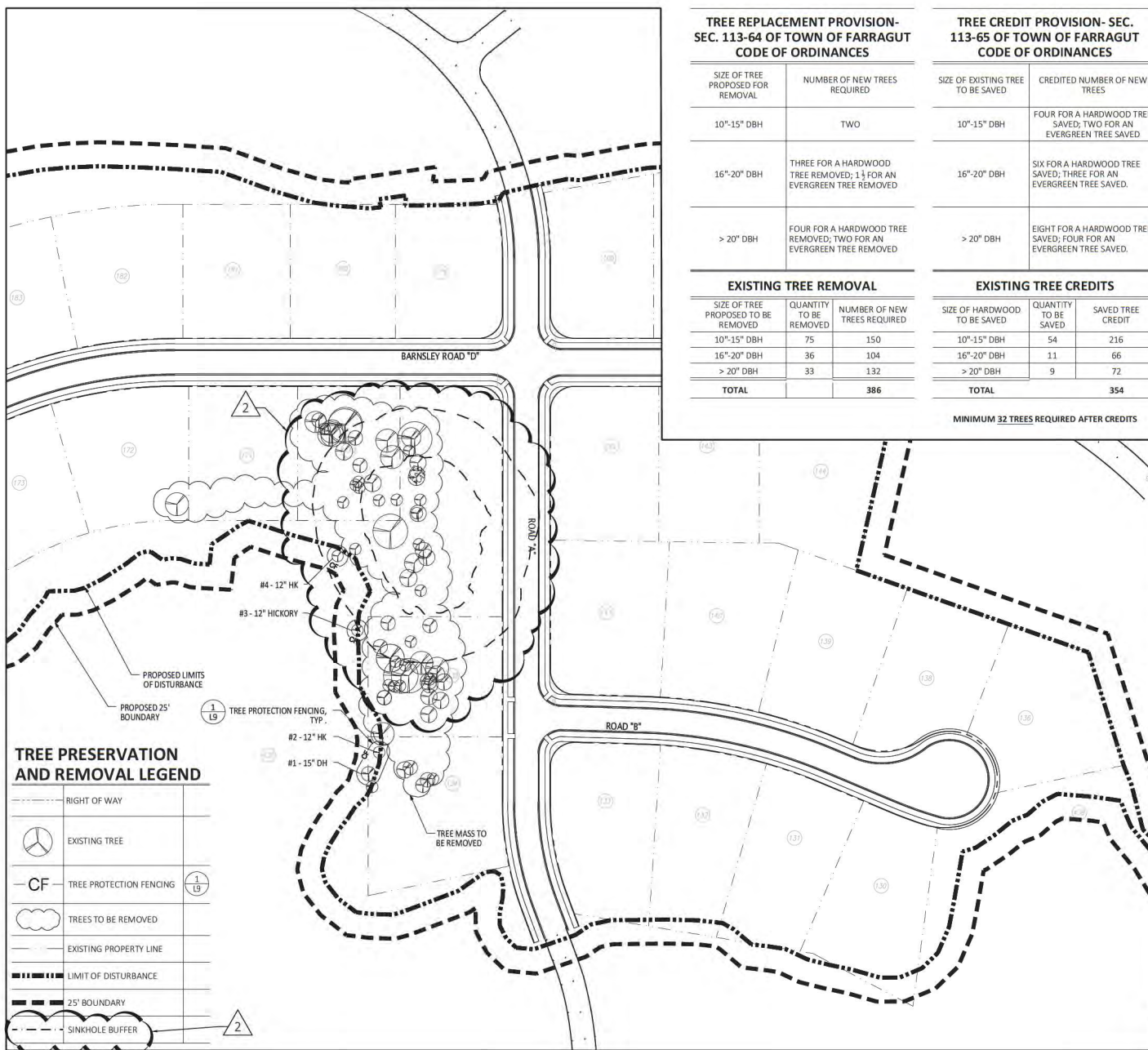
KEY PLAN

Project 250-008	Sheet LO	Revision #1		PNO
		Revision #2		
Date 12/05/22				
Scale 1"=50'				
		Revision/Issue		Date
		No.		

0.

File Name: FILE\$
Plot Date: DATE\$

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TREE REPLACEMENT PROVISION- SEC. 113-64 OF TOWN OF FARRAGUT CODE OF ORDINANCES

SIZE OF TREE PROPOSED FOR REMOVAL	NUMBER OF NEW TREES REQUIRED
10"-15" DBH	TWO
16"-20" DBH	THREE FOR A HARDWOOD TREE REMOVED; 1 1/2 FOR AN EVERGREEN TREE REMOVED
> 20" DBH	FOUR FOR A HARDWOOD TREE REMOVED; TWO FOR AN EVERGREEN TREE REMOVED

EXISTING TREE REMOVAL

SIZE OF TREE PROPOSED TO BE REMOVED	QUANTITY TO BE REMOVED	NUMBER OF NEW TREES REQUIRED
10"-15" DBH	75	150
16"-20" DBH	36	104
> 20" DBH	33	132
TOTAL		386

TREE CREDIT PROVISION- SEC. 113-65 OF TOWN OF FARRAGUT CODE OF ORDINANCES

SIZE OF EXISTING TREE TO BE SAVED	CREDITED NUMBER OF NEW TREES
10"-15" DBH	FOUR FOR A HARDWOOD TREE SAVED; TWO FOR AN EVERGREEN TREE SAVED
16"-20" DBH	SIX FOR A HARDWOOD TREE SAVED; THREE FOR AN EVERGREEN TREE SAVED
> 20" DBH	EIGHT FOR A HARDWOOD TREE SAVED; FOUR FOR AN EVERGREEN TREE SAVED

EXISTING TREE CREDITS

SIZE OF HARDWOOD TO BE SAVED	QUANTITY TO BE SAVED	SAVED TREE CREDIT
10"-15" DBH	54	216
16"-20" DBH	11	66
> 20" DBH	9	72
TOTAL		354

MINIMUM 32 TREES REQUIRED AFTER CREDITS

TREE PRESERVATION AND REMOVAL NOTES

- SURVEY DATA PREPARED BY: BENCHMARK & ASSOCIATES, INC.
CONTACT: BENNY MOORMAN
10308 HARDIN VALLEY ROAD
KNOXVILLE, TN 37932 865.692.4090.
- PROPERTY CONCERNED REFLECTS PARCEL 152 02503 AS SHOWN IN KNOX COUNTY CU MAP 152. ZONING FOR THE PROPERTY IS OSR, OPEN SPACE RESIDENTIAL OVERLAY
TOTAL AREA = 70.28± AC. LOTS = 108, OPEN SPACE = 25.59± AC (36.4%). TOTAL DISTURBED AREA = 56.7± AC.
- TREE MASSING INFORMATION IS FROM AERIAL PHOTOGRAPHY AND FIELD REVIEW.
- INDIVIDUAL SPECIMEN TREES SHOWN ARE FIELD LOCATED BY THE PROJECT SURVEYOR, AND FIELD VERIFIED BY THE PROJECT LANDSCAPE ARCHITECT. EVERY EFFORT HAS BEEN MADE TO CONFIRM ALL TREES MEETING THE SPECIMEN TREE SIZE REQUIREMENT HAVE BEEN SHOWN ON THESE PLANS. UPON FIELD STAKING OF LIMITS OF CLEARING ALL WOODED AREAS WILL BE REEVALUATED TO CONFIRM THAT NO SPECIMEN TREES HAVE BEEN MISSED. IF ADDITIONAL SPECIMEN TREES ARE LOCATED CLEARING WILL BE DELAYED UNTIL A REVISED TREE REMOVAL/PROTECTION PLAN IS APPROVED BY TOWN STAFF.
- PROTECTED TREES AS NOTED IN TREE INVENTORY SHALL HAVE TREE PROTECTION FENCING WHICH SHALL BE INSTALLED IN ACCORDANCE WITH THE TREE PROTECTION DETAIL. THE LOCATION OF TREE PROTECTIVE FENCE WHICH HAS BEEN APPROVED BY THE TOWN OF FARRAGUT, AS REFLECTED ON THE APPROVED PLANS, MUST NOT BE REMOVED OR ALTERED IN ANY WAY, ANY SUCH ALTERATION OF TREE PROTECTIVE FENCING WILL RESULT IN AN IMMEDIATE STOP WORK ORDER FOR THE ENTIRE PROJECT.
- SPECIAL MEASURES SUCH AS ROOT PRUNING IN CUT AREAS MAY BE NEEDED IN ADDITION TO PROVIDING TREE PROTECTION FENCING. THESE MEASURES MUST BE COORDINATED WITH THE TOWN STAFF AND PROJECT LANDSCAPE ARCHITECT, AND WILL BE REQUIRED TO BE IN PLACE PRIOR TO THE ISSUANCE OF A GRADING PERMIT.
- ALL WALKING TRAILS REQUIRED BY THE TOWN OF FARRAGUT WILL BE LAID OUT IN FIELD BY FARRAGUT TOWN STAFF AND PROJECT LANDSCAPE ARCHITECT TO AVOID DAMAGE TO ANY SPECIMEN TREES.
- THE DEMOLITION OF ALL STRUCTURES WILL REQUIRE A DEMOLITION PERMIT AND A FIELD MEETING WITH THE TOWN STAFF TO ENSURE THAT MEASURES ARE IN PLACE TO PROTECT SURROUNDING TREES TO BE PRESERVED.
- AN ARBORISTS REVIEW MAY BE REQUIRED IF THERE IS A SERIOUS CONCERN THAT THE HEALTH OF SELECTED TREES WILL BE COMPROMISED WITHOUT SPECIAL MEASURES BEING EMPLOYED. THE ARBORISTS RECOMMENDATIONS WILL BECOME PART OF THE APPROVAL OF THE TREE PRESERVATION/REMOVAL PLAN AND WILL BE REQUIRED TO BE IMPLEMENTED AT THE APPROPRIATE STAGES OF DEVELOPMENT.
- PRIOR TO THE ISSUANCE OF A GRADING PERMIT, DRAINAGE RELATED MODIFICATIONS WILL BE REVIEWED WITH STAFF TO ASSESS THE NEED TO ADD OR MODIFY PERMANENT EROSION CONTROL MEASURES. AN ARBOR/ST'S ASSESSMENT MAY BE REQUIRED BY THE TOWN STAFF.

TREE ABBREVIATIONS

DH	DECIDUOUS HOLLY
DECID	UNKNOWN DECIDUOUS
YP	YELLOW POPLAR
BC	BLACK CHERRY
CO	CHESTNUT OAK
CE	CEDAR ELM
SW	SOURWOOD
HK	HACKBERRY
PER	PERSIMMON
BW	BLACK WALNUT
AB	AMERICAN BEECH

TREE NO.	TREE SPECIES	DBH	TO BE SAVED	HAZARD / DISEASED
#1	DH	15"	YES	NO
#2	HK	12"	YES	NO
#3	HICKORY	12"	YES	NO
#4	HK	12"	YES	NO



PRELIMINARY PLAN
PHASE 3B & 4
BRIDGEMORE SUBDIVISION
BARNESLEY ROAD
KNOXVILLE, TENNESSEE 37922

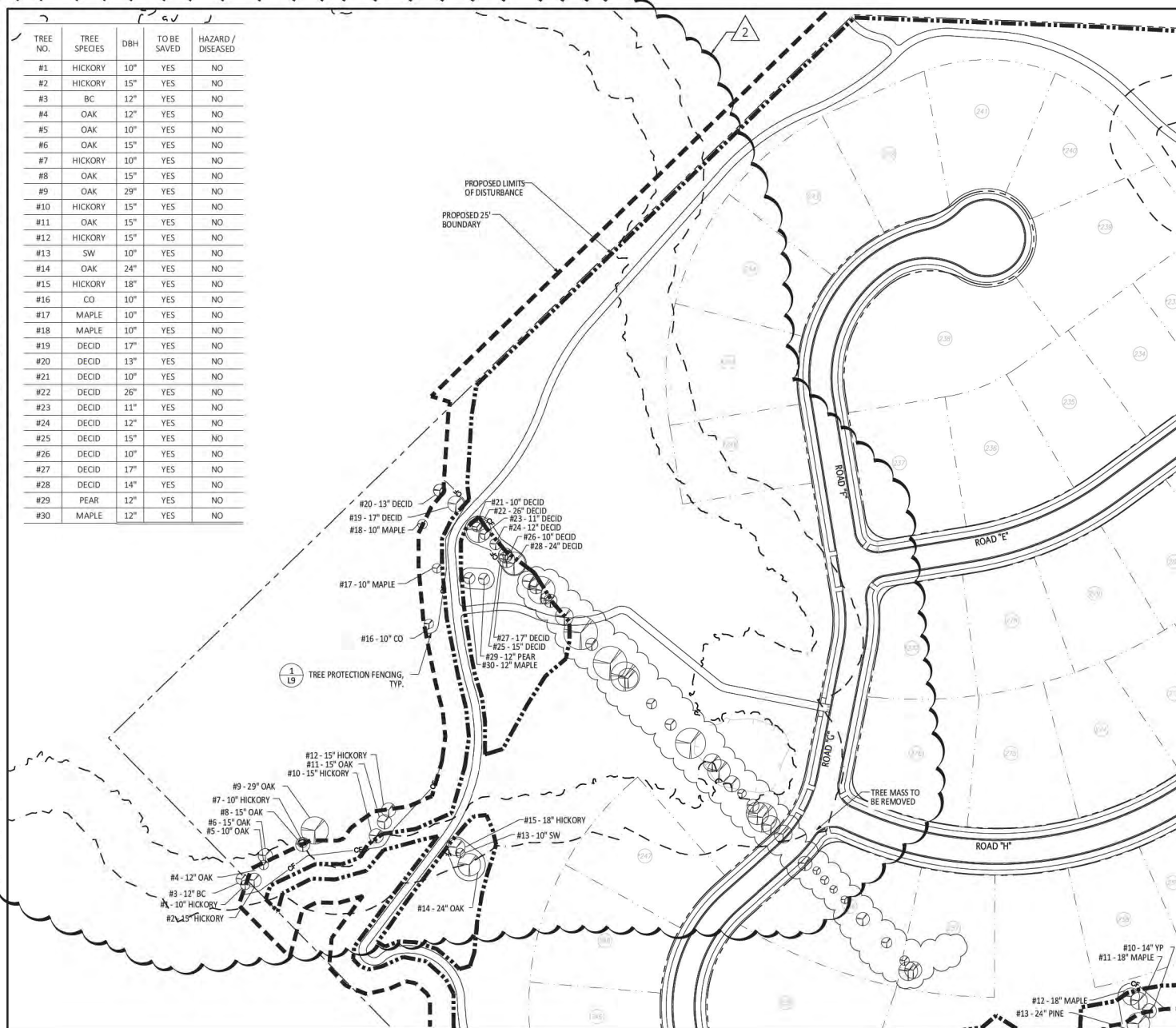
PLACEMAKERS NO. 2 PARTNERSHIP
11800 KINGSTON PIKE
KNOXVILLE, TN 37934
CONTACT: MS. SUE LASH
TELEPHONE NO.: 865.777.9191

TREE PRESERVATION
AND REMOVAL PLAN

PROJ. NO.	250-009	DATE	12/05/22
ISSUED BY	CLB	REVISION #1	
DESIGNED BY	CLB	REVISION #2	
CHECKED BY			
APPROVED BY			
PROJECT	250-009	SHEET	11
DATE	12/05/22	SCALE	1"=50'



TREE NO.	TREE SPECIES	DBH	TO BE SAVED	HAZARD / DISEASED
#1	HICKORY	10"	YES	NO
#2	HICKORY	15"	YES	NO
#3	BC	12"	YES	NO
#4	OAK	12"	YES	NO
#5	OAK	10"	YES	NO
#6	OAK	15"	YES	NO
#7	HICKORY	10"	YES	NO
#8	OAK	15"	YES	NO
#9	OAK	29"	YES	NO
#10	HICKORY	15"	YES	NO
#11	OAK	15"	YES	NO
#12	HICKORY	15"	YES	NO
#13	SW	10"	YES	NO
#14	OAK	24"	YES	NO
#15	HICKORY	18"	YES	NO
#16	CO	10"	YES	NO
#17	MAPLE	10"	YES	NO
#18	MAPLE	10"	YES	NO
#19	DECID	17"	YES	NO
#20	DECID	13"	YES	NO
#21	DECID	10"	YES	NO
#22	DECID	26"	YES	NO
#23	DECID	11"	YES	NO
#24	DECID	12"	YES	NO
#25	DECID	15"	YES	NO
#26	DECID	10"	YES	NO
#27	DECID	17"	YES	NO
#28	DECID	14"	YES	NO
#29	PEAR	12"	YES	NO
#30	MAPLE	12"	YES	NO



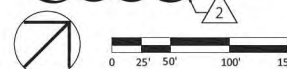
SEE SHEET L1 FOR TREE
PRESERVATION AND REMOVAL
NOTES

TREE ABBREVIATIONS

DH	DECIDUOUS HOLLY
DECID	UNKNOWN DECIDUOUS
YP	YELLOW POPLAR
BC	BLACK CHERRY
CO	CHESTNUT OAK
CE	CEDAR ELM
SW	SOURWOOD
HK	HACKBERRY
PER	PERSIMMON
BW	BLACK WALNUT
AB	AMERICAN BEECH

**TREE PRESERVATION
AND REMOVAL LEGEND**

	RIGHT OF WAY	
	EXISTING TREE	
	TREE PROTECTION FENCING	
	TREES TO BE REMOVED	
	EXISTING PROPERTY LINE	
	LIMIT OF DISTURBANCE	
	25' BOUNDARY	
	SINKHOLE BUFFER	
		
		



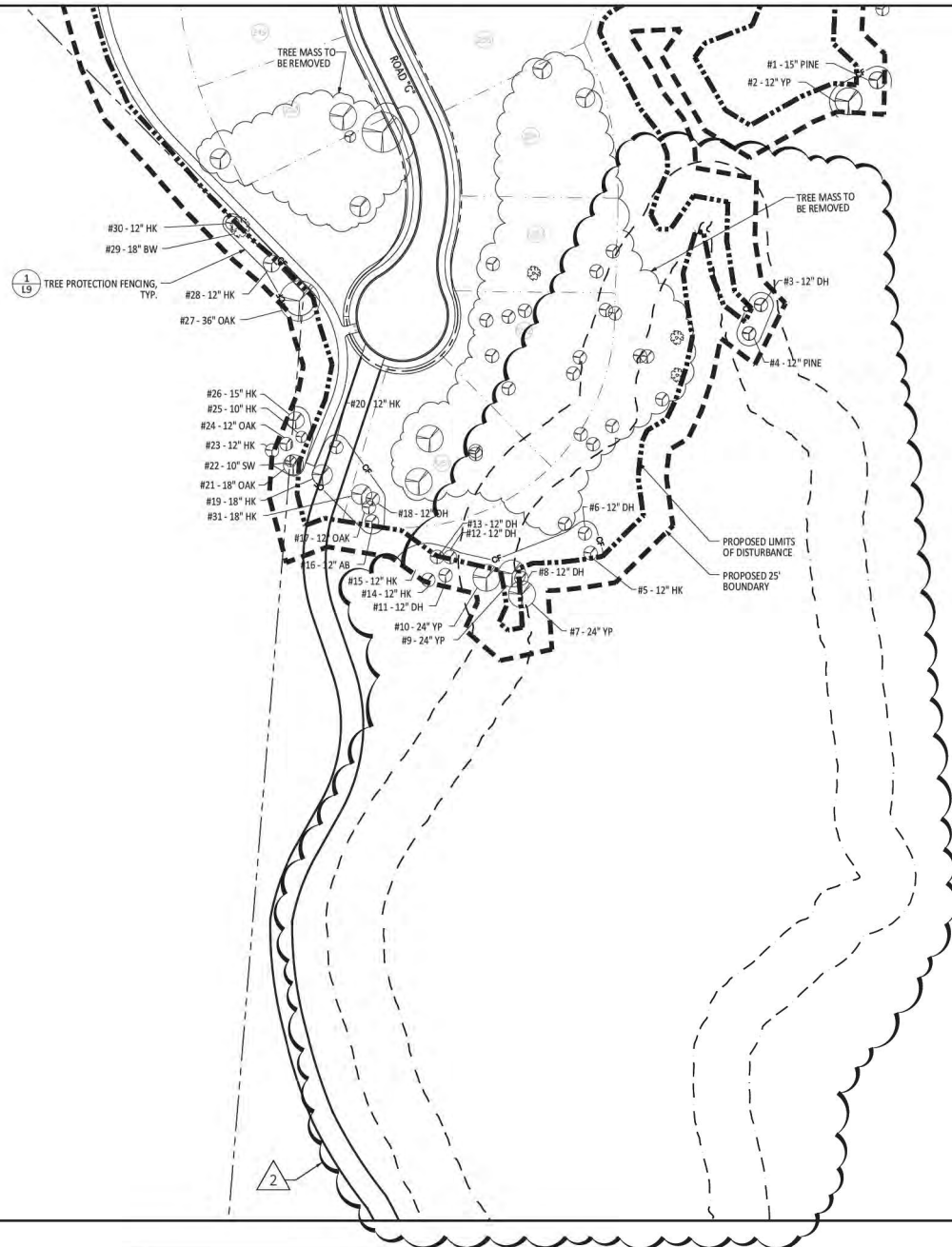
PRELIMINARY PLAT
PHASE 3B & 4
BRIDGEMORE SUBDIVISION
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KNOXVILLE, TENNESSEE 37922

PLACEMAKERS NO. 2 PARTNERSHIP
11800 KINGSTON PIKE
KNOXVILLE, TN 37934
CONTACT: MS. SUSIE LASH
TELEPHONE NO.: 865.777.9191

**TREE PRESERVATION
AND REMOVAL PLAN**

PROJ. NO.	CUB	DESIGNED BY	PNO	DRAWN BY	FNO
A	#REVISION #1				*
B	#REVISION #2				*
					*
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					*
Project ZSO-008			Sheet		
Date 12/06/22	L3				
Scale 1"=50'					

TREE NO.	TREE SPECIES	DBH	TO BE SAVED	HAZARD / DISEASED
#1	PINE	15"	YES	NO
#2	YP	12"	YES	NO
#3	DH	12"	YES	NO
#4	PINE	12"	YES	NO
#5	K	12"	YES	NO
#6	DH	12"	YES	NO
#7	YP	24"	YES	NO
#8	DH	12"	YES	NO
#9	YP	29"	YES	NO
#10	YP	24"	YES	NO
#11	DH	12"	YES	NO
#12	DH	12"	YES	NO
#13	DH	12"	YES	NO
#14	HK	12"	YES	NO
#15	HK	12"	YES	NO
#16	AB	12"	YES	NO
#17	OAK	12"	YES	NO
#18	DH	12"	YES	NO
#19	HK	18"	YES	NO
#20	HK	12"	YES	NO
#21	OAK	18"	YES	NO
#22	SW	10"	YES	NO
#23	HK	12"	YES	NO
#24	OAK	12"	YES	NO
#25	HK	10"	YES	NO
#26	HK	15"	YES	NO
#27	OAK	36"	YES	NO
#28	HK	12"	YES	NO
#29	BW	18"	YES	NO
#30	HK	12"	YES	NO
#31	HK	18"	YES	NO



SEE SHEET L1 FOR TREE
PRESERVATION AND REMOVAL
NOTES

TREE ABBREVIATIONS

DH	DECIDUOUS HOLLY
DECID	UNKNOWN DECIDUOUS
YP	YELLOW POPLAR
BC	BLACK CHERRY
CO	CHESTNUT OAK
CE	CEDAR ELM
SW	SOURWOOD
HK	HACKBERRY
PER	PERSIMMON
BW	BLACK WALNUT
AB	AMERICAN BEECH

TREE PRESERVATION AND REMOVAL LEGEND

---	RIGHT OF WAY	
	EXISTING TREE	
CF	TREE PROTECTION FENCING	1/19
	TREES TO BE REMOVED	
---	EXISTING PROPERTY LINE	
---	LIMIT OF DISTURBANCE	
---	25' BOUNDARY	
	SINKHOLE BUFFER	



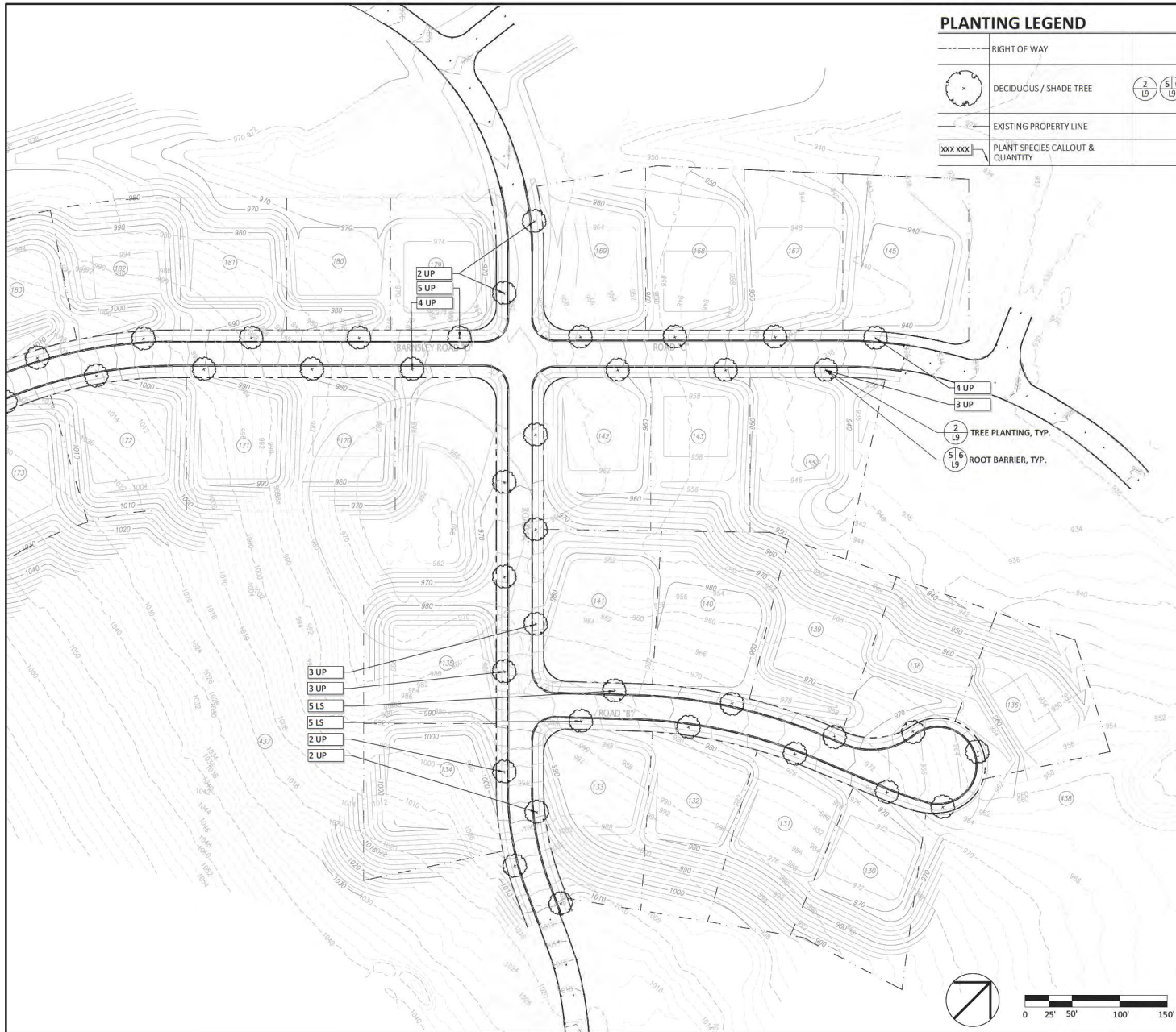
PRELIMINARY PLAT
PHASE 3B & 4
BRIDGEMORE SUBDIVISION
BARNESLEY ROAD
KNOXVILLE, TENNESSEE 37922

PLACEMAKERS NO. 2 PARTNERSHIP
11800 KINGSTON PINE
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CONTACT: MS. SUE LASH
TELEPHONE NO.: 865.777.9191

TREE PRESERVATION AND REMOVAL PLAN

PROJ. NO.	CLB	REVISION #1	REVISION #2	DATE	REVISION/ISSUE	DATE
250-009						
Project	Sheet					
Date						
Scale						

L4



PLANTING NOTES:

1. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN THE FIELD AND REPORT DISCREPANCIES TO THE OWNER'S REPRESENTATIVE OR LANDSCAPE ARCHITECT PRIOR TO STARTING WORK.
2. ALL NEW PLANT MATERIAL SHALL CONFORM TO THE MINIMUM GUIDELINES ESTABLISHED WITHIN THE AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION, PUBLISHED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION (ANSI Z-60.1).
3. ALL NEW PLANTS SHALL BE CONTAINER GROWN OR BALLED AND BURLAPPED UNLESS OTHERWISE NOTED ON PLANT SCHEDULE.
4. THE CONTRACTOR SHALL SUPPLY ALL NEW PLANT MATERIAL IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTING SHOWN ON THE DRAWINGS.
5. QUANTITIES SHOWN IN THE PLANT SCHEDULE ARE TO BE PROVIDED. THE CONTRACTOR SHALL VERIFY AND SHALL BE RESPONSIBLE FOR PROVIDING THE PLANT QUANTITIES LISTED IN THE PLANT SCHEDULE. THESE QUANTITIES REPRESENT A MINIMUM OF PLANTS REQUIRED TO MEET CODE REQUIREMENTS ON SITE.
6. ALL NEW TREES SHALL BE TAGGED AND APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
7. NO TREES SHALL BE PLANTED BEFORE ACCEPTANCE OF ROUGH GRADING. TREES SHALL BEAR SAME RELATIONSHIP TO FINISH GRADE AS THEY BORE TO PREVIOUS GRADE. SEE TREE PLANTING DETAIL.
8. STAKE LOCATION OF ALL PROPOSED TREES, PLANTS, & PLANT BED EDGES FOR APPROVAL BY THE OWNER'S REPRESENTATIVE PRIOR TO THE COMMENCEMENT OF PLANTING.
9. ALL EXISTING TREES TO REMAIN SHALL BE PROPERLY PROTECTED, PRUNED AND FERTILIZED PER THE SPECIFICATIONS.
10. ALL LAWN AREAS DISTURBED BY CONSTRUCTION OPERATIONS INSIDE AND OUTSIDE THE LIMIT OF WORK SHALL RECEIVE FOUR INCHES (4") TOPSOIL AND SEED AS SPECIFIED.
11. ALL TREE QUANTITIES SHALL REMAIN CONSISTENT THROUGHOUT THE INSTALLATION PROCESS. IF A TREE LOCATION CONFLICTS WITH ADDITIONAL DESIGN ELEMENTS THAT TREE MAY BE RELOCATED. NO PROPOSED TREES SHALL BE REMOVED FROM THE SITE SO AS TO ADEQUATELY MEET CODE REQUIREMENTS.
12. THE CONTRACTOR SHALL LOCATE AND VERIFY ALL EXISTING UTILITY LINES PRIOR TO PLANTING AND REPORT ANY CONFLICTS TO THE OWNER'S REPRESENTATIVE OR LANDSCAPE ARCHITECT.
13. PLANTS MAY NEED TO BE SHIFTED IN THE FIELD BASED ON EXISTING CONDITIONS. COORDINATE WITH THE OWNER'S REPRESENTATIVE OR LANDSCAPE ARCHITECT PRIOR TO ANY CHANGES.
14. ANY PROPOSED SUBSTITUTIONS OF PLANT SPECIES SHALL BE MADE WITH PLANTS OF EQUIVALENT OVERALL FORM, HEIGHT, AND BRANCHING HABIT ONLY AS APPROVED BY THE OWNER'S REPRESENTATIVE.
15. CONTRACTOR TO COMPLETE WORK WITHIN SCHEDULE ESTABLISHED BY OWNER.
16. CONTRACTOR TO PROVIDE ONE YEAR WARRANTY FOR ALL MATERIALS FROM DATE OF SUBSTANTIAL COMPLETION. CONTRACTOR TO PROVIDE INTERIM MAINTENANCE (WATERING, PRUNING, FERTILIZING, GUYING, MOWING, TRIMMING, ADEQUATE DRAINAGE OF PONDING AREAS, EDGING, WEEDING, MULCHING, AND GENERAL LANDSCAPE CLEAN-UP) UNTIL SUBSTANTIAL COMPLETION NOTICE IS PROVIDED BY THE OWNER'S REPRESENTATIVE. APPLICATION OF INSECTICIDES/HERBICIDES MUST BE APPROVED BY OWNER'S REPRESENTATIVE OR LANDSCAPE ARCHITECT PRIOR TO USE ON SITE.
17. SEE CIVIL DRAWINGS FOR FURTHER INFORMATION REGARDING:
 - EROSION AND SEDIMENT CONTROL
 - LOCATIONS OF EXISTING AND PROPOSED STRUCTURES, PAVING, DRIVEWAYS, CUT AND FILL AREAS, AND RETENTION AREAS, LIMITS OF CONSTRUCTION
 - LOCATIONS OF EXISTING AND PROPOSED UTILITIES OR EASEMENTS
18. ALL AREAS TO BE SEEDED SHALL RECEIVE SOIL PREPARATION AS SPECIFIED PRIOR TO SEEDING, UNLESS OTHERWISE NOTED ON PLAN.
19. PREPARE ALL PLANTING STRIPS WITH PLANTING SOIL TO A MINIMUM DEPTH MATCHING THE DEPTH OF ROOT BALLS. PLANTING SOIL SHALL BE CONTINUOUS THROUGHOUT ENTIRE PLANTING STRIP.
20. ALL TREE PROTECTION FENCING SHALL BE TDOT HIGH VISIBILITY CONSTRUCTION FENCE (707.0811). REFER TO TDOT STANDARD DRAWING S-F-1.
21. STREET TREES TO BE PLANTED IN THE LANDSCAPE STRIP EQUIDISTANT FROM BACK OF CURB AND SIDEWALK.
22. ALL TREE SPACING IS ROUGHLY 100'-0". IDENTIFY UTILITIES AND ADDITIONAL DESIGN ELEMENTS PRIOR TO PLANTING TO AVOID CONFLICTS.

