AGENDA FOR THE REGULAR MEETING OF THE
BRENTWOOD MUNICIPAL PLANNING COMMISSION
Tuesday, January 3, 2023 -- 7:00PM
BRENTWOOD CITY HALL

Agenda Item Location Map

Call to Order
Roll Call
Pledge of Allegiance to the Flag

Approval or Correction of Minutes

1. December 5, 2022

Comments from Citizens: Public comments will be allowed on all regular agenda items and items removed from the Consent Agenda. Upon being recognized by the Chair, any person wishing to speak shall state his/her name and address and shall limit comments to the agenda item being discussed.

Public Hearing

1. **PUBLIC HEARING - APPROVAL OF ADDITIONAL HEIGHT FOR THREE PROPOSED FOUR-STORY OFFICE BUILDINGS - 5101 MARYLAND WAY, MARYLAND FARMS - ZONING C-2**

Consent Agenda

1. **BPC2209-007 Hillside Protection Site Plan Review - Hillview Estates Subdivision, Section 2, Lot 97, 1017 Highland Road, Zoning R-2 -** *Applicant: Ms. Lauren Griffith, 1017 Highland Road, Brentwood, TN 37027*

2. ~~**BPC2211-008 Minor Site Plan Alteration - Crossroads Surgery Center, Crossroads South, Section 1, Lot 7, 1805 Williamson Court, Zoning C-3 -** *Applicant: Davis Stokes Collaborative Architects, P.C., 7121 Crossroads Boulevard, Brentwood, TN 37027*~~

3. **BPC2212-002 Minor Site Plan Alteration - Crema Brentwood, Brentwood Place Shopping Center, 330 Franklin Road Suite 901 D and 904 D, Zoning C-2 -** *Applicant: Mr. Evan Brooks, Powell, LLC, 904 Main Street, Suite A1, Nashville, TN 37206*

4. **BPC2212-003 Revised Preliminary Plan - Brentwood Country Club, Zoning OSRD -** *Applicant: Mr. Chris Mabery, Ragan Smith Associates, 1500 Medical Center Parkway, Suite 2J, Murfreesboro, TN 37129*

5. **BPC2212-004 Revised Final Plat - Brentwood Country Club, Lot 131, 5215 Country Club Drive, Zoning OSRD -** *Applicant: Mr. Chris Mabery, RaganSmith Associates, 1500 Medical Center Parkway, Suite 2J, Murfreesboro, TN 37129*

6. **BPC2212-009 Revised Preliminary Plan - Eastman's Preserve, Zoning OSRD -** *Applicant: Ms. Amanda Reed, RaganSmith Associates, PO Box 60070, Nashville, TN 37206*

7. **BPC2212-010 Revised Preliminary Plan - Primm Farm Subdivision, Zoning OSRD -** *Applicant: Mr. Matt Bryant, M2 Group, LLC, P. O. Box 848, Franklin, TN 37065*

8. **BPC2209-006 Final Plat - Primm Farm Subdivision, Zoning OSRD -** *Applicant: Mr. Matt Bryant, M2 Group, LLC, P. O. Box 848, Franklin, TN 37065*

NOTE: All matters listed under the consent agenda are considered to be routine, and will be enacted upon one motion. There will be no separate discussion of these items unless a Planning Commission member so requests, in which case it will be removed from the Consent Agenda and considered separately. Additionally, any citizen or agenda applicant present may request that consideration be given by the Planning Commission to remove an item from the Consent Agenda so that discussion may be held on that item.

Regular Agenda

1. **BPC2209-004 Preliminary Plan - Amelia Subdivision FKA Roberts Property, 310 Wilson Pike, Lot 4, Zoning R-2 -** *Applicant: Mr. Wayde Morrow, M2 Group, LLC, P.O. Box 848, Franklin, TN 37065*

2. **BPC2209-009 Preliminary Plan - Aix Retreat Subdivision, 9919 Maupin Road, Zoning R-2 -** *Applicant: Mr. Jason Brouillette, S&ME, Inc., 658 Grassmere Park, Suite 100, Nashville, TN 37211*

3. **BPC2211-005 Master Plan - 5101 Maryland Way, Maryland Farms, Section 15, Lot 2, Zoning C-2 -** *Applicant: Mr. Brad Slayden, RaganSmith Associates, 315 Woodland Street, Nashville, TN 37206*

4. **BPC2212-007 Revised Site Plan - Brentwood Towne Center, 122 Franklin Road & 128 Pewitt Drive, Zoning C-4, -** *Applicant: Mr. Gary Emerson, Development Management Group, LLC, 4209 Gallatin Pike, Nashville, TN 37216*

Other Business

1. Monthly Security Report -- December 2022

Administrative Information

1. Planning and Codes Department Monthly Report -- November 2022

Robert Leeman
Planning & Codes Director

Anyone requesting accommodations due to disabilities, please contact April Curlin, ADA Coordinator, before the meeting at 615-371-0060.

BRENTWOOD PLANNING COMMISSION **1.**

Meeting Date: 01/03/2023

Approval or correction of minutes from Regular Scheduled Commission meeting

Submitted by: Holly Earls, Administration

Department: Administration

Information

Subject

Approval or correction of minutes from the December 5, 2022 meeting

Background

Staff Recommendation

Attachments

Draft Minutes

D R A F T

MINUTES OF MEETING OF BRENTWOOD PLANNING COMMISSION

BRENTWOOD, TENNESSEE

The Brentwood Planning Commission met on Monday, December 5, 2022 at 7:30 pm at Brentwood City Hall.

Present:	Chair Janet Donahue; Vice Chair Stevan Pippin; Commissioner Mark Gorman; Commissioner Preston Bain; Commissioner Chris Clark; Commissioner Carole Crigger; Commissioner Ryan Crowley; Commissioner Michael Kaplan; Commissioner Brandon Oliver; Commissioner John Vitucci
Staff Present:	Planning & Codes Director Bob Leeman; City Manager Kirk Bednar; Assistant City Manager Jay Evans; City Planner Todd Petrowski; City Planner Allison Roberts; City Attorney Kristen Corn

Approval or Correction of Minutes

November 7, 2022

Moved by Commissioner Mark Gorman for approval of the minutes as written, seconded by Commissioner Ryan Crowley

Vote: 7 - 0 Approved

Other: Vice Chair Stevan Pippin (Abstain)
Commissioner Chris Clark (Abstain)
Commissioner Brandon Oliver (Abstain)

Item 2 (BPC2209-006) on the Consent Agenda was deferred by the applicant.

CONSENT AGENDA

Item 1: BPC2208-007 Final Plat - Bella Collina Subdivision, Zoning R-2 - Applicant: Amanda Reed, Ragan Smith Associates, P. O. Box 60070, Nashville, TN 37206

Ragan Smith Associates requested approval of a final plat that showed 8 lots on 17.71 acres. Seven lots will have a gated shared driveway and one lot will have direct access to Concord Road. The cemetery relocation has been completed and the proposed plat matched the approved preliminary plan.

Staff recommended approval of the proposed final plat subject to the following conditions:

1. Prior to signing of the plat, water and sewer as-builts (PDF & digital), CCTV inspection of the gravity sewer mains (if applicable), and construction cost summary are to be provided to the Water Services Department.

2. Provide TDOT's approval of the modification to remove or reduce the size of the culvert under the entrance.

3. Standard grinder pump note shall be added to plat.

4. The permanent cemetery fence must be installed before the final plat will be signed for recording.

5. Approval of a final plat by the Planning Commission shall become effective upon the date of the last signature required on the plat for recording. The initial vesting period shall be for a period of five years after approval.

6. Add the following note to all pages of the final plat:

   This final plat is subject to a vesting period, during which the development standards in effect on the date of approval will remain the standards applicable to this plan. Upon expiration of the vesting period, development of the property shown on this plat may be subject to standards other than those that were applicable during the vesting period. The vesting period for this plat expires on_____, unless extended by the City of Brentwood. Persons relying on this plat after said date should contact the City of Brentwood to determine if development may continue as depicted on the plan.

   (Planning and Codes Department staff will insert the expiration year for the plat at the time the plat is ready for recording and may also make changes to the wording of the above note as necessary to carry out the intent of Standard Requirements 1, 2 and 3 below.)

7. Provide the Planning staff with a digital copy of the proposed subdivision. This request is consistent with Article 2.3 of the Brentwood Subdivision Regulations. The file should be in AutoCAD .DWG or .DXF compatible format. The file shall use the Tennessee State Plane coordinate system, FIPS Zone 4100, NAD 83 datum. The digital copies must be received before the plat may be recorded.

8. The property owner is responsible for all development fees including water and sewer service and tap fees, building permit fees and Public Works Project Fees. The required fees shall be used for future infrastructure related improvements required by the proposed development.

9. Applicable security for all required improvements in accordance with the requirements of Article Eight of the Brentwood Subdivision Regulations shall be provided before the final plat may be signed and recorded.

10. Complete building plans shall be submitted to the Planning and Codes Department for review, approval, and issuance of the required permits before any work is begun. Additionally, all required electrical permits, issued by the State of Tennessee must be received before any work is begun.

11. Development of this project shall comply with all applicable codes and ordinances of the City of Brentwood.

12. Deviations from the approved plat in the development of the project or the failure to satisfy any standard requirements or special conditions of approval imposed by the planning commission will be considered a violation of the provisions of the Zoning Ordinance, which shall be subject to punishment as provided in Section 1-9 of the Brentwood Municipal Code. The City may also require the applicant to appear before the Planning Commission to address any deficiencies or unapproved modifications. The project may also be subject to delays in issuance of permits,

certificates of occupancy, recordation of plats or other project approvals.

13. Any changes to the plat approved by the Planning Commission will require staff review and re-approval by the Planning Commission.

14. Approval of the proposed plat shall be limited to the illustrations and plans presented to the Planning Commission for review and approval on **December 5, 2022**. Any changes to Planning Commission approved plans and specifications will require staff review and re-approval by the Planning Commission.

Item 2: BPC2211-002 Minor Site Plan Alteration - Fifth Third Bank, Interstate Industrial Park, Phase 1, Lot 1, 1713 Mallory Lane, Zoning C-3 - Applicant: Mr. Hayden Hesler, MAP Strategies, 181 W Madison Street, Suite 3815, Chicago, IL 60602

MAP Strategies requested approval to improve ADA access in the parking lot by moving the ADA stall further south and placing on concrete. A new sidewalk connection from the front parking lot to the sidewalk along Mallory Lane was also proposed. The site will continue to meet the minimum parking and green space requirements.

Staff recommended approval of the proposed minor site plan alteration subject to the following conditions:

1. A site plan shall be vested for a period of three years from the date of the original approval.
2. Add the following note to the site plan:

   This site plan is subject to a three-year vesting period, during which the development standards in effect on the date of approval will remain the standards applicable to this plan. If construction is not completed during the first three years, the original site plan is considered a preliminary site plan and the applicant must obtain approval of a final site plan. Development of the property shown on this plan may be subject to standards other than those that were applicable during the vesting period. The Initial vesting period for this plan expires on **December 5, 2025**, unless extended by the City of Brentwood. Persons relying on this plan after said date should contact the City of Brentwood to determine if development may continue as depicted on the plan.
3. When the construction authorized pursuant to a site plan is not completed within three years from the date of initial approval, but the applicant desires to complete the project proposed for the site, the plan as initially approved for the project or as amended shall be considered a preliminary site plan. If the applicant secures all necessary permits, commences site preparation and obtains approval of a final site plan within the three-year vesting period following approval of the preliminary site plan, then the vesting period shall be extended an additional two years beyond the expiration of the initial three-year vesting period. During the two-year extension, the applicant must commence construction and maintain any necessary permits to remain vested.

4. If necessary permits are maintained and construction, as defined by Section 78-43, has commenced by the end of the two-year extension, then the vesting period shall remain in effect until the Planning and Codes Department has certified final completion of the project, provided the total vesting period shall not exceed ten years from the date of approval of the preliminary site plan.

5. If the construction authorized pursuant to a site plan is completed within three years from the date of approval, the site plan shall then be considered the final site plan for the project.

6. The property owner is responsible for all development fees including water and sewer service and tap fees, building permit fees and Public Works Project Fees. The required fees shall be used for future infrastructure

related improvements required by the proposed development.

7. Add the following note to the plans that are to be submitted for building permit review: "This document certifies that the building materials specified in the Planning Commission approval of this project (BPC____-___) are likewise provided for in the plans submitted. Any deviation from the approved building materials will negate any staff approval of said plans. Proposed changes to project specifications will be submitted to the Planning Commission for further consideration.

8. Complete building plans shall be submitted to the Planning and Codes Department for review, approval and issuance of the required permits before any work is begun. Additionally, all required electrical permits, issued by the State of Tennessee must be received before any work is begun.

9. Development of this project shall comply with all applicable codes and ordinances of the City of Brentwood.

10. Any changes to plans approved by the Planning Commission will require staff review and re-approval by the Planning Commission.

11. Deviations from the approved plan in the development of a project or the failure to satisfy any standard requirements or special conditions of approval imposed by the planning commission will be considered a violation of the provisions of the Zoning Ordinance, which shall be subject to punishment as provided in Section 1-9 of the Brentwood Municipal Code. The City may also require the applicant to appear before the Planning Commission to address any deficiencies or unapproved modifications. The project may also be subject to delays in issuance of permits, certificates of occupancy, recordation of plats or other project approvals.

12. Approval of the proposed plan shall be limited to the illustrations and plans presented to the Planning Commission for review and approval on **December 5, 2022**. Any changes to Planning Commission approved plans and specifications will require staff review and re-approval by the Planning Commission.

Item 3: BPC2211-007 Revised Hillside Protection Site Plan Review - Witherspoon Subdivision, Section 4, Lot 45, 9248 Lehigh Drive, Zoning OSRD - Applicant: Mr. Christian Noble, Noble Johnson Architects LLC, PO Box 2008, Brentwood, TN 37024

Noble Johnson Architects LLC requested approval of a revised Hillside Protection Site Plan for Lot 45 of the Witherspoon Subdivision. The proposal included a new 355 sq. ft. porch area off the back of the house and a 741 sq.ft. detached pool house with open-air outdoor living area.

Staff recommended approval of the provised revised hillside protection overlay site plan subject to the following conditions:

1. Approval by the Board of Zoning Appeals will be required for the proposed accessory structure.

2. Removal of established trees outside the building envelope and the limits of disturbance shall be limited, with the exception of diseased or hazardous trees as recommended in writing by a landscape architect, licensed to practice in Tennessee.

3. Existing natural vegetation around a proposed structure in the HP Overlay district, particularly if located in areas of potential high visibility from properties and roadways at lower elevations, shall be preserved to the greatest extent feasible and practical. Additional evergreen trees and shrubs may be required to effectively screen the structure.

4. A site plan shall be vested for a period of three years from the date of the original approval.

5. Add the following note to the site plan:

   This site plan is subject to a three-year vesting period, during which the development standards in effect on the date of approval will remain the standards applicable to this plan. If construction is not completed during the first three years, the original site plan is considered a preliminary site plan and the applicant must obtain approval of a final site plan. Development of the property shown on this plan may be subject to standards other than those that were applicable during the vesting period. The Initial vesting period for this plan expires on **December 5, 2025**, unless extended by the City of Brentwood. Persons relying on this plan after said date should contact the City of Brentwood to determine if development may continue as depicted on the plan.

6. When the construction authorized pursuant to a site plan is not completed within three years from the date of initial approval, but the applicant desires to complete the project proposed for the site, the plan as initially approved for the project or as amended shall be considered a preliminary site plan. If the applicant secures all necessary permits, commences site preparation and obtains approval of a final site plan within the three-year vesting period following approval of the preliminary site plan, then the vesting period shall be extended an additional two years beyond the expiration of the initial three-year vesting period. During the two-year extension, the applicant must commence construction and maintain any necessary permits to remain vested.

7. If necessary permits are maintained and construction, as defined by Section 78-43, has commenced by the end of the two-year extension, then the vesting period shall remain in effect until the Planning and Codes Department has certified final completion of the project, provided the total vesting period shall not exceed ten years from the date of approval of the preliminary site plan.

8. If the construction authorized pursuant to a site plan is completed within three years from the date of approval, the site plan shall then be considered the final site plan for the project.

9. The property owner is responsible for all development fees including water and sewer service and tap fees, building permit fees and Public Works Project Fees. The required fees shall be used for future infrastructure related improvements required by the proposed development.

10. Add the following note to the plans that are to be submitted for building permit review: “This document certifies that the building materials specified in the Planning Commission approval of this project (BPC2211-007) are likewise provided for in the plans submitted. Any deviation from the approved building materials will negate any staff approval of said plans. Proposed changes to project specifications will be submitted to the Planning Commission for further consideration."

11. Complete building plans shall be submitted to the Planning and Codes Department for review, approval and issuance of the required permits before any work is begun. Additionally, all required electrical permits, issued by the State of Tennessee must be received before any work is begun.

12. Development of this project shall comply with all applicable codes and ordinances of the City of Brentwood.

13. Any changes to plans approved by the Planning Commission will require staff review and re-approval by the Planning Commission.

14. Deviations from the approved plan in the development of a project or the failure to satisfy any

standard requirements or special conditions of approval imposed by the planning commission will be considered a violation of the provisions of the Zoning Ordinance, which shall be subject to punishment as provided in Section 1-9 of the Brentwood Municipal Code. The City may also require the applicant to appear before the Planning Commission to address any deficiencies or unapproved modifications. The project may also be subject to delays in issuance of permits, certificates of occupancy, recordation of plats or other project approval.

15. Approval of the proposed plan shall be limited to the illustrations and plans presented to the Planning Commission for review and approval on **December 5, 2022**. Any changes to Planning Commission approved plans and specifications will require staff review and re-approval by the Planning Commission.

Item 4: BPC2211-009 Revised Preliminary Plan - Retaining Wall, Ragsdale Subdivision, Zoning OSRD - Applicant: Mr. Terry Rasmussen, BRS Development, 5617 Cottowood Drive, Brentwood, TN 37027

BRS Development requested approval of a revised preliminary plan that showed the proposed building materials and elevations for five proposed retaining walls. The location of these walls remained the same as previously approved. However, no details were provided regarding the materials or colors of the proposed walls originally. All walls will be made out of redi-rock blocks in a natural color.

Staff recommended approval of the proposed revised preliminary plan subject to the following conditions:

1. All previous conditions placed on the project by the Planning Commission shall remain applicable to the project.

2. A preliminary site plan shall be vested for a period of three years from the date of the original approval.

3. Add the following note to the preliminary plan:

   This site plan is subject to a three-year vesting period, during which the development standards in effect on the date of approval will remain the standards applicable to this plan. If construction is not completed during the first three years, the original site plan is considered a preliminary site plan and the applicant must obtain approval of a final site plan. Development of the property shown on this plan may be subject to standards other than those that were applicable during the vesting period. The Initial vesting period for this plan expires on **September 7, 2024**, unless extended by the City of Brentwood. Persons relying on this plan after said date should contact the City of Brentwood to determine if development may continue as depicted on the plan.

4. When the construction authorized pursuant to a site plan is not completed within three years from the date of initial approval, but the applicant desires to complete the project proposed for the site, the plan as initially approved for the project or as amended shall be considered a preliminary site plan. If the applicant secures all necessary permits, commences site preparation and obtains approval of a final site plan within the three-year vesting period following approval of the preliminary site plan, then the vesting period shall be extended an additional two years beyond the expiration of the initial three-year vesting period. During the two-year extension, the applicant must commence construction and maintain any necessary permits to remain vested.

5. If necessary, permits are maintained and construction, as defined by Section 78-43, has commenced by the end of the two-year extension, then the vesting period shall remain in effect until the Planning and Codes Department has certified final completion of the project, provided the total vesting period shall not exceed

ten years from the date of approval of the preliminary site plan.

6. If the construction authorized pursuant to a site plan is completed within three years from the date of approval, the site plan shall then be considered the final site plan for the project.

7. The property owner is responsible for all development fees including water and sewer service and tap fees, building permit fees and Public Works Project Fees. The required fees shall be used for future infrastructure related improvements required by the proposed development.

8. Applicable security for all required roadway, drainage, utilities, water, sewer, landscaping and amenity improvements in accordance with the requirements of Article Eight of the Brentwood Subdivision Regulations shall be provided before the final plat may be recorded.

9. Complete plans shall be submitted to the Planning and Codes Department for review, approval and issuance of the required permits before any work is begun. Additionally, all required electrical permits, issued by the State of Tennessee must be received before any work is begun.

10. Development of this project shall comply with all applicable codes and ordinances of the City of Brentwood.

11. Deviations from the approved plan in the development of a project or the failure to satisfy any standard requirements or special conditions of approval imposed by the planning commission will be considered a violation of the provisions of the Zoning Ordinance, which shall be subject to punishment as provided in Section 1-9 of the Brentwood Municipal Code. The City may also require the applicant to appear before the Planning Commission to address any deficiencies or unapproved modifications. The project may also be subject to delays in issuance of permits, certificates of occupancy, recordation of plats or other project approvals.

12. Development of this project shall comply with all applicable codes and ordinances of the City of Brentwood.

13. Approval of the proposed plan shall be limited to the illustrations and plans presented to the Planning Commission for review and approval on **December 5, 2022**. Any changes to Planning Commission approved plans and specifications will require staff review and re-approval by the Planning Commission.

Moved by Vice Chair Stevan Pippin for approval of the items on the Consent Agenda, seconded by Commissioner Brandon Oliver

Vote: 10 - 0 Approved - Unanimously

REGULAR AGENDA

Item 1: BPC2211-004 Preliminary Plan - Calistoga FKA Sam Donald Estates Subdivision, Zoning R-2 - Applicant: Mr. Tylor Fischer, Ragan Smith Associates, 315 Woodland Street, Nashville, TN 37206

Ragan Smith Associates requested approval of a preliminary plan showing 62 lots on approximately 147 acres. Site access will be from Sam Donald Road with a connection to Spruell Drive in the adjoining Scales Farmstead Subdivision located in Nolensville. Sewer was provided by Metro Water Services and water was provided by the Nolensville College Grove Utility District.

Staff recommended approval of the proposed preliminary plan subject to the following conditions:

1. Pond access via open space will require grading of slopes to be accessible for future maintenance needs.

2. The road connection on Spruell Drive between Scales Farmstead and Calistoga shall have a temporary barricade to prevent normal vehicular traffic between the two subdivisions until after 56 (90%) of the homes in Calistoga have received a certificate of occupancy. The temporary barricade shall not prevent emergency vehicles from accessing either subdivision via Spruell Lane.

3. Per the requirements of Section 50-29(b) of the Municipal Code, the applicant is required to pay for the Neel-Shaffer traffic study review. The amount shall be forwarded to city staff before any permits will be issued for the project.

4. A preliminary site plan shall be vested for a period of three years from the date of the original approval.

5. Add the following note to the preliminary plan:

   This site plan is subject to a three-year vesting period, during which the development standards in effect on the date of approval will remain the standards applicable to this plan. If construction is not completed during the first three years, the original site plan is considered a preliminary site plan and the applicant must obtain approval of a final site plan. Development of the property shown on this plan may be subject to standards other than those that were applicable during the vesting period. The Initial vesting period for this plan expires on **December 5, 2025**, unless extended by the City of Brentwood. Persons relying on this plan after said date should contact the City of Brentwood to determine if development may continue as depicted on the plan.

6. When the construction authorized pursuant to a site plan is not completed within three years from the date of initial approval, but the applicant desires to complete the project proposed for the site, the plan as initially approved for the project or as amended shall be considered a preliminary site plan. If the applicant secures all necessary permits, commences site preparation and obtains approval of a final site plan within the three-year vesting period following approval of the preliminary site plan, then the vesting period shall be extended an additional two years beyond the expiration of the initial three-year vesting period. During the two-year extension, the applicant must commence construction and maintain any necessary permits to remain vested.

7. If necessary, permits are maintained and construction, as defined by Section 78-43, has commenced by the end of the two-year extension, then the vesting period shall remain in effect until the Planning and Codes Department has certified final completion of the project, provided the total vesting period shall not exceed ten years from the date of approval of the preliminary site plan.

8. If the construction authorized pursuant to a site plan is completed within three years from the date of approval, the site plan shall then be considered the final site plan for the project.

9. It is the policy of the U. S. Postal Service that mail delivery to all new and extended developments use centralized delivery, via cluster box units (CBU). It is the responsibility of the customer (developers and builders) to provide the necessary mail receptacle equipment. Show/label an area on the plan to accommodate the cluster box units. Developers must receive approval from the USPS before mail service can begin.

10. The homes in the subdivision shall use U.S. Postal Service approved Cluster Box Units for Mail Delivery. Each home builder shall install permanent address posts, in lieu of mailboxes at the end of each driveway to facilitate emergency response. The address posts must be installed before a certificate of occupancy will be issue for the home.

11. Approval of the site plan does not constitute approval of the signage plan. All signs must comply with the Brentwood Sign Ordinance. A comprehensive sign package including all signs (temporary or permanent, wall or ground) shall be submitted to the Planning Department for a compliance review. Please submit a comprehensive sign package to Allison Roberts at allison.roberts@brentwoodtn.gov.

12. On all sheets of the plan show the location of existing and platted property lines, existing streets, buildings, watercourses, railroads, cemeteries, sewer lines, bridges, culverts, drain pipes, water mains, fire hydrants, street lights, tree masses, public utility easements.

13. The property owner is responsible for all development fees including water and sewer service and tap fees, building permit fees and Public Works Project Fees. The required fees shall be used for future infrastructure related improvements required by the proposed development.

14. Applicable security for all required roadway, drainage, utilities, water, sewer, landscaping and amenity improvements in accordance with the requirements of Article Eight of the Brentwood Subdivision Regulations shall be provided before the final plat may be recorded.

15. A Maintenance Agreement and Storm Water System Long-Term Operation and Maintenance Plan for all storm water structures and facilities must be prepared, submitted and approved per Section 56-43 of the Brentwood Code.

16. Development of this project shall comply with all applicable codes and ordinances of the City of Brentwood.

17. Deviations from the approved plan in the development of a project or the failure to satisfy any standard requirements or special conditions of approval imposed by the planning commission will be considered a violation of the provisions of the Zoning Ordinance, which shall be subject to punishment as provided in Section 1-9 of the Brentwood Municipal Code. The City may also require the applicant to appear before the Planning Commission to address any deficiencies or unapproved modifications. The project may also be subject to delays in issuance of permits, certificates of occupancy, recordation of plats or other project approvals.

18. Approval of the proposed plan shall be limited to the illustrations and plans presented to the Planning Commission for review and approval on **December 5, 2022**. Any changes to Planning Commission approved plans and specifications will require staff review and re-approval by the Planning Commission.

Moved by Commissioner Carole Crigger for approve subject to the above conditions being met to the satisfaction of staff, seconded by Commissioner John Vitucci

Vote: 10 - 0 Approved - Unanimously

OTHER BUSINESS

Revised 2023 Schedule of Meetings for the Planning Commission

Moved by Commissioner Mark Gorman for approval, seconded by Chair Janet Donahue

Vote: 10 - 0 Approved - Unanimously

Monthly Security Report - November 2022

Moved by Vice Chair Stevan Pippin for approval, seconded by Commissioner Brandon Oliver

Vote: 10 - 0 Approved - Unanimously

With no further business, the meeting adjourned at 7:48 pm.

APPROVED _____



Holly Earls, City Recorder

BRENTWOOD PLANNING COMMISSION **1.**

Meeting Date: 01/03/2023

Information

PROJECT NUMBER

PROJECT DESCRIPTION

Section 78-205(9) of the Brentwood Municipal Code requires that a Public Hearing be conducted prior to the approval of new four-story office buildings.

ZONING OF PROPERTY

APPLICANT NAME/ADDRESS

Attachments

No file(s) attached.

Consent Agenda 1.

BRENTWOOD PLANNING COMMISSION

Meeting Date: 01/03/2023

Current Zoning: R-2 - SUBURBAN RESIDENTIAL

Information

Subject

BPC2209-007 Hillside Protection Site Plan Review - Hillview Estates Subdivision, Section 2, Lot 97, 1017 Highland Road, Zoning R-2 - *Applicant: Ms. Lauren Griffith, 1017 Highland Road, Brentwood, TN 37027*

General Information

Lauren Griffith requests approval of a Hillside Protection Site Plan for Lot 97 of the Hillview Estates Subdivision. The proposal includes a 542 square foot room addition and a 259 square foot patio addition on the rear of the house. The applicant also proposes to replace and expand the deck that is on the front of the house.

Conditions of Approval

Staff recommends that the following 3 conditions be attached to the approval of the request.

1. The contractor shall follow all recommendations from the Geotechnical report for footings.

2. The new deck must be placed within the minimum building setbacks.

3. Provide hydraulic calculations from a TN Licensed Professional Engineer for the swale behind the proposed addition and patio to account for any offsite drainage. Swale shall be designed according to the hydraulic calculations.

Standard Requirements

Staff recommends that the following **15** conditions be attached to the approval of the request.

1. A site plan shall be vested for a period of three years from the date of the original approval.

2. Add the following note to the site plan:

   This site plan is subject to a three-year vesting period, during which the development standards in effect on the date of approval will remain the standards applicable to this plan. If construction is not completed during the first three years, the original site plan is considered a preliminary site plan and the applicant must obtain approval of a final site plan. Development of the property shown on this plan may be subject to standards other than those that were applicable during the vesting period. The Initial vesting period for this plan expires on **January 3, 2026**, unless extended by the City of Brentwood. Persons relying on this plan after said date should contact the City of Brentwood to determine if development may continue as depicted on the plan.

3. When the construction authorized pursuant to a site plan is not completed within three years from the date of initial approval, but the applicant desires to complete the project proposed for the site, the plan as initially approved for the project or as amended shall be considered a preliminary site plan. If the applicant secures all necessary permits, commences site preparation and obtains approval of a final site plan within the three-year vesting period following approval of the preliminary site plan, then the vesting period shall be extended an additional two years beyond the expiration of the initial three-year vesting period. During the two-year extension, the applicant must commence construction and maintain any necessary permits to remain vested.

4. If necessary permits are maintained and construction, as defined by Section 78-43, has commenced by the end of the two-year extension, then the vesting period shall remain in effect until the Planning and Codes Department has certified final completion of the project, provided the total vesting period shall not exceed ten years from the date of approval of the preliminary site plan.

5. If the construction authorized pursuant to a site plan is completed within three years from the date of approval, the site plan shall then be considered the final site plan for the project.

6. The property owner is responsible for all development fees including water and sewer service and tap fees, building permit fees and Public Works Project Fees. The required fees shall be used for future infrastructure related improvements required by the proposed development.

7. Add the following note to the plan - “All structures designed for human use and occupancy, including residential dwelling units and garages, shall be protected through an automatic sprinkler system installed in accordance with National Fire Protection Association (NFPA) standards and requirements and approved by the fire chief or his designee.

8. Add the following note to the plans that are to be submitted for building permit review: “This document certifies that the building materials specified in the Planning Commission approval of this project (BPC2209-007) are likewise provided for in the plans submitted. Any deviation from the approved building materials will negate any staff approval of said plans. Proposed changes to project specifications will be submitted to the Planning Commission for further consideration.

9. Existing natural vegetation around a proposed structure in the HP Overlay district, particularly if located in areas of potential high visibility from properties and roadways at lower elevations, shall be preserved to the greatest extent feasibly and practical. Additional evergreen trees and shrubs may be required to effectively screen the structure.

10. Removal of established trees outside of the building envelope or the limits of disturbance shall be limited, with the exception of diseased or hazardous trees as recommended in writing by a landscape architect, licensed to practice in Tennessee.

11. Complete building plans shall be submitted to the Planning and Codes Department for review, approval and issuance of the required permits before any work is begun.

Additionally, all required electrical permits, issued by the State of Tennessee must be received before any work is begun.

12. Development of this project shall comply with all applicable codes and ordinances of the City of Brentwood.

13. Deviations from the approved plan in the development of a project or the failure to satisfy any standard requirements or special conditions of approval imposed by the planning commission will be considered a violation of the provisions of the Zoning Ordinance, which shall be subject to punishment as provided in Section 1-9 of the Brentwood Municipal Code. The City may also require the applicant to appear before the Planning Commission to address any deficiencies or unapproved modifications. The project may also be subject to delays in issuance of permits, certificates of occupancy, recordation of plats or other project approvals.

14. Any changes to plans approved by the Planning Commission will require staff review and re-approval by the Planning Commission.

15. Approval of the proposed plan shall be limited to the illustrations and plans presented to the Planning Commission for review and approval on **January 3, 2023**. Any changes to Planning Commission approved plans and specifications will require staff review and re-approval by the Planning Commission.

Staff Recommendation

Staff requests that the Planning Commission vote to approve the proposed hillside protection overlay site plan subject to the requirements of the staff report.

Attachments

Proposed Site Plan

Proposed Floor Plan

Geotechnical Report



VICINITY MAP

PERMIT HOLDER ACKNOWLEDGEMENT

I ACKNOWLEDGE THAT THE CITY ENGINEER MUST APPROVE ANY DEVIATIONS FROM THE APPROVED SITE PLAN. THE CHANGES SHALL BE SUBMITTED ON A REVISED SITE PLAN. VERBAL APPROVAL MAY NOT BE GIVEN. I ACKNOWLEDGE THAT ALL GRADING AND DRAINAGE AS PER APPROVED SITE PLAN SHALL BE 100% COMPLETE UPON FINAL INSPECTION. CERTIFICATE OF OCCUPANCY WILL NOT BE ISSUED UNTIL 100% COMPLETION IS ACHIEVED.

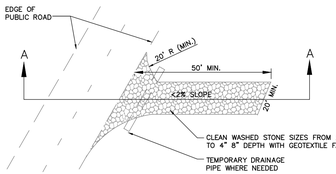
I, Lauren Griffith / Sean Thornton HAVE READ AND REVIEWED THIS SITE PLAN.
(PRINT NAME OF OWNER/POOL CONTRACTOR)

Lauren Griffith
(SIGNATURE OF OWNER)
November 30, 2022
(DATE OF SIGNATURE)

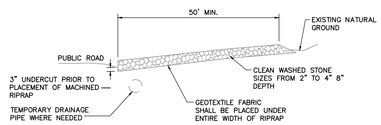
Sean Thornton
(SIGNATURE OF POOL CONTRACTOR)
November 30, 2022
(DATE OF SIGNATURE)

PLANNING DEPARTMENT NOTES:

- This Hillside Protection site plan is subject to a three year vesting period, during which the development standards in effect on the date of approval will remain the standards applicable to this plan. If construction is not completed during the first three years, the original site plan is considered a preliminary site plan and the applicant must obtain approval of a final site plan. Development of the property shown on this plan may be subject to standards other than those that were applicable during the vesting period. The initial vesting period for this plan expires on **January 3, 2026**, unless extended by the City of Brentwood. Persons relying on this plan after said date should contact the City of Brentwood to determine if development may continue as depicted on the plan.
- When the construction authorized pursuant to a site plan is not completed within three years from the date of initial approval, but the applicant desires to complete the project proposed for the site, the plan as initially approved for the project or as amended shall be considered a preliminary site plan. If the applicant secures all necessary permits, commences site preparation and obtains approval of a final site plan within the three-year vesting period following approval of the preliminary site plan, then the vesting period shall be extended an additional two years beyond the expiration of the initial three-year vesting period. During the two-year extension, the applicant must commence construction and maintain any necessary permits to remain vested.
- If necessary permits are maintained and construction, as defined by Section 78-43, has commenced by the end of the two-year extension, then the vesting period shall remain in effect until the Planning and Codes Department has certified final completion of the project, provided the total vesting period shall not exceed ten Planning Department years from the date of approval of the preliminary site plan
- If the construction authorized pursuant to a site plan is completed within three years from the date of approval, the site plan shall then be considered the final site plan for the project.
- The property owner is responsible for all development fees including water and sewer service and tap fees, building permit fees and Public Works Project Fees. The required fees shall be used for future infrastructure related improvements required by the proposed development.
- Deviations from the approved plan in the development of a project or the failure to satisfy any standard requirements or special conditions of approval imposed by the planning commission will be considered a violation of the provisions of the Zoning Ordinance, which shall be subject to punishment as provided in Section 1-9 of the Brentwood Municipal Code. The City may also require the applicant to appear before the Planning Commission to address any deficiencies or unapproved modifications. The project may also be subject to delays in issuance of permits, certificates of occupancy, recordation of plats or other project approvals.
- Complete plans shall be submitted to the Planning and Codes Department for review, approval and issuance of the required permits before any work is begun. Additionally, all required electrical permits, issued by the State of Tennessee must be received before any work is begun.
- Development of this project shall comply with all applicable codes and ordinances of the City of Brentwood.
- Any changes to plans approved by the Planning Commission will require staff review and re-approval by the Planning Commission.
- Approval of the proposed plan shall be limited to the illustrations and plans presented to the Planning Commission for review and approval on **January 3, 2023**. Any changes to Planning Commission approved plans and specifications will require staff review and re-approval by the Planning Commission.

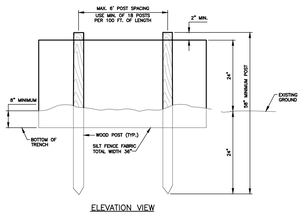


PLAN VIEW OF TEMPORARY CONSTRUCTION ROAD

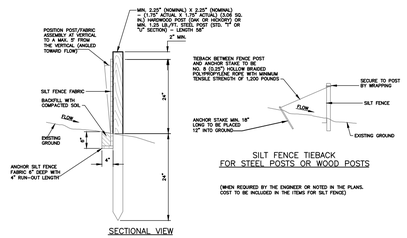


SECTION A–A

CONSTRUCTION ROUTE
NOT TO SCALE



ELEVATION VIEW



SILT FENCE TIEBACK
FOR STEEL POSTS OR WOOD POSTS

(WHEN REQUIRED BY THE ENGINEER OR NOTED IN THE PLANS. COST TO BE INCLUDED IN THE ITEMS FOR SILT FENCE)

SECTIONAL VIEW

SILT FENCE
NOT TO SCALE

GENERAL NOTES:

- BUILDER TO CALL BRENTWOOD ENGINEERING DEPARTMENT FOR INITIAL EROSION CONTROL INSPECTION (615-371-0080) PRIOR TO ISSUANCE OF A PERMIT
- ALL RETAINING WALLS GREATER THAN 4' WILL BE DESIGNED AND INSPECTED BY A LICENSED PROFESSIONAL ENGINEER AND CERTIFIED IN WRITING PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY
- A TEMPORARY CERTIFICATE OF OCCUPANCY WILL NOT BE GIVEN FOR GRADING AND DRAINAGE RELATED ISSUES
- ALL RETAINING WALLS WITH HEIGHT IN EXCESS OF 30" REQUIRE SAFETY RAIL OR BARRIER AS PER BRENTWOOD CODE
- THE MAXIMUM GRADE OF ANY PORTION OF A DRIVEWAY SHALL NOT EXCEED 20% FOR PAVED SURFACES AND 10% FOR UNPAVED SURFACES, WITH A MAXIMUM CROSS SLOPE OF 5%
- ALL DRIVEWAYS WITH 15% OR GREATER LONGITUDINAL SLOPES AND/OR 5% OR GREATER CROSS-SLOPES SHALL BE PROFILED AND SECTIONED BY A TN R.L.S. AND APPROVED BY THE CITY ENGINEER PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
- SALT WATER CANNOT BE DISCHARGED TO PUBLIC DRAINAGE OR WATERWAYS
- ANY DAMAGE TO THE EXISTING DRIVE CAUSED BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER
- POOL EDGE AT MBSL AND WILL REQUIRE AS-BUILT SURVEY TO VERIFY WITHIN BUILDING ENVELOPE

EROSION & SEDIMENT CONTROL NOTES:

THE FOLLOWING PRE-CONSTRUCTION EROSION PREVENTION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs) MUST BE CORRECTLY INSTALLED PRIOR TO THE INITIATION OF THE DISTURBANCE ACTIVITIES:

- A STABILIZED CONSTRUCTION ACCESS, SUCH AS A TEMPORARY STONE ACCESS, MUST BE INSTALLED TO PREVENT OFFSITE TRACKING
- SILT FENCE, OR OTHER SEDIMENT BARRIERS, MUST BE INSTALLED ALONG TOPOGRAPHICAL CONTOURS DOWNSLOPE OF THE AREA TO BE DISTURBED
- WHERE APPLICABLE, INLET PROTECTION FOR NEARBY STORM SEWER AND DROP INLETS MUST BE INSTALLED

THE FOLLOWING EROSION AND SEDIMENT CONTROL BMPs MUST BE PERFORMED UNTIL PROJECT IS COMPLETED

- EROSION AND SEDIMENT CONTROLS SHOULD BE INSTALLED, INSPECTED, AND MAINTAINED IN ACCORDANCE WITH CITY OF BRENTWOOD GUIDELINES
- INSPECTIONS OF THE CONTROL MEASURES AND DISTURBED AREAS MUST BE PERFORMED BY A QUALIFIED INDIVIDUAL AT LEAST TWICE PER WEEK UNTIL THE SITE IS ADEQUATELY STABILIZED. INSPECTIONS SHOULD BE PERFORMED AT LEAST 72 HOURS APART. INSPECTIONS SHOULD BE DOCUMENTED AND AVAILABLE IF REQUESTED.
- ANY INADEQUATE CONTROL MEASURES OR CONTROL MEASURES IN DISREPAIR MUST BE REPLACED OR MODIFIED, OR REPAIRED AS NECESSARY, BEFORE THE NEXT RAIN EVENT, BUT IN NO CASE MORE THAN 7 DAYS AFTER THE NEED IS IDENTIFIED.
- SEDIMENT SHOULD BE REMOVED FROM THE SEDIMENT TRAPS, SILT FENCES, SEDIMENTATION PONDS, AND OTHER SEDIMENT CONTROLS AS NECESSARY, AND MUST BE REMOVED WHEN DESIGN CAPACITY HAS BEEN REDUCED BY 50%.
- SEDIMENT THAT HAS ESCAPED THE CONSTRUCTION SITE AND HAS COLLECTED IN THE STREET OR DRAINAGE STRUCTURES MUST IMMEDIATELY BE PHYSICALLY REMOVED.
- STABILIZATION MEASURES SHOULD BE INITIATED AS SOON AS POSSIBLE ON PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. TEMPORARY OR PERMANENT SOIL STABILIZATION AT THE SITE MUST BE COMPLETED NOT LATER THAN 15 DAYS AFTER CONSTRUCTION ACTIVITY ON THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. (STABILIZATION PRACTICES INCLUDE: TEMPORARY SEEDING, PERMANENT SEEDING, MULCHING, MATTING, AND SOD STABILIZATION)
- ROOF DOWNSPOUTS MUST DISCHARGE ONTO SPLASH BLOCKS TO PREVENT EROSION. IF DOWNSPOUTS ARE ROUTED THROUGH DRAIN LINES, THE SYSTEM MUST NOT DISCHARGE DIRECTLY INTO THE STREET OR DRAINAGE SYSTEM.
- BUILDING AND WASTE MATERIALS, AND NON-STORM WATER DISCHARGES, SUCH AS CONCRETE OR PAINT WASTEWATER, MUST BE MANAGED TO PREVENT THEM FROM ENTERING THE STORM WATER SYSTEM OR NEARBY WATER BODY.
- ALL DAMAGE TO EXISTING PAVEMENT, DRAINAGE STRUCTURES, AND CURBS RESULTING FROM NEW CONSTRUCTION MUST BE REPAIRED OR REPLACED BY LIKE MATERIALS AT THE BUILDER'S EXPENSE.

OWNERS
JOSHUA & LAUREN GRIFFITH

BUILDER
SEAN THORNTON
THORNTON CONSTRUCTION & DESIGN
510 MANSION CT.
BRENTWOOD, TN 37027
615-477-8242

SURVEY INFORMATION:
SURVEYOR: J. ALAN CUMMINGS, RLS
SURVEY DATE: 11.8.2022
VERTICAL DATUM IS NAVD 1988 AND WAS ESTABLISHED USING THE TDOT GNSS REFERENCE NETWORK

SITE INFO:
SUBDIVISION: HILLVIEW EST., LOT 97
ZONING: R-2
PLAT BOOK 4, PAGE 95
SITE AREA: 50,725 SF OR 1.16 AC

SITE CALCULATIONS:

EXISTING BUILDING COVERAGE = 2,148 SF OR 4.2% (25% MAX.)

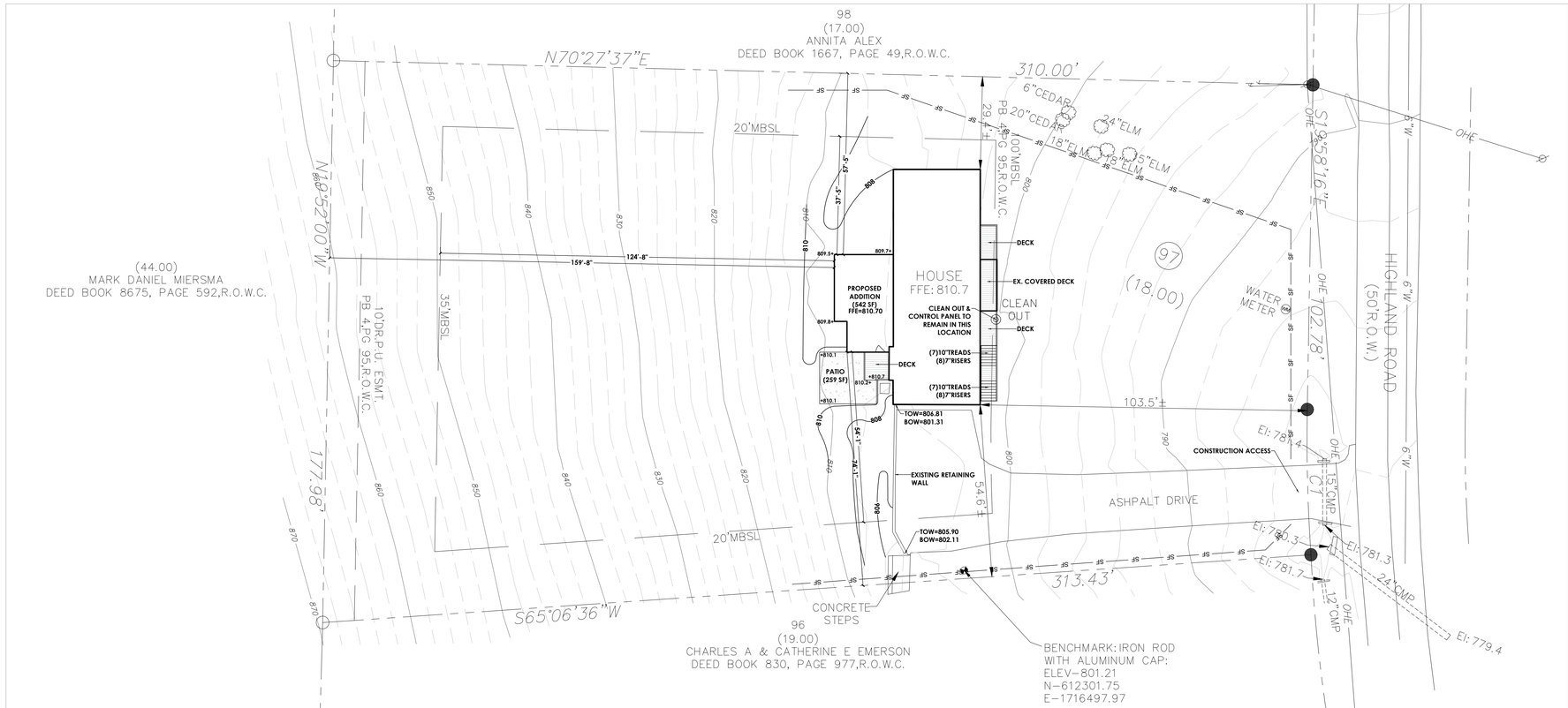
PROPOSED BUILDING COVERAGE = 2,684 SF OR 5.3% (25% MAX.)

EXISTING GREEN SPACE COVERAGE = 45,143 SF OR 89.0% (40% MIN.)

PROPOSED GREEN SPACE COVERAGE = 44,603 SF OR 87.9% (40% MIN.)

TOTAL IMPERVIOUS SURFACE AREA = 6,122 SF

***NOTE: NO TREES TO BE REMOVED**



0 10 20 40
SCALE: 1" = 20'–0"

JONATHAN P. SANDERS
REGISTERED
LANDSCAPE ARCHITECT
JSLA
JONATHAN SANDERS RLA
1475 COLUMBIA AVENUE
FRANKLIN, TN 37064
JSANDERSRLA@GMAIL.COM

TRANSITIONAL LOT SITE PLAN

GRIFFITH RESIDENCE
1017 HIGHLAND ROAD
BRENTWOOD, WILLIAMSON CO., TN

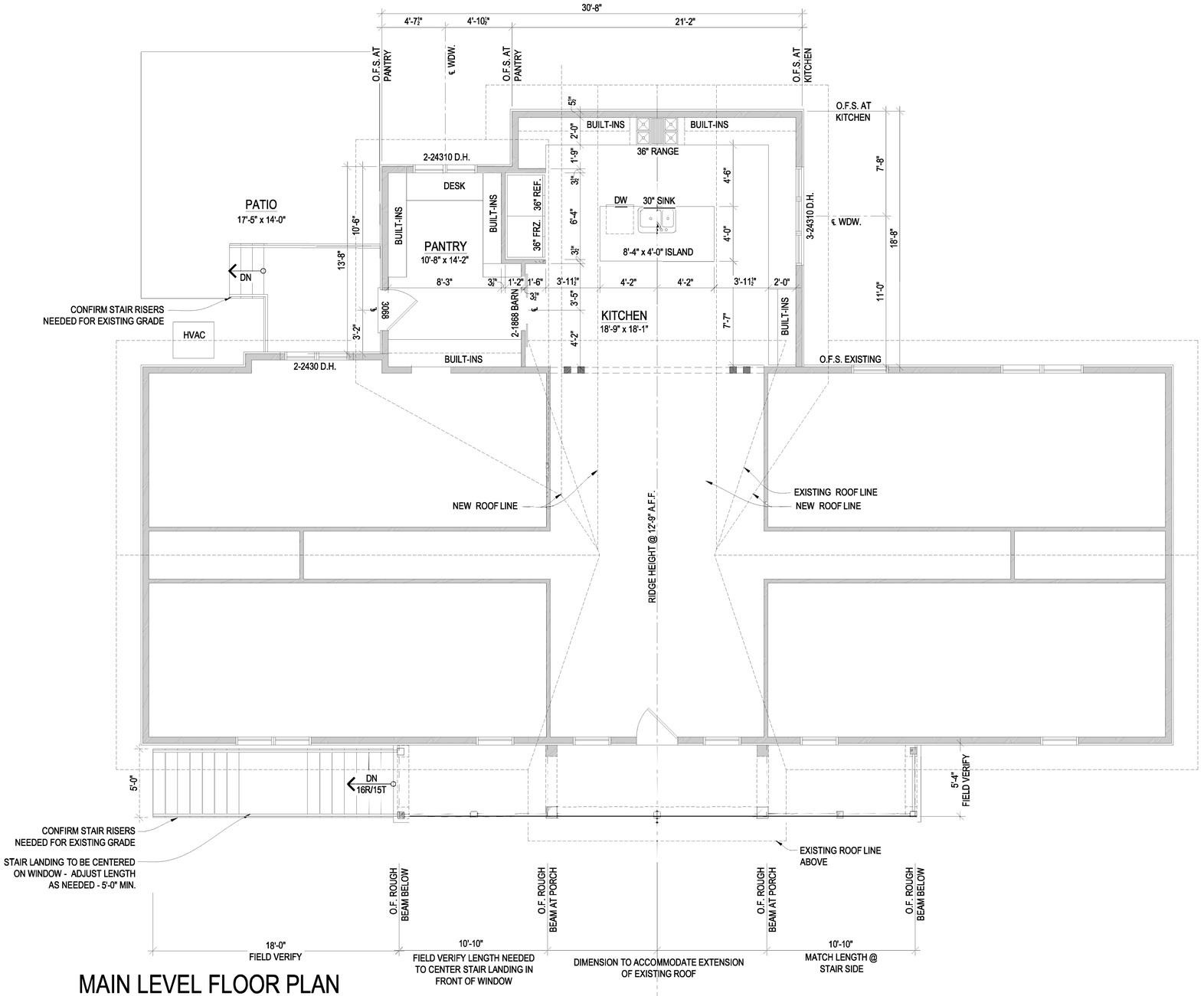
ISSUE DATE: 11.30.2022

REVISIONS
12.19.22 REVISED PER CITY COMMENTS

DRAWN BY: JPS

SITE PLAN

SHEET: S1



MAIN LEVEL FLOOR PLAN

scale: 1/4" = 1'-0"

notes:

- FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS
- ALL DIMENSIONS ARE FROM FACE OF STUD UNLESS NOTED
- ALL EXTERIOR FRAMING WALLS ARE 2x6 STUDS UNLESS NOTED
- ALL INTERIOR FRAMING WALLS ARE 2x4 STUDS UNLESS NOTED
- CEILING HEIGHT IN NEW KITCHEN AND PANTRY IS 9'-0"
- CONFIRM WINDOW SIZES TO ACCOMMODATE COUNTERTOPS
- FINISH FLOORS SHALL BE FLUSH TO ADJACENT FLOORS UNLESS NOTED
- BUILDER TO VERIFY EXTERIOR STAIR RISER REQUIREMENTS FOR GRADE CONDITIONS
- BUILDER TO LOCATE CRAWL SPACE VENTS PER LOCAL CODES
- BUILDER TO SIZE ALL BEAMS AND FRAMING PRIOR TO CONSTRUCTION
- BUILDER TO ENSURE THAT ALL CONSTRUCTION MEETS OR EXCEEDS APPLICABLE CODES
- BUILDER TO PROVIDE POSITIVE DRAINAGE WITHIN THE CRAWL SPACE AND AROUND THE PERIMETER OF THE HOUSE
- BUILDER TO PROVIDE TERMITE TREATMENTS THAT COMPLY WITH LOCAL BUILDING CODES
- INSTALL TERMITE SHIELDS BETWEEN WOOD AND CONCRETE SURFACES
- ALL STRUCTURAL INFORMATION IS SHOWN FOR REFERENCE PURPOSES ONLY - BUILDER TO HAVE A LICENSED STRUCTURAL ENGINEER REVIEW ACTUAL SITE CONDITIONS AND DESIGN ALL STRUCTURAL ELEMENTS

square footage:

outside face of finished material

MAIN LEVEL ADDITION HEATED	542 sq.ft.
TOTAL HEATED:	542 sq.ft.
COVERED PORCHES:	118 sq.ft.
TOTAL UNDER ROOF:	660 sq.ft.

1017 HIGHLAND ROAD

BRENTWOOD, TENNESSEE

NOTES:

A101

MAIN LEVEL FLOOR PLAN
03.26.22

BEAVER ENGINEERING, INC.

7378 COCKRILL BEND BLVD / NASHVILLE, TN 37209
(615) 350-8124

E-MAIL: data@beaverengineering.com
FAX (615) 350-8149

August 17, 2022

Lauren Griffith
1017 Highland Rd
Brentwood, TN 37027

RE: Geotechnical Engineering Report
1017 Highland Rd, Brentwood, TN
Project #22-7782

Dear Lauren:

We have completed our investigation for the 1017 Highland Road project. Three copies of our report are enclosed. One of them has been left unbound for your convenience.

Beaver Engineering would like to review the final site grading plan, foundation design, and specifications. We also would appreciate the opportunity to provide the construction observation and testing once construction has begun, and to provide continuity between the geotechnical investigation and the condition found in the field during site grading.

If you need any other information, or if we can help in any way, please call me. Please also contact us if the structures are changed in size, location, or configuration or if there are additional structures not identified in the report, as additional analysis may be required to incorporate any proposed additions into the Geotechnical recommendations.

Thank you for including Beaver Engineering in this project.

Sincerely,

Chris Beaver, P.E.

CB/js

Cc:

Geotechnical Engineering Report

1017 Highland Road

Brentwood, TN

22-7782

July 1, 2022

BEAVER ENGINEERING, INC.
7378 Cockrill Bend Blvd.
Nashville, TN 37209
615/350-8124 FAX: 350-8149

GEOTECHNICAL REPORT CONTENTS

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Scope of Work

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SESIMIC ANALYSIS

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BEDROCK FORMATION

Design Considerations

The project consists of a single-story addition to an existing residence and a proposed deck. The proposed finished floor elevation of the addition will match the existing floor elevation. We are not aware of any planned grade changes to the addition and deck sites. The proposed addition and existing are located on a slope. We estimate that wall and column loads will not exceed 5 kips per linear foot and 50 kips, respectively.

The existing house is single story with a partial basement. The basement walls are constructed from concrete masonry units.

Scope of Work

Beaver Engineering was authorized to drill 4 test borings at the proposed addition, to a depth of 20 feet or to auger refusal depth, whichever was encountered first, and to drill 1 soil test boring in the proposed deck to 20 feet or auger refusal, whichever was encountered first. This scope of work is based on the proposal contract dated June 3, 2022 and executed by Lauren Griffith.

Christopher Beaver and Lauren Griffith agreed to reduce the scope of work in person while on site. The scope was reduced to 2 borings in the addition and 1 boring in the proposed deck. This agreement occurred on July 21, 2022.

Site Conditions

SURFACE

The addition and deck sites are currently lawn and garden spaces. The house site has been notched into the hillside. The proposed addition site (behind the existing house) is flat and located at the base of a 2.5:1 slope with a rip rap ditch. The proposed deck site is located in front of the house and has a gentle slope away from the hosue.

SOIL

Beneath the proposed addition and deck, lies 0.0 to 5.5 feet of manmade fill. The fill thickness increases near the existing basement. This material is most likely backfill placed against the walls of the basement. Manmade fills are unpredictable, meaning their future structural performance cannot be predicted with conventional engineering practices. Beneath the initial layer of fill material, there is a layer of **residual CL and CH clays**. The clays vary between medium stiff and very stiff. The clay generally increases with stiffness with depth.

Split spoon soil samples were returned to the Beaver Engineering laboratory for further analysis. Soil moisture tests indicated moisture ranges of the residual soil that range from 19.6 percent to 28.2 percent moisture.

BEDROCK

The bedrock at this site is the Leipers and Catheys Formations. These formations are similar and generally mapped together. They are mostly thin-bedded (beds 6 inches or less in thickness) with some beds ranging up to 2 feet thick. Thin-bedded zones are clayey limestone with shale interbeds. Medium-bedded zones are more coarsely crystalline, and some are phosphatic. These units typically crop out on moderately steep hillsides along the edges of the Central Basin and on many hills within the Central Basin. Their combined thickness ranges up to 250 feet.

GROUNDWATER

No groundwater was detected at the time of drilling or shortly after. The test borings were dry at the time of drilling or shortly after. True groundwater is likely beneath the depth of our test borings. Determination of the true water table is beyond the scope of this investigation.

Recommendations

FOUNDATIONS

We recommend a safe undisturbed soil bearing capacity of 2000 pounds per square foot. Foundations should not be supported by existing fill.

Closing

This study covers the proposed project as described in the Design Considerations and Scope of Work sections of this report. If the size, location, or configuration of the addition changes in any way, further study will be required to investigate the subsurface for changes.

Only the structure described in this report is covered by this investigation. If other structures are planned or are to be built on this site, they are not included in this study, and an additional investigation may be required. Please notify Beaver Engineering of any existing or planned changes to determine if additional study is required.

This geotechnical report was created for design purposes and may not be sufficient to prepare a final bid for construction. Contractors wishing copies of the report may secure them from our firm with the understanding that their scope is limited to design considerations.

Beaver Engineering should be retained to provide observation and testing of construction activities involved in the earthwork, foundations, pavements, and related activities of this project. Beaver Engineering cannot accept responsibility for any conditions, which deviated from those described in this report, nor for the performance of the foundations and pavements if not engaged to also provide construction observation and testing for this project.

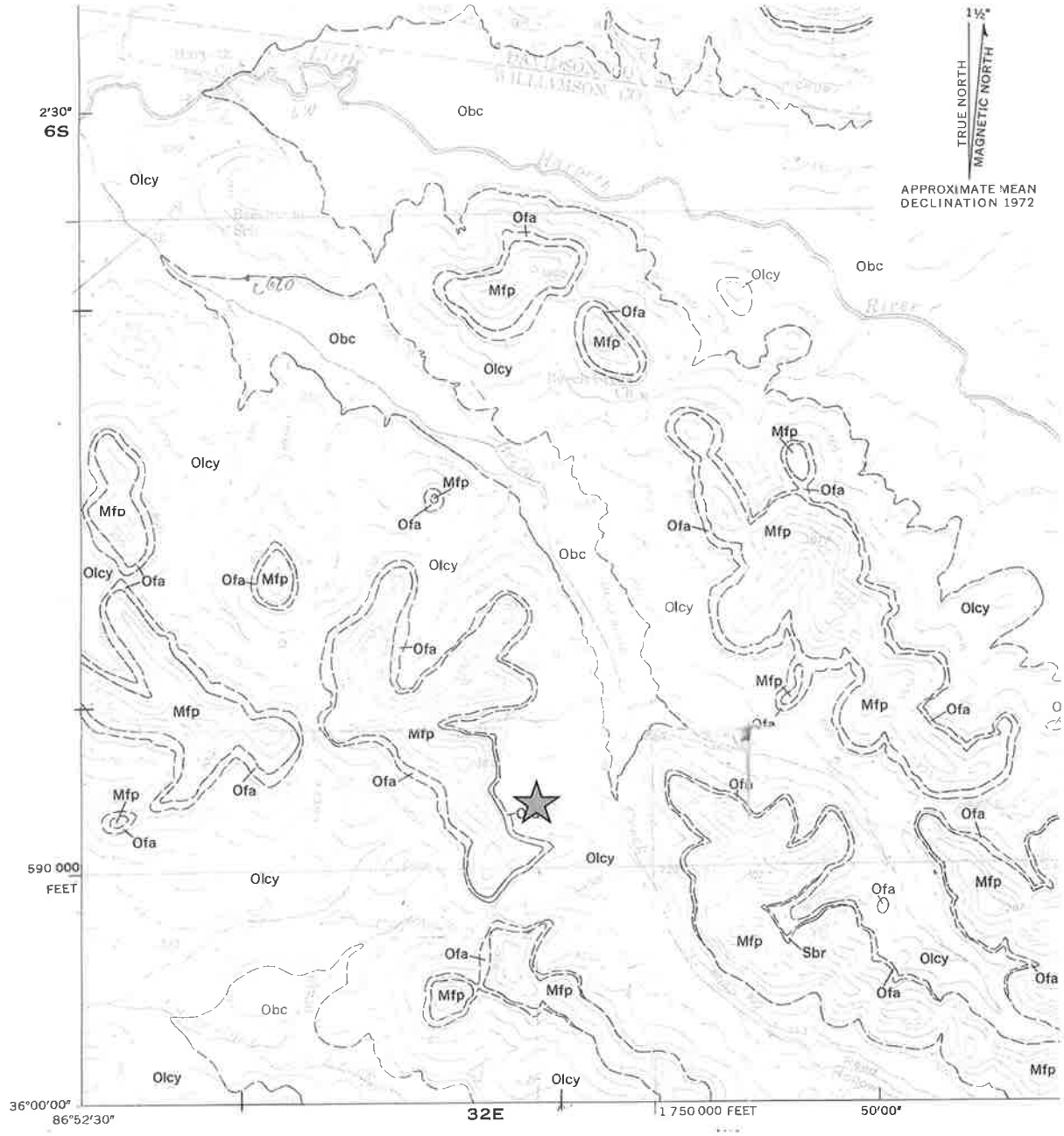
Beaver Engineering can provide soil engineering services during site grading and foundation construction, review design concepts and specifications, and make any necessary modifications to this report that arise once actual site work begins.

BEAVER ENGINEERING, INC.



Chris Beaver, PE
August 17, 2022

NOTICE TO CONTRACTORS: Contractors should NOT use this report for FINAL BIDS. The location and number of test borings were selected for foundation design and site grading planning.
It is all right to use this report for preliminary bids and planning, but final bids should be based on the contractor's site visit and his own subsurface test borings and analysis.



SITE LOCATION ★

Mfp—Fort Payne Formation
Ofa –Fernvale and Arnheim
Olcy –Leipers and Catheys Formations
Obc— Bigby—Cannon Limestone

BEAVER ENGINEERING
SINCE 1968

July 29, 2022	SITE GEOLOGIC MAP
22-7782	1017 HIGHLAND ROAD BRENTWOOD, TN

APPENDIX A

SITE GRADING

Exposed subgrade beneath slab areas and re-worked paving areas, should be proof-rolled to detect unstable conditions. The proof-rolling should be done after a suitable period of dry weather to avoid rutting the subgrade. Proof-rolling should be done with a heavily loaded double-axle dump truck and observed by a geotechnical engineer. Soft organic material, highly plastic clay, or unstable old fill encountered during proof-rolling should be removed and replaced with properly compacted fill.

STRUCTURAL FILL

Compacted fill, placed for the support of the slab on grade and building foundations, shall be structural fill. In addition, certain other areas may be marked on the site grading plan as a structural fill area.

An area, 10 feet beyond the edge of proposed buildings and structural fill areas, should be stripped of topsoil and proof-rolled under the observation of a geotechnical engineer. After the subgrade is approved by the geotechnical engineer, controlled filling can begin as follows:

1. Soil fill may be used if: it has a plasticity index (PI) of 30 or less, and more than 5; it is not classified as ML; and it is free of organic matter. Higher PI clay can be used for deeper fills, if approved by the geotechnical engineer. The soil is to be placed in loose lifts, not exceeding 8 inches, and compacted to 98 percent of standard proctor maximum density (ASTM D698). Each lift should be tested for density and moisture at 2500 square foot intervals prior to the placement of subsequent lifts.
2. Rock fill may be used if the rock is hard limestone, with less than 20 percent soil, mixed. The limestone should have a maximum size of 18 inches. The rock should be placed in 18 inch thick lifts, and densified by making eight passes with a steel wheel, 10 ton vibratory roller, or a D8 (or larger) bulldozer. Larger boulders may be placed deep in parking lot and road fills, if approved by the geotechnical engineer.
3. Soil/Rock Mixtures may be used, if approved by the geotechnical engineer. Normally soil/rock mixtures are used in parking lot and road fills, not as structural fill. Under some field conditions, soil/rock mixtures can be compacted as structural fill by placing them in lifts, not exceeding 8 inches, and compacting each lift with a bulldozer and a sheep's foot roller. Density and moisture tests are not used as the basis for acceptance in soil/rock mixtures. Each lift should be proof rolled with a fully loaded tandem axle dumptruck under the observation of the geotechnical engineer.

LANDSCAPE AREAS

Use TDOT Standard Specification as above, but topsoil finish, according to project landscape plans and specifications.

CUT SLOPES

Slopes with vertical height of more than 10 feet require special geotechnical analysis that is not included in this geotechnical report.

For slopes less than 10 feet in height, the following guidelines can be used.

MATERIAL	LAID BACK SLOPE
Gravel & sand	1.5h: 1v
CLAY (CL or CH)	2.5h: 1v

FILL SLOPES

Slopes with vertical height of more than 10 feet require special geotechnical analysis that is not included in this geotechnical report.

For slopes less than 10 feet in height, the following guidelines can be used.

MATERIAL	LAID BACK SLOPE
Shot Rock Controlled Placement	1.5h: 1v
CLAY (CL or CH) & SILT (ML) Compacted to 95% Standard Proctor	2.5h: 1v

TRENCH EXCAVATIONS

The soil on site is classified as a Type C soil for OSHA excavation safety purposes. Type C soil can be laid back at a 1½H:1V slope for excavations deeper than 5 feet but less than 20 feet. Excavations deeper than 20 feet require an excavation plan by a registered engineer.

SOIL TYPE	SLOPE
TYPE A	3/4 H:1V
TYPE B	1H:1V
TYPE C	1½ H:1V

APPENDIX B

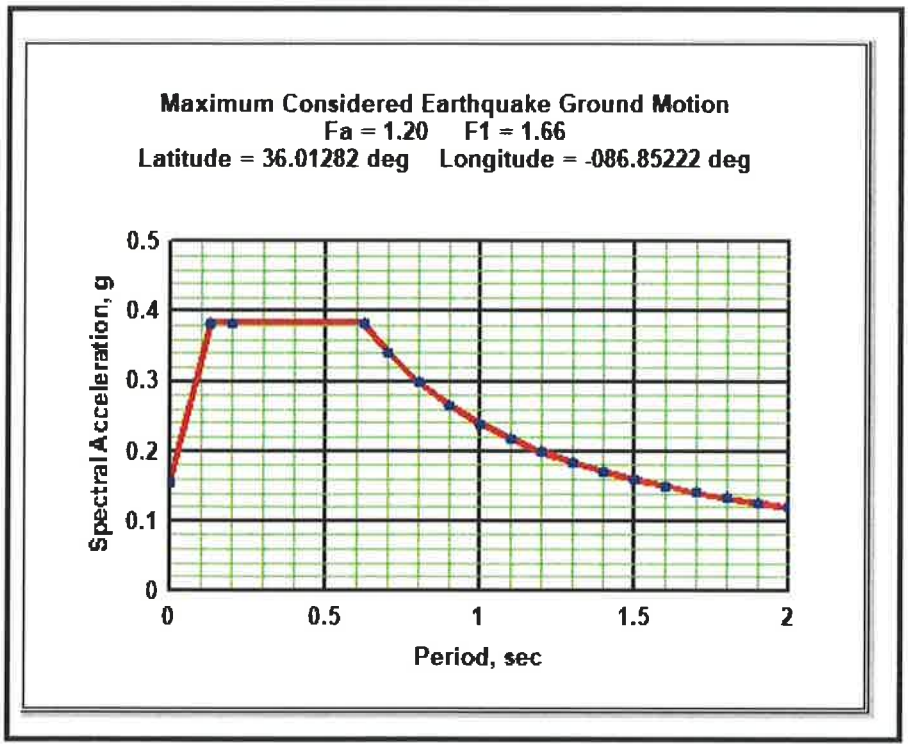
BEAVER ENGINEERING
SINCE 1968

SEISMIC ANALYSIS

INTERNATIONAL BUILDING CODE
2018
SECTION 1613

PROJECT: 1017 HIGHLAND ROAD

SITE CLASS : C



(sec),(%g)
0.2, 32.0, Map Value, Soil Factor of 1.0
1.0, 14.4, Map Value, Soil Factor of 1.0
MCE SPECTRUM x SOIL FACTORS
Fa = 1.20
Fv = 1.66
Period, SA
(sec), (%g)
0.000, 015.3, 0.4FaSs
0.125, 038.4, To
0.200, 038.4, T=0.2, FaSs
0.624, 038.4, Ts
0.700, 034.2,
0.800, 029.9,
0.900, 026.6,
1.000, 023.9, T=1.0, FvS1
1.100, 021.8,
1.200, 019.9,
1.300, 018.4,
1.400, 017.1,
1.500, 016.0,
1.600, 015.0,
1.700, 014.1,
1.800, 013.3,
1.900, 012.6,
2.000, 012.0,

(sec),(%g)
0.2, 32.0, Map Value, Soil Factor of 1.0
1.0, 14.4, Map Value, Soil Factor of 1.0
MCE Parameters x Specified Soil Factors
0.2, 38.4, Soil Factor of 1.20
1.0, 23.9, Soil Factor of 1.66

APPENDIX C

FOOTINGS MINIMUMS

We recommend that spread footings and strip footings be constructed so that the bottoms of footings are 24 inches, or deeper, below finished grade. This will protect the footings from frost heave. Strip footings should be at least 24 inches wide, even if bearing capacity calculations indicate less. Spread footings should be at least 24 inches square, even if bearing capacity calculations indicate less.

HAZARDOUS WASTE

An assessment of the site from an environmental risk standpoint was not included in the purposes and scope of this geotechnical study.

BORING LOCATIONS

Beaver Engineering established boring locations using the site plan provided. We interpolated boring elevations from contours on that site plan.

WATER LEVELS

The boring logs show water level measurements and represent the distance from the surface down to the water level under the conditions stated on the boring logs. These data have been reviewed and interpretations made in the text of this report. However, fluctuations in the level of ground water may occur due to variations in rainfall, temperature, seasons of the year, and other factors, that can cause water levels to be different than those reported by our measurements in this report.

DRILLING AND SAMPLING

We used a truck mounted drill rig to perform soil test borings, and a hollow stem auger to advance the holes. We employed split barrel sampling procedures, in accordance with ASTM: D 1586, to obtain soil samples, and took rock cores in accordance with ASTM D2113.

STANDARD PENETRATION TEST

Beaver Engineering uses a CME automatic trip hammer to make standard penetration tests. We performed standard penetration tests at 2 ½ foot and 5 foot intervals while sampling the soil. The *standard penetration value* is the number of blows required to advance a 2 inch O.D. split-barrel sampler 12 inches with a 140 pound hammer. Because of the known extreme variability of SPT hammers, the field measured values of N are normalized to 60%, because 60% represents the historical average on which many soil correlations are based. These energy relationships are listed below.

HAMMER TYPE	ENERGY INPUT	NORMALIZING FACTOR
CME Automatic Trip Hammer	85%	1.42
Rope/Cat Head & Safety Hammer	70%	1.16
Historical Correlations, Schmertmann, Robertson, Sneed & Skimpton	60%	1.00
Rope/Cat Head & Donut Weight	45%	0.75



SOIL BORING LOCATION

NOT TO SCALE

N

BEAVER ENGINEERING
SINCE 1968

1017 HIGHLAND ROAD
BRENTWOOD, TN

BORING PLOT PLAN

22-7782

JULY 29, 2022

SOIL BORING LOG

PROJECT: 1017 Highland Road
Brentwood, TN
BORING NO.: B1
LOCATION: Addition
SURFACE ELEV: 812.0

PROJECT NO.: 22-7782
DATE: July 21, 2022
DRILLER & RIG: SACHS 45
WATER LEVEL: Dry @ Drilling

DEPTH	N	N_{60}	Qu	W	USCS	LOG	DESCRIPTION
					FILL		FILL, SILTY CLAY, dark yellowishish brown, dry, medium stiff,
	5	7		16.8			
							FILL, GRAVELLY SILTY CLAY, dark yellowish brown, dry, stiff,
5 — 5.5	8	11	1.0	19.3			
					CH		CLAY with GRAVEL, dark yellowish brown, damp, very stiff, (residual)
	13	18	10.1	21.7			
	12	17	5.4	24.4			
10 — 11.5							Auger Refusal @ 11.5 feet.
15 —							
20 —							

N	Penetration, Blows per Foot, 140-lb. hammer, 30" drop, actual field test.
N_{60}	Penetration, Blows per Foot, normalized to 60% energy input.
Qu	Unconfined Compressive Strength, Kips per Sq. Ft.
W	Water Content, % Dry Weight
USCS	Unified Soil Classification System

BEAVER ENGINEERING, INC. **NASHVILLE, TN**

SOIL BORING LOG

PROJECT: 1017 Highland Road
Brentwood, TN
BORING NO.: B2
LOCATION: ADDITION
SURFACE ELEV: 812.0

PROJECT NO.: 22-7782
DATE: July 22, 2022
DRILLER & RIG: SACHS/CME45
WATER LEVEL: Dry @ Drilling
WATER LEVEL: Dry @ 1/4 Hour

DEPTH	N	N_{60}	Qu	W	USCS	LOG	DESCRIPTION
3.0	7	10		19.6	CL		SILTY CLAY, dark yellowish brown, dry, medium stiff, (possible fill)
5.5	14	20	9.5	20.8			SILTY CLAY, dark yellowish brown, damp, very stiff
8.0	11	16	7.3	24.7	CH		CLAY with GRAVEL, dark yellowish brown, damp, very stiff, residual
12.5	12	17	0.0	22.0			CLAY, yellowish brown, damp, very stiff, residual
							Auger Refusal @12.5 feet.

5
10
20

N	Penetration, Blows per Foot, 140-lb. hammer, 30" drop, actual field test.
N_{60}	Penetration, Blows per Foot, normalized to 60% energy input.
Qu	Unconfined Compressive Strength, Kips per Sq. Ft.
W	Water Content, % Dry Weight
USCS	Unified Soil Classification System

BEAVER ENGINEERING, INC. **NASHVILLE, TN**

SOIL BORING LOG

PROJECT: 1017 Highland Road
BRENTWOOD
BORING NO.: B3
LOCATION: Deck
SURFACE ELEV: 803.0

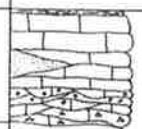
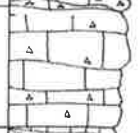
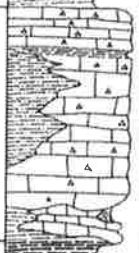
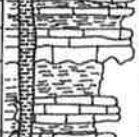
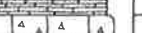
PROJECT NO.: 22-7782
DATE: July 22, 2022
DRILLER & RIG: SACHS /CME45
WATER LEVEL: Dry @ Drilling

DEPTH	N	N_{60}	Qu	W	USCS	LOG	DESCRIPTION
					FILL		FILL, SANDY GRAVEL, dark brown, dry, medium stiff, wall back fill
	7	10	9.1	16.0			
					CL		GRAVELLY, SILTY CLAY, strong brown, damp, medium stiff
4.5	7	10		22.5			
5					CH		CLAY, yellowish brown, very stiff, residual
	12	17	4.9	28.2			
							CLAY, olive, damp, strong brown, stiff
10	12	17					
	12	17	3.1	24.4			
15							
16.0							Auger Refusal @ 16.0 feet.

N	Penetration, Blows per Foot, 140-lb. hammer, 30" drop, actual field test.
N_{60}	Penetration, Blows per Foot, normalized to 60% energy input.
Qu	Unconfined Compressive Strength, Kips per Sq. Ft.
W	Water Content, % Dry Weight
USCS	Unified Soil Classification System

BEAVER ENGINEERING, INC. **NASHVILLE, TN**

Bedrock Geology Of The Nashville And Middle Tennessee Area

SYSTEM	GROUP	FORMATION	ROCK STRATA	AVERAGE THICKNESS ft.	RANGE OF THICKNESS ft.	GENERALIZED DESCRIPTION OF ROCKS OUTCROPPING IN NASHVILLE AND MIDDLE TENNESSEE.
MISSISSIPPIAN		STE. GENEVIEVE (MONTEAGLE)		250	180-350	STE. GENEVIEVE LIMESTONE: Gray to white limestone, variable bedding thickness, oolitic layers, gray chert near base. Weathers to present ground water table, very cavernous, develops karst topography, weathers to reddish brown clay 20-40 feet thick. Outcrops on Northern Highland Rim.
		ST. LOUIS		180	100-280	ST. LOUIS FORMATION: Brownish gray cherty limestone, thick bedded to massive, numerous gray to black chert beds and nodules. Weathers deep to present ground water table, develops karst topography, weathers to reddish brown clay about 20 feet thick. Outcrops on Highland Rim.
		WARSAW		100	40-150	WARSAW LIMESTONE: Gray, cross bedded limestone, massive, fine grained, some chert. Weathers deep but sinkhole development not as intense as St. Louis Formation. Sandy and shaley facies near base. Weathers to reddish brown clay about 20 feet deep. Outcrops on Highland Rim.
		FT. PAYNE		250	200-400	FORT PAYNE FORMATION: Dark gray siltstone, shale, and cherty limestone. Thin beds of crinoidal limestone, green shale at base (Maury Shale), contains phosphate nodules. Weathers to residual cherty clay about 15 feet deep. Outcrops along Highland Rim and higher hills within Central Basin. Excellent road metal.
DEVONIAN		CHATTANOOGA		20	10-70	CHATTANOOGA SHALE: Dark grayish black fissle, carbonaceous shale, thin sandstone at base. Weathers to light buff clay. Outcrops on Highland Rim and on higher hills within Central Basin. Widely used by geologists as a mapping unit, both in surface and subsurface.
		PEGRAM		17	0-30	PEGRAM FORMATION: Light gray limestone, massive. Minor amounts of light gray shale and sandstone in lower portion. Outcrops mainly in the Kingston Springs area.
		CAMDEN		95	0-220	CAMDEN FORMATION: Thin to medium bedded blue gray, shaley limestone containing nodules and bands of chert. Chert beds average 6 to 12 inches thick and are separated by white clay partings. Weathers to thin residual soil less than three feet thick then a thicker weathered layer of angular blocks and sharp fragments of chert rubble. Very difficult to drill or excavate with conventional excavation equipment. Outcrops mainly in Benton, Decatur, and Perry counties. Chert beds are used locally as road metal and ballast.
		FLAT GAP		20	0-55	FLAT GAP LIMESTONE: Light gray and pink limestone, occasionally glauconitic in upper part. Outcrops in extreme western counties of Highland Rim. Very good concrete aggregate.
		ROSS		45	0-110	ROSS FORMATION: Alternating facies of thin limestone and thick shales. Shales are blue or greenish gray. Limestones weather to glades and shales generally do not have slope stability on steep road cuts.
SILURIAN		DECATUR		VARIABLE	0-250	SILURIAN SYSTEM: Extremely variable in outcrop and thickness. Major unconformity extends from base of Mississippian System through Devonian and Silurian Systems. Silurian is predominantly limestone and shaley limestone. See Tennessee Division Geology Bulletin 56 for complete description.
		BROWNSPORT				
	WAYNE					SEQUATCHIE FORMATION: Greenish gray, massive mudstone with some sand, shale, and limestone. Contains Mannie Shale Facies which is a green calcareous shale that weathers into laminated cobbles of green silt. Outcrops mostly in Lincoln, Franklin, and Marion Counties. Contains Farmvale Limestone Facies, which is an irregular bedded massive limestone containing enough limonite to be a low grade iron ore.
		BRASSFIELD				LEIPERS FORMATION: Dark blue gray, earthy, nodular limestone. Thin beds of limestone separated by shale mudstone and siltstone beds from a few inches to 10 feet thick. Weathers to light brown silty clay soil 3 to 5 feet thick. Weathering along fractures and faults can penetrate 20 feet into rock mass. Outcrops mostly along edge of Central Basin.
ORDOVICIAN		SEQUATCHIE		55	0-275	INMAN FORMATION: Greenish gray calcareous shale interbedded with thin beds of dense limestone. Weathers to thin clay soil. Outcrops in southeastern part of Middle Tennessee is a very restricted outcrop belt.
	MAYSVILLE	LEIPERS		70	0-160	CATHEYS FORMATION: A complex mixture of shaley limestone units. Typically it is thin bedded, blue gray nodular limestone interbedded with thin partings of shale and siltstone. Weathers to thin silty clay soil usually 3 to 4 feet thick. Outcrops extensively in Central Basin.
	EDEN	INMAN		50	0-70	BIGBY CANNON LIMESTONE: Composed of 3 facies; (1) the Bigby facies is blue gray, massive, granular, cross bedded, and phosphatic. (2) Dove facies is a light gray (Dove colored) dense fine grained limestone. (3) Cannon facies is blue gray limestone, massive but non-phosphatic. All facies weather to reddish-brown clay usually less than 10 feet thick. Some sinkhole development and considerable deep weathering along vertical fractures. Outcrops in Central Basin. Mined for phosphate in several counties of Central Basin.
	NASHVILLE	CATHEYS		130	10-250	HERMITAGE FORMATION: Variable rock units consisting of thin-bedded, dark blue-gray shaley limestone and sandy limestone in northwest part of Central Basin. Persistent layer of shale and phosphatic shale in central part of Central Basin. Silty shale and nodular limestone in south part of Central Basin. Weathers to a silty and sandy clay up to 20 feet thick. Outcrops extensively in Central Basin.
		BIGBY CANNON		80	50-100	CARTERS LIMESTONE: Contains upper and Lower member separated by T^3 bentonite clay. Upper member is thin bedded, light gray shaley limestone about 10 feet thick. Lower member is massive, light gray, fine grained limestone about 50 feet thick and contains T^2 and T^1 bentonite clays. Weathers to brown plastic clay about 4 feet thick with some sink holes. Outcrops extensively in Central Basin.
		HERMITAGE		120	70-180	LEBANON LIMESTONE: Blue-gray, dense, fine-grained, thin-bedded limestone. Bedding planes contain thin shale layers, weathers to loose slabs of limestone with very little residual soil. Forms cedar glades and has worm-eaten appearance. Outcrops in central part of Central Basin.
	STONES RIVER	CARTERS		60	37-93	RIDLEY LIMESTONE: Blue-gray and dove gray, dense, fine-grained, massive limestone. Bedding planes average 3 feet and contain thin shale layers. Limestone contains some chert and has distinctive sugary texture. Weathers to yellow-brown clay about 4 feet thick. Erosion results in flat topography. Outcrops extensively in central part of Central Basin.
		LEBANON		92	74-120	PIERCE LIMESTONE: Blue-gray, dense, fine-grained, thin-bedded, limestone. Shale partings on bedding planes. Weathers to rough pinnacles and occasional sinkholes. Outcrop area confined to Central Basin, mostly Rutherford County.
		RIDLEY		110	110-115	MURFREESBORO LIMESTONE: Dark blue-gray, dense, brittle, fine-grained, massive limestone. Occasional black chert in upper part. Weathers to a reddish-brown clay with occasional sinkholes. Outcrops in center of Central Basin, mostly in Rutherford County. *Base not exposed.
		PIERCE		27	23-28	
		MURFREESBORO		70*	200-400	

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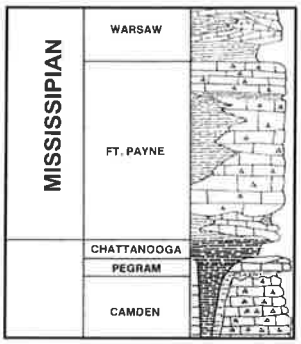
DATA SUMMARY

FORT PAYNE FORMATION

RESIDUAL SOIL

The Fort Payne Formation weathers deep to form large and thick areas of residuum. On steeper hills, it moves by gravity and slopewash to form unstable colluvium. Soil scientists classify this as a Dellrose soil. This soil is rapidly drained, acidic, and contains lots of chert and shale chips. It contains little mineralogic clay, but fine silica particles behave mechanically like clay soils in most ways.



BEDROCK

The Formation is mostly siliceous material (chert, silicastone, siliceous siltstone and shale) with minor lenses of limestone in thelower part. Where less intensely weathered, there are massive highly jointed rock parts along smooth, nearly vertical planes (see photo). The lower part of the formation may be mostly shale, but the rock particles are extremely fine silica fragments. Where highly weathered, relict beds of chert persist in residuum. Although easily ripped, they may be difficult to auger or to drill. The formation has extensive outcrop, and caps the Highland Rim and many higher hills throughout Middle Tennessee. Thickness ranges up to 250 feet.



Weathered Fort Payne road cut
Lynnwood Way
Franklin, TN

ROCK WEATHERING

The Fort Payne contains only minor amounts of lime; it is mostly silicastone and siliceous shale, and weathers very deeply. Weathering to a depth of 20 feet or more is common, and can be generally uniform. Joints weather deeper and are more porous than the adjacent rock.

Fort Payne soils are very porous, rapidly drained, and acidic. Ground water can move rapidly through the weathered joints.

Massive amounts of chert are present in the soil profile. The contact between "bedrock" and "soil" is not distinct.



Unweathered Fort Payne road cut

HYDROLOGY

Due to deep weathering and extensive joint development, the Fort Payne forms important aquifers. It can provide sufficient volumes of water to serve entire communities, and many wells throughout the Highland Rim are developed in this unit. Yields can range to over 100 gallons per minute (gpm) with typical wells yielding 10 gallons per minute (gpm). Depth of wells averages less than 100 feet. Water quality is excellent.

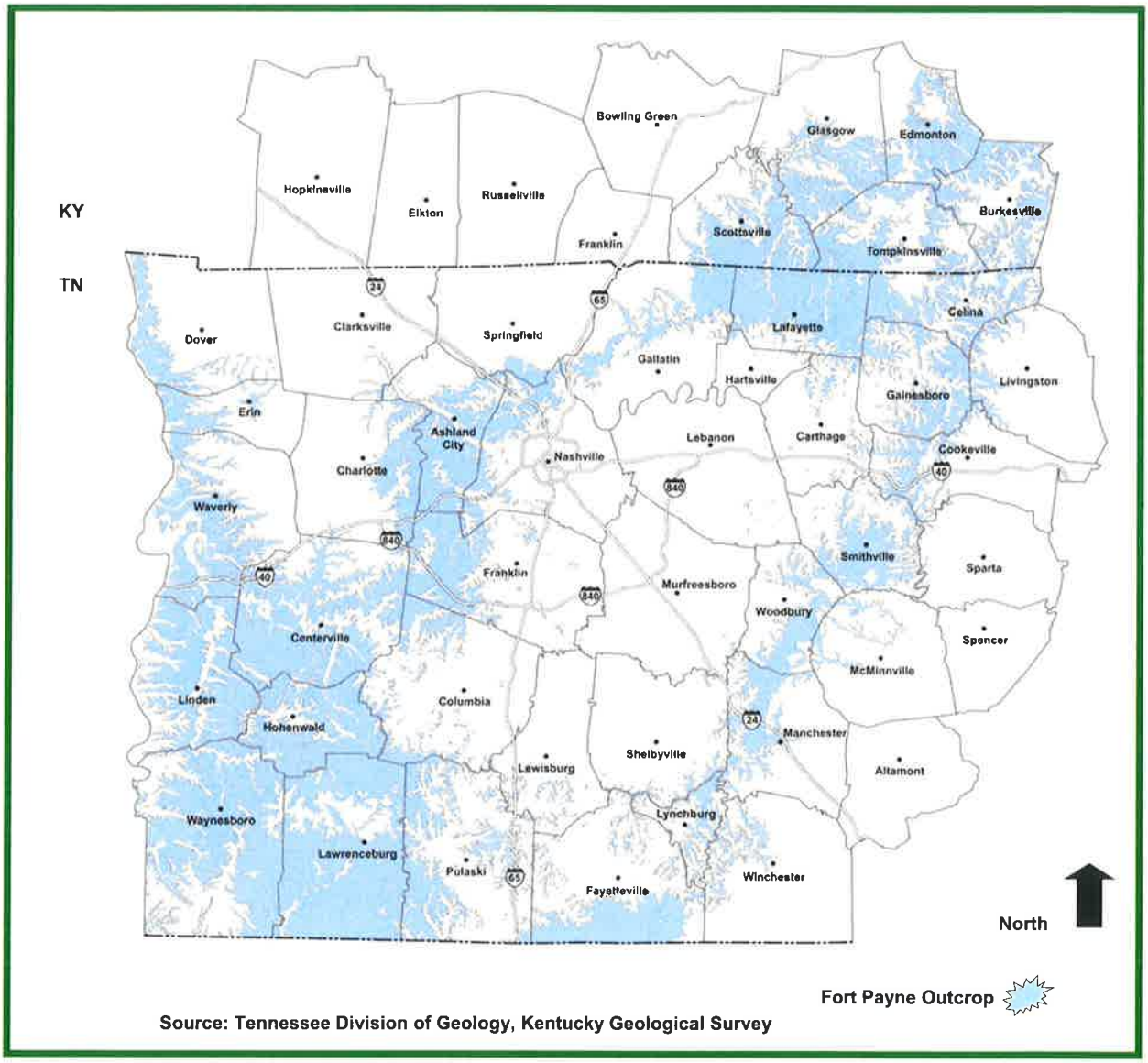
ENGINEERING and CONSTRUCTION

Although Fort Payne bedrock is hard, and where unweathered may be difficult to excavate, bedded reisdual chert is easily ripped. There is no true clay present in the soil, and the matrix of silica particles acts like silt. There is often a 3 to 5 foot thick layer at the surface that is classified as ML in the United Soil Classification System. This silt can be very unstable in the wet season of the year and some times has to be undercut and removed.

Building foundations can bear on the weathered bedrock or on the residual soil below the soft moist silt layer. Shallow foundations using spread footings for one or two story buildings can use a safe bearing capacity of 3,000 pounds per square foot. Medium to high rise buildings can bear on sound bedrock, which may be 20 to 30 feet deep, using drilled piers or micro piles at a bearing capacity of 100,000 pounds per square foot.

FORT PAYNE FORMATION

Surface Outcrop Map



Source: Tennessee Division of Geology, Kentucky Geological Survey

TYPICAL WEATHERING

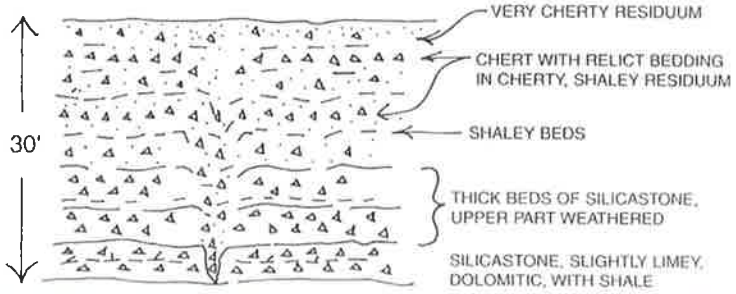


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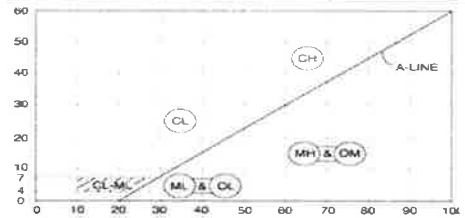
Table 4. ASTM (Unified) Soil Classification System

Major Divisions			Group Symbols	Typical Descriptions	Classification Criteria		
Coarse-Grained Soils More than 50% retained on No. 200 sieve*	Gravels 50% or more of coarse fraction retained on No. 4 sieve	Clean Gravels	GW	Well-graded gravels and gravel-sand mixtures, little or no fines.	Classification on basis of percentage of fines GW, GP, SW, SP GM, GC, SM, SC Borderline classification requiring use of dual symbols Less than 5% No. 200 sieve More than 12% pas No. 200 sieve 5% to 12% pas No. 200 sieve	$C_u = D_{60}/D_{10}$	Greater than 4
			GP	Poorly graded gravels and gravel-sand mixtures, little or no fines.		$C_Z = \frac{(D_{30})^2}{D_{10} \times D_{60}}$	Between 1 and 3
		Gravels with Fines	GM	Silty gravels, gravel-sand-silt mixtures		Not meeting criteria for GW	
			GC	Clayey gravels, gravel-sand-clay mixtures		Fines classify as ML or MH / Fines classify as CL or CH	Atterberg limits plotting in hatched area are borderline classifications requiring use of dual symbols
	Sands 50% or more of coarse fraction passes No. 4 sieve	Clean Sands	SW	Well-graded sands, and gravelly sands, little or no fines.		$C_u = D_{60}/D_{10}$	Greater than 6
			SP	Poorly graded sands, and gravelly sands, little or no fines.		$C_Z = \frac{(D_{30})^2}{D_{10} \times D_{60}}$	Between 1 and 3
		Sands with Fines	SM	Silty sands, sand-silt mixtures		Not meeting criteria for SW	
			SC	Clayey sands, sand-clay mixtures		Fines classify as ML or MH / Fines classify as CL or CH	Atterberg limits plotting in hatched area are borderline classifications requiring use of dual symbols
Fine-Grained soils 50% or more passes No. 200 sieve*	Silts and Clays Liquid Limit less than 50		ML	Inorganic silts, very fine sands, rock flour, silty or clayey fine sands			
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays			
			OL	Organic silts and organic silty clays of low plasticity	Plasticity Index / Liquid Limit		
	Silts and Clays Liquid Limit 50 or more		MH	Inorganic silts, micaceous or diatomaceous fine sands or silts, elastic silts			
			CH	Inorganic clays of high plasticity, fat clays			
			OH	Organic clays of medium to high plasticity			
Highly Organic Soils			PT	Peat, muck and other highly organic soils.	Visual-Manual Identification, see ASTM Designation D2488		

***Based on the material passing the 3-in. (75-mm.) sieve**

Beaver Engineering
7378 Cockrill Bend Boulevard
Nashville, TN 37209

BEAVER ENGINEERING SINCE 1968

SOIL DESCRIPTION EXPLANATION

NON-COHESIVE SOILS
(Gravel, Sand, Silt and Combinations)

DENSITY	N	PARTICLE SIZE INFORMATION	
Very Loose	5 or less	Boulders	- 8 inch diameter or more
		Cobbles	- 3 to 8 inch diameter
Loose	6 – 10	Gravel	- Coarse - 1 to 3 inch
			- Medium - .50 to 1 inch
Medium Dense	11 - 30		- Fine - .25 to .50 inch
		Sand	- Coarse - 2.00mm to .25 inch
Dense	31 – 50		- Medium - 0.42mm to 2.00mm
			- Fine - 0.074mm to 0.074mm
Very Dense	50 +	Silt	- - 0.042mm to 0.002mm

COHESIVE SOILS
(Silt, Clay, and Combinations)

CONSISTENCY	N	PLASTICITY	PLASTICITY INDEX
Very Soft	2 or less	None to slight	0 - 4
Soft	3 – 5	Slight	5 - 7
Medium Stiff	6 – 10	Medium	8 - 22
Stiff	11 – 15	High	22 - 35
Very Stiff	16 – 30	Very High	35 +
Hard	30 +		

Classification on logs are made by visual inspection of samples.

Standard Penetration Test: Driving a 2.0" O.D., 1 3/8" I.D. sampler a distance of 1.0 foot into undisturbed soil with a 140 hammer free falling a distance of 30.0 inches. It is customary to drive the spoon 6.0 inches to seat into disturbed soil, and then perform the test. The number of hammer blows for seating the spoon and making the test are recorded for each 6.0 inches of penetration on the drill log (Example: 6/8/9).
The standard penetration test result can be obtained by adding the last two figures (i.e., N = 8 + 9 = 17 blows/ft). (ASTMD1586-67)

Consent Agenda 2.

BRENTWOOD PLANNING COMMISSION

Meeting Date: 01/03/2023

Current Zoning: C-3 - COMMERCIAL SERVICE - WAREHOUSING

Information

Subject

~~**BPC2211-008 Minor Site Plan Alteration - Crossroads Surgery Center, Crossroads South, Section 1, Lot 7, 1805 Williamson Court, Zoning C-3** - *Applicant: Davis Stokes Collaborative Architects, P.C., 7121 Crossroads Boulevard, Brentwood, TN 37027*~~

General Information

THIS ITEM HAS BEEN DEFERRED FROM THE AGENDA.

Davis Stokes Collaborative Architects, P.C. requests approval of a revised site plan to add an emergency diesel generator and a new HVAC unit to the West side of the building located at 1805 Williamson Court. The emergency generator and the new HVAC unit will be in their own masonry enclosure completely screened from public view. The 80 KW diesel generator will only operate during a power failure.

Conditions of Approval

Staff recommends that the following **2** conditions be attached to the approval of the request.

1. The new enclosures are shown to be blocking an existing drainage swale. Proposed contours showing the relocated swale should be added, and the swale should be of sufficient depth, slope and capacity so as not to flood the new pads and enclosures while still maintaining positive drainage (no ponding). This will need addressed with permit submittal.

2. Show and label the pad elevations.

Standard Requirements

Staff recommends that the following **13** conditions be attached to the approval of the request.

1. A site plan shall be vested for a period of three years from the date of the original approval.

2. Add the following note to the site plan:

   This site plan is subject to a three-year vesting period, during which the development standards in effect on the date of approval will remain the standards applicable to this plan. If construction is not completed during the first three years, the original site plan is considered a preliminary site plan and the applicant must obtain approval of a final site

plan. Development of the property shown on this plan may be subject to standards other than those that were applicable during the vesting period. The Initial vesting period for this plan expires on **January 3, 2026**, unless extended by the City of Brentwood. Persons relying on this plan after said date should contact the City of Brentwood to determine if development may continue as depicted on the plan.

3. When the construction authorized pursuant to a site plan is not completed within three years from the date of initial approval, but the applicant desires to complete the project proposed for the site, the plan as initially approved for the project or as amended shall be considered a preliminary site plan. If the applicant secures all necessary permits, commences site preparation and obtains approval of a final site plan within the three-year vesting period following approval of the preliminary site plan, then the vesting period shall be extended an additional two years beyond the expiration of the initial three-year vesting period. During the two-year extension, the applicant must commence construction and maintain any necessary permits to remain vested.

4. All signs must comply with the Brentwood Sign Ordinance. A comprehensive sign package including all signs (temporary or permanent, all or ground) with dimensions shall be submitted to the Planning Department for a compliance review. Please submit a comprehensive sign package to Allison Roberts at allison.roberts@brentwoodtn.gov.

5. If necessary permits are maintained and construction, as defined by Section 78-43, has commenced by the end of the two-year extension, then the vesting period shall remain in effect until the Planning and Codes Department has certified final completion of the project, provided the total vesting period shall not exceed ten years from the date of approval of the preliminary site plan

6. The property owner is responsible for all development fees including water and sewer service and tap fees, building permit fees and Public Works Project Fees. The required fees shall be used for future infrastructure related improvements required by the proposed development.

7. Ground and roof level electrical transformers, heat and air conditioning equipment and similar facilities shall be screened from public view per the requirements of Section 78-206 (l) of the zoning ordinance.

8. Unenclosed guarded service equipment on the exterior of building in commercial and service institution districts shall be limited to mandatory disconnects and metering equipment. All other service equipment shall be placed in an enclosed area of a structure.

9. Add the following note to the plans that are to be submitted for building permit review: "This document certifies that the building materials specified in the Planning Commission approval of this project (BPC2211-008) are likewise provided for in the plans submitted. Any deviation from the approved building materials will negate any staff approval of said plans. Proposed changes to project specifications will be submitted to the Planning Commission for further consideration.

10. Complete building plans shall be submitted to the Planning and Codes Department for

review, approval and issuance of the required permits before any work is begun. Additionally, all required electrical permits, issued by the State of Tennessee must be received before any work is begun.

11. Development of this project shall comply with all applicable codes and ordinances of the City of Brentwood.

12. Deviations from the approved plan in the development of a project or the failure to satisfy any standard requirements or special conditions of approval imposed by the planning commission will be considered a violation of the provisions of the Zoning Ordinance, which shall be subject to punishment as provided in Section 1-9 of the Brentwood Municipal Code. The City may also require the applicant to appear before the Planning Commission to address any deficiencies or unapproved modifications. The project may also be subject to delays in issuance of permits, certificates of occupancy, recordation of plats or other project approvals.

13. Approval of the proposed plan shall be limited to the illustrations and plans presented to the Planning Commission for review and approval on **January 3, 2023**. Any changes to Planning Commission approved plans and specifications will require staff review and re-approval by the Planning Commission.

Staff Recommendation

Staff requests that the Planning Commission vote to approve the proposed minor site plan alteration, subject to the requirements of the staff report.

Attachments

Proposed Site Plan

AIA® Document G714™ – 2017

Construction Change Directive

PROJECT: *(name and address)*
Crossroads Ambulatory Surgery Center
Brentwood, TN

CONTRACT INFORMATION:
Contract For: General Construction
Date:

CCD INFORMATION:
Directive Number: 002
Date: 12/9/2022

OWNER: *(name and address)*
Crossroads Surgery Center, LLC
215 Jamestown Park Road
Suite 205
Brentwood, TN 37027

ARCHITECT: *(name and address)*
Davis Stokes Collaborative, P.C.
7121 Crossroads Blvd.
Brentwood, TN 37027

CONTRACTOR: *(name and address)*

The Contractor is hereby directed to make the following change(s) in this Contract:
(Insert a detailed description of the change and, if applicable, attach or reference specific exhibits.)

CCD#002 REVISION#003 Dated: 12/09/2022

Description of Changes:
Changes based on Field Observations.

Attachment(s):
Sheets (8.5 x11): 1
Sheets (Full Size): G1.01, AS1.01, A1.01, A2.01, A2.02, M1.01, E2.01

PROPOSED ADJUSTMENTS

1. The proposed basis of adjustment to the Contract Sum or Guaranteed Maximum Price is:

☐ Lump Sum decrease of $0.00

☐ Unit Price of $ per

☐ Cost, as defined below, plus the following fee:
(Insert a definition of, or method for determining, cost)

☒ As follows: Provide documentation per 7.3.3 of AIA Document A201-2017 for Owner approval prior to commencing work outlines in this Directive.

2. The Contract Time is proposed to remain unchanged. The proposed adjustment, if any, is (0 days).

NOTE: The Owner, Architect and Contractor should execute a Change Order to supersede this Construction Change Directive to the extent they agree upon adjustments to the Contract Sum, Contract Time, or Guaranteed Maximum price for the change(s) described herein.

When signed by the Owner and Architect and received by the Contractor, this document becomes effective IMMEDIATELY as a Construction Change Directive (CCD), and the Contractor shall proceed with the change(s) described above.

Contractor signature indicates agreement with the proposed adjustments in Contract Sum and Contract Time set forth in this CCD.

Davis Stokes Collaborative, P.C.	Crossroads Surgery Center, LLC	
ARCHITECT *(Firm name)*	**OWNER** *(Firm name)*	**CONTRACTOR** *(Firm name)*

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User Notes: (3B9ADA4A)

SIGNATURE	SIGNATURE	SIGNATURE
Lyndon Brown, Principal Architect PRINTED NAME AND TITLE	PRINTED NAME AND TITLE	PRINTED NAME AND TITLE
12/15/2022 DATE	DATE	DATE

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User Notes: (3B9ADA4A)

DAVIS STOKES COLLABORATIVE, P.C.
DSC ARCHITECTS

Crossroads ASC
CCD #002 - Revision #3

Dated:
12.09.2022

Description of Changes:
Changes based on field observations

Architect Project No:19071

ARCHITECTURAL

G1.01 – General Notes
1. Added A2.01 and A2.02 to Drawing Index

AS1.01 – Architectural Site Plan
1. Moved Generator and AC-1 to new locations
2. Added General Notes 1 and 2

A1.01 – Dimensioned and Noted Floor Plans
1. Added Notation for New locations of Generator and AC-1

A2.01 – Generator/Mechanical Unit Enclosure Floor Plans and Elevations
1. Added Sheet

A2.02 – Generator/Mechanical Unit Section and Details
1. Added Sheet

MECHANICAL

M1.01 – HVAC Floor Plan
1. Revised AC/CU locations

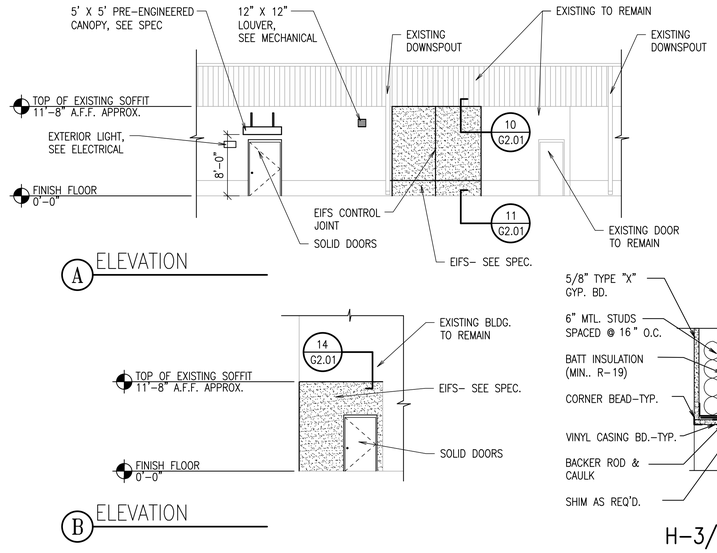
ELECTRICAL

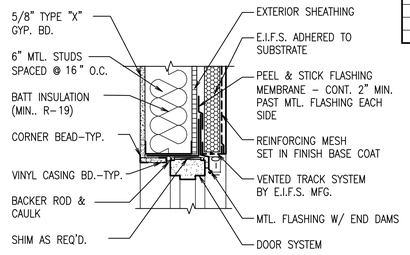
E2.01 – Power Floor Plan
1. Revised mechanical and generator locations to coordinate with base plans

End of document

ABBREVIATION LIST

A.C.T.	ACOUSTICAL CEILING TILE	MAX.	MAXIMUM
A.F.F.	ABOVE FINISH FLOOR	MECH.	MECHANICAL
ALT.	ALTERNATE	MFR.	MANUFACTURER
ALUM.	ALUMINUM	M.O.	MASONRY OPENING
APPROX.	APPROXIMATE	MTL.	METAL
		MIN.	MINIMUM
BD.	BOARD	M.R.	MOISTURE RESISTANT
BLK'G	BLOCKING		
B.M.	BENCH MARK	N.I.C.	NOT IN CONTRACT
BOCA	BUILDING OFFICIALS & CODE ADMINISTRATORS	NO. / #	NUMBER
B.O.J.	BOTTOM OF JOIST	O.C.S.	ON CENTER SPACE
BOT.	BOTTOM	O.D.	OUTSIDE DIAMETER
		O.H.	OPPOSITE HAND
CAB.	CABINET		
CEM.	CEMENT	P. LAM.	PLASTIC LAMINATE
C.G.	CORNER GUARD	PLAST.	PLASTIC
CLG.	CEILING	PLYWD	PLYWOOD
CLR.	CLEAR	PR.	PAIR
℄	CENTER LINE	PREFAB.	PREFABRICATED
C.M.U.	CONCRETE MASONRY UNIT	PRS'V. T.	PRESERVATIVE TREATED
COL.	COLUMN	P.T.	PRESSURE TREATED
CONC.	CONCRETE		
CONT.	CONTINUOUS	Q.T.	QUARRY TILE
COORD.	COORDINATE	QTY.	QUANTITY
CPT.	CARPET		
C.T.	CERAMIC TILE	RAD.	RADIUS
C.J.	CONTROL JOINT	R.B.	RESILIENT BASE
CTR.	CENTER	R.D.	ROOF DRAIN
		REBAR.	REINFORCEMENT (STEEL)
DIA.	DIAMETER	RECPT.	RECEPTACLE
DIM.	DIMENSION	REINF.	REINFORCED/ REINFORCEMENT
DIR.	DIRECTION	RES.	RESILIENT
DN.	DOWN	REQ'D	REQUIRED
DWG.	DRAWING	RM.	ROOM
		R.T.U.	ROOF TOP UNIT
EA.	EACH	RTRN.	RETURN
ELEC.	ELECTRICAL		
ELEV/EL.	ELEVATION/ ELEVATOR	SBC	STANDARD BUILDING CODE
E.F.	EXHAUST FAN	SHT.	SHEET
E.I.F.S.	EXTERIOR INSULATED FINISH SYSTEM	SHEATH.	SHEATHING
E.O.S.	EDGE OF SLAB	SIM.	SIMILAR
E.P.D.M.	ETHYLENE PROPYLENE DIENE MONOMER	SPECS.	SPECIFICATIONS
		SQ. IN.	SQUARE INCH/ INCHES
EQ.	EQUAL	SQ. FT.	SQUARE FOOT/ FEET
EQUIP.	EQUIPMENT	STD.	STANDARD
E.W.C.	ELECTRIC WATER COOLER	STOR.	STORAGE
EXIST.	EXISTING	STRUCT.	STRUCTURE / STRUCTURAL
EXP.	EXPOSED	SUSP.	SUSPENDED
EXP. JT.	EXPANSION JOINT	SYM.	SYMBOL
EXT.	EXTERIOR		
		TEMP.	TEMPERED / TEMPERATURE
F.E.	FINISHED END	THK.	THICK/ THICKNESS
FE	FIRE EXTINGUISHER	TLT.	TOILET
FEC	FIRE EXTINGUISHER CABINET	T.O.B.	TOP OF BEAM
F.F.E.	FINISH FLOOR ELEVATION	T.O.C.	TOP OF CONCRETE / CURB
F,F&E	FURNITURE, FINISHES & EQUIPMENT	T.O.M.	TOP OF MASONRY
FIN.	FINISH	T.O.S.	TOP OF STEEL
FIXT.	FIXTURE	TYP.	TYPICAL
FLASH.	FLASHING		
FLR.	FLOOR	UBC	UNIFORM BUILDING CODE
F.O.B.	FACE OF BRICK	U.L.	UNDERWRITER'S LABORATORY
F.O.E.W.	FACE OF EXISTING WALL	U.N.O.	UNLESS NOTED OTHERWISE
F.O.M.	FACE OF MASONRY		
F.O.S.	FACE OF STUD	V.C.T.	VINYL COMPOSITE TILE
F.O.W.	FACE OF WALL	VERT.	VERTICAL
F.R.	FIRE RESISTIVE/ FIRE RETARDANT	V.I.F.	VERIFY IN FIELD
FT.	FOOT/ FEET	VIT.	VITREOUS
FTG.	FOOTING	VOL.	VOLUME
FURN.	FURNITURE/ FURNISHINGS		
		W/	WITH
GA.	GAUGE	W.C.	WATER CLOSET
GALV.	GALVANIZED	WD.	WOOD
GYP. BD.	GYPSUM BOARD	W.G.	WALL GUARD
GYP.	GYPSUM	W.H.	WATER HEATER
		W/O	WITHOUT
H.M.	HOLLOW METAL	W.P.	WATER PROOF/ PROOFING
HORIZ.	HORIZONTAL	WT.	WEIGHT
HR.	HOUR		
IBC	INTERNATIONAL BUILDING CODE		
I.D.	INSIDE DIAMETER		
INSUL.	INSULATION/ INSULATED		
INT.	INTERIOR		
JT.	JOINT		
JST.	JOIST		
JST. BRG.	JOIST BEARING		
K.S.	KNEE SPACE		
K.D.	KEYBOARD DRAWER		
LAM.	LAMINATE		
LAV.	LAVATORY		
L.F.	LINEAR FOOT / FEET		
LSC	LIFE SAFETY CODE		
LVR.	LOUVER		





H-3/ J-3 SIM.

BUILDING DATA

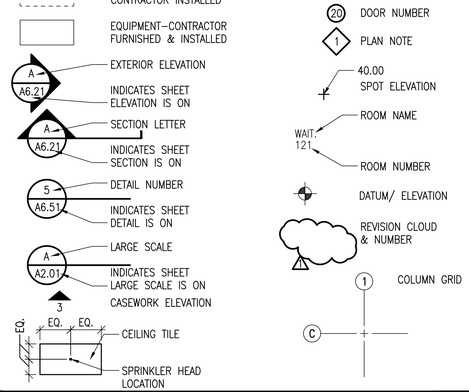
PROJECT DESCRIPTION	ENERGY DATA
OR ADDITION TO AN EXISTING ASC FACILITY THAT IS FULLY SPRINKLER.	WALLS - EXISTING R-19 MIN. ROOF - EXISTING

BUILDING AREA CALCULATIONS

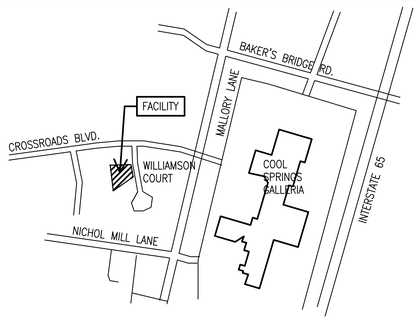
TOTAL GROSS SQUARE FOOTAGE
4,193 EXISTING SQ. FT.
RENOVATION AREA IS 487 SQ. FT. IN EXISTING SPACE

EXISTING PARKING PROVIDED
69 SPACES (2 ACCESSIBLE)

GRAPHIC SYMBOLS



VICINITY MAP



CONSULTANTS

STRUCTURAL

LATTA STRUCTURAL ENGINEERS
8005 CHURCH ST E, SUITE 216
BRENTWOOD, TN 37027
PHONE: (615) 750-3268
FAX: (615) 750-3294

MECHANICAL, PLUMBING & ELECTRICAL

ENTECH ENGINEERING INC.
5301 VIRGINIA WAY, SUITE 140
BRENTWOOD, TN 37027
PHONE: 615-373-2640
FAX: 615-373-4837

DRAWING INDEX

C-0	COVER
G0.01	CODE ANALYSIS
G1.01	GENERAL NOTES AND DOOR/ DETAILS SCHEDULE SHEET
G2.01	RATED WALL DETAILS
G3.01	UL ASSEMBLIES
G3.02	UL ASSEMBLIES
G3.03	UL ASSEMBLIES
G4.01	ADA STANDARDS
	ARCHITECTURAL
AS1.01	ARCHITECTURAL SITE PLAN
LS1.01	LIFE SAFETY AND DEMOLITION PLAN
~~A1.01~~	~~DIMENSIONED AND NOTED/ FINISH FLOOR PLAN~~
A2.01	GENERATOR/MECHANICAL UNIT ENCLOSURE FLOOR PLANS AND ELEVATIONS
A2.02	GENERATOR/MECHANICAL UNIT SECTION AND DETAILS
A2.21	ENLARGED O.R. PLANS, ELEVATIONS AND DETAILS
A3.01	EQUIPMENT AND REFLECTED CEILING PLAN FLOOR
	STRUCTURAL
S1.00	GENERAL NOTES, PLANS AND DETAILS
	MECHANICAL
M0.01	HVAC LEGENDS AND SCHEDULES
M1.01	FLOOR PLAN-HVAC
M2.01	HVAC DETAILS
MG0.01	MEDICAL GAS SCHEDULES AND DETAILS
MG1.01	MEDICAL GAS FLOOR PLAN AND LEGEND
	PLUMBING
P1.01	FLOOR PLAN - PLUMBING
	ELECTRICAL
E1.01	FLOOR PLAN - LIGHTING
E2.01	POWER FLOOR PLAN
E3.01	SYSTEMS FLOOR PLAN
E5.01	DETAILS - ELECTRICAL
E6.01	ELECTRICAL RISER & PANELBOARDS
E7.01	LEGENDS SCHEDULES - ELECTRICAL

MATERIAL DESIGNATION

SECTION

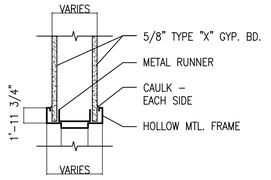
EARTH	PARTICLE BD.	RIGID INSUL.
ROCK	E.I.F.S.	PLYWD.
BLOCKING	MARBLE	GYP. BD.
FINISHED WD.	GRANULAR FILL	EXTERIOR SHEATHING
BATT INSUL.	BRICK	CAST/CUT STONE
CMU	TERRAZZO	METAL
STRUCTURAL CONCRETE	LIGHTWEIGHT INSUL. CONC.	ACOUSTICAL CEILING TILE

ELEVATION

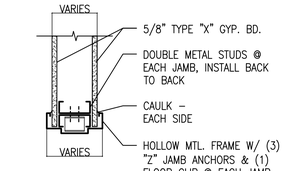
CERAMIC TILE / QUARRY TILE	BRICK	CONC. / E.I.F.S. PLASTER
MASONRY RUNNING BOND	GLASS	

DOOR SCHEDULE

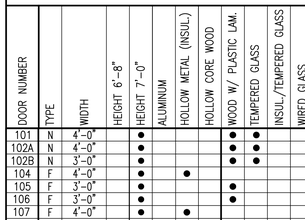
DOOR NUMBER	DOOR TYPE	WIDTH	HEIGHT 6'-8"	HEIGHT 7'-0"	ALUMINUM	HOLLOW METAL (INSUL.)	HOLLOW CORE WOOD	WOOD W/ PLASTIC LAM.	TEMPERED GLASS	INSUL./TEMPERED GLASS	WIRED GLASS	DOUBLE EGRESS	RATING 20 MINUTE LABEL	RATING 45 MINUTE LABEL	FRAME TYPE	FRAME HOLLOW METAL	FRAME ALUMINUM	DETAILS HEAD	DETAILS JAMB	DETAILS SILL	FIRE STOP DIVIDER	THRESHOLD	3/4" UNDERCUT	HARDWARE SET NUMB.	DOOR NUMBER	REMARKS
101	N	4'-0"		●				●	●						F-1	●		H-1	J-1					1.0	101	MATCH EXISTING IN COLOR AND FINISH
102A	N	4'-0"		●				●	●						F-1	●		H-1	J-1					1.0	102A	MATCH EXISTING IN COLOR AND FINISH
102B	N	3'-0"		●				●	●						F-1	●		H-1	J-1					1.0	102B	MATCH EXISTING IN COLOR AND FINISH
104	F	4'-0"		●		●									F-2	●		H-2	J-2	S-1		●		3.0	104	MATCH EXISTING IN COLOR AND FINISH
105	F	3'-0"		●				●							F-1	●		H-1	J-1					2.0	105	MATCH EXISTING IN COLOR AND FINISH
106	F	3'-0"		●				●							F-1	●		H-1	J-1					2.0	106	MATCH EXISTING IN COLOR AND FINISH
107	F	4'-0"		●		●									F-2	●		H-3	J-3	S-1		●		2.0	107	MATCH EXISTING IN COLOR AND FINISH
EX1																									EX1	EXISTING DOOR TO REMAIN



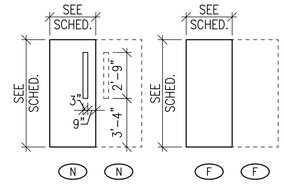
H-1



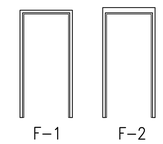
J-1



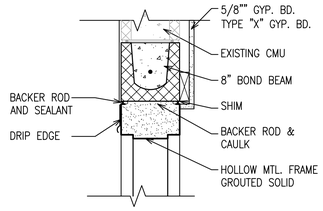
S-1



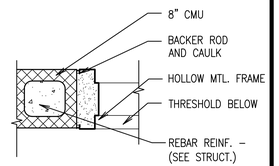
DOOR TYPES



FRAME TYPES



H-2



J-2

GENERAL NOTES:

1.) ALL DOOR NUMBERS ON SCHEDULE MAY NOT HAVE BEEN USED.

2.) FRAME TYPES AND DOOR TYPE ELEVATIONS ARE FOR REFERENCE ONLY. ALL TYPES MAY NOT BE USED. REFER TO DOOR SCHEDULE.

3.) ALL DOORS 1 3/4" THICK UNLESS OTHERWISE NOTED.

4.) ALL HOLLOW METAL FRAMES TO BE CONT. WELDED AND GROUND.

5.) ALL NEW DOORS TO MATCH EXISTING IN TYPE, FINISH AND COLOR. COORDINATE PRIOR TO INSTALLATION.

6.) NEW DOORS WITH VISION PANEL; GLASS TO MATCH EXISTING IN TYPE AND TINT COLOR

DOOR TYPES ABREVATIONS

ALUM.	-	ALUMINUM
H.M.	-	HOLLOW METAL
SCW	-	SOLID CORE WOOD
HCW	-	HOLLOW CORE WOOD
WPL	-	WOOD W/ PLASTIC LAM.
TG	-	TEMPERED GLASS
ITG	-	INSUL./TEMPERED GLASS
WG	-	WIRED GLASS
DE	-	DOUBLE EGRESS

GENERAL NOTES

1.) ALL DRYWALL PARTITIONS ARE DIMENSIONED CENTERLINE TO CENTERLINE. ALL MASONRY PARTITIONS ARE DIMENSIONED OUT TO OUT.

2.) CONCEAL ALL PIPING IN DRYWALL. WHERE PIPING IS TOO LARGE, WALLS ARE TO BE FURRED OUT MINIMUM TO CONCEAL PIPING.

3.) PROVIDE CHASES FOR MECHANICAL DUCTWORK. REFER TO MECHANICAL DRAWINGS FOR SIZES OF DUCTWORK. WALLS ARE TO BE FURRED OUT MINIMUM TO CONCEAL DUCTWORK.

4.) NO FURRING ON CORRIDOR SIDE OF WALLS.

5.) ELECTRICAL PANELS, FIRE EXTINGUISHER CABINETS, ETC. LOCATED IN RATED PARTITIONS SHALL BE BACKED WITH DRYWALL AS REQ'D TO MAINTAIN RATING. CONTRACTOR TO VERIFY WALL THICKNESS REQ'D FOR ALL ELECTRICAL PANELS, FIRE EXTINGUISHER CABINETS, ETC.

6.) PROVIDE DOUBLE STUDS, BLOCKING, BRACING AND BACK-UP PLATES WHERE REQ'D TO SUPPORT EQUIPMENT, MISCELLANEOUS ITEMS, I.E., TYPICAL CASEWORK, CABINETS, GRAB BARS, TOILET ACCESSORIES, ETC.

7.) DO NOT SCALE DRAWINGS. IF DIMENSIONS ARE IN QUESTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING CLARIFICATION FROM THE OWNER'S REPRESENTATIVE BEFORE CONTINUING WITH CONSTRUCTION.

8.) ALL DASHED-IN EQUIPMENT SHALL BE FURNISHED BY THE OWNER AND RECEIVED AND STORED BY THE GENERAL CONTRACTOR. (SEE OWNER-FURNISHED EQUIPMENT MANUAL). CONTRACTOR TO COORDINATE W/ OWNER ON INSTALLATION OF EQUIPMENT.

9.) CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND COORDINATE ALL TRADES.

10.) CONTRACTOR SHALL VERIFY ALL EQUIPMENT LOCATIONS AND DIMENSIONS AND REQ'D CLEARANCES OF ALL EQUIPMENT (REFER TO DRAWINGS, SPECIFICATIONS AND EQUIPMENT MANUAL.)

11.) WHERE WALL TYPE DESIGNATIONS APPEAR ON BOTH SIDES OF DOORS AND/ OR WINDOWS, WALL TYPE SHALL BE CONTINUOUS ACROSS OPENING.

12.) ALL SYMBOLS AND ABBREVIATIONS USED ON THESE DRAWINGS ARE CONSIDERED TO BE INDUSTRY STANDARDS. REFER TO ABBREVIATIONS LIST AND SYMBOL LEGEND ON THIS SHEET FOR REFERENCE. CONTRACTOR TO NOTIFY THE ARCHITECT FOR CLARIFICATION IF ABBREVIATIONS OR SYMBOLS ARE IN QUESTION.

13.) ALL SYMBOLS, ABBREVIATIONS AND NOTES MARKED "TYPICAL" OR "TYP." SHALL APPLY IN ALL SIMILAR CIRCUMSTANCES UNLESS NOTED OTHERWISE.

14.) THESE DRAWINGS DO NOT CONTAIN INFORMATION W/ REGARD TO CONSTRUCTION SAFETY PROCEDURES. THE CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION SAFETY AND SHALL PERFORM ALL WORK IN ACCORDANCE W/ STATE AND/ OR FEDERAL CONSTRUCTION SAFETY GUIDELINES.

15.) THESE DRAWINGS ARE THE PROPERTY OF THE ARCHITECT. NO CHANGES TO THESE DOCUMENTS, EITHER IN WHOLE OR IN PART, MAY BE MADE WITHOUT THE KNOWLEDGE AND WRITTEN CONSENT OF THE INDIVIDUAL WHOSE NAME AND SIGNATURE APPEARS UPON THE DOCUMENTS.

16.) ALL WOOD ABOVE THE ROOF DECK AND AT EXTERIOR PENETRATIONS, WINDOWS AND DOORS SHALL BE P.T. W/ PRESERVATIVE.

17.) ALL WOOD BLOCKING, PANELS & BACKING SHALL BE FIRE RETARDANT TREATED.

18.) ALL SPRINKLER HEADS TO BE CENTERED IN CEILING TILES.

JOHN W. DAVIS
REGISTERED LANDSCAPE ARCHITECT
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REG. NO. 03491
STATE OF TENNESSEE
12/05/22

CROSSROADS ASC
BRENTWOOD, TENNESSEE

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REVISIONS

NO.	DATE	DESCRIPTION
1	2.22.22	CCD #1 REV #2
2	2.22.22	CCD #2 REV #3

GENERAL NOTES

G1.01

ISSUE DATE	JOB NUMBER
12.09.2022	19071

2/14/2022 9:58 AM
2/25/2022 10:46 AM
2/28/2022 11:03 AM
19071_C0101.dwg
DRAWING CREATED:
LAST DRAWING UPDATE:
PLOT DATE:
FILE NAME:
SCALE FACTOR: 1:96

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A-GRAP	A-GRAP	BLK
A-EXST	A-EXST	BLK
G1.0x	G1.0x	BLK

DRAWING CREATED: - 12/5/2022 1:34 PM
LAST DRAWING UPDATE: - 12/5/2022 1:34 PM
PLOT DATE: - 12/5/2022 1:47 PM
FILE NAME: - 19071_AS1.01.dwg
SCALE FACTOR: - 1:0.2583713

S 88°29'14" E 285.47'

FENCE

CITY OF BRENTWOOD
CITY OF FRANKLIN
CITY LIMITS LINE

NEW EMERGENCY GENERATOR, SEE MECHANICAL

EMERGENCY ELECTRICAL CONDUIT

NEW CONCRETE PAD, SEE STRUCTURAL

EMERGENCY GENERATOR

A2.01

6" STEEL PIPE W/ PIPE HINGE SLEEVE/COLLAR, PRIME/PAINT (TYP.)

Tree Protection

3" BOX RIB PANELS IN 4" STEEL TUBE FRAME, PRIME/PAINT

NEW AC UNIT, SEE MECHANICAL

NEW CU-1-2, SEE MECHANICAL

NEW CONCRETE PAD, SEE STRUCTURAL

NEW AC

21 TREE

B
A2.01

NEW 10' C.M.U. ENCLOSURE @ AC-1, TYP. SEE DETAILS ON SHEET G2.02

5'X5' PRE-ENGINEERED CANOPY ATTACHED TO EXISTING BUILDING

STRIP AREA AT PATIENT DISCHARGE DOOR

WHEEL STOP

BUILDING
FFE: 702.66

CORR. 101

OR 102
292 SF

CART

SCRUB 103

CORR 104

EMERG. ELECT. 105

MED GAS 106

VACUUM PUMP 107

EXTERIOR COVERED SPACE

CONCRETE

LOT 8
LOT 7

RETAINING WALL

HVAC

MECHANICAL YARD

50' M.B.S.L.

LOTS 7 & 8
1.47 ACRES

MAP 53K, GROUP A, PARCEL7
DEED BK. 2473, PG. 30

1805

WATER VAULT

EXCLUSIVE M
P
3

PARKING LOT

CLEANOUT

24' WIDE INGRESS/EGRESS EASEMENT

10' P.U.D.E.

N 06°43'45" W
326.04'

10'

24'

FORCE MAIN

S 88°29'37" E 293.65'

705
704
703
702
701
709

GENERAL NOTES:

1. THIS SITE PLAN IS SUBJECT TO A THREE YEAR VESTING PERIOD, DURING WHICH TIME THE SUBDIVISION REGULATIONS IN EFFECT ON THE DATE OF APPROVAL WILL REMAIN THE STANDARD APPLICABLE TO THIS PLAN. IF CONSTRUCTION IS NOT COMPLETED DURING THE FIRST THREE YEARS, THE ORIGINAL SITE PLAN IS CONSIDERED A PRELIMINARY SITE PLAN AND THE APPLICANT MUST OBTAIN APPROVAL OF A FINAL SITE PLAN. DEVELOPMENT OF THE PROPERTY AFTER THE FIRST THREE YEARS SHALL BE CONSIDERED UNDER THOSE RULES THAT WERE APPLICABLE DURING THE VESTING PERIOD. THE INITIAL VESTING PERIOD FOR THIS PLAN EXPIRES ON DECEMBER 5, 2025, UNLESS EXTENDED BY THE CITY OF BRENTWOOD. PERSONS RELYING ON THIS PLAN AFTER SAID DATE DO SO AT THEIR OWN RISK. THE VESTING PERIOD FOR ANY DEVELOPMENT MAY CONTINUE AS DEPICTED ON THE PLAN.
2. 30 % OF LOT AREA SQUARE FOOTAGE: 64,033 SQ. FT. X 0.2 =
   - TOTAL GREEN SPACE REQUIRED = 12,806.6 SQ. FT.
   - TOTAL GREEN SPACE SQUARE FOOTAGE = 15,240.50 FT.
   - 2,434 SQ. FT. OF GREEN SPACE MORE THAN REQUIRED.

3

| | | |

DRAWING CREATED: 2/25/2022 10:44 AM
LAST DRAWING UPDATE: 12/14/2022 11:28 PM
PLOT DATE: 12/09/2022 11:03 AM
FILE NAME: 19071_2101.dwg
SCALE FACTOR: 1:96

LEGENDS

WALL PROTECTION

CORNER GUARD

WALL PROTECTION (WP1) — NOT USED

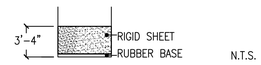
CRASH RAIL (WP2)

INTERIOR FINISH

* – CEILING TYPE
* – WALL FINISH
* – BASE FINISH
* – FLOOR FINISH

WALL PROTECTIONS CONFIGURATIONS

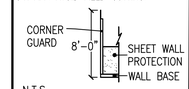
TOP OF RIGID SHEET IS TO BE AT 40" AFF. RIGID SHEET TO BE ADHERED TO WALL AND INSTALLED BEHIND BASE, ON TOP OF FINISHED FLOOR.



CLEAR PLASTIC CORNER GUARDS AT CORNERS TO MATCH EXISTING. MATCH CLEAR PLASTIC CORNER GUARDS AT LOCATIONS ON PLAN. WP2 – WALL PROTECTION AT OR COLOR TO BE COORDINATED WITH OWNER PRIOR TO INSTILLATION.
SPEC FOR THE "RIGID VINYL SHEET WALL PROTECTION" AT OR TO BE: THICKNESS .040", TEXTURE TO BE "VELVET", COLOR TO BE SELECTED BY OWNER, ADHESIVE IS INPRO BOND ADHESIVE, NOTE TO UTILIZE VINYL TRIM PIECES AT TOP AND EDGE.

WALL PROTECTION DETAILS

SURFACE MOUNT CORNER GUARD – ELEVATION VIEW CORNER GUARD IS TO BE INSTALLED SO THAT THE TOP IS AT 8'H AFF. AVOID FIELD–CUTTING.



CG ● "A"
MANUFACTURE: "INPRO"CORNER GUARD – 90 DEGREE/ CUSTOM CORNERS "INPRO"
STYLE: SSCG; SURFACE MOUNT
COLOR: STAINLESS STEEL
MATERIAL TYPE: 430 ALLOY/16 GAUGE
WING SIZE: 90°–3–1/2", CUSTOM AVAIL.
HEIGHT: 8'
NOTES: INSTALL ABOVE WALL BASE; UTILIZE TOP AND BOTTOM CAPS

CG ● MATCH EXISTING IN STYLE, TYPE COLOR AND FINISH

MATERIAL DESIGNATIONS

CEILING:

ACT1 – MATCH EXISTING
ACOUSTICAL CEILING TILE
"CLEAN ROOM VL UNPERFORATED" 868
SMOOTH TEXTURE LAY–IN
COLOR: FACTORY PAINTED WHITE
SIZE: 24"X24"
SUSPENSION SYSTEM: 1 5/16" CLEAN ROOM GRID

ACT2 –

FLOORING:

SV1 – MATCH EXISTING SHEET VINYL W/ 6" INTERGRAL COVE BASE 1A

LVT – MATCH EXISTING LUXURY VINYL TILE

SC – SEALED CONCRETE

BASE:

VB – VINYL BASE – MATCH EXISTING/ 4" BASE

WALLS:

P1 – MATCH EXISTING

P2 – PAINT (WALL PAINT – GENERAL) MATCH EXISTING

SCRUB WALL TRIM AND TILE

SCH1 – METAL TILE TRIM (COVED TRIM)
MANUFACTURER: SCHLUTER
PROFILE: DILEX–EHK BRUSHED STAINLESS

SCH2 – METAL TILE TRIM (TILE EDGE)
MANUFACTURER: SCHLUTER
PROFILE: JOLLY BRUSHED STAINLESS

CWT1 – COLOR, PATTERN AND SIZE TO MATCH EXISTING

* CONSULT OWNER FOR APPROVAL OF FINISH COLOR SELECTIONS PRIOR TO INSTALLATION.

FINISH GENERAL NOTES

A. CLEAN AND PROTECT ALL SURFACES/FINISHES TO REMAIN DURING CONSTRUCTION.

B. ALL INTERIOR DOORS/ DOOR FRAMES TO MATCH EXISTING.

C. PROVIDE CORNER GUARDS PER PLANS AND SPECIFICATIONS.

D. CONTRACTOR SHALL SUBMIT ALL FINISHES FOR OWNER AND ARCHITECT'S APPROVAL PRIOR TO INSTALLATION.

E. PATCH ALL FINISHES AFFECTED BY DEMOLITION/CONSTRUCTION. ALL SCRATCHES, DENTS, CRACKS AND/OR OPENINGS ON EXISTING AND NEW WALLS SURFACES ARE TO BE FILLED AND SANDED SMOOTH TO PROVIDE A "LIKE NEW" SURFACE CONDITION PRIOR TO INSTALLING NEW FINISHES.

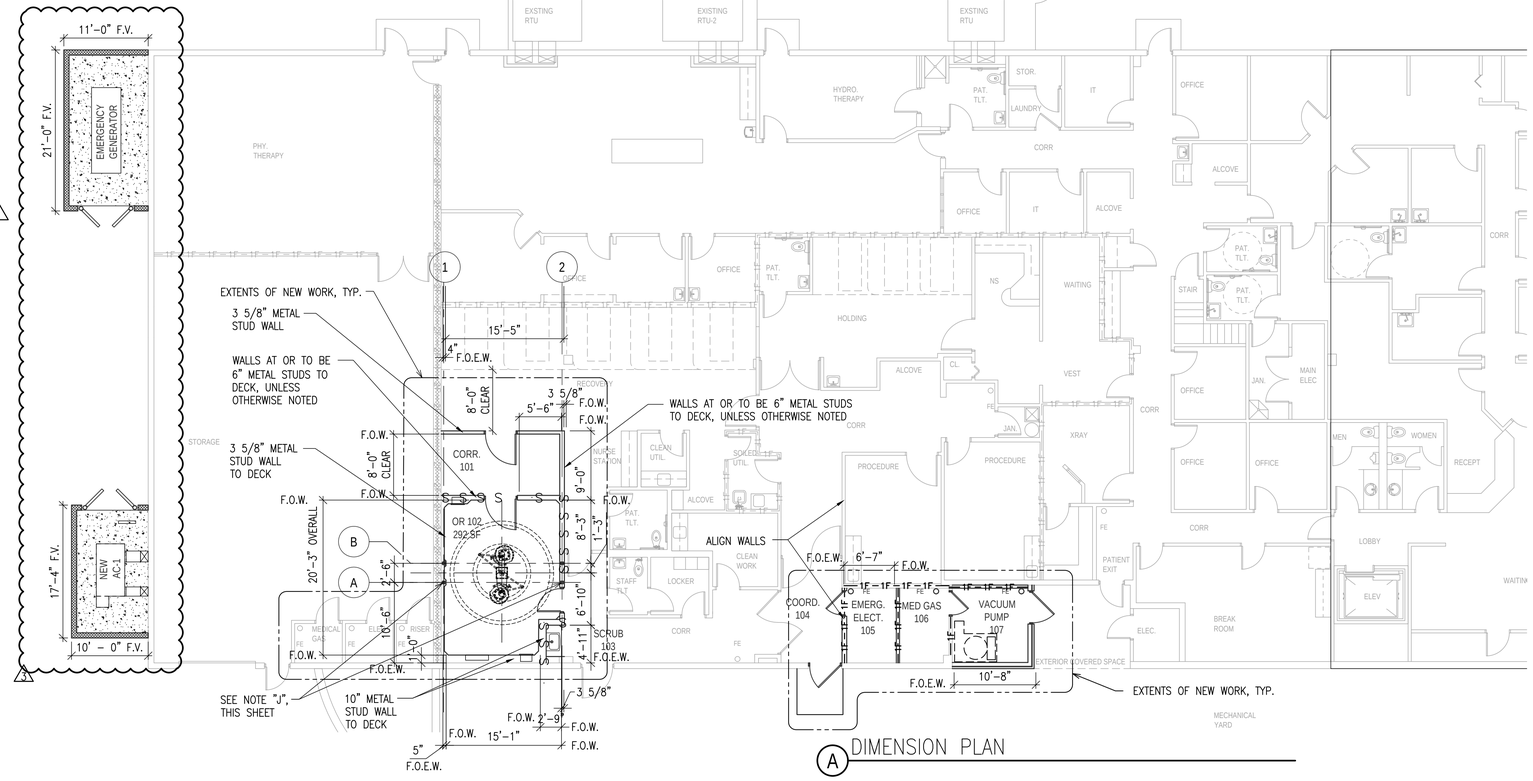
F. PROVIDE A SMOOTH FINISHED WALL SURFACE DOWN TO THE SUB–FLOOR TO ALLOW FOR THE PROPER INSTALLATION OF THE SPECIFIED WALL BASE FOR ALL EXISTING WALL CONSTRUCTION WITHIN THE AREA OF WORK. THIS IS INCLUSIVE, BUT NOT LIMITED TO TAPING, FINISHING, TRIM BEADS, AND THE FILLING OF SCREW HOLES AND VOIDS.

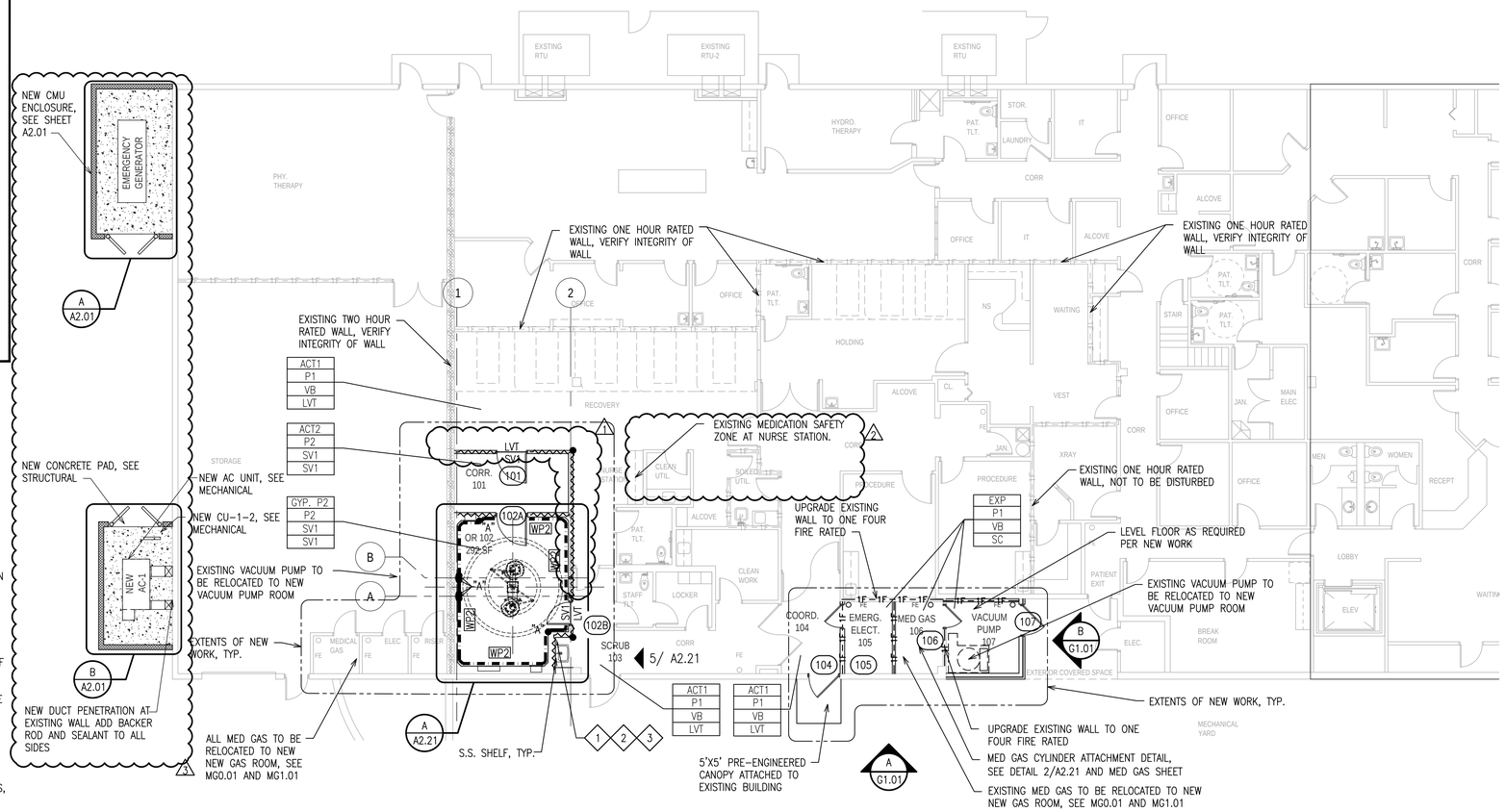
G. FEATHER EXISTING IRREGULAR FLOORING CONDITIONS TO ACHIEVE A SMOOTH, UNNOTICEABLE TRANSITION.

H. ALL FLOOR SURFACES SHALL BE STABLE, FIRM, AND SLIP RESISTANT PER ICC/ANSI A117.1 2003; CHANGES IN FLOOR LEVEL SHALL NOT EXCEED 1/4" VERTICAL HEIGHT.

I. CEILING HEIGHTS MAY VARY SLIGHTLY DUE TO FLOOR VARIATIONS, VERIFY EXISTING CONDITIONS IN THE FIELD.

J. WALL TO BE FURRED OUT AROUND STRUCTURAL PLATE IN FLOOR AT COLUMN FOR LIGHT ATTACHMENT, TYPICAL AT ALL NEW STRUCTURAL PLATES.





EQUIPMENT LEGEND

OWNER FURNISHED / CONTRACTOR INSTALLED
CONTRACTOR FURNISHED / INSTALLED

WALL LEGEND

NEW PARTITION
NEW PARTITION W/ SOUND ATTEN. BLANKET

NOTE: 1.) FOR WALL RATINGS SEE NOTED PLAN.
2.) ALL WALL TYPES MAY NOT BE USED.

EQUIPMENT LEGEND

OWNER FURNISHED / CONTRACTOR INSTALLED
CONTRACTOR FURNISHED / INSTALLED

WALL LEGEND

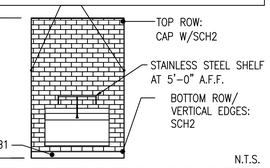
GYP. BD.	CMU	WALL CONSTRUCTION TYP.
		EXISTING PARTITION
		UNRATED PARTITION TO ABOVE CLG.
		UNRATED PARTITION TO DECK
1F	1F	EXISTING 1 HOUR FIRE BARRIER
2F	2F	EXISTING 2 HOUR FIRE BARRIER

CERAMIC TILE AT SCRUB SINK

SCRUB SINK ALCOVES ARE TO RECEIVE CERAMIC WALL TILE INSTALLED FROM FLOOR TO CEILING. TOP AND BOTTOM ROWS OF TILE ARE TO BE TRIMMED WITH SCHLUTER JOLLY (SCH2). VERTICAL EDGES, WHERE TILE MEETS DRYWALL, ARE TO BE SCHLUTER JOLLY AS WELL

SCRUB SINKS ARE TO RECEIVE THE FOLLOWING TILE PATTERN: MATCH EXISTING IS COLOR, STYLE AND SIZE.

UTILIZE BULLNOSE CORNER PIECE (BULLNOSED ON TOP AND OUTER SIDE) WHERE OUTSIDE CORNER MEETS CORNER GUARD



NOTE: WALL TILE IS TO STOP 2" SHORT OF OUTSIDE CORNER TO MAKE ROOM FOR CORNER GUARD.

FINISH KEY NOTES AT SCRUB SINK

1. THIS WALL TO BE CWT–1 TO CEILING
2. GYP BD. SOFFIT AT THIS LOCATION. SEE SHEET A2.21 AND A3.01 FOR NOTING
3. TILE PATTERN AT SCRUB. SEE CERAMIC TILE AT SCRUB SINK ELEVATION THIS SHEET.

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REGISTERED LANDSCAPE ARCHITECT
AGRICULTURE
No. 03490
STATE OF TENNESSEE
12/09/22

CROSSROADS ASC
BRENTWOOD, TENNESSEE

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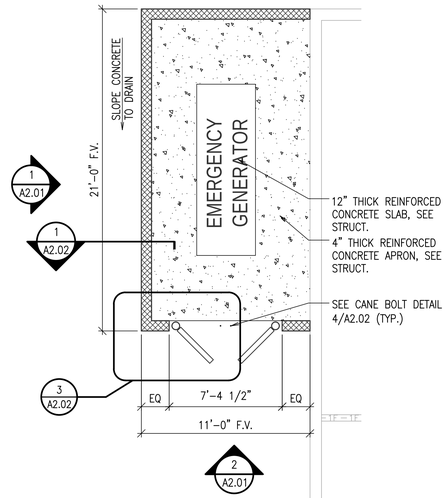
REVISIONS

NO.	DATE	DESCRIPTION
1	11.05.2021	REVIT - PRE-BID RFI RESPONSE
2	2.22.22	CCD#1 REVIT
3	12.09.22	CCD#2 REVIT

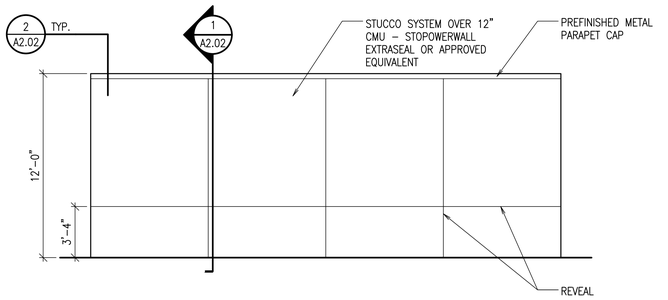
DIMENSIONED AND NOTED FLOOR PLANS

A1.01

ISSUE DATE:	JOB NUMBER
12. 09. 2022	19071



A GENERATOR ENCLOSURE PLAN



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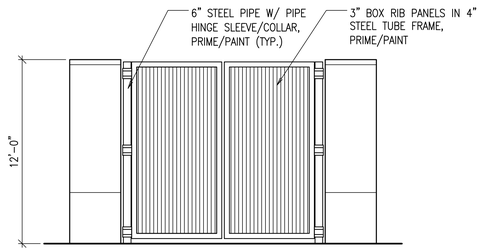

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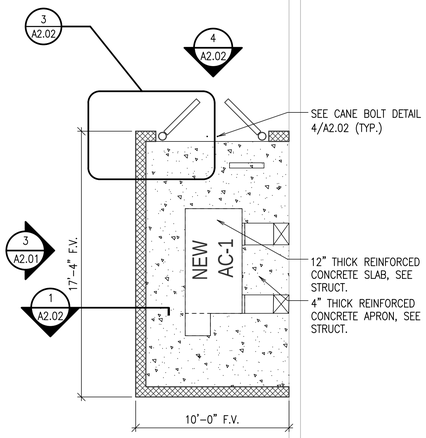
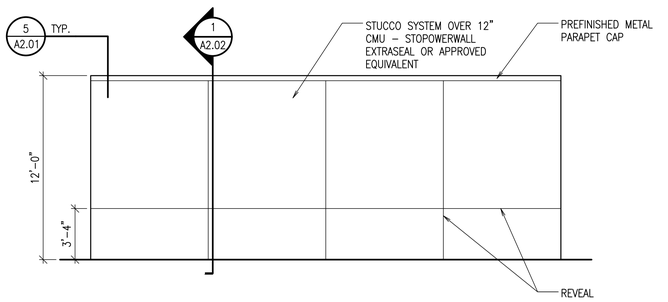


B MECHANICAL ENCLOSURE PLAN



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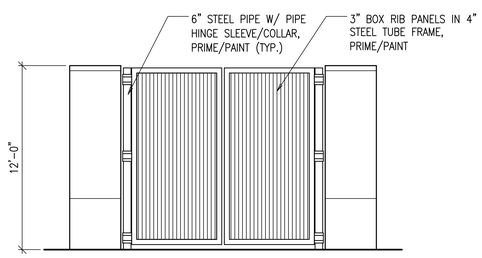

4 MECHANICAL UNIT ENCLOSURE ELEVATION

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JOHN W. DAVIS REGISTERED ARCHITECT AGRICULTURE No. 03490 STATE OF TENNESSEE 12/05/22

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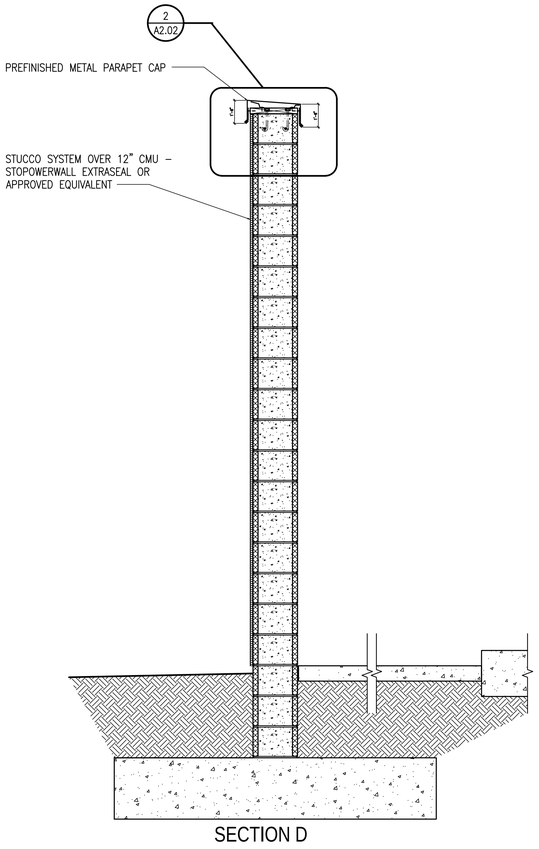
REVISIONS

NO	DATE	DESCRIPTION
1	12.09.2022	CCD #2 REV#3

GENERATOR/MECHANICAL UNIT ENCLOSURE FLOOR PLANS AND ELEVATIONS

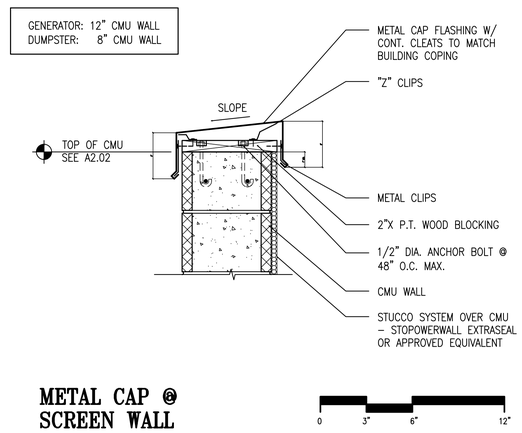
3 A2.01

ISSUE DATE: 12. 09. 2022
JOB NUMBER: 19071



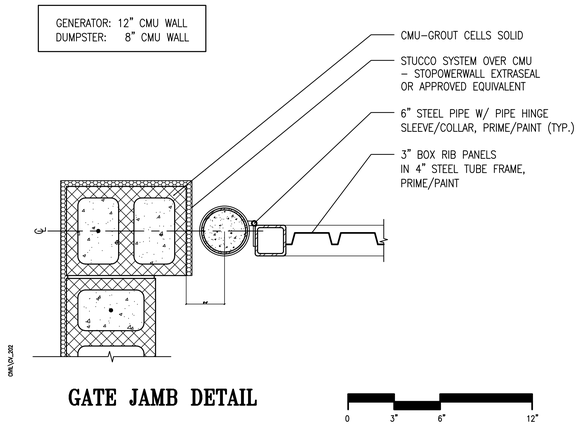
SECTION D

1 MECHANICAL UNIT ENCLOSURE ELEVATION



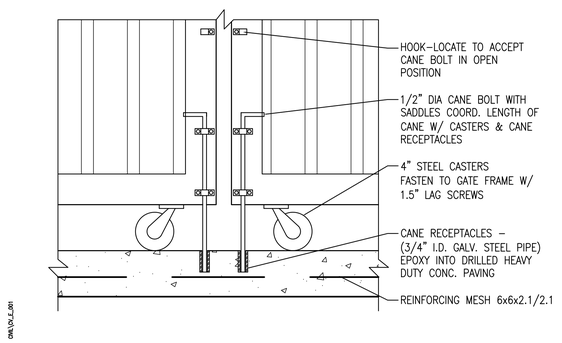
METAL CAP @ SCREEN WALL

2 GENERATOR ENCLOSURE ELEVATION



GATE JAMB DETAIL

3 GENERATOR ENCLOSURE ELEVATION



GATE–CANE BOLT & CASTER **N.T.S.**

4 MECHANICAL UNIT ENCLOSURE ELEVATION

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A2.0x
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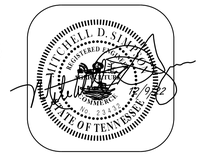

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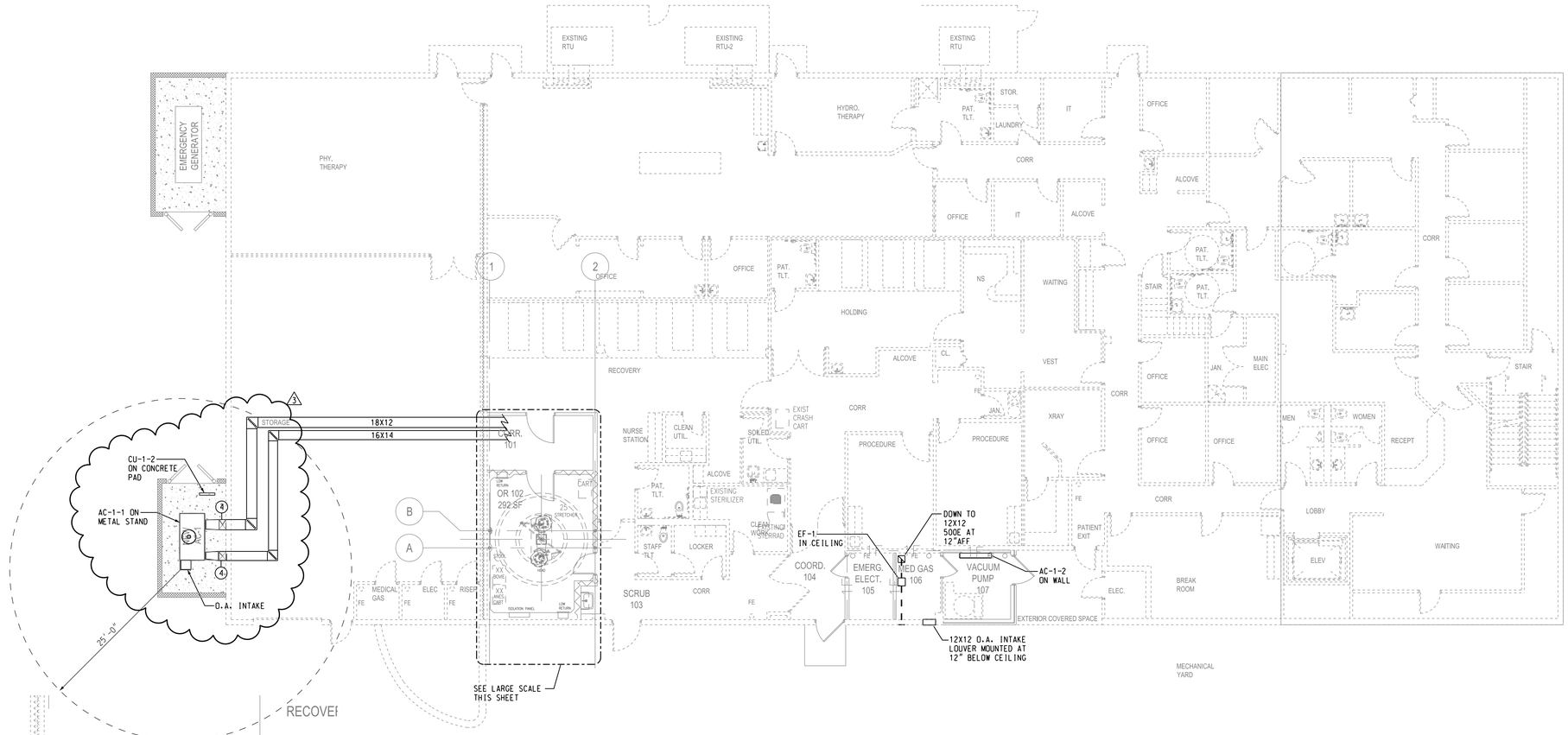
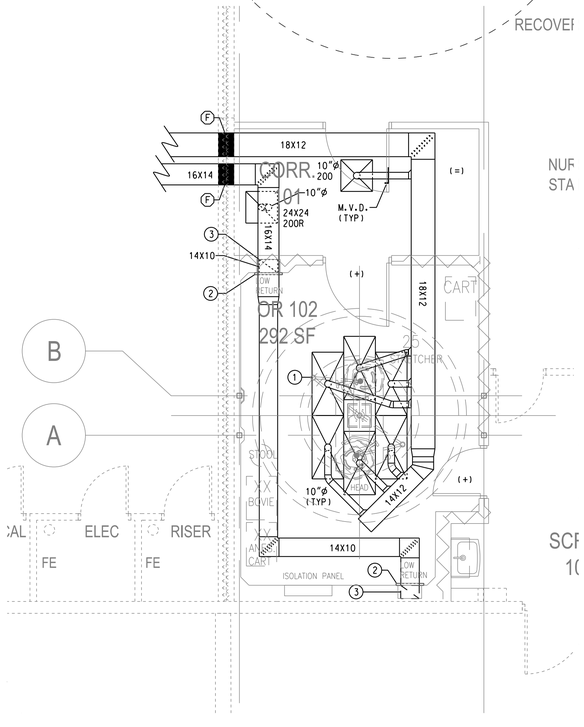
BRENTWOOD, TENNESSEE





LARGE SCALE PLAN
SCALE: 1/4" = 1'-0"

GENERAL NOTES:

A. O.A. INTAKE TO BE A MINIMUM OF 25'-0" FROM ANY EXHAUST FANS, VENTS, FLUES, ETC.

B. BOTTOM OF O.A. INTAKE TO BE MINIMUM OF 6'-0" ABOVE GRADE.

PLAN NOTES:

1. 24X48 LAMINAR FLOW DIFFUSER, 250 CFM EACH. TYPICAL OF 6. SEE AIR DISTRIBUTION SCHEDULE ON SHEET M0.01.
2. 12X18 LOW RETURN IN WALL. MOUNT BOTTOM OF GRILLE AT 8" AFF. BALANCE TO 500 CFM EACH. TYPICAL OF 2. SEE AIR DISTRIBUTION SCHEDULE ON SHEET M0.01.
3. 14X10 DUCT TO DROP DOWN IN WALL TO LOW RETURN GRILLE.
4. 18X12 SUPPLY AND 14X10 RETURN DUCT UP EXTERIOR WALL. ENTER BUILDING ABOVE CEILING HEIGHT. COORDINATE WITH ARCHITECTURAL ELEVATIONS.

WALL LEGEND

GYP. BD.	WALL CONSTRUCTION TYP.
	EXISTING PARTITION
SB	EXISTING SMOKE BARRIER
1HR	EXISTING ONE HOUR FIRE BARRIER
	UNRATED PARTITION TO ABOVE CLG.
	UNRATED PARTITION TO DECK
1HR	1 HOUR FIRE BARRIER

HVAC
FLOOR PLAN

0 2 4 8 16

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DAVIS STOKES COLLABORATIVE P.C.
DSC ARCHITECTS
7121 CROSSROADS BLVD
BRENTWOOD, TN 37027
TEL (615) 726-0010
MAIL dscinfo@dsccol.com
WEB www.dsccol.com

REVISIONS

NO.	DATE	DESCRIPTION
1	11/05/21	REVISION #1
2	02/22/22	CCD#1 REVISION#2
3	12/09/22	CCD#2 REVISION#3

HVAC
FLOOR PLAN

M1.01

ISSUE DATE: 10-11-21
JOB NUMBER: 19071

ENTECH ENGINEERING INC.
5301 VIRGINIA WAY
BRENTWOOD, TN 37027
v. 615.373.2640
email@entechtn.com
SUITE 140
f. 615.373.4837
entechtn.com

ROBERT ALLEN ALBRITTON
REGISTERED
ENGINEER
STATE OF TENNESSEE

$FILE$
$DATE$
$TIME$

$SCALE$
$USER$



GENERAL NOTES:

A. WIRING METHODS TO COMPLY WITH NEC. 517.13 & 517.31.

B. ALL RECEPTACLES TO BE TAMPER PROOF HOSPITAL GRADE.

C. REFERENCE VENDOR DRAWINGS FOR ADDITIONAL REQUIRED WORK.

D. ALL ISOLATION PANEL BRANCH CONDUCTORS SHALL BE TYPE XHHW & INSTALLED IN ACCORDANCE WITH NEC. 517.160

PLAN NOTES:

1. CONNECT TO EXISTING RECEPTACLE CIRCUIT.
2. POWER CONNECTION FOR O.R. LIGHT.
3. POWER CONNECTION FOR MEDICAL GAS MANIFOLD.
4. RE-CIRCUIT EXISTING FIRE ALARM PANEL TO CIRCUIT LS-3.
5. RE-CIRCUIT EXISTING MEDICAL GAS MANIFOLD TO CIRCUIT LS-7.
6. RE-CIRCUIT EXISTING VACUUM PUMP TO CIRCUIT EO-3/5/7. RE-CIRCUIT EXISTING VACUUM PUMP CONTROLS TO CIRCUIT EO-9.
7. RE-CIRCUIT EXISTING NURSE CALL TO CIRCUIT CR-7.
8. RE-CIRCUIT EXISTING MEDICAL GAS ALARM PANEL TO CIRCUIT LS-9.
9. SURGICAL LIGHT CONTROLLER. (FBO)
10. CLOCK TIMER CONTROL. (FBO)
11. PRESSURE MONITORS.
12. FED FROM CU-1-2 USING FEEDER 'A2'.
13. FEED TO AC-1-2 USING FEEDER 'A2'.

WALL LEGEND

GYP. BD.	WALL CONSTRUCTION TYP.
	EXISTING PARTITION
SB	EXISTING SMOKE BARRIER
1	EXISTING ONE HOUR FIRE BARRIER
	UNRATED PARTITION TO ABOVE CLG.
	UNRATED PARTITION TO DECK
1	1 HOUR FIRE BARRIER

0 2 4 8 16

POWER
FLOOR PLAN

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CROSSROADS ASC
BRENTWOOD, TENNESSEE

DAVIS STOKES COLLABORATIVE P.C.
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REVISIONS

NO.	DATE	DESCRIPTION
1	11/05/21	REVISION #1
2	02/22/22	CCD#1 REVISION#2
3	12/09/22	CCD#2 REVISION#3

POWER
FLOOR PLAN

E2.01

ISSUE DATE:	JOB NUMBER
10-11-21	19071

Consent Agenda 3.

BRENTWOOD PLANNING COMMISSION
Meeting Date: 01/03/2023
Current Zoning: C-2 - COMMERCIAL RETAIL

Information

Subject

BPC2212-002 Minor Site Plan Alteration - Crema Brentwood, Brentwood Place Shopping Center, 330 Franklin Road Suite 901 D and 904 D, Zoning C-2 - *Applicant: Mr. Evan Brooks, Powell, LLC, 904 Main Street, Suite A1, Nashville, TN 37206*

General Information

Powell, LLC requests approval of a tenant build out for a coffee shop in the Brentwood Place Shopping Center. The coffee shop will include a commercial kitchen, restrooms, dining room, and a coffee bar. A change to the exterior facade is proposed to introduce a recessed patio. The existing storefront facade for 901D will be removed and the opening size will remain the same in proportion to the adjacent tenants. The existing awning will remain. A new stem wall and storefront system to match the existing will be built recessed from the facade to allow for a covered patio.

Conditions of Approval

Staff recommends that the following condition be attached to the approval of the request.

1. A site plan shall be vested for a period of three years from the date of the original approval.

Standard Requirements

Staff recommends that the following **13** conditions be attached to the approval of the request.

1. Add the following note to the site plan:

   This site plan is subject to a three-year vesting period, during which the development standards in effect on the date of approval will remain the standards applicable to this plan. If construction is not completed during the first three years, the original site plan is considered a preliminary site plan and the applicant must obtain approval of a final site plan. Development of the property shown on this plan may be subject to standards other than those that were applicable during the vesting period. The Initial vesting period for this plan expires on **January 3, 2026**, unless extended by the City of Brentwood. Persons relying on this plan after said date should contact the City of Brentwood to determine if development may continue as depicted on the plan.

2. When the construction authorized pursuant to a site plan is not completed within three years from the date of initial approval, but the applicant desires to complete the project proposed for the site, the plan as initially approved for the project or as amended shall be considered

a preliminary site plan. If the applicant secures all necessary permits, commences site preparation and obtains approval of a final site plan within the three-year vesting period following approval of the preliminary site plan, then the vesting period shall be extended an additional two years beyond the expiration of the initial three-year vesting period. During the two-year extension, the applicant must commence construction and maintain any necessary permits to remain vested.

3. All signs must comply with the Brentwood Sign Ordinance. A comprehensive sign package including all signs (temporary or permanent, all or ground) with dimensions shall be submitted to the Planning Department for a compliance review. Please submit a comprehensive sign package to Allison Roberts at allison.roberts@brentwoodtn.gov.

4. If necessary permits are maintained and construction, as defined by Section 78-43, has commenced by the end of the two-year extension, then the vesting period shall remain in effect until the Planning and Codes Department has certified final completion of the project, provided the total vesting period shall not exceed ten years from the date of approval of the preliminary site plan.

5. If the construction authorized pursuant to a site plan is completed within three years from the date of approval, the site plan shall then be considered the final site plan for the project.

6. The property owner is responsible for all development fees including water and sewer service and tap fees, building permit fees and Public Works Project Fees. The required fees shall be used for future infrastructure related improvements required by the proposed development.

7. Ground and roof level electrical transformers, heat and air conditioning equipment and similar facilities shall be screened from public view per the requirements of Section 78-206 (l) of the zoning ordinance.

8. Unenclosed guarded service equipment on the exterior of building in commercial and service institution districts shall be limited to mandatory disconnects and metering equipment. All other service equipment shall be placed in an enclosed area of a structure.

9. Add the following note to the plans that are to be submitted for building permit review: "This document certifies that the building materials specified in the Planning Commission approval of this project (BPC2212-002) are likewise provided for in the plans submitted. Any deviation from the approved building materials will negate any staff approval of said plans. Proposed changes to project specifications will be submitted to the Planning Commission for further consideration.

10. Complete building plans shall be submitted to the Planning and Codes Department for review, approval and issuance of the required permits before any work is begun. Additionally, all required electrical permits, issued by the State of Tennessee must be received before any work is begun.

11. Development of this project shall comply with all applicable codes and ordinances of the City of Brentwood.

12. Deviations from the approved plan in the development of a project or the failure to satisfy any standard requirements or special conditions of approval imposed by the planning commission will be considered a violation of the provisions of the Zoning Ordinance, which shall be subject to punishment as provided in Section 1-9 of the Brentwood Municipal Code. The City may also require the applicant to appear before the Planning Commission to address any deficiencies or unapproved modifications. The project may also be subject to delays in issuance of permits, certificates of occupancy, recordation of plats or other project approvals.

13. Approval of the proposed plan shall be limited to the illustrations and plans presented to the Planning Commission for review and approval on **January 3, 2023**. Any changes to Planning Commission approved plans and specifications will require staff review and re-approval by the Planning Commission.

Staff Recommendation

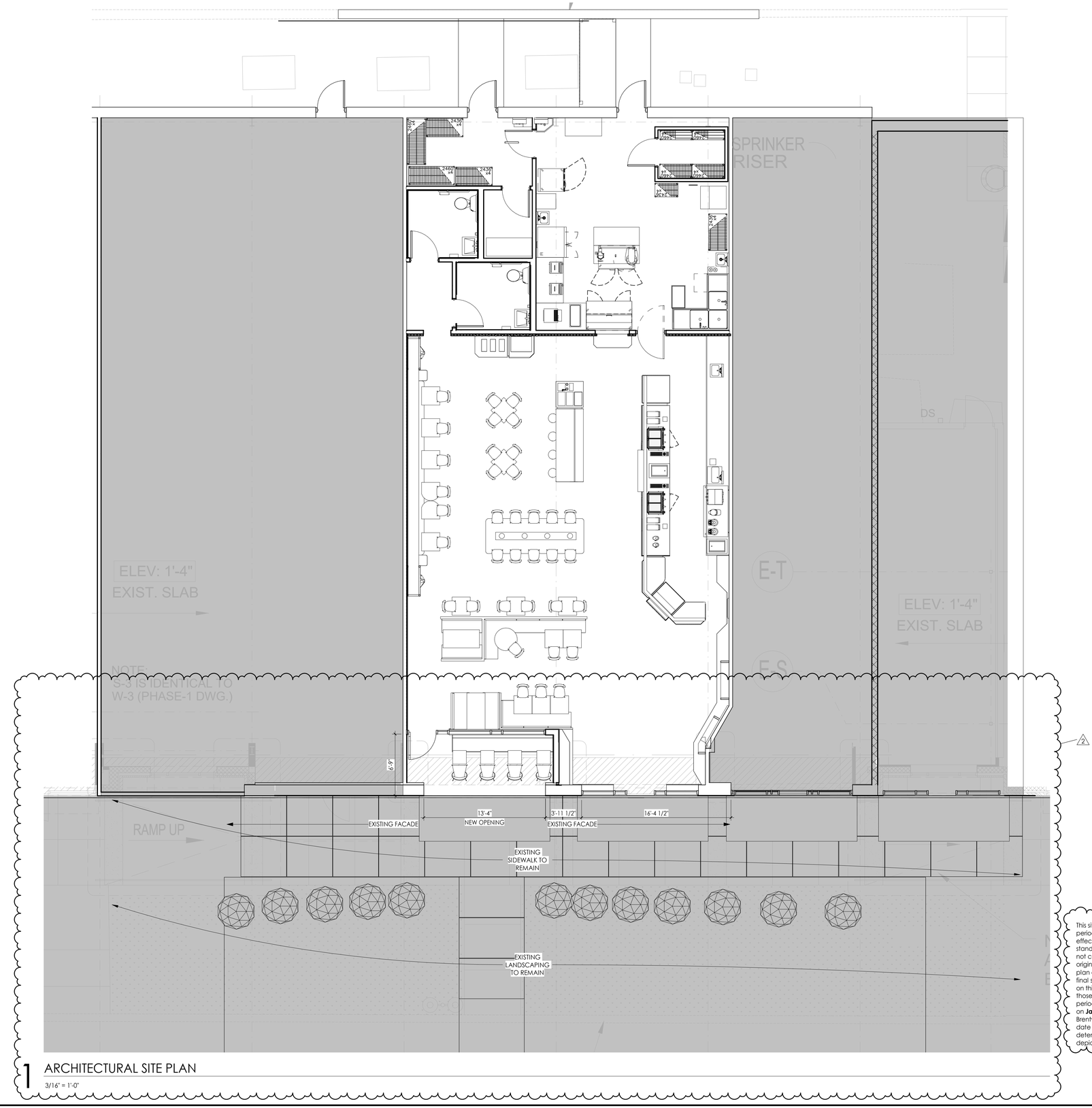
Staff requests that the Planning Commission vote to approve the proposed minor site plan alteration, subject to the requirements of the staff report.

Attachments

Proposed Site Plan

Proposed Rendering

Brentwood Place Shopping Center - Parking



1 ARCHITECTURAL SITE PLAN

3/16" = 1'-0"

This site plan is subject to a three year vesting period, during which the development standards in effect on the date of approval will remain the standards applicable to this plan. If construction is not completed during the first three years, the original site plan is considered a preliminary site plan and the applicant must obtain approval of a final site plan. Development of the property shown on this plan may be subject to standards other than those that were applicable during the vesting period. The Initial vesting period for this plan expires on **January 3, 2026**, unless extended by the City of Brentwood. Persons relying on this plan after said date should contact the City of Brentwood to determine if development may continue as depicted on the plan.

POWELL

CREMA BRENTWOOD

BRENTWOOD PLACE SHOPPING CENTER, 330 FRANKLIN RD.
SUITE 901D AND 904D
BRENTWOOD, TN, 37027
CONSTRUCTION DOCUMENTS

REVISIONS

2	Revision 2	Date 2



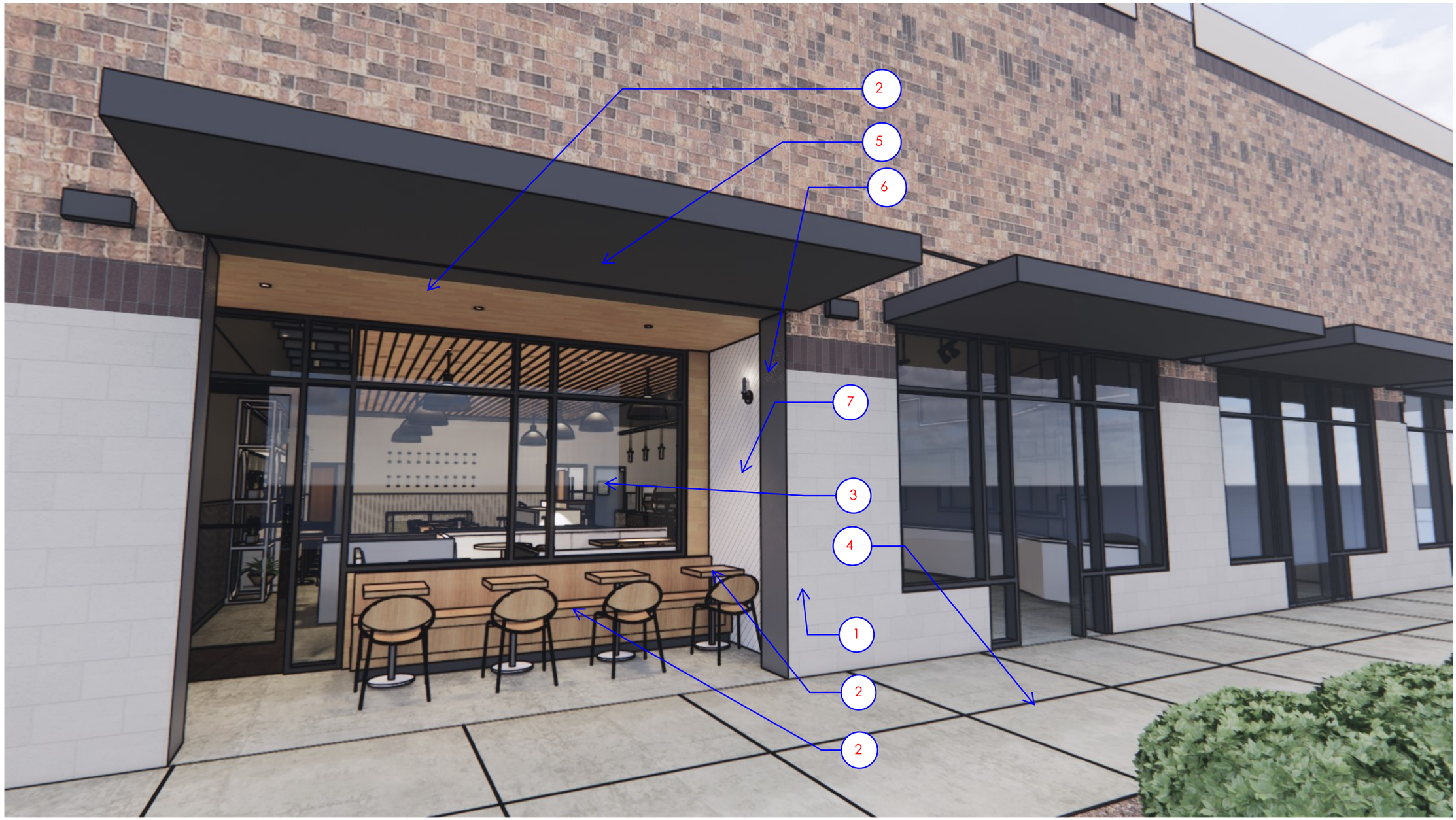
PROJECT #:	22097
ISSUED:	11.18.22
DRAWN BY:	HGENSAW

ARCHITECTURAL SITEPLAN

A100

12/19/2022 9:17:29 PM
BIM 360://22097 - Crema/22097-CremaBrentwood-SD.rvt

© POWELL ARCHITECTURE & BUILDING STUDIO 2019

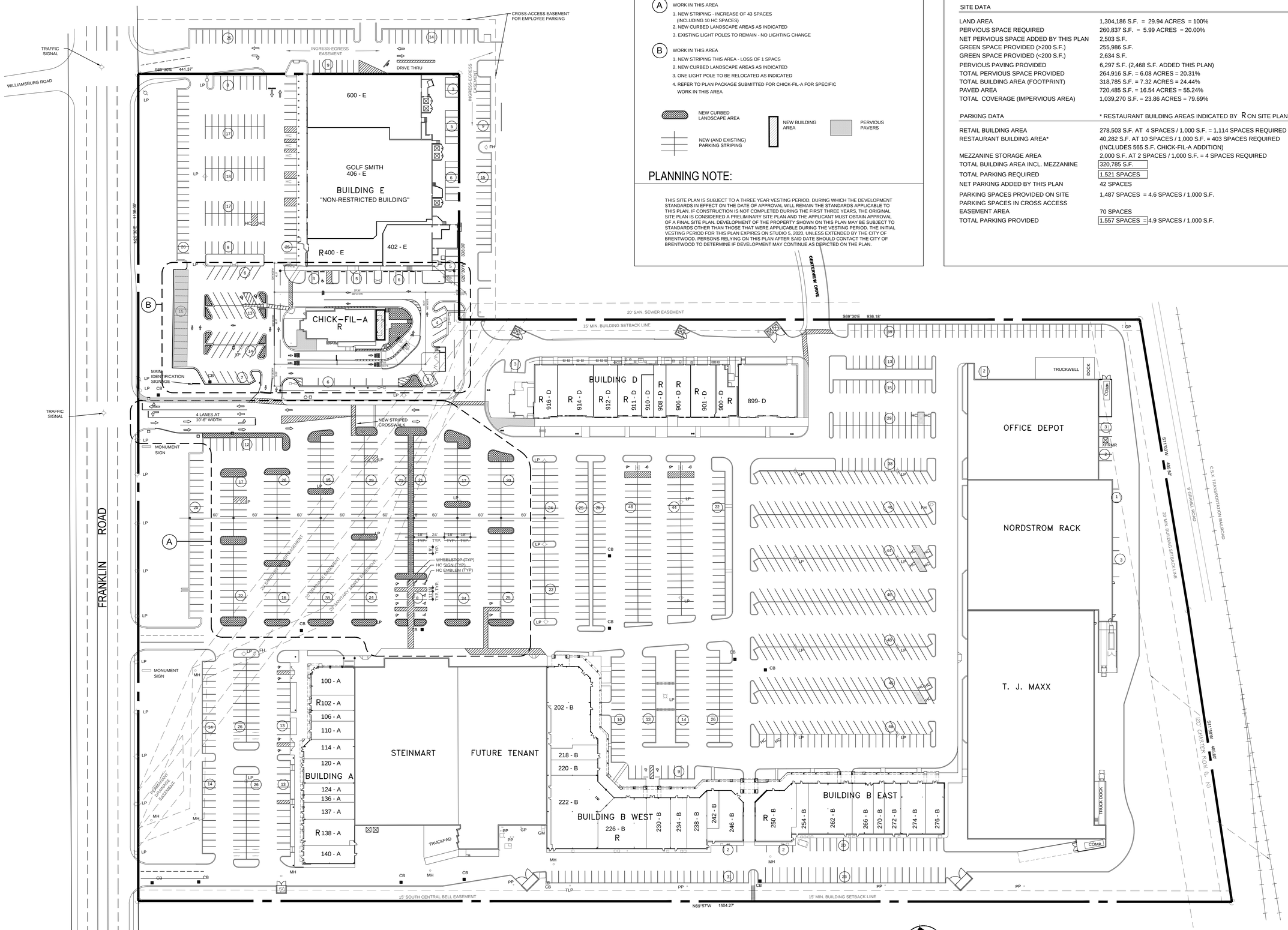


1. EXSITING MASONRY WALL. NO CHANGE
2. WOOD TABLES, BANQUETTE, AND CEILING TO BE NORTH ARMERICAN WHITE OAK W/ CLEAR FINISH
3. GLASS STOREFRONT TO MATCH EXISITNG STOREFRONT
4. EXISITING SIDEWALK- NO CHANGE
5. EXISITNG AWNING- NO CHANGE
6. METAL TRIM AROUND OPENING TO MATCH AWNING COLOR.
7. COMPLIMENTARY TILE TO BE ON THE SIDE WALLS.

CREMA BRENTWOOD
BRENTWOOD PLACE SUITE 901D, 904D
BRENTWOOD, TN

POWELL

POWELL 2020



NEW CONSTRUCTION NOTES:

A
WORK IN THIS AREA
1. NEW STRIPING - INCREASE OF 43 SPACES (INCLUDING 10 HC SPACES)
2. NEW CURBED LANDSCAPE AREAS AS INDICATED
3. EXISTING LIGHT POLES TO REMAIN - NO LIGHTING CHANGE

B
WORK IN THIS AREA
1. NEW STRIPING THIS AREA - LOSS OF 1 SPACS
2. NEW CURBED LANDSCAPE AREAS AS INDICATED
3. ONE LIGHT POLE TO BE RELOCATED AS INDICATED
4. REFER TO PLAN PACKAGE SUBMITTED FOR CHICK-FIL-A FOR SPECIFIC WORK IN THIS AREA

NEW CURBED LANDSCAPE AREA
NEW BUILDING AREA
PERVIOUS PAVERS
NEW (AND EXISTING) PARKING STRIPING

PLANNING NOTE:

THIS SITE PLAN IS SUBJECT TO A THREE YEAR VESTING PERIOD, DURING WHICH THE DEVELOPMENT STANDARDS IN EFFECT ON THE DATE OF APPROVAL WILL REMAIN THE STANDARDS APPLICABLE TO THIS PLAN. IF CONSTRUCTION IS NOT COMPLETED DURING THE FIRST THREE YEARS, THE ORIGINAL SITE PLAN IS CONSIDERED A PRELIMINARY SITE PLAN AND THE APPLICANT MUST OBTAIN APPROVAL OF A FINAL SITE PLAN. DEVELOPMENT OF THE PROPERTY SHOWN ON THIS PLAN MAY BE SUBJECT TO STANDARDS OTHER THAN THOSE THAT WERE APPLICABLE DURING THE VESTING PERIOD. THE INITIAL VESTING PERIOD FOR THIS PLAN EXPIRES ON STUDIO 5, 2020, UNLESS EXTENDED BY THE CITY OF BRENTWOOD. PERSONS RELYING ON THIS PLAN AFTER SAID DATE SHOULD CONTACT THE CITY OF BRENTWOOD TO DETERMINE IF DEVELOPMENT MAY CONTINUE AS DEPICTED ON THE PLAN.

PROPOSED CONDITIONS

SITE DATA

LAND AREA	1,304,186 S.F. = 29.94 ACRES = 100%
PERVIOUS SPACE REQUIRED	260,837 S.F. = 5.99 ACRES = 20.00%
NET PERVIOUS SPACE ADDED BY THIS PLAN	2,503 S.F.
GREEN SPACE PROVIDED (>200 S.F.)	255,986 S.F.
GREEN SPACE PROVIDED (<200 S.F.)	2,634 S.F.
PERVIOUS PAVING PROVIDED	6,297 S.F. (2,468 S.F. ADDED THIS PLAN)
TOTAL PERVIOUS SPACE PROVIDED	264,916 S.F. = 6.08 ACRES = 20.31%
TOTAL BUILDING AREA (FOOTPRINT)	318,785 S.F. = 7.32 ACRES = 24.44%
PAVED AREA	720,485 S.F. = 16.54 ACRES = 55.24%
TOTAL COVERAGE (IMPERVIOUS AREA)	1,039,270 S.F. = 23.86 ACRES = 79.69%

PARKING DATA — * RESTAURANT BUILDING AREAS INDICATED BY R ON SITE PLAN

RETAIL BUILDING AREA	278,503 S.F. AT 4 SPACES / 1,000 S.F. = 1,114 SPACES REQUIRED
RESTAURANT BUILDING AREA*	40,282 S.F. AT 10 SPACES / 1,000 S.F. = 403 SPACES REQUIRED (INCLUDES 565 S.F. CHICK-FIL-A ADDITION)
MEZZANINE STORAGE AREA	2,000 S.F. AT 2 SPACES / 1,000 S.F. = 4 SPACES REQUIRED
TOTAL BUILDING AREA INCL. MEZZANINE	320,785 S.F.
TOTAL PARKING REQUIRED	1,521 SPACES
NET PARKING ADDED BY THIS PLAN	42 SPACES
PARKING SPACES PROVIDED ON SITE	1,487 SPACES = 4.6 SPACES / 1,000 S.F.
PARKING SPACES IN CROSS ACCESS EASEMENT AREA	70 SPACES
TOTAL PARKING PROVIDED	1,557 SPACES = 4.9 SPACES / 1,000 S.F.

Proposed Site Plan

Scale: 1"=50'

0 25 50 100 200

H. Michael Hindman Architects, P.C.
1607 Westgate Circle - Suite 100
Brentwood, Tennessee 37027
615.370.3252
www.hmharchitects.com

SITE MODIFICATIONS TO

Brentwood Place Shopping Center

BRENTWOOD, TENNESSEE

BAKER STOREY McDONALD PROPERTIES
3001 ARMORY DR.
SUITE 250
NASHVILLE, TENNESSEE
37204
P: (615) 373-9511
F: (615) 373-9541

HENRY M. HINDMAN REGISTERED ARCHITECT NO. 01315 STATE OF TENNESSEE 7-3-17

Revisions

HMH Job Number 17016

Drawn By HMH

Date 06.29.17

Drawing PROP. SITE PLAN

SP1.2

Wed. 23. Aug 2017 - 11:16 Z:\HMH Project Files\2017\17016 BRENTWOOD PLACE SITE CHANGES\07 - Planning Commission\RESUBMITTAL 8-17\17016 SP1.2 8.23-17.MODEL

Consent Agenda 4.

BRENTWOOD PLANNING COMMISSION

Meeting Date: 01/03/2023

Current Zoning: OSRD - OPEN SPACE RESIDENTIAL DEVELOPMENT

Information

Subject

BPC2212-003 Revised Preliminary Plan - Brentwood Country Club, Zoning OSRD - *Applicant: Mr. Chris Mabery, Ragan Smith Associates, 1500 Medical Center Parkway, Suite 2J, Murfreesboro, TN 37129*

General Information

Ragan Smith Associates requests approval of a revised preliminary plan that proposes a reduction in the golfer's easement area of Lot 131. The proposed revision reduces the golfer's easement by 3.6 feet or 346 square feet, which is 3 feet beyond the existing wood deck. At its September 6, 2022 meeting, the Planning Commission approved a 3-foot reduction or 287 square feet to accommodate a reconstructed deck. Upon further evaluation, the applicant realized that an additional reduction of 3.6 feet was needed to accommodate the proposed deck. The subdivision will still maintain of 16.90 acres of excess open space.

Conditions of Approval

Staff recommends that the following **1** conditions be attached to the approval of the request.

1. A preliminary site plan shall be vested for a period of three years from the date of the original approval.

Standard Requirements

Staff recommends that the following **12** conditions be attached to the approval of the request.

1. Add the following note to the preliminary plan:

   This site plan is subject to a three-year vesting period, during which the development standards in effect on the date of approval will remain the standards applicable to this plan. If construction is not completed during the first three years, the original site plan is considered a preliminary site plan and the applicant must obtain approval of a final site plan. Development of the property shown on this plan may be subject to standards other than those that were applicable during the vesting period. The Initial vesting period for this plan expires on **January 3, 2026**, unless extended by the City of Brentwood. Persons relying on this plan after said date should contact the City of Brentwood to determine if development may continue as depicted on the plan.

2. When the construction authorized pursuant to a site plan is not completed within three years from the date of initial approval, but the applicant desires to complete the project proposed

for the site, the plan as initially approved for the project or as amended shall be considered a preliminary site plan. If the applicant secures all necessary permits, commences site preparation and obtains approval of a final site plan within the three-year vesting period following approval of the preliminary site plan, then the vesting period shall be extended an additional two years beyond the expiration of the initial three-year vesting period. During the two-year extension, the applicant must commence construction and maintain any necessary permits to remain vested.

3. If necessary, permits are maintained and construction, as defined by Section 78-43, has commenced by the end of the two-year extension, then the vesting period shall remain in effect until the Planning and Codes Department has certified final completion of the project, provided the total vesting period shall not exceed ten years from the date of approval of the preliminary site plan.

4. If the construction authorized pursuant to a site plan is completed within three years from the date of approval, the site plan shall then be considered the final site plan for the project.

5. On all sheets of the plan show the location of existing and platted property lines, existing streets, buildings, watercourses, railroads, cemeteries, sewer lines, bridges, culverts, drain pipes, water mains, fire hydrants, street lights, tree masses, public utility easements.

6. Show the location of any sinkholes on the subject property as identified by a qualified geo-technical Engineer shall be located and appropriately labeled on the preliminary plan. The plan shall be configured to locate all sinkholes in permanent open space only and not within any buildable lots. Sinkholes in the permanent open space shall be protected from natural and/or man-made debris.

7. The property owner is responsible for all development fees including water and sewer service and tap fees, building permit fees and Public Works Project Fees. The required fees shall be used for future infrastructure related improvements required by the proposed development.

8. Applicable security for all required roadway, drainage, utilities, water, sewer, landscaping and amenity improvements in accordance with the requirements of Article Eight of the Brentwood Subdivision Regulations shall be provided before the final plat may be recorded.

9. A Maintenance Agreement and Storm Water System Long-Term Operation and Maintenance Plan for all storm water structures and facilities must be prepared, submitted and approved per Section 56-43 of the Brentwood Code.

10. Development of this project shall comply with all applicable codes and ordinances of the City of Brentwood.

11. Deviations from the approved plan in the development of a project or the failure to satisfy any standard requirements or special conditions of approval imposed by the planning commission will be considered a violation of the provisions of the Zoning Ordinance, which shall be subject to punishment as provided in Section 1-9 of the Brentwood

Municipal Code. The City may also require the applicant to appear before the Planning Commission to address any deficiencies or unapproved modifications. The project may also be subject to delays in issuance of permits, certificates of occupancy, recordation of plats or other project approvals.

12. Approval of the proposed plan shall be limited to the illustrations and plans presented to the Planning Commission for review and approval on **January 3, 2023**. Any changes to Planning Commission approved plans and specifications will require staff review and re-approval by the Planning Commission.

Staff Recommendation

Staff requests that the Planning Commission vote to approve the proposed revised preliminary plan and forward a recommendation of approval of the proposed corresponding revisions to the OSRD Development Plan to the Board of Commissioners, subject to the requirements of the staff report.

Attachments

Vicinity Map

Revised Preliminary Plan


Brentwood United Methodist Church
Chick-fil-A
AT&T Store
TJ Maxx & H
Granny White Pike
Little Harpeth River
SITE
Brentwood Country Club
Granny White Park
Brentwood Middle School
Brentwood High School
Murray Ln
Murray Ln
Murray Ln
U.S. Hwy 31
Little Harpeth River
Ironhorse



GENERAL NOTES AND SITE DATA (STANDARD OSRD)

1. SUBJECT PROPERTY CONSISTS OF:

PARCEL REFERENCES FOR RESIDENTIAL		
LOTS 1–15, 17–86, 88–139		
MAP	GROUP	PARCELS
11P	D	1.00, 2.00–87.00
12L	C	2.00–20.00, 21.01–57.00

PARCEL REFERENCES FOR GOLF COURSE OPEN SPACES AND AMENITY LOTS		
GOLF COURSE–OPEN SPACE AREA		
MAP	GROUP	PARCELS
11P	D	1.01

AMENITY LOTS 143 AND 144		
MAP	GROUP	PARCELS
12L	C	1.00 & 21.00

2. PROPERTY OWNERS: BRENTWOOD COUNTRY CLUB.
3. EXISTING ZONING: OSRD (OPEN SPACE RESIDENTIAL DEVELOPMENT).
4. GROSS SITE AREA: 180.17 ACRES.
5. BOUNDARY INFORMATION TAKEN FROM PLATS OF RECORD.
6. TOPOGRAPHIC INFORMATION TAKEN FROM CITY OF BRENTWOOD MAPPING.
7. NUMBER OF PROPOSED LOTS: 146.
8. PROPOSED DENSITY: 139/180.27 = 0.77 DU./ACRE.
9. MAXIMUM BUILDING COVERAGE OF PROPOSED LOTS: 25%.
10. EACH PROPOSED LOT SHALL PROVIDE A MINIMUM OF TWO OFF–STREET PARKING SPACES.
12. MINIMUM BUILDING SETBACKS:
    FRONT – 30'
    SIDE – 15'
    SIDE ABUTTING A STREET: 30'
    REAR – 20'
    ABUTTING PROJECT PERIMETER – 35'
    ABUTTING MEADOW LAKE SUBDIVISION – 75'
13. ALL ELECTRIC SERVICE FOR THE PROPOSED DEVELOPMENT SHALL BE UNDERGROUND. ALL PUBLIC UTILITIES SHALL BE SUBJECT TO THE APPROVAL OF THE APPLICABLE UTILITY COMPANIES.
14. LOTS DESIGNATED AS TRANSITIONAL SHALL REQUIRE DETAILED SITE AND GRADING PLANS REVIEW BY THE CITY ENGINEER PRIOR TO ISSUANCE OF A BUILDING PERMIT.
15. GOLF GREENS AND GOLF CART PATH LOCATIONS ARE APPROXIMATE AND SUBJECT TO REVISION.
16. THIS SITE PLAN IS SUBJECT TO A THREE–YEAR VESTING PERIOD, DURING WHICH THE DEVELOPMENT STANDARDS IN EFFECT ON THE DATE OF APPROVAL WILL REMAIN THE STANDARDS APPLICABLE TO THIS PLAN. IF CONSTRUCTION IS NOT COMPLETED DURING THE FIRST THREE YEARS, THE ORIGINAL SITE PLAN IS CONSIDERED A PRELIMINARY SITE PLAN AND THE APPLICANT MUST OBTAIN APPROVAL OF A FINAL SITE PLAN. DEVELOPMENT OF THE PROPERTY SHOWN ON THIS PLAN MAY BE SUBJECT TO STANDARDS OTHER THAN THOSE THAT WERE APPLICABLE DURING THE VESTING PERIOD. THE INITIAL VESTING PERIOD FOR THIS PLAN EXPIRES ON JANUARY 3, 20226, UNLESS EXTENDED BY THE CITY OF BRENTWOOD. PERSONS RELYING ON THIS PLAN AFTER SAID DATE SHOULD CONTACT THE CITY OF BRENTWOOD TO DETERMINE IF DEVELOPMENT MAY CONTINUE AS DEPICTED ON THE PLAN.

- **12/05/22 – THE PURPOSE OF THIS REVISION IS TO REVISE THE GOLFER'S EASEMENT AND REAR SETBACK LINE ON LOT 131.**

LOT AREA TABLE

LOT	SQ. FT. +/-	ACRES +/-
1	15405	0.35
2	14889	0.34
3	14943	0.34
4	14036	0.32
5	14101	0.32
6	14114	0.32
7	14010	0.32
8	14183	0.33
9	14558	0.33
10	14952	0.34
11	15003	0.34
12	14758	0.34
13	14608	0.34
14	14474	0.33
15	31083	0.71
17	15416	0.35
18	14014	0.32
19	14246	0.33
20	14181	0.33
21	14656	0.34
22	15068	0.35
23	14874	0.34
24	14363	0.33
25	14141	0.32
26	14583	0.33
27	14358	0.33
28	15095	0.35
29	14110	0.32
30	14151	0.32
31	14608	0.34
32	16149	0.37
33	16150	0.37
34	16148	0.37
35	14247	0.33
36	17141	0.39
37	17648	0.41
38	18648	0.43
39	16890	0.39
40	14141	0.32
41	14006	0.32
42	15867	0.36
43	20965	0.48
44	18237	0.42
45	14066	0.32
46	14198	0.33
47	14036	0.32
48	15105	0.35

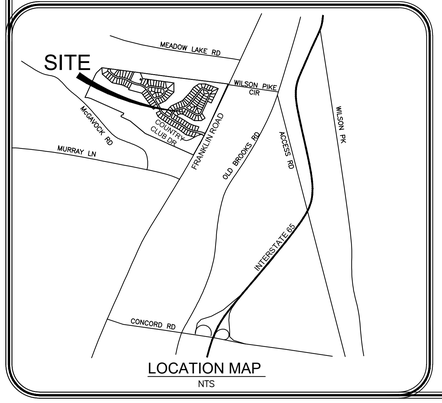
LOT	SQ. FT. +/-	ACRES +/-
49	19106	0.44
50	17930	0.41
51	17980	0.41
52	17633	0.40
53	17245	0.40
54	17446	0.40
55	18014	0.41
56	18583	0.43
57	15626	0.36
58	15505	0.36
59	16493	0.38
60	16231	0.37
61	15147	0.35
62	16079	0.37
63	15897	0.36
64	16288	0.37
65	14297	0.33
66	16917	0.39
67	14332	0.33
68	14055	0.32
69	14960	0.34
70	15072	0.35
71	16948	0.39
72	15069	0.35
73	14998	0.34
74	14310	0.33
75	14009	0.32
76	14007	0.32
77	14001	0.32
78	13996	0.32
79	14115	0.32
80	13963	0.32
81	13873	0.32
82	14501	0.33
83	17801	0.41
84	18574	0.43
85	19605	0.45
86	16858	0.39
88	18502	0.42
89	14033	0.32
90	13999	0.32
91	14992	0.34
92	14888	0.34
93	18814	0.43
94	17807	0.41
95	36335	0.83
96	34449	0.79

LOT	SQ. FT. +/-	ACRES +/-
97	18851	0.43
98	15070	0.35
99	18400	0.42
100	15000	0.34
101	18432	0.42
102	17833	0.41
103	21298	0.49
104	16020	0.37
105	19547	0.45
106	19441	0.45
107	14161	0.33
108	14818	0.34
109	14277	0.33
110	14101	0.32
111	15059	0.35
112	14337	0.33
113	14470	0.33
114	14165	0.33
115	14126	0.32
116	17789	0.41
117	16733	0.38
118	16150	0.37
119	16150	0.37
120	16150	0.37
121	16150	0.37
122	16150	0.37
123	15205	0.35
124	16442	0.38
125	18098	0.42
126	15398	0.35
127	15091	0.35
128	16577	0.38
129	17106	0.39
130	21155	0.49
131	19653	0.45
132	16949	0.39
133	16749	0.38
134	21744	0.50
135	30760	0.71
136	26643	0.61
137	24021	0.55
138	23786	0.55
139	28575	0.66
141	24162	0.55
142	23315	0.54

TOTAL NO. OF LOTS		
139	2334013	53.58

OPEN SPACE TABLE

OS LOT	SQ. FT. +/-	ACRES +/-
143	114137	2.62
144	110935	2.55
A	3239920	74.38
B	1596172	36.64
	5061164	116.19



LOCATION MAP
NTS

OVERALL OSRD Calculations	Acres
Total Site Area	180.27
Less Internal ROW Dedication	10.50
Total	169.77
Less Area 25% in slopes	1.90
Plus 25% of Slopes over 25%	0.48
Less Areas Floodways	35.79
Plus 25% of Areas in Floodways	8.95
Total Usable Land Area (AC)	141.50
Less Area in Lots > 1.0 Acre	0.00
Total Land Area Available	141.50
Total Land Area Required @ 1 DUPA (AC)	139.00
Land Area in Lots	53.58
Open Space Required	85.42
Plus Area Golfer's Easement	13.86
Total Open Space Required	99.28
Golf Course (Open Space)	111.02
Open Space – Clubhouse, Rec. Ctr.	5.17
Total Open Space Provided	116.19
EXCESS OPEN SPACE	16.90

The Golfer's Easement, as shown on the recorded plats is included as part of the required open space for the project.

LEGEND

G = GOLF COURSE AREA
OS = OPEN SPACE AREA
H = HISTORICAL AREA

SLOPE OVER 25%
GOLF COURSE
OPEN SPACE
FLOODWAY

LEGEND

CM(O)	CONCRETE MONUMENT (OLD)	Ø	UTILITY POLE
	FIRE HYDRANT		TELEPHONE RISER
	WATER VALVE		CABLE TV BOX
	WATER METER	—P—	OVERHEAD POWER LINE
	SIAMESE WATER CONNECTION	—SA—	SANITARY SEWER LINE
	POST INDICATOR VALVE	—G—	GAS LINE
	CATCH BASIN	—W—	WATER LINE
ST	STORM MANHOLE	–UGE–	UNDERGROUND ELECTRIC LINE
E	ELECTRIC MANHOLE	–UGT–	UNDERGROUND TELEPHONE LINE
	SANITARY SEWER MANHOLE (UNLESS OTHERWISE NOTED)	–X–X–	FENCE
	LIGHT STANDARD	TC	TOP OF CASTING
	YARD LIGHT	INV	INVERT
E	ELECTRIC BOX	ELEV	ELEVATION
	BOLLARD	FFE	FINISHED FLOOR ELEVATION
	SIGN	SPOT	SPOT ELEVATION
	GAS VALVE	RCP	REINFORCED CONCRETE PIPE
	ASPHALT SURFACE	R.O.D.C.T.	REGISTER'S OFFICE FOR DAVIDSON COUNTY, TN

UTILITY PROVIDERS:

ELECTRICITY:
NASHVILLE ELECTRIC SERVICE
(615) 736–6900

WATER AND SEWER:
MR. CHRIS MILTON
CITY OF BRENTWOOD
(615) 371–2241

NATURAL GAS:
ATMOS ENERGY CORPORATION
(615) 794–2596

TELEPHONE:
AT&T
(615) 269–6563

0 200 400 600

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SUITE 500
NASHVILLE, TN 37203
(615) 244-8591
www.ragansmith.com

CHRISTOPHER J. MABRY
REGISTERED LANDSCAPE ARCHITECT
STATE OF TENNESSEE
No. 343
12/15/2022
TENNESSEE NO. 343

OSRD PLAN
FOR
BRENTWOOD COUNTRY CLUB

12/15/2022 REVISED PER CITY COMMENTS
12/05/2022 REVISED LOT 131 ESMT & SETBACK
08/16/2022 REVISED PER CITY COMMENTS
05/01/2020 CLUBHOUSE BUILDING ADDITIONS & SPLASH PAD ADDITION
07/21/2020 REVISED PER CITY COMMENTS
07/02/2020 REVISED LOT 131 REAR SETBACK
05/01/2020 ADDED SPLASH PAD TO AMENITY
11/04/2019 REVISED LOT 131 REAR SETBACK
10/22/2019 REVISED PER CITY COMMENTS
10/07/2019 REVISED LOTS 78 & 79 SETBACK
08/14/2018 REVISED PER CITY COMMENTS
07/17/2018 REVISED PER CITY COMMENTS
07/02/2018 REVISED PER CITY COMMENTS
05/02/2018 REVISED PER CITY COMMENTS
06/05/2017 REVISED PER CITY COMMENTS
05/17/2016 REVISED PER CITY COMMENTS
03/29/2016 REVISED PER CITY COMMENTS
03/22/2016 REVISED PER CITY COMMENTS
02/12/2016 REVISED PER CITY COMMENTS
02/01/2016 REVISED PER LOT 47 ESMT REVISION
04/24/2014 REVISED PER CITY COMMENTS
04/22/2014 COUNTRY CLUB LAYOUT ADJUSTMENTS
11/19/2013 OSRD PER CITY COMMENTS

REVISIONS

DATE: November 4, 2013
DESIGNED: K.Guenther
DRAWN: D.Kirkham
SCALE: 1"=200'
JOB NO. 13-060
WK. ORDER 9781

OSRD PLAN

1

G:\2013\13-060\CAD\PLAN\13060OSRD.DWG
XREF: XBASE-ALTA.DWG, XBASE-OSRD.DWG
LAST UPDATED BY CMABRY ON 12/15/2022 11:13 AM

Consent Agenda 5.

BRENTWOOD PLANNING COMMISSION

Meeting Date: 01/03/2023

Current Zoning: OSRD - OPEN SPACE RESIDENTIAL DEVELOPMENT

Information

Subject

BPC2212-004 Revised Final Plat - Brentwood Country Club, Lot 131, 5215 Country Club Drive, Zoning OSRD - *Applicant: Mr. Chris Mabery, RaganSmith Associates, 1500 Medical Center Parkway, Suite 2J, Murfreesboro, TN 37129*

General Information

RaganSmith Associates requests approval of a revised final plat for Lot 131 that reduces the golfer's easement by approximately 3.6 feet. This reduction abandons approximately 346 square feet of the golfer's easement located behind the existing house. The proposal also adjusts the rear building setback line to correspond with the adjustment in the Golfer's easement. This will allow for the construction of an extension beyond the existing deck. The subdivision will still maintain 16.90 acres of excess open space.

Conditions of Approval

Staff recommends that the following **1** conditions be attached to the approval of the request.

1. Approval of a final plat by the Planning Commission shall become effective upon the date of the last signature required on the plat for recording. The initial vesting period shall be for a period of five years after approval.

Standard Requirements

Staff recommends that the following **6** conditions be attached to the approval of the request.

1. Add the following note to all pages of the final plat:

   This final plat is subject to a vesting period, during which the development standards in effect on the date of approval will remain the standards applicable to this plan. Upon expiration of the vesting period, development of the property shown on this plat may be subject to standards other than those that were applicable during the vesting period. The vesting period for this plat expires on_____, unless extended by the City of Brentwood. Persons relying on this plat after said date should contact the City of Brentwood to determine if development may continue as depicted on the plan.

   (Planning and Codes Department staff will insert the expiration year for the plat at the time the plat is ready for recording and may also make changes to the wording of the above note

as necessary to carry out the intent of Standard Requirements 1, 2 and 3 below.)

2. Provide the Planning staff with a digital copy of the proposed subdivision. This request is consistent with Article 2.3 of the Brentwood Subdivision Regulations. The file should be in AutoCAD .DWG or .DXF compatible format. The file shall use the Tennessee State Plane coordinate system, FIPS Zone 4100, NAD 83 datum. The digital copies must be received before the plat may be recorded.

3. The property owner is responsible for all development fees including water and sewer service and tap fees, building permit fees and Public Works Project Fees. The required fees shall be used for future infrastructure related improvements required by the proposed development.

4. Development of this project shall comply with all applicable codes and ordinances of the City of Brentwood.

5. Deviations from the approved plat in the development of the project or the failure to satisfy any standard requirements or special conditions of approval imposed by the planning commission will be considered a violation of the provisions of the Zoning Ordinance, which shall be subject to punishment as provided in Section 1-9 of the Brentwood Municipal Code. The City may also require the applicant to appear before the Planning Commission to address any deficiencies or unapproved modifications. The project may also be subject to delays in issuance of permits, certificates of occupancy, recordation of plats or other project approvals.

6. Approval of the proposed plat shall be limited to the illustrations and plans presented to the Planning Commission for review and approval on **January 3, 2023**. Any changes to Planning Commission approved plans and specifications will require staff review and re-approval by the Planning Commission.

Staff Recommendation

Staff requests that the Planning Commission vote to approve the proposed revised final plat subject to the requirements of the staff report.

Attachments

Vicinity Map
Revised Final Plat


Brentwood United Methodist Church
Chick-fil-A
AT&T Store
TJ Maxx & H
Granny White Pike
Little Harpeth River
SITE
Brentwood Country Club
Granny White Park
Brentwood Middle School
Brentwood High School
Murray Ln
Murray Ln
Murray Ln
U.S. Hwy 31
Little Harpeth River
Ironhorse

GENERAL NOTES

1. THE PURPOSE OF RECORDING THIS PLAT IS TO REVISE THE GOLFER'S EASEMENT AND REAR SETBACK LINE ON LOT 131.

2. BEARINGS SHOWN HEREON ARE BASED ON THE TENNESSEE COORDINATE SYSTEM OF 1983. GPS EQUIPMENT WAS USED TO DETERMINE THE POSITION OF TWO (2) CONTROL POINTS FOR THE SURVEYED PROPERTY TO ESTABLISH AS BASIS FOR BEARING FOR THE SURVEY. TYPE OF GPS EQUIPMENT USED: SPECTRA PRECISION SP80. TYPE OF GPS SURVEY: TDOT NETWORK ADJUSTED REAL TIME KINEMATIC. THE AVERAGE POSITIONAL QUALITY IS 0.05'.

3. THIS SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. ABOVE GRADE AND UNDERGROUND UTILITIES SHOWN WERE TAKEN FROM VISIBLE APPURTENANCES, PUBLIC RECORDS, AND/OR MAPS PREPARED BY OTHERS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THEREFORE, RELIANCE UPON THE TYPE, SIZE AND LOCATION OF UTILITIES SHOWN SHOULD BE DONE SO WITH THIS CIRCUMSTANCE CONSIDERED. DETAILED VERIFICATION OF EXISTENCE, LOCATION AND DEPTH SHOULD ALSO BE MADE PRIOR TO ANY DECISION RELATIVE THERETO IS MADE. AVAILABILITY AND COST OF SERVICE SHOULD BE CONFIRMED WITH THE APPROPRIATE UTILITY COMPANY. IN TENNESSEE, IT IS A REQUIREMENT, PER "THE UNDERGROUND UTILITY DAMAGE PREVENTION ACT", THAT ANYONE WHO ENGAGES IN EXCAVATION MUST NOTIFY ALL KNOWN UNDERGROUND UTILITY OWNERS NO LESS THAN THREE (3) NOR MORE THAN TEN (10) WORKING DAYS PRIOR TO THE DATE OF THEIR INTENT TO EXCAVATE AND ALSO TO AVOID ANY POSSIBLE HAZARD OR CONFLICT. TENNESSEE ONE CALL, DIAL 811.

4. BY SCALED MAP LOCATION AND GRAPHIC PLOTTING ONLY, THIS PROPERTY LIES WITHIN FLOOD ZONES "AE" AND "X", AS DESIGNATED ON CURRENT FEDERAL EMERGENCY MANAGEMENT AGENCY MAP NO. 47187C0093G, WITH AN EFFECTIVE DATE OF DECEMBER 22, 2016, WHICH MAKES UP A PART OF THE NATIONAL FLOOD INSURANCE ADMINISTRATION REPORT; COMMUNITY NO. 470205, PANEL NO. 93, SUFFIX G, WHICH IS THE CURRENT FLOOD INSURANCE RATE MAP FOR THE COMMUNITY IN WHICH SAID PREMISES IS SITUATED. SAID MAP DEFINES ZONE "AE" UNDER "SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD" AS BASE FLOOD ELEVATIONS DETERMINED. SAID MAP DEFINES ZONE "X" UNDER "OTHER AREAS" AS AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

5. EXISTING ZONING: OSRD (OPEN SPACE RESIDENTIAL DEVELOPMENT).

6. MINIMUM BUILDING SETBACKS PER BRENTWOOD COUNTRY CLUB FINAL PLAT OF RECORD IN PLAT BOOK 11, PAGE 44 ARE AS FOLLOWS:
   FRONT – 30'
   SIDE – 15'
   REAR – AS SHOWN

7. ALL ELECTRIC SERVICE FOR THE PROPOSED DEVELOPMENT SHALL BE UNDERGROUND. ALL PUBLIC UTILITIES SHALL BE SUBJECT TO THE APPROVAL OF THE APPLICABLE UTILITY COMPANIES.

8. I HEREBY STATE THAT THIS SURVEY WAS DONE IN COMPLIANCE WITH THE CURRENT TENNESSEE MINIMUM STANDARDS OF PRACTICE AND THIS IS A CATEGORY I SURVEY AND THE RATIO OF PRECISION OF THE UNADJUSTED SURVEY IS < 1:15,000 AS SHOWN HEREON.

BY: _____ DATE: 12/05/2022
CHRISTOPHER J. MABERY, R.L.S. NO. 2483

9. THE OPEN SPACE IS THE SAME PROPERTY CONVEYED TO BRENTWOOD COUNTRY CLUB HOMEOWNER'S ASSOCIATION BY DEED OF RECORD IN BOOK 670, PAGE 193, R.O.W.C.T. AND LEASED TO BRENTWOOD COUNTRY CLUB BY DEED OF RECORD IN BOOK 670, PAGE 214, R.O.W.C.T.

10. THE GOLFERS EASEMENTS AND GOLF CART EASEMENTS ARE SUBJECT TO THE TERMS OF THE QUITCLAIM DEED OF RECORD IN BOOK 670, PAGE 193, R.O.W.C.T. AND WERE LEASED TO BRENTWOOD COUNTRY CLUB BY DEED OF RECORD IN BOOK 670, PAGE 214, R.O.W.C.T.

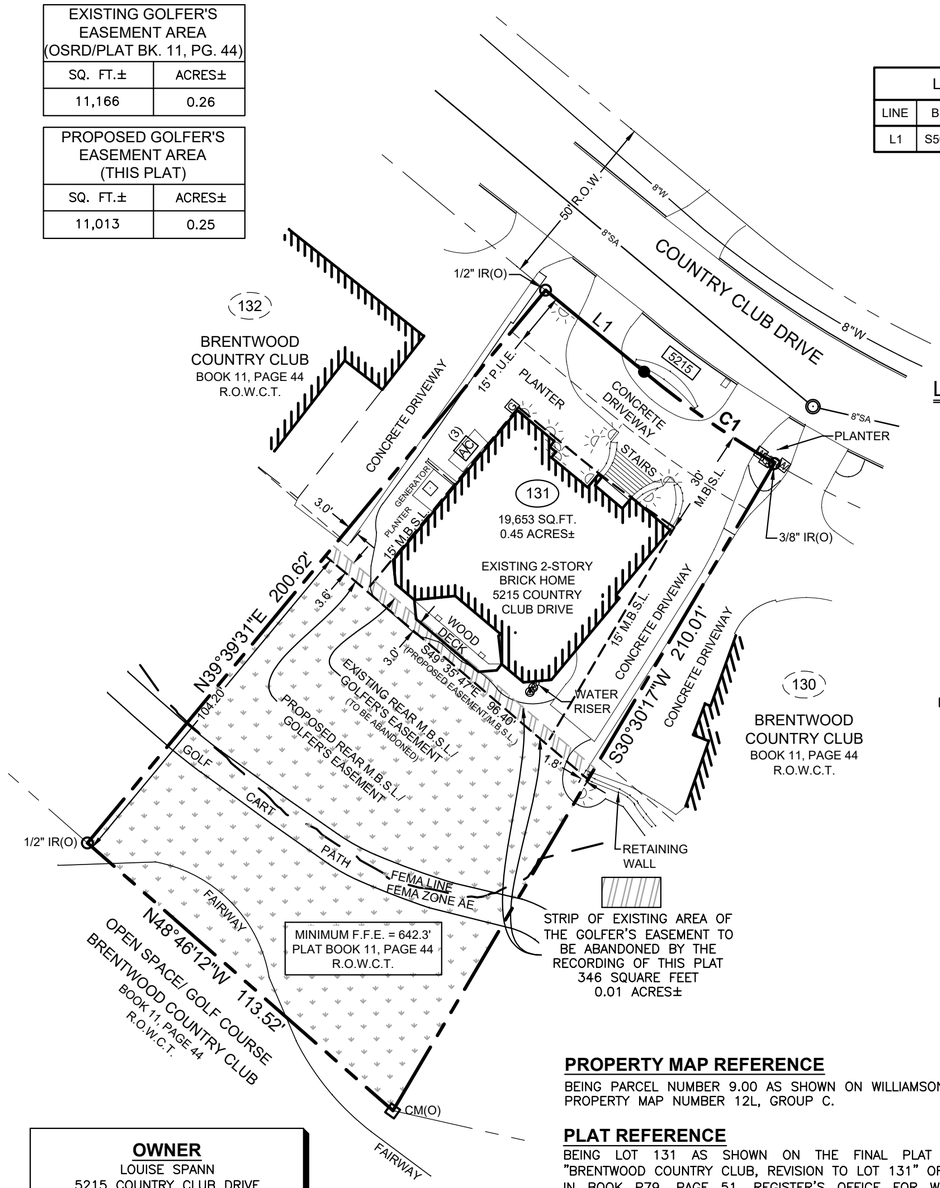
11. THIS PROPERTY IS SUBJECT TO THE DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS OF RECORD IN BOOK 670, PAGE, 149, R.O.W.C.T. BY–LAWS WERE AMENDED OF RECORD IN BOOK 1252, PAGE 104, BOOK 1579, PAGE 444, BOOK 2071, 241 AND BOOK 5731, PAGE 406, R.O.W.C.T.

12. THE RECORDING OF THIS PLAT VOIDS, VACATES AND SUPERSEDES THE RECORDING OF LOT 131 AS SHOWN ON THE FINAL PLAT ENTITLED "BRENTWOOD COUNTRY CLUB, REVISION TO LOT 131" OF RECORD IN PLAT BOOK P79, PAGE 51, REGISTER'S OFFICE FOR WILLIAMSON COUNTY, TENNESSEE.

13. THIS FINAL PLAT IS SUBJECT TO A VESTING PERIOD, DURING WHICH THE DEVELOPMENT STANDARDS IN EFFECT ON THE DATE OF APPROVAL WILL REMAIN THE STANDARDS APPLICABLE TO THIS PLAN. UPON EXPIRATION OF THE VESTING PERIOD, DEVELOPMENT OF THE PROPERTY SHOWN ON THIS PLAT MAY BE SUBJECT TO STANDARDS OTHER THAN THOSE THAT WERE APPLICABLE DURING THE VESTING PERIOD. THE VESTING PERIOD FOR THIS PLAT EXPIRES ON _____, UNLESS EXTENDED BY THE CITY OF BRENTWOOD. PERSONS RELYING ON THIS PLAT AFTER SAID DATE SHOULD CONTACT THE CITY OF BRENTWOOD TO DETERMINE IF DEVELOPMENT MAY CONTINUE AS DEPICTED ON THE PLAN.

EXISTING GOLFER'S EASEMENT AREA (OSRD/PLAT BK. 11, PG. 44)	
SQ. FT.±	ACRES±
11,166	0.26

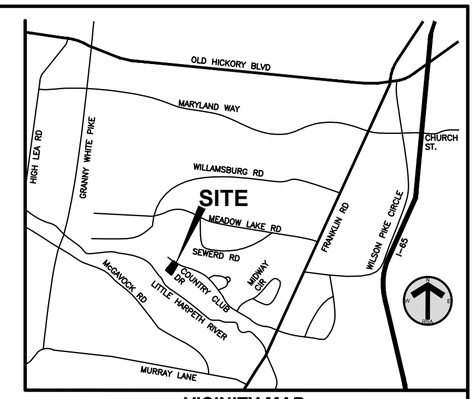
PROPOSED GOLFER'S EASEMENT AREA (THIS PLAT)	
SQ. FT.±	ACRES±
11,013	0.25



LINE TABLE		
LINE	BEARING	DISTANCE
L1	S50°20'29"E	35.73'

CURVE TABLE						
CURVE	RADIUS	LENGTH	DELTA	TANGENT	CHORD	CHORD BRG
C1	275.00'	44.53'	009°16'41"	22.31'	44.48'	S54°58'50"E

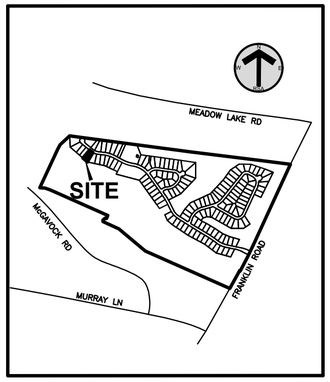
N
W E
RSA
(SEE NOTE 2)



VICINITY MAP
(NOT TO SCALE)

LEGEND

O IR(O)	IRON ROD (OLD)	T	TELEPHONE RISER
●	IRON ROD (NEW) (1/2" X 18" W/CAP STAMPED "RAGAN SMITH ASSOC")	C	CABLE TV BOX
□ CM(O)	CONCRETE MONUMENT (OLD)	G	GAS METER
W	WATER METER		SANITARY SEWER MANHOLE
	IRRIGATION CONTROL VALVE		YARD LIGHT
M.B.S.L.	MINIMUM BUILDING SETBACK LINE	—SA—	SANITARY SEWER LINE
F.F.E.	FINISH FLOOR ELEVATION	—W—	WATER LINE
P.U.E.	PUBLIC UTILITY EASEMENT	5215	STREET ADDRESS
R.O.W.C.T.	REGISTER'S OFFICE FOR WILLIAMSON COUNTY, TENNESSEE	A/C	AIR CONDITIONING UNIT
			GOLFER'S EASEMENT



KEY MAP
(NOT TO SCALE)

OVERALL OSRD CALCULATIONS

	ACRES
TOTAL SITE AREA	180.27
LESS INTERNAL ROW DEDICATION	10.50
TOTAL	169.77
LESS AREA 25% IN SLOPES	1.90
PLUS 25% OF SLOPES OVER 25%	0.48
LESS AREAS FLOODWAYS	35.79
PLUS 25% OF AREAS IN FLOODWAYS	8.95
TOTAL USABLE LAND AREA (AC)	141.50
LESS AREA IN LOTS > 1.0 ACRE	0.00
TOTAL LAND AREA AVAILABLE	141.50
TOTAL LAND AREA REQUIRED @ 1 DUPA (AC)	139.00
LAND AREA IN LOTS	53.58
OPEN SPACE REQUIRED	85.42
PLUS AREA GOLFER'S EASEMENT	13.86
TOTAL OPEN SPACE REQUIRED	99.28
GOLF COURSE (OPEN SPACE)	111.02
OPEN SPACE--CLUBHOUSE, RECREATION CENTER	5.17
TOTAL OPEN SPACE PROVIDED	116.19
EXCESS OPEN SPACE	16.90

THE GOLFER'S EASEMENT, AS SHOWN ON THE RECORDED PLATS, IS INCLUDED AS PART OF THE REQUIRED OPEN SPACE FOR THE PROJECT.

RECORDER'S INFORMATION

OWNER
LOUISE SPANN
5215 COUNTRY CLUB DRIVE
BRENTWOOD, TENNESSEE 37027
(615) 812–2498

SURVEYOR
RAGAN–SMITH ASSOCIATES, INC.
CHRIS MABERY, RLS
1500 MEDICAL CENTER PKWY., SUITE 2J
MURFREESBORO, TENNESSEE 37129
(615) 546–6050

PROPERTY MAP REFERENCE
BEING PARCEL NUMBER 9.00 AS SHOWN ON WILLIAMSON COUNTY PROPERTY MAP NUMBER 12L, GROUP C.

PLAT REFERENCE
BEING LOT 131 AS SHOWN ON THE FINAL PLAT ENTITLED "BRENTWOOD COUNTRY CLUB, REVISION TO LOT 131" OF RECORD IN BOOK P79, PAGE 51, REGISTER'S OFFICE FOR WILLIAMSON COUNTY, TENNESSEE

DEED REFERENCE
BEING THE SAME PROPERTY CONVEYED TO JOHN A. SPANN, III AND WIFE, LOUISE P. SPANN FROM SON EVANS AND WIFE, MAVOLEN V. EVANS BY WARRANTY DEED OF RECORD IN BOOK 5281, PAGE 621, REGISTER'S OFFICE FOR WILLIAMSON COUNTY, TENNESSEE, AND LATER CONVEYED TO LOUISE PRIVETTE SPANN BY EXECUTOR'S QUITCLAIM DEED OF RECORD IN BOOK 7655, PAGE 779, REGISTER'S OFFICE FOR WILLIAMSON COUNTY, TENNESSEE.

TOTAL LOT 131 AREA = 19,653 SQ. FT. OR 0.45 ACRES±

CERTIFICATE OF OWNERSHIP & DEDICATION OF EASEMENTS
I (WE) HEREBY CERTIFY THAT I AM (WE ARE) THE OWNER(S) OF THE OPEN SPACE AND GOLFERS EASEMENTS SHOWN AND DESCRIBED HEREON AND THAT I (WE) HEREBY ADOPT THIS REVISION TO THE GOLFERS EASEMENT WITH MY (OUR) FREE CONSENT.

OWNER NAME: BRENTWOOD COUNTRY CLUB HOMEOWNERS ASSOCIATION

BY: _____
JOHN CHURCH
TITLE: BCC HOA BOARD PRESIDENT DATE: _____

CERTIFICATE OF APPROVAL OF STREET NAMES
I HEREBY CERTIFY THAT THE WILLIAMSON COUNTY DEPARTMENT OF EMERGENCY COMMUNICATIONS HAS APPROVED THE STREET NAMES.

_____ _____
WILLIAMSON COUNTY DEPARTMENT OF EMERGENCY COMMUNICATIONS — DATE

CERTIFICATE OF PROVISION OF ELECTRICAL SERVICE
I HEREBY CERTIFY THAT THE REQUIREMENTS SET FORTH IN RULES, REGULATIONS, BY–LAWS, POLICY AND OPERATIONAL BULLETINS, PLAT APPROVAL CHECKLIST AND TREE PLANTING GUIDELINES HAVE BEEN MET FOR THE ELECTRICAL PROVIDER NAMED BELOW. ANY APPROVAL IS AT ALL TIMES CONTINGENT UPON CONTINUING COMPLIANCE WITH THE AFOREMENTIONED REQUIREMENTS.

_____ _____
NASHVILLE ELECTRIC SERVICE — DATE

CERTIFICATE OF APPROVAL OF SUBDIVISION NAME
I HEREBY CERTIFY THAT THE CITY OF BRENTWOOD HAS APPROVED THE SUBDIVISION NAME.

_____ _____
SECRETARY, PLANNING COMMISSION — DATE

CERTIFICATE OF APPROVAL OF ADDRESSES
I HEREBY CERTIFY THAT THE SUBDIVISION PLAT SHOWN HEREON HAS BEEN ASSIGNED THE ADDRESSES IN CONFORMANCE WITH THE CITY OF BRENTWOOD ADDRESSING STANDARDS.

_____ _____
CITY OF BRENTWOOD ADDRESSING AUTHORITY — DATE

CERTIFICATE OF OWNERSHIP & DEDICATION
I (WE) HEREBY CERTIFY THAT I AM (WE ARE) THE OWNER(S) OF THE PROPERTY SHOWN AND DESCRIBED HEREON AND THAT I (WE) HEREBY ADOPT THIS PLAN OF SUBDIVISION WITH MY (OUR) FREE CONSENT, ESTABLISH THE MINIMUM BUILDING RESTRICTION LINES, AND DEDICATE ALL STREETS, ALLEYS, WALKS, PARKS, AND OTHER OPEN SPACES TO PUBLIC OR PRIVATE USE AS NOTED.

OWNERS' NAMES: LOUISE PRIVETTE SPANN

BY: _____ DATE: _____
LOUISE PRIVETTE SPANN, OWNER

CERTIFICATE OF ACCURACY
I HEREBY CERTIFY THAT THE PLAN SHOWN AND DESCRIBED HEREON IS A TRUE AND CORRECT SURVEY TO THE ACCURACY REQUIRED BY THE SPECIFICATIONS OF THE

BRENTWOOD MUNICIPAL PLANNING COMMISSION

NAME: RAGAN-SMITH-ASSOCIATES, INC.

BY: _____ DATE: 12/05/2022
CHRISTOPHER J. MABERY, RLS

CERTIFICATE OF APPROVAL OF UTILITY SYSTEMS
I HEREBY CERTIFY THAT THE FOLLOWING UTILITY SYSTEMS OUTLINED OR INDICATED ON THE FINAL SUBDIVISION PLAT ENTITLED "BRENTWOOD COUNTRY CLUB, REVISION TO LOT 131" HAVE BEEN INSTALLED IN ACCORDANCE WITH CURRENT APPLICABLE REGULATIONS.

SEWER SYSTEM _____ 20__ _____
(CITY OF BRENTWOOD) — AUTHORIZED APPROVING AGENT

WATER SYSTEM _____ 20__ _____
(CITY OF BRENTWOOD) — AUTHORIZED APPROVING AGENT

CERTIFICATE OF APPROVAL OF STREETS
I HEREBY CERTIFY THAT ALL STREETS DESIGNATED ON THE FINAL SUBDIVISION PLAT ENTITLED "BRENTWOOD COUNTRY CLUB, REVISION TO LOT 131" HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH CURRENT APPLICABLE REGULATIONS.

_____ 20__
DATE

_____
CITY OF BRENTWOOD DIRECTOR OF ENGINEERING

CERTIFICATE OF APPROVAL FOR RECORDING
I HEREBY CERTIFY THAT THE SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE SUBDIVISION REGULATIONS OF THE CITY OF BRENTWOOD, WITH THE EXCEPTION OF SUCH VARIANCES AND/OR MODIFICATIONS, IF ANY, AS ARE NOTED IN THE MINUTES OF THE PLANNING COMMISSION, AND THAT IT HAS BEEN APPROVED FOR RECORDING IN THE OFFICE OF THE CITY RECORDER.

_____ 20__
DATE

_____
SECRETARY, PLANNING COMMISSION

REVISED: _____

BRENTWOOD COUNTRY CLUB

SECOND REVISION TO

LOT 131

DRAWN BY: C. MABERY/A. REED DATE: DECEMBER 5, 2022
JOB NO: 22–0231 SCALE: 1" = 30'

FINAL SUBDIVISION PLAT

CITY OF BRENTWOOD

WILLIAMSON COUNTY, TENNESSEE

NET AREA: 0.45 ACRES± TOTAL LOTS: 1
ACRES NEW ROAD: N/A CIVIL DISTRICT: 15TH
MILES NEW ROAD: N/A CLOSURE ERROR: 1:15000±

OWNER: LOUISE SPANN
SURVEYOR: RAGAN - SMITH - ASSOCIATES, INC.
SCALE: 1" = 30' 0 15' 30' 60'

G:\22-0231\1-SURVEY\PLAT\2022.12.05 REVISION\22-0231 LOT 131 PLAT REVISION.DWG SHEET 1 OF 1

Consent Agenda 6.

BRENTWOOD PLANNING COMMISSION

Meeting Date: 01/03/2023

Current Zoning: OSRD - OPEN SPACE RESIDENTIAL DEVELOPMENT

Information

Subject

BPC2212-009 Revised Preliminary Plan - Eastman's Preserve, Zoning OSRD - *Applicant: Ms. Amanda Reed, RaganSmith Associates, PO Box 60070, Nashville, TN 37206*

General Information

RaganSmith Associates requests approval of a revised preliminary plan showing 25 lots on approximately 31.70 acres. This preliminary plan is a revision to the plan that was approved on May 2, 2022. As a part of the Franklin Road construction, a power pole was installed at the corner of Eastman's Preserve's proposed entrance. To avoid this conflict, RaganSmith Associates is proposing to shift the entire entrance by 8'. This shift allows the approved minimum distance from the power pole without having to remove or revise any entrance features. This revised Preliminary Plan also reflects grading and utility changes per staff comments during the construction phase.

Conditions of Approval

Staff recommends that the following **2** conditions be attached to the approval of the request.

1. All previous conditions placed on the project by the Planning Commission shall remain applicable to the project.

2. A preliminary site plan shall be vested for a period of three years from the date of the original approval.

Standard Requirements

Staff recommends that the following **15** conditions be attached to the approval of the request.

1. Add the following note to the preliminary plan:

   This site plan is subject to a three-year vesting period, during which the development standards in effect on the date of approval will remain the standards applicable to this plan. If construction is not completed during the first three years, the original site plan is considered a preliminary site plan and the applicant must obtain approval of a final site plan. Development of the property shown on this plan may be subject to standards other than those that were applicable during the vesting period. The Initial vesting period for this plan expires on **May 2, 2025**, unless extended by the City of Brentwood. Persons relying

on this plan after said date should contact the City of Brentwood to determine if development may continue as depicted on the plan.

2. When the construction authorized pursuant to a site plan is not completed within three years from the date of initial approval, but the applicant desires to complete the project proposed for the site, the plan as initially approved for the project or as amended shall be considered a preliminary site plan. If the applicant secures all necessary permits, commences site preparation and obtains approval of a final site plan within the three-year vesting period following approval of the preliminary site plan, then the vesting period shall be extended an additional two years beyond the expiration of the initial three-year vesting period. During the two-year extension, the applicant must commence construction and maintain any necessary permits to remain vested.

3. If necessary, permits are maintained and construction, as defined by Section 78-43, has commenced by the end of the two-year extension, then the vesting period shall remain in effect until the Planning and Codes Department has certified final completion of the project, provided the total vesting period shall not exceed ten years from the date of approval of the preliminary site plan.

4. If the construction authorized pursuant to a site plan is completed within three years from the date of approval, the site plan shall then be considered the final site plan for the project.

5. It is the policy of the U. S. Postal Service that mail delivery to all new and extended developments use centralized delivery, via cluster box units (CBU). It is the responsibility of the customer (developers and builders) to provide the necessary mail receptacle equipment. Show/label an area on the plan to accommodate the cluster box units. Developers must receive approval from the USPS before mail service can begin.

6. The homes in the subdivision shall use U.S. Postal Service approved Cluster Box Units for Mail Delivery. Each home builder shall install permanent address posts, in lieu of mailboxes at the end of each driveway to facilitate emergency response. The address posts must be installed before a certificate of occupancy will be issue for the home.

7. Approval of the site plan does not constitute approval of the signage plan. All signs must comply with the Brentwood Sign Ordinance. A comprehensive sign package including all signs (temporary or permanent, wall or ground) shall be submitted to the Planning Department for a compliance review. Please submit a comprehensive sign package to Allison Roberts at allison.roberts@brentwoodtn.gov.

8. On all sheets of the plan show the location of existing and platted property lines, existing streets, buildings, watercourses, railroads, cemeteries, sewer lines, bridges, culverts, drain pipes, water mains, fire hydrants, street lights, tree masses, public utility easements.

9. Show the location of any sinkholes on the subject property as identified by a qualified geo-technical Engineer shall be located and appropriately labeled on the preliminary plan. The plan shall be configured to locate all sinkholes in permanent open space only and not within any buildable lots. Sinkholes in the permanent open space shall be protected from natural and/or man-made debris.

10. The property owner is responsible for all development fees including water and sewer service and tap fees, building permit fees and Public Works Project Fees. The required fees shall be used for future infrastructure related improvements required by the proposed development.

11. Applicable security for all required roadway, drainage, utilities, water, sewer, landscaping and amenity improvements in accordance with the requirements of Article Eight of the Brentwood Subdivision Regulations shall be provided before the final plat may be recorded.

12. A Maintenance Agreement and Storm Water System Long-Term Operation and Maintenance Plan for all storm water structures and facilities must be prepared, submitted and approved per Section 56-43 of the Brentwood Code.

13. Development of this project shall comply with all applicable codes and ordinances of the City of Brentwood.

14. Deviations from the approved plan in the development of a project or the failure to satisfy any standard requirements or special conditions of approval imposed by the planning commission will be considered a violation of the provisions of the Zoning Ordinance, which shall be subject to punishment as provided in Section 1-9 of the Brentwood Municipal Code. The City may also require the applicant to appear before the Planning Commission to address any deficiencies or unapproved modifications. The project may also be subject to delays in issuance of permits, certificates of occupancy, recordation of plats or other project approvals.

15. Approval of the proposed plan shall be limited to the illustrations and plans presented to the Planning Commission for review and approval on **January 3, 2023**. Any changes to Planning Commission approved plans and specifications will require staff review and re-approval by the Planning Commission.

Staff Recommendation

Staff requests that the Planning Commission vote to approve the proposed revised preliminary plan and forward a recommendation of approval of the proposed corresponding revisions to the OSRD Development Plan to the Board of Commissioners, subject to the requirements of the staff report.

Attachments

Vicinity Map

Revised Preliminary Plan



RaganSmith

Nashville - Murfreesboro - Chattanooga
ragansmith.com

EASTMAN'S PRESERVE

FOR

THE RIVERSTONE GROUP

CITY OF BRENTWOOD, WILLIAMSON COUNTY, TENNESSEE

Scale: 1"=600'

Date: 03/07/2022

Approved By: AMR

Revisions:

Drawing Title:

OVERALL VICINITY EXHIBIT

Drawing No.

1 OF 1

Project No.

22-0050

PRELIMINARY PLAN

EASTMAN'S PRESERVE

FOR

THE RIVERSTONE GROUP

CONTACTS

OWNER

TN BAPTIST CHILDREN'S HOMES
GREG McCOY
P.O. BOX 2206
BRENTWOOD, TN 37024
(615) 376-3140
GMCCOY@TENNESSEECHILDREN.ORG

DEVELOPER

THE RIVERSTONE GROUP
DAVID ATCHISON
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FRANKLIN, TN 37069
(615) 210-7770
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CIVIL

JACOB VINCENT, PE
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NASHVILLE, TN 37206
(615) 244-8591
JVINCENT@RAGANSMITH.COM

LANDSCAPE ARCHITECTURE

TYLOR FISCHER, PLA
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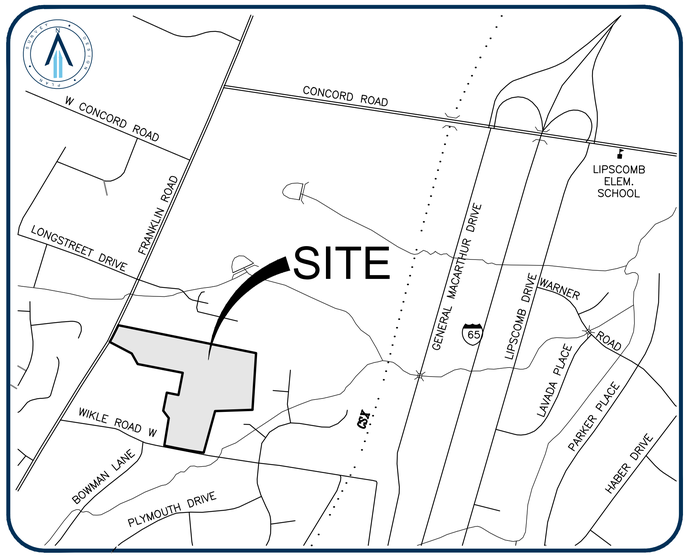
NASHVILLE, TN 37206
(615) 244-8591
TFISCHER@RAGANSMITH.COM



LOCATION MAP
NOT TO SCALE

INDEX OF SHEETS

SHEET	DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES AND DETAILS
3	OVERALL SITE PLAN (OSRD)
4	ENLARGED SITE PLAN (OSRD)
5	ENLARGED SITE PLAN (OSRD)
L1.0	LANDSCAPE PLAN - OVERALL
L1.1	LANDSCAPE PLAN - BUFFERS
L1.2	ENTRANCE MONUMENT
L1.3	LANDSCAPE NOTES & SCHEDULES
L2.0	TREE INVENTORY

CITY OF BRENTWOOD,
WILLIAMSON COUNTY,
TENNESSEE

RaganSmith

Nashville - Murfreesboro - Chattanooga
ragansmith.com

JACOB F. VINCENT
REGISTERED ENGINEER
AGE:CUSTOMER
NO. 00114098
STATE OF TENNESSEE
12 20 2022

EASTMAN'S PRESERVE
FOR
THE RIVERSTONE GROUP
CITY OF BRENTWOOD, WILLIAMSON COUNTY, TENNESSEE

Scale: NOT TO SCALE

Date: 4/19/22

Approved By: JFV

Revisions:

-	–	–
5	12/20/22	REVISED PER STAFF COMMENTS
4	12/05/22	REVISED PER ENTRANCE SHIFT
3	4/19/22	REVISED PER STAFF COMMENTS
2	4/05/22	REVISED PER STAFF COMMENTS
1	3/22/22	REVISED PER STAFF COMMENTS

Drawing Title:

COVER

Drawing No.

1

Project No.

22-0050

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

GENERAL NOTES AND SITE DATA

1. SUBJECT PROPERTY CONSISTS OF PARCEL 101.05 AND A PORTION OF PARCEL 101.00 AS SHOWN ON WILLIAMSON COUNTY PROPERTY MAP NO. 36.
2. PROPERTY OWNER:
   THE TENNESSEE BAPTIST CHILDREN'S HOME, INC.
   A PORTION OF DEED BOOK 55, PAGE 213, R.O.W.C.T.
3. EXISTING ZONING: OSRD (OPEN SPACE RESIDENTIAL DEVELOPMENT).
4. GROSS SITE AREA: 31.70 ACRES.
5. BOUNDARY INFORMATION TAKEN FROM FIELD RUN SURVEY PERFORMED BY KEVIN L. BIRDWELL (RAGANSMITH) DATED MAY 18, 2021.
6. FOR TOPOGRAPHIC ASPECTS OF THIS SURVEY, RTK GPS POSITIONAL DATA WAS OBSERVED ON 04-23-2021 UTILIZING A TRIMBLE R10 DUAL FREQUENCY RECEIVER. THE GRID COORDINATES OF THE FIXED STATION(S) SHOWN WERE DERIVED USING A VRS NETWORK OF CORS STATIONS REFERENCED TO NAD 83 (2011) (EPOCH 2010), GEOID 12B.

   CORS STATION DESIGNATION TN31, PID = DJ9550, LATITUDE 36°10'13.05616"N, LONGITUDE 86°52'14.38399"W, ELLIPSOID HEIGHT: 192.391M.

   POSITIONAL ACCURACY OF THE GPS VECTORS DOES NOT EXCEED: H 0.02', V 0.05'.

   COMBINED GRID FACTOR: 0.99992178 CENTERED ON FIXED STATION 15 AS SHOWN HEREON.

   ELEVATIONS SHOWN HEREON ARE BASED ON NAVD 88. CONTOURS ARE AT TWO FOOT INTERVALS AND ARE BASED ON A FIELD RUN SURVEY USING RANDOM SPOT ELEVATIONS. CONTOURS WERE DERIVED USING SURFACE MODELING TECHNIQUES.
7. NUMBER OF PROPOSED LOTS: 25.
8. PROPOSED DENSITY: 0.79 DU/AC. (1.0 DU/AC. MAXIMUM).
9. MAXIMUM BUILDING COVERAGE OF PROPOSED LOTS: 25%.
10. EACH PROPOSED LOT SHALL PROVIDE A MINIMUM OF TWO OFF-STREET PARKING SPACES.
11. MINIMUM LOT WIDTH AT BUILDING LINE: 110' OR 120' FOR TRANSITIONAL LOTS.
12. MINIMUM BUILDING SETBACKS: (UNLESS SHOWN OTHERWISE)

    FRONT - 50' (UNLESS SHOWN OTHERWISE)
    SIDE - 15'/25' OR 20'/20' (TOTAL 40' BETWEEN BUILDINGS)
    SIDE ABUTTING A PUBLIC STREET - 30'
    REAR - 30'
    ABUTTING PROJECT PERIMETER - 35'
    ABUTTING 150' ARTERIAL BUFFER - 50'

13. ALL ELECTRIC SERVICE FOR THE PROPOSED DEVELOPMENT SHALL BE UNDERGROUND. ALL PUBLIC UTILITIES SHALL BE SUBJECT TO THE APPROVAL OF THE APPLICABLE UTILITY COMPANIES.
14. UTILITY PROVIDERS:

    ELECTRICITY:
    NASHVILLE ELECTRIC SERVICE
    (615) 736-6900

    WATER:
    CITY OF BRENTWOOD WATER SERVICES
    (615) 371-0080

    TELEPHONE:
    AT&T
    (888) 757-6500

    SANITARY SEWER:
    CITY OF BRENTWOOD
    (615) 371-0080

    NATURAL GAS:
    ATMOS GAS
    (888) 286-6700

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

15. EXISTING VEGETATION TO REMAIN SHALL BE CONTAINED WITHIN A SCENIC EASEMENT. ALL OPEN SPACE AREAS DESIGNATED AS SCENIC EASEMENTS SHALL REMAIN UNDISTURBED. SCENIC EASEMENT LOCATIONS TO BE DETERMINED ON FINAL PLATS.
16. THIS PRELIMINARY PLAN IS SUBJECT TO A THREE YEAR VESTING PERIOD, DURING WHICH THE DEVELOPMENT STANDARDS IN EFFECT ON THE DATE OF APPROVAL WILL REMAIN THE STANDARDS APPLICABLE TO THIS PLAN. IF UPON EXPIRATION OF THE VESTING PERIOD, DEVELOPMENT OF THE PROPERTY SHOWN ON THIS PLAN MAY BE SUBJECT TO STANDARDS OTHER THAN THOSE THAT WERE APPLICABLE DURING THE VESTING PERIOD. THE VESTING PERIOD FOR THIS PLAN EXPIRES ON MAY 2, 2025, UNLESS EXTENDED BY THE CITY OF BRENTWOOD. PERSONS RELYING ON THIS PLAN AFTER SAID DATE SHOULD CONTACT THE CITY OF BRENTWOOD TO DETERMINE IF DEVELOPMENT MAY CONTINUE AS DEPICTED ON THE PLAN.
17. BY SCALED MAP LOCATION AND GRAPHIC PLOTTING ONLY, THIS PROPERTY LIES WITHIN FLOODS ZONE "X" AND "AE", AS DESIGNATED ON CURRENT FEDERAL EMERGENCY MANAGEMENT AGENCY MAP NO. 47187C0205F & 47187C0206F WITH EFFECTIVE DATES OF SEPTEMBER 29, 2006, WHICH MAKES UP A PART OF THE NATIONAL FLOOD INSURANCE ADMINISTRATION REPORT; COMMUNITY NO. 470204 & 470205, PANEL NO. 0205 & 0206, SUFFIX F, WHICH IS THE CURRENT FLOOD INSURANCE RATE MAP FOR THE COMMUNITY IN WHICH SAID PREMISES IS SITUATED. SAID MAP DEFINES ZONE "X" UNDER "OTHER AREAS" AS AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN. SAID MAP DEFINES ZONE "AE" UNDER "SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD" AS BASE FLOOD ELEVATIONS DETERMINED.
18. THIS SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. ABOVE GRADE AND UNDERGROUND UTILITIES SHOWN WERE TAKEN FROM VISIBLE APPURTENANCES AT THE SITE, PUBLIC RECORDS AND/OR MAPS PREPARED BY OTHERS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THEREFORE, RELIANCE UPON THE TYPE, SIZE AND LOCATION OF UTILITIES SHOWN SHOULD BE DONE SO WITH THIS CIRCUMSTANCE CONSIDERED. DETAILED VERIFICATION OF EXISTENCE, LOCATION AND DEPTH SHOULD ALSO BE MADE PRIOR TO ANY DECISION RELATIVE THERETO IS MADE. AVAILABILITY AND COST OF SERVICE SHOULD BE CONFIRMED WITH THE APPROPRIATE UTILITY COMPANY. IN TENNESSEE IT IS A REQUIREMENT, PER "THE UNDERGROUND UTILITY DAMAGE PREVENTION ACT", THAT ANYONE WHO ENGAGES IN EXCAVATION MUST NOTIFY ALL KNOWN UNDERGROUND UTILITY OWNERS, NO LESS THAN (3) THREE NOR MORE THAN (10) TEN WORKING DAYS PRIOR TO THE DATE OF THEIR INTENT TO EXCAVATE AND ALSO TO AVOID ANY POSSIBLE HAZARD OR CONFLICT. TENNESSEE ONE CALL 811.
19. THE FUTURE HOUSE ON LOT 20 SHALL DIRECTLY FACE THE FRONT YARD SETBACK LINE.

OWNER'S AGENT/DEVELOPER

THE RIVERSTONE GROUP
DAVID ATCHISON
1035 SIMMONS LANE
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DAVID@THERIVERSTONEGROUP.COM

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(615)244-8591
TFISCHER@RAGANSMITH.COM

G:\22-0050\1-CIVIL ENGINEERING\CDRD-PRELIMINARY PLANS (In SHEETS)\00_CDRD-PRELIM PLAN.DWG
LAST UPDATED BY AMANDA REED ON: 12/20/2022 7:53 AM
PLOTTED BY AMANDA REED ON: 12/20/2022 3:53 PM

OSRD CALCULATIONS

Overall	
Total Site Area (AC)	31.70
Less R.O.W. dedication -- Internal streets	2.93
TOTAL	28.77
Less Areas in 25% Slopes	0.00
Plus 25% of slopes over 25%	0.00
Less Areas in Floodway	0.00
Plus 25% Areas in Floodways	0.00
Less Areas in Electrical Natural & Gas Easements	0.00
Plus 25% of Areas in Electrical Natural & Gas Easements	0.00
Total Usable Land Area (AC)	28.77
Less area in lots>1 acre	1.66
TOTAL LAND AREA AVAILABLE	27.11
Total Land Area Required @ 1 DUPA (AC)	25.00
Land Area in Lots	18.37
Open Space Required	6.63
Dedicated Open Space	10.40
EXCESS OPEN SPACE	3.77

Phase One	
Total Site Area (AC)	28.04
Less R.O.W. dedication -- Internal streets	2.93
TOTAL	25.11
Less Areas in 25% Slopes	0.00
Plus 25% of slopes over 25%	0.00
Less Areas in Floodway	0.00
Plus 25% Areas in Floodways	0.00
Less Areas in Electrical Natural & Gas Easements	0.00
Plus 25% of Areas in Electrical Natural & Gas Easements	0.00
Total Usable Land Area (AC)	25.11
Less area in lots>1 acre	1.10
TOTAL LAND AREA AVAILABLE	24.01
Total Land Area Required @ 1 DUPA (AC)	24.00
Land Area in Lots	16.81
Open Space Required	7.19
Dedicated Open Space	8.30
EXCESS OPEN SPACE	1.11

Phase Two	
Total Site Area (AC)	3.66
Less R.O.W. dedication -- Internal streets	0.00
TOTAL	3.66
Less Areas in 25% Slopes	0.00
Plus 25% of slopes over 25%	0.00
Less Areas in Floodway	0.00
Plus 25% Areas in Floodways	0.00
Less Areas in Electrical Natural & Gas Easements	0.00
Plus 25% of Areas in Electrical Natural & Gas Easements	0.00
Total Usable Land Area (AC)	3.66
Less area in lots>1 acre	0.56
TOTAL LAND AREA AVAILABLE	3.10
Total Land Area Required @ 1 DUPA (AC)	1.00
Land Area in Lots	1.56
Open Space Required	-0.56
Dedicated Open Space	2.10
EXCESS OPEN SPACE	2.66

OSRD LOT AREA TABLES

Phase One		
Lot	Sq. Ft.	Acres
1	28571	0.66
2	23257	0.53
3	23250	0.53
4	23242	0.53
5	23234	0.53
6	26607	0.61
7	30679	0.70
8	29452	0.68
9	30062	0.69
10	24738	0.57
11	23673	0.54
12	23499	0.54
13	22736	0.52
14	25657	0.59
15	30403	0.70
16	43946	1.01
17	79847	1.83
19	54740	1.26
20	32070	0.74
21	25232	0.58
22	25387	0.58
23	25542	0.59
24	25697	0.59
25	30569	0.70
	732090	16.81

Phase Two		
Lot	Sq. Ft.	Acres
18	67783	1.56
	67783	1.56

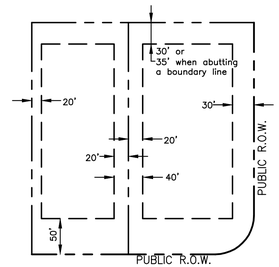
Total	
Lots	25
Sq. Ft.	799873
Acres	18.363

OPEN SPACE

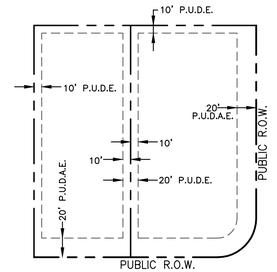
Phase One		
Open Space	Sq. Ft.	Acres
1	39269	0.90
2	165011	3.79
3	6575	0.15
4	119858	2.75
5	29220	0.67
6	1481	0.03
	361414	8.30

Phase Two		
Open Space	Sq. Ft.	Acres
7	91551	2.10
	91551	2.10

Total	
Sq. Ft.	452965
Acres	10.40



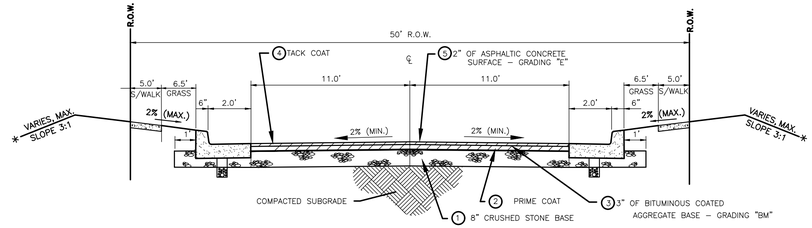
TYPICAL LOT SETBACK LINES
(UNLESS SHOWN OTHERWISE)
N.T.S.



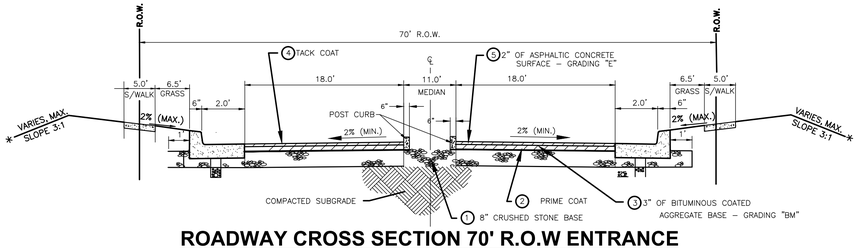
TYPICAL LOT EASEMENT LINES
(UNLESS SHOWN OTHERWISE)
N.T.S.

LEGEND

R.O.W.	RIGHT-OF-WAY
P.U.D.E.	PUBLIC UTILITY & DRAINAGE EASEMENT
P.U.D.A.E.	PUBLIC UTILITY DRAINAGE & ACCESS EASEMENT



ROADWAY CROSS SECTION 50' R.O.W
NOT TO SCALE



ROADWAY CROSS SECTION 70' R.O.W ENTRANCE
NOT TO SCALE

RaganSmith

Nashville - Murfreesboro - Chattanooga
ragansmith.com

JACOB F. VINCENT
REGISTERED
NO. 00114598
STATE OF TENNESSEE
AGE: CIVIL
12 20 2022

EASTMAN'S PRESERVE

FOR

THE RIVERSTONE GROUP

CITY OF BRENTWOOD, WILLIAMSON COUNTY, TENNESSEE

Scale: N/A

Date: 4/19/22

Approved By: JFV

Revisions:

-	-	-
5	12/20/22	REVISED PER STAFF COMMENT
4	12/05/22	REVISED PER ENTRANCE SHIFT
3	4/19/22	REVISED PER STAFF COMMENT
2	4/05/22	REVISED PER STAFF COMMENT
1	3/22/22	REVISED PER STAFF COMMENT

Drawing Title:

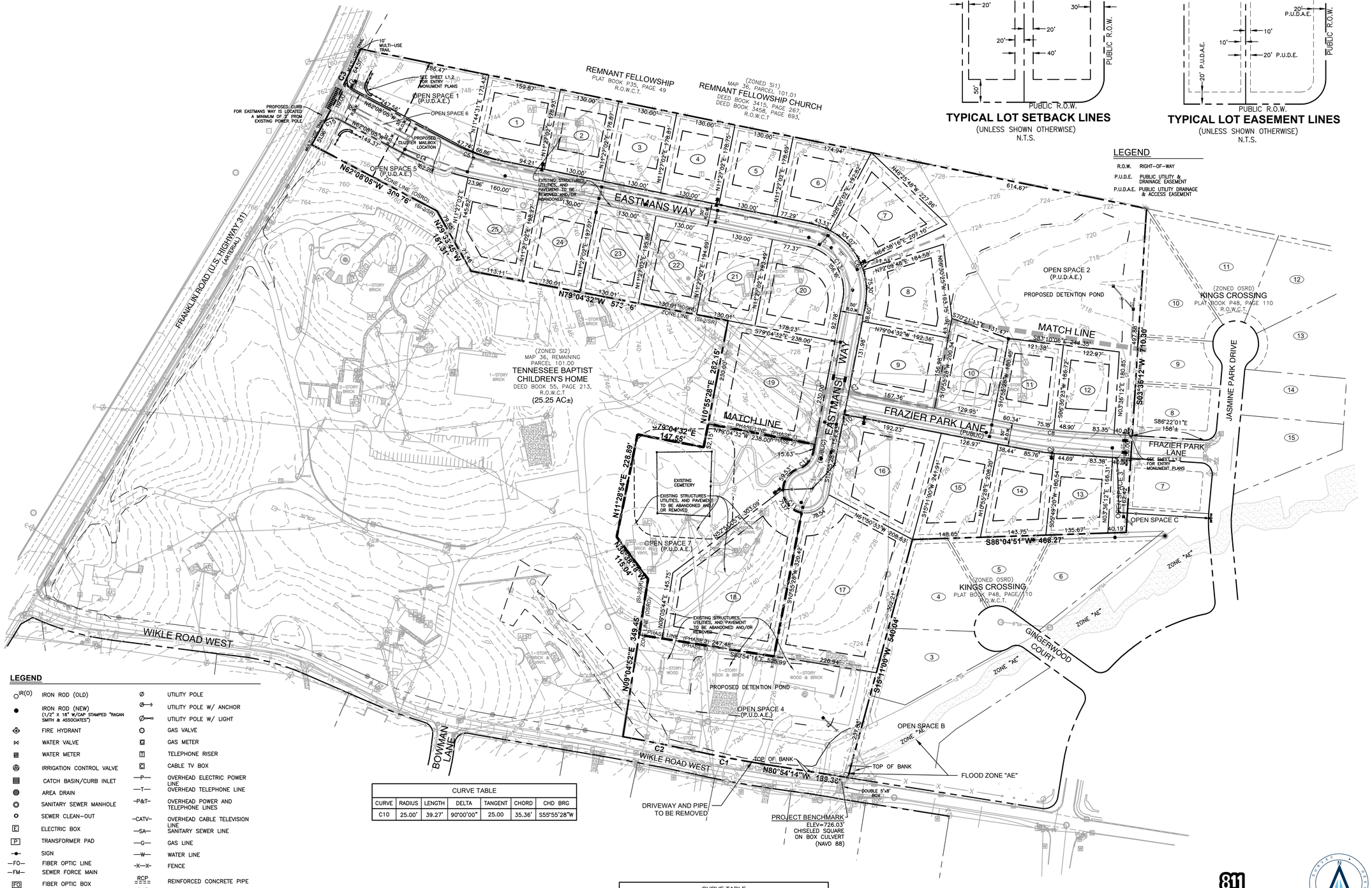
GENERAL NOTES AND DETAILS

Drawing No.

2

Project No.

22-0050


FRANKLIN ROAD (U.S. HIGHWAY 31)
(ARTERIAL)
WIKLE ROAD WEST
BOWMAN LANE
EASTMANS WAY
FRAZIER PARK LANE
(PUBLIC)
JASMINE PARK DRIVE
FRAZIER PARK LANE
GINGERWOOD COURT
REMNANT FELLOWSHIP
PLAT BOOK P35, PAGE 49
R.O.W.C.T.
REMNANT FELLOWSHIP CHURCH
(ZONED SI1)
MAP 36, PARCEL 101.01
DEED BOOK 3415, PAGE 267,
DEED BOOK 3458, PAGE 693,
R.O.W.C.T
TENNESSEE BAPTIST
CHILDREN'S HOME
DEED BOOK 55, PAGE 213,
R.O.W.C.T.
(25.25 AC±)
(ZONED SI2)
MAP 36, REMAINING
PARCEL 101.00
KINGS CROSSING
PLAT BOOK P48, PAGE 110
R.O.W.C.T.
(ZONED OSRD)
OPEN SPACE 1
(P.U.D.A.E.)
OPEN SPACE 2
(P.U.D.A.E.)
PROPOSED DETENTION POND
OPEN SPACE 4
(P.U.D.A.E.)
OPEN SPACE 5
(P.U.D.A.E.)
OPEN SPACE 6
OPEN SPACE 7
(P.U.D.A.E.)
OPEN SPACE B
OPEN SPACE C
EXISTING CEMETERY
EXISTING STRUCTURES, UTILITIES, AND PAVEMENT TO BE ABANDONED AND OR REMOVED
PROPOSED CLUSTER MAILBOX LOCATION
PROPOSED CURB FOR EASTMANS WAY IS LOCATED A MINIMUM OF 2' FROM EXISTING POWER POLE
10' MULTI-USE TRAIL
SEE SHEET L1.2 FOR ENTRY MONUMENT PLANS
MATCH LINE
ZONE LINE, (SI-2/SR)
ZONE LINE (OSRD)
PHASE LINE
TOP OF BANK
FLOOD ZONE "AE"
ZONE "AE"
DRIVEWAY AND PIPE TO BE REMOVED
DOUBLE 5'x8' BOX
PROJECT BENCHMARK
ELEV=726.03'
CHISELED SQUARE
ON BOX CULVERT
(NAVD 88)
N63°08'05"W 309.76'
N79°04'32"W 577.61'
N10°55'28"E 282.15'
S79°04'32"E 147.55'
N11°28'54"E 228.89'
N30°58'52"W 115.04'
N09°04'52"E 349.45'
S10°55'28"W 328.48'
S15°11'00"W 540.04'
S03°38'12"W 710.00'
S88°04'51"W 468.27'
N64°25'46"W 227.86'
N64°36'16"E 207.10'
N72°09'48"E 164.58'
N79°04'32"W 192.36'
S79°04'32"E 238.00'
S70°21'13"E 131.47'
S83°10'06"E 244.35'
S86°22'01"E 156'±
N80°54'11"W 189.38'
N62°08'05"W 148.37'
N62°08'05"W 47.56'
S27°51'54"W 78.54'
N61°50'33"W 208.63'
S10°55'28"W 208.29'
S05°49'20"W 160.54'
N03°36'12"E 180.85'
N03°36'12"E 166.31'
N03°36'12"E 162.42'
S86°36'23"W 180.72'
N11°29'09"E 178.89'
N11°29'09"E 178.81'
N11°29'09"E 178.73'
N11°29'09"E 178.65'
N11°29'09"E 178.57'
N11°29'09"E 178.49'
N11°29'09"E 197.97'
N11°29'09"E 194.69'
N11°29'09"E 195.58'
N11°29'09"E 195.66'
N11°29'09"E 195.74'
N11°29'09"E 195.82'
N11°29'09"E 195.90'
N11°29'09"E 208.29'
N11°29'09"E 208.37'
N11°29'09"E 208.45'
N11°29'09"E 208.53'
N11°29'09"E 208.61'
N11°29'09"E 208.69'
N11°29'09"E 208.77'
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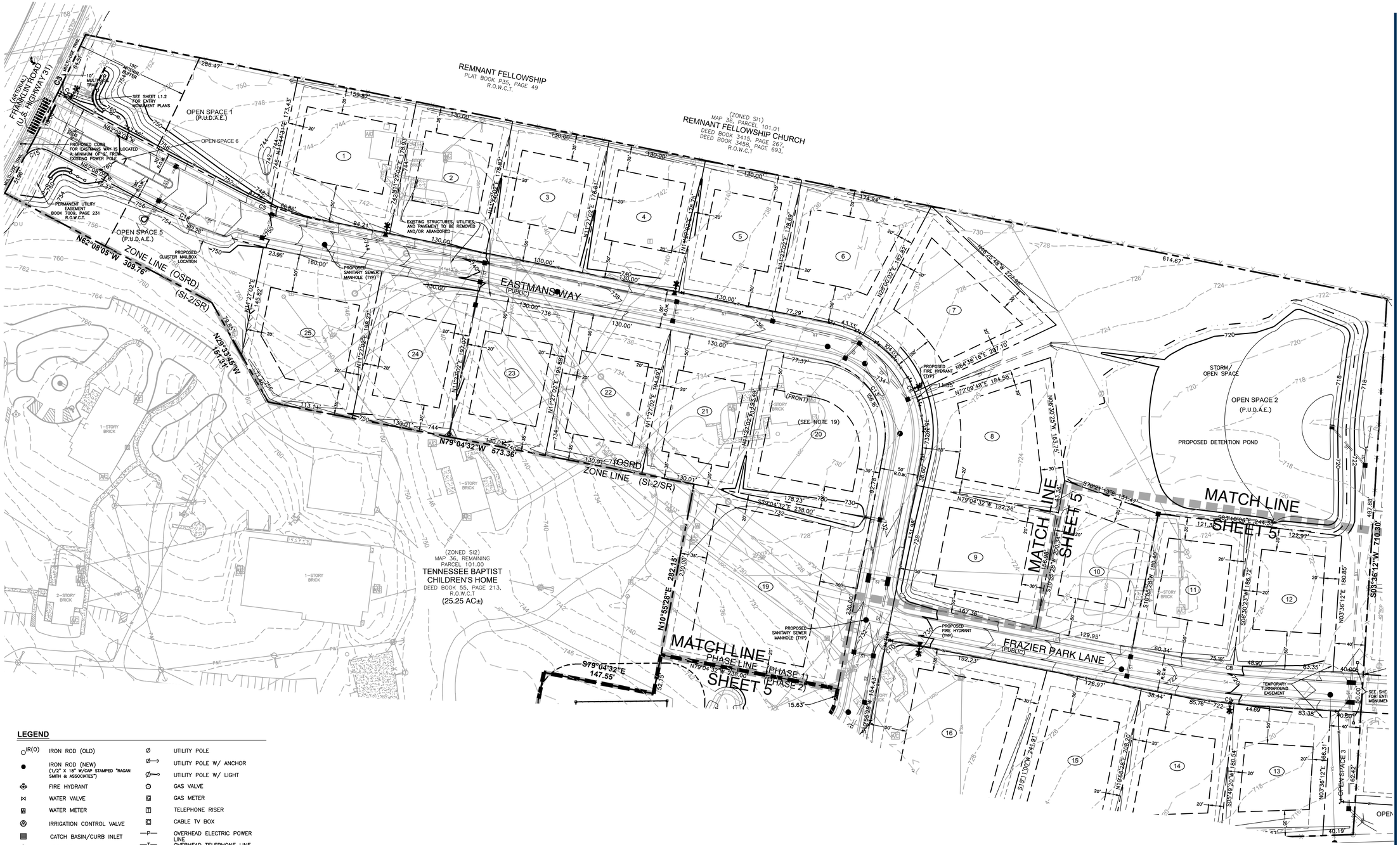
N11°29'09"E 208.93'
N11°29'09"E 209.01'
N11°29'09"E 209.09'
N11°29'09"E 209.17'
N11°29'09"E 209.25'
N11°29'09"E 209.33'
N11°29'09"E 209.41'
N11°29'09"E 209.49'
N11°29'09"E 209.57'
N11°29'09"E 209.65'
N11°29'09"E 209.73'
N11°29'09"E 209.81'
N11°29'09"E



LEGEND

IR(O)	IRON ROD (OLD)		UTILITY POLE
	IRON ROD (NEW) (1/2" X 18" W/CAP STAMPED "RAGAN SMITH & ASSOCIATES")		UTILITY POLE W/ ANCHOR
	FIRE HYDRANT		UTILITY POLE W/ LIGHT
	WATER VALVE		GAS VALVE
	WATER METER		GAS METER
	IRRIGATION CONTROL VALVE		TELEPHONE RISER
	CATCH BASIN/CURB INLET		CABLE TV BOX
	AREA DRAIN	—P—	OVERHEAD ELECTRIC POWER LINE
	SANITARY SEWER MANHOLE	—T—	OVERHEAD TELEPHONE LINE
	SEWER CLEAN-OUT	—P&T—	OVERHEAD POWER AND TELEPHONE LINES
E	ELECTRIC BOX	—CATV—	OVERHEAD CABLE TELEVISION LINE
P	TRANSFORMER PAD	—SA—	SANITARY SEWER LINE
	SIGN	—G—	GAS LINE
—FO—	FIBER OPTIC LINE	—W—	WATER LINE
—FM—	SEWER FORCE MAIN	—X—X—	FENCE
FO	FIBER OPTIC BOX	RCP	REINFORCED CONCRETE PIPE
	HEADWALL	CMP	CORRUGATED METAL PIPE
E	ELECTRIC STUBOUT	—UGC—	UNDERGROUND CABLE TELEVISION LINE
G	GAS STUBOUT	—ANC—	ANCHOR WIRE
1	LOT NUMBER	PVC	POLYVINYL CHLORIDE
R.O.W.C.T.	REGISTER'S OFFICE FOR WILLIAMSON COUNTY, TN		SEWER VALVE
P.U.D.A.E.	PUBLIC UTILITY, DRAINAGE & ACCESS EASEMENT		CONCRETE SURFACE

811
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ragansmith.com

JACOB F. VINCENT
REGISTERED ENGINEER
AGE: CULTURE
No. 00114598
STATE OF TENNESSEE
12/20/2022

EASTMAN'S PRESERVE
FOR
THE RIVERSTONE GROUP
CITY OF BRENTWOOD, WILLIAMSON COUNTY, TENNESSEE

Scale:	1"=60'
Date:	4/19/22
Approved By:	JFV

Revisions:

-	-	-
5	12/20/22	REVISED PER STAFF COMMENTS
4	12/05/22	REVISED PER ENTRANCE SHIFT
3	4/19/22	REVISED PER STAFF COMMENTS
2	4/05/22	REVISED PER STAFF COMMENTS
1	3/22/22	REVISED PER STAFF COMMENTS

Drawing Title:

ENLARGED SITE PLAN

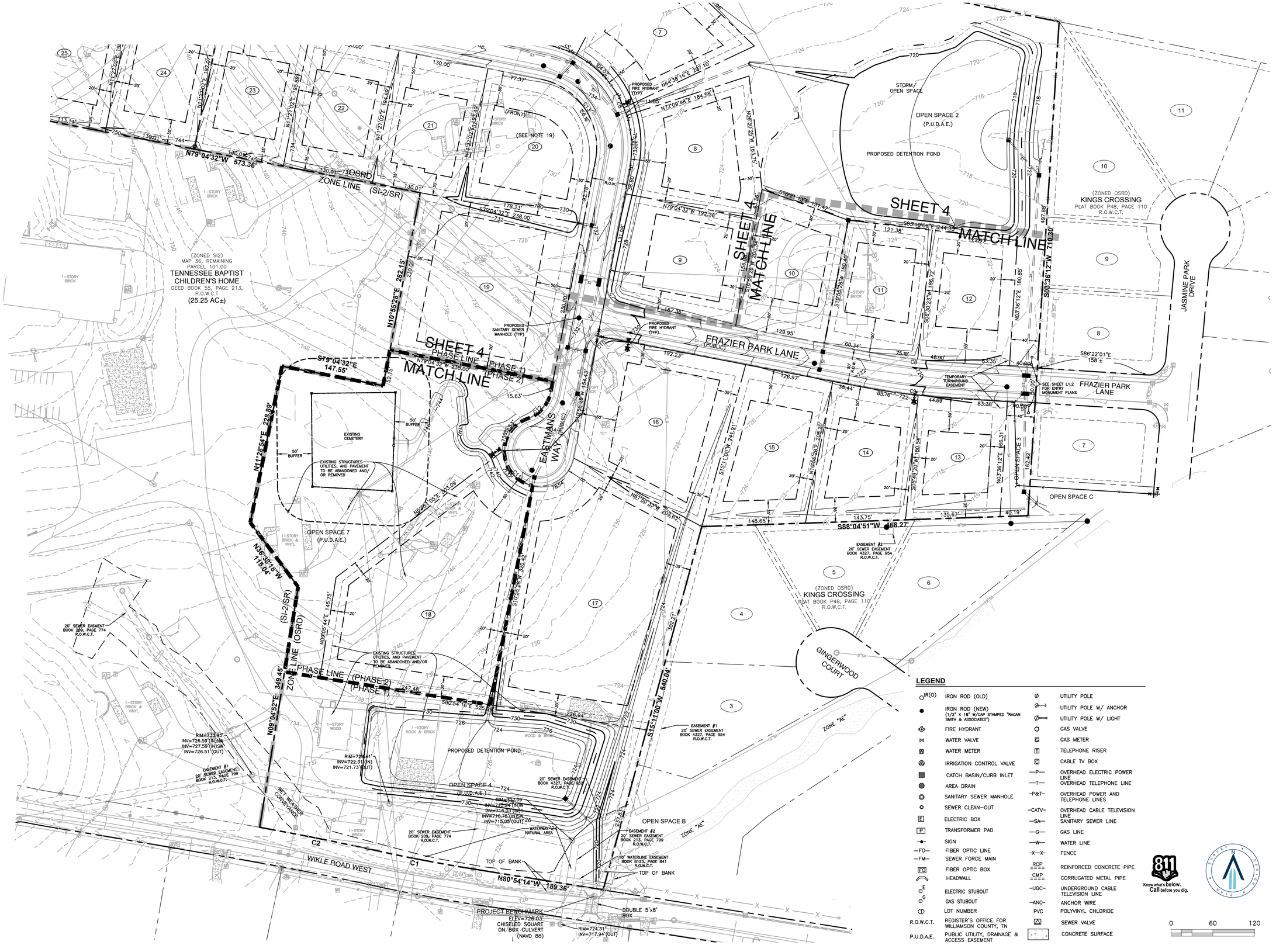
Drawing No.

4

Project No.

22-0050

G:\22-0050\1-CIVIL ENGINEERING\DSRD-PRELIMINARY PLAN\PLAN SHEETS\0050_DSRD-PRELIM PLAN.DWG
PLOTTED BY AMANDA REED ON 12/20/2022 7:56 AM LAST UPDATED BY AREED ON 12/20/2022 7:53 AM



LEGEND

IR(O)	IRON ROD (OLD)		UTILITY POLE
	IRON ROD (NEW) (1/2" X 18" W/CAP STAMPED "RAGAN SMITH & ASSOCIATES")		UTILITY POLE W/ ANCHOR
			UTILITY POLE W/ LIGHT
	FIRE HYDRANT		GAS VALVE
	WATER VALVE		GAS METER
	WATER METER		TELEPHONE RISER
	IRRIGATION CONTROL VALVE		CABLE TV BOX
	CATCH BASIN/CURB INLET	—P—	OVERHEAD ELECTRIC POWER LINE
	AREA DRAIN	—T—	OVERHEAD TELEPHONE LINE
	SANITARY SEWER MANHOLE	—P&T—	OVERHEAD POWER AND TELEPHONE LINES
	SEWER CLEAN-OUT	—CATV—	OVERHEAD CABLE TELEVISION LINE
E	ELECTRIC BOX	—SA—	SANITARY SEWER LINE
P	TRANSFORMER PAD	—G—	GAS LINE
	SIGN	—W—	WATER LINE
—FO—	FIBER OPTIC LINE	-X—X-	FENCE
—FM—	SEWER FORCE MAIN	RCP	REINFORCED CONCRETE PIPE
FO	FIBER OPTIC BOX	CMP	CORRUGATED METAL PIPE
	HEADWALL	—UGC—	UNDERGROUND CABLE TELEVISION LINE
E	ELECTRIC STUBOUT	—ANC—	ANCHOR WIRE
G	GAS STUBOUT	PVC	POLYVINYL CHLORIDE
	LOT NUMBER		SEWER VALVE
R.O.W.C.T.	REGISTER'S OFFICE FOR WILLIAMSON COUNTY, TN		CONCRETE SURFACE
P.U.D.A.E.	PUBLIC UTILITY, DRAINAGE & ACCESS EASEMENT		

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JACOB F. VINCENT
REGISTERED
LANDSCAPE
ARCHITECT
NO. 0011459
STATE OF TENNESSEE
12/20/2022

EASTMAN'S PRESERVE

FOR

THE RIVERSTONE GROUP

CITY OF BRENTWOOD, WILLIAMSON COUNTY, TENNESSEE

Scale: 1"=60'

Date: 4/19/22

Approved By: JFV

Revisions:

5	12/20/22	REVISED PER STAFF COMMENTS
4	12/05/22	REVISED PER ENTRANCE SHIFT
3	4/19/22	REVISED PER STAFF COMMENTS
2	4/05/22	REVISED PER STAFF COMMENTS
1	3/22/22	REVISED PER STAFF COMMENTS

Drawing Title:

ENLARGED SITE PLAN

Drawing No.

5

Project No.

22-0050

G:\22\0050\CIVIL\DESIGN\CONSTRUCTION\SHEETS\22-0050 ENLARGED SITE PLAN.DWG
PLOTTED BY: KARLA REED ON 12/20/2022 7:56 AM LAST SAVED BY: KREED ON 12/20/2022 7:56 AM



PLANT SCHEDULE LANDSCAPE									
BUFFER TREES DECIDUOUS	CODE	QTY	BOTANICAL NAME	COMMON NAME	TYPE	SIZE	HEIGHT	SPACING	REMARKS
	AB	6	ACER SACCHARUM "BAILSTA" TM	FALL FIESTA SUGAR MAPLE	DECIDUOUS	2" CAL.	12-14' HT	AS SHOWN	B&B, STRONG CENTRAL LEADER, FULL CANOPY
	GI	2	GLEDITSIA TRIACANTHOS INERMIS "SKYCOLE" TM	SKYLINE HONEY LOCUST	DECIDUOUS	2" CAL.	12-14' HT	AS SHOWN	B&B, STRONG CENTRAL LEADER, FULL CANOPY
	LT	1	LIRODENDRON TULIPIFERA	TULIP POPLAR	DECIDUOUS	2" CAL.	12-14' HT	AS SHOWN	B&B, STRONG CENTRAL LEADER, FULL CANOPY
	QS	6	QUERCUS SHUMARDII	SHUMARD OAK	DECIDUOUS	2" CAL.	12-14' HT	AS SHOWN	B&B, STRONG CENTRAL LEADER, FULL CANOPY
	TS	2	TAXODIUM DISTICHUM "SOFINE" TM	AUTUMN GOLD BALD CYPRESS	DECIDUOUS	2" CAL.	12-14' HT	AS SHOWN	B&B, STRONG CENTRAL LEADER, FULL CANOPY
BUFFER TREES EVERGREEN	CODE	QTY	BOTANICAL NAME	COMMON NAME	TYPE	SIZE	HEIGHT	SPACING	REMARKS
	JE	29	JUNIPERUS VIRGINIANA	EASTERN REDCEDAR	EVERGREEN		8' HT. MIN.	AS SHOWN	B&B, FULL TO BASE
	JB	49	JUNIPERUS VIRGINIANA "BURKII"	BURK EASTERN REDCEDAR	EVERGREEN		8' HT. MIN.	AS SHOWN	B&B, FULL TO BASE
	MB	41	MAGNOLIA GRANDIFLORA "BRACKENS BROWN BEAUTY"	BRACKEN'S BEAUTY SOUTHERN MAGNOLIA	EVERGREEN		8' HT. MIN.	AS SHOWN	B&B, FULL TO BASE
	TG	24	THUJA STANDISHII X PLICATA "GREEN GIANT"	GREEN GIANT ARBORVITAE	EVERGREEN		8' HT. MIN.	AS SHOWN	B&B, FULL TO BASE
STREET TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	TYPE	SIZE	HEIGHT	SPACING	REMARKS
	NG	10	NYSSA SYLVATICA "NSUHH" TM	GREEN GABLE TUPELO	DECIDUOUS	3" CAL.	16-18' HT	AS SHOWN	B&B, STRONG CENTRAL LEADER, FULL CANOPY
	QT	25	QUERCUS NUTTALLII "QNSTC" TM	ESPLANADE NUTTALL OAK	DECIDUOUS	3" CAL.	16-18' HT	AS SHOWN	B&B, STRONG CENTRAL LEADER, FULL CANOPY
	QA	6	QUERCUS PHELLOS "QPSTJ" TM	ASCENDOR WILLOW OAK	DECIDUOUS	3" CAL.	16-18' HT	AS SHOWN	B&B, STRONG CENTRAL LEADER, FULL CANOPY

LANDSCAPE SITE DATA

PROPERTY INFORMATION:

STREET ADDRESS: 1310 FRANKLIN ROAD
SITE ACREAGE: 31.70 ACRES

PROJECT LANDSCAPE ARCHITECT:

TYLOR FISCHER, PLA
RAGAN-SMITH ASSOCIATES, INC.
315 WOODLAND STREET
NASHVILLE, TN 37206
(615) 244-8591
TFISCHER@RAGANSMITH.COM

LANDSCAPE BUFFER REQUIREMENT:

ROAD FRONTAGE (FRANKLIN ROAD) 238 L.F.
BUFFER WIDTH PROVIDED: 150+

TREES REQUIRED (238/100 X 45): 108
TREES PROVIDED: 108

EXISTING VEGETATION: 7 (1 EVERGREEN)
PROPOSED VEGETATION: 101
EVERGREEN (MIN. 75%): 82 (81%)
DECIDUOUS: 19 (INCL. 6 ST. TREES)

RESIDENTIAL STANDARDS:

CALIPERS REQUIRED (25 CAL PER AC)
31.70 AC X 25: 792"

CALIPERS PROVIDED: 2,603"
STREET TREES (40 X 3" CAL.): 120"
ARTERIAL BUFFER (95 X 2"): 190"
SUPPLEMENTAL BUFFERS (60 X 2") 120"
EXISTING VEGETATION TO REMAIN: 2,173"

0 80 160

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ragansmith.com

TYLOR LEWARON FISCHER REGISTERED LANDSCAPE ARCHITECT STATE OF TENNESSEE NO. 1117
12/5/22

EASTMAN'S PRESERVE

FOR

THE RIVERSTONE GROUP

CITY OF BRENTWOOD, WILLIAMSON COUNTY, TENNESSEE

Scale: 1"=60'

Date: 4/19/22

Approved By: TF

Revisions:

-	-	-
-	-	-
-	-	-
4	12/5/22	REVISED PER ENTRANCE SHIFT
2	4/5/22	REVISED PER STAFF COMMENTS
1	3/22/22	REVISED PER STAFF COMMENTS

Drawing Title:

LANDSCAPE PLAN - OVERALL

Drawing No.

L1.0

Project No.

22-0050

G:\22-0050\1-CAD\L ENGINEERING\DRD-PREL\MAINSTR-MM_DRD-PREL_LANDSCAPE.DWG
PLOTTED BY TYLOR FISCHER ON 12/5/2022 10:19 AM
LAST UPDATED BY TFISCHER ON 12/5/2022 10:19 AM

PLANT SCHEDULE LANDSCAPE

BUFFER TREES DECIDUOUS	CODE	QTY	BOTANICAL NAME	COMMON NAME	TYPE	SIZE	HEIGHT	SPACING	REMARKS
	AB	8	ACER SACCHARUM "BAILSTX" TM	FALL FIESTA SUGAR MAPLE	DECIDUOUS	2" CAL.	12-14' HT	AS SHOWN	B&B, STRONG CENTRAL LEADER, FULL CANOPY
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	TS	2	TAXODIUM DISTICHUM "SOFINE" TM	AUTUMN GOLD BALD CYPRESS	DECIDUOUS	2" CAL.	12-14' HT	AS SHOWN	B&B, STRONG CENTRAL LEADER, FULL CANOPY
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	TG	24	THUJA STANDISHII X PLICATA "GREEN GIANT"	GREEN GIANT ARBORVITAE	EVERGREEN		8' HT. MIN.	AS SHOWN	B&B, FULL TO BASE
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LANDSCAPE SITE DATA

PROPERTY INFORMATION:

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SITE ACREAGE: 31.70 ACRES

PROJECT LANDSCAPE ARCHITECT:

TYLOR FISCHER, PLA
RAGAN-SMITH ASSOCIATES, INC.
315 WOODLAND STREET
NASHVILLE, TN 37206
(615) 244-8591
TFISCHER@RAGANSMITH.COM

LANDSCAPE BUFFER REQUIREMENT:

ROAD FRONTAGE (FRANKLIN ROAD) 238 L.F.
BUFFER WIDTH PROVIDED: 150+

TREES REQUIRED (238/100 X 45): 108
TREES PROVIDED: 108

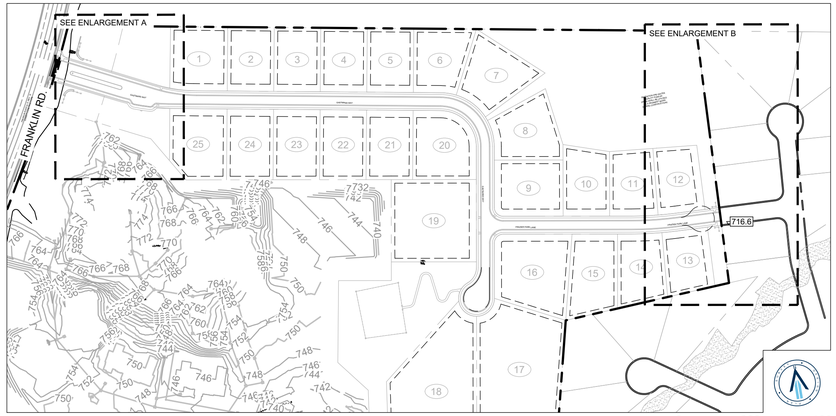
EXISTING VEGETATION: 7 (1 EVERGREEN)
PROPOSED VEGETATION: 101
EVERGREEN (MIN. 75%): 82 (81%)
DECIDUOUS: 19 (INCL. 6 ST. TREES)

RESIDENTIAL STANDARDS:

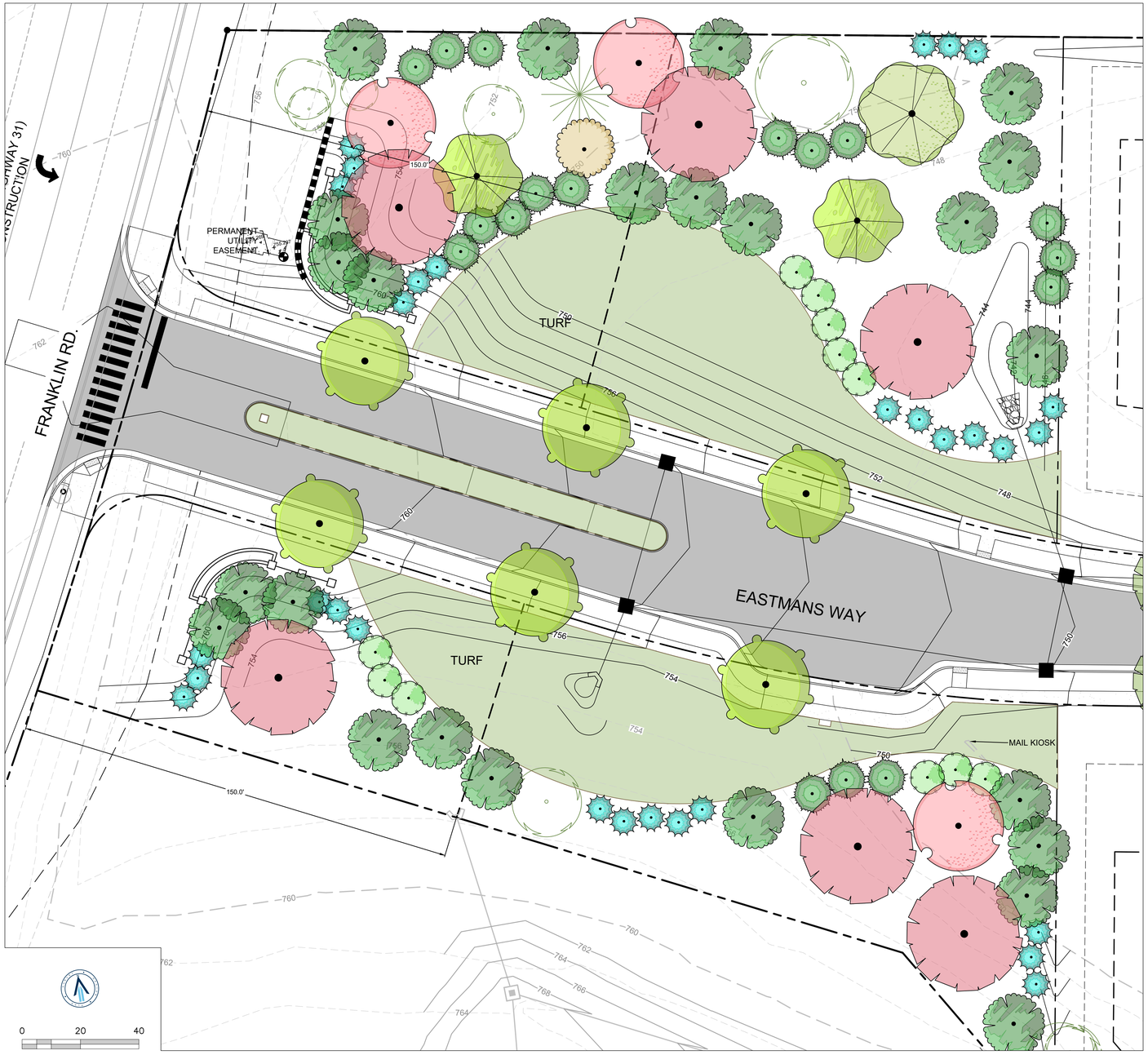
CALIPERS REQUIRED (25 CAL PER AC)
31.70 AC X 25: 792"

CALIPERS PROVIDED: 2,603"
STREET TREES (40 X 3" CAL.): 120"
ARTERIAL BUFFER (95 X 2"): 190"
SUPPLEMENTAL BUFFERS (60 X 2") 120"
EXISTING VEGETATION TO REMAIN: 2,173"

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



CONTEXT MAP
0 200 400



ENLARGEMENT A - ARTERIAL BUFFER
1" = 20'
0 20 40



ENLARGEMENT B - SUPPLEMENTAL KINGS CROSSING SCREENING
1" = 40'
0 40 80

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TYLOR LEWARON FISCHER REGISTERED LANDSCAPE ARCHITECT TENNESSEE NO. 1170
12/5/22

EASTMAN'S PRESERVE

FOR

THE RIVERSTONE GROUP

CITY OF BRENTWOOD, WILLIAMSON COUNTY, TENNESSEE

Scale: VARIES
Date: 4/19/22
Approved By: TF
Revisions:

-	-	-
-	-	-
-	-	-
4	12/5/22	REVISED PER ENTRANCE SHIFT
2	4/5/22	REVISED PER STAFF COMMENTS
1	3/22/22	REVISED PER STAFF COMMENTS

Drawing Title:

LANDSCAPE PLAN - BUFFERS

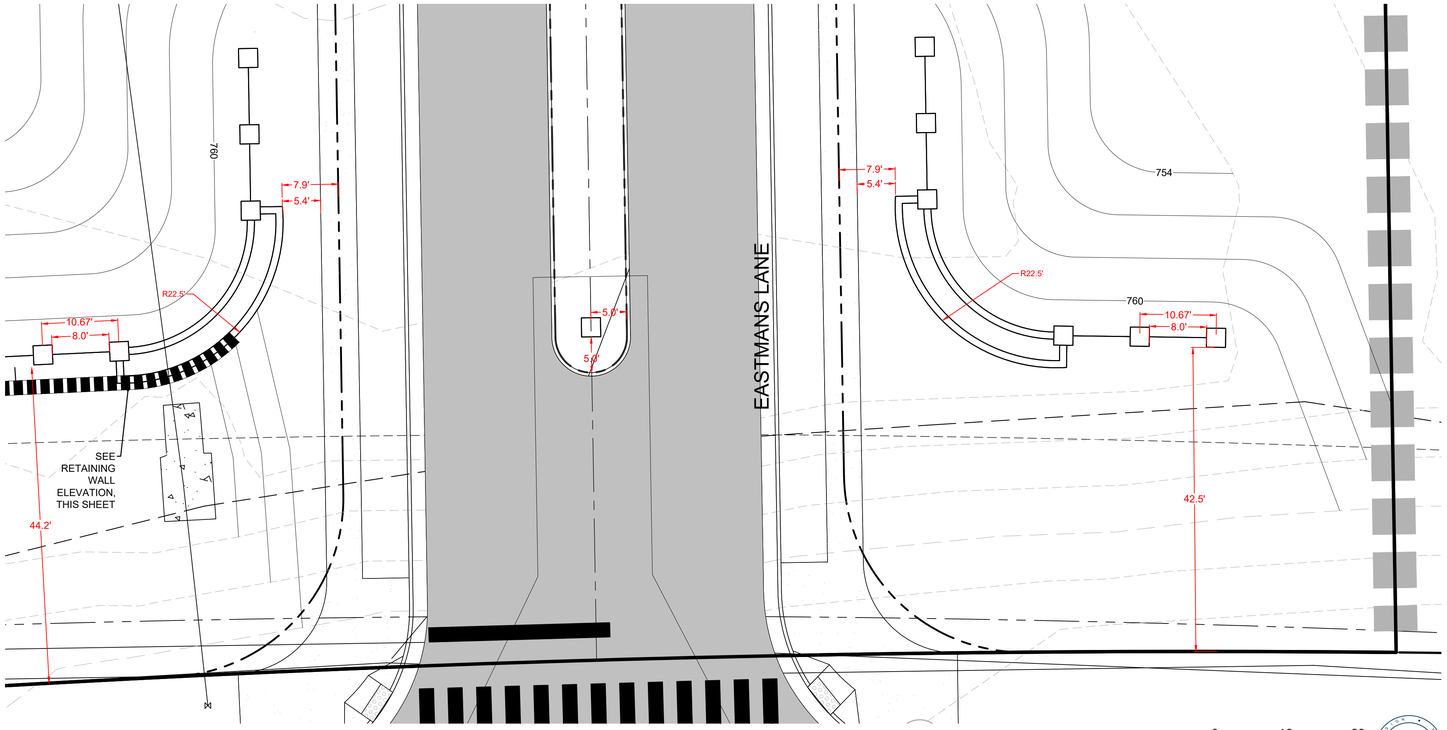
Drawing No.

L1.1

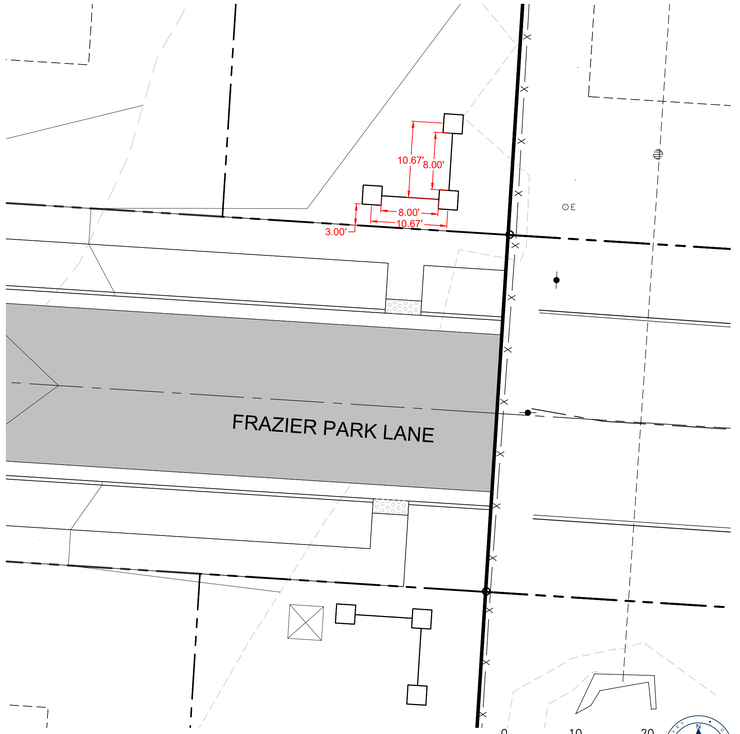
Project No.

22-0050

G:\22-0050\1-CIVIL ENGINEERING\05-PRELIM\MKT PLAN\PLAN SHEETS-WIMB_GRID-PRELIM_LANDSCAPE.DWG
PLOTTED BY: TYLOR FISCHER ON: 12/5/2022 - 10:19 AM LAST UPDATED BY: TFISCHER ON: 12/5/2022 - 10:19 AM



ENTRANCE MONUMENT PLAN
SCALE: 1" = 10'



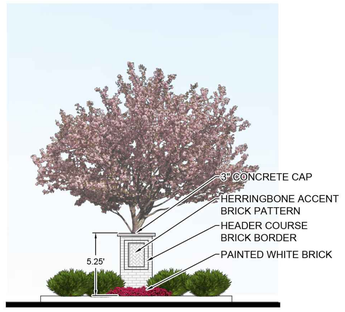
FRAZIER PARK LANE ENTRANCE PLAN
SCALE: 1" = 10'



ENTRANCE MONUMENT ELEVATION
SCALE: $\frac{1}{2}$" = 1'



FRAZIER PARK LANE ENTRANCE ELEVATION
SCALE: $\frac{1}{2}$" = 1'



MEMORIAL COLUMN ELEVATION
SCALE: $\frac{1}{2}$" = 1'



RETAINING WALL ELEVATION
NTS

RaganSmith

Nashville - Murfreesboro - Chattanooga
ragansmith.com

TYLOR LEWARON FISCHER
REGISTERED
AGRICULTURE
TENNESSEE NO. 11
LANDSCAPE ARCHITECT
12/5/22

EASTMAN'S PRESERVE
FOR
THE RIVERSTONE GROUP
CITY OF BRENTWOOD, WILLIAMSON COUNTY, TENNESSEE

Scale:	VARIES
Date:	4/19/22
Approved By:	TG

Revisions:

-	-	-
-	-	-
4	12/5/22	REVISED PER ENTRANCE SHIFT
3	10/12/22	REVISED RETAINING WALL
2	4/5/22	REVISED PER STAFF COMMENTS
1	3/22/22	REVISED PER STAFF COMMENTS

Drawing Title:

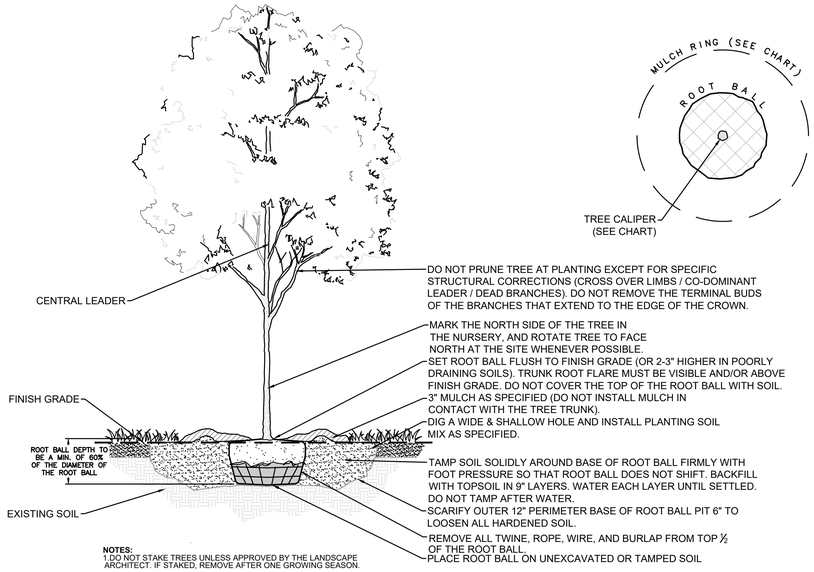
ENTRANCE MONUMENT

Drawing No.

L1.3

Project No.

22-0050

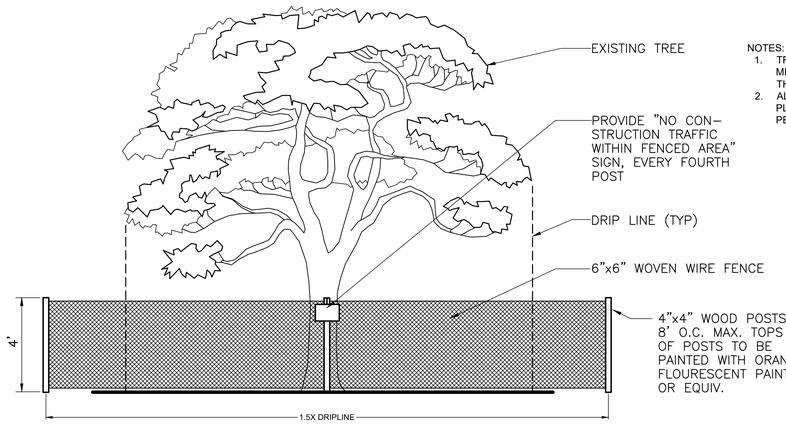


NOTES:
1.DO NOT STAKE TREES UNLESS APPROVED BY THE LANDSCAPE ARCHITECT. IF STAKED, REMOVE AFTER ONE GROWING SEASON.

2.DO NOT WRAP TREE TRUNKS UNLESS APPROVED BY THE LANDSCAPE ARCHITECT. REMOVE WRAP AFTER PLANTING.

3.NON-BIODEGRADABLE BURLAP TO BE REMOVED OR ROLLED UNDER ROOT BALL AFTER PLANT IS PLACED IN HOLE.

TYPICAL MULCH RING SIZING CHART		
CALIPER	MIN. ROOT BALL DIAMETER	MULCH RING DIAMETER
1"	16"	4' MIN.
1.5"	20"	4-6' MIN.
2"	2'-0"	6' MIN.
2.5"	28"	6-8' MIN.
3"	32"	8' MIN.
3.5"	38"	8-10' MIN.
4"	42"	10' MIN.
5"	54"	12' MIN.
6"	60"	12-14' MIN.
7"	70"	16' MIN.
8"	80"	20' MIN.



NOTES:
1. TREE PROTECTION TO BE INSTALLED AT A MINIMUM DISTANCE OF ONE AND A HALF TIMES THE RADIUS OF THE DRIP LINE.
2. ALL TREE PROTECTION FENCING SHALL BE IN PLACE PRIOR TO THE ISSUANCE OF A GRADING PERMIT.

TREE PROTECTION DETAIL

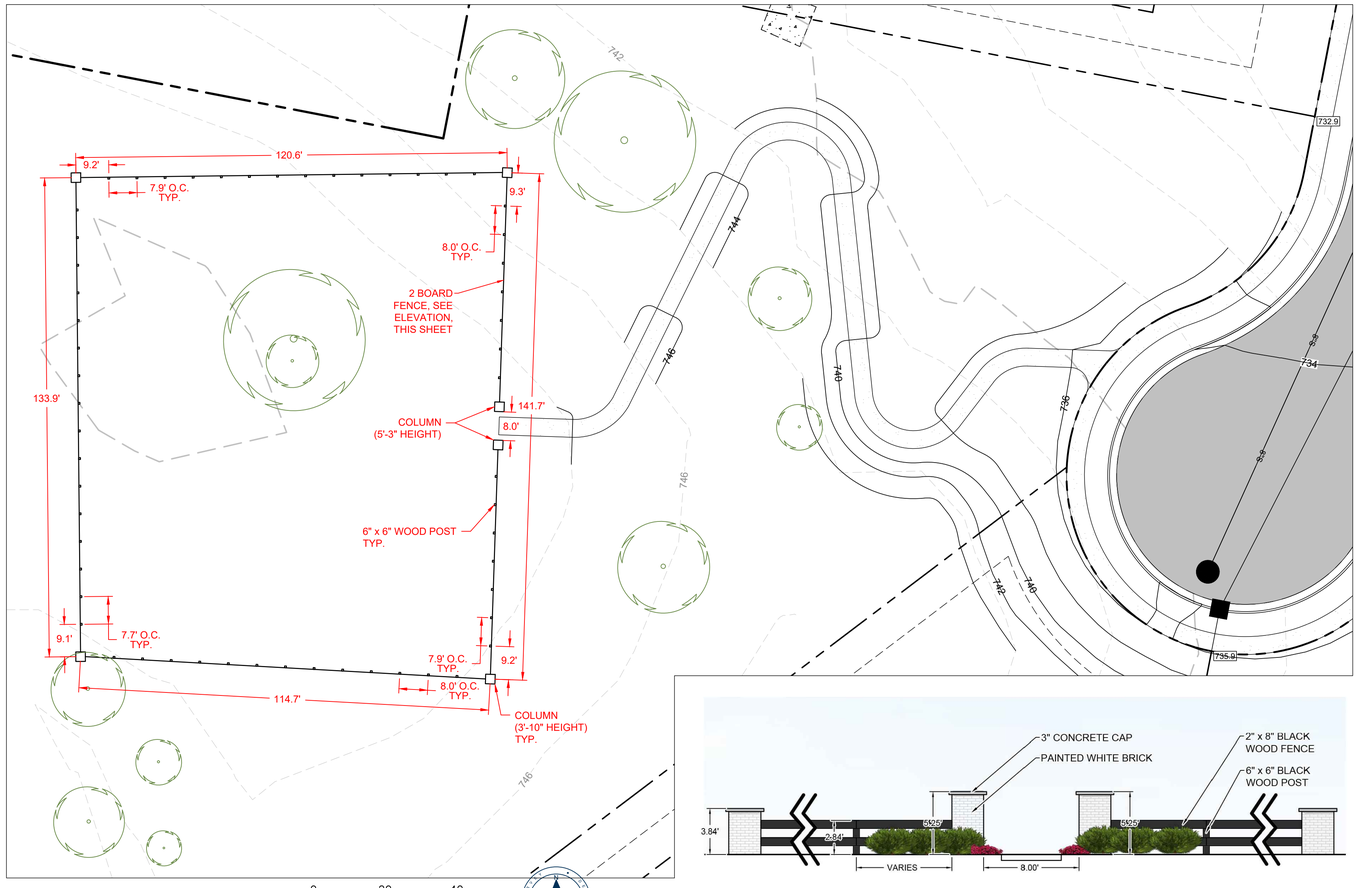
PLANTING NOTES:

1. ANY SERIES OF TREES TO BE PLACED IN A PARTICULAR ARRANGEMENT WILL BE FIELD CHECKED FOR ACCURACY. ANY PLANTS MISARRANGED WILL BE RELOCATED.
2. SOIL USED IN BACKFILLING PLANTING PITS SHALL BE TOPSOIL AND MIXED WITH 25% PEAT BY VOLUME. EXCEPT FOR ERICACEOUS PLANTS, VERY ACID OR SOUR SOIL (SOIL HAVING A pH less than 6) SHALL BE MIXED WITH SUFFICIENT LIME TO PRODUCE A SLIGHTLY ACID REACTION (A pH of 6.0 to 6.5). ADD 10-10-10 COMMERCIAL FERTILIZER AT THE RATE OF 2 POUNDS PER CUBIC YARD. MIX BOTH FERTILIZER AND PEAT THOROUGHLY BY HAND OR ROTARY TILLER.
3. SOIL USED IN BACKFILLING ERICACEOUS PLANTS SHALL BE TOPSOIL MIXED WITH 50% PEAT BY VOLUME. ADD 5-10-5 COMMERCIAL FERTILIZER AT THE RATE OF 5 POUNDS PER CUBIC YARD. MIX BOTH FERTILIZER AND PEAT THOROUGHLY BY HAND OR ROTARY TILLER.
4. UPON SECURING PLANT MATERIAL AND BEFORE INSTALLATION, THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE FOR A PRE-INSTALLATION INSPECTION TO VERIFY ALL PLANT MATERIAL MEETS SPECIFICATION. MATCH TREES OF SAME SPECIES IN GROWTH CHARACTER AND UNIFORMITY.
5. APPLY HERBICIDE (TREFLAN OR EQUIVALENT) TO ALL PLANT BEDS PRIOR TO PLANTING FOR NOXIOUS WEED CONTROL AT A RATE OF 2 POUNDS PER 1,000 SQUARE FEET.
6. CONTRACTOR SHALL SUBMIT A 10 OUNCE SAMPLE OF THE TOPSOIL PROPOSED TO A TESTING LABORATORY FOR ANALYSIS. SUBMIT TEST RESULTS WITH RECOMMENDATIONS FOR SUITABILITY TO THE OWNER'S REPRESENTATIVE FOR APPROVAL.
7. PLANTS SHALL BE ORIENTED FOR BEST APPEARANCE AND VERTICAL. ALL NON-BIODEGRADABLE ROOT CONTAINERS SHALL BE REMOVED.
8. SELECTIVELY TRIM TREE BRANCHES BY 25%, MAINTAINING NATURAL SHAPE. PRUNE ALL DEAD AND BROKEN BRANCHES IN TREES AND SHRUBS. REMOVE TAGS, TWINE OR OTHER NON-BIODEGRADABLE MATERIAL.
9. SCARIFY SUBSOIL IN PLANTING BEDS TO A DEPTH OF 3 INCHES. ALL PLANTING BEDS SHALL RECEIVE A MINIMUM OF 6 INCHES OF TOPSOIL.
10. CONTRACTOR SHALL PROVIDE SMOOTH, NEATLY TRENCHED (3 INCH DEEP) BED EDGES.
11. ALL PLANTING BEDS TO HAVE A MINIMUM 4 INCH DEEP PINE BARK MULCH, PINE STRAW MULCH OR OTHER MULCH AS SPECIFIED.
12. DIMENSIONS FOR TRUNK CALIPER, HEIGHTS, AND SPREAD SPECIFIED ON THE MATERIAL SCHEDULE ARE A GENERAL GUIDE FOR THE MINIMUM REQUIRED SIZE OF EACH PLANT. QUALITY AND SIZE OF PLANTS, SPREAD OF ROOTS AND SIZE OF BALLS SHALL BE IN ACCORDANCE WITH A.N.S.I. Z80 "AMERICAN STANDARD FOR NURSERY STOCK" (CURRENT EDITION) AS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC.
13. THE QUANTITIES INDICATED ON THE MATERIAL SCHEDULE ARE PROVIDED FOR THE BENEFIT OF THE CONTRACTOR, BUT SHOULD NOT BE ASSUMED TO ALWAYS BE CORRECT. IN THE EVENT OF A DISCREPANCY, THE PLANTING PLAN (PLANT SYMBOLS) WILL TAKE PRECEDENCE OVER THE MATERIAL SCHEDULE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HIS/HER OWN QUANTITY CALCULATIONS AND THE LIABILITY PERTAINING TO THOSE QUANTITIES AND ANY RELATED CONTRACT DOCUMENTS AND/OR PRICE QUOTATIONS.
14. CONTRACTOR TO WARRANTY ALL MATERIAL FOR ONE YEAR AFTER DATE OF FINAL ACCEPTANCE.

SEEDING NOTES:

1. SEED ALL DISTURBED AREAS WITH KY-31 AT THE RATE OF 5 POUNDS PER 1,000 S.F. ALL SEED TO BE 98% PURE WITH 85% GERMINATION AND CONFORM TO ALL STATE REQUIREMENTS FOR GRASS SEED. THE FERTILIZER TO BE 6-12-12 COMMERCIAL TYPE WITH 50% OF ITS ELEMENTS DERIVED FROM ORGANIC SOURCES.
2. PLACE STRAW MULCH ON SEEDED AREAS. STRAW TO BE OATS OR WHEAT STRAW, FREE FROM WEEDS, FOREIGN MATTER DETRIMENTAL TO PLANT LIFE, AND DRY. HAY OR CHOPPED CORNSTALKS ARE NOT ACCEPTABLE.
3. THE CONTRACTOR SHALL VERIFY THAT THE PREPARED SOIL BASE IS READY TO RECEIVE WORK. CULTIVATE THE TOPSOIL TO A DEPTH OF 4 INCHES WITH A MECHANICAL TILLER AND SUBSEQUENTLY RAKE UNTIL SMOOTH. REMOVE FOREIGN MATERIALS COLLECTED DURING CULTIVATION AND RAKING OPERATIONS.
4. APPLY FERTILIZER ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. LIMESTONE MAY BE APPLIED WITH THE FERTILIZER. APPLY FERTILIZER AFTER SMOOTH RAKING AND PRIOR TO ROLLER COMPACTION AND MIX THOROUGHLY IN THE UPPER 2 INCHES OF TOPSOIL.
5. APPLY SEED EVENLY IN TWO INTERSECTING DIRECTIONS AND RAKE IN LIGHTLY. WATER TOPSOIL LIGHTLY PRIOR TO APPLYING SEED. DO NOT SEED AREA IN EXCESS OF THAT WHICH CAN BE MULCHED ON THE SAME DAY.
6. ROLL SEEDED AREA WITH ROLLER NOT EXCEEDING 112 POUNDS.
7. IMMEDIATELY FOLLOWING SEEDING AND COMPACTING, APPLY STRAW MULCH AT THE RATE OF ONE AND ONE HALF BALES PER 1,000 SQUARE FEET. IMMEDIATELY AFTER MULCHING, APPLY WATER WITH A FINE SPRAY AND SATURATE THE GROUND TO A DEPTH OF 4 INCHES.
8. CONTRACTOR IS RESPONSIBLE FOR WATERING SEEDED AREAS TO PREVENT GRASS AND SOIL FROM DRYING OUT UNTIL THE INSTALLATION IS INSPECTED AND ACCEPTED BY THE OWNER'S REPRESENTATIVE.
9. CONTRACTOR IS RESPONSIBLE FOR RESEEDING BARE SPOTS FOR A PERIOD OF ONE YEAR AFTER ACCEPTANCE OF INSTALLATION.

NOTE:
ALL DISTURBED LAND NOT OTHERWISE PLANTED SHALL BE SEEDED PER SEEDING NOTES ON THIS SHEET.



CEMETERY PLAN
SCALE: 1" = 20'

CEMETERY ELEVATION
SCALE: 1/2" = 1'

0:\22-0050_CAD_ENGINEERING\DRD-PRELIM\MKT PLAN\PLAN SHEETS-1MK_DRD_PRELIM_LANDSCAPE.DWG
PLOTTED BY TYLOR FISCHER ON 12/5/2022 10:29 AM LAST UPDATED BY TFISCHER ON 12/5/2022 1:05 PM

RaganSmith
Nashville - Murfreesboro - Chattanooga
ragansmith.com

TYLOR LEWARON FISCHER REGISTERED AGRICULTURE TENNESSEE NO. 1 LANDSCAPE ARCHITECT
12/5/22

EASTMAN'S PRESERVE
FOR
THE RIVERSTONE GROUP
CITY OF BRENTWOOD, WILLIAMSON COUNTY, TENNESSEE

Scale: NTS
Date: 4/19/22
Approved By: TF

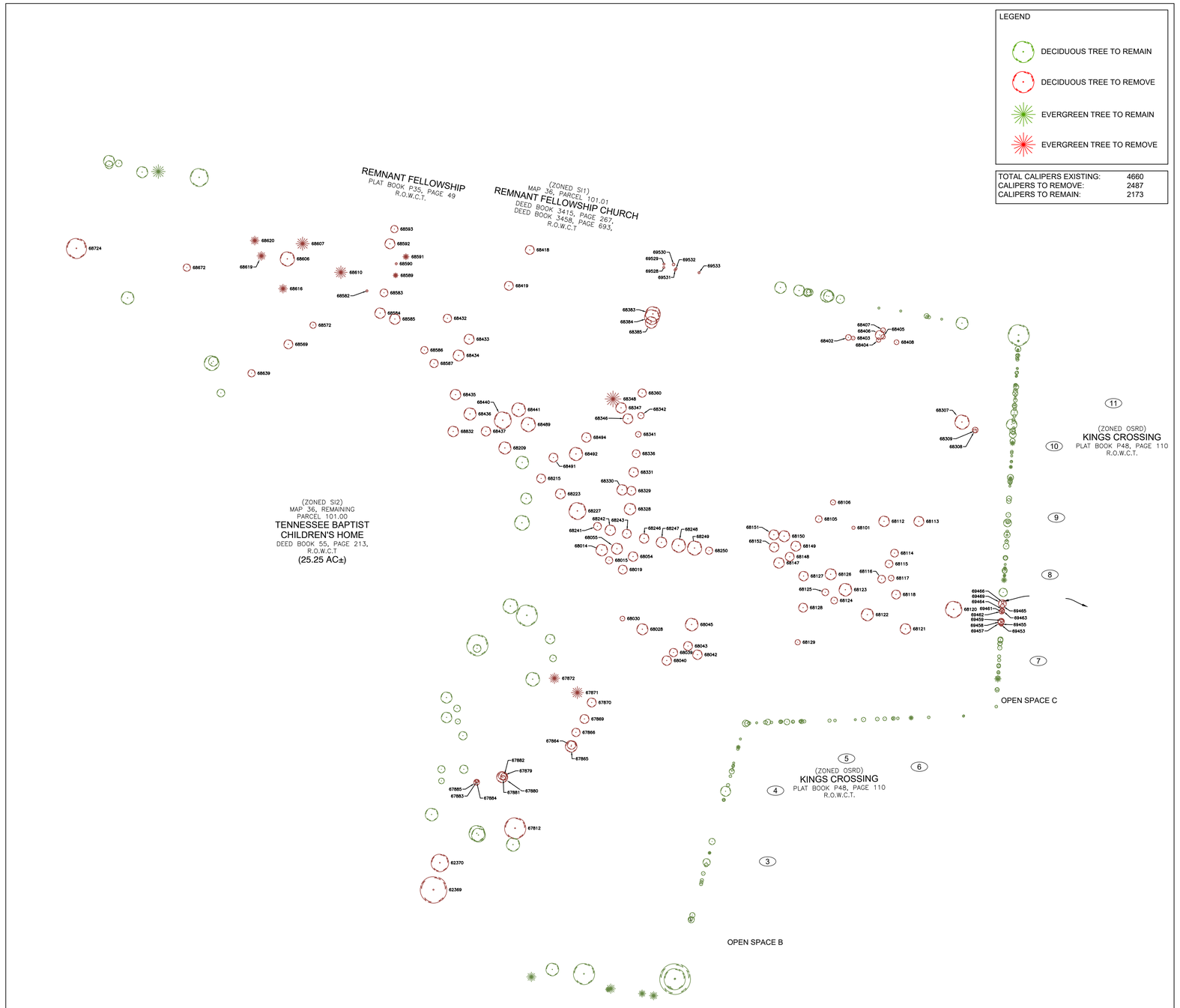
Revisions:

-	-	-
-	-	-
-	-	-
-	-	-
2	4/5/22	REVISED PER STAFF COMMENTS
1	3/22/22	REVISED PER STAFF COMMENTS

Drawing Title:
LANDSCAPE NOTES & DETAILS

Drawing No.
L1.4

Project No.
22-0050



TREE #	CALIPER	TYPE
5519	14	PINE
5523	18	PINE
5524	10	PINE
5582	24	MAGNOLIA
5584	18	PINE
5709	16	PINE
6392	40	MAGNOLIA
16257	58	HACKBERRY
60379	40	ASH
67813	25	HACKBERRY
67875	26	ELM
67886	30	HACKBERRY
67887	26	HACKBERRY
67915	24	BRADFORD
67916	11	CYPRESS
67918	14	BRADFORD
67920	16	CHERRY
67923	16	DBLBCHERRY
67924	10	DBLSCHERRY
67926	20	CYPRESS
67928	13	CYPRESS
67929	21	CYPRESS
67939	15	HACKBERRY
67940	40	HACKBERRY
67941	13	CYPRESS
67942	18	CYPRESS
67943	40	ELM
67944	28	WALNUT
67984	28	PINE
67996	21	MAPLE
68212	24	MAPLE
68648	15	BRADFORD
68686	34	HACKEBERRY
68695	26	CEDAR
68697	21	HACKEBERRY
68700	13	WALNUT
68702	21	HACKEBERRY
68703	15	WALNUT
68753	24	ASH
69333	39	HACKEBERRY
69334	4	HACKEBERRY
69335	7	BRADFORD
69336	12	BRADFORD
69337	10	BRADFORD
69338	6	BRADFORD
69339	6	CHERRY
69340	6	ASH
69341	7	CHERRY
69342	7	HACKEBERRY
69343	14	DBLTCHERRY
69344	6	CEDAR
69345	5	CEDAR
69346	12	HACKEBERRY
69347	6	BRADFORD
69348	4	BRADFORD
69349	19	BRADFORD
69351	6	BRADFORD
69352	5	HACKEBERRY
69354	10	DBLSCHERRY
69355	5	HACKEBERRY
69356	5	HACKEBERRY
69357	5	CHERRY
69358	4	CHERRY
69359	8	CEDAR
69360	5	BRADFORD
69361	4	HACKEBERRY
69363	13	CHERRY
69365	10	DBLSBRADFORD
69366	6	CHERRY
69367	4	HACKEBERRY
69369	7	CHERRY
69370	11	CHERRY
69371	5	HACKEBERRY
69372	5	HACKEBERRY
69373	5	HACKEBERRY
69374	7	HACKEBERRY
69375	11	CHERRY
69376	5	HACKEBERRY
69377	6	HACKEBERRY
69378	6	HACKEBERRY
69379	6	HACKEBERRY
69380	4	HACKEBERRY
69381	8	HACKEBERRY
69382	6	HACKEBERRY
69385	6	BRADFORD
69387	5	HACKEBERRY
69388	4	HACKEBERRY
69389	8	HACKEBERRY
69391	7	BRADFORD
69392	7	HACKEBERRY
69394	4	BRADFORD
69395	7	BRADFORD
69397	5	CHERRY
69402	9	CEDAR
69404	5	HACKEBERRY
69410	4	BRADFORD
69411	4	BRADFORD
69426	5	HACKEBERRY
69431	8	HACKEBERRY
69434	6	HACKEBERRY
69436	8	HACKEBERRY
69437	13	CEDAR
69438	6	HACKEBERRY
69439	5	HACKEBERRY
69440	7	HACKEBERRY
69441	7	HACKEBERRY
69442	6	CHERRY
69444	6	HACKEBERRY
69446	8	HACKEBERRY
69447	8	BRADFORD
69448	8	BRADFORD
69449	10	HACKEBERRY
69450	10	HACKEBERRY
69471	16	HACKEBERRY
69473	11	CEDAR
69474	6	CEDAR
69475	4	HACKEBERRY
69476	7	HACKEBERRY
69478	10	HACKEBERRY
69479	7	CEDAR
69481	4	HACKEBERRY
69482	7	HACKEBERRY
69483	9	HACKEBERRY
69485	11	HACKEBERRY
69486	7	CHERRY
69487	4	HACKEBERRY
69488	4	HACKEBERRY
69489	12	HACKEBERRY
69491	5	HACKEBERRY
69493	15	HACKEBERRY
69494	5	HACKEBERRY
69495	9	HACKEBERRY
69497	9	HACKEBERRY
69502	9	HACKEBERRY
69503	10	HACKEBERRY
69506	4	HACKEBERRY
69509	5	HACKEBERRY
69510	5	HACKEBERRY
69511	9	HACKEBERRY
69512	9	CEDAR
69513	12	HACKEBERRY
69514	7	CEDAR
69515	4	HACKEBERRY
69516	5	HACKEBERRY
69517	4	HACKEBERRY
69518	5	HACKEBERRY
69519	5	HACKEBERRY
69520	10	CEDAR
69521	10	HACKEBERRY
69522	13	HACKEBERRY
69523	6	HACKEBERRY
69524	11	HACKEBERRY
69525	6	HACKEBERRY
69526	4	HACKEBERRY
69527	20	DBL10ASH
69538	22	HACKEBERRY
69540	21	HACKEBERRY
69542	13	ASH
69543	16	ASH
69545	13	HACKEBERRY
69551	20	HACKEBERRY
69552	24	HACKEBERRY
69555	16	HACKEBERRY
69568	4	SASSAFRAS
69570	4	SASSAFRAS
69580	9	SASSAFRAS
69581	5	BRADFORD
69582	6	CHERRY
69586	4	SASSAFRAS
69590	23	HACKEBERRY
69607	4	CEDAR
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69610	4	HACKEBERRY
69611	4	HACKEBERRY
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69625	4	HACKEBERRY
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69627	10	HACKEBERRY
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69629	4	HACKEBERRY
69630	10	HACKEBERRY
69631	5	HACKEBERRY
69632	4	HACKEBERRY
69633	7	HACKEBERRY
69634	5	HACKEBERRY
69635	9	HACKEBERRY
69636	6	HACKEBERRY
69637	6	HACKEBERRY
69638	13	HACKEBERRY
69639	6	HACKEBERRY
69640	6	HACKEBERRY
69641	6	HACKEBERRY

2173

TREE #	CALIPER	TYPE
62369	50	OAK
62370	33	HACKEBERRY
67812	40	HACKEBERRY
67864	16	HACKEBERRY
67865	22	DBL11HACKEBERRY
67866	16	BRADFORD
67869	17	BRADFORD
67870	17	BRADFORD
67871	23	PINE
67872	20	PINE
67879	35	BRADFORD
67880	21	TRPLT BRADFORD
67881	9	BRADFORD
67882	13	BRADFORD
67883	6	HACKBERRY
67884	6	BRADFORD
67885	31	CHERRY
68014	22	BRADFORD
68015	14	BRADFORD
68019	37	BRADFORD
68028	21	MAPLE
68030	9	MAPLE
68039	16	BRADFORD
68040	16	BRADFORD
68042	18	SYCAMORE
68043	17	BRADFORD
68045	24	BRADFORD
68054	18	BRADFORD
68055	21	BRADFORD
68101	6	DOGWOOD
68105	13	BRADFORD
68106	10	BRADFORD
68112	20	DBL10 MULBERRY
68113	19	HACKBERRY
68114	15	CYPRESS
68115	15	CYPRESS
68116	15	CYPRESS
68117	11	MAPLE
68118	17	MAPLE
68120	31	SYCAMORE
68121	20	POPLAR
68122	23	OAK
68123	24	OAK
68124	13	BRADFORD
68125	13	BRADFORD
68126	21	BRADFORD
68127	18	DBL9 MAGNOLIA
68128	17	BRADFORD
68129	10	BRADFORD
68147	20	BRADFORD
68148	17	BRADFORD
68149	19	BRADFORD
68150	21	BRADFORD
68151	19	BRADFORD
68152	18	BRADFORD
68209	23	MAPLE
68215	17	MAPLE
68223	19	MAPLE
68227	32	MAPLE
68241	15	MAPLE
68242	20	BRADFORD
68243	17	BRADFORD
68246	18	BRADFORD
68247	20	MAPLE
68248	26	DBL11MAGNOLIA
68249	27	BRADFORD
68250	14	BRADFORD
68307	27	ASH
68308	31	HACKEBERRY
68309	7	HACKEBERRY
68328	22	CYPRESS
68329	17	CYPRESS
68330	20	WALNUT
68331	18	CYPRESS
68336	15	CYPRESS
68341	11	CYPRESS
68342	12	CYPRESS
68346	19	WALNUT
68347	20	BRADFORD
68348	30	PINE
68360	16	MULBERRY
68383	28	HACKBERRY
68384	28	HACKBERRY
68385	22	HACKBERRY
68402	11	WALNUT
68403	7	WALNUT
68404	8	WALNUT
68405	8	WALNUT
68406	17	CATALPA
68407	9	WALNUT
68408	9	WALNUT
68418	17	BRADFORD
68419	17	BRADFORD
68432	16	POPLAR
68433	19	BRADFORD
68434	21	BRADFORD
68435	20	MAPLE
68436	23	MAPLE
68437	18	MAPLE
68440	32	BRADFORD
68441	26	BRADFORD
68489	27	BRADFORD
68491	17	HACKBERRY
68492	23	SYCAMORE
68494	18	WALNUT
68569	17	BRADFORD
68572	12	BRADFORD
68582	4	OAK
68583	15	BRADFORD
68584	20	BRADFORD
68585	20	BRADFORD
68586	14	BRADFORD
68587	16	BRADFORD
68589	10	CEDAR
68590	4	OAK
68591	12	CEDAR
68592	19	BRADFORD
68593	14	BRADFORD
68606	27	SYCAMORE
68607	25	PINE
68610	24	PINE
68616	17	CEDAR
68619	17	CEDAR
68620	17	CEDAR
68639	14	BRADFORD
68654	28	ASH
68655	18	HACKBERRY
68672	14	SYCAMORE
68724	38	ASH
68832	20	MAPLE
69453	4	HACKBERRY
69455	7	HACKBERRY
69457	12	HACKBERRY
69458	12	HACKBERRY
69459	6	BRADFORD
69461	4	HACKBERRY
69462	10	CHERRY
69463	8	BRADFORD
69464	5	HACKBERRY
69465	7	HACKBERRY
69466	5	HACKBERRY
69469	15	BOIS D'ARC
69528	4	SUMAC
69529	4	SUMAC
69530	5	SUMAC
69531	4	SUMAC
69532	4	SUMAC
69533	4	WALNUT

2487

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TYLER LEWARON FISCHER
REGISTERED
AGRICULTURE
TENNESSEE NO. 1
LANDSCAPE ARCHITECT

12/5/22

EASTMAN'S PRESERVE

FOR

THE RIVERSTONE GROUP

CITY OF BRENTWOOD, WILLIAMSON COUNTY, TENNESSEE

Scale: 1"=100'

Date: 03/07/22

Approved By: TF

Revisions:

- – –
- – –
- – –
- – –
- – –
- – –

Drawing Title:

TREE INVENTORY

Drawing No.

L2.0

Project No.

22-0050

Know what's below. Call before you dig.

0 100 200

G:\22-0050\LA\PDL ENGINEERING\CIVIL\RES LAYOUT PLANS AS SHEETS\01 MK_CIVIL\PRELIM_TREE INVENTORY.DWG
PLOTTED BY TYLOR FISCHER ON 12/5/2022 10:29 AM - LAST UPDATED BY FISCHER ON 3/4/2022 3:14 PM

Consent Agenda 7.

BRENTWOOD PLANNING COMMISSION

Meeting Date: 01/03/2023

Current Zoning: OSRD - OPEN SPACE RESIDENTIAL DEVELOPMENT

Information

Subject

BPC2212-010 Revised Preliminary Plan - Primm Farm Subdivision, Zoning OSRD - *Applicant: Mr. Matt Bryant, M2 Group, LLC, P. O. Box 848, Franklin, TN 37065*

General Information

M2 Group LLC requests approval of a revised preliminary plan showing 24 lots on approximately 29 acres. This revision relates to the incorporation of staggered side setbacks as allowed per the OSRD zoning. Originally, the developer had proposed 20-foot side setbacks with a minimum separation between buildings of 40-feet. This revision proposes a 15-foot side setback on one side of the lot and 25-foot setback on the other side. All adjoining lots would still have a minimum separation of 40 feet between buildings.

This proposal meets the requirements of the code.

Conditions of Approval

Staff recommends that the following **1** condition be attached to the approval of the request.

1. A preliminary site plan shall be vested for a period of three years from the date of the original approval.

Standard Requirements

Staff recommends that the following **16** conditions be attached to the approval of the request.

1. Add the following note to the preliminary plan:

   This site plan is subject to a three-year vesting period, during which the development standards in effect on the date of approval will remain the standards applicable to this plan. If construction is not completed during the first three years, the original site plan is considered a preliminary site plan and the applicant must obtain approval of a final site plan. Development of the property shown on this plan may be subject to standards other than those that were applicable during the vesting period. The Initial vesting period for this plan expires on **August 1, 2023**, unless extended by the City of Brentwood. Persons relying on this plan after said date should contact the City of Brentwood to determine if development may continue as depicted on the plan.

2. When the construction authorized pursuant to a site plan is not completed within three years from the date of initial approval, but the applicant desires to complete the project proposed

for the site, the plan as initially approved for the project or as amended shall be considered a preliminary site plan. If the applicant secures all necessary permits, commences site preparation and obtains approval of a final site plan within the three-year vesting period following approval of the preliminary site plan, then the vesting period shall be extended an additional two years beyond the expiration of the initial three-year vesting period. During the two-year extension, the applicant must commence construction and maintain any necessary permits to remain vested.

3. If necessary, permits are maintained and construction, as defined by Section 78-43, has commenced by the end of the two-year extension, then the vesting period shall remain in effect until the Planning and Codes Department has certified final completion of the project, provided the total vesting period shall not exceed ten years from the date of approval of the preliminary site plan.

4. If the construction authorized pursuant to a site plan is completed within three years from the date of approval, the site plan shall then be considered the final site plan for the project.

5. A stormwater system long term operation and maintenance plan is required by the time of a final plat and will need to be sealed by a licensed Tennessee Professional Engineer.

6. It is the policy of the U. S. Postal Service that mail delivery to all new and extended developments use centralized delivery, via cluster box units (CBU). It is the responsibility of the customer (developers and builders) to provide the necessary mail receptacle equipment. Show/label an area on the plan to accommodate the cluster box units. Developers must receive approval from the USPS before mail service can begin.

7. The homes in the subdivision shall use U.S. Postal Service approved Cluster Box Units for Mail Delivery. Each home builder shall install permanent address posts, in lieu of mailboxes at the end of each driveway to facilitate emergency response. The address posts must be installed before a certificate of occupancy will be issue for the home.

8. Approval of the site plan does not constitute approval of the signage plan. All signs must comply with the Brentwood Sign Ordinance. A comprehensive sign package including all signs (temporary or permanent, wall or ground) shall be submitted to the Planning Department for a compliance review. Please submit a comprehensive sign package to Allison Roberts at allison.roberts@brentwoodtn.gov.

9. On all sheets of the plan show the location of existing and platted property lines, existing streets, buildings, watercourses, railroads, cemeteries, sewer lines, bridges, culverts, drain pipes, water mains, fire hydrants, street lights, tree masses, public utility easements.