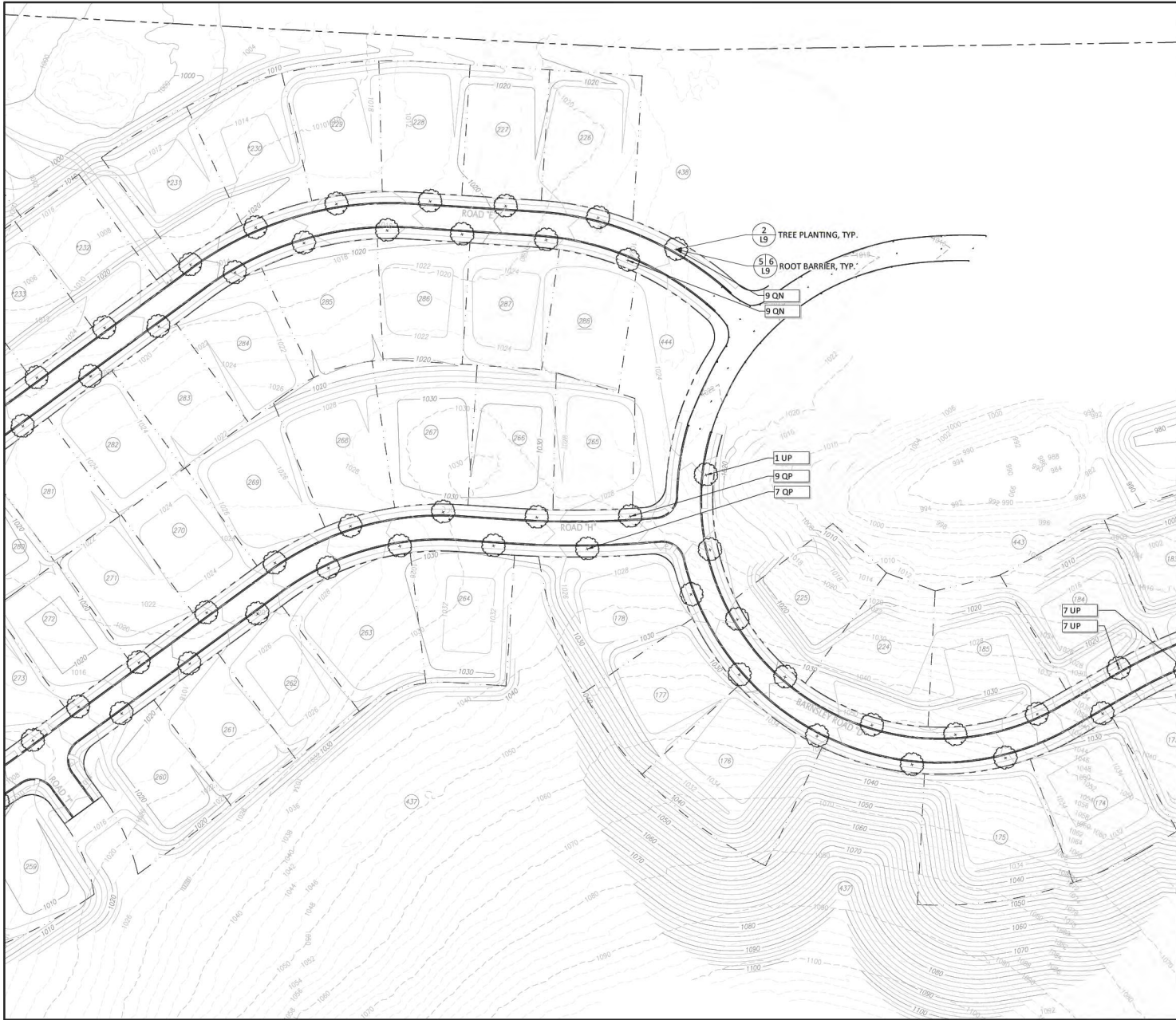


PRELIMINARY PLAT
PHASE 3B & 4
BRIDGEMORE SUBDIVISION
BARNESLEY ROAD
KNOXVILLE, TENNESSEE 37922

PLACEMAKERS NO. 2 PARTNERSHIP
11800 KINGSTON PIKE
KNOXVILLE, TN 37934
CONTACT: MS. SUE LASH
TELEPHONE NO.: 865.777.9191

PLANTING PLAN

PROJ. NO.	CLB	DESIGNED BY	DATE
250-009	250-009	250-009	250-009
PROJECT	SHEET	REVISION/ISSUE	DATE
250-009	15		
12/06/22			
Scale	1"=50'		



SEE SHEET L5 FOR PLANTING NOTES

PLANTING LEGEND

	RIGHT OF WAY	
	DECIDUOUS / SHADE TREE	2 L9 5 L9 6 L9
	EXISTING PROPERTY LINE	
	PLANT SPECIES CALLOUT & QUANTITY	



**PRELIMINARY PLAT
PHASE 3B & 4
BRIDGEMORE SUBDIVISION
BARNESLEY ROAD
KNOXVILLE, TENNESSEE 37922**

**PLACEMAKERS NO. 2 PARTNERSHIP
11800 KINGSTON PIKE
KNOXVILLE, TN 37934
CONTACT: MS. SUE LASH
TELEPHONE NO.: 865.777.9191**

PLANTING PLAN

NO.	DATE	CLB	DESIGNED BY	DRAWN BY	DATE
1	12/05/22	15-1-13	15-1-13	15-1-13	15-1-13
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SEE SHEET L5 FOR PLANTING
NOTES

PLANTING LEGEND

	RIGHT OF WAY	
	DECIDUOUS / SHADE TREE	
	EXISTING PROPERTY LINE	
	PLANT SPECIES CALLOUT & QUANTITY	



PRELIMINARY PLAT
PHASE 3B & 4
BRIDGEMORE SUBDIVISION
BARNESLEY ROAD
KNOXVILLE, TENNESSEE 37922

PLACEMAKERS NO. 2 PARTNERSHIP
11800 KINGSTON PIKE
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CONTACT: MS. SUE LASH
TELEPHONE NO.: 865.777.9191

PLANTING PLAN

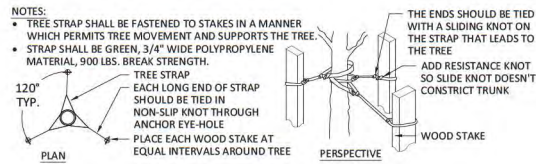
PROJ. NO.	SECTION #	CLB	SECTION #	DATE	NO.	REVISION / ISSUE	DATE
250.009	1	1	1	12/06/22	1		

L7



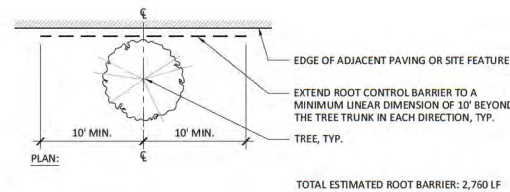
PLANT SCHEDULE

QTY	ZONE	ABBREV.	SCIENTIFIC NAME	COMMON NAME	MIN. SIZE	SPACING	NOTES
DECIDUOUS SHADE TREES							
10	LS		<i>Liquidambar styraciflua</i> 'Rotundiloba'	Sweet Gum	2" CAL.	SEE PLANTING PLAN	B&B; STRONG CENTRAL LEADER
37	QL		<i>Quercus lyrata</i> 'Highbeam'	Highbeam Overcup Oak	2" CAL.		
25	QN		<i>Quercus nuttallii</i> 'Highpoint'	Highpoint Nuttall Oak	2" CAL.		
23	QP		<i>Quercus phellos</i> 'Kingpin'	Kingpin Willow Oak	2" CAL.		
43	UP		<i>Ulmus parvifolia</i> 'Emer II'	Chinese Allee Elm	2" CAL.		
138	TOTAL						



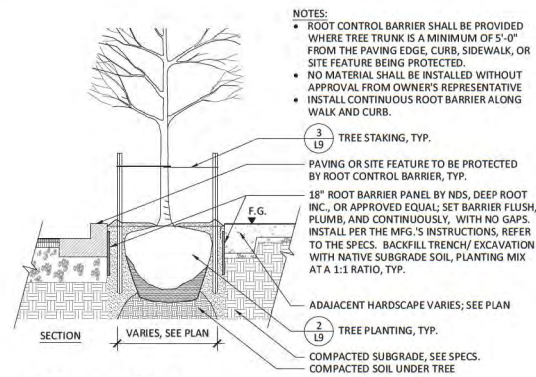
4 TREE STRAPPING, TYP.

N.T.S.



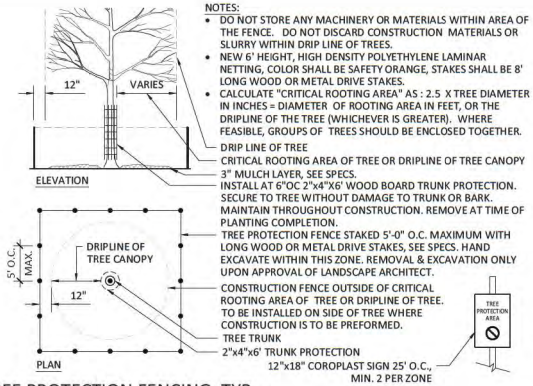
5 ROOT BARRIER - PLAN

N.T.S.



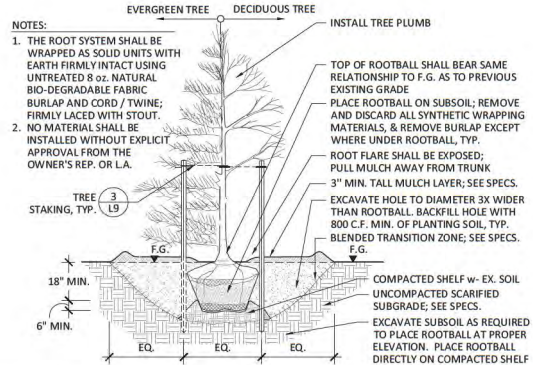
6 ROOT BARRIER - SECTION

N.T.S.



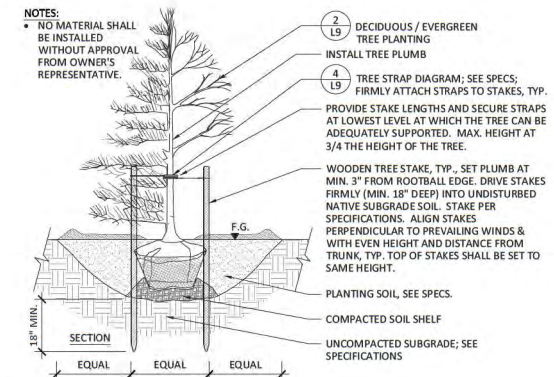
1 TREE PROTECTION FENCING, TYP.

N.T.S.



2 TREE PLANTING, TYP.

N.T.S.



3 TREE STAKING, TYP.

N.T.S.



PRELIMINARY PLAT
PHASE 3B & 4
BRIDGEMORE SUBDIVISION
BARNESLEY ROAD
KNOXVILLE, TENNESSEE 37922

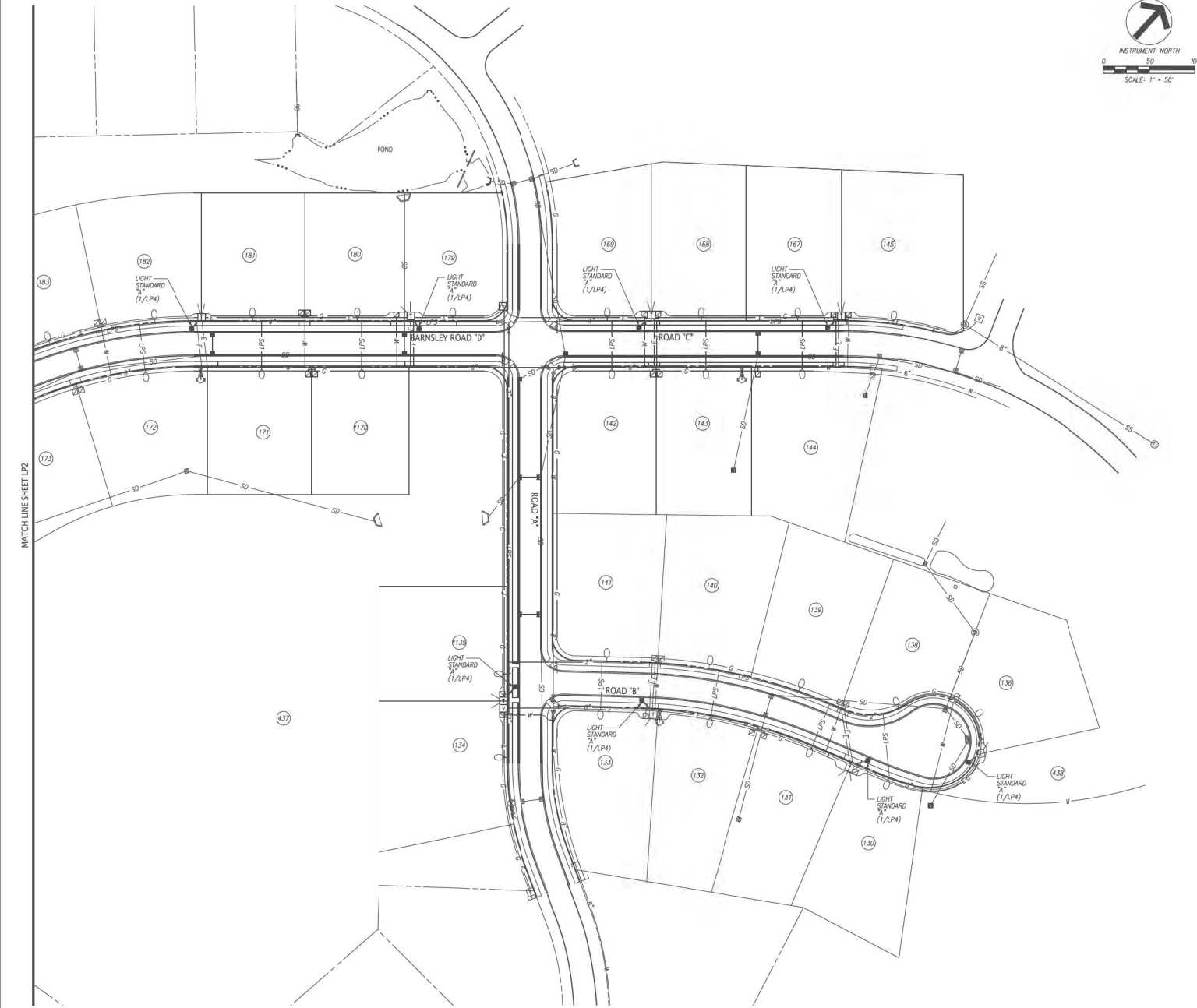
PLACEMAKERS NO. 2 PARTNERSHIP
11800 KINGSTON PIKE
KNOXVILLE, TN 37934
CONTACT: MS. SUE LASH
TELEPHONE NO.: 865.777.9191

PLANTING DETAILS

NO.	DATE	BY	CHKD BY	DATE	BY	CHKD BY	DATE
1	12/06/22	12/06/22	12/06/22	12/06/22	12/06/22	12/06/22	12/06/22
2	12/06/22	12/06/22	12/06/22	12/06/22	12/06/22	12/06/22	12/06/22
3	12/06/22	12/06/22	12/06/22	12/06/22	12/06/22	12/06/22	12/06/22
4	12/06/22	12/06/22	12/06/22	12/06/22	12/06/22	12/06/22	12/06/22
5	12/06/22	12/06/22	12/06/22	12/06/22	12/06/22	12/06/22	12/06/22
6	12/06/22	12/06/22	12/06/22	12/06/22	12/06/22	12/06/22	12/06/22
7	12/06/22	12/06/22	12/06/22	12/06/22	12/06/22	12/06/22	12/06/22
8	12/06/22	12/06/22	12/06/22	12/06/22	12/06/22	12/06/22	12/06/22
9	12/06/22	12/06/22	12/06/22	12/06/22	12/06/22	12/06/22	12/06/22
10	12/06/22	12/06/22	12/06/22	12/06/22	12/06/22	12/06/22	12/06/22

Project: 250-009
Date: 12/06/22
Scale: 1"=50'

L9



- LIGHTING NOTES:**
1. MAXIMUM VOLTAGE DROP SHALL BE LIMITED TO 5%.
 2. WORK SHALL CONFORM TO NATIONAL, STATE, AND LOCAL CODES. WHERE A CONFLICT EXISTS BETWEEN APPLICABLE CODES, CONTACT THE AUTHORITY HAVING JURISDICTION FOR CLARIFICATION.
 3. ELECTRICAL CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS & FEES RELATIVE TO THE INSTALLATION OF HIS OR HER WORK.
 4. CONTRACTOR SHALL FURNISH AND INSTALL SPECIFIED EQUIPMENT OR APPROVED EQUAL. APPROVED EQUIPMENT SUCH AS JUNCTION BOXES, HANGERS, OR FITTINGS MAY BE REQUIRED FOR A COMPLETE AND WORKING ELECTRICAL SYSTEM. WHETHER OR NOT SUCH EQUIPMENT IS INDICATED ON THE DRAWINGS, CONTRACTOR SHALL PROVIDE MATERIAL, LABOR, AND EQUIPMENT REQUIRED FOR A COMPLETE AND WORKING INSTALLATION.
 5. LOCATE JUNCTION BOXES, TRANSFORMERS, VAULTS, ETC. OUTSIDE OF PAVED AREAS EXCEPT WHERE OTHERWISE NOTED.
 6. SECONDARY ELECTRICAL EQUIPMENT AND CONNECTIONS SHALL BE UNDERWRITER'S LABORATORY (UL) LISTED AND LABELED.
 7. ELECTRICAL CONDUCTORS SHALL BE TYPE THWN-2 OR APPROVED EQUAL EXCEPT WHERE OTHERWISE NOTED.
 8. UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 PVC EXCEPT WHERE OTHERWISE NOTED. EXPOSED CONDUIT, SUCH AS RISERS, SHALL BE SCH 80 PVC OR RGS THAT EXTENDS A MINIMUM OF 18 INCHES BELOW GRADE.
 9. THE LOCATIONS OF THE EXISTING UTILITIES SHOWN ON THESE DRAWINGS ARE APPROXIMATE. THE EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD BY POT-HOLING AND BY CONTACTING THE UTILITY COMPANIES INVOLVED.
 10. PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD THE EXISTING UTILITIES FROM DAMAGE DURING THE CONSTRUCTION OF THIS PROJECT. FURNISH ANY SPECIAL EQUIPMENT REQUIRED TO WORK OVER AND AROUND THE UTILITIES.
 11. PRIOR TO COMMENCING WORK THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS TO NOTIFY THEM OF WORK IN THE AREA AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY. NOTIFICATION SHALL BE GIVEN AT LEAST THREE BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY.
 12. UTILITIES CAN BE LOCATED BY CALLING THE TENNESSEE ONE CALL SYSTEM, AT 1-800-351-1111.
 13. TRENCH DESIGN AND SAFETY FOR PIPELINE CONSTRUCTION IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL CONFORM WITH ALL APPLICABLE LOCAL, STATE, AND OSHA REGULATIONS.
 14. UTILITIES SHALL BE INSTALLED AFTER GRADING IS COMPLETED AND APPROVED AND BEFORE ANY PAVEMENT IS INSTALLED.
 15. ADEQUATE DRAINAGE, EROSION, AND SEDIMENT CONTROL MEASURES, BEST MANAGEMENT PRACTICES, AND/OR OTHER STORMWATER MANAGEMENT FACILITIES SHALL BE PROVIDED AND MAINTAINED AT ALL TIMES DURING CONSTRUCTION. DAMAGES TO ADJACENT PROPERTY AND/OR THE CONSTRUCTION SITE CAUSED BY THE CONTRACTOR'S FAILURE TO MAINTAIN ADEQUATE DRAINAGE AND EROSION/SEDIMENT CONTROL FOR THE CONSTRUCTION AREA SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
 16. REFERENCE SHEET C22 FOR STORM NOTES.
 17. REFERENCE SHEET C26 FOR WATER NOTES.
 18. REFERENCE SHEET C32 FOR SANITARY SEWER NOTES.
 19. REFERENCE SHEET C26 FOR UTILITY OWNER INFORMATION.
 20. REFERENCE SHEET C46 FOR CONDUIT NOTES.

LEGEND:

■ PROPOSED LIGHT POLE
--- PROPOSED LIGHT CONDUIT



MATCH LINE SHEET 1P2



PRELIMINARY PLAT
PHASE 3B & 4
BRIDGEMORE SUBDIVISION
BARNESLEY ROAD
KNOXVILLE, TENNESSEE 37922

PLACEMAKERS NO. 2 PARTNERSHIP
11800 KINGSTON PIKE
KNOXVILLE, TN 37934
CONTACT: MS. SUSIE LASH
TELEPHONE NO.: 865.777.9191

LIGHTING PLAN

Project	250.009	Sheet	LP3
Date	10/11/21		
Scale	1"=50'		
PROJ. MGR.	DESIGNED BY	DRAWN BY	DATE
	10/11/21	10/11/21	10/26/22
			REVISED PER LAYOUT & CONDUIT CHANGES
			ISSUED FOR CONSTRUCTION
			10/11/21

Sec. 107-68. - General requirements.

- (1) *Placing substances and objects in sinkholes.* No person shall place or cause to be placed any substances or objects, other than stormwater runoff, in any sinkhole or sinkhole drainage area in such a way so as to allow such substances or objects to be washed into a sinkhole or sinkhole throat during storm events.
- (2) *Filling or obstructing sinkhole drainage outlets and springs.* No person shall fill or obstruct the drainage outlet from a sinkhole or system of sinkholes; or fill over a sinkhole outlet, spring, or cave opening without approval from the State of Tennessee Department of Environment and Conservation Division of Water Supply and Division of Water Pollution and the Town of Farragut.
- (3) *Filling sinkholes.* Except as provided below, no fill shall be placed, and no construction shall occur below a sinkhole's lip elevation. Identified sinkholes should be avoided by design and separated from construction activities, except as provided for in this article (Sinkhole Ordinance).

 The limited filling of sinkholes may be permitted by the town upon a finding that:

- a) The avoidance of a sinkhole is clearly not possible given existing conditions, for example when widening an existing collector or arterial street. The town's staff may seek additional review and approval from the planning commission and the stormwater advisory committee whenever they determine that the circumstances warrant.
- b) A sinkhole is identified during or after approved site construction activities, the town determines that it was not reasonably identifiable prior to construction using standard practices, and development activities have progressed to the point that redesigning to avoid filling the sinkhole is shown to be impracticable and fully documented by the developer. The town's staff may seek additional review and approval from the planning commission and the stormwater advisory committee whenever they determine that the circumstances warrant.
- c) The planning commission has determined that such fill and construction is appropriate to advance a competing and adopted public policy, plan, or ordinance; is related and proportional to the public interests involved; and avoidance of the sinkhole is not reasonable given the specifics of the site and surrounding area. For example, the planning commission may permit the limited filling of a sinkhole area to facilitate the construction of a critical walkway extension to further the town's adopted connectivity goals.

In all cases where fill or construction is permitted below the sinkhole lip elevation the following shall apply:

- a) Any permitted fill and construction shall be limited to the minimum necessary to carry out the project.
- b) The town may require a developer to prepare alternative designs that avoid the sinkhole and evaluate their feasibility.

- c) A study and sinkhole management plan shall be prepared by a state-licensed geotechnical engineer to ensure the structural stability of the proposed fill and/or construction area. The plan and study shall identify all tests that will be completed to determine subsurface conditions. It shall also include recommended mitigation actions that shall be implemented.
 - d) All sinkhole related plans and activities shall be coordinated with the Tennessee Department of Environment and Conservation. All required state or other permits shall be obtained prior to approval by the town.
 - e) All related plans, studies, and permits shall be reviewed by the town's engineer and other applicable staff prior to any filling or construction within a sinkhole. The town may further impose appropriate additional conditions and restrictions intended to mitigate impacts related to any such permitted fill or construction.
- (4) *Stormwater runoff into sinkholes.* All persons draining stormwater runoff into sinkholes shall coordinate with the State of Tennessee Department of Environment and Conservation Division of Water Supply and Division of Water Pollution to ensure appropriate compliance with applicable provisions. Every effort shall be made to prevent changes in the volume and rate of runoff into sinkholes from preconstruction levels to post construction levels. Copies of approved permits and any pertinent site-specific provisions shall be submitted to the town prior to the issuance of a grading permit.
- (5) *Disturbance in sinkhole drainage areas.* The immediate area around a sinkhole shall be disturbed as little as possible. Adequate sediment and erosion control measures shall be put in place prior to any disturbance. The use of mechanized grading equipment near the sinkhole throat shall be avoided. All use of explosives shall be in compliance with the state fire marshal's office, and shall be avoided whenever possible. The underground system of caves and streams is dynamic and explosions in the vicinity can alter or block underground drainage passage ways.
-  (6) *Building construction in sinkhole areas and sinkhole drainage areas.* Sinkhole areas are known to be unstable for construction. Structures placed on soil foundations in sinkhole areas may be subject to both settling and collapse of the sinkhole. Uncontrolled fill placement may present additional settlement hazards. Mitigation of these possible undesirable consequences shall, at a minimum, be addressed as follows:

All buildings shall be set back a minimum of 50 feet from the sinkhole lip elevation unless at the time of sinkhole identification and determination during the platting or site planning process the Farragut Municipal Planning Commission finds:

- (a) That the applicant provides sufficient and proper evidence for the Farragut Municipal Planning Commission to determine that there is no danger other than that which would normally be encountered in the construction of a similar building in other areas;
- (b)

That the drainage function of the sinkhole will not be compromised by the construction within said 50 foot line;

(c) That there will be no hazard to groundwater; and

(d) That the applicant has obtained all necessary permits necessary from the Tennessee Department of Environment and Conservation.

As part of the evaluation involving (a) thru (d) above, the planning commission may require the submittal of all necessary engineering and scientific studies to document any findings or determinations made under this subsection. Including but not limited to geotechnical analysis, structural engineering reports, and drainage or flood studies.

A structural engineer must approve all building foundations constructed within sinkhole areas; except where the planning commission has reduced the required building setback in accordance with this subsection (subsection 6).

The sinkhole elevation, the sinkhole lip elevation, and the minimum building setback from the sinkhole lip elevation shall be indicated on all preliminary plats, final plats and site plans.

The finished floor elevation (FFE) of any habitable structure located within a sinkhole drainage area or a sinkhole area, as defined by this article, shall be at least one foot above the sinkhole floodplain (lip) elevation; except within any portion of a sinkhole area that does not also fall within the drainage area (i.e. where a building site is located downslope and below the sinkhole). In such areas, the FFE shall be at least one foot above the highest adjacent grade. Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall also be located in accordance with this elevation standard. The sinkhole floodplain elevation and corresponding FFE (minimum floor elevation MFE) shall be indicated on all preliminary plats, final plats, and site plans; along with a corresponding explanatory note. Verification of this elevation must be submitted to the town.

- (7) *Easements.* When appropriate, sinkholes shall be designated as drainage easements on all preliminary and final plats. All sinkholes, whether designated as a drainage easement or not, shall be identified on preliminary and final plats. If feasible, sinkholes shall be placed on community open space land.

(Ord. No. 17-15, § 1, 11-9-2017)

REPORT TO THE FARRAGUT MUNICIPAL PLANNING COMMISSION

PREPARED BY: Mark Shipley, Community Development Director

SUBJECT: Discussion and public hearing on a site plan for a new fieldhouse and athletic field improvements at First Baptist Church of Concord, 11704 Kingston Pike, Zoned R-3 and R-1-S-A (Izic Jeffers - MBI Companies, Applicant)

INTRODUCTION AND BACKGROUND: This item involves a request from First Baptist Church of Concord for athletic field improvements and a new fieldhouse. The area proposed for athletic field improvements is currently being used as athletic fields. The proposal would eliminate the circular turn around at the south end of the parking lot for the school and a playground and temporary structures to the west of the turn-around. The field improvements would create a more formalized ballfield with dugouts, seating, a press box and a scoreboard. The rectangular field would include some grading in the southwest portion. A scoreboard has recently been installed for this field in the southwest corner after being approved by the Visual Resources Review Board.

The proposed fieldhouse would be situated to the west of the ballfield and to the north of the rectangular field. As proposed, this building would be two-story with each floor being approximately 12,000 square feet. The site plan set, including elevations for the fieldhouse, are included in the packet.

DISCUSSION: This item was discussed at the staff developer meeting on November 29. It was noted that the Church is in two different residential zoning districts with most of the area affected at this time being zoned R-1-S-A, which is the same district as the Belleaire Subdivision. A few residents spoke regarding the site plan being presented at this time. Some of the concerns were regarding increased noise, lighting, and stray balls impacting motorists and pedestrians along Belleaire Drive. An additional concern was whether these improvements would create more field activity and more traffic into the campus and how this may affect existing accesses.

RECOMMENDATION: Initial staff comments and applicant responses are included in the packet along with the revised plans. Staff will provide recommendations based on a review of the revisions.

NEW FIELDHOUSE AND ATHLETIC FIELD IMPROVEMENTS

11704 KINGSTON PIKE
KNOXVILLE, TN 37934

PROJECT INFORMATION:

OWNER
NAME: FIRST BAPTIST CHURCH CONCORD
CONTACT: BLAKE HENRY
ADDRESS: 11704 KINGSTON PIKE
KNOXVILLE, TN 37934
PHONE: (865) 966-9793

PROPERTY DATA
ADDRESS: 11704 KINGSTON PIKE
KNOXVILLE, TN 37934

MAP: 142
PARCEL ID: 142N000901
ZONING: R-3 & R-1-S-A

VERTICAL DATUM: NAVD 88

SETBACKS: 50' FRONT
50' REAR
50' SIDE

LIST OF DRAWINGS:

GENERAL
S000 - COVER SHEET

SURVEY
S0101 - SITE SURVEY
S0102 - SITE SURVEY

GENERAL
C001 - CIVIL NOTES & LEGENDS
C002 - OVERALL SITE PLAN

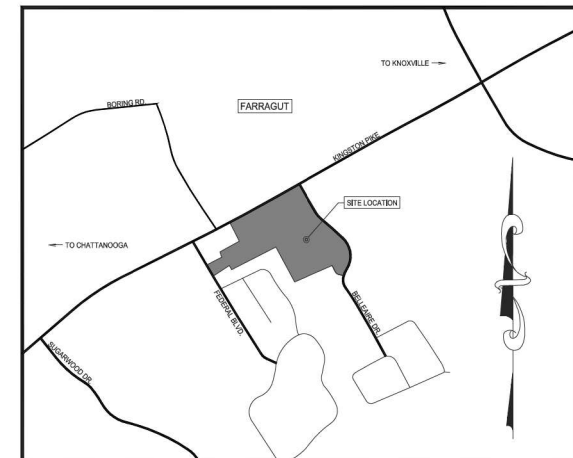
CIVIL AND SITE ENGINEERING
C100 - PHASE 1 EROSION PREVENTION & SEDIMENT CONTROL PLAN
C101 - PHASE 2 EROSION PREVENTION & SEDIMENT CONTROL PLAN
C102 - PHASE 3 EROSION PREVENTION & SEDIMENT CONTROL PLAN
C200 - SITE DEMOLITION PLAN
C300 - SITE LAYOUT PLAN
C301 - BASEBALL & SOFTBALL FIELD LAYOUT PLAN
C400 - SITE GRADING PLAN
C500 - SITE DRAINAGE PLAN
C600 - SITE UTILITY PLAN
C800 - CIVIL DETAILS
C801 - CIVIL DETAILS

LANDSCAPING
L100 - LANDSCAPING PLAN

ARCHITECTURAL
A101 - FIRST FLOOR PLAN
A102 - SECOND FLOOR PLAN
A201 - EXTERIOR ELEVATIONS
A202 - EXTERIOR MATERIALS

NUMBER OF SHEETS: 21 TOTAL

VICINITY MAP:



MBI

ENGINEER

MBI COMPANY INC.
200 N. WOODBURN ROAD
KNOXVILLE, TN 37919

PHONE: (865) 594-0000

FAX: (865) 594-0215

YES: (865) 594-0000

CONSULTANT

SEAL



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PROJECT INFORMATION

PROJECT:

NEW FIELDHOUSE
AND ATHLETIC
FIELD IMPROVEMENTS

PROJECT ADDRESS:

11704 KINGSTON PIKE
KNOXVILLE, TN 37934

PROJECT NO.: 21040

ACTIVE DESIGN PHASE

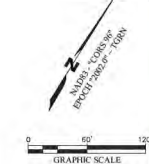
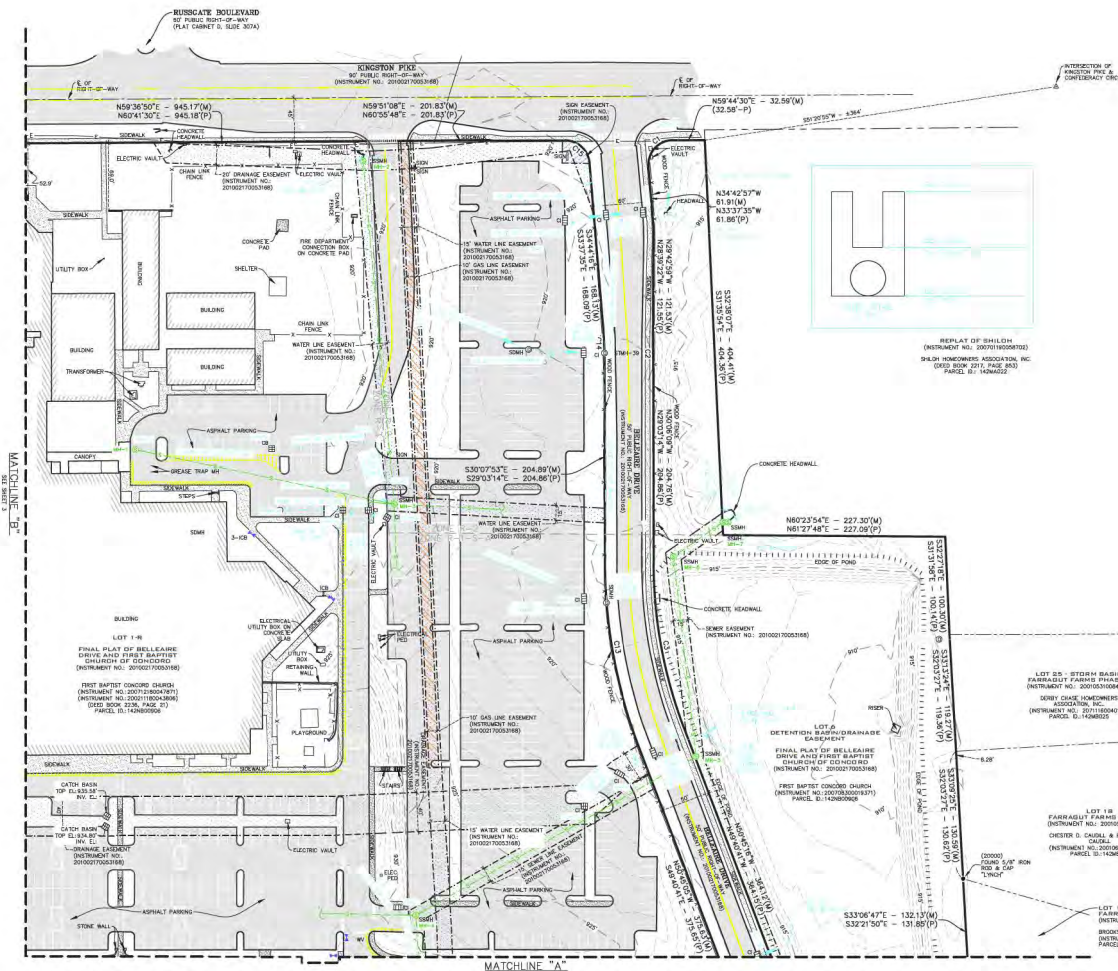
☐ FOR REVIEW ONLY
☐ FOR PERMITTING ONLY
☐ SCHEMATIC DESIGN
☐ DESIGN DEVELOPMENT
☐ CONSTRUCTION DOCUMENTS
☐ AS-BUILT RECORD SET

REVISION INFORMATION

NO. DATE DESCRIPTION

1 1/20/2022 TOWN OF FARRAGUT COMMENTS

PHASE I PRELIMINARY



SURVEYOR'S NOTES

1. BEARINGS SHOWN HEREON ARE REDUCED TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), CORP 1986, EPOCH 2000.0, TENNESSEE STATE PLANE COORDINATE SYSTEM, ZONE 440, TENNESSEE GEODETIC REFERENCE NETWORK AND FURTHER REFERENCED TO THE TENNESSEE DEPARTMENT OF TRANSPORTATION VIRTUAL REFERENCE NETWORK.
2. ALL DISTANCES SHOWN HEREON ARE HORIZONTAL, GROUND DISTANCES AND ARE MEASURED IN U.S. SURVEY FEET. THE COMBINED SCALE FACTOR FOR THIS PROJECT IS 0.9999950478.
3. GLOBAL POSITIONAL DATA (REAL-TIME KINEMATIC (RTK) GPS) WAS OBSERVED ON JUNE 14, 2021, UTILIZING A TRIMBLE RIN 960, FREQUENCY RECEIVER. THE POSITIONAL ACCURACY OF THE GPS SURVEY CONTROL SET TO PERFORM THIS SURVEY DOES NOT EXCEED 0.07 FEET HORIZONTALLY.
4. FIXED CONTROL STATIONS ARE LISTED AS FOLLOWS:
A. T001 DISTRICT 1A HELLSPRING STATE COMMUNITY COLLEGE CORP 86, LATITUDE N35°46'53.5176", LONGITUDE W84°10'00.37632"
5. THE SURVEY SHOWN HEREON WAS REVIEWED BY THE CERTIFYING SURVEYOR IN THE OFFICE ON THE FOLLOWING DATE: JULY 8, 2021. THE FIELD WORK WAS COMPLETED ON JULY 2, 2021.
6. ALL ABOVE GROUND IMPROVEMENTS AND UTILITIES WITHIN 5 FEET OF ALL PROPERTY LINES HAVE BEEN LOCATED AND ARE SHOWN HEREON. THERE HAS BEEN NO ATTEMPT TO LOCATE ANY UNDERGROUND UTILITIES OR IMPROVEMENTS. UNDERGROUND UTILITIES SHOWN WERE FROM ACTUAL FIELD EVIDENCE. OTHER UTILITIES MAY EXIST AND NOT BE SHOWN OR VARY FROM WHERE SHOWN. NO GUARANTEE IS EXPRESSED OR IMPLIED AS TO THE ACTUAL LOCATION OF ANY UTILITIES SHOWN, WHICH ARE NOT NOSE FROM THE SURFACE.
7. THE SURVEY SHOWN HEREON WAS COMPLETED WITHOUT THE BENEFIT OF A TITLE COMMITMENT OR TITLE SEARCH. ALL PROPERTY AND USED INFORMATION WAS PROVIDED BY THE CLIENT. PROPERTY MAY BE SUBJECT TO EASEMENTS, RIGHT-OF-WAYS, OR OTHER ENCUMBRANCES NOT SHOWN IN THE DEEDS OF RECORD.
8. SOURCES OF INFORMATION USED TO FACILITATE THIS SURVEY WERE PREVIOUS SURVEYS BY THIS FIRM, SURVEYS BY OTHER FIRMS AND INFORMATION FURNISHED BY CLIENT. NO TITLE SEARCH, TITLE OPINION OR ABSTRACT WAS PERFORMED BY THIS FIRM. THERE MAY BE DEEDS OF RECORD, UNRECORDED DEEDS, EASEMENTS, RIGHT-OF-WAYS OR OTHER INSTRUMENTS OF RECORD WHICH COULD AFFECT THE BOUNDARIES OF THIS PROPERTY THAT WERE NOT FURNISHED AT THE TIME OF SURVEY.
9. THE PROPERTY SHOWN HEREON IS LOCATED IN FLOOD ZONE "X" ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP FOR KNOX COUNTY, TENNESSEE AND INCORPORATED AREAS. THIS MAP IS DESIGNATED AS MAP NUMBER 470502002AD WITH AN EFFECTIVE DATE OF AUGUST 5, 2013, AND MAP NUMBER 470502002AD AND HAS AN EFFECTIVE DATE OF MAY 02, 2007.
10. FIVE FOOT UTILITY, DRAINAGE, AND CONSTRUCTION EASEMENT ON EACH SIDE OF INTERIOR LOT LINES, TEN FOOT U.I., D. & C EASEMENT INSIDE ROAD RIGHTS-OF-WAY AND EXTERIOR LOT LINES. (INSTRUMENT NO.: 20100270053168)
11. THE PROPERTY SHOWN HEREON IS ZONED FAR R-3, FAR R-2, & FAR R-1-S-A ACCORDING TO KNOX COUNTY. (BUILDING SETBACKS ARE AS FOLLOWS PER INSTRUMENT NO.: 20100270053168)

ZONE (R-1-S-A)	(CHURCHES) FRONT.....	REAR.....	SIDES.....
ZONE (R-2) <td>(CHURCHES) FRONT.....</td> <td>REAR.....</td> <td>SIDES.....</td>	(CHURCHES) FRONT.....	REAR.....	SIDES.....
ZONE (R-3) <td>(CHURCHES) FRONT.....</td> <td>REAR.....</td> <td>SIDES.....</td>	(CHURCHES) FRONT.....	REAR.....	SIDES.....
12. OWNER INFORMATION AND PROPERTY ADDRESS:
FIRST BAPTIST CHURCH CONCORD
1704 KNOXVILLE PIKE
KNOXVILLE, TENNESSEE 37934
13. THIS SURVEY IS CERTIFIED TO:
FIRST BAPTIST CHURCH CONCORD

SURVEYOR'S CERTIFICATION

(NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL SEAL OF A TENNESSEE LICENSED LAND SURVEYOR)

I HEREBY CERTIFY THAT THE SURVEY OF THE PROPERTY SHOWN HEREON WAS COMPLETED UNDER MY DIRECTION AND SAID SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.
I FURTHER CERTIFY THAT THIS SURVEY MEETS THE MINIMUM TECHNICAL STANDARDS FOR SURVEYS SET FORTH BY THE TENNESSEE STATE BOARD OF EXAMINERS FOR LAND SURVEYORS IN CHAPTER 0820-03-.07(1) AND STANDARDS OF PRACTICE. NO SEARCH OF PUBLIC RECORDS WAS MADE BY THIS OFFICE. THE SURVEY IS BASED ON INFORMATION PROVIDED BY THE CLIENT OR THE CLIENT'S REPRESENTATIVE.
I FURTHER CERTIFY THAT THE SURVEY CONTROL SHOWN AND UTILIZED FOR THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC (RTK) POSITIONING SYSTEMS METHODOLOGY, MEETING RULE 0820-03-.07(1) AND THE CURRENT MINIMUM STANDARD FOR A CATEGORY IV SURVEY.
I FURTHER CERTIFY THAT THE BOUNDARY SURVEYING AND CONVENTIONAL TRANSFERING MEETS THE CURRENT MINIMUM STANDARDS FOR A CATEGORY IV SURVEY. THE RATIO OF PRECISION OF THE UNADJUSTED SURVEY MEETS OR EXCEEDS 1:7,500 AS SHOWN HEREON.