10. Show the location of any sinkholes on the subject property as identified by a qualified geo-technical Engineer shall be located and appropriately labeled on the preliminary plan. The plan shall be configured to locate all sinkholes in permanent open space only and not within any buildable lots. Sinkholes in the permanent open space shall be protected from natural and/or man-made debris.

11. The property owner is responsible for all development fees including water and sewer

service and tap fees, building permit fees and Public Works Project Fees. The required fees shall be used for future infrastructure related improvements required by the proposed development.

12. Applicable security for all required roadway, drainage, utilities, water, sewer, landscaping and amenity improvements in accordance with the requirements of Article Eight of the Brentwood Subdivision Regulations shall be provided before the final plat may be recorded.

13. A Maintenance Agreement and Storm Water System Long-Term Operation and Maintenance Plan for all storm water structures and facilities must be prepared, submitted and approved per Section 56-43 of the Brentwood Code.

14. Deviations from the approved plan in the development of a project or the failure to satisfy any standard requirements or special conditions of approval imposed by the planning commission will be considered a violation of the provisions of the Zoning Ordinance, which shall be subject to punishment as provided in Section 1-9 of the Brentwood Municipal Code. The City may also require the applicant to appear before the Planning Commission to address any deficiencies or unapproved modifications. The project may also be subject to delays in issuance of permits, certificates of occupancy, recordation of plats or other project approvals.

15. Development of this project shall comply with all applicable codes and ordinances of the City of Brentwood.

16. Approval of the proposed plan shall be limited to the illustrations and plans presented to the Planning Commission for review and approval on **January 3, 2023**. Any changes to Planning Commission approved plans and specifications will require staff review and re-approval by the Planning Commission.

Staff Recommendation

Staff requests that the Planning Commission vote to approve the proposed revised preliminary plan subject to the requirements of the staff report.

Attachments

Vicinity Map

Revised Preliminary Plan



M2 GROUP
P.O. BOX 848
FRANKLIN, TN 37065
615.406.3415 / WWW.M2GROUPLLC.COM

VICINITY MAP

PRIMM FARM
8318 MOORES LANE
CITY OF BRENTWOOD
WILLIAMSON COUNTY, TENNESSEE

DATE	NOVEMBER, 2018
PROJECT #	18-765
SHEET NO.	EX-1

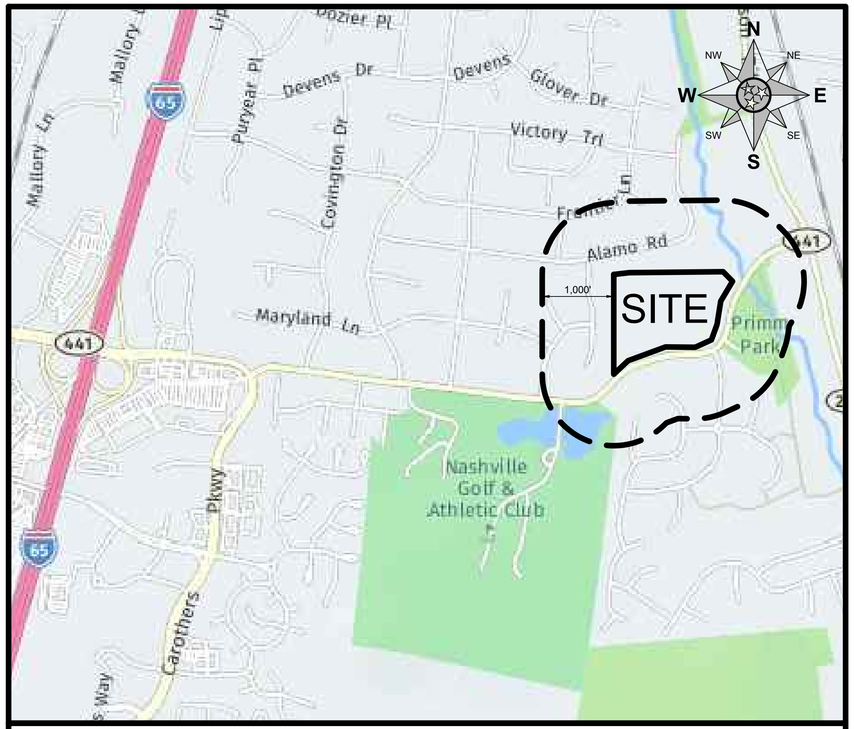
OWNER/APPLICANT:
THE 2010-C PEDIGO TRUST
ADDRESS: 1711 OLD FORT PARKWAY, SUITE A
MURFREESBORO, TENNESSEE 37129
PHONE NO.: 615-948-5800
EMAIL: jerroldpedigo@gmail.com
CONTACT NAME: JERROLD PEDIGO

CIVIL ENGINEER:
M2 GROUP, LLC
ADDRESS: P.O. BOX 848
FRANKLIN TENNESSEE 37065
PHONE NO.: 615-406-3415
matt@m2groupllc.com
CONTACT NAME: MATT BRYANT, PE

LANDSCAPE ARCHITECT:
HEIBERT+BALL LAND DESIGN, LLC
ADDRESS: 1894 GEN. GEORGE PATTON DR.
FRANKLIN, TENNESSEE 37067
PHONE NO.: 615-376-2421
EMAIL: connor@hblanddesign.com
CONTACT NAME: CONNOR BALL, RLA

SURVEYOR:
BROWN LAND SURVEYING, LLC.
ADDRESS: 105 LUTHER ROAD
DICKSON, TENNESSEE 37055
PHONE NO.: 615-446-3700
EMAIL: brownsurvey@bellsouth.net
CONTACT NAME: JOSEPH BROWN, R.L.S.

PRELIMINARY PLANS FOR
PRIMM FARM
8318 MOORES LANE
BRENTWOOD, TN
TAX MAP 54, PARCEL 35.00
APRIL, 2022



VICINITY MAP
SCALE: 1" = 1,000'

Sheet List Table	
Sheet Number	Sheet Title
C0.0	COVER SHEET
C1.0	EXISTING CONDITIONS AND DEMOLITION PLAN
C2.0	OVERALL SITE LAYOUT PLAN
C2.0A	OVERALL SITE AYOUT PLAN (OFFSITE IMPROVEMENTS)
C2.1	OFFSITE ROADWAY IMPROVEMENTS PLAN
C3.0	GRADING AND DRAINAGE PLAN
C3.1	EPSC PHASE I PLAN
C3.2	EPSC PHASE II PLAN
C3.3	EPSC PHASE III PLAN
C3.4	GRADING, DRAINAGE & EPSC DETAILS
C4.1	ENTRANCE PLAN & PROFILE
C4.2	ROADWAY PLAN & PROFILE
C4.3	ROADWAY PLAN & PROFILE
C5.0	OVERALL UTILITY PLAN
C5.1	UTILITY DETAILS
C5.2	UTILITY DETAILS
C6.0	SITE DETAILS
C7.0	TREE INVENTORY PLAN
L1.2	BUFFERYARD LANDSCAPE PLAN
L1	ENTRY - SITE
L2	ENTRY - LANDSCAPE PLAN
L3	MAIL KIOSK LANDSCAPE PLAN
L4	DETAILS - 1
L5	DETAILS - 2

GENERAL NOTES:

1. BOUNDARY AND EASEMENT INFORMATION SHOWN IS BASED ON THE "BOUNDARY TOPOGRAPHIC SURVEY" BY BROWN LAND SURVEYING, LLC. DATED OCTOBER 28, 2015. TOPOGRAPHICAL INFORMATION SHOWN IS CURRENT FIELD-RUN DATA AND NOT BASED ON AERIAL OR GIS INFORMATION.
2. THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION OR EARTH MOVING OPERATIONS. INFORM ENGINEER OF ANY CONFLICTS DETRIMENTAL TO THE DESIGN INTENT.
3. 72 HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING AGENCIES: TENNESSEE 811 AND ALL OTHER AGENCIES THAT MAY HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NON-MEMBERS OF TENNESSEE 811.
4. THE CONTRACTOR AND SUBCONTRACTORS SHALL BE RESPONSIBLE FOR COMPLYING WITH APPLICABLE FEDERAL, STATE AND LOCAL REQUIREMENTS, TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SUBCONTRACTORS TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK.
5. THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE OWNER AND OWNER'S REPRESENTATIVE FOR ANY AND ALL INJURIES AND/OR DAMAGES TO PERSONNEL, EQUIPMENT AND/OR EXISTING FACILITIES OCCURRING IN THE COURSE OF THE DEMOLITION AND CONSTRUCTION DESCRIBED IN THE PLANS AND SPECIFICATIONS.
6. CONTRACTOR SHALL OBTAIN A PERMIT FOR ALL CONSTRUCTION ACTIVITIES AND PERFORM SAID ACTIVITIES IN ACCORDANCE WITH ALL LOCAL, STATE, FEDERAL & OSHA REGULATIONS.
7. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL CODES, OBTAIN ALL APPLICABLE PERMITS, AND PAY ALL REQUIRED FEES PRIOR TO BEGINNING WORK.
8. ANY WORK PERFORMED IN THE LOCAL RIGHT OF WAYS SHALL BE IN ACCORDANCE WITH THE APPLICABLE LOCAL REQUIREMENTS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE NECESSARY PERMITS FOR THE WORK, SCHEDULE NECESSARY INSPECTIONS, AND PROVIDE THE NECESSARY TRAFFIC CONTROL MEASURES AND DEVICES, ETC., FOR WORK PERFORMED IN THE RIGHT OF WAYS.
9. THE PROPOSED SITE IMPROVEMENTS WILL NOT REQUIRE COVERAGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT ISSUED BY THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC) AS THE TOTAL SITE DISTURBANCE IS LESS THAN 1.0 ACRE.
10. CONTRACTOR SHALL IMPLEMENT ALL SOIL AND EROSION CONTROL, PRACTICES REQUIRED BY THE CITY OF BRENTWOOD AND TDEC.
11. ALL GROUND SURFACE AREAS THAT HAVE BEEN EXPOSED OR LEFT BARE AS A RESULT OF CONSTRUCTION AND ARE TO FINAL GRADE AND ARE TO REMAIN SO, SHALL BE PERMANENTLY STABILIZED AS SOON AS PRACTICAL IN ACCORDANCE WITH SPECIFICATIONS.
12. ALL WORK SHALL COMPLY WITH CITY OF BRENTWOOD SPECIFICATIONS, AND ALL CONSTRUCTION WORK SHALL BE DONE ACCORDING TO SAID SPECIFICATIONS AND IN ACCORDANCE WITH APPLICABLE STANDARDS OF THE CITY OF BRENTWOOD.
13. ALL WORK PERFORMED BY THE CONTRACTOR SHALL CONFORM TO THE LATEST REGULATIONS OF THE AMERICANS WITH DISABILITIES ACT.
14. CONTRACTOR SHALL REFER TO OTHER PLANS WITHIN THIS CONSTRUCTION SET FOR OTHER PERTINENT INFORMATION. IT IS NOT THE ENGINEER'S INTENT THAT ANY SINGLE PLAN SHEET IN THIS SET OF DOCUMENTS FULLY DEPICT ALL WORK ASSOCIATED WITH THE PROJECT.
15. BEFORE INSTALLATION OF STORM OR SANITARY SEWER, OR OTHER UTILITY THE CONTRACTOR SHALL VERIFY ALL CROSSINGS, BY EXCAVATION WHERE NECESSARY, AND INFORM THE OWNER AND THE ENGINEER OF ANY CONFLICTS. THE ENGINEER WILL BE HELD HARMLESS IN THE EVENT THEY ARE NOT NOTIFIED OF DESIGN CONFLICTS PRIOR TO CONSTRUCTION.
16. WHERE CURB IS PRESENT, DIMENSIONS ARE SHOWN TO THE FACE OF CURB, OTHERWISE DIMENSIONS ARE SHOWN TO THE EDGE OF PAVEMENT AND/OR EDGE OF BUILDING UNLESS OTHERWISE NOTED.
17. SITE SIGNAGE AND STRIPING SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.).
18. CONSTRUCTION OF ALL ROADWAYS AND SIDEWALKS SHALL MEET THE REQUIREMENTS OF BRENTWOOD PUBLIC WORKS ROADWAY CONSTRUCTION CRITERIA AND STANDARD DETAILS.
19. CONTRACTOR SHALL PROVIDE AND MAINTAIN TRAFFIC CONTROL MEASURES IN ACCORDANCE WITH STATE DEPARTMENT OF TRANSPORTATION REGULATIONS AND AS REQUIRED BY LOCAL AGENCIES WHEN WORKING IN AND/OR ALONG STREETS, ROADS, HIGHWAYS, ETC. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN APPROVAL AND COORDINATE WITH LOCAL AND/OR STATE AGENCIES REGARDING THE NEED, EXTENT AND LIMITATIONS ASSOCIATED WITH INSTALLING AND MAINTAINING TRAFFIC CONTROL MEASURES.
20. ALL TRENCHING, PIPE LAYING AND BACKFILLING SHALL BE IN ACCORDANCE WITH ALL FEDERAL OSHA REGULATIONS. CONTRACTOR TO PAY PARTICULAR ATTENTION TO 29 CFR PART 1926, SUBPARTS M AND P.

DEMOLITION NOTICE:

1. A SITE DEMOLITION PERMIT SHALL NOT BE ISSUED UNTIL AN EPSC PRECONSTRUCTION MEETING HAS OCCURRED WITH ENGINEERING STAFF.

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

VARIANCE REQUEST:
THE APPLICANT REQUESTS A VARIANCE FROM THE CITY OF BRENTWOOD ENGINEERING STANDARDS TO ALLOW FOR A 25 MPH DESIGN SPEED FOR ROADWAY DESIGN.

NOTE TO CONTRACTOR:
THE CONTRACTOR SHALL REFER TO ALL PLANS WITHIN THIS PLAN SET AND THE WRITTEN PROJECT SPECIFICATIONS. IT IS NOT THE ENGINEER'S INTENT THAT ANY SINGLE PLAN SHEET IN THIS SET OF DOCUMENTS FULLY DEPICT ALL WORK ASSOCIATED WITH THIS PROJECT.

NOTE:
DRAWING BASED ON BOUNDARY & TOPOGRAPHICAL SURVEY AS PREPARED BY BROWN LAND SURVEYING, LLC DATED 10-28-15 UTILIZING FIELD RUN SURVEY USING EDM EQUIPMENT ADJUSTED FOR TEMPERATURE, VERTICAL DATUM NAVD88. BEARINGS SHOWN HEREON ARE BASED ON TENNESSEE STATE PLANE COORDINATE SYSTEM.

REVISION #	DATE	DESCRIPTION
1	4/19/2022	PER BRENTWOOD STAFF COMMENTS
2	5/23/2022	PER BRENTWOOD STAFF COMMENTS
3	12/5/2022	REVISED SETBACK LINES
4	12/20/2022	PER BRENTWOOD STAFF COMMENTS

MATTHEW W. BRYANT — REGISTERED ENGINEER — NUMBER 120,168 — COMMISSIONED — STATE OF TENNESSEE
04/05/22

REVISED PRELIMINARY PLANS FOR:
PRIMM FARM
8318 MOORES LANE
CITY OF BRENTWOOD
WILLIAMSON COUNTY, TENNESSEE

M2 GROUP
P.O. BOX 848
FRANKLIN, TN 37065
615.406.3415 / WWW.M2GROUPLLC.COM

COVER SHEET

DRAWN BY : BTU, BPH
CHECKED BY : MWB
DATE : APRIL, 2022
PROJECT NO. : 18-765

SHEET NUMBER:
C0.0

PF - C0.0 - COVER SHEET DWG / Tuesday, December 20, 2022 5:03:08 PM



PROPERTY OWNER INFO:

CURRENT OWNER OF RECORD
NAME: CHARLIE PRIMM
ADDRESS: 1145 BAILERS WORK ROAD
BURNS, TN 37029

SLOPES LEGEND:

NATURAL SLOPES 14% - 19%

NATURAL SLOPES 20% & GREATER

AREA DATA:

LOTS	16.44 AC.
R.O.W.	2.47 AC.
OPEN SPACE	10.00 AC.
ONSITE TOTAL	28.90 AC.
REMAINDER PARCEL	15.04 AC.
TOTAL AREA	43.94 AC.

N, NE, E, SE, S, SW, W, NW

100 0 100 200
GRAPHIC SCALE

DEMOLITION GENERAL NOTES:

1. DEMOLITION AND REMOVAL OPERATIONS SHALL COMMENCE ONLY AFTER ALL EROSION AND SEDIMENTATION CONTROL MEASURES ARE IN PLACE AND FUNCTIONAL.
2. THE CONTRACTOR AND SUBCONTRACTORS SHALL BE RESPONSIBLE FOR COMPLYING WITH APPLICABLE FEDERAL, STATE, AND LOCAL REQUIREMENTS, TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SUBCONTRACTORS TO INITIATE, MAINTAIN, AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS, AND PROGRAMS IN CONNECTION WITH THE WORK.
3. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL CODES, OBTAIN ALL PERMITS, AND PAY ALL FEES REQUIRED FOR THE EXECUTION OF THE WORK.
4. NOTIFY LOCAL UTILITY LOCATOR SERVICE (CALL 811) OF INTENDED DEMOLITION OPERATIONS.
5. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES, INCLUDING IRRIGATION LINES, TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN, AND REPAIR CONTRACTOR CAUSED DAMAGE ACCORDING TO CURRENT LOCAL STANDARDS AND AT THE CONTRACTOR'S EXPENSE. COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANIES. RELOCATE EXISTING IRRIGATION LINES AS NECESSARY FOR CONSTRUCTION..
6. CONTRACTOR SHALL DEVELOP AND IMPLEMENT A WASTE MANAGEMENT PLAN PRIOR TO THE COMMENCEMENT OF WORK. AT A MINIMUM THE PLAN SHALL INCLUDE:
   - 6.1. THE PROPER PROCEDURES FOR DISPOSAL OR RECLAIMING FOR REUSE / RECYCLING.
   - 6.2. DESIGNATED AREAS FOR WASTE MANAGEMENT CONTAINERS. CONTAINERS SHALL BE PROPERLY MARKED FOR ALLOWABLE AND PROHIBITED ITEMS AND MATERIALS.
   - 6.3. DESIGNATED CHEMICAL STORAGE AREAS, APPROPRIATE CHEMICAL STORAGE CONTAINERS, AND PROCEDURES FOR SPILL CONTROL. CHEMICALS SHALL NOT BE PERMITTED TO INFILTRATE TO GROUNDWATER OR BE PUMPED UNTREATED FROM PIT DEWATERING FACILITIES.
   - 6.4. CONCRETE WASHOUT AREAS, LOCATED AWAY FROM DESIGNATED CONSTRUCTION EXIT.
7. PROVIDE NEAT AND STRAIGHT SAWCUTS OF EXISTING PAVEMENT ALONG ALL LIMITS OF PAVEMENT DEMOLITION.
8. ALL DEMOLISHED MATERIALS BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE DESIGNATED. DISPOSE OF OFF THE OWNER'S PROPERTY IN A LEGAL MANNER. PROLONGED STORAGE OR THE SALE OF DEMOLISHED ITEMS OR MATERIALS ON-SITE IS NOT PERMITTED WITHOUT PRIOR NOTIFICATION AND CONSENT OF OWNER.
9. ALL PAVEMENT, BASE COURSE, SIDEWALKS, CURBS, BUILDINGS, FOUNDATIONS, ETC., IN THE AREA TO BE REMOVED SHALL BE REMOVED TO FULL DEPTH. EXISTING BASE COURSE MATERIALS MAY BE WORKED INTO THE NEW PAVEMENT OR BUILDING SUBGRADE PROVIDED THAT THE GRADATION, CONSISTENCY, COMPACTION, SUBGRADE CONDITION, ETC., ARE IN ACCORDANCE WITH THE SPECIFICATIONS. BASE COURSE MATERIALS SHALL NOT BE WORKED INTO THE SUBGRADE OF AREAS TO RECEIVE PLANTING.
10. THE CONTRACTOR SHALL USE WATER SPRINKLING AND OTHER SUITABLE METHODS AS NECESSARY TO CONTROL DUST AND DIRT CAUSED BY THE DEMOLITION WORK.
11. ALL EXISTING FEATURES REMAINING AND NOT SPECIFICALLY MENTIONED THAT INTERFERE WITH THE NEW CONSTRUCTION SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER. NOTIFY THE OWNER OR CONSTRUCTION MANAGER OF DISCREPANCIES BETWEEN EXISTING CONDITIONS AND DRAWINGS BEFORE PROCEEDING WITH DEMOLITION WORK.
12. IT IS NOT ANTICIPATED THAT HAZARDOUS MATERIALS WILL BE ENCOUNTERED. IF MATERIALS SUSPECTED OF CONTAINING HAZARDOUS MATERIALS ARE ENCOUNTERED, IMMEDIATELY NOTIFY THE OWNER.
13. CONTRACTOR SHALL PROVIDE PROTECTION TO ALL STREETS, FENCES, TREES, UTILITIES AND STRUCTURES THAT ARE TO REMAIN. CONTRACTOR-CAUSED DAMAGE SHALL BE REPAIRED TO MATCH EXISTING CONDITIONS AT NO ADDITIONAL COST TO THE OWNER.
14. NO DEMOLITION ACTIVITIES SHALL OCCUR UNTIL THE SITE PLAN HAS BEEN APPROVED, AND THE SITE PERMITS (INCLUDING THE GRADING PERMIT) HAVE BEEN ISSUED.

FLOODPLAIN NOTE:

THIS IS TO CERTIFY THAT I HAVE EXAMINED THE FLOOD INSURANCE RATE MAP AND FOUND THE HEREON DESCRIBED PROPERTY APPEARS TO BE LOCATED IN A SPECIAL FLOOD HAZARD AREA PER FEMA MAP NO. 47187C0207F & 47187C0209F FOR WILLIAMSON COUNTY TENNESSEE UNINC, & INC. AREAS. DATED 9/29/2006.

SURVEYOR NOTES:

1. BEARINGS SHOWN HEREON ARE BASED ON TENNESSEE STATE PLANE COORDINATES.
2. PARCEL NUMBERS PERTAIN TO WILLIAMSON COUNTY TAX MAPS.
3. PROPERTY SUBJECT TO RIGHT OF WAY OF MOORES LANE.
4. UNDERGROUND UTILITY LOCATIONS WERE TAKEN FROM FIELD LOCATIONS AND/OR APPROPRIATE GOVERNING AGENCIES AND ARE APPROXIMATE. PRECISE LOCATION OF UNDERGROUND UTILITIES IS RECOMMENDED PRIOR TO ANY CONSTRUCTION ON THIS PROPERTY.
5. NO ABSTRACT OF TITLE PROVIDED TO SURVEYOR. THERE MAY EXIST OTHER EASEMENTS (WRITTEN OR UNWRITTEN) OR DOCUMENTS OF RECORD THAT COULD EFFECT THIS PROPERTY.

NOTE:
DRAWING BASED ON BOUNDARY & TOPOGRAPHICAL SURVEY AS PREPARED BY BROWN LAND SURVEYING, LLC DATED 10-28-15 UTILIZING FIELD RUN SURVEY USING EDM EQUIPMENT ADJUSTED FOR TEMPERATURE, VERTICAL DATUM NAVD88. BEARINGS SHOWN HEREON ARE BASED ON TENNESSEE STATE PLANE COORDINATE SYSTEM.

Know what's below. Call before you dig.

REVISION #	DATE	DESCRIPTION
1	4/19/2022	PER BRENTWOOD STAFF COMMENTS
2	5/23/2022	PER BRENTWOOD STAFF COMMENTS
3	12/5/2022	REVISED SETBACK LINES
4	12/20/2022	PER BRENTWOOD STAFF COMMENTS

MATTHEW W. BRYAN — REGISTERED ENGINEER — 120183 — COMMISSIONED — STATE OF TENNESSEE
04/05/22

REVISED PRELIMINARY PLANS FOR:
PRIMM FARM
8318 MOORES LANE
CITY OF BRENTWOOD
WILLIAMSON COUNTY, TENNESSEE

M2 GROUP
P.O. BOX 848
FRANKLIN, TN 37065
615.406.3415 / WWW.M2GROUPLLC.COM

EXISTING CONDITIONS AND DEMOLITION PLAN

DATE :	APRIL, 2022	DRAWN BY :	BTU, BPH
PROJECT NO. :	18-755	CHECKED BY :	MWB

SHEET NUMBER:
C1.0

PF: C1.0 - EXISTING CONDITIONS.DWG / Tuesday, December 20, 2022 5:03:13 PM

Curve Table					
Curve #	Length	Radius	Delta	Chord Direction	Chord Length
C1	35.19	25.00	80.64	S31° 14' 04"W	32.35
C2	66.81	250.00	15.31	S1° 25' 51"E	66.61
C3	39.27	25.00	90.00	N38° 46' 31"W	35.36
C4	66.81	250.00	15.31	S88° 34' 09"W	66.61
C5	30.77	25.00	70.53	S45° 38' 56"W	28.87
C6	67.92	50.00	77.83	S49° 17' 51"W	62.81
C7	53.02	50.00	60.76	N61° 24' 37"W	50.57
C8	51.70	50.00	59.24	N1° 24' 37"W	49.43
C9	45.99	50.00	52.70	N54° 33' 43"E	44.39
C10	20.55	300.00	3.93	N82° 52' 33"E	20.55
C11	59.62	300.00	11.39	S89° 28' 06"E	59.52
C12	33.90	25.00	77.69	N57° 22' 53"E	31.36
C13	30.33	300.00	5.79	N15° 38' 31"E	30.31
C14	34.15	300.00	6.52	N9° 29' 08"E	34.13
C15	38.62	25.00	88.52	N38° 02' 04"W	34.90
C16	92.32	661.04	8.00	N86° 17' 40"W	92.24
C17	101.43	661.04	8.79	S85° 18' 32"W	101.33
C18	21.03	25.00	48.19	S56° 51' 45"W	20.41
C19	31.26	50.00	35.82	S50° 40' 44"W	30.75
C20	71.81	50.00	82.29	N70° 15' 49"W	65.80
C21	49.00	50.00	56.15	N1° 02' 34"W	47.06
C22	52.36	50.00	60.00	N57° 01' 56"E	50.00
C23	36.75	50.00	42.11	S71° 54' 38"E	35.93
C24	21.03	25.00	48.19	S74° 56' 53"E	20.41
C25	13.32	711.04	1.07	N81° 27' 01"E	13.32
C26	123.95	711.04	9.99	N86° 58' 51"E	123.79
C27	71.13	711.04	5.73	S85° 09' 34"E	71.10
C28	39.92	25.00	91.48	S51° 57' 56"W	35.81
C29	75.22	350.00	12.31	S12° 22' 53"W	75.07
C30	16.72	438.53	2.19	S17° 26' 43"W	16.72
C31	77.52	438.53	10.13	S11° 17' 20"W	77.42
C32	53.45	200.00	15.31	S1° 25' 51"E	53.29

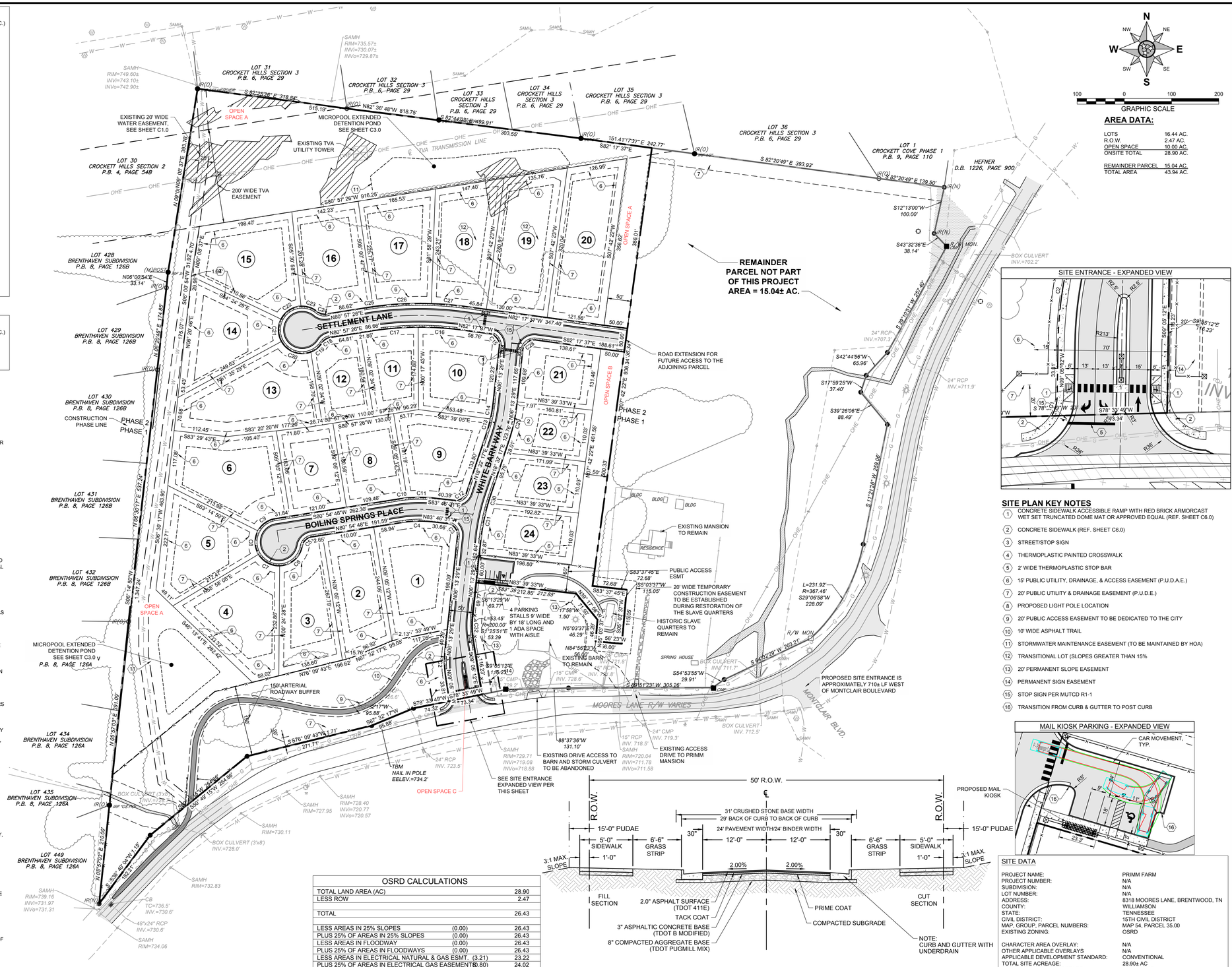
LOT DATA		
LOT #	AREA (SF)	AREA (AC.)
1	35,407	0.81
2	28266	0.65
3	29,110	0.67
4	36,412	0.84
5	32,592	0.75
6	39,473	0.91
7	21,964	0.50
8	23,474	0.54
9	29,846	0.67
10	29,347	0.67
11	19,630	0.45
12	19,332	0.44
13	42,185	0.97
14	30,723	0.71
15	36,969	0.85
16	32,526	0.75
17	33,456	0.77
18	33,883	0.78
19	39,062	0.90
20	41,128	0.94
21	21,536	0.49
22	18,033	0.41
23	20,080	0.46
24	21,630	0.50
TOTAL	716,064	16.44

OPEN SPACE DATA		
OS #	AREA (SF)	AREA (AC.)
A	389,605	8.94
B	45,882	1.05
C	254	0.01

GENERAL NOTES:

1. ALL STREET LIGHTS SHALL HAVE A LED LIGHT SOURCE.
2. STREET LIGHT LOCATIONS SHOWN ARE CONCEPTUAL. CONTRACTOR AND OWNER TO COORDINATE WITH MTEMC FOR FINAL DESIGN LOCATION.
3. TRENCH EXCAVATIONS WITHIN PUBLIC STREETS SHALL BE MILLED AND OVERLAID A MINIMUM OF 50 FEET IN EACH DIRECTION FROM THE TRENCH WHEN PERPENDICULAR TO TO TRAFFIC FLOW, AND FOR THE FULL PAVEMENT WIDTH WHEN PARALLEL TO TRAFFIC FLOW.
4. DEVELOPMENT ON ALL LOTS WITHIN THIS DEVELOPMENT SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 58-6 OF THE BRENTWOOD MUNICIPAL CODE, WHICH REQUIRES PRIOR WRITTEN APPROVAL OF CONSTRUCTION AND/OR ADDITION OF ANY OBSTRUCTION WITHIN A PLATTED PUBLIC UTILITY AND DRAINAGE EASEMENT.
5. TENNESSEE DEPARTMENT OF TRANSPORTATION TO PROVIDE APPROVAL FOR SITE ENTRANCE TO MOORES LANE, STATE ROUTE 441.
6. PROPOSED STORMWATER MANAGEMENT PONDS TO BE MAINTAINED BY THE HOMEOWNER'S ASSOCIATION.
7. THIS SITE PLAN IS SUBJECT T A THREE YEAR VESTING PERIOD, DURING WHICH THE DEVELOPMENT STANDARDS IN EFFECT ON THE DATE OF APPROVAL WILL REMAIN THE STANDARDS APPLICABLE TO THIS PLAN. IF CONSTRUCTION IS NOT COMPLETED DURING THE FIRST THREE YEARS, THE ORIGINAL SITE PLAN IS CONSIDERED A PRELIMINARY SITE PLAN AND THE APPLICANT MUST OBTAIN APPROVAL OF A FINAL SITE PLAN. DEVELOPMENT OF THE PROPERTY SHOWN ON THIS PLAN MAY BE SUBJECT TO STANDARDS OTHER THAN THOSE THAT WERE APPLICABLE DURING THE VESTING PERIOD. THE INITIAL VESTING PERIOD FOR THIS PLAN EXPIRES ON MAY 2, 2025, UNLESS EXTENDED BY THE CITY OF BRENTWOOD. PERSONS RELYING ON THIS PLAN AFTER SAID DATE SHOULD CONTACT THE CITY OF BRENTWOOD TO DETERMINE IF DEVELOPMENT MAY CONTINUE AS DEPICTED ON THE PLAN.
8. WHEN THE CONSTRUCTION AUTHORIZED PURSUANT TO A SITE PLAN IS NOT COMPLETED WITHIN THREE YEARS FROM THE DATE OF INITIAL APPROVAL, BUT THE APPLICANT DESIRES TO COMPLETE THE PROJECT PROPOSED FOR THE SITE, THE PLAN AS INITIALLY APPROVED FOR THE PROJECT OR AS AMENDED SHALL BE CONSIDERED A PRELIMINARY SITE PLAN. IF THE APPLICANT SECURES ALL NECESSARY PERMITS, COMMENCES SITE PREPARATION AND OBTAINS APPROVAL OF A FINAL SITE PLAN WITHIN THE THREE-YEAR VESTING PERIOD FOLLOWING APPROVAL OF THE PRELIMINARY SITE PLAN, THEN THE VESTING PERIOD SHALL BE EXTENDED AN ADDITIONAL TWO YEARS BEYOND THE EXPIRATION OF THE INITIAL THREE-YEAR VESTING PERIOD. DURING THE TWO-YEAR EXTENSION, THE APPLICANT MUST COMMENCE AND MAINTAIN ANY NECESSARY PERMITS TO REMAIN VESTED.
9. IF NECESSARY PERMITS ARE MAINTAINED AND CONSTRUCTION, AS DEFINED BE SECTION 78-43, HAS COMMENCED BY THE END OF THE TWO-YEAR EXTENSION, THEN THE VESTING PERIOD SHALL REMAIN IN EFFECT UNTIL THE PLANNING AND CODES DEPARTMENT HAS CERTIFIED FINAL COMPLETION OF THE PROJECT, PROVIDED THE TOTAL VESTING PERIOD SHALL NOT EXCEED TEN YEARS FROM THE DATE OF APPROVAL OF THE PRELIMINARY SITE PLAN.
10. IF THE CONSTRUCTION AUTHORIZED PURSUANT TO A SITE PLAN IS COMPLETED WITHIN THREE YEARS FROM THE DATE OF APPROVAL, THE SITE PLAN SHALL THEN BE CONSIDERED THE FINAL SITE PLAN FOR THE PROJECT.
11. ADEQUATE SECURITY FOR ALL REQUIRED ROADWAY, DRAINAGE, UTILITIES, WATER, SEWER, AMENITY AND LANDSCAPING IMPROVEMENTS, IN ACCORDANCE WITH THE REQUIREMENTS OR ARTICLE EIGHT OF THE BRENTWOOD SUBDIVISION REGULATIONS SHALL BE PROVIDED BEFORE THE FINAL PLAT MAY BE RECORDED.
12. THE PROPERTY OWNER IS RESPONSIBLE FOR ALL DEVELOPMENT FEES INCLUDING WATER AND SEWER SERVICE AND TAP FEES AND PUBLIC WORKS PROJECT FEES. THE REQUIRED FEES SHALL BE USED FOR FUTURE INFRASTRUCTURE RELATED IMPROVEMENTS REQUIRED BY THE PROPOSED DEVELOPMENT.
13. APPROVAL OF THE SITE PLAN DOES NOT CONSTITUTE APPROVAL OF THE SIGNAGE PLAN. ALL SIGNS MUST COMPLY WITH THE BRENTWOOD SIGN ORDINANCE. A COMPREHENSIVE SIGN PACKAGE INCLUDING ALL SIGNS (TEMPORARY OR PERMANENT, WALL OR GROUND) MUST BE SUBMITTED TO THE PLANNING DEPARTMENT FOR REVIEW.
14. COMPLETE PLANS SHALL BE SUBMITTED TO THE PLANNING AND CODES DEPARTMENT FOR REVIEW, APPROVAL AND ISSUANCE OF THE REQUIRED PERMITS BEFORE ANY WORK IS BEGUN. ADDITIONALLY, ALL REQUIRED ELECTRICAL PERMITS, ISSUED BY THE STATE OF TENNESSEE MUST BE RECEIVED BEFORE ANY WORK IS BEGUN.
15. DEVIATIONS FROM THE APPROVED PLAN IN THE DEVELOPMENT OF A PROJECT OR THE FAILURE TO SATISFY ANY STANDARD REQUIREMENTS OR SPECIAL CONDITIONS OF APPROVAL IMPOSED BY THE PLANNING COMMISSION WILL BE CONSIDERED A VIOLATION OF THE PROVISIONS OF THE ZONING ORDINANCE, WHICH SHALL BE SUBJECT TO PUNISHMENT AS PROVIDED IN SECTION 1-9 OF THE BRENTWOOD MUNICIPAL CODE. THE CITY MAY ALSO REQUIRE THE APPLICANT TO APPEAR BEFORE THE PLANNING COMMISSION TO ADDRESS ANY DEFICIENCIES OR UNAPPROVED MODIFICATIONS. THE PROJECT MAY ALSO BE SUBJECT TO DELAYS IN ISSUANCE OF PERMITS, CERTIFICATES OF OCCUPANCY, RECORDATION OF PLATS OR OTHER PROJECT APPROVALS.
16. ANY CHANGES TO PLANS APPROVED BY THE PLANNING COMMISSION WILL REQUIRE STAFF REVIEW AD RE-APPROVAL BY THE PLANNING COMMISSION.
17. DEVELOPMENT OF THIS PROJECT SHALL COMPLY WITH ALL APPLICABLE CODES AND ORDINANCES OF THE CITY OF BRENTWOOD.
18. APPROVAL OF THE PROPOSED PLAN SHALL BE LIMITED TO THE ILLUSTRATIONS AND PLANS PRESENTED TO THE PLANNING COMMISSION FOR REVIEW AND APPROVAL ON MAY 2, 2022. ANY CHANGES TO PLANNING COMMISSION APPROVED PLANS AND SPECIFICATIONS WILL REQUIRE STAFF REVIEW AND RE-APPROVAL BY THE PLANNING COMMISSION.

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



AREA DATA:

LOTS	16.44 AC.
R.O.W.	2.47 AC.
OPEN SPACE	10.00 AC.
ONSITE TOTAL	28.90 AC.
REMAINDER PARCEL	15.04 AC.
TOTAL AREA	43.94 AC.

SITE ENTRANCE - EXPANDED VIEW
R2.5'
R213'
70'
R36'
S78° 33' 40"W
593.34'
S 78° 33' 40" W 20'
S 26°45'12"E 116.23'
S09° 05' 12"E 116.23'
S42°44'56"W 65.96'
S17°59'25"W 37.40'
S39°26'06"E 88.49'
S 11°21'26" W 298.08'
S 82°10'31"W 257.46'
S43°32'36"E 38.14'
S12°13'00"W 100.00'
S 82°20'49" E 139.50'
S 82°20'49" E 393.93'
S 82°20'49" W 203.21'
S54°53'55"W 29.91'
L=231.92'
R=367.46'
S29°06'58"W
228.09'
S 80°15'23"W 305.26'
S 76°09'43"W 271.71'
S 76°09'43"W 271.71'
S 80°57'26"E 130.00'
S 80°57'26"W 130.00'
S 80°57'26"E 86.66'
S 80°57'26"W 86.66'
S 82°17'37"E 188.61'
N 82°17'37"W 347.40'
S 80°57'26"W 916.25'
S 82°36'48"E 818.75'
S 82°44'03"E 499.91'
S 82°37'45"E 72.68'
S 83°03'37"W 115.05'
S 83°37'45"E 72.68'
S 83°39'22"E 212.85'
S 83°39'22"E 212.85'
N 83°39'33"W 196.80'
N 83°39'33"W 171.99'
N 83°39'33"W 192.82'
N 83°39'33"W 160.81'
N 83°39'33"W 110.00'
N 83°39'33"W 110.00'
N 83°39'33"W 461.65'
N 83°46'31"E 262.30'
N 80°54'48"E 191.59'
S 83°46'31"W 262.30'
S 83°20'20"W 177.20'
S 83°20'20"W 177.20'
S 83°29'43"E 105.40'
S 83°14'50"E 212.44'
S 83°14'50"E 212.44'
S 83°39'30"E 212.44'
S 83°39'30"E 212.44'
S 82°39'05"E 453.48'
S 82°39'05"E 453.48'
S 82°42'22"E 936.34'
S 82°42'22"E 936.34'
S 82°42'22"E 461.65'
S 82°42'22"E 461.65'
S 82°42'22"E 50.33'
S 82°42'22"E 50.33'
S 82°42'22"E 50.33

GENERAL NOTES:

1. IF NECESSARY PERMITS ARE MAINTAINED AND CONSTRUCTION, AS DEFINED BE SECTION 78-43, HAS COMMENCED BY THE END OF THE TWO-YEAR EXTENSION, THEN THE VESTING PERIOD SHALL REMAIN IN EFFECT UNTIL THE PLANNING AND CODES DEPARTMENT HAS CERTIFIED FINAL COMPLETION OF THE PROJECT, PROVIDED THE TOTAL VESTING PERIOD SHALL NOT EXCEED TEN YEARS FROM THE DATE OF APPROVAL OF THE PRELIMINARY SITE PLAN.
2. STREET LIGHTS SHALL HAVE A LED LIGHT SOURCE.
3. STREET LIGHT LOCATIONS SHOWN ARE CONCEPTUAL. CONTRACTOR AND OWNER TO COORDINATE WITH MTEMC FOR FINAL DESIGN LOCATION.
4. TRENCH EXCAVATIONS WITHIN PUBLIC STREETS SHALL BE MILLED AND OVERLAID A MINIMUM OF 50 FEET IN EACH DIRECTION FROM THE TRENCH WHEN PERPENDICULAR TO TO TRAFFIC FLOW, AND FOR THE FULL PAVEMENT WIDTH WHEN PARALLEL TO TRAFFIC FLOW.
5. DEVELOPMENT ON ALL LOTS WITHIN THIS DEVELOPMENT SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 58-6 OF THE BRENTWOOD MUNICIPAL CODE, WHICH REQUIRES PRIOR WRITTEN APPROVAL OF CONSTRUCTION AND/OR ADDITION OF ANY OBSTRUCTION WITHIN A PLATTED PUBLIC UTILITY AND DRAINAGE EASEMENT.
6. TENNESSEE DEPARTMENT OF TRANSPORTATION TO PROVIDE APPROVAL FOR SITE ENTRANCE TO MOORES LANE, STATE ROUTE 441.
7. PROPOSED STORMWATER MANAGEMENT PONDS TO BE MAINTAINED BY THE HOMEOWNER'S ASSOCIATION.
8. THIS SITE PLAN IS SUBJECT T A THREE YEAR VESTING PERIOD, DURING WHICH THE DEVELOPMENT STANDARDS IN EFFECT ON THE DATE OF APPROVAL WILL REMAIN THE STANDARDS APPLICABLE TO THIS PLAN. IF CONSTRUCTION IS NOT COMPLETED DURING THE FIRST THREE YEARS, THE ORIGINAL SITE PLAN IS CONSIDERED A PRELIMINARY SITE PLAN AND THE APPLICANT MUST OBTAIN APPROVAL OF A FINAL SITE PLAN. DEVELOPMENT OF THE PROPERTY SHOWN ON THIS PLAN MAY BE SUBJECT TO STANDARDS OTHER THAN THOSE THAT WERE APPLICABLE DURING THE VESTING PERIOD. THE INITIAL VESTING PERIOD FOR THIS PLAN EXPIRES ON MAY 2, 2025, UNLESS EXTENDED BY THE CITY OF BRENTWOOD. PERSONS RELYING ON THIS PLAN AFTER SAID DATE SHOULD CONTACT THE CITY OF BRENTWOOD TO DETERMINE IF DEVELOPMENT MAY CONTINUE AS DEPICTED ON THE PLAN.
9. WHEN THE CONSTRUCTION AUTHORIZED PURSUANT TO A SITE PLAN IS NOT COMPLETED WITHIN THREE YEARS FROM THE DATE OF INITIAL APPROVAL, BUT THE APPLICANT DESIRES TO COMPLETE THE PROJECT PROPOSED FOR THE SITE, THE PLAN AS INITIALLY APPROVED FOR THE PROJECT OR AS AMENDED SHALL BE CONSIDERED A PRELIMINARY SITE PLAN. IF THE APPLICANT SECURES ALL NECESSARY PERMITS, COMMENCES SITE PREPARATION AND OBTAINS APPROVAL OF A FINAL SITE PLAN WITHIN THE THREE-YEAR VESTING PERIOD FOLLOWING APPROVAL OF THE PRELIMINARY SITE PLAN, THEN THE VESTING PERIOD SHALL BE EXTENDED AN ADDITIONAL TWO YEARS BEYOND THE EXPIRATION OF THE INITIAL THREE-YEAR VESTING PERIOD. DURING THE TWO-YEAR EXTENSION, THE APPLICANT MUST COMMENCE AND MAINTAIN ANY NECESSARY PERMITS TO REMAIN VESTED.
10. IF THE CONSTRUCTION AUTHORIZED PURSUANT TO A SITE PLAN IS COMPLETED WITHIN THREE YEARS FROM THE DATE OF APPROVAL, THE SITE PLAN SHALL THEN BE CONSIDERED THE FINAL SITE PLAN FOR THE PROJECT.
11. ADEQUATE SECURITY FOR ALL REQUIRED ROADWAY, DRAINAGE, UTILITIES, WATER, SEWER, AMENITY AND LANDSCAPING IMPROVEMENTS, IN ACCORDANCE WITH THE REQUIREMENTS OR ARTICLE EIGHT OF THE BRENTWOOD SUBDIVISION REGULATIONS SHALL BE PROVIDED BEFORE THE FINAL PLAT MAY BE RECORDED.
12. THE PROPERTY OWNER IS RESPONSIBLE FOR ALL DEVELOPMENT FEES INCLUDING WATER AND SEWER SERVICE AND TAP FEES AND PUBLIC WORKS PROJECT FEES. THE REQUIRED FEES SHALL BE USED FOR FUTURE INFRASTRUCTURE RELATED IMPROVEMENTS REQUIRED BY THE PROPOSED DEVELOPMENT.
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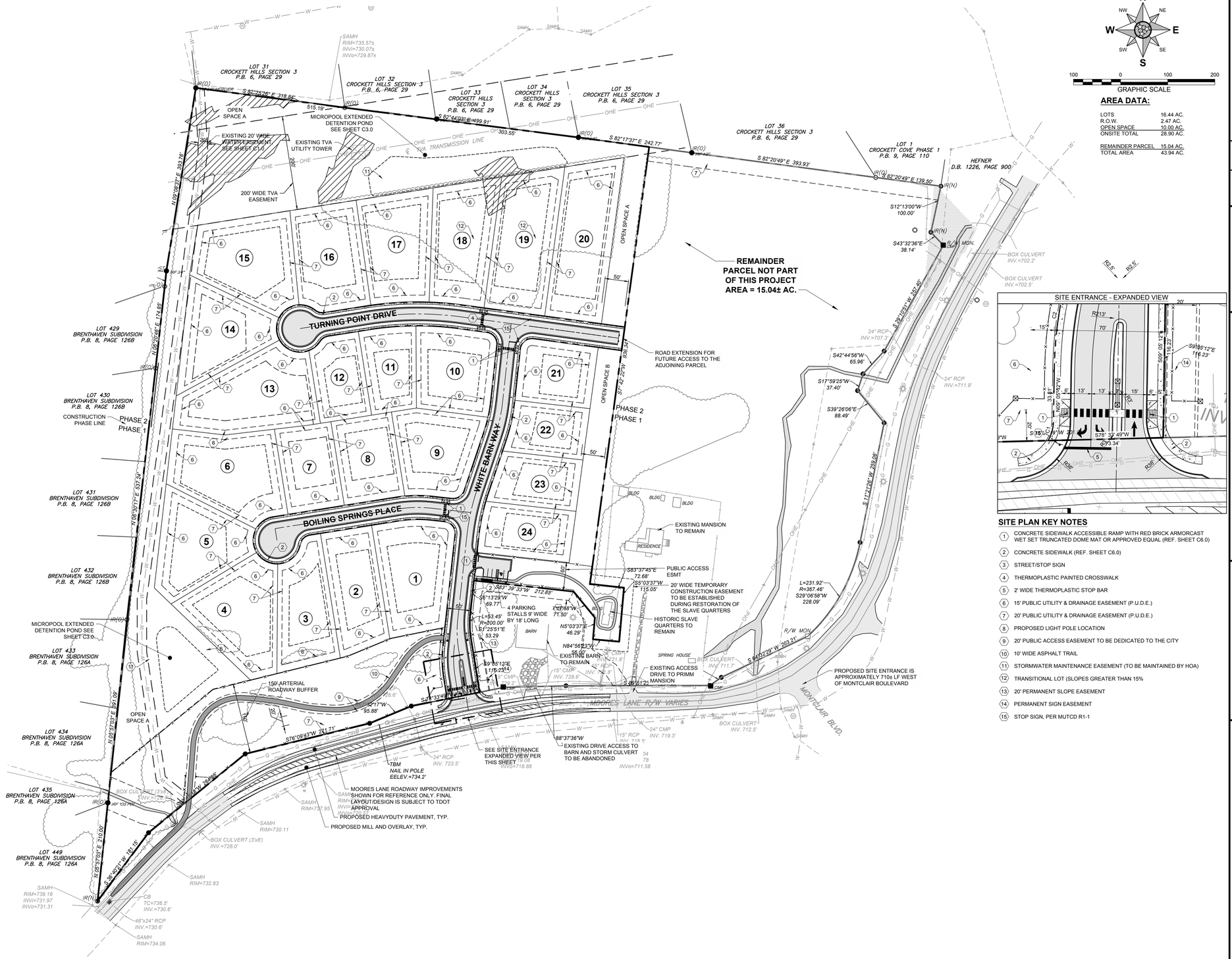
15. DEVIATIONS FROM THE APPROVED PLAN IN THE DEVELOPMENT OF A PROJECT OR THE FAILURE TO SATISFY ANY STANDARD REQUIREMENTS OR SPECIAL CONDITIONS OF APPROVAL IMPOSED BY THE PLANNING COMMISSION WILL BE CONSIDERED A VIOLATION OF THE PROVISIONS OF THE ZONING ORDINANCE, WHICH SHALL BE SUBJECT TO PUNISHMENT AS PROVIDED IN SECTION 1-9 OF THE BRENTWOOD MUNICIPAL CODE. THE CITY MAY ALSO REQUIRE THE APPLICANT TO APPEAR BEFORE THE PLANNING COMMISSION TO ADDRESS ANY DEFICIENCIES OR UNAPPROVED MODIFICATIONS. THE PROJECT MAY ALSO BE SUBJECT TO DELAYS IN ISSUANCE OF PERMITS, CERTIFICATES OF OCCUPANCY, RECORDATION OF PLATS OR OTHER PROJECT APPROVALS.
16. ANY CHANGES TO PLANS APPROVED BY THE PLANNING COMMISSION WILL REQUIRE STAFF REVIEW AD RE-APPROVAL BY THE PLANNING COMMISSION.
17. DEVELOPMENT OF THIS PROJECT SHALL COMPLY WITH ALL APPLICABLE CODES AND ORDINANCES OF THE CITY OF BRENTWOOD.
18. APPROVAL OF THE PROPOSED PLAN SHALL BE LIMITED TO THE ILLUSTRATIONS AND PLANS PRESENTED TO THE PLANNING COMMISSION FOR REVIEW AND APPROVAL ON DECEMBER 3, 2018. ANY CHANGES TO PLANNING COMMISSION APPROVED PLANS AND SPECIFICATIONS WILL REQUIRE STAFF REVIEW AND RE-APPROVAL BY THE PLANNING COMMISSION.


LOT 31 CROCKETT HILLS SECTION 3 P.B. 6, PAGE 29
LOT 32 CROCKETT HILLS SECTION 3 P.B. 6, PAGE 29
LOT 33 CROCKETT HILLS SECTION 3 P.B. 6, PAGE 29
LOT 34 CROCKETT HILLS SECTION 3 P.B. 6, PAGE 29
LOT 35 CROCKETT HILLS SECTION 3 P.B. 6, PAGE 29
LOT 36 CROCKETT HILLS SECTION 3 P.B. 6, PAGE 29
LOT 1 CROCKETT COVE PHASE 1 P.B. 9, PAGE 110
HEFNER D.B. 1226, PAGE 900
OPEN SPACE A
MICROPOOL EXTENDED DETENTION POND SEE SHEET C3.0
EXISTING 20' WIDE WATER EASEMENT SEE SHEET C3.0
EXISTING TVA UTILITY TOWER
TVA TRANSMISSION LINE
200' WIDE TVA EASEMENT
REMAINDER PARCEL NOT PART OF THIS PROJECT AREA = 15.04± AC.
TURNING POINT DRIVE
WHITE BARN WAY
BOILING SPRINGS PLACE
OPEN SPACE B
ROAD EXTENSION FOR FUTURE ACCESS TO THE ADJOINING PARCEL
PHASE 2
PHASE 1
CONSTRUCTION PHASE LINE
EXISTING MANSION TO REMAIN
PUBLIC ACCESS ESMT
20' WIDE TEMPORARY CONSTRUCTION EASEMENT TO BE ESTABLISHED DURING RESTORATION OF THE SLAVE QUARTERS
4 PARKING STALLS 9' WIDE BY 18' LONG
HISTORIC SLAVE QUARTERS TO REMAIN
EXISTING BARN TO REMAIN
EXISTING ACCESS DRIVE TO PRIMM MANSION
PROPOSED SITE ENTRANCE IS APPROXIMATELY 710± LF WEST OF MONTCLAIR BOULEVARD
150' ARTERIAL ROADWAY BUFFER
OPEN SPACE A
MOORES LANE R/W VARIES
MONTCLAIR BLVD.
SEE SITE ENTRANCE EXPANDED VIEW PER THIS SHEET
EXISTING DRIVE ACCESS TO BARN AND STORM CULVERT TO BE ABANDONED
TBM NAIL IN POLE EELEV.=734.2'
MOORES LANE ROADWAY IMPROVEMENTS SHOWN FOR REFERENCE ONLY. FINAL LAYOUT/DESIGN IS SUBJECT TO TDOT APPROVAL
PROPOSED HEAVYDUTY PAVEMENT, TYP.
PROPOSED MILL AND OVERLAY, TYP.
LOT 429 BRENTHAVEN SUBDIVISION P.B. 8, PAGE 126B
LOT 430 BRENTHAVEN SUBDIVISION P.B. 8, PAGE 126B
LOT 431 BRENTHAVEN SUBDIVISION P.B. 8, PAGE 126B
LOT 432 BRENTHAVEN SUBDIVISION P.B. 8, PAGE 126B
LOT 433 BRENTHAVEN SUBDIVISION P.B. 8, PAGE 126A
LOT 434 BRENTHAVEN SUBDIVISION P.B. 8, PAGE 126A
LOT 435 BRENTHAVEN SUBDIVISION P.B. 8, PAGE 126A
LOT 449 BRENTHAVEN SUBDIVISION P.B. 8, PAGE 126A
S 82°20'49" E 393.93'
S 82°20'49" E 139.50'
S 82°17'37" E 242.77'
S 82°44'23" E 499.91'
S 82°29'26" E 318.84'
N 09°08'37" E 304.26'
N 09°20'46" E 174.85'
N 08°30'17" E 597.39'
N 05°37'07" E 597.06'
N 05°37'07" E 210.00'
S 08°40'21" W 181.05'
S 76°09'43" W 233.71'
S 17°33'43" W 95.88'
S 07°42'22" W 536.44'
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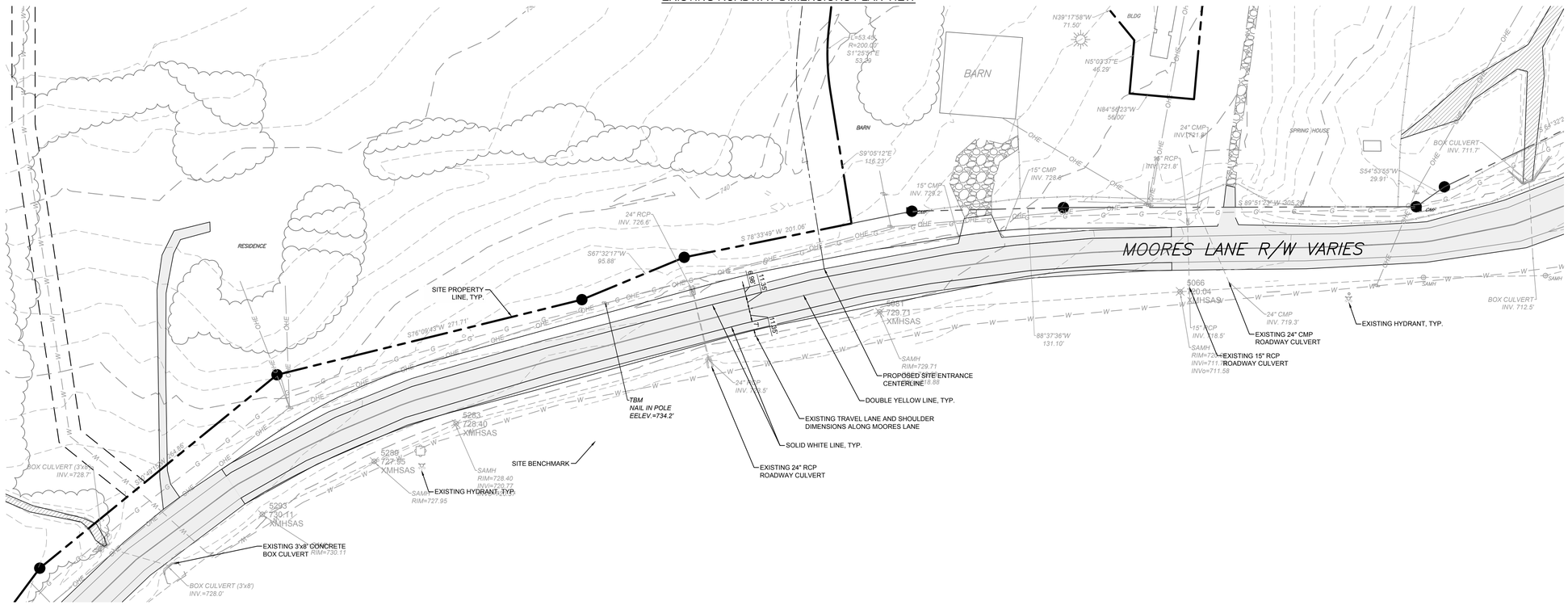
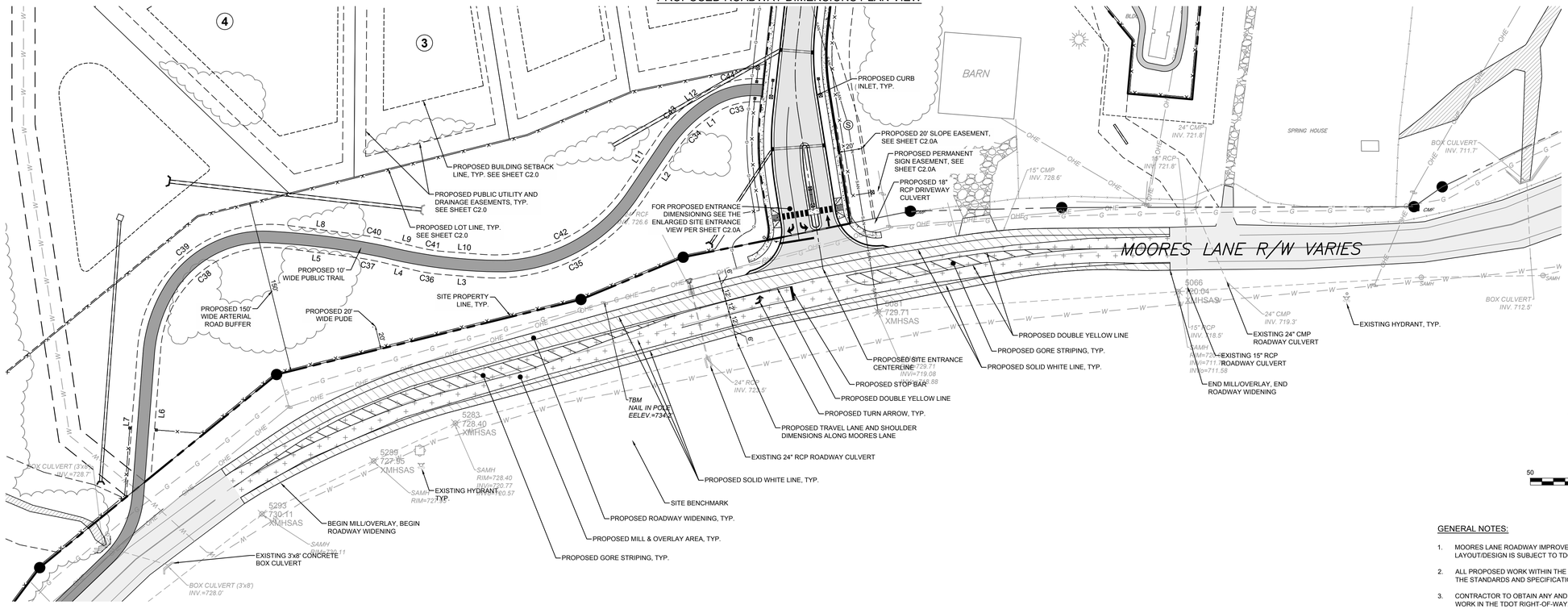
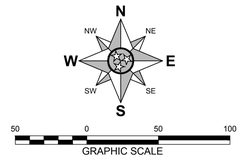
S 09°05'12" E 116.23'
S 08°05'12" E 116.23'
S 33°31'02" W 33.81'
S 69°05'12" E 116.23'
S 09°05'12" E 116.23'
L=53.45' R=200.00' S7°25'51"E 53.29
L=231.92' R=367.46' S29°06'58"W 228.09'
R=2.5'
R=2.5'
R=13'
R=36'
R=36'
20'
15'
70'
13'
13'
6'
15'
6'
24" RCP INV.=707.3'
24" RCP INV.=711.9'
24" RCP INV. 723.5'
24" CMP INV. 719.3'
15" RCP INV. 728.6'
15" CMP INV. 728.6'
15" RCP INV. 731.8'
15" RCP INV. 715.8'
BOX CULVERT INV.=702.2'
BOX CULVERT INV.=702.5'
BOX CULVERT INV. 711.1'
BOX CULVERT INV. 712.5'
BOX CULVERT (3'x8') INV.=728.0'
SAMH RIM=735.57± INV=730.07± INVo=729.87±
SAMH RIM=739.16 INVi=731.97 INVo=731.31
SAMH RIM=730.11
SAMH RIM=737.95 INVi=720.02
SAMH RIM=732.83
SAMH RIM=734.06
CB TC=736.5' INV.=730.6'
48"x24" RCP INV.=730.6'
SAMH RIM=718.88 INVo=711.58
SAMH RIM=734.06
SAMH RIM=734.06
SAMH RIM=734.06

EXISTING ROADWAY DIMENSIONS PLAN VIEW



PROPOSED ROADWAY DIMENSIONS PLAN VIEW





GENERAL NOTES:

1. MOORES LANE ROADWAY IMPROVEMENTS SHOWN FOR REFERENCE ONLY. FINAL LAYOUT/DESIGN IS SUBJECT TO TDOT APPROVAL.
2. ALL PROPOSED WORK WITHIN THE TDOT RIGHT-OF-WAY TO BE PERFORMED TO THE STANDARDS AND SPECIFICATIONS OF TDOT.
3. CONTRACTOR TO OBTAIN ANY AND ALL NECESSARY PERMTIS TO PERFORM WORK IN THE TDOT RIGHT-OF-WAY.

NOTE:
DRAWING BASED ON BOUNDARY & TOPOGRAPHICAL SURVEY AS PREPARED BY BROWN LAND SURVEYING, LLC DATED 10-28-15 UTILIZING FIELD RUN SURVEY USING EDM EQUIPMENT ADJUSTED FOR TEMPERATURE, VERTICAL DATUM NAVD88. BEARINGS SHOWN HEREON ARE BASED ON TENNESSEE STATE PLANE COORDINATE SYSTEM.

Know what's below. Call before you dig.

REVISION #	DATE	DESCRIPTION
1	4/19/2022	PER BRENTWOOD STAFF COMMENTS
2	5/23/2022	PER BRENTWOOD STAFF COMMENTS
3	12/5/2022	REVISED SETBACK LINES
4	12/20/2022	PER BRENTWOOD STAFF COMMENTS

MATTHEW W. BRYANT
REGISTERED ENGINEER
NUMBER 120,111
COMMERCIAL
RESIDENTIAL
STATE OF TENNESSEE
04/05/22

REVISED PRELIMINARY PLANS FOR:
PRIMM FARM
8318 MOORES LANE
CITY OF BRENTWOOD
WILLIAMSON COUNTY, TENNESSEE

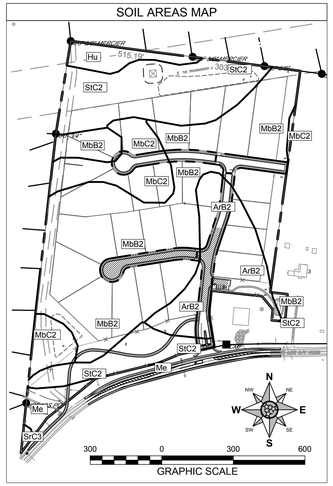
MA GROUP
P.O. BOX 849
FRANKLIN, TN 37065
615.406.3415 / WWW.M2GROUPLLC.COM

OFFSITE ROADWAY IMPROVEMENTS PLAN

DATE:	APRIL, 2022	DRAWN BY:	BTU, BPH
PROJECT NO.:	18-755	CHECKED BY:	MWB

SHEET NUMBER:
C2.1

PF - C2.1 - SITE ENTRANCE LAYOUT PLAN.DWG / Tuesday, December 20, 2022 5:03:45 PM



SITE PLAN KEY NOTES

1. TRANSITIONAL LOT (SLOPES GREATER THAN 15%
2. STORMWATER MAINTENANCE EASEMENT (TO BE MAINTAINED BY HOA)
3. TRANSITIONAL LOT (SLOPES GREATER THAN 15%



REVISION #	DATE	DESCRIPTION
1	4/19/2022	PER BRENTWOOD STAFF COMMENTS
2	5/23/2022	PER BRENTWOOD STAFF COMMENTS
3	12/5/2022	REVISED SETBACK LINES
4	12/20/2022	PER BRENTWOOD STAFF COMMENTS

MATTHEW W. BRYANT
REGISTERED ENGINEER
COMMISSIONED
STATE OF TENNESSEE
04/05/22

REVISED PRELIMINARY PLANS FOR:

PRIMM FARM

8318 MOORES LANE

CITY OF BRENTWOOD

WILLIAMSON COUNTY, TENNESSEE

M2 GROUP
P.O. BOX 848
FRANKLIN, TN 37065
615.406.3415 / WWW.M2GROUPLLC.COM

GRADING AND DRAINAGE PLAN

DATE :	APRIL, 2022
PROJECT NO. :	18-765
DRAWN BY :	BTU, BPH
CHECKED BY :	MWB

NOTE:

1. ALL OPEN SPACE TO BE DESIGNATED AS A PUBLIC UTILITY AND DRAINAGE EASEMENT.

NOTE:
DRAWING BASED ON BOUNDARY & TOPOGRAPHICAL SURVEY AS PREPARED BY BROWN LAND SURVEYING, LLC DATED 10-28-15 UTILIZING FIELD RUN SURVEY USING EDM EQUIPMENT ADJUSTED FOR TEMPERATURE, VERTICAL DATUM NAVD88. BEARINGS SHOWN HEREON ARE BASED ON TENNESSEE STATE PLANE COORDINATE SYSTEM.

SHEET NUMBER:

C3.0

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

PF - C3.0 - GRADING & DRAINAGE PLAN.DWG / Tuesday, December 20, 2022 5:04:00 PM

EPSC GENERAL NOTES:

1. SEDIMENT SHALL BE REMOVED FROM SILT FENCE WHEN IT REACHES 1/3 THE HEIGHT OF THE FENCE; SEDIMENT SHALL BE REMOVED FROM ALL OTHER EPSC MEASURES AND CONTROL AS RECOMMENDED IN THE TNEPSC HANDBOOK, AND MUST BE REMOVED WHEN DESIGN CAPACITY HAS BEEN REDUCED BY 50%.
2. EPSC SHALL BE IMPLEMENTED BEFORE EARTH- MOVING BEGINS.
3. AREAS WHERE CONSTRUCTION HAS TEMPORARILY/PERMANENTLY CEASED SHALL BE STABILIZED WITHIN 15 DAYS (7 DAYS FOR ≥35% SLOPES).
4. INSPECTIONS OF OUTFALLS/EPSC MEASURES SHALL BE CONDUCTED AT LEAST TWICE WEEKLY AND AT LEAST 72 HOURS APART.
5. VEGETATION, EPSCS & OTHER PROTECTIVE MEASURES SHALL BE REPAIRED, REPLACED, OR MODIFIED AFTER BEING NOTIFIED OF AN ISSUE WITHIN 7 DAYS OR BY THE NEXT SIGNIFICANT RAIN CHANCE OF 50% OR GREATER. ISSUES WITH IMMEDIATE THREATS TO WATER QUALITY SHALL BE REPAIRED IMMEDIATELY AS PER FMC 23-106(2)(g).
6. CONSTRUCTION SHALL BE PHASED FOR ACTIVITIES THAT WILL DISTURB >50 ACRES.
7. EPSCS SHALL BE DESIGNED TO CONTROL THE RAINFALL AND RUNOFF FROM A 5-YEAR, 24-HOUR RETURN INTERVAL STORM.
8. TEMPORARY SEDIMENT BASIN(S) SHALL BE PROVIDED FOR ON-SITE OUTFALLS THAT RECEIVE DRAINAGE FROM ≥10 ACRES; ≥5 ACRES FOR SITES THAT DISCHARGE TO IMPAIRED OR EXCEPTIONAL TN WATERS.
9. GREEN INFRASTRUCTURE BMPS SHALL BE PROTECTED DURING SITE WORK, WITH SILT FENCE, TO PREVENT SEDIMENTATION AND COMPACTION.
10. IF DEEMED APPROPRIATE, THE CITY MAY REQUIRE THE ADDITION, REMOVAL OR MODIFICATION OF EPSC MEASURES AND/OR EPSC LOCATIONS AT ANY TIME DURING THE CONSTRUCTION PROCESS TO ENSURE PROPER EPSC PERFORMANCE.

EROSION AND SEDIMENT CONTROL PLAN NOTES:

1. PRIOR TO INSTALLATION OF EROSION CONTROL MEASURES OR INITIATION OF EARTH DISTURBING ACTIVITIES, THE CONTRACTOR SHALL CLEARLY DELINEATE THE PROPOSED LIMITS OF DISTURBANCE IN THE FIELD UTILIZING FLAGGING, STAKES, AND/OR CONSTRUCTION FENCE. NO DISTURBANCE BEYOND THESE LIMITS SHALL BE PERMITTED WITHOUT FIRST OBTAINING WRITTEN PERMISSION FROM THE ENGINEER, THE AFFECTED PROPERTY OWNER AND ANY APPLICABLE REGULATORY AGENCIES.
2. THE CONSTRUCTION ACTIVITIES ANTICIPATED FOR THIS PROJECT INCLUDES GRADING, PAVING, AND UTILITY INSTALLATION.
3. THE APPROXIMATE TOTAL DISTURBED AREA OF THIS SITE IS 31.1 ACRES +/-. ANY INCREASE IN THE APPROXIMATE TOTAL DISTURBED AREA SHALL BE APPROVED BY THE CITY OF BRENTWOOD PRIOR TO ADDITIONAL DISTURBANCE.
4. CONSTRUCTION SHALL BE SEQUENCED BY THE CONTRACTOR AS TO MINIMIZE EXPOSURE TIME OF CLEARED SURFACE AREAS. PERIMETER EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE AND FUNCTIONAL PRIOR TO EARTH MOVING OPERATIONS.
5. THE CONTRACTOR SHALL DESIGNATE IN WRITING THE NAME AND PHONE NUMBER OF THE PERSON(S) RESPONSIBLE FOR EROSION AND SEDIMENT CONTROLS AT THE SITE. THIS INFORMATION SHALL BE POSTED AT THE JOB SITE TRAILER, OR AT THE SITE CONSTRUCTION SIGN.
6. PRE-CONSTRUCTION VEGETATIVE GROUNDCOVER SHALL NOT BE REMOVED MORE THAN 14 DAYS PRIOR TO COMMENCEMENT OF GRADING ACTIVITIES. ALL GRADED AREAS EXPECTED TO REMAIN UNFINISHED FOR MORE THAN 14 DAYS SHALL BE COVERED WITH TEMPORARY GRASS, SOD, STRAW, MULCH, OR FABRIC MATTING. STEEP SLOPES (GREATER THAN 35%) SHALL BE TEMPORARILY STABILIZED NOT LATER THAN 3 DAYS AFTER CONSTRUCTION ACTIVITY ON THE SLOPE HAS TEMPORARILY OR PERMANENTLY CEASED. PERMANENT SOIL STABILIZATION SHALL BE INSTALLED WITHIN 15 DAYS OF THE ESTABLISHMENT OF FINAL GRADES.
7. THE CONTRACTOR SHALL MAINTAIN RECORDS OF EROSION AND SEDIMENT CONTROL FOR A PERIOD OF THREE YEARS AFTER COMPLETION OF CONSTRUCTION OR AS REQUIRED BY GOVERNING AUTHORITIES.
8. TEMPORARY SEEDING FOR THIS PROJECT SHALL UTILIZE TDOT, TDEC OR LOCAL STANDARDS UNLESS OTHERWISE INDICATED HEREON.
9. MULCHING SHALL CONSIST OF LOOSE HAY OR STRAW APPLIED AT A RATE OF 2 TONS PER ACRE. MULCH MUST BE CRIMPED INTO THE SOIL BY MECHANICAL MEANS. BROADCAST SPREADING OF MULCH IS NOT ACCEPTABLE.
10. SOIL STOCKPILES SHALL BE STABILIZED AND PROTECTED FROM EROSION. ALL STOCKPILES SHALL BE COVERED WITH TEMPORARY SEEDING AND PROTECTED WITH SILT FENCING.
11. FOR PERMANENT STABILIZATION OF ALL SLOPES 3:1 OR STEEPER, INSTALL TEMPORARY EROSION CONTROL BLANKET (TENSAR NORTH AMERICAN GREEN S150 OR APPROVED EQUAL) INSTALLED PER MANUFACTURERS' RECOMMENDATIONS SHALL BE USED IN PLACE OF STRAW MULCH.
12. THE LOCATION OF SOME OF THE EROSION CONTROL MEASURES MAY NEED TO BE ALTERED DUE TO CHANGING SITE CONDITIONS COMMENSURATE WITH PROGRESS OF THE WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION AND SEDIMENT CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES OF CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
13. EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL A PERMANENT GROUND COVER IS ESTABLISHED. SEEDED AREAS MUST HAVE A MINIMUM 70% COVERAGE (ENGINEER WILL DETERMINE APPROXIMATE PERCENTAGE OF COVER) PRIOR TO REMOVAL OF THE TEMPORARY EROSION CONTROL DEVICES. FINAL SEEDING AND ESTABLISHMENT OF GROUNDCOVER SHALL BE APPLIED TO ANY AREA DISTURBED AS A RESULT OF THE REMOVAL OF THE EROSION CONTROL MEASURES.
14. CONTRACTOR SHALL PREPARE, IMPLEMENT, AND MAINTAIN A SPILL PREVENTION, CONTROL AND COUNTERMEASURES (SPCC) PLAN, AS A SEPARATE DOCUMENT OR AS A COMPONENT OF THE SWPPP, FOR ALL TANKS/CONTAINERS STORING ONSITE FUEL, CHEMICALS, OR OTHER POLLUTANTS CONSISTENT WITH THE REQUIREMENTS OF STATE NPDES RULES. EFFECTIVE MEASURES NECESSARY TO PREVENT SPILLS AND TO CLEAN UP SPILLS OF ANY TOXIC POLLUTANT, AS DOCUMENTED IN THE FACILITY'S SPCC PLAN, SHALL BE FULLY IMPLEMENTED. SOIL CONTAMINATED BY HAZARDOUS SUBSTANCES, PAINTS, FUEL, OR CHEMICAL SPILLS, SHALL BE IMMEDIATELY CLEANED UP, MANAGED, AND DISPOSED OF IN AN APPROVED MANNER. WHERE POTENTIAL SPILLS CAN OCCUR, MATERIALS HANDLING PROCEDURES SHALL BE SPECIFIED AND PROCEDURES FOR IMMEDIATE CLEANUP/REMEDIATION OF SPILLS SHALL BE DESCRIBED IN THE SPCC PLAN OR EMPLOYEE TRAINING EXACT LOCATION OF THE SPILL, COMPANY NAME AND LOCATION, THE MATERIAL SPILLED, THE ESTIMATED QUANTITY, THE SOURCE OF THE SPILL, THE CAUSE OF THE SPILL, THE NEAREST DOWNSTREAM WATER WITH THE POTENTIAL TO RECEIVE THE SPILL, AND THE ACTIONS BEING TAKEN FOR CONTAINMENT AND CLEANUP.
15. ALL EROSION AND SEDIMENT CONTROL DEVICES TO BE SELECTED, INSTALLED AND MAINTAINED IN ACCORDANCE WITH TDEC SEDIMENT AND EROSION CONTROL HANDBOOK, LATEST EDITION.
16. WATER QUALITY BMPs SHALL NOT BE INSTALLED UNTIL BUILD IS NEAR COMPLETION TO PREVENT CONSTRUCTION SEDIMENT FROM ENTERING WATER QUALITY BMPs. WATER QUALITY AREAS SHALL NOT BE USED AS SEDIMENT BASINS DURING CONSTRUCTION. INSTALLER'S OF WATER QUALITY BMPs SHOULD FOLLOW ALL INSTALLATION GUIDELINES SET FORTH IN THE CITY OF FRANKLIN BMP MANUAL LOCATED ON THE CITY'S WEBSITE.
17. WATER QUALITY SIGNS SHALL BE PLACED WITHIN THE WATER QUALITY AREAS. THE SIGNS, MATERIALS, AND LABOR TO INSTALL WILL BE PROVIDED BY THE CITY STAFF.

CONSTRUCTION SEQUENCE:

1. INSTALL CONSTRUCTION ENTRANCE
2. INSTALL EROSION PREVENTION AND SEDIMENT CONTROL MEASURES
3. INSTALL WATER QUALITY BUFFER SIGNS, IF REQUIRED
4. CONTACT CITY OF BRENTWOOD AT 615-371-0080 FOR INSPECTION OF EROSION PREVENTION AND SEDIMENT CONTROL DEVICES AND TO OBTAIN A FULL GRADING PERMIT.
5. CLEAR, GRUB, AND GRADE THE SITE
6. CONSTRUCT REMAINDER OF SITE PER APPROVED PLANS INCLUDING INSTALLATION OF ALL ADDITIONAL EPSC MEASURES SHOWN ON THE PLANS OR AS DIRECTED BY THE EPSC INSPECTOR
7. UPON PERMANENT STABILIZATION OF THE SITE, REMOVE ALL TEMPORARY EROSION CONTROL DEVICES (SEE C3.2 AND C3.3 EPSC FOR ADDITIONAL EPSC PROCESSES).

EPSC DATA CHART:

BMP DESIGN RAIN EVENT: 5 YEAR, 24 HR STORM

BIORETENTION CELL OR WATER QUALITY SWALE CONSTRUCTION SEQUENCING:

1. CONSTRUCTION OF THE AREA MAY ONLY BEGIN AFTER THE ENTIRE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED WITH VEGETATION. IT MAY BE NECESSARY TO BLOCK CERTAIN CURBS OR OTHER INLETS WHILE THE AREA IS BEING CONSTRUCTED.
2. CONTRACTOR IS TO DIVERT RUNOFF FLOW AROUND THE CONSTRUCTION OF THE AREA DURING PERIODS OF RAINFALL TO ENSURE SEDIMENT DOES NOT ENTER THE AREA. EPSC MEASURES MAY NEED TO BE UTILIZED DURING THE INSTALLATION. CONSTRUCTION MATERIALS THAT ARE CONTAMINATED BY SEDIMENTS MUST BE REMOVED AND REPLACED WITH CLEAN MATERIALS.
3. EXCAVATE THE AREA. EQUIPMENT SHALL WORK FROM THE SIDES TO EXCAVATE TO THE DESIGN DEPTH AND DIMENSIONS. EQUIPMENT SHOULD HAVE SCOOPS WITH ADEQUATE REACH SO THEY DO NOT SIT INSIDE THE FOOTPRINT OF THE AREA. IF HEAVY RAINFALL OCCURS WHILE THE AREA IS OPEN, THE SOIL SHALL BE SCARIFIED/RAKED TO ENSURE THE SURROUNDING SOILS HAVE NOT BEEN SMEARED.
4. SCARIFY SUBGRADE BY RIPPING THE BOTTOM SOILS TO A DEPTH OF 12" PRIOR TO STONE PLACEMENT.
5. CALL CITY OF BRENTWOOD INSPECTOR FOR INSPECTION 615-371-0080.
6. INSTALL WASHED STONE LAYER. INSTALL UNDERDRAIN PIPES AND CONNECT TO THE OUTLET STRUCTURE. INSTALL ADDITIONAL STONE ON THE UNDERDRAIN PIPES AS PER THE SECTION DETAIL. CONTRACTOR TO FLAG THE UNDERDRAIN LOCATIONS (3' EACH SIDE) AS THE ADDITIONAL SECTIONS ARE BEING INSTALLED. A SMALL LOADER IS TO BE USED FOR PLACEMENT OF ADDITIONAL SECTIONS AND IS TO AVOID ACCESSING THE AREAS OF THE INSTALLED PIPE TO PREVENT DAMAGE TO THE PERFORATED PIPE.
7. CALL CITY OF BRENTWOOD INSPECTOR FOR INSPECTION 615-371-0080.
8. SEND AMENDED SOIL SAMPLE TO UT AGRICULTURE EXTENSION OFFICE FOR SOIL ANALYSIS TO ENSURE IT MEETS CITY SPECIFICATIONS OF 85% TO 88% SAND, 8% TO 12% SOIL FINES, AND 3% TO 5% ORGANIC MATTER. AMENDED SOILS SHALL NOT CONTAIN ANY RECYCLED PRODUCTS AND/OR GRAVEL/STONE/ROCK. THIS STEP IS OPTIONAL, BUT HIGHLY ENCOURAGED.
9. DELIVER THE SOIL MEDIA AND STORE IT ON PLASTIC SHEETING WITH THE APPROPRIATE EROSION CONTROL MEASURES ON THE DOWNHILL AND BIORETENTION SIDES.
10. INSTALL CHOKER STONE LAYER
11. CALL CITY OF BRENTWOOD INSPECTOR FOR INSPECTION 615-371-0080.
12. INSTALL THE SOIL MEDIA IN 12" LIFTS UNTIL THE DESIRED TOP ELEVATION IS ACHIEVED. WAIT A FEW DAYS TO CHECK FOR SETTLEMENT AND ADD ADDITIONAL MEDIA AS NEEDED TO ACHIEVE THE DESIGN ELEVATIONS. DO NOT COMPACT WITH EQUIPMENT.
13. PREPARE PLANTING HOLES FOR ANY TREES AND SHRUBS, INSTALL THE VEGETATION AND WATER ACCORDINGLY. EQUIPMENT SHALL NOT BE UTILIZED WITHIN THE AREA WHEN PLANTING. LIMIT FOOT TRAFFIC AS MUCH AS POSSIBLE. IRRIGATION SHALL NOT BE INSTALLED IN THE BIORETENTION AREA.
14. INSTALL SPECIFIED GROUNDCOVER OVER AMENDED SOILS AND AROUND PLANTINGS.
15. STABILIZE SLOPES AS SHOWN ON APPROVED PLANS.
16. CONTRACTOR TO FLAG LIMITS OF BIORETENTION BASIN FOR SURVEY TO LOCATE AND SHOW ON AS-BUILT PLANS.

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



LEGEND

- PROPERTY LINE
- BUILDING LINE
- 780 EXISTING MAJOR CONTOUR
- 779 EXISTING MINOR CONTOUR
- ST STORM PIPE
- TEMPORARY DIVERSION DITCH
- LIMITS OF DISTURBANCE
- SF SILT FENCE
- FS FILTER SOCK
- TP TREE PROTECTION FENCE
- SILT FENCE INLET PROTECTION
- WATTLE INLET PROTECTION
- ROCK CHECK DAM

NOTE:
DRAWING BASED ON BOUNDARY & TOPOGRAPHICAL SURVEY AS PREPARED BY BROWN LAND SURVEYING, LLC DATED 10-28-15 UTILIZING FIELD RUN SURVEY USING EDM EQUIPMENT ADJUSTED FOR TEMPERATURE, VERTICAL DATUM NAVD88. BEARINGS SHOWN HEREON ARE BASED ON TENNESSEE STATE PLANE COORDINATE SYSTEM.

REVISION #	DATE	DESCRIPTION
1	4/19/2022	PER BRENTWOOD STAFF COMMENTS
2	5/23/2022	PER BRENTWOOD STAFF COMMENTS
3	12/5/2022	REVISED SETBACK LINES
4	12/20/2022	PER BRENTWOOD STAFF COMMENTS

MATTHEW W. BRYAN — REGISTERED ENGINEER — AGRICULTURE & BIOSYSTEMS ENGINEERING — STATE OF TENNESSEE — 04/05/22

REVISED PRELIMINARY PLANS FOR:
PRIMM FARM
8318 MOORES LANE
CITY OF BRENTWOOD
WILLIAMSON COUNTY, TENNESSEE

MA GROUP
P.O. BOX 848
FRANKLIN, TN 37065
615.406.3415 / WWW.M2GROUPLLC.COM

EPSC PHASE I PLAN

DATE: APRIL, 2022 | DRAWN BY: BTU, BPH | CHECKED BY: MWB | PROJECT NO.: 18-765

SHEET NUMBER: **C3.1**

EPSC GENERAL NOTES:

1. SEDIMENT SHALL BE REMOVED FROM SILT FENCE WHEN IT REACHES 1/3 THE HEIGHT OF THE FENCE; SEDIMENT SHALL BE REMOVED FROM ALL OTHER EPSC MEASURES AND CONTROL AS RECOMMENDED IN THE TNEPSC HANDBOOK, AND MUST BE REMOVED WHEN DESIGN CAPACITY HAS BEEN REDUCED BY 50%.
2. EPSC SHALL BE IMPLEMENTED BEFORE EARTH- MOVING BEGINS.
3. AREAS WHERE CONSTRUCTION HAS TEMPORARILY/PERMANENTLY CEASED SHALL BE STABILIZED WITHIN 15 DAYS (7 DAYS FOR ≥35% SLOPES).
4. INSPECTIONS OF OUTFALLS/EPSC MEASURES SHALL BE CONDUCTED AT LEAST TWICE WEEKLY AND AT LEAST 72 HOURS APART.
5. VEGETATION, EPSCS & OTHER PROTECTIVE MEASURES SHALL BE REPAIRED, REPLACED, OR MODIFIED AFTER BEING NOTIFIED OF AN ISSUE WITHIN 7 DAYS OR BY THE NEXT SIGNIFICANT RAIN CHANCE OF 50% OR GREATER. ISSUES WITH IMMEDIATE THREATS TO WATER QUALITY SHALL BE REPAIRED IMMEDIATELY AS PER FMC 23-106(2)(g).
6. CONSTRUCTION SHALL BE PHASED FOR ACTIVITIES THAT WILL DISTURB >50 ACRES.
7. EPSCS SHALL BE DESIGNED TO CONTROL THE RAINFALL AND RUNOFF FROM A 5-YEAR, 24-HOUR RETURN INTERVAL STORM.
8. TEMPORARY SEDIMENT BASIN(S) SHALL BE PROVIDED FOR ON-SITE OUTFALLS THAT RECEIVE DRAINAGE FROM ≥10 ACRES; ≥5 ACRES FOR SITES THAT DISCHARGE TO IMPAIRED OR EXCEPTIONAL TN WATERS.
9. GREEN INFRASTRUCTURE BMPS SHALL BE PROTECTED DURING SITE WORK, WITH SILT FENCE, TO PREVENT SEDIMENTATION AND COMPACTION.
10. IF DEEMED APPROPRIATE, THE CITY MAY REQUIRE THE ADDITION, REMOVAL OR MODIFICATION OF EPSC MEASURES AND/OR EPSC LOCATIONS AT ANY TIME DURING THE CONSTRUCTION PROCESS TO ENSURE PROPER EPSC PERFORMANCE.

EROSION AND SEDIMENT CONTROL PLAN NOTES:

1. PRIOR TO INSTALLATION OF EROSION CONTROL MEASURES OR INITIATION OF EARTH DISTURBING ACTIVITIES, THE CONTRACTOR SHALL CLEARLY DELINEATE THE PROPOSED LIMITS OF DISTURBANCE IN THE FIELD UTILIZING FLAGGING, STAKES, AND/OR CONSTRUCTION FENCE. NO DISTURBANCE BEYOND THESE LIMITS SHALL BE PERMITTED WITHOUT FIRST OBTAINING WRITTEN PERMISSION FROM THE ENGINEER, THE AFFECTED PROPERTY OWNER AND ANY APPLICABLE REGULATORY AGENCIES.
2. THE CONSTRUCTION ACTIVITIES ANTICIPATED FOR THIS PROJECT INCLUDES GRADING, PAVING, AND UTILITY INSTALLATION.
3. THE APPROXIMATE TOTAL DISTURBED AREA OF THIS SITE IS 31.1 ACRES +/-. ANY INCREASE IN THE APPROXIMATE TOTAL DISTURBED AREA SHALL BE APPROVED BY THE CITY OF BRENTWOOD PRIOR TO ADDITIONAL DISTURBANCE.
4. CONSTRUCTION SHALL BE SEQUENCED BY THE CONTRACTOR AS TO MINIMIZE EXPOSURE TIME OF CLEARED SURFACE AREAS. PERIMETER EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE AND FUNCTIONAL PRIOR TO EARTH MOVING OPERATIONS.
5. THE CONTRACTOR SHALL DESIGNATE IN WRITING THE NAME AND PHONE NUMBER OF THE PERSON(S) RESPONSIBLE FOR EROSION AND SEDIMENT CONTROLS AT THE SITE. THIS INFORMATION SHALL BE POSTED AT THE JOB SITE TRAILER, OR AT THE SITE CONSTRUCTION SIGN.
6. PRE-CONSTRUCTION VEGETATIVE GROUNDCOVER SHALL NOT BE REMOVED MORE THAN 14 DAYS PRIOR TO COMMENCEMENT OF GRADING ACTIVITIES. ALL GRADED AREAS EXPECTED TO REMAIN UNFINISHED FOR MORE THAN 14 DAYS SHALL BE COVERED WITH TEMPORARY GRASS, SOD, STRAW, MULCH, OR FABRIC MATTING. STEEP SLOPES (GREATER THAN 35%) SHALL BE TEMPORARILY STABILIZED NOT LATER THAN 3 DAYS AFTER CONSTRUCTION ACTIVITY ON THE SLOPE HAS TEMPORARILY OR PERMANENTLY CEASED. PERMANENT SOIL STABILIZATION SHALL BE INSTALLED WITHIN 15 DAYS OF THE ESTABLISHMENT OF FINAL GRADES.
7. THE CONTRACTOR SHALL MAINTAIN RECORDS OF EROSION AND SEDIMENT CONTROL FOR A PERIOD OF THREE YEARS AFTER COMPLETION OF CONSTRUCTION OR AS REQUIRED BY GOVERNING AUTHORITIES.
8. TEMPORARY SEEDING FOR THIS PROJECT SHALL UTILIZE TDOT, TDEC OR LOCAL STANDARDS UNLESS OTHERWISE INDICATED HEREON.
9. MULCHING SHALL CONSIST OF LOOSE HAY OR STRAW APPLIED AT A RATE OF 2 TONS PER ACRE. MULCH MUST BE CRIMPED INTO THE SOIL BY MECHANICAL MEANS. BROADCAST SPREADING OF MULCH IS NOT ACCEPTABLE.
10. SOIL STOCKPILES SHALL BE STABILIZED AND PROTECTED FROM EROSION. ALL STOCKPILES SHALL BE COVERED WITH TEMPORARY SEEDING AND PROTECTED WITH SILT FENCING.
11. FOR PERMANENT STABILIZATION OF ALL SLOPES 3:1 OR STEEPER, INSTALL TEMPORARY EROSION CONTROL BLANKET (TENSAR NORTH AMERICAN GREEN S150 OR APPROVED EQUAL) INSTALLED PER MANUFACTURERS' RECOMMENDATIONS SHALL BE USED IN PLACE OF STRAW MULCH.
12. THE LOCATION OF SOME OF THE EROSION CONTROL MEASURES MAY NEED TO BE ALTERED DUE TO CHANGING SITE CONDITIONS COMMENSURATE WITH PROGRESS OF THE WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION AND SEDIMENT CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES OF CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
13. EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL A PERMANENT GROUND COVER IS ESTABLISHED. SEEDED AREAS MUST HAVE A MINIMUM 70% COVERAGE (ENGINEER WILL DETERMINE APPROXIMATE PERCENTAGE OF COVER) PRIOR TO REMOVAL OF THE TEMPORARY EROSION CONTROL DEVICES. FINAL SEEDING AND ESTABLISHMENT OF GROUNDCOVER SHALL BE APPLIED TO ANY AREA DISTURBED AS A RESULT OF THE REMOVAL OF THE EROSION CONTROL MEASURES.
14. CONTRACTOR SHALL PREPARE, IMPLEMENT, AND MAINTAIN A SPILL PREVENTION, CONTROL AND COUNTERMEASURES (SPCC) PLAN, AS A SEPARATE DOCUMENT OR AS A COMPONENT OF THE SWPPP, FOR ALL TANKS/CONTAINERS STORING ONSITE FUEL, CHEMICALS, OR OTHER POLLUTANTS CONSISTENT WITH THE REQUIREMENTS OF STATE NPDES RULES. EFFECTIVE MEASURES NECESSARY TO PREVENT SPILLS AND TO CLEAN UP SPILLS OF ANY TOXIC POLLUTANT, AS DOCUMENTED IN THE FACILITY'S SPCC PLAN, SHALL BE FULLY IMPLEMENTED. SOIL CONTAMINATED BY HAZARDOUS SUBSTANCES, PAINTS, FUEL, OR CHEMICAL SPILLS, SHALL BE IMMEDIATELY CLEANED UP, MANAGED, AND DISPOSED OF IN AN APPROVED MANNER. WHERE POTENTIAL SPILLS CAN OCCUR, MATERIALS HANDLING PROCEDURES SHALL BE SPECIFIED AND PROCEDURES FOR IMMEDIATE CLEANUP/REMEDIATION OF SPILLS SHALL BE DESCRIBED IN THE SPCC PLAN OR EMPLOYEE TRAINING EXACT LOCATION OF THE SPILL, COMPANY NAME AND LOCATION, THE MATERIAL SPILLED, THE ESTIMATED QUANTITY, THE SOURCE OF THE SPILL, THE CAUSE OF THE SPILL, THE NEAREST DOWNSTREAM WATER WITH THE POTENTIAL TO RECEIVE THE SPILL, AND THE ACTIONS BEING TAKEN FOR CONTAINMENT AND CLEANUP.
15. ALL EROSION AND SEDIMENT CONTROL DEVICES TO BE SELECTED, INSTALLED AND MAINTAINED IN ACCORDANCE WITH TDEC SEDIMENT AND EROSION CONTROL HANDBOOK, LATEST EDITION.
16. WATER QUALITY BMPs SHALL NOT BE INSTALLED UNTIL BUILD IS NEAR COMPLETION TO PREVENT CONSTRUCTION SEDIMENT FROM ENTERING WATER QUALITY BMPs. WATER QUALITY AREAS SHALL NOT BE USED AS SEDIMENT BASINS DURING CONSTRUCTION. INSTALLER'S OF WATER QUALITY BMPs SHOULD FOLLOW ALL INSTALLATION GUIDELINES SET FORTH IN THE CITY OF FRANKLIN BMP MANUAL LOCATED ON THE CITY'S WEBSITE.
17. WATER QUALITY SIGNS SHALL BE PLACED WITHIN THE WATER QUALITY AREAS. THE SIGNS, MATERIALS, AND LABOR TO INSTALL WILL BE PROVIDED BY THE CITY STAFF.

CONSTRUCTION SEQUENCE:

1. INSTALL CONSTRUCTION ENTRANCE
2. INSTALL EROSION PREVENTION AND SEDIMENT CONTROL MEASURES
3. INSTALL WATER QUALITY BUFFER SIGNS, IF REQUIRED
4. CONTACT CITY OF BRENTWOOD AT 615-371-0080 FOR INSPECTION OF EROSION PREVENTION AND SEDIMENT CONTROL DEVICES AND TO OBTAIN A FULL GRADING PERMIT.
5. CLEAR, GRUB, AND GRADE THE SITE
6. CONSTRUCT REMAINDER OF SITE PER APPROVED PLANS INCLUDING INSTALLATION OF ALL ADDITIONAL EPSC MEASURES SHOWN ON THE PLANS OR AS DIRECTED BY THE EPSC INSPECTOR
7. UPON PERMANENT STABILIZATION OF THE SITE, REMOVE ALL TEMPORARY EROSION CONTROL DEVICES (SEE C3.2 AND C3.3 EPSC FOR ADDITIONAL EPSC PROCESSES).

EPSC DATA CHART:

BMP DESIGN RAIN EVENT: 5 YEAR, 24 HR STORM

BIORETENTION CELL OR WATER QUALITY SWALE CONSTRUCTION SEQUENCING:

1. CONSTRUCTION OF THE AREA MAY ONLY BEGIN AFTER THE ENTIRE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED WITH VEGETATION. IT MAY BE NECESSARY TO BLOCK CERTAIN CURBS OR OTHER INLETS WHILE THE AREA IS BEING CONSTRUCTED.
2. CONTRACTOR IS TO DIVERT RUNOFF FLOW AROUND THE CONSTRUCTION OF THE AREA DURING PERIODS OF RAINFALL TO ENSURE SEDIMENT DOES NOT ENTER THE AREA. EPSC MEASURES MAY NEED TO BE UTILIZED DURING THE INSTALLATION. CONSTRUCTION MATERIALS THAT ARE CONTAMINATED BY SEDIMENTS MUST BE REMOVED AND REPLACED WITH CLEAN MATERIALS.
3. EXCAVATE THE AREA. EQUIPMENT SHALL WORK FROM THE SIDES TO EXCAVATE TO THE DESIGN DEPTH AND DIMENSIONS. EQUIPMENT SHOULD HAVE SCOOPS WITH ADEQUATE REACH SO THEY DO NOT SIT INSIDE THE FOOTPRINT OF THE AREA. IF HEAVY RAINFALL OCCURS WHILE THE AREA IS OPEN, THE SOIL SHALL BE SCARIFIED/RAKED TO ENSURE THE SURROUNDING SOILS HAVE NOT BEEN SMEARED.
4. SCARIFY SUBGRADE BY RIPPING THE BOTTOM SOILS TO A DEPTH OF 12" PRIOR TO STONE PLACEMENT.
5. CALL CITY OF BRENTWOOD INSPECTOR FOR INSPECTION 615-371-0080.
6. INSTALL WASHED STONE LAYER. INSTALL UNDERDRAIN PIPES AND CONNECT TO THE OUTLET STRUCTURE. INSTALL ADDITIONAL STONE ON THE UNDERDRAIN PIPES AS PER THE SECTION DETAIL. CONTRACTOR TO FLAG THE UNDERDRAIN LOCATIONS (3' EACH SIDE) AS THE ADDITIONAL SECTIONS ARE BEING INSTALLED. A SMALL LOADER IS TO BE USED FOR PLACEMENT OF ADDITIONAL SECTIONS AND IS TO AVOID ACCESSING THE AREAS OF THE INSTALLED PIPE TO PREVENT DAMAGE TO THE PERFORATED PIPE.
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9. DELIVER THE SOIL MEDIA AND STORE IT ON PLASTIC SHEETING WITH THE APPROPRIATE EROSION CONTROL MEASURES ON THE DOWNHILL AND BIORETENTION SIDES.
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13. PREPARE PLANTING HOLES FOR ANY TREES AND SHRUBS, INSTALL THE VEGETATION AND WATER ACCORDINGLY. EQUIPMENT SHALL NOT BE UTILIZED WITHIN THE AREA WHEN PLANTING. LIMIT FOOT TRAFFIC AS MUCH AS POSSIBLE. IRRIGATION SHALL NOT BE INSTALLED IN THE BIORETENTION AREA.
14. INSTALL SPECIFIED GROUNDCOVER OVER AMENDED SOILS AND AROUND PLANTINGS.
15. STABILIZE SLOPES AS SHOWN ON APPROVED PLANS.
16. CONTRACTOR TO FLAG LIMITS OF BIORETENTION BASIN FOR SURVEY TO LOCATE AND SHOW ON AS-BUILT PLANS.

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



REVISION #	DATE	DESCRIPTION
1	4/19/2022	PER BRENTWOOD STAFF COMMENTS
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MATTHEW W. BRIAN — REGISTERED ENGINEER — AGRICULTURAL & BIOSYSTEMS ENGINEER — STATE OF TENNESSEE — 04/05/22

REVISED PRELIMINARY PLANS FOR:

PRIMM FARM

8318 MOORES LANE
CITY OF BRENTWOOD
WILLIAMSON COUNTY, TENNESSEE

M2 GROUP
P.O. BOX 848
FRANKLIN, TN 37065
615.406.3415 / WWW.M2GROUPLLC.COM

EPSC PHASE II PLAN

DATE :	APRIL, 2022	DRAWN BY :	BTU, BPH
PROJECT NO. :	18-765	CHECKED BY :	MWB

LEGEND

- PROPERTY LINE
- BUILDING LINE
- 780 — EXISTING MAJOR CONTOUR
- 779 — EXISTING MINOR CONTOUR
- 780 — PROPOSED MAJOR CONTOUR
- 779 — PROPOSED MINOR CONTOUR
- ST — STORM PIPE
- TEMPORARY DIVERSION DITCH
- LIMITS OF DISTURBANCE
- SF — SILT FENCE
- FS — FILTER SOCK
- TP — TREE PROTECTION FENCE
- SILT FENCE INLET PROTECTION
- WATTLE INLET PROTECTION
- ROCK CHECK DAM
- STORM STRUCTURES
- RIP RAP

NOTE:
DRAWING BASED ON BOUNDARY & TOPOGRAPHICAL SURVEY AS PREPARED BY BROWN LAND SURVEYING, LLC DATED 10-28-15 UTILIZING FIELD RUN SURVEY USING EDM EQUIPMENT ADJUSTED FOR TEMPERATURE, VERTICAL DATUM NAVD88. BEARINGS SHOWN HEREON ARE BASED ON TENNESSEE STATE PLANE COORDINATE SYSTEM.

SHEET NUMBER:

C3.2

PF - C3.2 - EPSC PHASE II PLAN.DWG / Tuesday, December 20, 2022 5:04:28 PM

EPSC GENERAL NOTES:

1. SEDIMENT SHALL BE REMOVED FROM SILT FENCE WHEN IT REACHES 1/3 THE HEIGHT OF THE FENCE; SEDIMENT SHALL BE REMOVED FROM ALL OTHER EPSC MEASURES AND CONTROL AS RECOMMENDED IN THE TNEPSC HANDBOOK, AND MUST BE REMOVED WHEN DESIGN CAPACITY HAS BEEN REDUCED BY 50%.
2. EPSC SHALL BE IMPLEMENTED BEFORE EARTH- MOVING BEGINS.
3. AREAS WHERE CONSTRUCTION HAS TEMPORARILY/PERMANENTLY CEASED SHALL BE STABILIZED WITHIN 15 DAYS (7 DAYS FOR ≥35% SLOPES).
4. INSPECTIONS OF OUTFALLS/EPSC MEASURES SHALL BE CONDUCTED AT LEAST TWICE WEEKLY AND AT LEAST 72 HOURS APART.
5. VEGETATION, EPSCS & OTHER PROTECTIVE MEASURES SHALL BE REPAIRED, REPLACED, OR MODIFIED AFTER BEING NOTIFIED OF AN ISSUE WITHIN 7 DAYS OR BY THE NEXT SIGNIFICANT RAIN CHANCE OF 50% OR GREATER. ISSUES WITH IMMEDIATE THREATS TO WATER QUALITY SHALL BE REPAIRED IMMEDIATELY AS PER FMC 23-106(2)(g).
6. CONSTRUCTION SHALL BE PHASED FOR ACTIVITIES THAT WILL DISTURB >50 ACRES.
7. EPSCS SHALL BE DESIGNED TO CONTROL THE RAINFALL AND RUNOFF FROM A 5-YEAR, 24-HOUR RETURN INTERVAL STORM.
8. TEMPORARY SEDIMENT BASIN(S) SHALL BE PROVIDED FOR ON-SITE OUTFALLS THAT RECEIVE DRAINAGE FROM ≥10 ACRES; ≥5 ACRES FOR SITES THAT DISCHARGE TO IMPAIRED OR EXCEPTIONAL TN WATERS.
9. GREEN INFRASTRUCTURE BMPS SHALL BE PROTECTED DURING SITE WORK, WITH SILT FENCE, TO PREVENT SEDIMENTATION AND COMPACTION.
10. IF DEEMED APPROPRIATE, THE CITY MAY REQUIRE THE ADDITION, REMOVAL OR MODIFICATION OF EPSC MEASURES AND/OR EPSC LOCATIONS AT ANY TIME DURING THE CONSTRUCTION PROCESS TO ENSURE PROPER EPSC PERFORMANCE.

EROSION AND SEDIMENT CONTROL PLAN NOTES:

1. PRIOR TO INSTALLATION OF EROSION CONTROL MEASURES OR INITIATION OF EARTH DISTURBING ACTIVITIES, THE CONTRACTOR SHALL CLEARLY DELINEATE THE PROPOSED LIMITS OF DISTURBANCE IN THE FIELD UTILIZING FLAGGING, STAKES, AND/OR CONSTRUCTION FENCE. NO DISTURBANCE BEYOND THESE LIMITS SHALL BE PERMITTED WITHOUT FIRST OBTAINING WRITTEN PERMISSION FROM THE ENGINEER, THE AFFECTED PROPERTY OWNER AND ANY APPLICABLE REGULATORY AGENCIES.
2. THE CONSTRUCTION ACTIVITIES ANTICIPATED FOR THIS PROJECT INCLUDES GRADING, PAVING, AND UTILITY INSTALLATION.
3. THE APPROXIMATE TOTAL DISTURBED AREA OF THIS SITE IS 31.1 ACRES +/-. ANY INCREASE IN THE APPROXIMATE TOTAL DISTURBED AREA SHALL BE APPROVED BY THE CITY OF BRENTWOOD PRIOR TO ADDITIONAL DISTURBANCE.
4. CONSTRUCTION SHALL BE SEQUENCED BY THE CONTRACTOR AS TO MINIMIZE EXPOSURE TIME OF CLEARED SURFACE AREAS. PERIMETER EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE AND FUNCTIONAL PRIOR TO EARTH MOVING OPERATIONS.
5. THE CONTRACTOR SHALL DESIGNATE IN WRITING THE NAME AND PHONE NUMBER OF THE PERSON(S) RESPONSIBLE FOR EROSION AND SEDIMENT CONTROLS AT THE SITE. THIS INFORMATION SHALL BE POSTED AT THE JOB SITE TRAILER, OR AT THE SITE CONSTRUCTION SIGN.
6. PRE-CONSTRUCTION VEGETATIVE GROUNDCOVER SHALL NOT BE REMOVED MORE THAN 14 DAYS PRIOR TO COMMENCEMENT OF GRADING ACTIVITIES. ALL GRADED AREAS EXPECTED TO REMAIN UNFINISHED FOR MORE THAN 14 DAYS SHALL BE COVERED WITH TEMPORARY GRASS, SOD, STRAW, MULCH, OR FABRIC MATTING. STEEP SLOPES (GREATER THAN 35%) SHALL BE TEMPORARILY STABILIZED NOT LATER THAN 3 DAYS AFTER CONSTRUCTION ACTIVITY ON THE SLOPE HAS TEMPORARILY OR PERMANENTLY CEASED. PERMANENT SOIL STABILIZATION SHALL BE INSTALLED WITHIN 15 DAYS OF THE ESTABLISHMENT OF FINAL GRADES.
7. THE CONTRACTOR SHALL MAINTAIN RECORDS OF EROSION AND SEDIMENT CONTROL FOR A PERIOD OF THREE YEARS AFTER COMPLETION OF CONSTRUCTION OR AS REQUIRED BY GOVERNING AUTHORITIES.
8. TEMPORARY SEEDING FOR THIS PROJECT SHALL UTILIZE TDOT, TDEC OR LOCAL STANDARDS UNLESS OTHERWISE INDICATED HEREON.
9. MULCHING SHALL CONSIST OF LOOSE HAY OR STRAW APPLIED AT A RATE OF 2 TONS PER ACRE. MULCH MUST BE CRIMPED INTO THE SOIL BY MECHANICAL MEANS. BROADCAST SPREADING OF MULCH IS NOT ACCEPTABLE.
10. SOIL STOCKPILES SHALL BE STABILIZED AND PROTECTED FROM EROSION. ALL STOCKPILES SHALL BE COVERED WITH TEMPORARY SEEDING AND PROTECTED WITH SILT FENCING.
11. FOR PERMANENT STABILIZATION OF ALL SLOPES 3:1 OR STEEPER, INSTALL TEMPORARY EROSION CONTROL BLANKET (TENSAR NORTH AMERICAN GREEN S150 OR APPROVED EQUAL) INSTALLED PER MANUFACTURERS' RECOMMENDATIONS SHALL BE USED IN PLACE OF STRAW MULCH.
12. THE LOCATION OF SOME OF THE EROSION CONTROL MEASURES MAY NEED TO BE ALTERED DUE TO CHANGING SITE CONDITIONS COMMENSURATE WITH PROGRESS OF THE WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION AND SEDIMENT CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES OF CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
13. EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL A PERMANENT GROUND COVER IS ESTABLISHED. SEEDED AREAS MUST HAVE A MINIMUM 70% COVERAGE (ENGINEER WILL DETERMINE APPROXIMATE PERCENTAGE OF COVER) PRIOR TO REMOVAL OF THE TEMPORARY EROSION CONTROL DEVICES. FINAL SEEDING AND ESTABLISHMENT OF GROUNDCOVER SHALL BE APPLIED TO ANY AREA DISTURBED AS A RESULT OF THE REMOVAL OF THE EROSION CONTROL MEASURES.
14. CONTRACTOR SHALL PREPARE, IMPLEMENT, AND MAINTAIN A SPILL PREVENTION, CONTROL AND COUNTERMEASURES (SPCC) PLAN, AS A SEPARATE DOCUMENT OR AS A COMPONENT OF THE SWPPP, FOR ALL TANKS/CONTAINERS STORING ONSITE FUEL, CHEMICALS, OR OTHER POLLUTANTS CONSISTENT WITH THE REQUIREMENTS OF STATE NPDES RULES. EFFECTIVE MEASURES NECESSARY TO PREVENT SPILLS AND TO CLEAN UP SPILLS OF ANY TOXIC POLLUTANT, AS DOCUMENTED IN THE FACILITY'S SPCC PLAN, SHALL BE FULLY IMPLEMENTED. SOIL CONTAMINATED BY HAZARDOUS SUBSTANCES, PAINTS, FUEL, OR CHEMICAL SPILLS, SHALL BE IMMEDIATELY CLEANED UP, MANAGED, AND DISPOSED OF IN AN APPROVED MANNER. WHERE POTENTIAL SPILLS CAN OCCUR, MATERIALS HANDLING PROCEDURES SHALL BE SPECIFIED AND PROCEDURES FOR IMMEDIATE CLEANUP/REMEDIATION OF SPILLS SHALL BE DESCRIBED IN THE SPCC PLAN OR EMPLOYEE TRAINING EXACT LOCATION OF THE SPILL, COMPANY NAME AND LOCATION, THE MATERIAL SPILLED, THE ESTIMATED QUANTITY, THE SOURCE OF THE SPILL, THE CAUSE OF THE SPILL, THE NEAREST DOWNSTREAM WATER WITH THE POTENTIAL TO RECEIVE THE SPILL, AND THE ACTIONS BEING TAKEN FOR CONTAINMENT AND CLEANUP.
15. ALL EROSION AND SEDIMENT CONTROL DEVICES TO BE SELECTED, INSTALLED AND MAINTAINED IN ACCORDANCE WITH TDEC SEDIMENT AND EROSION CONTROL HANDBOOK, LATEST EDITION.
16. WATER QUALITY BMPs SHALL NOT BE INSTALLED UNTIL BUILD IS NEAR COMPLETION TO PREVENT CONSTRUCTION SEDIMENT FROM ENTERING WATER QUALITY BMPs. WATER QUALITY AREAS SHALL NOT BE USED AS SEDIMENT BASINS DURING CONSTRUCTION. INSTALLER'S OF WATER QUALITY BMPs SHOULD FOLLOW ALL INSTALLATION GUIDELINES SET FORTH IN THE CITY OF FRANKLIN BMP MANUAL LOCATED ON THE CITY'S WEBSITE.
17. WATER QUALITY SIGNS SHALL BE PLACED WITHIN THE WATER QUALITY AREAS. THE SIGNS, MATERIALS, AND LABOR TO INSTALL WILL BE PROVIDED BY THE CITY STAFF.

CONSTRUCTION SEQUENCE:

1. INSTALL CONSTRUCTION ENTRANCE
2. INSTALL EROSION PREVENTION AND SEDIMENT CONTROL MEASURES
3. INSTALL WATER QUALITY BUFFER SIGNS, IF REQUIRED
4. CONTACT CITY OF BRENTWOOD AT 615-371-0080 FOR INSPECTION OF EROSION PREVENTION AND SEDIMENT CONTROL DEVICES AND TO OBTAIN A FULL GRADING PERMIT.
5. CLEAR, GRUB, AND GRADE THE SITE
6. CONSTRUCT REMAINDER OF SITE PER APPROVED PLANS INCLUDING INSTALLATION OF ALL ADDITIONAL EPSC MEASURES SHOWN ON THE PLANS OR AS DIRECTED BY THE EPSC INSPECTOR
7. UPON PERMANENT STABILIZATION OF THE SITE, REMOVE ALL TEMPORARY EROSION CONTROL DEVICES (SEE C3.2 AND C3.3 EPSC FOR ADDITIONAL EPSC PROCESSES).

EPSC DATA CHART:

BMP DESIGN RAIN EVENT: 5 YEAR, 24 HR STORM

BIORETENTION CELL OR WATER QUALITY SWALE CONSTRUCTION SEQUENCING:

1. CONSTRUCTION OF THE AREA MAY ONLY BEGIN AFTER THE ENTIRE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED WITH VEGETATION. IT MAY BE NECESSARY TO BLOCK CERTAIN CURBS OR OTHER INLETS WHILE THE AREA IS BEING CONSTRUCTED.
2. CONTRACTOR IS TO DIVERT RUNOFF FLOW AROUND THE CONSTRUCTION OF THE AREA DURING PERIODS OF RAINFALL TO ENSURE SEDIMENT DOES NOT ENTER THE AREA. EPSC MEASURES MAY NEED TO BE UTILIZED DURING THE INSTALLATION. CONSTRUCTION MATERIALS THAT ARE CONTAMINATED BY SEDIMENTS MUST BE REMOVED AND REPLACED WITH CLEAN MATERIALS.
3. EXCAVATE THE AREA. EQUIPMENT SHALL WORK FROM THE SIDES TO EXCAVATE TO THE DESIGN DEPTH AND DIMENSIONS. EQUIPMENT SHOULD HAVE SCOOPS WITH ADEQUATE REACH SO THEY DO NOT SIT INSIDE THE FOOTPRINT OF THE AREA. IF HEAVY RAINFALL OCCURS WHILE THE AREA IS OPEN, THE SOIL SHALL BE SCARIFIED/RAKED TO ENSURE THE SURROUNDING SOILS HAVE NOT BEEN SMEARED.
4. SCARIFY SUBGRADE BY RIPPING THE BOTTOM SOILS TO A DEPTH OF 12" PRIOR TO STONE PLACEMENT.
5. CALL CITY OF BRENTWOOD INSPECTOR FOR INSPECTION 615-371-0080.
6. INSTALL WASHED STONE LAYER. INSTALL UNDERDRAIN PIPES AND CONNECT TO THE OUTLET STRUCTURE. INSTALL ADDITIONAL STONE ON THE UNDERDRAIN PIPES AS PER THE SECTION DETAIL. CONTRACTOR TO FLAG THE UNDERDRAIN LOCATIONS (3' EACH SIDE) AS THE ADDITIONAL SECTIONS ARE BEING INSTALLED. A SMALL LOADER IS TO BE USED FOR PLACEMENT OF ADDITIONAL SECTIONS AND IS TO AVOID ACCESSING THE AREAS OF THE INSTALLED PIPE TO PREVENT DAMAGE TO THE PERFORATED PIPE.
7. CALL CITY OF BRENTWOOD INSPECTOR FOR INSPECTION 615-371-0080.
8. SEND AMENDED SOIL SAMPLE TO UT AGRICULTURE EXTENSION OFFICE FOR SOIL ANALYSIS TO ENSURE IT MEETS CITY SPECIFICATIONS OF 85% TO 88% SAND, 8% TO 12% SOIL FINES, AND 3% TO 5% ORGANIC MATTER. AMENDED SOILS SHALL NOT CONTAIN ANY RECYCLED PRODUCTS AND/OR GRAVEL/STONE/ROCK. THIS STEP IS OPTIONAL, BUT HIGHLY ENCOURAGED.
9. DELIVER THE SOIL MEDIA AND STORE IT ON PLASTIC SHEETING WITH THE APPROPRIATE EROSION CONTROL MEASURES ON THE DOWNHILL AND BIORETENTION SIDES.
10. INSTALL CHOKER STONE LAYER
11. CALL CITY OF BRENTWOOD INSPECTOR FOR INSPECTION 615-371-0080.
12. INSTALL THE SOIL MEDIA IN 12" LIFTS UNTIL THE DESIRED TOP ELEVATION IS ACHIEVED. WAIT A FEW DAYS TO CHECK FOR SETTLEMENT AND ADD ADDITIONAL MEDIA AS NEEDED TO ACHIEVE THE DESIGN ELEVATIONS. DO NOT COMPACT WITH EQUIPMENT.
13. PREPARE PLANTING HOLES FOR ANY TREES AND SHRUBS. INSTALL THE VEGETATION AND WATER ACCORDINGLY. EQUIPMENT SHALL NOT BE UTILIZED WITHIN THE AREA WHEN PLANTING. LIMIT FOOT TRAFFIC AS MUCH AS POSSIBLE. IRRIGATION SHALL NOT BE INSTALLED IN THE BIORETENTION AREA.
14. INSTALL SPECIFIED GROUNDCOVER OVER AMENDED SOILS AND AROUND PLANTINGS.
15. STABILIZE SLOPES AS SHOWN ON APPROVED PLANS.
16. CONTRACTOR TO FLAG LIMITS OF BIORETENTION BASIN FOR SURVEY TO LOCATE AND SHOW ON AS-BUILT PLANS.

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



LEGEND

- PROPERTY LINE
- BUILDING LINE
- 780 EXISTING MAJOR CONTOUR
- 779 EXISTING MINOR CONTOUR
- 780 PROPOSED MAJOR CONTOUR
- 779 PROPOSED MINOR CONTOUR
- ST STORM PIPE
- LIMITS OF DISTURANCE
- STORM STRUCTURES
- RIP RAP
- TURF REINFORCEMENT MATTING
- FINAL STABILIZATION

NOTE:
DRAWING BASED ON BOUNDARY & TOPOGRAPHICAL SURVEY AS PREPARED BY BROWN LAND SURVEYING, LLC DATED 10-28-15 UTILIZING FIELD RUN SURVEY USING EDM EQUIPMENT ADJUSTED FOR TEMPERATURE, VERTICAL DATUM NAVD88. BEARINGS SHOWN HEREON ARE BASED ON TENNESSEE STATE PLANE COORDINATE SYSTEM.

REVISION #	DATE	DESCRIPTION
1	4/19/2022	PER BRENTWOOD STAFF COMMENTS
2	5/23/2022	PER BRENTWOOD STAFF COMMENTS
3	12/5/2022	REVISED SETBACK LINES
4	12/20/2022	PER BRENTWOOD STAFF COMMENTS

MATTHEW W. BRIAN — LICENSED PROFESSIONAL ENGINEER — STATE OF TENNESSEE — 04/05/22

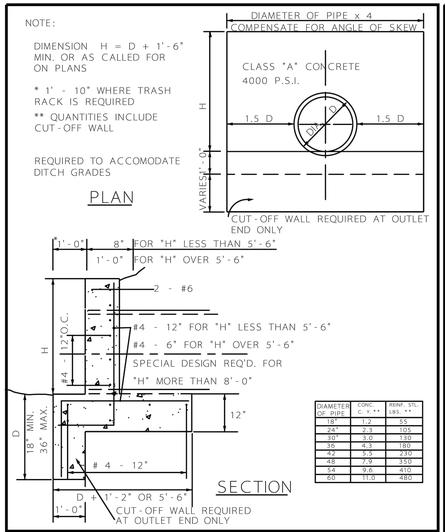
REVISED PRELIMINARY PLANS FOR:
PRIMM FARM
8318 MOORES LANE
CITY OF BRENTWOOD
WILLIAMSON COUNTY, TENNESSEE

MA GROUP
P.O. BOX 849
FRANKLIN, TN 37065
615.406.3415 / WWW.MZGROUPLLC.COM

EPSC PHASE III PLAN

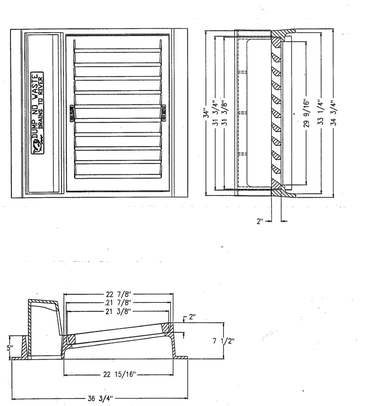
DATE: APRIL, 2022 | DRAWN BY: BTU, BPH | CHECKED BY: MWB | PROJECT NO.: 18-755

SHEET NUMBER: **C3.3**



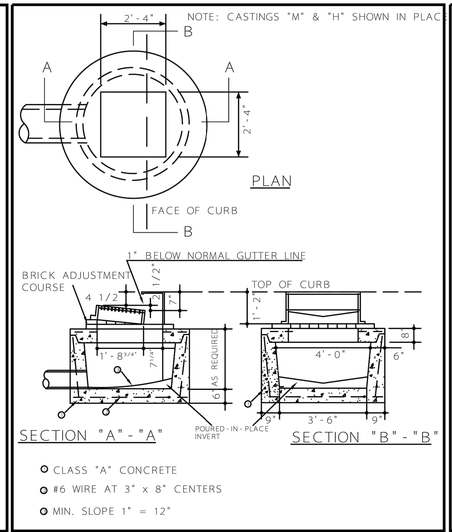
DIAMETER OF PIPE	CONC. C.Y.*	REINF. STL. LBS.**
18"	1.2	55
24"	2.3	105
30"	3.0	130
36	4.3	180
42	5.3	230
48	7.9	350
54	9.6	410
60	11.0	480

REINFORCED CONCRETE HEADWALL
DRAWING NO. 1
(NOT TO SCALE)



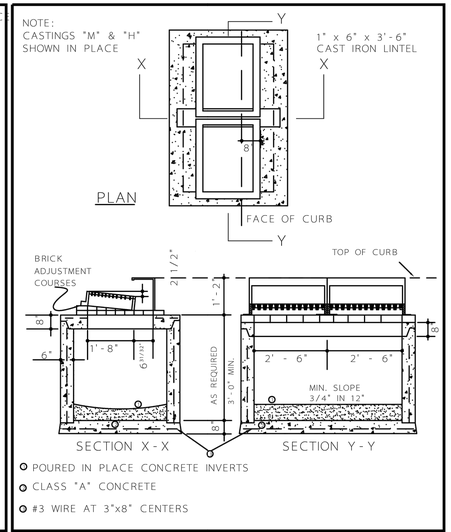
* MODEL 3300-V CURB INLET AS MANUFACTURED BY JBS OR EQUIVALENT.
** OPEN AREA = 1.88 SQ. FT.

STANDARD CATCH BASIN
DRAWING NO. 8
(NOT TO SCALE)



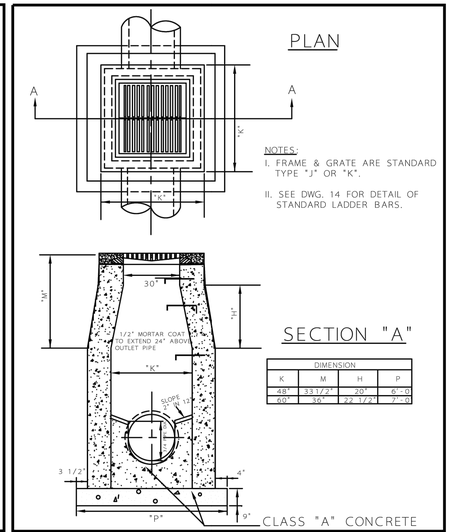
- CLASS "A" CONCRETE
- #6 WIRE AT 3" x 8" CENTERS
- MIN. SLOPE 1" = 12"

DETAILS OF SINGLE INLET
DRAWING NO. 10
(NOT TO SCALE)



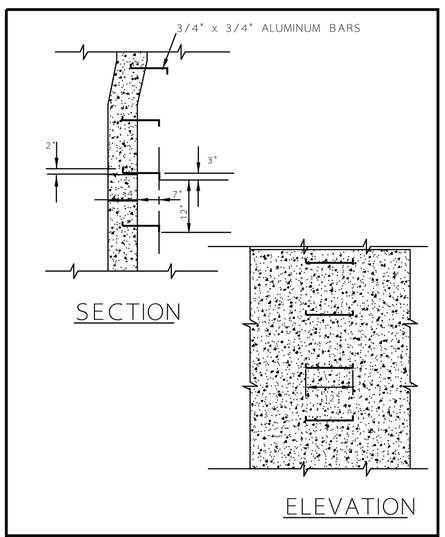
- POURED IN PLACE CONCRETE INVERTS
- CLASS "A" CONCRETE
- #3 WIRE AT 3"x8" CENTERS

DETAILS OF DOUBLE INLET
DRAWING NO. 12
(NOT TO SCALE)

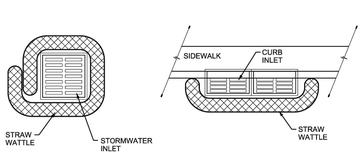


DIMENSION			
K	M	H	P
48"	33 1/2"	20"	6'-0
60"	36"	22 1/2"	7'-0

COMBINATION MANHOLE INLET
DRAWING NO. 16
(NOT TO SCALE)



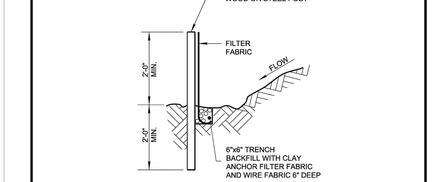
DETAIL OF STANDARD LADDER BARS
DRAWING NO. 14
(NOT TO SCALE)



NOTES:

1. STRAW WATTLES SHALL BE MANUFACTURED FROM RICE STRAW AND BE WRAPPED IN A TUBULAR PLASTIC NETTING. THE NETTING SHALL HAVE A STRAND THICKNESS OF 0.03 INCH, AND A KNOT THICKNESS OF 0.055 AND A WEIGHT OF 0.35 OUNCE PER FOOT AND SHALL BE MADE FROM 85% HIGH DENSITY POLYETHYLENE, 14% ETHYL VINYL ACETATE AND 1% COLOR FOR UV INHIBITION. STRAW WATTLES SHALL BE NINE INCHES IN DIAMETER, TWENTY-FIVE FEET LONG AND WEIGH APPROXIMATELY 35 POUNDS.
2. SHOULD TDEC EROSION AND SEDIMENT CONTROL REQUIREMENTS DIFFER FROM THIS DETAIL, THE STRICTER REQUIREMENTS SHALL GOVERN.

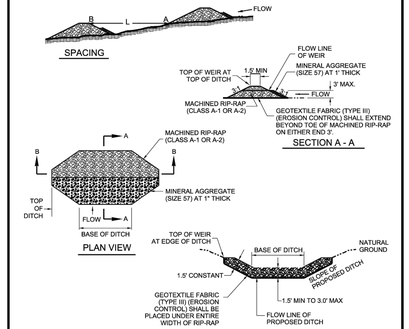
CITY OF BRENTWOOD WATER SERVICES
STANDARD DETAIL
STRAW WATTLES
MARCH, 2016
DRAWING NO. M-10



NOTES:

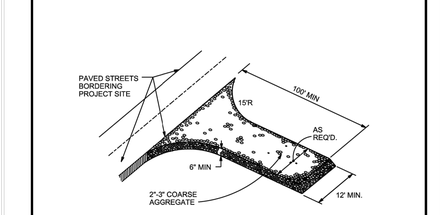
1. FILTER FABRIC FENCE TO BE PLACED PRIOR TO START OF ROUGH GRADING.
2. STEEL POSTS SHALL BE APPROVED BY OWNER PRIOR TO USE.
3. WOOD POSTS SHALL BE 2"x 2" MIN., OAK OR SIMILAR HARDWOOD.
4. POSTS SHALL BE SPACED AT 6' INTERVALS.
5. FILTER FABRIC SHALL BE SECURELY BOUND TO POSTS WITH EITHER STAPLES OR WIRE TIES.
6. FILTER FABRIC SHALL BE POLYPROPYLENE FABRIC WITH EQUVALENT OPENING SIZE (EOS) OF NO.100 SIEVE MIN., NO.40 SIEVE MAX., AS DETERMINED BY CORPS OF ENGINEERS GUIDE SPEC. CW 02215.
7. SHOULD TDEC EROSION AND SEDIMENT CONTROL REQUIREMENTS DIFFER FROM THIS DETAIL, THE STRICTER REQUIREMENTS SHALL GOVERN.

CITY OF BRENTWOOD WATER SERVICES
STANDARD DETAIL
TEMPORARY SILT FENCE
MARCH, 2016
DRAWING NO. M-09



NOTE:
1. SHOULD TDEC EROSION AND SEDIMENT CONTROL REQUIREMENTS DIFFER FROM THIS DETAIL, THE STRICTER REQUIREMENTS SHALL GOVERN.

CITY OF BRENTWOOD WATER SERVICES
STANDARD DETAIL
ROCK CHECK DAMS
MARCH, 2016
DRAWING NO. M-11



NOTES:

1. GRAVEL PAD IS REQUIRED TO PROVIDE BUFFER AREA WHERE VEHICLES CAN DROP THEIR MUD AND SEDIMENT TO AVOID TRANSPORTING IT ONTO PAVED STREETS. TO CONTROL EROSION FROM SURFACE RUNOFF, AND TO HELP CONTROL DUST.
2. SHOULD TDEC EROSION AND SEDIMENT CONTROL REQUIREMENTS DIFFER FROM THIS DETAIL, THE STRICTER REQUIREMENTS SHALL GOVERN.

CITY OF BRENTWOOD WATER SERVICES
STANDARD DETAIL
TEMPORARY CONSTRUCTION ENTRANCE
MARCH, 2016
DRAWING NO. M-08

REVISION #	DATE	DESCRIPTION
1	4/19/2022	PER BRENTWOOD STAFF COMMENTS
2	5/23/2022	PER BRENTWOOD STAFF COMMENTS
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4	12/20/2022	PER BRENTWOOD STAFF COMMENTS

MATTHEW W. BRIAN
REGISTERED ENGINEER
No. 120,161
COMMERCIAL
STATE OF TENNESSEE
04/05/22

REVISED PRELIMINARY PLANS FOR:
PRIMM FARM
8318 MOORES LANE
CITY OF BRENTWOOD
WILLIAMSON COUNTY, TENNESSEE

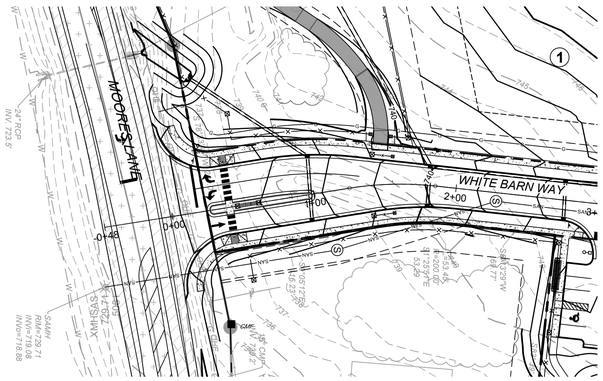
MA GROUP
P.O. BOX 848
FRANKLIN, TN 37065
615.406.3415 / WWW.M2GROUPLLC.COM

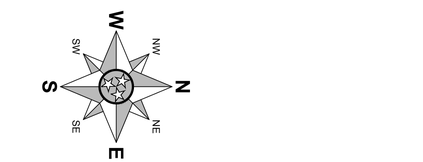
GRADING, DRAINAGE & EPSC DETAILS

DRAWN BY :	BTU, BPH
CHECKED BY :	MWB
DATE :	APRIL, 2022
PROJECT NO. :	18-765

SHEET NUMBER:
C3.4

PF - C3.4 - GRADING DRAINAGE & EPSC DETAILS.DWG / Tuesday, December 20, 2022 5:05:02 PM





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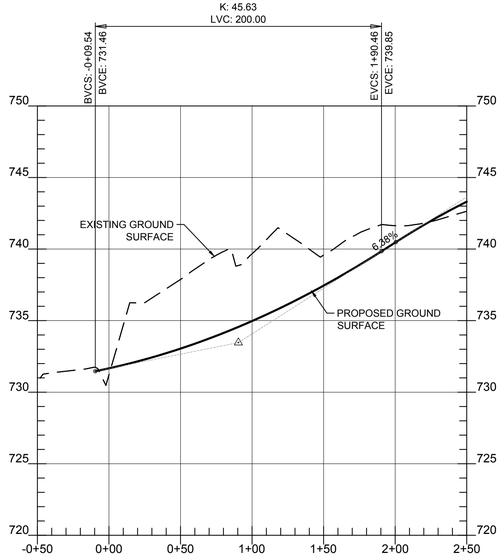
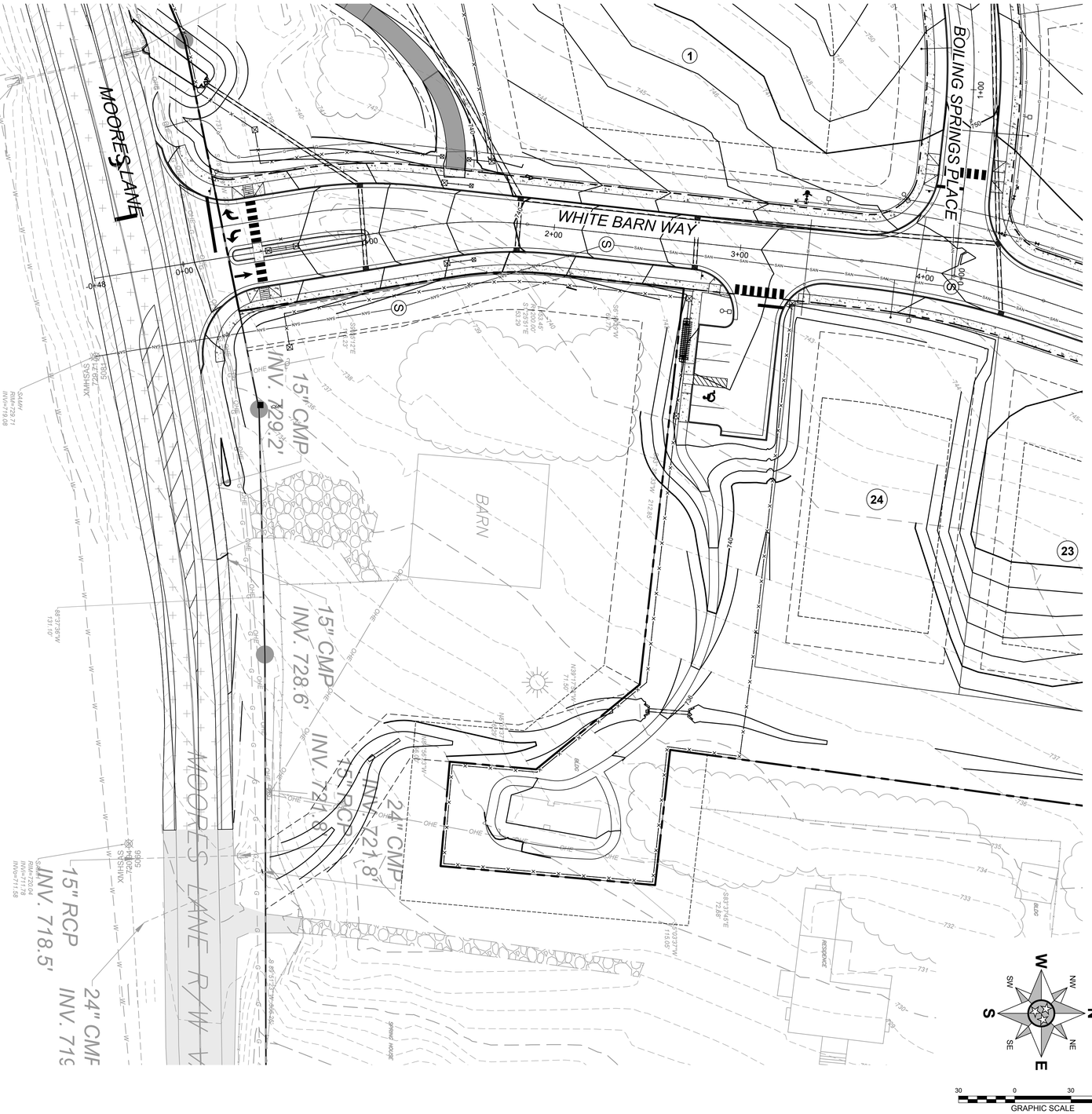
GRAPHIC SCALE



ENTRANCE PROFILE

SCALE H:1"=50'; V:1"=5'



30 0 30 60

GRAPHIC SCALE

NOTE:
DRAWING BASED ON BOUNDARY & TOPOGRAPHICAL SURVEY AS PREPARED BY BROWN LAND SURVEYING, LLC DATED 10-28-15 UTILIZING FIELD RUN SURVEY USING EDM EQUIPMENT ADJUSTED FOR TEMPERATURE, VERTICAL DATUM NAVD88. BEARINGS SHOWN HEREON ARE BASED ON TENNESSEE STATE PLANE COORDINATE SYSTEM.

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

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3	12/5/2022	REVISED SETBACK LINES
4	12/20/2022	PER BRENTWOOD STAFF COMMENTS

MATTHEW W. BRYAN
REGISTERED ENGINEER
NUMBER 120144
COMMERCIAL
STATE OF TENNESSEE
04/05/22

REVISED PRELIMINARY PLANS FOR:
PRIMM FARM
8318 MOORES LANE
CITY OF BRENTWOOD
WILLIAMSON COUNTY, TENNESSEE

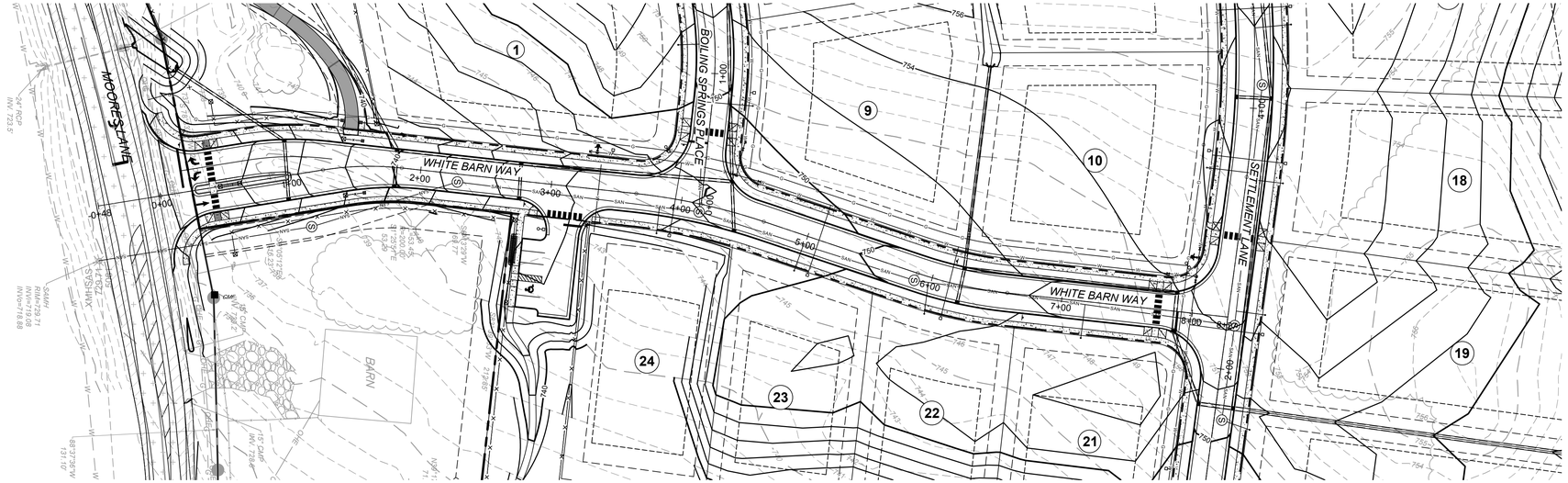
M2 GROUP
P.O. BOX 848
FRANKLIN, TN 37065
615.406.3415 / WWW.M2GROUPLLC.COM

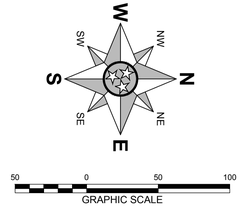
ENTRANCE PLAN & PROFILE

DATE :	APRIL, 2022	DRAWN BY :	BTU, BPH
PROJECT NO. :	18-765	CHECKED BY :	MWB

SHEET NUMBER:
C4.1

PF - C4.1 - ROADWAY PLAN AND PROFILE.DWG / Tuesday, December 20, 2022 5:05:22 PM





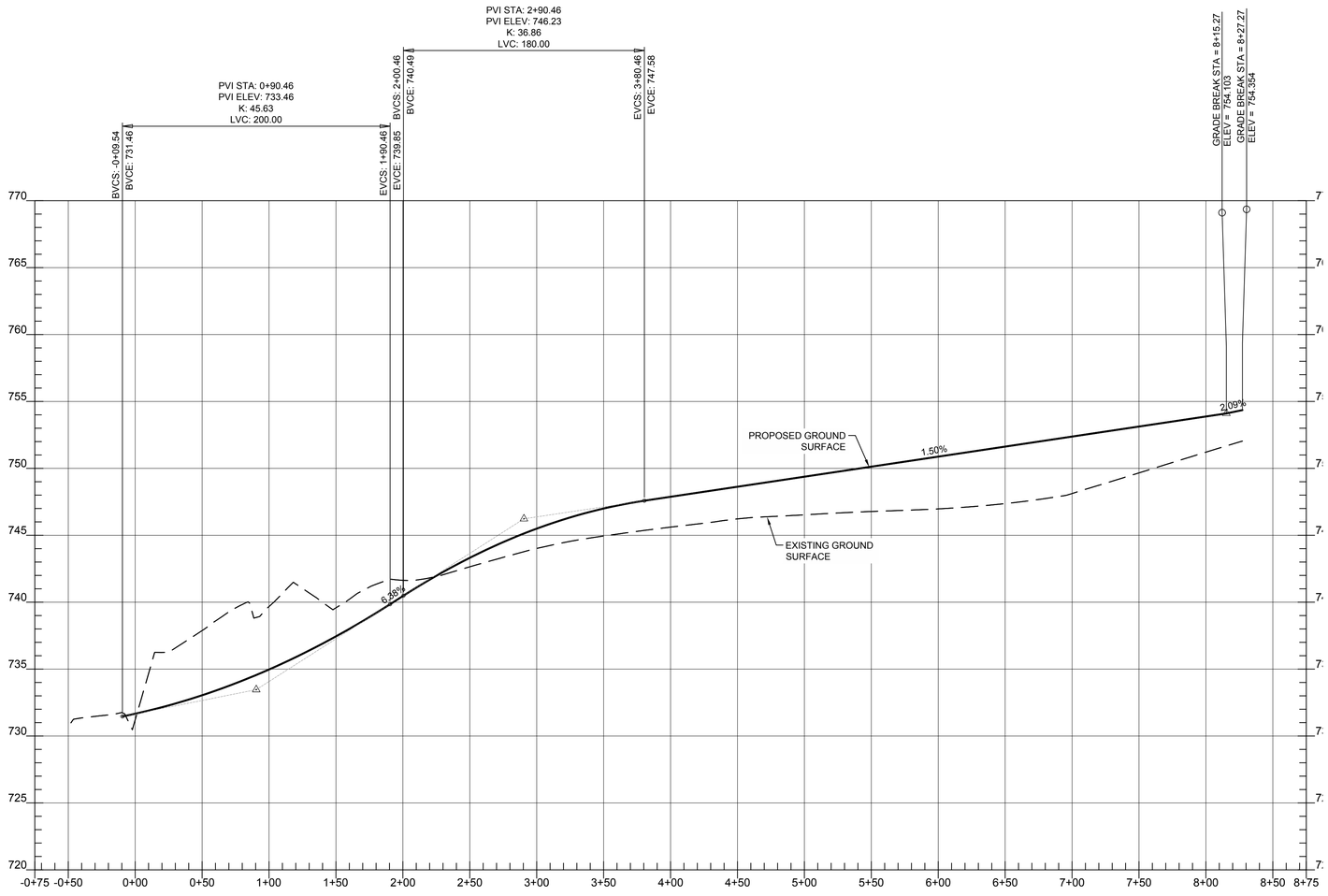
REVISION #	DATE	DESCRIPTION
1	4/19/2022	PER BRENTWOOD STAFF COMMENTS
2	5/23/2022	PER BRENTWOOD STAFF COMMENTS
3	12/5/2022	REVISED SETBACK LINES
4	12/20/2022	PER BRENTWOOD STAFF COMMENTS

MATTHEW W. BRIAN
REGISTERED ENGINEER
NUMBER 120,141
COMMISSIONED
STATE OF TENNESSEE
04/05/22

REVISED PRELIMINARY PLANS FOR:

PRIMM FARM

8318 MOORES LANE
CITY OF BRENTWOOD
WILLIAMSON COUNTY, TENNESSEE



WHITE BARN WAY PROFILE
SCALE H:1"=50'; V:1"=5'

ROADWAY PLAN & PROFILE

DATE:	APRIL, 2022	DRAWN BY:	BTU, BPH
PROJECT NO. :	18-755	CHECKED BY:	MWB

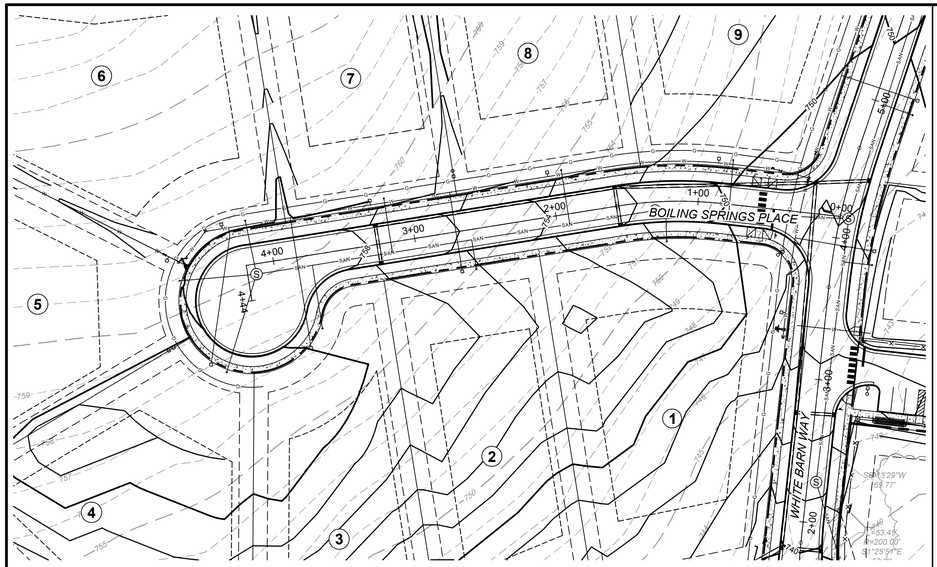
MA GROUP
P.O. BOX 849
FRANKLIN, TN 37065
615.406.3415 / WWW.M2GROUPLLC.COM

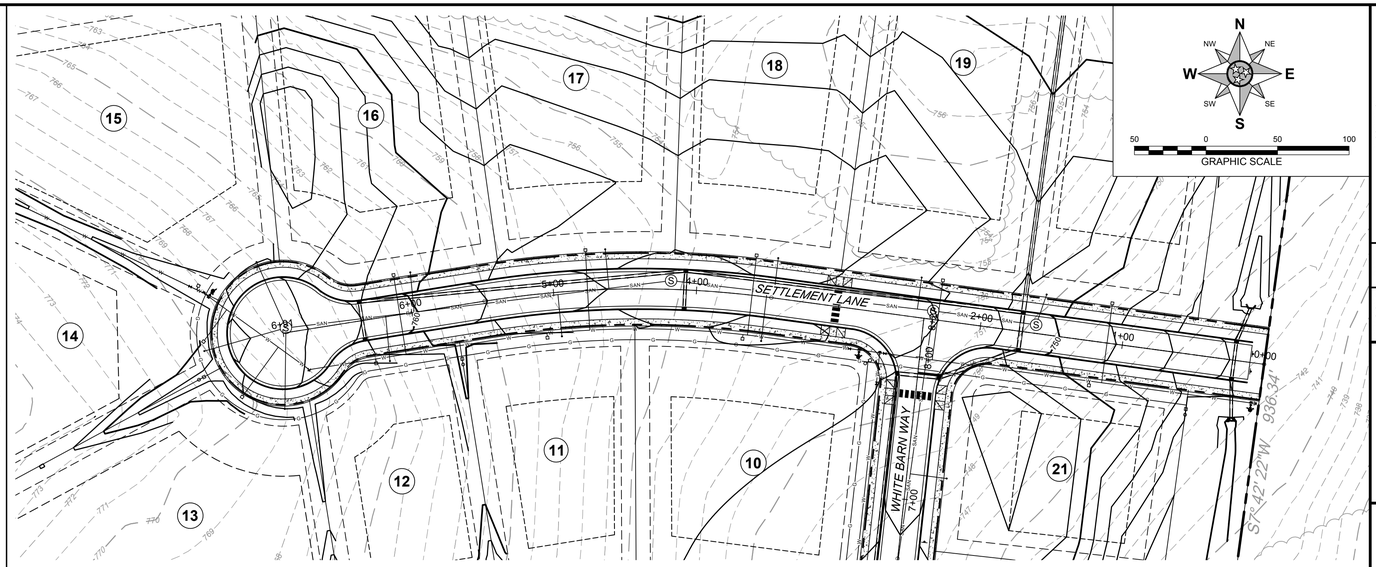
NOTE:
DRAWING BASED ON BOUNDARY & TOPOGRAPHICAL SURVEY AS PREPARED BY BROWN LAND SURVEYING, LLC DATED 10-28-15 UTILIZING FIELD RUN SURVEY USING EDM EQUIPMENT ADJUSTED FOR TEMPERATURE, VERTICAL DATUM NAVD88. BEARINGS SHOWN HEREON ARE BASED ON TENNESSEE STATE PLANE COORDINATE SYSTEM.

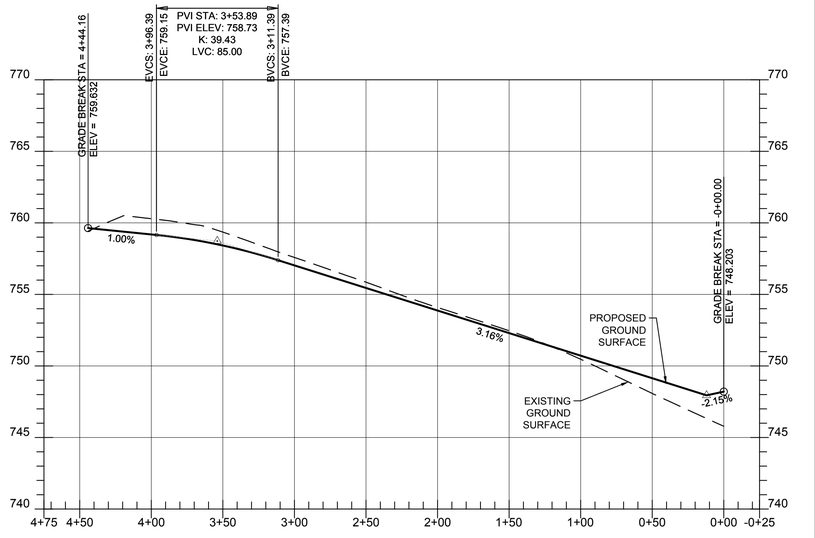
SHEET NUMBER:
C4.2

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

PF - C4.1 - ROADWAY PLAN AND PROFILE.DWG / Tuesday, December 20, 2022 5:05:25 PM

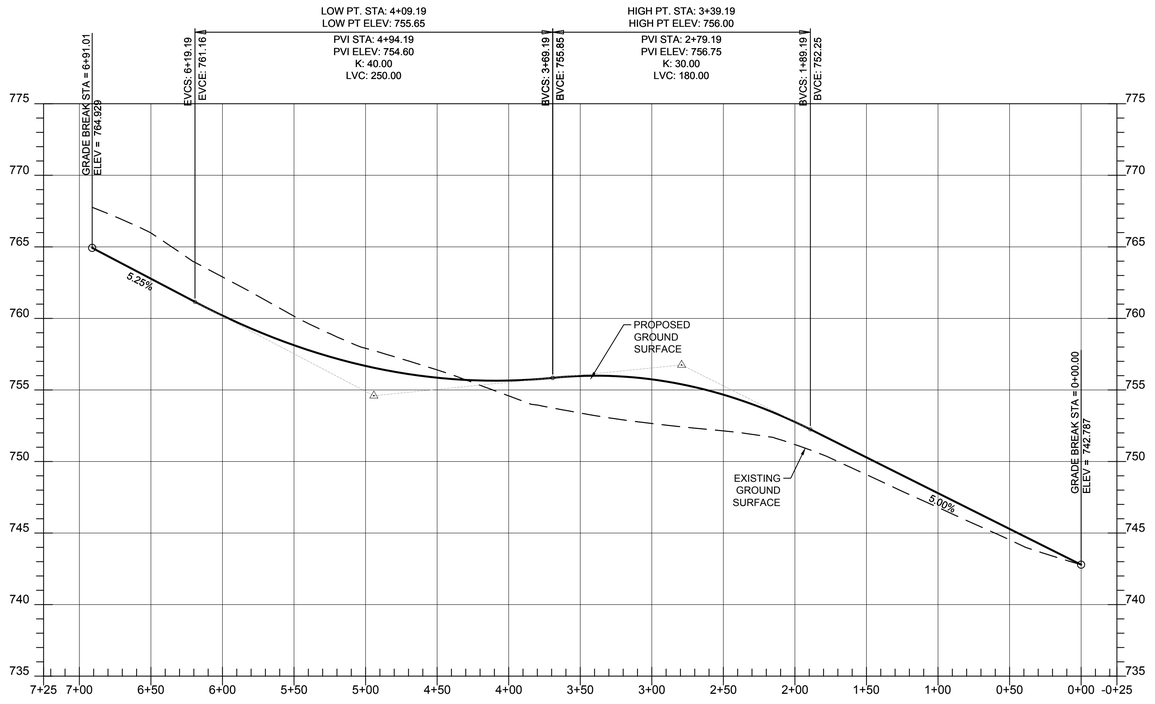






BOILING SPRINGS PLACE PROFILE

SCALE H:1"=50'; V:1"=5'



SETTLEMENT LANE PROFILE

SCALE H:1"=50'; V:1"=5'

NOTE:
DRAWING BASED ON BOUNDARY & TOPOGRAPHICAL SURVEY AS PREPARED BY BROWN LAND SURVEYING, LLC DATED 10-28-15 UTILIZING FIELD RUN SURVEY USING EDM EQUIPMENT ADJUSTED FOR TEMPERATURE, VERTICAL DATUM NAVD88. BEARINGS SHOWN HEREON ARE BASED ON TENNESSEE STATE PLANE COORDINATE SYSTEM.

Know what's below. Call before you dig.

REVISION #	DATE	DESCRIPTION
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2	5/23/2022	PER BRENTWOOD STAFF COMMENTS
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4	12/20/2022	PER BRENTWOOD STAFF COMMENTS

MATTHEW W. BRIAN — LICENSED PROFESSIONAL ENGINEER — STATE OF TENNESSEE — 04/05/22

REVISED PRELIMINARY PLANS FOR:
PRIMM FARM
8318 MOORES LANE
CITY OF BRENTWOOD
WILLIAMSON COUNTY, TENNESSEE

M2 GROUP
P.O. BOX 848
FRANKLIN, TN 37065
615.406.3415 / WWW.M2GROUPLLC.COM

ROADWAY PLAN & PROFILE

DATE: APRIL, 2022 | DRAWN BY: BTU, BPH | CHECKED BY: MWB
PROJECT NO.: 18-765

SHEET NUMBER:
C4.3

PF - C4.1 - ROADWAY PLAN AND PROFILE.DWG / Tuesday, December 20, 2022 5:05:30 PM

NOTES:

1. ALL PIPES UNDER EXISTING PAVED AREAS SHALL BE BACKFILLED TO TOP OF SUBGRADE WITH CRUSHED STONE UNLESS CITY OF BRENTWOOD SPECIFICATIONS REQUIRE FLOWABLE FILL.
2. WHERE SEWER LINES PASS OVER OR WITHIN 2.5' OF WATER MAINS, THE SEWER SHALL BE ENCASED IN CONCRETE.
3. ALL PAVED AREAS SHALL BE CONSTRUCTED TO SUBGRADE AND ALL PROPOSED FILLS SHALL BE MADE AND COMPACTED PRIOR TO CONSTRUCTION OF SANITARY SEWERS.
4. PROPOSED SEWER LINES INSTALLED WITHIN NATURAL EARTH MAY BE SDR 35 PVC. PROPOSED SEWER LINES INSTALLED WITHIN FILL MUST BE DUCTILE IRON PIPE.
5. THE CONTRACTOR IS RESPONSIBLE FOR ALL HORIZONTAL AND VERTICAL BENDS, JOINTS, AND FITTINGS REQUIRED TO CONSTRUCT UTILITIES.
6. THE CONTRACTOR SHALL VERIFY THE EXISTING INVERT ELEVATIONS OF SANITARY SEWERS PRIOR TO CONSTRUCTION.
7. A MINIMUM OF 3' OF GROUND COVER SHALL BE MAINTAINED OVER ALL PROPOSED SANITARY SEWER MAINS.
8. ALL UTILITY INSTALLATION IS TO BE DONE IN ACCORDANCE WITH THE LOCAL STANDARDS OR OTHER APPLICABLE CODES.
9. GC SHALL REVIEW MTEMC AND CITY OF BRENTWOOD SPECIFICATIONS PRIOR TO INITIATING WORK.
10. CURRENT SERVICE TO EXISTING STRUCTURES SHALL NOT BE INTERRUPTED WITHOUT ADVANCED WRITTEN PERMISSION FROM THE OWNER.

WATER & SEWER GENERAL NOTES

1. ALL PERSONS WHO UNDERTAKE THE CONSTRUCTION OF WATER, SEWER AND/OR RECLAIMED WATER LINES LOCATED IN THE CITY OF BRENTWOOD SHALL COMPLY WITH THE REQUIREMENTS AND REGULATIONS SET FORTH IN THE CITY'S REGULATIONS.

2. CONTRACTOR SHALL OBTAIN WATER & SEWER INFRASTRUCTURE INSTALLATION PERMIT PRIOR TO SCHEDULING REQUIRED PRE-CONSTRUCTION SITE MEETING. CONTRACTOR SHALL COMPLETE THE PRECONSTRUCTION SITE MEETING PRIOR TO COMMENCING WITH CONSTRUCTION.

3. CONTRACTOR SHALL OBTAIN AND KEEP ALL OF THE FOLLOWING ITEMS ON THE JOBSITE AT ALL TIMES DURING CONSTRUCTION:
   - A. APPROVED, STAMPED AND SIGNED WATER AND/OR SEWER PLANS
   - B. WATER & SEWER INFRASTRUCTURE INSTALLATION PERMIT, WITH ALL STEPS COMPLETED AND SIGNED BY APPROPRIATE CITY EMPLOYEES.
   - C. COPY OF APPROVED AVAILABILITY REQUEST RESPONSE LETTER.
   - D. A COPY OF ALL APPROVED CUT SHEETS.

4. ACCEPTANCE OF CITY OF BRENTWOOD PUBLIC WATER INFRASTRUCTURE, SANITARY SEWER INFRASTRUCTURE AND/OR RECLAIMED WATER INFRASTRUCTURE SHALL BECOME THE RESPONSIBILITY OF THE CITY OF BRENTWOOD, TN FOLLOWING APPROVAL FROM THE CITY OF BRENTWOOD INSPECTORS AND ACCEPTANCE BY THE BRENTWOOD MUNICIPAL PLANNING COMMISSION. THE ACCEPTANCE DATE SHALL BE BASED ON THE DAY MAINTENANCE SURETIES ARE ESTABLISHED BY THE BRENTWOOD MUNICIPAL PLANNING COMMISSION.

5. PRIOR TO THE ACCEPTANCE OF CITY OF BRENTWOOD PUBLIC WATER INFRASTRUCTURE, SANITARY SEWER INFRASTRUCTURE AND/OR RECLAIMED WATER INFRASTRUCTURE THE CONTRACTOR SHALL BE REQUIRED TO SUBMIT AS-BUILT DRAWINGS TO THE PLANNING AND SUSTAINABILITY DEPARTMENT.

6. ALL OFF-SITE WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL REQUIRE AN APPROVED TRAFFIC CONTROL PLAN WHICH COMPLIES WITH THE MUTCD. NO OFF-SITE EXCAVATION MAY BE UNDERTAKEN IN ANY STREET, ROAD, ALLEY OR RIGHT-OF-WAY OF ANY UTILITY OR TEMPORARY CONSTRUCTION EASEMENT OF THE CITY OF BRENTWOOD BY ANY ENTITY UNLESS 72-HOUR NOTICE HAS BEEN GIVEN TO THE CITY OF BRENTWOOD TRAFFIC OPERATIONS CENTER. THE CONTRACTOR SHALL HAVE AN APPROVED TRAFFIC CONTROL PLAN ONSITE DURING CONSTRUCTION.

7. ANY DAMAGES CAUSED TO EXISTING UTILITIES DURING CONSTRUCTION SHALL, AT HIS OWN EXPENSE, BE REPLACED OR REPAIRED TO ORIGINAL CONDITION AND QUALITY, AS APPROVED BY THE OWNER AND REPRESENTATIVE OF THE APPROPRIATE UTILITY COMPANY, BY THE CONTRACTOR.

8. CONTRACTOR MUST RETEST ALL SANITARY SEWER MANHOLES AFTER ALTERATIONS. THIS MUST BE PERFORMED IN ACCORDANCE TO CITY OF BRENTWOOD SANITARY SEWER SPECIFICATIONS.



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MATTHEW W. BRYANT — LICENSED PROFESSIONAL ENGINEER — 120143 — COMMERCIAL — RESIDENTIAL — STATE OF TENNESSEE
04/05/22

REVISED PRELIMINARY PLANS FOR:

PRIMM FARM

8318 MOORES LANE
CITY OF BRENTWOOD
WILLIAMSON COUNTY, TENNESSEE

M2 GROUP
P.O. BOX 848
FRANKLIN, TN 37065
615.406.3415 / WWW.M2GROUPLLC.COM

OVERALL UTILITY PLAN

DATE:	APRIL, 2022	DRAWN BY:	BTU, BPH
PROJECT NO.:	18-765	CHECKED BY:	MWB

UTILITY CONTACTS:

SANITARY SEWER
CITY OF BRENTWOOD
1750 GENERAL GEORGE PATTON DRIVE
BRENTWOOD, TN 37027
CONTACT: CHRIS MILTON
CHRIS.MILTON@BRENTWOODTN.GOV
615-371-0080

ELECTRIC SERVICE
MIDDLE TN ELECTRIC MEMBERSHIP CORP.
2156 EDWARD CURD LANE
FRANKLIN, TN 37067
CONTACT: BOBBY O'NEAL
BOBBY.O'NEAL@MTEMC.COM
615-595-4683

GAS SERVICE
PIEDMONT GAS
83 CENTURY BLVD.
NASHVILLE, TN 37214
CONTACT: CRAIG OWEN
CRAIG.OWEN@PIEDMONTNG.COM
615-872-2403

WATER SERVICE
CITY OF BRENTWOOD
1750 GENERAL GEORGE PATTON DRIVE
BRENTWOOD, TN 37027
CONTACT: CHRIS MILTON
CHRIS.MILTON@BRENTWOODTN.GOV
615-371-0080

COMMUNICATION SERVICE
AT&T
333 COMMERCE STREET, ROOM 23C10
NASHVILLE, TN 37201
CONTACT: JASON ARMES
JA8744@ATT.COM
615-585-3878

COMCAST CABLE
660 MAINSTREAM DRIVE
NASHVILLE, TN 37228
CONTACT: RUSTY HOLLOWAY
RUSSELL_HOLLOWAY@COMCAST.COM
615-244-7462 x1115471

NOTE:
DRAWING BASED ON BOUNDARY & TOPOGRAPHICAL SURVEY AS PREPARED BY BROWN LAND SURVEYING, LLC DATED 10-28-15 UTILIZING FIELD RUN SURVEY USING EDM EQUIPMENT ADJUSTED FOR TEMPERATURE, VERTICAL DATUM NAVD88. BEARINGS SHOWN HEREON ARE BASED ON TENNESSEE STATE PLANE COORDINATE SYSTEM.

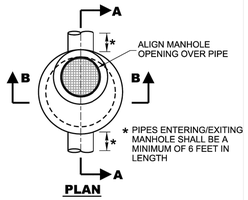
SHEET NUMBER:
C5.0

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

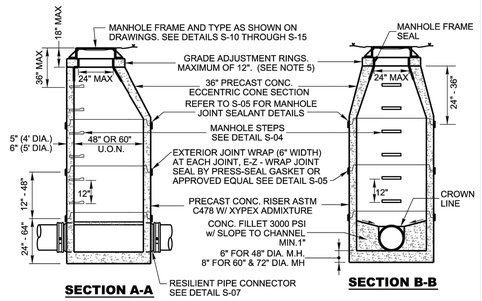
PF - C5.0 - OVERALL UTILITY PLAN.DWG / Tuesday, December 20, 2022 5:05:42 PM

NOTES:

1. DO NOT USE GRADE RINGS WHERE MH EXTENDS ABOVE GRADE.
2. PLACE 2 STRIPS OF BUTYL RUBBER SEALANT BETWEEN TOP OF CONCRETE AND BOTTOM OF MANHOLE FRAME. GROUT FRAME AND COVER TO MANHOLE.
3. ALL PRECAST MANHOLE SEGMENTS TO MEET REQUIREMENTS OF ASTMC478
4. WHERE GRADE ADJUSTMENT IS DONE, A MANHOLE FRAME SEAL SHALL BE PROVIDED.
5. MANHOLE 4.1' TO 12' TO BE 48" DIAMETER. MANHOLE 12.1' TO 18' TO BE 60" DIAMETER.



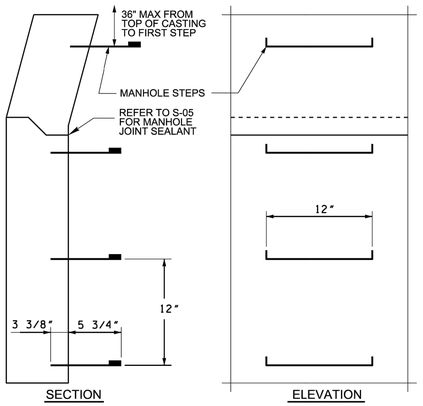
PLAN



CITY OF BRENTWOOD WATER SERVICES
STANDARD DETAIL

TYPICAL SANITARY SEWER MANHOLE
MARCH, 2016

DRAWING NO. S-01



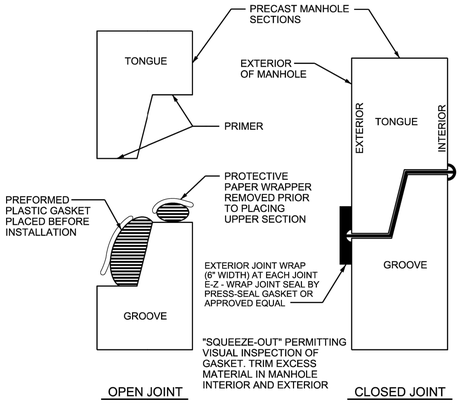
1. STEPS TO BE INTEGRALLY CAST INTO MANHOLE SECTION.
2. STEPS TO BE ALIGNED VERTICALLY THROUGHOUT EACH MANHOLE SECTION
3. LAST STEP TO BE 12" ABOVE PIPE
4. STEPS TO BE 3/4" FORMED ALUMINUM RUNGS OR STEEL - REINFORCED, COPOLYMER POLYPROPYLENE PLASTIC COVERED.

CITY OF BRENTWOOD WATER SERVICES
STANDARD DETAIL

TYPICAL MANHOLE STEPS
MARCH, 2016

DRAWING NO. S-04

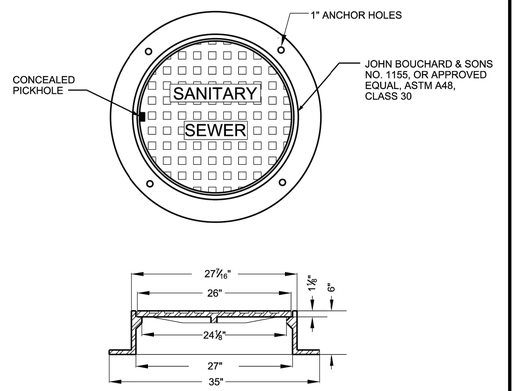
NOTE:
WHERE MASTIC DOES NOT PROTRUDE, EITHER INSIDE OR OUTSIDE, POINT UP JOINT WITH GROUT



CITY OF BRENTWOOD WATER SERVICES
STANDARD DETAIL

MANHOLE JOINT SEALANT
MARCH, 2016

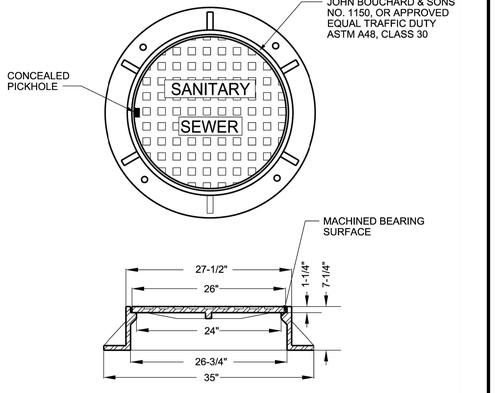
DRAWING NO. S-05



CITY OF BRENTWOOD WATER SERVICES
STANDARD DETAIL

NON-TRAFFIC TYPE MANHOLE FRAME AND COVER
MARCH, 2016

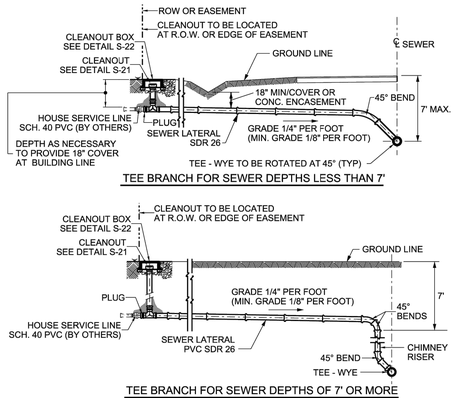
DRAWING NO. S-10



CITY OF BRENTWOOD WATER SERVICES
STANDARD DETAIL

TRAFFIC TYPE MANHOLE FRAME AND COVER
MARCH, 2016

DRAWING NO. S-11

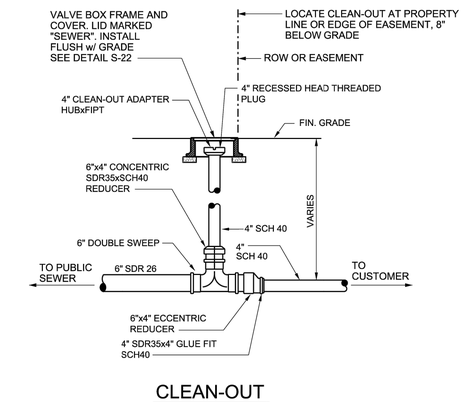


NOTES:
1. LATERAL SIZE TO BE 6" PVC SDR 26 SERVICES >6" MUST CONNECT AT A MANHOLE.
2. TEES SHALL BE SDR 26 WITH GASKETED BRANCHES OR MJ C153 DI TEE.
3. TEES SHALL NOT BE ORIENTED IN THE 12 O'CLOCK (STRAIGHT UP) POSITION.
4. TEES SHALL NOT BE PLACED BACK-TO-BACK. CONSECUTIVE TEES MUST BE SEPARATED BY AT LEAST 6 FT OF MAIN LINE PIPE.
5. PLACE TREATED 4"x 4" TIMBER, 42" LONG OR 2" SCH. 40 PVC PIPE FOR END OF SERVICE LOCATION. PAINT LOCATION MARKER GREEN.

CITY OF BRENTWOOD WATER SERVICES
STANDARD DETAIL

SANITARY SEWER LATERALS
MARCH, 2016

DRAWING NO. S-20



CLEAN-OUT

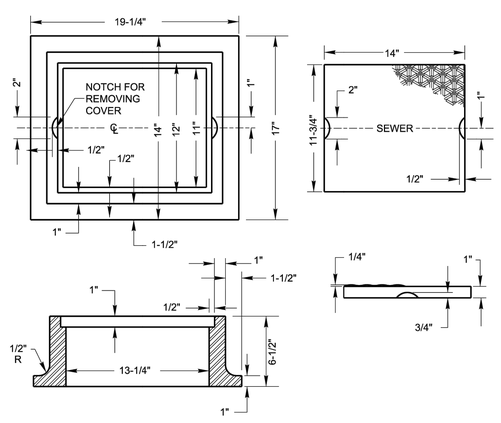
FITTING	PART No. *
6" DOUBLE SWEEP	G1006
6"x4" CONCENTRIC REDUCER	G1216
4" CLEAN-OUT ADAPTER HUB	P1404
4" RECESSED HEAD THREADED PLUG	P1144
6"x4" ECCENTRIC REDUCER	G1306
4" SDR35xSCH40 ADAPTER	P1213

*AS MANUFACTURED BY PLASTIC TRENDS, INC. OR EQUIVALENT

CITY OF BRENTWOOD WATER SERVICES
STANDARD DETAIL

LOT LINE SEWER SERVICE CONNECTION
MARCH, 2016

DRAWING NO. S-21



NOTES:

1. NO OPEN SAND CASTINGS, CASTINGS ARE TO BE MADE OF CAST IRON IN ACCORDANCE WITH CURRENT SPECIFICATIONS. COVER MUST FIT EVENLY ON RABBIT OF FRAME IN ORDER TO EQUALLY DISTRIBUTE WEIGHT OF COVER OVER FRAME MINIMUM WEIGHT OF FRAME 150 LBS. MINIMUM WEIGHT OF COVER 45 LBS.

CITY OF BRENTWOOD WATER SERVICES
STANDARD DETAIL

SANITARY SEWER CLEANOUT BOX FRAME & COVER
MARCH, 2016

DRAWING NO. S-22

REVISION #	DATE	DESCRIPTION
1	4/19/2022	PER BRENTWOOD STAFF COMMENTS
2	5/23/2022	PER BRENTWOOD STAFF COMMENTS
3	12/5/2022	REVISED SETBACK LINES
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MATTHEW W. BRANT
REGISTERED ENGINEER
COMMERCIAL & RESIDENTIAL
CERTIFICATE NO. 120,000
STATE OF TENNESSEE
04/05/22

REVISED PRELIMINARY PLANS FOR:
PRIMM FARM
8318 MOORES LANE
CITY OF BRENTWOOD
WILLIAMSON COUNTY, TENNESSEE

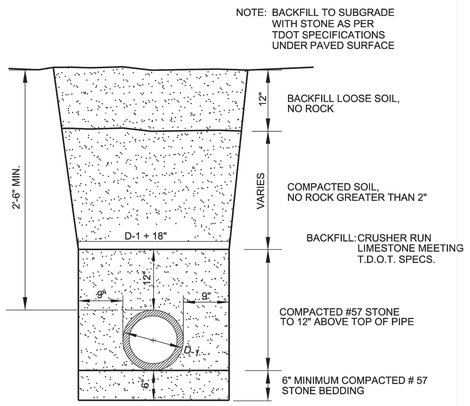
MJ GROUP
P.O. BOX 846
FRANKLIN, TN 37065
615.406.3415 / WWW.MJGROUPLLC.COM

UTILITY DETAILS

DATE: APRIL, 2022
PROJECT NO.: 18-765
DRAWN BY: BTU, BPH
CHECKED BY: MWB

SHEET NUMBER:
C5.1

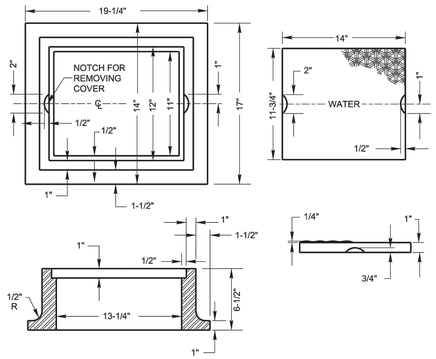
PF - C5.1 - UTILITY DETAILS.DWG / Tuesday, December 20, 2022 5:06:50 PM



CITY OF BRENTWOOD WATER SERVICES
STANDARD DETAIL

TYPICAL TRENCH SECTION - ALL PIPE
MARCH, 2016

DRAWING NO. W-01



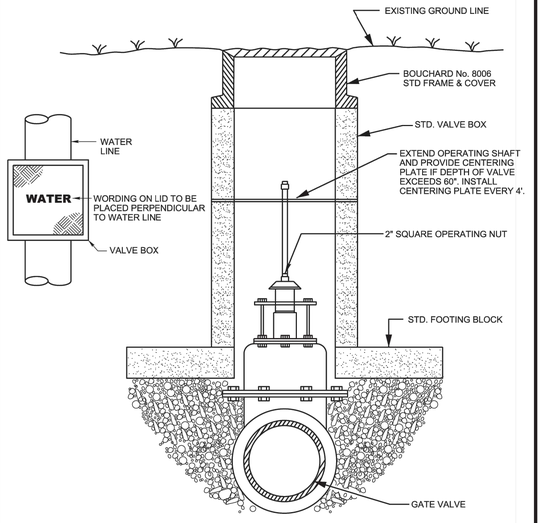
NOTES:

1. NO OPEN SAND CASTINGS, CASTINGS ARE TO BE MADE OF CAST IRON IN ACCORDANCE WITH CURRENT SPECIFICATIONS. COVER MUST FIT EVENLY ON RABBIT OF FRAME IN ORDER TO EQUALLY DISTRIBUTE WEIGHT OF COVER OVER FRAME MINIMUM WEIGHT OF FRAME 150 LBS. MINIMUM WEIGHT OF COVER 45 LBS.

CITY OF BRENTWOOD WATER SERVICES
STANDARD DETAIL

VALVE BOX FRAME AND COVER
2" VALVE & LARGER
MARCH, 2016

DRAWING NO. W-02



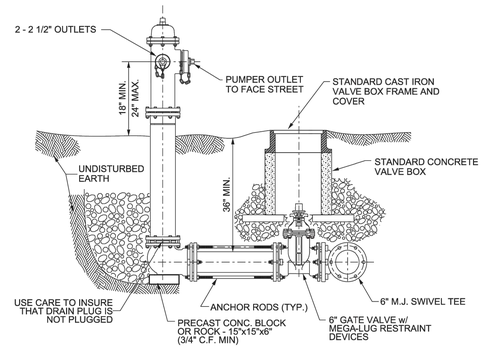
CITY OF BRENTWOOD WATER SERVICES
STANDARD DETAIL

TYPICAL VALVE BOX SETTING
2" VALVE & LARGER
MARCH, 2016

DRAWING NO. W-04

NOTES:

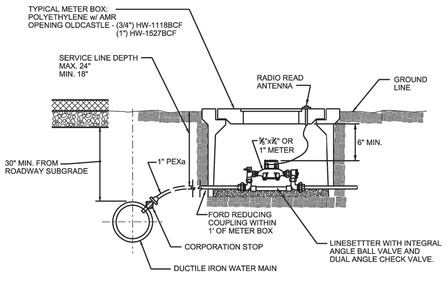
1. HYDRANT SHALL BE SET ON CONCRETE VALVE BOX FOOTING BLOCK. OR POURED CONCRETE (CLASS A)
2. CARE SHALL BE USED TO SET HYDRANT PLUMB. THE FIRE HYDRANT SHALL BE LOCATED NOT LESS THAN 12" OR MORE THAN 18" FROM FACE OF CURB TO FRONT OF HYDRANT.
3. A MINIMUM OF 2 CU. FT. OF CRUSHED STONE SHALL BE PLACED AROUND HYDRANT BASE TO ALLOW FOR DRAINAGE.
4. HYDRANTS TO BE PAINTED PER WSD DIRECTION FOR CITY COLOR CODING OF FIRE HYDRANTS.
5. HYDRANT TEE AND HYDRANT SHOE TO INCLUDE MEGA-LUG RESTRAINT DEVICES.
6. FIRE HYDRANT SHALL NOT SIT CLOSER THAN 5' FROM EDGE OF ANY POWER AND/OR LIGHT POLE.
7. HYDRANT BURY SHALL BE AT LEAST 48" + O.D. IF WATER LINE LOCATED IN ROADWAY AND 36" + O.D. IF LOCATED OUTSIDE ROADWAY.
8. HYDRANT SHALL BE RODDED TO VALVE.
9. HYDRANT SHALL BE MUELLER SUPER CENTURION 250, A-423. THERE IS NO SUBSTITUTE.



CITY OF BRENTWOOD WATER SERVICES
STANDARD DETAIL

TYPICAL FIRE HYDRANT
MARCH, 2016

DRAWING NO. W-06



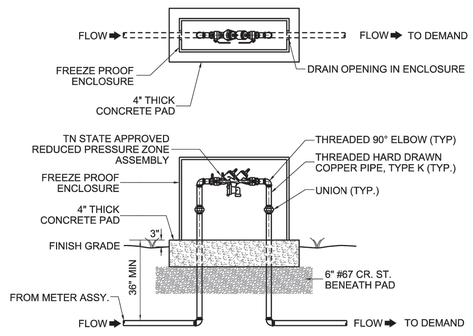
NOTES:

1. FOR TAPS IN PVC PIPE USE TAPPING SADDLE. NO SADDLE REQUIRED FOR DUCTILE IRON PIPE.
2. PLACE 3" DEEP OF CLEAN ¼" TO ⅜" CRUSHED STONE IN BOTTOM OF METER BOX.
3. PEXa SERVICE TUBING SHALL BE INSTALLED WITH 14 GA. SOLID STRAND COPPER WIRE. TRACER WIRE SHALL BE CONNECTED TO THE CORP STOP AND TERMINATED IN THE METER BOX TO ALLOW FOR CONNECTION TO DETECTION EQUIPMENT.

CITY OF BRENTWOOD WATER SERVICES
STANDARD DETAIL

¾" OR 1" SERVICE ASSEMBLY
MARCH, 2016

DRAWING NO. W-09



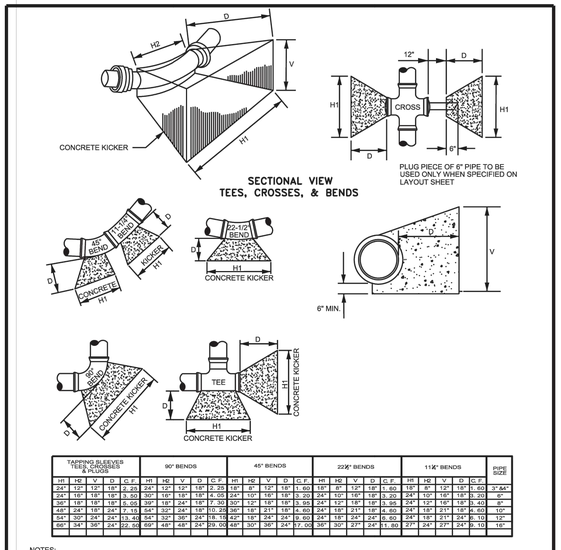
NOTES:

1. BACKFLOW DEVICE SHALL BE INSTALLED AT PROPERTY LINE OR IN ACCESSIBLE LOCATION AS APPROVED BY THE BRENTWOOD WATER & SEWER DEPARTMENT.
2. NO CONNECTIONS ALLOWED BETWEEN METER AND BACKFLOW PREVENTER.
3. CONCRETE PAD IS OPTIONAL FOR RESIDENTIAL USES.

CITY OF BRENTWOOD WATER SERVICES
STANDARD DETAIL

¾" TO 2" REDUCED PRESSURE ZONE BACKFLOW PREVENTER ASSEMBLY
MARCH, 2016

DRAWING NO. W-15



TAPPING SLEEVES INCLUDES VALVES & PLUGS						90° BENDS					45° BENDS					22½° BENDS					11¼° BENDS					PIPE SIZE
H1	H2	V	D	C.F.		H1	H2	V	D	C.F.	H1	H2	V	D	C.F.	H1	H2	V	D	C.F.	H1	H2	V	D	C.F.	
24"	12"	12"	16"	2.25		24"	12"	12"	18"	2.25	18"	8"	12"	18"	1.62	18"	8"	12"	18"	1.62	18"	8"	12"	18"	1.62	3"-64"
24"	18"	18"	18"	3.62		30"	18"	18"	18"	5.05	24"	10"	18"	18"	3.20	24"	10"	18"	18"	3.20	24"	10"	18"	18"	3.20	6"
36"	18"	18"	18"	5.05		39"	18"	24"	18"	7.30	30"	12"	18"	18"	3.55	24"	12"	18"	18"	3.55	24"	12"	18"	18"	3.40	8"
48"	24"	18"	24"	7.15		54"	32"	24"	18"	10.28	36"	18"	21"	18"	4.60	24"	18"	21"	18"	4.60	24"	18"	21"	18"	4.60	10"
54"	30"	24"	24"	13.40		54"	32"	36"	24"	18.18	42"	18"	24"	24"	9.60	24"	18"	24"	24"	8.60	24"	18"	24"	24"	8.10	12"
60"	34"	36"	24"	22.68		69"	48"	48"	24"	29.04	48"	30"	36"	24"	17.08	36"	30"	27"	24"	11.60	27"	24"	27"	24"	9.10	16"

NOTES:

1. RESTRAINED JOINT PIPE AND FITTINGS IS THE STANDARD REQUIREMENT OF WSD.
2. THIS DETAIL IS ONLY APPLICABLE WHEN RESTRAINED JOINT PIPE AND FITTINGS CANNOT BE UTILIZED AND WHEN APPROVED BY WSD.
3. THRUST BLOCKS ARE REQUIRED AT ALL TAPPING TEES.
4. THRUST BLOCKS MAY BE REQUIRED IN OTHER LOCATIONS WHERE DIRECTED BY THE WATER AND SEWER DEPARTMENT.
5. CONCRETE FOR THRUST BLOCKS SHALL HAVE 4000 PSI COMPRESSIVE STRENGTH.
6. THRUST BLOCKS SHALL NOT BE POURED IN WET OR FROZEN GROUND.
7. THRUST BLOCKS SHALL BEAR AGAINST UNDISTURBED MATERIAL.
8. PLASTIC SHEETING SHALL BE PROVIDED AT FITTINGS SO AS TO PREVENT COVERING ANCHOR BOLTS WITH CONCRETE.

CITY OF BRENTWOOD WATER SERVICES
STANDARD DETAIL

TYPICAL CONCRETE THRUST BLOCK
MARCH, 2016

DRAWING NO. W-20

REVISION #	DATE	DESCRIPTION
1	4/19/2022	PER BRENTWOOD STAFF COMMENTS
2	5/23/2022	PER BRENTWOOD STAFF COMMENTS
3	12/5/2022	REVISED SETBACK LINES
4	12/20/2022	PER BRENTWOOD STAFF COMMENTS

MATTHEW W. BRYAN
REGISTERED ENGINEER
No. 120,144
COMMISSIONED
TENNESSEE
STATE OF TENNESSEE
04/05/22

REVISED PRELIMINARY PLANS FOR:
PRIMM FARM
8318 MOORES LANE
CITY OF BRENTWOOD
WILLIAMSON COUNTY, TENNESSEE

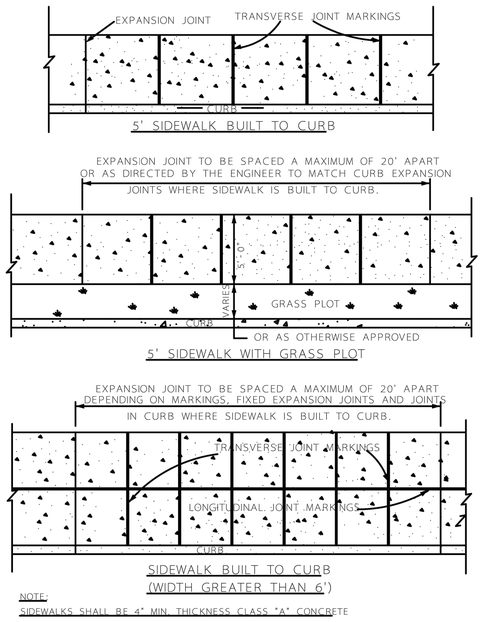
M2 GROUP
P.O. BOX 846
FRANKLIN, TN 37065
615.406.3415 / WWW.M2GROUPLLC.COM

UTILITY DETAILS

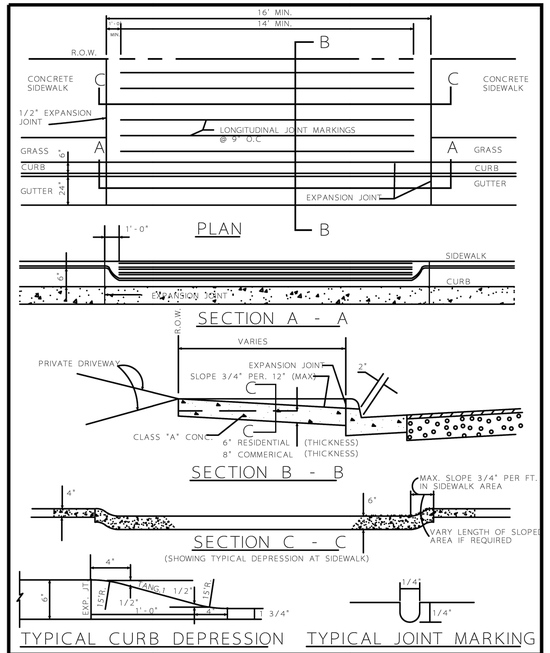
DATE: APRIL, 2022
DRAWN BY: BTU, BPH
CHECKED BY: MWB
PROJECT NO.: 18-765

SHEET NUMBER:
C5.2

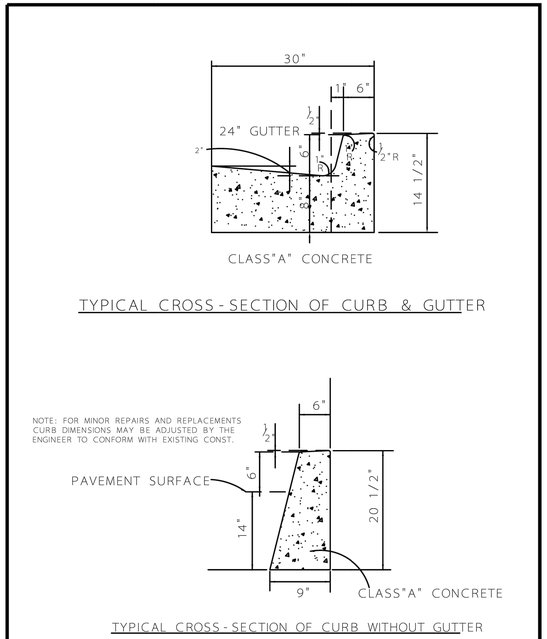
PF - C5.1 - UTILITY DETAILS.DWG / Tuesday, December 20, 2022 5:06:59 PM



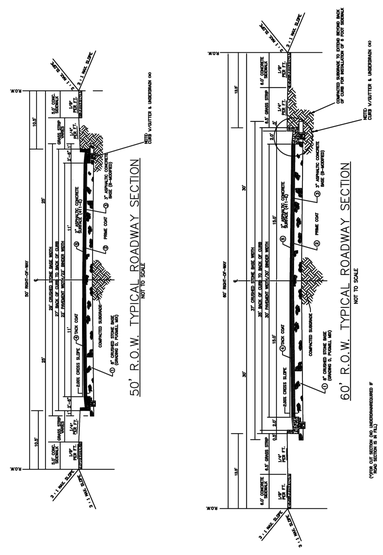
STANDARD CONCRETE SIDEWALK
DRAWING NO. 4
(NOT TO SCALE)



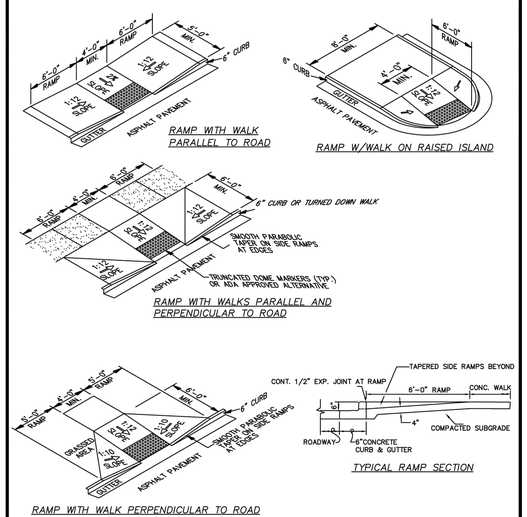
STANDARD DRIVEWAY RAMPS
DRAWING NO. 5
(NOT TO SCALE)



STANDARD CURBS & GUTTER
DRAWING NO. 6
(NOT TO SCALE)



TYPICAL ROADWAY SECTION
DRAWING NO. 9
(NOT TO SCALE)



HANDICAP RAMP DETAILS
DRAWING NO. 18
(NOT TO SCALE)

REVISION #	DATE	DESCRIPTION
1	11/05/18	PRELIMINARY SITE PLAN SUBMITTAL
2	11/20/18	PRELIMINARY SITE PLAN RE-SUBMITTAL
3	12/10/18	TDOT SITE PLAN SUBMITTAL
4	xx/xx/19	PRELIMINARY SITE PLAN RE-SUBMITTAL

MATTHEW W. BRYANT
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
CERTIFICATE No. 111009
STATE OF TENNESSEE

PRELIMINARY PLANS FOR:
PRIMM FARM
8318 MOORES LANE
CITY OF BRENTWOOD
WILLIAMSON COUNTY, TENNESSEE

M2 GROUP
P.O. BOX 848
FRANKLIN, TN 37065
615.406.3415 / WWW.M2GROUPLLC.COM

SITE DETAILS

DATE :	NOVEMBER, 2018	DRAWN BY :	DT, BPH, MSC
PROJECT NO. :	18-765	CHECKED BY :	MWB

SHEET NUMBER:
C6.0

PF - C6.0 - SITE DETAILS.DWG / Tuesday, December 20, 2022 5:06:10 PM

PF - C7.0 - TREE INVENTORY PLAN.DWG / Tuesday, December 20, 2022 5:06:29 PM

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



NOTE:
DRAWING BASED ON BOUNDARY & TOPOGRAPHICAL SURVEY AS PREPARED BY BROWN LAND SURVEYING, LLC DATED 10-28-15 UTILIZING FIELD DATA SURVEY USING EDM EQUIPMENT ADJUSTED FOR TEMPERATURE, VERTICAL DATUM NAVD88. BEARINGS SHOWN HEREON ARE BASED ON TENNESSEE STATE PLANE COORDINATE SYSTEM.

SHEET NUMBER: C7.0

TREE INVENTORY PLAN

DATE :	APRIL, 2022	DRAWN BY :	BTU, BPH
PROJECT NO. :	18-765	CHECKED BY :	MWB

M2 GROUP
P.O. BOX 848
FRANKLIN, TN 37065
615.406.3415 / WWW.M2GROUPLLC.COM

REVISED PRELIMINARY PLANS FOR:
PRIMM FARM
8318 MOORES LANE
CITY OF BRENTWOOD
WILLIAMSON COUNTY, TENNESSEE

STATE OF TENNESSEE
MATTHEW W. BRYANT
04/05/22

REVISION #	DATE	DESCRIPTION
1	4/19/2022	PER BRENTWOOD STAFF COMMENTS
2	5/23/2022	PER BRENTWOOD STAFF COMMENTS
3	12/5/2022	REVISED SETBACK LINES
4	12/20/2022	PER BRENTWOOD STAFF COMMENTS

Consent Agenda 8.

BRENTWOOD PLANNING COMMISSION

Meeting Date: 01/03/2023

Current Zoning: OSRD - OPEN SPACE RESIDENTIAL DEVELOPMENT

Information

Subject

BPC2209-006 Final Plat - Primm Farm Subdivision, Zoning OSRD - *Applicant: Mr. Matt Bryant, M2 Group, LLC, P. O. Box 848, Franklin, TN 37065*

General Information

M2 Group, LLC requests approval of a final plat that shows 24 lots on approximately 29 acres. The renovation work on the historic slave cabins must be completed and inspected for compliance before the plat will be signed for recording. This plat reflects the recently revised preliminary plan changes to incorporate staggered side setbacks as allowed per the OSRD zoning.

Conditions of Approval

Staff recommends that the following **2** conditions be attached to the approval of the request.

1. The proposed renovation work on the historic slave cabins shall be completed and inspected for period correctness before the final plat for the project may be recorded. The inspection shall be performed by an architectural firm specializing in historic preservation and their fee paid by the applicant per Sec. 50-29(b) of the Brentwood Municipal Code.

2. The Public Access Easement must be accepted by the City Commission before the plat will be signed for recording.

Standard Requirements

Staff recommends that the following **11** conditions be attached to the approval of the request.

1. Meter box lids are required to have thru hole to accommodate sensus smartpoint (520m) transceiver. If current lids cannot meet this requirement, oldcastle/carson 13x24 fiberlyte lid with sensus smartpoint 520m thru hole shall be used.

2. Prior to signing of plat, water and sewer as-builts (PDF & digital), CCTV inspection of gravity sewer mains (if applicable), and construction cost summary are to be provided to the Water Services Department.

3. Approval of a final plat by the Planning Commission shall become effective upon the date of the last signature required on the plat for recording. The initial vesting period shall be for a period of five years after approval.

4. Add the following note to all pages of the final plat:

   This final plat is subject to a vesting period, during which the development standards in effect on the date of approval will remain the standards applicable to this plan. Upon expiration of the vesting period, development of the property shown on this plat may be subject to standards other than those that were applicable during the vesting period. The vesting period for this plat expires on_____, unless extended by the City of Brentwood. Persons relying on this plat after said date should contact the City of Brentwood to determine if development may continue as depicted on the plan.

   (Planning and Codes Department staff will insert the expiration year for the plat at the time the plat is ready for recording and may also make changes to the wording of the above note as necessary to carry out the intent of Standard Requirements 1, 2 and 3 below.)

5. Provide the Planning staff with a digital copy of the proposed subdivision. This request is consistent with Article 2.3 of the Brentwood Subdivision Regulations. The file should be in AutoCAD .DWG or .DXF compatible format. The file shall use the Tennessee State Plane coordinate system, FIPS Zone 4100, NAD 83 datum. The digital copies must be received before the plat may be recorded.

6. The property owner is responsible for all development fees including water and sewer service and tap fees, building permit fees and Public Works Project Fees. The required fees shall be used for future infrastructure related improvements required by the proposed development.

7. A Storm Water System Long-Term Operation and Maintenance Plan for all storm water structures and facilities must be prepared, submitted and approved per Section 56-43 of the Brentwood Code.

8. Complete building plans shall be submitted to the Planning and Codes Department for review, approval and issuance of the required permits before any work is begun. Additionally, all required electrical permits, issued by the State of Tennessee must be received before any work is begun.

9. Development of this project shall comply with all applicable codes and ordinances of the City of Brentwood.

10. Deviations from the approved plat in the development of the project or the failure to satisfy any standard requirements or special conditions of approval imposed by the planning commission will be considered a violation of the provisions of the Zoning Ordinance, which shall be subject to punishment as provided in Section 1-9 of the Brentwood Municipal Code. The City may also require the applicant to appear before the Planning Commission to address any deficiencies or unapproved modifications. The project may also be subject to delays in issuance of permits, certificates of occupancy, recordation of plats or other project approvals.

11. Approval of the proposed plat shall be limited to the illustrations and plans presented to the Planning Commission for review and approval on **January 3, 2023**. Any changes to

Planning Commission approved plans and specifications will require staff review and re-approval by the Planning Commission.

Staff Recommendation

Staff requests that the Planning Commission vote to approve the proposed final plat subject to the requirements of the staff report.

Attachments

Vicinity Map

Proposed Final Plat

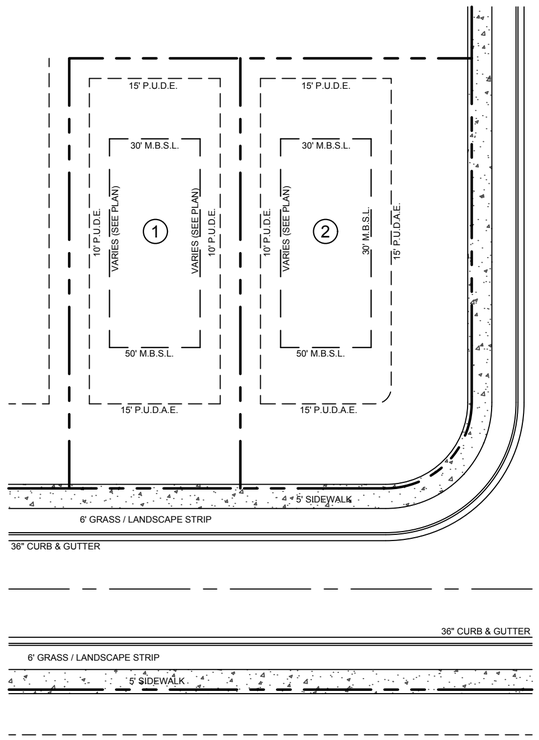


M2 GROUP
P.O. BOX 848
FRANKLIN, TN 37065
615.406.3415 / WWW.M2GROUPLLC.COM

VICINITY MAP

PRIMM FARM
8318 MOORES LANE
CITY OF BRENTWOOD
WILLIAMSON COUNTY, TENNESSEE

DATE	NOVEMBER, 2018
PROJECT #	18-765
SHEET NO.	EX-1



LOT SIZES VARY, SEE LOT TABLE FOR DETAILS.

TYPICAL LOT LAYOUT

SCALE: N.T.S.

SITE DATA:

- OWNER: 2010 C. PEDIGO TRUST
- PARCEL ID: MAP 54, PARCEL 35.00
- INSTRUMENT: DB 8037, PG 1
- TOTAL AREA = 28.88 AC.±
- SITE ADDRESS: 8318 MOORES LN
- EXISTING ZONING: OSRD
  -MINIMUM SETBACKS:
  - FRONT YARD = 50'
  - REAR YARD = 30'
  - SIDE YARD = VARIES (SEE PLAN)
  - SIDE YARD (STREET) = 30'
  - PERIMETER BOUNDARY = 35'

NOTE:

1. SEE SHEET FP-02 FOR GENERAL NOTES, SITE DETAILS, AND LEGEND.

FINAL PLAT FOR:

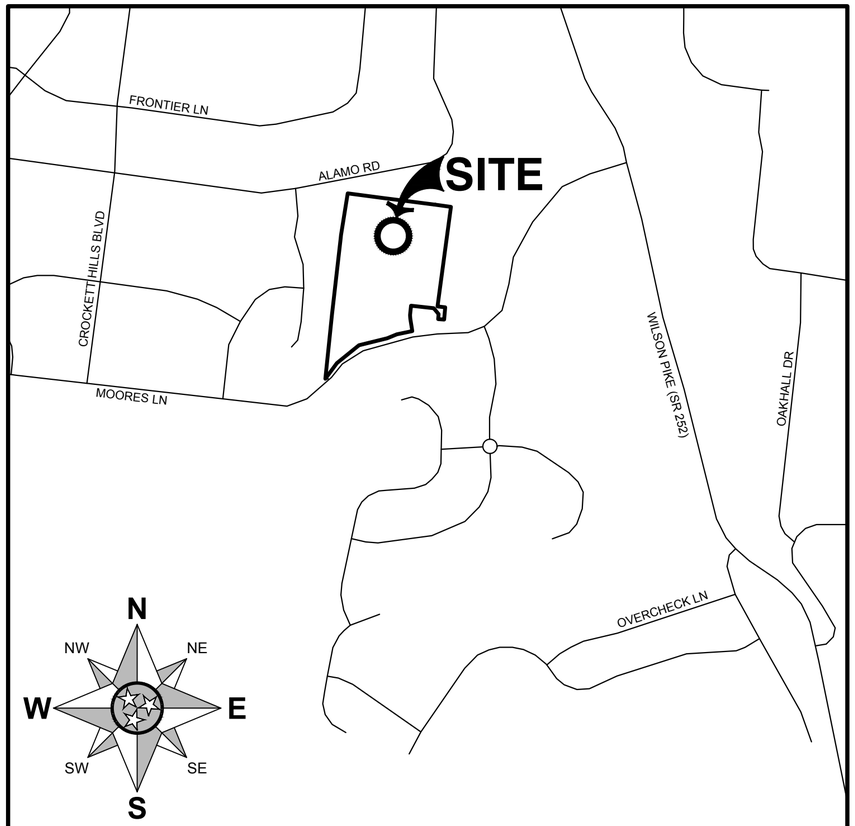
PRIMM FARM SUBDIVISION

CITY OF BRENTWOOD

WILLIAMSON COUNTY, TENNESSEE

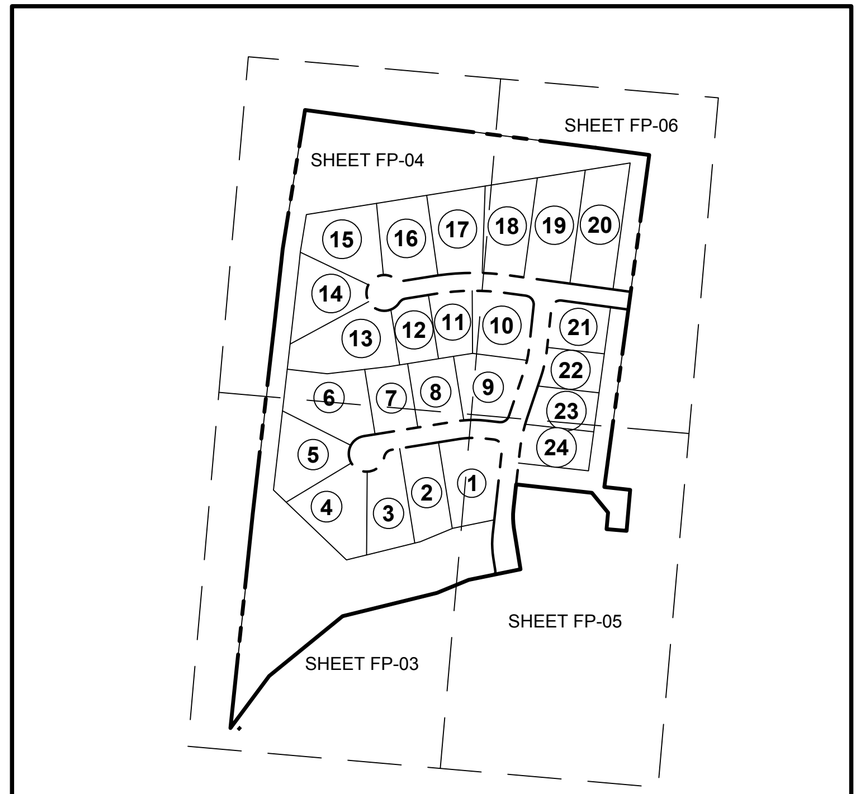
OCTOBER 3, 2022

SHEET LIST TABLE	
Sheet Number	Sheet Title
FP-01	COVER SHEET
FP-02	NOTES & DETAILS
FP-03	FINAL PLAT
FP-04	FINAL PLAT
FP-05	FINAL PLAT
FP-06	FINAL PLAT



VICINITY MAP

SCALE: 1" = 1,000'



OVERALL DEVELOPMENT MAP

SCALE: 1" = 300'

CERTIFICATE OF OWNERSHIP AND DEDICATION

I (WE) HEREBY CERTIFY THAT I AM (WE ARE) THE OWNER (S) OF THE PROPERTY SHOWN AND DESCRIBED HEREON AND THAT I (WE) HEREBY ADOPT THIS PLAN OF SUBDIVISION WITH MY (OUR) FREE CONSENT, ESTABLISH THE MINIMUM BUILDING RESTRICTION LINES, AND DEDICATE ALL STREETS, ALLEYS, WALKS, PARKS AND OTHER OPEN SPACES TO PUBLIC OR PRIVATE USE AS NOTED.

DATE _____ OWNER SIGNATURE _____

OWNER NAME (PRINTED) TITLE (IF ACTING FOR PARTNERSHIP OR CORPORATION) _____

CERTIFICATE OF ACCURACY

I HEREBY CERTIFY THAT THE PLAN SHOWN AND DESCRIBED HEREON IS A TRUE AND CORRECT SURVEY TO THE ACCURACY REQUIRED BY THE SPECIFICATIONS OF THE BRENTWOOD PLANNING COMMISSION.

FURTHERMORE, I HEREBY CERTIFY THAT THE SURVEY SHOWN HEREON REPRESENTS A CATEGORY I SURVEY, HAVING A LINEAR ERROR OF CLOSURE WHICH IS EQUAL TO OR LESS THAN 1 FOOT PER 10,000 FEET OF LAND (1:10,000). THIS SURVEY WAS MADE IN COMPLIANCE WITH THE CURRENT TENNESSEE MINIMUM STANDARDS OF PRACTICE.

DATE _____ REGISTERED LAND SURVEYOR _____

CERTIFICATION OF THE APPROVAL OF STREET NAMES

I HEREBY CERTIFY THAT THE WILLIAMSON COUNTY DEPARTMENT OF EMERGENCY COMMUNICATIONS HAS APPROVED THE STREET NAME(S).

WILLIAMSON COUNTY DEPARTMENT OF EMERGENCY COMMUNICATIONS _____ DATE _____

CERTIFICATE OF APPROVAL OF SUBDIVISION NAME

I HEREBY CERTIFY THAT THE CITY OF BRENTWOOD PLANNING AND CODES DEPARTMENT HAS APPROVED THE SUBDIVISION NAME.

SECRETARY, PLANNING COMMISSION OR PLANNING AND CODES DIRECTOR _____ DATE _____

CERTIFICATE OF APPROVAL FOR RECORDING

I HEREBY CERTIFY THAT THE SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE SUBDIVISION REGULATIONS FOR THE CITY OF BRENTWOOD, WITH THE EXCEPTION OF SUCH VARIANCES AND/OR MODIFICATIONS, IF ANY, AS ARE NOTED IN THE MINUTES OF THE PLANNING COMMISSION.

SECRETARY, PLANNING COMMISSION OR PLANNING AND CODES DIRECTOR _____ DATE _____

CERTIFICATE OF PROVISION OF ELECTRICAL SERVICE

I HEREBY CERTIFY THAT THE REQUIREMENTS SET FORTH IN RULES, REGULATIONS, BY-LAWS, POLICY AND OPERATIONAL BULLETINS, PLAT APPROVAL CHECKLISTS AND TREE PLANTING GUIDELINES HAVE BEEN MET FOR THE ELECTICAL PROVIDER BELOW. ANY APPROVAL IS AT ALL TIMES CONTINGENT UPON CONTINUING COMPLIANCE WITH THE AFOREMENTIONED REQUIREMENTS.

ELECTRICAL PROVIDER _____ DATE _____

CERTIFICATE OF APPROVAL FOR ADDRESSES

I HEREBY CERTIFY THAT THE SUBDIVISION PLAT SHOWN HEREON HAS BEEN ASSIGNED THE ADDRESSES IN CONFORMANCE WITH THE CITY OF BRENTWOOD ADDRESSING STANDARDS.

CITY OF BRENTWOOD ADDRESSING AUTHORITY _____ DATE _____

CERTIFICATE OF APPROVAL OF UTILITY SYSTEMS

I HEREBY CERTIFY THAT THE FOLLOWING UTILITY SYSTEMS OUTLINED OR INDICATED ON THE FINAL SUBDIVISION PLAT ENTITLED "PRIMM FARM SUBDIVISION" HAVE BEEN INSTALLED IN ACCORDANCE WITH CURRENT APPLICABLE REGULATIONS.

WATER SYSTEM _____, 20___ _____
NAME, TITLE, AND AGENCY OF AUTHORIZED APPROVING AGENT

WATER SYSTEM _____, 20___ _____
NAME, TITLE, AND AGENCY OF AUTHORIZED APPROVING AGENT

CERTIFICATE OF APPROVAL OF STREETS

I HEREBY CERTIFY THAT ALL STREETS DESIGNATED ON THE FINAL SUBDIVISION PLAT HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH CURRENT APPLICABLE REGULATIONS.

ENGINEERING DIRECTOR _____ DATE _____

FINAL SUBDIVISION PLAT
CITY OF BRENTWOOD, TENNESSEE

TOTAL ACRES:	28.88±	TOTAL LOTS:	24
ACRES NEW STREETS:	2.47 AC.±	FEET NEW STREETS:	1,962 L.F.±
CIVIL DISTRICT:	15	CLOSURE ERROR:	1:10,000±
MILES OF NEW ROADS:	0.37 MI.±	DATE:	10/3/2022

REVISION #	DATE	DESCRIPTION
1	12/20/22	PER CITY OF BRENTWOOD COMMENTS

FINAL PLAT FOR:
PRIMM FARM SUBDIVISION
CITY OF BRENTWOOD
WILLIAMSON COUNTY, TENNESSEE

M2 GROUP
P.O. BOX 848
FRANKLIN, TN 37065
615.406.3415 / WWW.M2GROUPLLC.COM

DATE :	OCTOBER 3, 2022	DRAWN BY :	BPH
PROJECT NUMBER :	22-070	CHECKED BY :	SVH

SHEET NUMBER: **FP-01**

FP - FINAL PLAT - COVER SHEET.DWG / Tuesday, December 20, 2022 4:54:17 PM

EASEMENT LINE TABLE

LINE #	LENGTH	BEARING
L1	7.23	S54° 17' 55"W
L2	54.91	S34° 03' 37"W
L3	34.01	N85° 42' 21"W
L4	23.16	N76° 19' 41"W
L5	58.11	N82° 42' 22"W
L6	111.49	S4° 22' 09"W
L7	130.50	N4° 22' 09"E
L8	58.11	S82° 42' 22"E
L9	23.16	S76° 19' 41"E
L10	34.01	S85° 42' 21"E
L11	54.91	N34° 03' 37"E
L12	7.23	N54° 17' 55"E

EASEMENT CURVE TABLE

CURVE #	LENGTH	RADIUS	CHORD BRNG	CHORD LENGTH
C33	46.24	65.00	S74° 40' 41"W	45.27
C34	31.79	90.00	S44° 10' 46"W	31.63
C35	162.95	155.00	S64° 10' 38"W	155.55
C36	26.19	160.00	N81° 01' 01"W	26.16
C37	32.28	290.00	N79° 31' 02"W	32.26
C38	154.08	95.00	S50° 49' 53"W	137.74
C39	186.51	115.00	N50° 49' 53"E	166.73
C40	34.51	310.00	S79° 31' 02"E	34.49
C41	22.91	140.00	S81° 01' 01"E	22.89
C42	141.92	135.00	N64° 10' 38"E	135.48
C43	38.85	110.00	N44° 10' 46"E	38.65
C44	60.87	85.00	N74° 48' 56"E	59.58

CURVE TABLE

CURVE #	LENGTH	RADIUS	CHORD BRNG	CHORD LENGTH
C1	12.94	25.00	N5° 44' 46"E	12.80
C2	66.81	250.00	N1° 25' 51"W	66.61
C3	39.27	25.00	N38° 46' 31"W	35.36
C4	66.81	250.00	S88° 34' 09"W	66.61
C5	30.77	25.00	S45° 38' 56"W	28.87
C6	67.92	50.00	S49° 17' 51"W	62.81
C7	53.02	50.00	N61° 24' 37"W	50.57
C8	51.70	50.00	N1° 24' 37"W	49.43
C9	45.99	50.00	N54° 33' 43"E	44.39
C10	20.55	300.00	N82° 52' 33"E	20.55
C11	59.62	300.00	S89° 28' 06"E	59.52
C12	33.90	25.00	N57° 22' 53"E	31.36
C13	30.33	300.00	N15° 38' 31"E	30.31
C14	34.15	300.00	N9° 29' 08"E	34.13
C15	38.62	25.00	N38° 02' 04"W	34.90
C16	92.32	661.04	N86° 17' 40"W	92.24
C17	101.43	661.04	S85° 18' 32"W	101.33
C18	21.03	25.00	S56° 51' 45"W	20.41
C19	31.26	50.00	S50° 40' 44"W	30.75
C20	71.81	50.00	N70° 15' 49"W	65.80
C21	49.00	50.00	N1° 02' 34"W	47.06
C22	52.36	50.00	N57° 01' 56"E	50.00
C23	36.75	50.00	S71° 54' 38"E	35.93
C24	21.03	25.00	S74° 56' 53"E	20.41
C25	13.32	711.04	N81° 27' 01"E	13.32
C26	123.95	711.04	N86° 58' 51"E	123.79
C27	71.13	711.04	S85° 09' 34"E	71.10
C28	39.92	25.00	S51° 57' 56"W	35.81
C29	75.22	350.00	S12° 22' 53"W	75.07
C30	16.72	438.53	S17° 26' 43"W	16.72
C31	77.52	438.53	S11° 17' 20"W	77.42
C32	53.45	200.00	S1° 25' 51"E	53.29

LOT AREA TABLE

LOT #	AREA (S.F.)	AREA (AC.)
1	35,407	0.81
2	28,266	0.65
3	29,110	0.67
4	36,412	0.84
5	32,592	0.75
6	39,473	0.91
7	21,963	0.50
8	23,474	0.54
9	29,846	0.69
10	29,347	0.67
11	19,630	0.45
12	19,334	0.44
13	42,284	0.97
14	30,723	0.71
15	36,964	0.85
16	32,526	0.75
17	33,456	0.77
18	33,883	0.78
19	39,062	0.90
20	41,128	0.94
21	21,536	0.49
22	18,034	0.41
23	20,080	0.46
24	21,630	0.50

OPEN SPACE AREA TABLE

O.S. #	AREA (S.F.)	AREA (AC.)
OPEN SPACE "A"	388,668	8.92
OPEN SPACE "B"	45,882	1.05

OSRD CALCULATIONS

TOTAL LAND AREA (AC)		28.88
LESS ROW		2.47
TOTAL		26.41
LESS AREAS IN 25% SLOPES	(0.00)	26.41
PLUS 25% OF AREAS IN 25% SLOPES	(0.00)	26.41
LESS AREAS IN FLOODWAY	(0.00)	26.41
PLUS 25% OF AREAS IN FLOODWAYS	(0.00)	26.41
LESS AREAS IN ELECTRICAL NATURAL & GAS ESMT.	(3.21)	23.20
PLUS 25% OF AREAS IN ELECTRICAL GAS ESMTS.	(0.80)	24.00
TOTAL USABLE LAND AREA (AC)		24.00
LESS AREA IN LOTS > 1 ACRE	0	0
TOTAL AREA AVAILABLE		24.00
TOTAL LAND AREA REQUIRED @ 1 DUPA (AC)	24	24.00
LAND AREA IN LOTS		19.17
OPEN SPACE REQUIRED	(24.00-16.44= 7.56)	7.56
OPEN SPACE PROVIDED		9.97
EXCESS OPEN SPACE		2.41

24 LOTS MAX ALLOWED IN THE OSRD

GENERAL NOTES:

1. THE PURPOSE OF THIS PLAT IS TO CREATE 24 SINGLE-FAMILY LOTS, 2 OPEN SPACES, AND ESTABLISH EASEMENTS AND MINIMUM BUILDING SETBACK LOCATIONS.
2. BEARINGS ARE BASED ON THE TENNESSEE STATE PLANE COORDINATE SYSTEM (NAD83, 2011).
3. THE FIELD SURVEY WAS COMPLETED ON APRIL 22, 2021.
4. THIS SURVEY WAS PREPARED USING THE CURRENT DEEDS AND PLATS OF RECORD.
5. ALL DEED BOOK AND PLAT REFERENCES PERTAIN TO THE REGISTER'S OFFICE FOR WILLIAMSON COUNTY, TENNESSEE.
6. ADJOINING PROPERTY LINES SHOWN WERE PLOTTED FROM INFORMATION TAKEN FROM EITHER DEED DESCRIPTION, RECORD PLATS, OR TAX MAPS.
7. PROPERTY CORNERS SET THIS SURVEY ARE 18" #4 REBAR WITH ORANGE PLASTIC CAP STAMPED "M2 GROUP", 18" #5 REBAR WITH YELLOW PLASTIC CAP STAMPED "M2 GROUP, LLC", OR PK NAIL WITH STAINLESS STEEL WASHER STAMPED "M2 GROUP, LLC", UNLESS NOTED OTHERWISE.
8. UTILITIES SHOWN HEREON WERE COMPILED FROM VISIBLE STRUCTURES AT THE SITE, INFORMATION FROM PLANS, AND PHYSICAL MARKINGS AND COMBINED TO DEVELOP A VIEW OF THE UNDERGROUND UTILITIES. HOWEVER, LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY, AND RELIABLY DEPICTED. IN ADDITION, IN SOME JURISDICTIONS, 811 OR OTHER SIMILAR UTILITY LOCATE REQUESTS FROM SURVEYORS MAY BE IGNORED OR RESULT IN AN INCOMPLETE RESPONSE. THIS SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THIS SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. VERIFICATION OF EXISTENCE, LOCATIONS, AND DEPTH SHOULD BE MADE BEFORE CONDUCTING ANY EXCAVATION IN THE VICINITY OF THE UTILITY.
9. THE PROPERTY SHOWN HEREON IS LOCATED IN A FLOOD HAZARD ZONE "X" (AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN) ACCORDING TO F.I.R.M. MAP "WILLIAMSON COUNTY, TENNESSEE" PANELS 206-209 OF 485, MAP NUMBERS 47187C0206F, 47187C0207F, 47187C0208F, AND 47187C0209F, ALL REVISED SEPTEMBER 29, 2006.
10. NO TITLE REPORT WAS PROVIDED TO THIS SURVEYOR REGARDING THE SUBJECT PROPERTIES, THEREFORE, THIS SURVEY IS SUBJECT TO THE FINDINGS OR ANY OTHER FACTS THAT AN ACCURATE AND CURRENT TITLE SEARCH AND REPORT MAY DISCLOSE.
11. OPEN SPACE AREAS, AS SHOWN HEREON, ARE TO SERVE AS PUBLIC UTILITY, ACCESS, AND DRAINAGE EASEMENTS.
12. THIS FINAL PLAT IS SUBJECT TO A VESTING PERIOD, DURING WHICH THE DEVELOPMENT STANDARDS IN EFFECT ON THE DATE OF APPROVAL WILL REMAIN THE STANDARDS APPLICABLE TO THIS PLAN. UPON EXPIRATION OF THE VESTING PERIOD, DEVELOPMENT OF THE PROPERTY SHOWN ON THIS PLAT MAY BE SUBJECT TO STANDARDS OTHER THAN THOSE THAT WERE APPLICABLE DURING THE VESTING PERIOD. THE VESTING PERIOD FOR THIS PLAT EXPIRES ON _____ UNLESS EXTENDED BY THE CITY OF BRENTWOOD. PERSONS RELYING ON THIS PLAT AFTER SAID DATE SHOULD CONTACT THE CITY OF BRENTWOOD TO DETERMINE IF DEVELOPMENT MAY CONTINUE AS DEPICTED ON THE PLAN.
13. THE CITY'S FUTURE TRAIL MAINTENANCE RESPONSIBILITIES WITHIN THE PUBLIC ACCESS EASEMENT SHALL BE LIMITED TO REPAIR AND REPLACEMENT OF ASPHALT SURFACING AND SUBSURFACE AS NEEDED. THE HOA SHALL BE RESPONSIBLE FOR ROUTINE TRAIL MAINTENANCE INCLUDING GRASS GUTTING, REMOVAL OF VEGETATION BLOCKING USE OF TRAIL, AND PERIODIC CLEANING AS NEEDED TO ENSURE SAFE SURFACE CONDITIONS FOR TRAIL USERS.
14. THE 20' PUBLIC ACCESS EASEMENT FOR THE 10' ASPHALT TRAIL SHOWN HEREON IS RECORDED IN BOOK _____ PAGE _____.

CERTIFICATE OF OWNERSHIP AND DEDICATION

I (WE) HEREBY CERTIFY THAT I AM (WE ARE) THE OWNER (S) OF THE PROPERTY SHOWN AND DESCRIBED HEREON AND THAT I (WE) HEREBY ADOPT THIS PLAN OF SUBDIVISION WITH MY (OUR) FREE CONSENT, ESTABLISH THE MINIMUM BUILDING RESTRICTION LINES, AND DEDICATE ALL STREETS, ALLEYS, WALKS, PARKS AND OTHER OPEN SPACES TO PUBLIC OR PRIVATE USE AS NOTED.

_____ _____
DATE OWNER SIGNATURE

_____ _____
OWNER NAME (PRINTED) TITLE (IF ACTING FOR PARTNERSHIP OR CORPORATION)

CERTIFICATE OF ACCURACY

I HEREBY CERTIFY THAT THE PLAN SHOWN AND DESCRIBED HEREON IS A TRUE AND CORRECT SURVEY TO THE ACCURACY REQUIRED BY THE SPECIFICATIONS OF THE BRENTWOOD PLANNING COMMISSION.

FURTHERMORE, I HEREBY CERTIFY THAT THE SURVEY SHOWN HEREON REPRESENTS A CATEGORY I SURVEY, HAVING A LINEAR ERROR OF CLOSURE WHICH IS EQUAL TO OR LESS THAN 1 FOOT PER 10,000 FEET OF LAND (1:10,000). THIS SURVEY WAS MADE IN COMPLIANCE WITH THE CURRENT TENNESSEE MINIMUM STANDARDS OF PRACTICE.

_____ _____
DATE REGISTERED LAND SURVEYOR

CERTIFICATION OF THE APPROVAL OF STREET NAMES

I HEREBY CERTIFY THAT THE WILLIAMSON COUNTY DEPARTMENT OF EMERGENCY COMMUNICATIONS HAS APPROVED THE STREET NAME(S).

_____ _____
WILLIAMSON COUNTY DEPARTMENT OF EMERGENCY COMMUNICATIONS DATE

CERTIFICATE OF APPROVAL OF SUBDIVISION NAME

I HEREBY CERTIFY THAT THE CITY OF BRENTWOOD PLANNING AND CODES DEPARTMENT HAS APPROVED THE SUBDIVISION NAME.

_____ _____
SECRETARY, PLANNING COMMISSION OR PLANNING AND CODES DIRECTOR DATE

CERTIFICATE OF APPROVAL FOR RECORDING

I HEREBY CERTIFY THAT THE SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE SUBDIVISION REGULATIONS FOR THE CITY OF BRENTWOOD, WITH THE EXCEPTION OF SUCH VARIANCES AND/OR MODIFICATIONS, IF ANY, AS ARE NOTED IN THE MINUTES OF THE PLANNING COMMISSION.

_____ _____
SECRETARY, PLANNING COMMISSION OR PLANNING AND CODES DIRECTOR DATE

CERTIFICATE OF PROVISION OF ELECTRICAL SERVICE

I HEREBY CERTIFY THAT THE REQUIREMENTS SET FORTH IN RULES, REGULATIONS, BY-LAWS, POLICY AND OPERATIONAL BULLETINS, PLAT APPROVAL CHECKLISTS AND TREE PLANTING GUIDELINES HAVE BEEN MET FOR THE ELECTICAL PROVIDER BELOW. ANY APPROVAL IS AT ALL TIMES CONTINGENT UPON CONTINUING COMPLIANCE WITH THE AFOREMENTIONED REQUIREMENTS.

_____ _____
ELECTRICAL PROVIDER DATE

CERTIFICATE OF APPROVAL FOR ADDRESSES

I HEREBY CERTIFY THAT THE SUBDIVISION PLAT SHOWN HEREON HAS BEEN ASSIGNED THE ADDRESSES IN CONFORMANCE WITH THE CITY OF BRENTWOOD ADDRESSING STANDARDS.

_____ _____
CITY OF BRENTWOOD ADDRESSING AUTHORITY DATE

CERTIFICATE OF APPROVAL OF UTILITY SYSTEMS

I HEREBY CERTIFY THAT THE FOLLOWING UTILITY SYSTEMS OUTLINED OR INDICATED ON THE FINAL SUBDIVISION PLAT ENTITLED "PRIMM FARM SUBDIVISION" HAVE BEEN INSTALLED IN ACCORDANCE WITH CURRENT APPLICABLE REGULATIONS.

WATER SYSTEM _____, 20____

_____
NAME, TITLE, AND AGENCY OF AUTHORIZED APPROVING AGENT

WATER SYSTEM _____, 20____

_____
NAME, TITLE, AND AGENCY OF AUTHORIZED APPROVING AGENT

CERTIFICATE OF APPROVAL OF STREETS

I HEREBY CERTIFY THAT ALL STREETS DESIGNATED ON THE FINAL SUBDIVISION PLAT HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH CURRENT APPLICABLE REGULATIONS.

_____ _____
ENGINEERING DIRECTOR DATE

LEGEND:

- EXISTING PROPERTY LINE
- EXISTING ADJACENT PROPERTY LINE
- EXISTING RIGHT-OF-WAY
- EXISTING EASEMENT
- MBSL — MINIMUM BUILDING SETBACK LINE
- SAN — EXISTING SANITARY SEWER LINE
- ST — EXISTING STORM SEWER LINE
- G — G — EXISTING GAS LINE
- W — W — EXISTING WATER LINE
- IRON REBAR FOUND (IRF)
- CONCRETE MONUMENT FOUND (CMF)
- IRON REBAR SET W/CAP (IRS)
- CURB INLET
- INLET SQUARE
- SANITARY MANHOLE
- SEWER CONNECTION
- WV — WATER BOX (WATER VALVE)
- FIRE HYDRANT
- WATER METER
- WMK — WATERLINE MARKER
- POWER POLE
- LIGHT STANDARD
- 1 — LOT NUMBER
- 911 — ADDRESS
- (POI) — POINT OF INSERTION
- (DIST) — DISTURBED

REVISION #	DATE	DESCRIPTION
1	12/20/22	PER CITY OF BRENTWOOD COMMENTS

FINAL PLAT FOR: PRIMM FARM SUBDIVISION

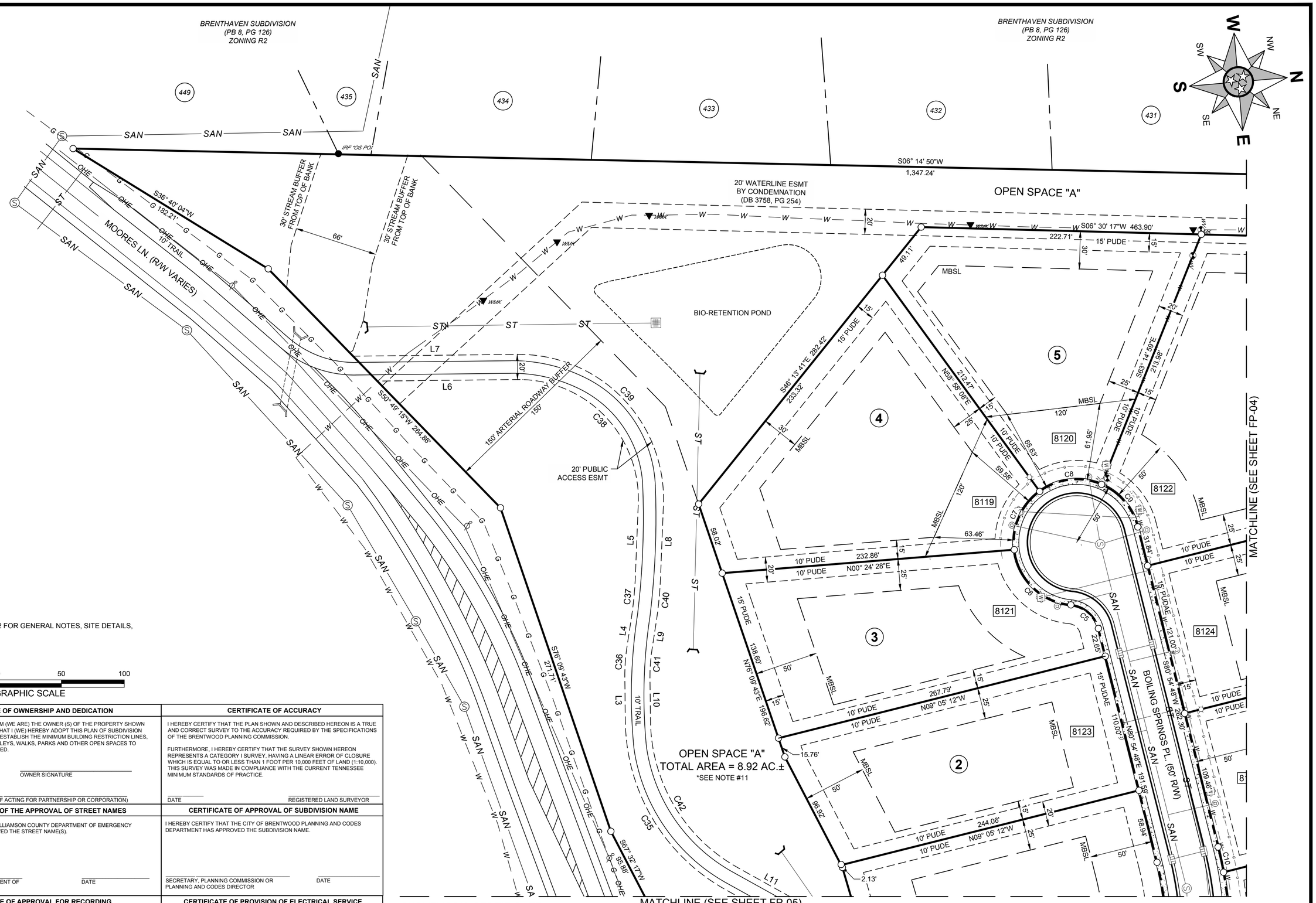
CITY OF BRENTWOOD
WILLIAMSON COUNTY, TENNESSEE

M2 GROUP
P.O. BOX 848
FRANKLIN, TN 37065
615.406.3415 / WWW.M2GROUPLLC.COM

DATE :	OCTOBER 3, 2022	DRAWN BY :	BPH
PROJECT NUMBER :	22-070	CHECKED BY :	SVH

SHEET NUMBER: FP-02

FP - FINAL PLAT - LAYOUT.DWG / Tuesday, December 20, 2022 4:54:26 PM



NOTE:

1. SEE SHEET FP-02 FOR GENERAL NOTES, SITE DETAILS, AND LEGEND.

50 0 50 100

GRAPHIC SCALE

OPEN SPACE "A"
TOTAL AREA = 8.92 AC.±
*SEE NOTE #11

CERTIFICATE OF OWNERSHIP AND DEDICATION

I (WE) HEREBY CERTIFY THAT I AM (WE ARE) THE OWNER (S) OF THE PROPERTY SHOWN AND DESCRIBED HEREON AND THAT I (WE) HEREBY ADOPT THIS PLAN OF SUBDIVISION WITH MY (OUR) FREE CONSENT, ESTABLISH THE MINIMUM BUILDING RESTRICTION LINES, AND DEDICATE ALL STREETS, ALLEYS, WALKS, PARKS AND OTHER OPEN SPACES TO PUBLIC OR PRIVATE USE AS NOTED.

DATE _____ OWNER SIGNATURE _____

OWNER NAME (PRINTED) TITLE (IF ACTING FOR PARTNERSHIP OR CORPORATION) _____

CERTIFICATE OF ACCURACY

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FURTHERMORE, I HEREBY CERTIFY THAT THE SURVEY SHOWN HEREON REPRESENTS A CATEGORY I SURVEY, HAVING A LINEAR ERROR OF CLOSURE WHICH IS EQUAL TO OR LESS THAN 1 FOOT PER 10,000 FEET OF LAND (1:10,000). THIS SURVEY WAS MADE IN COMPLIANCE WITH THE CURRENT TENNESSEE MINIMUM STANDARDS OF PRACTICE.

DATE _____ REGISTERED LAND SURVEYOR _____

CERTIFICATION OF THE APPROVAL OF STREET NAMES

I HEREBY CERTIFY THAT THE WILLIAMSON COUNTY DEPARTMENT OF EMERGENCY COMMUNICATIONS HAS APPROVED THE STREET NAME(S).

WILLIAMSON COUNTY DEPARTMENT OF EMERGENCY COMMUNICATIONS _____ DATE _____

CERTIFICATE OF APPROVAL OF SUBDIVISION NAME

I HEREBY CERTIFY THAT THE CITY OF BRENTWOOD PLANNING AND CODES DEPARTMENT HAS APPROVED THE SUBDIVISION NAME.

SECRETARY, PLANNING COMMISSION OR PLANNING AND CODES DIRECTOR _____ DATE _____

CERTIFICATE OF APPROVAL FOR RECORDING

I HEREBY CERTIFY THAT THE SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE SUBDIVISION REGULATIONS FOR THE CITY OF BRENTWOOD, WITH THE EXCEPTION OF SUCH VARIANCES AND/OR MODIFICATIONS, IF ANY, AS ARE NOTED IN THE MINUTES OF THE PLANNING COMMISSION.

SECRETARY, PLANNING COMMISSION OR PLANNING AND CODES DIRECTOR _____ DATE _____

CERTIFICATE OF PROVISION OF ELECTRICAL SERVICE

I HEREBY CERTIFY THAT THE REQUIREMENTS SET FORTH IN RULES, REGULATIONS, BY-LAWS, POLICY AND OPERATIONAL BULLETINS, PLAT APPROVAL CHECKLISTS AND TREE PLANTING GUIDELINES HAVE BEEN MET FOR THE ELECTICAL PROVIDER BELOW. ANY APPROVAL IS AT ALL TIMES CONTINGENT UPON CONTINUING COMPLIANCE WITH THE AFOREMENTIONED REQUIREMENTS.

ELECTRICAL PROVIDER _____ DATE _____

CERTIFICATE OF APPROVAL FOR ADDRESSES

I HEREBY CERTIFY THAT THE SUBDIVISION PLAT SHOWN HEREON HAS BEEN ASSIGNED THE ADDRESSES IN CONFORMANCE WITH THE CITY OF BRENTWOOD ADDRESSING STANDARDS.

CITY OF BRENTWOOD ADDRESSING AUTHORITY _____ DATE _____

CERTIFICATE OF APPROVAL OF UTILITY SYSTEMS

I HEREBY CERTIFY THAT THE FOLLOWING UTILITY SYSTEMS OUTLINED OR INDICATED ON THE FINAL SUBDIVISION PLAT ENTITLED "PRIMM FARM SUBDIVISION" HAVE BEEN INSTALLED IN ACCORDANCE WITH CURRENT APPLICABLE REGULATIONS.

WATER SYSTEM _____, 20___ _____
NAME, TITLE, AND AGENCY OF AUTHORIZED APPROVING AGENT

WATER SYSTEM _____, 20___ _____
NAME, TITLE, AND AGENCY OF AUTHORIZED APPROVING AGENT

CERTIFICATE OF APPROVAL OF STREETS

I HEREBY CERTIFY THAT ALL STREETS DESIGNATED ON THE FINAL SUBDIVISION PLAT HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH CURRENT APPLICABLE REGULATIONS.

ENGINEERING DIRECTOR _____ DATE _____

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THE INFORMATION SHOWN HEREON IS TRUE AND ACCURATE TO THE BEST OF MY PROFESSIONAL KNOWLEDGE AND BELIEF. THE SURVEY SHOWN HEREON REPRESENTS A CATEGORY I SURVEY, HAVING A LINEAR ERROR OF CLOSURE WHICH IS EQUAL TO OR LESS THAN 1 FOOT PER 10,000 FEET OF LAND (1:10,000). THIS SURVEY WAS MADE IN COMPLIANCE WITH THE CURRENT TENNESSEE MINIMUM STANDARDS OF PRACTICE.

REVISION #	DATE	DESCRIPTION
1	12/20/22	PER CITY OF BRENTWOOD COMMENTS

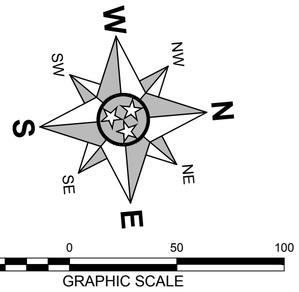
FINAL PLAT FOR:
PRIMM FARM SUBDIVISION
CITY OF BRENTWOOD
WILLIAMSON COUNTY, TENNESSEE

M2 GROUP
P.O. BOX 848
FRANKLIN, TN 37065
615.406.3415 / WWW.M2GROUPLLC.COM

DATE :	OCTOBER 3, 2022	DRAWN BY :	BPH
PROJECT NUMBER :	22-070	CHECKED BY :	SVH

SHEET NUMBER: **FP-03**

FP - FINAL PLAT - LAYOUT.DWG / Tuesday, December 20, 2022 4:54:28 PM





NOTE:

1. SEE SHEET FP-02 FOR GENERAL NOTES, SITE DETAILS, AND LEGEND.

CERTIFICATE OF ACCURACY

I HEREBY CERTIFY THAT THE PLAN SHOWN AND DESCRIBED HEREON IS A TRUE AND CORRECT SURVEY TO THE ACCURACY REQUIRED BY THE SPECIFICATIONS OF THE BRENTWOOD PLANNING COMMISSION.

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DATE _____ REGISTERED LAND SURVEYOR _____

CERTIFICATE OF APPROVAL OF SUBDIVISION NAME

I HEREBY CERTIFY THAT THE CITY OF BRENTWOOD PLANNING AND CODES DEPARTMENT HAS APPROVED THE SUBDIVISION NAME.

SECRETARY, PLANNING COMMISSION OR PLANNING AND CODES DIRECTOR _____ DATE _____

CERTIFICATE OF OWNERSHIP AND DEDICATION

I (WE) HEREBY CERTIFY THAT I AM (WE ARE) THE OWNER (S) OF THE PROPERTY SHOWN AND DESCRIBED HEREON AND THAT I (WE) HEREBY ADOPT THIS PLAN OF SUBDIVISION WITH MY (OUR) FREE CONSENT, ESTABLISH THE MINIMUM BUILDING RESTRICTION LINES, AND DEDICATE ALL STREETS, ALLEYS, WALKS, PARKS AND OTHER OPEN SPACES TO PUBLIC OR PRIVATE USE AS NOTED.

DATE _____ OWNER SIGNATURE _____

OWNER NAME (PRINTED) TITLE (IF ACTING FOR PARTNERSHIP OR CORPORATION) _____

CERTIFICATION OF THE APPROVAL OF STREET NAMES

I HEREBY CERTIFY THAT THE WILLIAMSON COUNTY DEPARTMENT OF EMERGENCY COMMUNICATIONS HAS APPROVED THE STREET NAME(S).

WILLIAMSON COUNTY DEPARTMENT OF EMERGENCY COMMUNICATIONS _____ DATE _____

CERTIFICATE OF APPROVAL FOR RECORDING

I HEREBY CERTIFY THAT THE SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE SUBDIVISION REGULATIONS FOR THE CITY OF BRENTWOOD, WITH THE EXCEPTION OF SUCH VARIANCES AND/OR MODIFICATIONS, IF ANY, AS ARE NOTED IN THE MINUTES OF THE PLANNING COMMISSION.

SECRETARY, PLANNING COMMISSION OR PLANNING AND CODES DIRECTOR _____ DATE _____

CERTIFICATE OF PROVISION OF ELECTRICAL SERVICE

I HEREBY CERTIFY THAT THE REQUIREMENTS SET FORTH IN RULES, REGULATIONS, BY-LAWS, POLICY AND OPERATIONAL BULLETINS, PLAT APPROVAL CHECKLISTS AND TREE PLANTING GUIDELINES HAVE BEEN MET FOR THE ELECTICAL PROVIDER BELOW. ANY APPROVAL IS AT ALL TIMES CONTINGENT UPON CONTINUING COMPLIANCE WITH THE AFOREMENTIONED REQUIREMENTS.

ELECTRICAL PROVIDER _____ DATE _____

CERTIFICATE OF APPROVAL FOR ADDRESSES

I HEREBY CERTIFY THAT THE SUBDIVISION PLAT SHOWN HEREON HAS BEEN ASSIGNED THE ADDRESSES IN CONFORMANCE WITH THE CITY OF BRENTWOOD ADDRESSING STANDARDS.

CITY OF BRENTWOOD ADDRESSING AUTHORITY _____ DATE _____

CERTIFICATE OF APPROVAL OF UTILITY SYSTEMS

I HEREBY CERTIFY THAT THE FOLLOWING UTILITY SYSTEMS OUTLINED OR INDICATED ON THE FINAL SUBDIVISION PLAT ENTITLED "PRIMM FARM SUBDIVISION" HAVE BEEN INSTALLED IN ACCORDANCE WITH CURRENT APPLICABLE REGULATIONS.

WATER SYSTEM _____, 20___ _____
NAME, TITLE, AND AGENCY OF AUTHORIZED APPROVING AGENT

WATER SYSTEM _____, 20___ _____
NAME, TITLE, AND AGENCY OF AUTHORIZED APPROVING AGENT

CERTIFICATE OF APPROVAL OF STREETS

I HEREBY CERTIFY THAT ALL STREETS DESIGNATED ON THE FINAL SUBDIVISION PLAT HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH CURRENT APPLICABLE REGULATIONS.

ENGINEERING DIRECTOR _____ DATE _____

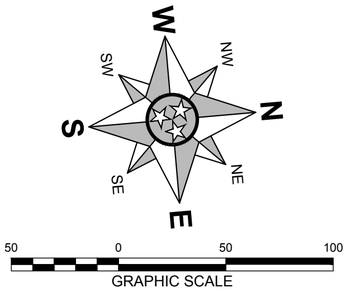
REVISION #	DATE	DESCRIPTION
1	12/20/22	PER CITY OF BRENTWOOD COMMENTS

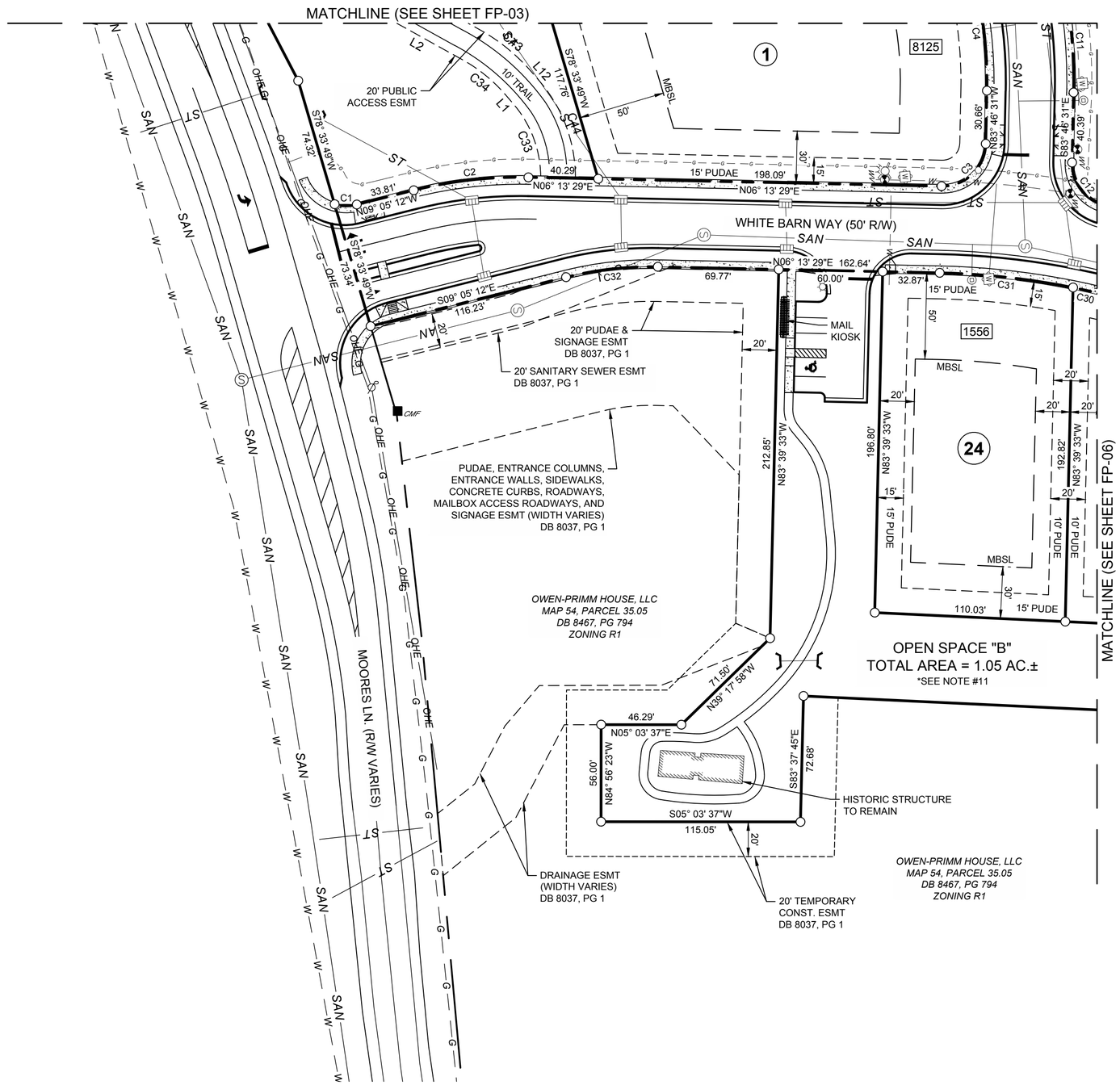
FINAL PLAT FOR:
PRIMM FARM SUBDIVISION
CITY OF BRENTWOOD
WILLIAMSON COUNTY, TENNESSEE

M2 GROUP
P.O. BOX 848
FRANKLIN, TN 37065
615.406.3415 / WWW.M2GROUPLLC.COM

DATE :	OCTOBER 3, 2022	DRAWN BY :	BPH
PROJECT NUMBER :	22-070	CHECKED BY :	SVH

SHEET NUMBER: **FP-04**





NOTE:

1. SEE SHEET FP-02 FOR GENERAL NOTES, SITE DETAILS, AND LEGEND.

CERTIFICATE OF ACCURACY

I HEREBY CERTIFY THAT THE PLAN SHOWN AND DESCRIBED HEREON IS A TRUE AND CORRECT SURVEY TO THE ACCURACY REQUIRED BY THE SPECIFICATIONS OF THE BRENTWOOD PLANNING COMMISSION.

FURTHERMORE, I HEREBY CERTIFY THAT THE SURVEY SHOWN HEREON REPRESENTS A CATEGORY I SURVEY, HAVING A LINEAR ERROR OF CLOSURE WHICH IS EQUAL TO OR LESS THAN 1 FOOT PER 10,000 FEET OF LAND (1:10,000). THIS SURVEY WAS MADE IN COMPLIANCE WITH THE CURRENT TENNESSEE MINIMUM STANDARDS OF PRACTICE.

DATE _____ REGISTERED LAND SURVEYOR _____

CERTIFICATE OF APPROVAL OF SUBDIVISION NAME

I HEREBY CERTIFY THAT THE CITY OF BRENTWOOD PLANNING AND CODES DEPARTMENT HAS APPROVED THE SUBDIVISION NAME.

SECRETARY, PLANNING COMMISSION OR PLANNING AND CODES DIRECTOR _____ DATE _____

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DATE _____ OWNER SIGNATURE _____

OWNER NAME (PRINTED) TITLE (IF ACTING FOR PARTNERSHIP OR CORPORATION) _____

CERTIFICATION OF THE APPROVAL OF STREET NAMES

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WILLIAMSON COUNTY DEPARTMENT OF EMERGENCY COMMUNICATIONS _____ DATE _____

CERTIFICATE OF APPROVAL FOR RECORDING

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SECRETARY, PLANNING COMMISSION OR PLANNING AND CODES DIRECTOR _____ DATE _____

CERTIFICATE OF PROVISION OF ELECTRICAL SERVICE

I HEREBY CERTIFY THAT THE REQUIREMENTS SET FORTH IN RULES, REGULATIONS, BY-LAWS, POLICY AND OPERATIONAL BULLETINS, PLAT APPROVAL CHECKLISTS AND TREE PLANTING GUIDELINES HAVE BEEN MET FOR THE ELECTICAL PROVIDER BELOW. ANY APPROVAL IS AT ALL TIMES CONTINGENT UPON CONTINUING COMPLIANCE WITH THE AFOREMENTIONED REQUIREMENTS.

ELECTRICAL PROVIDER _____ DATE _____

CERTIFICATE OF APPROVAL FOR ADDRESSES

I HEREBY CERTIFY THAT THE SUBDIVISION PLAT SHOWN HEREON HAS BEEN ASSIGNED THE ADDRESSES IN CONFORMANCE WITH THE CITY OF BRENTWOOD ADDRESSING STANDARDS.

CITY OF BRENTWOOD ADDRESSING AUTHORITY _____ DATE _____

CERTIFICATE OF APPROVAL OF UTILITY SYSTEMS

I HEREBY CERTIFY THAT THE FOLLOWING UTILITY SYSTEMS OUTLINED OR INDICATED ON THE FINAL SUBDIVISION PLAT ENTITLED "PRIMM FARM SUBDIVISION" HAVE BEEN INSTALLED IN ACCORDANCE WITH CURRENT APPLICABLE REGULATIONS.

WATER SYSTEM _____, 20____ NAME, TITLE, AND AGENCY OF AUTHORIZED APPROVING AGENT _____

WATER SYSTEM _____, 20____ NAME, TITLE, AND AGENCY OF AUTHORIZED APPROVING AGENT _____

CERTIFICATE OF APPROVAL OF STREETS

I HEREBY CERTIFY THAT ALL STREETS DESIGNATED ON THE FINAL SUBDIVISION PLAT HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH CURRENT APPLICABLE REGULATIONS.

ENGINEERING DIRECTOR _____ DATE _____

REVISION #	DATE	DESCRIPTION
1	12/20/22	PER CITY OF BRENTWOOD COMMENTS

FINAL PLAT FOR: PRIMM FARM SUBDIVISION

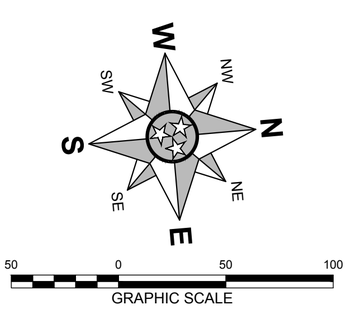
CITY OF BRENTWOOD
WILLIAMSON COUNTY, TENNESSEE

M2 GROUP
P.O. BOX 848
FRANKLIN, TN 37065
615.406.3415 / WWW.M2GROUPLLC.COM

DATE :	OCTOBER 3, 2022	DRAWN BY :	BPH
PROJECT NUMBER :	22-070	CHECKED BY :	SVH

SHEET NUMBER: **FP-05**

FP - FINAL PLAT - LAYOUT.DWG / Tuesday, December 20, 2022 4:54:30 PM



MATCHLINE (SEE SHEET FP-03)

MATCHLINE (SEE SHEET FP-05)

WHITE BARN WAY (50' R/W)

TURNING POINT DR. (50' R/W)

OPEN SPACE "B"

OPEN SPACE "A"

BIO-RETENTION POND

PRIVATE SERVICE LINE

RK JUNIOR CONTACTING SERVICES, LLC
MAP 54, PARCEL 35.07
DB 8553, PG 661
ZONING R1/R2

ROYCE FINE HOMES, LLC
MAP 54, PARCEL 35.06
DB 8467, PG 781
ZONING R1/R2

30' PUDE, SANITARY, & ACCESS ESMT
DB 8037, PG 1

NOTE:

1. SEE SHEET FP-02 FOR GENERAL NOTES, SITE DETAILS, AND LEGEND.
2. LOTS SHOWN AS THUS [*] ARE TRANSITIONAL LOTS BASED ON THE EXISTENCE OF SLOPES EXCEEDING 15%.

CERTIFICATE OF ACCURACY

I HEREBY CERTIFY THAT THE PLAN SHOWN AND DESCRIBED HEREON IS A TRUE AND CORRECT SURVEY TO THE ACCURACY REQUIRED BY THE SPECIFICATIONS OF THE BRENTWOOD PLANNING COMMISSION.

FURTHERMORE, I HEREBY CERTIFY THAT THE SURVEY SHOWN HEREON REPRESENTS A CATEGORY I SURVEY, HAVING A LINEAR ERROR OF CLOSURE WHICH IS EQUAL TO OR LESS THAN 1 FOOT PER 10,000 FEET OF LAND (1:10,000). THIS SURVEY WAS MADE IN COMPLIANCE WITH THE CURRENT TENNESSEE MINIMUM STANDARDS OF PRACTICE.

DATE _____ REGISTERED LAND SURVEYOR _____

CERTIFICATE OF APPROVAL OF SUBDIVISION NAME

I HEREBY CERTIFY THAT THE CITY OF BRENTWOOD PLANNING AND CODES DEPARTMENT HAS APPROVED THE SUBDIVISION NAME.

SECRETARY, PLANNING COMMISSION OR PLANNING AND CODES DIRECTOR _____ DATE _____

CERTIFICATE OF OWNERSHIP AND DEDICATION

I (WE) HEREBY CERTIFY THAT I AM (WE ARE) THE OWNER (S) OF THE PROPERTY SHOWN AND DESCRIBED HEREON AND THAT I (WE) HEREBY ADOPT THIS PLAN OF SUBDIVISION WITH MY (OUR) FREE CONSENT, ESTABLISH THE MINIMUM BUILDING RESTRICTION LINES, AND DEDICATE ALL STREETS, ALLEYS, WALKS, PARKS AND OTHER OPEN SPACES TO PUBLIC OR PRIVATE USE AS NOTED.

DATE _____ OWNER SIGNATURE _____

OWNER NAME (PRINTED) TITLE (IF ACTING FOR PARTNERSHIP OR CORPORATION)

CERTIFICATION OF THE APPROVAL OF STREET NAMES

I HEREBY CERTIFY THAT THE WILLIAMSON COUNTY DEPARTMENT OF EMERGENCY COMMUNICATIONS HAS APPROVED THE STREET NAME(S).

WILLIAMSON COUNTY DEPARTMENT OF EMERGENCY COMMUNICATIONS _____ DATE _____

CERTIFICATE OF APPROVAL FOR RECORDING

I HEREBY CERTIFY THAT THE SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE SUBDIVISION REGULATIONS FOR THE CITY OF BRENTWOOD, WITH THE EXCEPTION OF SUCH VARIANCES AND/OR MODIFICATIONS, IF ANY, AS ARE NOTED IN THE MINUTES OF THE PLANNING COMMISSION.

SECRETARY, PLANNING COMMISSION OR PLANNING AND CODES DIRECTOR _____ DATE _____

CERTIFICATE OF PROVISION OF ELECTRICAL SERVICE

I HEREBY CERTIFY THAT THE REQUIREMENTS SET FORTH IN RULES, REGULATIONS, BY-LAWS, POLICY AND OPERATIONAL BULLETINS, PLAT APPROVAL CHECKLISTS AND TREE PLANTING GUIDELINES HAVE BEEN MET FOR THE ELECTICAL PROVIDER BELOW. ANY APPROVAL IS AT ALL TIMES CONTINGENT UPON CONTINUING COMPLIANCE WITH THE AFOREMENTIONED REQUIREMENTS.

ELECTRICAL PROVIDER _____ DATE _____

CERTIFICATE OF APPROVAL FOR ADDRESSES

I HEREBY CERTIFY THAT THE SUBDIVISION PLAT SHOWN HEREON HAS BEEN ASSIGNED THE ADDRESSES IN CONFORMANCE WITH THE CITY OF BRENTWOOD ADDRESSING STANDARDS.

CITY OF BRENTWOOD ADDRESSING AUTHORITY _____ DATE _____

CERTIFICATE OF APPROVAL OF UTILITY SYSTEMS

I HEREBY CERTIFY THAT THE FOLLOWING UTILITY SYSTEMS OUTLINED OR INDICATED ON THE FINAL SUBDIVISION PLAT ENTITLED "PRIMM FARM SUBDIVISION" HAVE BEEN INSTALLED IN ACCORDANCE WITH CURRENT APPLICABLE REGULATIONS.

WATER SYSTEM _____, 20___ NAME, TITLE, AND AGENCY OF AUTHORIZED APPROVING AGENT _____

WATER SYSTEM _____, 20___ NAME, TITLE, AND AGENCY OF AUTHORIZED APPROVING AGENT _____

CERTIFICATE OF APPROVAL OF STREETS

I HEREBY CERTIFY THAT ALL STREETS DESIGNATED ON THE FINAL SUBDIVISION PLAT HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH CURRENT APPLICABLE REGULATIONS.

ENGINEERING DIRECTOR _____ DATE _____

REVISION #	DATE	DESCRIPTION
1	12/20/22	PER CITY OF BRENTWOOD COMMENTS

FINAL PLAT FOR: PRIMM FARM SUBDIVISION

CITY OF BRENTWOOD
WILLIAMSON COUNTY, TENNESSEE

M2 GROUP
P.O. BOX 848
FRANKLIN, TN 37065
615.406.3415 / WWW.M2GROUPLLC.COM

DATE :	OCTOBER 3, 2022	DRAWN BY :	BPH
PROJECT NUMBER :	22-070	CHECKED BY :	SVH

SHEET NUMBER: **FP-06**

FP - FINAL PLAT - LAYOUT.DWG / Tuesday, December 20, 2022 4:54:32 PM

BRENTWOOD PLANNING COMMISSION
Meeting Date: 01/03/2023
Current Zoning: R-2 - SUBURBAN RESIDENTIAL

Information

Subject

BPC2209-004 Preliminary Plan - Amelia Subdivision FKA Roberts Property, 310 Wilson Pike, Lot 4, Zoning R-2 - *Applicant: Mr. Wayde Morrow, M2 Group, LLC, P.O. Box 848, Franklin, TN 37065*

General Information

M2 Group, LLC requests approval of a preliminary plan showing 4 lots on approximately 6 acres. All four lots will be accessed from a new cul-de-sac that will connect to Meadowlawn Drive.

Conditions of Approval

Staff recommends that the following **5** conditions be attached to the approval of the request.

1. Per Section 50-29(b) of the municipal code, the applicant will pay for the city's traffic engineering consultant's review. This invoice must be paid before any permits will be issued for the project.

2. Remove all references to a Waterway Natural Area (WNA) from the plans.

3. The rear setback for Lot 101 should be 30 feet, not 20 feet.

4. Add bearings and distances along the rear setback for Lot 102.

5. Coordination with the city's traffic engineering consultant is needed regarding a traffic access report. The access study is meant to look at how the proposal meets the city's driveway spacing and alignment requirements. This study must be submitted to and approved by city staff before any permit will be issued.

Standard Requirements

Staff recommends that the following **18** conditions be attached to the approval of the request.

1. Construction shall follow all recommendations from the provided Geotechnical Report.

2. A preliminary site plan shall be vested for a period of three years from the date of the original approval.

3. Add the following note to the preliminary plan:

This site plan is subject to a three-year vesting period, during which the development standards in effect on the date of approval will remain the standards applicable to this plan. If construction is not completed during the first three years, the original site plan is considered a preliminary site plan and the applicant must obtain approval of a final site plan. Development of the property shown on this plan may be subject to standards other than those that were applicable during the vesting period. The Initial vesting period for this plan expires on **January 3, 2026**, unless extended by the City of Brentwood. Persons relying on this plan after said date should contact the City of Brentwood to determine if development may continue as depicted on the plan.

4. When the construction authorized pursuant to a site plan is not completed within three years from the date of initial approval, but the applicant desires to complete the project proposed for the site, the plan as initially approved for the project or as amended shall be considered a preliminary site plan. If the applicant secures all necessary permits, commences site preparation and obtains approval of a final site plan within the three-year vesting period following approval of the preliminary site plan, then the vesting period shall be extended an additional two years beyond the expiration of the initial three-year vesting period. During the two-year extension, the applicant must commence construction and maintain any necessary permits to remain vested.

5. If necessary, permits are maintained and construction, as defined by Section 78-43, has commenced by the end of the two-year extension, then the vesting period shall remain in effect until the Planning and Codes Department has certified final completion of the project, provided the total vesting period shall not exceed ten years from the date of approval of the preliminary site plan.

6. If the construction authorized pursuant to a site plan is completed within three years from the date of approval, the site plan shall then be considered the final site plan for the project.

7. Any new dwelling constructed more than 500 feet from a public roadway or more than 500 feet from a fire hydrant shall be protected through an automatic residential fire sprinkler system installed in accordance with NFPA standards and requirements and approved by the fire chief or a designee.

8. It is the policy of the U. S. Postal Service that mail delivery to all new and extended developments use centralized delivery, via cluster box units (CBU). It is the responsibility of the customer (developers and builders) to provide the necessary mail receptacle equipment. Show/label an area on the plan to accommodate the cluster box units. Developers must receive approval from the USPS before mail service can begin.

9. The homes in the subdivision shall use U.S. Postal Service approved Cluster Box Units for Mail Delivery. Each home builder shall install permanent address posts, in lieu of mailboxes at the end of each driveway to facilitate emergency response. The address posts must be installed before a certificate of occupancy will be issue for the home.

10. Approval of the site plan does not constitute approval of the signage plan. All signs must comply with the Brentwood Sign Ordinance. A comprehensive sign package including all

signs (temporary or permanent, wall or ground) shall be submitted to the Planning Department for a compliance review. Please submit a comprehensive sign package to Allison Roberts at allison.roberts@brentwoodtn.gov.

11. On all sheets of the plan show the location of existing and platted property lines, existing streets, buildings, watercourses, railroads, cemeteries, sewer lines, bridges, culverts, drain pipes, water mains, fire hydrants, street lights, tree masses, public utility easements.

12. Show the location of any sinkholes on the subject property as identified by a qualified geo-technical Engineer shall be located and appropriately labeled on the preliminary plan. The plan shall be configured to locate all sinkholes in permanent open space only and not within any buildable lots. Sinkholes in the permanent open space shall be protected from natural and/or man-made debris.

13. The property owner is responsible for all development fees including water and sewer service and tap fees, building permit fees and Public Works Project Fees. The required fees shall be used for future infrastructure related improvements required by the proposed development.

14. Applicable security for all required roadway, drainage, utilities, water, sewer, landscaping and amenity improvements in accordance with the requirements of Article Eight of the Brentwood Subdivision Regulations shall be provided before the final plat may be recorded.

15. A Maintenance Agreement and Storm Water System Long-Term Operation and Maintenance Plan for all storm water structures and facilities must be prepared, submitted and approved per Section 56-43 of the Brentwood Code.

16. Development of this project shall comply with all applicable codes and ordinances of the City of Brentwood.

17. Deviations from the approved plan in the development of a project or the failure to satisfy any standard requirements or special conditions of approval imposed by the planning commission will be considered a violation of the provisions of the Zoning Ordinance, which shall be subject to punishment as provided in Section 1-9 of the Brentwood Municipal Code. The City may also require the applicant to appear before the Planning Commission to address any deficiencies or unapproved modifications. The project may also be subject to delays in issuance of permits, certificates of occupancy, recordation of plats or other project approvals.

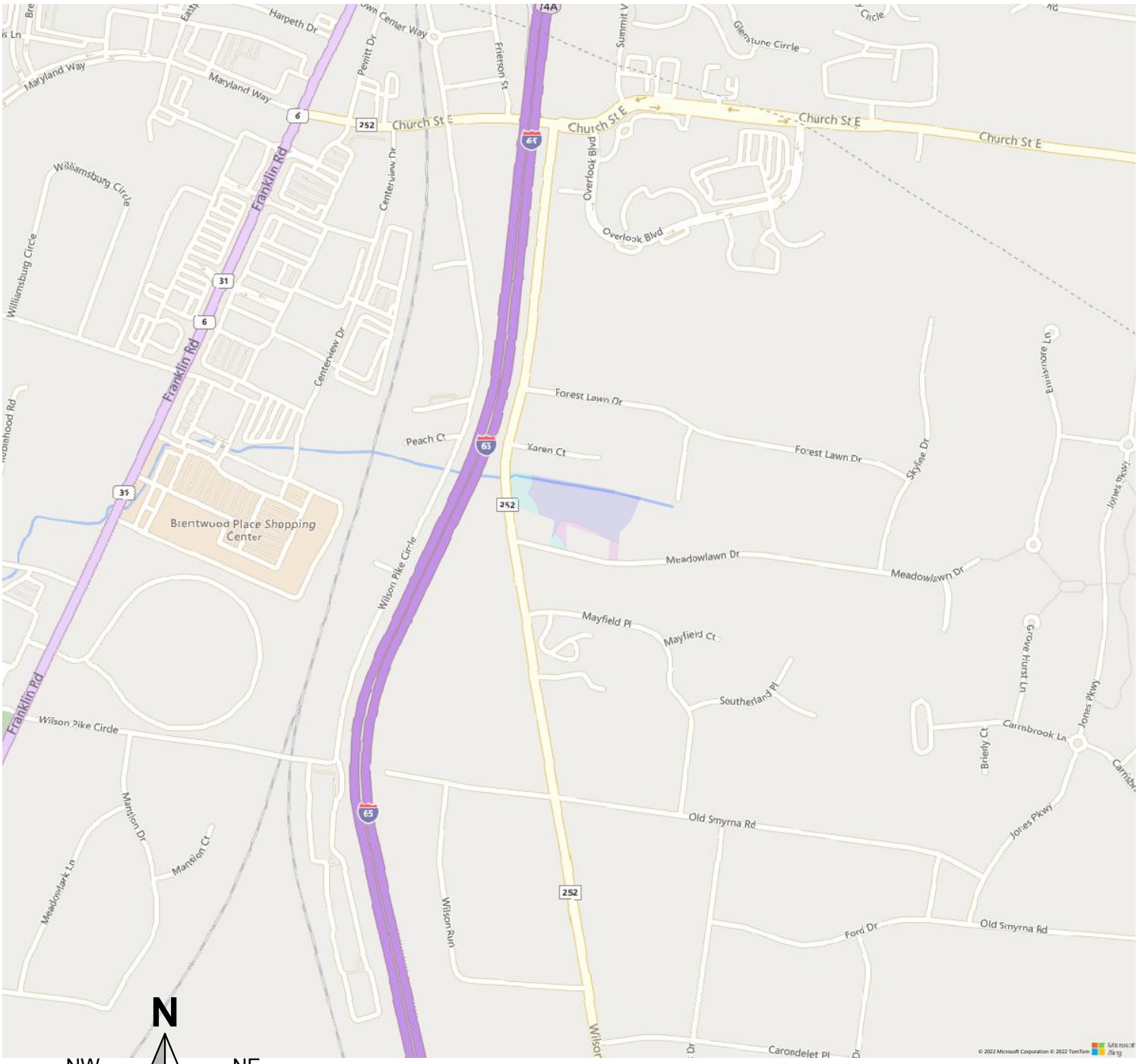
18. Approval of the proposed plan shall be limited to the illustrations and plans presented to the Planning Commission for review and approval on **January 3, 2023**. Any changes to Planning Commission approved plans and specifications will require staff review and re-approval by the Planning Commission.

Staff Recommendation

Staff requests that the Planning Commission vote to approve the proposed preliminary plan subject to the requirements of the staff report.

Attachments

Vicinity Map
Preliminary Plan
Traffic Assessment Report
Drainage Report



M2 GROUP
P.O. BOX 848
FRANKLIN, TN 37065
WWW.M2GROUPLLC.COM

VICINITY MAP

FOR

AMELIA - 310 WILSON PIKE

CITY OF BRENTWOOD

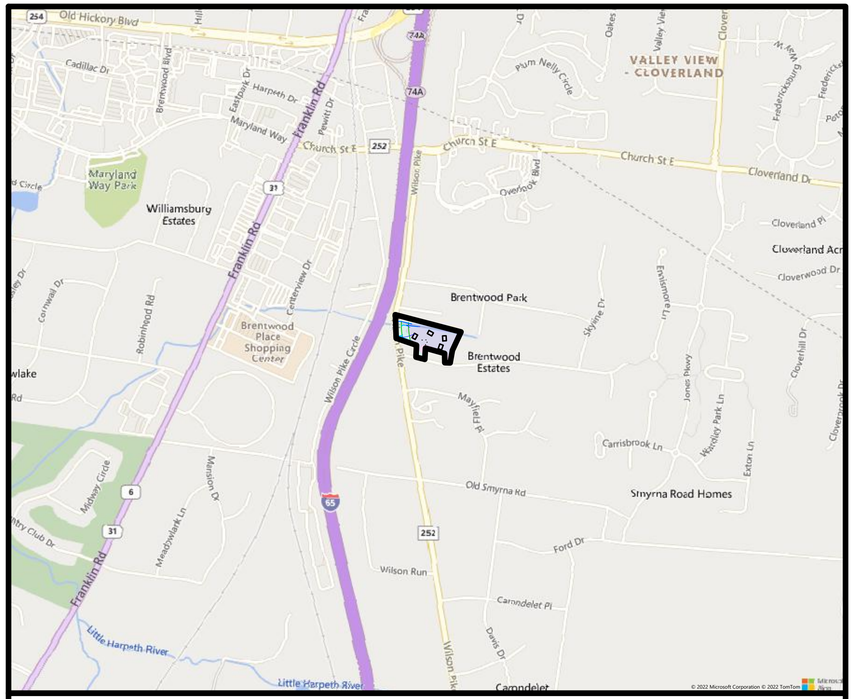
WILLIAMSON COUNTY, TENNESSEE

DATE	SEPTEMBER, 2022
PROJECT #	
SHEET NO.	EX-1

310 WP - XREF - LAYOUT.DWG / Tuesday, September 6, 2022 10:04:39 AM

PRELIMINARY PLANS FOR
AMELIA - RESIDENTIAL LOTS
310 WILSON PIKE
BRENTWOOD, TN
DECEMBER 2022

1. THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION OR EARTH MOVING OPERATIONS. INFORM ENGINEER OF ANY CONFLICTS DETRIMENTAL TO THE DESIGN INTENT.
2. 72 HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING AGENCIES: TENNESSEE 811 AND ALL OTHER AGENCIES THAT MAY HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NON-MEMBERS OF TENNESSEE 811.
3. THE CONTRACTOR AND SUBCONTRACTORS SHALL BE RESPONSIBLE FOR COMPLYING WITH APPLICABLE FEDERAL, STATE AND LOCAL REQUIREMENTS, TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SUBCONTRACTORS TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK.
4. THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE OWNER AND OWNER'S REPRESENTATIVE FOR ANY AND ALL INJURIES AND/OR DAMAGES TO PERSONNEL, EQUIPMENT AND/OR EXISTING FACILITIES OCCURRING IN THE COURSE OF THE DEMOLITION AND CONSTRUCTION DESCRIBED IN THE PLANS AND SPECIFICATIONS.
5. CONTRACTOR SHALL OBTAIN A PERMIT FOR ALL CONSTRUCTION ACTIVITIES AND PERFORM SAID ACTIVITIES IN ACCORDANCE WITH ALL LOCAL, STATE, FEDERAL & OSHA REGULATIONS.
6. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL CODES, OBTAIN ALL APPLICABLE PERMITS, AND PAY ALL REQUIRED FEES PRIOR TO BEGINNING WORK.
7. ANY WORK PERFORMED IN THE LOCAL RIGHT OF WAYS SHALL BE IN ACCORDANCE WITH THE APPLICABLE LOCAL REQUIREMENTS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE NECESSARY PERMITS FOR THE WORK, SCHEDULE NECESSARY INSPECTIONS, AND PROVIDE THE NECESSARY TRAFFIC CONTROL MEASURES AND DEVICES, ETC., FOR WORK PERFORMED IN THE RIGHT OF WAYS.
8. CONTRACTOR SHALL IMPLEMENT ALL SOIL AND EROSION CONTROL, PRACTICES REQUIRED BY THE CITY OF BRENTWOOD AND TDEC.
9. ALL GROUND SURFACE AREAS THAT HAVE BEEN EXPOSED OR LEFT BARE AS A RESULT OF CONSTRUCTION AND ARE TO FINAL GRADE AND ARE TO REMAIN SO, SHALL BE PERMANENTLY STABILIZED AS SOON AS PRACTICAL IN ACCORDANCE WITH SPECIFICATIONS.
10. ALL WORK SHALL COMPLY WITH CITY OF BRENTWOOD SPECIFICATIONS, AND ALL CONSTRUCTION WORK SHALL BE DONE ACCORDING TO SAID SPECIFICATIONS AND IN ACCORDANCE WITH APPLICABLE STANDARDS OF THE CITY OF BRENTWOOD.
11. ALL WORK PERFORMED BY THE CONTRACTOR SHALL CONFORM TO THE LATEST REGULATIONS OF THE AMERICANS WITH DISABILITIES ACT.
12. BEFORE INSTALLATION OF STORM OR SANITARY SEWER, OR OTHER UTILITY THE CONTRACTOR SHALL VERIFY ALL CROSSINGS, BY EXCAVATION WHERE NECESSARY, AND INFORM THE OWNER AND THE ENGINEER OF ANY CONFLICTS. THE ENGINEER WILL BE HELD HARMLESS IN THE EVENT THEY ARE NOT NOTIFIED OF DESIGN CONFLICTS PRIOR TO CONSTRUCTION.
13. WHERE CURB IS PRESENT, DIMENSIONS ARE SHOWN TO THE FACE OF CURB, OTHERWISE DIMENSIONS ARE SHOWN TO THE EDGE OF PAVEMENT AND/OR EDGE OF BUILDING UNLESS OTHERWISE NOTED.
14. SITE SIGNAGE AND STRIPING SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.).
15. CONSTRUCTION OF ALL ROADWAYS AND SIDEWALKS SHALL MEET THE REQUIREMENTS OF BRENTWOOD PUBLIC WORKS ROADWAY CONSTRUCTION CRITERIA AND STANDARD DETAILS.
16. CONTRACTOR SHALL PROVIDE AND MAINTAIN TRAFFIC CONTROL MEASURES IN ACCORDANCE WITH STATE DEPARTMENT OF TRANSPORTATION REGULATIONS AND AS REQUIRED BY LOCAL AGENCIES WHEN WORKING IN AND/OR ALONG STREETS, ROADS, HIGHWAYS, ETC. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN APPROVAL AND COORDINATE WITH LOCAL AND/OR STATE AGENCIES REGARDING THE NEED, EXTENT AND LIMITATIONS ASSOCIATED WITH INSTALLING AND MAINTAINING TRAFFIC CONTROL MEASURES.
17. ALL TRENCHING, PIPE LAYING AND BACKFILLING SHALL BE IN ACCORDANCE WITH ALL FEDERAL OSHA REGULATIONS. CONTRACTOR TO PAY PARTICULAR ATTENTION TO 29 CFR PART 1926, SUBPARTS M AND P.
18. THIS SITE PLAN IS SUBJECT TO A THREE YEAR VESTING PERIOD, DURING WHICH THE DEVELOPMENT STANDARDS IN EFFECT ON THE DATE OF APPROVAL WILL REMAIN THE STANDARDS APPLICABLE TO THIS PLAN. IF CONSTRUCTION IS NOT COMPLETED DURING THE FIRST THREE YEARS, THE ORIGINAL SITE PLAN IS CONSIDERED A PRELIMINARY SITE PLAN AND THE APPLICANT MUST OBTAIN APPROVAL OF A FINAL SITE PLAN. DEVELOPMENT OF THE PROPERTY SHOWN ON THIS PLAN MAY BE SUBJECT TO STANDARDS OTHER THAN THOSE THAT WERE APPLICABLE DURING THE VESTING PERIOD. THE INITIAL VESTING PERIOD FOR THIS PLAN EXPIRES ON JANUARY 3, 2026, UNLESS EXTENDED BY THE CITY OF BRENTWOOD. PERSONS RELYING ON THIS PLAN AFTER SAID DATE SHOULD CONTACT THE CITY OF BRENTWOOD TO DETERMINE IF DEVELOPMENT MAY CONTINUE AS DEPICTED ON THE PLAN.
19. WHEN THE CONSTRUCTION AUTHORIZED PURSUANT TO A SITE PLAN IS NOT COMPLETED WITHIN THREE YEARS FROM THE DATE OF INITIAL APPROVAL, BUT THE APPLICANT DESIRES TO COMPLETE THE PROJECT PROPOSED FOR THE SITE, THE PLAN AS INITIALLY APPROVED FOR THE PROJECT OR AS AMENDED SHALL BE CONSIDERED A PRELIMINARY SITE PLAN. IF THE APPLICANT SECURES ALL NECESSARY PERMITS, COMMENCES SITE PREPARATION AND OBTAINS APPROVAL OF A FINAL SITE PLAN WITHIN THE THREE-YEAR VESTING PERIOD FOLLOWING APPROVAL OF THE PRELIMINARY SITE PLAN, THEN THE VESTING PERIOD SHALL BE EXTENDED AN ADDITIONAL TWO YEARS BEYOND THE EXPIRATION OF THE INITIAL THREE-YEAR VESTING PERIOD. DURING THE TWO-YEAR EXTENSION, THE APPLICANT MUST COMMENCE CONSTRUCTION AND MAINTAIN ANY NECESSARY PERMITS TO REMAIN VESTED.
20. IF NECESSARY PERMITS ARE MAINTAINED AND CONSTRUCTION, AS DEFINED BY SECTION 78-43, HAS COMMENCED BY THE END OF THE TWO-YEAR EXTENSION, THEN THE VESTING PERIOD SHALL REMAIN IN EFFECT UNTIL THE PLANNING AND CODES DEPARTMENT HAS CERTIFIED FINAL COMPLETION OF THE PROJECT, PROVIDED THE TOTAL VESTING PERIOD SHALL NOT EXCEED TEN YEARS FROM THE DATE OF APPROVAL OF THE PRELIMINARY SITE PLAN.
21. IF THE CONSTRUCTION AUTHORIZED PURSUANT TO A SITE PLAN IS COMPLETED WITHIN THREE YEARS FROM THE DATE OF APPROVAL, THE SITE PLAN SHALL THEN BE CONSIDERED THE FINAL SITE PLAN FOR THE PROJECT.
22. THE PROPERTY OWNER IS RESPONSIBLE FOR ALL DEVELOPMENT FEES INCLUDING WATER AND SEWER SERVICE AND TAP FEES, BUILDING PERMIT FEES AND PUBLIC WORKS PROJECT FEES. THE REQUIRED FEES SHALL BE USED FOR FUTURE INFRASTRUCTURE RELATED IMPROVEMENTS REQUIRED BY THE PROPOSED DEVELOPMENT.
23. APPLICABLE SECURITY FOR ALL REQUIRED ROADWAY, DRAINAGE, UTILITIES, WATER, SEWER, IMPROVEMENTS AND LANDSCAPING IN ACCORDANCE WITH THE REQUIREMENTS OF ARTICLE EIGHT OF THE BRENTWOOD SUBDIVISION REGULATIONS SHALL BE PROVIDED BEFORE THE FINAL PLAT MAY BE RECORDED.
24. A MAINTENANCE AGREEMENT AND STORM WATER SYSTEM LONG-TERM OPERATION AND MAINTENANCE PLAN FOR ALL STORM WATER STRUCTURES AND FACILITIES MUST BE PREPARED, SUBMITTED AND APPROVED PER SECTION 56-43 OF THE BRENTWOOD MUNICIPAL CODE.
25. IT IS THE POLICY OF THE U. S. POSTAL SERVICE THAT MAIL DELIVERY TO ALL NEW AND EXTENDED DEVELOPMENTS USE CENTRALIZED DELIVERY, VIA CLUSTER BOX UNITS (CBU). IT IS THE RESPONSIBILITY OF THE CUSTOMER (DEVELOPERS AND BUILDERS) TO PROVIDE THE NECESSARY MAIL RECEPTACLE EQUIPMENT. SHOW/LABEL AN AREA ON THE PLAN TO ACCOMMODATE THE CLUSTER BOX UNITS. DEVELOPERS MUST RECEIVE APPROVAL FROM THE USPS BEFORE MAIL SERVICE CAN BEGIN.
26. PROOF OF USPS APPROVAL OF THE PROPOSED METHOD OF MAIL DELIVERY SHALL BE PROVIDED AS PART OF THE SUBMITTAL OF THE FINAL PLAT FOR REVIEW BY THE PLANNING COMMISSION. PLEASE CONTACT THE USPS FOE APPROVAL OF THE PROPOSED LOCATION AND DESIGN OF THE CBU DELIVERY/PICK-UP LOCATION. THE PROPOSED LOCATION MUST BE SHOWN ON THE FINAL PLAT.
27. AS PART OF THE SUBMISSION OF THE FINAL PLAT, PROVIDED A COPY OF THE "MODE OF DELIVERY AGREEMENT"INDICATING APPROVAL OF THE LOCATIONS OF THE CBU'S BY THE USPS. CONTACT TERI ROBERTS -- THERESA.M.ROBERTS@USPS.GOV.
28. ADEQUATE LIGHTING SHALL BE PROVIDED IN THE AREA OF THE CBU'S.
29. PER THE REQUIREMENTS OF APPENDIX SEVEN OF THE SUBDIVISION REGULATIONS, IN LIEU OF INDIVIDUAL MAILBOXES AN ADDRESS POST SHALL BE PERMANENTLY PLACED IN CONCRETE AT THE END OF EACH DRIVEWAY, WITHIN THE STREET RIGHT-OF-WAY, OR PRIVATE INGRESS/EGRESS EASEMENT DISPLAYING THE ASSIGNED ADDRESS FOR THE STRUCTURE. THE ADDRESS POST MUST BE INSTALLED BEFORE A CERTIFICATE OF OCCUPANCY WILL BE ISSUED FOR THE FUTURE STRUCTURE. REFER TO THIS ARTICLE FOR ADDITIONAL INFORMATION.
30. COMPLETE PLANS SHALL BE SUBMITTED TO THE PLANNING AND CODES DEPARTMENT FOR REVIEW, APPROVAL AND ISSUANCE OF THE REQUIRED PERMITS BEFORE ANY WORK IS BEGUN. ADDITIONALLY, ALL REQUIRED ELECTRICAL PERMITS, ISSUED BY THE STATE OF TENNESSEE MUST BE RECEIVED BEFORE ANY WORK IS BEGUN.
31. DEVIATIONS FROM THE APPROVED PLAN IN THE DEVELOPMENT OF A PROJECT OR THE FAILURE TO SATISFY ANY STANDARD REQUIREMENTS OR SPECIAL CONDITIONS OF APPROVAL IMPOSED BY THE PLANNING COMMISSION WILL BE CONSIDERED A VIOLATION OF THE PROVISIONS OF THE ZONING ORDINANCE, WHICH SHALL BE SUBJECT TO PUNISHMENT AS PROVIDED IN SECTION 1-9 OF THE BRENTWOOD MUNICIPAL CODE. THE CITY MAY ALSO REQUIRE THE APPLICANT TO APPEAR BEFORE THE PLANNING COMMISSION TO ADDRESS ANY DEFICIENCIES OR UNAPPROVED MODIFICATIONS. THE PROJECT MAY ALSO BE SUBJECT TO DELAYS IN ISSUANCE OF PERMITS, CERTIFICATES OF OCCUPANCY, RECORDATION OF PLATS OR OTHER PROJECT APPROVALS.
32. ANY CHANGES TO PLANS APPROVED BY THE PLANNING COMMISSION WILL REQUIRE STAFF REVIEW AND RE-APPROVAL BY THE PLANNING COMMISSION.
33. DEVELOPMENT OF THIS PROJECT SHALL COMPLY WITH ALL APPLICABLE CODES AND ORDINANCES OF THE CITY OF BRENTWOOD.
34. APPROVAL OF THE PROPOSED PLAN SHALL BE LIMITED TO THE ILLUSTRATIONS AND PLANS PRESENTED TO THE PLANNING COMMISSION FOR REVIEW AND APPROVAL ON JANUARY 3, 2023. ANY CHANGES TO PLANNING COMMISSION APPROVED PLANS AND SPECIFICATIONS WILL REQUIRE STAFF REVIEW AND RE-APPROVAL BY THE PLANNING COMMISSION.



VICINITY MAP
SCALE: 1" = 1,000'

Sheet List Table	
SHEET NUMBER	SHEET TITLE
C0.0	COVER SHEET
C2.0	SITE LAYOUT PLAN
C3.0	GRADING AND DRAINAGE PLAN
C5.0	UTILITY PLAN

OWNER/APPLICANT:
310 WILSON PIKE, LLC
ADDRESS: 4467 S. CAROTHERS ROAD
FRANKLIN, TENNESSEE 37064
PHONE NO.: 615-306-6939
EMAIL: adayofrealestate@gmail.com
CONTACT NAME: ANDREW DAY

CIVIL ENGINEER:
M2 GROUP, LLC
ADDRESS: P.O. BOX 848
FRANKLIN TENNESSEE 37065
PHONE NO.: 615-406-3415
EMAIL: matt@m2groupllc.com
CONTACT NAME: MATT BRYANT, PE

SURVEYOR:
M2 GROUP, LLC
ADDRESS: P.O. BOX 848
FRANKLIN TENNESSEE 37065
PHONE NO.: 931-623-8913
EMAIL: stephen@m2groupllc.com
CONTACT NAME: STEPHEN VANDER HORST, RLS

NOTE TO CONTRACTOR:
THE CONTRACTOR SHALL REFER TO ALL PLANS WITHIN THIS PLAN SET AND THE WRITTEN PROJECT SPECIFICATIONS. IT IS NOT THE ENGINEER'S INTENT THAT ANY SINGLE PLAN SHEET IN THIS SET OF DOCUMENTS FULLY DEPICT ALL WORK ASSOCIATED WITH THIS PROJECT.

REVISION #	DATE	DESCRIPTION
NO. 1	09/20/2022	COB - PLANNING COMMISSION RESUBMITTAL
NO. 2	12/02/2022	COB - PLANNING COMMISSION RESUBMITTAL
NO. 3	12/20/2022	COB - PLANNING COMMISSION RESUBMITTAL

MATTHEW W. BRYAN — REGISTERED ENGINEER — AGRICULTURE — SUMNER COUNTY — BRIGHAM, NC — STATE OF TENNESSEE
12/20/2022

PRELIMINARY PLAN
FOR:
AMELIA - 310 WILSON PIKE
CITY OF BRENTWOOD
WILLIAMSON COUNTY, TENNESSEE

M2 GROUP
P.O. BOX 848
FRANKLIN, TN 37065
615.406.3415 / WWW.M2GROUPLLC.COM

COVER SHEET

DRAWN BY: JWM
CHECKED BY: MSC
DATE: DECEMBER, 2022
PROJECT NO.: 22-082

SHEET NUMBER:
C0.0

310 WP - COVER SHEET.DWG / Tuesday, December 20, 2022 8:07:33 AM

WATERWAY NATURAL AREA BUFFER NOTE:

THERE SHALL BE NO CLEARING, GRADING, CONSTRUCTION, OR DISTURBANCE OF VEGETATION WITHIN THE WATERWAY NATURAL AREA, EXCEPT AS PERMITTED BY THE CITY OF BRENTWOOD.

LEGEND

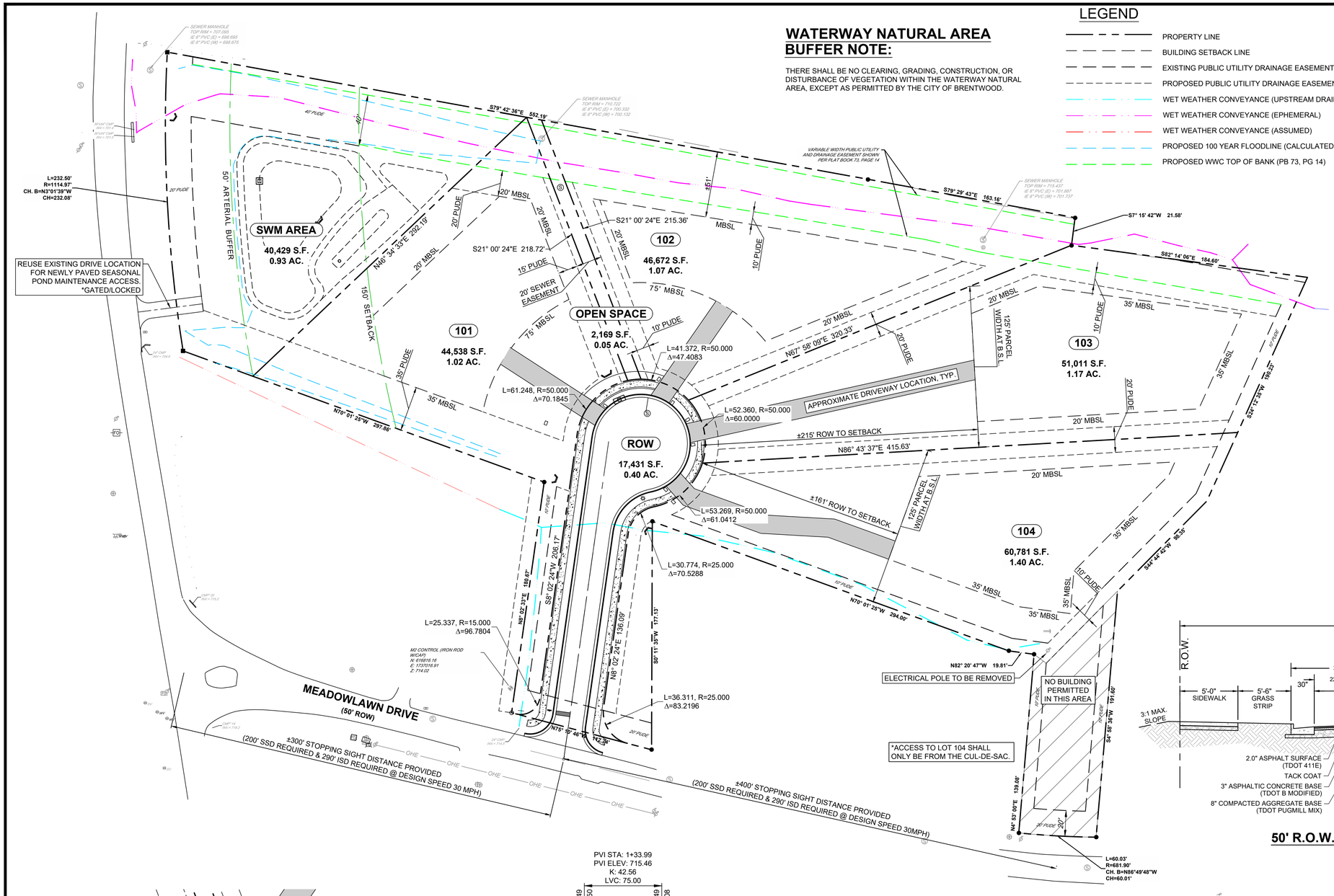
- PROPERTY LINE
- BUILDING SETBACK LINE
- EXISTING PUBLIC UTILITY DRAINAGE EASEMENT
- PROPOSED PUBLIC UTILITY DRAINAGE EASEMENT
- WET WEATHER CONVEYANCE (UPSTREAM DRAINAGE)
- WET WEATHER CONVEYANCE (EPHEMERAL)
- WET WEATHER CONVEYANCE (ASSUMED)
- PROPOSED 100 YEAR FLOODLINE (CALCULATED)
- PROPOSED WWC TOP OF BANK (PB 73, PG 14)

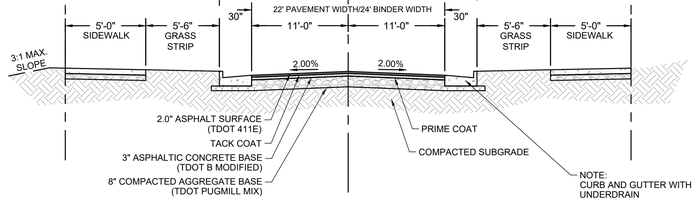
SITE DATA

PROJECT NAME:	AMELIA
LOT NUMBER:	011KA02200000015011J
ADDRESS:	310 WILSON PIKE
COUNTY:	WILLIAMSON
STATE:	TENNESSEE
EXISTING ZONING:	R-2
TOTAL SITE ACREAGE:	6.04 ± AC
TOTAL SITE SQUARE FOOTAGE:	263,031 ± SF
MINIMUM REQUIRED SETBACKS:	
FRONT YARD:	75'
REAR YARD:	30'
SIDE YARD NOT ABUTTING PUBLIC STREET	20'
SIDE YARD ABUTTING PUBLIC STREET	30'
FROM BOUNDARY LINE:	35'
MINIMUM LOT SIZE:	1 ACRE
MINIMUM LOT WIDTH AT SETBACK:	125'
BUILDING SQUARE FOOTAGE:	N/A
BUILDING HEIGHT:	2 STORY - 52 FEET TALL (SEC. 78-144)

LOT AREA TABLE

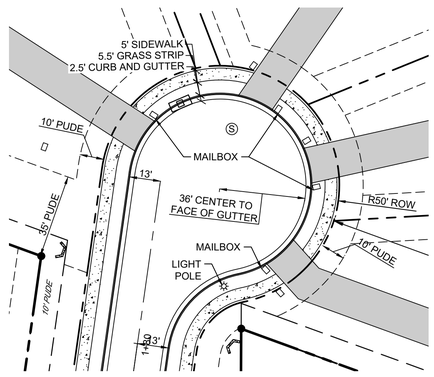
Lot #	Area (s.f.)	Area (ac.)
101	44,538	1.02
102	46,672	1.07
103	51,011	1.17
104	60,781	1.40
OPEN SPACE	2,169	0.05
ROW	17,431	0.40
SWM AREA	40,429	0.93

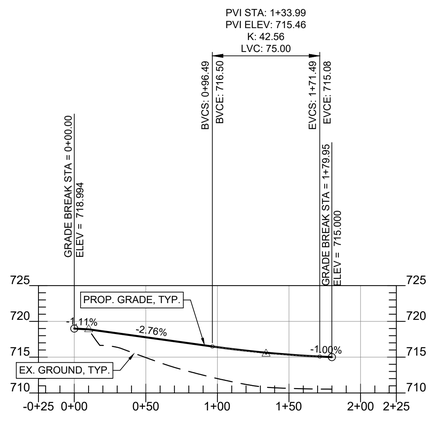




50' R.O.W. TYPICAL ROAD SECTION

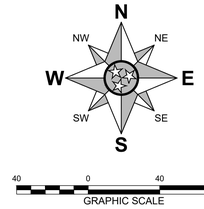
NOT TO SCALE





ALIGNMENT - PUBLIC ROAD CENTER PROFILE

SCALE H:1"=50'; V:1"=10'



40 0 40 80
GRAPHIC SCALE

Know what's below. Call before you dig.

REVISION #	DATE	DESCRIPTION
NO. 1	09/20/2022	COB - PLANNING COMMISSION RESUBMITTAL
NO. 2	12/02/2022	COB - PLANNING COMMISSION RESUBMITTAL
NO. 3	12/20/2022	COB - PLANNING COMMISSION RESUBMITTAL

MATTHEW W. BRYAN — REGISTERED ENGINEER — AGRICULTURE — SUMNER COUNTY — BRENTWOOD — WILLIAMSON COUNTY — STATE OF TENNESSEE — 12/20/2022

PRELIMINARY PLAN
FOR:
AMELIA - 310 WILSON PIKE
CITY OF BRENTWOOD
WILLIAMSON COUNTY, TENNESSEE

M2 GROUP
P.O. BOX 848
FRANKLIN, TN 37065
615.406.3415 / WWW.M2GROUPLLC.COM

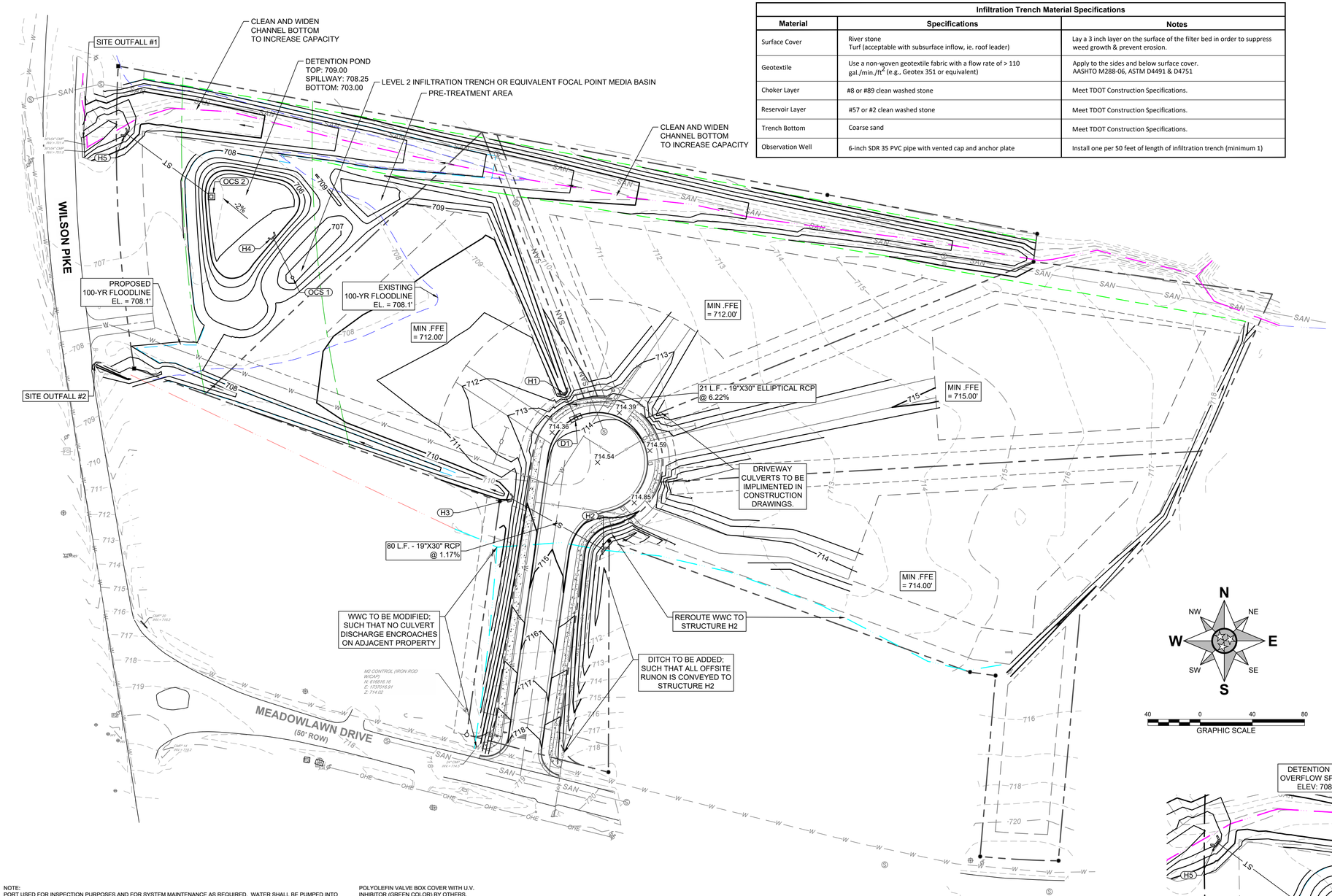
SITE LAYOUT PLAN

DATE: DECEMBER, 2022 | DRAWN BY: JWM
PROJECT NO. : 22-082 | CHECKED BY : MSC

SHEET NUMBER: C2.0

310 WP - SITE LAYOUT PLAN.DWG / Tuesday, December 20, 2022 8:07:47 AM

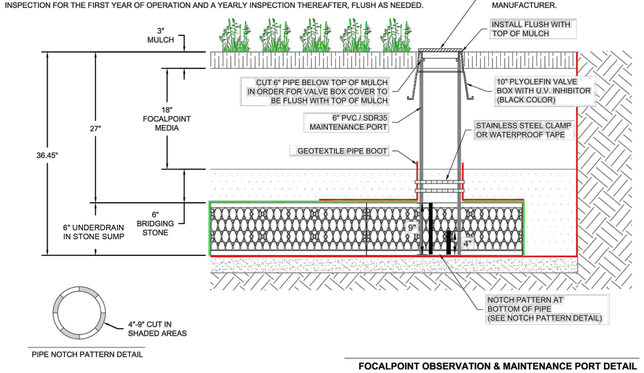
Infiltration Trench Material Specifications		
Material	**Specifications**	**Notes**
Surface Cover	River stone Turf (acceptable with subsurface inflow, ie. roof leader)	Lay a 3 inch layer on the surface of the filter bed in order to suppress weed growth & prevent erosion.
Geotextile	Use a non-woven geotextile fabric with a flow rate of > 110 gal./min./ft^2 (e.g., Geotex 351 or equivalent)	Apply to the sides and below surface cover. AASHTO M288-06, ASTM D4491 & D4751
Choker Layer	#8 or #89 clean washed stone	Meet TDOT Construction Specifications.
Reservoir Layer	#57 or #2 clean washed stone	Meet TDOT Construction Specifications.
Trench Bottom	Coarse sand	Meet TDOT Construction Specifications.
Observation Well	6-inch SDR 35 PVC pipe with vented cap and anchor plate	Install one per 50 feet of length of infiltration trench (minimum 1)

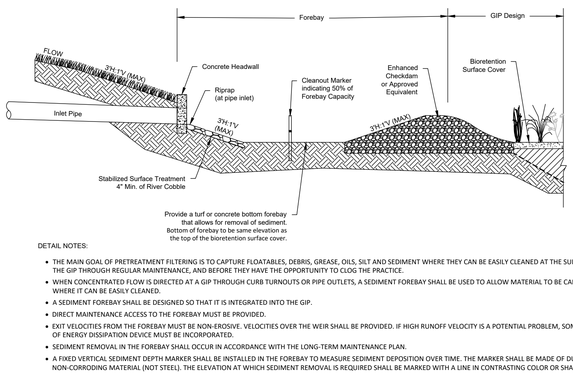


GRADING NOTES:

1. ALL PIPES UNDER EXISTING PAVED AREAS SHALL BE BACKFILLED TO TOP OF SUBGRADE WITH CRUSHED STONE UNLESS PUBLIC WORKS OR LOCAL UTILITY SPECIFICATIONS REQUIRE FLOWABLE FILL.
2. CONTRACTOR TO VERIFY ALL EXISTING UTILITY ELEVATIONS AND GRADES PRIOR TO BEGINNING WORK. NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES FROM THE PLANS.
3. CONTOUR LINES AND SPOT ELEVATIONS ARE THE RESULT OF DETAILED ENGINEERING GRADING DESIGN AND REFLECT A PLANNED INTENT WITH REGARD TO DRAINAGE AND MOVEMENT OF MATERIALS. SHOULD THE CONTRACTOR HAVE ANY QUESTIONS OF THE INTENT OR ANY PROBLEMS WITH CONTINUITY OF GRADES, THE ENGINEER SHOULD BE CONTACTED IMMEDIATELY PRIOR TO BEGINNING WORK.
4. NO TREES ARE TO BE REMOVED AND/OR VEGETATION DISTURBED EXCEPT AS NECESSARY FOR GRADING PURPOSES AND ONLY AS APPROVED BY OWNER'S REPRESENTATIVE.
5. TOPSOIL IS TO BE STRIPPED FROM ALL CUT AND FILL AREAS. IF POSSIBLE, STOCKPILE AND REDISTRIBUTE A MINIMUM OF 6" OF TOPSOIL OVER FINISHED LANDSCAPED AREAS UNLESS OTHERWISE STATED ON THE LANDSCAPE PLAN.
6. FILL MATERIAL REQUIRED SHALL MEET THE CRITERIA OF THE GEOTECHNICAL REPORT AND BE BORROWED AT THE CONTRACTOR'S EXPENSE.
7. ALL GRADED AREAS, INCLUDING SLOPES, ARE TO BE MULCHED AND SEEDED WITHIN 14 DAYS AFTER GRADING IS SUSPENDED OR COMPLETED.
8. GRADING OPERATIONS ARE NOT TO BEGIN UNTIL EROSION CONTROL HAS BEEN INSTALLED AS SHOWN ON DRAWINGS AND THE LAND DISTURBANCE PERMIT HAS BEEN ISSUED.
9. SILT BARRIERS SHALL BE CLEANED OF ACCUMULATED SEDIMENT OR REPLACED WHEN APPROXIMATELY 50% FILLED WITH SEDIMENT OR DIRECTED BY THE EROSION CONTROL SPECIALIST.
10. ALL DIMENSIONS AND LOCATIONS OF TEMPORARY EROSION CONTROL DEVICES SHALL BE SUBJECT TO ADJUSTMENT AS DESIGNATED BY THE OWNER'S REPRESENTATIVE.
11. WHEN THE TEMPORARY EROSION CONTROL DEVICES ARE NO LONGER NEEDED FOR THE INTENDED PURPOSE IN THE OPINION OF THE DESIGNATED SITE EROSION CONTROL SPECIALIST, THEY MAY BE REMOVED.
12. THE CONTRACTOR SHALL PROVIDE THE NECESSARY PROTECTION FOR TREES TO REMAIN IN ACCORDANCE WITH CITY SPECIFICATIONS. DO NOT OPERATE OR STORE HEAVY EQUIPMENT NOR HANDLE OR STORE MATERIALS WITHIN THE DRIP LINES OF TREES TO REMAIN.
13. CONTRACTOR TO PROVIDE AN AREA FOR CONCRETE WASH DOWN AND EQUIPMENT FUELING IN ACCORDANCE WITH METRO CP-10 AND CP-13, RESPECTIVELY. CONTRACTOR TO COORDINATE EXACT LOCATION WITH NPDES DEPARTMENT DURING PRECONSTRUCTION MEETING. GRADING PERMITTEE TO INCLUDE BMP'S DESIGNED TO CONTROL SITE WASTES SUCH AS DISCARDED BUILDING MATERIALS, CHEMICALS, LITTER, AND SANITARY WASTES THAT MY CAUSE ADVERSE IMPACTS TO WATER QUALITY. THE LOCATION OF AND / OR NOTES REFERRING TO SAID BMP'S SHALL BE SHOWN ON THE EPSC PLAN.
14. PRIOR TO FINAL ACCEPTANCE AND INSPECTION, SEDIMENT MUST BE REMOVED ALL NEW AND EXISTING STRUCTURES.
15. GC SHALL REVIEW AND FOLLOW THE SPECIFICATIONS OF METRO DEPARTMENT OF PUBLIC WORKS.
16. ALL SLOPES 3:1 AND STEEPER SHALL RECEIVE EROSION CONTROL MATTING (TENSAR ROLLMAX OR APPROVED EQUAL) OR SOD.
17. SIZE DRIVEWAY CULVERTS PER THE DESIGN CRITERIA SET FORTH BY THE METRO STORMWATER MANAGEMENT MANUAL (MINIMUM DRIVEWAY CULVERT IN METRO ROW IS 15" CMP).
18. METRO WATER SERVICES SHALL BE PROVIDED SUFFICIENT AND UNENCUMBERED INGRESS AND EGRESS AT ALL TIMES IN ORDER TO MAINTAIN, REPAIR, REPLACE AND INSPECT ANY STORMWATER FACILITIES WITHIN THE PROPERTY.
19. ANY EXCAVATION, FILL OR DISTURBANCE OF THE EXISTING GROUND ELEVATION MUST BE DONE IN ACCORDANCE WITH STORMWATER MANAGEMENT ORDINANCE NO. 78-840 AND APPROVED BY THE METROPOLITAN DEPARTMENT OF WATER SERVICES.

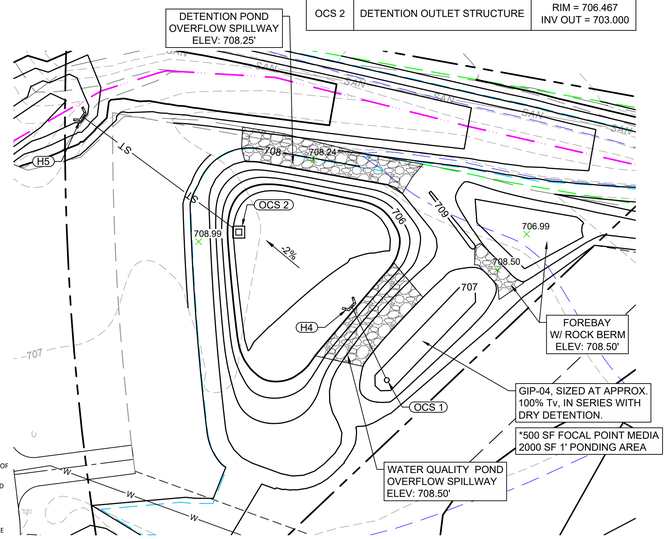
STRUCTURE TABLE		
NAME	INLET TYPE	DETAILS
D1	TRIPLE INLET	RIM = 713.688 INV OUT = 710.600
H1	HEADWALL	RIM = 713.403 INV IN = 709.300
H2	HEADWALL	RIM = 713.271 INV OUT = 711.000
H3	HEADWALL	RIM = 712.337 INV IN = 710.066
H4	HEADWALL	RIM = 706.633 INV IN = 704.500
H5	HEADWALL	RIM = 704.733 INV IN = 702.600
OCS 1	GIP OUTLET STRUCTURE	RIM = 707.202 INV OUT = 704.735
OCS 2	DETENTION OUTLET STRUCTURE	RIM = 706.467 INV OUT = 703.000





DETAIL NOTES:

- THE MAIN GOAL OF PRETREATMENT FILTERING IS TO CAPTURE FLOATABLES, DEBRIS, GREASE, OILS, SILT AND SEDIMENT WHERE THEY CAN BE EASILY CLEANED AT THE SURFACE OF THE GIP THROUGH REGULAR MAINTENANCE, AND BEFORE THEY HAVE THE OPPORTUNITY TO CLOG THE PRACTICE.
- WHEN CONCENTRATED FLOW IS DIRECTED AT A GIP THROUGH CURB TURNOUTS OR PIPE OUTLETS, A SEDIMENT FOREBAY SHALL BE USED TO ALLOW MATERIAL TO BE CAPTURED WHERE IT CAN BE EASILY CLEANED.
- A SEDIMENT FOREBAY SHALL BE DESIGNED SO THAT IT IS INTEGRATED INTO THE GIP.
- DIRECT MAINTENANCE ACCESS TO THE FOREBAY MUST BE PROVIDED.
- EXIT VELOCITIES FROM THE FOREBAY MUST BE NON-EROSIVE. VELOCITIES OVER THE WEIR SHALL BE PROVIDED. IF HIGH RUNOFF VELOCITY IS A POTENTIAL PROBLEM, SOME TYPE OF ENERGY DISSIPATION DEVICE MUST BE INCORPORATED.
- SEDIMENT REMOVAL IN THE FOREBAY SHALL OCCUR IN ACCORDANCE WITH THE LONG-TERM MAINTENANCE PLAN.
- A FIXED VERTICAL SEDIMENT DEPTH MARKER SHALL BE INSTALLED IN THE FOREBAY TO MEASURE SEDIMENT DEPOSITION OVER TIME. THE MARKER SHALL BE MADE OF DURABLE, NON-CORRODING MATERIAL (NOT STEEL). THE ELEVATION AT WHICH SEDIMENT REMOVAL IS REQUIRED SHALL BE MARKED WITH A LINE IN CONTRASTING COLOR OR SHADE.
- ALL DISTURBED AREAS MUST BE IMMEDIATELY STABILIZED AFTER CONSTRUCTION TO MINIMIZE EROSION.



STORMWATER MANAGEMENT AREA DETAIL

SCALE 1" = 30'

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MATTHEW W. BRYAN
REGISTERED ENGINEER
AGRICULTURAL & BIOSYSTEMS
SUMNER COUNTY
BRENTWOOD, WILLIAMSON COUNTY
STATE OF TENNESSEE
12/20/2022

PRELIMINARY PLAN
FOR:
AMELIA - 310 WILSON PIKE
CITY OF BRENTWOOD
WILLIAMSON COUNTY, TENNESSEE

M2 GROUP
P.O. BOX 848
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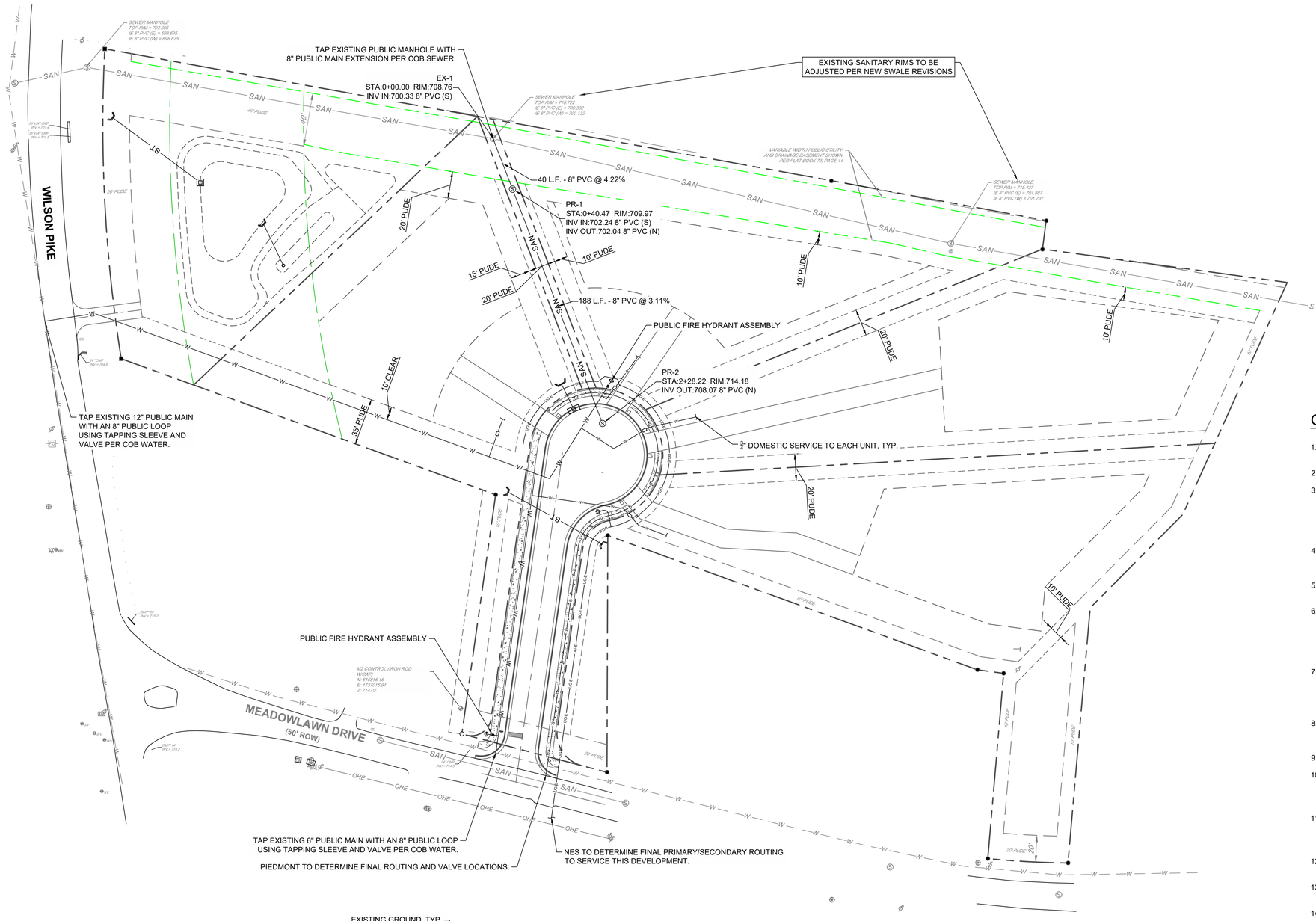
615.406.3415 / WWW.M2GROUPLLC.COM

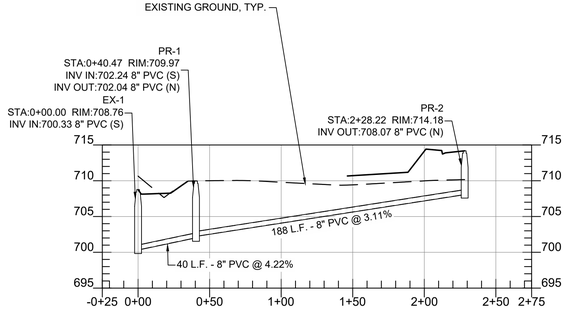
GRADING AND DRAINAGE PLAN

DATE : DECEMBER, 2022
PROJECT NO. : 22-082
DRAWN BY : JWM
CHECKED BY : MSC

SHEET NUMBER:
C3.0

310 WP - GRADING AND DRAINAGE PLAN.DWG / Tuesday, December 20, 2022 8:07:57 AM





ALIGNMENT - PUBLIC MAIN EXTENSION PROFILE

SCALE H:1"=50'; V:1"=10'

GENERAL UTILITY NOTES

1. WATER AND SEWER CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH ALL LOCAL CODES AND SPECIFICATIONS.
2. THE CONTRACTOR SHALL PAY ALL FEES AND OBTAIN ALL PERMITS.
3. ALL EXISTING UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE AND ARE BASED ON TOPOGRAPHIC SURVEYS AND RECORD DRAWINGS FROM THE FACILITY. ADDITIONAL UTILITIES MAY BE PRESENT. SHOULD UNCHARTED UTILITIES BE ENCOUNTERED DURING EXCAVATION OPERATIONS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER AS SOON AS POSSIBLE FOR INSTRUCTIONS.
4. THE CONTRACTOR SHALL NOTIFY THE TENNESSEE ONE-CALL SYSTEM, INC. (TOCS) AT 1-800-351-1111 AND ANY NON TOCS MEMBER UTILITY INDIVIDUALLY, AT LEAST 3 WORKING DAYS PRIOR TO ANY EXCAVATION AND/OR DEMOLITION.
5. MAINTAIN 10-FOOT HORIZONTAL AND 18-INCH VERTICAL SEPARATION BETWEEN SANITARY SEWER AND WATER SUPPLY LINES.
6. CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES INCLUDING IRRIGATION. TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN. REPAIR DAMAGE ACCORDING TO LOCAL STANDARDS AND AT THE CONTRACTOR'S EXPENSE. COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY. RELOCATE IRRIGATION LINES AS NECESSARY FOR CONSTRUCTION.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE SEQUENCING OF CONSTRUCTION FOR ALL UTILITY LINES SO THAT WATER LINES AND UNDERGROUND ELECTRIC DO NOT CONFLICT WITH SANITARY SEWERS OR STORM SEWERS. INSTALL UTILITIES PRIOR TO FINAL PAVEMENT CONSTRUCTION.
8. BACKFILL UTILITY TRENCHES UNDER PAVEMENT AREAS WITH CRUSHED STONE OR GRAVEL. BACKFILL UTILITY TRENCHES IN LAWN AREAS WITH SATISFACTORY FILL MATERIAL COMPACTED TO AT LEAST 98% OF MAXIMUM PER ASTM D698.
9. ADJUST ALL EXISTING CASTINGS TO MATCH PROPOSED FINISH GRADE.
10. THRUST BLOCK ALL WATERLINE FITTINGS WITH CONCRETE (2,500 P.S.I. MIN.) POURED AGAINST UNDISTURBED EARTH TO SUSTAIN 120 PERCENT TEST PRESSURE SPECIFIED. FORM THRUST BLOCKING SO AS TO NOT EMBED JOINTS, BOLTS, VALVE BOXES OR OPERATING NUTS.
11. PROVIDE VENTS AT HIGH POINTS IN WATERLINE AS NECESSARY FOR EXPELLING AIR DURING FILLING OF WATERLINE. PROVIDE BRONZE CORPORATION STOP FOR CLOSING VENT DURING TESTING AND SURVICE. LEAVE VENT COMPONENTS PLUGGED AND ATTACHED TO PIPE AFTER SUCCESSFUL TEST.
12. EXCESS MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR OFF THE OWNER'S PROPERTY AT NO ADDITIONAL COST IN A LEGAL MANNER.
13. ALL SANITARY SEWER PIPE SHALL BE CLASS SDR 35 PVC UNLESS NOTED OTHERWISE.
14. ALL WATER MAINS SHALL BE PRESSURE CLASS 350 DIP UNLESS NOTED OTHERWISE.
15. ALL FIRE HYDRANT ASSEMBLIES SHALL BE INSTALLED BETWEEN 3' AND 7' FROM PAVED SURFACE.
16. PROVIDE AS-BUILT DRAWINGS WHICH INCLUDE AT LEAST TWO DIMENSIONS TO EACH VALVE AND MANHOLE FROM KNOWN SITE FEATURES. DRAWINGS SHALL INCLUDE VERTICAL AND HORIZONTAL INFORMATION ON ALL NEW UTILITIES AS WELL AS EXIST. UTILITIES ENCOUNTERED.

Know what's below.
Call before you dig.

N NW NE W E SW SE S

40 0 40 80
GRAPHIC SCALE

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MATTHEW W. BRYAN
REGISTERED ENGINEER
AGRICULTURE
SUMNER COUNTY
ENGINEER
STATE OF TENNESSEE
12/20/2022

PRELIMINARY PLAN
FOR:
AMELIA - 310 WILSON PIKE
CITY OF BRENTWOOD
WILLIAMSON COUNTY, TENNESSEE

MA GROUP
P.O. BOX 848
FRANKLIN, TN 37065
615.406.3415 / WWW.M2GROUPLLC.COM

UTILITY PLAN

DRAWN BY : JWM
CHECKED BY : MSC
DATE : DECEMBER, 2022
PROJECT NO. : 22-082

SHEET NUMBER:
C5.0

310 WP - UTILITY PLAN.DWG / Tuesday, December 20, 2022 8:08:08 AM

310 Wilson Pike – Traffic Assessment

December 2022



Prepared By:

PO Box 848
Franklin, TN 37065

310 Wilson Pike
Drainage Calculations
December 2022

Enclosures:

- Vicinity Photos
- Photo Location Exhibit

Existing Intersection/Roadway Conditions

Location 1 is the intersection of Wilson Pike and Meadowlawn Drive. The intersection contains an irregular island that divides the right/left turn entry onto Meadowlawn Drive and the right/left turn exit onto Wilson Pike. The exit contains a stop sign with no striped stop bar.

Location 2 is the entrance to a lot southwest of the proposed Amelia development. Notable roadway deficiencies include a lack of striping. The proposed Amelia Development's entrance is approximately 132 LF east of this existing lot's driveway.

Location 3 is the proposed location for the Amelia development entrance. Notable roadway deficiencies include a lack of striping. The proposed Amelia Development's entrance is approximately 400 LF east of the Meadowlawn Drive/Wilson Pike intersection.

Location 4 is the "Roberts Property" existing access entrance. Stopping Sight Distance and Intersection Sight Distance are significantly impaired due to the existing road alignment of Wilson Pike. Primary access to the Amelia Development is intended to be from Meadowlawn.

Location 5 is the eastern most portion of the Amelia Development Meadowlawn Drive "Frontage". Notable roadway deficiencies include a lack of striping.

Conclusions

The proposed Amelia Development will have adequate stopping sight distance and adequate intersection sight distance. The proposed access entrance has adequate property line edge clearance and adequate clearance from adjacent lot entrances. The proposed entrance does not intersect Meadowlawn Drive at a 90 degree angle. This is an intentional design feature and is meant to provide adequate property line clearance between adjacent lots. The total deviation is less than 6 degrees.

Vicinity Photos

Location 1



North



South



East



West

Location 2



North



South



East



West

Location 3



North



South



East



West

Location 4



North



South



East



West

Location 5



North



South

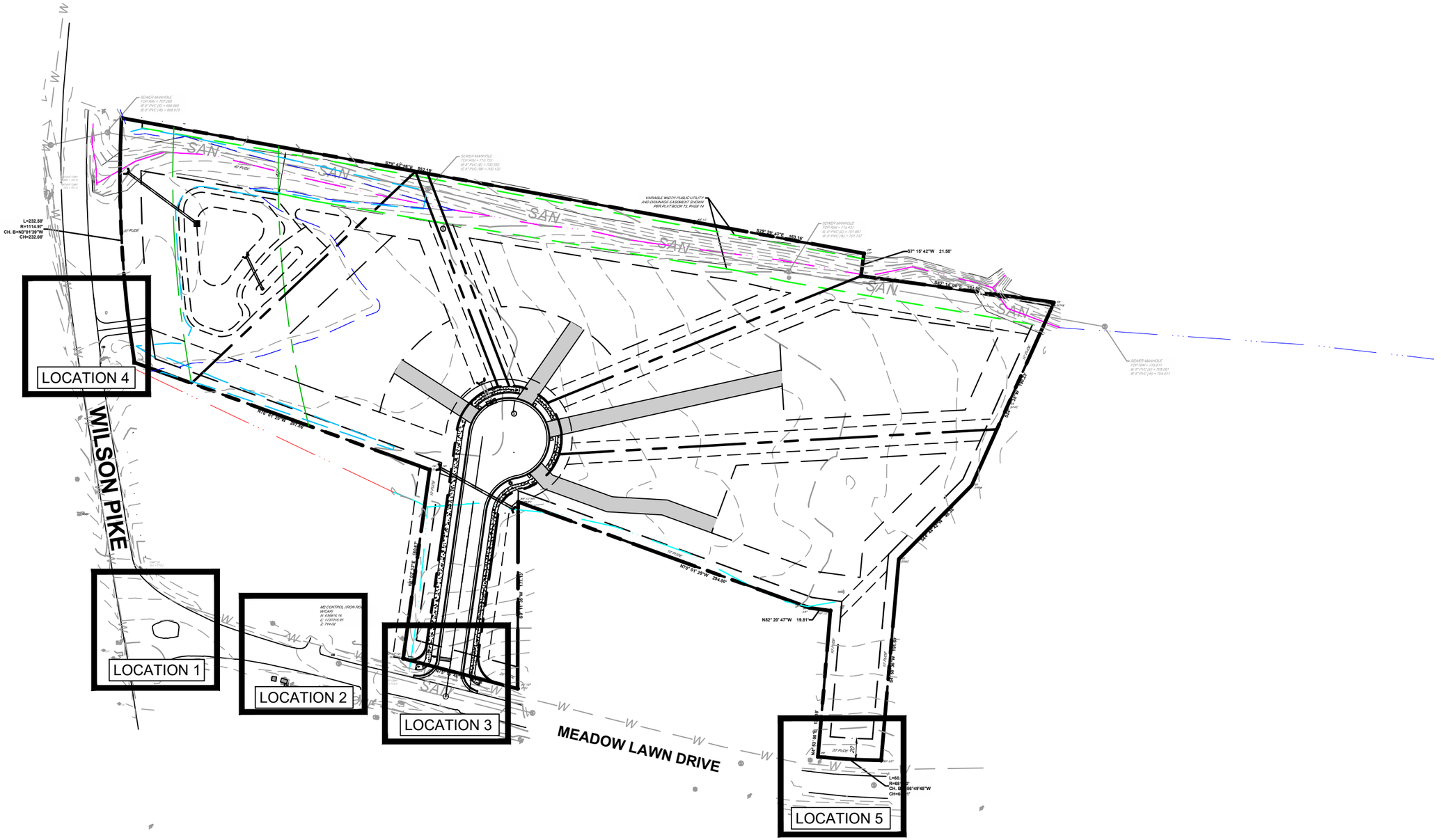


East



West

Photo Location Exhibit


LOCATION 4
LOCATION 1
LOCATION 2
LOCATION 3
LOCATION 5
WILSON PIKE
MEADOW LAWN DRIVE
SAN
W
L=232.58'
R=1114.97'
CH. B=N3°01'39"W
CH=232.05'
S72° 55' 42"E 553.19'
S72° 55' 42"E 163.16'
S37° 15' 42"W 21.58'
S58° 14' 06"E 193.65'
N75° 01' 23"W 284.60'
N82° 20' 47"W 19.81'
N7° 53' 00"E 1.00'
N82° 20' 47"W 19.81'
VARIABLE WIDTH PUBLIC UTILITY AND DRAINAGE EASEMENT, SHOWN PER PLAT BOOK 73, PAGE 14
SEWER MANHOLE
TOP=694.41
IE 8" PVC (S) = 683.91
IE 8" PVC (W) = 684.01
SEWER MANHOLE
TOP=694.41
IE 8" PVC (E

310 Wilson Pike – Preliminary Plan
Drainage Calculations

December 2022



Prepared By:

PO Box 848
Franklin, TN 37065

310 Wilson Pike
Drainage Calculations
December 2022

Enclosures:

- Pre-LID/Hydrology Map – MAP 1
- Post-LID/Hydrology Map – MAP 2
- Metro Nashville Pre-Development LID Spreadsheet
- Metro Nashville Post-Development LID Spreadsheet
- Forebay Volume Report
- Onsite Culvert/Swale Report
- Inlet Spread Analysis
- Hydrograph Report
- Downstream Analysis Report
- Geotechnical Report
- Hydrologic Determination
- USDA Web Soil Survey Report

Project Description

This project consists of constructing a 4-lot residential subdivision, public utility extensions, public road creation, and stormwater quantity and quality infrastructure. The pre-developed site consists of 1-lot of ±6 acres, with single family existing usage (approximately 75% tree canopy coverage). The topography of the site is gentle, averaging less than 5% slopes from east to west. The site currently conveys ±140 acres of upstream drainage area to two outfalls. Outfall 1 (108 acres) is a double culvert crossing beneath Wilson Pike; Outfall 2 (30 acres) is a single culvert crossing beneath Wilson Pike. The stormwater management approach is thus:

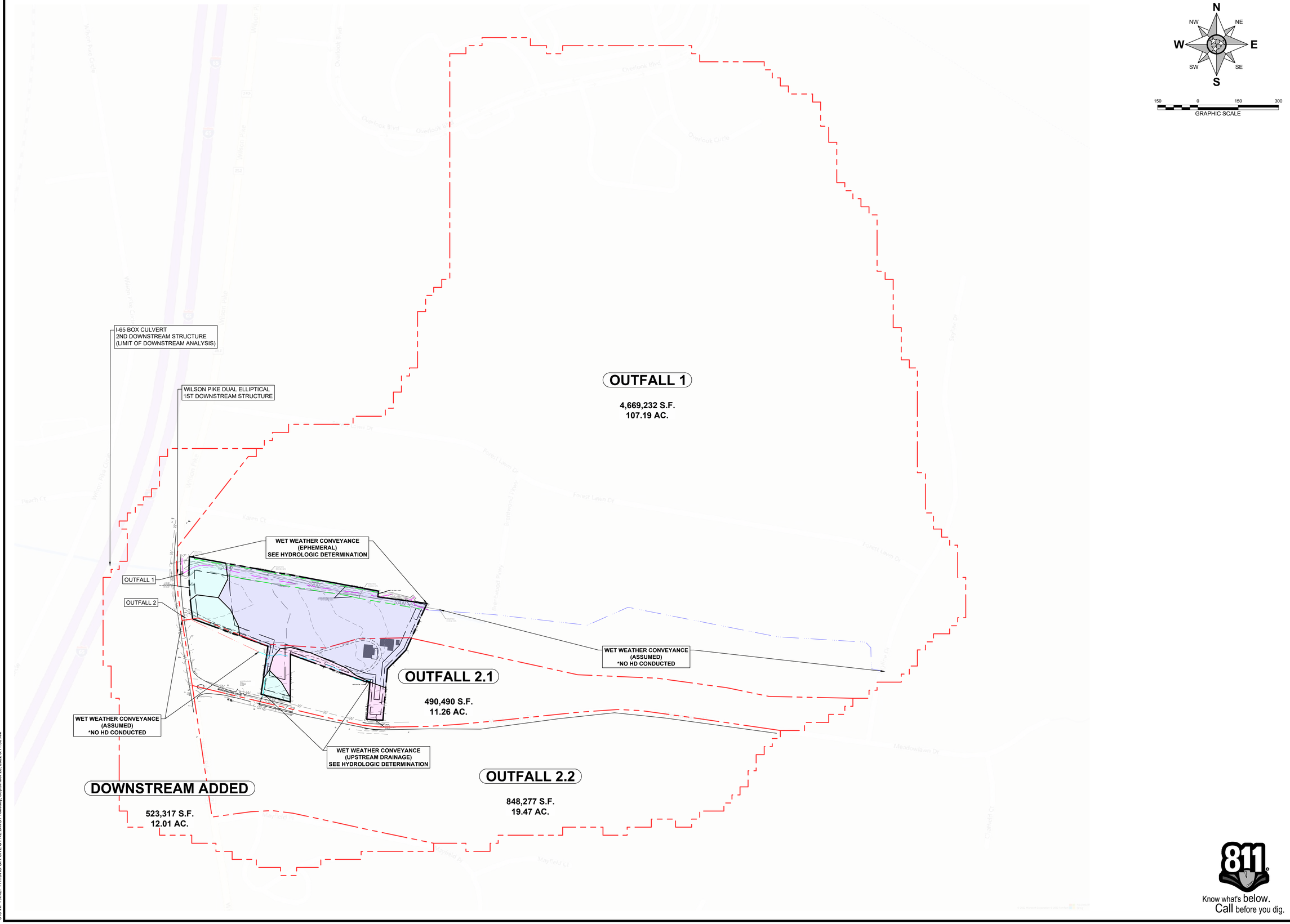
- Limit Site Disturbance and Treat to 80% TSS (Metro Nashville SWMM) all disturbed area
- Divert most of the offsite drainage into the existing wet weather conveyances
- Bypass less than 5% of all disturbed area, bypassing no proposed impervious areas
- Provide peak flow reduction for disturbed area (2yr Pre ≥ 25yr Post)

Low Impact Design Analysis and Water Volume Mitigation

Water quality requirements were calculated using the Metro BMP Manual and Water Quality Calculation Tool.