PHASE I PRELIMINARY

JULY 09, 2021
DATE OF SIGNATURE

MICHAEL E. MOORE
TENNESSEE REGISTERED LAND SURVEYOR
CERTIFICATE NO. 2336



9080 Barbee Ln, Ste. 105
Knoxville, TN 37923
Ofc: 865.200.4366
email: info@sam.biz

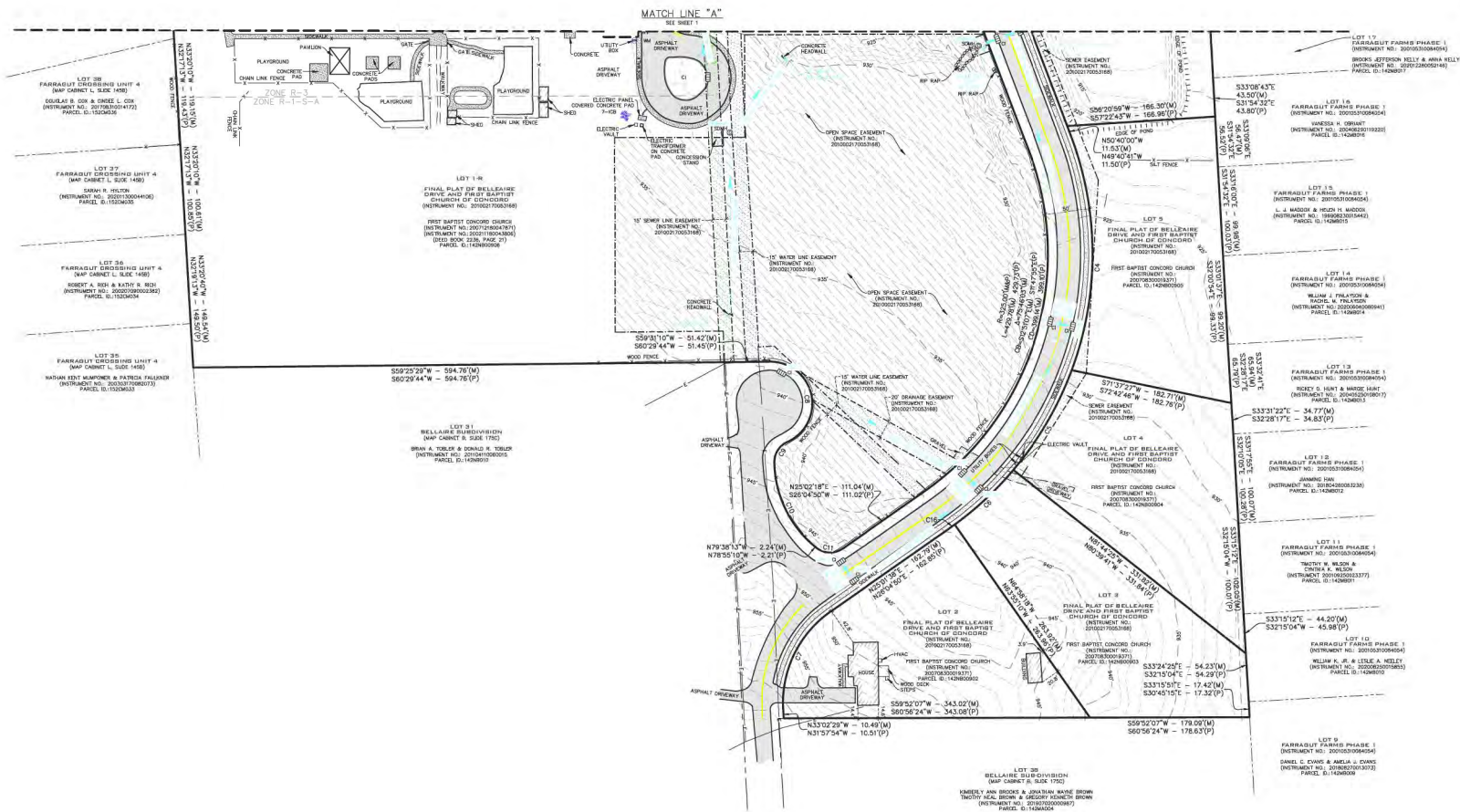
PROJECT: FIRST BAPTIST CHURCH CONCORD
PARTIAL TOPOGRAPHIC SURVEY - PHASE 1

JOB NUMBER: 1021062248
DATE: 7/9/2021
SCALE: 1"=60'
SURVEYOR: M. MOORE
TECHNICIAN: K. VAN CAMPEN
DRAWING: KINGSTON PIKE PARTIAL TOPO SURVEY - PHASE I
PARCEL ID: 142N000901, 00902, 00903, 00904, 00905, 00906
PARTY/CLIENT: T. BISHOP
FIELDBOOKS: FIELD BOOK 35950

Partial Topographic Survey for: First Baptist Church Concord, Phase I
Being Lot 1-R, Lot 2, Lot 3, Lot 4, Lot 5, & Lot 6 ~ The Final Plat of Belleaire Drive and First Baptist Church of Concord ~ Instrument No.: 201002170053168 ~ Being Six Parcels of Land Lying in the 6th Civil District of Knox County, Tennessee & Within the Town of Farragut

SHEET 1
OF 4

PHASE I PRELIMINARY



PHASE I PRELIMINARY



19080 Barbee Ln, Ste. 105
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email: info@sam.biz

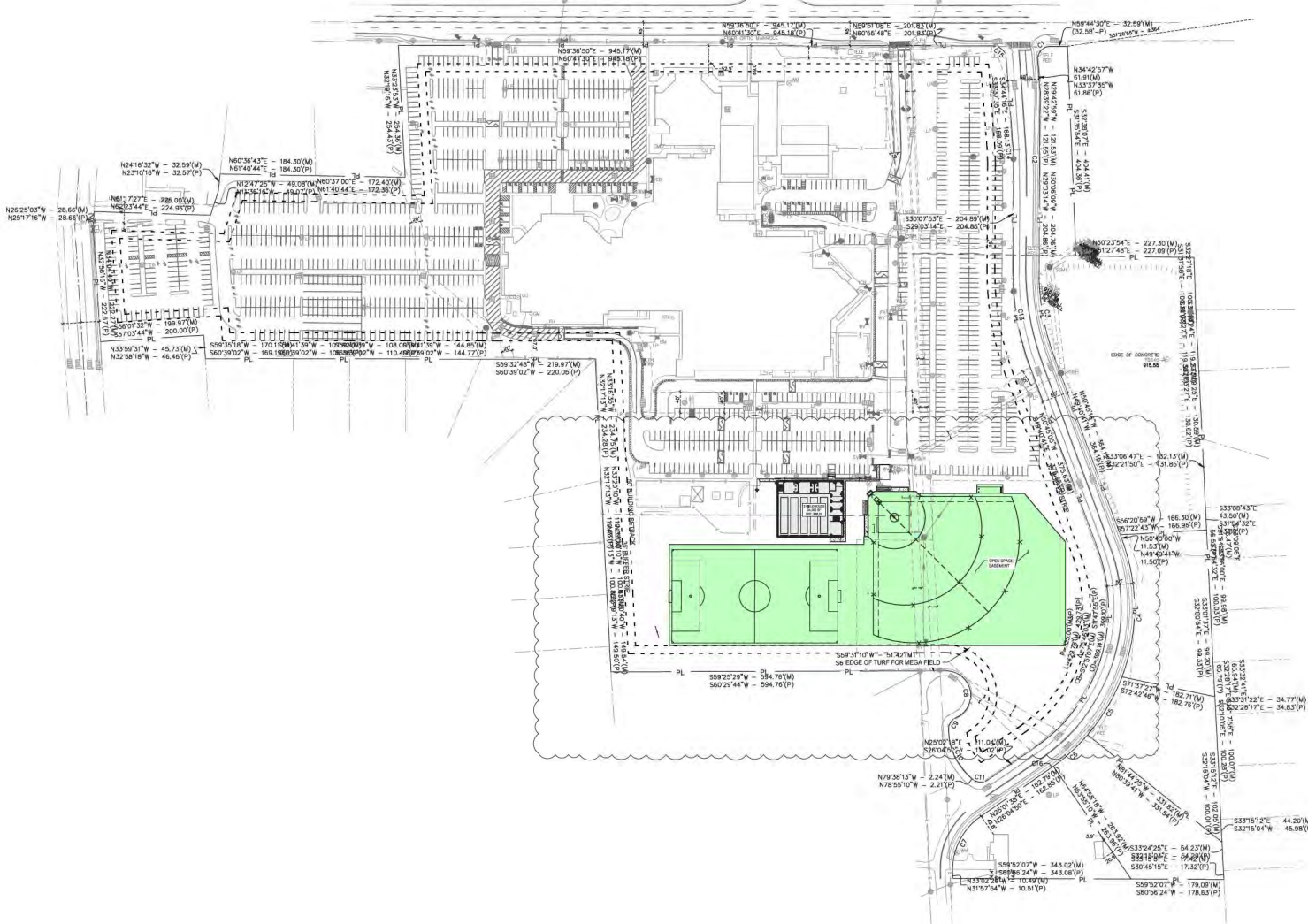
PROJECT: FIRST BAPTIST CHURCH CONCORD PARTIAL TOPOGRAPHIC SURVEY - PHASE I
JOB NUMBER: 1021062248
DATE: 7/9/2021
SCALE: 1" = 60'
SURVEYOR: M. MOORE
TECHNICIAN: K. VAN CAMPEN
DRAWING: KINGSTON PHZ PARTIAL TOPO SURVEY-PHASE I
PARCEL ID: 142NB00901, 00902, 00903, 00904, 00905, 00906
PARTY CHIEF: T. BISHOP
FIELD BOOKS: FIELD BOOK 39590

Partial Topographic Survey for: First Baptist Church Concord, Phase I
Being Lot 1-R, Lot 2, Lot 3, Lot 4, Lot 5, & Lot 6 ~ The Final Plat of Belleaire Drive and First Baptist
Church of Concord ~ Instrument No.: 201002170053168 ~ Being Six Parcels of Land Lying in the 6th
Civil District of Knox County, Tennessee & Within the Town of Farragut

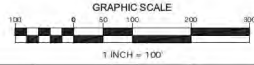
SHEET 2
OF 4

[illegible]

OVERALL SITE LAYOUT PLAN



1



MBI

ENGINEER

MBI COMPANY INC.
200 N. WILSON ROAD
KNOXVILLE, TN 37919

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FAX: (615) 584-0215
WEB: www.mbi-engineer.com

CONSULTANT

DATE: 11/15/22

PROJECT: NEW FIELDHOUSE AND ATHLETIC FIELD IMPROVEMENTS

PROJECT ADDRESS: 11500 ARISTON PARK, KNOXVILLE, TN 37936

PROJECT NO.: 210403

ACTIVE DESIGN PHASE

- ☒ FOR REVIEW ONLY
- ☐ FOR PERMITTING ONLY
- ☐ SCHEMATIC DESIGN
- ☐ DESIGN DEVELOPMENT
- ☐ CONSTRUCTION RECORDING
- ☐ CONSTRUCTION DOCUMENTS
- ☐ AS-BUILT RECORD SET

REVISION INFORMATION

NO.	DATE	DESCRIPTION
1	11/08/2022	TOWN OF FAIRFAX COMMENTS

KEY PLAN

SHEET INFORMATION

SHEET ISSUED: 11/08/2022

DESIGNED BY: LAL

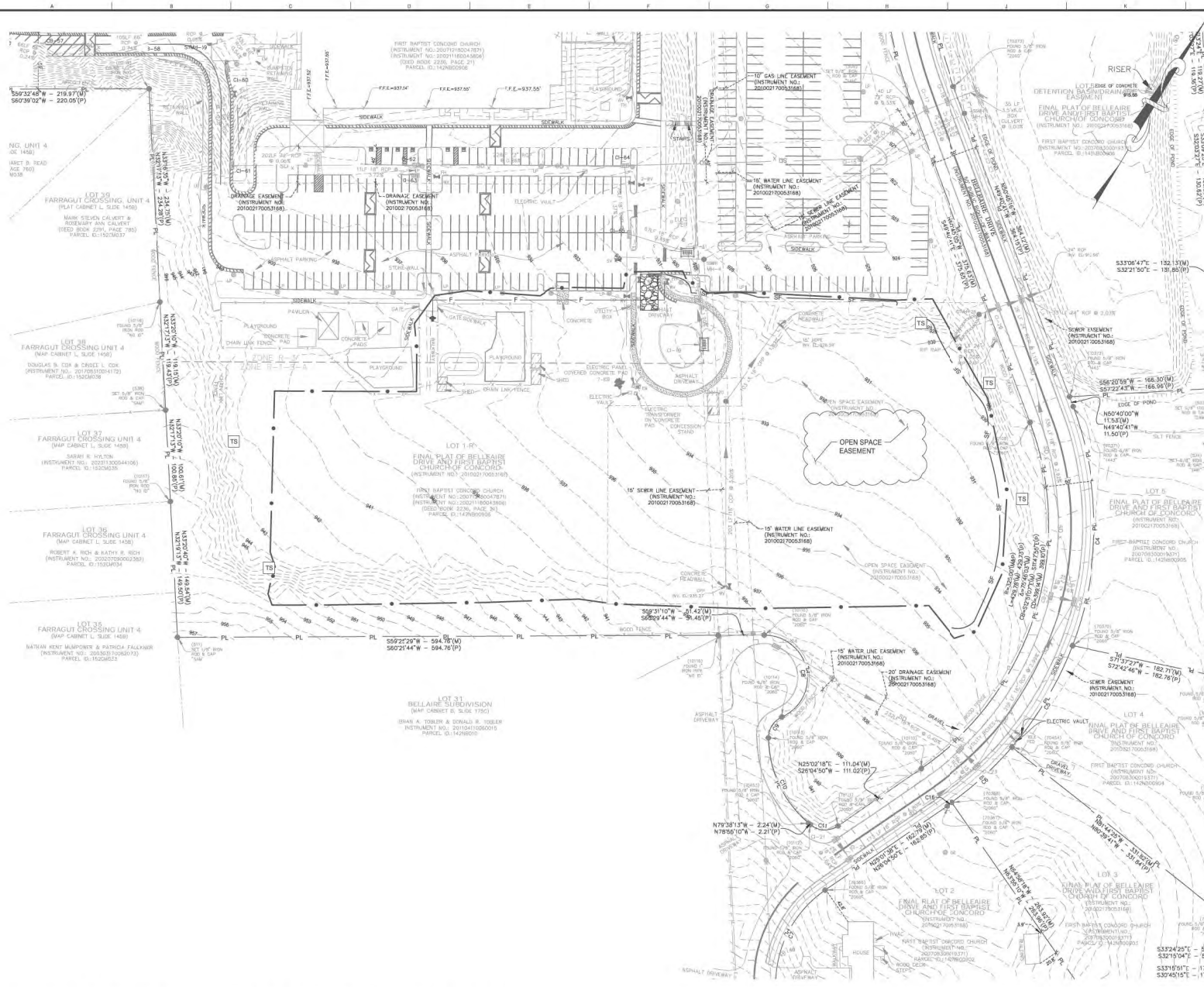
DRAWN BY: S.A.S.

REVIEWED BY: CAT

SHEET TITLE:

OVERALL SITE LAYOUT PLAN

SHEET NO.: C002



PHASE 1 EROSION PREVENTION & SEDIMENT CONTROL PLAN

GENERAL SHEET NOTES

1. SEE SHEET C001 FOR CIVIL NOTES AND LEGENDS

EROSION CONTROL LEGEND

- CONSTRUCTION LIMITS
- SILT FENCE, SEE DETAIL 5080
- CONSTRUCTION ENTRANCE, SEE DETAIL 1000
- PILE PROTECTION, SEE DETAIL 4000
- TEMPORARY SEEDING, SCOTT'S CONTRACTORS SEEDING MIX OR OWNER APPROVED EQUIVALENT

Know what's below.
Call before you dig.
In Tennessee call 811 or 1-800-351-1111

GRAPHIC SCALE
1 INCH = 50'

ENGINEER

MBI CONTRACTING INC.
200 N. WINDHAM ROAD
KNOXVILLE, TN 37919

PHONE: (615) 594-0000
FAX: (615) 594-0001
WEB: mbiengineer.com
CONSULTANT

PROJECT INFORMATION

PROJECT: NEW FIELDHOUSE AND ATHLETIC FIELD IMPROVEMENTS

PROJECT ADDRESS: 1150 ANDERSON PARK, KNOXVILLE, TN 37906

PROJECT NO.: 21040

ACTIVE DESIGN PHASE

- ☒ FOR REVIEW ONLY
- ☐ FOR PERMITTING ONLY
- ☐ SCHEMATIC DESIGN
- ☐ DESIGN DEVELOPMENT
- ☐ CONSTRUCTION RECORDING
- ☐ CONSTRUCTION DOCUMENTS
- ☐ AS-BUILT RECORD SET

REVISION INFORMATION

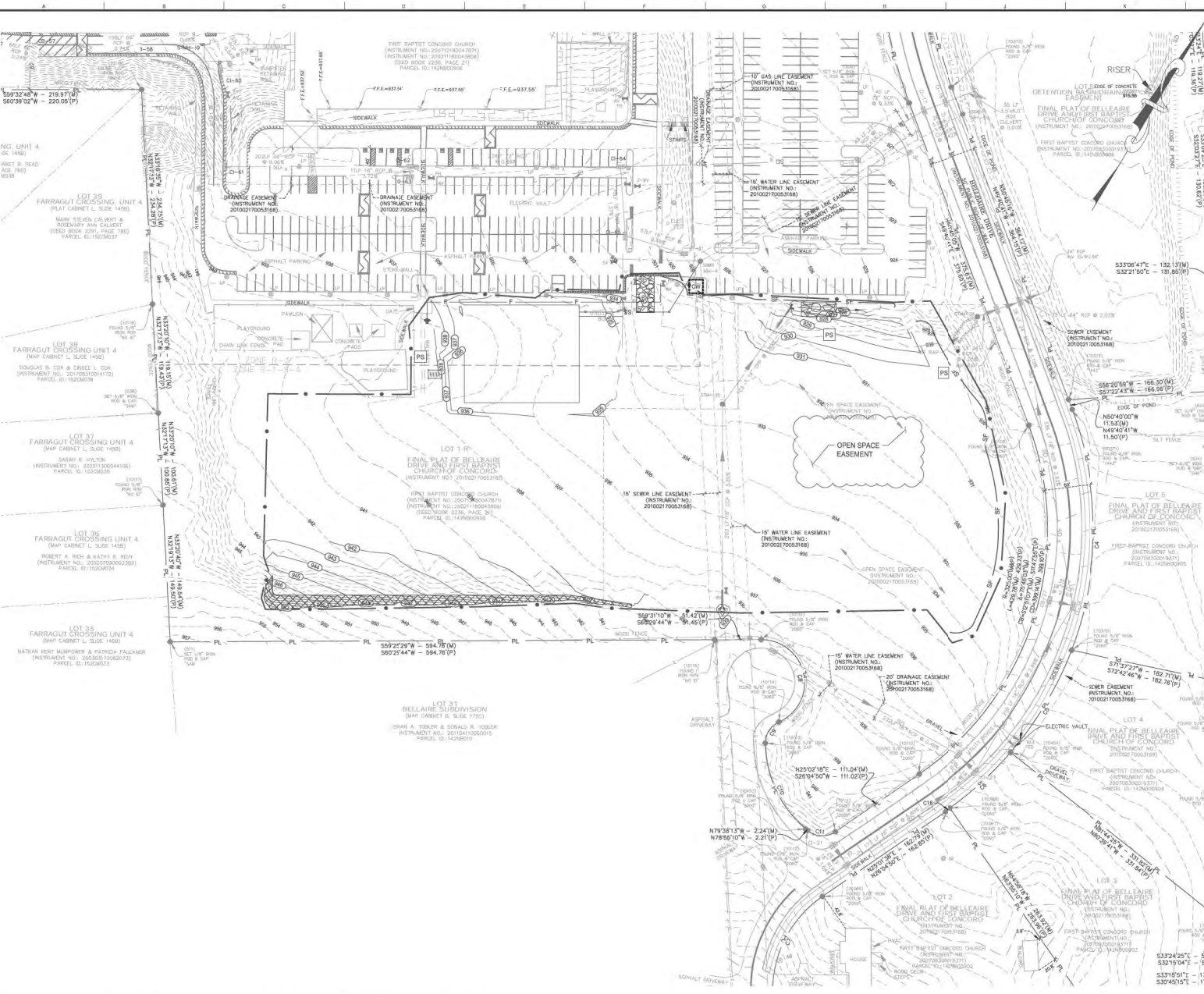
NO.	DATE	DESCRIPTION
1	10/06/2020	TOWN OF HARRIS COMMENTS

KEY PLAN

SHEET INFORMATION

SHEET TITLE: PHASE 1 EROSION PREVENTION & SEDIMENT CONTROL PLAN

SHEET NO.: C100



PHASE 2 EROSION PREVENTION & SEDIMENT CONTROL PLAN

GENERAL SHEET NOTES:

1. SEE SHEET C011 FOR CIVIL NOTES AND LEGENDS

EROSION CONTROL LEGEND

—	CONSTRUCTION LIMITS
SF	SILT FENCE, SEE DETAIL SC800
IP	CONSTRUCTION ENTRANCE, SEE DETAIL 1C1000
IP	INLET PROTECTION, SEE DETAIL AC800
OF	OUTFALL
OW	CONCRETE WASHOUT, SEE DETAIL SC300
FR	FIBER ROLL, SEE DETAIL SC800
19.5 X 12	19.5 X 12 RIPRAP OUTLET PROTECTION
PS	PERMANENT STABILIZATION, NOT TO CONTRACTORS SPECIFICATION OR OWNER APPROVED EQUIVALENT
SM	SLOPE MATTING, SEE DETAIL SC600

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GRAPHIC SCALE

1 INCH = 50'

MBI

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ANDERSON, TN 37004

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FAX: (615) 954-0000
WEB: www.mbi-engineers.com
CONSULTANT

PROJECT ADDRESS:

PROJECT NO. 21040

ACTIVE DESIGN PHASE

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FOR PERMITTING ONLY
SCHEMATIC DESIGN
DESIGN DEVELOPMENT
CONSTRUCTION DOCUMENTS
AS-BUILT RECORD SET

DESIGN INFORMATION

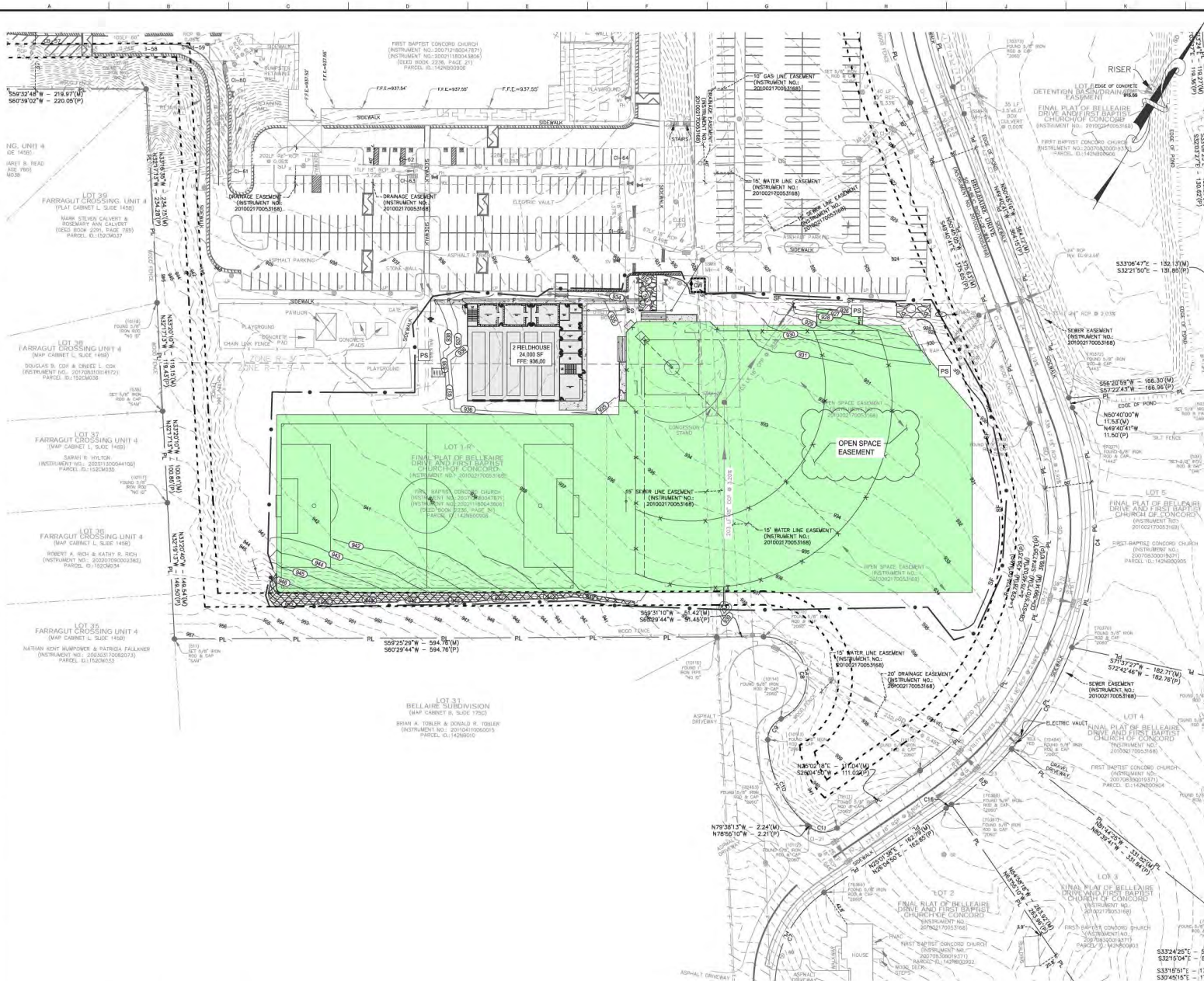
NO. DATE DESCRIPTION
1 10/26/2021 TOWN OF FARRAGUT COMMENTS

REVISION

NO. DATE DESCRIPTION
1 10/26/2021 TOWN OF FARRAGUT COMMENTS

PHASE 2 EROSION PREVENTION & SEDIMENT CONTROL PLAN

SHEET NO. C101



PHASE 3 EROSION PREVENTION & SEDIMENT CONTROL PLAN

GENERAL SHEET NOTES:

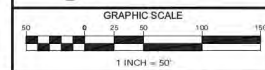
1. SEE SHEET C011 FOR CIVIL NOTES AND LEGENDS

EROSION CONTROL LEGEND

- CONSTRUCTION LIMITS
- SILT FENCE: SEE DETAIL SC800
- CONSTRUCTION ENTRANCE: SEE DETAIL 10080
- SLEET PROTECTION: SEE DETAIL AC800
- OUTFALL
- CONCRETE WASHOUT: SEE DETAIL SC800
- TYBER ROLL: SEE DETAIL 20080
- 15' x 15' REPAIR OUTLET PROTECTION
- PERMANENT STABILIZATION: SEE DETAIL 20080
- SLOPE MITTING: SEE DETAIL BC800



Know what's below.
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KNOXVILLE, TN 37919
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FAX: (615) 584-0001
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THE DESIGN AND CONSTRUCTION OF THE
PROJECT INFORMATION.

NEW FIELDHOUSE AND ATHLETIC FIELD IMPROVEMENTS

PROJECT ADDRESS:

PROJECT NO.: 11500 ARISTON PARK
KNOXVILLE, TN 37919

ACTIVE DESIGN PHASE

- ☒ FOR REVIEW ONLY
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- ☐ SCHEMATIC DESIGN
- ☐ DESIGN DEVELOPMENT
- ☐ CONSTRUCTION DOCUMENTS
- ☐ AS-BUILT RECORD SET

REVISION INFORMATION

NO. DATE DESCRIPTION

1 11/20/2010 TOWN OF FARRAGUT COMMENTS

KEY PLAN

1

SHEET INFORMATION

SHEET NUMBER: 1000000

DESIGNED BY: LAL

DRAWN BY: G.S.

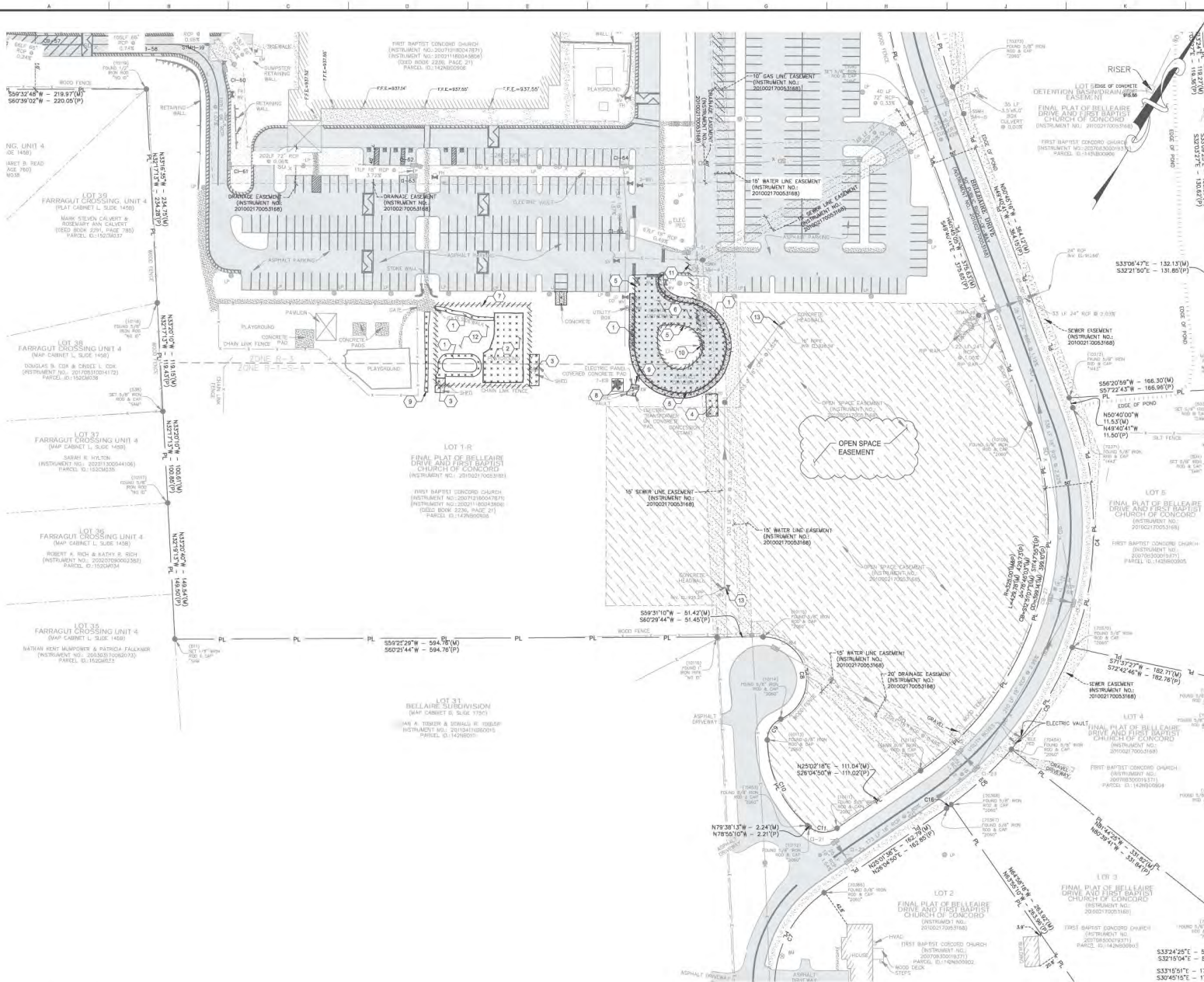
REVIEWED BY: G.S.

SHEET TITLE:

PHASE 3 EROSION PREVENTION & SEDIMENT CONTROL PLAN

SHEET NO.