One (1) Infiltration Trench (or Focal Point equivalent) is being proposed to satisfy the ***80%*** target runoff reduction requirement. The pre-developed Curve Number (CN) for the site is ***62.6***. With the proposed GIP for the development, the post-development CN is ***72.8***. Detention has been provided to further reduce the peak flows from the site. Hydrographs have been provided to summarize the peak-flows for each required storm event. Infiltration Trench / Focal Point has been sized for 100% of the treatment volume required. All remaining storage and detention practices are to be performed by the downstream dry detention basin.

Pre-LID Map – MAP 1



REVISION #	DATE	DESCRIPTION

DRAINAGE EXHIBITS FOR: 310 WILSON PIKE

CITY OF BRENTWOOD
WILLIAMSON COUNTY, TENNESSEE

M2 GROUP
P.O. BOX 848
FRANKLIN, TN 37065
615.406.3415 / WWW.M2GROUPLLC.COM

OFFSITE DRAINAGE EXHIBIT

DATE :	PROJECT NO. :	DRAWN BY :	CHECKED BY :
SEPTEMBER, 2022	--	JWM	MWB

SHEET NUMBER:

DR-1

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

310 WP - XREF - HYDRO OFFSITE & PRE.DWG / Tuesday, September 20, 2022 8:11:59 AM

Post-Development Map – MAP 2



CATCHMENT AREA TABLE	
CATCHMENT	AREA
ALL HOMES/ IA MISC.	3.31 AC 144307 SF
IA TO GIP	0.40 AC 17422 SF
TURF A/B BYPASS	1.39 AC 60513 SF
TURF B BYPASS	0.23 AC 10026 SF
TURF C BYPASS	0.03 AC 1429 SF
TURF C BYPASS (1)	0.04 AC 1550 SF
TURF C BYPASS (2)	0.25 AC 10773 SF
TURF C TO GIP	0.39 AC 17011 SF

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

REVISION #	DATE	DESCRIPTION

DRAINAGE EXHIBITS
FOR:
310 WILSON PIKE
CITY OF BRENTWOOD
WILLIAMSON COUNTY, TENNESSEE

M2 GROUP
P.O. BOX 848
FRANKLIN, TN 37065
615.406.3415 / WWW.M2GROUPLLC.COM

POST DEVELOPMENT LID EXHIBIT

DATE : SEPTEMBER, 2022
PROJECT NO. : —
DRAWN BY : JWM
CHECKED BY : MWB

SHEET NUMBER:
DR-2

310 WP - XREF - HYDRO & LID.DWG / Sunday, December 4, 2022 8:06:06 PM



Know what's below.
Call before you dig.

811

SHEET NUMBER: DR-3	**SLOPE ANALYSIS EXHIBIT**	M2 GROUP P.O. BOX 848 FRANKLIN, TN 37065 615.406.3415 / WWW.M2GROUPLLC.COM	DRAINAGE EXHIBITS FOR: **310 WILSON PIKE** CITY OF BRENTWOOD WILLIAMSON COUNTY, TENNESSEE
DATE : SEPTEMBER, 2022	DRAWN BY : JWM		
PROJECT NO. : --	CHECKED BY : MWB		

REVISION #	DATE	DESCRIPTION

Metro Nashville Pre-Development LID Spreadsheet

MWS LID Site Design Tool

Project Name	
Parcel Identification #	
Engineer	

Combined Sewer Overlay?	
Pre or Post Development Worksheet?	
Target Runoff Reduction Requirement =	80%

See Section 7.2.1 in Metro SWMM Volume 1

Capture Depth=	1	inch
Cistern Capture=		% Total Vol captured

From Cistern Design Tool

MWS LID SITE DESIGN TOOL VERSION 11 - July 12, 2021

Instructions

1. Input cells are in Green.
2. Break Site Into Sub areas by single soils and land use type combinations.
3. Assign a code to each subarea and input the code into column C. Descriptions can be entered in column B.
4. Input the subarea drainage area in column D.
5. Input treatment credit code (Column F) for the first tier of treatments
6. Input additional treatment code as desired (Column I) for any subarea
7. Adjust until you reach 80% reduction or better (Cell N turns green if 80% reached).
8. If 80% reduction is not reached and it has been decided that GIPs in series is an option use Step 3a to place GIPs in series . Their respective treatment volumes are calculated in column W. This volume is separate from GIPs upstream.

Percent Volume Reduction-Based Calculations

Step 1: Lay out the site and divide it into sub-areas each of a specific land use type and Rv.					Step 1a: Change any basic land use types through reforesting, permeable pavement or green roofs - or through use of open space for a GIP.			Step 2: Treat impervious areas through the use of sheet flow			Step 3: Treat primarily impervious areas with structural GIPs either in series with Step 3 intrinsic GIPs or alone downstream from Steps 1 and 2 land use.			Size controls for Step 3 by assigning structure ID to each sub-area, combining sub-areas into one structure if appropriate.			Step 3a Treatment in Series Calculation - Place Structural GIPs in same row as upstream GIP			Size controls for Step 3a in series by assigning a sequential structure ID to each area treated in series.				
Step1 Basic Land Use					Step 1a Modified LU			Step 2 Intrinsic GIPs			Step 3 Structural GIPs			Structure ID	IA Capture		Step 3a Structural GIPs in Series			Structure ID	IA Capture		Nominal Curve Number	
Subarea	Description	Code	Acres	Base Rv	Code	Acres	Eff Rv1	Code	Trtmt VR1	Eff Rv2	Code	Trtmt VR2	Eff Rv3	Site GIP ID Number	Tv Multiplier	Tv (cf)	Code	Trtmt VR2	Eff Rv4	Site GIP ID Number	Tv Multiplier	Structure in Series Tv (cf)	Step 1	Step 1A
1	TURF A	TA	0.45	0.15	TA	0.45	0.15		0	0.15		0	0.15		0.00	-		0	0.15		0.00	-	49	49
2	TURF B	TB	1.1	0.18	TB	1.1	0.18		0	0.18		0	0.18		0.00	-		0	0.18		0.00	-	69	69
3	TURF C	TC	0.31	0.20	TC	0.31	0.20		0	0.20		0	0.20		0.00	-		0	0.20		0.00	-	79	79
4				0.00		0	0.00		0	0.00		0	0.00		0.00	-		0	0.00		0.00	-	0	0
5	FOREST A	FA	0.24	0.02	FA	0.24	0.02		0	0.02		0	0.02		0.00	-		0	0.02		0.00	-	36	36
6	FOREST B	FB	3.1	0.03	FB	3.1	0.03		0	0.03		0	0.03		0.00	-		0	0.03		0.00	-	60	60
7	FOREST C	FC	0.84	0.04	FC	0.84	0.04		0	0.04		0	0.04		0.00	-		0	0.04		0.00	-	73	73
8				0.00		0	0.00		0	0.00		0	0.00		0.00	-		0	0.00		0.00	-	0	0
9				0.00		0	0.00		0	0.00		0	0.00		0.00	-		0	0.00		0.00	-	0	0
10				0.00		0	0.00		0	0.00		0	0.00		0.00	-		0	0.00		0.00	-	0	0
11				0.00		0	0.00		0	0.00		0	0.00		0.00	-		0	0.00		0.00	-	0	0
12				0.00		0	0.00		0	0.00		0	0.00		0.00	-		0	0.00		0.00	-	0	0
13				0.00		0	0.00		0	0.00		0	0.00		0.00	-		0	0.00		0.00	-	0	0
14				0.00		0	0.00		0	0.00		0	0.00		0.00	-		0	0.00		0.00	-	0	0
15				0.00		0	0.00		0	0.00		0	0.00		0.00	-		0	0.00		0.00	-	0	0
16				0.00		0	0.00		0	0.00		0	0.00		0.00	-		0	0.00		0.00	-	0	0
17				0.00		0	0.00		0	0.00		0	0.00		0.00	-		0	0.00		0.00	-	0	0
18				0.00		0	0.00		0	0.00		0	0.00		0.00	-		0	0.00		0.00	-	0	0
47				0.00		0	0.00		0	0.00		0	0.00		0.00	-		0	0.00		0.00	-	0	0
76				0.00		0	0.00		0	0.00		0	0.00		0.00	-		0	0.00		0.00	-	0	0
105				0.00		0	0.00		0	0.00		0	0.00		0.00	-		0	0.00		0.00	-	0	0
134				0.00		0	0.00		0	0.00		0	0.00		0.00	-		0	0.00		0.00	-	0	0
162				0.00		0	0.00		0	0.00		0	0.00		0.00	-		0	0.00		0.00	-	0	0
191				0.00		0	0.00		0	0.00		0	0.00		0.00	-		0	0.00		0.00	-	0	0
				Weighted Rv			0.076			0.076			0.076		Step 3 Tv Total	0				0.076		Final Tv Total	0	62.6	62.6
			6.04	Total Area=		6.04	0.46			0.46			0.46							0.46					
				% Removal			92.4%		% Removal	92.4%		% Removal	92.4%		% Removal	92.4%		% Removal		92.4%					

↑ THIS CELL WILL TURN GREEN WHEN TARGET RUNOFF REDUCTION MET ↑

Project Name	0
Parcel Identification #	0

PreDev CN	

METRO RAINFALL	
Return Period	Rainfall (in)
2-yr	3.39
5-yr	4.50
10-yr	5.23
25-yr	6.16
50-yr	6.85
100-yr	7.53

Curve Number Instructions

1. Enter the composite pre-development curve number (CN), to the left, for the wat
2. The tool automatically assigns curve numbers for each subarea based on MWS po
3. Curve numbers are shown for both Step 1 and Step 1a in columns **X** and **Y** as well
4. The ratio of the **Tv provided/Tv required** for each GIP (as a %) is entered in colum
5. Select the rainfall in **Cell AC19** based on return periods shown in table to left.
6. Adjusted curve numbers for each subarea are shown in the table below in column this value is greater than the composite Pre-Development CN then **Cell AK60** will stat
7. These are the curve numbers to be used in flood control design calculations. Each then the composite pre-development curve number and composite adjusted curve n
8. If there are GIPs in series, use the 2nd table to calculate the additional reduction i

Adjusted Curve Number Calculations (Step 3 only)

No Controls				With Structural Controls &Treatment Vol Remov					
Original CN	Rainfall (in	S (in)	Q (in)	Tv required (cu ft)	Tv provided (%)	RO Vol Red (cu ft)	Q reduction (in)	Q adj (in)	Adjusted CN
49.0	7.53	10.408	1.87	-			0	1.872	49.0
69.0	7.53	4.493	3.95	-			0	3.953	69.0
79.0	7.53	2.658	5.07	-			0	5.072	79.0
0.0	7.53	-	-	-			0	-	0.0
36.0	7.53	17.778	0.73	-			0	0.726	36.0
60.0	7.53	6.667	2.99	-			0	2.985	60.0
73.0	7.53	3.699	4.40	-			0	4.396	73.0
0.0	7.53	-	-	-			0	-	0.0
0.0	7.53	-	-	-			0	-	0.0
0.0	7.53	-	-	-			0	-	0.0
0.0	7.53	-	-	-			0	-	0.0
0.0	7.53	-	-	-			0	-	0.0
0.0	7.53	-	-	-			0	-	0.0
0.0	7.53	-	-	-			0	-	0.0
0.0	7.53	-	-	-			0	-	0.0
0.0	7.53	-	-	-			0	-	0.0
0.0	7.53	-	-	-			0	-	0.0
0.0	7.53	-	-	-			0	-	0.0
0.0	7.53	-	-	-			0	-	0.0
62.6	7.53	5.962	3.27	0			0	3.266	62.6

Note that this assumes the same Pre- and Post-developpment Time of Concentrations and Drainage Areas

DETENTION RE

MWS LID Site Design Tool

MWS LID SITE DESIGN TOOL VERSION 11 - July 12, 2021

ershed.
licy matching the land uses of Steps 1 and 1a to curve numbers (see column **G COVER SHEET**).
as the composite curve number for the site in line 59 of those columns.
n **AG** (e.g. if only required Tv is provided then this should be 100%).

AK, as well as the composite adjusted curve number in **Cell AK59**, for the rainfall selected. If
te "Detention Required"
watershed must be calculated independently. If there are multiple watersheds for the project,
umber should be compared for each watershed to determine if detention is required.
n CN.

Adjusted Curve Number Calculations (Step 3a added)

ved		No Controls				With Structural Controls &Treatment Vol Removed						
Difference	Adjusted CN (St 3)	Rainfall (in)	S (in)	Q (in)	Tv required (cu ft)	Tv provided (%)	RO Vol Red (cu ft)	Q reduction (in)	Q adj (in)	Adjusted CN	Difference
0.0	**49.0**	7.53	10.408	1.87	-			0	1.872	**49.0**	0.0
0.0	**69.0**	7.53	4.493	3.95	-			0	3.953	**69.0**	0.0
0.0	**79.0**	7.53	2.658	5.07	-			0	5.072	**79.0**	0.0
0.0	**0.0**	7.53	-	-	-			0	-	**0.0**	0.0
0.0	**36.0**	7.53	17.778	0.73	-			0	0.726	**36.0**	0.0
0.0	**60.0**	7.53	6.667	2.99	-			0	2.985	**60.0**	0.0
0.0	**73.0**	7.53	3.699	4.40	-			0	4.396	**73.0**	0.0
0.0	**0.0**	7.53	-	-	-			0	-	**0.0**	0.0
0.0	**0.0**	7.53	-	-	-			0	-	**0.0**	0.0
0.0	**0.0**	7.53	-	-	-			0	-	**0.0**	0.0
0.0	**0.0**	7.53	-	-	-			0	-	**0.0**	0.0
0.0	**0.0**	7.53	-	-	-			0	-	**0.0**	0.0
0.0	**0.0**	7.53	-	-	-			0	-	**0.0**	0.0
0.0	**0.0**	7.53	-	-	-			0	-	**0.0**	0.0
0.0	**0.0**	7.53	-	-	-			0	-	**0.0**	0.0
0.0	**0.0**	7.53	-	-	-			0	-	**0.0**	0.0
0.0	**0.0**	7.53	-	-	-			0	-	**0.0**	0.0
0.0	**0.0**	7.53	-	-	-			0	-	**0.0**	0.0
0.0	**0.0**	7.53	-	-	-			0	-	**0.0**	0.0
0.0	**0.0**	7.53	-	-	-			0	-	**0.0**	0.0
0.0	**0.0**	7.53	-	-	-			0	-	**0.0**	0.0
0.0	**0.0**	7.53	-	-	-			0	-	**0.0**	0.0
0.0	**62.6**	7.53	5.962	3.27	0			0	3.266	**62.6**	0.0
EQ										DETENTION REQ	

Note that this assumes the same Pre- and Post-developpment Time of Concentrations and Drainage Areas

Metro Nashville Post-Development LID Spreadsheet

MWS LID Site Design Tool

Project Name	
Parcel Identification #	
Engineer	

Combined Sewer Overlay?	
Pre or Post Development Worksheet?	
Target Runoff Reduction Requirement =	80%

See Section 7.2.1 in Metro SWMM Volume 1

Capture Depth=	1	inch
Cistern Capture=		% Total Vol captured

From Cistern Design Tool

MWS LID SITE DESIGN TOOL VERSION 11 - July 12, 2021

Instructions

1. Input cells are in Green.
2. Break Site Into Sub areas by single soils and land use type combinations.
3. Assign a code to each subarea and input the code into column C. Descriptions can be entered in column B.
4. Input the subarea drainage area in column D.
5. Input treatment credit code (Column F) for the first tier of treatments
6. Input additional treatment code as desired (Column I) for any subarea
7. Adjust until you reach 80% reduction or better (Cell N turns green if 80% reached).
8. If 80% reduction is not reached and it has been decided that GIPs in series is an option use Step 3a to place GIPs in series . Their respective treatment volumes are calculated in column W. This volume is separate from GIPs upstream.

Percent Volume Reduction-Based Calculations

Step 1: Lay out the site and divide it into sub-areas each of a specific land use type and Rv.					Step 1a: Change any basic land use types through reforesting, permeable pavement or green roofs - or through use of open space for a GIP.			Step 2: Treat impervious areas through the use of sheet flow			Step 3: Treat primarily impervious areas with structural GIPs either in series with Step 3 intrinsic GIPs or alone downstream from Steps 1 and 2 land use.			Size controls for Step 3 by assigning structure ID to each sub-area, combining sub-areas into one structure if appropriate.			Step 3a Treatment in Series Calculation - Place Structural GIPs in same row as upstream GIP			Size controls for Step 3a in series by assigning a sequential structure ID to each area treated in series.				
Step1 Basic Land Use					Step 1a Modified LU			Step 2 Intrinsic GIPs			Step 3 Structural GIPs			Structure ID	IA Capture		Step 3a Structural GIPs in Series			Structure ID	IA Capture		Nominal Curve Number	
Subarea	Description	Code	Acres	Base Rv	Code	Acres	Eff Rv1	Code	Trtmt VR1	Eff Rv2	Code	Trtmt VR2	Eff Rv3	Site GIP ID Number	Tv Multiplier	Tv (cf)	Code	Trtmt VR2	Eff Rv4	Site GIP ID Number	Tv Multiplier	Structure in Series Tv (cf)	Step 1	Step 1A
1				0.00		0	0.00		0	0.00		0	0.00		0.00	-		0	0.00		0.00	-	0	0
2	IMPERVIOUS			0.00		0	0.00		0	0.00		0	0.00		0.00	-		0	0.00		0.00	-	0	0
3	LOT 1	IA	0.25	0.95	IA	0.25	0.95		0	0.95	I2	0.9	0.10		1.25	1,078		0	0.10		0.00	-	98	98
4	LOT 2	IA	0.25	0.95	IA	0.25	0.95		0	0.95	I2	0.9	0.10		1.25	1,078		0	0.10		0.00	-	98	98
5	LOT 3	IA	0.25	0.95	IA	0.25	0.95		0	0.95	I2	0.9	0.10		1.25	1,078		0	0.10		0.00	-	98	98
6	LOT 4	IA	0.25	0.95	IA	0.25	0.95		0	0.95	I2	0.9	0.10		1.25	1,078		0	0.10		0.00	-	98	98
7	ROW	IA	0.4	0.95	IA	0.4	0.95		0	0.95	I2	0.9	0.10		1.25	1,724		0	0.10		0.00	-	98	98
8				0.00		0	0.00		0	0.00		0	0.00		0.00	-		0	0.00		0.00	-	0	0
9				0.00		0	0.00		0	0.00		0	0.00		0.00	-		0	0.00		0.00	-	0	0
10				0.00		0	0.00		0	0.00		0	0.00		0.00	-		0	0.00		0.00	-	0	0
11	PERVIOUS			0.00		0	0.00		0	0.00		0	0.00		0.00	-		0	0.00		0.00	-	0	0
12	TURF B	TB	2.31	0.18	TB	2.31	0.18		0	0.18	I2	0.9	0.02		1.25	1,887		0	0.02		0.00	-	69	69
13	TURF C	TC	0.39	0.20	TC	0.39	0.20		0	0.20	I2	0.9	0.02		1.25	354		0	0.02		0.00	-	79	79
14				0.00		0	0.00		0	0.00		0	0.00		0.00	-		0	0.00		0.00	-	0	0
15				0.00		0	0.00		0	0.00		0	0.00		0.00	-		0	0.00		0.00	-	0	0
16	TURF A BYPASS	TA	0.24	0.15	TA	0.24	0.15		0	0.15		0	0.15		0.00	-		0	0.15		0.00	-	49	49
17	TURF B BYPASS	TB	1.38	0.18	TB	1.38	0.18		0	0.18		0	0.18		0.00	-		0	0.18		0.00	-	69	69
18	TURF C BYPASS	TC	0.32	0.20	TC	0.32	0.20		0	0.20		0	0.20		0.00	-		0	0.20		0.00	-	79	79
47				0.00		0	0.00		0	0.00		0	0.00		0.00	-		0	0.00		0.00	-	0	0
76				0.00		0	0.00		0	0.00		0	0.00		0.00	-		0	0.00		0.00	-	0	0
105				0.00		0	0.00		0	0.00		0	0.00		0.00	-		0	0.00		0.00	-	0	0
134				0.00		0	0.00		0	0.00		0	0.00		0.00	-		0	0.00		0.00	-	0	0
162				0.00		0	0.00		0	0.00		0	0.00		0.00	-		0	0.00		0.00	-	0	0
191				0.00		0	0.00		0	0.00		0	0.00		0.00	-		0	0.00		0.00	-	0	0
				Weighted Rv			0.360			0.360			0.090		Step 3 Tv Total	8,275			0.090		Final Tv Total	8,275	76.1	76.1
			6.04	Total Area=		6.04	2.17			2.17			0.54						0.54					
				% Removal			64.0%			64.0%			91.0%						91.0%					

↑ THIS CELL WILL TURN GREEN WHEN TARGET RUNOFF REDUCTION MET ↑

Project Name	0
Parcel Identification #	0

PreDev CN	62.6

METRO RAINFALL	
Return Period	Rainfall (in)
2-yr	3.39
5-yr	4.50
10-yr	5.23
25-yr	6.16
50-yr	6.85
100-yr	7.53

Curve Number Instructions

1. Enter the composite pre-development curve number (CN), to the left, for the wat
2. The tool automatically assigns curve numbers for each subarea based on MWS po
3. Curve numbers are shown for both Step 1 and Step 1a in columns **X** and **Y** as well
4. The ratio of the **Tv provided/Tv required** for each GIP (as a %) is entered in colum
5. Select the rainfall in **Cell AC19** based on return periods shown in table to left.
6. Adjusted curve numbers for each subarea are shown in the table below in column this value is greater than the composite Pre-Development CN then **Cell AK60** will stat
7. These are the curve numbers to be used in flood control design calculations. Each then the composite pre-development curve number and composite adjusted curve n
8. If there are GIPs in series, use the 2nd table to calculate the additional reduction i

Adjusted Curve Number Calculations (Step 3 only)

No Controls				With Structural Controls &Treatment Vol Remov					
Original CN	Rainfall (in	S (in)	Q (in)	Tv required (cu ft)	Tv provided (%)	RO Vol Red (cu ft)	Q reduction (in)	Q adj (in)	Adjusted CN
0.0	7.53	-	-	-			0	-	0.0
0.0	7.53	-	-	-			0	-	0.0
98.0	7.53	0.204	7.29	1078	100.0%	1078	1.1875	6.103	87.9
98.0	7.53	0.204	7.29	1078	100.0%	1078	1.1875	6.103	87.9
98.0	7.53	0.204	7.29	1078	100.0%	1078	1.1875	6.103	87.9
98.0	7.53	0.204	7.29	1078	100.0%	1078	1.1875	6.103	87.9
98.0	7.53	0.204	7.29	1724	100.0%	1724	1.1875	6.103	87.9
0.0	7.53	-	-	-			0	-	0.0
0.0	7.53	-	-	-			0	-	0.0
0.0	7.53	-	-	-			0	-	0.0
0.0	7.53	-	-	-			0	-	0.0
69.0	7.53	4.493	3.95	1887	100.0%	1887	0.225	3.728	66.9
79.0	7.53	2.658	5.07	354	100.0%	354	0.25	4.822	76.8
0.0	7.53	-	-	-			0	-	0.0
0.0	7.53	-	-	-			0	-	0.0
49.0	7.53	10.408	1.87	-			0	1.872	49.0
69.0	7.53	4.493	3.95	-			0	3.953	69.0
79.0	7.53	2.658	5.07	-			0	5.072	79.0
0.0	7.53	-	-	-			0	-	0.0
0.0	7.53	-	-	-			0	-	0.0
0.0	7.53	-	-	-			0	-	0.0
0.0	7.53	-	-	-			0	-	0.0
0.0	7.53	-	-	-			0	-	0.0
0.0	7.53	-	-	-			0	-	0.0
76.1	7.53	3.140	4.74	8275.4925			0.377442053	4.366	72.8

Note that this assumes the same Pre- and Post-developpment Time of Concentrations and Drainage Areas

DETENTION RE

MWS LID Site Design Tool

MWS LID SITE DESIGN TOOL VERSION 11 - July 12, 2021

ershed.
licy matching the land uses of Steps 1 and 1a to curve numbers (see column **G COVER SHEET**).
as the composite curve number for the site in line 59 of those columns.
n **AG** (e.g. if only required Tv is provided then this should be 100%).

AK, as well as the composite adjusted curve number in **Cell AK59**, for the rainfall selected. If
te "Detention Required"
watershed must be calculated independently. If there are multiple watersheds for the project,
umber should be compared for each watershed to determine if detention is required.
n CN.

Adjusted Curve Number Calculations (Step 3a added)

ved		No Controls				With Structural Controls &Treatment Vol Removed						
Difference	Adjusted CN (St 3)	Rainfall (in)	S (in)	Q (in)	Tv required (cu ft)	Tv provided (%)	RO Vol Red (cu ft)	Q reduction (in)	Q adj (in)	Adjusted CN	Difference
0.0	**0.0**	7.53	-	-	-			0	-	**0.0**	0.0
0.0	**0.0**	7.53	-	-	-			0	-	**0.0**	0.0
-10.1	**87.9**	7.53	1.371	6.10	-			0	6.103	**87.9**	0.0
-10.1	**87.9**	7.53	1.371	6.10	-			0	6.103	**87.9**	0.0
-10.1	**87.9**	7.53	1.371	6.10	-			0	6.103	**87.9**	0.0
-10.1	**87.9**	7.53	1.371	6.10	-			0	6.103	**87.9**	0.0
0.0	**0.0**	7.53	-	-	-			0	-	**0.0**	0.0
0.0	**0.0**	7.53	-	-	-			0	-	**0.0**	0.0
0.0	**0.0**	7.53	-	-	-			0	-	**0.0**	0.0
0.0	**0.0**	7.53	-	-	-			0	-	**0.0**	0.0
-2.1	**66.9**	7.53	4.938	3.73	-			0	3.728	**66.9**	0.0
-2.2	**76.8**	7.53	3.022	4.82	-			0	4.822	**76.8**	0.0
0.0	**0.0**	7.53	-	-	-			0	-	**0.0**	0.0
0.0	**0.0**	7.53	-	-	-			0	-	**0.0**	0.0
0.0	**49.0**	7.53	10.408	1.87	-			0	1.872	**49.0**	0.0
0.0	**69.0**	7.53	4.493	3.95	-			0	3.953	**69.0**	0.0
0.0	**79.0**	7.53	2.658	5.07	-			0	5.072	**79.0**	0.0
0.0	**0.0**	7.53	-	-	-			0	-	**0.0**	0.0
0.0	**0.0**	7.53	-	-	-			0	-	**0.0**	0.0
0.0	**0.0**	7.53	-	-	-			0	-	**0.0**	0.0
0.0	**0.0**	7.53	-	-	-			0	-	**0.0**	0.0
0.0	**0.0**	7.53	-	-	-			0	-	**0.0**	0.0
0.0	**0.0**	7.53	-	-	-			0	-	**0.0**	0.0
-3.3	**76.1**	7.53	3.140	4.74	0			0	4.744	**72.8**	-3.3
EQ										DETENTION REQ	

Note that this assumes the same Pre- and Post-developpment Time of Concentrations and Drainage Areas

Forebay Volume Report

Pond Report

Pond No. 5 - Forebay

Pond Data

Contours -User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 707.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	707.00	350	0	0
1.00	708.00	850	582	582
1.75	708.75	1,300	800	1,382

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 0.00	0.00	0.00	0.00
Span (in)	= 0.00	0.00	0.00	0.00
No. Barrels	= 0	0	0	0
Invert El. (ft)	= 0.00	0.00	0.00	0.00
Length (ft)	= 0.00	0.00	0.00	0.00
Slope (%)	= 0.00	0.00	0.00	n/a
N-Value	= .000	.000	.000	n/a
Orifice Coeff.	= 0.00	0.00	0.00	0.00
Multi-Stage	= n/a	No	No	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 0.00	0.00	0.00	0.00
Crest El. (ft)	= 0.00	0.00	0.00	0.00
Weir Coeff.	= 0.00	0.00	0.00	0.00
Weir Type	= ---	---	---	---
Multi-Stage	= No	No	No	No

Exfil.(in/hr) = 0.000 (by Wet area)

TW Elev. (ft) = 0.00

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).

Stage / Storage / Discharge Table

Stage ft	Storage cuft	Elevation ft	Clv A cfs	Clv B cfs	Clv C cfs	PrfRsr cfs	Wr A cfs	Wr B cfs	Wr C cfs	Wr D cfs	Exfil cfs	User cfs	Total cfs
0.00	0	707.00	---	---	---	---	---	---	---	---	---	---	0.000
1.00	582	708.00	---	---	---	---	---	---	---	---	---	---	0.000
1.75	1,382	708.75	---	---	---	---	---	---	---	---	---	---	0.000

H2-H3 Culvert Report / North Swale Sections

Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Friday, Sep 2 2022

H2-H3_10yr Design Flow

Circular

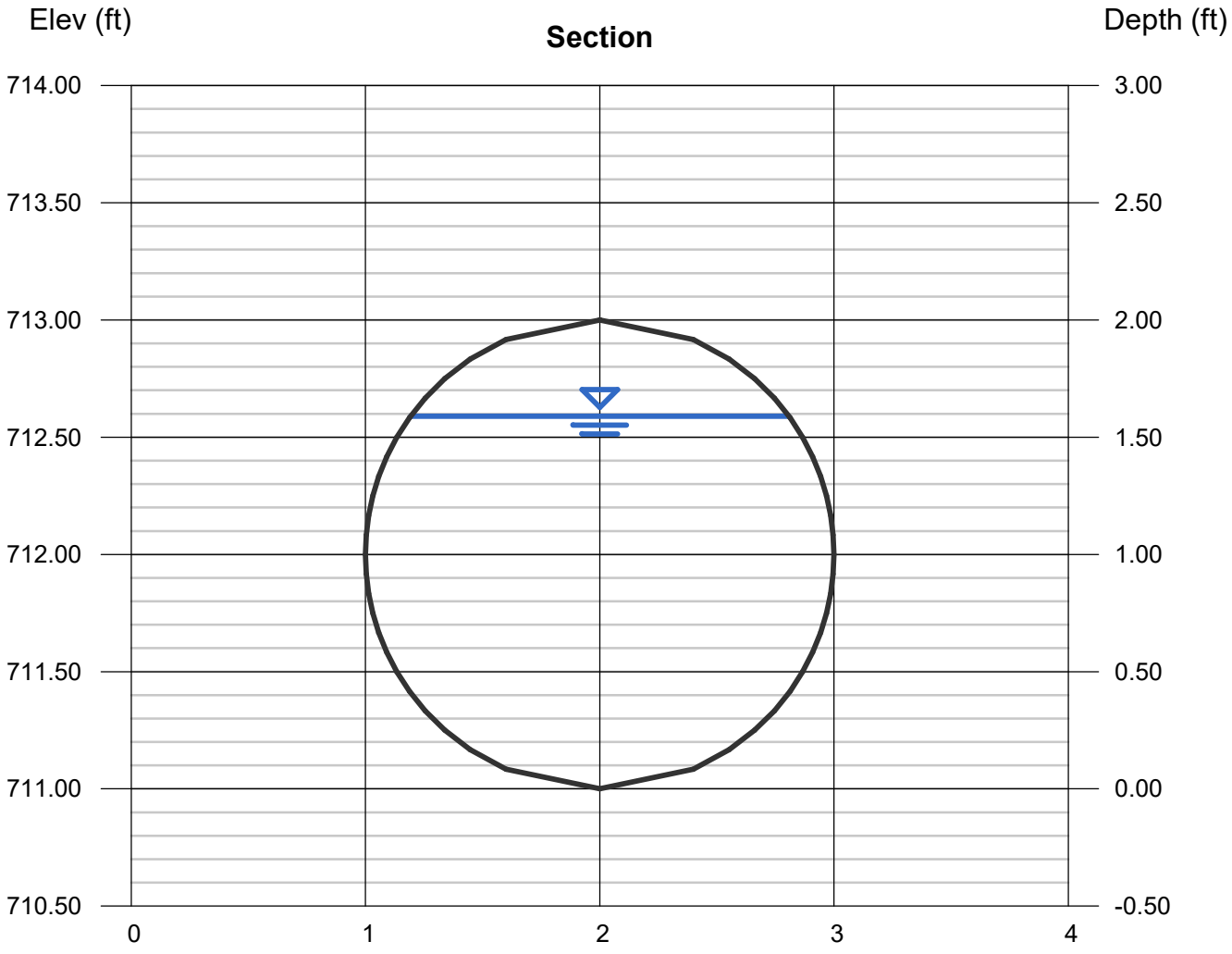
Diameter (ft)	= 2.00
Invert Elev (ft)	= 711.00
Slope (%)	= 1.20
N-Value	= 0.013

Calculations

Compute by:	Known Q
Known Q (cfs)	= 24.00

Highlighted

Depth (ft)	= 1.59
Q (cfs)	= 24.00
Area (sqft)	= 2.68
Velocity (ft/s)	= 8.95
Wetted Perim (ft)	= 4.41
Crit Depth, Yc (ft)	= 1.74
Top Width (ft)	= 1.61
EGL (ft)	= 2.83



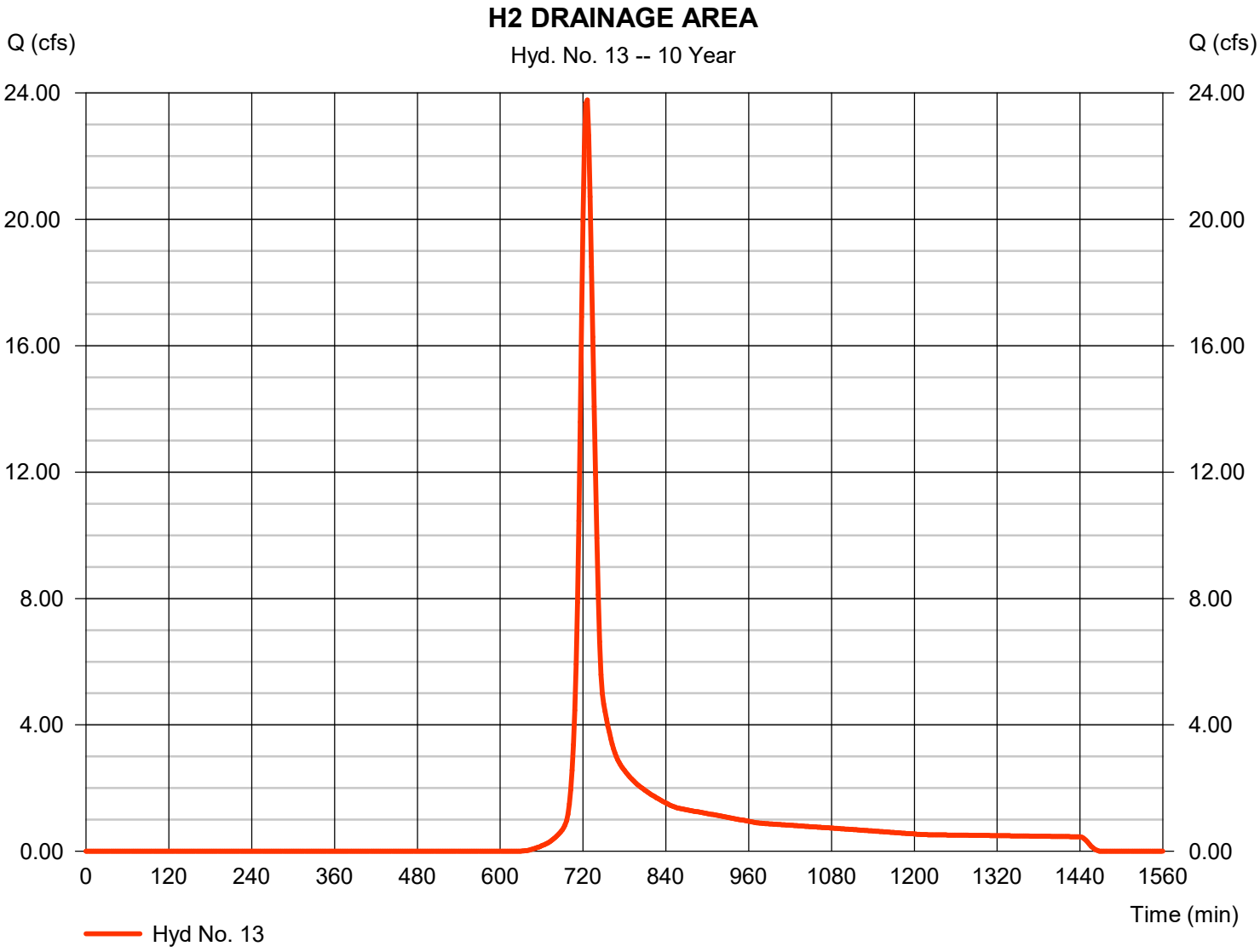
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022 Friday, 09 / 2 / 2022

Hyd. No. 13

H2 DRAINAGE AREA

Hydrograph type	= SCS Runoff	Peak discharge	= 23.78 cfs
Storm frequency	= 10 yrs	Time to peak	= 726 min
Time interval	= 2 min	Hyd. volume	= 77,024 cuft
Drainage area	= 11.250 ac	Curve number	= 66
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 20.00 min
Total precip.	= 5.23 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Sunday, Dec 4 2022

North Swale - Post Condition - 2yr

Trapezoidal

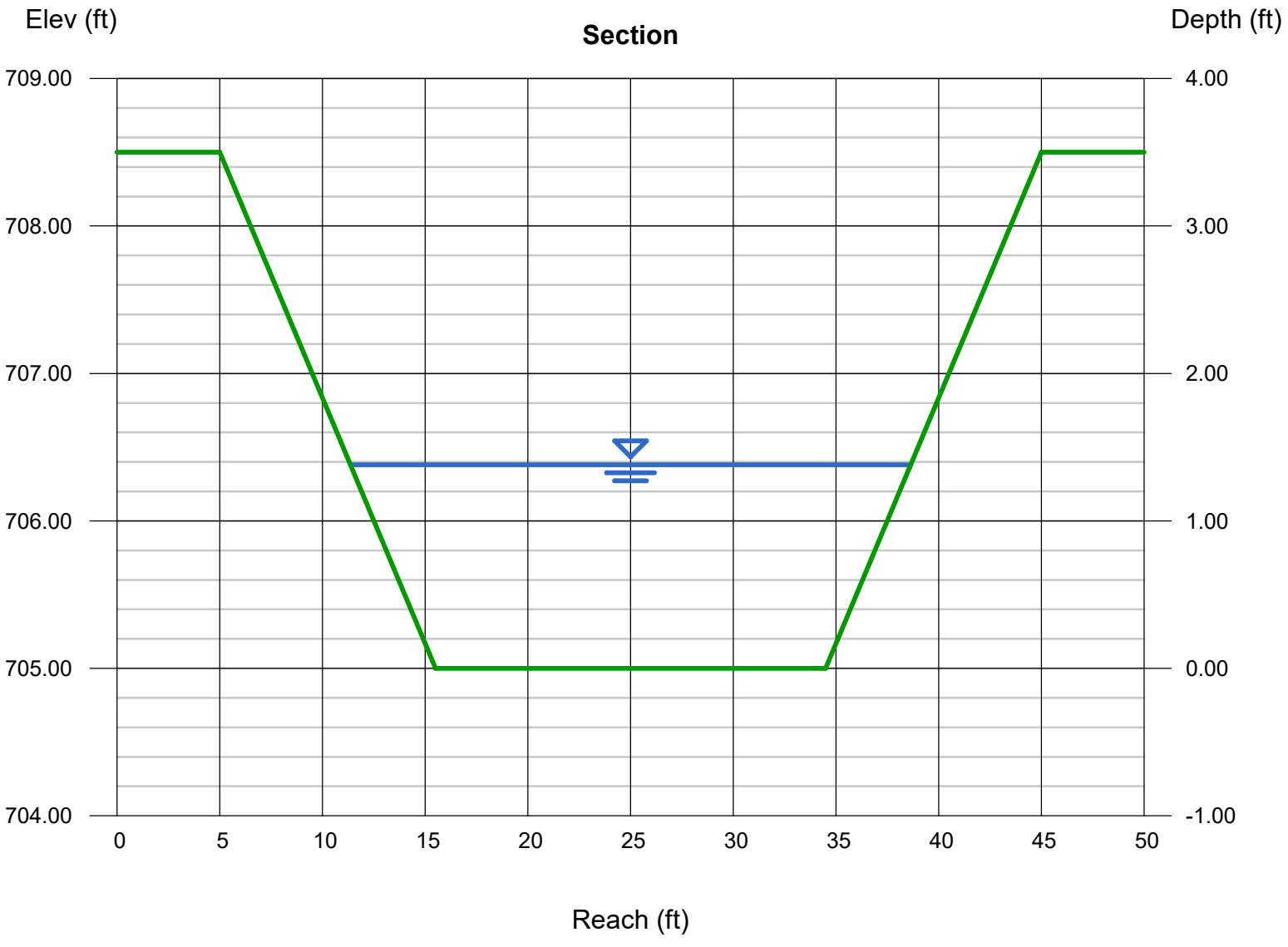
Bottom Width (ft)	= 19.00
Side Slopes (z:1)	= 3.00, 3.00
Total Depth (ft)	= 3.50
Invert Elev (ft)	= 705.00
Slope (%)	= 4.00
N-Value	= 0.150

Calculations

Compute by:	Known Q
Known Q (cfs)	= 69.00

Highlighted

Depth (ft)	= 1.38
Q (cfs)	= 69.00
Area (sqft)	= 31.93
Velocity (ft/s)	= 2.16
Wetted Perim (ft)	= 27.73
Crit Depth, Yc (ft)	= 0.72
Top Width (ft)	= 27.28
EGL (ft)	= 1.45



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Sunday, Dec 4 2022

North Swale - Post Condition - 10yr

Trapezoidal

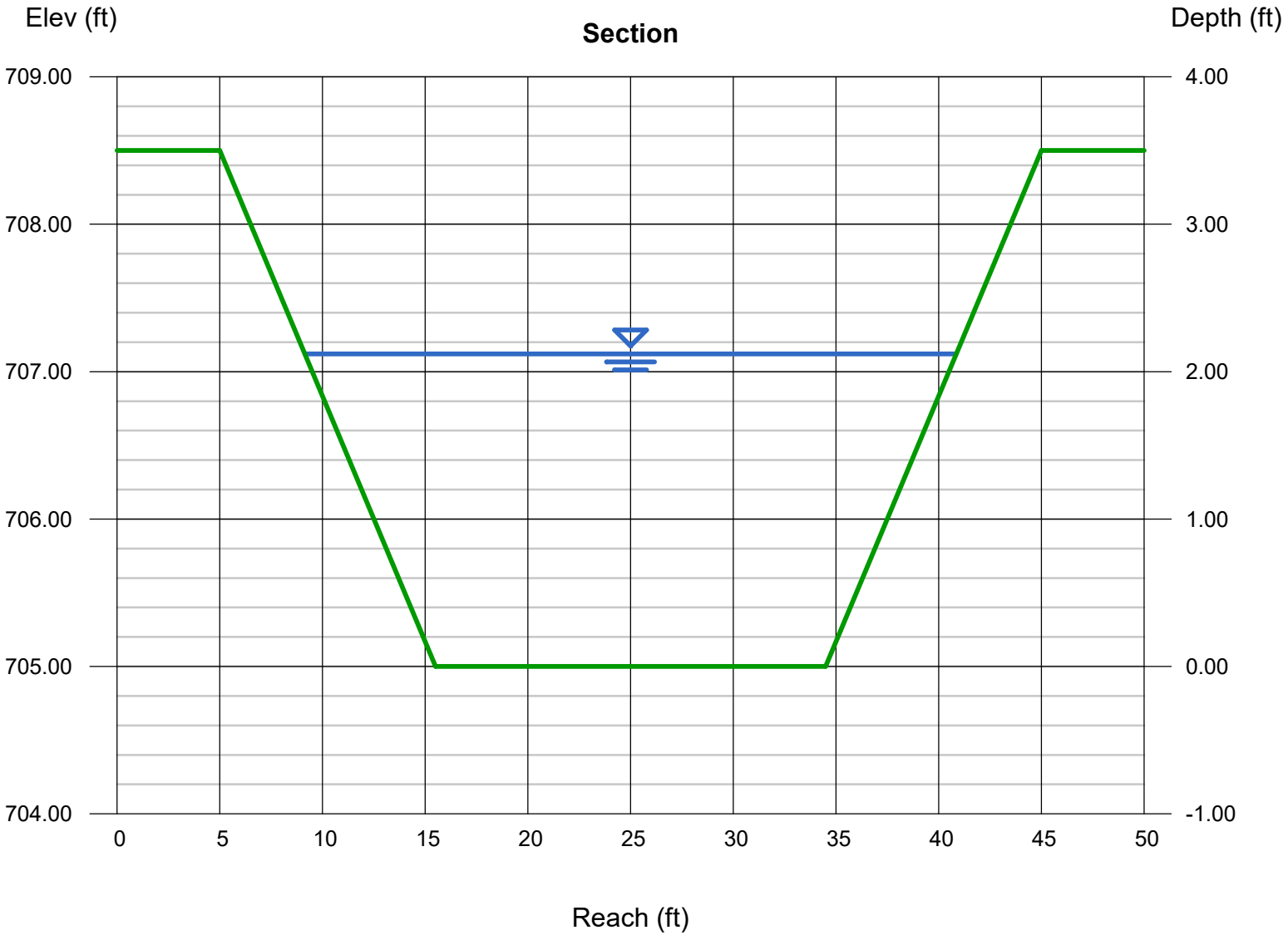
Bottom Width (ft)	= 19.00
Side Slopes (z:1)	= 3.00, 3.00
Total Depth (ft)	= 3.50
Invert Elev (ft)	= 705.00
Slope (%)	= 4.00
N-Value	= 0.150

Calculations

Compute by:	Known Q
Known Q (cfs)	= 149.00

Highlighted

Depth (ft)	= 2.12
Q (cfs)	= 149.00
Area (sqft)	= 53.76
Velocity (ft/s)	= 2.77
Wetted Perim (ft)	= 32.41
Crit Depth, Yc (ft)	= 1.17
Top Width (ft)	= 31.72
EGL (ft)	= 2.24



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Sunday, Dec 4 2022

North Swale - Post Condition - 100yr

Trapezoidal

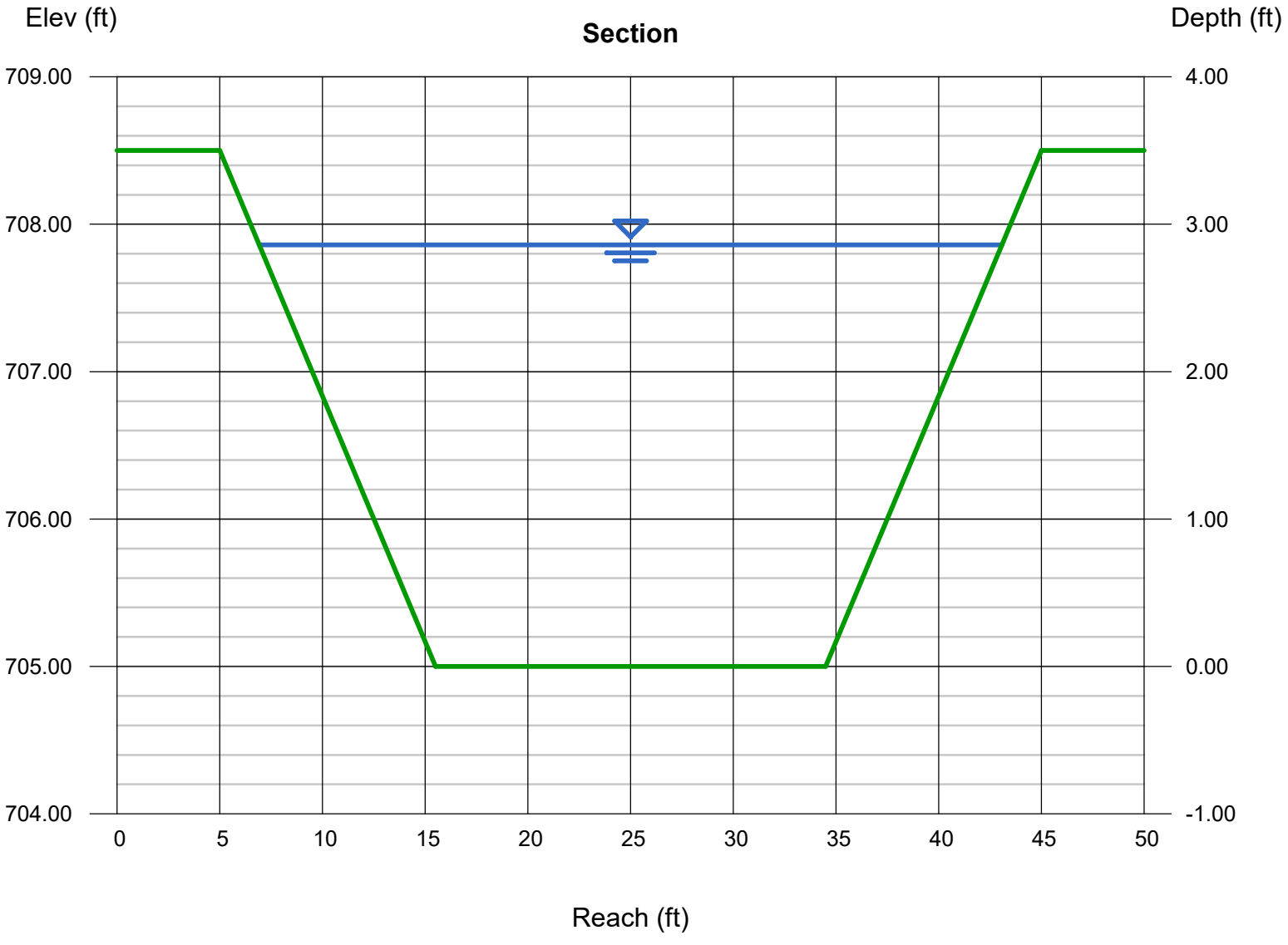
Bottom Width (ft)	= 19.00
Side Slopes (z:1)	= 3.00, 3.00
Total Depth (ft)	= 3.50
Invert Elev (ft)	= 705.00
Slope (%)	= 4.00
N-Value	= 0.150

Calculations

Compute by:	Known Q
Known Q (cfs)	= 258.00

Highlighted

Depth (ft)	= 2.86
Q (cfs)	= 258.00
Area (sqft)	= 78.88
Velocity (ft/s)	= 3.27
Wetted Perim (ft)	= 37.09
Crit Depth, Yc (ft)	= 1.64
Top Width (ft)	= 36.16
EGL (ft)	= 3.03



Culvert Report

Meadow Lawn Culvert at Capacity

Invert Elev Dn (ft)	=	714.50
Pipe Length (ft)	=	31.00
Slope (%)	=	0.65
Invert Elev Up (ft)	=	714.70
Rise (in)	=	24.0
Shape	=	Elliptical
Span (in)	=	36.0
No. Barrels	=	1
n-Value	=	0.012
Culvert Type	=	Horizontal Ellipse Concrete
Culvert Entrance	=	Square edge w/headwall (H)
Coeff. K,M,c,Y,k	=	0.01, 2, 0.0398, 0.67, 0.5

Embankment

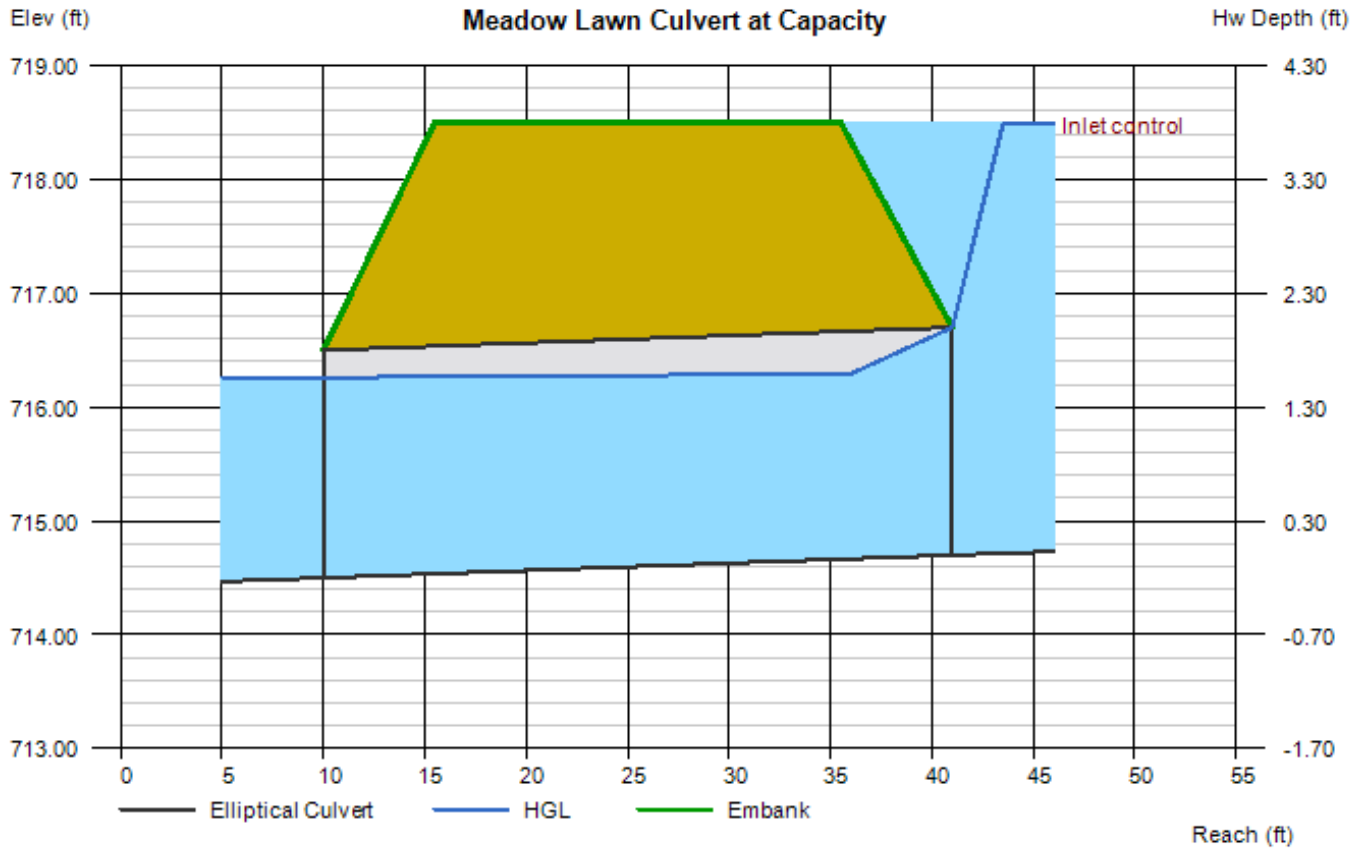
Top Elevation (ft)	=	718.50
Top Width (ft)	=	20.00
Crest Width (ft)	=	50.00

Calculations

Qmin (cfs)	=	10.00
Qmax (cfs)	=	70.00
Tailwater Elev (ft)	=	(dc+D)/2

Highlighted

Qtotal (cfs)	=	37.00
Qpipe (cfs)	=	37.00
Qovertop (cfs)	=	0.00
Veloc Dn (ft/s)	=	8.18
Veloc Up (ft/s)	=	9.02
HGL Dn (ft)	=	716.26
HGL Up (ft)	=	716.30
Hw Elev (ft)	=	718.49
Hw/D (ft)	=	1.89
Flow Regime	=	Inlet Control



Inlet Spread Analysis

Hydrology Report

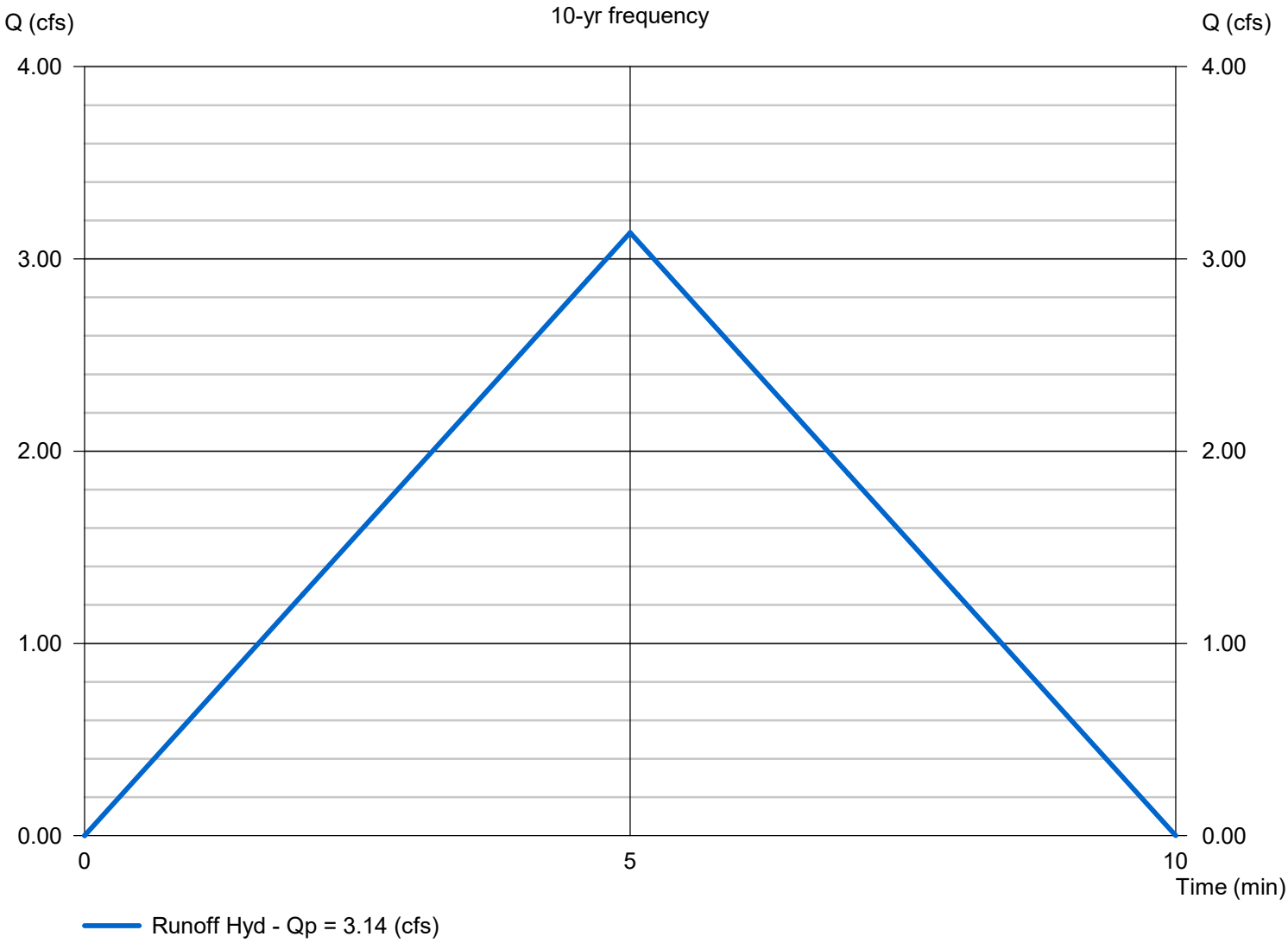
Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Saturday, Sep 17 2022

ROW area plus 20% - 10 yr

Hydrograph type	= Rational	Peak discharge (cfs)	= 3.136
Storm frequency (yrs)	= 10	Time interval (min)	= 1
Drainage area (ac)	= 0.500	Runoff coeff. (C)	= 0.9
Rainfall Inten (in/hr)	= 6.969	Tc by User (min)	= 5
IDF Curve	= Nashville IDF.IDF	Rec limb factor	= 1.00

Hydrograph Volume = 941 (cuft); 0.022 (acft)

Runoff Hydrograph



Inlet Report

10 YR GUTTER SPREAD (TRIPLE INLET)

Combination Inlet

Location	= Sag
Curb Length (ft)	= 9.00
Throat Height (in)	= 6.00
Grate Area (sqft)	= 10.00
Grate Width (ft)	= 1.60
Grate Length (ft)	= 8.33

Gutter

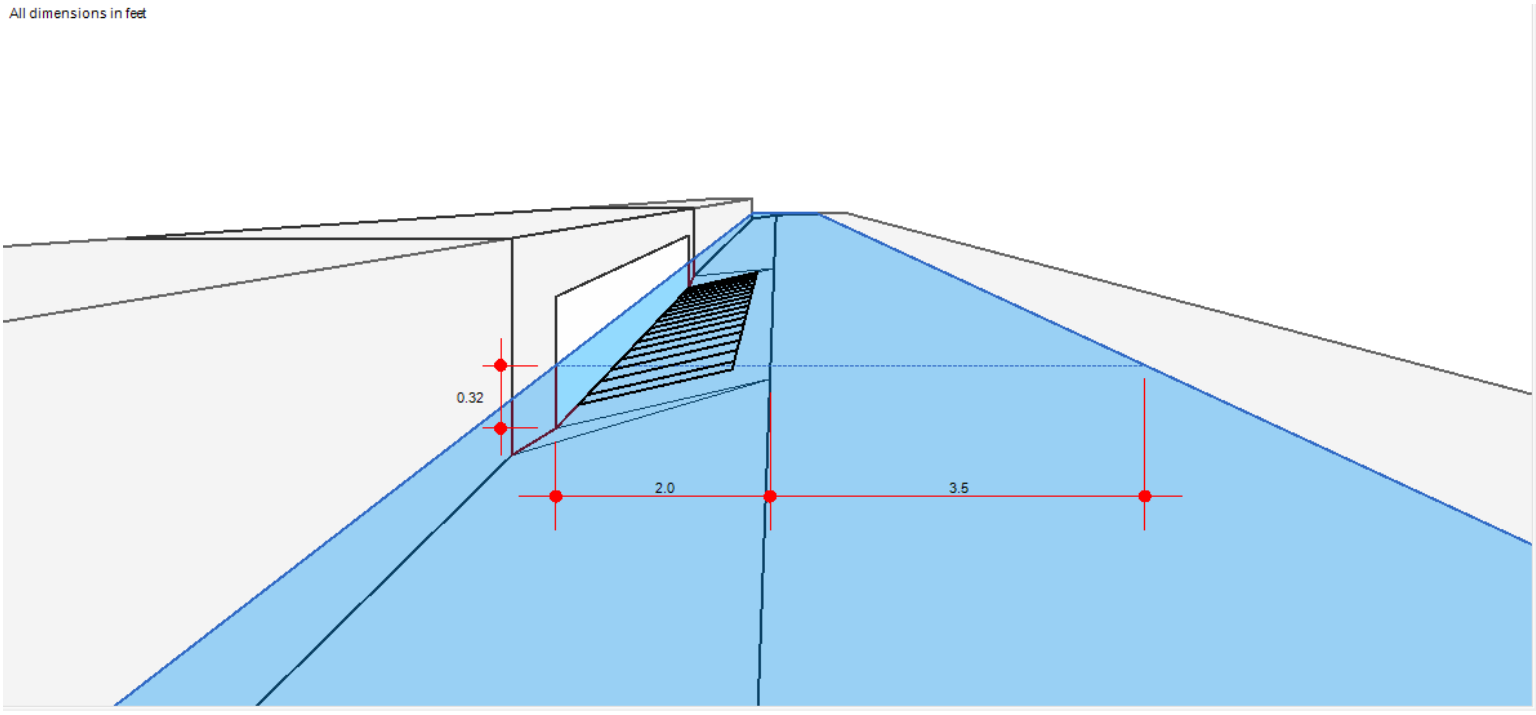
Slope, Sw (ft/ft)	= 0.083
Slope, Sx (ft/ft)	= 0.020
Local Depr (in)	= 1.00
Gutter Width (ft)	= 2.00
Gutter Slope (%)	= -0-
Gutter n-value	= -0-

Calculations

Compute by:	Known Q
Q (cfs)	= 3.33

Highlighted

Q Total (cfs)	= 3.33
Q Capt (cfs)	= 3.33
Q Bypass (cfs)	= -0-
Depth at Inlet (in)	= 3.83
Efficiency (%)	= 100
Gutter Spread (ft)	= 5.50
Gutter Vel (ft/s)	= -0-
Bypass Spread (ft)	= -0-
Bypass Depth (in)	= -0-



Hydrograph Report

Hydrograph Return Period Recap

Hyd. No.	Hydrograph type (origin)	Inflow hyd(s)	Peak Outflow (cfs)								Hydrograph Description
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	
1	SCS Runoff	------	-------	2.702	-------	6.290	8.990	12.71	15.70	18.75	EX. DEVELOPMENT (disturbed post
3	SCS Runoff	------	-------	7.939	-------	12.70	15.94	20.14	23.28	26.39	AREA TO INFILTRATION TRENCH (
4	SCS Runoff	------	-------	0.487	-------	0.942	1.276	1.732	2.084	2.439	AREA BYPASSING LID
6	Reservoir(i)	3	-------	0.471	-------	0.627	0.720	0.835	4.960	10.45	<no description>
9	Combine	4, 6,	-------	0.693	-------	1.301	1.739	2.298	5.404	11.51	POST DEVELOPMENT COMBINED

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

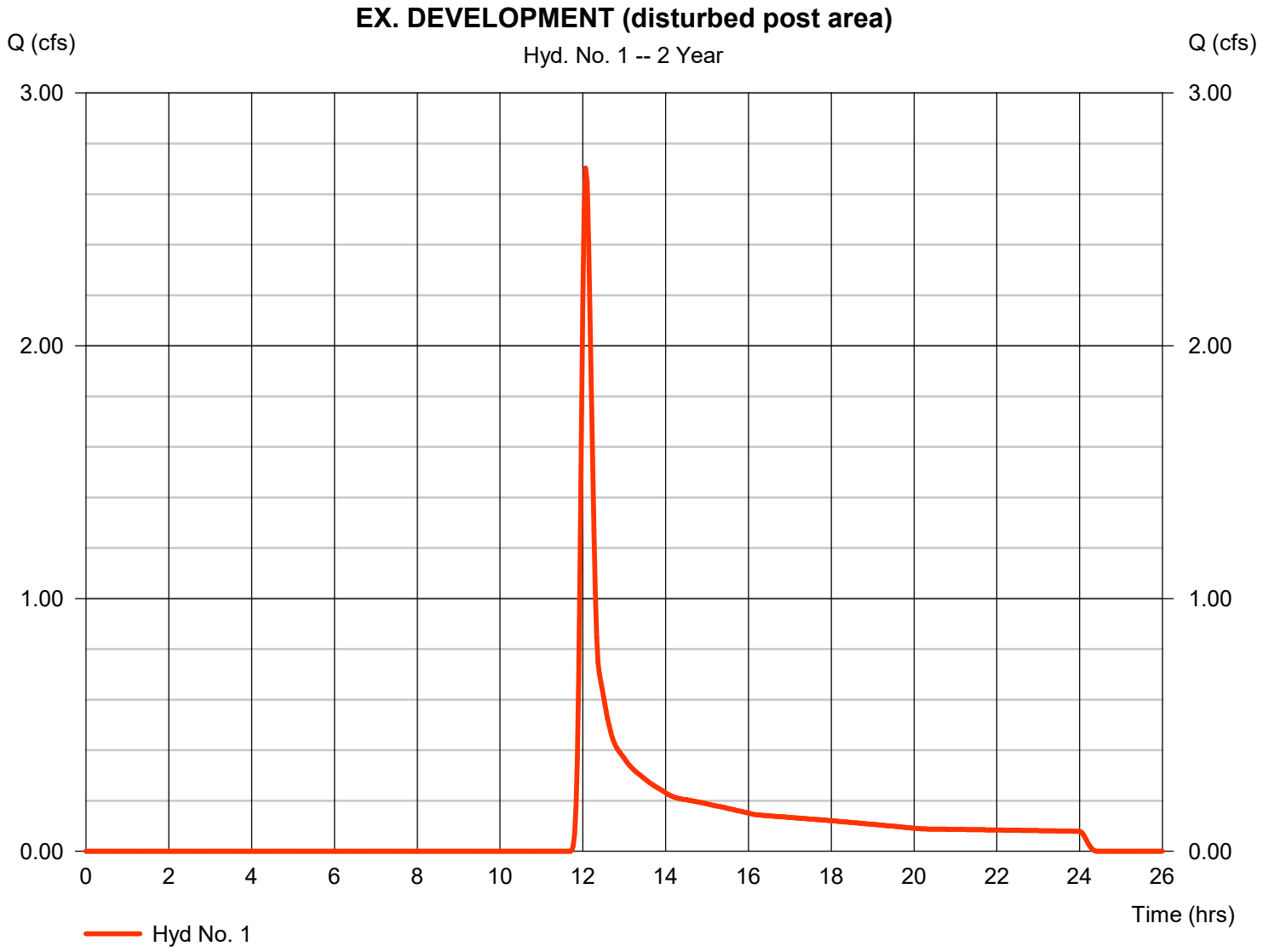
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	2.702	2	724	9,602	------	------	------	EX. DEVELOPMENT (disturbed post
3	SCS Runoff	7.939	2	722	22,385	------	------	------	AREA TO INFILTRATION TRENCH (
4	SCS Runoff	0.487	2	724	1,501	------	------	------	AREA BYPASSING LID
6	Reservoir(i)	0.471	2	798	12,487	3	708.38	13,036	<no description>
9	Combine	0.693	2	726	13,988	4, 6,	------	------	POST DEVELOPMENT COMBINED

Hydrograph Report

Hyd. No. 1

EX. DEVELOPMENT (disturbed post area)

Hydrograph type	= SCS Runoff	Peak discharge	= 2.702 cfs
Storm frequency	= 2 yrs	Time to peak	= 12.07 hrs
Time interval	= 2 min	Hyd. volume	= 9,602 cuft
Drainage area	= 4.600 ac	Curve number	= 62.6
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 14.90 min
Total precip.	= 3.39 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



TR55 Tc Worksheet

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No. 1

EX. DEVELOPMENT (disturbed post area)

Description	A		B		C		Totals
Sheet Flow							
Manning's n-value	= 0.170		0.011		0.011		
Flow length (ft)	= 100.0		0.0		0.0		
Two-year 24-hr precip. (in)	= 3.39		0.00		0.00		
Land slope (%)	= 2.00		0.00		0.00		
Travel Time (min)	**= 10.52**	**+**	**0.00**	**+**	**0.00**	**=**	**10.52**
Shallow Concentrated Flow							
Flow length (ft)	= 600.00		0.00		0.00		
Watercourse slope (%)	= 2.00		0.00		0.00		
Surface description	= Unpaved		Paved		Paved		
Average velocity (ft/s)	=2.28		0.00		0.00		
Travel Time (min)	**= 4.38**	**+**	**0.00**	**+**	**0.00**	**=**	**4.38**
Channel Flow							
X sectional flow area (sqft)	= 0.00		0.00		0.00		
Wetted perimeter (ft)	= 0.00		0.00		0.00		
Channel slope (%)	= 0.00		0.00		0.00		
Manning's n-value	= 0.015		0.015		0.015		
Velocity (ft/s)	=0.00						
			0.00				
					0.00		
Flow length (ft)	({0})0.0		0.0		0.0		
Travel Time (min)	**= 0.00**	**+**	**0.00**	**+**	**0.00**	**=**	**0.00**

Total Travel Time, Tc ..... 14.90 min

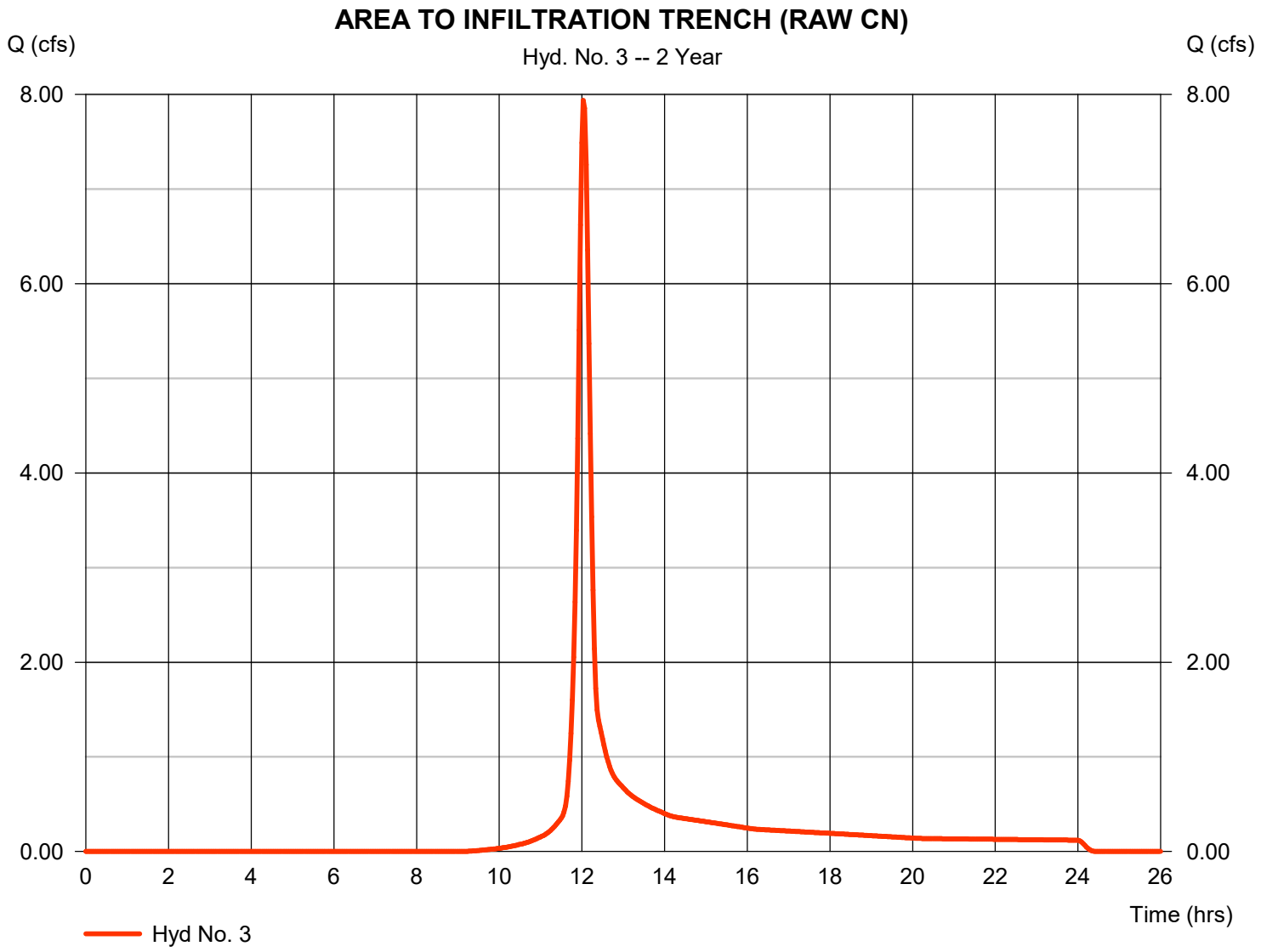
Hydrograph Report

Hyd. No. 3

AREA TO INFILTRATION TRENCH (RAW CN)

Hydrograph type	= SCS Runoff	Peak discharge	= 7.939 cfs
Storm frequency	= 2 yrs	Time to peak	= 12.03 hrs
Time interval	= 2 min	Hyd. volume	= 22,385 cuft
Drainage area	= 4.100 ac	Curve number	= 79.9*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 13.50 min
Total precip.	= 3.39 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(1.030 x 98) + (5.020 x 64)] / 4.100



TR55 Tc Worksheet

Hyd. No. 3

AREA TO INFILTRATION TRENCH (RAW CN)

Description	A		B		C		Totals
Sheet Flow							
Manning's n-value	= 0.170		0.011		0.011		
Flow length (ft)	= 100.0		0.0		0.0		
Two-year 24-hr precip. (in)	= 3.39		0.00		0.00		
Land slope (%)	= 2.00		0.00		0.00		
Travel Time (min)	**= 10.52**	**+**	**0.00**	**+**	**0.00**	**=**	**10.52**
Shallow Concentrated Flow							
Flow length (ft)	= 300.00		0.00		0.00		
Watercourse slope (%)	= 2.00		0.00		0.00		
Surface description	= Unpaved		Unpaved		Paved		
Average velocity (ft/s)	=2.28		0.00		0.00		
Travel Time (min)	**= 2.19**	**+**	**0.00**	**+**	**0.00**	**=**	**2.19**
Channel Flow							
X sectional flow area (sqft)	= 1.77		0.00		0.00		
Wetted perimeter (ft)	= 4.71		0.00		0.00		
Channel slope (%)	= 3.00		0.00		0.00		
Manning's n-value	= 0.015		0.015		0.015		
Velocity (ft/s)	=8.93						
			0.00				
					0.00		
Flow length (ft)	({0})400.0		0.0		0.0		
Travel Time (min)	**= 0.75**	**+**	**0.00**	**+**	**0.00**	**=**	**0.75**

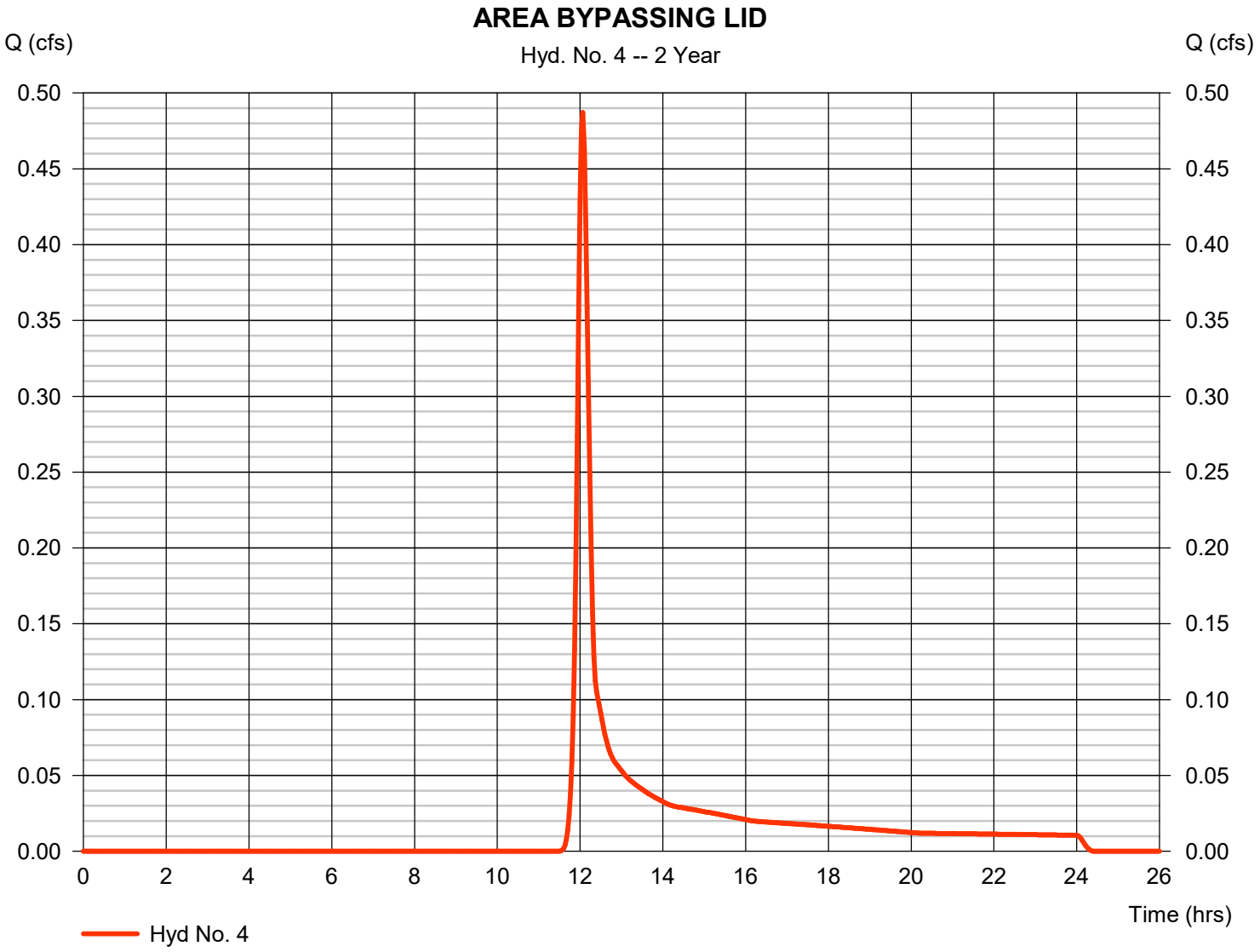
Total Travel Time, Tc ..... 13.50 min

Hydrograph Report

Hyd. No. 4

AREA BYPASSING LID

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.487 cfs
Storm frequency	=	2 yrs	Time to peak	=	12.07 hrs
Time interval	=	2 min	Hyd. volume	=	1,501 cuft
Drainage area	=	0.500 ac	Curve number	=	68.2
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	13.50 min
Total precip.	=	3.39 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



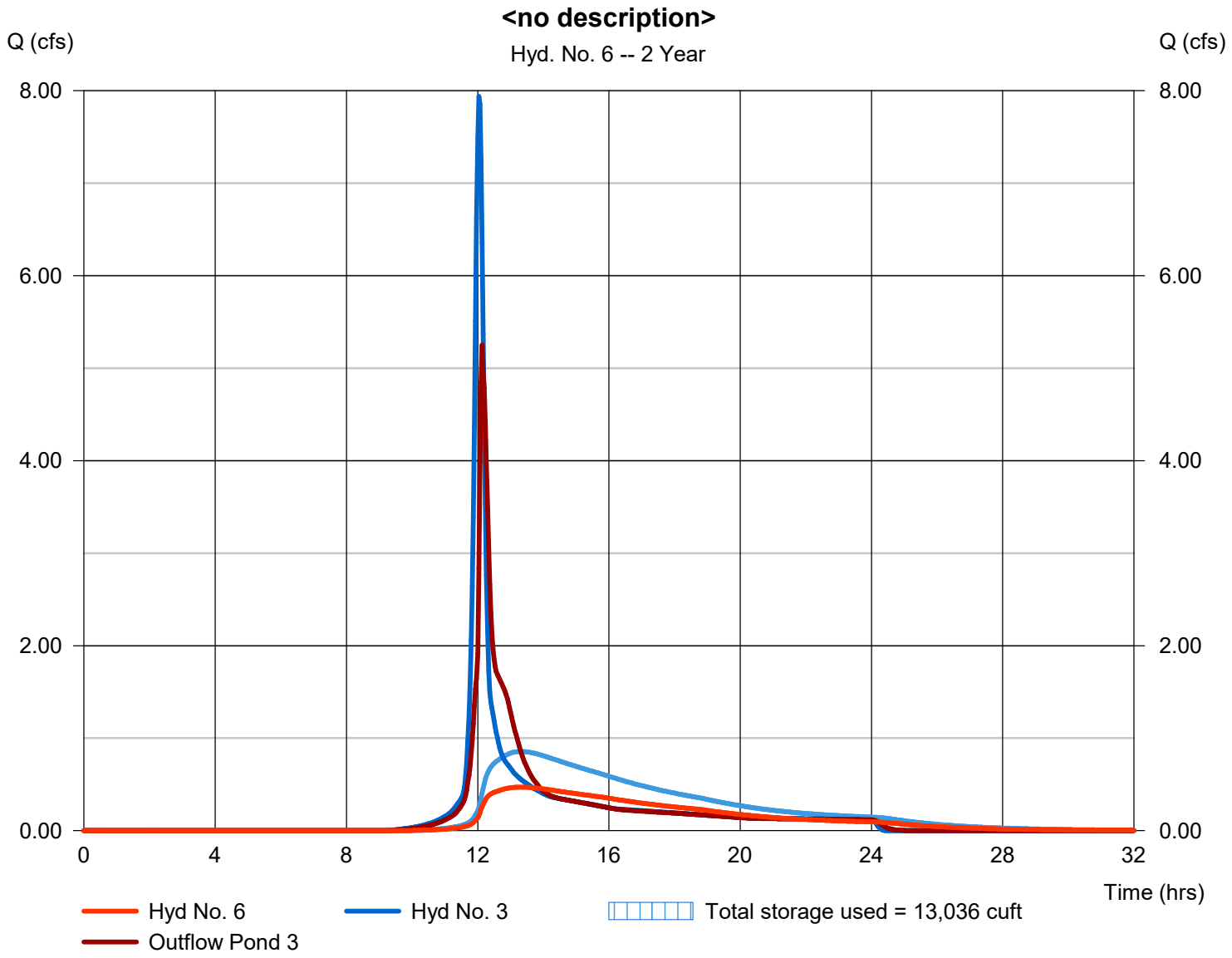
Hydrograph Report

Hyd. No. 6

<no description>

Hydrograph type	=	Reservoir (Interconnected)	Peak discharge	=	0.471 cfs
Storm frequency	=	2 yrs	Time to peak	=	13.30 hrs
Time interval	=	2 min	Hyd. volume	=	12,487 cuft
Upper Pond	=	Bio Tv	Lower Pond	=	POND
Inflow hyd.	=	3 - AREA TO INFILTRATION TRENCH (RAW CN)	Exfiltration	=	None
Max. Elevation	=	708.38 ft	Max. Elevation	=	704.55 ft
Max. Storage	=	4,343 cuft	Max. Storage	=	8,693 cuft

Interconnected Pond Routing. Storage Indication method used. Exfiltration extracted from Outflow.



Pond No. 3 - Bio Tv

Pond Data

Contours -User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 704.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	704.00	500	0	0
3.00	707.00	500	1,500	1,500
4.00	708.00	2,000	1,167	2,666
5.00	709.00	7,500	4,457	7,124

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 18.00	6.00	0.00	0.00
Span (in)	= 18.00	6.00	0.00	0.00
No. Barrels	= 1	1	0	0
Invert El. (ft)	= 704.00	704.00	0.00	0.00
Length (ft)	= 25.00	50.00	0.00	0.00
Slope (%)	= 1.00	1.00	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	Yes	No	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 4.71	50.00	0.00	0.00
Crest El. (ft)	= 708.00	708.50	0.00	0.00
Weir Coeff.	= 3.33	2.60	3.33	3.33
Weir Type	= 1	Broad	---	---
Multi-Stage	= Yes	No	No	No

Exfil.(in/hr) = 6.500 (by Contour)

TW Elev. (ft) = 0.00

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).

Stage / Storage / Discharge Table

Stage ft	Storage cuft	Elevation ft	Clv A cfs	Clv B cfs	Clv C cfs	PrfRsr cfs	Wr A cfs	Wr B cfs	Wr C cfs	Wr D cfs	Exfil cfs	User cfs	Total cfs
0.00	0	704.00	0.00	0.00	---	---	0.00	0.00	---	---	0.000	---	0.000
0.30	150	704.30	0.20 ic	0.20 ic	---	---	0.00	0.00	---	---	0.008	---	0.207
0.60	300	704.60	0.52 ic	0.51 ic	---	---	0.00	0.00	---	---	0.015	---	0.525
0.90	450	704.90	0.69 ic	0.69 ic	---	---	0.00	0.00	---	---	0.023	---	0.714
1.20	600	705.20	0.84 ic	0.84 ic	---	---	0.00	0.00	---	---	0.030	---	0.874
1.50	750	705.50	0.98 ic	0.98 ic	---	---	0.00	0.00	---	---	0.038	---	1.013
1.80	900	705.80	1.11 ic	1.09 ic	---	---	0.00	0.00	---	---	0.045	---	1.138
2.10	1,050	706.10	1.21 ic	1.20 ic	---	---	0.00	0.00	---	---	0.053	---	1.254
2.40	1,200	706.40	1.31 ic	1.30 ic	---	---	0.00	0.00	---	---	0.060	---	1.361
2.70	1,350	706.70	1.42 ic	1.39 ic	---	---	0.00	0.00	---	---	0.068	---	1.460
3.00	1,500	707.00	1.48 ic	1.48 ic	---	---	0.00	0.00	---	---	0.075	---	1.557
3.10	1,617	707.10	1.53 ic	1.51 ic	---	---	0.00	0.00	---	---	0.098	---	1.607
3.20	1,733	707.20	1.54 ic	1.54 ic	---	---	0.00	0.00	---	---	0.120	---	1.658
3.30	1,850	707.30	1.59 ic	1.56 ic	---	---	0.00	0.00	---	---	0.143	---	1.707
3.40	1,966	707.40	1.59 ic	1.59 ic	---	---	0.00	0.00	---	---	0.166	---	1.758
3.50	2,083	707.50	1.65 ic	1.62 ic	---	---	0.00	0.00	---	---	0.188	---	1.805
3.60	2,200	707.60	1.65 ic	1.64 ic	---	---	0.00	0.00	---	---	0.211	---	1.855
3.70	2,316	707.70	1.67 ic	1.67 ic	---	---	0.00	0.00	---	---	0.233	---	1.901
3.80	2,433	707.80	1.71 ic	1.69 ic	---	---	0.00	0.00	---	---	0.256	---	1.950
3.90	2,550	707.90	1.72 ic	1.72 ic	---	---	0.00	0.00	---	---	0.278	---	1.998
4.00	2,666	708.00	1.77 ic	1.74 ic	---	---	0.00	0.00	---	---	0.301	---	2.045
4.10	3,112	708.10	2.24 ic	1.75 ic	---	---	0.50	0.00	---	---	0.384	---	2.626
4.20	3,558	708.20	3.13 oc	1.73 ic	---	---	1.40	0.00	---	---	0.466	---	3.594
4.30	4,004	708.30	4.26 oc	1.68 ic	---	---	2.58	0.00	---	---	0.549	---	4.807
4.40	4,449	708.40	5.56 oc	1.60 ic	---	---	3.97	0.00	---	---	0.632	---	6.194
4.50	4,895	708.50	7.11 oc	1.57 ic	---	---	5.54	0.00	---	---	0.715	---	7.828
4.60	5,341	708.60	8.81 oc	1.52 ic	---	---	7.29	4.10	---	---	0.797	---	13.71
4.70	5,786	708.70	8.74 oc	1.56 ic	---	---	6.24 ic	11.61	---	---	0.880	---	20.28
4.80	6,232	708.80	8.68 oc	1.59 ic	---	---	6.67 ic	21.34	---	---	0.963	---	30.56
4.90	6,678	708.90	8.69 oc	1.61 ic	---	---	7.07 ic	32.86	---	---	1.046	---	42.59
5.00	7,124	709.00	9.08 oc	1.62 ic	---	---	7.45 ic	45.96	---	---	1.128	---	56.17

Pond Report

Pond No. 1 - POND

Pond Data

Contours -User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 703.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	703.00	3,329	0	0
5.00	708.00	8,237	28,001	28,001
5.25	708.25	10,500	2,336	30,338
6.00	709.00	20,000	11,247	41,584

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 18.00	4.00	0.00	0.00
Span (in)	= 18.00	4.00	0.00	0.00
No. Barrels	= 1	1	0	0
Invert El. (ft)	= 703.00	703.00	0.00	0.00
Length (ft)	= 25.00	0.50	0.00	0.00
Slope (%)	= 1.00	1.00	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	Yes	No	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 4.71	12.00	25.00	0.00
Crest El. (ft)	= 708.00	707.50	708.50	0.00
Weir Coeff.	= 3.33	3.33	2.60	3.33
Weir Type	= 1	Rect	Broad	---
Multi-Stage	= Yes	Yes	No	No

Exfil.(in/hr) = 6.500 (by Contour)

TW Elev. (ft) = 0.00

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).

Stage / Storage / Discharge Table

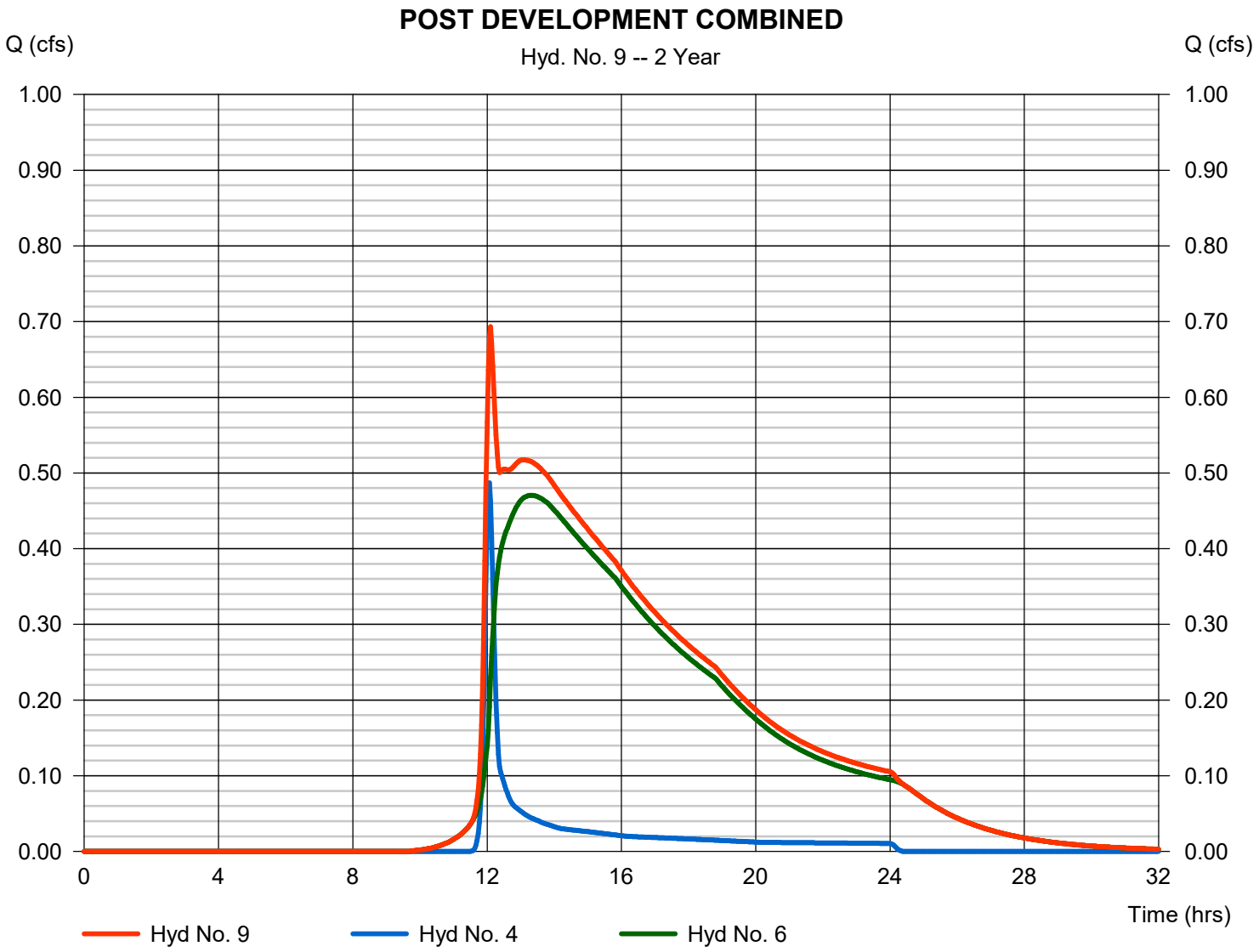
Stage ft	Storage cuft	Elevation ft	Clv A cfs	Clv B cfs	Clv C cfs	PrfRsr cfs	Wr A cfs	Wr B cfs	Wr C cfs	Wr D cfs	Exfil cfs	User cfs	Total cfs
0.00	0	703.00	0.00	0.00	---	---	0.00	0.00	0.00	---	0.000	---	0.000
0.50	2,800	703.50	0.23 ic	0.23 ic	---	---	0.00	0.00	0.00	---	0.124	---	0.353
1.00	5,600	704.00	0.36 ic	0.36 ic	---	---	0.00	0.00	0.00	---	0.248	---	0.609
1.50	8,400	704.50	0.46 ic	0.46 ic	---	---	0.00	0.00	0.00	---	0.372	---	0.834
2.00	11,201	705.00	0.55 ic	0.54 ic	---	---	0.00	0.00	0.00	---	0.496	---	1.040
2.50	14,001	705.50	0.62 ic	0.62 ic	---	---	0.00	0.00	0.00	---	0.620	---	1.237
3.00	16,801	706.00	0.69 ic	0.68 ic	---	---	0.00	0.00	0.00	---	0.744	---	1.426
3.50	19,601	706.50	0.76 ic	0.74 ic	---	---	0.00	0.00	0.00	---	0.868	---	1.610
4.00	22,401	707.00	0.80 ic	0.80 ic	---	---	0.00	0.00	0.00	---	0.991	---	1.790
4.50	25,201	707.50	0.85 ic	0.85 ic	---	---	0.00	0.00	0.00	---	1.115	---	1.965
5.00	28,001	708.00	14.61 ic	0.48 ic	---	---	0.00	14.13	0.00	---	1.239	---	15.85
5.03	28,235	708.03	15.66 ic	0.40 ic	---	---	0.06	15.20	0.00	---	1.273	---	16.93
5.05	28,469	708.05	16.59 ic	0.30 ic	---	---	0.18	16.12 s	0.00	---	1.307	---	17.90
5.07	28,702	708.08	16.85 ic	0.27 ic	---	---	0.32	16.26 s	0.00	---	1.342	---	18.19
5.10	28,936	708.10	17.04 ic	0.24 ic	---	---	0.50	16.30 s	0.00	---	1.376	---	18.41
5.13	29,169	708.13	17.20 ic	0.23 ic	---	---	0.69	16.28 s	0.00	---	1.410	---	18.61
5.15	29,403	708.15	17.34 ic	0.21 ic	---	---	0.91	16.21 s	0.00	---	1.444	---	18.78
5.18	29,637	708.18	17.46 ic	0.19 ic	---	---	1.15	16.11 s	0.00	---	1.478	---	18.93
5.20	29,870	708.20	17.57 ic	0.18 ic	---	---	1.40 s	15.99 s	0.00	---	1.512	---	19.08
5.23	30,104	708.23	17.66 ic	0.17 ic	---	---	1.58 s	15.91 s	0.00	---	1.546	---	19.21
5.25	30,338	708.25	17.75 ic	0.16 ic	---	---	1.74 s	15.85 s	0.00	---	1.580	---	19.33
5.32	31,462	708.33	17.98 ic	0.14 ic	---	---	2.13 s	15.71 s	0.00	---	1.723	---	19.71
5.40	32,587	708.40	18.19 ic	0.12 ic	---	---	2.45 s	15.61 s	0.00	---	1.866	---	20.05
5.47	33,712	708.47	18.37 ic	0.11 ic	---	---	2.72 s	15.54 s	0.00	---	2.009	---	20.37
5.55	34,836	708.55	18.54 ic	0.09 ic	---	---	2.94 s	15.49 s	0.73	---	2.152	---	21.41
5.62	35,961	708.63	18.71 ic	0.08 ic	---	---	3.14 s	15.46 s	2.88	---	2.295	---	23.86
5.70	37,086	708.70	18.86 ic	0.08 ic	---	---	3.32 s	15.46 s	5.82	---	2.437	---	27.12
5.77	38,210	708.78	19.02 ic	0.07 ic	---	---	3.48 s	15.45 s	9.38	---	2.580	---	30.96
5.85	39,335	708.85	19.17 ic	0.06 ic	---	---	3.62 s	15.46 s	13.46	---	2.723	---	35.33
5.92	40,460	708.93	19.32 ic	0.06 ic	---	---	3.75 s	15.48 s	18.02	---	2.866	---	40.17
6.00	41,584	709.00	19.46 ic	0.06 ic	---	---	3.87 s	15.52 s	22.98	---	3.009	---	45.44

Hydrograph Report

Hyd. No. 9

POST DEVELOPMENT COMBINED

Hydrograph type	= Combine	Peak discharge	= 0.693 cfs
Storm frequency	= 2 yrs	Time to peak	= 12.10 hrs
Time interval	= 2 min	Hyd. volume	= 13,988 cuft
Inflow hyds.	= 4, 6	Contrib. drain. area	= 0.500 ac



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

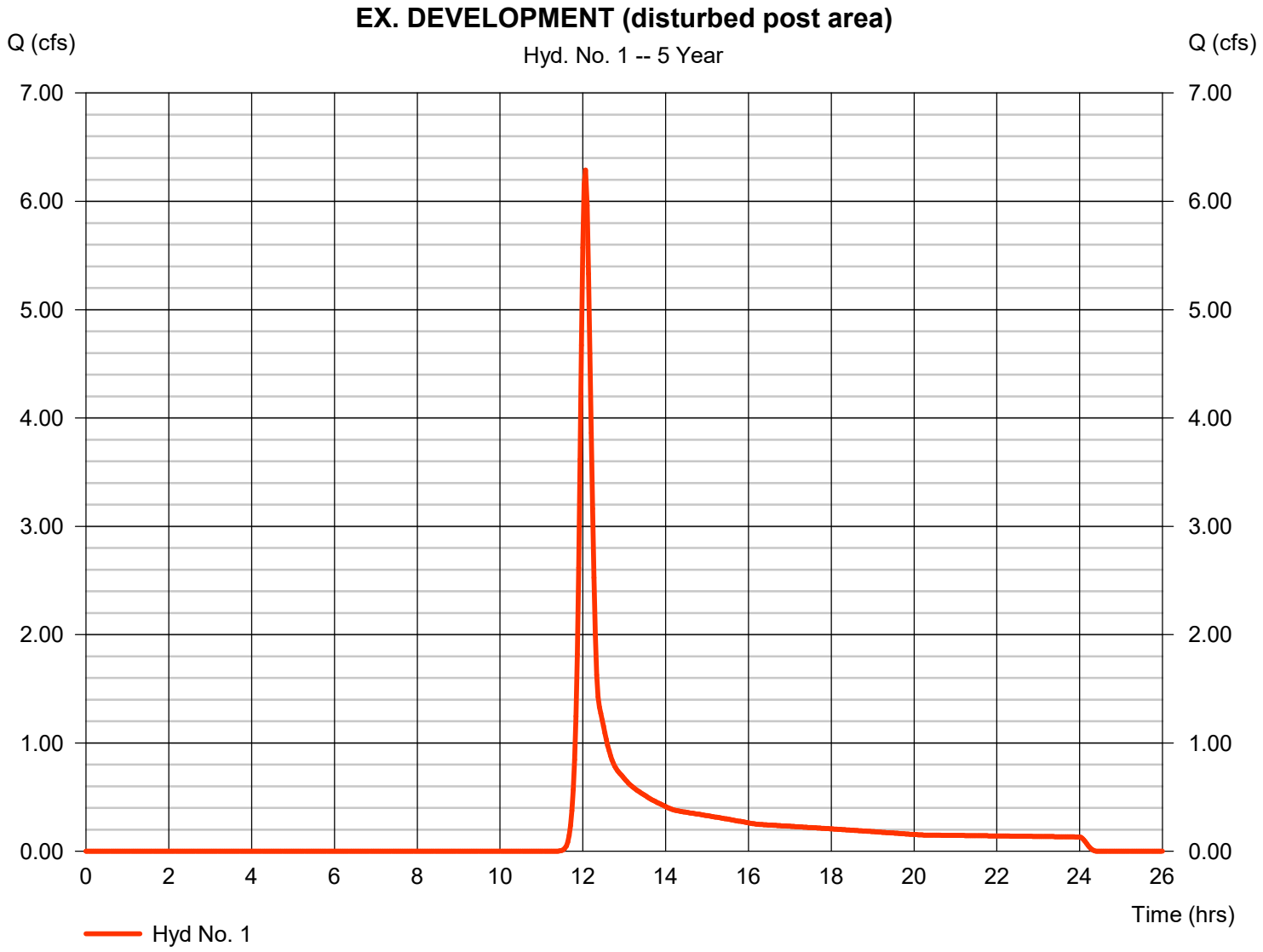
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	6.290	2	724	19,165	------	------	------	EX. DEVELOPMENT (disturbed post
3	SCS Runoff	12.70	2	722	35,595	------	------	------	AREA TO INFILTRATION TRENCH (
4	SCS Runoff	0.942	2	724	2,736	------	------	------	AREA BYPASSING LID
6	Reservoir(i)	0.627	2	798	18,622	3	708.58	19,658	<no description>
9	Combine	1.301	2	724	21,358	4, 6,	------	------	POST DEVELOPMENT COMBINED

Hydrograph Report

Hyd. No. 1

EX. DEVELOPMENT (disturbed post area)

Hydrograph type	= SCS Runoff	Peak discharge	= 6.290 cfs
Storm frequency	= 5 yrs	Time to peak	= 12.07 hrs
Time interval	= 2 min	Hyd. volume	= 19,165 cuft
Drainage area	= 4.600 ac	Curve number	= 62.6
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 14.90 min
Total precip.	= 4.50 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



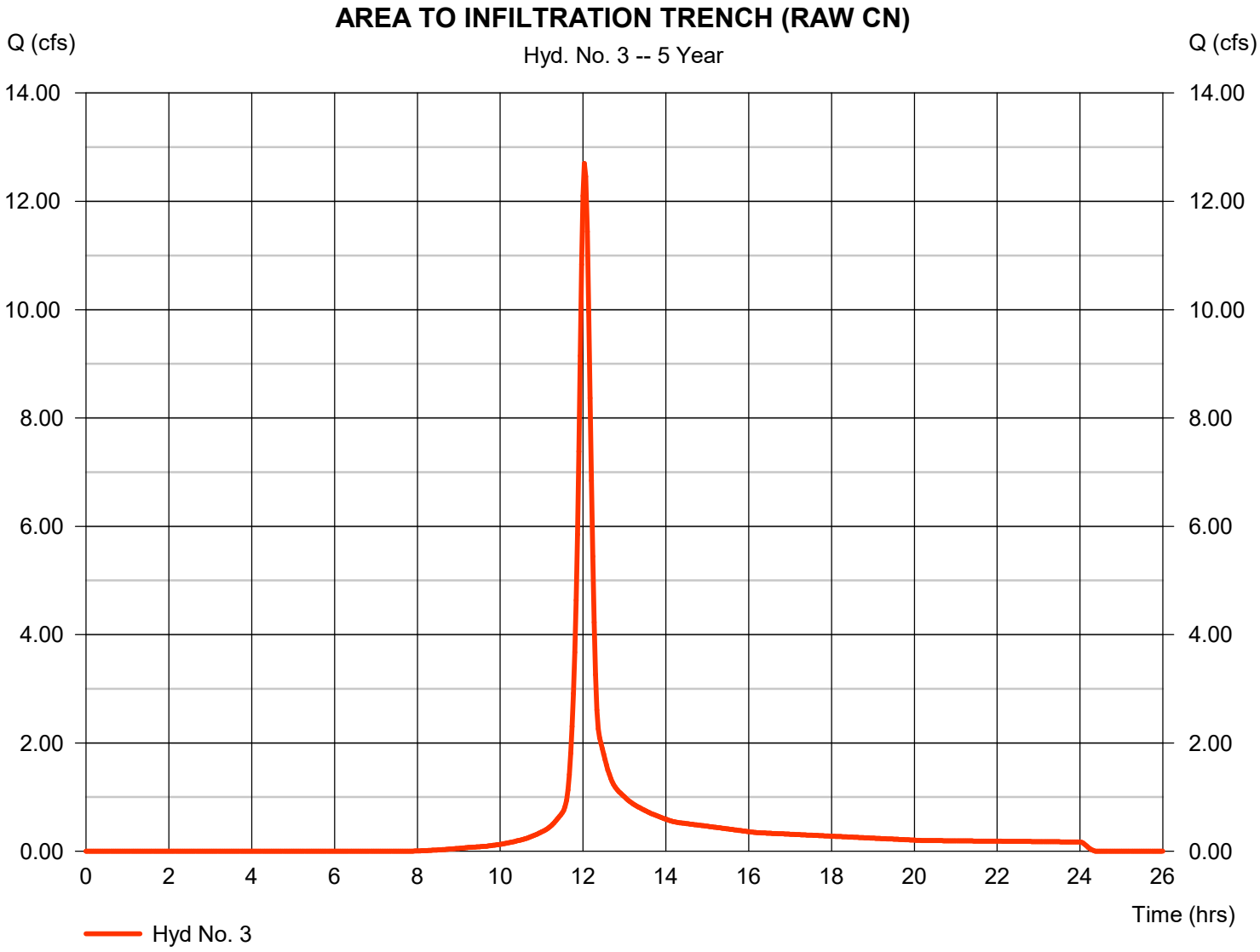
Hydrograph Report

Hyd. No. 3

AREA TO INFILTRATION TRENCH (RAW CN)

Hydrograph type	= SCS Runoff	Peak discharge	= 12.70 cfs
Storm frequency	= 5 yrs	Time to peak	= 12.03 hrs
Time interval	= 2 min	Hyd. volume	= 35,595 cuft
Drainage area	= 4.100 ac	Curve number	= 79.9*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 13.50 min
Total precip.	= 4.50 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(1.030 x 98) + (5.020 x 64)] / 4.100

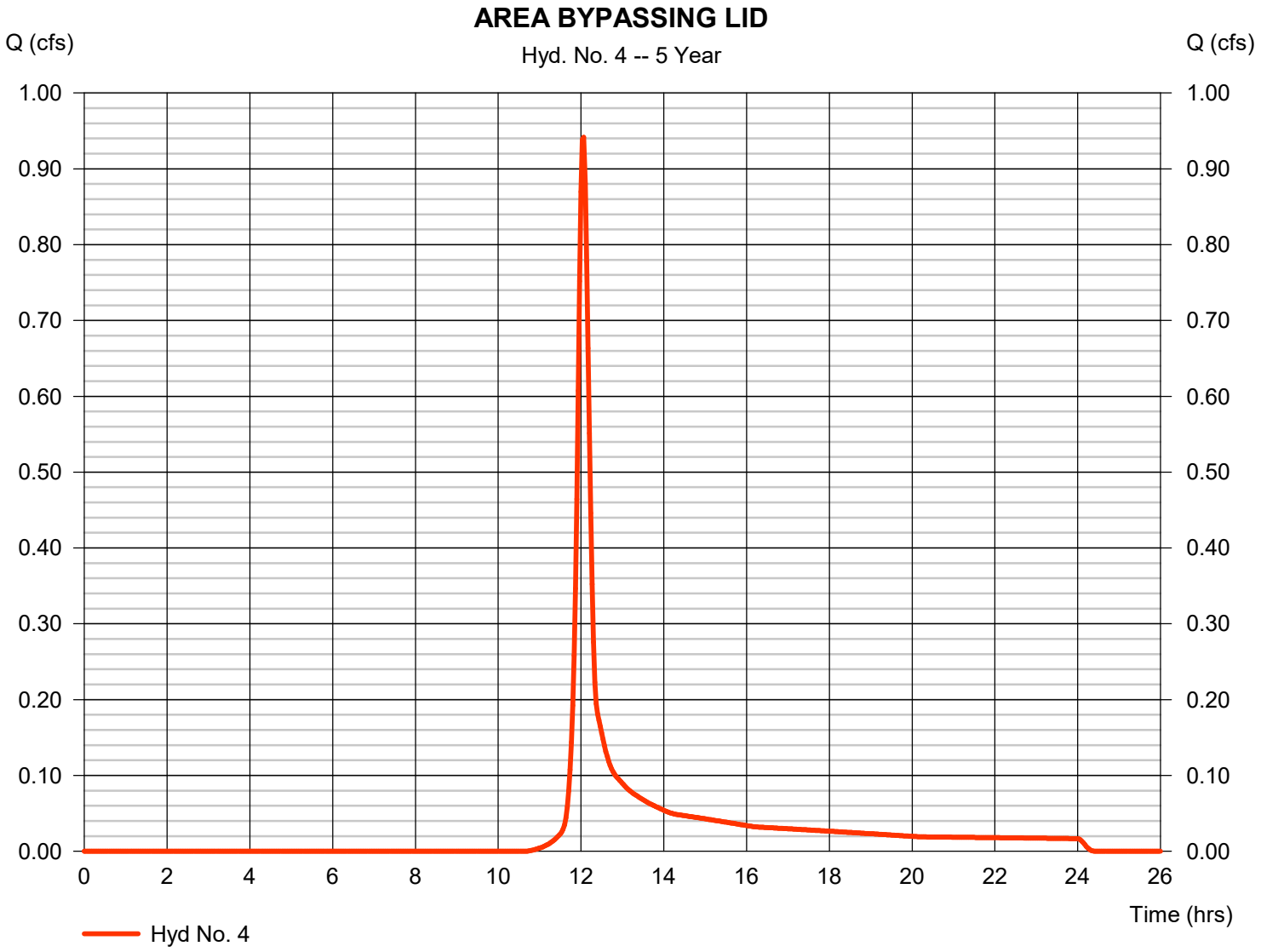


Hydrograph Report

Hyd. No. 4

AREA BYPASSING LID

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.942 cfs
Storm frequency	=	5 yrs	Time to peak	=	12.07 hrs
Time interval	=	2 min	Hyd. volume	=	2,736 cuft
Drainage area	=	0.500 ac	Curve number	=	68.2
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	13.50 min
Total precip.	=	4.50 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



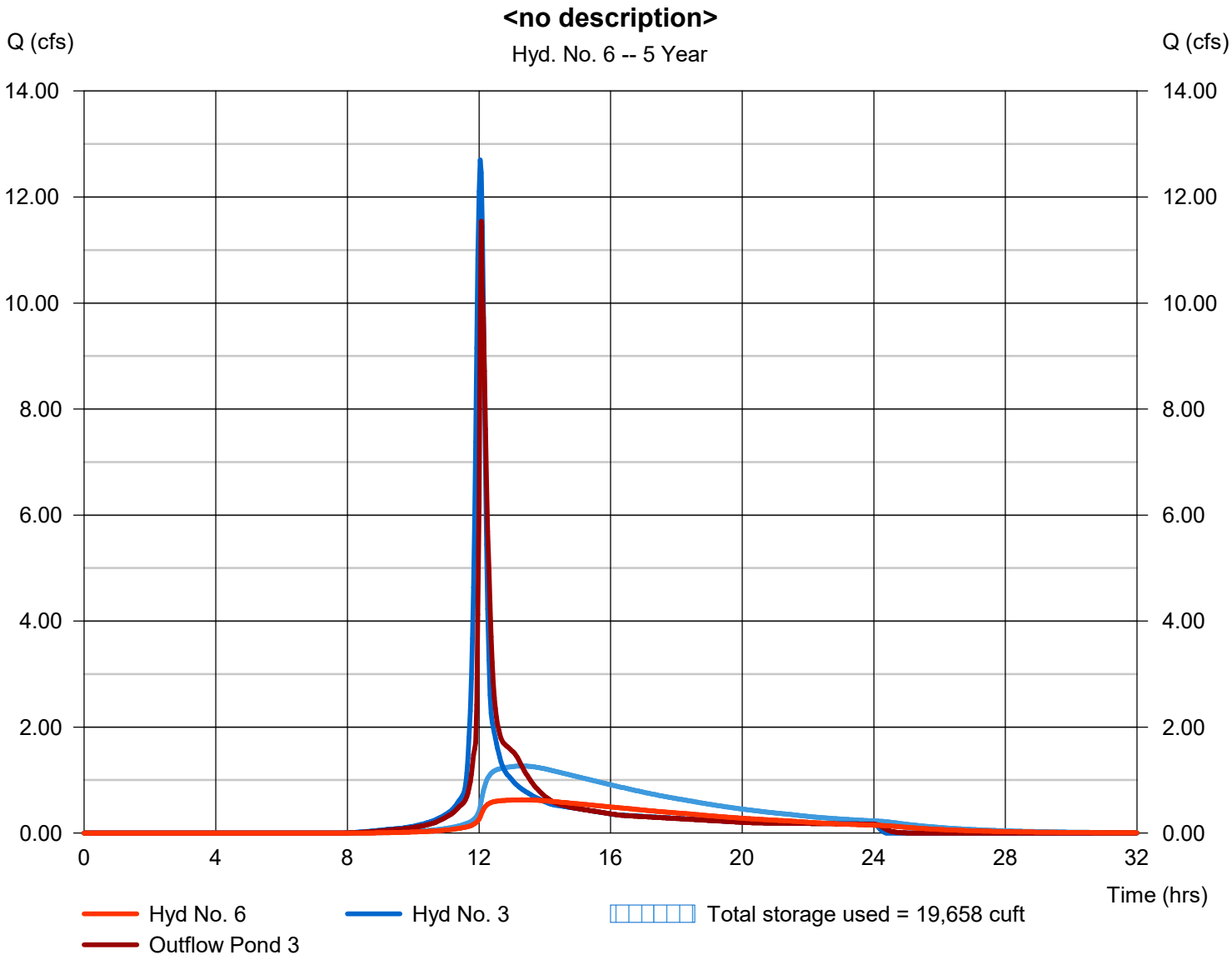
Hydrograph Report

Hyd. No. 6

<no description>

Hydrograph type	=	Reservoir (Interconnected)	Peak discharge	=	0.627 cfs
Storm frequency	=	5 yrs	Time to peak	=	13.30 hrs
Time interval	=	2 min	Hyd. volume	=	18,622 cuft
Upper Pond	=	Bio Tv	Lower Pond	=	POND
Inflow hyd.	=	3 - AREA TO INFILTRATION TRENCH (RAW CN)	Outflow hyd.	=	None
Max. Elevation	=	708.58 ft	Max. Elevation	=	705.58 ft
Max. Storage	=	5,236 cuft	Max. Storage	=	14,422 cuft

Interconnected Pond Routing. Storage Indication method used. Exfiltration extracted from Outflow.

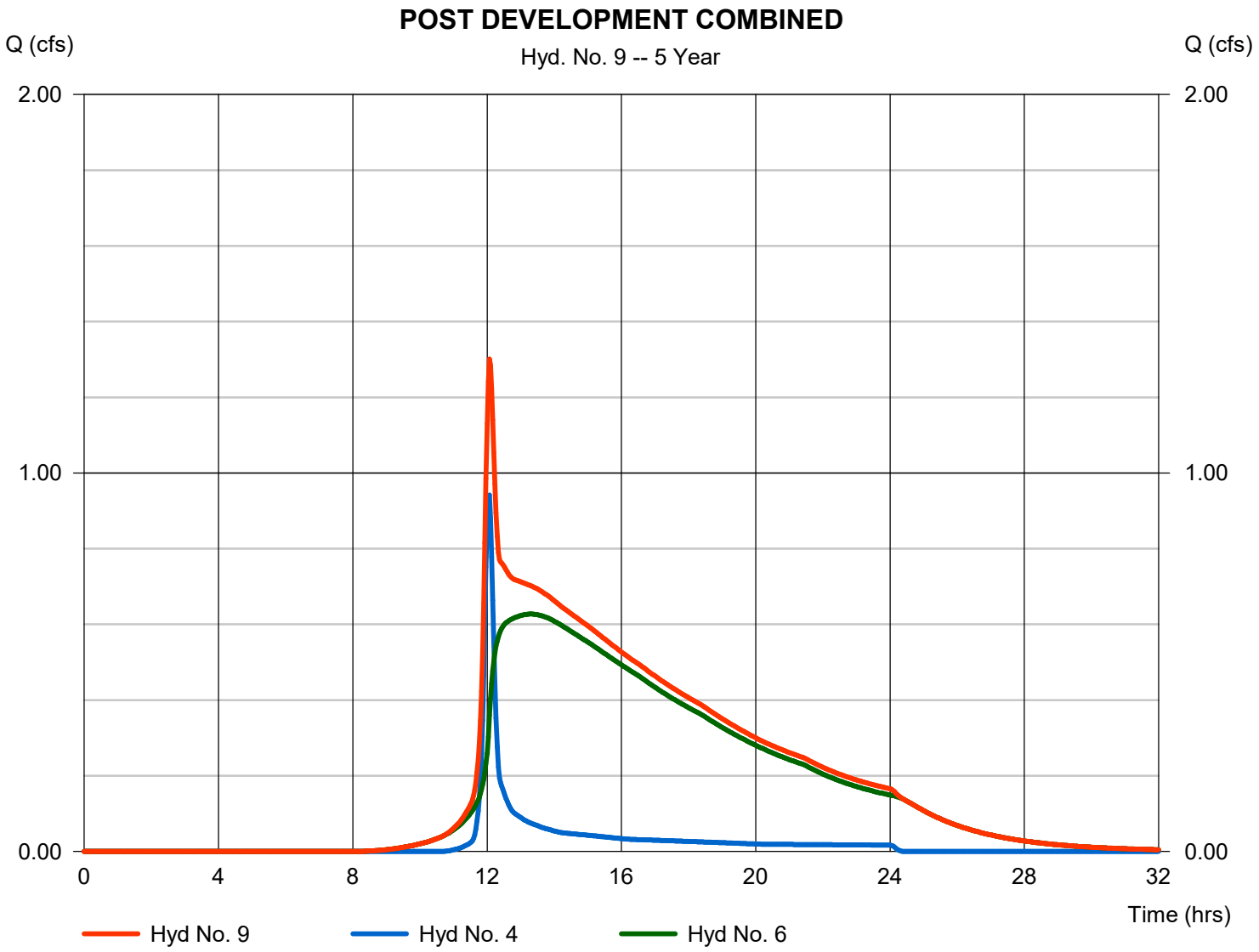


Hydrograph Report

Hyd. No. 9

POST DEVELOPMENT COMBINED

Hydrograph type	= Combine	Peak discharge	= 1.301 cfs
Storm frequency	= 5 yrs	Time to peak	= 12.07 hrs
Time interval	= 2 min	Hyd. volume	= 21,358 cuft
Inflow hyds.	= 4, 6	Contrib. drain. area	= 0.500 ac



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

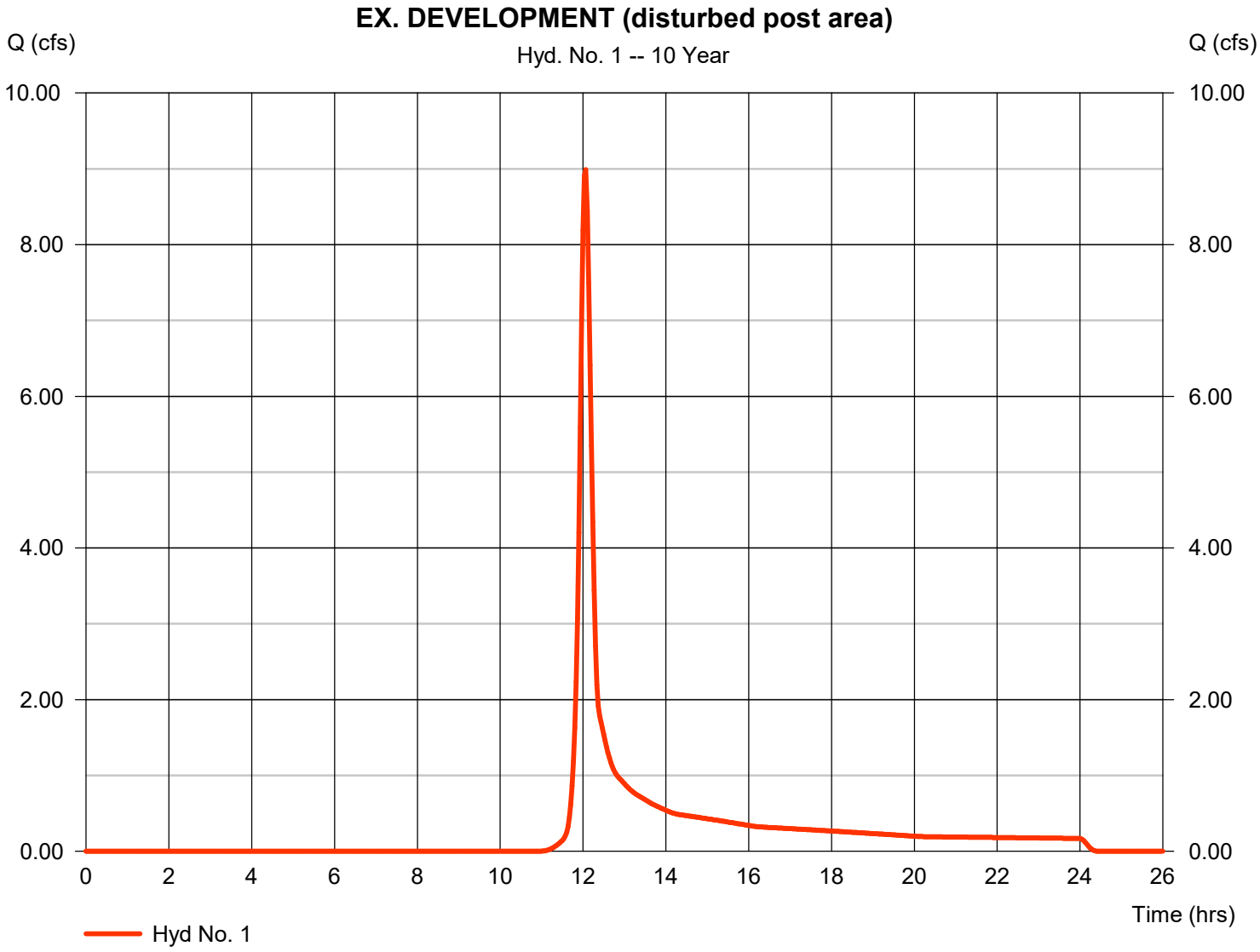
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	8.990	2	724	26,483	------	------	------	EX. DEVELOPMENT (disturbed post
3	SCS Runoff	15.94	2	722	44,767	------	------	------	AREA TO INFILTRATION TRENCH (
4	SCS Runoff	1.276	2	722	3,647	------	------	------	AREA BYPASSING LID
6	Reservoir(i)	0.720	2	790	22,582	3	708.63	24,047	<no description>
9	Combine	1.739	2	724	26,229	4, 6,	------	------	POST DEVELOPMENT COMBINED

Hydrograph Report

Hyd. No. 1

EX. DEVELOPMENT (disturbed post area)

Hydrograph type	= SCS Runoff	Peak discharge	= 8.990 cfs
Storm frequency	= 10 yrs	Time to peak	= 12.07 hrs
Time interval	= 2 min	Hyd. volume	= 26,483 cuft
Drainage area	= 4.600 ac	Curve number	= 62.6
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 14.90 min
Total precip.	= 5.23 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



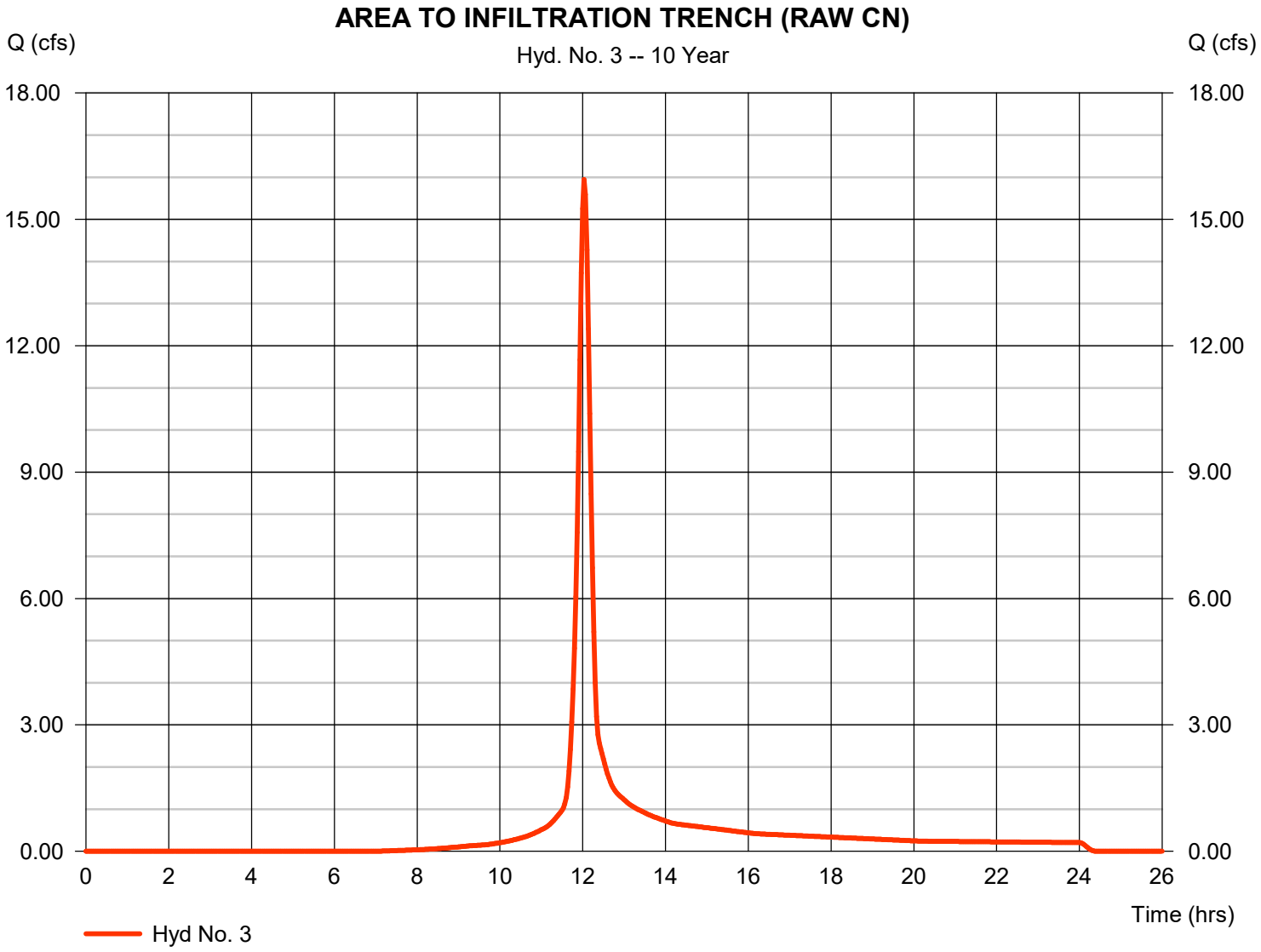
Hydrograph Report

Hyd. No. 3

AREA TO INFILTRATION TRENCH (RAW CN)

Hydrograph type	= SCS Runoff	Peak discharge	= 15.94 cfs
Storm frequency	= 10 yrs	Time to peak	= 12.03 hrs
Time interval	= 2 min	Hyd. volume	= 44,767 cuft
Drainage area	= 4.100 ac	Curve number	= 79.9*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 13.50 min
Total precip.	= 5.23 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(1.030 x 98) + (5.020 x 64)] / 4.100

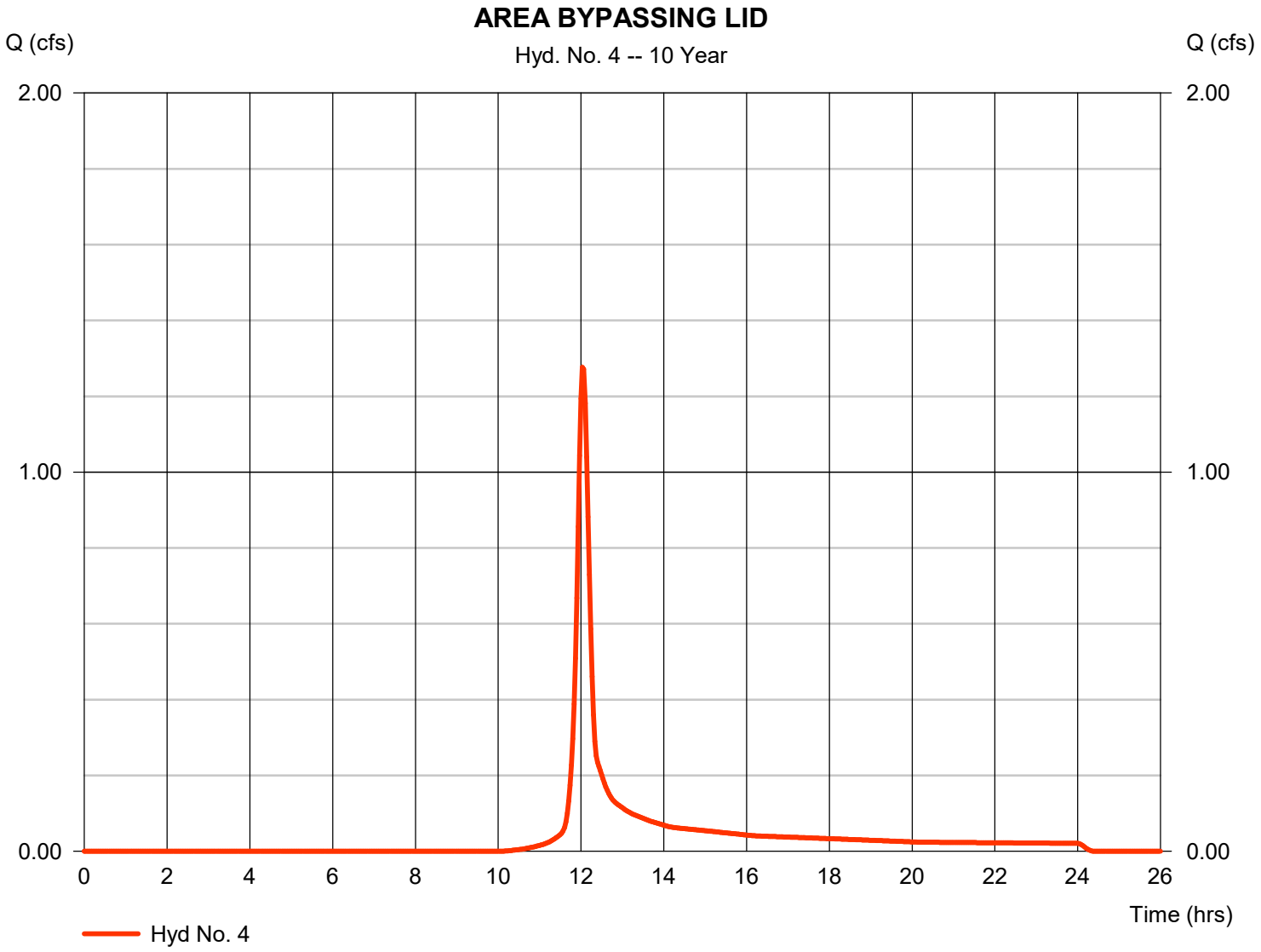


Hydrograph Report

Hyd. No. 4

AREA BYPASSING LID

Hydrograph type	=	SCS Runoff	Peak discharge	=	1.276 cfs
Storm frequency	=	10 yrs	Time to peak	=	12.03 hrs
Time interval	=	2 min	Hyd. volume	=	3,647 cuft
Drainage area	=	0.500 ac	Curve number	=	68.2
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	13.50 min
Total precip.	=	5.23 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



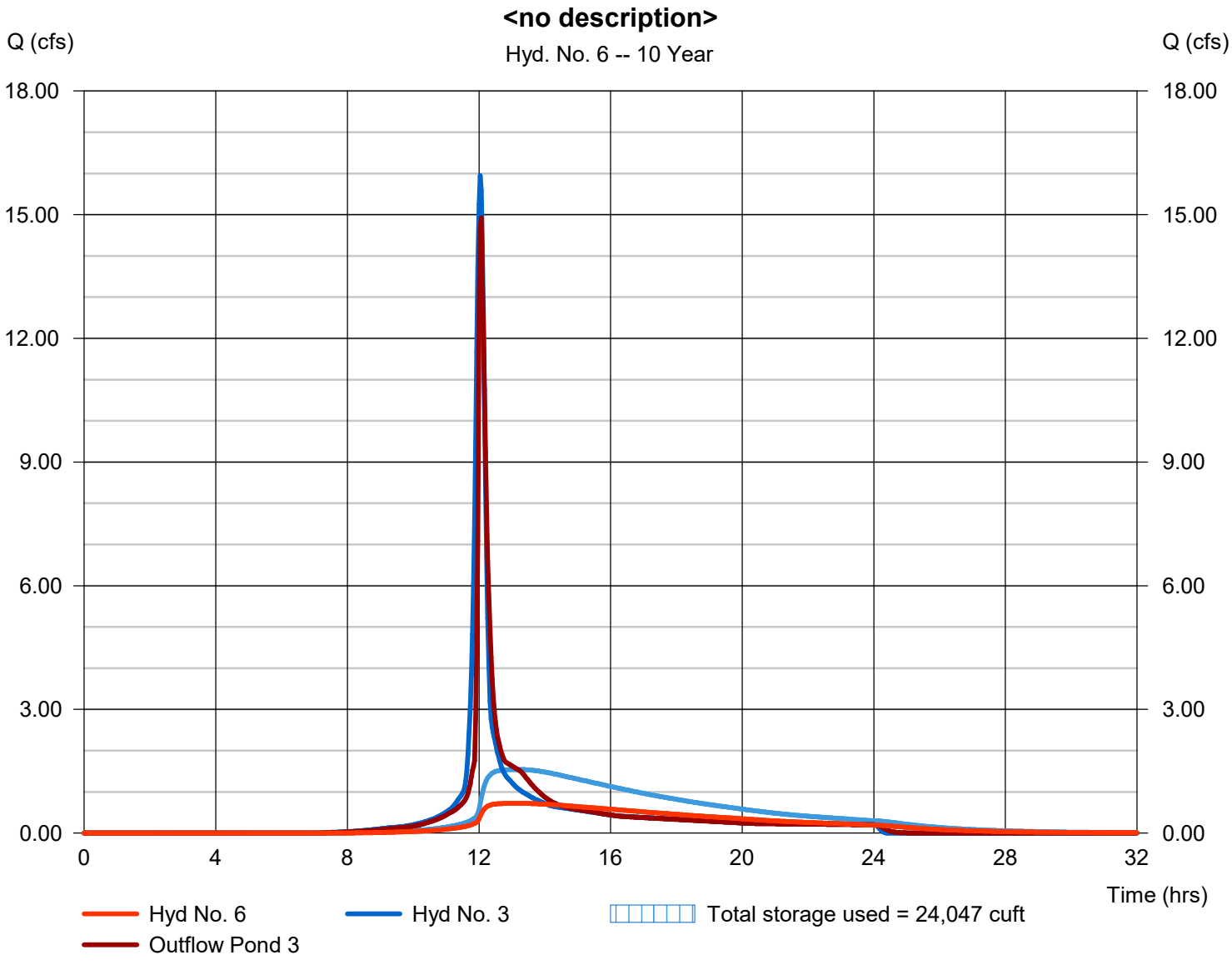
Hydrograph Report

Hyd. No. 6

<no description>

Hydrograph type	=	Reservoir (Interconnected)	Peak discharge	=	0.720 cfs
Storm frequency	=	10 yrs	Time to peak	=	13.17 hrs
Time interval	=	2 min	Hyd. volume	=	22,582 cuft
Upper Pond	=	Bio Tv	Lower Pond	=	POND
Inflow hyd.	=	3 - AREA TO INFILTRATION TRENCH (RAW CN)	Outflow hyd.	=	None
Max. Elevation	=	708.63 ft	Max. Elevation	=	706.32 ft
Max. Storage	=	5,479 cuft	Max. Storage	=	18,568 cuft

Interconnected Pond Routing. Storage Indication method used. Exfiltration extracted from Outflow.

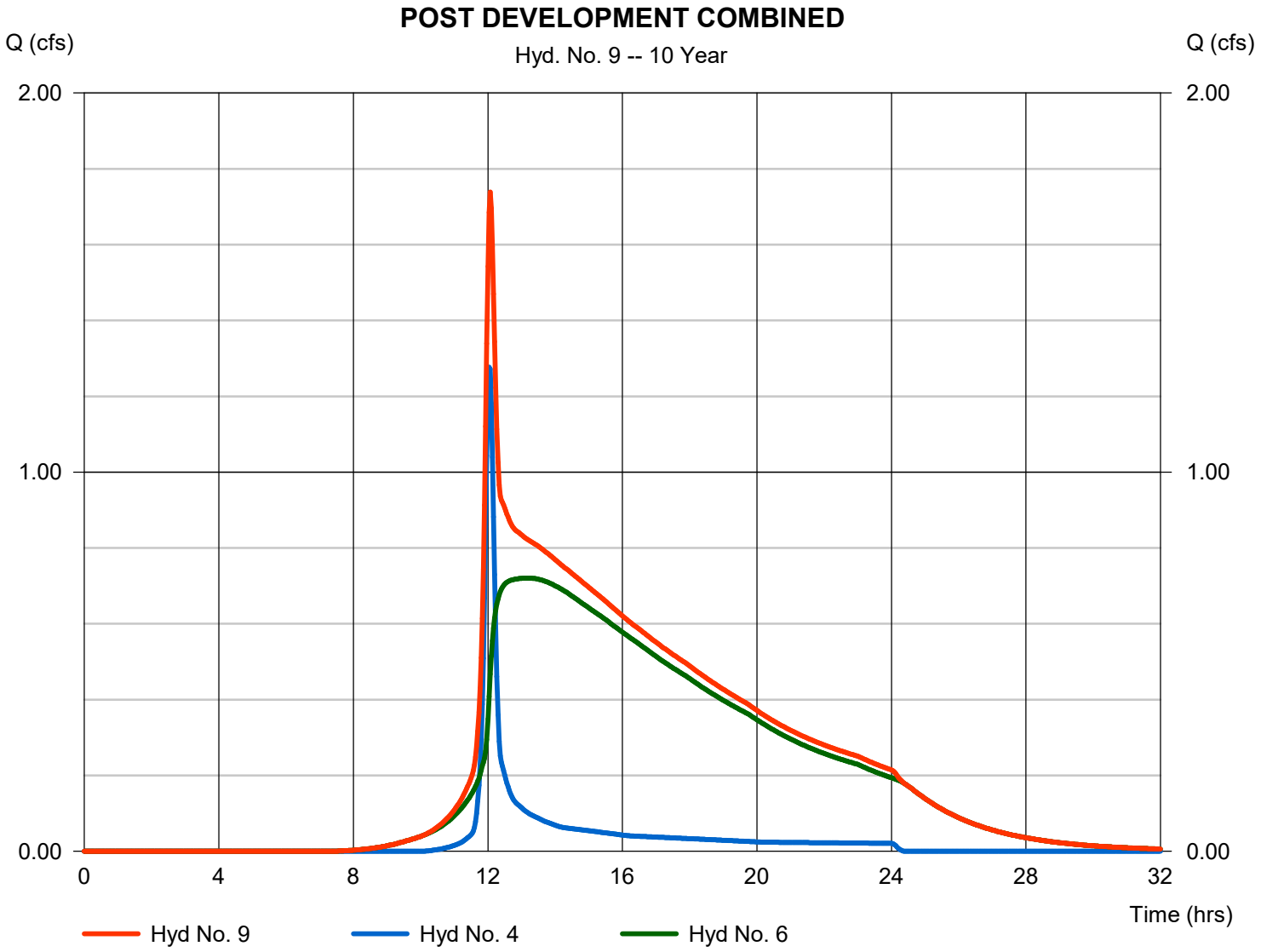


Hydrograph Report

Hyd. No. 9

POST DEVELOPMENT COMBINED

Hydrograph type	= Combine	Peak discharge	= 1.739 cfs
Storm frequency	= 10 yrs	Time to peak	= 12.07 hrs
Time interval	= 2 min	Hyd. volume	= 26,229 cuft
Inflow hyds.	= 4, 6	Contrib. drain. area	= 0.500 ac



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

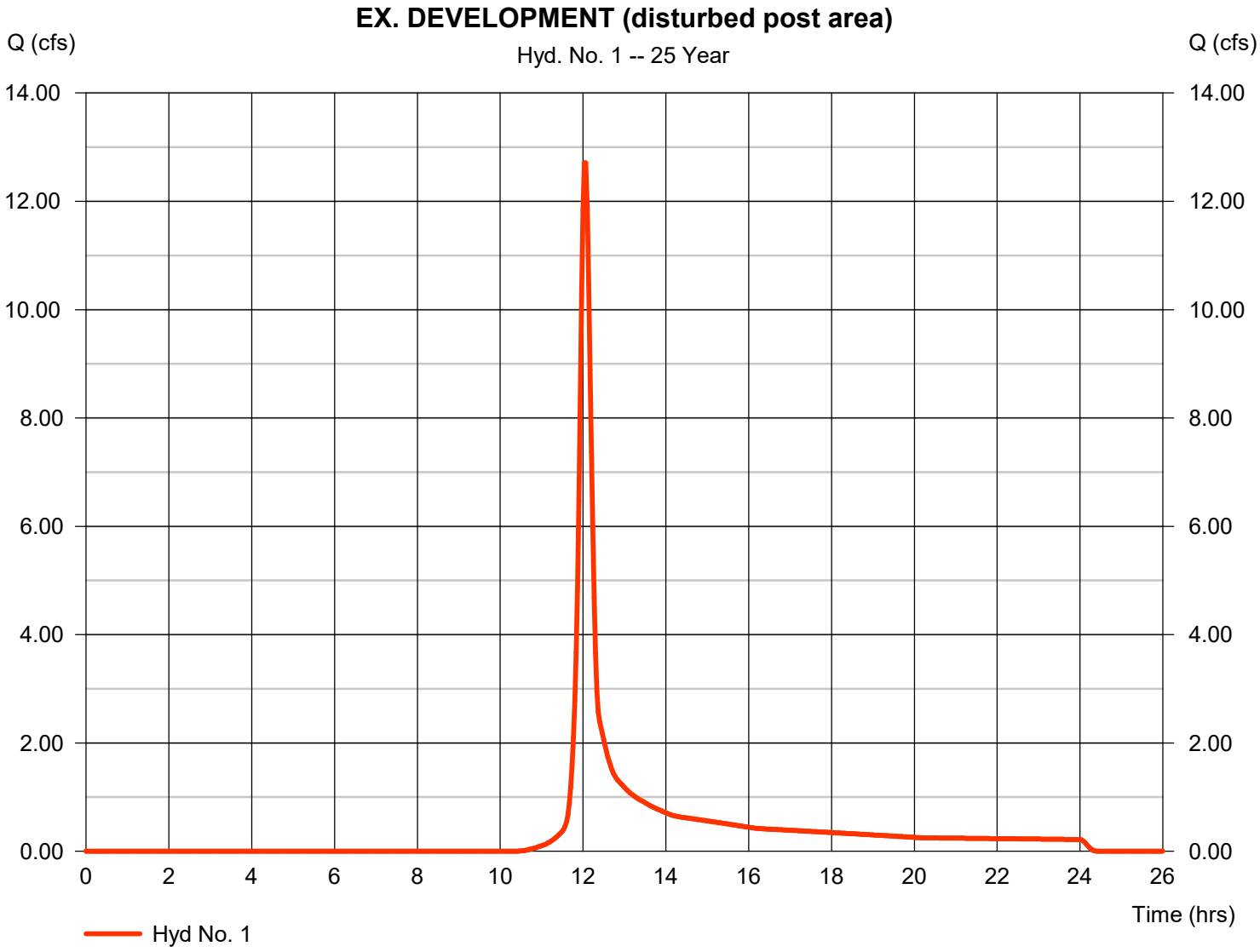
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	12.71	2	724	36,688	------	------	------	EX. DEVELOPMENT (disturbed post
3	SCS Runoff	20.14	2	722	56,819	------	------	------	AREA TO INFILTRATION TRENCH (
4	SCS Runoff	1.732	2	722	4,889	------	------	------	AREA BYPASSING LID
6	Reservoir(i)	0.835	2	768	27,427	3	708.69	30,171	<no description>
9	Combine	2.298	2	724	32,316	4, 6,	------	------	POST DEVELOPMENT COMBINED

Hydrograph Report

Hyd. No. 1

EX. DEVELOPMENT (disturbed post area)

Hydrograph type	= SCS Runoff	Peak discharge	= 12.71 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.07 hrs
Time interval	= 2 min	Hyd. volume	= 36,688 cuft
Drainage area	= 4.600 ac	Curve number	= 62.6
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 14.90 min
Total precip.	= 6.16 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



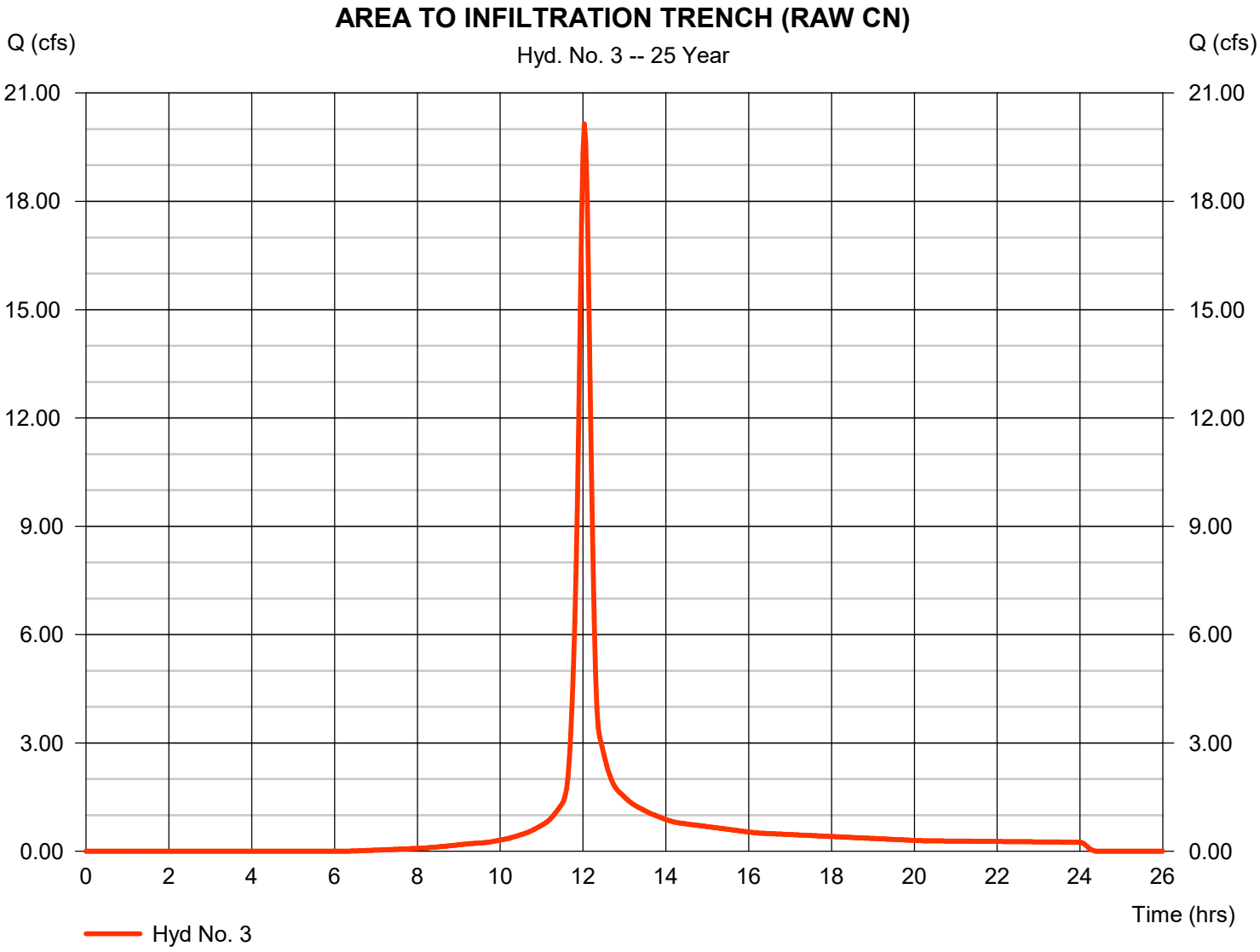
Hydrograph Report

Hyd. No. 3

AREA TO INFILTRATION TRENCH (RAW CN)

Hydrograph type	= SCS Runoff	Peak discharge	= 20.14 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.03 hrs
Time interval	= 2 min	Hyd. volume	= 56,819 cuft
Drainage area	= 4.100 ac	Curve number	= 79.9*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 13.50 min
Total precip.	= 6.16 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(1.030 x 98) + (5.020 x 64)] / 4.100

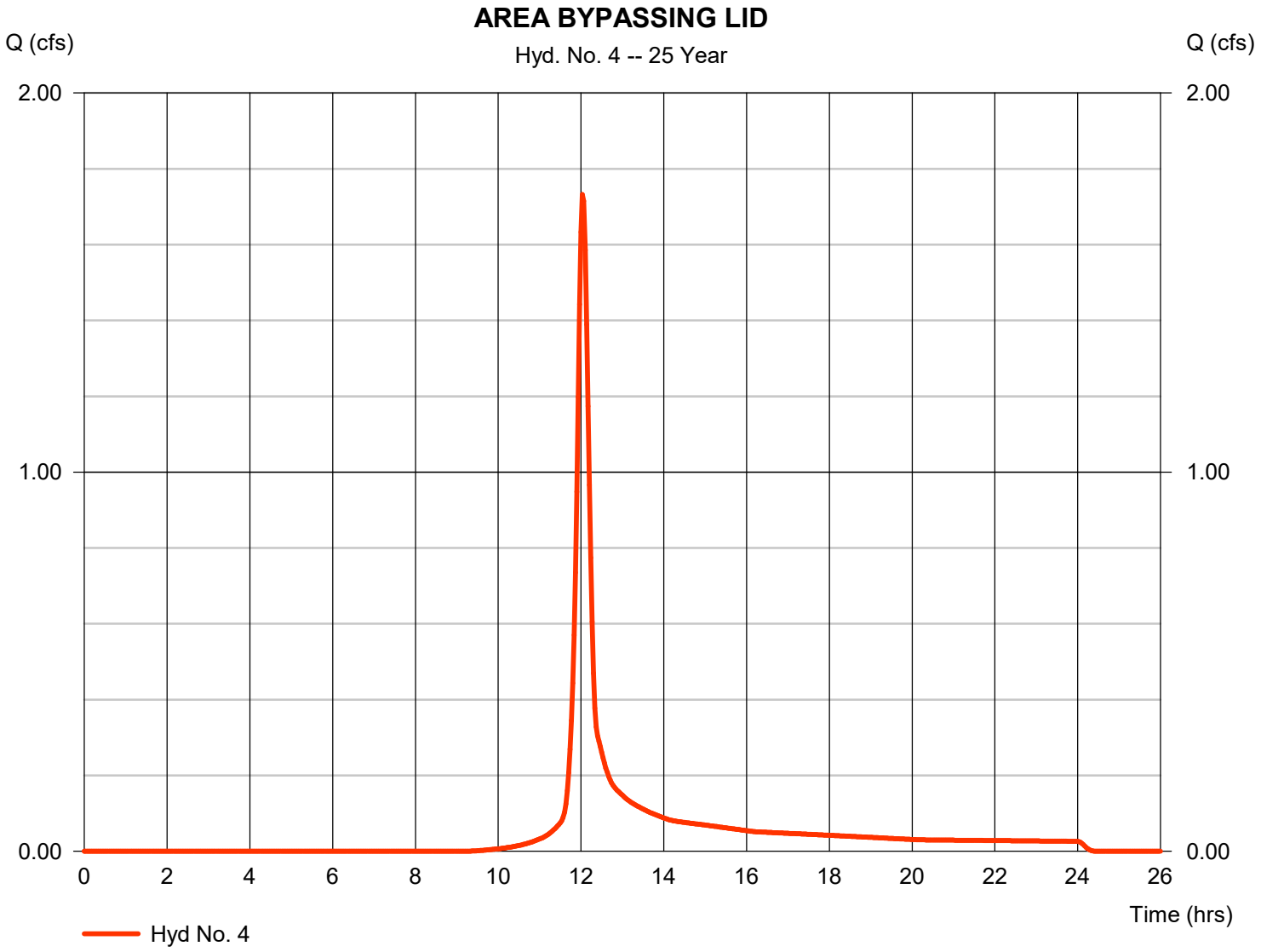


Hydrograph Report

Hyd. No. 4

AREA BYPASSING LID

Hydrograph type	=	SCS Runoff	Peak discharge	=	1.732 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.03 hrs
Time interval	=	2 min	Hyd. volume	=	4,889 cuft
Drainage area	=	0.500 ac	Curve number	=	68.2
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	13.50 min
Total precip.	=	6.16 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



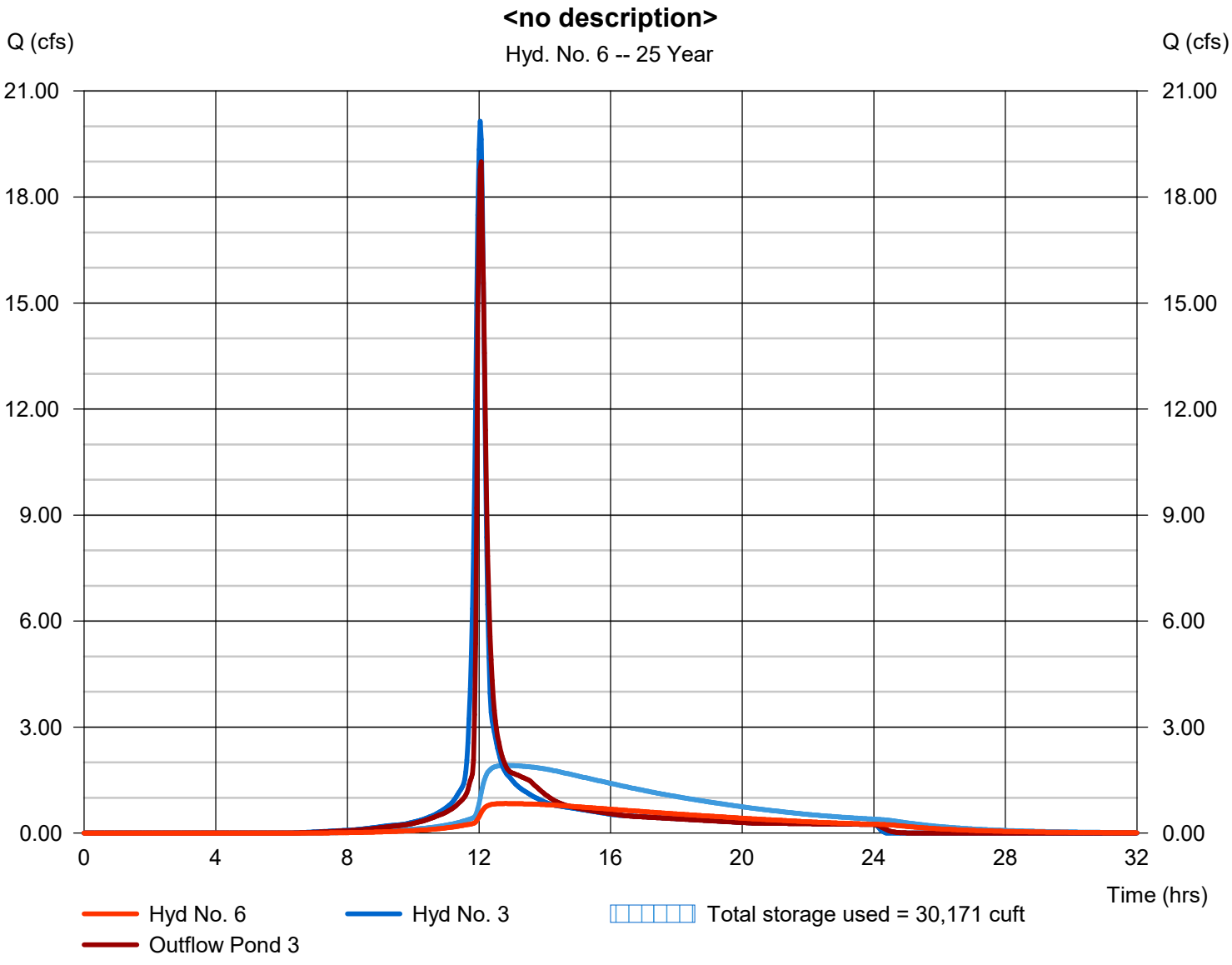
Hydrograph Report

Hyd. No. 6

<no description>

Hydrograph type	=	Reservoir (Interconnected)	Peak discharge	=	0.835 cfs
Storm frequency	=	25 yrs	Time to peak	=	12.80 hrs
Time interval	=	2 min	Hyd. volume	=	27,427 cuft
Upper Pond	=	Bio Tv	Lower Pond	=	POND
Inflow hyd.	=	3 - AREA TO INFILTRATION TRENCH (RAW CN)	Exfiltration	=	None
Max. Elevation	=	708.69 ft	Max. Elevation	=	707.36 ft
Max. Storage	=	5,758 cuft	Max. Storage	=	24,412 cuft

Interconnected Pond Routing. Storage Indication method used. Exfiltration extracted from Outflow.