C102



SITE DEMOLITION PLAN

GENERAL SHEET NOTES:

1. SEE SHEET C001 FOR LINE NOTES AND LEGENDS

DEMOLITION LEGEND

////	TO BE REMOVED
----	TO BE DEMOLISHED

DEMOLITION KEYED NOTES

- 1 REMOVE EXISTING SIDEWALK
- 2 RELOCATE EXISTING PLAYGROUND EQUIPMENT
- 3 REMOVE EXISTING SHED
- 4 REMOVE EXISTING CONCESSION STAND
- 5 REMOVE EXISTING CURB
- 6 REMOVE EXISTING ASPHALT PAVING
- 7 REMOVE EXISTING FENCE & ENTRANCE GATE
- 8 REMOVE EXISTING ELECTRICAL EQUIPMENT
- 9 REMOVE EXISTING WALKWAY
- 10 REMOVE EXISTING STORM SEWER STRUCTURE
- 11 REMOVE OR ABANDON EXISTING STORM SEWER PIPE
- 12 REMOVE EXISTING TURF PLAYGROUND SURFACE
- 13 REMOVE EXISTING CONCRETE HEADWALL

NEW FIELDHOUSE AND ATHLETIC FIELD IMPROVEMENTS

PROJECT ADDRESS:

PROJECT NO. 1158 ANDERSON PARK, ANDERSON, TN 37004

ACTIVE DESIGN PHASE

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- ☐ FOR PERMITTING ONLY
- ☐ SCHEMATIC DESIGN
- ☐ DESIGN DEVELOPMENT
- ☐ CONSTRUCTION DOCUMENTS
- ☐ AS-BUILT RECORD SET

REVISION INFORMATION

NO. DATE DESCRIPTION

1 10/26/2023 TOWN OF ANDERSON COMMENTS

KEY PLAN

SHEET INFORMATION

SHEET NUMBER 1000000

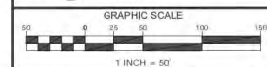
DESIGNED BY LAL

DRAWN BY SLD

REVIEWED BY CAT

SHEET TITLE

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ENGINEER

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FAX: (615) 444-0001

WEB: www.mbi-engineers.com

CONSULTANT

MBI ENGINEERS INC.
200 N. WINDHAM ROAD
NASHVILLE, TN 37210

PROJECT INFORMATION

PROJECT: NEW FIELDHOUSE AND ATHLETIC FIELD IMPROVEMENTS

PROJECT ADDRESS: 1158 ANDERSON PARK, ANDERSON, TN 37004

PROJECT NO. 1000000

ACTIVE DESIGN PHASE

FOR REVIEW ONLY

FOR PERMITTING ONLY

SCHEMATIC DESIGN

DESIGN DEVELOPMENT

CONSTRUCTION DOCUMENTS

AS-BUILT RECORD SET

REVISION INFORMATION

NO. DATE DESCRIPTION

1 10/26/2023 TOWN OF ANDERSON COMMENTS

KEY PLAN

SHEET INFORMATION

SHEET NUMBER 1000000

DESIGNED BY LAL

DRAWN BY SLD

REVIEWED BY CAT

SHEET TITLE

811 Know what's below.
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GRAPHIC SCALE

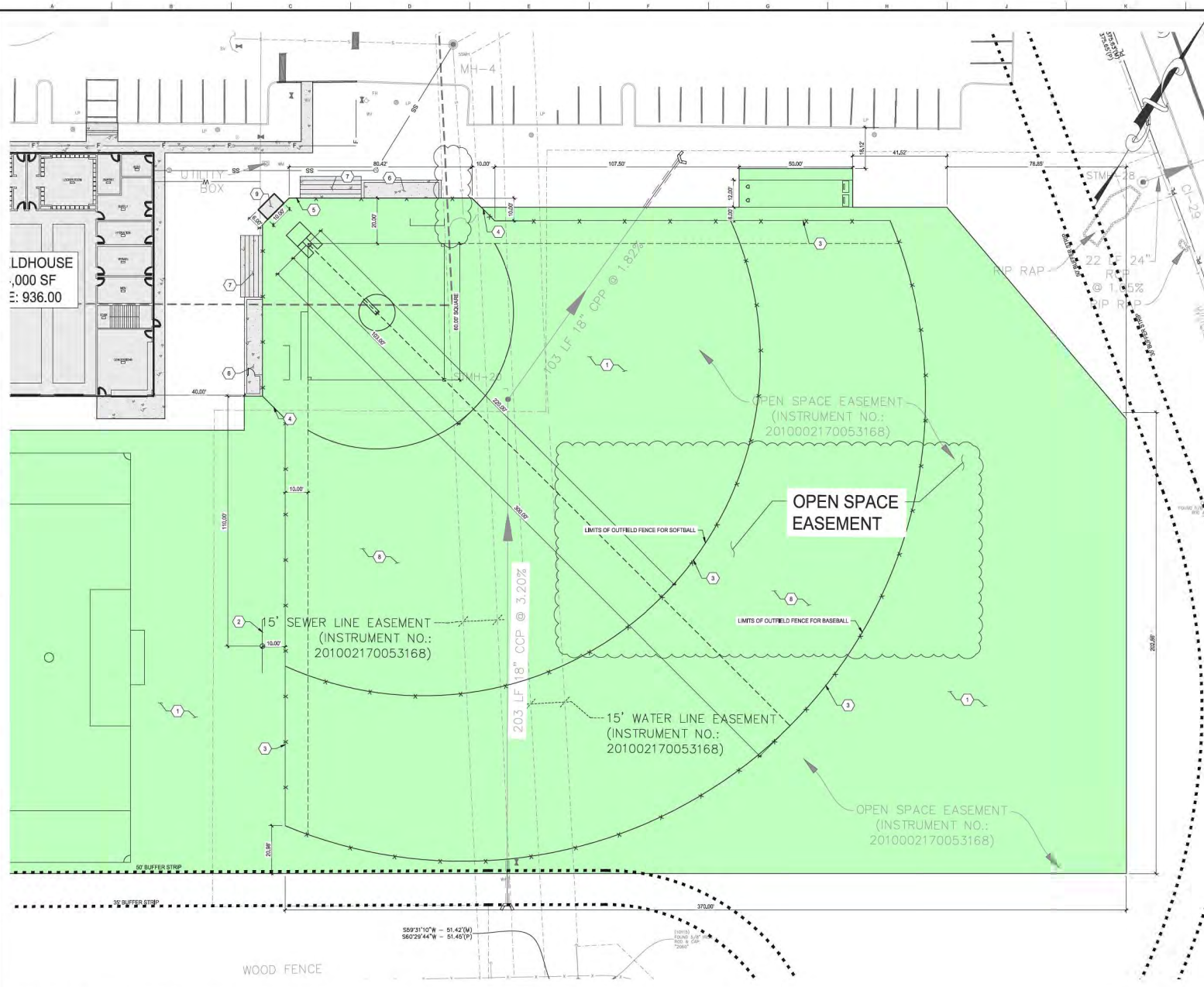
0 25 50 100 150

1 INCH = 50'

SITE DEMOLITION PLAN

SHEET NO. C200





BASEBALL & SOFTBALL FIELD LAYOUT PLAN

GENERAL SHEET NOTES:
1. SEE SHEET C301 FOR CIVIL NOTES AND LEGENDS

SITE KEYED NOTES

- TURF FIELD SURFACE, BY OTHERS
- BASEBALL/SOFTBALL SCOREBOARD, TO BE SPECIFIED BY ARCHITECT
- TEMPORARY FENCING, TO BE SPECIFIED BY ARCHITECT
- CHAIN LINK FENCING, TO BE SPECIFIED BY ARCHITECT
- BACKSTOP FENCING, TO BE SPECIFIED BY ARCHITECT
- DUGOUT, TO BE SPECIFIED BY ARCHITECT
- BLEACHERS, TO BE SPECIFIED BY ARCHITECT
- THIS MEGA FIELD, BY OTHERS
- SCORING HOSE

GRAPHIC SCALE
1 INCH = 20'

811 Know what's below. Call before you dig. In Tennessee call 811 or 1-800-551-1111

BASEBALL & SOFTBALL FIELD LAYOUT PLAN

SHEET NO. C301

MBI

ENGINEER

MBI COMPLETES INC.
220 N. HARRISON ROAD
ANCHORAGE, AL 37519

PHONE: (865) 254-0000
FAX: (865) 254-0000
WEB: (865) 254-0000
CONSULTANT

PROJECT INFORMATION

PROJECT: NEW FIELDHOUSE AND ATHLETIC FIELD IMPROVEMENTS

PROJECT ADDRESS: 11500 ARISTON PARK, ANCHORAGE, TN 37043

PROJECT NO.: 210403

ACTIVE DESIGN PHASE

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☐ SCHEMATIC DESIGN

☐ DESIGN DEVELOPMENT

☐ CONSTRUCTION DOCUMENTS

☐ AS-BUILT RECORD SET

REVISION INFORMATION

NO.	DATE	DESCRIPTION
1	1/20/2022	TOWN OF ANCHORAGE COMMENTS

KEY PLAN

SHEET INFORMATION

SHEET DESIGNED: 1/20/2022

DESIGNED BY: LAL

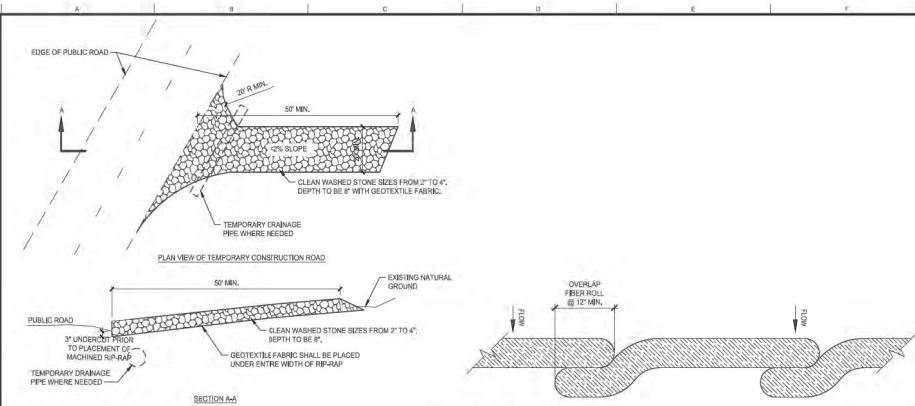
DRAWN BY: LAL

REVIEWED BY: CAL

SHEET TITLE:

BASEBALL & SOFTBALL FIELD LAYOUT PLAN

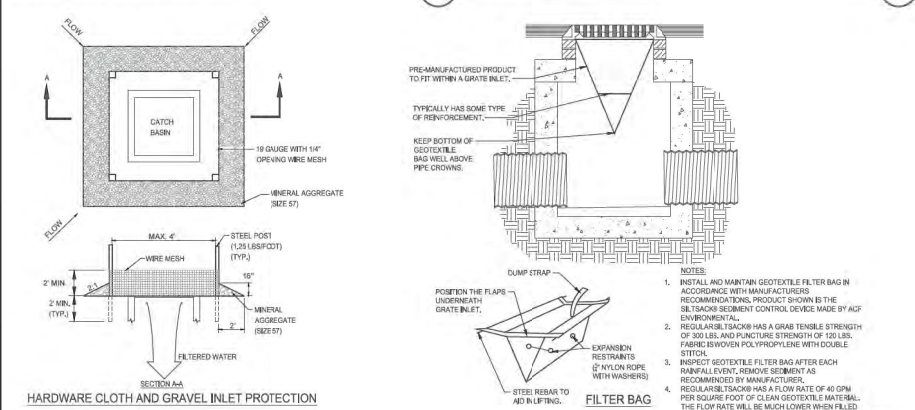
SHEET NO. C301



CONSTRUCTION EXIT

FIBER ROLL

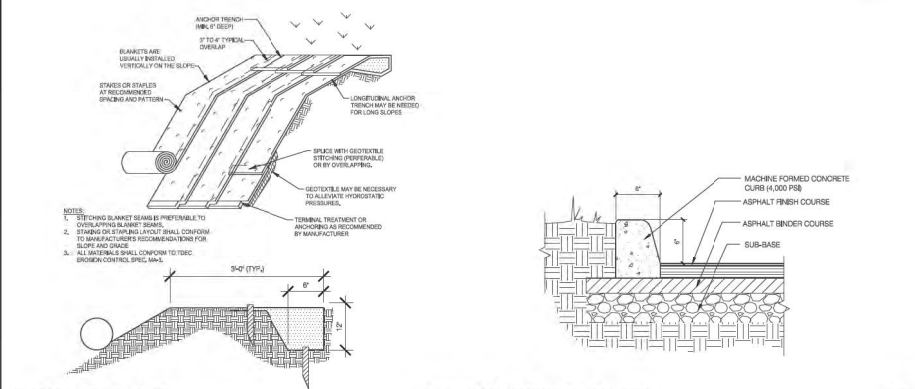
SILT FENCE



INLET PROTECTION

CONCRETE CURB

CONCRETE WASHOUT

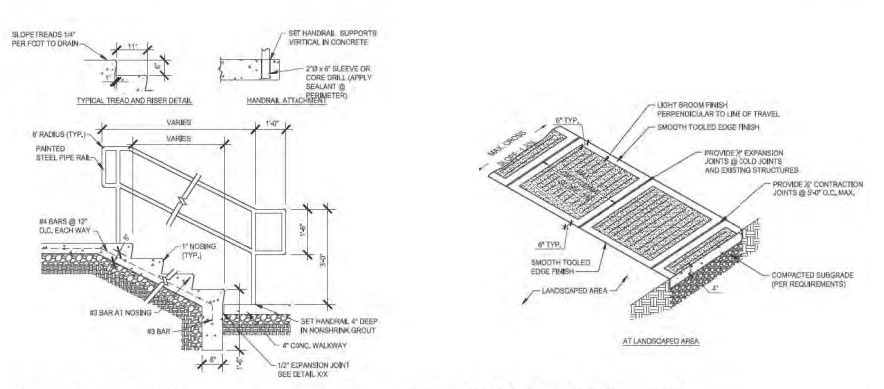


SLOPE MATTING

CONCRETE CURB

EXTERIOR STAIRS

CONCRETE SIDEWALK



MBI

ENGINEER

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WINDHAM, IL 61792
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FAX: (815) 295-0001
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CONSULTANT

SCALE



PROJECT INFORMATION
PROJECT: NEW FIELDHOUSE AND ATHLETIC FIELD IMPROVEMENTS
PROJECT ADDRESS: 1150 ANDERSON PARK, WINDHAM, IL 61792

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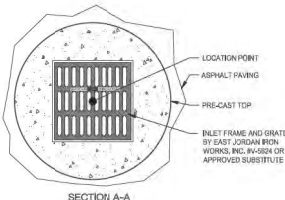
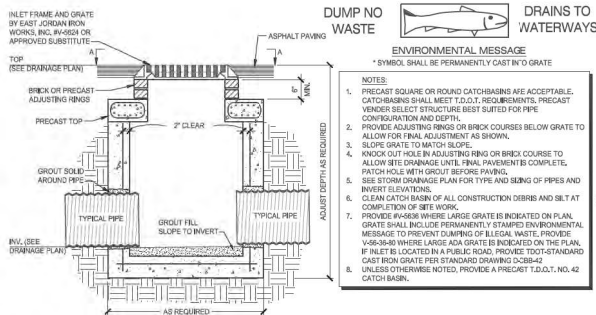
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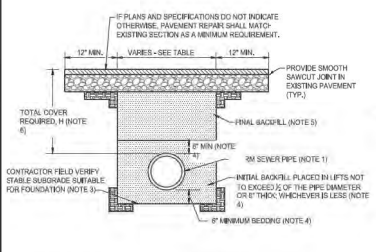
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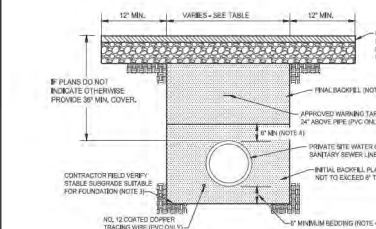
CATCH BASIN

1



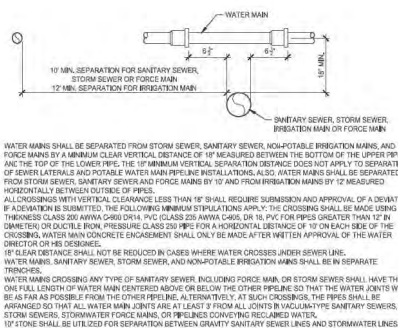
STORM SEWER TRENCH

4



WATER AND SEWER TRENCH

7

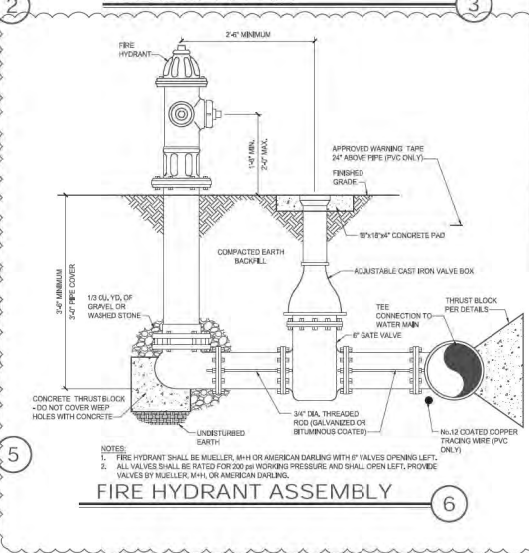


PIPE SEPARATION

2

ASPHALT REPAIR

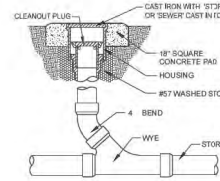
3



FIRE HYDRANT ASSEMBLY

6

ALUMINIZED CMP, HOPE AND PVC		
PIPE DIA. (IN.)	MINIMUM WIDTH (IN.)	
4	21	
6	23	
8	26	
10	28	
RCP AND CONCRETE		
PIPE DIA. (IN.)	MINIMUM WIDTH (IN.)	
12	22	12
15	25	15
18	31	18
24	40	24
30	50	30
36	58	36
42	66	42
48	74	48
54	82	54
60	90	60



STORM/SEWER CLEANOUT

5

MBI

ENGINEER

MBI ENGINEERS INC.
200 N. WILSON ROAD
INDIANAPOLIS, IN 46219

PHONE: (317) 544-0000
FAX: (317) 544-0001
WEB: www.mbi-engineers.com
CONSULTANT



CONTRACT INFORMATION

PROJECT: NEW FIELDHOUSE AND ATHLETIC FIELD IMPROVEMENTS

PROJECT ADDRESS: 11500 ANTONIO DRIVE, INDIANAPOLIS, IN 46240

PROJECT NO.: 21040

DESIGN INFORMATION

DESIGNED BY: MBI

CHECKED BY: MBI

DATE: 10/20/2020

REVISION INFORMATION

NO. DATE DESCRIPTION

1 10/20/2020 TYPICAL COMMENTS

KEY PLAN

ACTIVE DESIGN PHASE

FOR REVIEW ONLY

FOR PERMITTING ONLY

SCHEMATIC DESIGN

DESIGN DEVELOPMENT

CONSTRUCTION BIDDING

CONSTRUCTION RECORD SET

DESIGN INFORMATION

SHEET ISSUED: 10/20/2020

DESIGNED BY: MBI

CHECKED BY: MBI

DATE: 10/20/2020

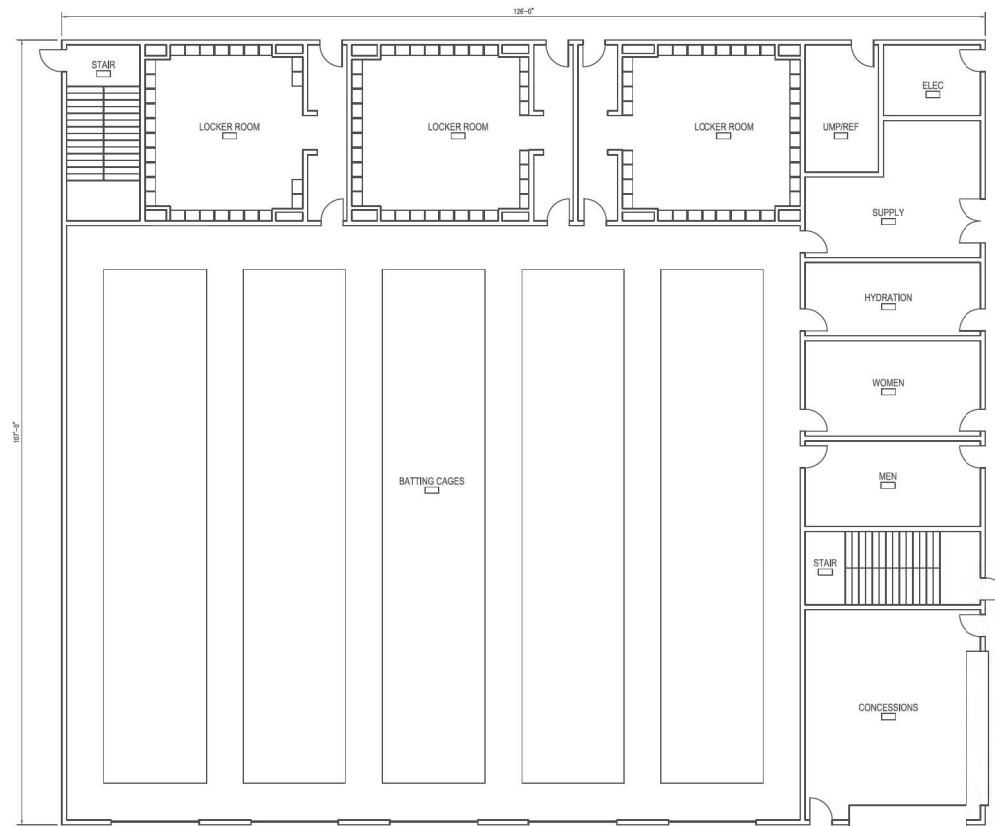
REVISION INFORMATION

NO. DATE DESCRIPTION

1 10/20/2020 TYPICAL COMMENTS

CIVIL DETAILS

SHEET NO. C801





FIRST FLOOR PLAN
 SCALE: 1/8"=1'-0"
 FIRST FLOOR AREA: 13,462 SF
 SECOND FLOOR AREA: 5,381 SF
 TOTAL AREA: 18,843 SF



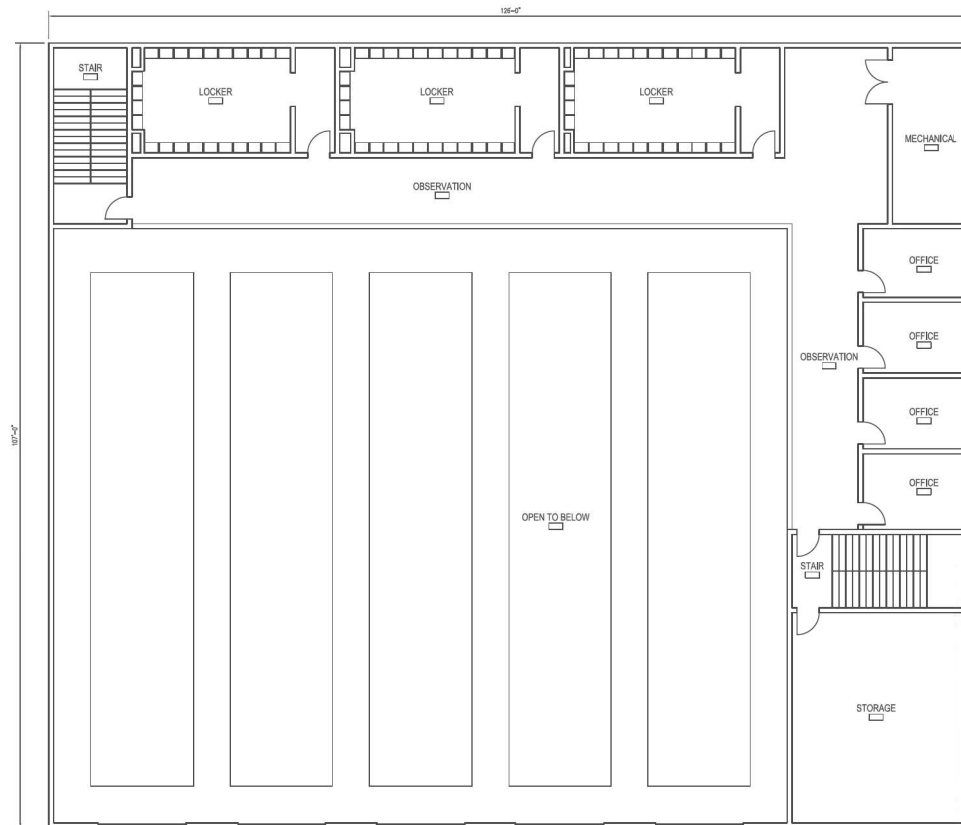
A New Baseball Fieldhouse for
First Baptist Concord

FORREST DANIELL
 & Associates, P.C.

 Architecture & Planning
 8007 American Way
 Dauphin, AL 36526
 251.623.6400 wk.
 251.623.6694 fs.
 www.fdanell.com

REVISIONS

JOB # _____
 DATE: 9/25/2022
A101
 FIRST FLOOR PLAN





SECOND FLOOR PLAN
 SCALE 1/8"=1'-0"



A New Baseball Fieldhouse for
First Baptist Concord

FORREST DANIELL
 & Associates, P.C.

 Architecture & Planning
 8007 American Way
 Dauphin, AL 36526
 251.625.6400 wk.
 251.625.6404 fs
 www.fdanell.com

REVISIONS
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JOB #
 DATE: 9/25/2022
A102
 SECOND FLOOR PLAN

A New Baseball Fieldhouse for First Baptist Concord

FORREST DANIELL
& Associates, P.C.

FD&A
Architecture & Planning

8007 American Way
Daphne, AL 36526
251.625.6400 w.k.
251.625.6404 f.c.
www.fdanilc.com

REVISIONS
1.
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6.
7.

JOB #:
DATE: 9/20/2022

A201
EXTERIOR ELEVATIONS



1 **SOUTHEAST ELEVATION**
SCALE 1/8"=1'-0"



2 **EAST ELEVATION**
SCALE 1/8"=1'-0"



3 **WEST ELEVATION**
SCALE 1/8"=1'-0"



4 **NORTHWEST ELEVATION**
SCALE 1/8"=1'-0"

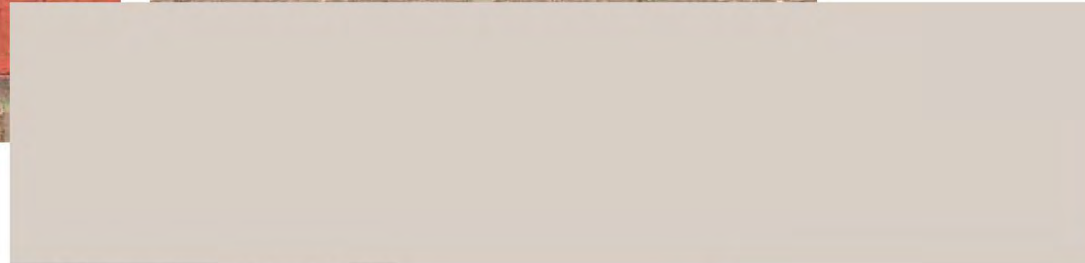




1 ACME RED WIRECUT BRICK



2 ACME MARBLE GRAY BRICK



3 STO GRAY DAWN CEMENT STUCCO



4 DARK BRONZE ALUM STOREFRONT



5 DARK BRONZE DOWN LIGHT



6 DARK BRONZE CANOPY AND FASCIA



7 EQUIPMENT SCREEN IMAGE
NEW EQUIPMENT SCREENS ARE TO MATCH EXISTING EQUIPMENT SCREENS ON SITE. THE DESIGN WILL BE A PHOTOGRAPHIC COPY BY ARCHITECTURAL LOWERS COMPANY OR EQUAL.



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First Baptist Concord

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& Associates, P.C.



8007 American Way
Daphne, AL 36526
251.625.6400 wk.
251.625.6494 fs.
www.fdanell.com

REVISIONS

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JOB #:
DATE: 9/25/2022

A202
EXTERIOR MATERIALS

December 5, 2022

Town of Farragut Site Plan Review

RE: 2020-270-SP Initial Staff Comments

To whom it may concern,

This letter is in response to comments provided on November 11th, 2022, for the New Fieldhouse and Athletic Field Improvements at 11704 Kingston Pike. Comment locations are underlined. **Comment responses are in bold.**

G000:

1. Provide construction type.

The construction type is IIB.

2. Please verify that the required 25 foot buffer is provided. If not, a landscape plan will be needed for new or supplemental buffer strip sections.

Per the Developer's Meeting on 11/29/2022 a 35 foot buffer is required and is provided.

3. Staff assumes there will be no loud speakers. No information was included regarding this.

There are no plans for permanent loudspeakers at this time or as part of this project.

C001:

1. 3(H):1(V) max., but 2.5:1 is acceptable with special stabilization measures.

The note has been revised on C001.

2. How much impervious surface is being added with this phase of development?

The note has been revised to specify that the impervious area calculation shown is referencing this phase of development.

3. What is area of disturbance with this phase of development?

The note has been revised to specify that the impervious area calculation shown is referencing this phase of development.

C002:

1. Connect sidewalks.

Sidewalks have been connected.

2. Please identify this line and what it represents.

That line represents the edge of new turf field. There is a transition here from turf to grass.

3. Please label what this represents. Staff assumes it is the 50 foot setback.

That line does represent the 50 foot setback. Labels have been added to C002, C300, & C301.

C101:

1. Please ensure that no grading occurs in buffer strips.

No grading occurs within the buffer strips.

C102:

1. Please clearly label the open space easement to show that no structures, other than fences, are within this area.

A hatching and label have been added to all sheets to show open space easements.

C300

1. Please ensure minimum landscaping for the area between the building and parking are met.

A sheet, L100, has been added to the set to show landscape requirements for the area between the building and parking lot.

2. Please label fence.

A note has been added to C300 & C301.

3. Provide construction type per IBC.

The construction type is IIB.

4. Structure must be of type I, II, III or IV per local code amendment.

Structure type shall be Type II.

5. Structure shall be fire sprinkler protected per local ordinance.

The structure will be sprinklered.

6. Confirm compliant fire apparatus access within 150' of all exterior points.

All exterior points of the structure are within 150' of all exterior points.

C301 & C400

1. A portion of this dugout is located in the sewer line easement.

The dugout has been shifted to not conflict with the easement.

C600

1. Provide flow data, less than 12 months old, for closest fire hydrants.

Flow test data will be provided with the Fire Protection plan.

2. Provide fire flow calculations in accordance with appendix B & C or the 2018 International Fire Code.

Flow test data will be provided with the Fire Protection plan.

3. Are any gas utilities proposed to this structure?

Gas is currently being discussed as an option to use for the space heating as well as inline gas water heaters for the showers.

REPORT TO THE FARRAGUT MUNICIPAL PLANNING COMMISSION

PREPARED BY: Mark Shipley, Community Development Director

SUBJECT: Discussion and public hearing on a site plan for JPMorgan Chase Bank, 11242 Kingston Pike, 1.32 Acres, Zoned PCD (Nicholas Bender – JPMorgan Chase, Applicant)

INTRODUCTION AND BACKGROUND: This agenda item involves a request for approval of a site plan involving the re-development of the corner lot at the east intersection of Brooklawn Street and Kingston Pike. The existing building on the property has most recently been used as a Mexican Restaurant but has been unoccupied for a few years.

DISCUSSION: As noted at the staff developer meeting on November 29, this lot is not within the Town Center at Biddle Farms PCD. It is however at a highly visible intersection that would be near commercial buildings that will be constructed to the east as part of the Town Center at Biddle Farms project. The proposed Chase Bank would not typically be a use that would lend itself to a location that is active and inviting to pedestrians. A staff comment on this project was that, considering the context, some provision should be included for transitioning to the more pedestrian focused developments that will be associated with the Town Center at Biddle Farms. This could include art displays, unique landscape features, and/or gathering space including outdoor seating.

The Town Center would benefit from a mixture of uses, including financial offices, where employees and patrons could eat or shop nearby, especially during the daytime hours. From staffs' perspective, it is important for such uses to be seen and function as part of the Town Center so the transitional space between the Chase Bank and the area to the east is critical. Other comments that were discussed at the staff developer meeting included the building having more height to transition better to the buildings that will be constructed to the east. This would also create the appearance of a two-story building. Another site plan element that was discussed was that the Chase Bank exceeds the required parking by 19 spaces. Consequently, the extra parking and access aisles will be constructed with permeable pavers and landscaped islands as required in the Town's Zoning Ordinance. Related to parking, staff noted that Chase Bank and the developer of the Town Center at Biddle Farms should establish shared parking agreements that would run with the land, especially given the likely presence of restaurants in the Town Center.

RECOMMENDATION: Included in the packet is the revised site plan and building elevations. Staff will review and provide a recommendation for the meeting.



CHASE

11242 Kingston Pike

CLT Map 143, Parcel 3.18

Farragut, Tennessee 37934

1/22
2/22
3/22
4/22
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20/22
21/22
22/22

All necessary inspections and/or certifications required by codes and/or utility service companies shall be performed prior to the final connection of services.

Water
Edwin Deyton First Utility District of Knox County 122 Durwood Rd Knoxville, Tennessee 37922 Phone: (865) 966-9741 Email: newdevelopment@fudknox.org

Gas
New Service Department
Knoxville Utility Board
445 S. Gay Street
Knoxville, Tennessee 37902
Phone: (865) 524-2911

Telephone
Tom Nitz
TDS Telecom
11505 Kingston Pike
Farragut, Tennessee 37934
Phone: (865) 671-2100
Fax: (865) 671-4595

Stormwater
Contact: Darryl Smith
Town of Farragut
11408 Municipal Town Center Dr.
Farragut, Tennessee 37934
Phone: (865) 966-7057
Fax: (865) 966-2096



Cover Sheet

REVISIONS

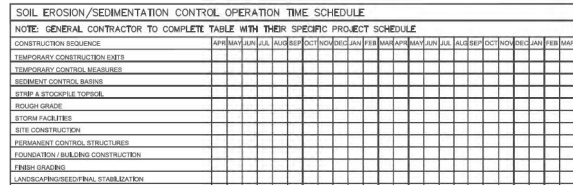
SITE PROJECT #: 1994

FILE: _____ Cover

SHEET: 1 OF: 22

CO.0





ALL CUT OR FILL SLOPES SHALL BE 3:1 OR GREATER. CONTRACTOR SHALL INSTALL TOPSOIL, PERMANENT GRASS COVER AND MULCH TO ALL DISTURBED AREAS NOT TO BE PAVED OR BUILT UPON WITHIN 14 DAYS OF COMPLETION OF GRADING. SLOPES STEEPER THAN 3H:1V SHALL BE STABILIZED NOT LATER THAN 7 DAYS AFTER CONSTRUCTION ACTIVITY ON THE SLOPE HAS TEMPORARILY OR PERMANENTLY CEASED. A PROTECTIVE BLANKET OR SOIL STABILIZATION MAT SHALL BE INSTALLED ON ALL SLOPES 3H:1V OR STEEPER. CURRENT VERSIONS OF THIS STORM WATER POLLUTION PREVENTION PLAN, THE NOTICE OF INTENT, AND THE NOTICE OF COVERAGE SHALL BE KEPT ON THE SITE FOR THE DURATION OF THE PROJECT. THE OWNER IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF CONSTRUCTION SITE POLLUTION PREVENTION CONTROLS THROUGHOUT THE LIFE OF THE PROJECT. CONTRACTOR SHALL IDENTIFY THE LOCATION OF THE CONCRETE WASHOUT AREA ON THE SITE MAPS. CONTRACTOR SHALL PROVIDE ADEQUATE SIGNAGE ON THE PROJECT SITE TO INDICATE THE AREA DESIGNATED FOR CONCRETE WASHOUT. ALL CHEMICALS AND SOLUBLE MATERIALS STORED ONSITE MUST EITHER BE STORED IN AN ENCLOSED, WATERPROOF STORAGE FACILITY OR PROVIDED WITH SECONDARY CONTAINMENT CAPABLE OF STOPPING THE SPILLS OF THE TOTAL AMOUNT OF CHEMICALS STORED. SPILL CLEANUP MATERIALS MUST BE LOCATED WITHIN THE IMMEDIATE PROXIMITY OF THE STORED MATERIALS. PLACEMENT OF PORT-A-POTTIES ON THE PROJECT SITE SHALL NOT BE LOCATED CLOSE TO STREAMS, WETLANDS, OR STORM DRAINS. CONTRACTOR SHALL PROVIDE AN AREA FOR THE STORAGE OF CONSTRUCTION RELATED MATERIALS AND DEBRIS, FOR TRASH ON THE PROJECT. A TRASH RECEPTACLE WITH A LID IS REQUIRED. CONTRACTOR SHALL IDENTIFY THE LOCATION OF THESE AREAS ON THE SITE MAPS. ALL SWPPP DOCUMENTATION SHALL BE KEPT ON SITE.

[illegible]

PORT-POUCH, WHEEL, RASH, CONCRETE WARDROB, MASON'S AREA EMB AND MATERIAL STORAGE AREA/CONTAINER, LOAD WARE CONTAINERS, ETC., INADEQUATELY COVERED FROM THE SITE MAPS AND NOTE ANY DAMAGE IN LOCATION AND THE LOCATION OF THE DAMAGE. IN ADDITION, NOTE ALL EMB WHERE ALL IS REPORTED FROM OR ON/OIL IS REPORTED ON THE SITE MAPS.

NOTE: DOWN SLOPE PROTECTIVE MEASURES MUST ALWAYS BE IN PLACE BEFORE SOIL IS DISTURBED. ACTIVITIES ARE IDENTIFIED IN THE ORDER OF SEQUENCE IN WHICH THEY ARE DESIGNED TO BE COMPLETED.

STAGE 1-B

1. INSTALL THE ERMPP INFORMATION SHEET AND POST REQUIRED DOCUMENTS WHEN THE PLANNED CONSTRUCTION ACTS AND METHOD ALLOW ACCESS TO THE GENERAL PUBLIC.
2. STAKE/LEAD THE LOD (WHERE STAKES IS NOT POSSIBLE/PRACTICAL, THE LOD MAY BE COMPOUNDLY, AND SUBSEQUENTLY, BARRED TO DISRUPT THE BOUNDARY). THE LOD MUST BE IDENTIFIED BY THE BARRIERS THROUGHOUT THE PROJECT.
3. INSTALL PERIMETER SEGMENT CONTROL RIPS IN THE VICINITY OF, AND DOWN GRADIENT FROM, THE LOCATION OF THE PLANNED CONSTRUCTION OR DAMAGE STORAGE AREA, OR TRAILER OR OTHER DAMAGE STORAGE AREAS. CLEAR ONLY THE MINIMUM AREA ABSOLUTELY NECESSARY TO INSTALL THESE PERIMETER CONTROL RIPS.
4. INSTALL STAKE/LEAD CONSTRUCTION EMB AND SET THE PROJECT OFFICE THALIA.
5. INSTALL REMAINING PERIMETER SEGMENT CONTROL RIPS, AS SEGMENT CONTROL RIPS SET THE SITE MAPS. CLEAR ONLY THE MINIMUM AREA NECESSARY TO INSTALL PERIMETER CONTROL RIPS.
6. PREPARE TEMPORARY PARKING AND STORAGE AREA.
7. HOLD ALL ACTIVITIES.

IMPORTANT: LDC SHALL REQUEST PRECONSTRUCTION MEETING WITH TOWN STAFF TO OBTAIN GRADING PERMIT PRIOR TO BEGINNING WORK IN STAGE B. GC TO COMPLETE ALL EMB'S IDENTIFIED IN EMB'S PRIOR TO BEGINNING WORK IN STAGE B.

NOTE: WEEKLY STORMWATER INSPECTION REPORTS MUST START ON THE NEXT BUSINESS DAY AFTER THE BEM CERTIFICATION IS UNDERTAKEN BY THE LDC.

STAGE 2

[illegible]

DEVELOPER/OWNER:
JPMORGAN CHASE 201 W UNIVERSITY AVE, FLOOR 1 CHAMPAIGN, ILLINOIS 61820-3911 (708) 843-2888
SITE OPERATOR/GENERAL CONTRACTOR:
SUPERINTENDENT:

IMPORTANT: GC MUST SIGN ALL PLAN SHEETS AND ANY NEW PLAN SHEETS ISSUED BY THE CEO



10215 Technology Drive, Suite 304
Knoxville, TN 37932
(865) 777-4160
www.aite-incorporated.com



Farragut
Rose Retail Banking Center
242 Kingston Pike
Farragut, IN 37934

Storm Water Pollution Prevention Plan - Notes

REVISIONS

[illegible]

ORIGINAL ISSUE: 11/14/2022

CITE PROJECT # 1004

SITE PROJECT #1 1994

FILE: SWPPP

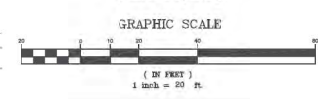
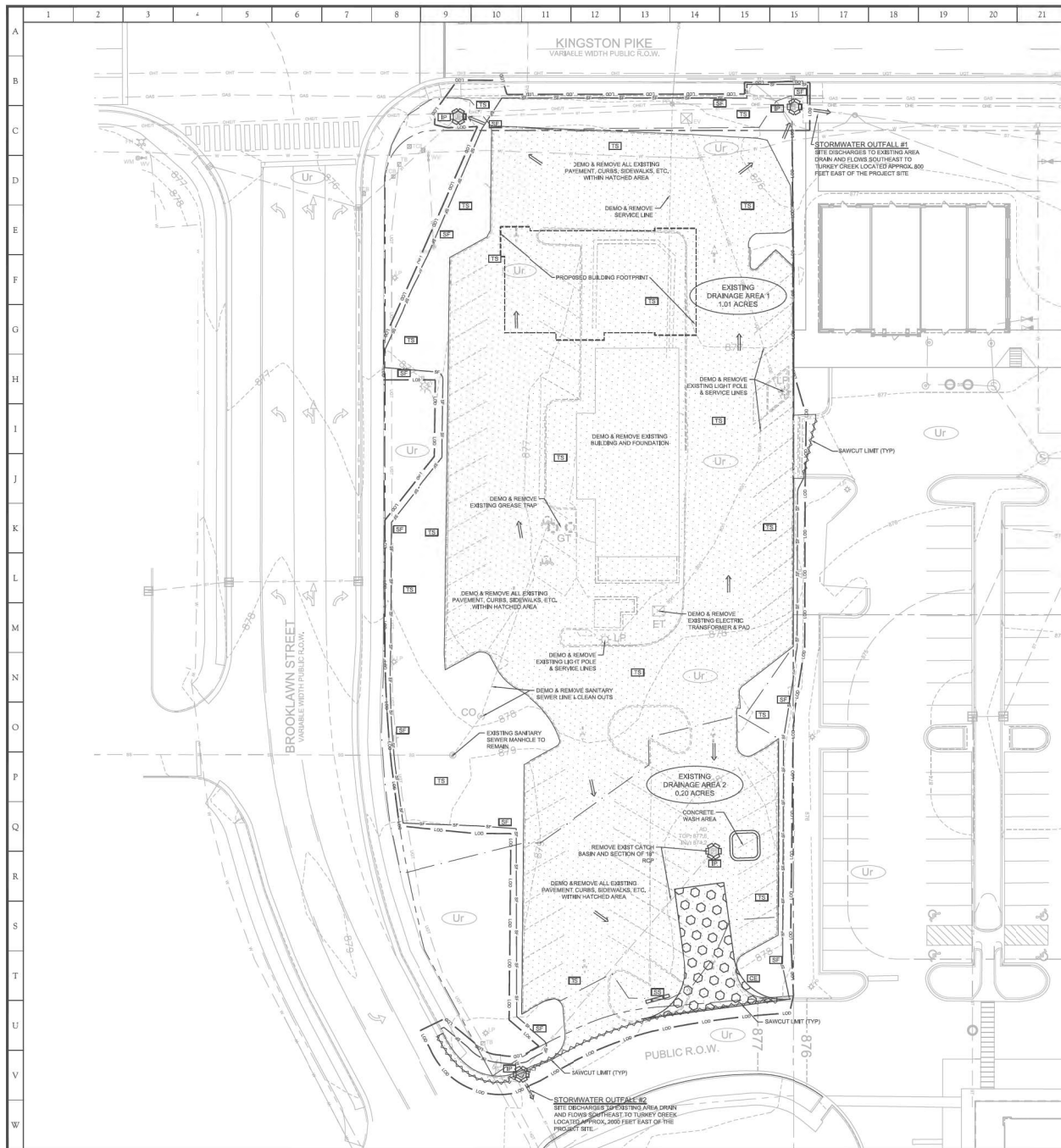
SHEET: 2 OF: 22

1000

20

C4.0

0210



SWPPP UPDATES AND AMENDMENTS

THE GC MUST UPDATE THE SWPPP INCLUDING THE SITE MAPS, TO REFLECT THE PROGRESS OF CONSTRUCTION ACTIVITIES AND GENERAL CHANGES TO THE PROJECT SITE. UPDATES SHOULD BE MADE DAILY TO TRACK PROGRESS WHEN ANY OF THE FOLLOWING ACTIVITIES OCCUR: BMP INSTALLATION, ACCEPTANCE OR REMOVAL, CONSTRUCTION ACTIVITIES (E.G., PAVING, STORM SEWER INSTALLATION, UTILITY INSTALLATION, ETC.), CLEARING, GRUBBING OR GRADING, OR TEMPORARY OR PERMANENT ESTABLISHMENT.