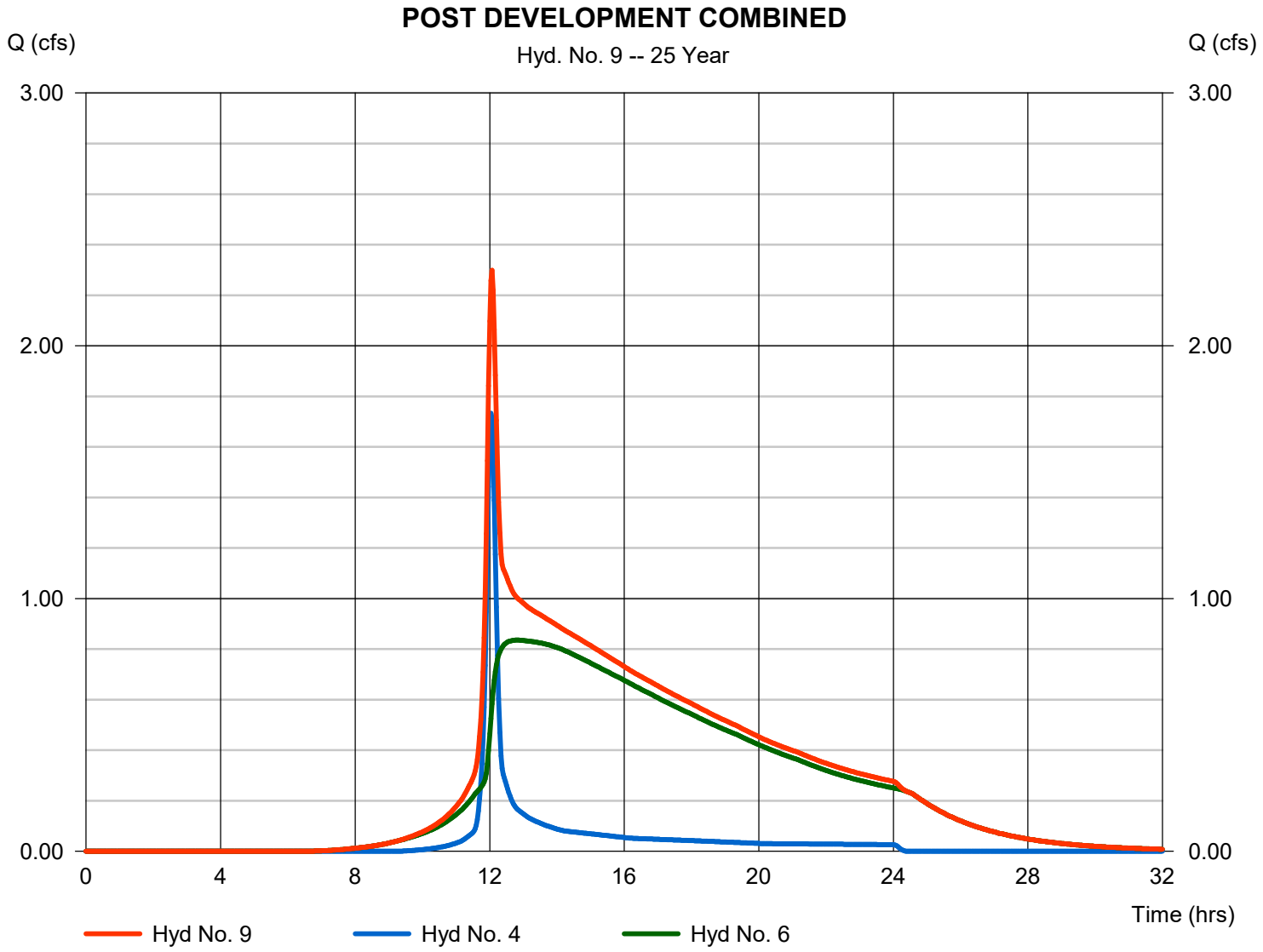


Hydrograph Report

Hyd. No. 9

POST DEVELOPMENT COMBINED

Hydrograph type	= Combine	Peak discharge	= 2.298 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.07 hrs
Time interval	= 2 min	Hyd. volume	= 32,316 cuft
Inflow hyds.	= 4, 6	Contrib. drain. area	= 0.500 ac



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

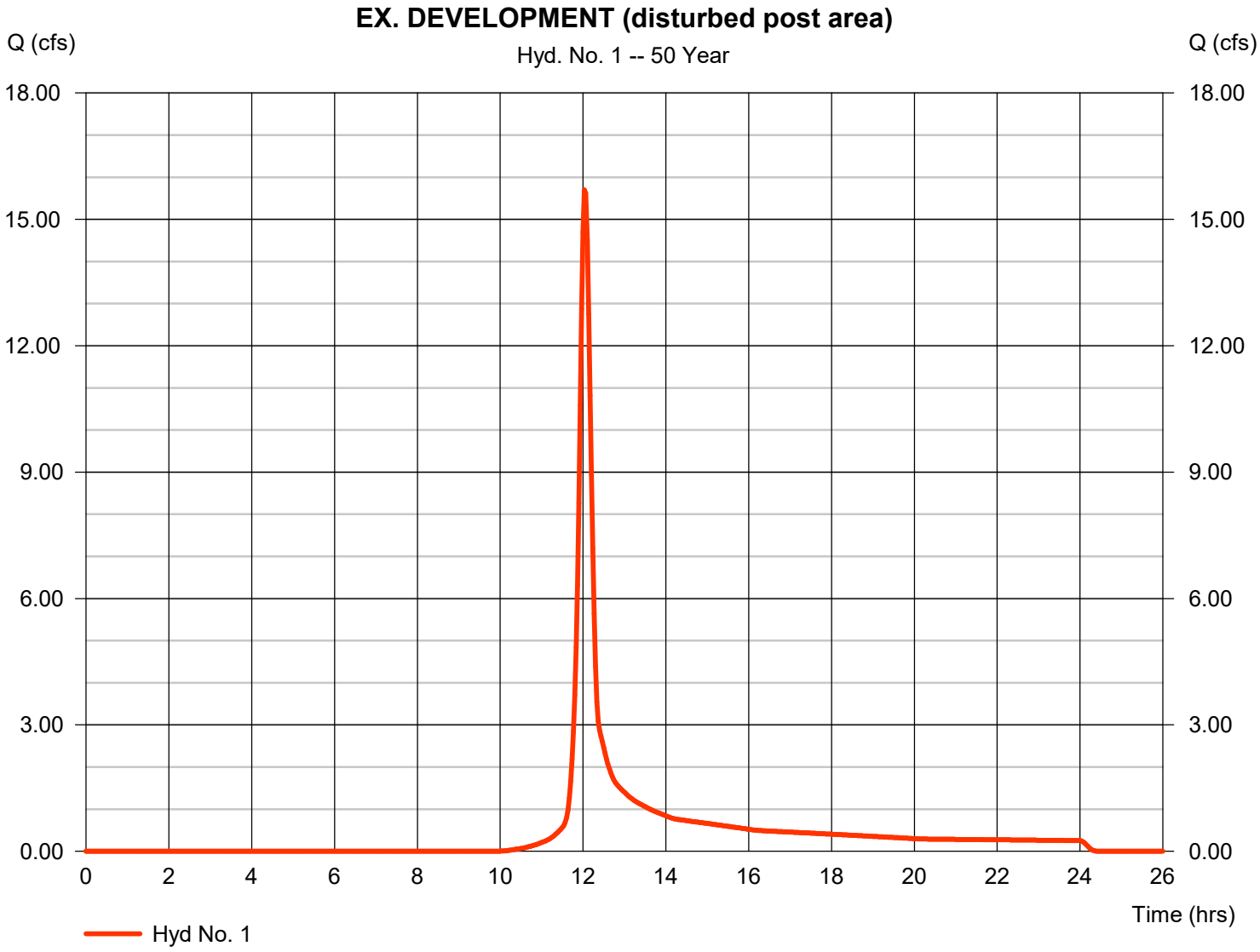
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	15.70	2	722	44,770	------	------	------	EX. DEVELOPMENT (disturbed post
3	SCS Runoff	23.28	2	722	65,957	------	------	------	AREA TO INFILTRATION TRENCH (
4	SCS Runoff	2.084	2	722	5,857	------	------	------	AREA BYPASSING LID
6	Reservoir(i)	4.960	2	740	33,476	3	708.73	31,945	<no description>
9	Combine	5.404	2	740	39,333	4, 6,	------	------	POST DEVELOPMENT COMBINED

Hydrograph Report

Hyd. No. 1

EX. DEVELOPMENT (disturbed post area)

Hydrograph type	=	SCS Runoff	Peak discharge	=	15.70 cfs
Storm frequency	=	50 yrs	Time to peak	=	12.03 hrs
Time interval	=	2 min	Hyd. volume	=	44,770 cuft
Drainage area	=	4.600 ac	Curve number	=	62.6
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	14.90 min
Total precip.	=	6.85 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



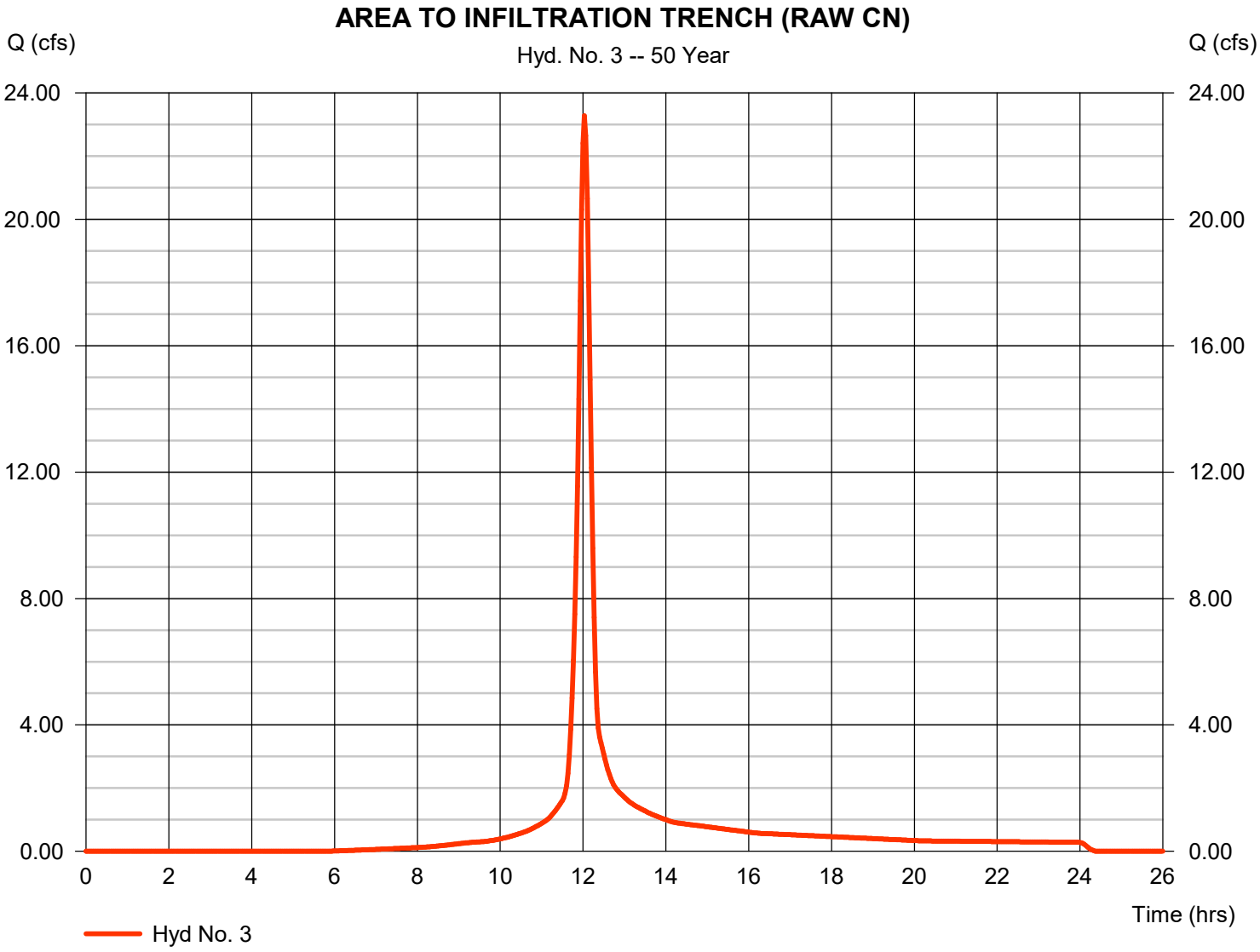
Hydrograph Report

Hyd. No. 3

AREA TO INFILTRATION TRENCH (RAW CN)

Hydrograph type	= SCS Runoff	Peak discharge	= 23.28 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.03 hrs
Time interval	= 2 min	Hyd. volume	= 65,957 cuft
Drainage area	= 4.100 ac	Curve number	= 79.9*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 13.50 min
Total precip.	= 6.85 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(1.030 x 98) + (5.020 x 64)] / 4.100

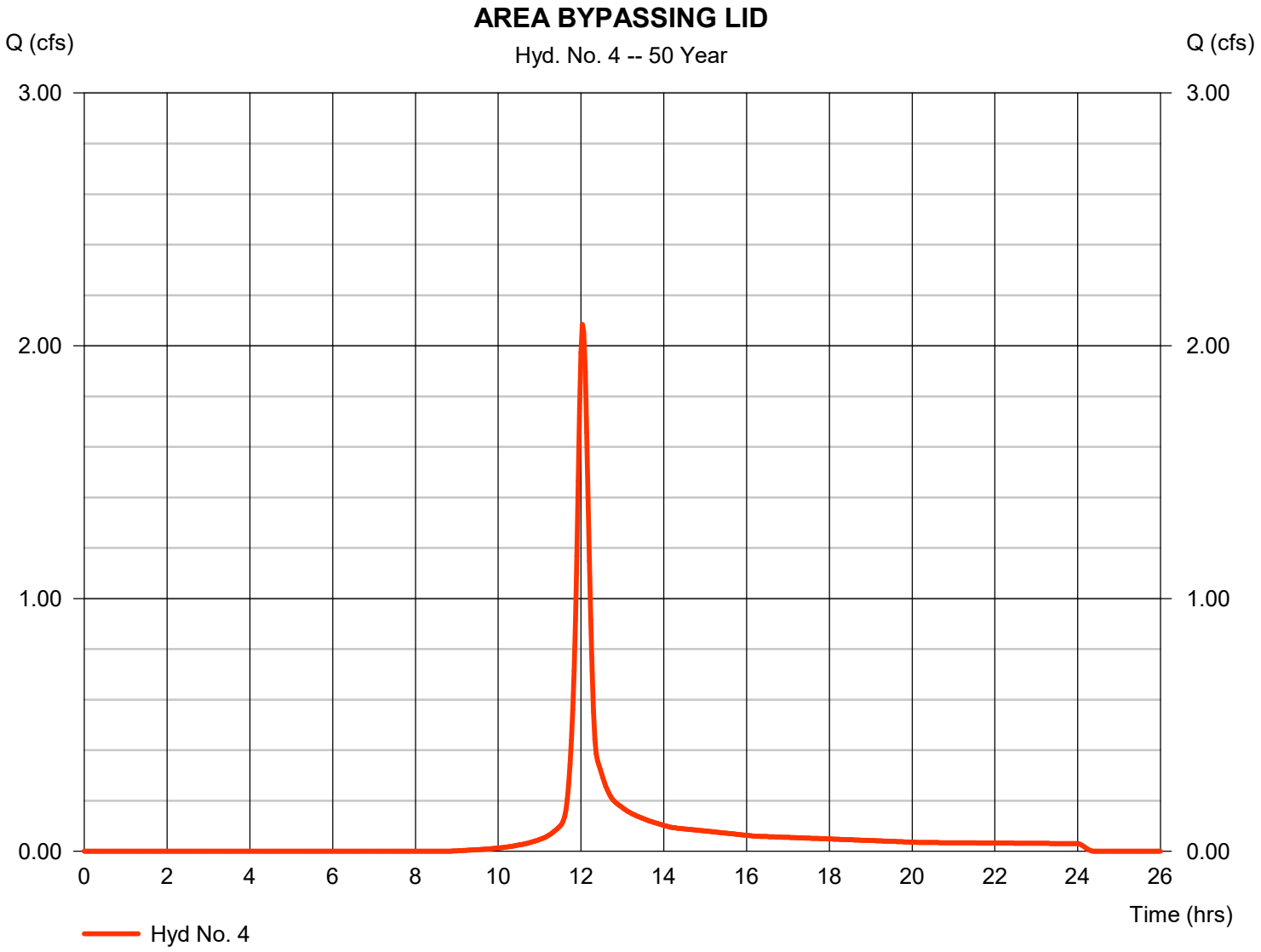


Hydrograph Report

Hyd. No. 4

AREA BYPASSING LID

Hydrograph type	=	SCS Runoff	Peak discharge	=	2.084 cfs
Storm frequency	=	50 yrs	Time to peak	=	12.03 hrs
Time interval	=	2 min	Hyd. volume	=	5,857 cuft
Drainage area	=	0.500 ac	Curve number	=	68.2
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	13.50 min
Total precip.	=	6.85 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



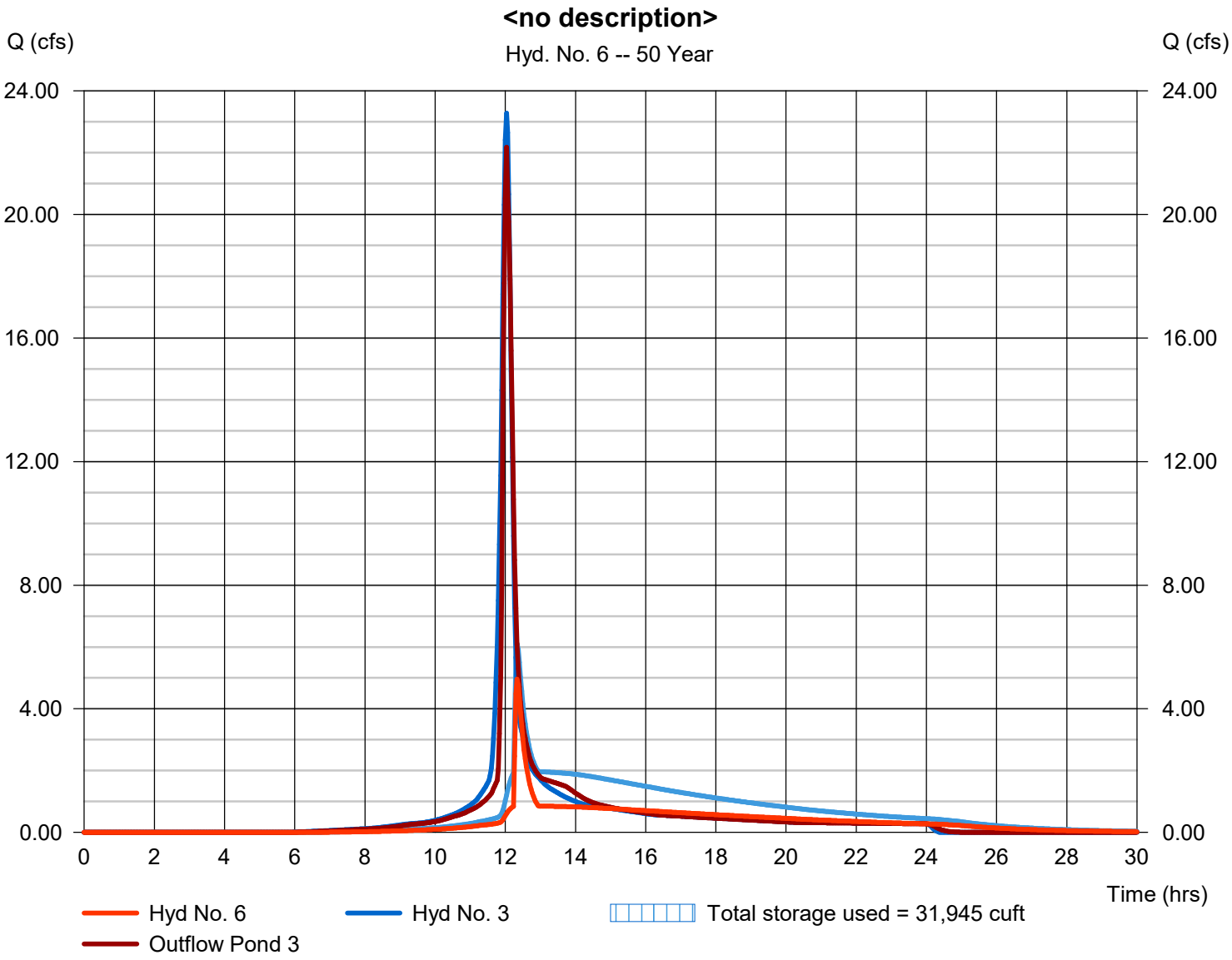
Hydrograph Report

Hyd. No. 6

<no description>

Hydrograph type	=	Reservoir (Interconnected)	Peak discharge	=	4.960 cfs
Storm frequency	=	50 yrs	Time to peak	=	12.33 hrs
Time interval	=	2 min	Hyd. volume	=	33,476 cuft
Upper Pond	=	Bio Tv	Lower Pond	=	POND
Inflow hyd.	=	3 - AREA TO INFILTRATION TRENCH (RAW CN)	Exfiltration	=	None
Max. Elevation	=	708.73 ft	Max. Elevation	=	707.65 ft
Max. Storage	=	5,908 cuft	Max. Storage	=	26,038 cuft

Interconnected Pond Routing. Storage Indication method used. Exfiltration extracted from Outflow.

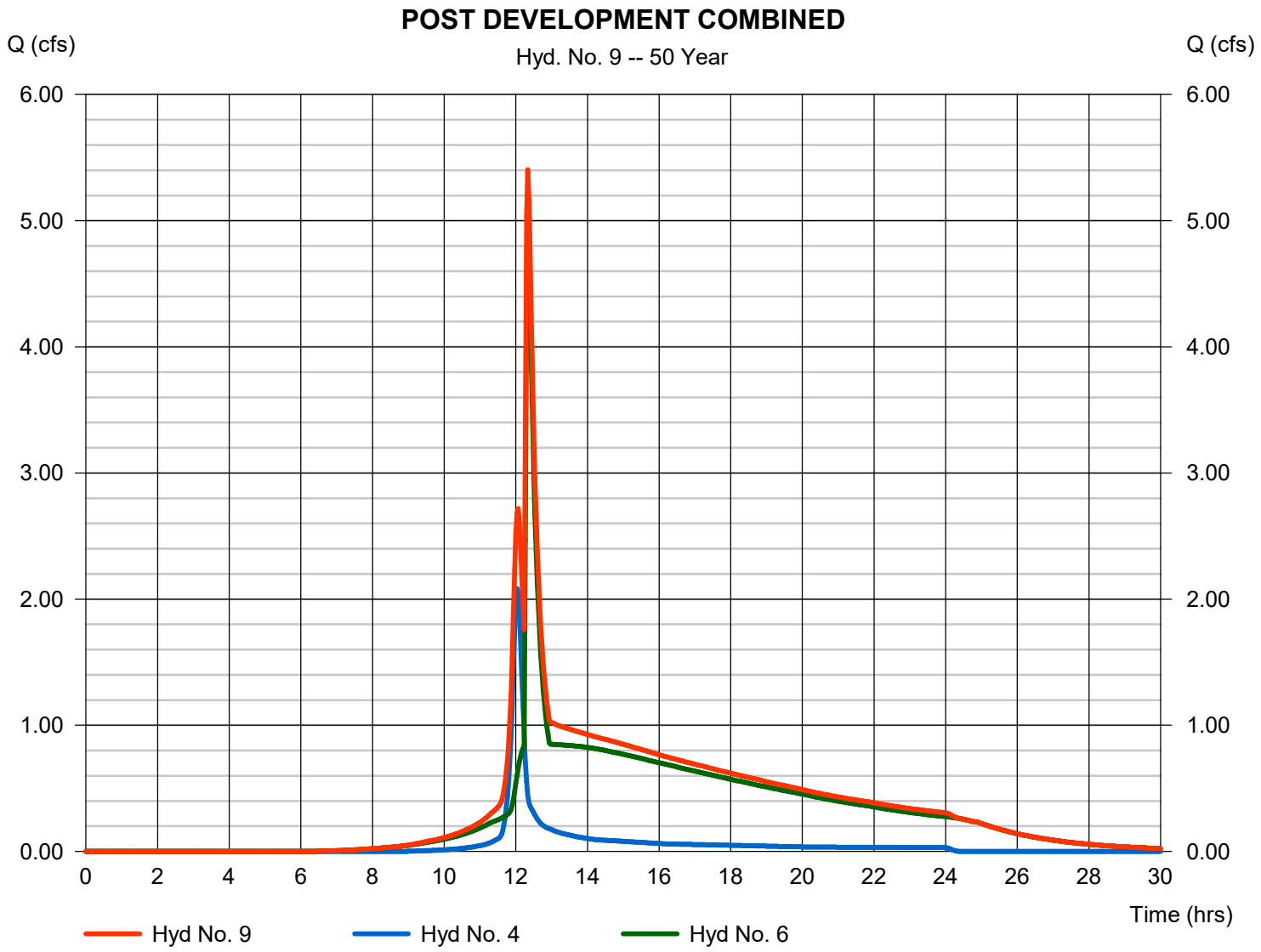


Hydrograph Report

Hyd. No. 9

POST DEVELOPMENT COMBINED

Hydrograph type	= Combine	Peak discharge	= 5.404 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.33 hrs
Time interval	= 2 min	Hyd. volume	= 39,333 cuft
Inflow hyds.	= 4, 6	Contrib. drain. area	= 0.500 ac



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

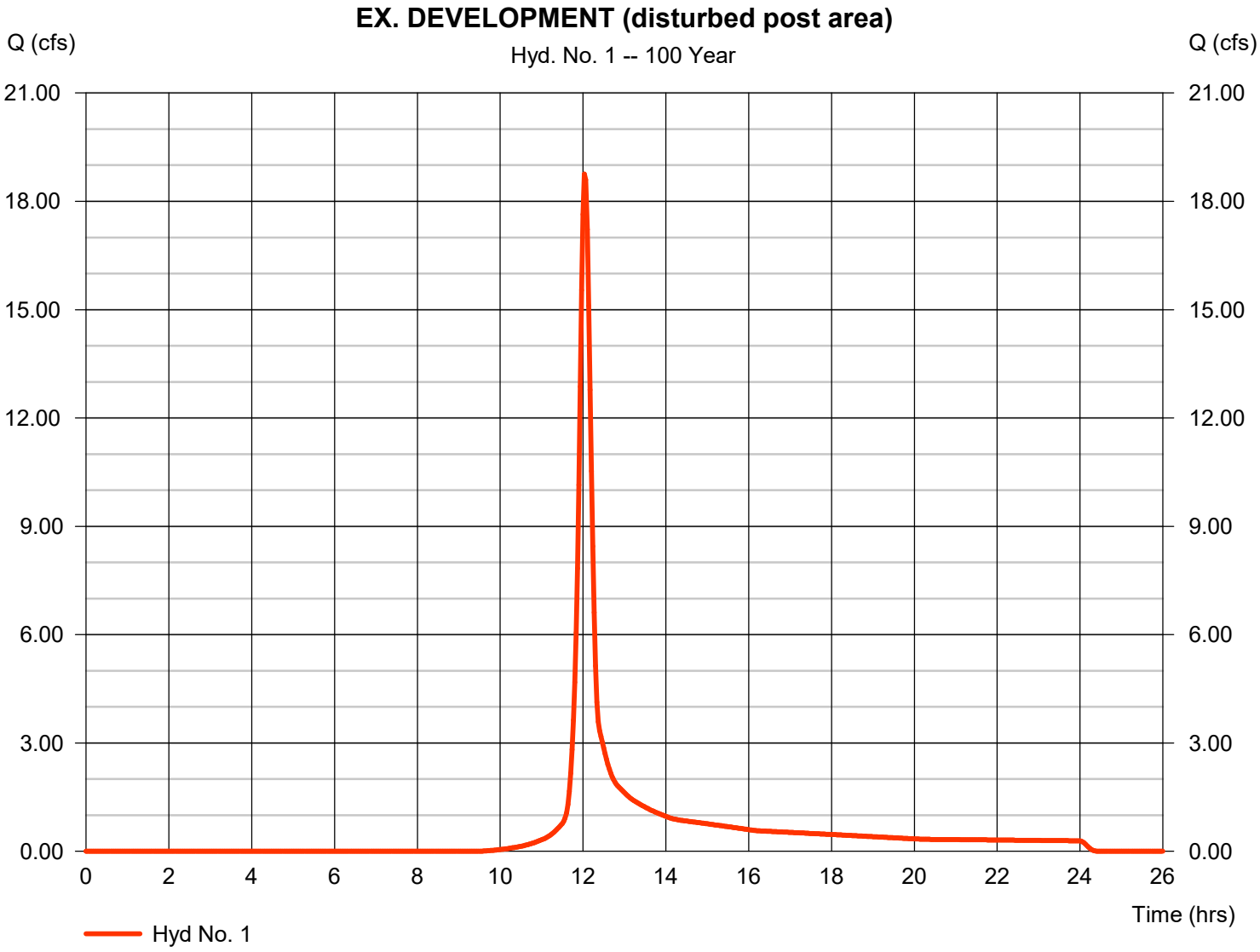
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	18.75	2	722	53,081	------	------	------	EX. DEVELOPMENT (disturbed post
3	SCS Runoff	26.39	2	722	75,086	------	------	------	AREA TO INFILTRATION TRENCH (
4	SCS Runoff	2.439	2	722	6,840	------	------	------	AREA BYPASSING LID
6	Reservoir(i)	10.45	2	734	40,345	3	708.76	33,194	<no description>
9	Combine	11.51	2	734	47,185	4, 6,	------	------	POST DEVELOPMENT COMBINED

Hydrograph Report

Hyd. No. 1

EX. DEVELOPMENT (disturbed post area)

Hydrograph type	=	SCS Runoff	Peak discharge	=	18.75 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.03 hrs
Time interval	=	2 min	Hyd. volume	=	53,081 cuft
Drainage area	=	4.600 ac	Curve number	=	62.6
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	14.90 min
Total precip.	=	7.53 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



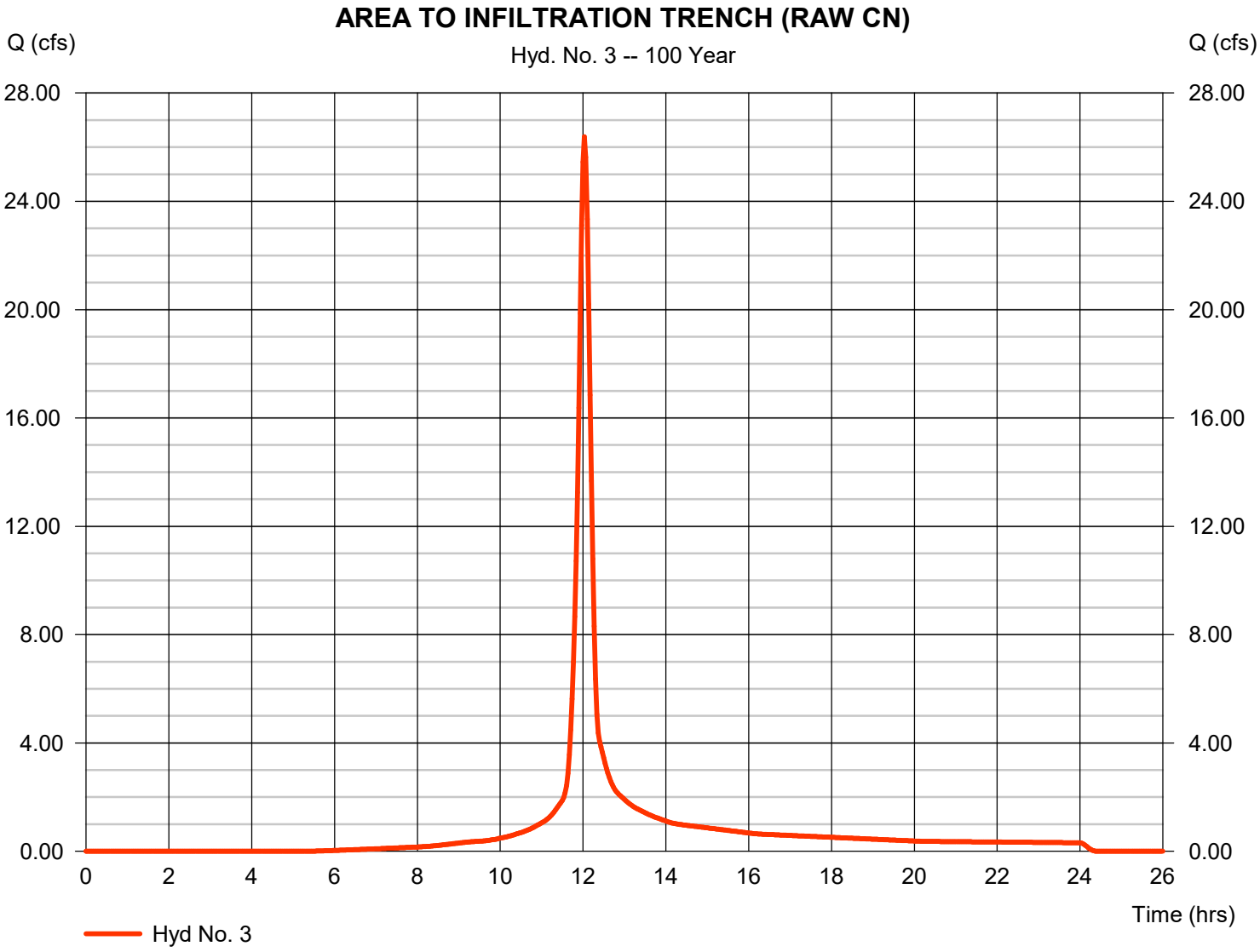
Hydrograph Report

Hyd. No. 3

AREA TO INFILTRATION TRENCH (RAW CN)

Hydrograph type	= SCS Runoff	Peak discharge	= 26.39 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.03 hrs
Time interval	= 2 min	Hyd. volume	= 75,086 cuft
Drainage area	= 4.100 ac	Curve number	= 79.9*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 13.50 min
Total precip.	= 7.53 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(1.030 x 98) + (5.020 x 64)] / 4.100

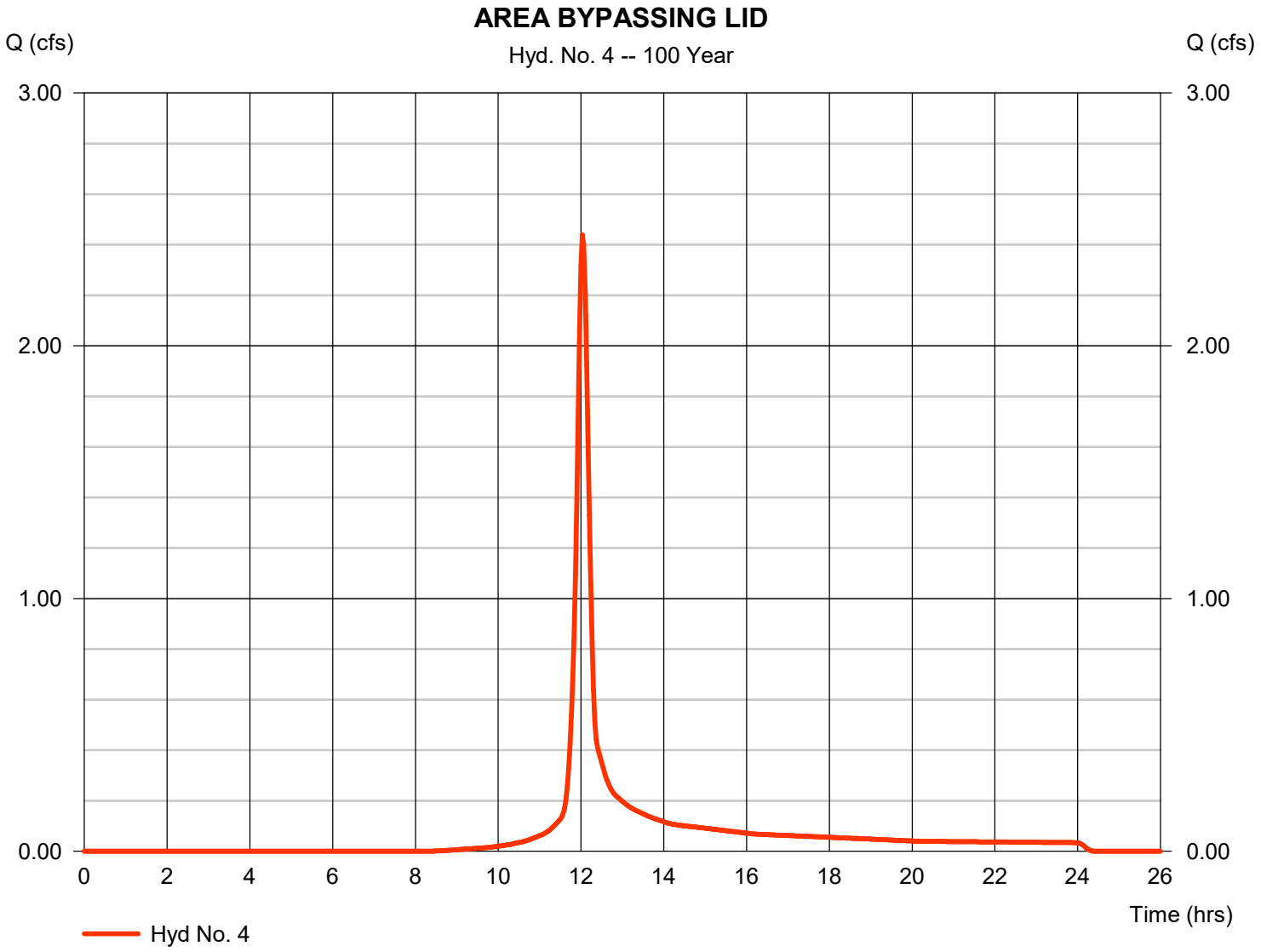


Hydrograph Report

Hyd. No. 4

AREA BYPASSING LID

Hydrograph type	=	SCS Runoff	Peak discharge	=	2.439 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.03 hrs
Time interval	=	2 min	Hyd. volume	=	6,840 cuft
Drainage area	=	0.500 ac	Curve number	=	68.2
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	13.50 min
Total precip.	=	7.53 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



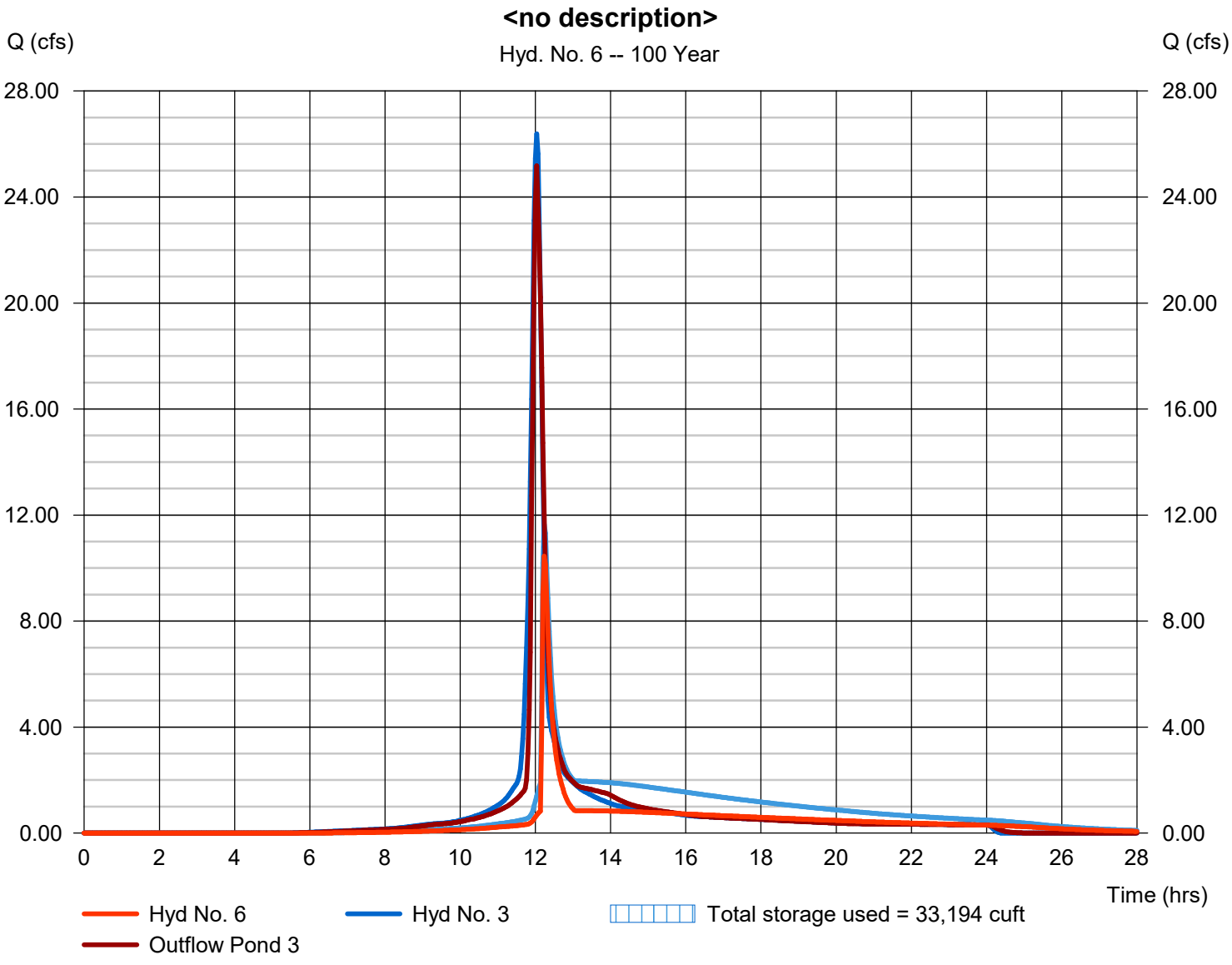
Hydrograph Report

Hyd. No. 6

<no description>

Hydrograph type	=	Reservoir (Interconnected)	Peak discharge	=	10.45 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.23 hrs
Time interval	=	2 min	Hyd. volume	=	40,345 cuft
Upper Pond	=	Bio Tv	Lower Pond	=	POND
Inflow hyd.	=	3 - AREA TO INFILTRATION TRENCH (RAW CN)	Outflow hyd.	=	None
Max. Elevation	=	708.76 ft	Max. Elevation	=	707.85 ft
Max. Storage	=	6,039 cuft	Max. Storage	=	27,155 cuft

Interconnected Pond Routing. Storage Indication method used. Exfiltration extracted from Outflow.

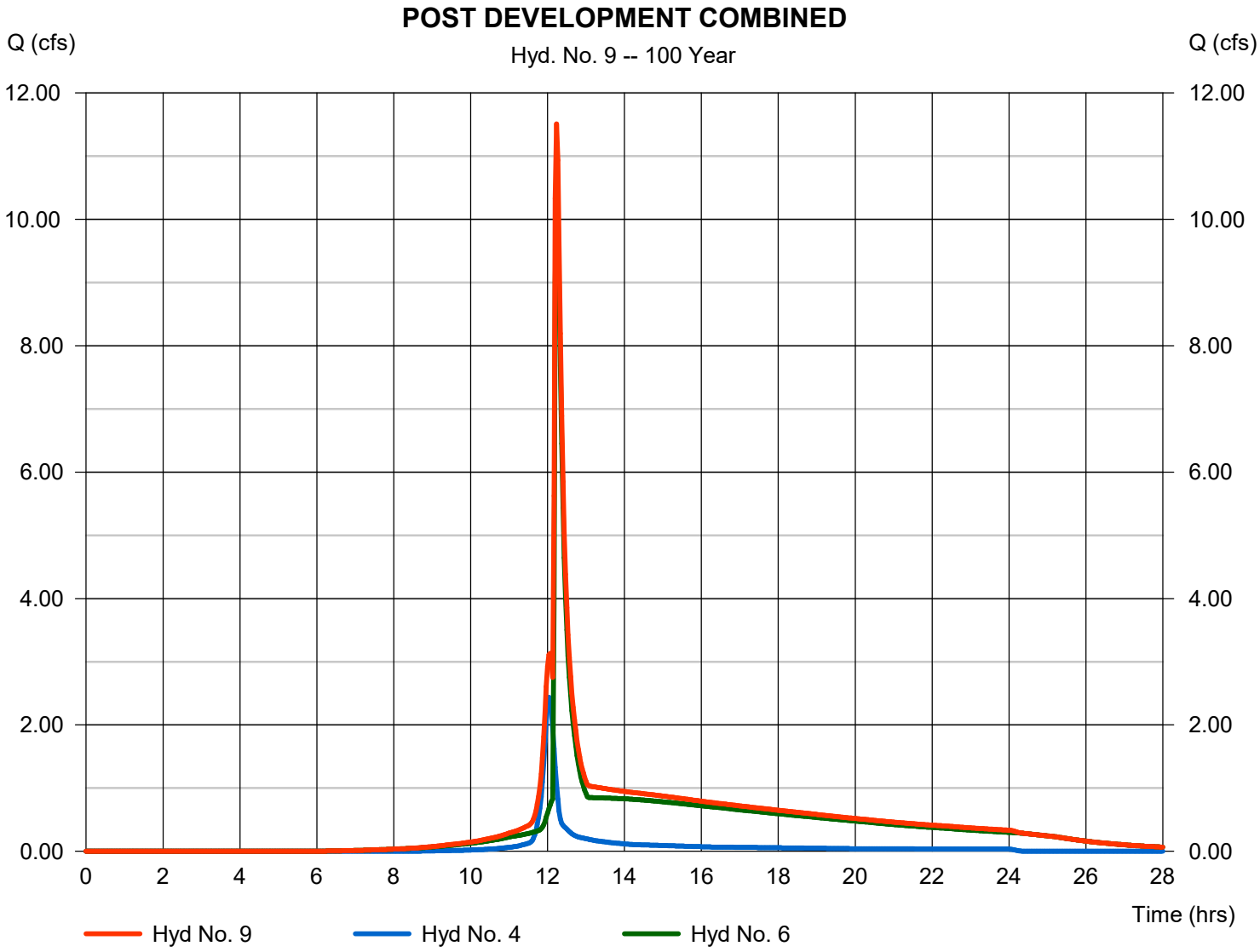


Hydrograph Report

Hyd. No. 9

POST DEVELOPMENT COMBINED

Hydrograph type	= Combine	Peak discharge	= 11.51 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.23 hrs
Time interval	= 2 min	Hyd. volume	= 47,185 cuft
Inflow hyds.	= 4, 6	Contrib. drain. area	= 0.500 ac



Downstream Analysis

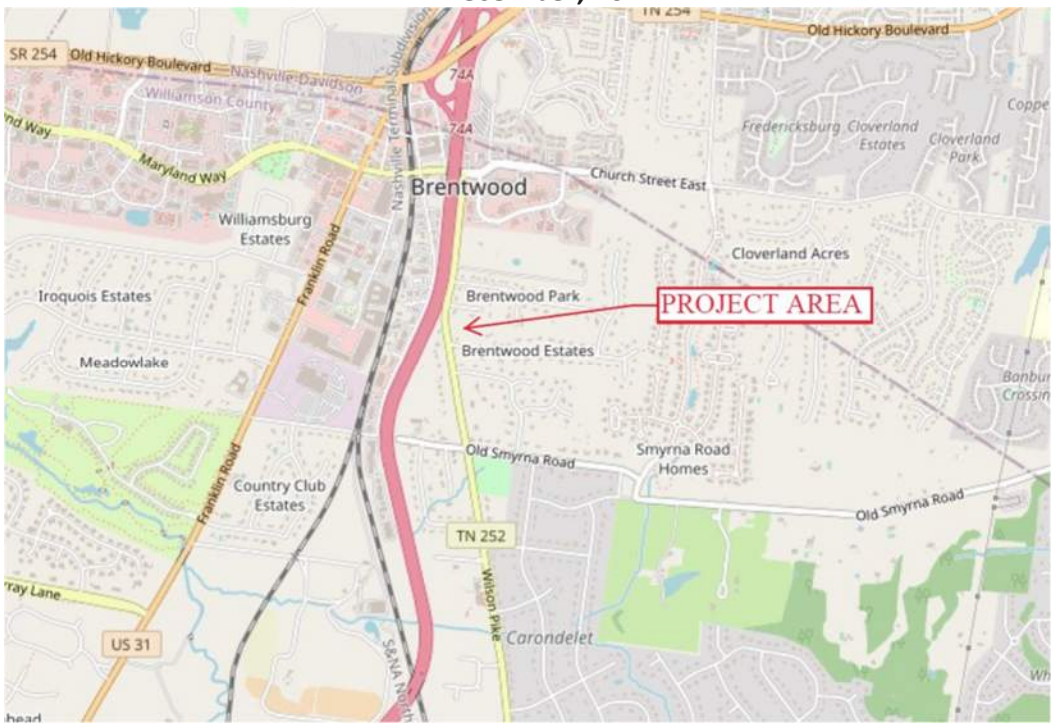
Hydrology and Hydraulics Report

For an Unnamed Urban Channel

Crossing Wilson Pike

Brentwood, Tennessee

December, 2022



Prepared By:
M2 Group, LLC
1475 Columbia Ave.
Franklin, Tennessee 37064
(615) 406-3415

Project Description

This purpose of this project is to establish a base flood elevation (BFE) for an unnamed urban drainage channel on the east side of Wilson Pike, between Maplelawn and Karen to determine the minimum grading for development on the subject site. The proposed grading includes fill to raise portions of the site above the BFE, compensatory storage as well as conveyance improvements. The subject parcel is shown as Zone X, Area of Minimal Flood Hazard on the National Flood Hazard Map 47187C0093G (eff 12/22/2016). A FIRMette is included in Appendix 1.

The studied reach begins on the west side of I-65 and ends approximately 200 feet east of Wilson Pike and is shown on the Limits of Study Exhibit in Appendix 1. The model includes road crossings at I-65 and Wilson Pike.

Hydrology

The contributing drainage (CDA) was broken into two distinct basins. Basin 1 which contains 0.17 square miles defined to the existing swale on the north end of the property. Basin 2 consisted of 0.23 square mile as the tributary area to the I-65 Culvert. Flows were determined using StreamStats, a web app maintained by the United States Geological Survey (USGS). Streamstats utilizes the USGS Urban regression equations for Tennessee to estimate peak flows. The flows can be summarized as:

Flows	North Swale	I-65 Culvert
2 year	69 cfs	88 cfs
10 year	149 cfs	188 cfs
100 year	258 cfs	325 cfs

The flow to the I-65 Culvert was cross-checked using the TDOT Urban Regression analysis. The formula for the 100 year peak flow is calculated as:

$Q_{100} = 77.0\ (A/640)^{0.75}\ I_{imp}^{0.40}\ P_{2\text{-}24}^{1.10}$

A= 149 ac

I Percent Imp 17%

$P_{2\text{-}24}$ = 3.68”

So the flow to the I-65 Culvert can be calculated as $Q_{100} = 77\ (149/640)^{.75}\ 17^{0.40}\ 3.68^{1.10} = 332$ cfs. The difference between the two flows is less than 3%, so it was decided to use the Streamstats flows for the purposes of the analysis.

Supplementary information on the CDA and flow calculations can be found in Appendix 2 along with the drainage basin maps.

Survey

Cross sections, Inverts and as-built size information for the culverts were field surveyed downstream of the site. These cross sections were used to perform preliminary culvert capacity calculations using HY-8 and construct the HEC-RAS model. LiDAR topographic data was also utilized both to confirm the drainage area as well to supplement these sections as necessary.

Hydraulics

The downstream side Wilson Pike is a pair of 54x36 elliptical culverts. The culverts are followed by approximately 130 feet of open channel before entering a 215' long, 5'w x 6'h concrete box culvert under I-65, downstream of I-65 there is short section of paved channel prior to another 5'w x 6'h concrete box under Wilson Pike Circle.

Because of the close proximity of all of the culverts, we ran an HY-8 analysis of the culverts to determine control for the starting water surface elevation. Using the inverts of the culvert at Wilson Pike Circle, and the LiDAR profile of the centerline, the starting water surface on the downstream side of I-65 was determined to be 705.74 using HY-8, which was used as the starting water surface for the HEC RAS analysis.

Existing cross section, stream profile, and structure data were obtained from a field survey. The locations and widths of the surveyed cross sections were specified to provide cross sections just upstream and downstream of each culverts providing bounding cross sections at the far downstream and upstream ends of the area to be studied

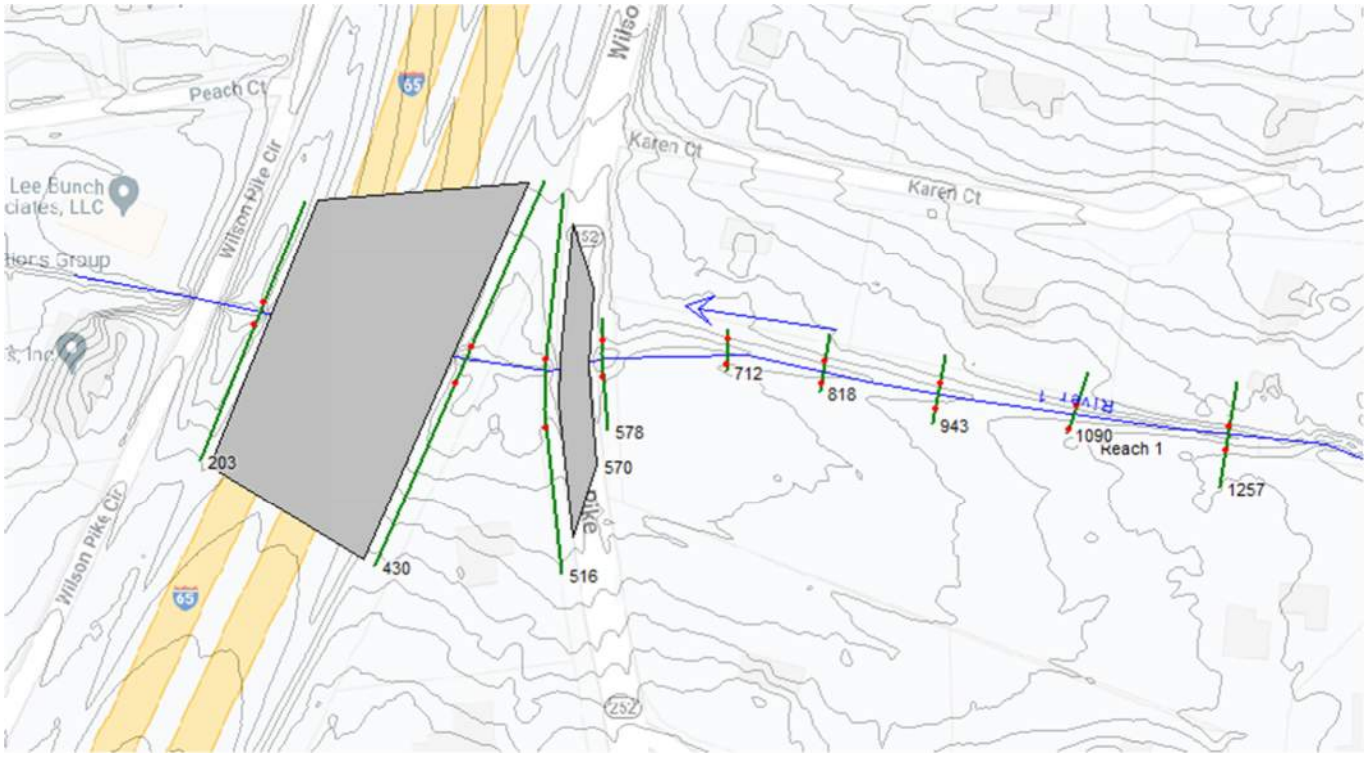
Contraction/Expansion Lengths:

Contraction and expansion coefficients are based on guidance in HEC-RAS Reference Manual. Normal flow cross sections use 0.1 and 0.3 per recommendations for 'gradual transitions'. The coefficients for the cross sections within the contraction reach or expanse reach adjacent to the structures are set to 0.3 and 0.5 respectively per the recommendations for 'typical bridge sections'. Though the reference manual states the coefficients can be set lower in supercritical flow situations, a decision was made to not lower the coefficients since portions of the studied reach are still in subcritical flow and the exact transitions vary depending on the flow rate. Higher coefficient values are also more conservative. Contraction and expansion reach lengths and locations were estimated via the methods described in Appendix B of the HEC-RAS manual.

Selection of Manning's Roughness 'N' Values:

Manning's 'n' values were estimated using visual inspections with site photos and publicly available aerial imagery. The stream flows through a mostly developed suburban area. The portion of the main channel downstream of I-65 is a formed concrete channel with lightly wooded overbanks. Values of and 0.035 were selected for the concrete and natural channels. Grassed and vegetated overbanks were assigned values of 0.042.

The HEC RAS model schematic is represented as:



Results/Conclusion

The results of the model indicate that the 100 year water surface upstream of I-65 of 708.01 The backwater carries over Wilson Pike to past section 712, then the water surface begins to maintain the normal stream slope. The profile can be summarized as:

Section	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width
		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)
1257	100 yr	258	711.67	715.37		715.82	0.007262	5.41	47.69	24.82
1090	100 yr	258	710.75	713.49	713.42	714.16	0.014162	6.56	39.45	26.93
943	100 yr	258	709.36	711.4	711.4	712.04	0.014659	6.5	41.85	36.11
818	100 yr	258	707.01	709.5	709.4	710.09	0.011038	6.24	43.77	33.38
712	100 yr	258	705.57	707.96	707.96	708.68	0.016455	6.78	38.21	28.91
578	100 yr	258	701.4	708.01	704.02	708.03	0.000095	1.11	306.31	118.8
570		Culvert								
516	100 yr	325	699.66	708.01		708.02	0.000022	0.58	859.81	400.37
430	100 yr	325	699.76	708.01	702.88	708.02	0.000008	0.4	1278.71	356.56
425		Culvert								
203	100 yr	325	696.93	705.74	700.39	705.74	0.000011	0.5	999.93	265.29

Based on the above analysis, we would recommend using 708.01 as the Base Flood Elevation on the east side of Wilson Pike, and that house be elevated at least 2 feet above that elevation. It is further recommended that the conveyance channel on the north side of the proposed Amelia Development be sized to convey 258 cfs using 708.01 as a beginning water surface and the channel be designed to convey the flow without overtopping.

APPENDIX 1

Project Maps, HY8, HEC RAS

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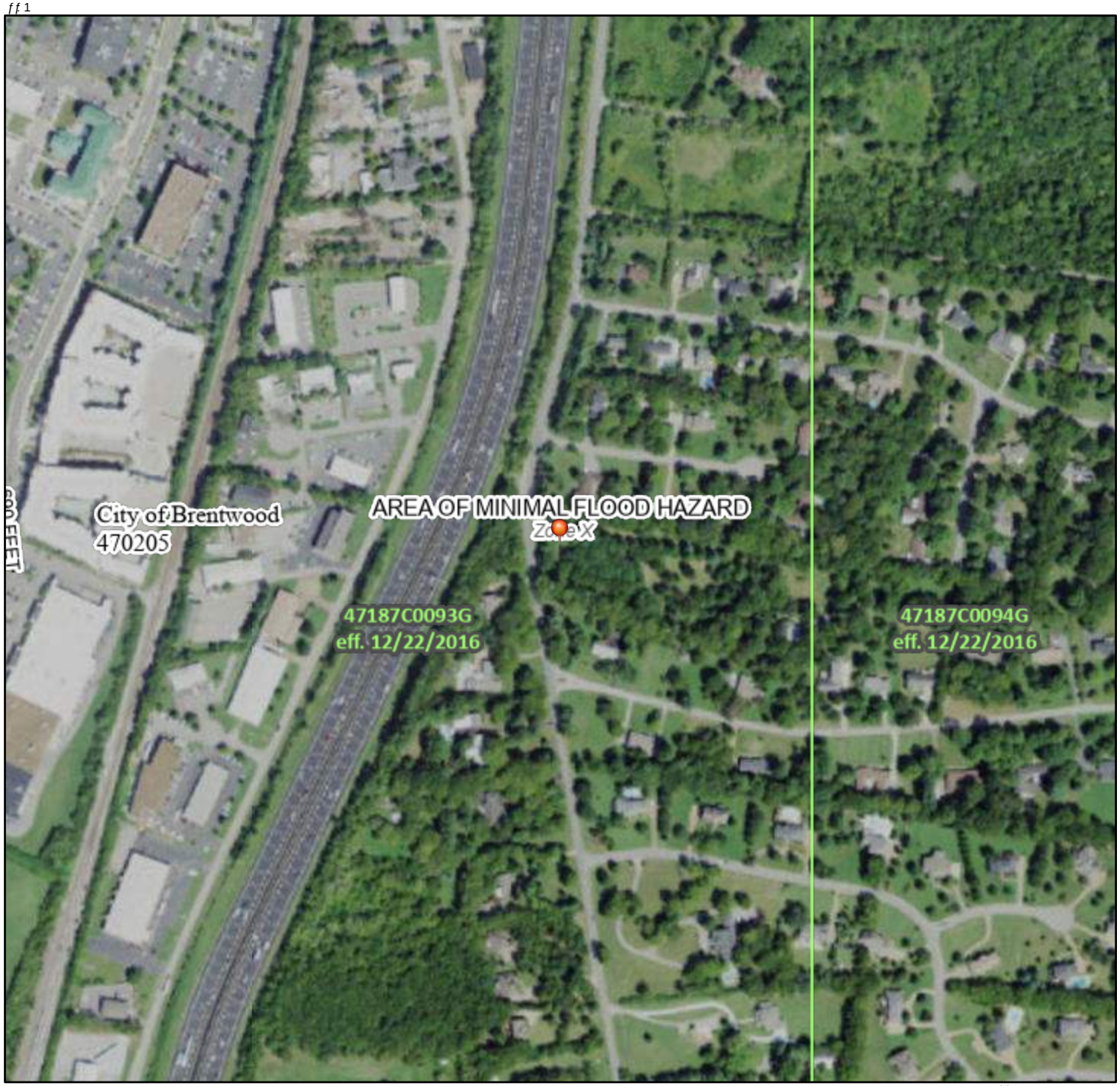
FEMA



)HHW

%DVHG RQ 1DWLRQDO 'LV 2UWKRJUDSKLF\ 'DWD UHUHVKHG 2FWREHU

/HJHQG

6)(5 $5($6 2) 0,1,0$/)/22' +$=$5'

L:WKRXW %DVH)ORRG(OHYDWLRQ %()
=RQH$ 9 $
L:WK%DVH)ORRG(OHYDWLRQV =RQHV$($+ $2 9(9$
5HGXFHGZRU\)ORRGZD

$QQXDO &KDQFH)ORRG+D]DUG $UHDV
R DQQXDO FKDQFHIORRGZ ZKDYHUDJH
GHSWKOHVV WKDQRQHIRRW RU ZKGUDLQDJH
DUHDV R OHVV WKDQRQH VTXDUHPLOHRQH;

)WXUH&RQGLWLRQV$QQXDO
&KDQFH)ORRG+D]DUG =RQH;
$UHDZLWK5HGXFHG)ORRG5LVNGXHWR
/HYHH 6HH1RWHV/ =RQH;
$UHDZLWK)ORRG5LVNGXHWR/HYHH =RQH'

$UHDRI1RW3URFHVVHG =RQH;
(IIHFWLYH/LQH
$UHDR 8QGHWHUPLQHG)ORRG+D]DUG =RQH'
&KDQQHO &XOYHUW RU6WUXFWXUH
/HYHH L'LNH RU)ORRGZDOO

&URVV6HFWLRQVZLWK$QQXDO &KDQFH
DWHU 6XUIDFH(OHYDWLRQ
&RDVWDO 7UDQVHFW
%DVH)ORRG(OHYDWLRQL LQH %()
/LPLW R 6WUXFW
-XULVGLFWLRQ%RXQGDU\
&RDVWDO 7UDQVHFW %DVHOLQH
3URILOH%DVHOLQH
+GURJUDSKLF)HDWXUH

L'LWDO DWD$YDLODEOH
R'LWDO DWD$YDLODEOH
8QPDSSHG

7KHSLQGLVSOD\HGRQWKHSUHVHQWDSSURJHWH
SRQW VHOHFWHGEWKHXVHU DQGGRHV QRW UHSUHV
DQDWKRULWDWLYHSURSHUW\ORFDWLRQ

7KLVPSFRROLHVZLWKJSVVWDQGDUGIRU WKHXHR
GL.LWDO IORRGPS/LI LW LVQRW YRLGV/GHVFULEHGEHORZ
7KHEDVHPSVKRZQFRROLHVZLWKJSVEDVHPS
DFFXUDWHWDQGDUG/

7KHIORRGKD]DUGLQRUPDWLQLV GHULYHGLUHFWO\IURPWKH
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UHOHFW FKDQHV RU DPGPQWV VXEVHTXHQW WR WKLVGDWH DQG
WLFI 7KHJHDQGHIHFWLYHLQRUPDWLQRQ PFKDQHRU
EHFRPXSUVHGEQHZGDWDRYHU WLFI

7KLVPSLPHLV YRLGLI WKHIQHRU RUHR WKHIO ORZLQPS
HOHQWV GRQW DSSHDU EDVHPSLPH\\ IORRGRQHODEHOV
OHHQG VFDOHEDU PSFRUWDLRQGDWH FRRL W\LGHQWLILHUV
)5$QO QHEU DQG)5HIHFWLYHGDWH DSLPHV IRU
XQPSSHG DQGXQRGHUGDUHDV FDQQW EHXVHGIRU
UHDO DWRU\SUSRVHV

N
NW
NE
W
E
SW
SE
S

6
OPEN CHANNEL
(TRAPEZOIDAL)
-5' BOTTOM WIDTH
-2' DEPTH
-3:1 SIDE SLOPES
-50' TOP WIDTH
-200 LF @ APPROX. 1.6%

5
BOX CULVERT
-5'X6' (WXH)
-40 LF
-0.8%

4
OPEN CHANNEL
(TRAPEZOIDAL)
-5' BOTTOM WIDTH
-2' DEPTH
-3:1 SIDE SLOPES
-50' TOP WIDTH
38 LF @ APPROX. 1%

BOX CULVERT
-7'X4'
FINAL STRUCTURE OF STUDY

7

3
BOX CULVERT
-5'X6' (WXH)
-215 LF
-1.2%

1
DUAL CMP
46 LF @ APPROX. 0.5%

2
OPEN CHANNEL (TRAPEZOIDAL)
-5' BOTTOM WIDTH
-2.2' DEPTH
-3:1 SIDE SLOPES
-25' TOP WIDTH
106 LF @ APPROX. 1.2%

L=232.50'
R=1114.97'
CH. B=N3°01'39"W
CH=232.08'

30 0 30 60
GRAPHIC SCALE

REVISION #	DATE	DESCRIPTION

DOWNSTREAM DRAINAGE SYSTEM
310 WILSON PIKE
CITY OF BRENTWOOD
WILLIAMSON COUNTY, TENNESSEE

M2 GROUP
P.O. BOX 848
FRANKLIN, TN 37065
M2GROUPLLC.COM

DATE :	**10/31/2022**	**DRAWN BY :**	**JWM**
MADE FOR :	**PAKKALA INDUSTRIES WORLDWIDE**	**CHECKED BY :**	**JWM**

SHEET NUMBER: **S1.0**

310 WILSON PIKE_XSEC.DWG | Monday, October 31, 2022 8:03:58 AM

HY-8 Culvert Analysis Report

Culvert Data: private crossing

Table 1 - Culvert Summary Table: Culvert 1

Discharge Names	Total Discharge (cfs)	Culvert Discharge (cfs)	Headwater Elevation (ft)	Inlet Control Depth (ft)	Outlet Control Depth (ft)	Flow Type	Normal Depth (ft)	Critical Depth (ft)	Outlet Depth (ft)	Tailwater Depth (ft)	Outlet Velocity (ft/s)	Tailwater Velocity (ft/s)
10 year	217.00 cfs	217.00 cfs	698.72	5.02	3.268	5-S2n	1.38	2.96	2.13	1.94	13.56	10.36
50 year	328.00 cfs	263.01 cfs	699.57	5.87	4.145	5-S2n	1.58	3.37	2.47	2.36	14.20	11.54
100 year	374.00 cfs	272.86 cfs	699.76	6.06	4.865	5-S2n	1.62	3.45	2.54	2.50	14.32	11.94

Culvert Barrel Data

Culvert Barrel Type Straight Culvert

Inlet Elevation (invert): 693.70 ft,

Outlet Elevation (invert): 693.00 ft

Culvert Length: 25.01 ft,

Culvert Slope: 0.0280

Culvert Data Summary - Culvert 1

Barrel Shape: Concrete Box
Barrel Span: 7.50 ft
Barrel Rise: 4.50 ft
Barrel Material: Concrete
Embedment: 0.00 in
Barrel Manning's n: 0.0120
Culvert Type: Straight
Inlet Configuration: Square Edge (90º) Headwall (Ke=0.5)
Inlet Depression: None

Roadway Data for Crossing: Crossing 1

Roadway Profile Shape: Constant Roadway Elevation
Crest Length: 50.00 ft
Crest Elevation: 699.00 ft
Roadway Surface: Paved
Roadway Top Width: 20.00 ft

Culvert Data: Wilson Pike Circle

Table 2 - Culvert Summary Table: Culvert 1

Discharge Names	Total Discharge (cfs)	Culvert Discharge (cfs)	Headwater Elevation (ft)	Inlet Control Depth (ft)	Outlet Control Depth (ft)	Flow Type	Normal Depth (ft)	Critical Depth (ft)	Outlet Depth (ft)	Tailwater Depth (ft)	Outlet Velocity (ft/s)	Tailwater Velocity (ft/s)
10 year	217.00 cfs	217.00 cfs	703.19	5.99	4.513	1-S2n	2.41	3.88	3.20	3.76	13.57	0.00
50 year	300.00 cfs	300.00 cfs	704.75	7.55	6.979	5-S2n	3.08	4.82	4.06	3.76	14.77	0.00
100 year	350.00 cfs	349.86 cfs	705.74	8.54	7.949	5-S2n	3.47	5.34	4.55	3.76	15.39	0.00

Culvert Barrel Data

Culvert Barrel Type Straight Culvert
Inlet Elevation (invert): 697.20 ft,
Outlet Elevation (invert): 696.80 ft
Culvert Length: 25.00 ft,
Culvert Slope: 0.0160

Culvert Data Summary - Culvert 1

Barrel Shape: Concrete Box
Barrel Span: 5.00 ft
Barrel Rise: 6.00 ft
Barrel Material: Concrete
Embedment: 0.00 in
Barrel Manning's n: 0.0120
Culvert Type: Straight
Inlet Configuration: 1.5:1 Bevel (90º) Headwall (Ke=0.2)
Inlet Depression: None

Roadway Data for Crossing: Pike Circle

Roadway Profile Shape: Irregular Roadway Shape (coordinates)

Irregular Roadway Cross-Section

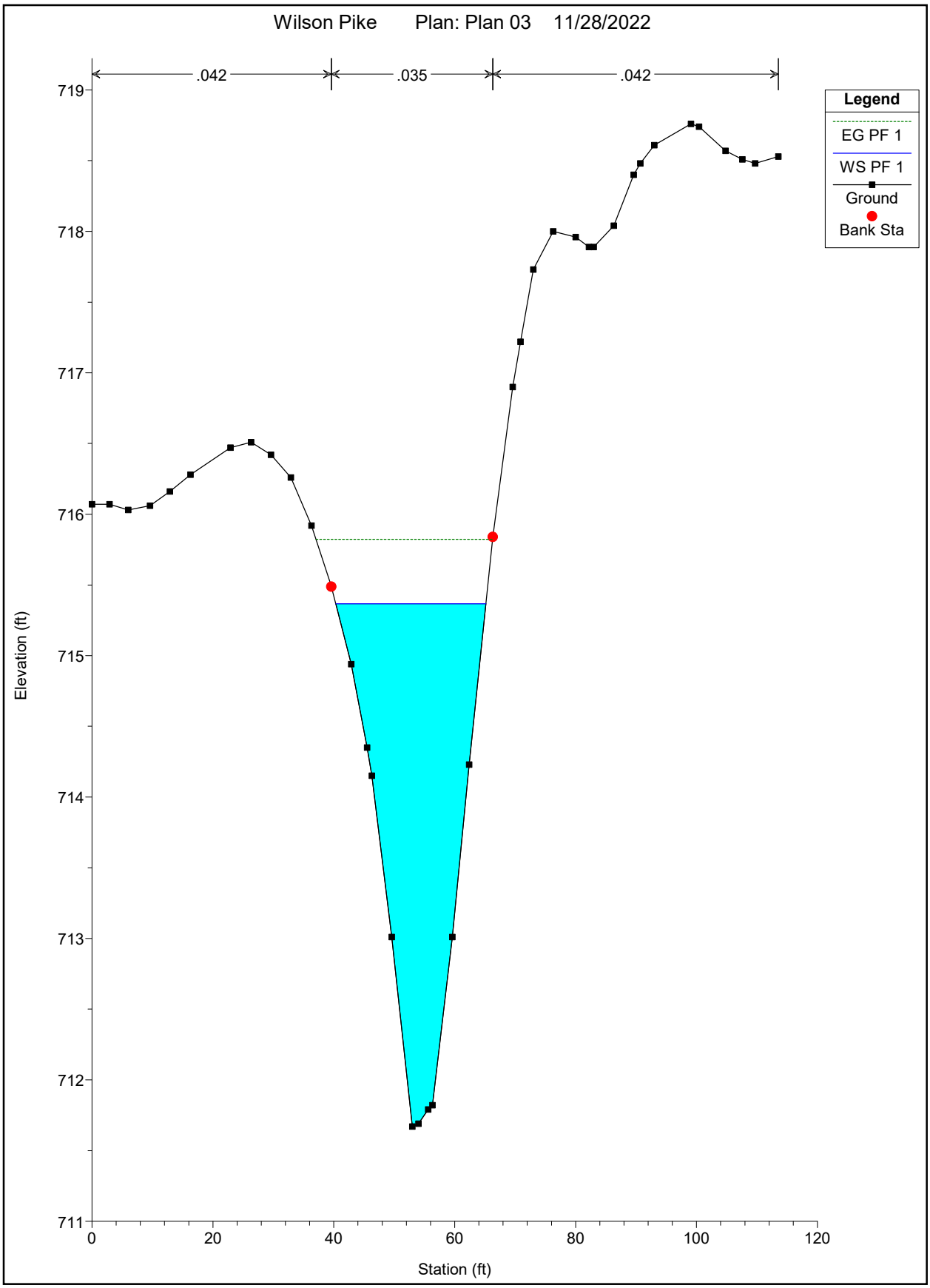
Coord No.	Station (ft)	Elevation (ft)
0	0.00	706.80
1	20.00	706.40
2	40.00	706.15
3	60.00	706.00
4	80.00	705.85
5	100.00	705.75
6	110.00	705.70
7	120.00	705.75
8	140.00	705.85
9	160.00	705.87
10	180.00	706.00

Roadway Surface: Paved

Roadway Top Width: 24.00 ft

HEC-RAS Plan: Existing River: River 1 Reach: Reach 1 Profile: PF 1

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Reach 1	1257	PF 1	258.00	711.67	715.37		715.82	0.007262	5.41	47.69	24.82	0.69
Reach 1	1090	PF 1	258.00	710.75	713.49	713.42	714.16	0.014162	6.56	39.45	26.93	0.94
Reach 1	943	PF 1	258.00	709.36	711.40	711.40	712.04	0.014659	6.50	41.85	36.11	0.96
Reach 1	818	PF 1	258.00	707.01	709.50	709.40	710.09	0.011038	6.24	43.77	33.38	0.85
Reach 1	712	PF 1	258.00	705.57	707.96	707.96	708.68	0.016455	6.78	38.21	28.91	1.01
Reach 1	578	PF 1	258.00	701.40	708.01	704.02	708.03	0.000095	1.11	306.31	118.80	0.09
Reach 1	570		Culvert									
Reach 1	516	PF 1	325.00	699.66	708.01		708.02	0.000022	0.58	859.81	400.37	0.04
Reach 1	430	PF 1	325.00	699.76	708.01	702.88	708.02	0.000008	0.40	1278.71	356.56	0.03
Reach 1	425		Culvert									
Reach 1	203	PF 1	325.00	696.93	705.74	700.39	705.74	0.000011	0.50	999.93	265.29	0.03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Ground
Bank Sta
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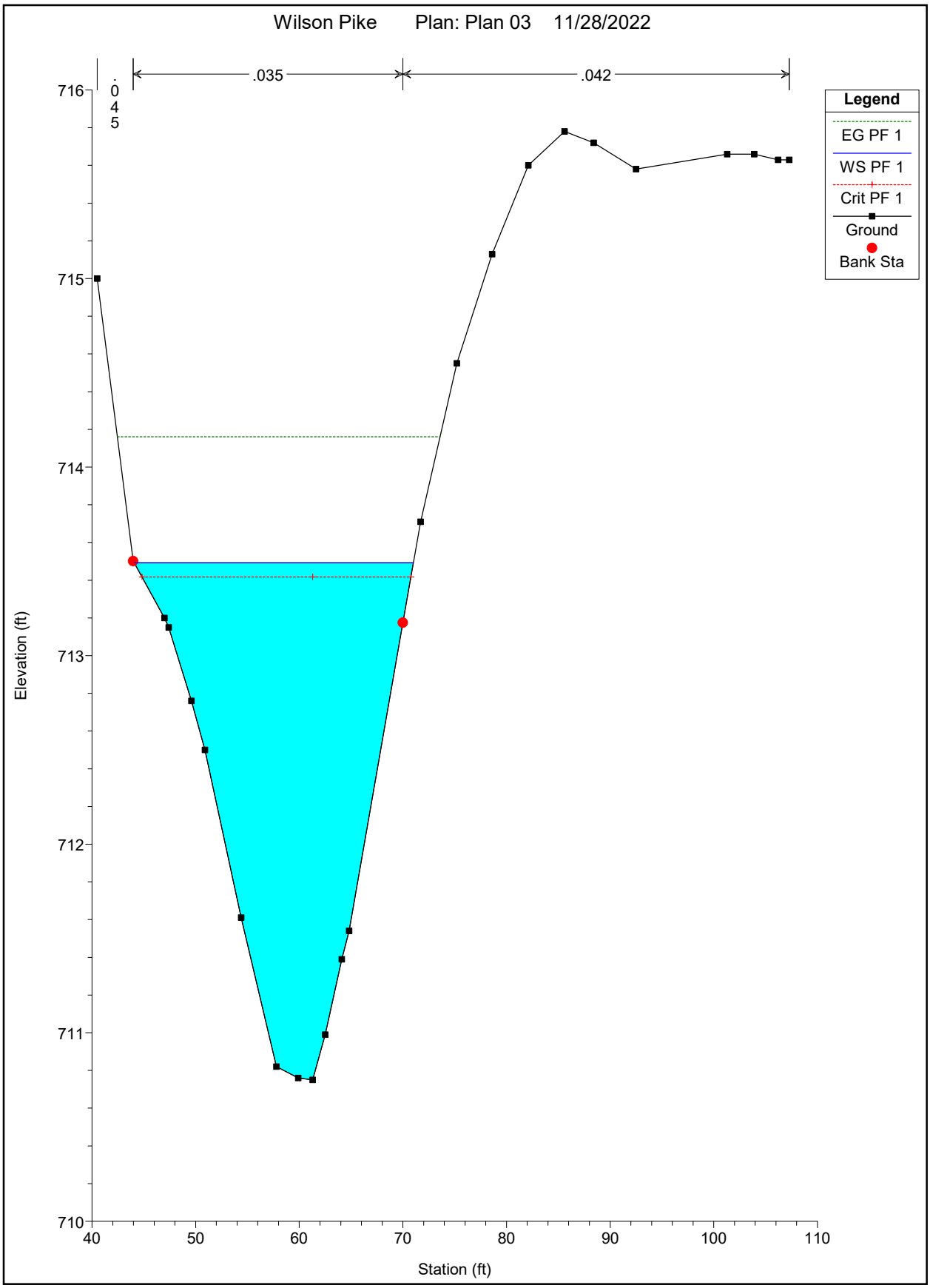
Station (ft)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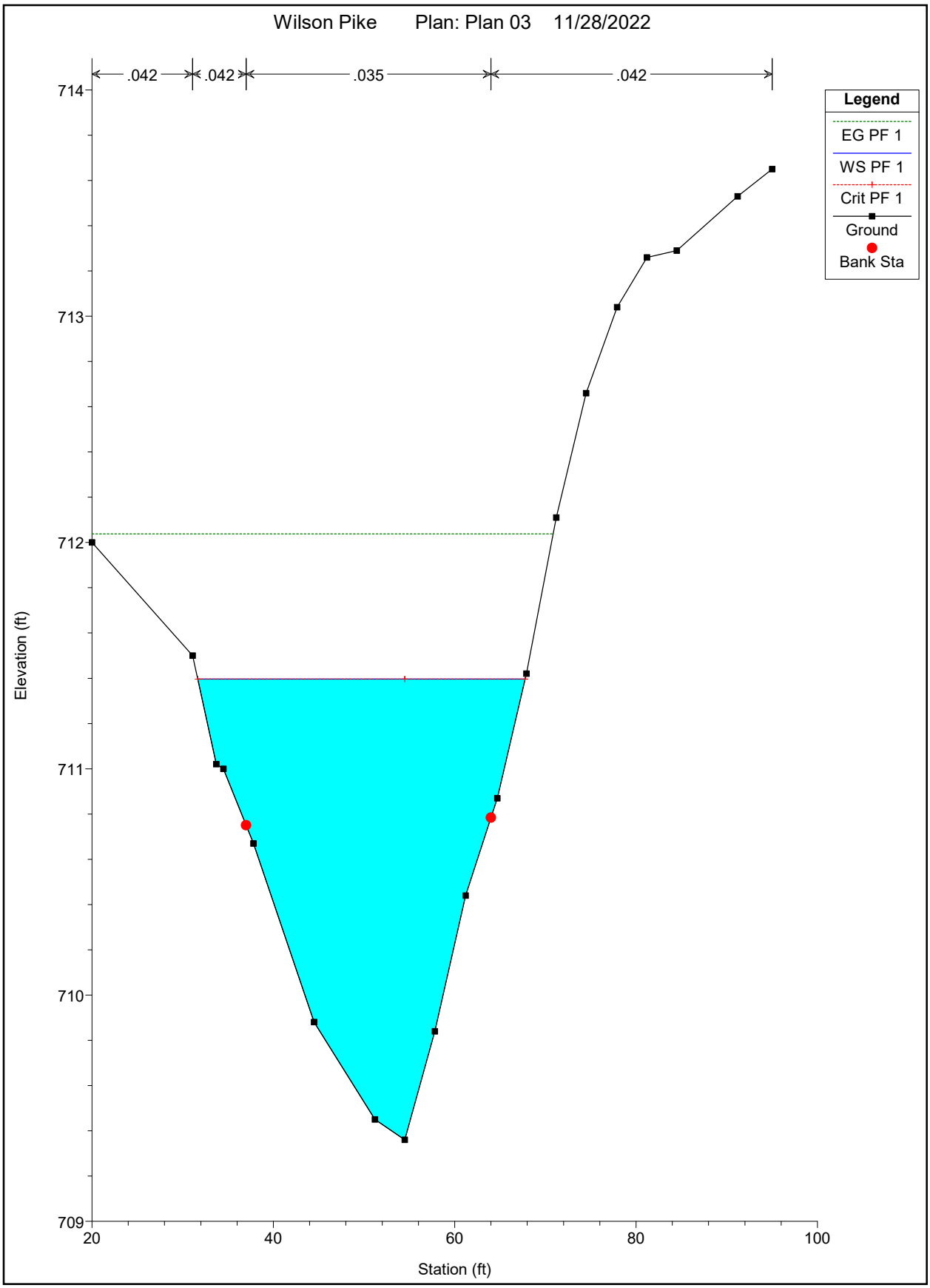
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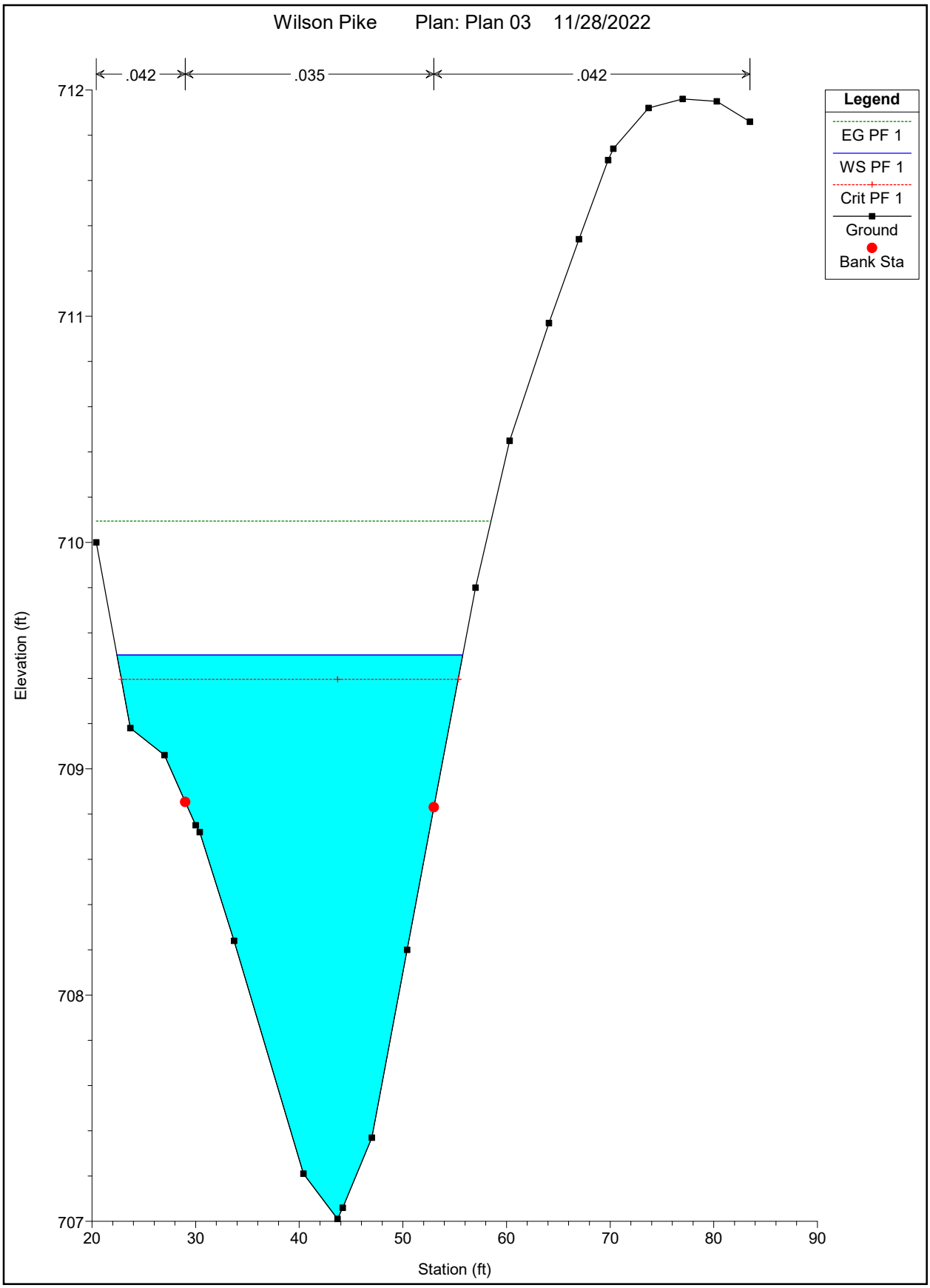
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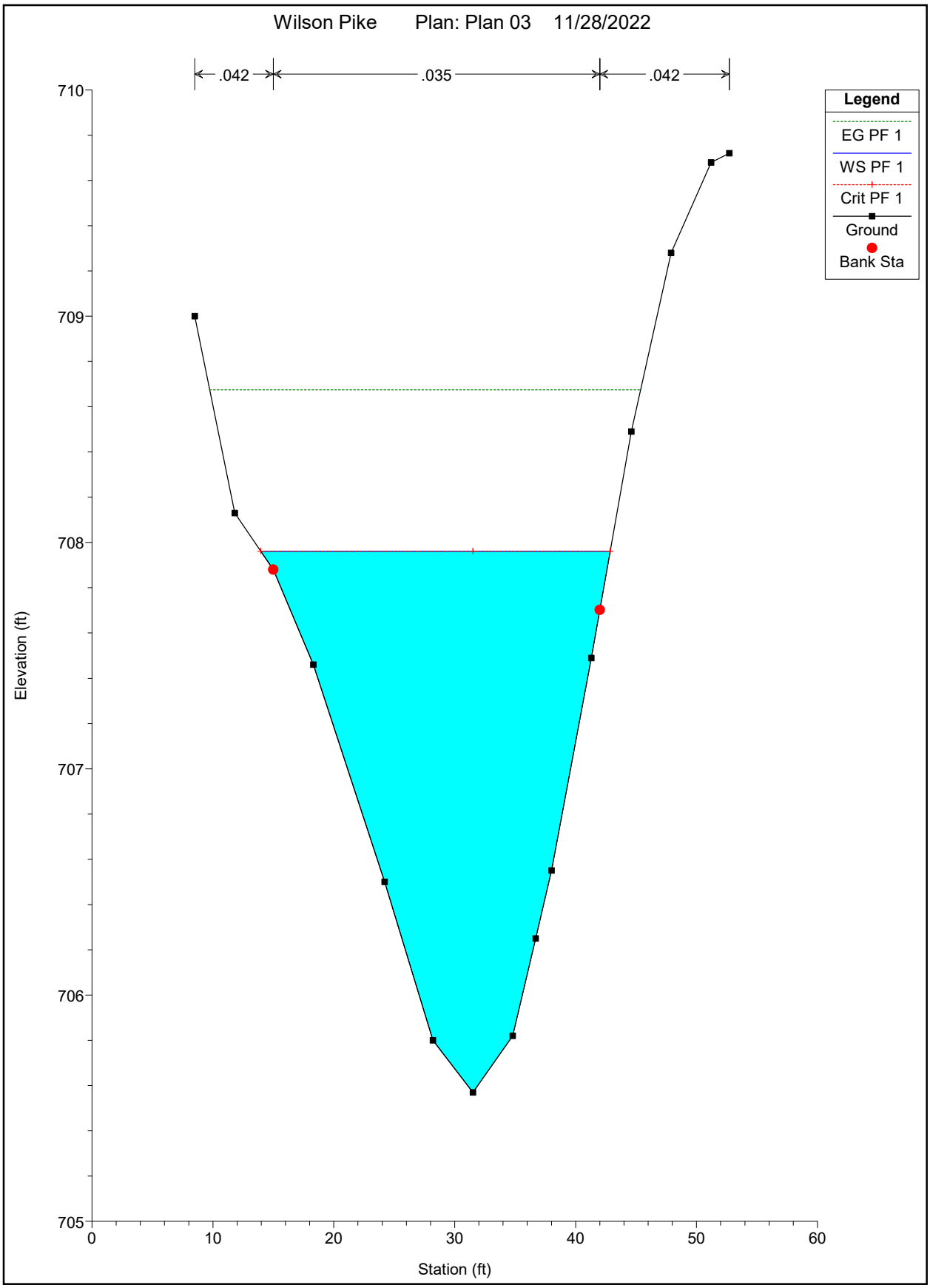
Station (ft)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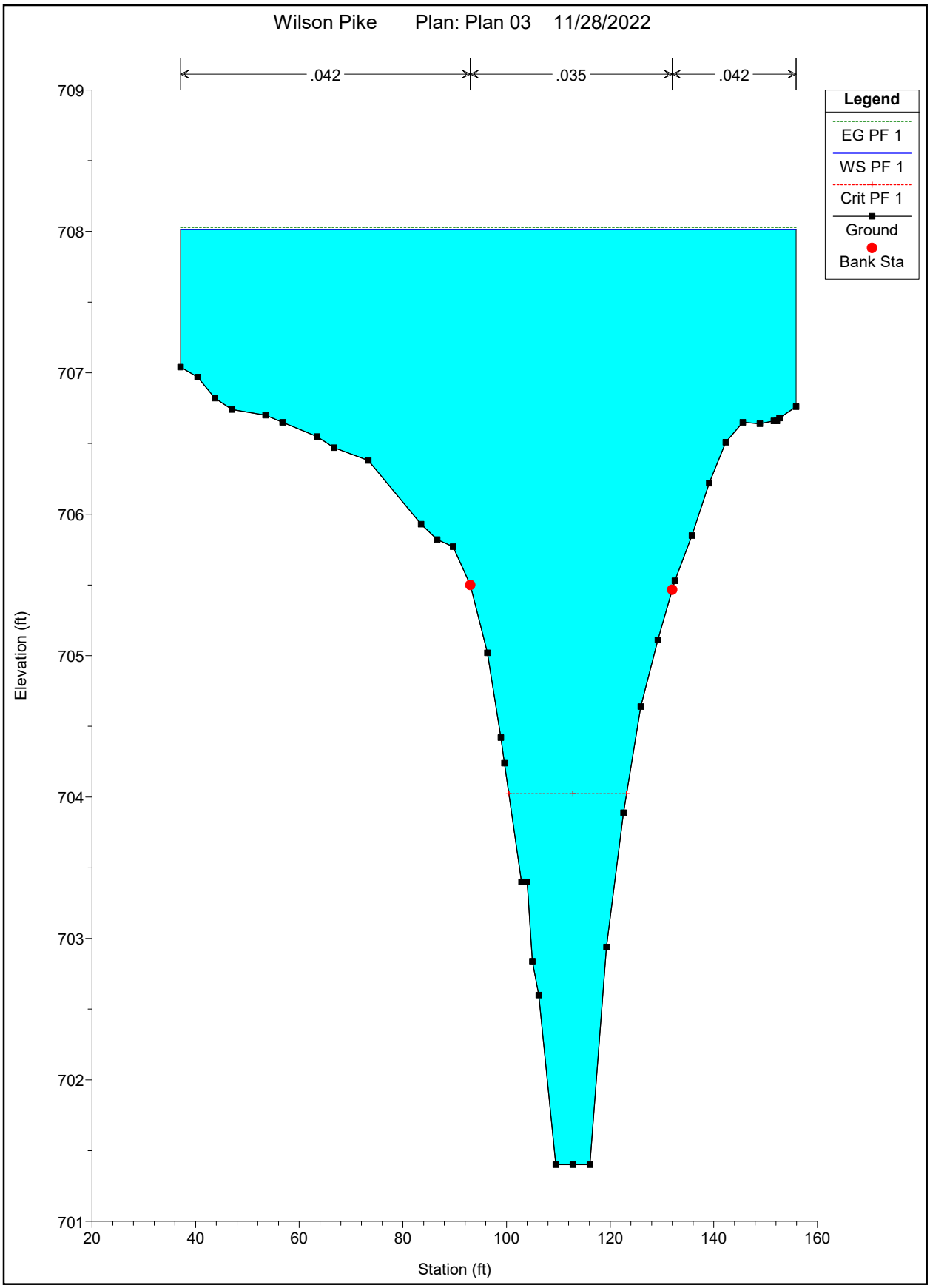
Station (ft)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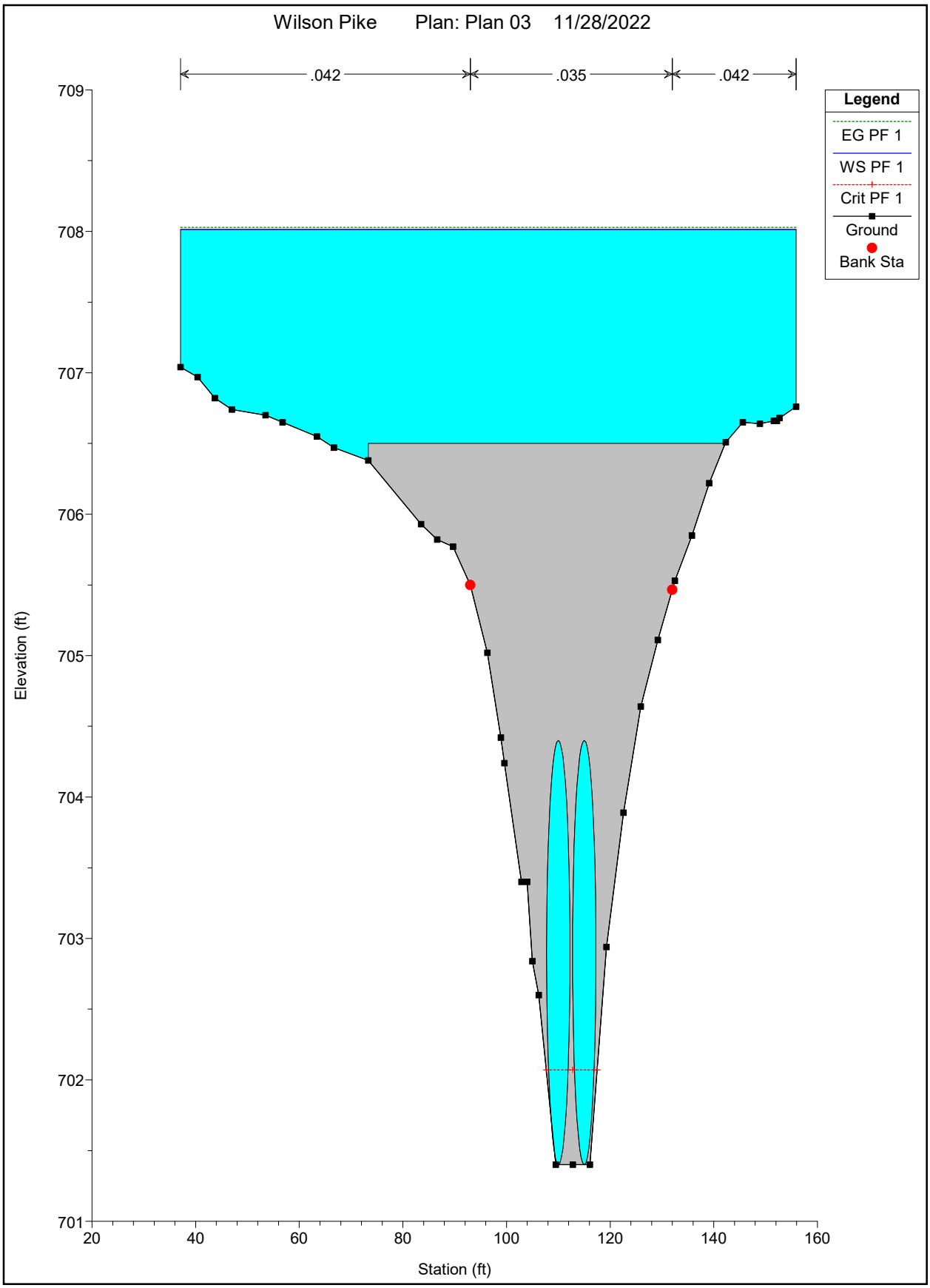
Station (ft)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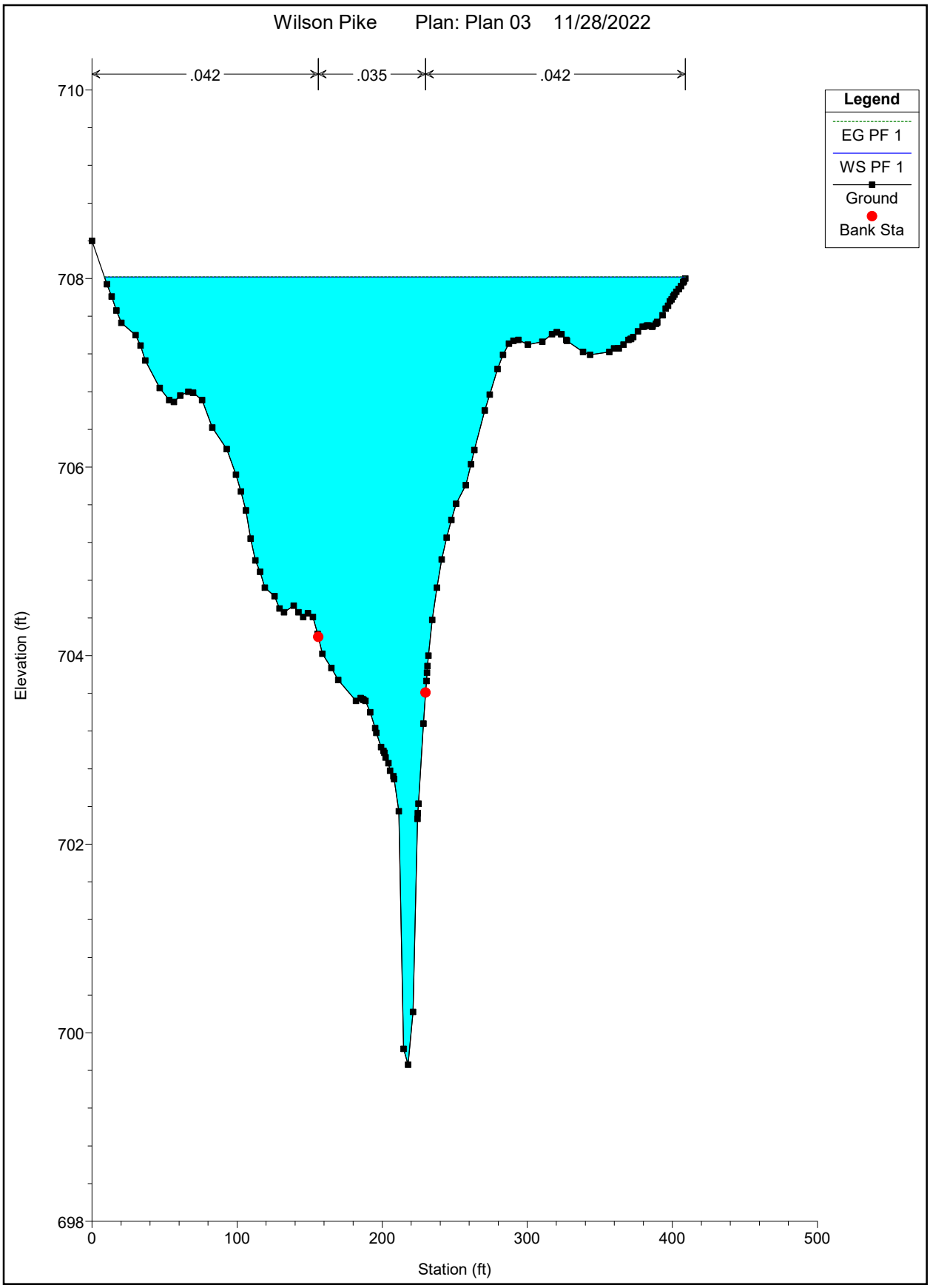
Station (ft)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Elevation (ft)
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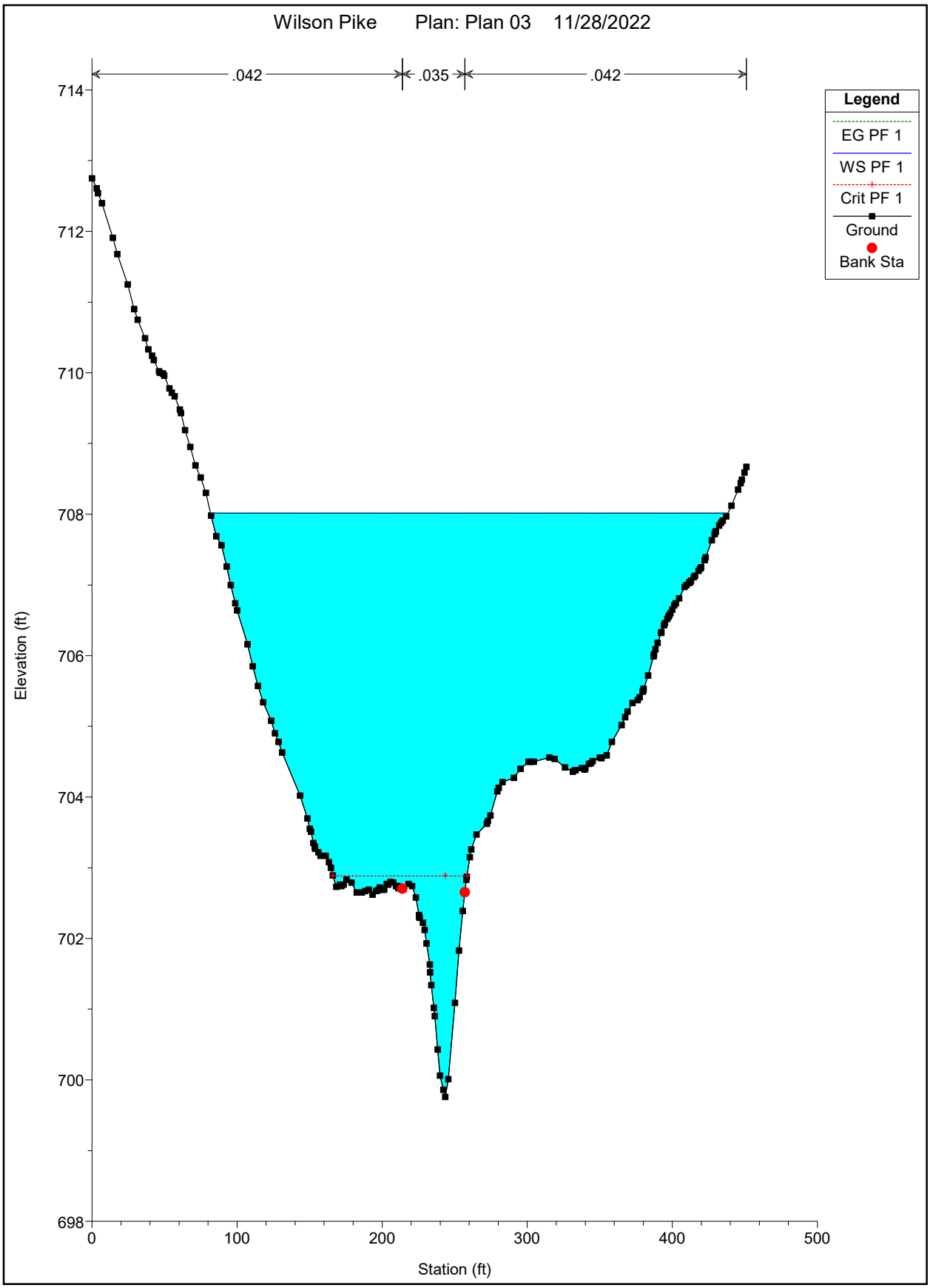
Station (ft)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Ground
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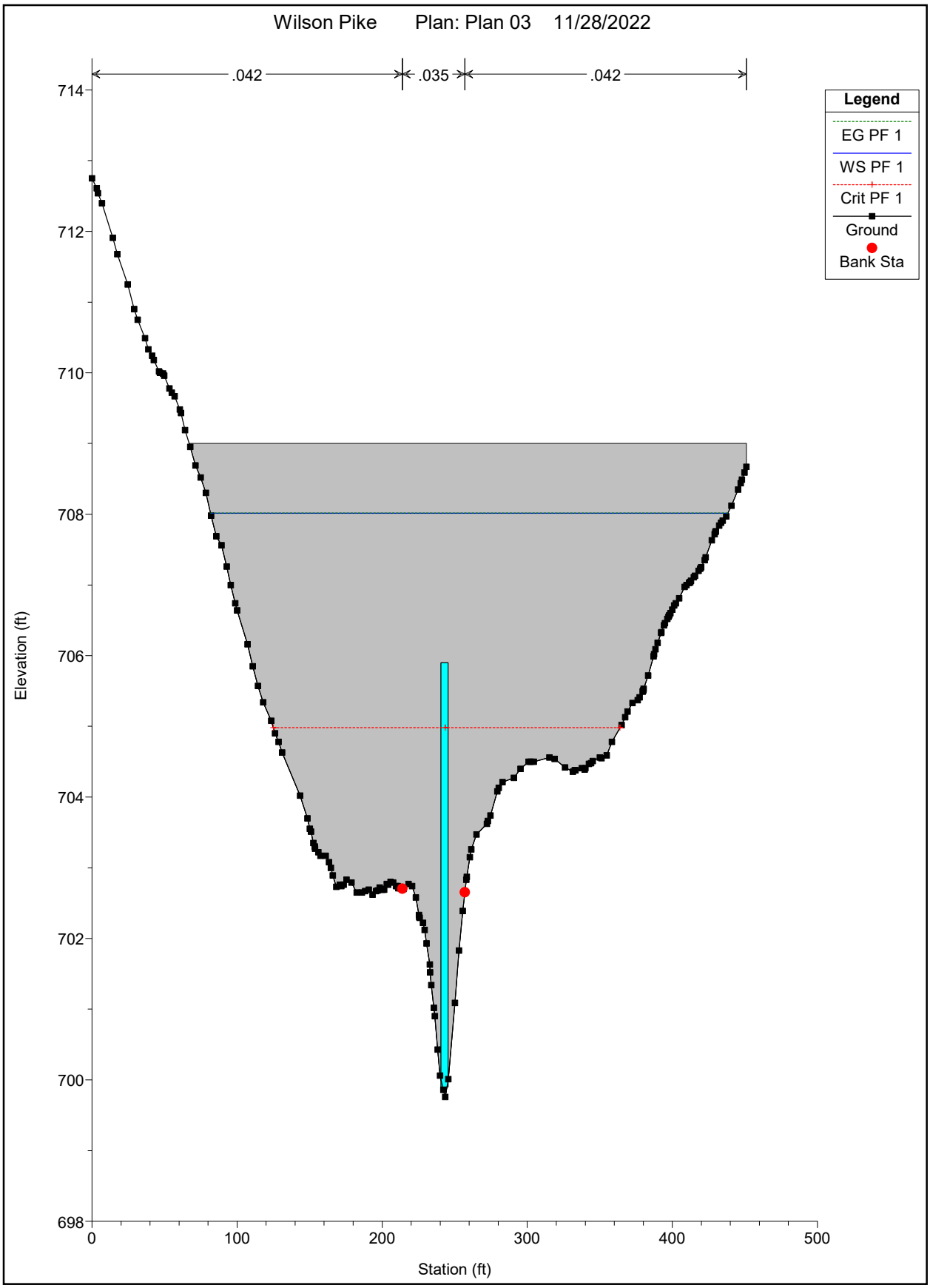
Station (ft)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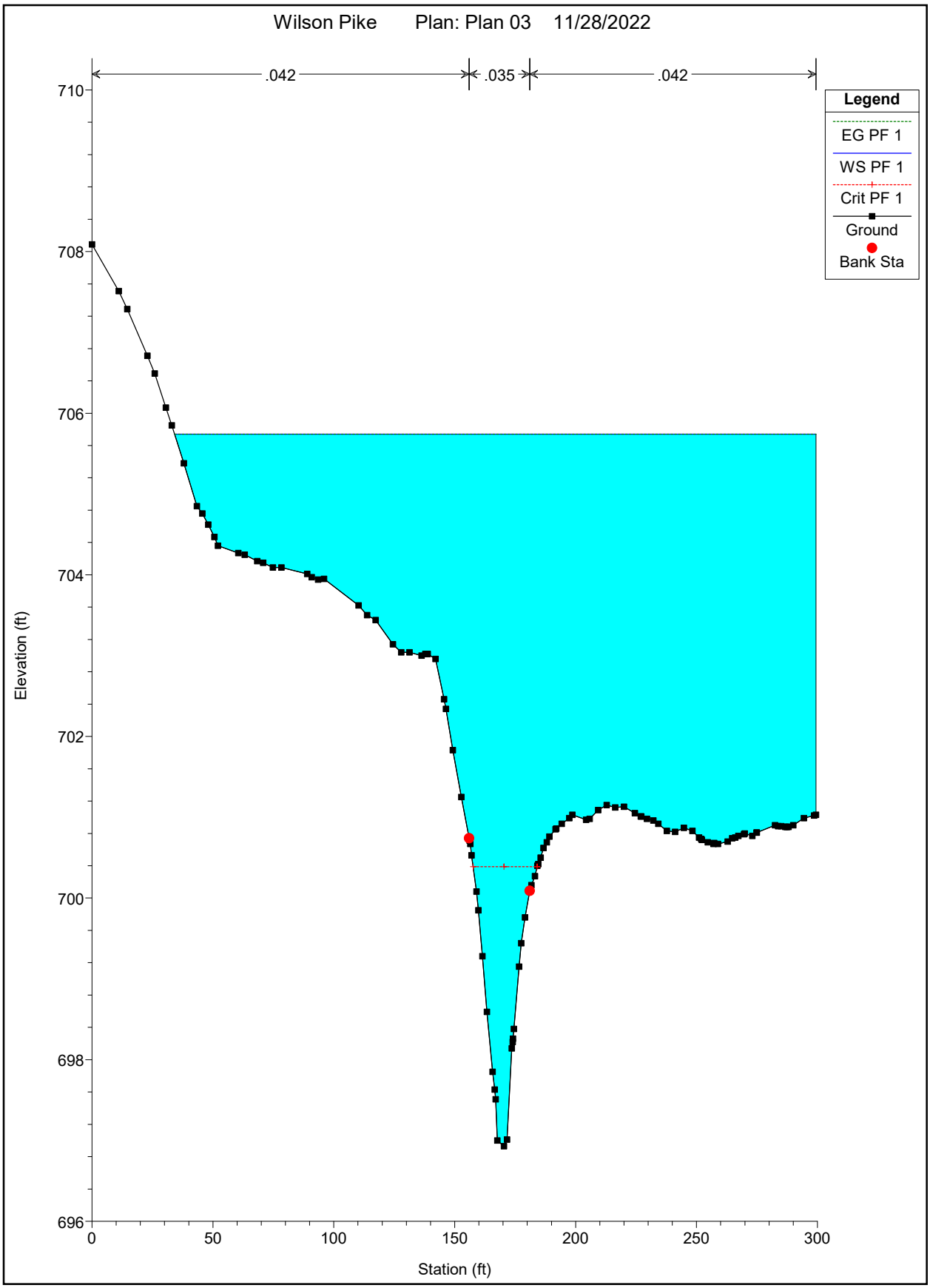
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Bank Sta
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698
696
Elevation (ft)
0
50
100
150
200
250
300
Station (ft)

StreamStats Report

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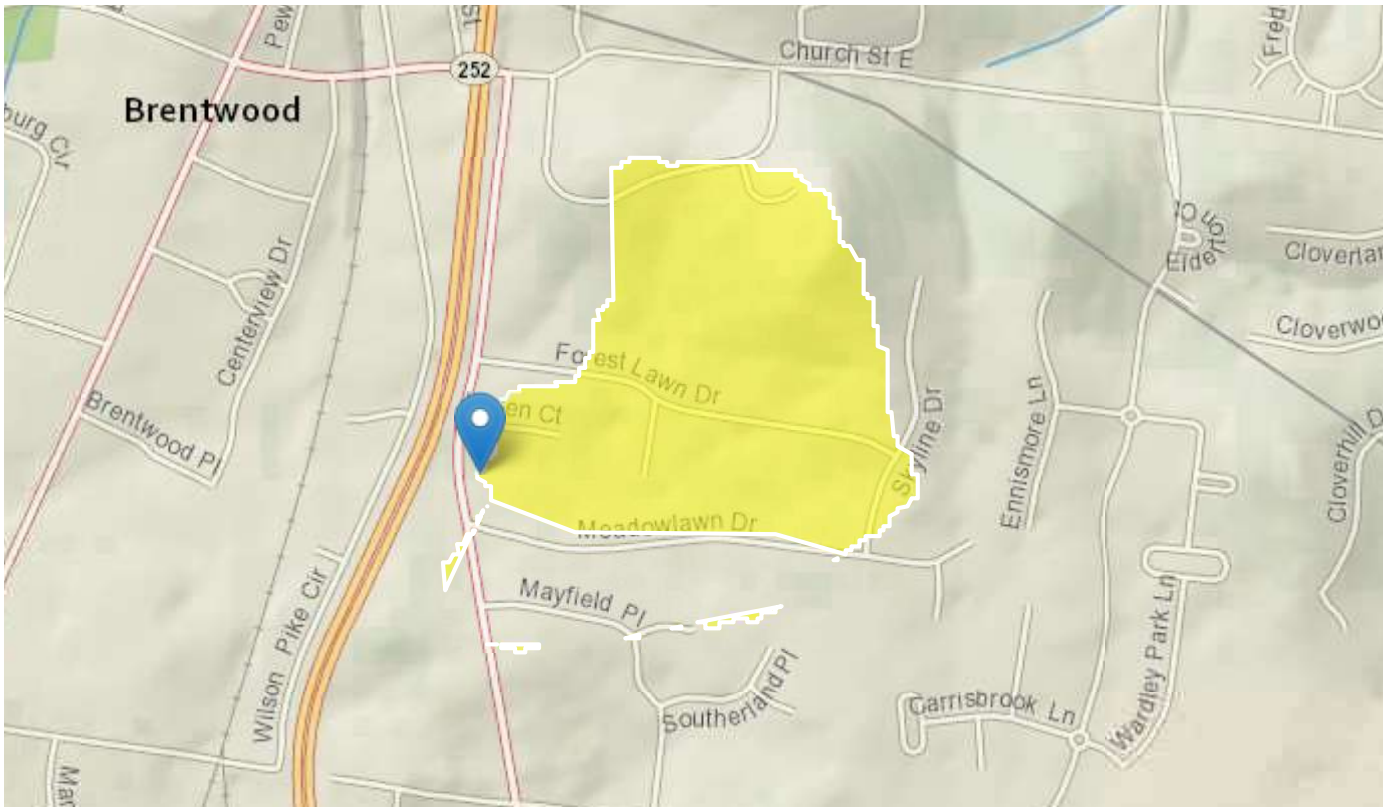

Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
CONTDA	Area that contributes flow to a point on a stream	0.17	square miles
CSL10_85	Change in elevation divided by length between points 10 and 85 percent of distance along main channel to basin divide - main channel method not known	175.41	feet per mi

General Disclaimers

This watershed has been edited, computed flows and basin characteristics may not apply. For more information, submit a support request from the 'Help' button in the upper-right of the screen, attach a pdf of this report and request assistance from your local streamstats regional representative.

Peak-Flow Statistics

Peak-Flow Statistics Parameters [MultiVariable Area 3 CDA LT 30.2]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
CONTDA	Contributing Drainage Area	0.17	square miles	0.173	30.2
CSL10_85	Stream Slope 10 and 85 Method	175.41	feet per mi	2.12	132

Peak-Flow Statistics Disclaimers [MultiVariable Area 3 CDA LT 30.2]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Peak-Flow Statistics Flow Report [MultiVariable Area 3 CDA LT 30.2]

Statistic	Value	Unit
50-percent AEP flood	68.9	ft^3/s
20-percent AEP flood	115	ft^3/s
10-percent AEP flood	149	ft^3/s
4-percent AEP flood	192	ft^3/s
2-percent AEP flood	226	ft^3/s
1-percent AEP flood	258	ft^3/s
0.2-percent AEP flood	335	ft^3/s

Peak-Flow Statistics Citations

Law, G.S., and Tasker G.D.,2003, Flood-Frequency Prediction Methods for Unregulated Streams of Tennessee, 2000: U.S. Geological Survey Water-Resources Investigations

Report 03-4176, 79p. (http://pubs.usgs.gov/wri/wri034176/)

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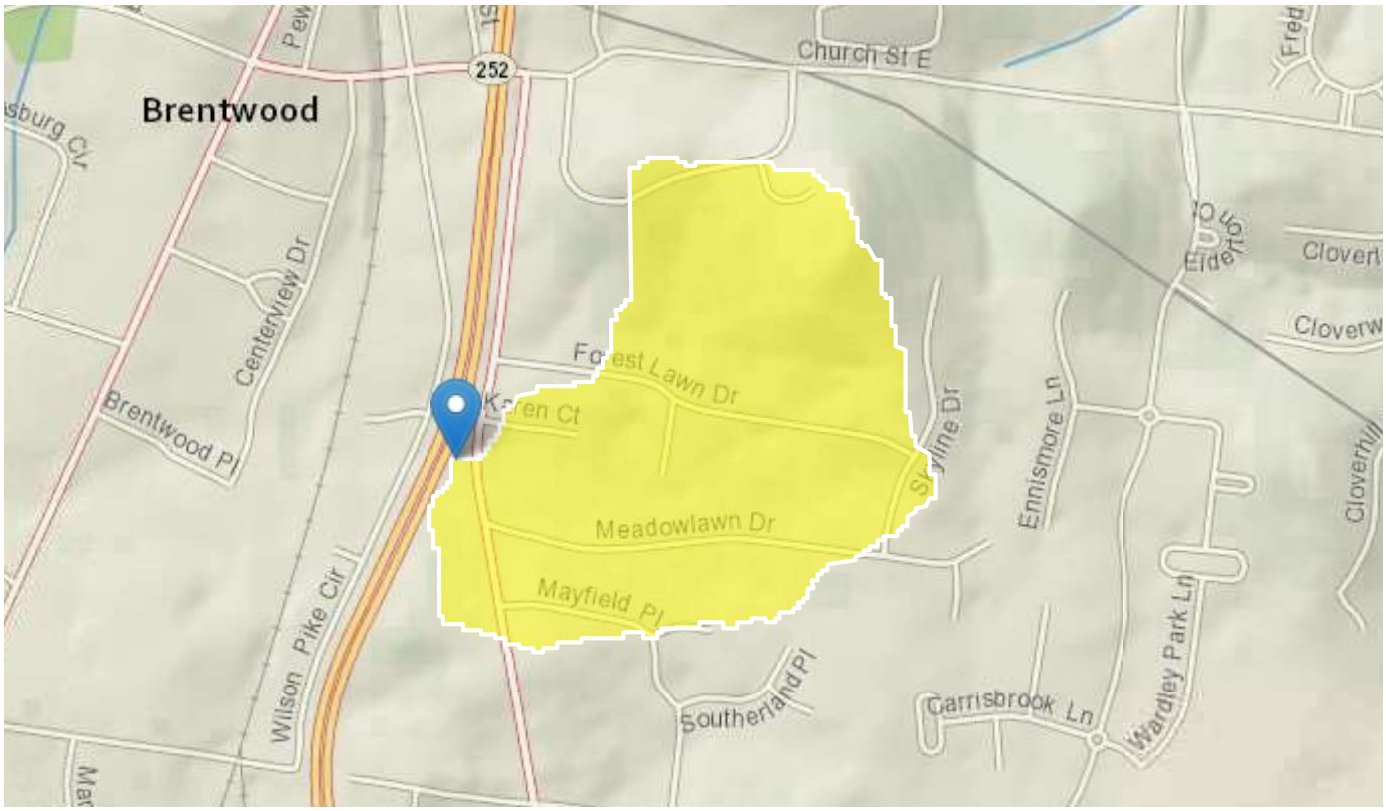
Application Version: 4.11.1
StreamStats Services Version: 1.2.22
NSS Services Version: 2.2.1

StreamStats Report

Region ID: TN
Workspace ID: TN20221106221832712000
Clicked Point (Latitude, Longitude): 36.02647, -86.78437
Time: 2022-11-06 17:18:54 -0500



Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
CONTDA	Area that contributes flow to a point on a stream	0.23	square miles
CSL10_85	Change in elevation divided by length between points 10 and 85 percent of distance along main channel to basin divide - main channel method not known	160.36	feet per mi

Peak-Flow Statistics

Peak-Flow Statistics Parameters [MultiVariable Area 3 CDA LT 30.2]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
CONTDA	Contributing Drainage Area	0.23	square miles	0.173	30.2
CSL10_85	Stream Slope 10 and 85 Method	160.36	feet per mi	2.12	132

Peak-Flow Statistics Disclaimers [MultiVariable Area 3 CDA LT 30.2]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Peak-Flow Statistics Flow Report [MultiVariable Area 3 CDA LT 30.2]

Statistic	Value	Unit
50-percent AEP flood	87.7	ft^3/s
20-percent AEP flood	146	ft^3/s
10-percent AEP flood	188	ft^3/s
4-percent AEP flood	241	ft^3/s
2-percent AEP flood	284	ft^3/s
1-percent AEP flood	325	ft^3/s
0.2-percent AEP flood	420	ft^3/s

Peak-Flow Statistics Citations

Law, G.S., and Tasker G.D.,2003, Flood-Frequency Prediction Methods for Unregulated Streams of Tennessee, 2000: U.S. Geological Survey Water-Resources Investigations Report 03-4176, 79p. (http://pubs.usgs.gov/wri/wri034176/)

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Application Version: 4.11.1
StreamStats Services Version: 1.2.22
NSS Services Version: 2.2.1

Geotechnical Report/Hydrologic Determination

REPORT OF GEOTECHNICAL EXPLORATION
PROPOSED DEVELOPMENT
310 WILSON PIKE
BRENTWOOD, TENNESSEE
GTA PROJECT NO. 31221511

PREPARED FOR:

Mr. Andrew Day

230 Great Circle Road, Suite 211, Nashville, TN 37228

Terra Nova ENGINEERING, PLLC is now:

GEO-TECHNOLOGY ASSOCIATES, INC.
GEOTECHNICAL AND
ENVIRONMENTAL CONSULTANTS

A Practicing Geoprofessional Business Association Member Firm

August 17, 2022

Mr. Andrew Day
318 Seaboard Lane, Suite 115
Franklin, TN 37067

Reference: Geotechnical Exploration
Proposed Development
310 Wilson Pike
Brentwood, Tennessee 37027
GTA Project Number 31221511

Mr. Day,

Geo-Technology Associates, Inc. (GTA) has completed a geotechnical exploration for the above referenced project and herewith present the data along with our comments and recommendations. The purposes of this study were to obtain information regarding subsurface conditions within the area proposed for construction and to develop recommendations regarding the geotechnical aspects of design and construction.

DESIGN CONSIDERATIONS

According to a conceptual design plan provided to us, the proposed project will consist of four new residential lots, an entrance road providing access from Meadowlawn Drive, and a detention pond. At present, we have not been provided with proposed grades. Based on existing grades, cuts and fills are expected to be 3 feet or less each within the proposed entrance roadway. Cuts of 5 to 10 feet are expected within the proposed detention pond in the northwestern quarter of the site.

We have based the following comments and recommendations upon the above stated information and the limited design data currently available. Any modification of these criteria will require that we review our recommendations in light of the new data. Specifically, GTA should review this report and provide additional comments as necessary once site grades are known.

EXPLORATION & TESTING

To assess the subsurface conditions, a total of 19 test pits were excavated at the locations and depths shown on the appended test pit plan and logs. Upon completion of the exploration, the test pits were checked for the presence of groundwater and subsequently backfilled.

The exploratory locations were located utilizing a hand-held GPS and by measuring from known site landmarks. Therefore, the test pit locations shown on the appended plan should be considered approximate. Surface elevations at test pit locations were interpolated from the plan provided to us and from Williamson County GIS data (williamsoncounty-tn.gov/371/Maps).

Members of our professional staff observed the exploration and logged the overburden. the respective soil data are depicted graphically on the attached individual logs. Laboratory testing was assigned to select samples in order to obtain fundamental engineering characteristics. The samples not destroyed during laboratory testing will remain stored at our office for 30 days and may then be discarded, unless we are directed otherwise.

SITE CONDITIONS

The subject property encompasses approximately 6 acres in plan area and is located at 310 Wilson Pike in Brentwood, Tennessee, northeast of the intersection of Wilson Pike and Meadowlawn Drive. Currently, the site is partially wooded, and contains a single-family residence and garage within the eastern quarter of the site. A gravel driveway extends from the Wilson Pike east into the property to near the property boundary. Based on a review of aerial photographs, the project site appears to have been unchanged for the last 20 years.

Topographically, the project site is relatively level, with the ground surface sloping slightly downward from east to west with surface elevations ranging from about 717 feet in the eastern and southern site limits to 707 feet in the northwestern site limits. Generally, surface water follows the local topography, flowing away from east to west. A drainage ditch is situated along the north side of the site. This drainage feature appears to collect surface runoff from the east, directing it to the drainage system along the east side of Wilson Pike. Our exploration was performed during a season of low precipitation and high temperatures. As a result, site conditions were dry at the surface, and ponded water was not observed. However, due to the site's relatively flat topography, surface water drainage is judged to be poor. An aerial view of the project site is provided below in **Figure 1.**

Figure 1: Aerial view of project site (Google Earth 2022)



SUBSURFACE CONDITIONS

At the locations explored, the overburden generally consists of a surficial interval of topsoil and vegetation varying from 9 to 16 inches in thickness. As noted above, site conditions were dry at the time of our exploration. Beneath the topsoil and vegetation and extending to depths of 2 to 2.5 feet below the ground surface is residuum consisting of stiff consistency, slightly moist, brown, very silty to silty clay (CL). Laboratory testing performed on samples of the upper, silty interval of residuum indicates a natural moisture content varying from 15.2% to 18.8%. Atterberg Limits testing resulted in a Liquid Limit of 41, a Plastic Limit of 24, and a Plasticity Index of 17.

Beneath the silty upper interval and extending to depths of 5 to 9 feet below the ground surface, the test pits encountered stiff consistency, silty, moist, brown to reddish brown clay (CL). Laboratory testing performed on samples of the upper, silty interval of residuum indicates a natural moisture content varying from 18.1% to 25.5%. Atterberg Limits testing resulted in a Liquid Limit of 46, a Plastic Limit of 25, and a Plasticity Index of 21.

Below depths of 5 to 9 feet below the ground surface and extending to the depths explored, stiff consistency, moist, yellowish brown to reddish brown, slightly silty clay (CH) varying to high plasticity silt (MH) was encountered. Laboratory testing performed on samples of the upper, silty interval of residuum indicates a natural moisture content 31.1%. Atterberg Limits testing resulted in a Liquid Limit of 73, a Plastic Limit of 36, and a Plasticity Index of 37.

As demonstrated by the laboratory testing, moisture content of the overburden generally increased with depth, from as low as 15.2% in the upper 2 feet, to as much as 25.5% from 2 feet to 5 feet, and to 31.1% below the upper 5 feet.

Bucket refusal on the bedrock surface was encountered at 13 of the 19 test pit locations at depths varying from 6.9 feet (test pit TP-15) to 11.1 feet (test pit TP-8). The remaining test pits were terminated within the overburden at a depth of 11 feet below the ground surface without encountering bedrock. Each test pit was dry upon refusal or completion. A subsurface summary of the test pits explored is provided in **Table 1** below. Details pertaining to subsurface lithology at each test pit are contained on the appended test pit logs. Laboratory testing data is also appended.

Table 1: Subsurface Exploration Summary

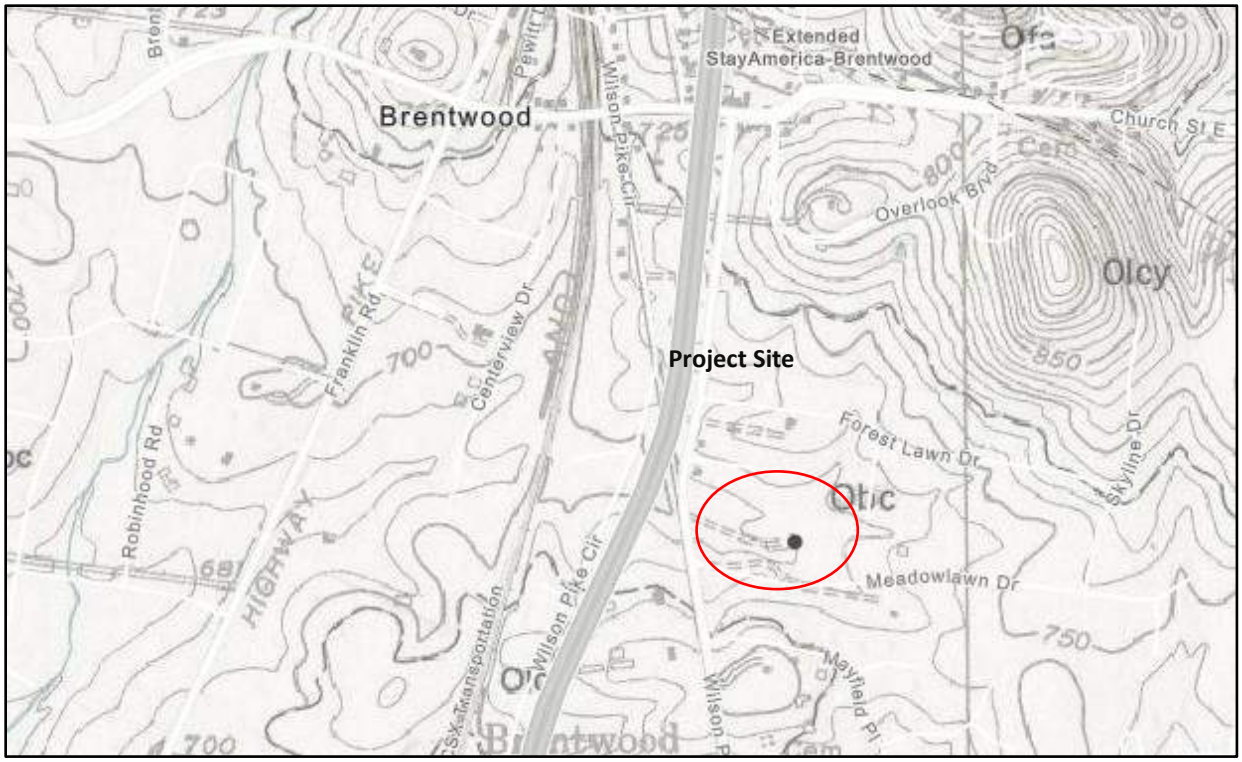
Location	Approximate Surface Elevation (ft)	Topsoil Thickness (in)	Exploration Depth (ft)
TP-1	709	12	8.9
TP-2	709	12	7.5
TP-3	707	12	10.9
TP-4	707	10	Terminated at 11
TP-5	711	12	10.1
TP-6	710	12	9.5
TP-7	710	12	Terminated at 11
TP-8	712	10	11.1
TP-9	713	12	Terminated at 11
TP-10	715	12	Terminated at 11
TP-11	714	14	9.3
TP-12	712	14	9.1
TP-13	712	14	10.3
TP-14	713	14	8.1
TP-15	714	14	6.9

TP-16	712	16	7.0
TP-17	706	10	Terminated at 11
TP-18	706	9	Terminated at 11
TP-19	710	15	9.0

Geologic Setting

Based on our review of published geologic data, the site is underlain by Ordovician-Aged limestone of the Bigby-Cannon Formation. The Bigby-Cannon limestone is typically blue-gray, medium to thickly bedded, cross-bedded limestone with some phosphate. The surface of the Bigby-Cannon limestone is known for being very irregular with rock pinnacles and deep soil slots ("cutters") extending to depths of 30 feet. The mapped site geology is provided below in **Figure 2.**

Figure 2: Oak Hill Quadrangle Geologic Map (TN Division of Geology) With Project Site Shown



COMMENTS AND RECOMMENDATIONS

Sinkhole Considerations

The project site is located in a region that is underlain by soluble limestone bedrock. Although our site reconnaissance and exploration did not provide evidence of sinkholes or karst activity, limestone bedrock can undergo solutioning when exposed to ground water that has become slightly acidic due to contact with organic soils. This weathering process is most active along pre-existing weaknesses within the bedrock, such as bedding planes and enlarged, vertical joints that typically transect the bedrock surface in crisscrossing patterns.

Any construction project within this geologic setting must recognize that undetected cavities could exist within the subsurface. For instance, it has been our experience that undetected sinkholes are more likely to appear during construction activities once site drainage has been altered. Karst related

activities are capable of causing ground subsidence and settlement of earth-supported structures. If such indications are observed or suspected, the geotechnical engineer should be notified and a subsurface exploration may be recommended for the suspect area. Any incipient sinkhole identified within the construction area will require remedial treatment in accordance with criteria established by the geotechnical engineer based on an inspection of the conditions encountered. In recognition of the inherent karst related risks and the risk of exposure to weathering processes, we offer the following comments to reduce the level of sinkhole related risk with respect to design and construction.

- Control storm water drainage by properly grading the site to promote complete and rapid runoff of surface water away from construction areas and avoid the ponding of water in open excavations.
- Construct underground and underslab plumbing systems in a leak proof manner.
- To the extent practicable, provide for overland or piped discharge of storm water.
- Thoroughly investigate any area of suspected sinkhole development, such as areas of abnormally thick topsoil deposits, depressed areas, locations of soil collapse or voids within the overburden.

Site Preparation

Initially, the proposed construction areas should be stripped of topsoil and vegetation. The existing residential structure and garage and out-building should also be razed, including any floor slabs and foundations. Any buried utilities removed should be backfilled with structural fill to the ground surface.

Based on the exploration, we expect stripping depths will typically range from 12 to 14 inches within most areas and up to 16 inches in isolated areas. Stripping will increase to as much as 36 inches to remove the root mass associated with large trees. Stripped topsoil can be stockpiled for later use in landscaping; however, waste materials should be hauled off-site for disposal.

Within the limits of proposed paved driveways or garage slabs for individual residences, the contractor should be prepared to dry out and compact wet soil subgrades prior to the placement of basestone or sub-base materials.

<u>Subgrade Assessment-Proposed Entrance Road</u>

Within the limits of the proposed entrance road leading from Meadowlawn Drive north into the development, the exposed soil subgrade should be proof-rolled with a loaded, tandem-axle dump truck to delineate soft or unstable zones. The geotechnical engineer should observe the proof-roll and identify unstable areas. Unstable areas will require repair.

Specific subgrade repair will depend on the response of the subgrade to the proof-roll testing. Tires rutting during proof-rolling indicates instability within surficial materials (typically within the upper 12 to 18 inches). Rutting can typically be repaired by scarifying, moisture conditioning, and re-compacting the near surface materials.

Pumping subgrade during proof-rolling indicates instability at greater depth (typically 18 inches or more) below the ground surface. Pumping typically requires over-excavation and possible removal and replacement to obtain a stable subgrade. If over-excavation is necessary, over-excavation depths within cut areas can be limited to 2 to 3 feet below the subgrade elevation provided shot rock fill (placed and compacted as described in this report) is utilized as backfill. In addition, depending on proposed grades within fill areas, bridge lifts constructed with rock fill (as described later in this report) can be performed in lieu of undercutting. The geotechnical engineer can provide specific

recommendations pertaining to subgrade repair, undercutting, and bridge lifts in the field at the time of grading.

Specifically, for the project site, the following factors will contribute to subgrade repair during site preparation for the entrance road:

- As noted, the upper 2 to 2.5 feet of overburden consists of very silty clay. As discussed, this exploration as performed during a season of very low precipitation and high temperatures. As such, the surficial very silty soils were dry and demonstrated a stiff consistency at the time of the exploration. However, very silty clays lose shear strength and become unstable with even small increases in moisture content and are difficult to stabilize through scarification and re-compaction. Therefore, if grading activities are conducted during the wetter months of the year, repair quantities are expected to be greater than during drier seasons.
- Further, as noted, surface water drainage across the site and within the limits of the proposed entrance road is poor, which will result in wet surface conditions and possible ponded water following periods of heavy precipitation or during wet seasons.

In consideration of these factors, prevailing weather conditions will **significantly** affect the amount of subgrade repair. Therefore, GTA recommends grading activities be performed during the summer and early fall if possible, where higher temperatures tend to result in drier conditions and moisture conditioning can be more easily achieved than during winter and early spring months.

For planning purposes, if grading activities are performed during summer or early fall, GTA recommends a contingency be maintained for moisture conditioning and re-compacting wet surficial soils following rainfall events. If construction of the roadway must be performed during winter or early spring months, GTA recommends a contingency be maintained for the removal and replacement of up to 200 cubic yards of material to construct a stable subgrade.

It should be noted that actual repair procedures and quantities can only be determined based on technical observations in the field at the time of construction, and we recommend that the geotechnical engineer or his representative observe the conditions exposed in the field during grading to provide additional recommendations as needed. Further, once proposed site grades are known, GTA can provide additional comments pertaining to expected quantities of subgrade repair.

The site should also be maintained in a positively drained condition during and after construction in order to prevent the ponding of water and destabilization of subgrade soils. The use of temporary berms should be considered to direct surface water away from construction areas. Heavy traffic on prepared soil subgrade areas should be avoided, particularly following periods of wet weather.

Bedrock Removal

Based on the results of the exploration and the geologic formation, bedrock removal may be required in isolated locations during construction, particularly within utility installation or foundation construction. Bedrock was not explored as part of this exploration. However, based on our experience, removal of the limestone of the Bigby-Cannon Formation typically requires a hoe-ram. Once proposed grades are determined, GTA can provide additional comments and recommendations with respect to bedrock removal quantities.

Site Excavations and Slope Stability

Temporary slope inclinations must comply with OSHA 29 CFR Part 1926. In GTA's opinion, the overburden is classified as a type "B" as it relates to the referenced OSHA standard. Regardless, the responsibility for temporary excavations must reside with the contractor employed to perform the excavation.

Subsurface Water

As discussed, the test pits were dry upon refusal or termination, although it should be noted that the exploration was performed during a period of very low precipitation and high temperatures. In addition, “perched” water trapped between the ground surface and bedrock surface is common within this geologic setting, particularly following periods of wet weather. Therefore, the contractor should be prepared to dewater construction areas. If exposed subsurface water cannot be daylighted away from the construction area, berms, rim ditches, or pumps are expected to be appropriate based on our experience with similar projects.

Engineered Fill

Soil Fill

GTA expects the site grading plan will be designed to balance the site. However, a borrow source may be necessary depending on the finished grades. Any soil designated for use as engineered fill, whether generated on-site or off-site, should consist of a low to moderate plasticity clay (LL < 60, PI<35). Soil fill should consist of non-organic, lean to moderately plastic clay containing less than 5% by weight of rock material and with rocks no larger than 4 inches in maximum dimension. Engineered earth fill must be placed in lifts not exceeding 8 inches in uncompacted thickness and subsequently compacted to at least 95% of the soil's maximum dry density and within 3 percentage points of the optimum moisture content as determined by ASTM D 698 (standard Proctor). Compacted soil fill should also be stable under the influence of compaction equipment. However, after soil fill is properly placed and compacted, GTA advises limiting heavy construction traffic on the soil subgrade.

Shot-Rock Fill

Depending on the availability of suitable soil fill and the time of year construction takes place, the use of shot-rock fill may be advantageous. Shot-rock fill should consist of a densely graded mixture of rock fragments ranging in particle size from 18 inches in maximum dimension down to 1 inch, and containing less than 10 percent soil size particles by weight. The rock fill is to be placed in horizontal lifts not more than 24 inches thick and subsequently compacted to produce a stable, unyielding mass with essentially no voids. Compaction of the rock fill should be performed with a heavy (10 ton) smooth-drum vibratory roller.

Areas that require limited fill intervals can utilize surge-stone (maximum 6 to 8-inch particles) or dense graded aggregate (in accordance with TDOT Section 903, Grading D). Surge-rock or dense graded should be placed in maximum 12-inch lifts. Surges stone should be compacted to produce a dense, unyielding mass similar to larger diameter rock fill. Dense graded aggregate should be compacted to at least 95% of the standard Proctor maximum dry density.

Foundation Design

It is GTA’s opinion the proposed residential structures can be founded by means of shallow foundations bearing on the residual soil or compacted structural fill. We recommend foundation elements be proportioned based on a maximum net bearing pressure of 2,000 psf. A minimum footing width of 18 inches should be maintained and a minimum embedment depth of 18 inches below finished exterior grades should be maintained in order to provide for frost protection and confinement. Foundations for residential structures should bear on a uniform bearing surface. Therefore, bedrock encountered at the bearing elevation should be excavated to a depth of at least 2 feet below the bearing surface and the over-excavation backfilled with compacted soil fill meeting the criteria provided above.

Prior to foundation placement, the foundation subgrade should be observed by the geotechnical engineer or his representative. Isolated zones of soft soil may be encountered at the bearing

elevation. If soft zones are encountered, the footing subgrade should be undercut to a stiff stratum. Over-excavations of footings should be backfilled with engineered fill or lean concrete. GTA recommends foundation concrete be placed as soon as possible following observation by the engineer, and footing excavations should be kept free of water.

Provided that the site is developed as recommended, total, post construction settlement will approximate ¾-inch. Differential settlement will approach half the total stated between adjacent columns and along 30-foot sections of continuous foundations. As such, exterior brick or masonry veneer construction should incorporate an appropriate number of control joints to reduce the effects of differential settlement.

LIMITATIONS

The foregoing recommendations were developed based on observations of a limited number of exploratory locations and with the assumption that the materials exposed fairly represent conditions existing across the site. It is possible that different conditions could exist between the explored locations, and such unknown conditions could have an impact on design and construction. Additionally, subsurface conditions can change with the passage of time. Because it is not possible to know every detail of the conditions hidden beneath the surface, our comments and recommendations are presented as opinions and judgments, as opposed to statements of fact. Should any conditions at variance with this report be encountered during construction, this office should be notified immediately so that further studies can be made and supplemental recommendations can be provided. The purpose of this report is to provide information and recommendations for use by the owner and the building designers. While the subsurface information may be helpful to contractors, the study is not intended to provide all information that a contractor may need to evaluate construction costs and material quantities. The data and recommendations are specific to the site and project described herein.

CLOSURE

We are available at your convenience to discuss with you the details of this project and our recommendations. We appreciate this opportunity to be of service to you.

Sincerely,

Geo-Technology Associates, Inc.

TyAnna Cox
Staff Professional

MICHAEL L WALL
125
STATE OF TENN

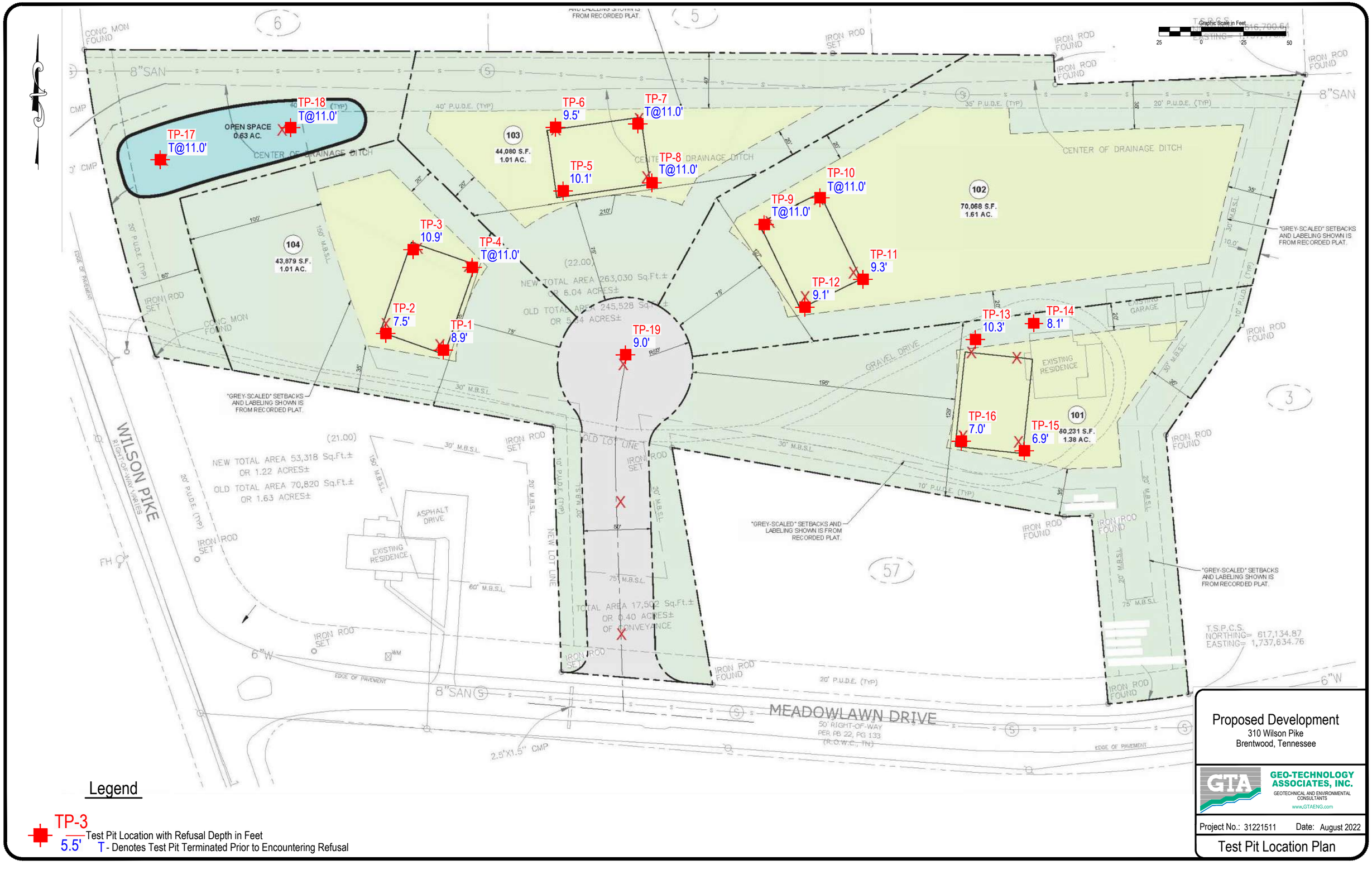
8/17/22

Michael Wall, PE
Senior Geotechnical Engineer

APPENDIX A: TEST PIT LOCATION PLAN

REPORT OF GEOTECHNICAL EXPLORATION
PROPOSED DEVELOPMENT
310 WILSON PIKE
BRENTWOOD, TENNESSEE
GTA PROJECT NO. 31221511

230 Great Circle Road, Suite 211, Nashville, TN 37228



Legend

TP-3 — Test Pit Location with Refusal Depth in Feet

5.5' T - Denotes Test Pit Terminated Prior to Encountering Refusal

Proposed Development
310 Wilson Pike
Brentwood, Tennessee

GEO-TECHNOLOGY ASSOCIATES, INC.
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS
www.GTAENG.com

Project No.: 31221511 Date: August 2022

Test Pit Location Plan

APPENDIX B: TEST PIT LOGS

REPORT OF GEOTECHNICAL EXPLORATION
PROPOSED DEVELOPMENT
310 WILSON PIKE
BRENTWOOD, TENNESSEE
GTA PROJECT NO. 31221511

230 Great Circle Road, Suite 211, Nashville, TN 37228

Test Pit Log

Project Name 310 Wilson Pike
Location Brentwood, TN
Project Number 31221511
Equipment Used Backhoe
Date Excavated 7/26/2022
Total Depth (ft.) 8.9

Surface Elevation: 709.0 ft. **Test Pit No.** TP-1

Remarks: Surface elevations interpolated from Williamson County GIS

w = Natural Moisture Content, LL = Liquid Limit, PL = Plastic Limit, PI = Plasticity Index

Depth (ft.)	Lithologic Description
1	**(0.0'-1.0') Topsoil:** 12 inches thick, with roots
2	**(1.0'-2.0') CL:** Clay, stiff, slightly moist, very silty, brown (Residuum)
3	**(2.0'-8.9') CL:** Clay, stiff, moist, silty, brown
4	w = 19%, LL = 46, PL = 25, PI = 21
5	
6	
7	
8	

Refusal at 8.9' on bedrock surface.
Dry upon completion



Test Pit Log

Project Name 310 Wilson Pike
Location Brentwood, TN
Project Number 31221511
Equipment Used Backhoe
Date Excavated 7/26/2022
Total Depth (ft.) 7.5

Surface Elevation: 709.0 ft. **Test Pit No.** TP-2

Remarks: Surface elevations interpolated from Williamson County GIS

w = Natural Moisture Content, LL = Liquid Limit, PL = Plastic Limit, PI = Plasticity Index

Depth (ft.)	Lithologic Description
1	**(0.0'-1.0') Topsoil:** 12 inches thick, with roots
2	**(1.0'-2.5') CL:** Clay, stiff, slightly moist, very silty, brown (Residuum)
3	
4	
5	**(2.5'-7.5') CL:** Clay, stiff, moist, silty, brown
6	
7	

Refusal at 7.5' on bedrock surface.

Dry upon completion



Test Pit Log

Project Name 310 Wilson Pike
Location Brentwood, TN
Project Number 31221511
Equipment Used Backhoe
Date Excavated 7/26/2022
Total Depth (ft.) 10.9

Surface Elevation: 707.0 ft. **Test Pit No.** TP-3

Remarks: Surface elevations interpolated from Williamson County GIS

w = Natural Moisture Content, LL = Liquid Limit, PL = Plastic Limit, PI = Plasticity Index

Depth (ft.)	Lithologic Description
1	**(0.0'-1.0') Topsoil:** 12 inches thick, with roots to 1.5'
2	**(1.0'-2.0') CL:** Clay, stiff, slightly moist, very silty, brown (Residuum) w = 18.8%
3	
4	**(2.0'-5.0') CL:** Clay, stiff, moist, silty, brown
5	
6	
7	**(5.0'-9.5') CL:** Clay, very stiff, moist, silty, brown, with some chert fragments
8	
9	
10	**(9.5'-10.9') CH:** Clay, stiff, moist, slightly silty, light reddish-brown, with some chert fragments

Refusal at 10.9' on bedrock surface.
Dry upon completion



Test Pit Log

Project Name 310 Wilson Pike
Location Brentwood, TN
Project Number 31221511
Equipment Used Backhoe
Date Excavated 7/26/2022
Total Depth (ft.) 11.0

Surface Elevation: 707.0 ft. **Test Pit No.** TP-4

Remarks: Surface elevations interpolated from Williamson County GIS

w = Natural Moisture Content, LL = Liquid Limit, PL = Plastic Limit, PI = Plasticity Index

Depth (ft.)	Lithologic Description
1	**(0.0'-0.8') Topsoil:** 10 inches thick, with roots to 1.5'
2	**(0.8'-3.0') CL:** Clay, stiff, moist, silty, brown to reddish-brown (Residuum) w = 18.4%, LL = 41, PL = 24, PI = 17
3	
4	
5	
6	**(3.0'-9.0') CL:** Clay, stiff, moist, silty, reddish-brown, with some chert fragments
7	
8	
9	
10	**(9.0'-11.0') CH:** Clay, very stiff, moist, slightly silty, reddish-brown, with abundant chert fragments
11	Terminated at 11.0' Dry upon completion



Test Pit Log

Project Name 310 Wilson Pike
Location Brentwood, TN
Project Number 31221511
Equipment Used Backhoe
Date Excavated 7/26/2022
Total Depth (ft.) 10.1

Surface Elevation: 711.0 ft. **Test Pit No.** TP-5

Remarks: Surface elevations interpolated from Williamson County GIS

w = Natural Moisture Content, LL = Liquid Limit, PL = Plastic Limit, PI = Plasticity Index

Depth (ft.)	Lithologic Description
1	**(0.0'-1.0') Topsoil:** 12 inches thick, with roots
2	
3	**(1.0'-6.5') CL:** Clay, stiff, moist, silty, brown to reddish-brown (Residuum)
4	
5	w = 25.5%
6	
7	
8	**(6.5'-10.1') CH:** Clay, stiff, moist, slightly silty, brown to reddish-brown, with trace chert fragments
9	
10	

Refusal at 10.1' on bedrock surface.
Dry upon completion



Test Pit Log

Project Name 310 Wilson Pike
Location Brentwood, TN
Project Number 31221511
Equipment Used Backhoe
Date Excavated 7/26/2022
Total Depth (ft.) 9.5

Surface Elevation: 710.0 ft. **Test Pit No.** TP-6

Remarks: Surface elevations interpolated from Williamson County GIS

w = Natural Moisture Content, LL = Liquid Limit, PL = Plastic Limit, PI = Plasticity Index

Depth (ft.)	Lithologic Description
1	**(0.0'-1.0') Topsoil:** 12 inches thick, with roots
2	**(1.0'-4.0') CL:** Clay, stiff, moist, silty, brown (Residuum)
3	
4	
5	**(4.0'-7.0') CL:** Clay, stiff, moist, silty, light reddish-brown, with some chert fragments
6	
7	
8	**(7.0'-9.5') CH:** Clay, stiff, moist, slightly silty, brown to reddish-brown, with trace chert fragments
9	

Refusal at 9.5' on bedrock surface.
Dry upon completion



Test Pit Log

Project Name 310 Wilson Pike
Location Brentwood, TN
Project Number 31221511
Equipment Used Backhoe
Date Excavated 7/26/2022
Total Depth (ft.) 11.0

Surface Elevation: 710.0 ft. **Test Pit No.** TP-7

Remarks: Surface elevations interpolated from Williamson County GIS

w = Natural Moisture Content, LL = Liquid Limit, PL = Plastic Limit, PI = Plasticity Index

Depth (ft.)	Lithologic Description
1	**(0.0'-1.0') Topsoil:** 12 inches thick, with roots to 1.5'
2	**(1.0'-2.0') CL:** Clay, stiff, slightly moist, very silty, brown (Residuum)
3	w = 18.1%
4	
5	**(2.0'-6.5') CL:** Clay, stiff, moist, silty, reddish-brown
6	
7	**(6.5'-8.0') CL:** Clay, very stiff, moist, silty, reddish-brown, with some chert fragments
8	
9	**(8.0'-11.0') CH:** Clay, stiff, moist, slightly silty, brown to reddish-brown, with trace chert fragments
10	
11	Terminated at 11.0'

Dry upon completion



Test Pit Log

Project Name 310 Wilson Pike
Location Brentwood, TN
Project Number 31221511
Equipment Used Backhoe
Date Excavated 7/26/2022
Total Depth (ft.) 11.1

Surface Elevation: 712.0 ft. **Test Pit No.** TP-8

Remarks: Surface elevations interpolated from Williamson County GIS

w = Natural Moisture Content, LL = Liquid Limit, PL = Plastic Limit, PI = Plasticity Index

Depth (ft.)	Lithologic Description
0	**(0.0'-0.8') Topsoil:** 10 inches thick, with roots to 1.5'
1	
2	**(0.8'-3.0') CL:** Clay, stiff, slightly moist, very silty, brown (Residuum)
3	
4	
5	
6	**(3.0'-9.0') CL:** Clay, stiff, moist, silty, reddish-brown
7	
8	
9	
10	**(9.0'-11.1') CH:** Clay, medium, very moist, slightly silty, yellowish-brown
11	

Refusal at 11.1' on bedrock surface.
Dry upon completion



Test Pit Log

Project Name 310 Wilson Pike
Location Brentwood, TN
Project Number 31221511
Equipment Used Backhoe
Date Excavated 7/26/2022
Total Depth (ft.) 11.0

Surface Elevation: 713.0 ft. **Test Pit No.** TP-9

Remarks: Surface elevations interpolated from Williamson County GIS

w = Natural Moisture Content, LL = Liquid Limit, PL = Plastic Limit, PI = Plasticity Index

Depth (ft.)	Lithologic Description
1	**(0.0'-1.0') Topsoil:** 12 inches thick, with roots
2	**(1.0'-2.0') CL:** Clay, stiff, slightly moist, very silty, brown (Residuum)
3	
4	**(2.0'-7.0') CL:** Clay, stiff, moist, silty, reddish-brown
5	
6	
7	
8	
9	**(7.0'-11.0') CH:** Clay, medium, very moist, slightly silty, yellowish-brown
10	
11	Terminated at 11.0'

Dry upon completion



Test Pit Log

Project Name 310 Wilson Pike
Location Brentwood, TN
Project Number 31221511
Equipment Used Backhoe
Date Excavated 7/26/2022
Total Depth (ft.) 11.0

Surface Elevation: 715.0 ft. **Test Pit No.** TP-10

Remarks: Surface elevations interpolated from Williamson County GIS

w = Natural Moisture Content, LL = Liquid Limit, PL = Plastic Limit, PI = Plasticity Index

Depth (ft.)	Lithologic Description
1	**(0.0'-1.0') Topsoil:** 12 inches thick, with roots
2	**(1.0'-2.5') CL:** Clay, stiff, slightly moist, very silty, brown (Residuum)
3	
4	
5	**(2.5'-8.0') CL:** Clay, stiff, moist, silty, reddish-brown
6	
7	
8	
9	**(8.0'-11.0') CH:** Clay, medium, very moist, slightly silty, yellowish-brown
10	
11	Terminated at 11.0'

Dry upon completion



Test Pit Log

Project Name 310 Wilson Pike
Location Brentwood, TN
Project Number 31221511
Equipment Used Backhoe
Date Excavated 7/26/2022
Total Depth (ft.) 9.3

Surface Elevation: 714.0 ft.

Test Pit No. TP-11

Remarks: Surface elevations interpolated from Williamson County GIS

w = Natural Moisture Content, LL = Liquid Limit, PL = Plastic Limit, PI = Plasticity Index

Depth (ft.)	Lithologic Description
1	**(0.0'-1.2') Topsoil:** 14 inches thick, with roots
2	**(1.2'-2.0') CL:** Clay, stiff, slightly moist, silty, brown (Residuum)
3	
4	**(2.0'-7.0') CL:** Clay, stiff, moist, silty, brown
5	
6	
7	**(7.0'-9.3') CH:** Clay, stiff, moist, slightly silty, brown to reddish-brown, with trace chert fragments
8	
9	

Refusal at 9.3' on bedrock surface.
Dry upon completion



Test Pit Log

Project Name 310 Wilson Pike
Location Brentwood, TN
Project Number 31221511
Equipment Used Backhoe
Date Excavated 7/26/2022
Total Depth (ft.) 9.1

Surface Elevation: 712.0 ft. **Test Pit No.** TP-12

Remarks: Surface elevations interpolated from Williamson County GIS

w = Natural Moisture Content, LL = Liquid Limit, PL = Plastic Limit, PI = Plasticity Index

Depth (ft.)	Lithologic Description
1	**(0.0'-1.2') Topsoil:** 14 inches thick, with roots
2	
3	
4	**(1.2'-7.5') CL:** Clay, stiff, moist, silty, brown (Residuum)
5	
6	
7	
8	**(7.5'-9.1') CH:** Clay, stiff, moist, slightly silty, brown to reddish-brown, with trace chert fragments
9	

Refusal at 9.1' on bedrock surface.
Dry upon completion



Test Pit Log

Project Name 310 Wilson Pike
Location Brentwood, TN
Project Number 31221511
Equipment Used Backhoe
Date Excavated 7/26/2022
Total Depth (ft.) 10.3

Surface Elevation: 712.0 ft. **Test Pit No.** TP-13

Remarks: Surface elevations interpolated from Williamson County GIS

w = Natural Moisture Content, LL = Liquid Limit, PL = Plastic Limit, PI = Plasticity Index

Depth (ft.)	Lithologic Description
1	**(0.0'-1.2') Topsoil:** 14 inches thick, with roots
2	**(1.2'-2.0') CL:** Clay, stiff, slightly moist, silty, brown (Residuum)
3	
4	
5	**(2.0'-8.0') CL:** Clay, stiff, moist, silty, brown
6	
7	
8	
9	**(8.0'-10.3') CH:** Clay, stiff, moist, slightly silty, brown to reddish-brown, with trace chert fragments
10	

Refusal at 10.3' on bedrock surface.
Dry upon completion



Test Pit Log

Project Name 310 Wilson Pike
Location Brentwood, TN
Project Number 31221511
Equipment Used Backhoe
Date Excavated 7/26/2022
Total Depth (ft.) 8.1

Surface Elevation: 713.0 ft. **Test Pit No.** TP-14

Remarks: Surface elevations interpolated from Williamson County GIS

w = Natural Moisture Content, LL = Liquid Limit, PL = Plastic Limit, PI = Plasticity Index

Depth (ft.)	Lithologic Description
1	**(0.0'-1.2') Topsoil:** 14 inches thick, with roots
2	
3	
4	**(1.2'-6.5') CL:** Clay, stiff, moist, silty, brown (Residuum)
5	
6	
7	**(6.5'-8.1') CH:** Clay, stiff, moist, slightly silty, brown to reddish-brown, with trace chert fragments
8	

Refusal at 8.1' on bedrock surface.
Dry upon completion



Test Pit Log

Project Name 310 Wilson Pike
Location Brentwood, TN
Project Number 31221511
Equipment Used Backhoe
Date Excavated 7/26/2022
Total Depth (ft.) 6.9

Surface Elevation: 714.0 ft. **Test Pit No.** TP-15

Remarks: Surface elevations interpolated from Williamson County GIS

w = Natural Moisture Content, LL = Liquid Limit, PL = Plastic Limit, PI = Plasticity Index

Depth (ft.)	Lithologic Description
1	**(0.0'-1.2') Topsoil:** 14 inches thick, with roots
2	**(1.2'-2.0') CL:** Clay, stiff, moist, very silty, brown (Residuum)
3	
4	**(2.0'-6.0') CL:** Clay, stiff, moist, silty, brown
5	
6	**(6.0'-6.9') CH:** Clay, stiff, moist, slightly silty, brown to reddish-brown, with trace chert fragments

Refusal at 6.9' on bedrock surface.

Dry upon completion



Test Pit Log

Project Name 310 Wilson Pike
Location Brentwood, TN
Project Number 31221511
Equipment Used Backhoe
Date Excavated 7/26/2022
Total Depth (ft.) 7.0

Surface Elevation: 712.0 ft. **Test Pit No.** TP-16

Remarks: Surface elevations interpolated from Williamson County GIS

w = Natural Moisture Content, LL = Liquid Limit, PL = Plastic Limit, PI = Plasticity Index

Depth (ft.)	Lithologic Description
1	**(0.0'-1.3') Topsoil:** 16 inches thick, with roots
2	**(1.3'-2.5') CL:** Clay, stiff, moist, very silty, brown (Residuum)
3	
4	
5	**(2.5'-7.0') CL:** Clay, stiff to very stiff, moist, silty, brown
6	
7	

Refusal at 7.0' on bedrock surface.

Dry upon completion



Test Pit Log

Project Name 310 Wilson Pike
Location Brentwood, TN
Project Number 31221511
Equipment Used Backhoe
Date Excavated 7/26/2022
Total Depth (ft.) 11.0

Surface Elevation: 706.0 ft. **Test Pit No.** TP-17

Remarks: Surface elevations interpolated from Williamson County GIS

w = Natural Moisture Content, LL = Liquid Limit, PL = Plastic Limit, PI = Plasticity Index

Depth (ft.)	Lithologic Description
1	**(0.0'-0.8') Topsoil:** 10 inches thick, with roots to 1.5'
2	**(0.8'-2.0') CL:** Clay, medium, slightly moist, very silty, brown (Residuum)
3	
4	**(2.0'-6.5') CL:** Clay, stiff, moist, silty, reddish-brown
5	
6	
7	
8	
9	**(6.5'-11.0') CL:** Clay, medium, moist, silty, reddish-brown
10	
11	Terminated at 11.0'

Dry upon completion



Test Pit Log

Project Name 310 Wilson Pike
Location Brentwood, TN
Project Number 31221511
Equipment Used Backhoe
Date Excavated 7/26/2022
Total Depth (ft.) 11.0

Surface Elevation: 706.0 ft. **Test Pit No.** TP-18

Remarks: Surface elevations interpolated from Williamson County GIS

w = Natural Moisture Content, LL = Liquid Limit, PL = Plastic Limit, PI = Plasticity Index

Depth (ft.)	Lithologic Description
1	**(0.0'-0.75') Topsoil:** 9 inches thick
2	**(0.75'-3.0') CL:** Clay, medium, slightly moist, very silty, brown (Residuum) w = 15.2%
3	
4	**(3.0'-5.0') CL:** Clay, stiff, moist, silty, reddish-brown, with some chert fragments
5	w = 31.1%, LL = 73, PL = 36, PI = 37
6	
7	
8	**(5.0'-11.0') MH:** Silt, stiff, moist, clayey, light reddish-brown, with trace chert fragments
9	
10	
11	Terminated at 11.0' Dry upon completion



Test Pit Log

Project Name 310 Wilson Pike
Location Brentwood, TN
Project Number 31221511
Equipment Used Backhoe
Date Excavated 7/26/2022
Total Depth (ft.) 9.0

Surface Elevation: 710.0 ft. **Test Pit No.** TP-19

Remarks: Surface elevations interpolated from Williamson County GIS

w = Natural Moisture Content, LL = Liquid Limit, PL = Plastic Limit, PI = Plasticity Index

Depth (ft.)	Lithologic Description
1	**(0.0'-1.25') Topsoil:** 15 inches thick, with roots
2	**(1.25'-2.5') CL:** Clay, stiff, moist, very silty, brown (Residuum)
3	
4	
5	**(2.5'-8.0') CL:** Clay, stiff, moist, silty, brown
6	
7	
8	**(8.0'-9.0') CL:** Clay, medium, very moist, silty, brown
9	

Refusal at 9.0' on bedrock surface.
Dry upon completion



APPENDIX C: LABORATORY TESTING DATA

REPORT OF GEOTECHNICAL EXPLORATION
PROPOSED DEVELOPMENT
310 WILSON PIKE
BRENTWOOD, TENNESSEE
GTA PROJECT NO. 31221511

230 Great Circle Road, Suite 211, Nashville, TN 37228

MOISTURE CONTENT

ASTM D 2216-19

Client: GTA
Client Reference: 310 Wilson Pike
Project No.: N2022-119-001

Lab ID:	001	002	003	004	005
Boring No.:	TP-1	TP-3	TP-4	TP-5	TP-7
Depth (ft):	4	2	2	5	3
Sample No.:	NA	NA	NA	NA	NA
Tare Number	T31	24	T16	T14	T27
Wt. of Tare & Wet Sample (g)	115.01	83.64	167.14	137.75	161.31
Wt. of Tare & Dry Sample (g)	97.67	71.45	142.49	111.41	137.63
Weight of Tare (g)	6.62	6.47	8.45	8.31	6.50
Weight of Water (g)	17.34	12.19	24.65	26.34	23.68
Weight of Dry Sample (g)	91.05	64.98	134.04	103.10	131.13
Water Content (%)	**19.0**	**18.8**	**18.4**	**25.5**	**18.1**

Lab ID	006	007
Boring No.	TP-18	TP-18
Depth (ft)	2	5
Sample No.	NA	NA
Tare Number	26	T35
Wt. of Tare & Wet Sample (g)	112.27	155.25
Wt. of Tare & Dry Sample (g)	98.30	120.00
Weight of Tare (g)	6.48	6.50
Weight of Water (g)	13.97	35.25
Weight of Dry Sample (g)	91.82	113.50
Water Content (%)	**15.2**	**31.1**

Notes :

Tested By *JV* *Date* *7/28/22* *Checked By* *NC* *Date* *8/2/22*

ATTERBERG LIMITS

ASTM D 4318-17

Client:	GTA	Boring No.:	TP-1
Client Reference:	310 Wilson Pike	Depth (ft):	4
Project No.:	N2022-119-001	Sample No.:	NA
Lab ID:	N2022-119-001-001	Soil Description:	DARK BROWN LEAN CLAY

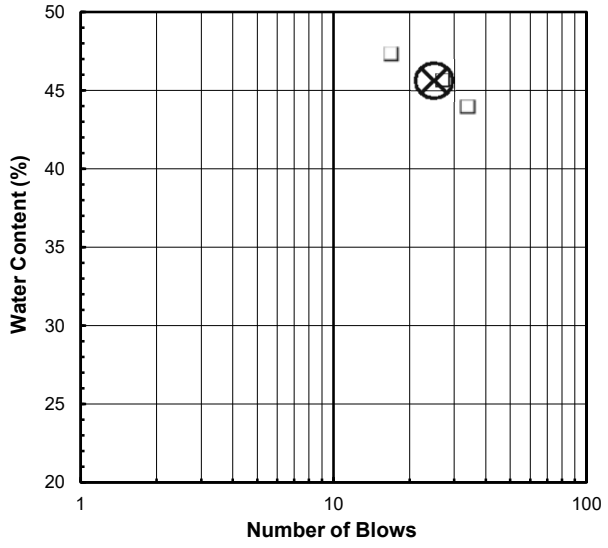
Note: The* USCS *symbol used with this test refers only to the minus No. 40 (Minus #40 sieve material, Air dried)
sieve material. See the "Sieve and Hydrometer Analysis" graph page for the complete material description.

As Received Moisture Content		**Liquid Limit Test**			
ASTM D2216-19		**1**	**2**	**3**	**M**
Tare Number:	T31	G	A	S	**U**
Wt. of Tare & Wet Sample (g):	115.01	32.49	32.37	32.58	**L**
Wt. of Tare & Dry Sample (g):	97.67	29.77	29.62	29.69	**T**
Weight of Tare (g):	6.62	23.58	23.59	23.58	**I**
Weight of Water (g):	17.3	2.7	2.8	2.9	**P**
Weight of Dry Sample (g):	91.1	6.2	6.0	6.1	**O**
Was As Received MC Preserved:	**Yes**				**I**
Moisture Content (%):	**19.0**	**43.9**	**45.6**	**47.3**	**N**
Number of Blows:		**34**	**27**	**17**	**T**

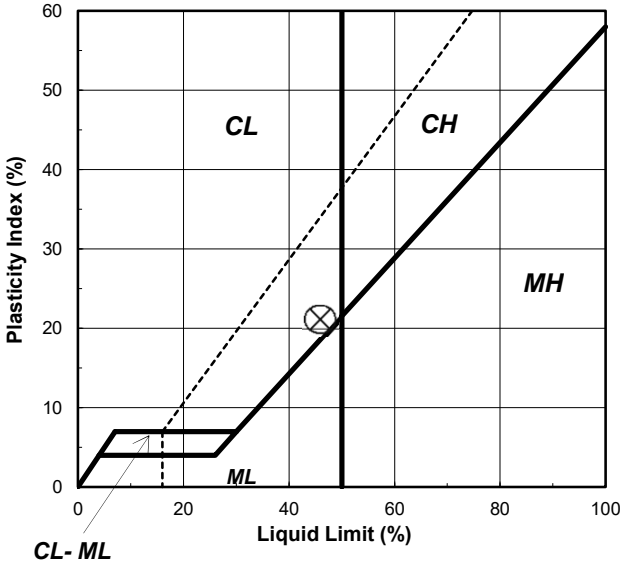
Plastic Limit Test	**1**	**2**	**Range**
Tare Number:	J	V	
Wt. of Tare & Wet Sample (g):	31.91	30.99	
Wt. of Tare & Dry Sample (g):	30.24	29.49	
Weight of Tare (g):	23.54	23.54	
Weight of Water (g):	1.7	1.5	
Weight of Dry Sample (g):	6.7	6.0	
Moisture Content (%):	**24.9**	**25.2**	**-0.3**
Note: The acceptable range of the two Moisture Contents is ±			1.12

Test Results	
Liquid Limit (%):	**46**
Plastic Limit (%):	**25**
Plasticity Index (%):	**21**
USCS Symbol:	**CL**

Flow Curve



Plasticity Chart



Tested By *JV* *Date* *8/1/22* *Checked By* *NC* *Date* 8/2/22

 DCN: CTS4B, DATE: 5/22/18 REVISION: 8

ATTERBERG LIMITS

ASTM D 4318-17

Client:	GTA	Boring No.:	TP-4
Client Reference:	310 Wilson Pike	Depth (ft):	2
Project No.:	N2022-119-001	Sample No.:	NA
Lab ID:	N2022-119-001-003	Soil Description:	BROWN LEAN CLAY

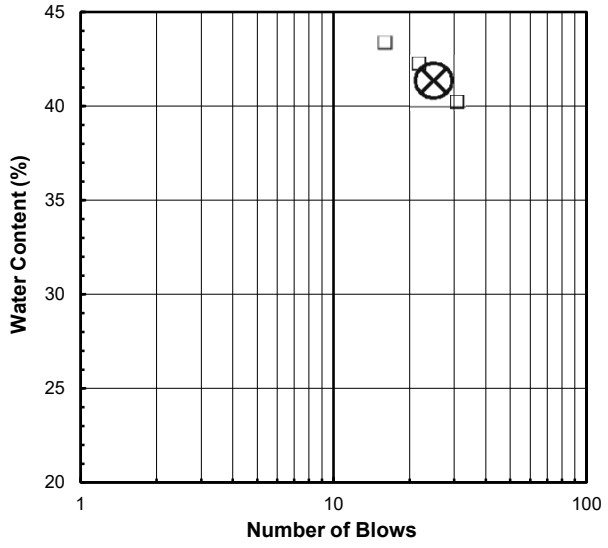
Note: The* USCS *symbol used with this test refers only to the minus No. 40 sieve material. See the "Sieve and Hydrometer Analysis" graph page for the complete material description. (Minus #40 sieve material, Air dried)

As Received Moisture Content		Liquid Limit Test			
ASTM D2216-19		1	2	3	M
Tare Number:	T16	O	H	M	U
Wt. of Tare & Wet Sample (g):	167.14	32.09	32.06	32.94	L
Wt. of Tare & Dry Sample (g):	142.49	29.58	29.48	30.14	T
Weight of Tare (g):	8.45	23.34	23.37	23.68	I
Weight of Water (g):	24.7	2.5	2.6	2.8	P
Weight of Dry Sample (g):	134.0	6.2	6.1	6.5	O
Was As Received MC Preserved:	**Yes**				I
Moisture Content (%):	**18.4**	**40.2**	**42.2**	**43.3**	N
Number of Blows:		**31**	**22**	**16**	T

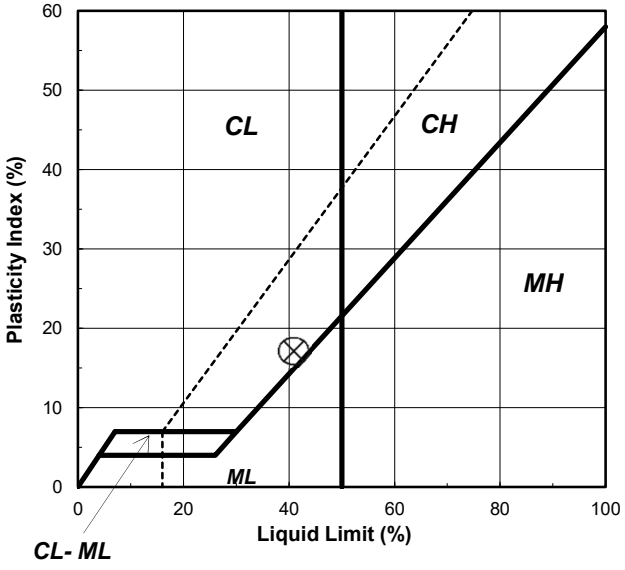
Plastic Limit Test	1	2	Range
Tare Number:	N	L	
Wt. of Tare & Wet Sample (g):	33.29	33.22	
Wt. of Tare & Dry Sample (g):	31.38	31.35	
Weight of Tare (g):	23.29	23.56	
Weight of Water (g):	1.9	1.9	
Weight of Dry Sample (g):	8.1	7.8	
Moisture Content (%):	**23.6**	**24.0**	**-0.4**
Note: The acceptable range of the two Moisture Contents is ±			1.12

Test Results	
Liquid Limit (%):	**41**
Plastic Limit (%):	**24**
Plasticity Index (%):	**17**
USCS Symbol:	**CL**

Flow Curve



Plasticity Chart



Tested By JV *Date* 8/1/22 *Checked By* NC *Date* 8/2/22

 DCN: CTS4B, DATE: 5/22/18 REVISION: 8

ATTERBERG LIMITS

ASTM D 4318-17

Client:	GTA	Boring No.:	TP-18
Client Reference:	310 Wilson Pike	Depth (ft):	5
Project No.:	N2022-119-001	Sample No.:	NA
Lab ID:	N2022-119-001-007	Soil Description:	BROWN ELASTIC SILT

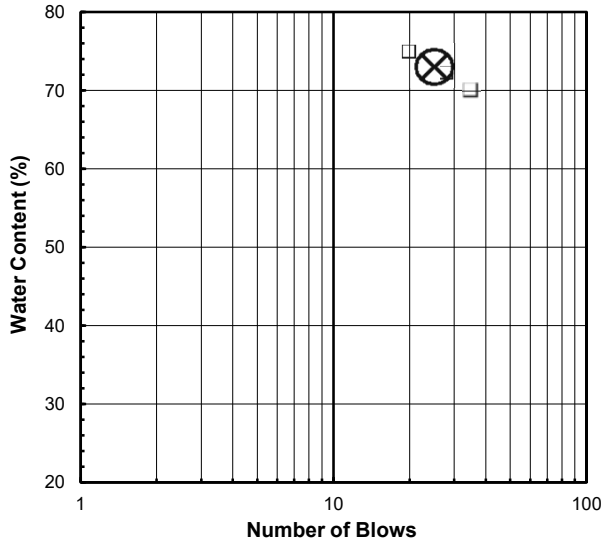
Note: The* USCS *symbol used with this test refers only to the minus No. 40 (Minus #40 sieve material, Air dried)
sieve material. See the "Sieve and Hydrometer Analysis" graph page for the complete material description.

As Received Moisture Content		**Liquid Limit Test**			
ASTM D2216-19		**1**	**2**	**3**	**M**
Tare Number:	T35	1	2	3	**U**
Wt. of Tare & Wet Sample (g):	155.25	25.46	26.98	27.06	**L**
Wt. of Tare & Dry Sample (g):	120.00	22.00	23.39	23.48	**T**
Weight of Tare (g):	6.50	17.06	18.42	18.70	**I**
Weight of Water (g):	35.3	3.5	3.6	3.6	**P**
Weight of Dry Sample (g):	113.5	4.9	5.0	4.8	**O**
Was As Received MC Preserved:	**Yes**				**I**
Moisture Content (%):	**31.1**	**70.0**	**72.2**	**74.9**	**N**
Number of Blows:		**35**	**28**	**20**	**T**

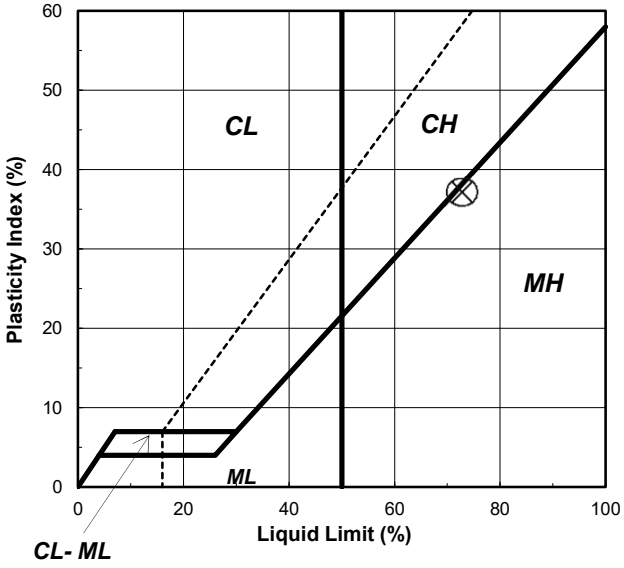
Plastic Limit Test	**1**	**2**	**Range**	
Tare Number:	T	X		
Wt. of Tare & Wet Sample (g):	33.16	32.28		
Wt. of Tare & Dry Sample (g):	30.60	29.91		
Weight of Tare (g):	23.54	23.45		
Weight of Water (g):	2.6	2.4		
Weight of Dry Sample (g):	7.1	6.5		
Moisture Content (%):	**36.3**	**36.7**	**-0.4**	
Note: The acceptable range of the two Moisture Contents is ±				0.84

Test Results	
Liquid Limit (%):	**73**
Plastic Limit (%):	**36**
Plasticity Index (%):	**37**
USCS Symbol:	**MH**

Flow Curve



Plasticity Chart



Tested By *JV* *Date* *8/1/22* *Checked By* *NC* *Date* 8/2/22

 DCN: CTS4B, DATE: 5/22/18 REVISION: 8

GROW
ENVIRONMENTAL SOLUTIONS

1406 Wilson Avenue
Tullahoma, TN 37388
(931) 247-8915

June 21, 2022

Tennessee Department of Environment and Conservation
Division of Water Resources
Nashville Environmental Field Office
711 R.S. Gass Boulevard
Nashville, TN 37216

RE: Hydrologic Determination Report – 310 Wilson Pike, Brentwood, Williamson County

The attached hydrologic determination (HD) (Attachment 1) is submitted **to qualify for treatment provided for in §69-3-108(r).** A hydrologic determination was conducted on the approximate 6-acre site to identify water resources. The site investigation identified the following wet weather conveyance (WWC) features:

WWC 1 – Start: 36.025241, -86.782796, End: 36.025645, -86.782751
WWC 2 – Start: 36.025411, -86.781443, End: 36.025684, -86.782814
WWC 3 – Start: 36.026287, -86.781467, End: 36.026521, -86.783775

No wetlands or ponds were observed within the project site. A site plan has yet to be developed. The property consists of 1 parcel owned by Roberts Family Trust (Parcel ID 011K A 02200 00015011J).

Please contact me via my cell phone or email if you have any questions. All submitted information is true, accurate and complete.

Sincerely,



Christopher Grow
TNQHP #1172-TN18

Attachments:
1. Hydrologic Determination Report
2. Property Access Permission Letter

Attachment 1

Hydrologic Determination Report

310 Wilson Pike

HYDROLOGIC DETERMINATION REPORT

310 Wilson Pike
Williamson County, Tennessee

Prepared by:

Christopher Grow
TNQHP #1172-TN18

and

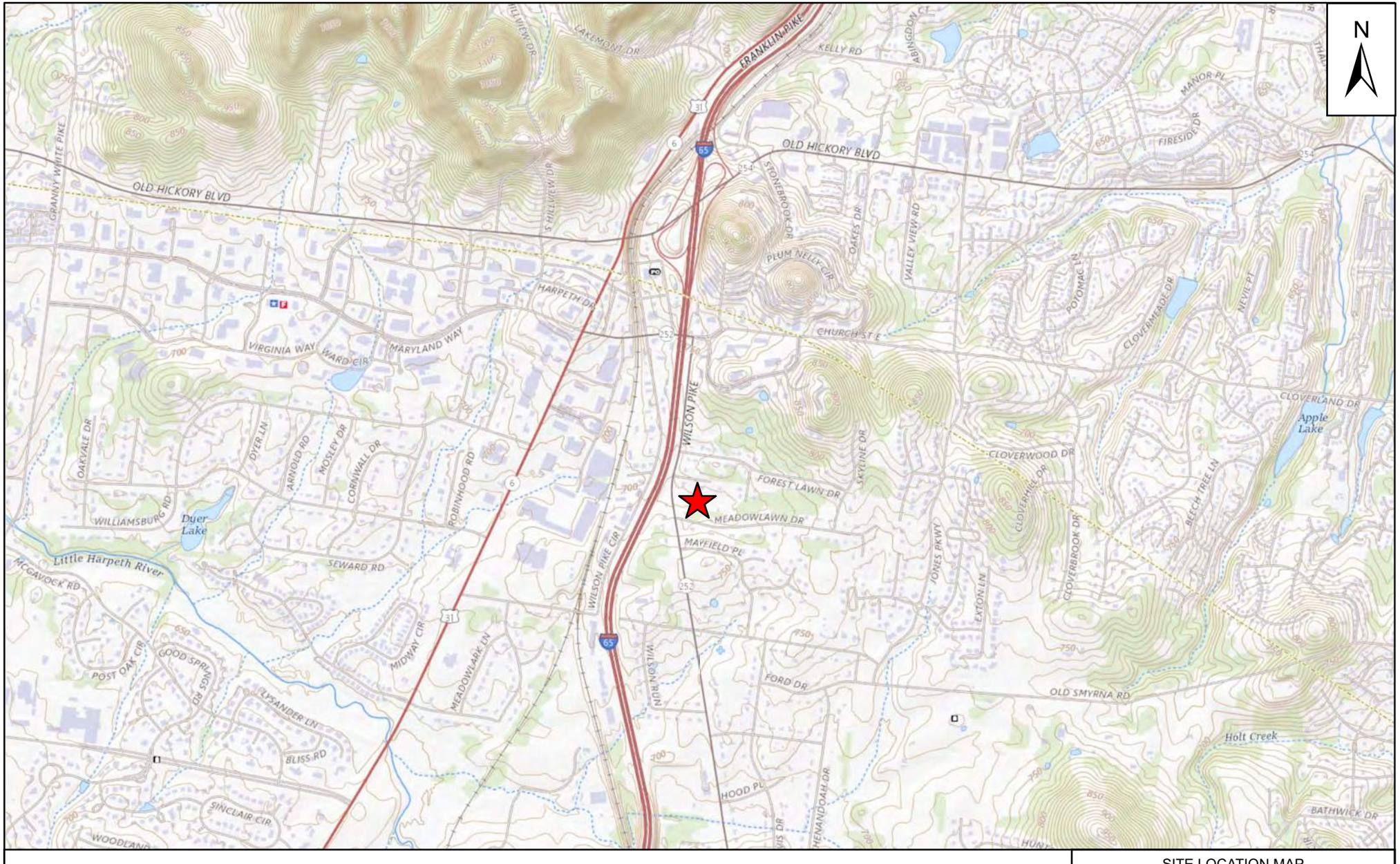
Dru Wilhite
Field Technician

May 19, 2022

Contents

Site Maps
Datasheets and Photos
Rain Data

Site Maps



LEGEND

SITE LOCATION

0 2,000 4,000

SCALE IN FEET

Coordinate System: NAD 1983
State Plane Tennessee Feet

SITE LOCATION MAP
310 WILSON PIKE
WILLIAMSON COUNTY, TENNESSEE
MAY 19, 2022

GROW ENVIRONMENTAL SOLUTIONS

Data Source: USGSTopo: USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National



LEGEND

PROJECT BOUNDARY

0 500 1,000

SCALE IN FEET

Coordinate System: NAD 1983
State Plane Tennessee Feet

VICINITY MAP
310 WILSON PIKE
WILLIAMSON COUNTY, TENNESSEE
MAY 19, 2022

GROW
ENVIRONMENTAL SOLUTIONS

Data Source: World Imagery (Clarity): Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the



LEGEND

- UPLAND POINT
- WWC / UPLAND DRAINAGE
- WWC / EPHEMERAL
- PROJECT BOUNDARY

0 100 200

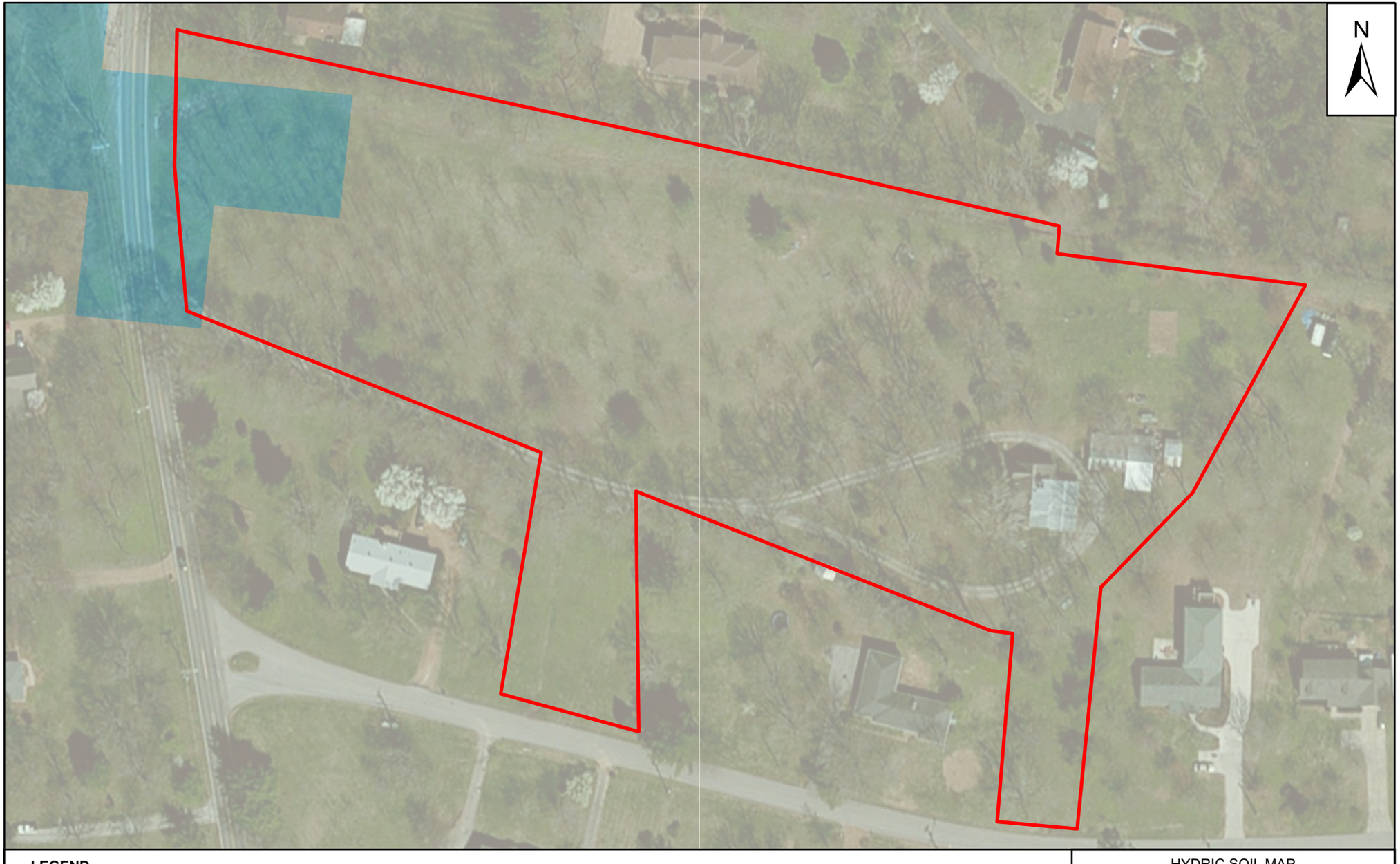
SCALE IN FEET

Coordinate System: NAD 1983
State Plane Tennessee Feet

HYDROLOGIC DETERMINATION MAP
310 WILSON PIKE
WILLIAMSON COUNTY, TENNESSEE
MAY 19, 2022

GROW ENVIRONMENTAL SOLUTIONS

Data Source: World Imagery (Clarity): Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the



LEGEND

PROJECT BOUNDARY

0 100 200

SCALE IN FEET

Coordinate System: NAD 1983
State Plane Tennessee Feet

HYDRIC SOIL MAP
310 WILSON PIKE
WILLIAMSON COUNTY, TENNESSEE
MAY 19, 2022

GROW
ENVIRONMENTAL SOLUTIONS

Data Source: USA SSURGO - Soil Hydric Class: Source: USDA NRCS, Esri



LEGEND

- PROJECT BOUNDARY
- FRESHWATER EMERGENT WETLAND
- FRESHWATER FORESTED/SHRUB WETLAND
- FRESHWATER POND
- LAKE
- RIVERINE

0 100 200

SCALE IN FEET

Coordinate System: NAD 1983
State Plane Tennessee Feet

NATIONAL WETLAND INVENTORY MAP
310 WILSON PIKE
WILLIAMSON COUNTY, TENNESSEE
MAY 19, 2022

GROW
ENVIRONMENTAL SOLUTIONS

Data Source: World Imagery (Clarity): Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the



LEGEND

PROJECT BOUNDARY

0 100 200

SCALE IN FEET

Coordinate System: NAD 1983
State Plane Tennessee Feet

FLOOD HAZARD MAP
310 WILSON PIKE
WILLIAMSON COUNTY, TENNESSEE
MAY 19, 2022

GROW
ENVIRONMENTAL SOLUTIONS

Data Source: National Flood Hazard Layer (NFHL) - FEMA:

Datasheets
and
Photos

Hydrologic Determination Field Data Sheet

Tennessee Division of Water Pollution Control, Version 1.5

Named Waterbody: Unnamed	Date/Time: 5/19/22
Assessors/Affiliation: C. Grow #1172-TN18	Project ID : WWC 1
Site Name/Description: 310 Wilson Pike	
Site Location: 310 Wilson Pike, Brentwood, TN	
HUC (12 digit): 051302040601 (Little Harpeth)	Lat/Long: Start: 36.025241, -86.782796
Previous Rainfall (7-days) : 5/12/22 - 5/19/22 = 0.00"	End: 36.025645, -86.782751
Precipitation this Season vs. Normal : abnormally wet elevated **[average]** low abnormally dry unknown Source of recent & seasonal precip data : CoCoRahs Station #TN-WL-38; NOAA	
Watershed Size :	County: Williamson
Soil Type(s) / Geology : Huntington silt loam, phosphatic	Source: USDA/NRCS
Surrounding Land Use : Residential	
Degree of historical alteration to natural channel morphology & hydrology (circle one & describe fully in Notes) : Severe **[Moderate]** Slight Absent	

Primary Field Indicators Observed

Primary Indicators	NO	YES
1. Hydrologic feature exists solely due to a process discharge	X	WWC
2. Defined bed and bank absent, vegetation composed of upland and FACU species		**[WWC]**
3. Watercourse dry anytime during February through April 15th, under normal precipitation / groundwater conditions		WWC
4. Daily flow and precipitation records showing feature only flows in direct response to rainfall		WWC
5. Presence of multiple populations of obligate lotic organisms with ≥ 2 month aquatic phase		Stream
6. Presence of fish (except *Gambusia*)		Stream
7. Presence of naturally occurring ground water table connection		Stream
8. Flowing water in channel and 7 days since last precip >0.1" in local watershed		Stream
9. Evidence watercourse has been used as a supply of drinking water		Stream

NOTE: If any Primary Indicators 1-9 = "Yes", then no further investigation is necessary. However, assessors may choose to score secondary indicators as supporting evidence.

In the absence of a primary indicator, or other definitive evidence, complete the secondary indicator table on page 2 of this sheet, and provide score below.

Guidance for the interpretation and scoring of both the primary & secondary indicators is provided in *TDEC-WPC Guidance For Making Hydrologic Determinations, Version 1.5*

Overall Hydrologic Determination = WWC

Secondary Indicator Score (if applicable) =

Justification / Notes : Defined bed and bank absent. Channel dominated by grass and clover.

PHOTOS
310 Wilson Pike
Williamson County, Tennessee
May 19, 2022



Photo 1: Wet weather conveyance 1, looking upstream.
Coordinates: 36.025516, -86.782764



Photo 2: Wet weather conveyance 1, looking downstream.
Coordinates: 36.025516, -86.782764

Hydrologic Determination Field Data Sheet

Tennessee Division of Water Pollution Control, Version 1.5

Named Waterbody: Unnamed	Date/Time: 5/19/22
Assessors/Affiliation: C. Grow #1172-TN18	Project ID : WWC 2
Site Name/Description: 310 Wilson Pike	
Site Location: 310 Wilson Pike, Brentwood, TN	
HUC (12 digit): 051302040601 (Little Harpeth)	Lat/Long: Start: 36.025411, -86.781443
Previous Rainfall (7-days) : 5/12/22 - 5/19/22 = 0.00"	End: 36.025684, -86.782814
Precipitation this Season vs. Normal : abnormally wet elevated **[average]** low abnormally dry unknown Source of recent & seasonal precip data : CoCoRahs Station #TN-WL-38; NOAA	
Watershed Size :	County: Williamson
Soil Type(s) / Geology : Huntington silt loam, phosphatic	Source: USDA/NRCS
Surrounding Land Use : Residential	
Degree of historical alteration to natural channel morphology & hydrology (circle one & describe fully in Notes) : Severe **[Moderate]** Slight Absent	

Primary Field Indicators Observed

Primary Indicators	NO	YES
1. Hydrologic feature exists solely due to a process discharge	X	WWC
2. Defined bed and bank absent, vegetation composed of upland and FACU species		**[WWC]**
3. Watercourse dry anytime during February through April 15th, under normal precipitation / groundwater conditions		WWC
4. Daily flow and precipitation records showing feature only flows in direct response to rainfall		WWC
5. Presence of multiple populations of obligate lotic organisms with ≥ 2 month aquatic phase		Stream
6. Presence of fish (except *Gambusia*)		Stream
7. Presence of naturally occurring ground water table connection		Stream
8. Flowing water in channel and 7 days since last precip >0.1" in local watershed		Stream
9. Evidence watercourse has been used as a supply of drinking water		Stream

NOTE: If any Primary Indicators 1-9 = "Yes", then no further investigation is necessary. However, assessors may choose to score secondary indicators as supporting evidence.

In the absence of a primary indicator, or other definitive evidence, complete the secondary indicator table on page 2 of this sheet, and provide score below.

Guidance for the interpretation and scoring of both the primary & secondary indicators is provided in *TDEC-WPC Guidance For Making Hydrologic Determinations, Version 1.5*

Overall Hydrologic Determination = WWC

Secondary Indicator Score (if applicable) =

Justification / Notes : Defined bed and bank absent. Channel dominated by grass, clover, privet, and hackberry.

PHOTOS
310 Wilson Pike
Williamson County, Tennessee
May 19, 2022



Photo 3: Wet weather conveyance 2, looking upstream.
Coordinates: 36.025665, -86.782647



Photo 4: Wet weather conveyance 2, looking downstream.
Coordinates: 36.025665, -86.782647

Hydrologic Determination Field Data Sheet

Tennessee Division of Water Pollution Control, Version 1.5

Named Waterbody: Unnamed	Date/Time: 5/19/22
Assessors/Affiliation: C. Grow #1172-TN18	Project ID : WWC 3
Site Name/Description: 310 Wilson Pike	
Site Location: 310 Wilson Pike, Brentwood, TN	
HUC (12 digit): 051302040601 (Little Harpeth)	Lat/Long: Start: 36.026287, -86.781467
Previous Rainfall (7-days) : 5/12/22 - 5/19/22 = 0.00"	End: 36.026521, -86.783775
Precipitation this Season vs. Normal : abnormally wet elevated **[average]** low abnormally dry unknown Source of recent & seasonal precip data : CoCoRahs Station #TN-WL-38; NOAA	
Watershed Size :	County: Williamson
Soil Type(s) / Geology : Huntington silt loam, phosphatic	Source: USDA/NRCS
Surrounding Land Use : Residential	
Degree of historical alteration to natural channel morphology & hydrology (circle one & describe fully in Notes) : Severe **[Moderate]** Slight Absent	

Primary Field Indicators Observed

Primary Indicators	NO	YES
1. Hydrologic feature exists solely due to a process discharge	X	WWC
2. Defined bed and bank absent, vegetation composed of upland and FACU species	X	WWC
3. Watercourse dry anytime during February through April 15th, under normal precipitation / groundwater conditions	X	WWC
4. Daily flow and precipitation records showing feature only flows in direct response to rainfall	X	WWC
5. Presence of multiple populations of obligate lotic organisms with ≥ 2 month aquatic phase	X	Stream
6. Presence of fish (except *Gambusia*)	X	Stream
7. Presence of naturally occurring ground water table connection	X	Stream
8. Flowing water in channel and 7 days since last precip >0.1" in local watershed	X	Stream
9. Evidence watercourse has been used as a supply of drinking water	X	Stream

NOTE: If any Primary Indicators 1-9 = "Yes", then no further investigation is necessary. However, assessors may choose to score secondary indicators as supporting evidence.

In the absence of a primary indicator, or other definitive evidence, complete the secondary indicator table on page 2 of this sheet, and provide score below.

Guidance for the interpretation and scoring of both the primary & secondary indicators is provided in *TDEC-WPC Guidance For Making Hydrologic Determinations, Version 1.5*

Overall Hydrologic Determination = WWC (EPH)

Secondary Indicator Score (if applicable) = 10.75

Justification / Notes : Bed and bank present throughout. Some wetland plants in channel. Soils not hydric at 10YR 5/4 with 10YR 5/8. Some very small drift piles present. Sorting primarily of sediment. No water present. See secondary indicators.

Secondary Field Indicator Evaluation

WWC 3

A. Geomorphology (Subtotal = 5)	**Absent**	**Weak**	**Moderate**	**Strong**
1. Continuous bed and bank	0	1	[2]	3
2. Sinuous channel	[0]	1	2	3
3. In-channel structure: riffle-pool sequences	[0]	1	2	3
4. Sorting of soil textures or other substrate	0	[1]	2	3
5. Active/relic floodplain	[0]	0.5	1	1.5
6. Depositional bars or benches	[0]	1	2	3
7. Braided channel	[0]	1	2	3
8. Recent alluvial deposits	0	[0.5]	1	1.5
9. Natural levees	[0]	1	2	3
10. Headcuts	0	[1]	2	3
11. Grade controls	[0]	0.5	1	1.5
12. Natural valley or drainageway	0	[0.5]	1	1.5
13. At least second order channel on existing USGS or NRCS map	[No = 0]		Yes = 3	

B. Hydrology (Subtotal = 2)	**Absent**	**Weak**	**Moderate**	**Strong**
14. Subsurface flow/discharge into channel	[0]	1	2	3
15. Water in channel and >48 hours since sig. rain	[0]	1	2	3
16. Leaf litter in channel (January – September)	1.5	[1]	0.5	0
17. Sediment on plants or on debris	0	[0.5]	1	1.5
18. Organic debris lines or piles (wrack lines)	0	[0.5]	1	1.5
19. Hydric soils in channel bed or sides of channel	[No = 0]		Yes = 1.5	

C. Biology (Subtotal = 3.75)	**Absent**	**Weak**	**Moderate**	**Strong**
20. Fibrous roots in channel bed [1]	3	2 [ ]	1	0
21. Rooted plants in the thalweg [1]	3	2 [ ]	1	0
22. Crayfish in stream (exclude in floodplain)	[0]	1	2	3
23. Bivalves/mussels	[0]	1	2	3
24. Amphibians	[0]	0.5	1	1.5
25. Macrobenthos (record type & abundance)	[0]	1	2	3
26. Filamentous algae; periphyton	[0]	1	2	3
27. Iron oxidizing bacteria/fungus	[0]	0.5	1	1.5
28.Wetland plants in channel bed [2]	0	0.5 [ ]	1	1.5

[1] Focus is on the presence of terrestrial plants.

[2] Focus is on the presence of aquatic or wetland plants.

Total Points = 10.75

Under Normal Conditions, Watercourse is a Wet Weather Conveyance if Secondary Indicator Score < 19 points

Notes : 1) Bed and bank present throughout most of channel

4) Sorting of primarily of sediment

8) Some recent alluvial deposits observed within channel

10) A few small headcuts present

12) Channel has been heavily modified

16) Little leaf litter scattered along reach

17) Sediment on leaves and debris piles within channel

18) A few small debris piles observed within channel

20) Fibrous roots scattered along reach

21) Fescue and Johnsongrass present within channel

28) Some viola, nutsedge, and polygonum present within channel

PHOTOS
310 Wilson Pike
Williamson County, Tennessee
May 19, 2022



Photo 5: Wet weather conveyance 3 (Ephemeral), looking upstream.
Coordinates: 36.026424, -86.782622



Photo 6: Wet weather conveyance 3 (Ephemeral), looking downstream.
Coordinates: 36.026424, -86.782622

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: 310 Wilson Pike City/County: Brentwood / Williamson Sampling Date: 5/19/22

Applicant/Owner: State: TN Sampling Point: NW_1

Investigator(s): C. Grow Section, Township, Range:

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%):

Subregion (LRR or MLRA): LRR Lat: 36.0262510 Long: -86.7830356 Datum:

Soil Map Unit Name: Huntington silt loam, phosphatic phase NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	No X	**Is the Sampled Area within a Wetland?** Yes No X
Hydric Soil Present?	Yes	No X	
Wetland Hydrology Present?	Yes	No X	

Remarks:

Photos 7 & 8

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	No X	Depth (inches):
Water Table Present?	Yes	No X	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes	No X	Depth (inches):

Wetland Hydrology Present? Yes No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: NW_1

Tree Stratum (Plot size: r = 15')	Absolute % Cover	Dominant Species?	Indicator Status
1. Fraxinus americana	30	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	30 = Total Cover		
50% of total cover: 15	20% of total cover: 6		

Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
	= Total Cover		
50% of total cover:	20% of total cover:		

Herb Stratum (Plot size: r = 15')			
1. Dactylis glomerata	35	Y	FACU
2. Schedonorus arundinaceus	25	Y	FACU
3. Ruellia humilis	15	Y	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	75 = Total Cover		
50% of total cover: 37.5	20% of total cover: 15		

Woody Vine Stratum (Plot size: r = 15')			
1. Toxicodendron radicans	15	Y	FAC
2. Parthenocissus quinquefolia	15	Y	FACU
3.			
4.			
5.			
	30 = Total Cover		
50% of total cover: 15	20% of total cover: 6		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 17 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ___ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: NW_1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6"	10YR 3/4	100					SiL	Dry

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbric Surface (F13) **(MLRA 136, 122)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** X

Remarks:

PHOTOS
310 Wilson Pike
Williamson County, Tennessee
May 19, 2022



Photo 7: Soil at NW_1.
Coordinates: 36.026249, -86.783035



Photo 8: Overview of NW_1.
Coordinates: 36.026249, -86.783035

Rain Data

Normal Weather Conditions Calculations Table

310 Wilson Pike
Station #TN-WL-38

	Month	Standard Deviation	Long-term rainfall records: Minus One Std. Dev. (DRY)	Normal (Mean inches)	Plus One Std. Dev. (WET)	Actual Rainfall	Condition (elevated, low, average)	Condition value	Month weight value	Product of previous two columns
1st prior month*	April 2022	2.04	2.30	4.34	6.38	6.32	Average	2	3	6
2nd prior month*	March 2022	2.68	2.73	5.41	6.38	4.97	Average	2	2	4
3rd prior month*	Feb. 2022	2.10	2.28	4.38	6.48	10.30	Elevated	3	1	3
									Sum =	13

Note: The period has been normal.

If sum is:	
6-9	then prior period has been abnormally dry
10-14	then prior period has been normal (average)
15-18	Then prior period has been abnormally wet

Condition value:	
Low =	1
Average =	2
Elevated =	3

View Data : Station Report Summary US Units

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- Daily Comments Reports
- Significant Weather Reports
- Multiple Day Reports
- Condition Monitoring Reports
- Condition Monitoring Charts
- Soil Moisture
- ET Reports

- Days with Hail
- Search Hail Reports
- Station Hail Reports
- Station Precip Summary

- Water Year Summary
- Station Precip Summary
- Station Snow Summary
- Rainy Days Report
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- Message of the Day
- Publications
- CoCoRaHS Blog
- Web Groups
- State Newsletters
- Master Gardener Guide
- State Climate Series
- March Madness

Station Report Summary

Station 1 : TN-WL-38 Example: CO-LR-273

Station 2 :

Station 3 :

Start Date: 5/12/2022 **End Date:** 5/19/2022

Get Summary

Stations:

TN-WL-38
Brentwood 2.7 SSE
Lat: 35.9591
Lon: -86.7729

* indicates Multi-Day Accumulation Report

Station **TN-WL-38**

Date	Precip in.
05/12/2022	0.00
05/13/2022	0.00
05/14/2022	0.00
05/15/2022	0.00
05/16/2022	T
05/17/2022	0.00
05/18/2022	0.00
05/19/2022	0.00
Totals :	0.00 in.

View Data : Station Report Summary US Units

View Data

- Daily Precip Reports
- Daily Comments Reports
- Significant Weather Reports
- Multiple Day Reports
- Condition Monitoring Reports
- Condition Monitoring Charts
- Soil Moisture
- ET Reports

- Days with Hail
- Search Hail Reports
- Station Hail Reports
- Station Precip Summary

- Water Year Summary
- Station Precip Summary
- Station Snow Summary
- Rainy Days Report
- Total Precip Summary

- Station Water Balance
- Water Balance Summary
- Water Balance Charts

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- State Climate Series
- March Madness

Station Report Summary

Station 1 : TN-WL-38 Example: CO-LR-273
Station 2 :
Station 3 :
Start Date: 4/1/2022 **End Date:** 4/30/2022
Get Summary

Stations:

TN-WL-38
Brentwood 2.7 SSE
Lat: 35.9591
Lon: -86.7729

* indicates Multi-Day Accumulation Report

Station **TN-WL-38**

Date	Precip in.
04/01/2022	0.02
04/02/2022	0.00
04/03/2022	0.00
04/04/2022	0.00
04/05/2022	0.00
04/06/2022	0.46
04/07/2022	0.24
04/08/2022	T
04/09/2022	0.05
04/10/2022	0.00
04/11/2022	0.00
04/12/2022	0.31
04/13/2022	1.71
04/14/2022	1.02
04/15/2022	0.00
04/16/2022	0.76
04/17/2022	0.00
04/18/2022	1.06
04/19/2022	0.00
04/20/2022	0.00
04/21/2022	0.12
04/22/2022	0.01
04/23/2022	0.00
04/24/2022	0.00
04/25/2022	0.00
04/26/2022	0.56
04/27/2022	0.00
04/28/2022	0.00
04/29/2022	0.00
04/30/2022	0.00
Totals :	6.32 in.

View Data : Station Report Summary US Units

View Data

- Daily Precip Reports
- Daily Comments Reports
- Significant Weather Reports
- Multiple Day Reports
- Condition Monitoring Reports
- Condition Monitoring Charts
- Soil Moisture
- ET Reports

- Days with Hail
- Search Hail Reports
- Station Hail Reports
- Station Precip Summary

- Water Year Summary
- Station Precip Summary
- Station Snow Summary
- Rainy Days Report
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- State Climate Series
- March Madness

Station Report Summary

Station 1 : TN-WL-38 Example: CO-LR-273
Station 2 :
Station 3 :
Start Date: 3/1/2022 **End Date:** 3/31/2022

Get Summary

Stations:

TN-WL-38
Brentwood 2.7 SSE
Lat: 35.9591
Lon: -86.7729

* indicates Multi-Day Accumulation Report

Station **TN-WL-38**

Date	Precip in.
03/01/2022	0.00
03/02/2022	0.00
03/03/2022	0.00
03/04/2022	0.00
03/05/2022	0.00
03/06/2022	0.00
03/07/2022	0.00
03/08/2022	0.78
03/09/2022	0.42
03/10/2022	0.00
03/11/2022	0.00
03/12/2022	0.27
03/13/2022	0.00
03/14/2022	0.00
03/15/2022	T
03/16/2022	0.33
03/17/2022	0.05
03/18/2022	0.00
03/19/2022	0.48
03/20/2022	0.00
03/21/2022	0.00
03/22/2022	0.00
03/23/2022	1.63
03/24/2022	0.00
03/25/2022	0.05
03/26/2022	0.00
03/27/2022	0.00
03/28/2022	0.00
03/29/2022	0.00
03/30/2022	0.00
03/31/2022	0.96
Totals :	4.97 in.

View Data : Station Report Summary US Units

View Data

- Daily Precip Reports
- Daily Comments Reports
- Significant Weather Reports
- Multiple Day Reports
- Condition Monitoring Reports
- Condition Monitoring Charts
- Soil Moisture
- ET Reports

- Days with Hail
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- Station Precip Summary

- Water Year Summary
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- State Climate Series
- March Madness

Station Report Summary

Station 1 : TN-WL-38 Example: CO-LR-273
Station 2 :
Station 3 :
Start Date: 2/1/2022 **End Date:** 2/28/2022

Get Summary

Stations:

TN-WL-38
Brentwood 2.7 SSE
Lat: 35.9591
Lon: -86.7729

* indicates Multi-Day Accumulation Report

Station **TN-WL-38**

Date	Precip in.
02/01/2022	0.00
02/02/2022	0.25
02/03/2022	1.15
02/04/2022	0.98
02/05/2022	T
02/06/2022	0.00
02/07/2022	0.00
02/08/2022	0.00
02/09/2022	0.00
02/10/2022	0.00
02/11/2022	0.00
02/12/2022	0.00
02/13/2022	0.00
02/14/2022	0.00
02/15/2022	0.00
02/16/2022	0.00
02/17/2022	0.07
02/18/2022	1.78
02/19/2022	0.00
02/20/2022	0.00
02/21/2022	0.00
02/22/2022	0.35
02/23/2022	2.92
02/24/2022	2.03
02/25/2022	0.68
02/26/2022	0.02
02/27/2022	0.07
02/28/2022	0.00
Totals :	10.30 in.

Attachment 2

Property Access Permission Letter

310 Wilson Pike

Date: June 21, 2022

Division of Water Resources
Tennessee Department of Environment and Conservation (TDEC)
711 R.S. Gass Boulevard
Nashville, TN 37216

U.S. Army Corps of Engineers – Nashville District
Regulatory Division
3701 Bell Road
Nashville, TN, 37214

RE: Permission to Access Property for Hydrologic Determination and Jurisdictional Determination of 310 Wilson Pike, Brentwood (Williamson County)

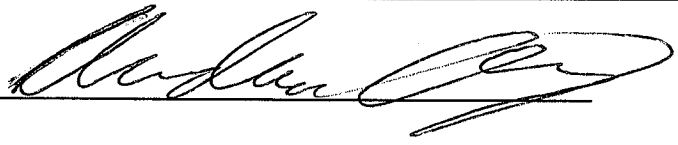
TDEC and USACE have my permission to access the property located at 310 Wilson Pike (Parcel # 011K A 02200 00015011J) as referenced in the Hydrologic Determination Report and Jurisdictional Determination Request conducted by Mr. Christopher Grow.

Please contact me via my cell phone or email if you have any questions.

Sincerely,

Company Name (if applicable): 310 Wilson Pike, LLC.

Name: Andrew Day

Signature: 

Address: 4467 S. Carothers Road Franklin, TN 37064

Phone: (615) 306-6939

Email: aday@daysconstruct.com

Cc: Christopher Grow, TNQHP

DEPARTMENT OF THE ARMY
NASHVILLE DISTRICT, CORPS OF ENGINEERS
REGULATORY DIVISION
3701 BELL ROAD
NASHVILLE, TENNESSEE 37214

September 8, 2022

SUBJECT: File No. LRN-2022-00650, Wilson Pike Site, Brentwood, Williamson County, Tennessee

310 Wilson Pike LLC
C/O Andrew Day
4467 S. Carothers Road
Franklin, TN 37061

Dear Mr. Day:

This letter is in regard to your report entitled "Jurisdictional Determination Request – 310 Wilson Pike, June 21, 2022", which documented potential waters of the United States on a review area of approximately 6 acres. The JD Report, associated with the Wilson Pike site in Brentwood, Williamson County, Tennessee, indicated your preference for potential waters of the U.S. in different area of the review area to be reviewed as either a preliminary jurisdictional determination (PJD) or an Approved Jurisdictional Determination (AJD). This project has been assigned File No. LRN-2022-00650, please refer to this number in any future correspondence.

The U.S. Army Corps of Engineers (USACE) has regulatory responsibilities pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344) and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403). Under Section 10, the USACE regulates any work in, or affecting, navigable waters of the U.S. It appears the review area does not include navigable waters of the U.S. and would not be subject to the provisions of Section 10. Under Section 404, the USACE regulates the discharge of dredged and/or fill material into waters of the U.S., including wetlands.

a. Preliminary Jurisdictional Determination: Based on a review of the JD Report, 1 reach of ephemeral stream totaling 711 linear feet was documented within the review area. This office has determined these features **may** be jurisdictional waters of the U.S. in accordance with 33 C.F.R. 331.2 and a PJD has been prepared. The PJD is non-binding, cannot be appealed and only provides a written indication that waters of the U.S, including wetlands, may be present on-site. For purposes of computation of impacts, compensatory mitigation requirements and other resource protection measures, a permit decision made on the basis of a PJD will treat all waters that would

be affected in any way by the permitted activity on the site as if they are jurisdictional waters of the U.S. This determination is only valid for the review area shown on the attached map entitled “LRN-2022-00650 Figure 1 Enclosure 4”, attached to this letter.

Enclosed with this letter is a copy of the PJD. If you agree with the findings of this PJD and understand your options regarding the same, please sign and date the form and return it to this office within 30 days of receipt of this letter. You should submit the signed copy to the following address:

U.S. Army Corps of Engineers
Nashville District
3701 Bell Rd.
Nashville, TN 37214
Attn: Sammy Iskrzycki

b. Approved Jurisdictional Determination: Also enclosed is an approved jurisdictional determination for aquatic resources identified as “WWC-1” and “WWC-2”. These features were determined to be non-jurisdictional. The rationale for this determination is provided in the attached Approved Jurisdictional Determination form. The approved jurisdictional determination expires five years from the date of this letter, unless new information warrants revision of the determination before the expiration date, or the District Engineer identifies specific geographic areas with rapidly changing environmental conditions that merit re-verification on a more frequent basis. This approved jurisdictional determination is only valid for the review area as shown on the map labeled “LRN-2022-00650 Figure 1 Enclosure 3”.

If you object to this decision, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeals Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal this decision you must submit a completed RFA form to the Great Lakes and Ohio River Division, Division Office at the following address:

Regulatory Appeal Review Officer
ATTN: Ms. Katie McCafferty
Army Engineer Division
550 Main Street, Room 10-780
Cincinnati, OH 45202-3222
TEL (513) 684-2699

In order for an RFA to be accepted by the USACE, the USACE must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division Office within 60 days of the date listed on the RFA

form. **It is not necessary to submit an RFA form to the Division Office if you do not object to the decision in this letter**.

The delineation included herein has been conducted to identify the location and extent of the aquatic resource boundaries and/or the jurisdictional status of aquatic resources for purposes of the Clean Water Act for the particular site identified in this request. This delineation and/or jurisdictional determination may not be valid for the Wetland Conservation Provisions of the Food Security Act of 1985, as amended. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should discuss the applicability of a certified wetland determination with the local USDA service center, prior to starting work.

We appreciate your awareness of the USACE regulatory program. If you have any questions, you may contact me or Sammy Iskrzycki at (615) 829-3086 or by e-mail at Samantha.N.Iskrzycki@usace.army.mil.

Sincerely,

Timothy C. Wilder
Chief, West Branch
Regulatory Division

Enclosures:

Enclosure 1 – PJD Form
Enclosure 2 – AJD Form
Enclosure 3 – Appeal Form
Enclosure 4 – LRN-2022-00650 Figures

Electronic Copies Furnished:

Chris Grow, Grow Environmental Solutions, LLC

ATTACHMENT

PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR (PJD): 09/07/2022

B. NAME AND ADDRESS OF PERSON REQUESTING PRELIMINARY JD:

310 Wilson Pike, LLC
C/O Andrew Day
4467 S. Carothers Road
Franklin, TN 37061

C. DISTRICT OFFICE, FILE NAME, AND NUMBER:

Nashville District
Wilson Pike Site
LRN-2022-00650

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:
(USE THE ATTACHED TABLE TO DOCUMENT MULTIPLE AQUATIC RESOURCES AND/OR AQUATIC RESOURCES AT DIFFERENT SITES)

State: TN County/parish/borough: Williamson City: Brentwood
Center coordinates of site (lat/long in degree decimal format):
Lat. 36.025241° **N**, Long. -86.782796° **W**.

Universal Transverse Mercator: 16

Name of nearest waterbody: Little Harpeth River

Identify (estimate) amount of waters in the review area:

Non-wetland waters:

711 linear feet of Ephemeral Stream

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☒ Office (Desk) Determination. Date: 07/09/2022
☐ Field Determination. Date(s):

TABLE OF AQUATIC RESOURCES IN REVIEW AREA WHICH "MAY BE" SUBJECT TO REGULATORY JURISDICTION.

Site numbe r	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in	Type of aquatic resource (i.e., wetland vs.	Geographic authority to which the aquatic

			review area (acreage and linear feet, if applicable)	non-wetland waters)	resource "may be" subject (i.e., Section 404 or Section 10/404)
WWC-3	N 36.026287°	W -86.781467°	711 linear ft.	Riverine, (Ephemeral)	Section 404

1. The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.

2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an AJD for the activity, the permit applicant is hereby made aware that: (1) the permit applicant has elected to seek a permit authorization based on a PJD, which does not make an official determination of jurisdictional aquatic resources; (2) the applicant has the option to request an AJD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an AJD could possibly result in less compensatory mitigation being required or different special conditions; (3) the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) undertaking any activity in reliance upon the subject permit authorization without requesting an AJD constitutes the applicant's acceptance of the use of the PJD; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a PJD constitutes agreement that all aquatic resources in the review area affected in any way by that activity will be treated as jurisdictional, and waives any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7)whether the applicant elects to use either an AJD or a PJD, the JD will be processed as soon as practicable. Further, an AJD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331. If, during an administrative appeal, it becomes appropriate to make an official determination whether geographic jurisdiction exists over aquatic resources in the review area, or to provide an official delineation of jurisdictional aquatic resources in the review area, the Corps will provide an AJD to accomplish that result, as soon as is practicable. This PJD finds that there *"may be"* waters of the U.S. and/or that there *"may be"* navigable waters of the U.S. on the subject review area, and identifies all aquatic features in the review area that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA. Data reviewed for preliminary JD (check all that apply - checked items should be included in case file and, where checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Map: LRN-2022-00650_20220719_AJD PJD-RQST.

☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
- ☒ Office concurs with data sheets/delineation report.
- ☐ Office does not concur with data sheets/delineation report. Rationale: .

☐ Data sheets prepared by the Corps: .

☐ Corps navigable waters' study: .

☐ U.S. Geological Survey Hydrologic Atlas: .
- ☒ USGS NHD data.
- ☐ USGS 8 and 12 digit HUC maps.

☒ U.S. Geological Survey map(s).

☒ Natural Resources Conservation Service Soil Survey. Citation: LRN-2022-00650_20220719_AJD PJD-RQST

☒ National wetlands inventory map(s). Cite name: LRN-2022-00650_20220719_AJD PJD-RQST.

☐ State/Local wetland inventory map(s): .

☐ FEMA/FIRM maps: .

☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): Google Earth accessed 09/07/2022. or ☒ Other (Name & Date): LRN-2022-00650_20220719_AJD PJD-RQST.

☐ Previous determination(s). File no. and date of response letter: .

☒ Other information (please specify): See offsite analysis in file LRN-2022-00650_20220907_MFR.

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

09/07/2022

Signature and date of Project Manager (REQUIRED)

Signature and date of person requesting preliminary JD (REQUIRED, unless obtaining the signature is impracticable)[1]

[1] Districts may establish timeframes for requestor to return signed PJD forms. If the requestor does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action. For the Nashville District, concurrence is presumed after 30 days.

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 09/08/2022

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Nashville District, Wilson Pike Site, LRN-2022-00650

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: TN County/parish/borough: Williamson City: Brentwood
Center coordinates of site (lat/long in degree decimal format): Lat. 36.025241° **N**, Long. -86.782796° **W**.
Universal Transverse Mercator: 16
Name of nearest waterbody: Little Harpeth River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: N/A
Name of watershed or Hydrologic Unit Code (HUC): 051302040601
☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):
☒ Office (Desk) Determination. Date: 09/07/2022
☐ Field Determination. Date(s):

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "*navigable waters of the U.S.*" within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [*Required*]
☐ Waters subject to the ebb and flow of the tide.
☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are no** "*waters of the U.S.*" within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [*Required*]

1. **Waters of the U.S.**
   a. **Indicate presence of waters of U.S. in review area (check all that apply):** [1]
      ☐ TNWs, including territorial seas
      ☐ Wetlands adjacent to TNWs
      ☐ Relatively permanent waters[2] (RPWs) that flow directly or indirectly into TNWs
      ☐ Non-RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
      ☐ Impoundments of jurisdictional waters
      ☐ Isolated (interstate or intrastate) waters, including isolated wetlands

   b. **Identify (estimate) size of waters of the U.S. in the review area:**
      Non-wetland waters: linear feet: width (ft) and/or acres.
      Wetlands: acres.

   c. **Limits (boundaries) of jurisdiction** based on: **Pick List**
      Elevation of established OHWM (if known): .

2. **Non-regulated waters/wetlands (check if applicable):**[3]
   ☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
   Explain:

WWC-1 and WWC-2 are stormwater ditches with ephemeral flow that are not relocated tributaries or excavated in tributaries. The USACE considers WWC-1 and WWC-2 as non-tributaries and not jurisdictional under Section 404 of the Clean Water Act as defined by 33 CFR Part 328.3.

[1] Boxes checked below shall be supported by completing the appropriate sections in Section III below.
[2] For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).
[3] Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW
Identify TNW: .

Summarize rationale supporting determination: .

2. Wetland adjacent to TNW
Summarize rationale supporting conclusion that wetland is "adjacent": .

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:
Watershed size: **Pick List**
Drainage area: **Pick List**
Average annual rainfall: inches
Average annual snowfall: inches

(ii) Physical Characteristics:
(a) Relationship with TNW:
☐ Tributary flows directly into TNW.
☐ Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **Pick List** river miles from TNW.
Project waters are **Pick List** river miles from RPW.
Project waters are **Pick List** aerial (straight) miles from TNW.
Project waters are **Pick List** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: .

Identify flow route to TNW[5]: .

[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
[5] Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

Tributary stream order, if known: .

(b) General Tributary Characteristics (check all that apply):

Tributary is: ☐ Natural
☐ Artificial (man-made). Explain: .
☐ Manipulated (man-altered). Explain: .

Tributary properties with respect to top of bank (estimate):
Average width: feet
Average depth: feet
Average side slopes: **Pick List.**

Primary tributary substrate composition (check all that apply):

☐ Silts	☐ Sands	☐ Concrete
☐ Cobbles	☐ Gravel	☐ Muck
☐ Bedrock	☐ Vegetation. Type/% cover:	
☐ Other. Explain: .		

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: .
Presence of run/riffle/pool complexes. Explain: .
Tributary geometry: **Pick List**
Tributary gradient (approximate average slope): %

(c) Flow:
Tributary provides for: **Pick List**
Estimate average number of flow events in review area/year: **Pick List**
Describe flow regime: .
Other information on duration and volume: .

Surface flow is: **Pick List.** Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .
☐ Dye (or other) test performed: .

Tributary has (check all that apply):
☐ Bed and banks
☐ OHWM[6] (check all indicators that apply):

☐ clear, natural line impressed on the bank	☐ the presence of litter and debris
☐ changes in the character of soil	☐ destruction of terrestrial vegetation
☐ shelving	☐ the presence of wrack line
☐ vegetation matted down, bent, or absent	☐ sediment sorting
☐ leaf litter disturbed or washed away	☐ scour
☐ sediment deposition	☐ multiple observed or predicted flow events
☐ water staining	☐ abrupt change in plant community
☐ other (list):	

☐ Discontinuous OHWM.[7] Explain: .

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

☐ High Tide Line indicated by:	☐ Mean High Water Mark indicated by:
☐ oil or scum line along shore objects	☐ survey to available datum;
☐ fine shell or debris deposits (foreshore)	☐ physical markings;
☐ physical markings/characteristics	☐ vegetation lines/changes in vegetation types.
☐ tidal gauges	
☐ other (list):	

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain: .
Identify specific pollutants, if known: .

[6]A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.
[7]Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width): .
- ☐ Wetland fringe. Characteristics: .
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☐ Aquatic/wildlife diversity. Explain findings: .

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland size: acres

Wetland type. Explain: .

Wetland quality. Explain: .

Project wetlands cross or serve as state boundaries. Explain: .

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain: .

Surface flow is**: Pick List**

Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .

- ☐ Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

- ☐ Directly abutting
- ☐ Not directly abutting
  - ☐ Discrete wetland hydrologic connection. Explain: .
  - ☐ Ecological connection. Explain: .
  - ☐ Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.

Project waters are **Pick List** aerial (straight) miles from TNW.

Flow is from: **Pick List.**

Estimate approximate location of wetland as within the **Pick List** floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: .

Identify specific pollutants, if known: .

(iii) Biological Characteristics. Wetland supports (check all that apply):

- ☐ Riparian buffer. Characteristics (type, average width): .
- ☐ Vegetation type/percent cover. Explain: .
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☐ Aquatic/wildlife diversity. Explain findings: .

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: **Pick List**

Approximately ( ) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)

Summarize overall biological, chemical and physical functions being performed: .

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
   - ☐ TNWs: linear feet width (ft), Or, acres.
   - ☐ Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**
   - ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
   - ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

Provide estimates for jurisdictional waters in the review area (check all that apply):
- ☐ Tributary waters: linear feet width (ft).

☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

3. **Non-RPWs[8] that flow directly or indirectly into TNWs.**
☐ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**
☐ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
☐ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**
☐ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**
☐ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. **Impoundments of jurisdictional waters.[9]**
As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
☐ Demonstrate that impoundment was created from "waters of the U.S.," or
☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[10]
☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
☐ which are or could be used for industrial purposes by industries in interstate commerce.
☐ Interstate isolated waters. Explain: .
☐ Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

---

[8]See Footnote # 3.
[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
[10] Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.*

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .
☐ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):
☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
☐ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
☒ Other: (explain, if not covered above): **WWC-1 and WWC-2 are considered upland drainage features that were dug in uplands, transporting stormwater associated with the adjacent residential development.**

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):
☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: LRN-2022-00650_20220719_AJD PJD-RQST.
☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
☒ Office concurs with data sheets/delineation report.
☐ Office does not concur with data sheets/delineation report.
☐ Data sheets prepared by the Corps: .
☐ Corps navigable waters' study: .
☐ U.S. Geological Survey Hydrologic Atlas: .
☒ USGS NHD data.
☐ USGS 8 and 12 digit HUC maps.
☒ U.S. Geological Survey map(s).
☒ USDA Natural Resources Conservation Service Soil Survey. Citation: LRN-2022-00650_20220719_AJD PJD-RQST.
☒ National wetlands inventory map(s). Cite name: LRN-2022-00650_20220719_AJD PJD-RQST.
☐ State/Local wetland inventory map(s): .
☐ FEMA/FIRM maps: .
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): Google Earth accessed 09/07/2022.
or ☒ Other (Name & Date): LRN-2022-00650_20220719_AJD PJD-RQST.
☐ Previous determination(s). File no. and date of response letter: .
☐ Applicable/supporting case law: .
☐ Applicable/supporting scientific literature: .
☒ Other information (please specify): See LRN-2022-00650_20220907_MFR for offsite analysis.

B. ADDITIONAL COMMENTS TO SUPPORT JD: Additional features are found on a PJD within the project area.

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Andrew Day	File Number: LRN-2022-00650	Date: 09/08/2022

Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL	C
X	APPROVED JURISDICTIONAL DETERMINATION	D
X	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/CECW/Pages/reg_materials.aspx or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

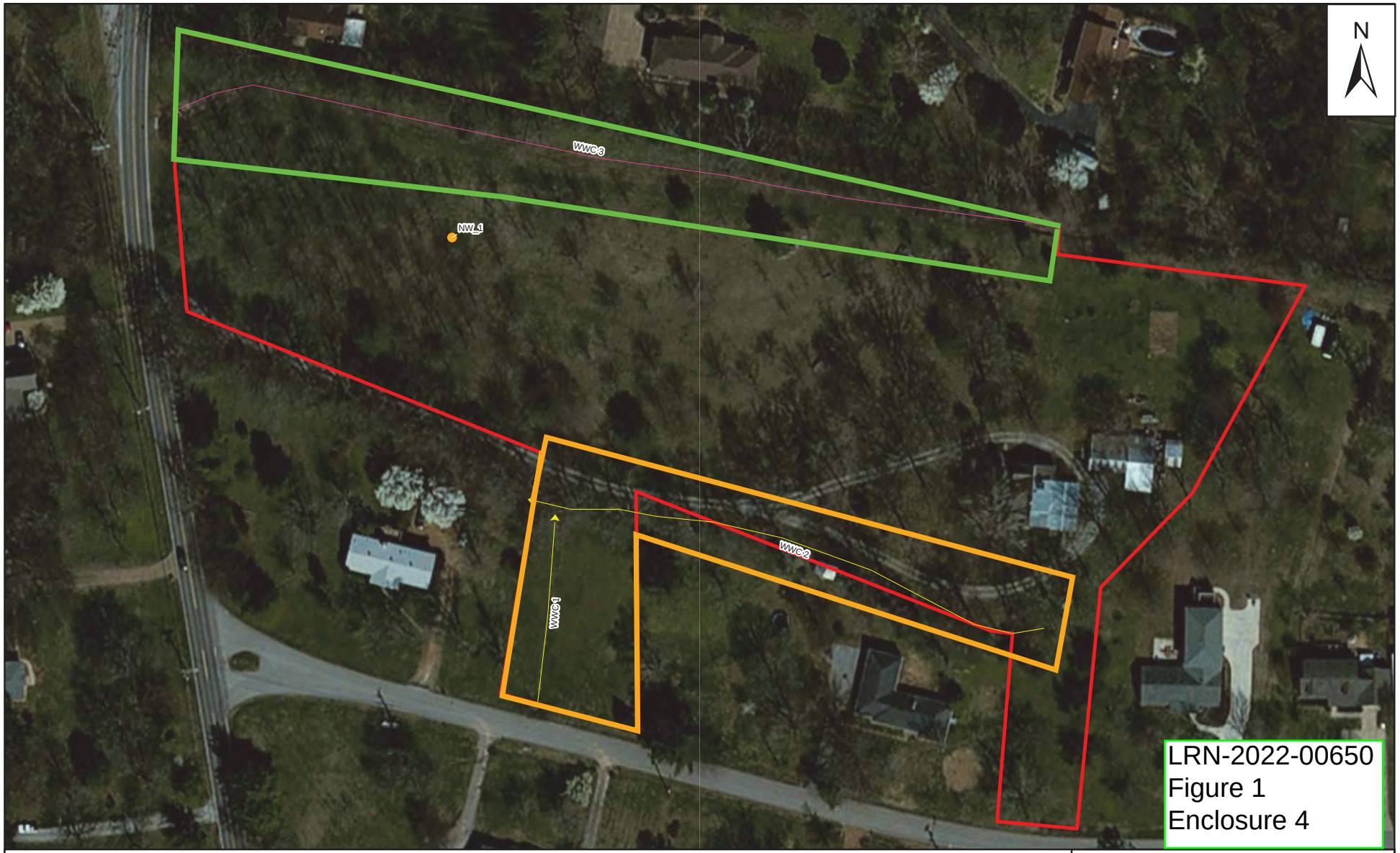
ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:	If you only have questions regarding the appeal process you may also contact:
Samantha Iskrzycki Nashville District, U.S. Army Corps of Engineers Regulatory Branch 3701 Bell Road Nashville, Tennessee 37214 (615) 369-7514; Samantha.N.Iskrzycki@usace.army.mil	Regulatory Appeals Review Officer ATTN: Katherine McCafferty Army Engineer Division 550 Main Street, Room 10-780 Cincinnati, Ohio 45202-3222 Phone: (513) 684-2699 Katherine.A.McCafferty2@usace.army.mil

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

	Date:	Telephone number:
_____ Signature of appellant or agent.		



LEGEND

- UPLAND POINT
- WWC / UPLAND DRAINAGE
- WWC / EPHEMERAL
- PROJECT BOUNDARY
- PJD
- AJD

0 100 200

SCALE IN FEET

Coordinate System: NAD 1983
State Plane Tennessee Feet

HYDROLOGIC DETERMINATION MAP
310 WILSON PIKE
WILLIAMSON COUNTY, TENNESSEE
MAY 19, 2022

GROW ENVIRONMENTAL SOLUTIONS

Data Source: World Imagery (Clarity): Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the



LEGEND

PROJECT BOUNDARY

0 500 1,000

SCALE IN FEET

Coordinate System: NAD 1983
State Plane Tennessee Feet

VICINITY MAP
310 WILSON PIKE
WILLIAMSON COUNTY, TENNESSEE
MAY 19, 2022

GROW
ENVIRONMENTAL SOLUTIONS

Data Source: World Imagery (Clarity): Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the

USDA Web Soil Survey Report



Map Scale: 1:1,570 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 20 40 80 120

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Williamson County, Tennessee
Survey Area Data: Version 16, Sep 10, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 31, 2019—Nov 2, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Eg	Egam silt loam, phosphatic	C	0.5	8.0%
HbC2	Hampshire silt loam, 5 to 12 percent slopes, eroded	C	0.7	12.0%
Hu	Huntington silt loam, phosphatic	B	3.8	66.1%
MbC2	Maury silt loam, 5 to 12 percent slopes, eroded	A	0.8	13.9%
Totals for Area of Interest			**5.7**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

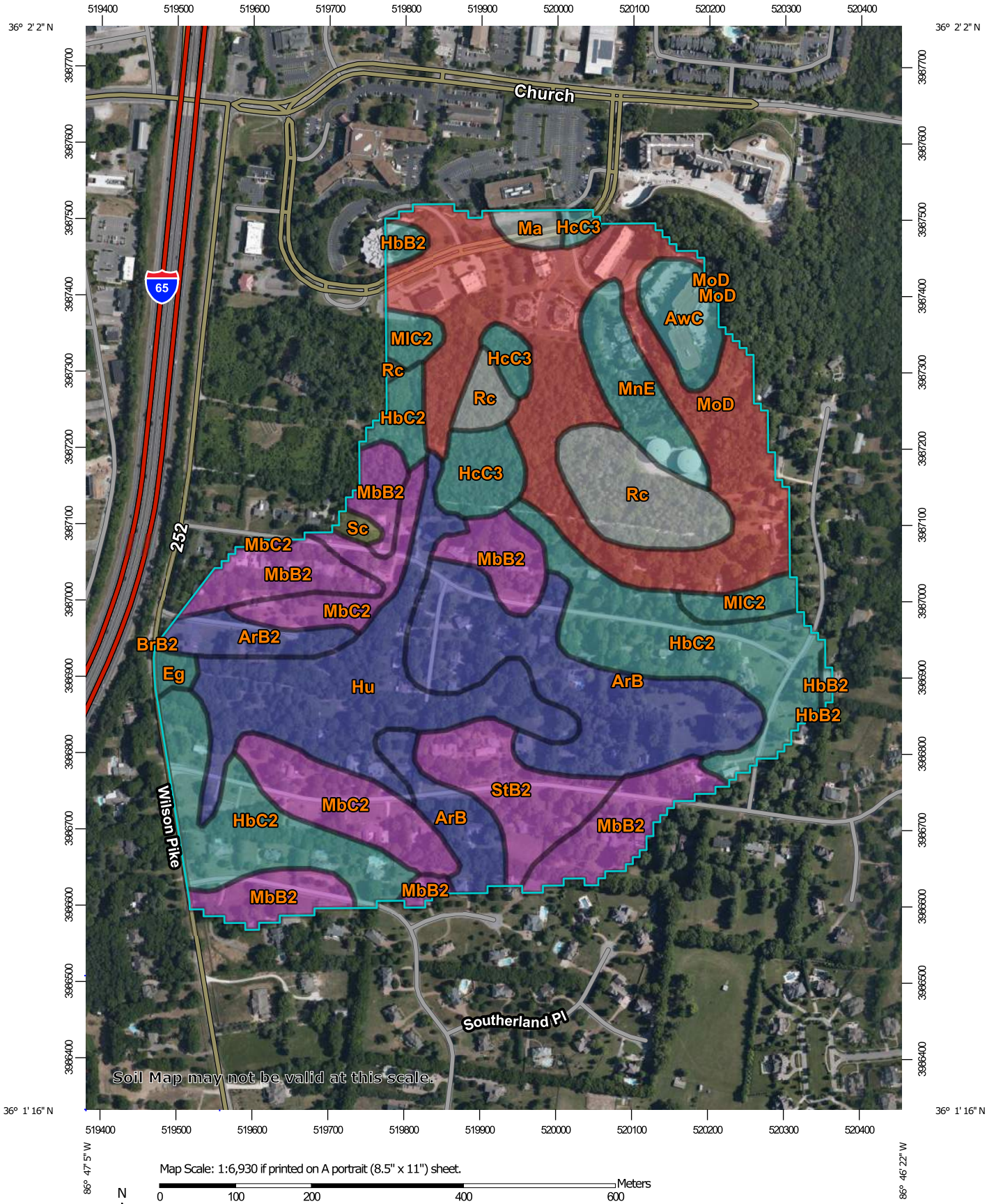
If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher



Map Scale: 1:6,930 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 100 200 400 600

Feet: 0 300 600 1200 1800

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

A
A/D
B
B/D
C
C/D
D
Not rated or not available

Soil Rating Lines

A
A/D
B
B/D
C
C/D
D
Not rated or not available

Soil Rating Points

A
A/D
B
B/D
C
C/D
D
Not rated or not available

Water Features

Streams and Canals

Transportation

Rails
Interstate Highways
US Routes
Major Roads
Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Williamson County, Tennessee
Survey Area Data: Version 16, Sep 10, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 31, 2019—Nov 2, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
ArB	Armour silt loam, 2 to 5 percent slopes	B	18.0	12.8%
ArB2	Armour silt loam, 2 to 5 percent slopes, eroded	B	2.7	1.9%
AwC	Ashwood silty clay loam, 5 to 12 percent slopes	C	3.2	2.3%
BrB2	Braxton cherty silt loam, 2 to 5 percent slopes, eroded	C	0.0	0.0%
Eg	Egam silt loam, phosphatic	C	0.7	0.5%
HbB2	Hampshire silt loam, 2 to 5 percent slopes, eroded	C	0.8	0.6%
HbC2	Hampshire silt loam, 5 to 12 percent slopes, eroded	C	21.5	15.3%
HcC3	Hampshire silty clay loam, 5 to 12 percent slopes, severely eroded	C	4.4	3.1%
Hu	Huntington silt loam, phosphatic	B	15.1	10.7%
Ma	Made land		1.0	0.7%
MbB2	Maury silt loam, 2 to 5 percent slopes, eroded	A	15.7	11.2%
MbC2	Maury silt loam, 5 to 12 percent slopes, eroded	A	9.3	6.6%
MlC2	Mimosa silt loam, 5 to 12 percent slopes, eroded	C	2.7	1.9%
MnE	Mimosa-Rock outcrop complex, 20 to 40 percent slopes	C	4.4	3.1%
MoD	Ashwood-Mimosa-Rock outcrop complex, 5 to 15 percent slopes	D	27.1	19.3%
Rc	Rockland		7.4	5.3%
Sc	Sees silty clay loam	C/D	0.4	0.3%
StB2	Stiversville silt loam, 2 to 5 percent slopes	A	6.0	4.3%
Totals for Area of Interest			**140.5**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Regular Agenda 2.

BRENTWOOD PLANNING COMMISSION

Meeting Date: 01/03/2023

Current Zoning: R-2 - SUBURBAN RESIDENTIAL

Information

Subject

BPC2209-009 Preliminary Plan - Aix Retreat Subdivision, 9919 Maupin Road, Zoning R-2 - *Applicant: Mr. Jason Brouillette, S&ME, Inc., 658 Grassmere Park, Suite 100, Nashville, TN 37211*

General Information

S&ME, Inc. requests approval of a preliminary plan showing 10 lots on approximately 13.2 acres. The plan proposes a public roadway with a cul-de-sac. The road is not proposed to be gated. The property is zoned R-2 and the proposal includes lot that are one-acre in size. The plan also includes four open space areas totaling 1.79 acres that are primarily used for stormwater detention.

A 30-foot wide landscape buffer is proposed along the frontage of Maupin Road, as well as a 5-foot wide right-of-way dedication.

All lots are identified as transitional lots. A mail kiosk is proposed at the midpoint of the cul-de-sac to allow for accessibility to the kiosk. The property is served by the Nolensville College Grove Water District and Metro Sewer. Due to the size of the development, a Traffic Impact Study was not required.

Conditions of Approval

Staff recommends that the following **3** conditions be attached to the approval of the request

1. Any offsite water and sewer easement shall be obtained prior to issuance of grading permit.

2. The proposed street serving the new subdivision will be a public street. Remove all references to "private street" from the plans.

3. Revise the plans to show grading for a future 5-foot sidewalk along the frontage of Maupin Road.

Standard Requirements

Staff recommends that the following **19** conditions be attached to the approval of the request.

1. Hydrologic calcs will be required meeting Brentwood's LID and detention reduction requirements. In addition to this there must be no increase of runoff at any of the site's out falls pre to post.

2. All retaining walls over 4ft tall will require design by a TN listened engineer.

3. Add armament to base of slope, or to 5' from property line, at detention outlet pipe discharge. Verify velocity of outlet is less than 6 fps. Add concrete level spreader at 10' min from property line if more than 6 fps.

4. A preliminary site plan shall be vested for a period of three years from the date of the original approval.

5. Add the following note to the preliminary plan:

   This site plan is subject to a three-year vesting period, during which the development standards in effect on the date of approval will remain the standards applicable to this plan. If construction is not completed during the first three years, the original site plan is considered a preliminary site plan and the applicant must obtain approval of a final site plan. Development of the property shown on this plan may be subject to standards other than those that were applicable during the vesting period. The Initial vesting period for this plan expires on **January 3, 2026**, unless extended by the City of Brentwood. Persons relying on this plan after said date should contact the City of Brentwood to determine if development may continue as depicted on the plan.

6. When the construction authorized pursuant to a site plan is not completed within three years from the date of initial approval, but the applicant desires to complete the project proposed for the site, the plan as initially approved for the project or as amended shall be considered a preliminary site plan. If the applicant secures all necessary permits, commences site preparation and obtains approval of a final site plan within the three-year vesting period following approval of the preliminary site plan, then the vesting period shall be extended an additional two years beyond the expiration of the initial three-year vesting period. During the two-year extension, the applicant must commence construction and maintain any necessary permits to remain vested.

7. If necessary, permits are maintained and construction, as defined by Section 78-43, has commenced by the end of the two-year extension, then the vesting period shall remain in effect until the Planning and Codes Department has certified final completion of the project, provided the total vesting period shall not exceed ten years from the date of approval of the preliminary site plan.

8. If the construction authorized pursuant to a site plan is completed within three years from the date of approval, the site plan shall then be considered the final site plan for the project.

9. A Stormwater System Long Term Operation and Maintenance Plan for all storm water structures and facilities is required by the time of a final plat and will need to be sealed by a licensed Tennessee Professional Engineer.

10. It is the policy of the U. S. Postal Service that mail delivery to all new and extended developments use centralized delivery, via cluster box units (CBU). It is the responsibility of the customer (developers and builders) to provide the necessary mail receptacle equipment. Show/label an area on the plan to accommodate the cluster box units. Developers must receive approval from the USPS before mail service can begin.

11. The homes in the subdivision shall use U.S. Postal Service approved Cluster Box Units for Mail Delivery. Each home builder shall install permanent address posts, in lieu of mailboxes at the end of each driveway to facilitate emergency response. The address posts must be installed before a certificate of occupancy will be issue for the home.

12. Approval of the site plan does not constitute approval of the signage plan. All signs must comply with the Brentwood Sign Ordinance. A comprehensive sign package including all signs (temporary or permanent, wall or ground) shall be submitted to the Planning Department for a compliance review. Please submit a comprehensive sign package to Allison Roberts at allison.roberts@brentwoodtn.gov.

13. On all sheets of the plan show the location of existing and platted property lines, existing streets, buildings, watercourses, railroads, cemeteries, sewer lines, bridges, culverts, drain pipes, water mains, fire hydrants, street lights, tree masses, public utility easements.

14. Show the location of any sinkholes on the subject property as identified by a qualified geo-technical Engineer shall be located and appropriately labeled on the preliminary plan. The plan shall be configured to locate all sinkholes in permanent open space only and not within any buildable lots. Sinkholes in the permanent open space shall be protected from natural and/or man-made debris.

15. The property owner is responsible for all development fees including water and sewer service and tap fees, building permit fees and Public Works Project Fees. The required fees shall be used for future infrastructure related improvements required by the proposed development.

16. Applicable security for all required roadway, drainage, utilities, water, sewer, landscaping and amenity improvements in accordance with the requirements of Article Eight of the Brentwood Subdivision Regulations shall be provided before the final plat may be recorded.

17. Development of this project shall comply with all applicable codes and ordinances of the City of Brentwood.

18. Deviations from the approved plan in the development of a project or the failure to satisfy any standard requirements or special conditions of approval imposed by the planning commission will be considered a violation of the provisions of the Zoning Ordinance, which shall be subject to punishment as provided in Section 1-9 of the Brentwood Municipal Code. The City may also require the applicant to appear before the Planning Commission to address any deficiencies or unapproved modifications. The project may also be subject to delays in issuance of permits, certificates of occupancy, recordation of plats or other project approvals.

19. Approval of the proposed plan shall be limited to the illustrations and plans presented to the Planning Commission for review and approval on **January 3, 2023**. Any changes to Planning Commission approved plans and specifications will require staff review and re-approval by the Planning Commission.

Staff Recommendation

Staff requests that the Planning Commission vote to approve the proposed preliminary plan subject to the requirements of the staff report.

Attachments

Vicinity Map

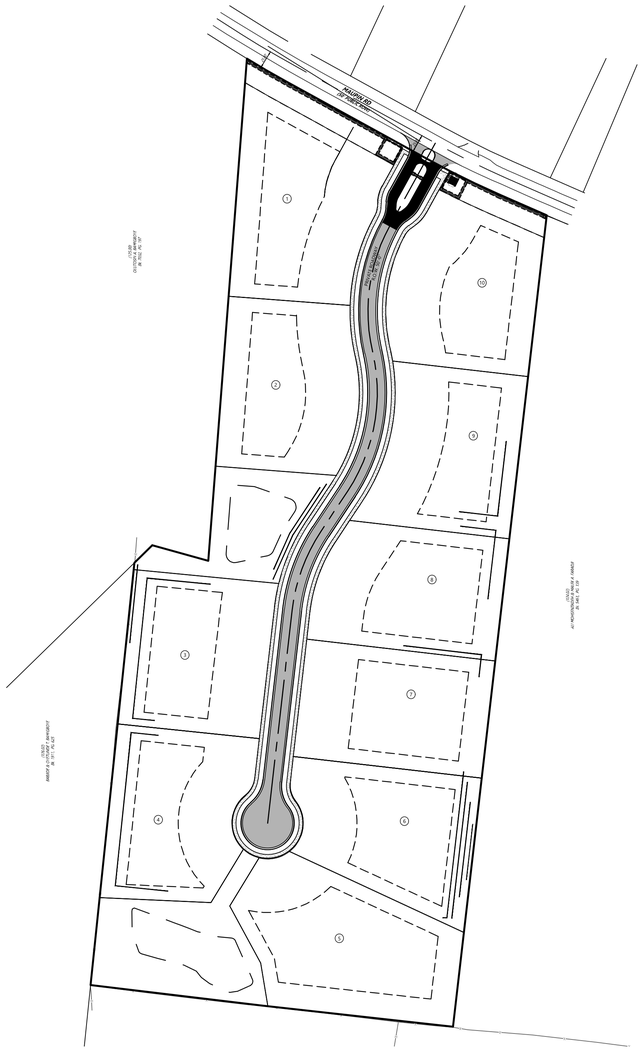
Proposed Preliminary Plan

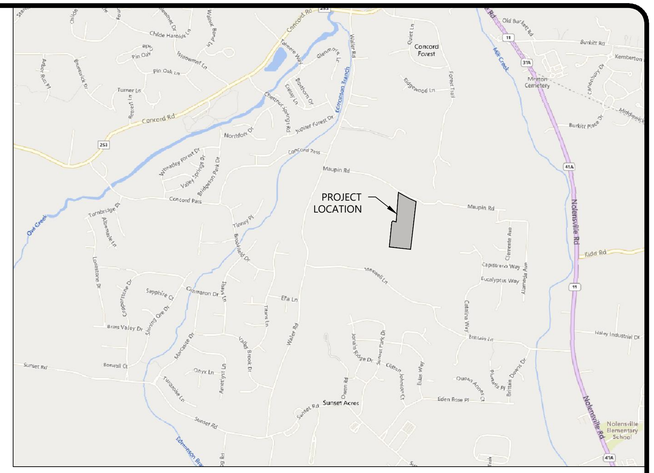
SITE CONSTRUCTION PLANS

MAUPIN ROAD

BRENTWOOD, TN

SEPTEMBER 6, 2022





VICINITY MAP
NOT TO SCALE

N

SITE DATA

PARCEL ID.:	WILLIAMSON COUNTY TAX MAP 33 PARCEL # 124.03
SITE ADDRESS:	9919 MAUPIN ROAD BRENTWOOD, TN 37027
SITE ACREAGE:	±13.64 AC.
EXISTING ZONING:	R-2
PROPOSED USE:	SINGLE FAMILY RESIDENTIAL
PROPOSED LOTS	10 SINGLE FAMILY LOTS
TOTAL UNITS:	10
PROPOSED MAX. BUILDING HEIGHT:	PER ZONING CODE/NO DEVIATIONS
PROJECT REPRESENTATIVE:	S&ME, INC.
ADDRESS:	658 GRASSMERE PARK SUITE 100 NASHVILLE, TN, 37211
PHONE NO.:	615-385-4144
CONTACT NAME:	JASON BROUILLETTE
CONTACT E-MAIL ADDRESS:	JBROUILLETTE@SMEINC.COM

RECORDED DOCUMENTS: DEED BOOK DEED BOOK # PAGE DEED PAGE #

FEMA PANEL:
THE SUBJECT PROPERTY DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD ZONE

Sheet List Table

Sheet Number	Sheet Title
C0.0	COVER
C1.0	EXISTING CONDITIONS
C1.1	OFF-SITE EXISTING CONDITIONS
C2.0	CIVIL NOTES
C3.0	INITIAL EROSION CONTROL PLAN
C3.1	INTERMEDIATE EROSION CONTROL PLAN
C3.2	FINAL EROSION CONTROL PLAN.
C3.3	SEDIMENT AND EROSION CONTROL DETAILS
C4.0	DEMOLITION PLAN
C5.-0	SITE LAYOUT PLAN
C5.1	DETAILED SITE LAYOUT PLAN
C6.0	GRADING & DRAINAGE PLAN
C6.1	DRAINAGE PLAN & PROFILE
C7.0	UTILITY PLAN
C7.1	UTILITY PLAN & PROFILE
C7.2	OFF-SITE SANITARY SEWER PLAN
C8.0	DETAILS
C8.1	DETAILS
C8.2	DETAILS
L1.1	HARDSCAPE PLAN
L1.2	HARDSCAPE DETAILS
L1.3	HARDSCAPE DETAILS
L2.1	DETAILED LANDSCAPE PLAN
L2.2	DETAILED LANDSCAPE PLAN
L2.3	DETAILED LANDSCAPE PLAN
L2.4	LANDSCAPE DETAILS

OWNER/DEVELOPER

FRANK STANTON DEVELOPERS, LLC
222 2ND AVE. SOUTH
SUITE 1700
NASHVILLE, TN 37201

CIVIL ENGINEER/LANDSCAPE ARCHITECT

658 GRASSMERE PARK DRIVE
SUITE 100
NASHVILLE, TN 37211
(615) 385-4144

PRELIMINARY

C:\Users\jkennedy\Documents\2022-08-30_Eric's stamp.jpg



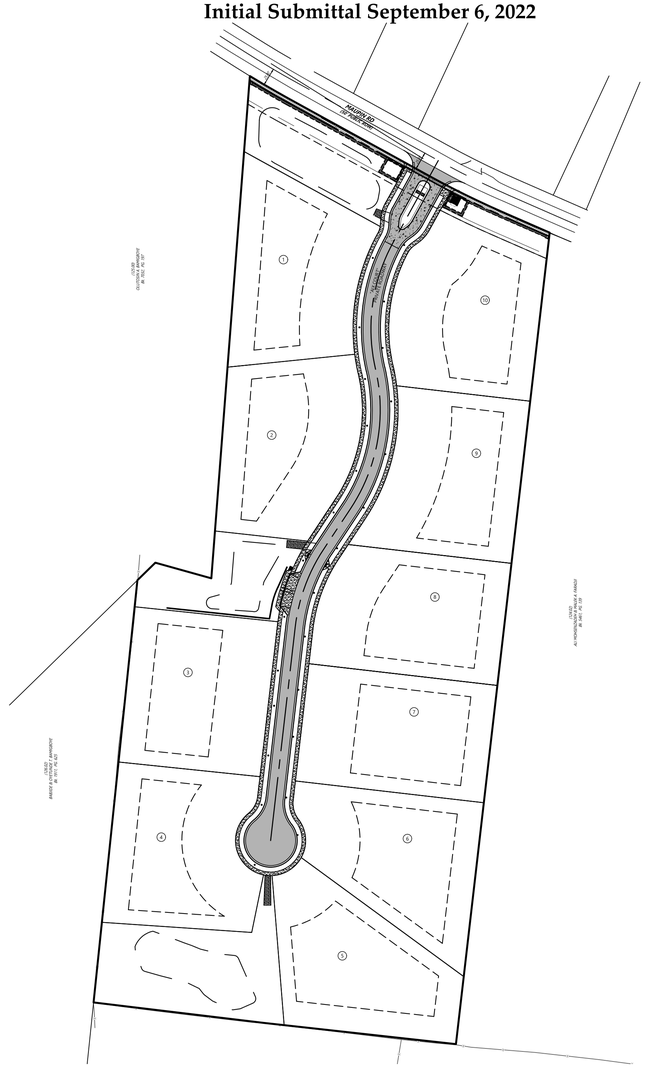
C0.0
COVER

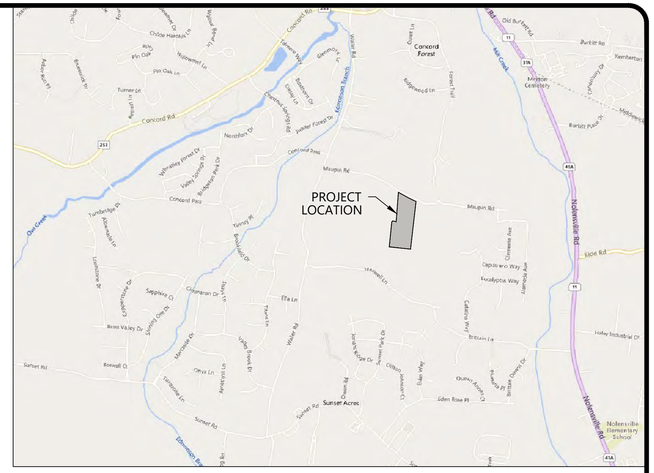
PRELIMINARY SITE PLANS

AIX RETREAT

BRENTWOOD, TN

Resubmittal December 19, 2022
Resubmittal December 5, 2022
Resubmittal November 22, 2022
Resubmittal October 18, 2022
Initial Submittal September 6, 2022





VICINITY MAP
NOT TO SCALE

N

SITE DATA

PARCEL ID.:	WILLIAMSON COUNTY TAX MAP 33 PARCEL # 124.03
SITE ADDRESS:	9919 MAUPIN ROAD BRENTWOOD, TN 37027
SITE ACREAGE:	±13.20 AC.
EXISTING ZONING:	R-2
PROPOSED USE:	SINGLE FAMILY RESIDENTIAL
PROPOSED LOTS	10 SINGLE FAMILY LOTS
TOTAL UNITS:	10
PROPOSED MAX. BUILDING HEIGHT:	PER ZONING CODE/NO DEVIATIONS
PROJECT REPRESENTATIVE:	S&ME, INC.
ADDRESS:	658 GRASSMERE PARK SUITE 100 NASHVILLE, TN, 37211
PHONE NO.:	615-385-4144
CONTACT NAME:	JASON BROUILLETTE
CONTACT E-MAIL ADDRESS:	JBROUILLETTE@SMEINC.COM

FEMA PANEL:
THE SUBJECT PROPERTY DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD ZONE

Sheet List Table

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C0.0	COVER
C1.0	EXISTING CONDITIONS
C1.1	OFF-SITE EXISTING CONDITIONS
C1.2	SLOPE ANAYSIS
C2.0	CIVIL NOTES
C3.0	INITIAL EROSION CONTROL PLAN
C3.1	INTERMEDIATE EROSION CONTROL PLAN
C3.2	FINAL EROSION CONTROL PLAN.
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NOTE:
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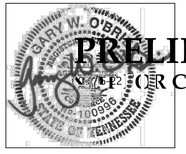
OWNER/DEVELOPER

FRANK STANTON DEVELOPERS, LLC
222 2ND AVE. SOUTH
SUITE 1700
NASHVILLE, TN 37201

CIVIL ENGINEER/LANDSCAPE ARCHITECT

658 GRASSMERE PARK DRIVE
SUITE 100
NASHVILLE, TN 37211
(615) 385-4144





PRELIMINARY
FOR CONSTRUCTION

C0.0
COVER

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658 GRASSMERE PARK DRIVE
SUITE 100
NASHVILLE, TN 37211
(615) 385-4144

NO.	DATE	DESCRIPTION	BY	CHK	APV

Know what's below.
Call before you dig.

N

0 60 120 180
GRAPHIC SCALE (IN FEET)

EXISITNG CONDITIONS

PRELIMINARY CONSTRUCTION PLANS
AIX RETREAT
9919 MAUPIN ROAD, BRENTWOOD, TN 37027

PROJECT NUMBER
211740

DRAWING NUMBER
C1.0

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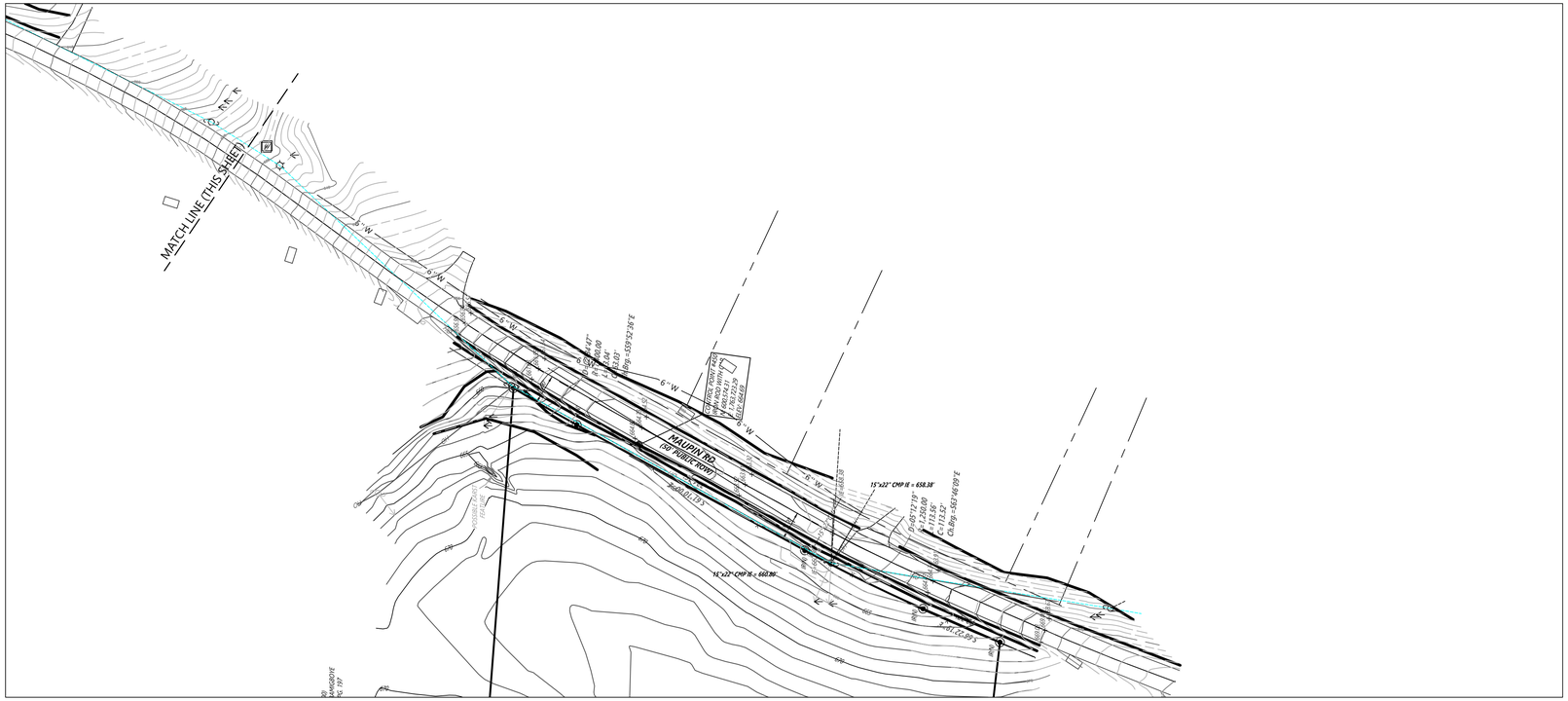

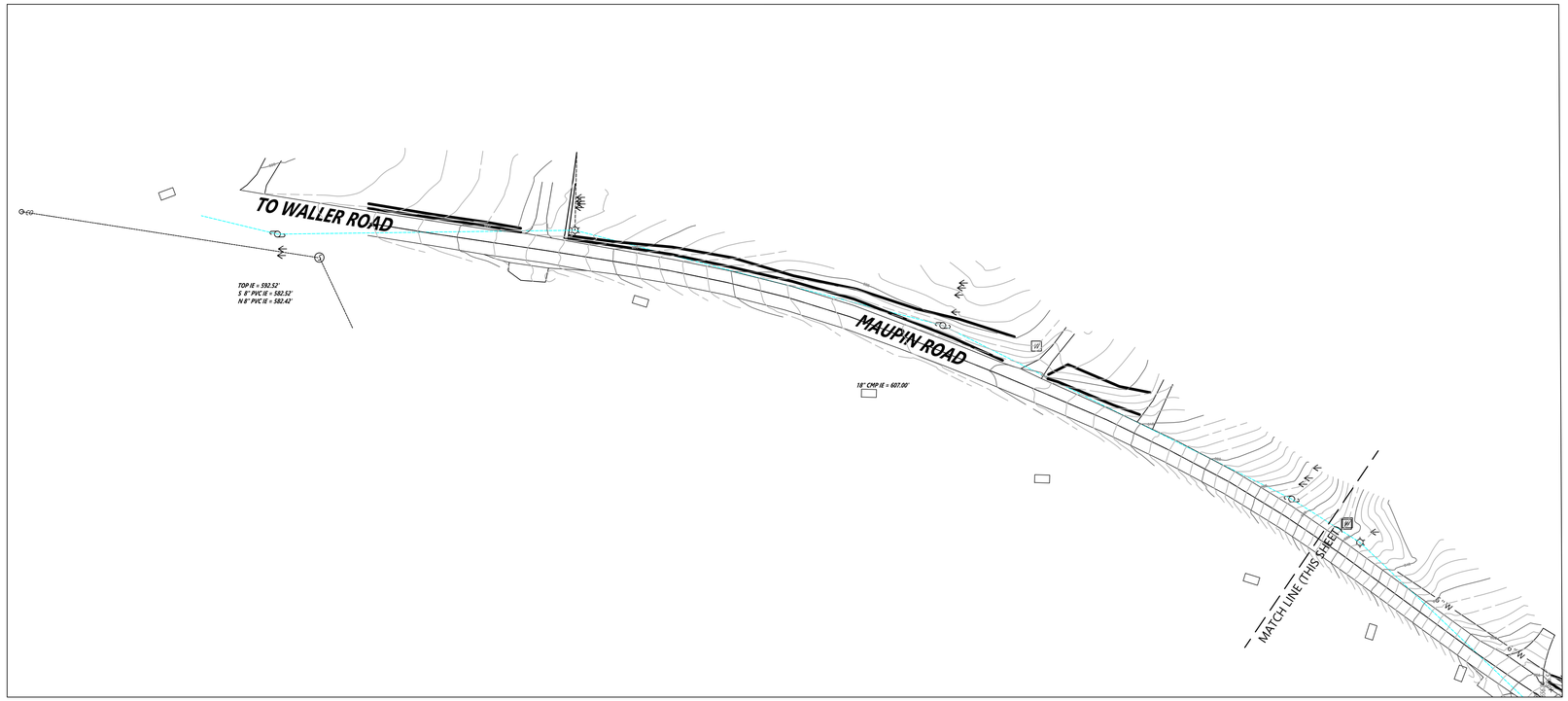

658 GRASSMERE PARK DRIVE
SUITE 100
NASHVILLE, TN 37211
(615) 385-4144

NO.	DATE	DESCRIPTION	BY	CHK	APV

OFF-SITE EXISITNG CONDITIONS

PRELIMINARY CONSTRUCTION PLANS
AIX RETREAT
9919 MAUPIN ROAD, BRENTWOOD, TN 37027

PROJECT NUMBER
211740

DRAWING NUMBER
C1.1

Know what's below.
Call before you dig.

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658 GRASSMERE PARK DRIVE
SUITE 100
NASHVILLE, TN 37211
(615) 385-4144

GARY W. O'BRIEN
REGISTERED ENGINEER
19-100936
STATE OF TENNESSEE
12-20-2022

NO.	DATE	DESCRIPTION	BY	CHK	APV

Know what's below.
Call before you dig.

N

0 60 120 180
GRAPHIC SCALE (IN FEET)

EXISITNG CONDITIONS

PRELIMINARY CONSTRUCTION PLANS
AIX RETREAT
9919 MAUPIN ROAD, BRENTWOOD, TN 37027

PROJECT NUMBER
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DRAWING NUMBER
C1.0

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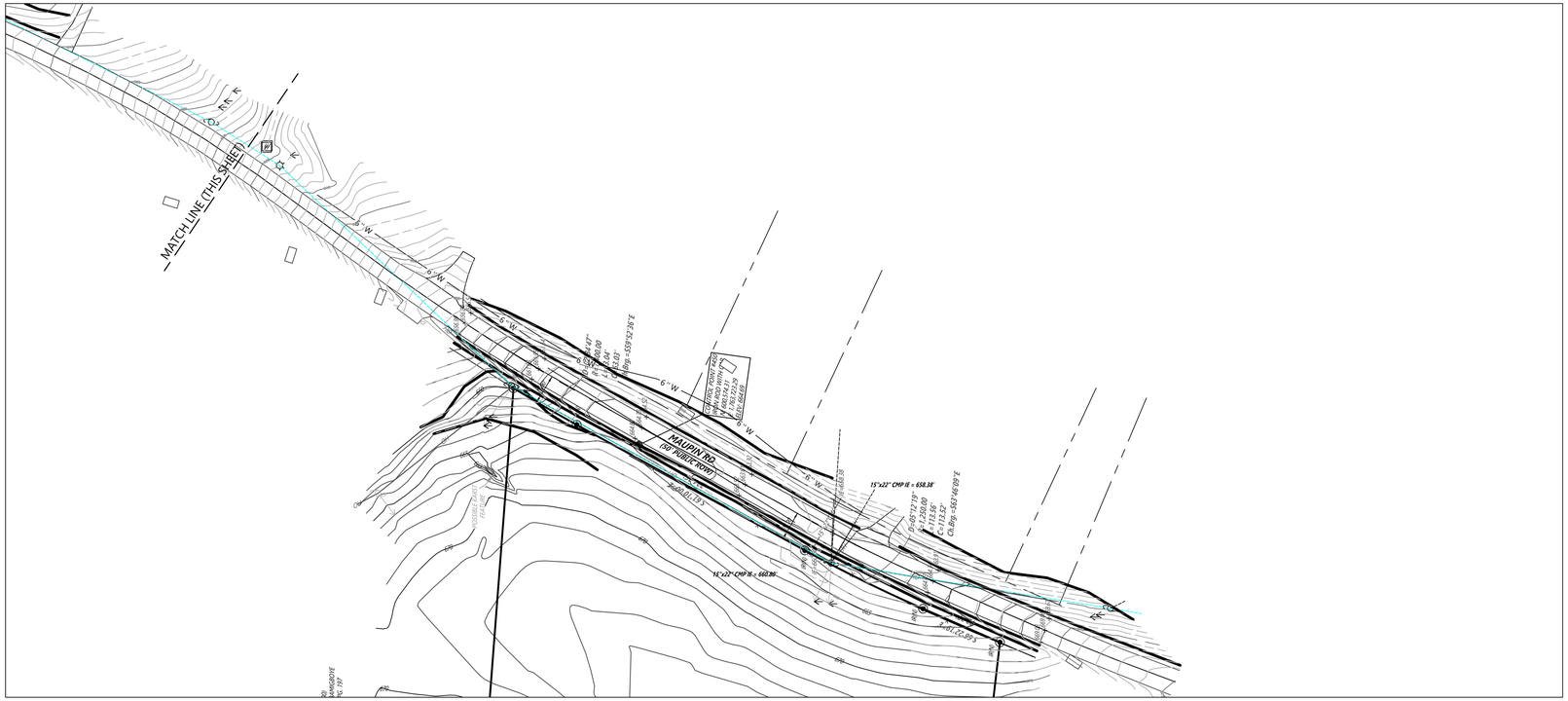

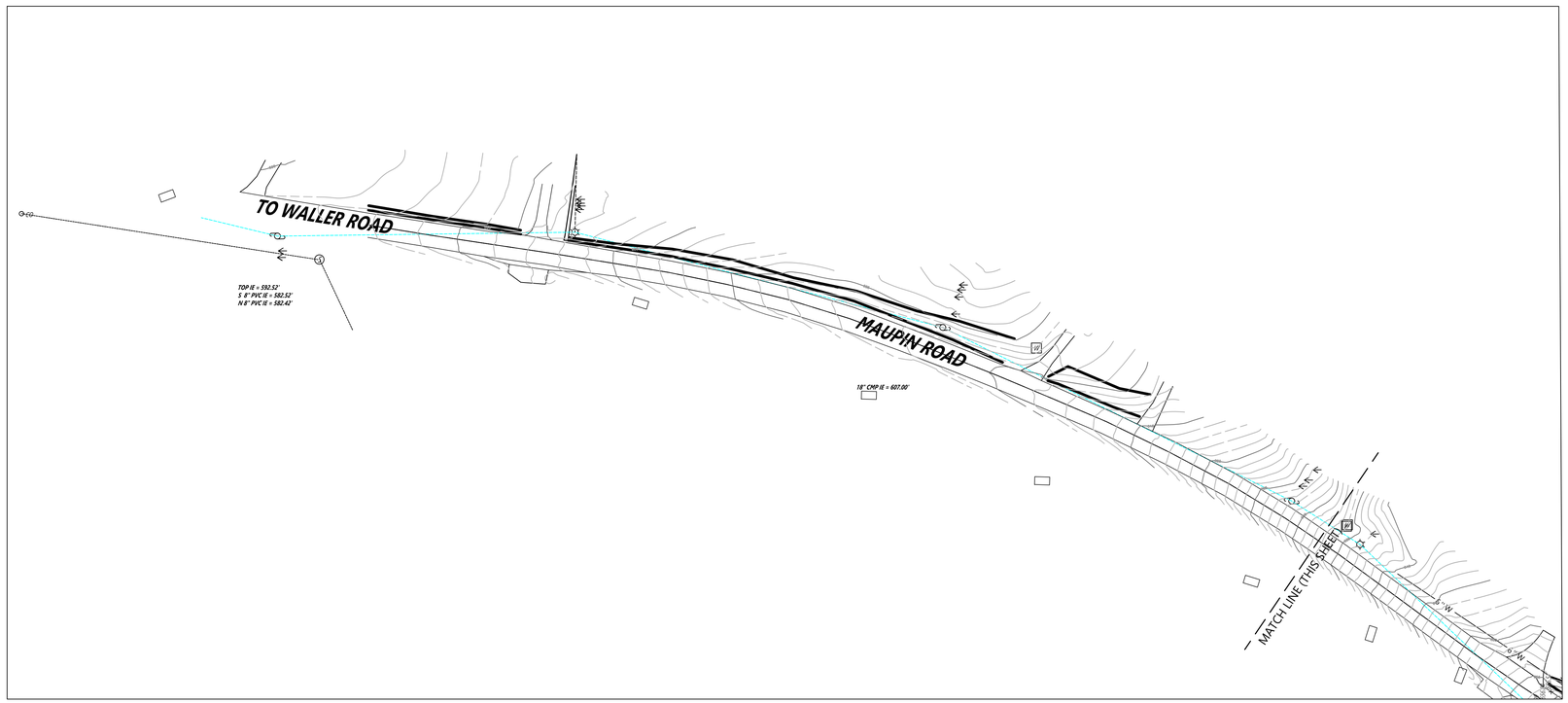

811
Know what's below.
Call before you dig.

N

0 60 120 180
GRAPHIC SCALE (IN FEET)

658 GRASSMERE PARK DRIVE
SUITE 100
NASHVILLE, TN 37211
(615) 385-4144

GARY W. O'BRIEN
19-100936
REGISTERED
STATE OF TENNESSEE
12-20-2022

NO.	DATE	DESCRIPTION	BY	CHK	APV

OFF-SITE EXISITNG CONDITIONS

PRELIMINARY CONSTRUCTION PLANS
AIX RETREAT
9919 MAUPIN ROAD, BRENTWOOD, TN 37027

PROJECT NUMBER
211740

DRAWING NUMBER
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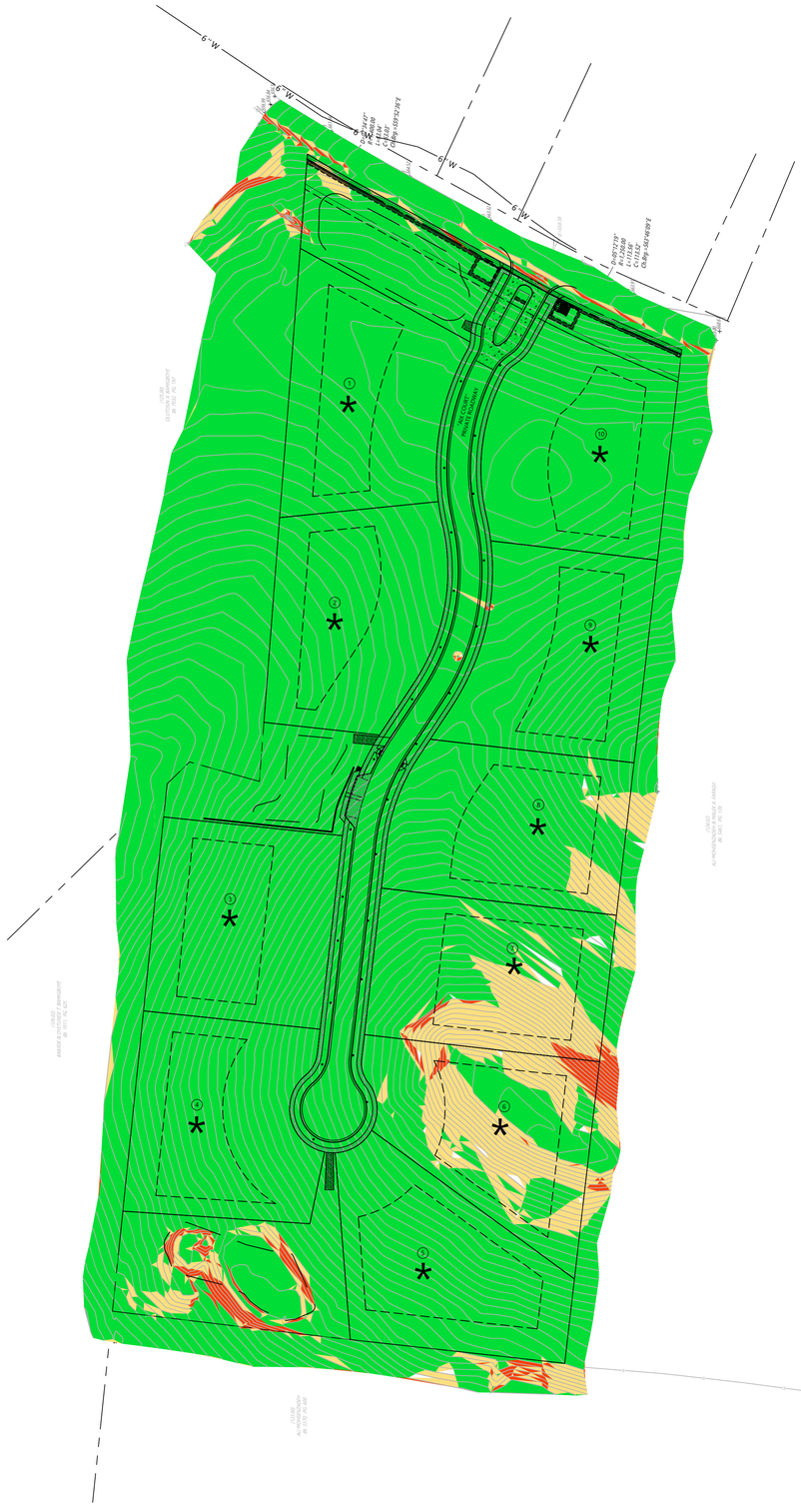

Slopes Table				
Number	Minimum Slope	Maximum Slope	Color	Area
1	0.00%	15.00%		686702.68
2	15.10%	25.00%		56641.41
3	25.10%	508.01%		10741.36

* INDICATES CRITICAL LOTS WITH SLOPES > 15%

Know what's below.
Call before you dig.

N

0 80 160 240
GRAPHIC SCALE (IN FEET)

658 GRASSMERE PARK DRIVE
SUITE 100
NASHVILLE, TN 37211
(615) 385-4144

PRELIMINARY

GARY W. O'BRIEN
REGISTERED ENGINEER
119100936
STATE OF TENNESSEE
6-20-2022

NO.	DATE	DESCRIPTION	BY	CHK	APV

SLOPE ANALYSIS

PRELIMINARY CONSTRUCTION PLANS
AIX RETREAT
9919 MAUPIN ROAD, BRENTWOOD, TN 37027

PROJECT NUMBER
211740
DRAWING NUMBER
C1.2

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TIME STAMP- 12/20/2022 11:30 AM

GENERAL NOTES

1. THE PROJECT SITE IS SHOWN ON JURISDICTION, TAX MAP 33, AS PARCEL 124.03.
2. ANY WORK UNACCEPTABLE TO THE OWNER'S REPRESENTATIVE OR TO THE LOCAL GOVERNING AUTHORITY SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
3. THE CONTRACTOR SHALL CONFORM TO ALL LOCAL CODES AND RECEIVE APPROVAL WHERE NECESSARY BEFORE CONSTRUCTION.
4. BASE INFORMATION WAS TAKEN FROM A SURVEY PREPARED BY S&ME DATED 05/26/2021.
5. THE CONTRACTOR SHALL CHECK ALL EXISTING CONDITIONS, (i.e. INVERTS, UTILITY ROUTINGS, UTILITY CROSSINGS, AND DIMENSIONS) IN THE FIELD PRIOR TO COMMENCEMENT OF WORK. REPORT ANY DISCREPANCIES TO THE ENGINEER.
6. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES. TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN. REPAIR ANY DAMAGE ACCORDING TO LOCAL STANDARDS AND AT THE CONTRACTOR'S EXPENSE. COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY. THE CONTRACTOR SHALL CALL NATIONAL ONE CALL (811) 72 HOURS PRIOR TO PROCEEDING WITH ANY EXCAVATION.

EROSION CONTROL NOTES:

1. THE DISTURBED AREA FOR THIS PROJECT IS APPROXIMATELY 13.18 ACRES.
2. THE SUBJECT PROPERTY DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD ZONE ACCORDING TO COMMUNITY PANEL NO. 47187C0230G OF THE F.E.M.A. FLOOD INSURANCE RATE MAPS FOR WILLIAMSON COUNTY, TENNESSEE, WITH AN EFFECTIVE DATE OF FEBRUARY 26, 2021.
3. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES MUST BE IN PLACE AND FUNCTIONAL BEFORE EARTH MOVING OPERATION BEGINS AND MUST BE CONSTRUCTED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. TEMPORARY MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY BUT MUST BE REPLACED AT THE END OF THE WORKDAY.
4. PROVIDE TEMPORARY CONSTRUCTION ACCESS(ES) AT THE POINT(S) WHERE CONSTRUCTION VEHICLES EXIT THE CONSTRUCTION AREA. MAINTAIN PUBLIC ROADWAYS FREE OF TRACKED MUD AND DIRT.
5. THE FOLLOWING RECORDS SHALL BE MAINTAINED ON OR NEAR SITE: THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR; THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE; THE DATES WHEN STABILIZATION MEASURES ARE INITIATED; INSPECTION RECORDS AND RAINFALL RECORDS.
6. THE CONTRACTOR SHALL MAINTAIN A RAIN GAUGE AND DAILY RAINFALL RECORDS AT THE SITE OR USE A REFERENCE SITE FOR A RECORD OF DAILY AMOUNT OF PRECIPITATION.
7. PRE-CONSTRUCTION VEGETATIVE GROUND COVER SHALL NOT BE DESTROYED, REMOVED OR DISTURBED MORE THAN 10 DAYS PRIOR TO GRADING OR EARTH MOVING UNLESS THE AREA IS SEEDED AND/OR MULCHED OR OTHER TEMPORARY COVER IS INSTALLED.
8. CONSTRUCTION MUST BE SEQUENCED TO MINIMIZE THE EXPOSURE TIME OF GRADED OR DENUDED AREAS.
9. SEDIMENT REMOVED FROM SEDIMENT CONTROL STRUCTURES IS TO BE PLACED AT A SITE APPROVED BY THE ENGINEER. IT SHALL BE TREATED IN A MANNER SO THAT THE AREA AROUND THE DISPOSAL SITE WILL NOT BE CONTAMINATED OR DAMAGED BY THE SEDIMENT IN THE RUN-OFF. THE CONTRACTOR SHALL OBTAIN THE DISPOSAL SITE AS PART OF THIS WORK.
10. SEDIMENT SHOULD BE REMOVED FROM SEDIMENT TRAPS, SILT FENCES, SEDIMENTATION PONDS AND OTHER SEDIMENT CONTROLS AS NECESSARY AND MUST BE REMOVED WHEN DESIGN CAPACITY HAS BEEN REDUCED BY 50% OR AS DIRECTED BY OWNERS REPRESENTATIVE.
11. THE CONTRACTOR SHALL REMOVE SEDIMENT FROM ALL DRAINAGE STRUCTURES BEFORE ACCEPTANCE BY LOCAL GOVERNING AGENCY OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
12. THE CONTRACTOR SHALL REMOVE THE TEMPORARY EROSION AND WATER POLLUTION CONTROL DEVICES ONLY AFTER A SOLID STAND OF GRASS HAS BEEN ESTABLISHED ON GRADED AREAS AND WHEN IN THE OPINION OF THE JURISDICTION HAVING AUTHORITY'S REPRESENTATIVE, THEY ARE NO LONGER NEEDED.
13. SOD ALL DISTURBED AREAS AS SOON AS POSSIBLE AFTER FINAL GRADING IS COMPLETED, UNLESS OTHERWISE INDICATED. CONTRACTOR SHALL TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.

TREE PROTECTION NOTES

1. PRIOR TO CONSTRUCTION ACTIVITY, THE GENERAL CONTRACTOR SHALL STAKE THE LIMITS OF CLEARING, GRADING AND BUILDING FOOTPRINTS THAT AFFECT THE TREE PRESERVATION AREAS.
2. THE LOCATION OF TREE PROTECTION MEASURES SHALL BE REVIEWED AND APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION COMMENCING. TREE PROTECTION BARRICADES SHALL CONSIST OF ORANGE PLASTIC BARRIER CONSTRUCTION FENCING, AND SHALL BE INSTALLED IN LOCATIONS AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
3. CONTRACTOR SHALL INSTALL ADEQUATE TREE PROTECTION MEASURES PRIOR TO ANY GRADING ACTIVITIES TO PREVENT CONSTRUCTION ACTIVITIES WITHIN PROXIMITY OF SPECIMEN TREES.
4. ALL GRADING WITHIN PROTECTED-ROOT-ZONE AREAS SHALL BE DONE BY HAND OR WITH SMALL EQUIPMENT TO MINIMIZE ROOT DAMAGE.
5. ROOTS EXPOSED BY CONSTRUCTION ACTIVITY SHALL BE PRUNED FLUSH WITH THE GROUND AND COVERED WITH BACKFILL AS SOON AS POSSIBLE. IF EXPOSED ROOTS ARE NOT COVERED WITHIN 24 HOURS, COVER THEM WITH MULCH AND THOROUGHLY WATER UNTIL COVERED WITH BACKFILL.
6. DO NOT OPERATE OR STORE HEAVY EQUIPMENT, NOR HANDLE OR STORE MATERIALS, WITHIN THE DRIP LINES OF TREES TO BE PRESERVED.
7. WHENEVER GRADING OR EXCAVATION IS DIRECTED WITHIN THE CANOPY COVERAGE AREA OF A TREE TO BE PRESERVED, FIRST CUT ROOTS USING A "DITCH WITCH" OR SIMILAR DEVICE TO PROVIDE CLEAN CUT OF ROOTS AT LIMITS OF ACTIVITY (PRIOR TO USE OF BACKHOE OR BULLDOZER). DO NOT ALLOW HEAVY EQUIPMENT WITHIN THE AREA BETWEEN CUT LINE AND TRUNK OF TREE. TRENCHES TO BE BACKFILLED AND TAMPERED TO MINIMIZE SETTLEMENT.
8. BARRICADES SHALL ENCROACH ON AREAS TO BE PAVED UNTIL PAVING AND/OR GRADE ADJUSTMENT ACTIVITIES BEGIN. ONLY THEN SHALL BARRICADES BE MOVED TO THE MAXIMUM ALLOWABLE PROTECTED ROOT TREE SAVE ZONE THAT WILL NOT ENCROACH ON THE PLANNED CONSTRUCTION. REMOVAL OF BARRICADE SHALL OCCUR ONLY AFTER PAVING IS COMPLETED AND CURBING IS INSTALLED, OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE.

TREE PROTECTION NOTES CONT.

9. PROVIDE WATERING OF SPECIMEN TREES DURING CONSTRUCTION WHEN PERIODS OF DROUGHT EXCEED SEVEN DAYS. UTILIZE OSCILLATING TYPE SPRINKLERS TO COVER ENTIRE PROTECTED ROOT ZONE FOR FOUR HOURS EACH WEEK.
10. ROOT AREA OF TREES WHERE SOIL HAS BEEN COMPACTED DUE TO CONSTRUCTION ACTIVITY SHALL BE VERTICALLY MULCHED (AERATED) AT DIRECTION OF LANDSCAPE ARCHITECT. THIS SHALL BE ACCOMPLISHED BY AUGURING THE SOIL IN A 2' GRID PATTERN TO WITHIN 3' OF TRUNK AND TO 10' BEYOND THE DRIP LINE. A 2" TO 3" HAND OPERATED AUGUR SHALL BE USED TO DRILL HOLES TO A MINIMUM DEPTH OF 12". TYPE OF BACKFILL WILL BE DETERMINED BY THE QUALIFIED PROFESSIONAL.
11. HEAVY ACCUMULATION OF DUST FROM CONSTRUCTION ACTIVITY MAY OCCUR ON THE SURFACE OF TREE FOLIAGE. TO CONTROL DUST, TREE FOLIAGE MAY BE HOSED DOWN UPON THE REQUEST OF THE QUALIFIED PROFESSIONAL
12. REMOVAL OF ALL TREE PROTECTION FENCING, SILT FENCING AND SIGNAGE WILL BE DONE BY THE GENERAL CONTRACTOR WHEN PERMITTED BY THE LOCAL CODE ENFORCEMENT OFFICIALS. RESTORATION OF ALL AREAS DISTURBED BY THE FENCING AND/OR SIGNAGE WILL BE THE GENERAL CONTRACTOR'S RESPONSIBILITY.

DEMOLITION NOTES

1. ALL MATERIALS BEING REMOVED AND NOT RELOCATED UNDER THE NEW CONSTRUCTION, INCLUDING TREES AND SHRUBS, SIGNS, UTILITY STRUCTURES, LIGHTING STANDARDS, ETC., SHALL BE FIRST OFFERED TO THE OWNER'S REPRESENTATIVE AND IF NOT ACCEPTED SHALL THEN BE PROPERLY DISPOSED OF BY THE CONTRACTOR.
2. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL CHARTED AND UNCHARTED UTILITIES. TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN OR REQUIRED TO REMAIN IN SERVICE UNTIL REPLACEMENT. REPAIR ANY DAMAGE ACCORDING TO LOCAL STANDARDS AND AT THE CONTRACTOR'S EXPENSE. COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY.
3. THE CONTRACTOR SHALL VERIFY THE LIMITS OF DEMOLITION WITH THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF WORK.
4. IN AREAS WHERE EXISTING PAVEMENT, WALKS, OR CURBS ARE TO BE REMOVED, SAW CUT TO PROVIDE A CLEAN EDGE. COORDINATE EXTENT OF PAVEMENT DEMOLITION WITH THE LIMIT OF NEW IMPROVEMENTS ON THE SITE LAYOUT PLAN & UTILITY INSTALLATION.
5. CONTRACTOR SHALL COORDINATE PHASING OF THE DEMOLITION WITH THE OWNER'S REPRESENTATIVE AND LOCAL GOVERNING AGENCY PRIOR TO BEGINNING WORK. DISRUPTION OF EXISTING UTILITY SERVICES AND TRAFFIC PATTERNS SHALL BE MINIMIZED TO THE EXTENT POSSIBLE AND INITIATED ONLY AFTER APPROVAL BY THE LOCAL GOVERNING AGENCY AND THE UTILITY COMPANIES.
6. CAVITIES LEFT BY STRUCTURE REMOVAL SHALL BE SUITABLY BACKFILLED AND COMPACTED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS.
7. THE CONTRACTOR SHALL USE WATER SPRINKLING AND OTHER SUITABLE METHODS AS NECESSARY TO CONTROL DUST AND DIRT CAUSED BY THE DEMOLITION WORK.
8. THE CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION AND REMOVAL NECESSARY TO ACCOMPLISH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.
9. THE CONTRACTOR SHALL PRESERVE AND PROTECT SURVEY CONTROL POINTS AND SHALL BE RESPONSIBLE FOR REPLACEMENT OF ANY DISTURBED CONTROL POINTS.
10. RELOCATION OF EXISTING PLANT MATERIALS SHALL BE COORDINATED WITH THE OWNER AND RELOCATED TO A DESIGNATED AREA ON SITE.
11. EXISTING TREES TO BE PRESERVED ARE TO BE BARRICADED BEFORE BEGINNING CONSTRUCTION IN ACCORDANCE WITH THE TREE PROTECTION NOTES.
12. NO UTILITY OR STORM SEWER LINES SHALL BE DEMOLISHED UNTIL THE NEW LINES HAVE BEEN INSTALLED AND ARE PLACED INTO OPERATION.
13. THE CONTRACTOR SHALL INCORPORATE INTO THEIR WORK ANY ISOLATION VALVES OR TEMPORARY PLUGS REQUIRED TO CONSTRUCT NEW UTILITY LINES AND DEMOLISH EXISTING UTILITY LINES.
14. SELECTIVE CLEARING CONSISTING OF REMOVAL OF VINES, SAPLINGS UNDER 1" DIAMETER AND UNDERBRUSH SHALL BE PERFORMED IN TREE PRESERVATION AREAS INTERNAL TO THE PROJECT AND NOTED ON PLANS.
15. WHERE WATER LINE AND SEWER LINE ABANDONMENT IS PLANNED, THE CONTRACTOR MAY ABANDON WATER LINES AND SEWER LINES IN PLACE WHERE THEY OCCUR AT LEAST 24" (TO TOP OF PIPE) BELOW FINAL SUBGRADE ELEVATIONS AND OUTSIDE THE BUILDING FOOT PRINT. ALL UTILITY LINES BEING ABANDONED IN PLACE SHALL HAVE ALL ENDS PERMANENTLY CLOSED USING A CONCRETE PLUG.
16. WHERE EXISTING IRRIGATION LINES LIE WITHIN THE AREA AFFECTED BY THE PROPOSED CONSTRUCTION, THE CONTRACTOR SHALL REWORK THE EXISTING IRRIGATION SYSTEMS IN ACCORDANCE WITH DIRECTIVES NOTED ON THE LANDSCAPE PLAN. SERVICE SHALL BE MAINTAINED DURING CONSTRUCTION TO THE LANDSCAPED AREAS CURRENTLY IRRIGATED.

SITE LAYOUT NOTES

1. THE SITE LAYOUT IS BASED ON REFERENCE POINTS AS NOTED.
2. THE PROPOSED BUILDING SHALL BE LAID OUT UTILIZING THE EXISTING STRUCTURE AS A CONTROL POINT AND THE ARCHITECTURAL DRAWINGS. DIMENSIONS SHOWN TO THE PROPOSED BUILDING ARE CALCULATED TO THE FACE OF EXTERIOR WALL. SEE ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS.
3. DIMENSIONS ARE TO FACE OF CURB AND/OR EXTERIOR FACE OF BUILDING UNLESS OTHERWISE NOTED.
4. PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING PAVEMENT AND NEW PAVEMENT. SLIGHT FIELD ADJUSTMENT OF FINAL GRADES MAY BE NECESSARY.
5. THE CONTRACTOR WILL BE REQUIRED TO ADJUST GRADES OF INTERSECTING STREETS, ALLEYS, PUBLIC ENTRANCES AND PRIVATE DRIVES AS DIRECTED BY THE ENGINEER.
6. ALL CURBING WILL BE REQUIRED TO ADJUST TO THE GRADES OF INTERSECTING STREETS, ALLEYS, PUBLIC ENTRANCES, AND PRIVATE DRIVES AS DIRECTED BY THE ENGINEER.
7. CURBS SHALL BE PARALLEL TO THE CENTERLINE OF DRIVES. THE CURB SHALL BE PLACED ONLY AFTER HAVING ALL BREAK POINTS (PC & PT OF CURVES) LOCATED AT THE FACE OF CURB OR AT A CONSISTENT OFFSET BY A REGISTERED LAND SURVEYOR.
8. ACCESSIBLE RAMPS SHALL HAVE A MAXIMUM SLOPE OF 1 HORIZONTAL : 12 VERITCAL. GRADES WITHIN ACCESSIBLE PARKING SPACES SHALL BE MAXIMUM 2% IN ALL DIRECTIONS.
9. CONCRETE FOR CURBS AND SIDEWALKS SHALL BE 3500 PSI CONCRETE.
10. THE CONTRACTOR SHALL COLD PLANE IN THE DIRECTION OF TRAFFIC.
11. THE CONTRACTOR SHALL PAVE IN THE DIRECTION OF TRAFFIC.

SITE GRADING & DRAINAGE NOTES

1. THE CONTRACTOR SHALL CHECK ALL EXISTING GRADES AND DIMENSIONS IN THE FIELD PRIOR TO BEGINNING WORK AND REPORT ANY DISCREPANCIES TO THE ENGINEER.
2. THE CONTRACTOR SHALL ADJUST THE CASTINGS OF ALL NEW AND EXISTING STRUCTURES TO MATCH PROPOSED FINISH GRADES.
3. PROPOSED CONTOUR LINES AND SPOT ELEVATIONS ARE THE RESULT OF AN ENGINEERED GRADING DESIGN AND REFLECT A PLANNED INTENT WITH REGARD TO DRAINAGE AND MOVEMENT OF MATERIALS. SHOULD THE CONTRACTOR HAVE ANY QUESTION OF THE INTENT OR ANY PROBLEM WITH THE CONTINUITY OF GRADES, THE ENGINEER SHALL BE CONTACTED IMMEDIATELY.
4. ALL CUT AND FILL SLOPES SHALL BE 3 HORIZONTAL TO 1 VERTICAL OR FLATTER UNLESS OTHERWISE INDICATED ON THE PLANS.
5. ALL PIPES UNDER EXISTING PAVED AREAS SHALL BE BACKFILLED TO THE TOP OF SUBGRADE WITH CRUSHED STONE.
6. MINIMUM GRADE ON ASPHALT OR CONCRETE PAVING SHALL BE 1.0%.
7. IF ANY SPRINGS OR UNDERGROUND STREAMS ARE EXPOSED DURING CONSTRUCTION PERMANENT FRENCH DRAINS MAY BE REQUIRED. THE DRAINS SHALL BE SPECIFIED AND LOCATED DURING CONSTRUCTION AS REQUIRED BY THE CONDITIONS WHICH ARE ENCOUNTERED, AND SHALL BE APPROVED BY THE ENGINEER.
8. THIS GRADING & DRAINAGE PLAN IS NOT A DETERMINATION OR GUARANTEE OF THE SUITABILITY OF THE SUBSURFACE CONDITIONS FOR THE WORK INDICATED. A GEOTECHNICAL REPORT HAS BEEN PREPARED AND IS AVAILABLE FROM THE OWNER. DETERMINATION OF THE SUITABILITY OF THE SUBSURFACE CONDITIONS FOR THE WORK INDICATED IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.
9. THE CONTRACTOR SHALL TAKE SPECIAL CARE TO COMPACT FILL SUFFICIENTLY AROUND AND OVER ALL PIPES, STRUCTURES, VALVE STEMS, ETC., INSIDE THE PROPOSED PAVED AREAS TO AVOID SETTLEMENT. ANY SETTLEMENT DURING THE WARRANTY PERIOD SHALL BE RESTORED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
10. IN NO CASE SHALL SLOPE, HEIGHT, SLOPE INCLINATION, OR EXCAVATION DEPTH, INCLUDING TRENCH CONSTRUCTION, EXCEED THOSE SPECIFIED IN LOCAL, STATE AND FEDERAL REGULATIONS, SPECIFICALLY THE CURRENT OSHA HEALTH AND SAFETY STANDARDS FOR EXCAVATIONS (29 CRF PART 1926) SHALL BE FOLLOWED.
11. DO NOT DISTURB VEGETATION OR REMOVE TREES EXCEPT WHEN NECESSARY FOR GRADING PURPOSES.
12. STRIP TOPSOIL FROM ALL CUT AND FILL AREAS AND STOCKPILE UPON COMPLETION OF GENERAL GRADING OVER ALL DISTURBED AREAS, TO A MINIMUM DEPTH OF 6". CONTRACTOR SHALL SUPPLY ADDITIONAL TOP SOIL IF INSUFFICIENT QUANTITIES EXIST ON SITE.
13. TOP OF GRATE ELEVATIONS AND LOCATION OF COORDINATES FOR DRAINAGE STRUCTURES SHALL BE AS SHOWN ON THE DETAIL UNLESS NOTED OTHERWISE. THE GRATES SHALL SLOPE LONGITUDINALLY WITH THE PAVEMENT GRADES.
14. ALL DRAINAGE CONSTRUCTION INSTALLATION SHALL CONFORM TO THE REQUIREMENTS AND SPECIFICATIONS OF THE LOCAL GOVERNING AGENCY.
15. POSITIVE DRAINAGE SHALL BE ESTABLISHED AS THE FIRST ORDER OF WORK AND SHALL BE MAINTAINED AT ALL TIMES DURING AND AFTER CONSTRUCTION. SOIL SOFTENED BY PERCHED WATER IN FOUNDATION AND PAVEMENT AREAS MUST BE UNDERCUT AND REPLACED WITH SUITABLE FILL MATERIALS APPROVED BY THE GEOTECHNICAL ENGINEER. GROUNDWATER INFILTRATION INTO EXCAVATIONS SHOULD BE EXPECTED, AND THE WATER SHALL BE REMOVED USING GRAVITY DRAINAGE OR PUMPING.
16. REINFORCED CONCRETE STORM DRAINAGE PIPE SHALL BE CLASS III, WALL "B". HDPE SHALL BE CORRUGATED, SMOOTH WALL N-12 PIPE WITH SOIL TIGHT JOINTS.
17. FILL SLOPES 3 HORIZONTAL :1 VERTICAL AND GREATER SHALL BE PLACED AND COMPACTED 5' BEYOND PROPOSED LIMITS AND THEN EXCAVATED BACK TO THE PROPOSED LOCATION.
18. THE CONTRACTOR SHALL PROVIDE AN AS-BUILT SURVEY STAMPED BY A LICENSED SURVEYOR IN THE STATE OF TENNESSEE OF ALL STORM SYSTEMS, ONSITE DETENTION PONDS, AND WATER QUALITY MEASURES VERIFYING COMPLIANCE WITH DESIGN DOCUMENTS.
19. THE LOCATION OF ALL DIVERSION SWALES AND DITCHES SHALL BE FIELD ADJUSTED TO AVOID TREES AS POSSIBLE. THE CONTRACTOR SHALL WALK THE ALIGNMENT OF THESE SWALES AND DITCHES IN THE FIELD TO VERIFY AVOIDANCE OF TREES, AND NOTIFY THE OWNERS REPRESENTATIVE OF SWALE WALK.
20. STOCKPILED TOPSOIL OR FILL MATERIAL IS TO BE TREATED SO THE SEDIMENT RUN-OFF WILL NOT CONTAMINATE SURROUNDING AREAS OR ENTER NEARBY STREAMS.
21. ANY SITE USED FOR DISPOSAL AND/OR STOCKPILE OF ANY MATERIAL SHALL BE PROPERLY PERMITTED FOR SUCH ACTIVITY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEE THAT ALL REQUIRED PERMITS ARE SECURED FOR EACH PROPERTY UTILIZED. A COPY OF THE APPROVED PERMIT MUST BE PROVIDED TO THE INSPECTOR PRIOR TO COMMENCEMENT OF WORK ON ANY PROPERTY. FAILURE TO DO SO MAY RESULT IN THE CONTRACTOR REMOVING ANY ILLEGALLY PLACED MATERIAL AT HIS OWN EXPENSE.
22. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO WASTE EXCESS EARTH MATERIAL OFF SITE AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL FIRST OFFER THE EXCESS MATERIAL TO THE OWNER. IF NOT ACCEPTED BY THE OWNER, THE CONTRACTOR SHALL DISPOSE OF EARTH MATERIAL OFF SITE. IT SHALL ALSO BE THE CONTRACTOR'S RESPONSIBILITY TO IMPORT SUITABLE MATERIAL (AT NO ADDITIONAL COST TO THE OWNER) FOR EARTHWORK OPERATIONS IF SUFFICIENT AMOUNTS OF EARTH MATERIAL ARE NOT AVAILABLE ON SITE.
23. SEGMENTAL WALLS SHALL BE PROVIDED BY THE CONTRACTOR AS A DESIGN BUILD. WALL DESIGN PLANS STAMPED BY A REGISTERED ENGINEER IN THE STATE OF THE PROJECT SHALL BE SUBMITTED TO THE ENGINEER AS A SHOP DRAWING. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY GEOTECHNICAL INFORMATION NECESSARY TO PROPERLY DESIGN THE WALL.

GEOTECHINCAL NOTES

1. A GEOTECHNICAL REPORT FOR THE SITE HAS BEEN PREPARED BY **EARTH SCIENCE ENGINEERING, LLC.** DATED AUGUST 29, 2022. REFER TO REPORT FOR RECOMMENDATIONS.
2. ALL FILL MATERIAL SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT. THIS MATERIAL SHALL BE PLACED IN LIFTS DIRECTED BY THE GEOTECHNICAL ENGINEER AND COMPACTED AS SPECIFIED BY THE GEOTECHNICAL ENGINEER.
3. WHERE DRAINAGE OR UTILITY LINES OCCUR IN PROPOSED FILL AREAS, THE FILL MATERIAL IS TO BE PLACED AND COMPACTED PRIOR TO INSTALLATION OF DRAINAGE OR UTILITY LINES. FILL IS TO BE INSPECTED BY A PROFESSIONAL GEOTECHNICAL ENGINEER TESTING FIRM EMPLOYED BY THE OWNER. RESULTS OF THE TEST SHALL BE FURNISHED TO THE OWNER'S REPRESENTATIVE. CONTRACTOR TO PAY FOR ANY RETESTING.
4. THE CONTRACTOR SHALL TAKE SPECIAL CARE TO COMPACT FILL SUFFICIENTLY AROUND AND OVER ALL PIPES, STRUCTURES, VALVE STEMS, ETC., INSIDE THE PROPOSED PAVED AREAS TO AVOID SETTLEMENT. ANY SETTLEMENT DURING THE WARRANTY PERIOD SHALL BE RESTORED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
5. ALL EARTHWORK, INCLUDING THE EXCAVATED SUBGRADE AND EACH LAYER OF FILL, SHALL BE MONITORED AND APPROVED BY A QUALIFIED GEOTECHNICAL ENGINEER, OR HIS REPRESENTATIVE.

SITE UTILITY NOTES

1. THE SANITARY SEWER SHALL BE OF THE MATERIAL INDICATED ON THE PLAN. POLYVINYLCHLORIDE (PVC) SHALL BE (SDR35). DUCTILE IRON PIPE (D.I.P.) SHALL BE CLASS 52.
2. ALL WATER LINES, SEWER LINES, AND APPURTENANCES SHALL BE OF MATERIALS AND CONSTRUCTION THAT CONFORM TO THE LOCAL AGENCY STANDARDS AND SPECIFICATIONS.
3. PROVIDE A MINIMUM 36/24" OF COVER OVER ALL WATER LINES.
4. THE CONTRACTOR SHALL MAINTAIN 10 FEET HORIZONTAL SEPARATION BETWEEN SANITARY SEWER LINES AND WATER LINES. WHERE THESE CRITERIA CANNOT BE MET, THE CONTRACTOR SHALL MAINTAIN 18" VERTICAL SEPARATION BETWEEN WATER AND SEWER LINES.
5. THE CONTRACTOR SHALL FIELD VERIFY THE EXACT HORIZONTAL AND VERTICAL LOCATION OF EXISTING MANHOLES OR SANITARY SEWER LINES AT THE POINT OF CONNECTION PRIOR TO THE COMMENCEMENT OF ORDERING OF MATERIALS, CONSTRUCTION OR REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE SEQUENCING OF CONSTRUCTION FOR ALL UTILITY LINES SO THAT WATER LINES DO NOT CONFLICT WITH SANITARY SEWERS, SANITARY SEWER SERVICES, STORM SEWERS, OR ANY OTHER UTILITY OR STRUCTURE, EXISTING OR PROPOSED.
7. THE LOCATION OF EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY.
8. BEFORE CONNECTIONS ARE MADE INTO EXISTING UTILITIES, THE NEW LINES ARE TO BE FLUSHED AND TESTED BY THE CONTRACTOR IN ACCORDANCE WITH THE LOCAL WATER AND SEWER DEPARTMENT SPECIFICATIONS.
9. ALL TRENCHES CUT IN EXISTING ROADS OR DRIVES SHALL UTILIZE A CLEAN SAW CUT AND SHALL BE BACKFIELD (100%) TO FINAL SUBGRADE WITH #57 STONE. REPAIR ROADS PER LOCAL AGENCY REQUIREMENTS.
10. REPAIR ALL DAMAGE TO EXISTING FEATURES (i.e. DRIVES, ROADS, YARDS, LANDSCAPING, ETC...) TO PRE-CONSTRUCTION CONDITION.
11. THE CONTRACTOR SHALL PROVIDE ALL HORIZONTAL AND VERTICAL BENDS TO ATTAIN THE ALIGNMENT INDICATED ON THE PLANS. PROVIDE VERTICAL BENDS WHERE NECESSARY TO ALLOW WATER LINES TO PASS UNDER OR OVER OTHER UTILITY LINES. (ALL BENDS AND BRACES NEEDED MAY NOT BE ACTUALLY SHOWN). PROVIDE BRACING AND/OR RODDING AT ALL BENDS AND TEES AS REQUIRED BY WATER DEPARTMENT.
12. REDUCED PRESSURE BACKFLOW PREVENTER (RPBP) OR DUAL CHECK WILL BE REQUIRED ON ALL TESTS AND FILL LINES (JUMPER) NEEDED FOR WATER MAIN CONSTRUCTION AND MUST BE APPROVED BY THE WATER DEPARTMENT.
13. COORDINATE THE EXACT LOCATION OF ALL UTILITIES ENTERING THE BUILDING WITH THE PLUMBING PLANS.
14. THE CONTRACTOR SHALL VERIFY REQUIRED PIPE LENGTHS. EXISTING PIPE MATERIAL AND SIZES AS SHOWN ON PLANS.
15. REPAIR EXISTING PAVEMENT, CURBS, WALKS, LANDSCAPING, ETC. THAT ARE DAMAGED BY CONSTRUCTION ACTIVITIES TO A LIKE NEW CONDITION AT NO ADDITIONAL COST TO THE OWNER.
16. THE PROPOSED GAS LINE CONSTRUCTION AND INSTALLATION SHALL BE COORDINATED WITH THE LOCAL GAS COMPANY BY THE CONTRACTOR.
17. THE PROPOSED ELECTRIC LINE CONSTRUCTION AND INSTALLATION SHALL BE COORDINATED WITH THE LOCAL ELECTRIC COMPANY BY THE CONTRACTOR.
18. THE PROPOSED COMMUNICATION LINE CONSTRUCTION AND INSTALLATION SHALL BE COORDINATED WITH THE LOCAL COMMUNICATION SERVICE PROVIDER BY THE CONTRACTOR.
19. THE CONTRACTOR SHALL ADJUST THE ALIGNMENT OF THE WATER LINES (HORIZONTALLY AND/OR VERTICALLY) TO ALLOW THE REQUIRED BRACING AT BENDS AND TEES.
20. EXISTING CASTINGS LOCATED IN FILL/CUT AREAS SHALL BE ADJUSTED TO ENSURE THAT THE TOP OF CASTING IS FLUSH WITH THE FINISHED GRADE.
21. THE OUTSIDE OF ALL MANHOLES SHALL BE COATED WITH BITUMINOUS PAINT.
22. THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT AT NO ADDITIONAL COST TO THE OWNER.
23. PRIOR TO SUBMITTING HIS BID, THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR CONTACTING OWNERS OF ALL AFFECTED UTILITIES IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENTS WILL HAVE UPON THE SCHEDULE OF WORK FOR THE PROJECT. WHILE SOME WORK MAY BE REQUIRED 'AROUND' UTILITY FACILITIES THAT WILL REMAIN IN PLACE, OTHER UTILITY FACILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTOR'S OPERATIONS.
24. ALL CONNECTIONS TO EXISTING MANHOLES SHALL BE BY THE CORING AND RESILIENT SEAL METHOD.
25. FIRE HYDRANT ASSEMBLIES INCLUDE THE APPROPRIATE SIZED TEE (WITH KICKER), 6" LINE TO HYDRANT, 6" GATE VALVE (WITH VALVE BOX), AND FIRE HYDRANT (WITH KICKER). HYDRANTS SHALL BE INSTALLED AT LOCATIONS SHOWN ON THE PLANS.
26. THE CONCRETE CAPS AND ENCASEMENTS ON WATER AND SEWER LINES SHALL BE A MINIMUM OF 6" THICK. USE 3000 PSI CONCRETE.
27. CONTRACTOR SHALL MARK THE LOCATION OF ALL NEW PVC LINES WITH #8 WIRE.
28. BACKFLOW PREVENTION DEVICE FOR THE DOMESTIC WATER SERVICE SHALL BE LOCATED INSIDE THE BUILDING, SEE PLUMBING PLANS.
29. SIAMESE STAND PIPE TO BE GALVANIZED STEEL.
30. SEWER SERVICES TO BE 6" DIAMETER PVC AT A MINIMUM SLOPE OF 1.0% UNLESS SHOWN OTHERWISE ON THE DRAWINGS. LINES SHALL START 5' BEYOND THE BUILDINGS. COORDINATE CONNECTION POINTS WITH THE BUILDING PLUMBING DRAWINGS. PROVIDE A MINIMUM 30" OF COVER OVER ALL SEWER SERVICES IN GRASS AREAS AND 48" OF COVER IN PAVED AREAS.
31. ALL FIRE LINES SHALL BE INSTALLED BY A SPRINKLER CONTRACTOR LICENSED IN THE STATE OF THE PROJECT.
32. THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION OF THE STORM DRAIN CONNECTIONS AT THE BUILDING WITH THE PLUMBING PLANS
33. EXISTING PAVEMENT OF PUBLIC ROADWAYS SHALL BE

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EROSION CONTROL KEYNOTES		
CODE	DESCRIPTION	DET #/SHT #
EC1	TEMPORARY CONSTRUCTION ENTRANCE	1/C3.3
EC2	SILT FENCE	4/C3.3
EC3	INLET PROTECTION P- STRAW WATTLES	2/C3.3
EC6	ROCK CHECK DAM	5/C3.3
EC7	RIPRAP AT HEADWALL	
EC8a	SEDIMENT BASIN OUTLET STRUCTURE	
EC8b	SEDIMENT BASIN	

SITE DESCRIPTION AND NOTES:

THE SITE IS LOCATED ON TAX MAP #######, PARCEL ######### IN BRENTWOOD, DAVIDSON COUNTY, TENNESSEE. CONSTRUCTION ACTIVITY ON THIS SITE WILL CONSIST OF DISTURBING APPROXIMATELY ##############± ACRES TO CONSTRUCT A TEN (10) LOT RESIDENTIAL SUBDIVISION.

1. APPROXIMATE CONSTRUCTION TIME TABLE:
   BEGIN CONSTRUCTION - [########]
   COMPLETE CONSTRUCTION - [########]

1. CONSTRUCTION SEQUENCE:
   A. ATTEND PRE-CONSTRUCTION MEETING.
   B. INSTALL CONSTRUCTION ENTRANCE AND PERIMETER CONTROL MEASURES.
   C. CONTACT LOCAL ENVIRONMENTAL AGENCY - EROSION CONTROL INSPECTOR FOR INSPECTION OF EROSION CONTROL DEVICES TO OBTAIN GRADING PERMIT.
   D. CLEAR AND GRUB THE REMAINING SITE.
   E. CONSTRUCT REMAINING SITE ACCORDING TO APPROVED PLANS, INCLUDING ALL ADDITIONAL EROSION CONTROL DEVICES.
   F. UPON PERMANENT SITE STABILIZATION APPLY PERMANENT CONTROL MEASURES.
   G. REMOVE ALL TEMPORARY EROSION CONTROL DEVICES PRIOR TO AS-BUILT APPROVALS.

3. TOTAL PROJECT AREA = ################### SF (##############± AC.)
   DISTURBED AREA = ################### S.F. (##############± AC.)

4. SEE SHEET C2.0 FOR GENERAL CONSTRUCTION NOTES AND C3.3 FOR EROSION CONTROL NOTES.

EROSION CONTROL NOTES:

1. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES MUST BE IN PLACE AND FUNCTIONAL BEFORE EARTH MOVING OPERATION BEGINS AND MUST BE CONSTRUCTED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. TEMPORARY MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY BUT MUST BE REPLACED AT THE END OF THE WORKDAY.
2. THE FOLLOWING RECORDS SHALL BE MAINTAINED ON OR NEAR SITE: THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR; THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE; THE DATES WHEN STABILIZATION MEASURES ARE INITIATED; INSPECTION RECORDS AND RAINFALL RECORDS.
3. THE CONTRACTOR SHALL MAINTAIN A RAIN GAUGE AND DAILY RAINFALL RECORDS AT THE SITE OR USE A REFERENCE SITE FOR A RECORD OF DAILY AMOUNT OF PRECIPITATION.
4. PRE-CONSTRUCTION VEGETATIVE GROUND COVER SHALL NOT BE DESTROYED, REMOVED OR DISTURBED MORE THAN 10 DAYS PRIOR TO GRADING OR EARTH MOVING UNLESS THE AREA IS SEEDED AND/OR MULCHED OR OTHER TEMPORARY COVER IS INSTALLED.
5. CONSTRUCTION MUST BE SEQUENCED TO MINIMIZE THE EXPOSURE TIME OF GRADED OR DENUDED AREAS.
6. SEDIMENT SHOULD BE REMOVED FROM SEDIMENT TRAPS, SILT FENCES, SEDIMENTATION PONDS AND OTHER SEDIMENT CONTROLS AS NECESSARY AND MUST BE REMOVED WHEN DESIGN CAPACITY HAS BEEN REDUCED BY 50% OR AS DIRECTED BY OWNERS REPRESENTATIVE.
7. THE CONTRACTOR SHALL REMOVE SEDIMENT FROM ALL DRAINAGE STRUCTURES BEFORE ACCEPTANCE BY LOCAL GOVERNING AGENCY OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
8. THE CONTRACTOR SHALL REMOVE THE TEMPORARY EROSION AND WATER POLLUTION CONTROL DEVICES ONLY AFTER A SOLID STAND OF GRASS HAS BEEN ESTABLISHED ON GRADED AREAS AND WHEN IN THE OPINION OF THE OWNER'S REPRESENTATIVE, THEY ARE NO LONGER NEEDED.

658 GRASSMERE PARK DRIVE
SUITE 100
NASHVILLE, TN 37211
(615) 385-4144

GARY W. O'BRIEN
10086
STATE OF TENNESSEE
12-20-2022

NO.	DATE	DESCRIPTION	BY	CHK	APV

Know what's below.
Call before you dig.

N

0 60 120 180
GRAPHIC SCALE (IN FEET)

INITIAL EROSION CONTROL PLAN

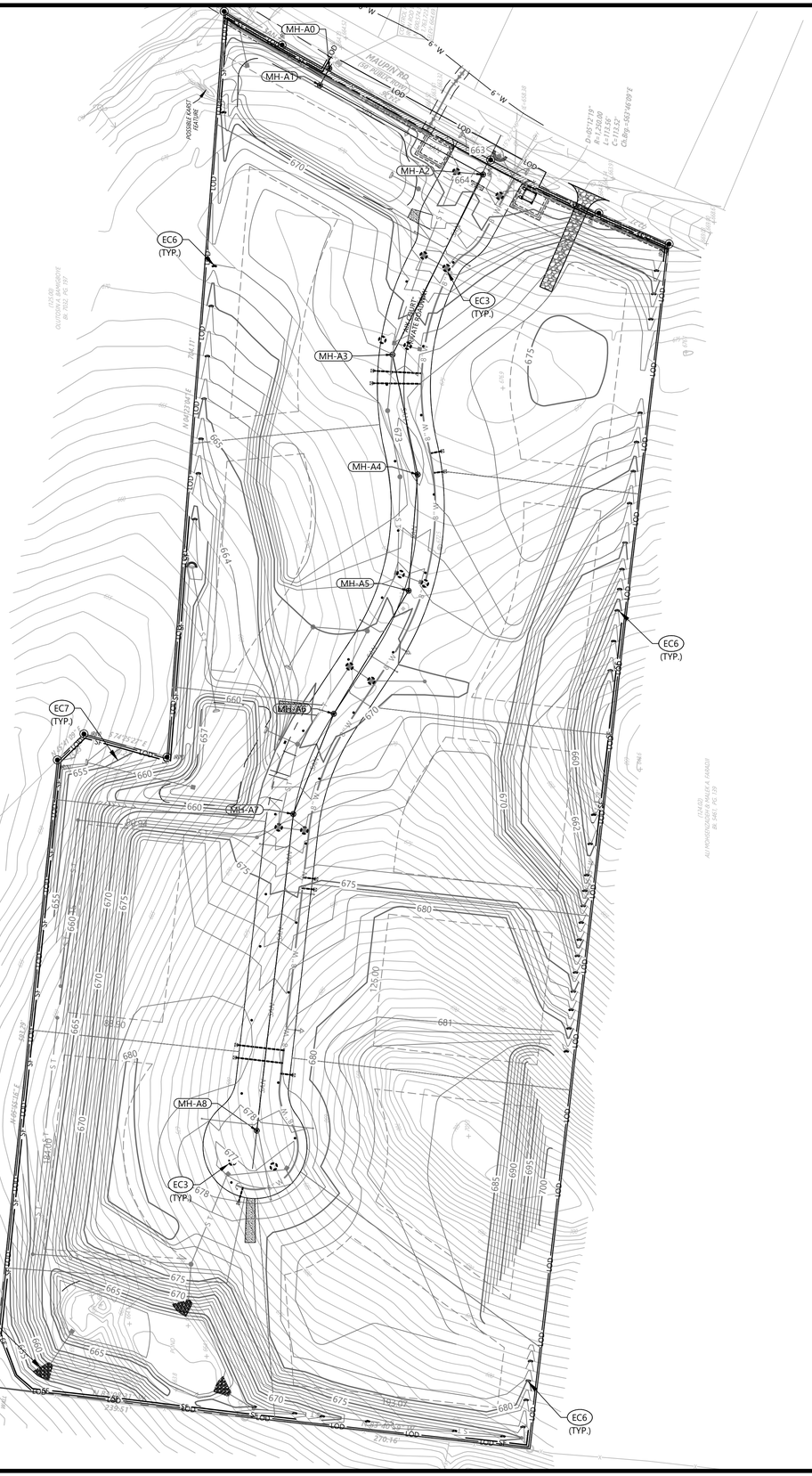
PRELIMINARY CONSTRUCTION PLANS
AIX RETREAT
9919 MAUPIN ROAD, BRENTWOOD, TN 37027

PROJECT NUMBER
211740

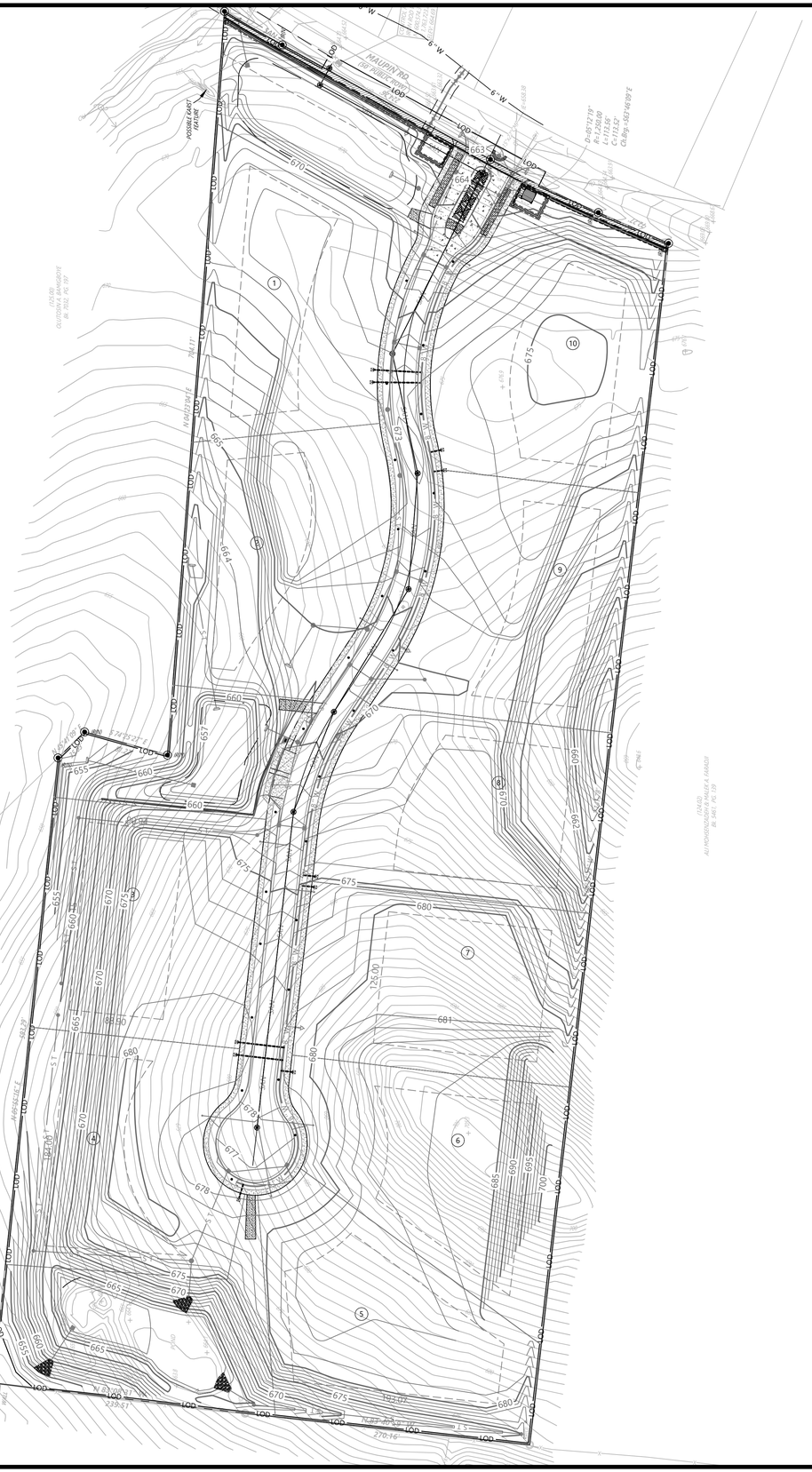
DRAWING NUMBER
C3.0

ORIGINAL SIZE: 24"X36" DRAWING PATH- T:\P&D\Projects\2021\211740_Mollette_Maupin Road_Brentwood\CAD\Construction\211740_ERO

TIME STAMP- 12/20/2022 11:30 AM


MH-A0
MH-A1
MH-A2
MH-A3
MH-A4
MH-A5
MH-A6
MH-A7
MH-A8
EC6 (TYP.)
EC3 (TYP.)
EC7 (TYP.)
MAUPIN RD.
ZEB PACE PIPE
LOD
TOD
SF
6"W
ROBBIE CAROL (DATUM)
PROPOSED STORM DRAIN
PROPOSED SANITARY SEWER
PROPOSED WATER LINE
PROPOSED GAS LINE
PROPOSED UNDERGROUND ELECTRIC
PROPOSED UNDERGROUND TELEPHONE
PROPOSED UNDERGROUND CABLE TV
PROPOSED CONCRETE
PROPOSED ASPHALT
PROPOSED GRAVEL
PROPOSED CONCRETE CURB & GUTTER
PROPOSED CONCRETE SIDEWALK
PROPOSED CONCRETE CROSSWALK
PROPOSED CONCRETE HANDICAP RAMP
PROPOSED CONCRETE DRIVEWAY
PROPOSED CONCRETE RETAINING WALL
PROPOSED CONCRETE HEADWALL
PROPOSED CONCRETE FLUME
PROPOSED CONCRETE SWALE
PROPOSED CONCRETE SPILLWAY
PROPOSED CONCRETE DITCH
PROPOSED CONCRETE CHANNEL
PROPOSED CONCRETE CULVERT
PROPOSED CONCRETE BRIDGE
PROPOSED CONCRETE TUNNEL
PROPOSED CONCRETE AQUEDUCT
PROPOSED CONCRETE SYPHON
PROPOSED CONCRETE INVERTED SIPHON
PROPOSED CONCRETE INVERTED

TIME STAMP- 12/20/2022 11:30 AM



EROSION CONTROL KEYNOTES		
CODE	DESCRIPTION	DET #/SHT #
EC1	TEMPORARY CONSTRUCTION ENTRANCE	
EC2	SILT FENCE	
EC3	INLET PROTECTION	
EC4	TREE PROTECTION	
EC5	DIVERSION DITCH	
EC6	ROCK CHECK DAM	
EC7	RIPRAP AT HEADWALL	
EC8a	SEDIMENT BASIN OUTLET STRUCTURE	
EC8b	SEDIMENT BASIN	

SITE DESCRIPTION AND NOTES:

THE SITE IS LOCATED ON TAX MAP #######, PARCEL ######### IN ############, ########### COUNTY, ###########. CONSTRUCTION ACTIVITY ON THIS SITE WILL CONSIST OF DISTURBING APPROXIMATELY ##############± ACRES TO CONSTRUCT ####################.

1. APPROXIMATE CONSTRUCTION TIME TABLE:
   BEGIN CONSTRUCTION - [########]
   COMPLETE CONSTRUCTION - [########]

1. CONSTRUCTION SEQUENCE:
   A. ATTEND PRE-CONSTRUCTION MEETING.
   B. INSTALL CONSTRUCTION ENTRANCE AND PERIMETER CONTROL MEASURES.
   C. CONTACT LOCAL ENVIRONMENTAL AGENCY - EROSION CONTROL INSPECTOR FOR INSPECTION OF EROSION CONTROL DEVICES TO OBTAIN GRADING PERMIT.
   D. CLEAR AND GRUB THE REMAINING SITE.
   E. CONSTRUCT REMAINING SITE ACCORDING TO APPROVED PLANS, INCLUDING ALL ADDITIONAL EROSION CONTROL DEVICES.
   F. UPON PERMANENT SITE STABILIZATION APPLY PERMANENT CONTROL MEASURES.
   G. REMOVE ALL TEMPORARY EROSION CONTROL DEVICES PRIOR TO AS-BUILT APPROVALS.

3. TOTAL PROJECT AREA = ################### SF (##############± AC.)
   DISTURBED AREA = ################### S.F. (##############± AC.)

4. SEE SHEET C2.0 FOR GENERAL CONSTRUCTION NOTES AND C3.3 FOR EROSION CONTROL NOTES.

EROSION CONTROL NOTES:

1. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES MUST BE IN PLACE AND FUNCTIONAL BEFORE EARTH MOVING OPERATION BEGINS AND MUST BE CONSTRUCTED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. TEMPORARY MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY BUT MUST BE REPLACED AT THE END OF THE WORKDAY.
2. THE FOLLOWING RECORDS SHALL BE MAINTAINED ON OR NEAR SITE: THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR; THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE; THE DATES WHEN STABILIZATION MEASURES ARE INITIATED; INSPECTION RECORDS AND RAINFALL RECORDS.
3. THE CONTRACTOR SHALL MAINTAIN A RAIN GAUGE AND DAILY RAINFALL RECORDS AT THE SITE OR USE A REFERENCE SITE FOR A RECORD OF DAILY AMOUNT OF PRECIPITATION.
4. PRE-CONSTRUCTION VEGETATIVE GROUND COVER SHALL NOT BE DESTROYED, REMOVED OR DISTURBED MORE THAN 10 DAYS PRIOR TO GRADING OR EARTH MOVING UNLESS THE AREA IS SEEDED AND/OR MULCHED OR OTHER TEMPORARY COVER IS INSTALLED.
5. CONSTRUCTION MUST BE SEQUENCED TO MINIMIZE THE EXPOSURE TIME OF GRADED OR DENUDED AREAS.
6. SEDIMENT SHOULD BE REMOVED FROM SEDIMENT TRAPS, SILT FENCES, SEDIMENTATION PONDS AND OTHER SEDIMENT CONTROLS AS NECESSARY AND MUST BE REMOVED WHEN DESIGN CAPACITY HAS BEEN REDUCED BY 50% OR AS DIRECTED BY OWNERS REPRESENTATIVE.
7. THE CONTRACTOR SHALL REMOVE SEDIMENT FROM ALL DRAINAGE STRUCTURES BEFORE ACCEPTANCE BY LOCAL GOVERNING AGENCY OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
8. THE CONTRACTOR SHALL REMOVE THE TEMPORARY EROSION AND WATER POLLUTION CONTROL DEVICES ONLY AFTER A SOLID STAND OF GRASS HAS BEEN ESTABLISHED ON GRADED AREAS AND WHEN IN THE OPINION OF THE OWNER'S REPRESENTATIVE, THEY ARE NO LONGER NEEDED.

658 GRASSMERE PARK DRIVE
SUITE 100
NASHVILLE, TN 37211
(615) 385-4144

GARY W. O'BRIEN
REGISTERED ENGINEER
No. 100986
STATE OF TENNESSEE
12-20-2022

NO.	DATE	DESCRIPTION	BY	CHK	APV

Know what's below.
Call before you dig.

N

0 60 120 180
GRAPHIC SCALE (IN FEET)

FINAL EROSION CONTROL PLAN

PRELIMINARY CONSTRUCTION PLANS
AIX RETREAT
9919 MAUPIN ROAD, BRENTWOOD, TN 37027

PROJECT NUMBER
211740

DRAWING NUMBER
C3.2

ORIGINAL SIZE: 24"X36" DRAWING PATH: T:\P&D\Projects\2021\211740_Mollette_Maupin Road_Brentwood\CAD\Construction\211740_ERO

TIME STAMP- 12/20/2022 11:30 AM

SCHEDULE OF INSPECTIONS AND MAINTENANCE NOTES

1. INSPECTIONS DESCRIBED IN PARAGRAPHS 2, 3 AND 4 BELOW, SHALL BE PERFORMED AT LEAST TWICE EVERY CALENDAR WEEK. INSPECTIONS SHALL BE PERFORMED AT LEAST 72 HOURS APART. WHERE SITES OR PORTION(S) OF CONSTRUCTION SITES HAVE BEEN TEMPORARILY STABILIZED, OR RUNOFF IS UNLIKELY DUE TO WINTER CONDITIONS (E.G., SITE COVERED WITH SNOW OR ICE) OR DUE TO EXTREME DROUGHT, SUCH INSPECTION ONLY HAS TO BE CONDUCTED ONCE PER MONTH UNTIL THAWING OR PRECIPITATION RESULTS IN RUNOFF OR CONSTRUCTION ACTIVITY RESUMES. INSPECTION REQUIREMENTS DO NOT APPLY TO DEFINABLE AREAS THAT HAVE BEEN FINALLY STABILIZED. WRITTEN NOTIFICATION OF THE INTENT TO CHANGE THE INSPECTION FREQUENCY AND THE JUSTIFICATION FOR SUCH REQUEST MUST BE SUBMITTED TO THE LOCAL ENVIRONMENTAL FIELD OFFICE. SHOULD ENVIRONMENTAL GOVERNING AGENCY DISCOVER THAT MONTHLY INSPECTIONS OF THE SITE ARE NOT APPROPRIATE DUE TO INSUFFICIENT STABILIZATION MEASURES OR OTHERWISE, TWICE WEEKLY INSPECTIONS SHALL RESUME. ENVIRONMENTAL GOVERNING AGENCY MAY INSPECT THE SITE TO CONFIRM OR DENY THE NOTIFICATION TO CONDUCT MONTHLY INSPECTIONS.