IMPORTANT: THE GENERAL CONTRACTOR MUST SUBMIT A REQUEST FOR INFORMATION (RFI) TO THE CEC AND OBTAIN WRITTEN CEC APPROVAL BEFORE CONSTRUCTION OF THE PROJECT WATER QUALITY. HOWEVER, GC MUST NOTIFY THE CEC AS SOON AS PRACTICAL AS TO THEIR ACTIONS TO DISCUSS THE NEED FOR ADDITIONAL OR SUPPLEMENTAL MEASURES AND TO OBTAIN THE REQUIRED APPROVALS. THE CONTRACTOR IS ULTIMATELY RESPONSIBLE TO ENSURE COMPLIANCE WITH THE PERMIT AND PROTECTION OF DOWNSTREAM WATER QUALITY.

AMENDING THE SWPPP DOES NOT MEAN THAT IT HAS TO BE REPRINTED. IT IS ACCEPTABLE TO ADD ADDENDUMS, SHEETS, NEW SECTIONS, DETAILS, AND/OR REVISED DRAWINGS THAT HAVE THE CEC NAME IN PRINT, ARE STAMPED, DATED, AND ARE ACCOMPANIED BY WRITTEN COPY OF THE ASSOCIATED RFI AND ITS RESPONSE FROM CEC ENGINEERING. ITEMS MUST BE SIGNED AND STAMPED BY THE CEC OF RECORD FOR THE PROJECT.

SITE DEMOLITION NOTES

1. PRIOR TO DEMOLITION OCCURRING, ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED.
2. THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL, AND DISPOSAL (IN A LOCATION APPROVED BY ALL GOVERNING AUTHORITIES) ALL STRUCTURES, FENCE WALLS, FENCES, FOUNDATIONS, PAVING, DRIVEWAYS, DRAINAGE STRUCTURES, UTILITIES, ETC., SUCH THAT THE IMPROVEMENTS SHOWN ON THE REMAINING PLANS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE ADJACENT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER THE SPECIFICATIONS.
3. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL DEBRIS FROM THE SITE AND DISPOSING OF THE DEBRIS IN A LAWFUL MANNER. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL.
4. THE CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANIES PRIOR TO THE REMOVAL AND/OR RELOCATION OF UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY CONCERNING PORTIONS OF WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANY'S FORCES AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR PAYING ALL FEES AND CHARGES.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISCONNECTION OF UTILITY SERVICES TO THE EXISTING STRUCTURES PRIOR TO DEMOLITION OF THE STRUCTURES.
6. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR CHECKING LOCATIONS OF EXISTING UTILITIES.
7. ALL EXISTING SEWERS, PIPING AND UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT LOCATION, OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY UNEXPECTED FEATURES. GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICES LINES AND CAP ALL LINES BEFORE PROCEEDING WITH THE WORK. UTILITIES DETERMINED TO BE ABANDONED AND LEFT IN PLACE SHALL BE GROUTED IF UNDER BUILDING.
8. ELECTRICAL, TELEPHONE, CABLE, WATER, FIBER OPTIC CABLE AND/OR GAS LINES NEEDING TO BE REMOVED OR RELOCATED SHALL BE COORDINATED WITH THE AFFECTED UTILITY COMPANY. ADEQUATE TIME SHALL BE PROVIDED FOR RELOCATION AND/OR COORDINATION WITH THE UTILITY COMPANY IS NECESSARY TO PROVIDE A SMOOTH TRANSITION IN UTILITY SERVICE. CONTRACTOR SHALL PAY CLOSE ATTENTION TO EXISTING UTILITIES WITHIN THE ANY ROAD RIGHT OF WAY DURING CONSTRUCTION.
9. CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, ETC., (AND OTHER APPROPRIATE BEST MANAGEMENT PRACTICES) AS APPROVED BY CONSTRUCTION MANAGER.
10. CONTINUOUS ACCESS SHALL BE MAINTAINED FOR THE SURROUNDING PROPERTIES AT ALL TIMES DURING DEMOLITION OF THE EXISTING FACILITIES.
11. CONTRACTOR MAY LIMIT SAWCUT & PAVEMENT REMOVAL TO ONLY THOSE AREAS WHERE IT IS REQUIRED AS SHOWN ON THESE CONSTRUCTION PLANS. IF ANY DAMAGE IS INCURRED IN ANY OF THE SURROUNDING PAVEMENT, ETC., THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS REMOVAL AND REPAIR.
12. DAMAGE TO ALL EXISTING CONDITIONS TO REMAIN WILL BE REPLACED AT CONTRACTOR'S EXPENSE.

LEGEND OF SYMBOLS	
	PROPERTY LINE
	LIMITS OF DISTURBANCE
	EXISTING CONTOURS
	PROPOSED CONTOURS
	LIMITS OF EXISTING DRAINAGE AREAS
	LIMITS OF EXISTING SOIL AREAS
	EXISTING STORM PIPE
	DIRECTION OF OVERLAND FLOW
	SILT FENCE
	CONSTRUCTION EXIT
	SWPPP INFORMATION SIGN
	TEMPORARY SEEDING
	SILT PROTECTION
LEGEND OF SOIL TYPES	
	URBAN LAND

DEVELOPER/OWNER:
JPMORGAN CHASE
201 W UNIVERSITY AVE, FLOOR 1
CHAMPAIGN, ILLINOIS 61820-3911
(708) 843-2888

SITE OPERATOR/GENERAL CONTRACTOR:
SUPERINTENDENT:

IMPORTANT: GC MUST SIGN ALL PLAN SHEETS AND ANY NEW PLAN SHEETS ISSUED BY THE CEC

INCORPORATED
SITE ENGINEERS & SURVEYORS
EST. 1967
10215 Technology Drive, Suite 304
Knoxville, TN 37932
(615) 777-4160
www.site-incorporated.com



Site Demolition & Storm Water Pollution Prevention Plan - Stage I

Farragut
JPM Chase Retail Banking Center
11242 Kingston Pike
Farragut, TN 37994

REVISIONS	
NO.	DATE / COMMENTS
1	11/04/2022 Revised per Item Comments

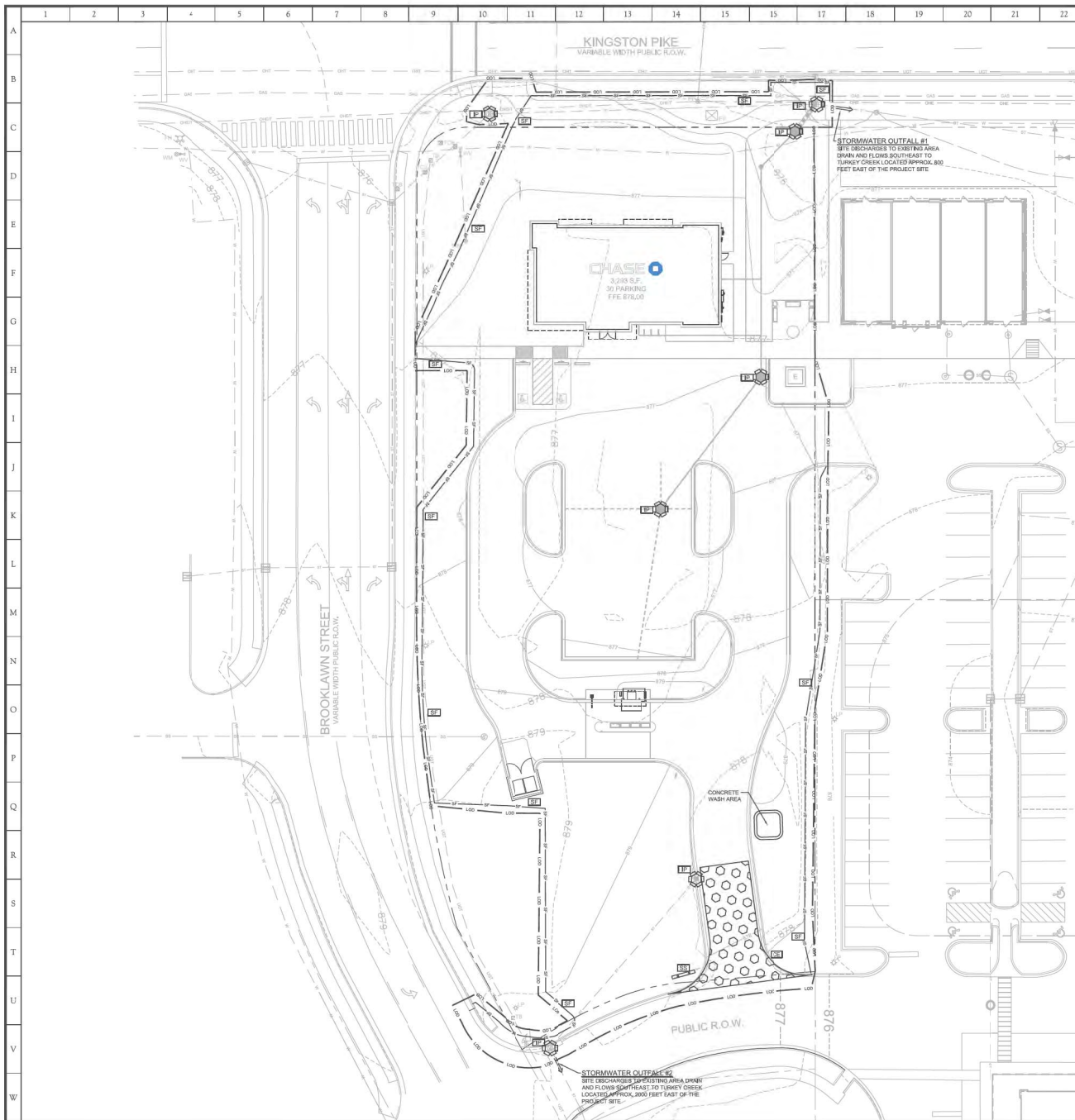
ORIGINAL ISSUE: 11/04/2022

SITE PROJECT #: 1994

FILE: SWPPP

SHEET: 1 OF 22

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SWPPP UPDATES AND AMENDMENTS

THE GC MUST UPDATE THE SWPPP INCLUDING THE SITE MAPS, TO REFLECT THE PROGRESS OF CONSTRUCTION ACTIVITIES AND GENERAL CHANGES TO THE PROJECT SITE. UPDATES SHOULD BE MADE DAILY TO TRACK PROGRESS WHEN ANY OF THE FOLLOWING ACTIVITIES OCCUR: BMP INSTALLATION, MODIFICATION OR REMOVAL, CONSTRUCTION ACTIVITIES (E.G., PAVING, STORM SEWER INSTALLATION, UTILITY INSTALLATION, ETC.), CLEARING, GRUBBING OR GRADING, OR TEMPORARY OR PERMANENT STABILIZATION.

IMPORTANT: THE GENERAL CONTRACTOR MUST SUBMIT A REQUEST FOR INFORMATION (RFI) TO THE CEC AND OBTAIN WRITTEN CEC APPROVAL BEFORE DOING ANY OF THE FOLLOWING:

1. MODIFYING EROSION OR SEDIMENT CONTROL BMPs (SUBSTITUTIONS ARE TYPICALLY ONLY APPROVED IF SPECIFIED MATERIALS ARE NOT AVAILABLE OR THERE IS A VALID REASON THE SPECIFIED BMP WILL NOT WORK).
2. ADDITIONAL EROSION OR SEDIMENT CONTROL BMPs;
3. MODIFYING THE SWPPP IMPLEMENTATION SCHEDULE; OR
4. PERFORMING ANY ACTIONS OR IN ANY MANNER THAT IS CONTRARY TO THE SWPPP.

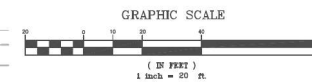
THE CONTRACTOR MAY MODIFY OR ADD ADDITIONAL BMPs, WITHOUT CEC APPROVAL, IN AN EMERGENCY SITUATION TO PREVENT SEDIMENT DEBRIS OR PROTECT WATER QUALITY. HOWEVER, GC MUST NOTIFY THE CEC AS SOON AS PRACTICAL AS TO THEIR ACTIONS TO DISCUSS THE NEED FOR ADDITIONAL OR SUPPLEMENTAL MEASURES AND TO OBTAIN THE REQUIRED APPROVALS. THE CONTRACTOR IS ULTIMATELY RESPONSIBLE TO ENSURE COMPLIANCE WITH THE PERMIT AND PROTECTION OF DOWNSTREAM WATER QUALITY.

AMENDING THE SWPPP DOES NOT MEAN THAT IT HAS TO BE REPRINTED. IT IS ACCEPTABLE TO ADD ADDENDUMS, NEW SECTIONS, DETAILS, AND/OR REVISED DRAWINGS THAT HAVE THE CEC NAME IN PRINT, ARE STAMPED, DATED, AND ARE ACCOMPANIED BY WRITTEN COPY OF THE ASSOCIATED RFI AND ITS RESPONSE FROM CEC. ENGINEERED ITEMS MUST BE SIGNED AND STAMPED BY THE CEC OF RECORD FOR THE PROJECT.

LEGEND OF SYMBOLS

---	PROPERTY LINE
---	LIMITS OF DISTURBANCE
---	EXISTING CONTOURS
---	PROPOSED CONTOURS
---	LIMITS OF EXISTING DRAINAGE AREAS
---	LIMITS OF EXISTING SOL AREAS
---	EXISTING STORM PIPE
---	PROPOSED STORM PIPE
---	EXISTING 100 YEAR FLOOD LINE
---	EXISTING 500 YEAR FLOOD LINE
---	EXISTING NO-FILL LINE
---	PROPOSED 100 YEAR FLOOD LINE
---	PROPOSED 500 YEAR FLOOD LINE
---	PROPOSED NO-FILL LINE
---	DIRECTION OF OVERLAND FLOW
---	SILT FENCE
---	CONSTRUCTION EXIT
---	SWPPP INFORMATION SIGN
---	PERMANENT SEEDING
---	INLET PROTECTION
---	BASIN RESEAL RETROFIT

REFERENCE EROSION AND SEDIMENT CONTROL PLANS FOR TOWN CENTER AT SIOLE FARMS BY SITE, INCORPORATED FOR INITIAL CONSTRUCTION SWPPP I, II, & III, NOTICE OF COVERAGE FOR PROJECT PROVIDED BY TDEC TRACKING NUMBER TN1134847



DEVELOPER/OWNER:

JPMORGAN CHASE
201 W UNIVERSITY AVE, FLOOR 1
CHAMPAIGN, ILLINOIS 61820-3911
(708) 843-2888

SITE OPERATOR/GENERAL CONTRACTOR:

SUPERINTENDENT:

IMPORTANT: GC MUST SIGN ALL PLAN SHEETS AND ANY NEW PLAN SHEETS ISSUED BY THE CEC.



10215 Technology Drive, Suite 304
Knoxville, TN 37932
(865) 777-4180
www.site-incorporated.com



Storm Water Pollution Prevention Plan - Stage II

Farragut
JPM Chase Retail Banking Center
11242 Kingston Pike
Farragut, TN 37934

REVISIONS

NO.	DATE	COMMENTS
1	11/04/2022	Revised Per Town Comments

DEVELOPER/OWNER:

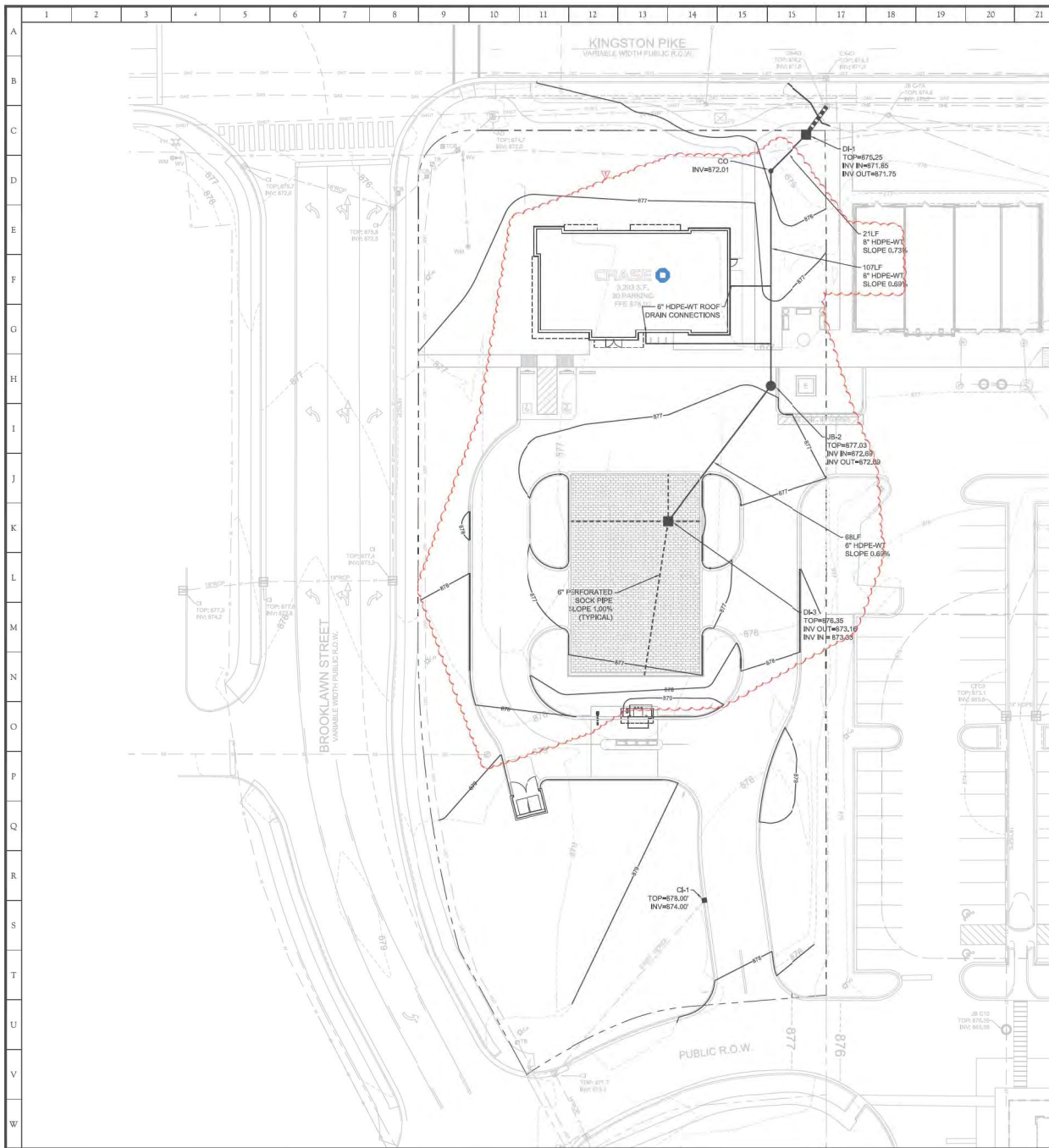
ORIGINAL ISSUE: 11/04/2022

SITE PROJECT #: 1994

FILE: SWPPP

SHEET: 4 OF 22

C2.2



LEGEND OF SYMBOLS

- PROPERTY LINE
- EXISTING CONTOURS
- PROPOSED CONTOURS
- EXISTING STORM PIPE
- PROPOSED SPOT SHOT
- TOP OF CURB
- BOTTOM OF CURB
- PROPOSED JUNCTION BOX
- PROPOSED CURBYARD INLET
- PROPOSED STORMWATER CLEANOUT

SEE SHEET C8.0 FOR DETAILS

SITE GRADING NOTES:

- CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES INCLUDING REMOVAL OF ANY EXISTING UTILITIES SERVING THE STRUCTURE. UTILITIES ARE TO BE REMOVED TO THE RIGHT-OF-WAY. CONTRACTOR SHALL COORDINATE WITH LOCAL UTILITY COMPANY AND PAY ALL FEES.
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 24 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. THE CONTRACTOR SHALL RELOCATE ALL EXISTING UTILITIES TO BE REMOVED WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES AND PAY ALL FEES.
- THE CONTRACTOR SHALL REPAIR AND/OR REPLACE ANY EXISTING STRUCTURES THAT ARE DAMAGED DURING, AND AS A RESULT OF, CONSTRUCTION. REPAIRS AND/OR REPLACEMENTS SHALL BE MADE AS NECESSARY TO RETURN THE DAMAGED STRUCTURES TO ORIGINAL OR BETTER CONDITION. REPAIRS AND/OR REPLACEMENTS SHALL BE AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE GENERAL N.B.S.E. FORM FOR STORM WATER DEGRADATION ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
- EXISTING AND PROPOSED GRADE CONTOUR INTERVALS SHOWN AT 1 FOOT.
- ALL CUT OR FILL SLOPES SHALL BE 2:1 OR FLATTER UNLESS OTHERWISE NOTED.
- ALL UNPAVED AREAS DETURBED BY GRADING OPERATIONS SHALL RECEIVE 4 INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY A SUBSTITUTION FIBER TO ALL SLOPES SUCH OR EXPOSED. CONTRACTOR SHALL STABILIZE DETURBED AREAS IN ACCORDANCE WITH PLANS AND SPECIFICATIONS UNTIL A HEALTHY STAND OF VEGETATION IS OBTAINED.
- CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
- CONTRACTOR SHALL ADJUST AND/OR SAW OUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH RT AND CONTIGUOUS GRADE.
- TOPOGRAPHIC INFORMATION TAKEN FROM A TOPOGRAPHIC SURVEY BY SITE, INC., DATED 10/10/2021. IF CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, THE CONTRACTOR SHALL SUPPLY AT THEIR EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR AND SUBMIT IT TO THE OWNER FOR REVIEW.
- CONTRACTOR SHALL INSPECT, REPAIR, AND CLEAN ALL EXISTING DRAINAGE STRUCTURES AND PIPING. ALL SCUMED AND DEBRIS SHALL BE REMOVED.
- ALL STORM PIPE EXISTING STRUCTURES SHALL BE GROUDED TO ASSURE CONNECTION AT STRUCTURE IS WATER-TIGHT.
- ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT AND SHALL HAVE TRAFFIC BEARING RING & COVERS. MANHOLES IN UNPAVED AREAS SHALL BE 6 INCHES ABOVE FINISH GRADE. LIDS SHALL BE LABELED "STORM SEWER".
- ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POUNDED WORTA INVERT FROM INVERT TO INVERT OUT.
- PRECAST STRUCTURES MAY BE USED AT THE CONTRACTOR'S OPTION.
- CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
- MINIMUM COVER FROM TOP OF STORM PIPE TO FINISH GRADE SHALL BE 2 FEET.
- HEADWALLS SHALL BE CONSTRUCTED AND/OR INSTALLED IMMEDIATELY FOLLOWING INSTALLATION OF PIPE TO MINIMIZE POSSIBLE PIPE DAMAGE AND FACILITATE FINAL GRADING.
- BRAMP STONE FOR EROSION PROTECTION SHALL BE PROVIDED AT ALL STORMWATER DISCHARGE LOCATIONS.
- WATER, SEWER, AND STORM LINES SHALL BE SEPT 10 FEET APART HORIZONTALLY AND 18 INCHES APART VERTICALLY WHEN CROSSING OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE UNLESS NOTED OTHERWISE.
- WHEN CROSSING WATER LINES SHALL BE CONSTRUCTED ABOVE SEWER LINES AND STORM LINES UNLESS A LACK OF SUFFICIENT DEPTH FOR SEWER OR STORM LINE REQUIRES CONSTRUCTION OF WATER LINE UNDER SEWER LINES OR STORM LINES. IN THE EVENT OF A VERTICAL CONFLICT, THE FOLLOWING REQUIREMENTS SHALL BE OBSERVED:
 - SEWER LINES SHALL BE DUCTILE IRON PIPE WITH MECHANICAL JOINTS AT LEAST 10 FEET ON BOTH SIDES OF THE CROSSING.
 - STORM LINES SHALL HAVE "GOING" GASKETS WITH HUGGER BAND COUPLING AT LEAST 10 FEET ON BOTH SIDES OF THE CROSSING.
 - WATER LINES SHALL BE DUCTILE IRON PIPE WITH MECHANICAL JOINTS AND APPROPRIATE THRUST BLOOMING MEETING THE REQUIREMENTS OF 1. AND 2.2.2.1 OR 2.1.1.1 (AS APPLICABLE).
- ALL WORK TO BE COMPLETED (EARTHWORK, FINAL UTILITIES, AND FINAL GRADING) BY THE MILESTONE DATE IN PROJECT DOCUMENTS.

SITE STORM SYSTEM NOTES

- ALL STORM PIPE LOCATED WITHIN RIGHT-OF-WAY SHALL BE RCP.
- ALL OTHER STORM PIPE SHALL BE HDPE-WT OR RCP UNLESS OTHERWISE NOTED ON THE PLAN.
- PIPES 30" OR SMALLER MAY BE HDPE-WT.
- REFER TO PROJECT SPECIFICATIONS FOR APPROVED PIPE TYPES.

REINFORCED CONCRETE PIPE (RCP)

ASTM C76 CLASS B UNLESS NOTED OTHERWISE ON DRAWINGS. INSTALLED WITH FLEXIBLE PLASTIC BETWEEN GASKETS AT JOINTS.

- GASKETS: ASHTO M108, TYPE B OR ASHTO C440, INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- FLANGED END SECTIONS: ASTM C76 OR, FOR SECTIONS WITH TIE WALL, ASHTO H715.

HIGH DENSITY POLYETHYLENE PIPE - WATER TIGHT (HDPE-WT)

ASHTO M252 TYPE S OR M252 TYPE S100. USE ONLY 2008 SMOOTH INTERIOR/ANNUAL EXTERIOR.

- RUBBER GASKET: ASTM F477
- RUBBER GASKET JOINTS: ASTM D212
- CORRUGATED COUPLING BANDS: AS RECOMMENDED BY MANUFACTURER

STORM DRAIN GRATE SCHEDULE:

TYPE	MODEL	USE
JS	NEENAH R-648	JUNCTION BOX
GI	NEENAH R-2076, WITH R-3078-481000	SINGLE CURB INLET
DI	NEENAH R-2076	DROP INLET
YI	NEENAH R-2850C	YARD INLET

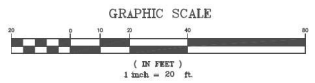
DEWATERING NOTE:

WHEN PERFORMING GRADING OPERATIONS DURING PERIODS OF WET WEATHER, PROVIDE ADEQUATE DEWATERING, DRAINAGE AND GROUND WATER MANAGEMENT TO CONTROL MOISTURE OF SOILS. REFER TO MASTER SITE SPECIFICATIONS.

CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EARTHWORK REQUIRED TO PREPARE THE UNCLASSIFIED SITE TO THE LINES AND GRADES AS SHOWN ON PLANS. THIS INCLUDES, BUT IS NOT LIMITED TO, ANY QUANTITY OF IMPORT OR EXPORT OF STRUCTURAL FILL AND/OR DISPOSAL OF UNSUITABLE MATERIAL, AS REQUIRED, ALL COSTS SHALL BE INCLUDED IN OVERALL BASE BID. ALL EXCAVATION SHALL BE CONSIDERED UNCLASSIFIED.

FLOODWAY AND NO-FILL LINE NOTES:

- NO PLACEMENT OF FILL MATERIALS SHALL BE PERFORMED BEYOND THE EXISTING NO-FILL LINE UNTIL THE CONTRACTOR IS NOTIFIED THE CLOMIR HAS BEEN APPROVED BY FEMA.
- NO WORK SHALL BE PERFORMED WITHIN THE FLOODWAY UNITS. THE CONTRACTOR IS NOTIFIED THE CLOMIR HAS BEEN APPROVED BY FEMA.
- ALL FILL WORK MUST BE DONE IN CONFORMANCE WITH THE TOWNS OF FARRAGUT LOCALLY ADOPTED REGULATIONS BEFORE AND AFTER APPROVAL OF THE CLOMIR.



REVISIONS

NO.	DATE	COMMENTS
1	11/04/2021	Revised Per Town Comments

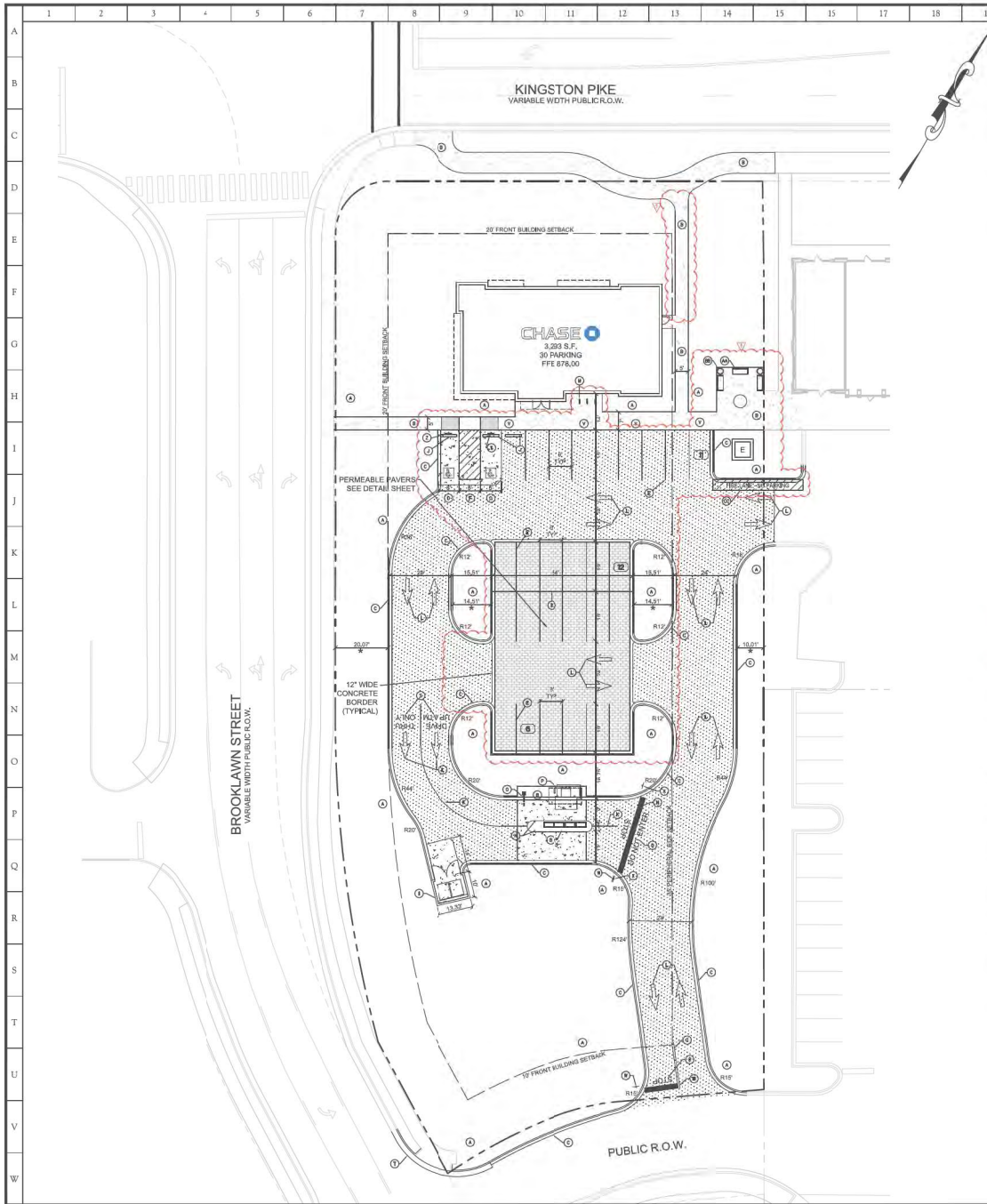
ORIGINAL ISSUE: 11/04/2021
SITE PROJECT #: 1994
FILE: Grading
SHEET: 4 OF 22

C3.0

Site Grading and Drainage Plan

Farragut
JPM Chase Retail Banking Center
11242 Kingston Pike
Farragut, Tennessee

10215 Technology Drive, Suite 304
Knoxville, TN 37932
(865) 777-4160
www.site-incorporated.com



PAVING MATERIALS SCHEDULE		
MATERIAL	THICKNESS	TYPE
HEAVY DUTY CONCRETE PAVING		
ADDED BASE COURSE	4"	TDOT TYPE A CLASS A & GRADING D
CONCRETE	8"	PCC 4000 PSI TYPE I WITH FIBER REINFORCEMENT
ASPHALT PAVING		
ADDED BASE COURSE LIFT 1"	4"	TDOT TYPE A CLASS A & GRADING D
ADDED BASE COURSE LIFT 2"	4"	TDOT TYPE A CLASS A & GRADING D
ASPHALTIC BINDER**	2"	TDOT GRADE B
ASPHALTIC SURFACE**	1.5"	TDOT GRADE E
TRACKLESS TACK COAT	0.06-0.10 GAL PER SQ. YD.	

REFER TO TDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, SECTION 300.09
**REFER TO TDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, SECTION 307
**REFER TO TDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, SECTION 411

REFER TO SHEET C8.1 FOR TYPICAL SITE DETAILS

LEGEND:	
(A)	LANDSCAPE AREAS/LAND (SEE DETAIL SHEET)
(B)	CONCRETE SIDEWALK (SEE DETAIL SHEET)
(C)	16" CONCRETE CURB & GUTTER (SEE DETAIL SHEET)
(D)	ADA SPACE WITH PAINTED ACCESSIBLE SYMBOL (SEE DETAIL SHEET)
(E)	4" WIDE PAINTED WHITE PARKING STRIPES
(F)	4" WIDE (MAGNOLIA PARK) STRIPES AT 24" O.C.
(G)	4" WIDE DOUBLE SOLID YELLOW LINE
(H)	2" WIDE WHITE STOP BAR (SEE DETAIL SHEET)
(I)	CUMPS/ENCLOSURE (REFER TO ARCHITECTURAL PLANS)
(J)	CONCRETE WHEEL STOP (SEE DETAIL SHEET)
(K)	4" WIDE SINGLE SOLID WHITE LINE
(L)	WHITE DIRECTIONAL ARROW (SEE DETAIL SHEET)
(M)	BIKE RACK (SEE DETAIL SHEET)
(N)	BOLLARD (SEE ARCH PLANS)
(O)	CLEARANCE BAR (SEE ARCH PLANS)
(P)	ATM TERMINAL (SEE ARCH PLANS)
(Q)	WORDS "NO ENTRY" PAINTED WHITE (SEE DETAIL SHEET)
(R)	WORD "STOP" PAINTED WHITE (SEE DETAIL SHEET)
(S)	ATM DRIVE-THRU MARKINGS (SEE DETAIL SHEET)
(T)	36" CONCRETE CURB & GUTTER (SEE DETAIL SHEET)
(U)	CONCRETE SIDEWALK WITH INTEGRAL CURB (SEE DETAIL SHEET)
(V)	FLUSH CONCRETE SIDEWALK (SEE DETAIL SHEET)
(W)	STOP SIGN (SEE DETAIL SHEET)
(X)	DO NOT ENTER SIGN (SEE DETAIL SHEET)
(Y)	ACCESSIBLE PARKING SIGN (SEE DETAIL SHEET)
(Z)	VAN ACCESSIBLE PARKING SIGN (SEE DETAIL SHEET)
(AA)	BENCH (SEE ARCHITECTURAL PLANS)
(AB)	PLANTER (SEE ARCHITECTURAL PLANS)
(AC)	FIRE LANE MARKING (SEE DETAIL SHEET)
(AD)	ACCESSIBLE RAMP (SEE DETAIL SHEET)

SUMMARY DATA	
LOT AREA:	1.35 ACRES
ZONING:	PUD
VEHICULAR PARKING ANALYSIS	
GROSS FLOOR AREA (SHOPPING AND RETAIL)	3239 SF
REQUIRED PARKING (1 PER 300 GROSS SQ FT)	11 SPACES
TOTAL STANDARD SPACES REQUIRED:	16 SPACES
TOTAL ACCESSIBLE SPACES REQUIRED:	2 SPACES
TOTAL SPACES REQUIRED:	18 SPACES
TOTAL STANDARD SPACES PROVIDED:	27 SPACES
TOTAL ACCESSIBLE SPACES PROVIDED:	3 SPACES
TOTAL SPACES PROVIDED:	30 SPACES
BICYCLE PARKING ANALYSIS	
RETAIL AREA	
REQUIRED PARKING (11 REQUIRED VEHICLE SPACES)	3 SPACES
PROVIDED PARKING:	3 SPACES
HVAC SYSTEMS, ANTENNAS, AND SATELLITE DISHES WILL BE SCREENED SO THAT THEY ARE NOT VISIBLE FROM ADJACENT PROPERTIES AND RIGHT-OF-WAYS PER TOWN OF FARRAGUT REQUIREMENTS.	
ALL WALKING FACILITIES (WALKING TRAILS/SIDEWALKS) MUST BE COORDINATED WITH TOWN STAFF PRIOR TO CONSTRUCTION.	
ALL DIMENSIONS ARE FACE OF CURB TO FACE OF CURB UNLESS NOTED WITH AN * ALL DIMENSIONS NOTED WITH AN * ARE BACK OF CURB TO BACK OF CURB.	
CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY LOCATIONS FOR ALL BUILDINGS.	

- SITE PLAN NOTES:**
1. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY/COUNTY REGULATIONS AND CODES AND QUALITY STANDARDS.
 2. ALL DISTURBED AREAS NOT BUILT NOR PAVED UPON ARE TO RECEIVE FOUR INCHES OF TOPSOIL, SEED, MULCH, AND WATER UNTIL A HEALTHY STAND OF GRASS IS ESTABLISHED.
 3. ALL DIMENSIONS AND RADII ARE TO FACE OF CURB UNLESS OTHERWISE NOTED WITH AN *. ALL DIMENSIONS NOTED WITH AN * ARE BACK OF CURB TO BACK OF CURB.
 4. ALL CURBED RADIUS ARE TO BE 4' UNLESS NOTED OTHERWISE.
 5. BUILDING DIMENSIONS SHOWN ON SHELLOUT PLAN ARE NOMINAL DIMENSIONS ONLY INTENDED FOR USE IN DETERMINING APPROXIMATE SQUARE FOOTAGES. SEE ARCHITECTURAL PLANS FOR ACTUAL DIMENSIONS OF BUILDING CONSTRUCTION.
 6. EXISTING STRUCTURES WITHIN THE CONSTRUCTION LIMITS ARE TO BE ABANDONED, REMOVED, OR RELOCATED AS NECESSARY. ALL COSTS SHALL BE INCLUDED IN BASE BID.
 7. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS, INCLUDING BUT NOT LIMITED TO ALL UTILITIES, STORM DRAINAGE, SEWER, ETC. AS REQUIRED. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COST SHALL BE INCLUDED IN BASE BID.
 8. SITE BOUNDARY TOPOGRAPHY, UTILITY AND ROAD INFORMATION WAS TAKEN FROM A SURVEY BY SITE, INCORPORATED DATED 9/10/2024. CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS WITHOUT EXCEPTION. THE CONTRACTOR SHALL SUPPLY, AT THEIR EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR AND SUBMIT IT TO THE OWNER FOR REVIEW.
 9. THE SITEWORK FOR THIS PROJECT SHALL MEET OR EXCEED THE SITE WORK SPECIFICATIONS. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES.
 10. IN ORDER TO PREVENT POUNDING THE CONTRACTOR SHALL INSTALL REVERSE-ARCH GUTTER AT ALL LOCATIONS WHERE ASPHALT SLOPES AWAY FROM OUTLET. REVERSE-ARCH GUTTER LOCATIONS ARE DENOTED AS SHOWN IN LEGEND.

- SITE LAYOUT NOTES:**
- PROPERTY LINE STAKEOUT**
ALL PROPERTY LINES SHALL BE MARKED FOR ROUGH LOCATION WITH CONTINUOUS SURVEYOR FLAGGING TAPE.
- ALL PROPERTY CORNERS AND ALL OUTLOT CORNERS SHALL BE ROUGH FINISH WITH 2" HIGH METAL ROD OR EQUIVALENT AND FLAGGED WITH SURVEYOR TAPE AT COMPLETION OF ROUGH GRADING AND MAINTAINED THROUGHOUT COURSE OF WORK.
- ROUGH LOCATION SHALL MEAN ACCURATE WITHIN 2' HORIZONTALLY. DO NOT ERR OUTSIDE PROPERTY LINE IN ANY CASE.
- BUILDING STAKEOUT**
BUILDING DIMENSIONS SHOWN ON-SITE PLANS ARE NOMINAL DIMENSIONS ONLY INTENDED FOR USE IN DETERMINING APPROXIMATE SQUARE FOOTAGES. SEE FOUNDATION PLAN FOR ACTUAL DIMENSIONS OF CONSTRUCTION.
- A SURVEYOR LICENSED IN THE STATE OF THE PROJECT LOCATION MUST BE USED IN LOCATING ALL BUILDINGS ON-SITE BEFORE WORK IS BEGUN. 24 FOOTINGS OF ANY BUILDINGS, SITE, INC. SHALL BE NOTIFIED BY THE SURVEYOR UPON COMPLETION OF THIS WORK.
- FOUNDATION AS-BUILT**
A FOUNDATION LOCATION PLAN MUST BE PREPARED BY THAT SURVEYOR AND SUBMITTED FOR SITE, INC. REVIEW AS SOON AS ALL FOUNDATION WORK IS UP TO FLOOR LEVEL.
- SITE WORK STAKEOUT**
CONSIDER SITE, INC. FOR ALL DIMENSIONS AND OTHER ITEMS LABELED "VERIFY" OR "YIELD VERIFY" PRIOR TO INSTALLATION OF THAT WORK OR ANY RELATED WORK.
- SITE PAVING NOTES**
- PAVING ELEVATION TOLERANCES**
FINISH ELEVATIONS SHALL BE DETERMINED BY PAVING CONTRACTOR FOR REQUIRED ELEVATION AND ADEQUATE COMPACTION BEFORE COMMENCING ANY PAVING ACTIVITY. PAVING ELEVATION SHALL NOT HAVE MORE THAN 0.01" VARIATION IN ANY 10' DIAMETER.
- PAVING THICKNESS TOLERANCES**
PAVING THICKNESS AT ANY ONE CORE SHALL NOT BE LESS THAN 80% OF SPECIFIED THICKNESS. THE AVERAGE OF ALL APPROVED TESTS MUST BE AT LEAST EQUAL TO THE SPECIFIED THICKNESS FOR EACH MATERIAL. NOT MORE THAN 20% OF ALL APPROVED TESTS MAY FALL BELOW SPECIFIED MINIMUMS. ANY AREA FOUND TO BE LESS THAN 90% SPECIFIED THICKNESS SHALL BE OVERLAIN WITH ASPHALT AS DIRECTED BY SITE, INC.
- TESTING DURING PLACEMENT**
GENERAL CONTRACTOR SHALL PROVIDE PAYMENT SPOOT CHECKS OF PAVING BASE THICKNESS PRIOR TO INSTALLATION OF ANY ASPHALT OR CONCRETE PAVING. DENSITY TESTS SHALL BE PERFORMED ON EACH LIFT AT THE RATE OF ONE TEST PER 10,000 SQUARE FEET.
- CONTRACTOR SHALL PROVIDE FOR TESTING OF COMPLETED PAVING INSTALLATION FOR COMPLIANCE WITH DESIGN CRITERIA AND REQUIRED THICKNESS. CONTRACTOR SHALL REPLACE ALL NON-PERFORMING MATERIAL AT HIS OWN EXPENSE.
- TESTING SHALL BE PERFORMED ONLY BY AN INDEPENDENT TESTING AGENCY APPROVED BY SITE, INC. TEST HOLES NOT SPOT-TYPED BY SITE, INC. MAY NOT BE COMBINED ACCEPTABLE.
- ALLOW A MINIMUM OF SIXTEEN CORE TESTS TO BE LOCATED ONLY BY WRITTEN INSTRUCTION BY SITE, INC.
- THE PAVING CONTRACTOR SHALL REPAIR ALL CORING HOLES BY FILLING HOLES WITH CONCRETE FLUSH TO TOP OF PAVEMENT.
- ASPHALTIC PAVING MATERIALS**
MATERIAL AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE SPECIFICATION OF THE HIGHWAY DEPARTMENT OF THE STATE IN WHICH THE PROJECT IS LOCATED. REFER TO PAVING MATERIALS LEGEND.
- CONCRETE**
CONCRETE CURBING SHALL BE 4000 PSI 28 DAY STRENGTH 2" - 3" SLUMP. (NO CURB DEFORMATION) 2% - 3% AIR ENTRAINMENT. INSTALL WITH 6000 PSI TWO COAT EMULSION OVER ASPHALT.
- PROVIDE CYLINDER BREAK TEST - 3500 LBS. OF CURBING OR 1500 POUNDS WITH BREAKS - 1 @ 28 DAYS, 2 @ 28 DAYS. COMPLY WITH ASTM C41 AND ASTM C430. ALSO PROVIDE ONE SLUMP TEST PER 500 LBS. OF CURBING OR 1500 POUNDS.
- PROVIDE EXPANSION JOINT @ 50' O.C. (MAX) AND CONTRAIL JOINTS @ 25' O.C. (MAX) AT ALL CONCRETE PAVING AREAS. REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.
- PAVEMENT MARKING**
PROVIDE PAVEMENT MARKINGS AS SHOWN ON THE DRAWINGS. STRIPING SHALL BE 4" WIDE OR AS NOTED OTHERWISE ON THE PLANS. ALL MARKINGS SHALL MEET THE TENNESSEE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, MARCH 1, 2008 (SECTION 712.02).
- CONTRACTOR SHALL REMOVE ALL EXISTING PAVEMENT MARKINGS THAT DO NOT CONFORM TO TDOT STANDARDS FOR INTERSECTION.
- TEMPORARY PAVEMENT LINE MARKINGS ON INTERMEDIATE LAYERS OF PAVEMENT SHALL BE REFLECTIVE TAPE OR REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS BEFORE DARK HOURS. SHORT, UNMARKED SECTIONS SHALL NOT BE ALLOWED.
- ALL MARKINGS SHALL CONFORM TO THE LATEST EDITION OF THE MUTCD AND TDOT STANDARD DRAWINGS TAK-1 THROUGH T-84.

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ALL WALKING FACILITIES (WALKING TRAILS/SIDEWALKS) MUST BE COORDINATED WITH TOWN STAFF PRIOR TO CONSTRUCTION.	
ALL DIMENSIONS ARE FACE OF CURB TO FACE OF CURB UNLESS NOTED WITH AN *. ALL DIMENSIONS NOTED WITH AN * ARE BACK OF CURB TO BACK OF CURB.	
CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY LOCATIONS FOR ALL BUILDINGS.	

Tennessee 811
Know what's below.
Call before you dig.

GRAPHIC SCALE
1" = 20' ft.

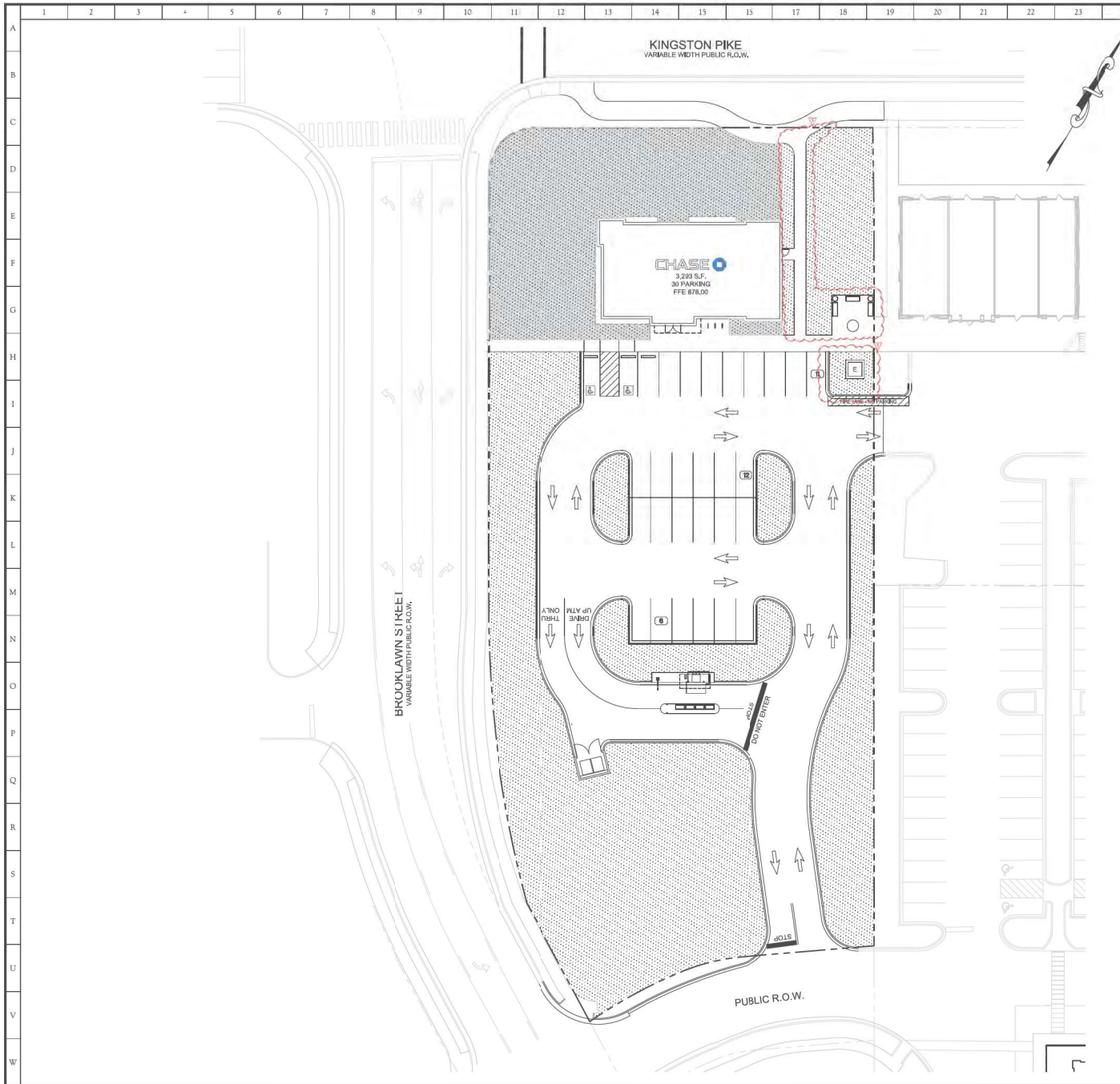
REVISIONS

NO.	DATE	COMMENTS
1	11/04/2024	Revised per Town Comments

ORIGINAL ISSUE: 11/04/2024
SITE PROJECT #: 1994
FILE: Layout
SHEET: 1 OF 22
C4.0

STAR SITE, INCORPORATED
EST. 1967
CIVIL ENGINEERS & SURVEYORS
10215 Technology Drive, Suite 304
Knoxville, TN 37932
(865) 777-4160
www.star-incorporated.com

SEAL OF THE BOARD OF REGISTRATION
FOR THE PROFESSION OF
CIVIL ENGINEERING
STATE OF TENNESSEE
JPM Chase Retail Banking Center
11242 Kingston Pike
Farragut, TN 37934
Site Layout Plan



SITE AREA DATA	
TOTAL SITE AREA	87,363 SF (1.32 ACRES)
PERVIOUS AREA	30,291 SF
IMPERVIOUS AREA	57,072 SF
LOT COVERAGE	47.30%
TOTAL LENGTH OF BUILDING FACING PARKING OR VEHICULAR DRIVE	305.29 LF
BUILDING LANDSCAPE AREA REQUIRED (2.5 x 20.33)	509 SF
BUILDING LANDSCAPE AREA PROVIDED	7,297 SF



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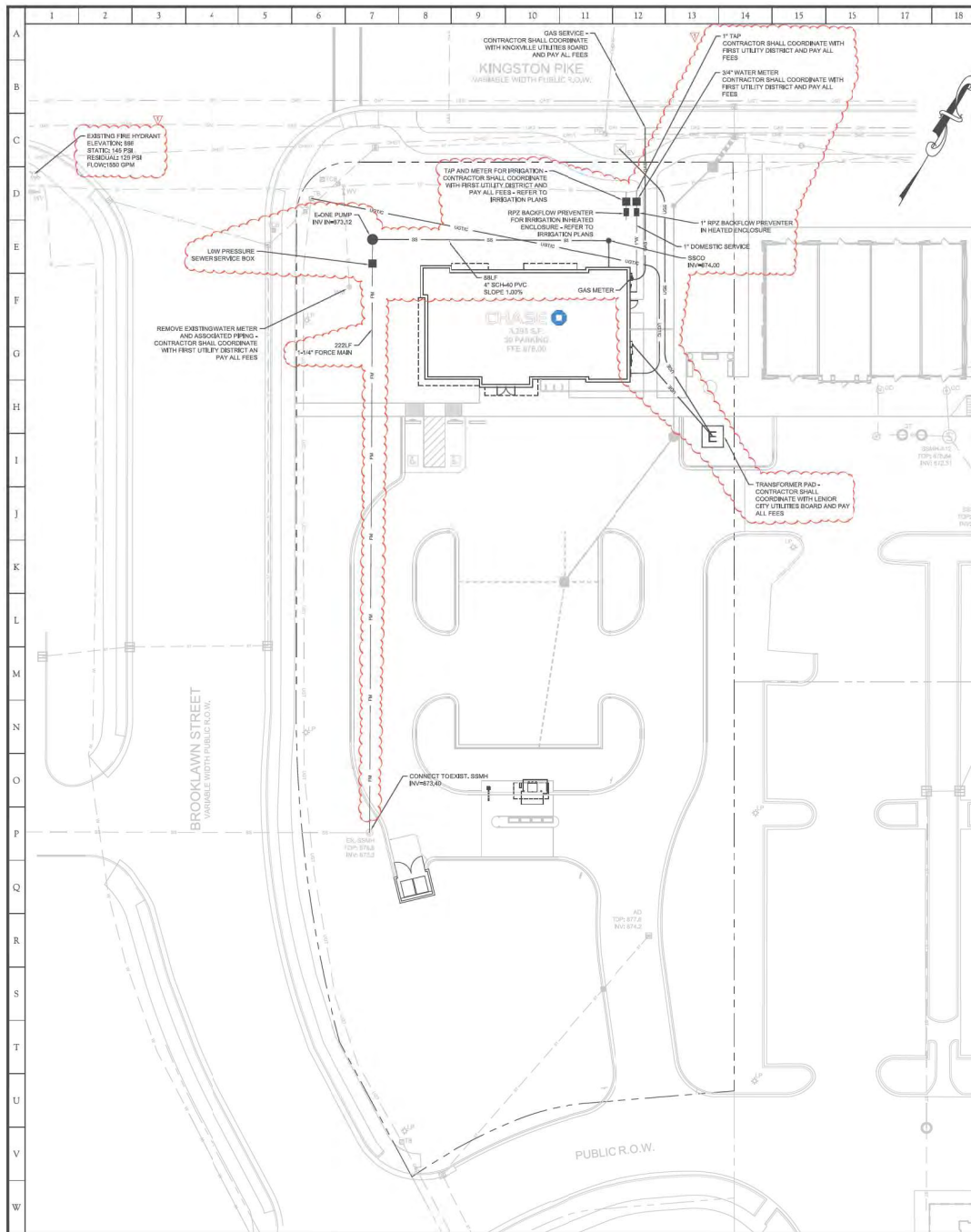
Site Area Plan
Farragut
JPM Chase Retail Banking Center
11247 Kingston Pike
Farragut, TN 37934

REVISIONS	
NO.	DATE COMMENTS
1	1/15/2022 Revised Per Town Comments

ORIGINAL ISSUE: 11/04/2021
SITE PROJECT #: 1994
FILE: Layout
SHEET: 8 OF 22

C4.1





SITE UTILITY LEGEND

---	EXISTING SANITARY SEWER LINE
---	EXISTING WATER LINE
---	EXISTING GAS LINE
---	EXISTING UNDERGROUND ELECTRIC
---	EXISTING OVERHEAD ELECTRIC
---	EXISTING STORM PIPE
---	PROPOSED SANITARY SEWER LINE
---	PROPOSED SANITARY SEWER FORCE MAIN
---	PROPOSED WATER LINE
---	PROPOSED GAS LINE
---	PROPOSED UNDERGROUND ELECTRIC
---	PROPOSED UNDERGROUND TELEPHONE
---	PROPOSED STORM PIPE - FOR REFERENCE ONLY
---	EXISTING
---	EXISTING TELEPHONE REDBATA
---	EXISTING ISOLATION GATE VALVE
---	EXISTING UTILITY POLE
---	EXISTING LIGHT POLE
---	EXISTING ELECTRIC VAULT
---	EXISTING SANITARY SEWER MANHOLE
---	EXISTING FIRE HYDRANT ASSEMBLY
---	EXISTING WATER METER
---	PROPOSED SANITARY SEWER MANHOLE
---	PROPOSED SANITARY SEWER CLEANOUT
---	PROPOSED ELECTRIC TRANSFORMER

UTILITY CONTACTS

WATER & SANITARY SEWER FIRST UTILITY DISTRICT 123 DUNWOOD RD. KNOXVILLE, TN 37923 CONTACT: EDWIN DEYTON PHONE: (865) 598-4191 EMAIL: new.development@tdknox.org	GAS KNOXVILLE UTILITIES BOARD 488 MIDDLEBROOK PK. KNOXVILLE, TN 37919 CONTACT: NEW SERVICE DEPARTMENT PHONE: (865) 558-2555	TELEPHONE TDS TELECOM 701 CONCORD RD. KNOXVILLE, TN 37923 CONTACT: TOM METE PHONE: (865) 671-4546 FAX: (865) 671-4535	STORMWATER TOWN OF FARRAGUT 11408 MINERAL TOWN CENTER DR. FARRAGUT, TN 37934 CONTACT: DANIEL SMITH PHONE: (865) 588-7057 FAX: (865) 588-2008	ELECTRIC LENOIR CITY UTILITIES BOARD 7696 CREEKWOOD PARK BLVD. LENOIR CITY, TN 37971 CONTACT: JAY HINES PHONE: (865) 681-4282
--	---	--	---	---

WATER, SEWER, GAS, ELECTRIC, TELEPHONE LINES, AND THEIR APPURTENANCES SHALL BE INSTALLED PER THE STANDARDS AND SPECIFICATIONS OF THE UTILITY PROVIDERS. CONTRACTOR SHALL COORDINATE ALL WORK WITH THE UTILITY PROVIDERS AND PAY ALL FEES.

SITE UTILITY NOTES

- ALL FILL MATERIAL IS TO BE IN PLACE AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES. ALL FILL MATERIALS SHALL BE STRUCTURAL FILL AS DESCRIBED IN THE SPECIFICATIONS FOR "EARTHWORK".
- DRAWINGS DO NOT PURPORT TO SHOW ALL EXISTING UTILITIES. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- ALL UTILITIES TAKEN OUT OF SERVICE SHALL BE DEMOLISHED AND REMOVED.
- CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES INSPECTORS A MINIMUM OF 72 HOURS BEFORE COMMENCEMENT OF UTILITY INSTALLATION AND FOR COORDINATION OF CONNECTIONS TO EXISTING LINES.
- LINES UNDERGROUND SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING. CONTRACTOR SHALL PAY ALL FEES.
- ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO ANY EXCAVATION, BUILDING, OR OTHER WORK. THE FINAL CONNECTION OF SERVICE, AS BUILT DRAWINGS SHALL BE PREPARED AND SUBMITTED TO UTILITY PROVIDERS AS REQUIRED AFTER CONSTRUCTION AND COMPLETION OF CONNECTIONS TO EXISTING LINES.
- CONTRACTOR SHALL MAINTAIN A MINIMUM COVER OF 3 FEET ON WATER LINES AND 4 FEET ON SEWER LINES.
- WATER, SEWER, AND STORM LINES SHALL BE KEPT 10 FEET APART HORIZONTALLY AND 18 INCHES APART VERTICALLY WHEN CROSSING OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE UNLESS NOTED OTHERWISE.
- WHEN CROSSING WATER LINES SHALL BE CONSTRUCTED ABOVE SEWER LINES AND STORM LINES UNLESS A LACK OF DEPTH ABOVE THE SEWER OR STORM LINE NECESSITATES CONSTRUCTION OF WATER LINES RELATIVE SEWER LINES OR STORM LINES. IN THE EVENT OF A VERTICAL CONFLICT, THE FOLLOWING MODIFICATIONS MUST OCCUR:
 - SEWER LINES SHALL BE CAST-IRON PIPE WITH MECHANICAL JOINTS AT LEAST 18 FEET ON BOTH SIDES OF THE CROSSING.
 - STORM LINES SHALL BE LOW-PROFILE DUCTS WITH MECHANICAL JOINTS AND APPROPRIATE THRUST BLOCKING MEETING THE REQUIREMENTS OF AINB 21-10 OR 21-11 (AWWA C-150/C-150 CLASS 50).
- WATER LINES SHALL BE AS FOLLOWS:
 - PIPE SIZES LESS THAN 4 INCHES SHALL BE CORROSION RESISTANT (TYPE "C" SOFT COPPER PER ASTM 886) OR PVC WATER PIPE (ASTM D2241, CONTINUALLY MARKED AS REQUIRED).
 - PIPE SIZES 4 INCHES AND LARGER SHALL BE BLACK WATER PIPE (AWWA C900) OR STEEL PIPE (CLASS 250 (4 INCHES-42 INCHES), PRESSURE CLASS 250 (14 INCHES-18 INCHES), CONTINUALLY MARKED AS REQUIRED).
- ALL WATER FITTINGS ARE TO BE MECHANICAL JOINTS WITH THRUST BLOCKING AS DESCRIBED IN SPECIFICATIONS.
- SANITARY SEWER PIPE SHALL BE AS FOLLOWS:
 - PVC (ASTM D3034, RATED 30 PSI, CONTINUALLY MARKED AS REQUIRED), FOR PIPES LESS THAN 12 FEET DEEP.
 - DUCTILE IRON PIPE (AWWA C155), FOR PIPES MORE THAN 12 FEET DEEP.
- TOPS OF EXISTING MANHOLES SHALL BE RAISED OR LOWERED AS NECESSARY TO BE FLUSH WITH PROPOSED PAVEMENT ELEVATIONS AND 4 INCHES ABOVE FINISHED GROUND ELEVATIONS IN UNPAVED AREAS.
- GAS LINES SHALL BE SIZED, LOCATED, AND INSTALLED BY UTILITY PROVIDER. CONTRACTOR SHALL COORDINATE AND PAY ALL FEES.
- MINIMUM TRENCH WIDTH SHALL BE 2 FEET.
- ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH AT 3000 P.S.I.
- REFER TO ARCHITECTURAL/MEP PLANS FOR TIE-IN OF ALL UTILITIES. LOCATIONS SHOWN ARE APPROXIMATE.
- REFER TO SITE ELECTRICAL PLANS FOR ELECTRICAL, COMMUNICATIONS, AND LIGHTING.

REFER TO SHEET C8.2 FOR SITE UTILITY DETAILS

FIRE FLOW FOR ALL BUILDINGS
REQUIRED: 1000 GPM AT 20 PSI
PROVIDED: 1000 GPM AT 20 PSI

NUMBER OF HYDRANTS FOR FIRE FLOW OF 1000 GPM
REQUIRED: 1
PROVIDED: 1

AVERAGE SPACING BETWEEN HYDRANTS:
REQUIRED: 500 FT MAX
PROVIDED: 500 FT MAX

DISTANCE FROM ANY POINT ON A STREET OR ROAD FRONTAGE TO A HYDRANT:
REQUIRED: 250 FT MAX
PROVIDED: 250 FT MAX

ALL FIRE HYDRANTS SHALL PROVIDE A MINIMUM FLOW OF 1000 GPM AT 20 PSI AND BE INSTALLED IN ACCORDANCE WITH TOWN OF FARRAGUT AND FIRST UTILITY DISTRICT REQUIREMENTS



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Site Utility Plan

Farragut
JPM Chase Retail Banking Center
11242 Kingston Pike
Farragut, TN 37934

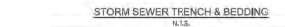
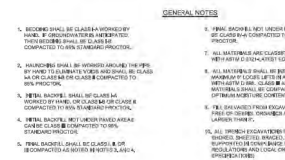
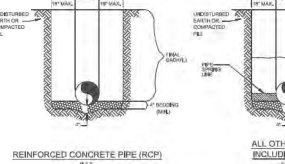
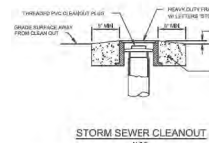
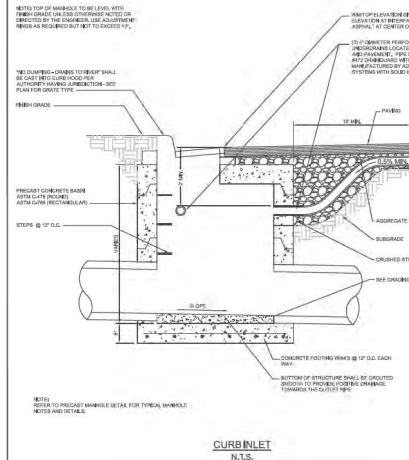
REVISIONS

NO.	DATE	COMMENTS
1	11/04/2022	Revised per Town Comments

ORIGINAL ISSUE: 11/04/2022
SITE PROJECT #: 1994
FILE: Utility
SHEET: 2 OF 22



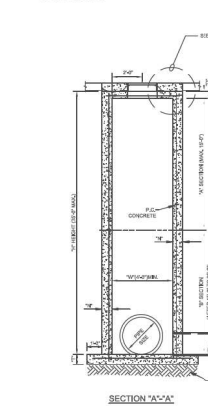
C5.0



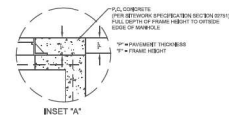
- GENERAL NOTES:
1. ALL CONCRETE SHALL BE TYPE 3000 CONCRETE.
2. THE CONCRETE SHALL BE PLACED IN 4" LAYERS.
3. THE CONCRETE SHALL BE CURED FOR 7 DAYS.
4. THE CONCRETE SHALL BE TESTED FOR STRENGTH.
5. THE CONCRETE SHALL BE PLACED IN 4" LAYERS.
6. THE CONCRETE SHALL BE CURED FOR 7 DAYS.
7. THE CONCRETE SHALL BE TESTED FOR STRENGTH.

PRECAST MANHOLE DETAIL FOR TYPICAL MANHOLE.
NOTES AND DETAILS.

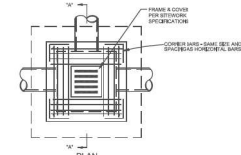
NOTES:
1. PRECAST MANHOLE DETAIL FOR TYPICAL MANHOLE.
2. NOTES AND DETAILS.



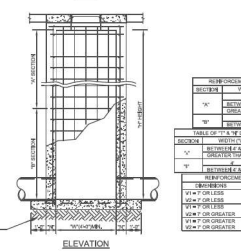
SECTION 'A-A'



INSET 'A'



PLAN



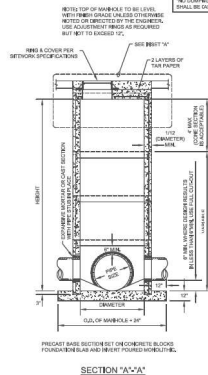
ELEVATION



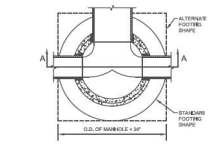
CORNER BAR

MANHOLE SIZES		TABLE 1.1 - MANHOLE SIZES	
SECTION	VERTICAL	SECTION	VERTICAL
1	4' DIA.	1	4' DIA.
2	4' DIA.	2	4' DIA.
3	4' DIA.	3	4' DIA.
4	4' DIA.	4	4' DIA.
5	4' DIA.	5	4' DIA.
6	4' DIA.	6	4' DIA.
7	4' DIA.	7	4' DIA.
8	4' DIA.	8	4' DIA.
9	4' DIA.	9	4' DIA.
10	4' DIA.	10	4' DIA.
11	4' DIA.	11	4' DIA.
12	4' DIA.	12	4' DIA.
13	4' DIA.	13	4' DIA.
14	4' DIA.	14	4' DIA.
15	4' DIA.	15	4' DIA.
16	4' DIA.	16	4' DIA.
17	4' DIA.	17	4' DIA.
18	4' DIA.	18	4' DIA.
19	4' DIA.	19	4' DIA.
20	4' DIA.	20	4' DIA.
21	4' DIA.	21	4' DIA.
22	4' DIA.	22	4' DIA.
23	4' DIA.	23	4' DIA.
24	4' DIA.	24	4' DIA.
25	4' DIA.	25	4' DIA.
26	4' DIA.	26	4' DIA.
27	4' DIA.	27	4' DIA.
28	4' DIA.	28	4' DIA.
29	4' DIA.	29	4' DIA.
30	4' DIA.	30	4' DIA.
31	4' DIA.	31	4' DIA.

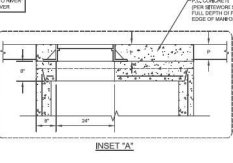
TABLE 1.1 - MANHOLE SIZES



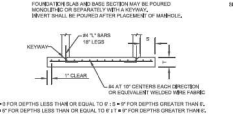
SECTION 'A-A'



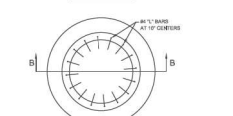
PLAN OF FOOTING



INSET 'A'



SECTION 'B-B'



PLAN OF MANHOLE TOP

BASE SECTION DIMENSIONS	
4' DIA.	4' DIA.
4' DIA.	4' DIA.
4' DIA.	4' DIA.
4' DIA.	4' DIA.

BASE SECTION DIMENSIONS

- GENERAL NOTES:
1. PRECAST MANHOLE SHALL BE MANUFACTURED PER LATEST SPECIFICATIONS.
2. THE CONCRETE SHALL BE TYPE 3000 CONCRETE.
3. THE CONCRETE SHALL BE PLACED IN 4" LAYERS.
4. THE CONCRETE SHALL BE CURED FOR 7 DAYS.
5. THE CONCRETE SHALL BE TESTED FOR STRENGTH.

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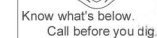


Site Drainage Details
Farragut
JPM Chase Retail Banking Center
11242 Kingston Pike
Farragut, TN 37934

REVISIONS	
NO.	DATE
1	11/14/2021
2	11/14/2021
3	11/14/2021
4	11/14/2021
5	11/14/2021
6	11/14/2021
7	11/14/2021
8	11/14/2021
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30	11/14/2021
31	11/14/2021

ORIGINAL ISSUE: 11/14/2021
SITE PROJECT #: 1994
FILE: Details
SHEET: 10 OF 22

C8.0



 **Dewberry**
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(615) 255-8071
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Project Number:
50156575

bdg
architects

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Tampa, FL 33602

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FL LIC#AR-0014752
www.bdgilp.com

CHASE 

Farragut
JPM Chase Retail Banking Center
11242 Kingston Pike,
Farragut, TN 37934

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SEN

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PROJECT INFORMATION BLOCK	
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JOB #:	22402
DATE:	11-14-2022
DRAWN BY:	PCW
CHECKED BY:	JDL

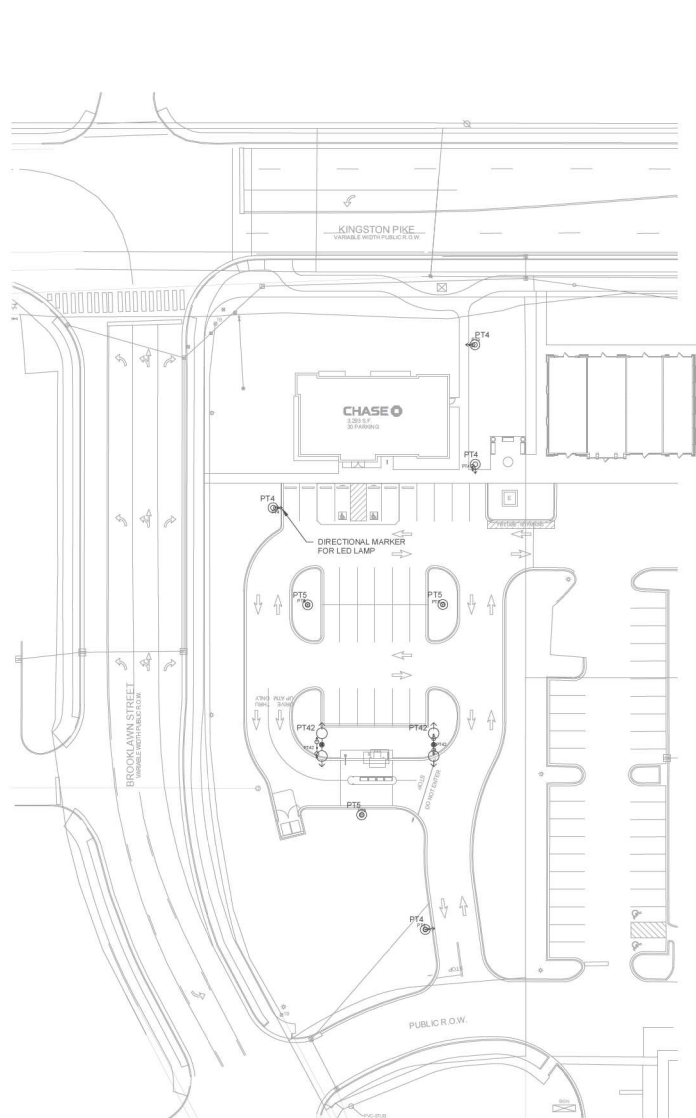
SHEET TITLE

ELECTRICAL SITE PLAN

SHEET NUMBER

E1.0

— SHEET 13 OF 22



PRINTED 8/6/2020

ELECTRICAL SITE PLAN

N	SCALE
	1" = 30'-0"

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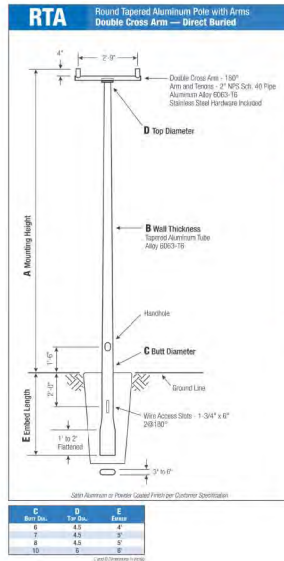
PARKING LOT 120 spaces at 100 sq ft per 100 ft horizontal FOOTCANDLES	PROPERTY LINE 120 spaces Horizontal FOOTCANDLES
Average 4.8	Average 5.3
Maximum 5.8	Maximum 6.1
Minimum 3.0	Minimum 0.1
Avg Side 1.44	Avg Side 12.32
Max Side 1.97	Max Side 20.05
Coal V/Lr 0.17	Coal V/Lr 0.63
Lot/Entr 1.30	
SIDEWALK 34 spaces Horizontal FOOTCANDLES	60 RADAR SECURITY AREA 100 spaces at 100 sq ft per 100 ft horizontal FOOTCANDLES
Average 2.8	Average 6.9
Maximum 3.8	Maximum 10.3
Minimum 1.8	Minimum 0.9
Avg Side 1.96	Avg Side 1.78
Max Side 2.29	Max Side 2.94
Coal V/Lr 0.17	Coal V/Lr 0.23

WLS LIGHTING SYSTEMS WLS-LXL-PT-5W-LED-251-40-32V
WLS LIGHTING SYSTEMS test report no. LED-11749
lamp(s): XX
candela for WLS-LXL-PT-5W-LED-251-40-32V at
1 lamp(s) per luminaire: photometry is adequate
Light Loss Factor = 0.890, watts per luminaire = 220
mounting height = 28 ft
number locations = 3, number luminaires = 3
see all test results

WLS LIGHTING SYSTEMS WLS-LX-PT-PT-LED-ZL-4-GU4
WLS LIGHTING SYSTEMS best report no. LED-11753
WLS(L): XXX
2 luminaires per location, candle fit WLS-LX-PT-PT-LED-ZL-
1 (lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.95, watts per luminaire = 230
Overhead (from mounting area to photometric center) 36 in
mounting height = 28 ft
number locations = 2, number luminaires = 4

WLS LIGHTING SYSTEMS WLS-LXL-PT-FT-LED-25-40-SL-W
WLS LIGHTING SYSTEMS test report no. LED-11752
tempco, XXX
candela file WLS-LXL-PT-FTLED-25-40-SL-W.vmr
1 tempco per luminaire, photometry in steradian
Light Loss Factor = 0.850, watts per luminaire = 220
mounting height = 25 ft
candle locations = 4, number luminaires = 4

PHOTOMETRIC SITE PLAN	SCALE	1" = 30'-0"



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WARNING: Do not install light pole without consultation



WLS LIGHTING SYSTEMS

LXL SERIES DECORATIVE LED

Type:

CONSTRUCTION

- Rugged die cast aluminum housing
- Cast aluminum wiring entries door located in lower half of unit
- Rugged die cast aluminum arms for consistency and strength
- Precision die cast aluminum head and adjustable frame
- Removable open aluminum cap/cover and house is secured by capitan stainless steel fasteners into safety cables. Housing and base cap/cover is sealed with a neoprene vented silicone gasket
- All exposed fasteners are black oxide control stainless steel. Internal fasteners are stainless steel or zinc plated stainless steel
- 1/8\"/>
- 1/32\"/>
- Fasteners are finished with WLS's PowderCoat polymer powder coat finishing process. The finishing finish withstands extreme weather changes without cracking or peeling. Other standard WLS finishes available. Contact factory.

OPTICAL SYSTEM

- State of the art precision silicone optic sheet delivers industry leading optical control with an integrated gasket to provide PMU sealed sealed optical chamber in 1 component
- Precision aluminum reflector optics provide exceptional coverage and uniformity in E5 types L, A, SM and T1
- Silicon optical material does not yellow or crack with age and provides a minimum light transmittance of 90%
- Optical features are heat treated in 500° Fahrenheit
- Available in smooth, etched and 2000-11-1791 color for temperature
- Aluminum CR-6070. Contact factory for higher CR requirements
- Integral inner IC option available for improved back light control without sacrificing street side performance

ELECTRICAL

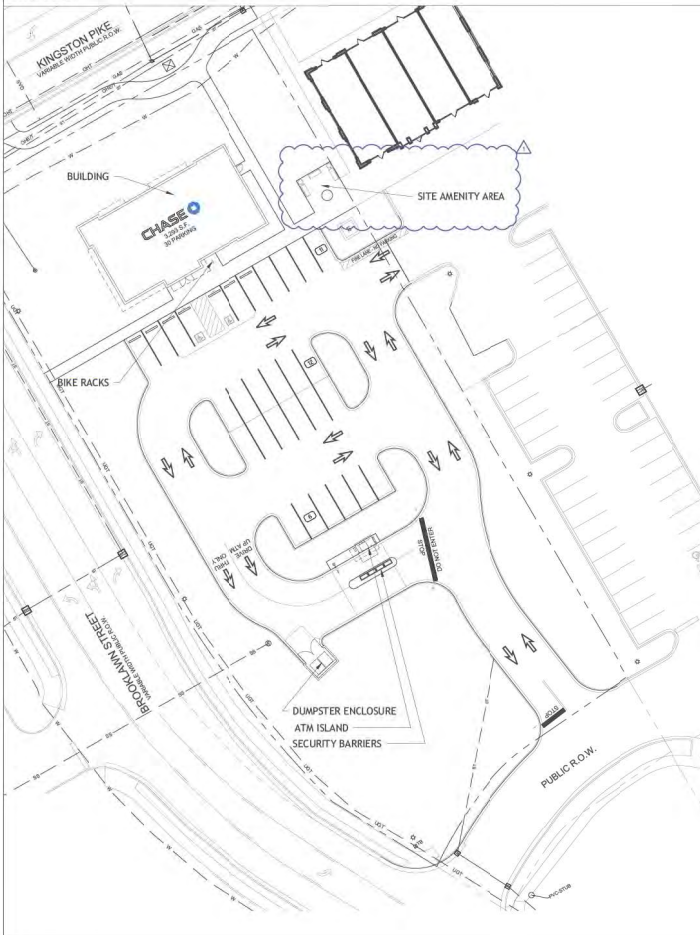
- High performance silicon features come with voltage, under voltage, short circuit and over temperature protection
- 6-70, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000, 1050, 1100, 1150, 1200, 1250, 1300, 1350, 1400, 1450, 1500, 1550, 1600, 1650, 1700, 1750, 1800, 1850, 1900, 1950, 2000, 2050, 2100, 2150, 2200, 2250, 2300, 2350, 2400, 2450, 2500, 2550, 2600, 2650, 2700, 2750, 2800, 2850, 2900, 2950, 3000, 3050, 3100, 3150, 3200, 3250, 3300, 3350, 3400, 3450, 3500, 3550, 3600, 3650, 3700, 3750, 3800, 3850, 3900, 3950, 4000, 4050, 4100, 4150, 4200, 4250, 4300, 4350, 4400, 4450, 4500, 4550, 4600, 4650, 4700, 4750, 4800, 4850, 4900, 4950, 5000, 5050, 5100, 5150, 5200, 5250, 5300, 5350, 5400, 5450, 5500, 5550, 5600, 5650, 5700, 5750, 5800, 5850, 5900, 5950, 6000, 6050, 6100, 6150, 6200, 6250, 6300, 6350, 6400, 6450, 6500, 6550, 6600, 6650, 6700, 6750, 6800, 6850, 6900, 6950, 7000, 7050, 7100, 7150, 7200, 7250, 7300, 7350, 7400, 7450, 7500, 7550, 7600, 7650, 7700, 7750, 7800, 7850, 7900, 7950, 8000, 8050, 8100, 8150, 8200, 8250, 8300, 8350, 8400, 8450, 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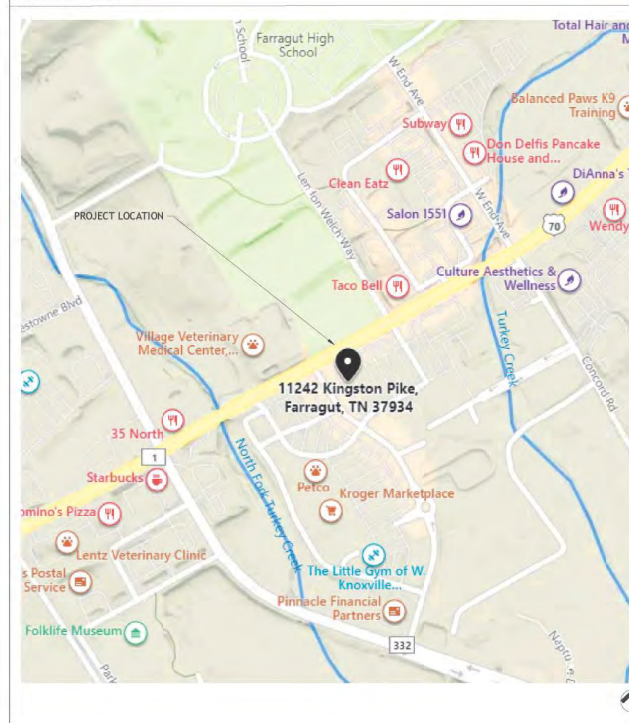
Farragut

JPM Chase Retail Banking Center
11242 Kingston Pike,
Farragut, TN 37934
CHASE # 48200R000709
Version 20.5

SITE PLAN



LOCATION MAP



SCOPE OF WORK

PROTOTYPE - 20.5
ATM CANOPY: Y
DUMPSTER ENCLOSURE: Y
BRG: H
PROTOTYPE BUILDING WITH CUSTOM EXTERIOR FINISHES

BUILDING FLOOR AREA = 3,293 SF

SITework AREA = 57,369 SF

SHEET INDEX

ARCHITECTURAL DRAWINGS	11-14-2022 ENTITLEMENT REVIEW	12-05-2022 ENTITLEMENT REVIEW
A00.0 ENTITLEMENT PACKAGE COVER SHEET		
A00.1 FURNITURE FLOOR PLAN		
A00.2 BUILDING RENDERINGS		
A00.3 CANOPY RENDERINGS		
A00.4 DUMPSTER RENDERINGS & SITE AMENITY		
A00.5 EXTERIOR ELEVATIONS		
A00.6 EXTERIOR ELEVATIONS		
E00.1 SITE PHOTOMETRIC		

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Architect of Record:
Christopher Gary Kinchew, AIA LEED AP
TN License No. 103000

ISSUE/REV	DATE	DESCRIPTION
A	TN 12-05-2022	ENTITLEMENT REVIEW

PROJECT INFORMATION BLOCK
JOB #: 224021
DATE: 11-14-2022
DRAWN BY: STAFF
CHECKED BY: TN

SHEET TITLE
ENTITLEMENT PACKAGE
COVER SHEET

SHEET NUMBER

A00.0

[illegible]

SEM

Architect of Record:
Christopher Gary Kirschner, AIA LEED AP
TN License No. 103505

[illegible]

PROJECT INFORMATION BLOCK	
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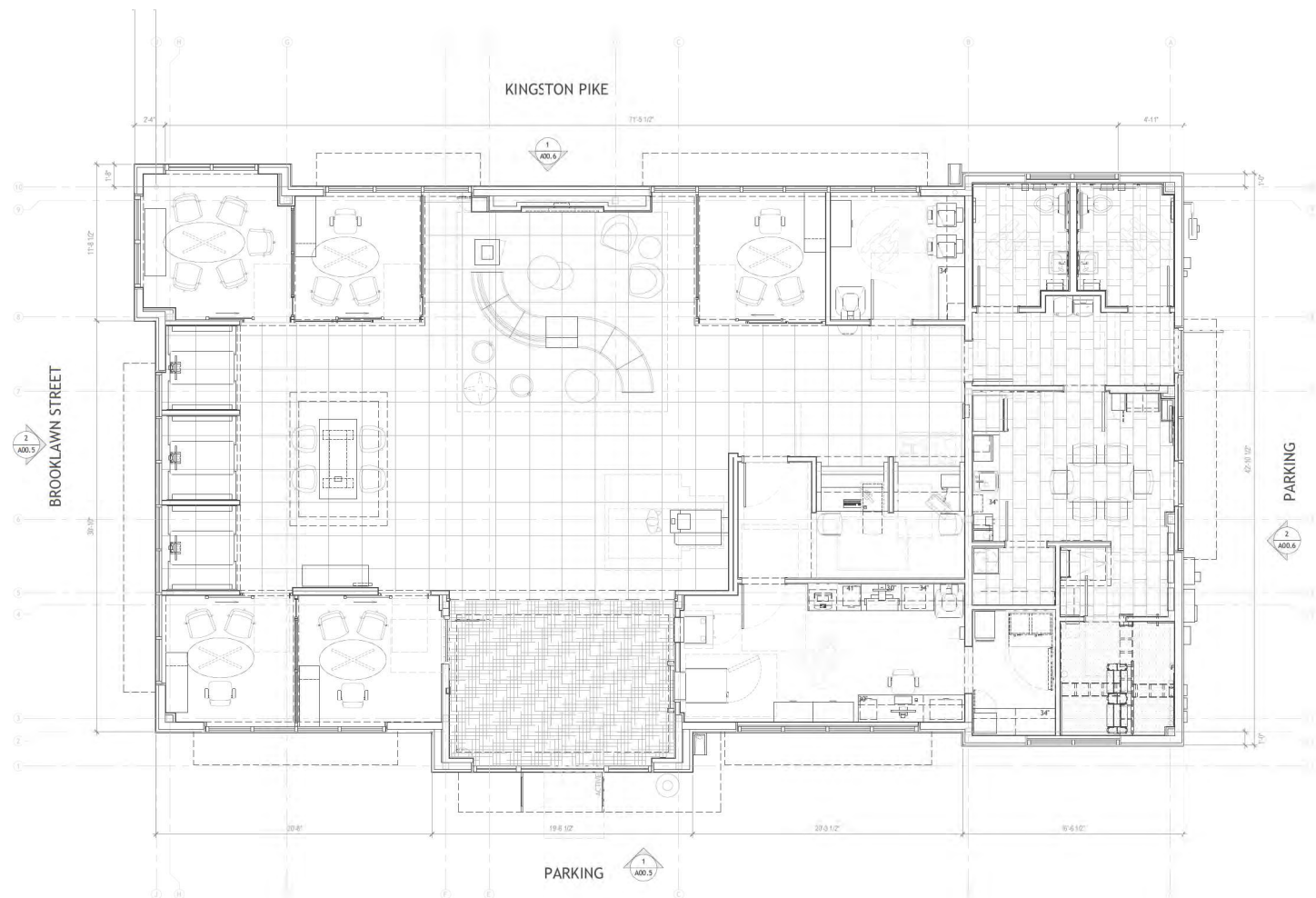
JOB #:	224021
DATE:	11-14-2022
DRAWN BY:	XX
CHECKED BY:	TN

SHEET TITLE

FURNITURE FLOOR PLAN

SHEET NUMBER

A00.1



FURNITURE FLOOR PLAN

SCALE
1/4" = 1'-0"



11242 KINGSTON PIKE
FARRAGUT, TN 37934

SCALE
NTS

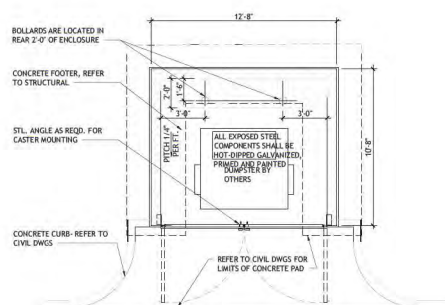


MISCELLANEOUS EQUIPMENT SCHEDULE													
IMAGE	TAG	DESCRIPTION	MANUFACTURER	PRODUCT	FINISH	FURNISHED BY			INSTALLED BY			NOTES	
						OWNER	GC	EQUIP VENDOR	FURN VENDOR	OWNER	GC		FURN VENDOR
	ME-02a	BICYCLE RACK-SHORT TERM	TBD	INVERTED U	BLACK		■				■		COORDINATE LOCATION WITH SITE PLAN
	ME-13	PARK BENCH - 6'	TREETOP PRODUCTS	STELLA ALUMINUM BENCH	BLACK		■				■		COORDINATE LOCATION WITH SITE PLAN; USE IN AMENITY AREA
	ME-15	SECURITY PLANTER 48 X 36	BOHLMANN	P4836R	GREY LIMESTONE		■				■		COORDINATE LOCATION WITH SITE PLAN; ONLY USE IF SPECIFIED BY DRIVE UP ATM, FILL WITH RIVER ROCK 3/4"-2"
	ME-16	ROUND PLANTER 19 X 15	BOHLMANN	P1915R	GREY LIMESTONE		■				■		COORDINATE LOCATION WITH SITE PLAN; USE IN AMENITY AREA

SITE AMENITY

SCALE
NTS

3



DUMPSTER PLAN

SCALE
1/4"=1'-0"

2



SOUTH ELEVATION



NORTH ELEVATION



EAST ELEVATION



WEST ELEVATION



FARRAGUT
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FARRAGUT, TN 37934



THE COLORS SHOWN IN THIS RENDERING ARE CLOSE APPROXIMATIONS. DUE TO INK VARIATIONS AND DIFFERENCES IN PRINTERS, AN EXACT MATCH CANNOT BE ASSURED. THE WRITER IS ADVISED TO USE THE RENDERING AS A GUIDELINE FOR THE ARRANGEMENT OF COLORS ON THE BUILDING, AND TO THEN REFER TO THE ACTUAL COLOR OR MATERIAL, JAMES COX PRODUCTS.

DUMPSTER RENDERINGS

SCALE
NTS

1

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ISSUE/REV	DATE	DESCRIPTION
1	12-05-2022	ENTITLED FOR REVIEW

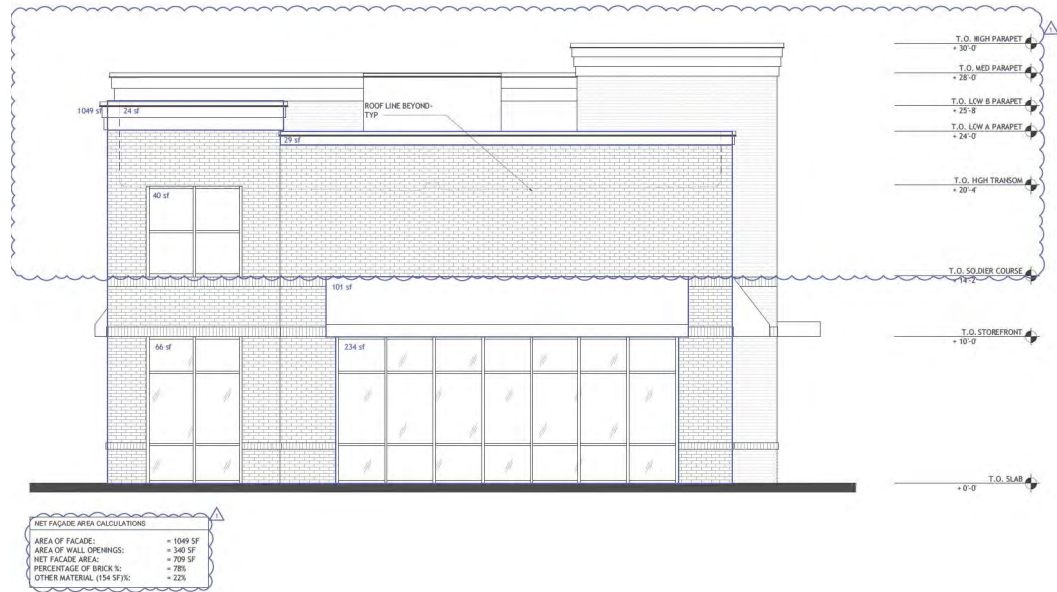
PROJECT INFORMATION BLOCK	
JOB #:	224021
DATE:	11-14-2022
DRAWN BY:	XX
CHECKED BY:	TN

SHEET TITLE

DUMPSTER RENDERINGS
& SITE AMENITY

SHEET NUMBER

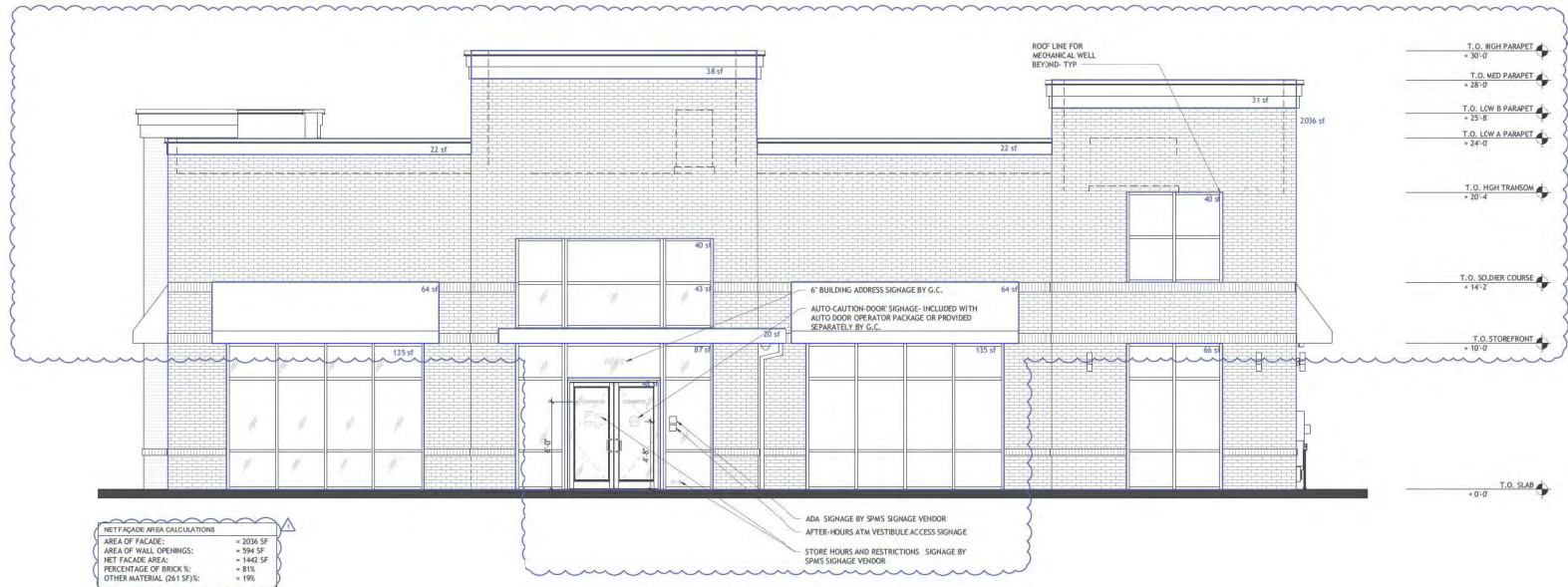
A00.4



WEST BUILDING ELEVATION

SCALE
1/4" = 1'-0"

2



SOUTH BUILDING ELEVATION

SCALE
1/4" = 1'-0"

1

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Architect of Record:

Christopher Gary Kinchen, AIA LEED AP

TN License No. 103300

DATE: 11-14-2022

DESCRIPTION: EXTERIOR ELEVATIONS

DATE: 11-14-2022

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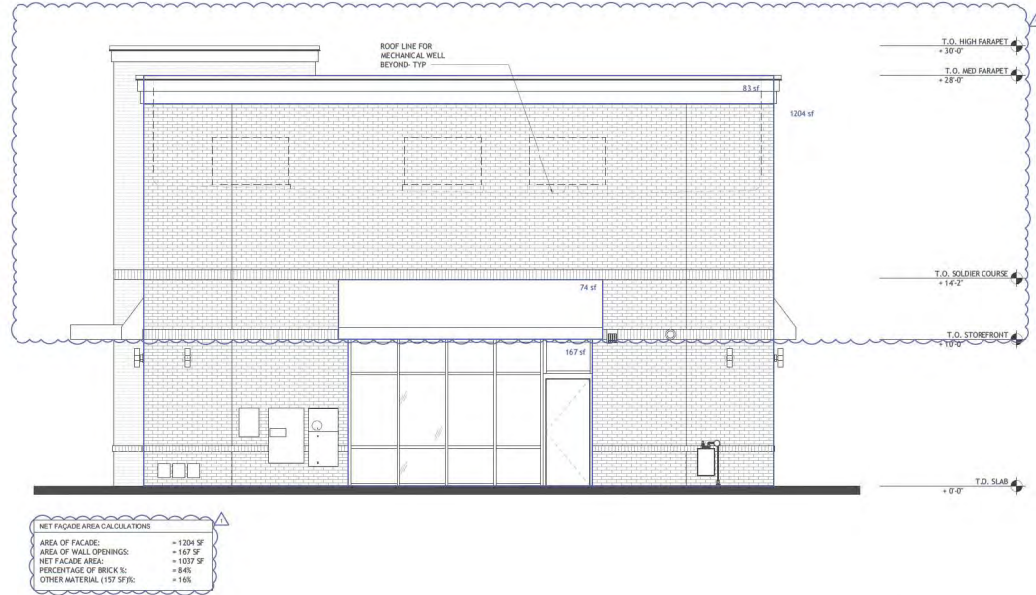
DATE: 11-14-2022

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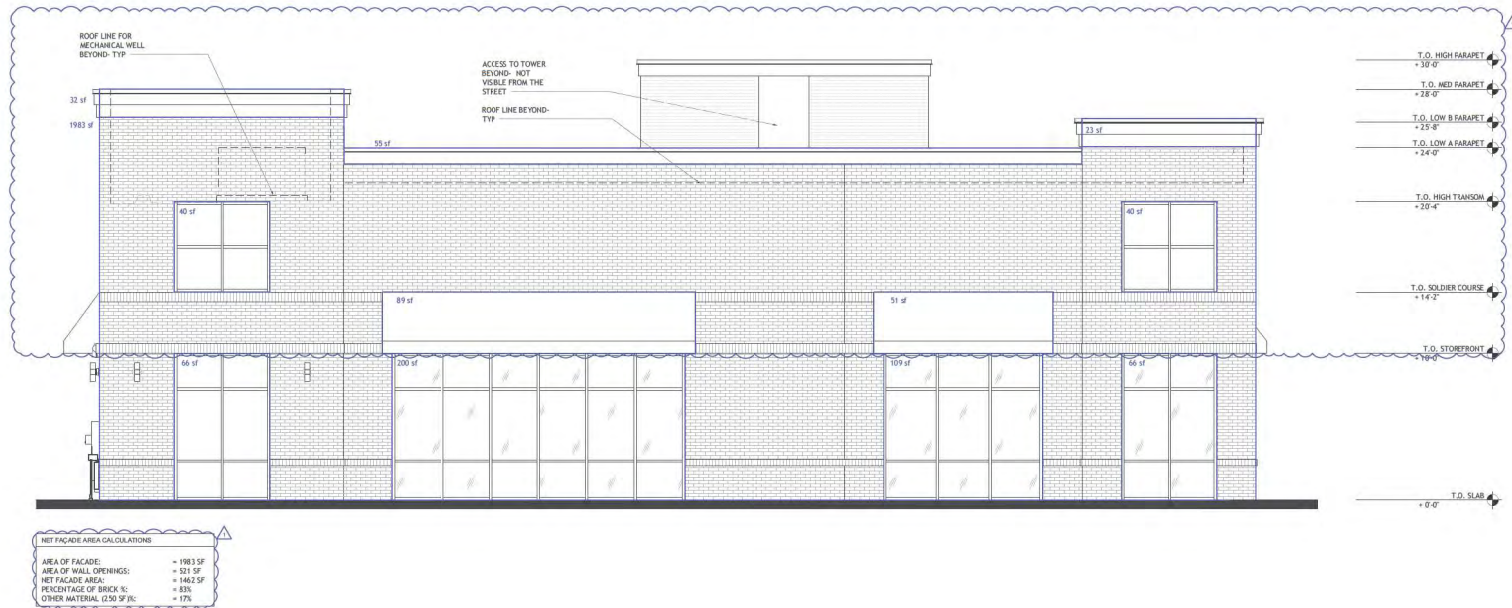
DATE: 11-14-2022



EAST BUILDING ELEVATION

SCALE
1/4" = 1'-0"

2



NORTH BUILDING ELEVATION

SCALE
1/4" = 1'-0"

1

EXTERIOR ELEVATIONS

SHEET NUMBER

A00.6

REPORT TO THE FARRAGUT MUNICIPAL PLANNING COMMISSION

PREPARED BY: Mark Shipley, Community Development Director

SUBJECT: Discussion and public hearing on a site plan for parking lot modifications and display/storage area associated with Current Watersports in a portion of the old Outlet Mall building at 11221 Outlet Drive, Zoned C-2-R/W (Savannah Greco – R2R Studio, LLC., Applicant)

INTRODUCTION AND BACKGROUND: This agenda item involves a request for approval for site modifications at the former Outlet Mall building across from Cotton Eyed Joes. Specifically, a boat sales and service business, Current Watersports, is interested in using the southeast section of the Outlet Mall building. They are proposing to have some indoor and outdoor boat display and storage. The applicable provisions related to outdoor display and storage are as follows:

1. Such merchandise and/or materials are displayed or stored in a permanent area designed for such use
2. Such merchandise and/or materials are not displayed or stored on any sidewalks, walkways, parking spaces, or other vehicle ways
3. Required yard setbacks for buildings are met for the storage/display area; and
4. Access to the display/storage area shall be restricted by means of a physical barrier such as a fence, a berm, landscaping, or other similar means.

The applicant is proposing to re-work the parking spaces along a portion of the eastern side property line to accommodate boat display and storage. They are also proposing to add some roll up doors on the east side of the building for boat access into and out of the building. A short metal fence and metal gates will be added around the storage area to delineate this as designated for display and storage and to protect the merchandise from theft. Establishing an area for display and storage is also required in the Zoning Ordinance, as outlined above. The display and storage area will meet the side setbacks for buildings. Customer parking will mostly be provided on the south end of the building outside the fenced area. The applicant is proposing to add black trim to their portion of the building to delineate the area devoted to this business.

Some comments noted at the staff developer meeting included ensuring that the fence does not affect existing trees within the landscaped islands, opportunities to expand the size of landscaped islands, and whether any of the remainder of the Outlet Mall building will be painted black to match the trim proposed with this project.

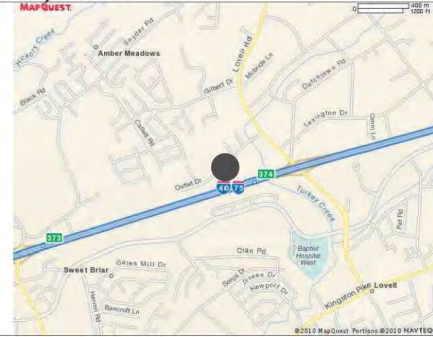
RECOMMENDATION: Included in the packet is the revised site plan. Staff will review and provide a recommendation for the meeting.

Project Architect



2575 Willow Point Way
Suite 105
Knoxville, TN 37931
865.769.8075 v.
865.769.8076 f.

Project Site



Project Consultants

Project Summary & Applicable Codes

Project: Exterior Modification for: Current Watersports
Project Location: 11221 Outlet Drive
Knoxville, TN 37931
Owner: Jason Haines
Owner Contact: jason@currentwes.com
Architect: Scott E. Osborn, AIA, 865.769.8075

Property Zoning: C-2-R/W
Property Area: Existing
Proposed Parking: Existing

Applicable Codes:

2018 International Building Code	2018 International Energy Conservation Code
2018 International Fire Code	2018 International Plumbing Code
2009 ICC/ANSI A117.1	2018 International Mechanical Code
	2018 NFPA 101 Life Safety Code

Revisions

1 November 29, 2022 - Addendum #1

Exterior Modification for:

Current Watersports

11221 Outlet Drive Knoxville, TN 37931



drawing index:

architectural:

- a0.1 Existing Site Photos
- a0.2 Existing Landscaping Photos
- d1.1 Architectural Demolition Site Plan
- a1.1 Architectural Site Plan
- a1.2 Enlarged Site Plan
- a3.1 Exterior Elevations

Project Number: 2018-49
Project Issue Date: November 10, 2022
Project Set: 100% Construction Documents

Set No.

Current Watersports
11221 Outlet Drive
Knoxville, TN 37931

Exterior Modification for:



1
a0.1
SCALE: N.T.S.
EXISTING SITE PHOTO

2
a0.1
SCALE: N.T.S.
EXISTING SITE PHOTO

3
a0.1
SCALE: N.T.S.
EXISTING SITE PHOTO



4
a0.1
SCALE: N.T.S.
EXISTING SITE PHOTO

5
a0.1
SCALE: N.T.S.
EXISTING SITE PHOTO

Revisions

Exterior Modification for:
Current Watersports
11221 Outlet Drive
Knoxville, TN 37934

Sheet No.
a0.1



Date: November 10, 2022

File Name: Current Water_a02

Project No: 2018-49

Drawing Title:

Existing Landscaping Photos

Revisions:

Exterior Modification for:
Current Watersports
11221 Outlet Drive
Knoxville, TN 37934

Sheet No. _____

a0.2

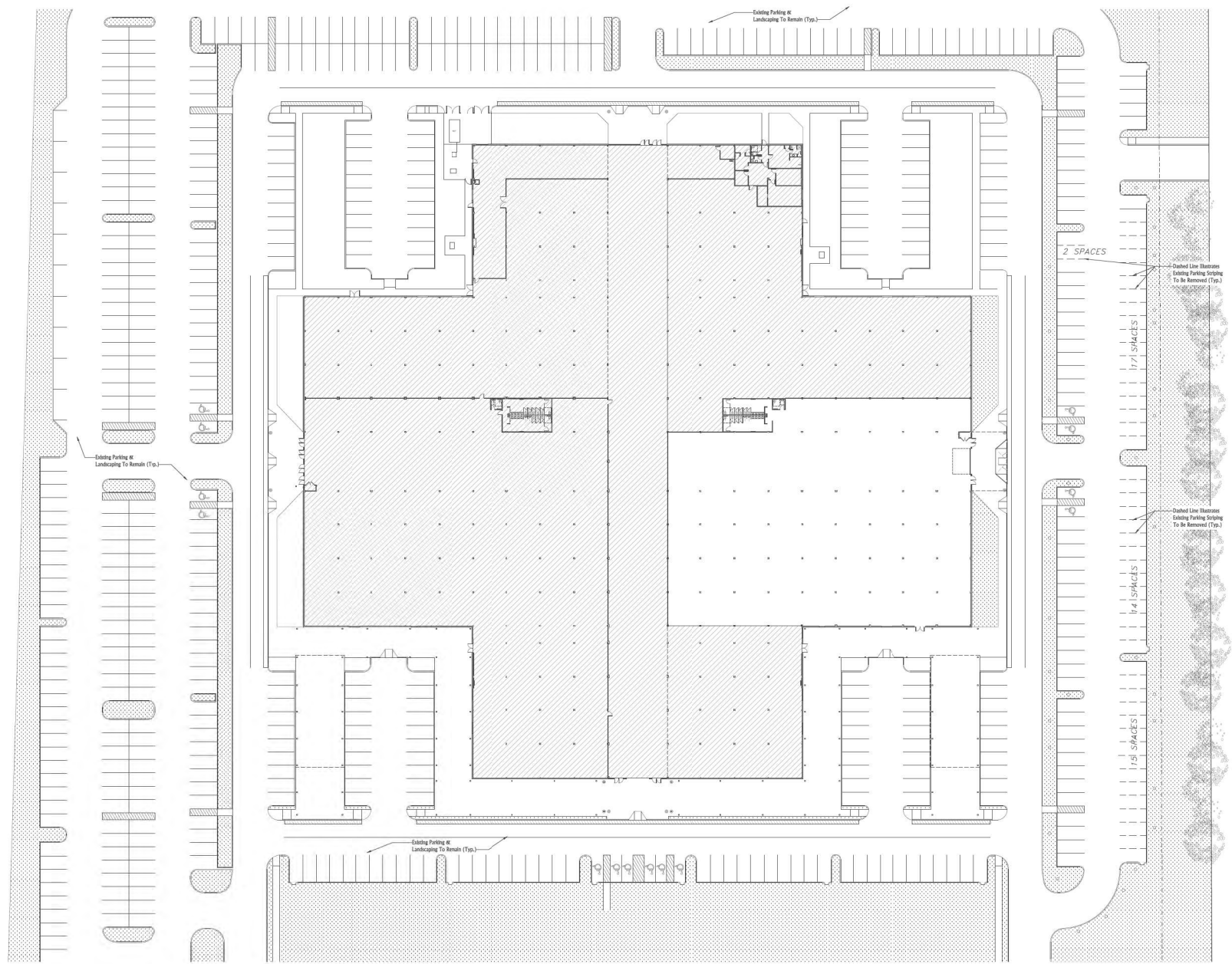
Revisions	
1	November 29, 2022

Exterior Modification for:
Current Watersports
11221 Outlet Drive
Knoxville, TN 37934

Sheet No.
d1.1

Existing Parking
Building Size: 162,100 SF
Total Spaces Provided: 660 Spaces
Handicap Spaces Provided: 14 Spaces
Total Spaces To Be Removed: 48 Spaces

Notes:
Site Plan For Schematic Layout Only.

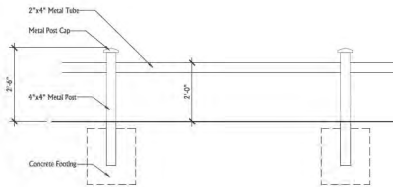


1
d1.1 **ARCHITECTURAL DEMOLITION SITE PLAN**
SCALE: 1/32" = 1'-0"

[illegible]

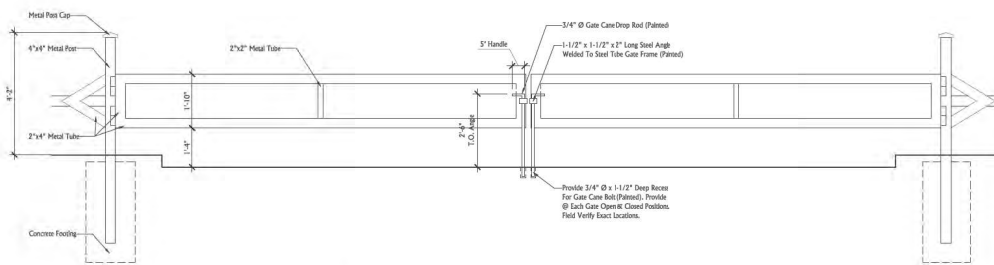


1
a1.2 **EXAMPLE GATE & FENCE PHOTOS**
SCALE: N.T.S.



3
a1.2 **FENCE DETAIL**
SCALE: 1/2" = 1'-0"

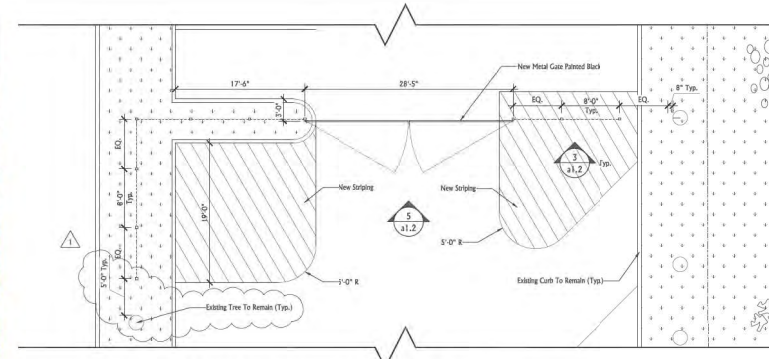
Note:
New Metal Fence & Gate
To Be Painted Black



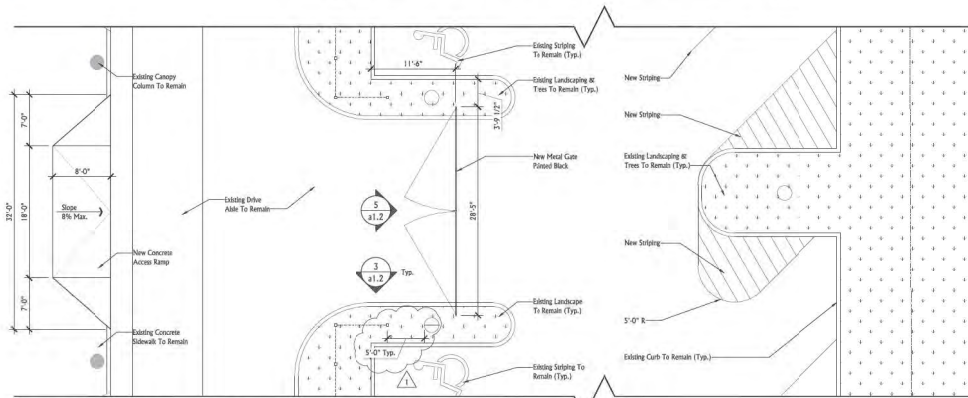
5
a1.2 **GATE DETAIL**
SCALE: 1/2" = 1'-0"

Note:
New Metal Fence & Gate
To Be Painted Black

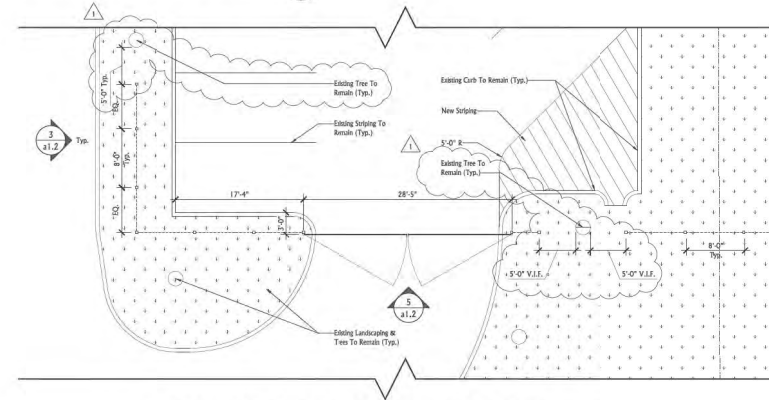
Note:
GC To Provide Locking Setup To Include Krow
Company Access System Lock (Typ. @ All Gates)



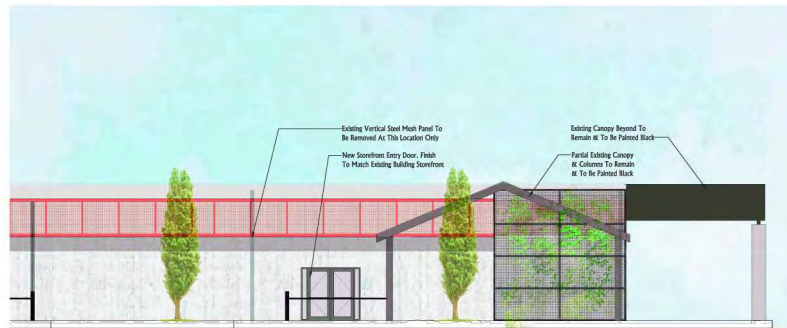
2
a1.2 **PARTIAL ARCHITECTURAL SITE PLAN**
SCALE: 1/8" = 1'-0"



4
a1.2 **PARTIAL ARCHITECTURAL SITE PLAN**
SCALE: 1/8" = 1'-0"



6
a1.2 **PARTIAL ARCHITECTURAL SITE PLAN**
SCALE: 1/8" = 1'-0"



1
a3.1 PARTIAL SOUTH ELEVATION
SCALE: 1/8" = 1'-0"

Note:
No Boat Storage Under
Existing Canopies (Typ.)



2
a3.1 PARTIAL EAST ELEVATION
SCALE: 1/8" = 1'-0"

Note:
No Boat Storage Under
Existing Canopies (Typ.)



3
a3.1 PARTIAL EAST ELEVATION
SCALE: 1/8" = 1'-0"

Note:
No Boat Storage Under
Existing Canopies (Typ.)

Revisions:
1 November 28, 2022

REPORT TO THE FARRAGUT MUNICIPAL PLANNING COMMISSION

PREPARED BY: Mark Shipley, Community Development Director

SUBJECT: Discussion on a concept site plan for Planning Commission feedback on parking and vehicular connectivity associated with an envisioned Japanese restaurant on Parcel 184.03, Tax Map 130, adjacent to Hampton Inn and Suites, 1.04 Acres, Zoned C-2 (Anna Katherine Kittrell – R2R Studio, LLC., Applicant)

INTRODUCTION AND BACKGROUND: This agenda involves a request to receive early feedback on the potential development of the tract to the east of the Hampton Inn at the western intersection of Campbell Lakes Drive and Lakesedge Drive. The property is constrained by a transmission line easement to the south. The applicant's client is envisioning a hibachi style restaurant with a footprint of roughly 7,100 square feet.

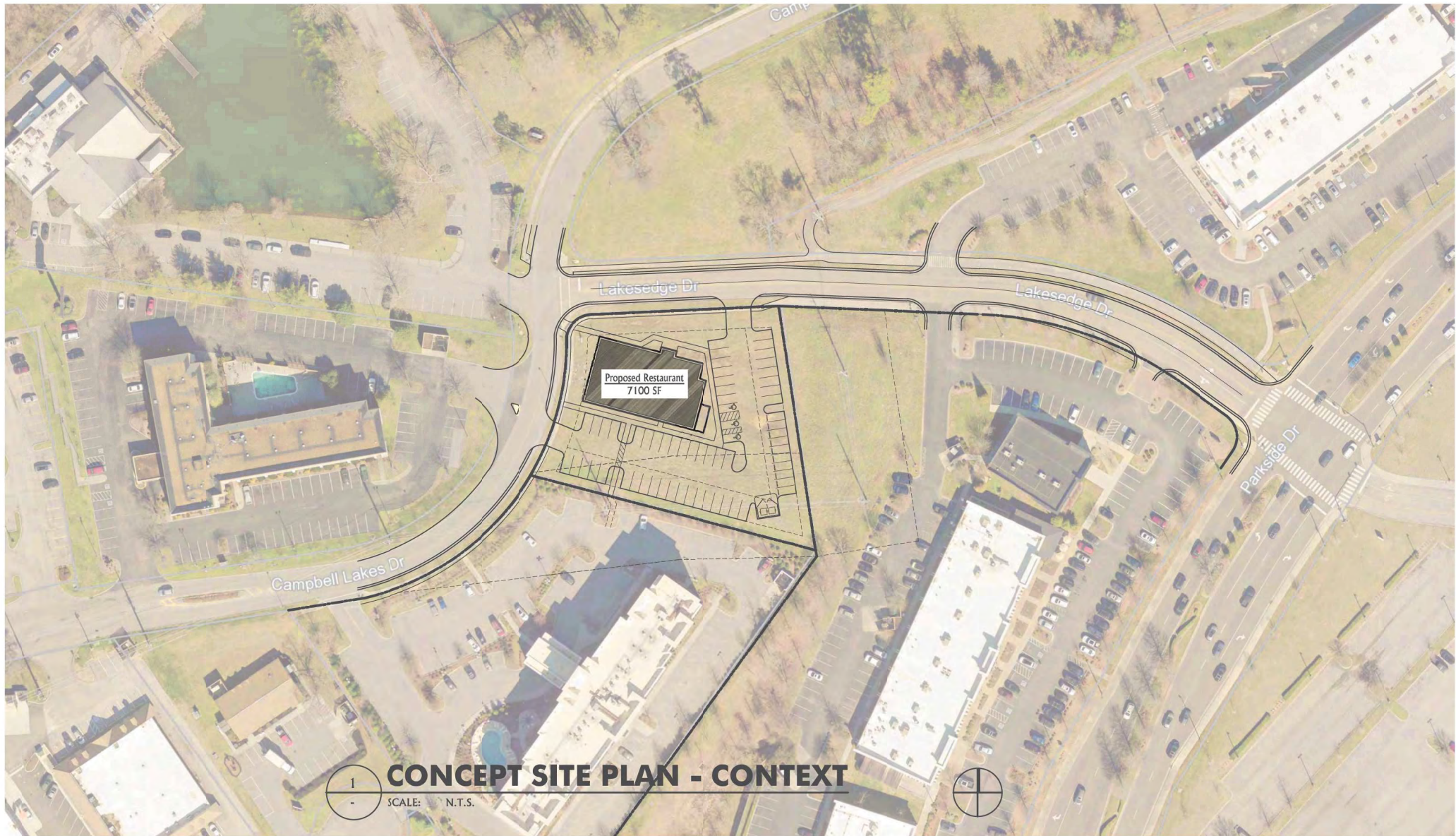
The applicant is specifically requesting input on the following site plan related questions:

1. Based on the parking space requirements for restaurants, one space per 100 square feet is required unless the Planning Commission determines that, based on demonstrated parking demands that are typical for the proposed use(s) throughout most of the year, the number of parking spaces being provided is acceptable. For a 7,100 square foot building the required number of parking spaces would be 71. The applicant is proposing 62 and justifies this number since a hibachi style restaurant has more internal space devoted to food preparation areas vs. seating. Thus, a hibachi style restaurant would not need as much parking as some other types of restaurants with more seating demands.

From staffs' perspective, this makes sense for the use proposed at this time and based on the parking provisions for nearby similar restaurants, such as the Wasabi at Lovell Road. Staffs' concern is that the use could change in the future and create parking issues for nearby businesses or vacant areas. Staff would recommend that the applicant secure some shared parking agreement with nearby entities to address this potential issue and that this be completed when the site plan is submitted for approval. The other option would be to evaluate whether the envisioned building size could be reduced to bring the parking more in line with the required amount for a restaurant use.

2. A second discussion item is cross vehicular access and whether the Planning Commission is okay with only a pedestrian access to the Hampton Inn vs. both a pedestrian and vehicular access. Given the proximity to a nearby intersection, traffic levels along both Campbell Lakes Drive, and no provisions for cross lot vehicular access being established when Hampton Inn was developed, staff is in support of only a pedestrian access to the Hampton Inn and the sidewalk network along the two abutting streets. A vehicular connection would not be critical and would consume needed parking spaces.

3. A third discussion item is the proposed access to Campbell Lakes Drive. Both Campbell Lakes Drive and Lakesedge Drive are classified as local collector streets and accesses are to be at 200 feet apart. Due to the transmission line easement and the need to maximize parking with the building's proposed location, the access shown onto Campbell Lakes Drive is slightly further from the intersection than the Sleep Inn Hotel access on the other side of Campbell Lakes Drive. This creates an offset between the two accesses. During discussion at the staff developer meeting, this offset was not seen by staff as a concern. The property is at an intersection and Campbell Lakes Drive is a dead-end road with limited traffic. The access proposed by the applicant is also further from the intersection. This is generally preferable. No issues were seen with the Lakesedge Drive access. Since they involve access to collector streets, both accesses will have to be approved ultimately by the Planning Commission and Board of Mayor and Aldermen when the site plan is submitted.



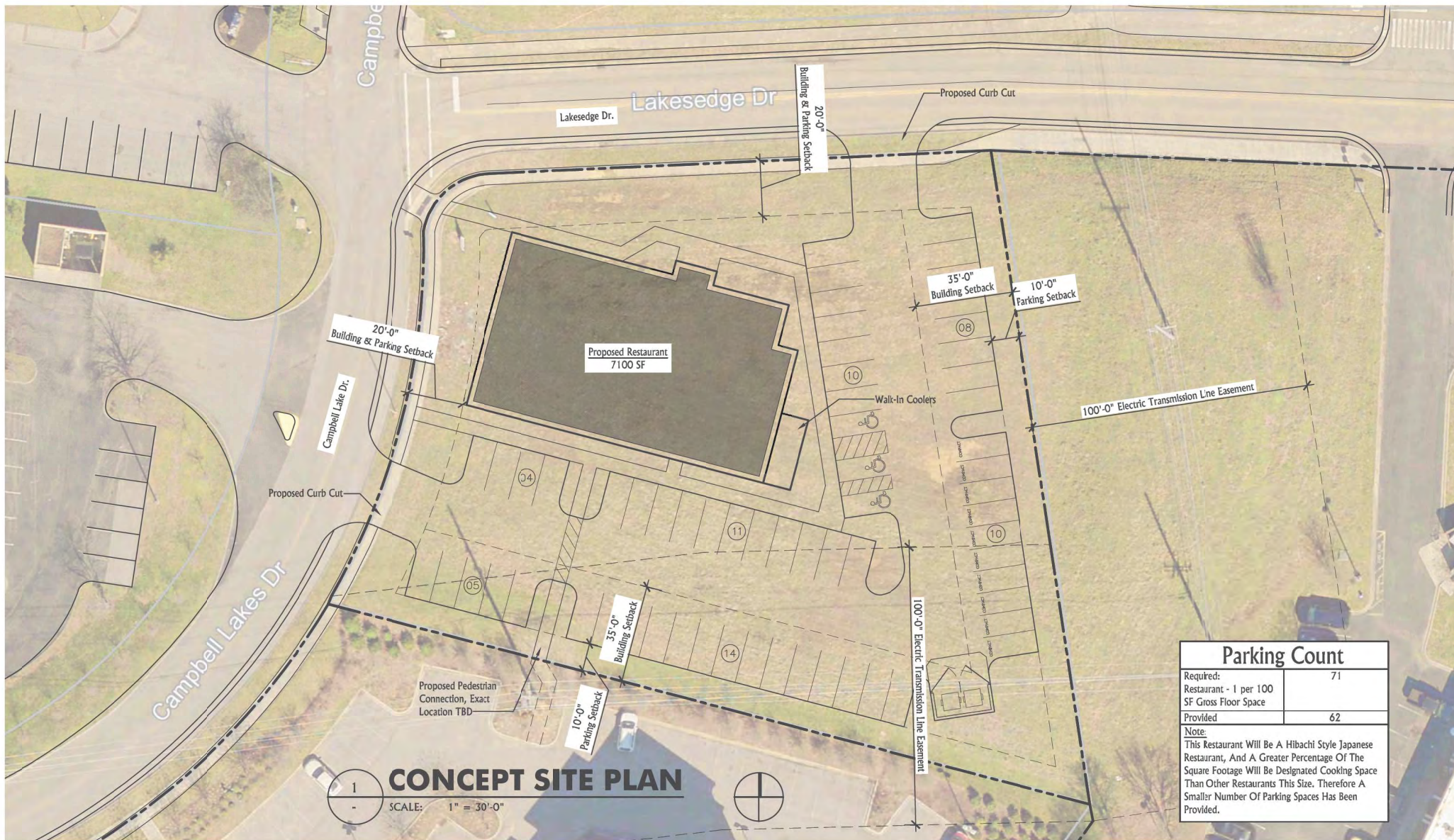
Japanese Restaurant - Concept Site Plan Submission

SE Corner Of Lakesedge Drive & Campbell Lake Drive, Farragut, TN

November 11, 2022

2575 Willow Point Way Suite 105 • Knoxville, TN 37931 • v. 855.769.8075 • f. 865.769.8076 • www.R2Rstudio.com

R2R
studio, llc



Japanese Restaurant - Concept Site Plan Submission

SE Corner Of Lakesedge Drive & Campbell Lake Drive, Farragut, TN

November 11, 2022

2575 Willow Point Way Suite 105 • Knoxville, TN 37931 • v. 855.769.8075 • f. 865.769.8076 • www.R2Rstudio.com

R2R
studio, llc

REPORT TO THE FARRAGUT MUNICIPAL PLANNING COMMISSION

PREPARED BY: Mark Shipley, Community Development Director

SUBJECT: Discussion on a zoning map amendment request for a portion of Parcel 069, Tax Map 142, north of the Ingles, from Office (O-1), General Single-Family Residential (R-2), and Rural Single-Family Residential (R-1) to Community Service (S-1), 10 acres (Joe Conver – Farragut IL – AL Investors, LLC)

INTRODUCTION AND BACKGROUND: This item, which is also related to the next item, involves a workshop discussion on a request to amend the zoning map for a portion of Parcel 069, Tax Map 142 which is situated to the north of the old and new Ingles and to the east of the Villages of Farragut. After making amendments to the Town's Zoning Ordinance in early 2016, the property where the Villages of Farragut is situated was rezoned. The portion which contains the Villages includes 23 acres and was rezoned from R-2 to S-1.

An amendment that was made to the S-1 District was to permit a senior living community, which was also defined as part of the text amendments associated with updating the S-1 District. Specific requirements were further added in Chapter 4 of the Zoning Ordinance that would govern senior living communities. The applicant would like to rezone 10 acres in the southwest portion of Parcel 069, Tax Map 142 to S-1 so that they could construct a three-story senior living community building. As envisioned, the building would be roughly 66,000 square feet with approximately 200 rooms divided into 100 independent living, 60 assisted living, and 40 memory care units. The S-1 District does not address density but rather the occupancy that would be permitted by the required license from the State of Tennessee. This is typical for these types of projects licensed through the State.

For comparison purposes, the existing Villages of Farragut building is approximately 44,000 square feet and three stories with 83 residential units. Freestanding independent living buildings have been approved for the next phase and memory care units will be constructed in the final phase.

During the staff developer meeting, staff noted that the area in question had recently been part of a larger study area where the community was engaged to assess its vision for future development. Based on predominant community input, amendments were approved by the Planning Commission to the Future Land Use Map except for the parcel between Baldwin Park and Waverly Court and a portion of Parcel 069, Tax Map 142, including where the requested rezoning is proposed. Those areas would remain as Medium Density Residential (6-8 dwelling units per acre) temporarily so that further assessment could occur on what land uses would best transition within the properties, as described in the Comprehensive Land Use Plan Update (CLUP).

From input provided by the community at three public workshops over a period of several months, these two areas were proposed to be changed to Very Low Density Residential (2-4 dwelling units per acre). During the Planning Commission's review, concerns were expressed by some that this would not provide for transitions within the property that would be consistent with the CLUP.

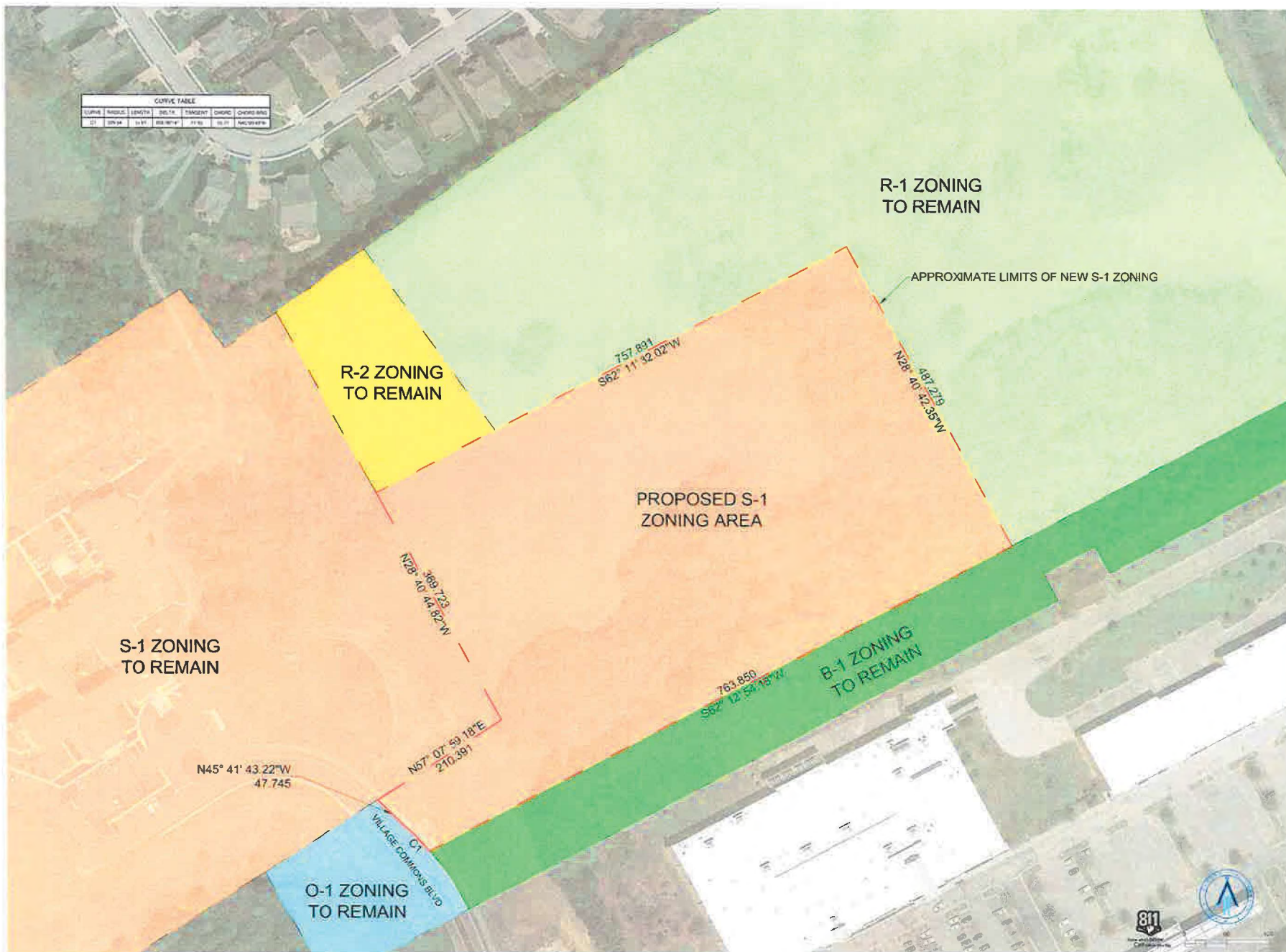
DISCUSSION: The question of building scale and whether the area being proposed for rezoning reflects a zoning district that the community would find acceptable, given that this was not a development type envisioned for this area, are discussion items that need to be explored. Though a rezoning to S-1 and the requirements for a senior living community offer more assurance that the development will not evolve into a multi-family residential project that would only be permitted in R-6, this will nonetheless be a large footprint building that, if provided for, will need to incorporate an effective transitional element to alleviate the differences in scale between this and nearby detached single family residential.

Given the recent community engagement process involving the general area in question, staff suggested to the applicant that they should consider reaching out to the existing residential developments nearby to discuss their proposal. A community meeting was held on November 9 with the HOA's of Baldwin Park, Waverly Court, Country Way, Fox Den and Village Green. The applicant will be at the December 15 meeting to discuss their company and their envisioned development.

As with any rezoning, staff would note that the focus should primarily be on whether the requested district(s) is(are) appropriate for the property, its context, and the community's vision. Concept plans and property owners can change but once the zoning changes, any use permitted within that zoning district could result.



CURVE TABLE							
CURVE	PIECES	LENGTH	BELT	TANGENT	CHORD	CHORD BEG	CHORD END
01	001-004	11.91	181.96'	71.93	111.71	N45°41'43.22"W	N45°41'43.22"W



RaganSmith

Nashville · Murfreesboro · Chattanooga
ragansmith.com

HARMONY AT FARRAGUT FOR **SMITH/PACKETT**

Scale: 1"=100'

Date: 11-11-20

Applicant: E

Revisions:

1	
2	
3	
4	
5	

Drawing Title

REZONING EXHIBIT

Drawing No

1 OF 1

Project No
22-C323



Harmony at Farragut Three Story Elevation



Front Elevation (West)



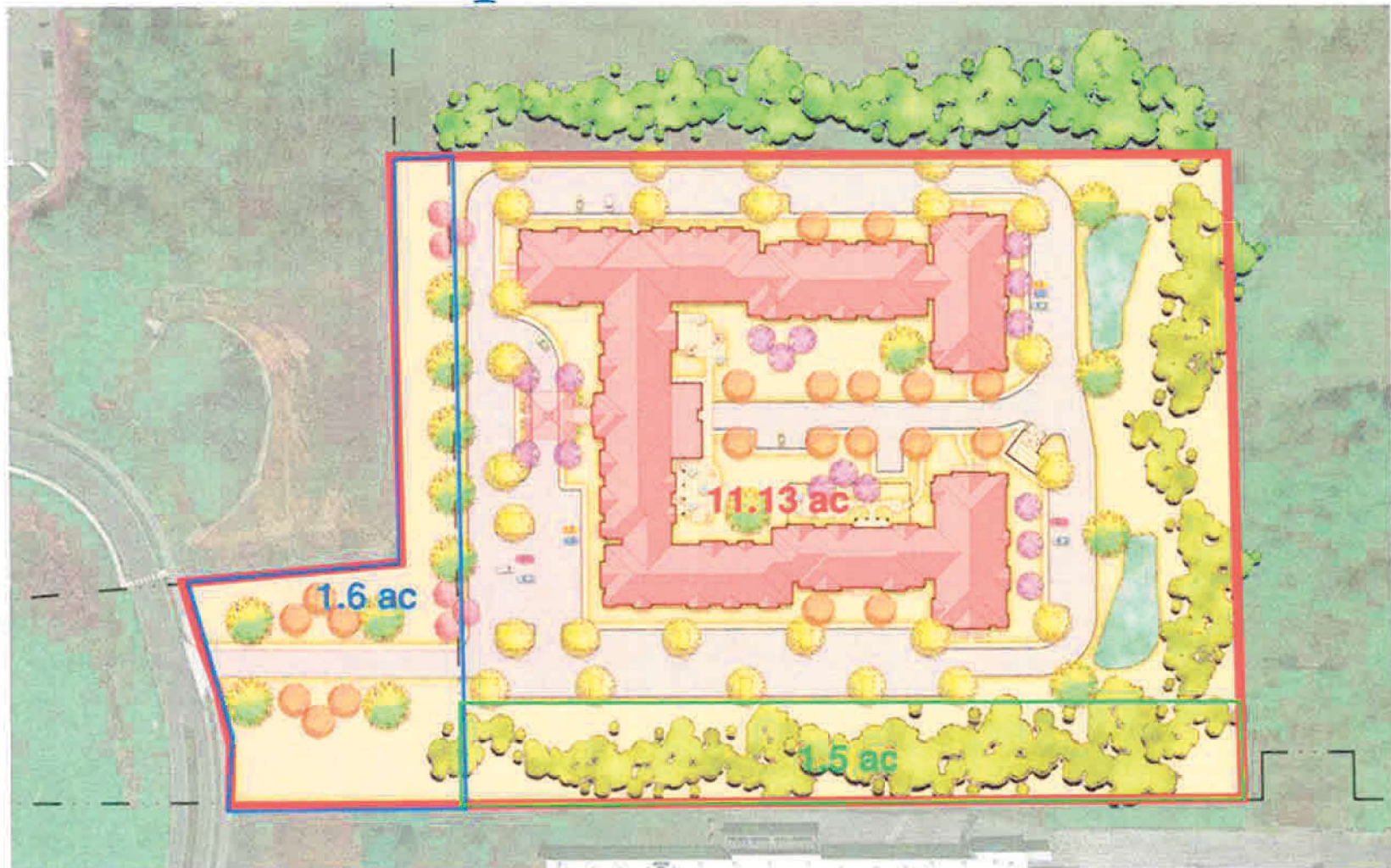
Entry Elevation Detail



HARMONY AT FARRAGUT
SENIOR LIVING COMMUNITY



Harmony at Farragut Proposed Site Plan



SMITH/PACKETT
AN ARCHITECTURAL FIRM

REPORT TO THE FARRAGUT MUNICIPAL PLANNING COMMISSION

PREPARED BY: Mark Shipley, Community Development Director

SUBJECT: Discussion on a future land use map amendment request for a portion of Parcel 069, Tax Map 142, north of the Ingles, from Office/Light Industrial and Medium Density Residential to Civic/Institutional (Joe Conver – Farragut IL – AL Investors, LLC)

INTRODUCTION AND BACKGROUND: Related to the previous item, this involves a workshop discussion to amend the Future Land Use Map for the area that would be rezoned to S-1. Though included in the 10 acres, the applicant is not proposing to change the area zoned B-1 that is now shown as the Open Space land use. Only areas currently within the Medium Density Residential land use would be amended.

The requested Civic/Institutional land use is most consistent with the S-1 Zoning District. Please see the previous item for discussion related questions.



Future Land Use Map Proposed Change

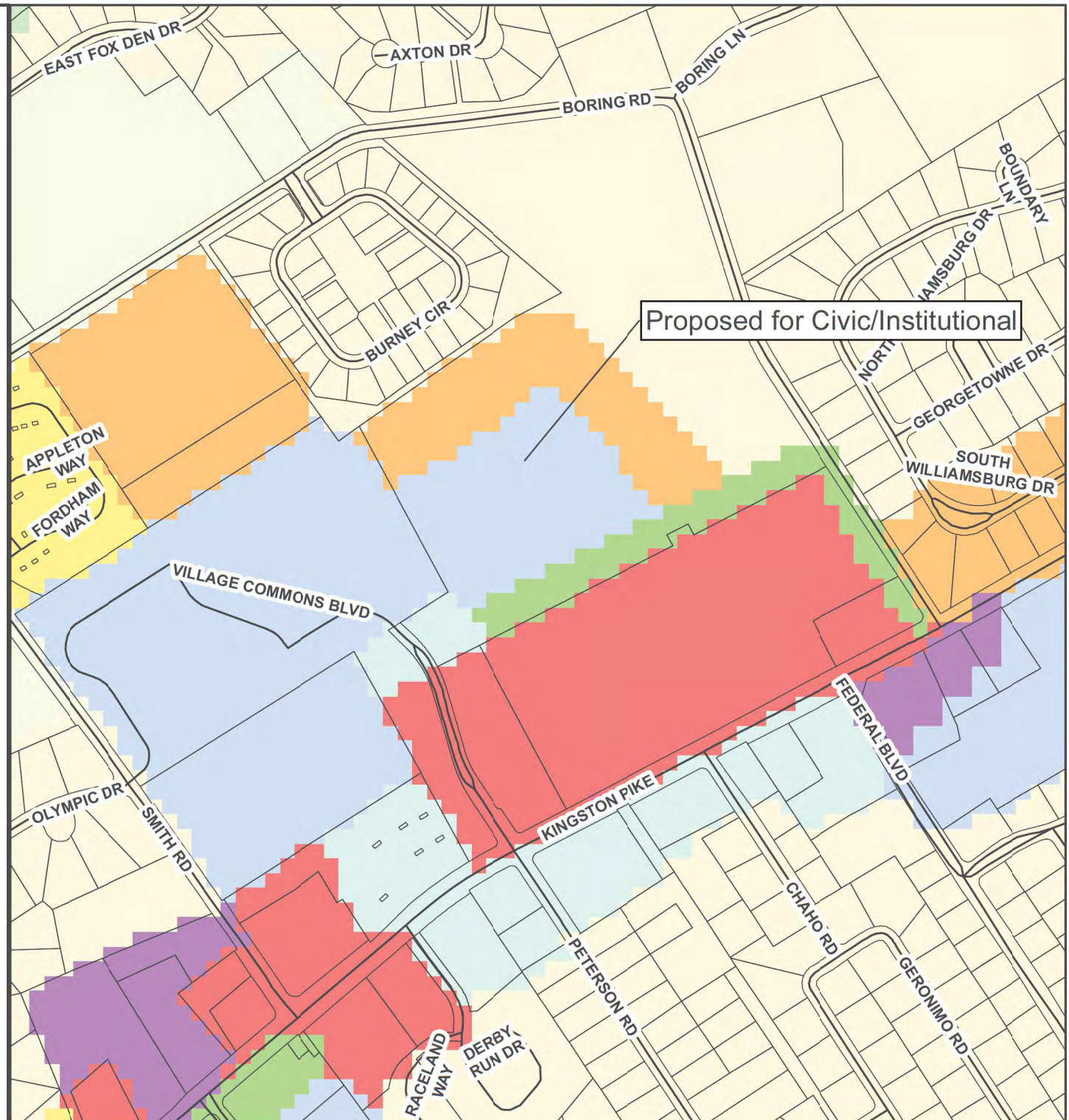
Harmony Farragut

Legend

- Streets
- Parcels
- Civic/Institutional
- Office/Light Industrial
- Commercial
- Open Space
- Parks and Rec
- Rural Residential (> 1 Acre)
- Very Low Density Residential (2-4 DUs /
- Low Density Residential (3-6 DUs /
- Med Density Residential (6-8 DUs / Acre)
- Mixed Use Neighborhood (6-8 DUs /



1 in = 500 ft



REPORT TO THE FARRAGUT MUNICIPAL PLANNING COMMISSION

PREPARED BY: Mark Shipley, Community Development Director

SUBJECT: Consideration of appointment of a representative from the Planning Commission to assist Town staff in design related questions that may arise for individual tenants specific to the Mixed-Use Town Center planning area portion of the Town

INTRODUCTION AND BACKGROUND: The developer of the Town Center at Biddle Farms is moving forward with finalizing space for different tenants in the commercial portion of the PCD. Understandably, each tenant has its own unique needs and desires. Some of these could involve modifications to different building or site elements that were part of what the Planning Commission has approved. This occurs with virtually all projects and staff is trying to avoid having to send every change back through the Planning Commission when the effect of the change would not appear to be substantial to the intent of the plan approved.

For example, staff has been asked about awning colors, variations in window and door locations, and some variation in building facades, dimensions, and arrangements of outdoor spaces. Where these requested modifications may not be considered major, staff is proposing for the Planning Commission to consider appointing a representative from the Commission to help staff in reviewing these tenant specific modifications to help facilitate the overall process.

Where it is apparent that a modification would need the full Planning Commission's review, the appointed representative could also help staff with presenting points that should be considered as part of the decision-making process. Staff would recommend that there be some flexibility to accommodate different tenants. Related to this, a question has emerged recently from a tenant with a need for a deeper building than what was approved with the site plan. In this case, the building would be about 11 feet deeper, but the building width would be reduced, and additional outdoor seating provided to the side of the building where the width reduction occurred. The issue for staff is that this would lessen the depth of the pedestrian area between the front plane of the building and the primary street curb from 20 feet to roughly nine feet.

As provided for on Page 55 of the Town's Architectural Design Standards, to best promote a highly active pedestrian area along primary streets in the Town Center, the pedestrian area should include a five-foot furnishing zone between the street and sidewalk which could include planters, street trees, benches, etc. From there, a ten-foot-wide unobstructed sidewalk would be provided, and then from the sidewalk to the building would be a maintenance strip area for outdoor seating, planters, overhangs, etc. This is the cross section that was shown on the approved site plans for the commercial portion of this development. Though some minor modification could be expected to this cross section, staff indicated to the applicant that they could not support a reduction of 11 feet. This would adversely affect the pedestrian experience and create inconsistency along the building frontages abutting the primary street. A question for the Planning Commission is whether any flexibility in this cross section could be accepted and, if so, is there a range that the Commission would be comfortable with so that some variation is permitted up to a point where it would not compromise the larger goals of the development and Planning Commission approval.

The establishment of these type of parameters would give tenants some flexibility and would assist staff and the Planning Commission appointee (if that is desired), in reviewing future requests.

3.5 Provide a highly-active pedestrian area between buildings and streets classified as "primary" in the Town Center.

The pedestrian area along a primary street should include:

- A "furnishing zone", at least 5' wide, between the street or parking area and sidewalk to provide space for benches, trees and planters, as well as access to cars parked along the street
- An unobstructed sidewalk at least 10' in width
- A "maintenance strip", at least 5' wide, between the sidewalk and building façade to provide space for outdoor seating, planters, canopy overhangs and other features

3.6 Provide a landscaped pedestrian area between buildings and streets classified as "secondary" in the Town Center.

The landscaped pedestrian area along a secondary street should include:

- A tree lawn or grass strip, at least 8' wide, between the street or parking area and sidewalk to provide a landscaped edge
- An unobstructed sidewalk or path at least 8' in width
- An additional area, at least 2' wide, between the sidewalk and building façade to provide space for utilities and allow maintenance access

3.7 Locate and furnish outdoor open spaces to encourage pedestrian activity in the Town Center.

- Locate outdoor open spaces near building entries or other focal points.
- Furnish outdoor open spaces with durable and functional elements that are designed for active use.
- Locate furnishings so they will not impede pedestrian access to buildings or parking areas.
- Design and locate stormwater management systems such as bioretention areas to serve as usable open space or site amenities.



Provide a high-quality pedestrian zone between buildings and the street.

Farragut Zoning Ordinance Town Center District

The Farragut Zoning Ordinance establishes a Town Center District (TCD) for application in areas designated as Mixed Use Town Center on the Future Land Use Map. The TCD includes zoning requirements intended to foster development of a downtown, including:

- » Minimum open space
- » Maximum building setbacks
- » Minimum sidewalk widths
- » Minimum building heights

In some cases, TCD zoning may not yet be applied to properties in the Town Center. The design guidelines in this section assume application of the TCD zone district, and build on zoning requirements with guidelines to encourage an active, pedestrian-oriented Town Center.

See the Planning Division page at www.farragut.org for more information on the Town Center District. Note that concepts included in the TCD may be extended to additional zone districts in the future.

Primary & Secondary Streets

The Farragut Zoning Ordinance requires streets within a TCD development to be classified as either primary or secondary. Primary streets include all streets on which buildings front. Secondary streets include all streets that have parking lots or open space fronting, but no buildings.