2. QUALIFIED PERSONNEL (PROVIDED BY THE PERMITTEE OR COOPERATIVELY BY MULTIPLE PERMITTEES) SHALL INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED, AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION, STRUCTURAL CONTROL MEASURES, LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE, AND EACH OUTFALL.

3. DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE SITE'S DRAINAGE SYSTEM. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY.

4. OUTFALL POINTS (WHERE DISCHARGES LEAVE THE SITE AND/OR ENTER WATERS OF THE STATE) SHALL BE INSPECTED TO DETERMINE WHETHER EROSION PREVENTION AND SEDIMENT CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATERS. WHERE DISCHARGE LOCATIONS ARE INACCESSIBLE, NEARBY DOWNSTREAM LOCATIONS SHALL BE INSPECTED. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFFSITE SEDIMENT TRACKING.

5. BASED ON THE RESULTS OF THE INSPECTION, ANY INADEQUATE CONTROL MEASURES OR CONTROL MEASURES IN DISREPAIR SHALL BE REPLACED OR MODIFIED, OR REPAIRED AS NECESSARY, BEFORE THE NEXT RAIN EVENT, BUT IN NO CASE MORE THAN 7 DAYS AFTER THE NEED IS IDENTIFIED.

6. BASED ON THE RESULTS OF THE INSPECTION, THE SITE DESCRIPTION AND POLLUTION PREVENTION MEASURES IDENTIFIED IN THIS SWPPP SHALL BE REVISED AS APPROPRIATE, BUT IN NO CASE LATER THAN 7 DAYS FOLLOWING THE INSPECTION. SUCH MODIFICATIONS SHALL PROVIDE FOR TIMELY IMPLEMENTATION OF ANY CHANGES TO THE SWPPP, BUT IN NO CASE LATER THAN 14 DAYS FOLLOWING THE INSPECTION.

7. ALL INSPECTIONS SHALL BE DOCUMENTED ON THE CONSTRUCTION STORMWATER INSPECTION CERTIFICATION FORM PROVIDED IN THE SWPPP REPORT FOR ALL CONSTRUCTION SITES. INSPECTION DOCUMENTATION WILL BE MAINTAINED ON SITE AND MADE AVAILABLE TO ENVIRONMENTAL GOVERNING AGENCY UPON REQUEST. INSPECTION REPORTS MUST BE SUBMITTED TO ENVIRONMENTAL GOVERNING AGENCY WITHIN 10 DAYS OF THE REQUEST. IF ENVIRONMENTAL GOVERNING AGENCY REQUESTS THE CONSTRUCTION STORMWATER INSPECTION CERTIFICATION FORM TO BE SUBMITTED, THE SUBMITTED FORM MUST CONTAIN THE PRINTED NAME AND SIGNATURE OF THE TRAINED CERTIFIED INSPECTOR AND THE PERSON WHO MEETS THE SIGNATORY REQUIREMENTS OF SECTION 7.7.2 OF THE NPDES GENERAL PERMIT.

8. TRAINED CERTIFIED INSPECTORS SHALL COMPLETE INSPECTION DOCUMENTATION TO THE BEST OF THEIR ABILITY. FALSIFYING INSPECTION RECORDS OR OTHER DOCUMENTATION OR FAILURE TO COMPLETE INSPECTION DOCUMENTATION SHALL RESULT IN A VIOLATION OF THIS PERMIT AND ANY OTHER APPLICABLE ACTS OR RULES.

9. SUBSEQUENT OPERATOR(S) (PRIMARY PERMITTEES) WHO HAVE OBTAINED COVERAGE UNDER THE NPDES GENERAL PERMIT SHOULD CONDUCT TWICE WEEKLY INSPECTIONS, UNLESS THEIR PORTION(S) OF THE SITE HAS BEEN TEMPORARILY STABILIZED, OR RUNOFF IS UNLIKELY DUE TO WINTER CONDITIONS OR DUE TO EXTREME DROUGHT AS STATED IN PARAGRAPH A) ABOVE. THE PRIMARY PERMITTEE IS NO LONGER REQUIRED TO CONDUCT INSPECTIONS OF PORTIONS OF THE SITE THAT ARE COVERED BY A SUBSEQUENT PRIMARY PERMITTEE.

SITE ASSESSMENT NOTES

1. THE SITE ASSESSMENT SHALL BE PERFORMED BY INDIVIDUALS WITH THE FOLLOWING QUALIFICATIONS:
   - A LICENSED PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT
   - A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC) OR
   - OTHER PERSONNEL WHO MEET THE CERTIFICATION AND TESTING REQUIREMENTS FOR SITE ASSESSMENT OF THE LOCAL ENVIRONMENTAL AGENCY, AND IS IN GOOD STANDING WITH THE LOCAL ENVIRONMENTAL AGENCY.

2. QUALITY ASSURANCE OF EROSION PREVENTION AND SEDIMENT CONTROLS SHALL BE DONE BY PERFORMING SITE ASSESSMENT AT A CONSTRUCTION SITE. THE SITE ASSESSMENT SHALL BE CONDUCTED AT EACH OUTFALL INVOLVING DRAINAGE TOTALING 10 OR MORE ACRES OR 5 OR MORE ACRES IF DRAINING TO AN IMPAIRED OR EXCEPTIONAL QUALITY WATERS, WITHIN A MONTH OF CONSTRUCTION COMMENCING AT EACH PORTION OF THE SITE THAT DRAINS THE QUALIFYING ACREAGE OF SUCH PORTION OF THE SITE.

3. AS A MINIMUM, SITE ASSESSMENT SHOULD BE PERFORMED TO VERIFY THE INSTALLATION, FUNCTIONALITY AND PERFORMANCE OF THE EPSC MEASURES DESCRIBED IN THE SWPPP REPORT. THE SITE ASSESSMENT SHOULD BE PERFORMED WITH THE INSPECTOR, AND SHOULD INCLUDE A REVIEW AND UPDATE (IF APPLICABLE) OF THE SWPPP REPORT. MODIFICATIONS OF PLANS AND SPECIFICATIONS FOR ANY BUILDING OR STRUCTURE, INCLUDING THE DESIGN OF SEDIMENT BASINS OR OTHER SEDIMENT CONTROLS INVOLVING STRUCTURAL, HYDRAULIC, HYDROLOGIC OR OTHER ENGINEERING CALCULATIONS SHALL BE PREPARED BY A LICENSED PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT AND STAMPED AND CERTIFIED IN ACCORDANCE WITH THE LOCAL ENVIRONMENTAL AGENCY CODES AND REGULATIONS.

4. THE SITE ASSESSMENT FINDINGS SHALL BE DOCUMENTED AND THE DOCUMENTATION KEPT WITH THE SWPPP REPORT AT THE SITE. AT A MINIMUM, THE DOCUMENTATION SHALL INCLUDE INFORMATION INCLUDED IN THE INSPECTION FORM PROVIDED IN APPENDIX D OF THE SWPPP REPORT. THE DOCUMENTATION MUST CONTAIN THE PRINTED NAME AND SIGNATURE OF THE INDIVIDUAL PERFORMING THE SITE ASSESSMENT AND THE FOLLOWING CERTIFICATION:

   "I CERTIFY UNDER PENALTY OF LAW THAT THIS REPORT AND ALL ATTACHMENTS ARE, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS."

5. THE SITE ASSESSMENT CAN TAKE THE PLACE OF ONE OF THE TWICE WEEKLY INSPECTIONS REQUIREMENT.

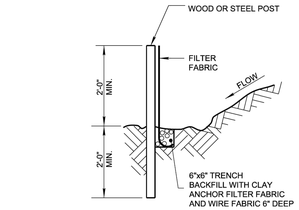
6. LOCAL ENVIRONMENTAL AGENCY MAY REQUIRE ADDITIONAL SITE ASSESSMENT(S) TO BE PERFORMED IF SITE INSPECTION BY LOCAL ENVIRONMENTAL AGENCY PERSONNEL REVEALS SITE CONDITIONS THAT HAVE POTENTIAL OF CAUSING POLLUTION TO THE WATERS OF THE STATE.

NOTE:

CONTRACTOR SHALL INSTALL A 4'X4' WEATHER PROOF SIGN (6' HEIGHT) AT THE MAIN CONSTRUCTION ENTRANCE. THE SIGN SHALL HAVE THE FOLLOWING INFORMATION:

1. A COPY OF THE NOTICE OF COVERAGE WITH THE NPDES PERMIT NUMBER (FURNISHED BY ENGINEER).
2. THE NAME AND TELEPHONE NUMBER OF A LOCAL CONTACT PERSON (FURNISHED BY CONSTRUCTION MANAGER).
3. DESCRIPTION OF PROJECT (FURNISHED BY CONSTRUCTION MANAGER).

4



NOTES:

1. FILTER FABRIC FENCE TO BE PLACED PRIOR TO START OF ROUGH GRADING.
2. STEEL POSTS SHALL BE APPROVED BY OWNER PRIOR TO USE.
3. WOOD POSTS SHALL BE 2"x 2" MIN., OAK OR SIMILAR HARDWOOD.
4. POSTS SHALL BE SPACED AT 6' INTERVALS.
5. FILTER FABRIC SHALL BE SECURELY BOUND TO POSTS WITH EITHER STAPLES OR WIRE TIES.
6. FILTER FABRIC SHALL BE POLYPROPYLENE FABRIC WITH EQUVALENT OPENING SIZE (EOS) OF NO.100 SIEVE MIN., NO.40 SIEVE MAX., AS DETERMINED BY CORPS OF ENGINEERS GUIDE SPEC. CW 02215.
7. SHOULD TDEC EROSION AND SEDIMENT CONTROL REQUIREMENTS DIFFER FROM THIS DETAIL, THE STRICTER REQUIREMENTS SHALL GOVERN.

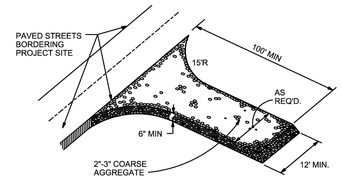
CITY OF BRENTWOOD WATER SERVICES
STANDARD DETAIL

TEMPORARY SILT FENCE

MARCH, 2016

DRAWING NO. M-09

1



NOTES:

1. GRAVEL PAD IS REQUIRED TO PROVIDE BUFFER AREA WHERE VEHICLES CAN DROP THEIR MUD AND SEDIMENT TO AVOID TRANSPORTING IT ONTO PAVED STREETS, TO CONTROL EROSION FROM SURFACE RUNOFF, AND TO HELP CONTROL DUST.
2. SHOULD TDEC EROSION AND SEDIMENT CONTROL REQUIREMENTS DIFFER FROM THIS DETAIL, THE STRICTER REQUIREMENTS SHALL GOVERN.

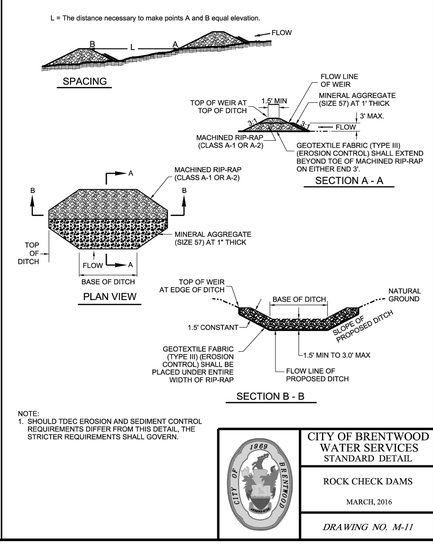
CITY OF BRENTWOOD WATER SERVICES
STANDARD DETAIL

TEMPORARY CONSTRUCTION ENTRANCE

MARCH, 2016

DRAWING NO. M-08

5



NOTE:
1. SHOULD TDEC EROSION AND SEDIMENT CONTROL REQUIREMENTS DIFFER FROM THIS DETAIL, THE STRICTER REQUIREMENTS SHALL GOVERN.

CITY OF BRENTWOOD WATER SERVICES
STANDARD DETAIL

ROCK CHECK DAMS

MARCH, 2016

DRAWING NO. M-11

2

NOTES:

1. STRAW WATTLES SHALL BE MANUFACTURED FROM RICE STRAW AND BE WRAPPED IN A TUBULAR PLASTIC NETTING. THE NETTING SHALL HAVE A STRAND THICKNESS OF 0.03 INCH, AND A KNOT THICKNESS OF 0.055 AND A WEIGHT OF 0.35 OUNCE PER FOOT AND SHALL BE MADE FROM 85% HIGH DENSITY POLYETHYLENE, 14% ETHYL VINYL ACETATE AND 1% COLOR FOR UV INHIBITION. STRAW WATTLES SHALL BE NINE INCHES IN DIAMETER, TWENTY-FIVE FEET LONG AND WEIGH APPROXIMATELY 35 POUNDS.
2. SHOULD TDEC EROSION AND SEDIMENT CONTROL REQUIREMENTS DIFFER FROM THIS DETAIL, THE STRICTER REQUIREMENTS SHALL GOVERN.

CITY OF BRENTWOOD WATER SERVICES
STANDARD DETAIL

STRAW WATTLES

MARCH, 2016

DRAWING NO. M-10

6

3

658 GRASSMERE PARK DRIVE
SUITE 100
NASHVILLE, TN 37211
(615) 385-4144

GARY W. O'BRIEN
REGISTERED ENGINEER
No. 100936
STATE OF TENNESSEE
12-20-2022

NO.	DATE	DESCRIPTION	BY	CHK	APV

SEDIMENT AND EROSION CONTROL DETAILS

PRELIMINARY CONSTRUCTION PLANS
AIX RETREAT
9919 MAUPIN ROAD, BRENTWOOD, TN 37027

PROJECT NUMBER
211740

DRAWING NUMBER
C3.3

ORIGINAL SIZE: 24"X36" DRAWING PATH: T:\P&D\Projects\2021\211740_Mollette_Maupin Road_Brentwood\CAD\Construction\211740_ERO

TIME STAMP: 12/20/2022 11:31 AM



DEMOLITION KEYNOTES

CODE	DESCRIPTION
D1	REMOVE EXISTING ASPHALT PAVEMENT
D2a	REMOVE EXISTING CONCRETE PAVEMENT
D2b	REMOVE EXISTING CONCRETE SIDEWALK
D3	REMOVE EXISTING CONCRETE CURB
D4	EVENLY SAWCUT
D5	REMOVE EXISTING FENCE
D6	REMOVE EXISTING DRAINAGE STRUCTURE
D7	REMOVE EXISTING STORM LINE
D8	REMOVE EXISTING WATERLINE & APPURTENANCES
D9	REMOVE EXISTING SANITARY SEWER LINE
D10	REMOVE EXISTING UTILITY LINE & APPURTENANCES
D11	EXISTING UTILITY LINE TO BE ABANDONED IN PLACE
D12	EXISTING HYDRANT TO BE RELOCATED
D13	REMOVE EXISTING TREE

NOTES:
1. SEE SHEET C2.0 FOR GENERAL AND DEMOLITION NOTES.

LEGEND

BUILDING TO REMOVE

CONCRETE TO REMOVE

ASPHALT PAVEMENT TO REMOVE

SILT FENCE — SF

TREE PROTECTION — T P

TREES TO BE REMOVED — X

Know what's below.
Call before you dig.

N

0 60 120 180
GRAPHIC SCALE (IN FEET)

&

658 GRASSMERE PARK DRIVE
SUITE 100
NASHVILLE, TN 37211
(615) 385-4144

PRELIMINARY

GARY W. O'BRIEN
REGISTERED ENGINEER
10-100936
STATE OF TENNESSEE
12-20-2022

NO.	DATE	DESCRIPTION	BY	CHK	APV

DEMOLITION PLAN

PRELIMINARY CONSTRUCTION PLANS
AIX RETREAT
9919 MAUPIN ROAD, BRENTWOOD, TN 37027

PROJECT NUMBER
211740

DRAWING NUMBER
C4.0

ORIGINAL SIZE: 24"X36" DRAWING PATH: T:\P&D\Projects\2021\211740_Mollette_Maupin Road_Brentwood\CAD\Construction\211740_DEM

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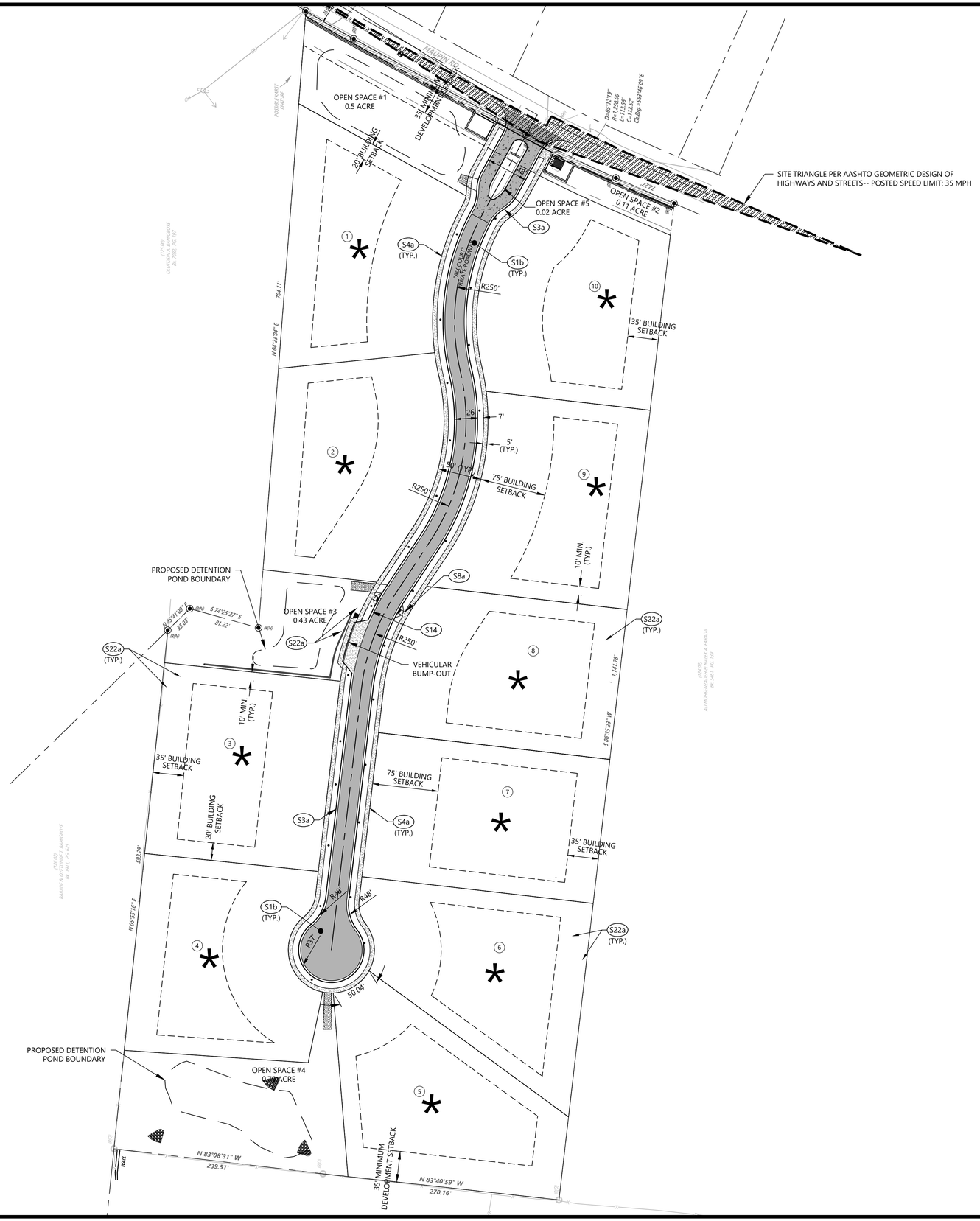


SITE LAYOUT KEYNOTES

CODE	DESCRIPTION	DET #/SHT #
S1a	ASPHALT PAVEMENT - LIGHT DUTY	
S1b	ASPHALT PAVEMENT - HEAVY DUTY	
S2	CONCRETE PAVEMENT	
S3a	CONCRETE CURB & GUTTER	
S3b	CONCRETE POST CURB	
S3c	CONCRETE EXTRUDED CURB	
S4a	CONCRETE SIDEWALK	
S5	SIDEWALK JOINTS	
S6	ACCESSIBLE SYMBOL	
S8a	ACCESSIBLE RAMP	
S8b	ACCESSIBLE WINGED RAMP	
S8c	SIDEWALK TRANSITION	
S9	TACTILE WARNING SURFACE	
S14	10 UNIT CBU ON BRICK PAD	
S15	UTILITY PAD	
S17	DRIVEWAY RAMP	
S18	DIRECTIONAL ARROWS	
S19	PEDESTRIAN CROSSWALK	
S20b	WOODEN SCREEN FENCE (SPECIFY HEIGHT)	
S22a	CONCRETE RETAINING WALL	
S22b	SEGMENTAL RETAINING WALL	
S23	PAINTED STOP BAR (SPECIFY WIDTH)	

SITE SIGNAGE KEYNOTES

CODE	DESCRIPTION	DET #/SHT #
SG1a	ACCESSIBLE PARKING SIGN	
SG1b	ACCESSIBLE PARKING SIGN IN BOLLARD	
SG2	ACCESSIBLE PASSENGER LOADING/UNLOADING SIGN	
SG3	"STOP" SIGN	
SG4	"DO NOT ENTER" SIGN	
SG5	"ONE WAY" SIGN	
SG6	FIRE LANE SIGNAGE	
SG7	DIRECTIONAL SIGNAGE	

PROPOSED FEATURES LEGEND

BUILDING
CONCRETE PAVEMENT
CONCRETE SIDEWALK
HEAVY DUTY PAVEMENT
LIGHT DUTY PAVEMENT
TACTILE WARNING
PAINTED STRIPE
CONCRETE CURB & GUTTER
CONCRETE POST CURB
CENTERLINE

NOTES:
1. SEE SHEET C2.0 FOR GENERAL AND SITE LAYOUT NOTES.
2. SEE SHEET C5.1 FOR DETAILED LAYOUT INFORMATION AT MAIN ENTRANCE.
3. LOTS WITH (*) DENOTE TRANSITIONAL LOTS OF 15% OR GREATER.

LOT AND OPEN SPACE AREAS

LOT 1	1.00 AC	43,709.2 S.F.
LOT 2	1.00 AC	43,744.03 S.F.
LOT 3	1.00 AC	43,598.41 S.F.
LOT 4	1.00 AC	43,723.32 S.F.
LOT 5	1.01 AC	44,145.27 S.F.
LOT 6*	1.01 AC	43,853.21 S.F.
LOT 7*	1.00 AC	43,715.91 S.F.
LOT 8*	1.01 AC	44,056.89 S.F.
LOT 9	1.00 AC	43,645.08 S.F.
LOT 10	1.03 AC	44,770.47 S.F
OPEN SPACE #1	0.50 AC	
OPEN SPACE #2	0.11 AC	
OPEN SPACE #3	0.43 AC	
OPEN SPACE #4	0.75 AC	
OPEN SPACE #5	0.02 AC	

Know what's below.
Call before you dig.

N

0 60 120 180
GRAPHIC SCALE (IN FEET)

658 GRASSMERE PARK DRIVE
SUITE 100
NASHVILLE, TN 37211
(615) 385-4144

PRELIMINARY

GARY W. O'BRIEN
REGISTERED ENGINEER
10-100936
STATE OF TENNESSEE
12-20-2022

NO.	DATE	DESCRIPTION	BY	CHK	APV

SITE LAYOUT PLAN

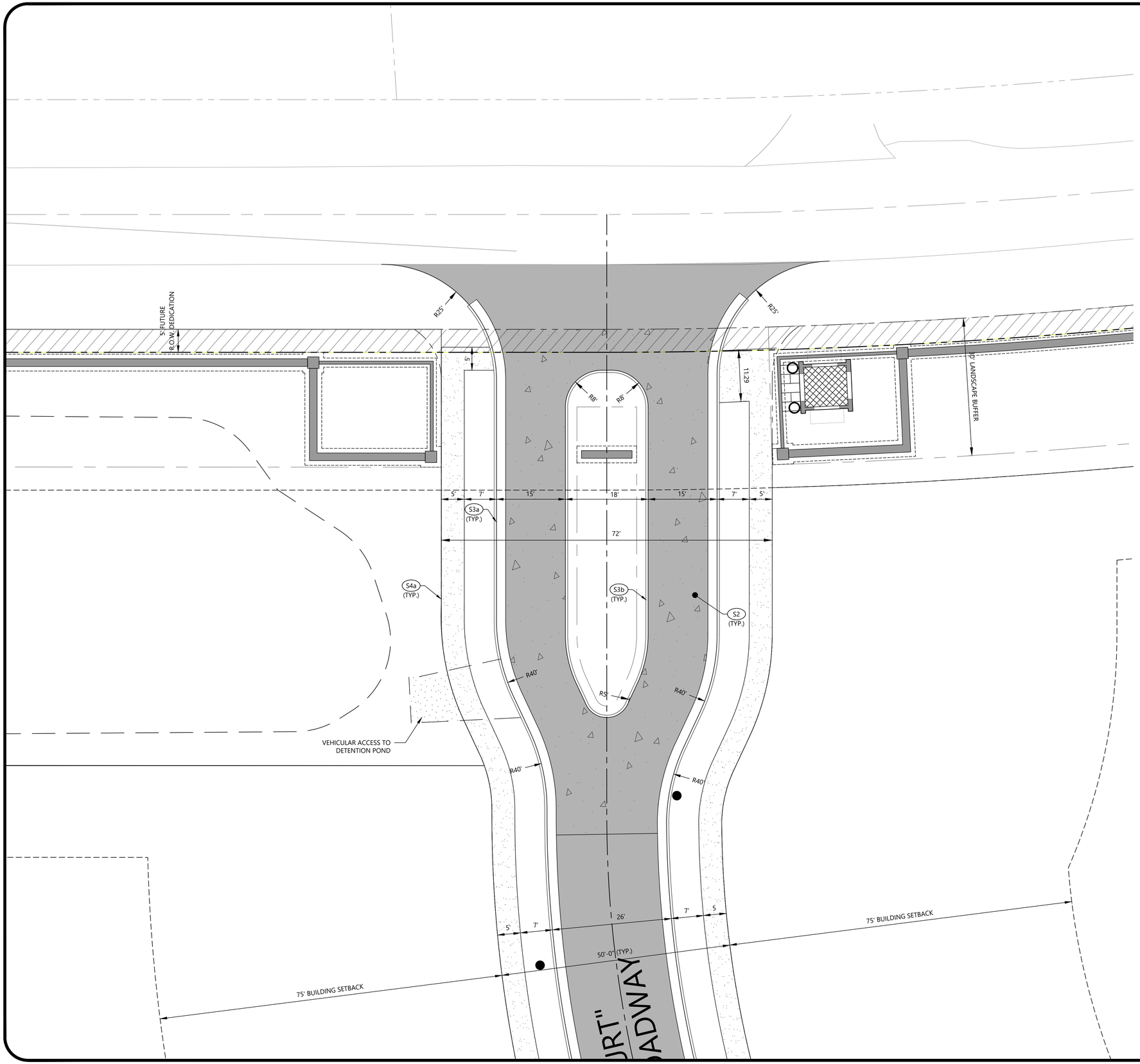
PRELIMINARY CONSTRUCTION PLANS
AIX RETREAT
9919 MAUPIN ROAD, BRENTWOOD, TN 37027

PROJECT NUMBER
211740

DRAWING NUMBER
C5.0

ORIGINAL SIZE: 24"X36" DRAWING PATH: T:\R&D\Projects\2021\211740_Molette_Maupin Road_Brentwood\CAD\Construction\211740_LAY

TIME STAMP: 12/20/2022 11:31 AM



SITE LAYOUT KEYNOTES

CODE	DESCRIPTION	DET #/SHT #
S1a	ASPHALT PAVEMENT - LIGHT DUTY	
S1b	ASPHALT PAVEMENT - HEAVY DUTY	
S2	STAMPED CONCRETE PAVEMENT	
S3a	CONCRETE CURB & GUTTER	
S3b	CONCRETE POST CURB	
S3c	CONCRETE EXTRUDED CURB	
S4a	CONCRETE SIDEWALK	
S5	SIDEWALK JOINTS	
S6	ACCESSIBLE SYMBOL	
S8a	ACCESSIBLE RAMP	
S8b	ACCESSIBLE WINGED RAMP	
S8c	SIDEWALK TRANSITION	
S9	TACTILE WARNING SURFACE	
S14	BOLLARD	
S15	UTILITY PAD	
S17	DRIVEWAY RAMP	
S18	DIRECTIONAL ARROWS	
S19	PEDESTRIAN CROSSWALK	
S20b	WOODEN SCREEN FENCE (SPECIFY HEIGHT)	
S22a	CONCRETE RETAINING WALL	
S22b	SEGMENTAL RETAINING WALL	
S23	PAINTED STOP BAR (SPECIFY WIDTH)	

PROPOSED FEATURES LEGEND

- BUILDING
- CONCRETE PAVEMENT
- CONCRETE SIDEWALK
- HEAVY DUTY PAVEMENT
- LIGHT DUTY PAVEMENT
- TACTILE WARNING
- PAINTED STRIPE
- CONCRETE CURB AND GUTTER
- CENTERLINE

NOTES:
1. SEE SHEET C2.0 FOR GENERAL AND SITE LAYOUT NOTES.

Know what's below.
Call before you dig.

0 20 40 60
GRAPHIC SCALE (IN FEET)

658 GRASSMERE PARK DRIVE
SUITE 100
NASHVILLE, TN 37211
(615) 385-4144

GARY W. O'BRIEN
10-100936
STATE OF TENNESSEE
REGISTERED ENGINEER
12-20-2022

NO.	DATE	DESCRIPTION	BY	CHK	APV

DETAILED SITE LAYOUT PLAN

PRELIMINARY CONSTRUCTION PLANS
AIX RETREAT
9919 MAUPIN ROAD, BRENTWOOD, TN 37027

PROJECT NUMBER
211740

DRAWING NUMBER
C5.1

ORIGINAL SIZE: 24"X36" DRAWING PATH: T:\P&D\Projects\2021\211740_Mollette_Maupin Road_Brentwood\CAD\Construction\211740_LAY

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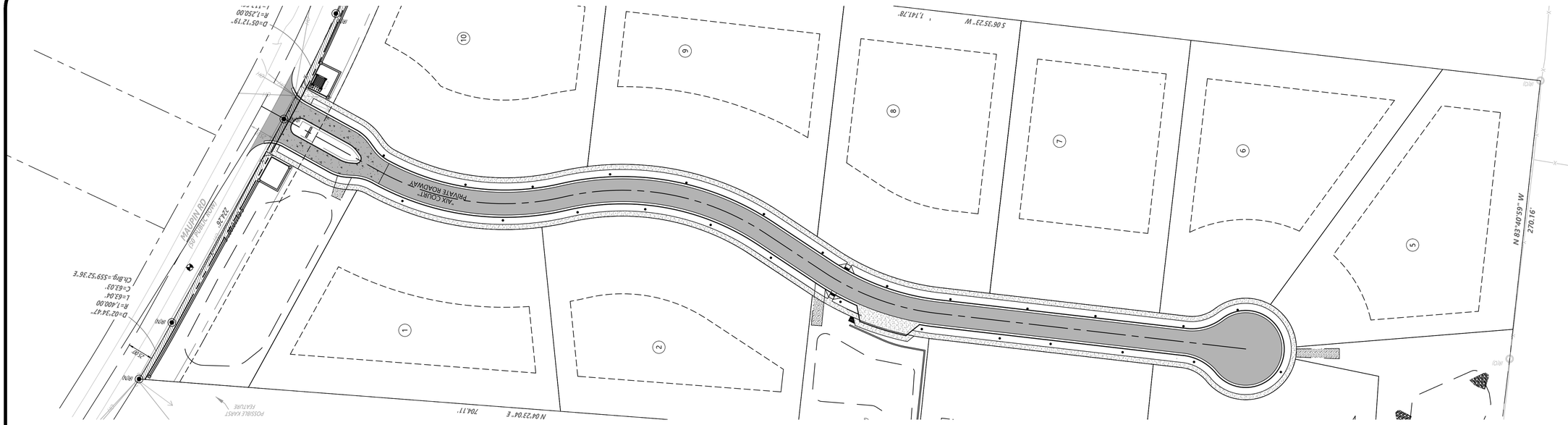

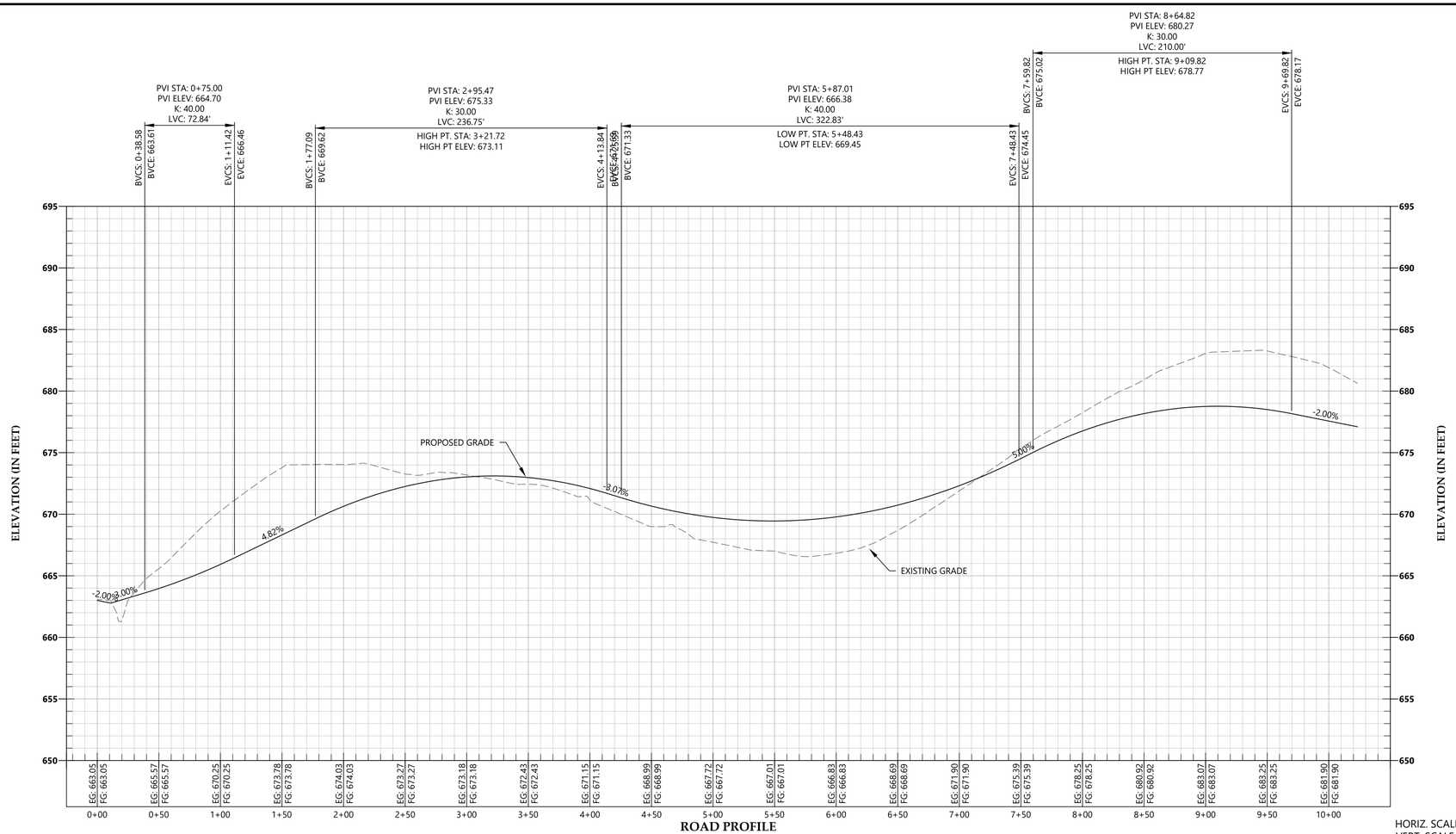

ROAD PROFILE

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

Know what's below.
Call before you dig.

N

0 50 100 150
GRAPHIC SCALE (IN FEET)

658 GRASSMERE PARK DRIVE
SUITE 100
NASHVILLE, TN 37211
(615) 385-4144

PRELIMINARY

GARY W. O'BRIEN
REGISTERED ENGINEER
19-100936
STATE OF TENNESSEE
12-20-2022

NO.	DATE	DESCRIPTION	BY	CHK	APV

ROAD PLAN & PROFILE

PRELIMINARY CONSTRUCTION PLANS
AIX RETREAT
9919 MAUPIN ROAD, BRENTWOOD, TN 37027

PROJECT NUMBER
211740

DRAWING NUMBER
C5.2

ORIGINAL SIZE: 24"X36" DRAWING PATH: T:\R&D\Projects\2021\211740_Molette_Maupin Road_Brentwood\CAD\Construction\211740_LAY

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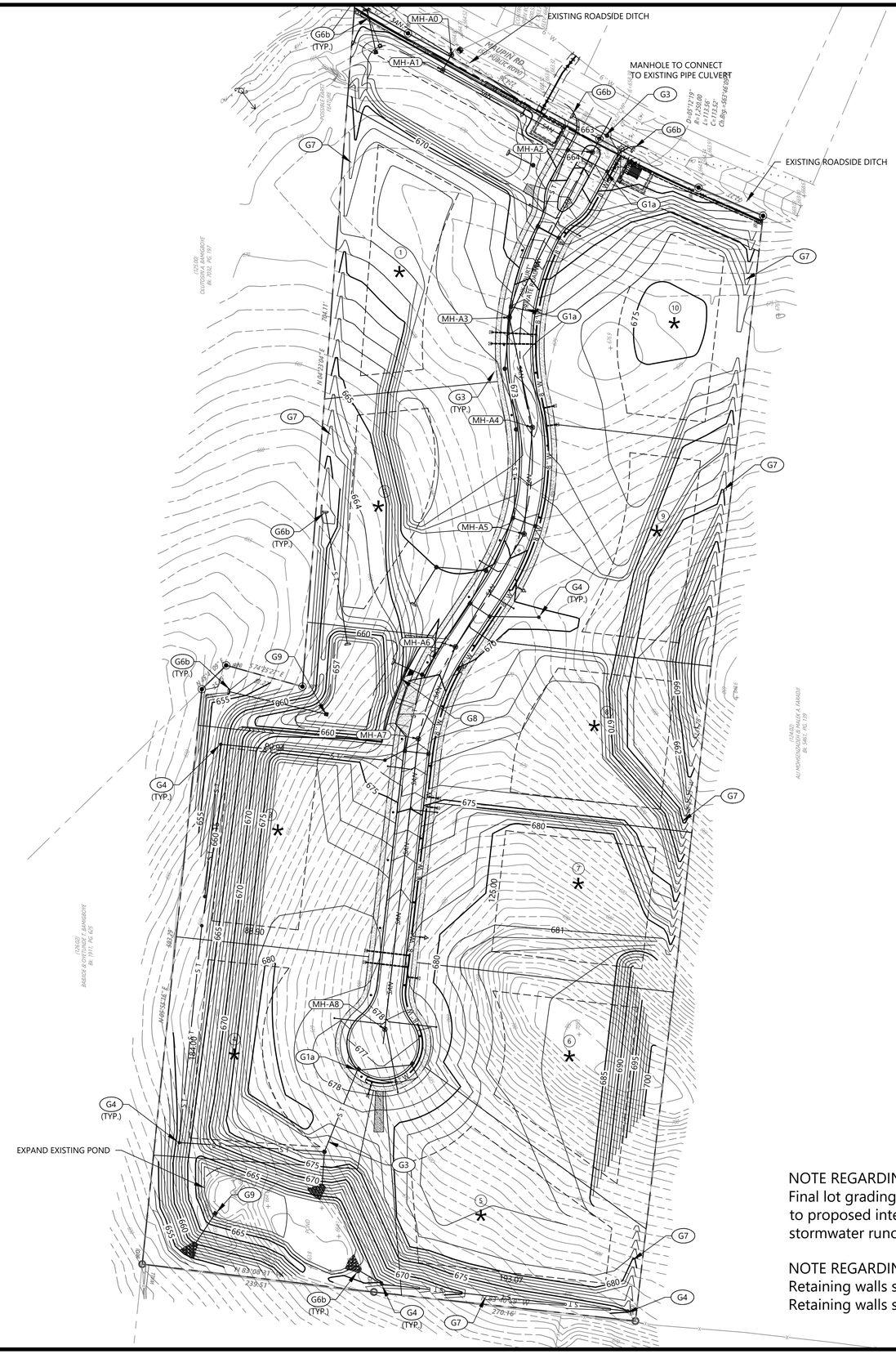

GRADING & DRAINAGE KEYNOTES

CODE	DESCRIPTION	DET #/SHT #
G1a	CURB INLET	
G1b	DOUBLE CURB INLET	
G2a	CATCH BASIN	
G2b	DOUBLE CATCH BASIN	
G3	JUNCTION MANHOLE	
G4	AREA DRAIN	
G5	CLEANOUT	
G6a	CONCRETE HEADWALL - STRAIGHT	
G6b	CONCRETE HEADWALL - WINGED	
G6c	TDOT U-SHAPED ENDWALL	
G7	DIVERSION DITCH	
G8	CONCRETE RETAINING WALL	
G9	DETENTION POND OUTLET STRUCTURE	
G10	WATER QUALITY STRUCTURE	
G11	CURB CUT	
G12	SIDEWALK DRAIN	
G13	TRENCH DRAIN	
G14	SILT FENCE	
G15	RIPRAP AT HEADWALL	
G16	RAIN GARDEN	
G17	TRANSITION FROM FLUSH CONDITION TO 6" CURB OVER XX FEET	
G18	MATCH EXISTING GRADE	
G19	FLUSH CONDITION	

NOTES:
1. SEE SHEET C2.0 FOR GENERAL AND GRADING NOTES.

PROPOSED FEATURES LEGEND

- STORM PIPE — S T —
- SPOT ELEVATION + 9.05
- PROPOSED MAJOR CONTOUR — 90 —
- PROPOSED MINOR CONTOUR — 92 —
- DRAINAGE STRUCTURE (C3)
- STORMWATER POND
- WATER QUALITY FEATURE
- CURB INLET
- CATCH BASIN
- CLEANOUT
- JUNCTION STRUCTURE (SD)
- OUTLET STRUCTURE
- HEADWALL/ENDWALL
- AREA DRAIN
- ROOF LEADERS — R D —
- SILT FENCE — SF —
- TREE PROTECTION — T P —
- INLET PROTECTION

* INDICATES TRANSITIONAL LOTS WITH A SLOPE OF >15%

NOTE REGARDING FINAL GRADING AND DRAINAGE:
Final lot grading shall reflect convenyance of stormwater runoff to proposed internal stormwater infrastructure. Post-Construction stormwater runoff shall not exceed pre-development conditions.

NOTE REGARDING RETAINING WALLS:
Retaining walls shall not exceed 10' within MBSL.
Retaining walls shall not exceed 6' ht. outside of MBSL

Know what's below. Call before you dig.

N

0 60 120 180
GRAPHIC SCALE (IN FEET)
VERTICAL DATUM: NAVD 88
HORIZONTAL DATUM: NAD 83/27

658 GRASSMERE PARK DRIVE
SUITE 100
NASHVILLE, TN 37211
(615) 385-4144

GARY W. O'BRIEN
REGISTERED ENGINEER
10-100936
STATE OF TENNESSEE
12-20-2022

NO.	DATE	DESCRIPTION	BY	CHK	APV

GRADING & DRAINAGE PLAN

PRELIMINARY CONSTRUCTION PLANS
AIX RETREAT
9919 MAUPIN ROAD, BRENTWOOD, TN 37027

PROJECT NUMBER
211740

DRAWING NUMBER
C6.0

ORIGINAL SIZE: 24"X36" DRAWING PATH: T:\P&D\Projects\2021\211740_Molette_Maupin Road_Brentwood\CAD\Construction\211740_GRA

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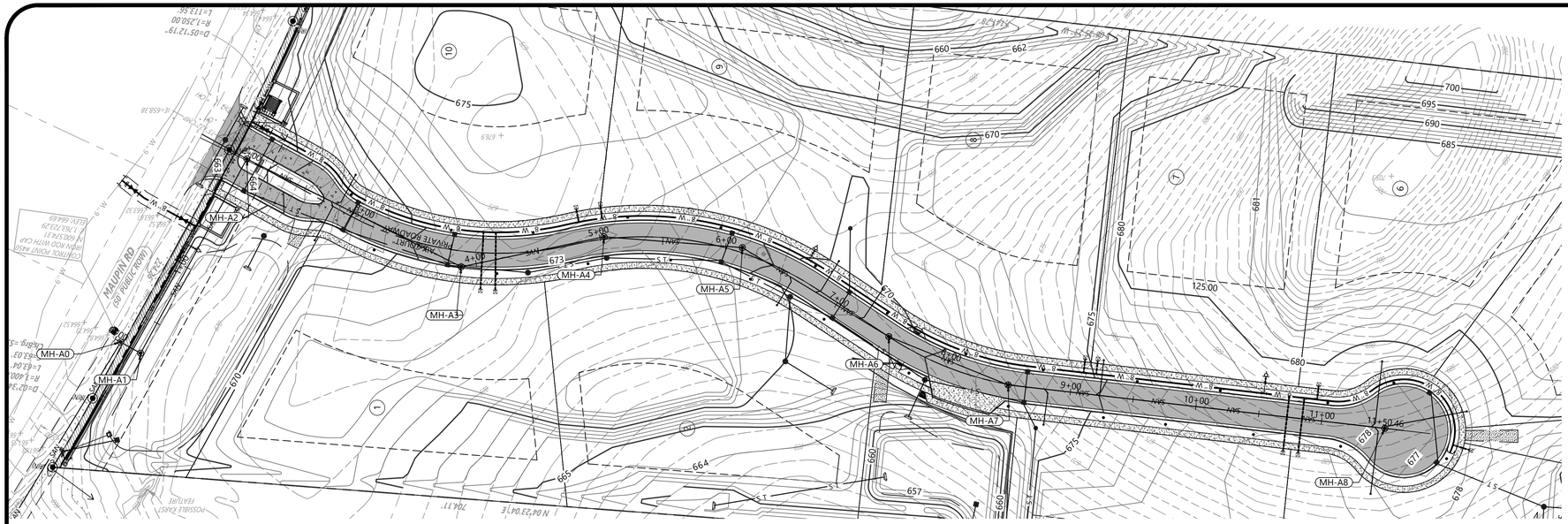
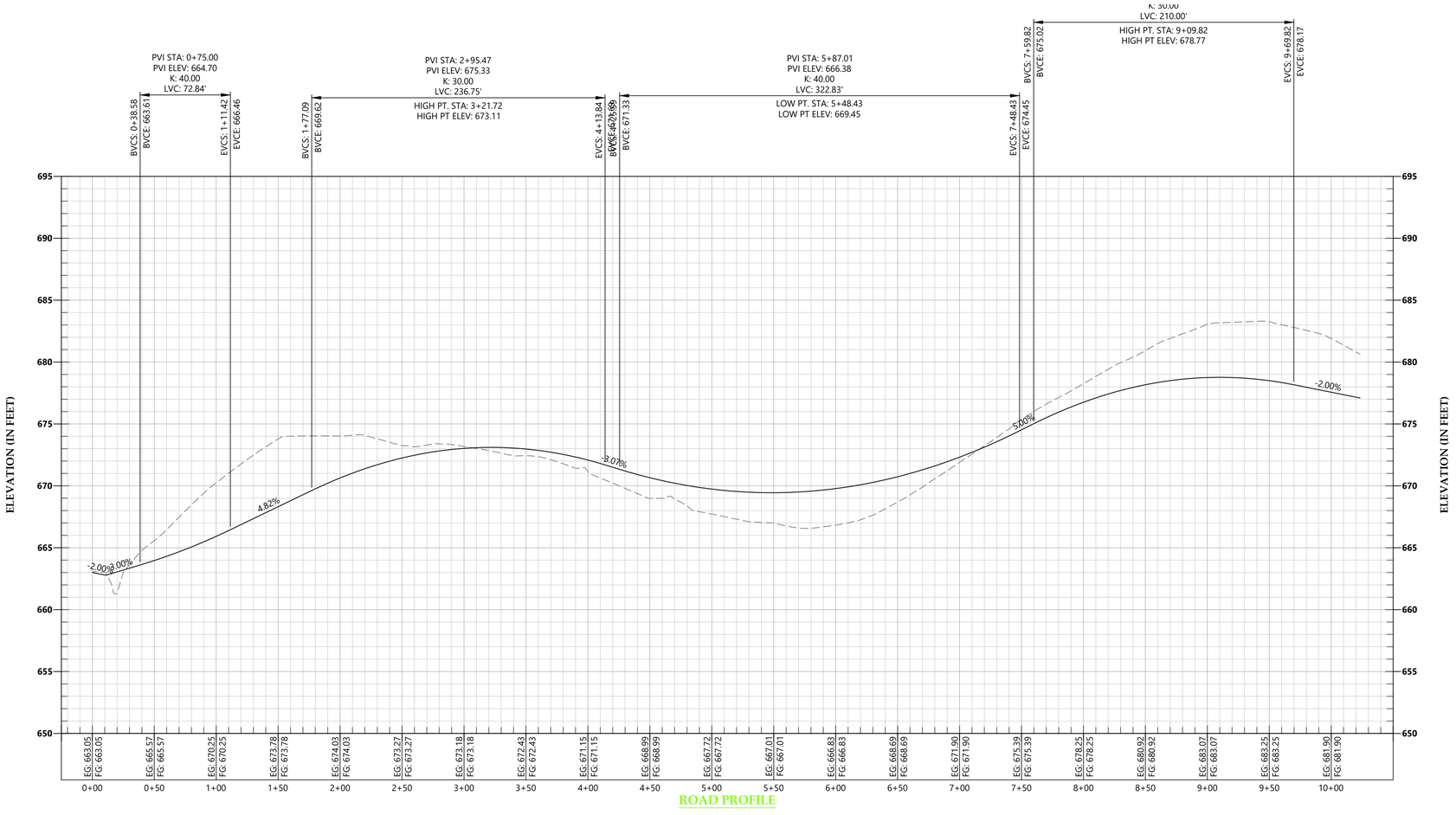


DRAINAGE PLAN
SCALE: 1" = 50'



ROAD PROFILE

DRAINAGE PROFILE
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'

GRADING & DRAINAGE KEYNOTES

CODE	DESCRIPTION	DET #/SHT #
G1a	CURB INLET	
G1b	DOUBLE CURB INLET	
G2a	CATCH BASIN	
G2b	DOUBLE CATCH BASIN	
G3	JUNCTION MANHOLE	
G4	AREA DRAIN	
G5	CLEANOUT	
G6a	CONCRETE HEADWALL - STRAIGHT	
G6b	CONCRETE HEADWALL - WINGED	
G7	BUILDING DOWNSPOUT CONNECTION	
G8	CONCRETE FLUME	
G9	DETENTION POND OUTLET STRUCTURE	
G10	WATER QUALITY STRUCTURE	
G11	CURB CUT	
G12	SIDEWALK DRAIN	
G13	TRENCH DRAIN	
G14	SILT FENCE	
G15	RIPRAP AT HEADWALL	
G16	RAIN GARDEN	
G17	TRANSITION FROM FLUSH CONDITION TO 6" CURB OVER XX FEET	
G18	MATCH EXISTING GRADE	
G19	FLUSH CONDITION	

NOTES:
1. SEE SHEET C2.0 FOR GENERAL AND GRADING NOTES.

PROPOSED FEATURES LEGEND

- STORM PIPE — S T
- SPOT ELEVATION — 9.05
- PROPOSED MAJOR CONTOUR — 90
- PROPOSED MINOR CONTOUR — 92
- DRAINAGE STRUCTURE — C3
- STORMWATER POND
- WATER QUALITY FEATURE
- CURB INLET
- CATCH BASIN
- CLEANOUT
- JUNCTION STRUCTURE — SD
- OUTLET STRUCTURE
- HEADWALL/ENDWALL
- AREA DRAIN
- ROOF LEADERS — R D
- SILT FENCE — SF
- TREE PROTECTION — T P
- INLET PROTECTION

Know what's below.
Call before you dig.

N

0 20 40 60
GRAPHIC SCALE (IN FEET)
VERTICAL DATUM: ########
HORIZONTAL DATUM: ##########

658 GRASSMERE PARK DRIVE
SUITE 100
NASHVILLE, TN 37211
(615) 385-4144

GARY W. O'BRIEN
10-100936
STATE OF TENNESSEE
REGISTERED ENGINEER
12-20-2022

NO.	DATE	DESCRIPTION	BY	CHK	APV

DRAINAGE PLAN & PROFILE

PRELIMINARY CONSTRUCTION PLANS
AIX RETREAT
9919 MAUPIN ROAD, BRENTWOOD, TN 37027

PROJECT NUMBER
211740

DRAWING NUMBER
C6.1

ORIGINAL SIZE: 24"X36" DRAWING PATH: T:\P&D\Projects\2021\211740_Molette_Maupin Road_Brentwood\CAD\Construction\211740_GRA

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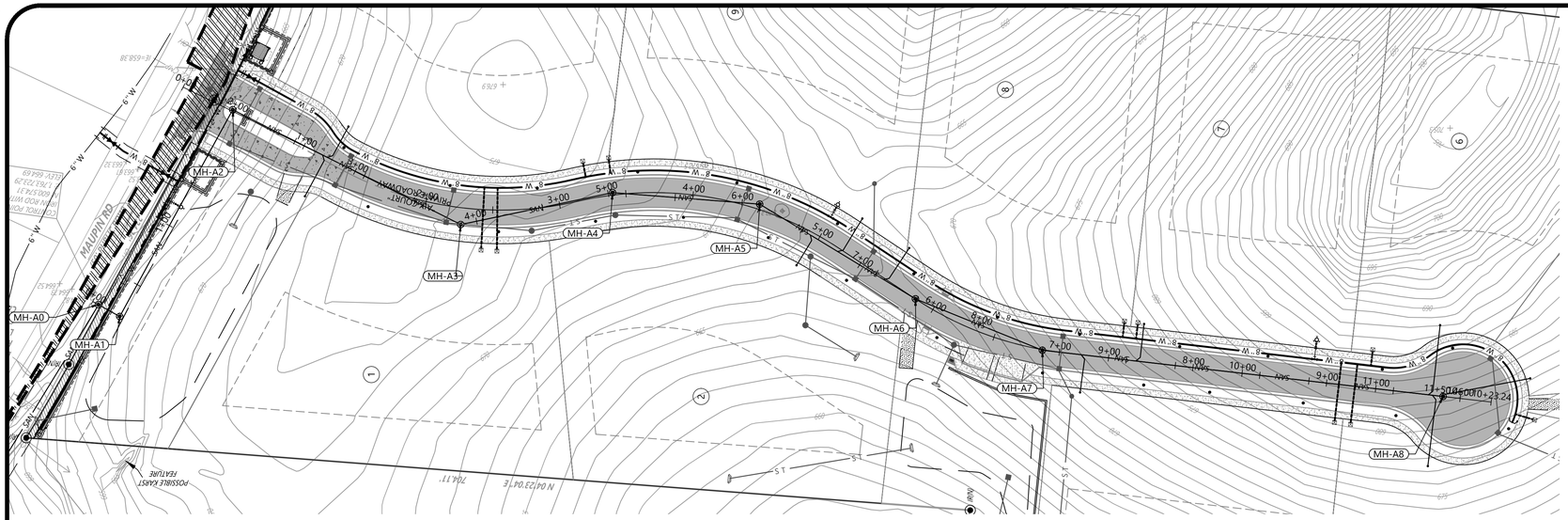
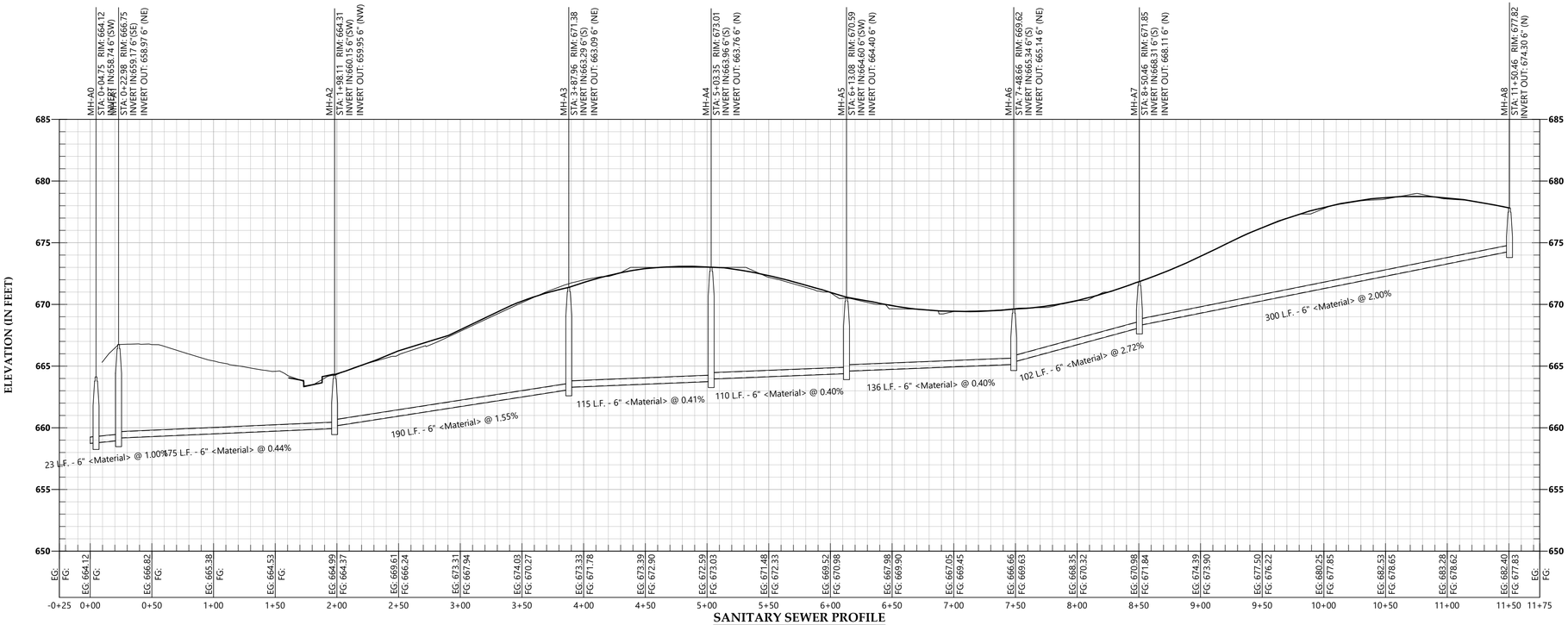
TIME STAMP: 12/20/2022 11:32 AM



UTILITY PLAN
SCALE: 1" = 50'_XREF



SANITARY SEWER PROFILE

UTILITY PROFILE
HORIZONTAL SCALE: 1" = 50'_XREF
VERTICAL SCALE: 1" = XX'

UTILITY KEYNOTES

CODE	DESCRIPTION	DET #/SHT #
U1a	(SIZE") - (MATERIAL) - WATER LINE	
U1b	(SIZE") - (MATERIAL) - WATER LINE	
U2a	(SIZE") - (MATERIAL) - FIRE LINE	
U2b	(SIZE") - (MATERIAL) - FIRE LINE	
U3a	(SIZE") - (MATERIAL) - IRRIGATION LINE	
U3b	(SIZE") - (MATERIAL) - IRRIGATION LINE	
U3b	(SIZE") - (MATERIAL) - IRRIGATION LINE	
U3b	(SIZE") - (MATERIAL) - IRRIGATION LINE	
U4a	(SIZE") - (MATERIAL) - WATER METER	
U4b	(SIZE") - (MATERIAL) - WATER METER	
U5	(SIZE") - REDUCED PRESSURE BACKFLOW PREVENTER	
U6	(SIZE") - DOUBLE DETECTOR CHECK VALVE ASSEMBLY	
U7a	WATER BLOCKING/KICKERS	
U7b	90° BEND	
U7c	45° BEND	
U8	POST INDICATOR VALVE	
U9	FIRE DEPARTMENT CONNECTION	
U10	FIRE HYDRANT ASSEMBLY	
U11a	(SIZE") - WATER VALVE	
U11b	(SIZE") - WATER VALVE	
U12a	(SIZE") - TEE	
U12b	(SIZE") - TEE	
U20a	(SIZE") - (MATERIAL) - SANITARY SEWER LINE	
U20b	(SIZE") - (MATERIAL) - SANITARY SEWER LINE	
U21	(SIZE") - (MATERIAL) - SANITARY SEWER FORCE MAIN	
U22	SANITARY SEWER MANHOLE	
U23	SANITARY SEWER CLEANOUT	
U24	GREASE INTERCEPTOR	
U30	(SIZE") - (MATERIAL) - NATURAL GAS LINE	SEE PLUMB. PLANS
U31	(SIZE") - NATURAL GAS METER	SEE PLUMB. PLANS
U40	ELECTRIC TRANSFORMER	SEE ELEC. PLANS
U41	UNDERGROUND ELECTRIC LINE	SEE ELEC. PLANS
U42	OVERHEAD ELECTRIC LINE	SEE ELEC. PLANS
U43	UNDERGROUND COMMUNICATION LINE	SEE COMM. PLANS
U44	OVERHEAD COMMUNICATION LINE	SEE COMM. PLANS
U45	SITE LIGHTING	SEE ELEC. PLANS
U46	(NUMBER) - (SIZE") - CONDUIT SLEEVES	SEE ELEC. PLANS
U50	BUILDING CONNECTIONS	SEE ELEC. PLANS

NOTES:
1. SEE SHEET C2.0 FOR GENERAL AND UTILITY NOTES.

PROPOSED FEATURES LEGEND

- DOMESTIC SERVICE — DW
- FIRE SERVICE — FW
- GAS LINE — GAS
- UNDERGROUND ELECTRIC — UG-E
- WATER LINE WITH 90° THRUST BLOCK
- SANITARY SEWER LINE WITH CLEANOUT
- FIRE HYDRANT ASSEMBLY
- POST INDICATOR VALVE
- METER
- FIRE DEPARTMENT CONNECTION

Know what's below.
Call before you dig.

0 50 100 150
GRAPHIC SCALE (IN FEET)
VERTICAL DATUM: NAVD 88
HORIZONTAL DATUM: NAD 83/27

658 GRASSMERE PARK DRIVE
SUITE 100
NASHVILLE, TN 37211
(615) 385-4144

GARY W. O'BRIEN
REGISTERED ENGINEER
19-100936
STATE OF TENNESSEE
12-20-2022

NO.	DATE	DESCRIPTION	BY	CHK	APV

UTILITY PLAN & PROFILE

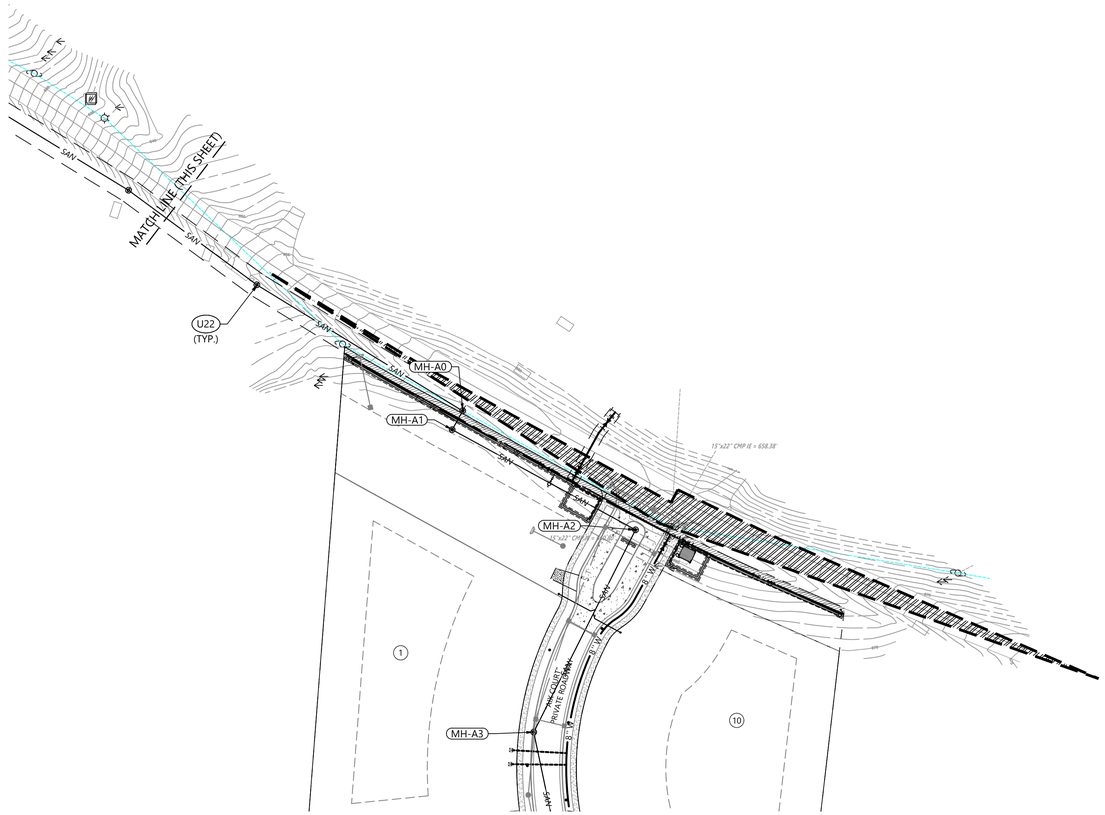
PRELIMINARY CONSTRUCTION PLANS
AIX RETREAT
9919 MAUPIN ROAD, BRENTWOOD, TN 37027

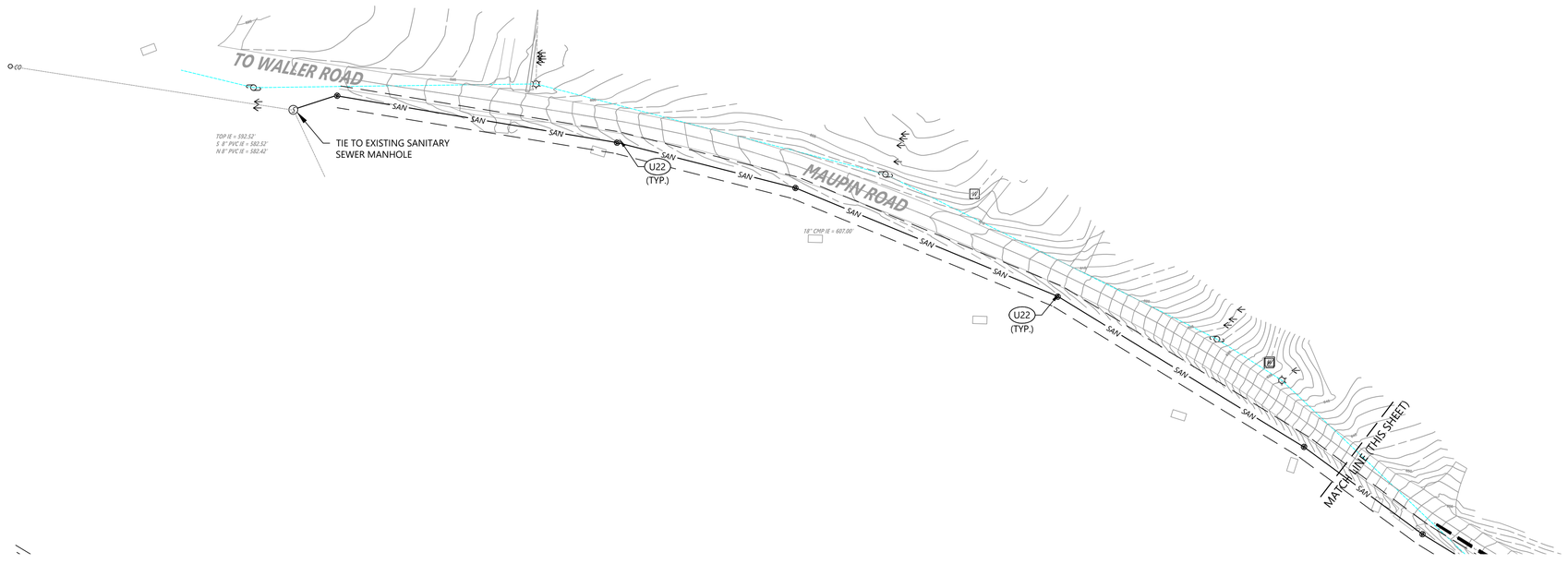
PROJECT NUMBER
211740

DRAWING NUMBER
C7.1

ORIGINAL SIZE: 24"X36" DRAWING PATH: T:\PBD\Projects\2021\211740_Molette_Maupin Road, Brentwood\CAD\Construction\211740_UTI

TIME STAMP: 12/20/2022 11:33 AM





UTILITY KEYNOTES

CODE	DESCRIPTION	DET #/SHT #
U1a	12" - (MATERIAL) - WATER LINE	
U1b	8" PVC - WATER LINE	
U2a	(SIZE") - (MATERIAL) - FIRE LINE	
U2b	(SIZE") - (MATERIAL) - FIRE LINE	
U3a	1 ¾" SCH. 40 PVC - IRRIGATION LINE	
U3b	1" SCH. 40 PVC- IRRIGATION LINE	
U3c	3/4" SCH. 40 PVC - IRRIGATION LINE	
U3d	1/2" SCH. 40 PVC - IRRIGATION LINE	
U4a	1" - WATER METER	
U4b	(SIZE") - (MATERIAL) - WATER METER	
U5	(SIZE") - REDUCED PRESSURE BACKFLOW PREVENTER	
U6	(SIZE") - DOUBLE DETECTOR CHECK VALVE ASSEMBLY	
U7a	WATER BLOCKING/KICKERS	
U7b	90° BEND	
U7c	45° BEND	
U8	POST INDICATOR VALVE	
U10	FIRE HYDRANT ASSEMBLY	
U11a	12" - WATER VALVE	
U11b	8" - WATER VALVE	
U12a	12"X8" - TEE	
U12b	12"X6" - TEE	
U20a	8" PVC - SANITARY SEWER LINE	
U20b	(SIZE") - (MATERIAL) - SANITARY SEWER LINE	
U22	SANITARY SEWER MANHOLE	
U23	SANITARY SEWER CLEANOUT	
U30	(SIZE") - (MATERIAL) - NATURAL GAS LINE	SEE PLUMB. PLANS
U31	(SIZE") - NATURAL GAS METER	SEE PLUMB. PLANS
U40	ELECTRIC TRANSFORMER	SEE ELEC. PLANS
U41	UNDERGROUND ELECTRIC LINE	SEE ELEC. PLANS
U42	OVERHEAD ELECTRIC LINE	SEE ELEC. PLANS
U43	UNDERGROUND COMMUNICATION LINE	SEE COMM. PLANS
U44	OVERHEAD COMMUNICATION LINE	SEE COMM. PLANS
U45	SITE LIGHTING	SEE ELEC. PLANS
U46	(NUMBER) - (SIZE") - CONDUIT SLEEVES	SEE ELEC. PLANS

NOTES:
1. SEE SHEET C2.0 FOR GENERAL AND UTILITY NOTES.

PROPOSED FEATURES LEGEND

- DOMESTIC SERVICE — DW
- FIRE SERVICE — FW
- GAS LINE — GAS
- UNDERGROUND ELECTRIC — UG-E
- WATER LINE WITH 90° THRUST BLOCK
- SANITARY SEWER LINE WITH CLEANOUT
- FIRE HYDRANT ASSEMBLY
- POST INDICATOR VALVE
- METER
- FIRE DEPARTMENT CONNECTION

Know what's below.
Call before you dig.

0 60 120 180
GRAPHIC SCALE 1"=60' (IN FEET)
VERTICAL DATUM: NAVD 88
HORIZONTAL DATUM: NAD 83/27

658 GRASSMERE PARK DRIVE
SUITE 100
NASHVILLE, TN 37211
(615) 385-4144

GARY W. O'BRIEN
REGISTERED ENGINEER
100936
STATE OF TENNESSEE
12-20-2022

NO.	DATE	DESCRIPTION	BY	CHK	APV

OFF-SITE SANITARY SEWER PLAN

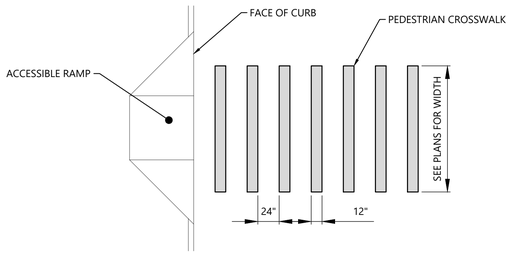
PRELIMINARY CONSTRUCTION PLANS
AIX RETREAT
9919 MAUPIN ROAD, BRENTWOOD, TN 37027

PROJECT NUMBER
211740

DRAWING NUMBER
C7.2

ORIGINAL SIZE: 24"X36" DRAWING PATH: T:\P&D\Projects\2021\211740_Mollette_Maupin Road_Brentwood\CAD\Construction\211740_UTL_OFFSITE

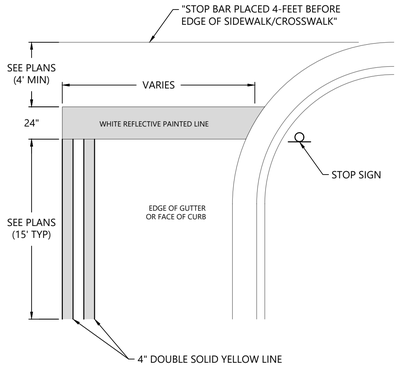
TIME STAMP: 12/20/2022 11:33 AM



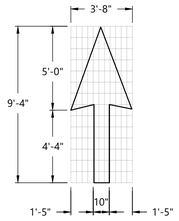
NOTES:

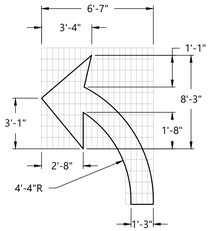
1. THE PEDESTRIAN CROSSWALK SHALL BE IN COMPLIANCE WITH ADAAG 403.3.
2. MARKINGS SHALL BE SOLID WHITE PAINTED ON ASPHALT.
3. PAINT 12" WIDE STRIPES AS INDICATED. USE PORTER "TRAFFIC WHITE" PAINT OR APPROVED EQUAL.

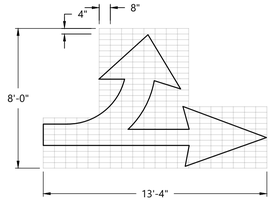
10 PEDESTRIAN CROSSWALK
NOT TO SCALE



7 PAINTED STOP BAR
NOT TO SCALE





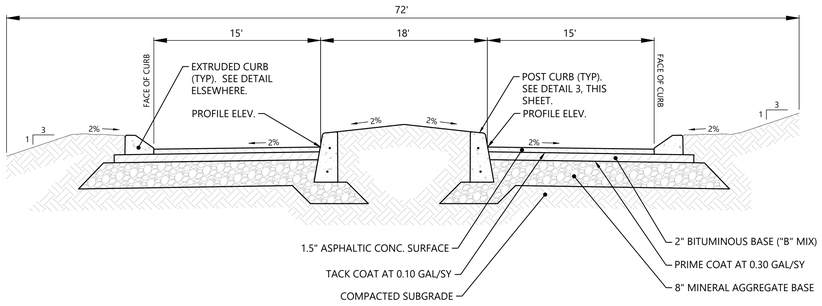


11 **ROADWAY DIRECTONAL ARROWS**
NO SCALE



FINAL KIOSK STRUCTURE SHALL BE APPROVED BY USPS PRIOR TO MAIL SERVICE

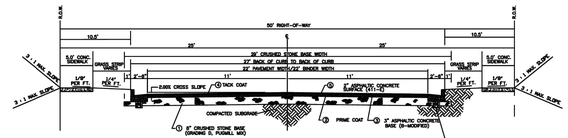
8 SAMPLE MAIL KIOSK
NOT TO SCALE



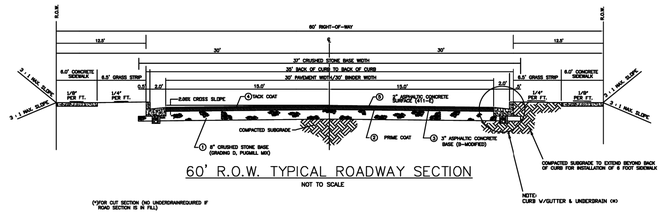
9 ENTRANCE DRIVE SECTION
NOT TO SCALE

CITY OF BRENTWOOD 1969

TYPICAL ROADWAY SECTION
DRAWING NO. 9
(NOT TO SCALE)

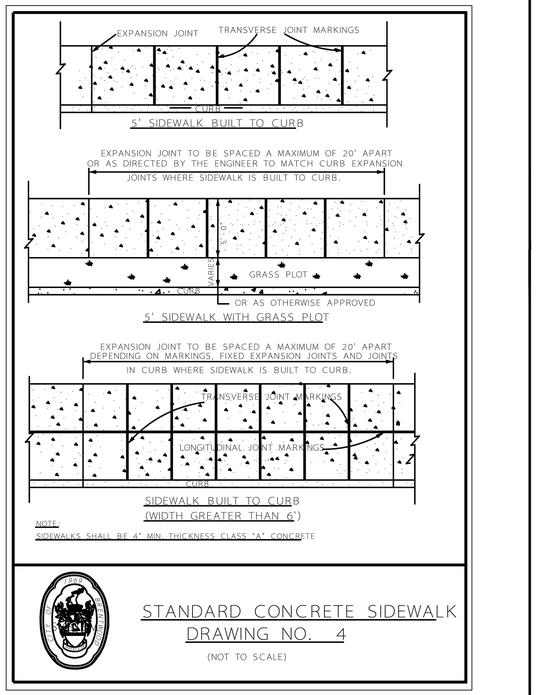


50' R.O.W. TYPICAL ROADWAY SECTION
NOT TO SCALE



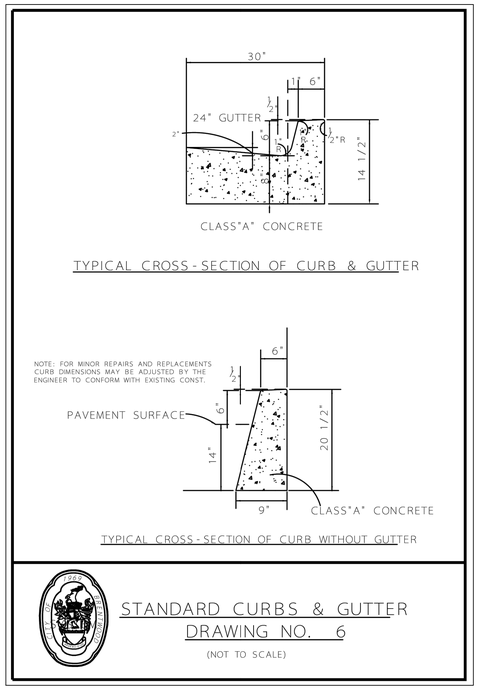
60' R.O.W. TYPICAL ROADWAY SECTION
NOT TO SCALE

1 50' R.O.W. TYPICAL ROADWAY SECTION
NOT TO SCALE



STANDARD CONCRETE SIDEWALK
DRAWING NO. 4
(NOT TO SCALE)

2 STANDARD CONCRETE SIDEWALK
NOT TO SCALE



STANDARD CURBS & GUTTER
DRAWING NO. 6
(NOT TO SCALE)

3 STANDARD CURB & GUTTER
NOT TO SCALE

658 GRASSMERE PARK DRIVE
SUITE 100
NASHVILLE, TN 37211
(615) 385-4144



NO.	DATE	DESCRIPTION	BY	CHK	APV

SITE DETAILS

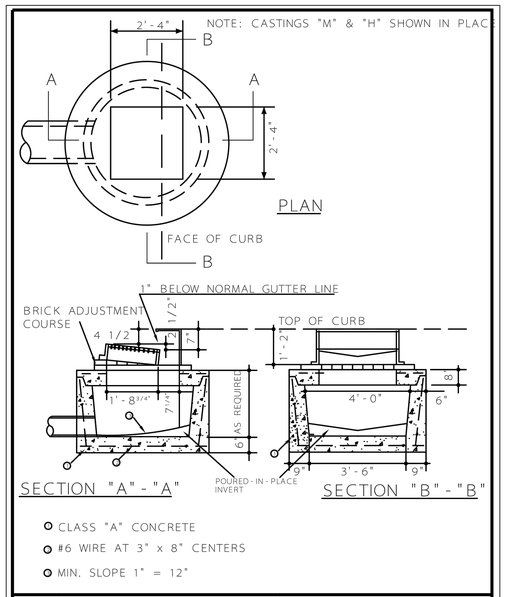
PRELIMINARY CONSTRUCTION PLANS
AIX RETREAT
9919 MAUPIN ROAD, BRENTWOOD, TN 37027

PROJECT NUMBER
211740

DRAWING NUMBER
C8.0

ORIGINAL SIZE: 24"X36" DRAWING PATH: T:\P&D\Projects\2021\211740_Mollette_Maupin Road_Brentwood\CAD\Construction\211740_DET

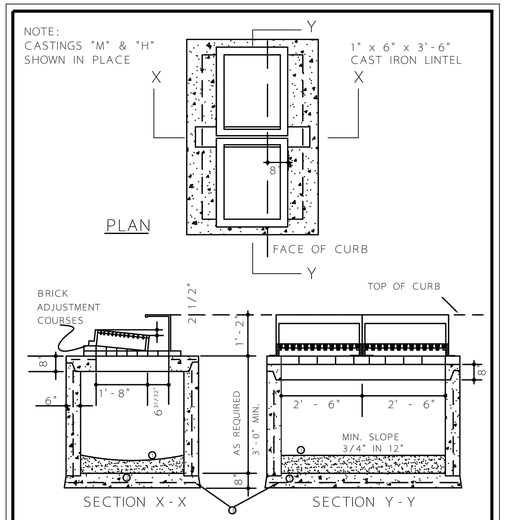
TIME STAMP: 12/20/2022 11:33 AM



- CLASS "A" CONCRETE
- #6 WIRE AT 3" x 8" CENTERS
- MIN. SLOPE 1" = 12"

DETAILS OF SINGLE INLET
DRAWING NO. 10
(NOT TO SCALE)

10 RESERVED
NOT TO SCALE

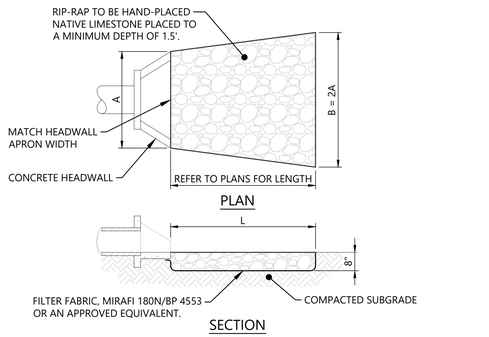


- POURED IN PLACE CONCRETE INVERTS
- CLASS "A" CONCRETE
- #3 WIRE AT 3"x8" CENTERS

DETAILS OF DOUBLE INLET
DRAWING NO. 12
(NOT TO SCALE)

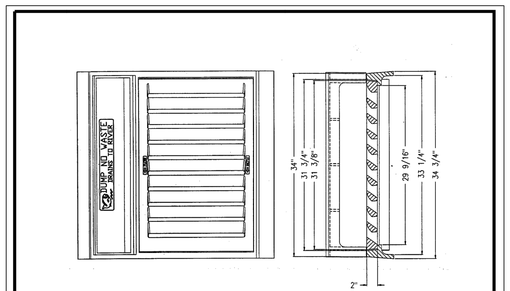
7 RESERVED
NOT TO SCALE

3 RESERVED
NOT TO SCALE



1. RIP-RAP STONE SHALL BE "FRACTURED FACED" WITH AT LEAST THREE DISTINCT SIDES. PROVIDE AND INSTALL IN ACCORDANCE WITH SECTION 709 OF THE CURRENT EDITION OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS - NASHVILLE - STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
2. d50 BY DEFINITION = 50 PERCENT OF THE STONE BY WEIGHT SHALL BE THE SIZE NOTED OR SMALLER.
3. THE CONTRACTOR SHALL UNIFORMLY DISTRIBUTE STONE SIZES THROUGHOUT THE RIP-RAP PAD.

1 RIP-RAP AT HEADWALLS
NOT TO SCALE



* MODEL 3300-V CURB INLET AS MANUFACTURED BY JBS OR EQUIVALENT.
** OPEN AREA = 1.88 SQ. FT.

STANDARD CATCH BASIN
DRAWING NO. 8
(NOT TO SCALE)

12 RESERVED
NOT TO SCALE

9 RESERVED
NOT TO SCALE

4 RESERVED
NOT TO SCALE



STRUCTURAL RETAINING WALL

BROADSTONE® 6IN - TRI-PLANE ST

The BroadStone series minimizes installation costs while maximizing structural performance and aesthetics. The lug connection system ensures setback and ease of installation. The vertically aligned cores enhance core fill placement and speed of installation. BroadStone delivers these advantages across a full line of block heights and face styles, including multi-piece and ashlar options that install at single-piece speed.



RETAINING WALLS · COLUMNS · STEPS



Tri-plane ST Unit

Unit Dimensions:
6"h x 18"w x 12"d (152mm x 457mm x 305mm)

Unit Weights:
54 lbs (24 kg)

Units/sq.ft.: .1

FEATURES & BENEFITS

Maximum Versatility and Performance
- Made of durable concrete with iron oxide pigments that resist fading in extended UV exposure. Meets or exceeds applicable requirements of ASTM C1372 for compressive strength, absorption and dimensional tolerance.
- A more vertical batter (¼" per course for all height units) maximizes buildable site area.

Ease of Installation
- Integral shear lugs easily mate with continuous shear channel to ensure setback and ease of installation.
- Vertically aligned cores make core-filling fast and complete, best-in-class weight and rounded grips make handling safer and easier.

Aesthetics
- Traditional angular face that showcases color contrast without bulges, craters or gaps.
- Capping units available.
- Variety of colors complement any landscape.

Note: Unit color, dimensions, weight, and availability varies by manufacturer.

Before specifying a specific product, please confirm availability with your local producer.

2 RETAINING WALL BLOCK MIN. STANDARD
NOT TO SCALE

658 GRASSMERE PARK DRIVE
SUITE 100
NASHVILLE, TN 37211
(615) 385-4144

GARY W. O'BRIEN
10-100936
STATE OF TENNESSEE
12-20-2022

NO.	DATE	DESCRIPTION	BY	CHK	APV

SITE DETAILS

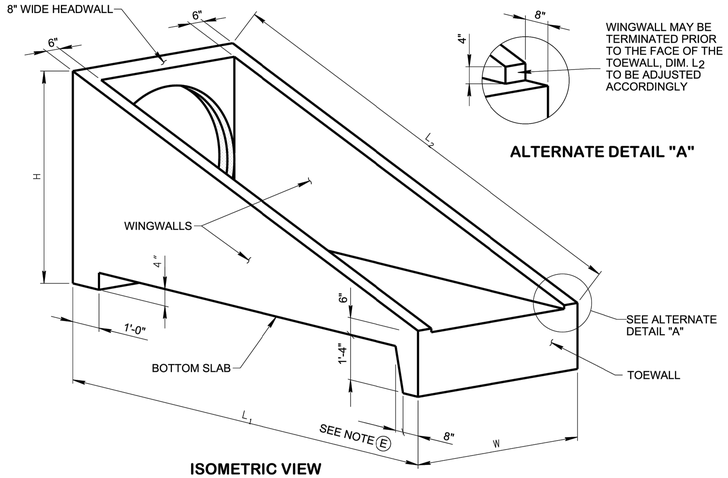
PRELIMINARY CONSTRUCTION PLANS
AIX RETREAT
9919 MAUPIN ROAD, BRENTWOOD, TN 37027

PROJECT NUMBER
211740

DRAWING NUMBER
C8.1

ORIGINAL SIZE: 24"X36" DRAWING PATH: T:\R&D\Projects\2021\211740_Mollette_Maupin Road_Brentwood\CAD\Construction\211740_DET

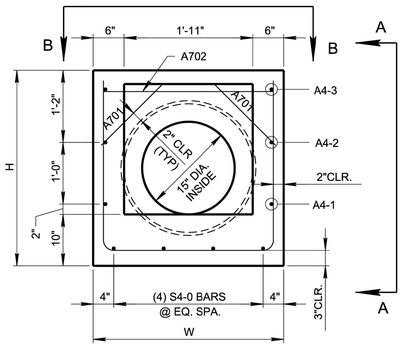
TIME STAMP- 12/20/2022 11:33 AM



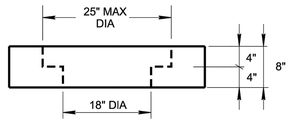
ISOMETRIC VIEW

NOTE: 3/4" CHAMFER REQUIRED ON ALL EXPOSED EDGES

ALTERNATE DETAIL "A"

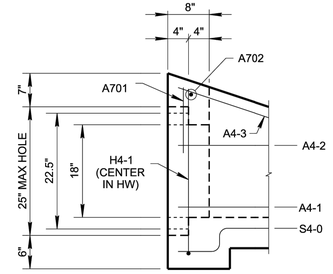


ELEVATION



PARTIAL VIEW B-B

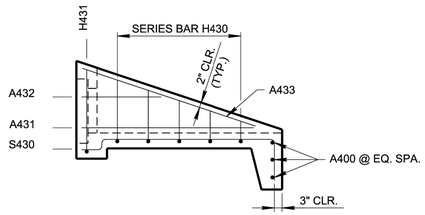
SEE NOTE F



PARTIAL VIEW A-A

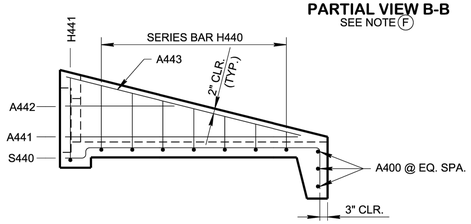
HEADWALL DETAILS

NOTES: INSTALL BARS A701 AT 45°
SEE GENERAL NOTES Ⓒ & Ⓕ



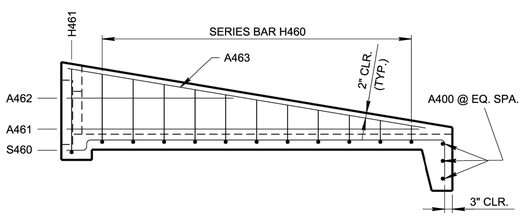
3:1 WINGWALL ELEVATION

NOTE: A-BARS IN HEADWALL NOT SHOWN FOR CLARITY.



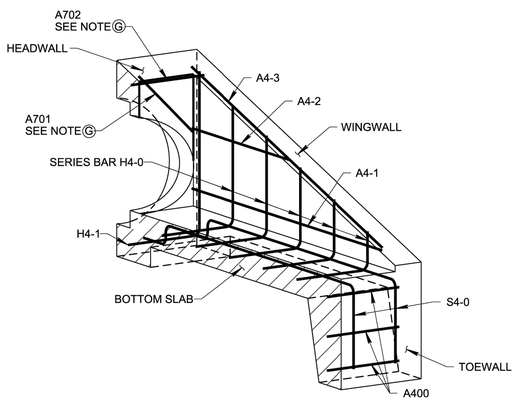
4:1 WINGWALL ELEVATION

NOTE: A-BARS IN HEADWALL NOT SHOWN FOR CLARITY.



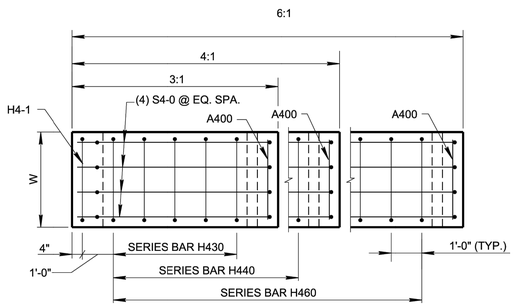
6:1 WINGWALL ELEVATION

NOTE: A-BARS IN HEADWALL NOT SHOWN FOR CLARITY.



ISOMETRIC HALF-SECTION SHOWING REINFORCEMENT

(3:1 SHOWN, 4:1 & 6:1 SIMILAR)
SEE GENERAL NOTE Ⓒ



BOTTOM SLAB PLAN

DIMENSIONS AND QUANTITIES FOR ONE ENDWALL 18" PIPE						
SLOPE	CONCRETE ENDWALL DIMENSIONS				ESTIMATED QUANTITIES	
	H	L_1	L_2	W	CLASS "A" CONC. CU. YD.	STEEL BAR REINF. LB.
3:1	3' - 2"	6' - 8"	7' - 0⅜"	2' - 11"	0.87	79
4:1		8' - 8"	8' - 11¼"		1.08	98
6:1		12' - 8"	12' - 10⅛"		1.49	137

GENERAL NOTES

Ⓐ DRAWING TO BE USED FOR ALL CAST-IN-PLACE AND ALL PRECAST 18" CONCRETE ENDWALLS (TYPE "U") FOR CROSS DRAINS ONLY. "U" ENDWALL TO BE PLACED AT 90° SKEW TO CENTERLINE. SEE STD. DWG. D-PE-99 FOR SKEWED CONNECTION DETAIL WHEN CROSS DRAIN IS NOT PERPENDICULAR TO CENTERLINE. CAST-IN-PLACE CONCRETE ENDWALL SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD SPECIFICATIONS, SECTION 611 AND/OR SPECIAL PROVISIONS.

Ⓑ SEE STD. DWG. D-PE-18B FOR BILL OF STEEL & PRECAST NOTES.

Ⓒ "-" IN BAR DESIGNATION REPRESENTS 3, 4 OR 6 FOR 3:1, 4:1 OR 6:1 SLOPES, RESPECTIVELY.

Ⓓ SPLICING OF REINFORCEMENT IS ACCEPTABLE PROVIDED THAT A MINIMUM 21" SPLICE LENGTH IS USED.

Ⓔ TOEWALL BACK SLOPE MAY BE CONSTRUCTED VARIABLE FROM VERTICAL UP TO 15°.

Ⓕ 90° STEPS ARE SHOWN ON THE STEPPED HOLE DETAIL, HOWEVER MINOR VARIATIONS OF THE TAPER ARE ACCEPTABLE.

Ⓖ OPTIONAL STEPPED HOLE OR HOLE FORMERS ARE ALLOWED PROVIDED THE AMOUNT OF COVER BETWEEN THE PIPE OPENING AND BARS A701 AND A702 IS THE SAME OR GREATER THAN SHOWN ON THIS DRAWING. .

Ⓗ PAYMENT WILL BE MADE UNDER:

611-07.54 18IN ENDWALL (CROSS DRAIN) 3:1 EACH
611-07.55 18IN ENDWALL (CROSS DRAIN) 4:1 EACH
611-07.56 18IN ENDWALL (CROSS DRAIN) 6:1 EACH

Ⓘ THE CONTRACTOR MAY ELECT TO SUBSTITUTE AN APPROVED ALTERNATIVE DESIGN.

Ⓙ DIMENSIONAL AND REINFORCING TOLERANCES WILL BE AS SHOWN IN STANDARD OPERATING PROCEDURE (SOP) 5-3.

- REV. 6-14-13: REVISED NOTE Ⓖ. ADDED NOTE Ⓗ AND Ⓘ
- REV. 1-6-15: REVISED HOLE OPENING SIZE. ADDED STEPPED HOLE DETAIL
- REV. 06-28-19: ADJUSTED ELEVATION VIEW. RENAMED AND REDREW SHEET.

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED

STATE OF TENNESSEE
STANDARD DRAWING
DEPARTMENT OF TRANSPORTATION

TYPE "U" CROSS DRAIN ENDWALL FOR 18" PIPE
(FOR 3:1, 4:1 & 6:1 SLOPES)

03-01-2012 | D-PE-18A

658 GRASSMERE PARK DRIVE
SUITE 100
NASHVILLE, TN 37211
(615) 385-4144



NO.	DATE	DESCRIPTION	BY	CHK	APV

SITE DETAILS

PRELIMINARY CONSTRUCTION PLANS
AIX RETREAT
9919 MAUPIN ROAD, BRENTWOOD, TN 37027

PROJECT NUMBER
211740

DRAWING NUMBER
C8.2

11/8/2019 11:42:39 AM
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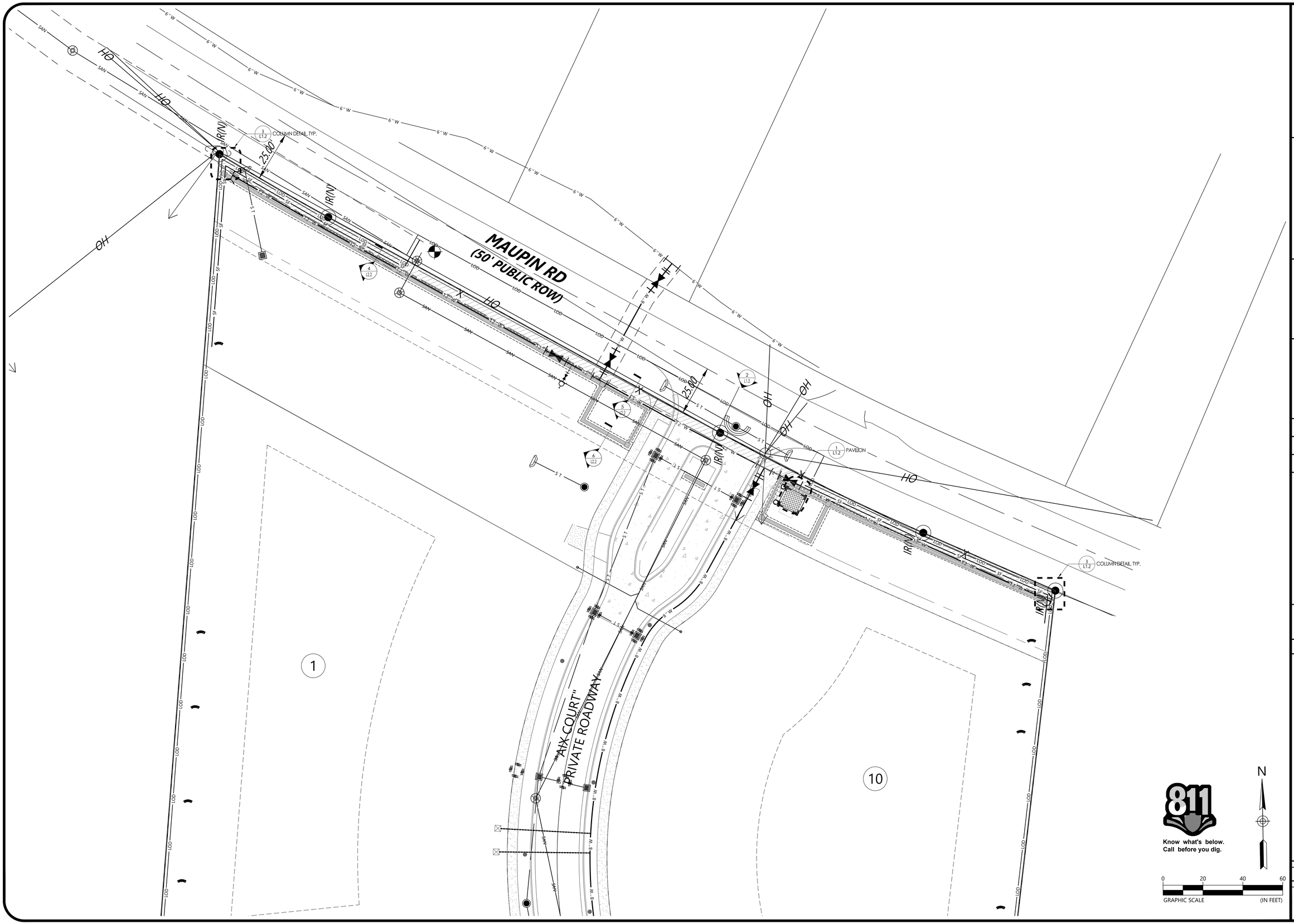
LLP
ORIGINAL SIZE: 24"X36" DRAWING PATH: T:\P&D\Projects\2021\211740_Molette_Maupin Road_Brentwood\CAD\Construction\211740_DET

NOT TO SCALE

1 TYPE "U" CROSS DRAIN ENDWALL

NOT TO SCALE



658 GRASSMERE PARK DRIVE
SUITE 100
NASHVILLE, TN 37211
(615) 385-4144

MICHAEL KENNEDY KAHNLE
REGISTERED
AGRICULTURE
COMMERCE
TENNESSEE NO. 1962
LANDSCAPE ARCHITECT

NO.	DATE	DESCRIPTION	BY	CHK	APV

HARDSCAPEE PLAN

PRELIMINARY CONSTRUCTION PLANS
AIX RETREAT
9919 MAUPIN ROAD, BRENTWOOD, TN 37027

PROJECT NUMBER
211740

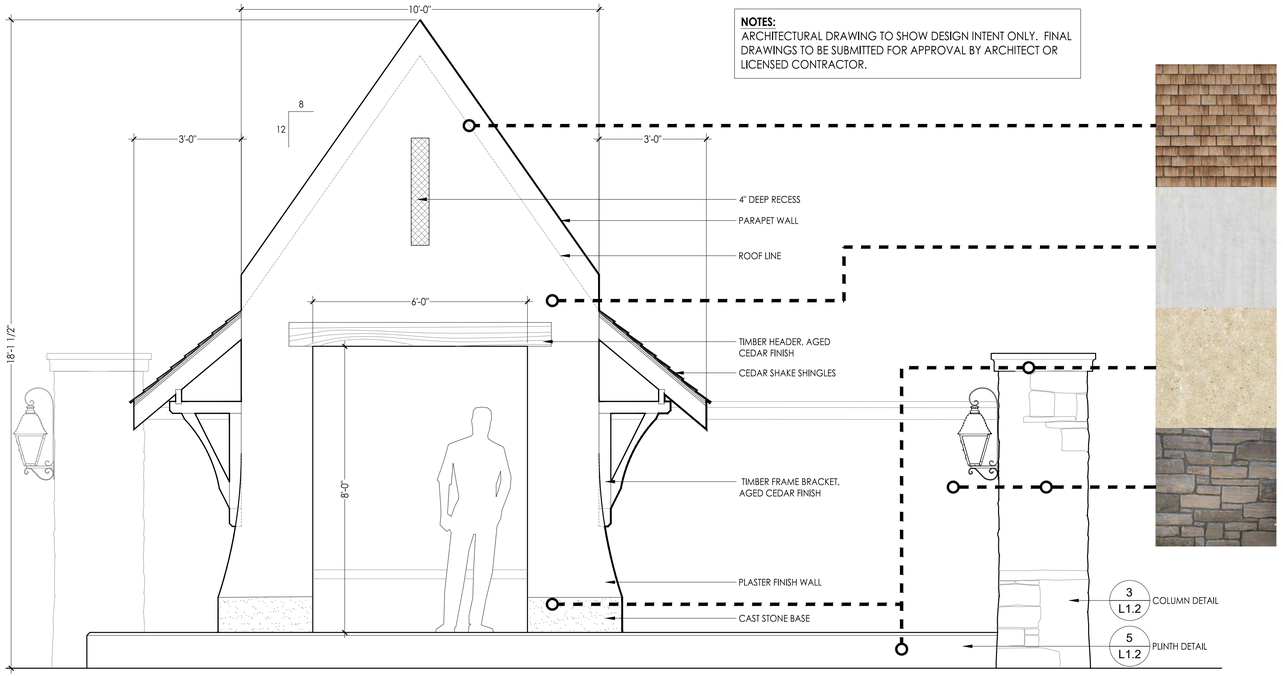
DRAWING NUMBER
L1.1

TIME STAMP: 12/20/2022 11:33 AM

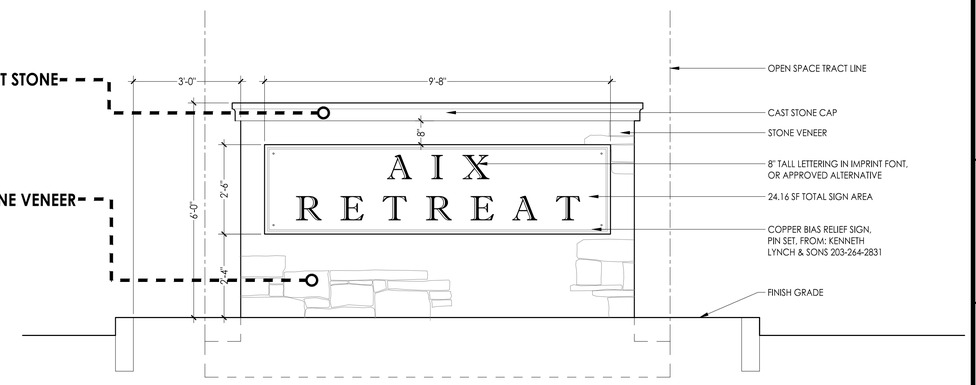
ORIGINAL SIZE: 24"X36" DRAWING PATH: T:\P&D\Projects\2021\211740_Molette_Maupin Road_Brentwood\CAD\Construction\211740_HAR

TIME STAMP: 12/20/2022 11:33 AM

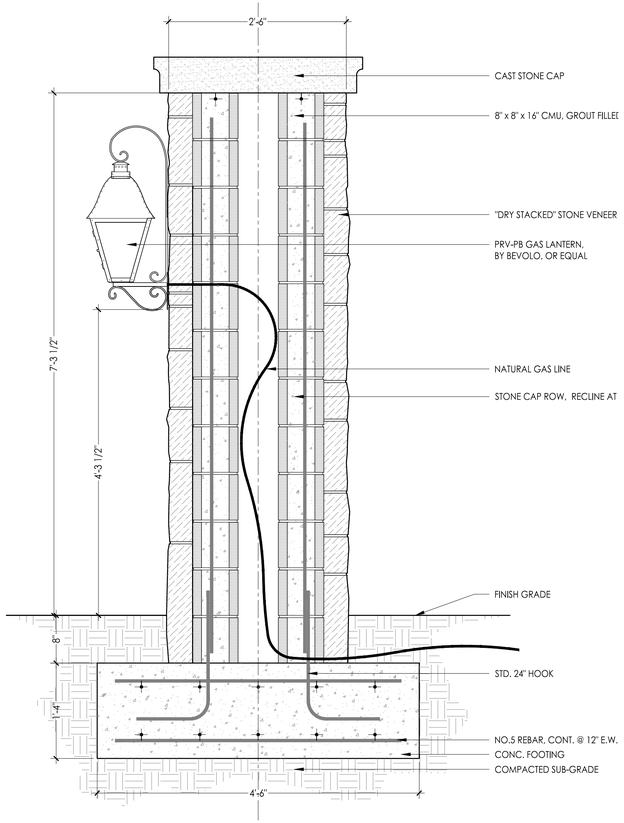
NOTES:
ARCHITECTURAL DRAWING TO SHOW DESIGN INTENT ONLY. FINAL DRAWINGS TO BE SUBMITTED FOR APPROVAL BY ARCHITECT OR LICENSED CONTRACTOR.



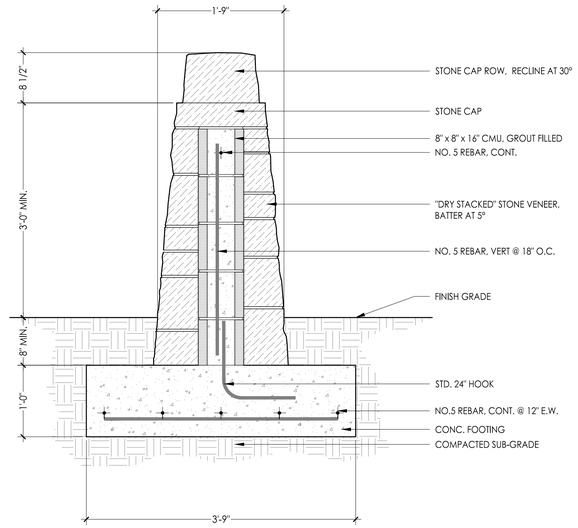
1 BUS SHELTER ELEVATION
SCALE: 1/2"=1'-0"



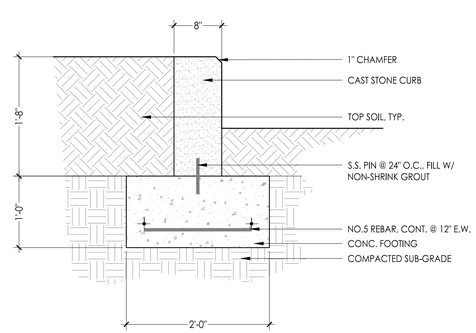
2 ENTRY SIGN
SCALE: 1/2"=1'-0"



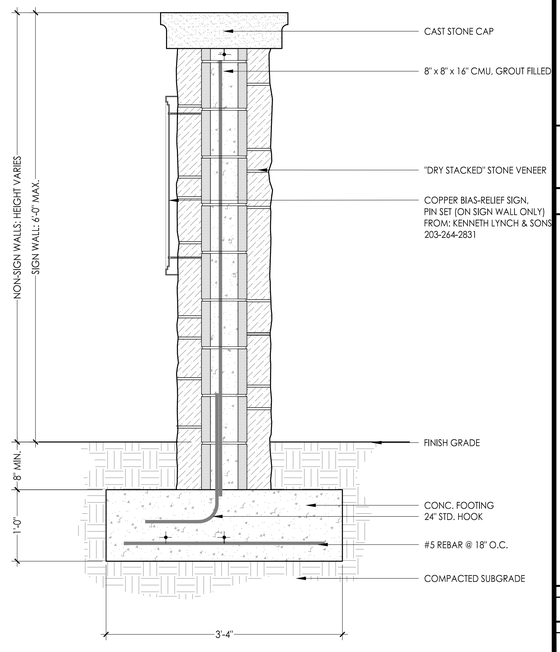
3 COLUMN DETAIL
SCALE: 1"=1'-0"



4 WALL DETAIL
SCALE: 1"=1'-0"



5 PLINTH DETAIL
SCALE: 1"=1'-0"



6 WALL DETAIL
SCALE: 1"=1'-0"

ORIGINAL SIZE: 24"X36" DRAWING PATH: T:\P&D\Projects\2021\211740_Molette_Maupin Road_Brentwood\CAD\Construction\211740_HAR

DRY STACKED STONE VENEER

658 GRASSMERE PARK DRIVE
SUITE 100
NASHVILLE, TN 37211
(615) 385-4144

MICHAEL KENNEDY KAHNLE
REGISTERED
AGRICULTURE
COMMERCE
TENNESSEE NO. 1042
LANDSCAPE ARCHITECT

NO.	DATE	DESCRIPTION	BY	CHK	APV

HARDSCAPEE DETAILS

PRELIMINARY CONSTRUCTION PLANS
AIX RETREAT
9919 MAUPIN ROAD, BRENTWOOD, TN 37027

PROJECT NUMBER
211740

DRAWING NUMBER
L1.2



1 BUS SHELTER VIGNETTE & FINISHES
SCALE: N.T.S.

658 GRASSMERE PARK DRIVE
SUITE 100
NASHVILLE, TN 37211
(615) 385-4144

MICHAEL KENNEDY KAHNLE
REGISTERED
AGRICULTURE
COMMERCE
TENNESSEE NO. 1842
LANDSCAPE ARCHITECT

NO.	DATE	DESCRIPTION	BY	CHK	APV

HARDSCAPEE DETAILS

PRELIMINARY CONSTRUCTION PLANS
AIX RETREAT
9919 MAUPIN ROAD, BRENTWOOD, TN 37027

PROJECT NUMBER
211740

DRAWING NUMBER
L1.3

TIME STAMP: 12/20/2022 11:33 AM

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TIME STAMP- 12/20/2022 11:34 AM

MAUPIN RD
(50' PUBLIC ROW)

"AIX COURT"
PRIVATE ROADWAY

POSSIBLE KARST FEATURE

SITE TRIANGLE PER AASHTO GEOMETRIC DESIGN OF HIGHWAYS AND STREETS-- POSTED SPEED LIMIT: 35 MPH

MATCHLINE SEE SHEET L2.2

Know what's below.
Call before you dig.

0 20 40 60
GRAPHIC SCALE (IN FEET)

N

658 GRASSMERE PARK DRIVE
SUITE 100
NASHVILLE, TN 37211
(615) 385-4144

MICHAEL KENNEDY KAIHLE
REGISTERED
AGRICULTURE
LANDSCAPE
TENNESSEE NO. 3842
LANDSCAPE ARCHITECT

NO.	DATE	DESCRIPTION	BY	CHK	APV

DETAILED LANDSCAPE PLAN

PRELIMINARY CONSTRUCTION PLANS
AIX RETREAT
9919 MAUPIN ROAD, BRENTWOOD, TN 37027

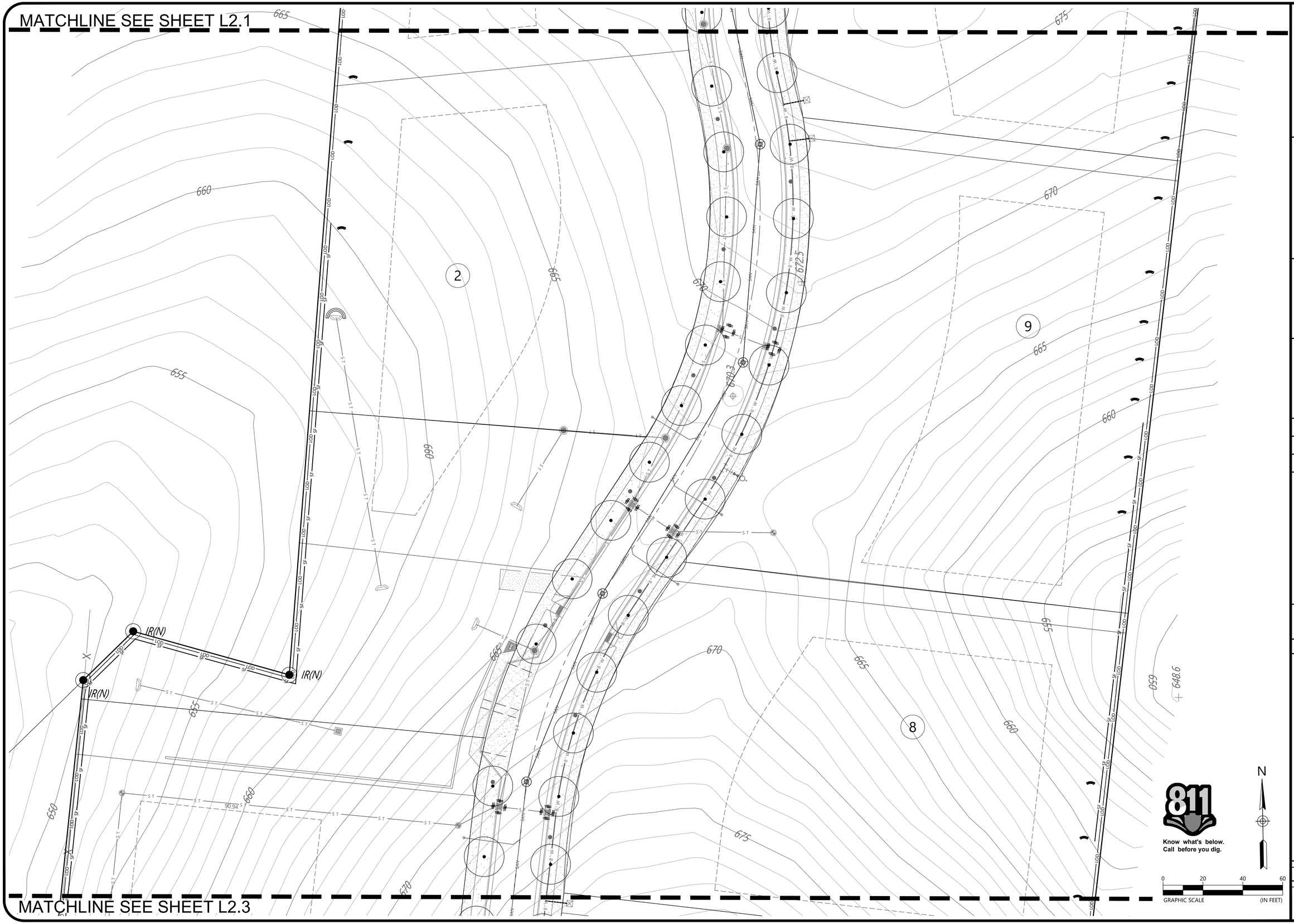
PROJECT NUMBER
211740

DRAWING NUMBER
L2.1

ORIGINAL SIZE: 24"x36" DRAWING PATH: T:\P&D\Projects\2021\211740_Mollette, Maupin Road_Brentwood\CAD\Construction\211740_LAN

TIME STAMP- 12/20/2022 11:34 AM

MATCHLINE SEE SHEET L2.1



MATCHLINE SEE SHEET L2.3

658 GRASSMERE PARK DRIVE
SUITE 100
NASHVILLE, TN 37211
(615) 385-4144

MICHAEL KENNEDY KAEHLER
REGISTERED
LANDSCAPE ARCHITECT
TENNESSEE NO. 3662

NO.	DATE	DESCRIPTION	BY	CHK	APV

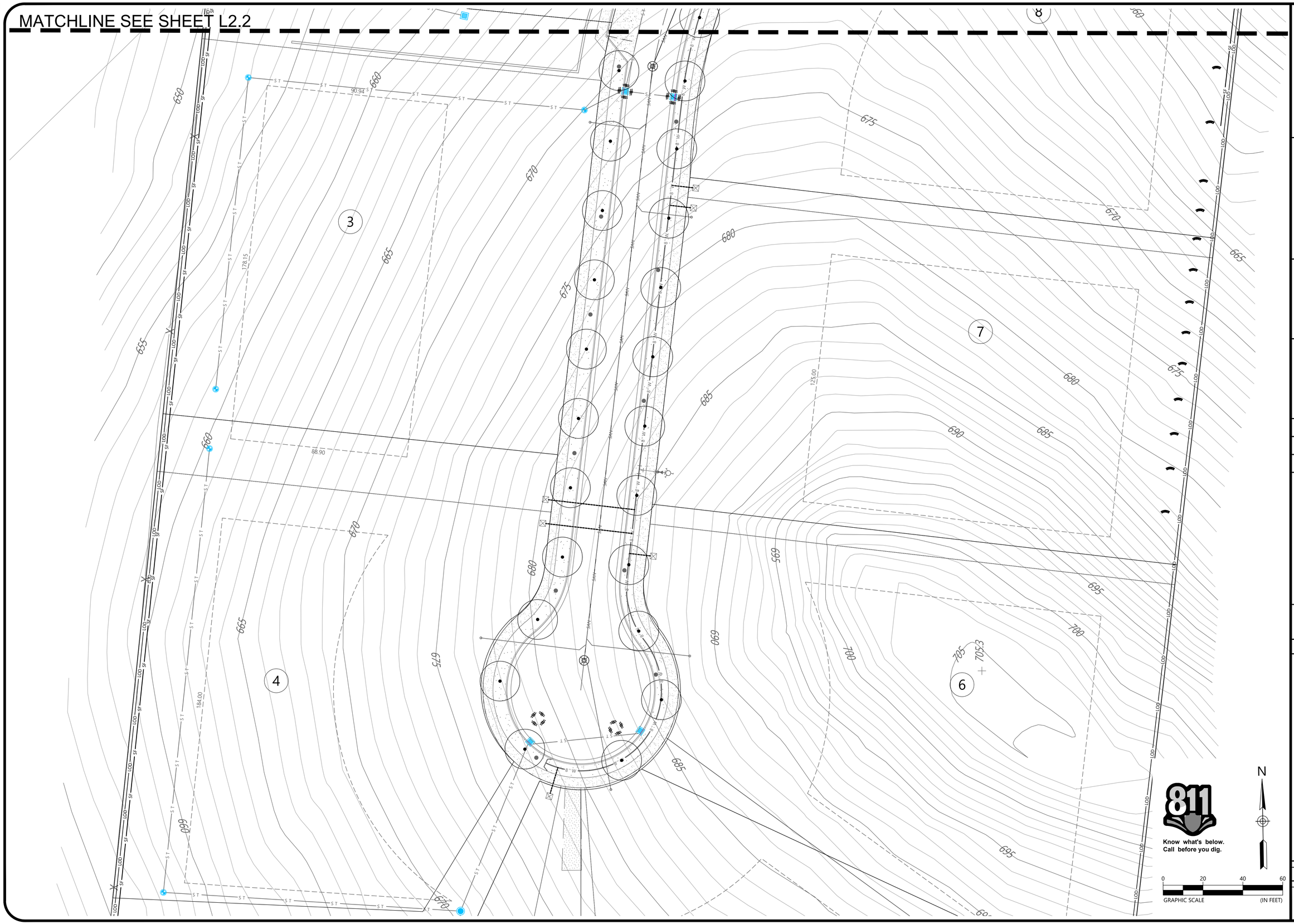
DETAILED LANDSCAPE PLAN

PRELIMINARY CONSTRUCTION PLANS
AIX RETREAT
9919 MAUPIN ROAD, BRENTWOOD, TN 37027

PROJECT NUMBER
211740

DRAWING NUMBER
L2.2

ORIGINAL SIZE: 24"X36" DRAWING PATH: T:\P&D\Projects\2021\211740_Melette_Maupin Road_Brentwood\CAD\Construction\211740_LAN



658 GRASSMERE PARK DRIVE
SUITE 100
NASHVILLE, TN 37211
(615) 385-4144

MICHAEL KENNEDY KAHNLE
REGISTERED
AGRICULTURE
COMMERCE
TENNESSEE NO. 1042
LANDSCAPE ARCHITECT

NO.	DATE	DESCRIPTION	BY	CHK	APV

DETAILED LANDSCAPE PLAN

PRELIMINARY CONSTRUCTION PLANS
AIX RETREAT
9919 MAUPIN ROAD, BRENTWOOD, TN 37027

PROJECT NUMBER
211740

DRAWING NUMBER
L2.3

TIME STAMP: 12/20/2022 11:34 AM

ORIGINAL SIZE: 24"X36" DRAWING PATH: T:\P&D\Projects\2021\211740_Molette_Maupin Road_Brentwood\CAD\Construction\211740_LAN

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LANDSCAPE NOTES

1. THE CONTRACTOR SHALL REVIEW PLANS TO BECOME THOROUGHLY FAMILIAR WITH SURFACE AND SUBSURFACE UTILITIES.
2. THE PLANT QUANTITIES SHOWN ON THE LANDSCAPE CONTRACT DOCUMENTS ARE FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES AND REPORTING ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT FOR CLARIFICATION PRIOR TO CONTRACT AWARD AND COMMENCEMENT OF WORK.
3. ALL INSTALLATION OF PLANT MATERIAL SHALL COMPLY WITH APPLICABLE JURISDICTIONAL CODES. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS ASSOCIATED WITH THIS WORK.
4. PRIOR TO PLANTING INSTALLATION, THE CONTRACTOR SHALL CONFIRM THE AVAILABILITY OF ALL THE SPECIFIED PLANT MATERIALS. SUBMIT DATED PHOTOGRAPHS OF ALL TREE MATERIAL AND SPECIMEN MATERIAL AS TO THE OWNER'S REPRESENTATIVE FOR REVIEW.
5. ALL PLANT MATERIAL SIZES SPECIFIED ARE MINIMUM SIZES. CONTAINER SIZE SHALL BE INCREASED IF NECESSARY TO PROVIDE OVERALL PLANT SIZE SPECIFIED.
6. IF PLANT MATERIAL DOES NOT COMPLY WITH THE REQUIREMENTS AS SPECIFIED HEREIN, THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT SUCH PLANTS AND REQUIRE THE CONTRACTOR TO REPLACE REJECTED WORK AND CONTINUE SPECIFIED MAINTENANCE UNTIL RE-INSPECTED AND FOUND TO BE ACCEPTABLE.
7. THE CONTRACTOR SHALL AMEND ALL PLANTING AREAS PER CITY OF THORNTON REQUIREMENTS: TILL IN 4 CY CLASS I OR II COMPOST PER 1,000 SF TO A 6" DEPTH.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR STABILITY AND PLUMB CONDITION OF ALL TREES AND SHRUBS, AND SHALL BE LEGALLY LIABLE FOR ANY DAMAGE CAUSED BY INSTABILITY OF ANY PLANT MATERIALS. STAKING OF TREES OR SHRUBS SHALL BE DONE IN ACCORDANCE WITH PLANS AND SPECIFICATIONS.
9. THE CONTRACTOR SHALL INSURE ADEQUATE VERTICAL DRAINAGE IN ALL PLANT BEDS AND PLANTERS. IF INADEQUATE VERTICAL DRAINAGE IS ENCOUNTERED, THE CONTRACTOR SHALL SUBMIT RECOMMENDATIONS FOR PROVIDING ADEQUATE DRAINAGE TO THE OWNER'S REPRESENTATIVE.
10. PEG SOD ON SLOPES GREATER THAN 3:1.
11. CONTRACTOR SHALL PROTECT EXISTING VEGETATION TO REMAIN AS SHOWN ON DRAWINGS OR BY MEANS APPROVED BY THE OWNER'S REPRESENTATIVE.
12. CONTRACTOR TO CLEAN, PRUNE, AND SHAPE EDGES OF EXISTING VEGETATION AS DIRECTED BY OWNER'S REPRESENTATIVE. CREATE SMOOTH BED LINES AROUND EXISTING VEGETATION.
13. THE CONTRACTOR SHALL BEAR ALL COSTS OF TESTING OF SOILS, AMENDMENTS, ETC. ASSOCIATED WITH THE WORK. SEE SPECIFICATIONS FOR ADDITIONAL TESTING REQUIREMENTS.
14. CONTRACTOR SHALL FIELD-ADJUST LOCATION OF PLANT MATERIAL PRIOR TO INITIATING INSTALLATION FOR THE REVIEW AND APPROVAL OF THE OWNER'S REPRESENTATIVE.
15. ALL PLANT MATERIAL SHALL BE IN FULL AND STRICT ACCORDANCE WITH LOCAL CODES.
16. ALL PLANTING BEDS SHALL BE TOP-DRESSED WITH A 3" LAYER OF MULCH AS SPECIFIED.
17. CONTRACTOR SHALL COORDINATE ALL PLANTING WORK WITH IRRIGATION WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL HAND WATERING AS REQUIRED TO SUPPLEMENT IRRIGATION WATERING AND RAINFALL.
18. CONTRACTOR SHALL BE RESPONSIBLE FOR HAND WATERING IN ALL PLANTING AREAS, REGARDLESS OF THE STATUS OF EXISTING OR PROPOSED IRRIGATION.
19. CONTRACTOR SHALL RE-GRADE ALL AREAS DISTURBED BY PLANT REMOVAL, RELOCATION, AND/OR INSTALLATION WORK.
20. CONTRACTOR SHALL REPLACE (BY EQUAL SIZE AND QUALITY) ANY AND ALL EXISTING PLANT MATERIAL DISTURBED OR DAMAGED BY PLANT REMOVAL, RELOCATION, AND/OR INSTALLATION WORK.
21. MAINTENANCE SHALL BEGIN AFTER EACH PLANT HAS BEEN INSTALLED AND SHALL CONTINUE UNTIL THE PROJECT HAS BEEN DEEMED SUBSTANTIALLY COMPLETE. MAINTENANCE INCLUDES WATERING, PRUNING, WEEDING, MULCHING, REPLACEMENTS OF SICK OR DEAD PLANTS, AND ANY OTHER CARE NECESSARY FOR THE PROPER GROWTH OF THE PLANT MATERIAL.
22. UPON COMPLETION OF ALL LANDSCAPING, AN INSPECTION FOR SUBSTANTIAL COMPLETION OF THE WORK SHALL BE HELD. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE FOR SCHEDULING THE INSPECTION AT LEAST SEVEN (7) DAYS PRIOR TO THE ANTICIPATED INSPECTION DATE.
23. CONTRACTOR SHALL SUBMIT WRITTEN GUARANTEE OF SURVIVABILITY OF ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR FROM DATE OF SUBSTANTIAL COMPLETION.
24. CONTRACTOR MUST REVIEW AND ACCEPT, APPROVE ALL GRADED AREAS PRIOR TO THE COMMENCEMENT OF PLANTING.
25. TREES ADJACENT TO BUILDINGS SHOULD BE PLANTED AT LEAST THE DIAMETER OF THE TREE CANOPY OR A MIN. OF 10'-0" (WHICHEVER IS GREATER) AWAY FROM THE BUILDING WALL.
26. ALL PLANTING AREAS SHALL BE AMENDED WITH 4 CY CLASS I OR II COMPOST PER 1,000 SF. TILL IN TO A 8" DEPTH.
27. ALL LANDSCAPE WORK TO BE PERFORMED IN CONFORMANCE WITH THE CITY STANDARDS AND SPECIFICATIONS.

IRRIGATION NOTES

1. LANDSCAPE CONTRACTOR TO PROVIDE IRRIGATION SYSTEM ON A DESIGN/BUILD ARRANGEMENT FOR AREA NOTED ON THE PLAN. CONTRACTOR TO PREPARE DESIGN DRAWINGS IN ACCORDANCE WITH PERFORMANCE SPECIFICATIONS CONTAINED IN THE PROJECT MANUAL AND SUBMIT SAME FOR APPROVAL BY THE OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION.
2. CONTRACTOR TO CONFIRM ADEQUATE PRESSURE EXISTS TO OPERATE SYSTEM PRIOR TO INSTALLATION.
3. IRRIGATION SPRINKLER HEADS SHALL BE MANUFACTURED BY EITHER TORO OR RAINBIRD. IRRIGATION CONTROLLER SHALL BE TORO VISION II MODEL OR APPROVED EQUAL.
4. MAIN LINE TO BE CLASS 200 PVC PIPE. LATERAL LINES TO BE CLASS 150 PVC.
5. IRRIGATION SYSTEM TO BE OPERATIONAL BEFORE PLANTING MATERIALS MAY BE INSTALLED IN PLANTING BEDS.
6. INSTALL SPRINKLER HEADS ACCORDING TO MANUFACTURERS SPECIFICATIONS. FLUSH ALL LINES BEFORE INSTALLING NOZZLES.
7. WIRE CONNECTIONS TO BE MADE BY USING RAINBIRD MODEL ST-103/PT-ST SNAP-TITE CONNECTIONS.
8. LEAVE 18 INCHES OF ADDITIONAL WIRE AT EACH VALVE LOCATION. ROLL WIRE INTO COIL AT EACH LOCATION.
9. ALL VALVES SHALL BE LOCATED IN AMATEX 10 INCH CIRCULAR VALVE BOXES WITH COVER, OR EQUAL.
10. IRRIGATION CONTRACTOR TO COORDINATE PLACEMENT OF REQUIRED SLEEVES WITH GENERAL CONTRACTOR PRIOR TO PAVING AND CONCRETE INSTALLATION BEING COMPLETED.

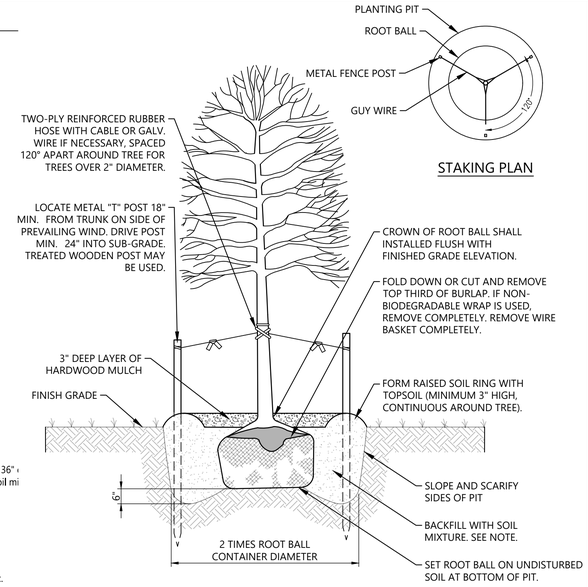
PLANT SCHEDULE

TREES	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	SIZE	SPREAD	REMARKS
	18	Juniperus virginiana 'Idyllwild'	Idyllwild Eastern Redcedar	B & B		8-10`		
	17	Juniperus virginiana 'Idyllwild'	Idyllwild Eastern Redcedar	B & B		12-13`		
	3	Magnolia grandiflora 'Claudia Wannamaker'	Claudia Wannamaker Magnolia	15 gal				
	53	Platanus x acerifolia	London Plane Tree	B & B	3"	10-12`		
	12	Prunus x 'Snow Goose'	Snow Goose Cherry	15 gal				
	6	Quercus bicolor	Swamp White Oak	B & B	3"			
	13	Vitex agnus-castus 'Alba'	White Chaste Tree	15 gal				

SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	CONT	CALIPER	HEIGHT	SPREAD	SPACING	REMARKS
	65	Buxus microphylla 'Faulkner'	Faulkner Littleleaf Boxwood	3 gal				36" o.c.	
	2	Buxus sempervirens	Common Boxwood	B & B		3.5`	5`	60" o.c.	
	60	Hydrangea macrophylla 'HORTMABLO'	Seaside Serenade® Cape Lookout Hydrangea	5 gal				48" o.c.	
	146	Lavandula x intermedia 'Provence'	Provence Lavendin	3 gal				30" o.c.	Plant in rows 36" a 50% sandy soil mi
	83	Rosa x 'Iceberg Climbing'	Iceberg Climbing Rose	5 gal				48" o.c.	

ORNAMENTAL GRASSES	QTY	BOTANICAL NAME	COMMON NAME	CONT	CALIPER	HEIGHT	SPREAD	SPACING	REMARKS
	182	Panicum virgatum `Prairie Sky`	Prairie Sky Switch Grass	#3 Cont.				42" o.c.	Space 42" o.c.

GROUND COVERS	QTY	BOTANICAL NAME	COMMON NAME	CONT	CALIPER	HEIGHT	SPREAD	SPACING	REMARKS
	87	Echinacea purpurea 'Alba'	White Coneflower	1 gal				18" o.c.	
	448	Liriope muscari 'Alba'	White Lilyturf	1 gal				16" o.c.	
	80	Nepeta racemosa 'Walker's Low'	Walker's Low Catmint	1 gal				24" o.c.	

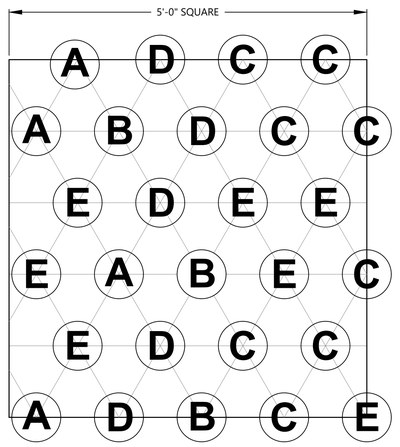


STAKING PLAN

NOTES;

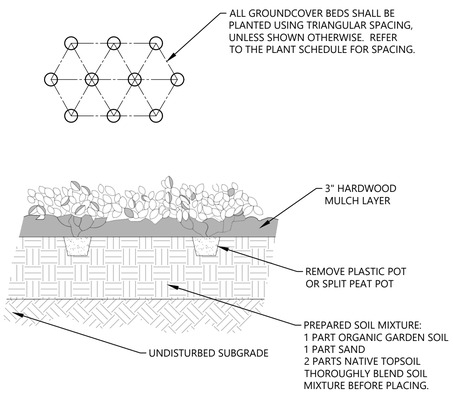
1. TREE STAKING IS NOT PREFERRED BUT TO BE USED AS A LAST RESORT ON WINDY SITES. INSTALL TWO OF THE THREE STAKES AND GUY WIRES ON THE UPHILL SIDE OF THE TREE.
2. DO NOT DAMAGE MAIN ROOTS OR DESTROY ROOT BALL WHEN INSTALLING TREE STAKES.
3. WATER THOROUGHLY AFTER INSTALLATION.
4. REMOVE GUY WIRES AND TIES AFTER 6 MONTHS OR AT THE DIRECTION OF THE LANDSCAPE ARCHITECT.
5. TREE SHALL STAND PLUMB.
6. SOIL MIX: 1 PART ORGANIC MATERIAL, 1 PART SAND AND 2 PARTS TOPSOIL.
7. REMOVE ALL TAGS, ROPE, AND CONTAINERS. APPLY TREE WRAP STARTING AT THE BOTTOM AND CONTINUING TO FIRST BRANCH.
8. CLEAN TRUNK TO HEIGHT SPECIFIED AND PAINT WOUNDS WITH APROVED DRESSING COMPOUND.

1 TREE PLANTING DETAIL
SCALE: N.T.S.

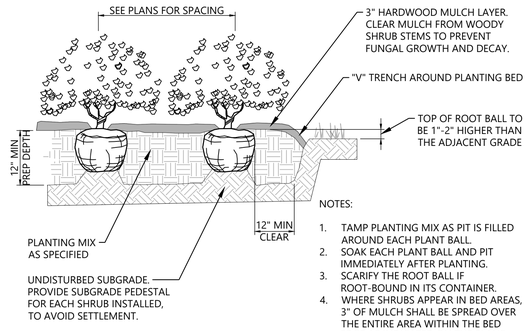


A: DWARF JOE PYE WEED 15%
B: FALSE INDIGO 10%
C: LAVENDER 30%
D: PURPLE CONE FLOWER 20%
E: WHITE YARROW 25%

4 PERENNIAL PLANTING DETAIL
SCALE: N.T.S.



3 GROUNDCOVER PLANTING DETAIL
SCALE: N.T.S.



NOTES:

1. TAMP PLANTING MIX AS PIT IS FILLED AROUND EACH PLANT BALL.
2. SOAK EACH PLANT BALL AND PIT IMMEDIATELY AFTER PLANTING.
3. SCARIFY THE ROOT BALL IF ROOT-BOUND IN ITS CONTAINER.
4. WHERE SHRUBS APPEAR IN BED AREAS, 3" OF MULCH SHALL BE SPREAD OVER THE ENTIRE AREA WITHIN THE BED EDGE AS INDICATED ON THE PLANS.
5. DO NOT PRUNE BEFORE ACCEPTANCE.
6. REMOVE BURLAP FROM TOP THIRD OF ROOT BALL OR CAREFULLY REMOVE THE PLASTIC CONTAINER, IF ONE IS USED.
7. BACKFILL WITH SOIL MIXTURE AS FOLLOWS: 1 PART COMPOSTED GARDEN SOIL - 1 PART SAND - 2 PARTS NATIVE TOPSOIL.

2 SHRUB PLANTING DETAIL
SCALE: N.T.S.

658 GRASSMERE PARK DRIVE
SUITE 100
NASHVILLE, TN 37211
(615) 385-4144

MICHAEL KENNEDY-MARBLE REGISTERED AGRICULTURE & LANDSCAPE ARCHITECT TENNESSEE, NO. 1962 LANDSCAPE ARCHITECTURE

NO.	DATE	DESCRIPTION	BY	CHK	APV

LANDSCAPE DETAILS

PRELIMINARY CONSTRUCTION PLANS
AIX RETREAT
9919 MAUPIN ROAD, BRENTWOOD, TN 37027

PROJECT NUMBER
211740

DRAWING NUMBER
L2.4

ORIGINAL SIZE: 24"X36" DRAWING PATH: T:\P&D\Projects\2021\211740_Mollette, Maupin Road, Brentwood\CAD\Construction\211740_LAN

BRENTWOOD PLANNING COMMISSION
Meeting Date: 01/03/2023
Current Zoning: C-2 - COMMERCIAL RETAIL

Information

Subject

BPC2211-005 Master Plan - 5101 Maryland Way, Maryland Farms, Section 15, Lot 2, Zoning C-2 - *Applicant: Mr. Brad Slayden, RaganSmith Associates, 315 Woodland Street, Nashville, TN 37206*

General Information

Ragan Smith Associates requests approval of a Master Plan including three, four-story office buildings totaling 324,000 square feet, a stand-alone three-story parking structure with 913 parking spaces and a retail and restaurant village area with nine, one-story buildings totaling 36,800 square feet on a total of 17.04 acres. Office Building A is also proposed to include 6,250 square feet of general retail uses.

The retail village is intended to provide a central focal point for the development and for this part of Maryland Farms. The retail village is proposed to have 23,000 square feet of restaurant uses, and 13,800 square feet of retail uses. The plan also includes 332 surface parking spaces and the extension of a public pedestrian trail/greenway. The trail will connect to and extend the existing Maryland Farms Greenway through this site to the existing sidewalk along Maryland Way, which connects to the Maryland Way Park.

The plan proposes three, four-story office buildings with 102,000 square feet, 112,000 square feet and 110,000 square feet. Office Building A is proposed to front Maryland Way and is adjacent to the proposed retail village, and will include 6,250 square feet of general retail uses. Building B is located in the center of the site. Building C is located at the rear of the site, adjacent to City owned property to the south. Building A and C meet the Zoning Code requirements for setbacks (100 feet from the property line along Maryland Way and 60 feet at the rear (south) side of the site). Staff notes that the City owned greenway property on the south side of the site is about 245 feet wide, as well. The proposed three-story parking garage is located along the southwestern side of the site and meets the required 20-foot setback from the rear of the property.

This proposal is situated on approximately 17 acres zoned C-2 (12.78 acres) and R-2 (4.27 acres) on the eastern portion of the site. This plan proposes to replace the existing Maryland Farms YMCA development. The existing YMCA includes approximately 12.88 acres of impervious area, while the proposed plan includes 10.89 acres of impervious land area-- a conversion of 1.99 acres to pervious surface, or a 15.5% reduction in impervious land area. The City's Engineering Department has reviewed the preliminary plans and has found that they reflect compliance with all Code requirements for addressing stormwater management. Detailed engineering design of all stormwater quality and quantity features will be reviewed when a final site plan is presented at a later time. Note that in working with the project design team, staff required that the stormwater

calculations and design be based on the 17-acre site being an undeveloped greenfield instead of assessing it only based on the incremental changes from the existing YMCA site.

The eastern side of the site is zoned R-2. The R-2 zoned area ranges in width from approximately 165 feet to 200 feet. The plan proposes no buildings within the R-2 area. The plan is consistent with the Zoning Code requirements to have a 100-foot building setback from the eastern property line and a 75-foot wide C-2 buffer area. Within this buffer area is proposed detention areas and a 50 to75 foot wide landscape buffer. The 12-foot wide public trail is also proposed within the R-2 zoned area. The developer has also committed to design, build and finance the extension of the trail on the City's greenway to the point where the trail connects to the portion proposed within the development. This connection will include the asphalt path and grading required to achieve the adequate slope. Final design of the trail will be submitted with the site plan and the developer has committed to working with the City to find a mutually agreeable design.

A traffic impact study (TIS) was submitted by the applicant and was prepared by KCI Technologies, Inc. The TIS was reviewed and accepted by Greg Judy with Neel-Schaffer, the City's traffic consultant. The plan proposes to reduce the number of access points on Maryland Way from three to two, while also utilizing an existing access easement to the west to provide access to Ward Circle where there is a signalized intersection on Maryland Way. The TIS included the following conclusions:

- The northbound approach of YMCA Western Driveway should be stop-controlled, and a stop bar and R1-1 "Stop" sign should be installed on the egress approach.
- YMCA Western Driveway should be designed to include sufficient width for one entering lane and two exiting lanes. The exiting approach should include one shared through/left turn lane and one right turn lane with a minimum of 75 feet of storage.
- The northbound approach of YMCA Eastern Driveway should be stop-controlled, and a stop bar and R1-1 "Stop" sign should be installed on the egress approach.
- YMCA Eastern Driveway should be designed to include sufficient width for one entering lane and two exiting lanes. The exiting approach should include one shared through/left turn lane and one right turn lane with a minimum of 75 feet of storage.
- The westbound approach of YMCA Eastern Driveway continue to operate as stop-controlled.
- YMCA Eastern Driveway should be designed to include sufficient width for one entering land and a minimum of one exiting lane.
- Signal timings in the AM peak hour should be optimized upon completion of the development (Maryland Way and Westpark Drive)
- Off-peak loading and deliveries for the retail/restaurant development should be encouraged to minimize impacts to traffic operations.
- Parking should be developed per code. [A Shared Parking Study was submitted as required by the Zoning Code].
- Final design of internal roadways and parking should meet all City of Brentwood standards and the latest version of "A Policy of Geometric Design of Highways and Streets" published by AASHTO. Any parking lots and streets associated with the development should ensure that passenger cars and emergency vehicles are capable of making all turning movements. Internal intersections should be two-way stop-controlled unless all way stop control warrants are met.

The TIS review also recommended that certain turn lanes be lengthened along Maryland Way to enter the site. Greg Judy recommended that all off-site improvements, including extension of the length of turn lanes, take place with the first phase of development and the applicant has agreed.

A Shared Parking Study was also submitted by the applicant and was prepared by KCI Technologies, Inc. The study was reviewed by Greg Judy with Neel-Schaffer, the City's traffic consultant. Per the Parking Study, the Brentwood Municipal Code would typically require 1,381 parking spaces, this project is proposing 1,255 total parking spaces. The Study found that for sites with a mixture of land uses, calculating all uses individually typically overestimates the parking demand. The overall peak parking demand for mixed-use sites can be significantly less than the sum of the peak parking demand of the individual uses since different types of uses have different peak parking demand characteristics. The Study looked at parking demand for each month of the year and at hourly parking demand rates for individual uses to determine actual needs. The Study found that parking demands vary from month to month and from weekday to weekends. It also found that developments containing multiple land uses will typically have a reduction of customer parking needs due to customers parking and visiting more than one use. In conclusion, the Study found that using ULI's Shared Parking, Third Edition, the parking requirements can be reduced by a total of 219 (16%) from what the Brentwood Zoning Code would typically require if aggregating each individual use. Therefore, a minimum of 1,162 parking spaces is recommended by the Study. Staff will note that the proposed plan actually includes more spaces that what the Shared Parking Study recommends. The plan includes a total of 1,245 total parking spaces, or a 9.5% reduction in parking.

The City's sewer system hydraulic modeling consultant completed an analysis of the sewer impacts from the proposed development, inclusive of the impacts previously projected for the Eastpark hotel redevelopment plan. The projected sewer flow from the proposed project at full build out is 72,208 gallons per day (GPD). This compares to the average non-COVID sewer flows from the existing YMCA facility of approximately 31,000 GPD. Note that with the City's first sewer equalization tank expected to be operational within a few weeks, the modeling analysis was completed with this new tank factored in. The results of the modeling analysis showed that during the two-year, 24-hour design storm, there are no sewer overflows downstream of the project site in either the collection lines between the project site and the main sewer trunk line or along the main sewer trunk line to the pump station. The modeling also showed that there is no increase in the overflow frequency or volume upstream in the system from where the collection lines serving this project intercept with the main trunk line.

Conditions of Approval

Staff recommends that the following **3** conditions be attached to the approval of the request.

1. No variances will be considered as part of this Master Plan proposal. Should the Master Plan be approved, the placement of all buildings, parking, stormwater, etc. must comply with the Brentwood Municipal Code.

2. Per our traffic consultant's recommendation, staff will require that all improvements (including modifications to the left turn lanes on Maryland Way) be implemented at project opening in conjunction with the project's first phase.

3. Per Section 50-29(b) of the municipal code, the applicant will pay for the city's traffic engineering consultant's review. This invoice must be paid before any permits will be issued for the project.

Standard Requirements

Staff recommends that the following **26** conditions be attached to the approval of the request.

1. The goal for water quality treatment shall be 80 percent removal of the average annual total suspended solids (TSS) load. The water quality volume is that volume of stormwater runoff resulting from the first 1.0 inch of rainfall from a site per storm event. Please provide documentation meeting this requirement with the future final site plan submittal.

2. Per City of Brentwood Code Section 78-343, the applicant shall provide geotechnical studies prepared by a qualified professional engineer licensed by the State of Tennessee to evaluate site characteristics and recommend design and construction methods that ensure proper and structurally sound soil conditions during and after land disturbance activities. Please provide a geotechnical report with the future final site plan submittal.

3. Provide sight distance triangles for each egress in accordance with AASHTO Geometric Design of Highways and Streets.

4. This site will be required to meet the City of Brentwood stormwater detention requirements. Please provide these calculations with the future final site plan submittal.

5. In addition to meeting flow reduction requirements at detention pond outfalls listed the post-developed discharges for all storm events, including the 1-year, 2-year, 5-year, 10-year, 25-year, 50-year and 100-year-24-hour design storms, must be reduced to be equal to or less than pre-developed discharges at the overall site outfall.Please provide these calculations with the future final site plan submittal.

6. Provide storm water table (inlet/outlet/pipe size) with future final site plan submittal. Include storm sewer calculations including inlet spread.

7. Provide hydraulic spread calculations for spacing of inlets with future final site plan submittal.

8. The sidewalk along your frontage with Maryland Way will need to be modified to meet current width and design standards.

9. Parking lot landscape islands and parking lot screening per Section 78-222 (11)(b) will be required. This will include a hedge to screen parking along Maryland Way.

10. Public water and sewer alignment and connectivity as shown on the master plan are approximate and general in nature. All public water and sewer infrastructure as shown on master plan is subject to change per Brentwood Water Services Department during review and approval of the site plan for this project.

11. The trail extension running through the site will need to be placed in a Public Access

Easement. This detail will need to be added at plat and site plan stage.

12. A preliminary site plan shall be vested for a period of three years from the date of the original approval.

13. Add the following note to the preliminary plan:

    This site plan is subject to a three-year vesting period, during which the development standards in effect on the date of approval will remain the standards applicable to this plan. If construction is not completed during the first three years, the original site plan is considered a preliminary site plan and the applicant must obtain approval of a final site plan. Development of the property shown on this plan may be subject to standards other than those that were applicable during the vesting period. The Initial vesting period for this plan expires on **January 3, 2026**, unless extended by the City of Brentwood. Persons relying on this plan after said date should contact the City of Brentwood to determine if development may continue as depicted on the plan.

14. When the construction authorized pursuant to a site plan is not completed within three years from the date of initial approval, but the applicant desires to complete the project proposed for the site, the plan as initially approved for the project or as amended shall be considered a preliminary site plan. If the applicant secures all necessary permits, commences site preparation and obtains approval of a final site plan within the three-year vesting period following approval of the preliminary site plan, then the vesting period shall be extended an additional two years beyond the expiration of the initial three-year vesting period. During the two-year extension, the applicant must commence construction and maintain any necessary permits to remain vested.

15. If necessary, permits are maintained and construction, as defined by Section 78-43, has commenced by the end of the two-year extension, then the vesting period shall remain in effect until the Planning and Codes Department has certified final completion of the project, provided the total vesting period shall not exceed ten years from the date of approval of the preliminary site plan.

16. If the construction authorized pursuant to a site plan is completed within three years from the date of approval, the site plan shall then be considered the final site plan for the project.

17. A stormwater system long term operation and maintenance plan is required by the time of a final plat and will need to be sealed by a licensed Tennessee Professional Engineer.

18. Approval of the site plan does not constitute approval of the signage plan. All signs must comply with the Brentwood Sign Ordinance. A comprehensive sign package including all signs (temporary or permanent, wall or ground) shall be submitted to the Planning Department for a compliance review. Please submit a comprehensive sign package to Allison Roberts at allison.roberts@brentwoodtn.gov.

19. On all sheets of the plan show the location of existing and platted property lines, existing streets, buildings, watercourses, railroads, cemeteries, sewer lines, bridges, culverts, drain pipes, water mains, fire hydrants, street lights, tree masses, public utility easements.

20. Show the location of any sinkholes on the subject property as identified by a qualified geo-technical Engineer shall be located and appropriately labeled on the preliminary plan. The plan shall be configured to locate all sinkholes in permanent open space only and not within any buildable lots. Sinkholes in the permanent open space shall be protected from natural and/or man-made debris.

21. The property owner is responsible for all development fees including water and sewer service and tap fees, building permit fees and Public Works Project Fees. The required fees shall be used for future infrastructure related improvements required by the proposed development.

22. Applicable security for all required roadway, drainage, utilities, water, sewer, landscaping and amenity improvements in accordance with the requirements of Article Eight of the Brentwood Subdivision Regulations shall be provided before the final plat may be recorded.

23. A Maintenance Agreement and Storm Water System Long-Term Operation and Maintenance Plan for all storm water structures and facilities must be prepared, submitted and approved per Section 56-43 of the Brentwood Code.

24. Development of this project shall comply with all applicable codes and ordinances of the City of Brentwood.

25. Deviations from the approved plan in the development of a project or the failure to satisfy any standard requirements or special conditions of approval imposed by the planning commission will be considered a violation of the provisions of the Zoning Ordinance, which shall be subject to punishment as provided in Section 1-9 of the Brentwood Municipal Code. The City may also require the applicant to appear before the Planning Commission to address any deficiencies or unapproved modifications. The project may also be subject to delays in issuance of permits, certificates of occupancy, recordation of plats or other project approvals.

26. Approval of the proposed plan shall be limited to the illustrations and plans presented to the Planning Commission for review and approval on **January 3, 2023**. Any changes to Planning Commission approved plans and specifications will require staff review and re-approval by the Planning Commission.

Staff Recommendation

Staff requests that the Planning Commission vote to approve the proposed master plan subject to the requirements of the staff report. The master plan does not include fully engineered plans and, therefore, may not show all final construction details. Subsequent engineered development plans must meet all requirements of the City's Zoning Ordinance and Subdivision Regulations.

Attachments

Vicinity Map

Proposed Master Plan
Traffic Impact Study
Traffic Impact Study Response Memo
Shared Parking Study
Sewer Capacity Evaluation


VALLEY VIEW
Old Hickory Blvd
Publix Super Market at Marketplace at...
Cadillac Dr
Thoroughbred Ln
Chuy's
United States Postal Service
McDonald's
E Park Dr
Harpeth Dr
Pewitt Dr
Maryland Way
Juris Ln
Church St E
Brentwood
Kiddie Academy of Brentwood, TN
Mere Bulles
Westwood Pl
Ward Cir
Sonesta ES Suites Nashville Brentwood
Kroger
Uncle Julio's Brentwood
REI
Centerview Dr
Wilson Pike Cir
CityPark Brentwood
Lenox Rd
Williamsburg Rd
Cochran Therapies
Dyer Ln
Arnold Rd
Mosley Dr
Seward Rd
Chick-fil-A
Total Wine & More
Karen Ct
Hayeswood Dr
APPROXIMATE SITE LOCATION

MASTER PLAN
FOR
5101 MARYLAND WAY
HIGHWOODS PROPERTIES

CONTACTS

OWNER/DEVELOPER
TAYLOR B. WELLS, AIA
HIGHWOODS PROPERTIES
3322 WEST END AVENUE, SUITE 600
NASHVILLE, TN 37203
(615) 340-1232
taylor.wells@highwoods.com

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RAGAN SMITH & ASSOCIATES
315 WOODLAND STREET
NASHVILLE, TN 37206
(615) 244-8591
bslayden@ragansmith.com

LANDSCAPE ARCHITECTURE
RICHIE JONES, RLA, ASLA, LEED AP
HODGSON DOUGLAS
507 MAIN STREET
NASHVILLE, TN 37206
(615) 327-4447
rjones@hodgsondouglas.com

ARCHITECTURE
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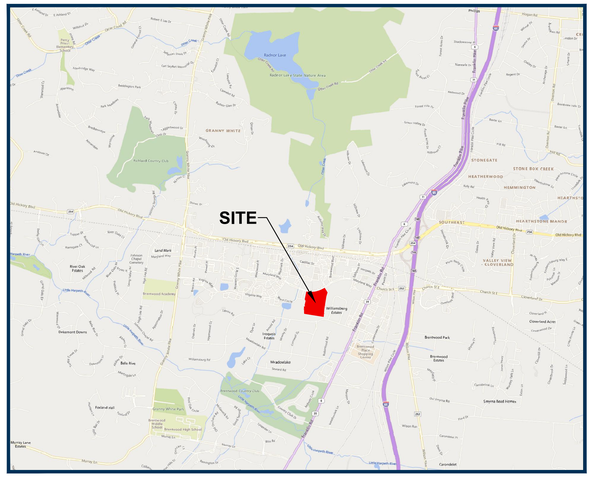
HASTING ARCHITECTURE
225 POLK AVENUE SUITE 100
NASHVILLE, TN 37203
(615) 329-1399
cgannaway@hastingsarchitecture.com


SITE
Radnor Lake
GRANNY WHITE
STONEGATE
HEATHERWOOD
HUMMINGTON
STONE BOX CREEK
HEARTHWOOD MANOR
SOUTHWEST
VALLEY VIEW GLENLAND
Old Hickory Blvd
Old Hickory Blvd
Concord Rd
Concord Rd
Wilkinsburg Estates
Brentwood Academy
Brentwood Downs
Meadowlake
Brentwood Oaks
Brentwood Park
Cloverland Acres
Lenora Road Homes
Brentwood Country Club
Brentwood Country Club
Brentwood High School
Brentwood Middle School
Brentwood Library & Heritage Center
Granny White Park
Primm Park
Primm Park
Primm



1 SITE PLAN
1" = 50'-0"
0 25' 50' 100'

HASTINGS

Hastings Architecture, LLC
225 Polk Avenue Suite 100
Nashville TN 37203
615.329.1399
hastingsarchitecture.com
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NOT FOR CONSTRUCTION

MASTERPLAN

HIGHWOODS PROPERTIES
5101 MARYLAND WAY

5101 MARYLAND WAY
BRENTWOOD, TN 37027

REVISION INFORMATION

PROJECT #	20022
ISSUE DATE	2022.12.05

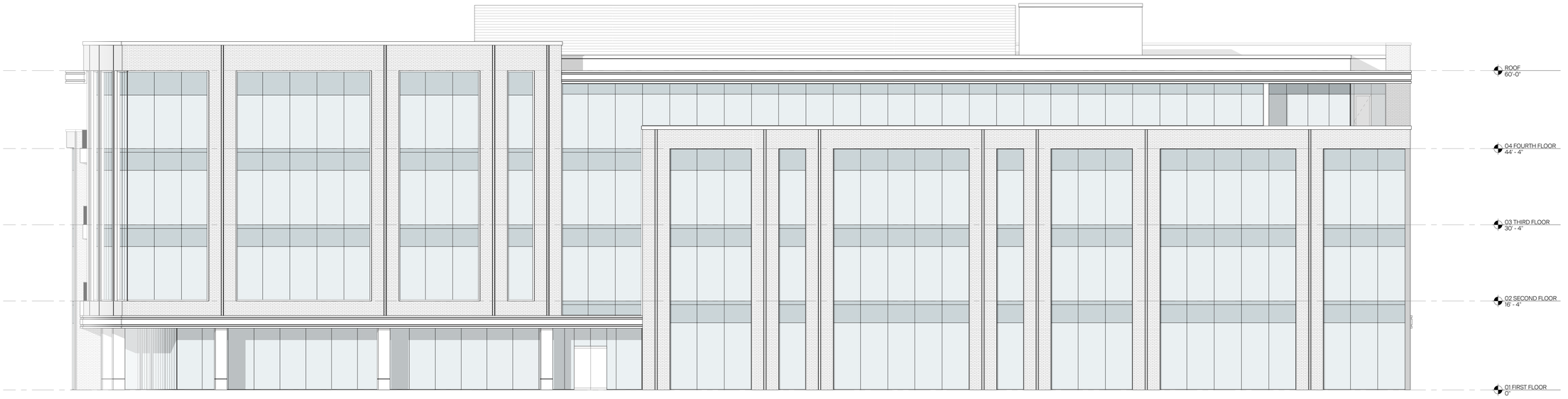
MASTERPLAN

A0.00



2 PRELIMINARY OFFICE ELEVATION - SOUTH

1/8" = 1'-0" 0 4' 8' 16'



1 PRELIMINARY OFFICE ELEVATION - NORTH

1/8" = 1'-0" 0 4' 8' 16'

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MASTERPLAN

Highwoods PROPERTIES

HIGHWOODS PROPERTIES
5101 MARYLAND WAY - OFFICE A

5101 MARYLAND WAY
BRENTWOOD, TN 37027

REVISION INFORMATION

PROJECT #	20022
ISSUE DATE	2022.12.05

BUILDING ELEVATIONS

A1.00



2 PRELIMINARY OFFICE ELEVATION - WEST

1/8" = 1'-0"

0 4' 8' 16'



1 PRELIMINARY OFFICE ELEVATION - EAST

1/8" = 1'-0"

0 4' 8' 16'

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MASTERPLAN

Highwoods PROPERTIES

HIGHWOODS PROPERTIES
5101 MARYLAND WAY - OFFICE A

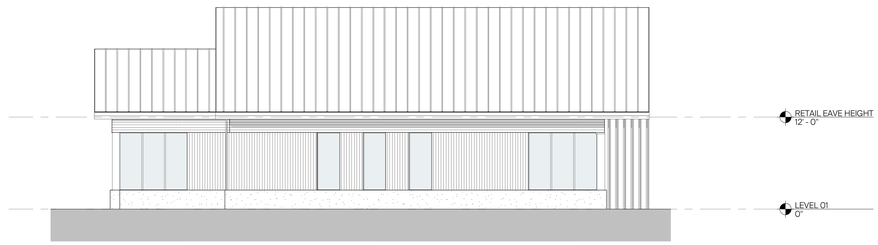
5101 MARYLAND WAY
BRENTWOOD, TN 37027

REVISION INFORMATION

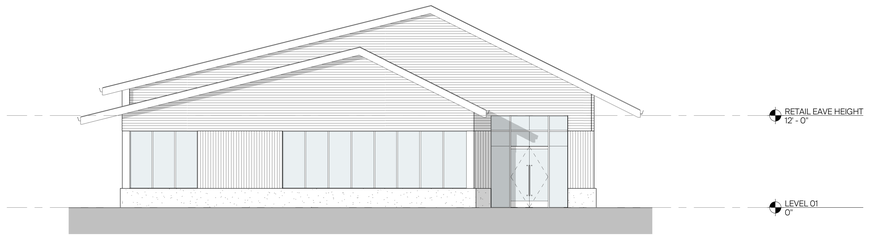
PROJECT #	20022
ISSUE DATE	2022.12.05

BUILDING ELEVATIONS

A1.01



2 PRELIMINARY RETAIL ELEVATION B - TYPICAL
1/8" = 1'-0"
0 4' 8' 16'



1 PRELIMINARY RETAIL ELEVATION A - TYPICAL
1/8" = 1'-0"
0 4' 8' 16'

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MASTERPLAN

Highwoods PROPERTIES

HIGHWOODS PROPERTIES
5101 MARYLAND WAY - RETAIL VILLAGE

5101 MARYLAND WAY
BRENTWOOD, TN 37027

REVISION INFORMATION

PROJECT #	20022
ISSUE DATE	2022.12.05

BUILDING ELEVATIONS

A1.02



1 AERIAL VIEW - NE CORNER
NTS

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MASTERPLAN

HIGHWOODS PROPERTIES
5101 MARYLAND WAY

5101 MARYLAND WAY
BRENTWOOD, TN 37027

REVISION INFORMATION

PROJECT #	20022
ISSUE DATE	2022.12.05

AERIAL VIEW

A2.00



















PRECEDENT IMAGERY

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MASTERPLAN

HIGHWOODS PROPERTIES
5101 MARYLAND WAY

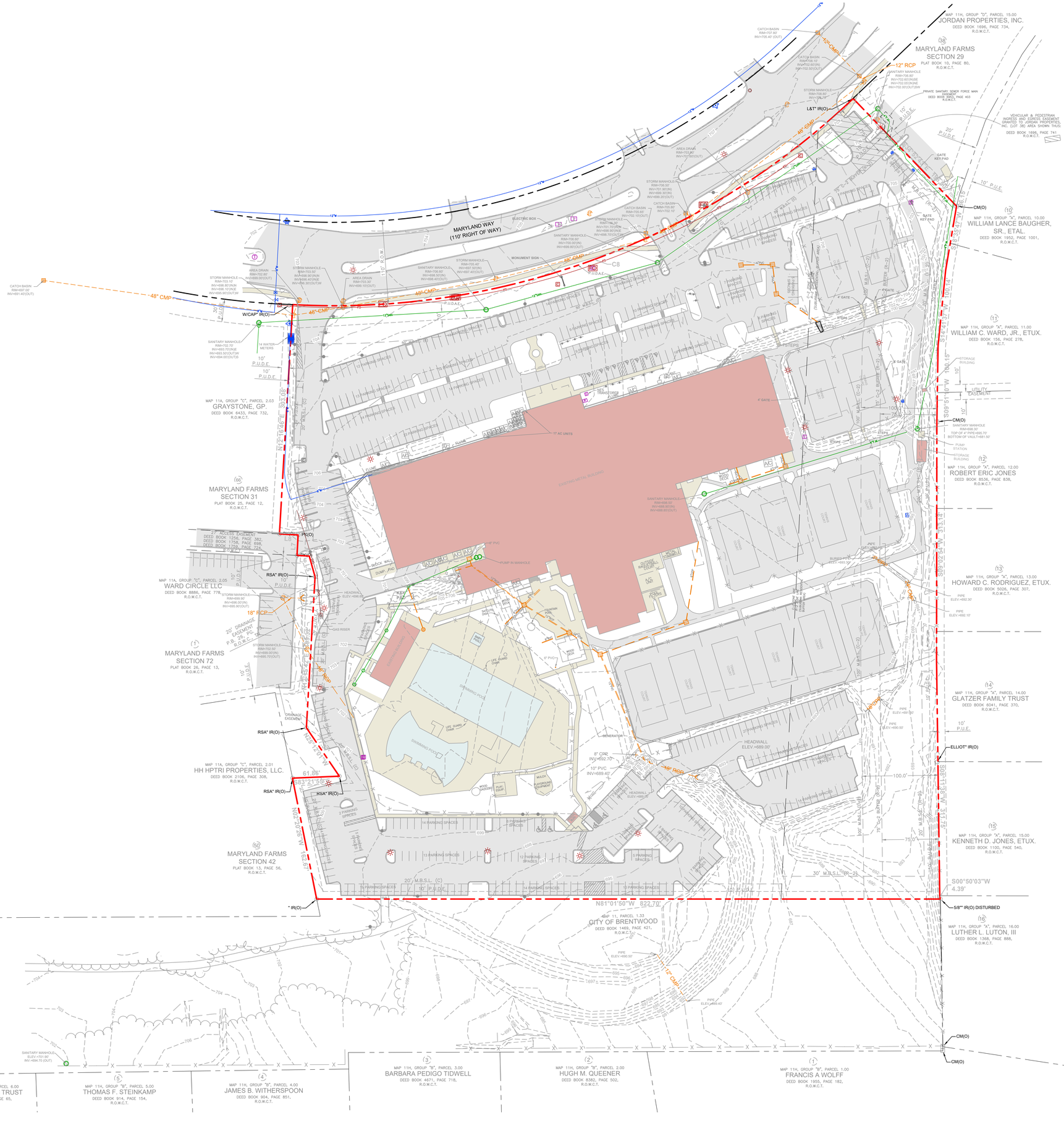
5101 MARYLAND WAY
BRENTWOOD, TN 37027

REVISION INFORMATION

PROJECT #	20022
ISSUE DATE	2022.12.05

PRECEDENT IMAGERY

A3.00



LEGEND

□CM(O)	CONCRETE MONUMENT (OLD)	(R)	R–2 ZONING SETBACK
○IR(O)	IRON ROD (OLD)	(C)	C–2 ZONING SETBACK
●IR(N)	IRON ROD (NEW) (1/2" X 18" W/CAP STAMPED "RAGAN SMITH & ASSOCIATES")	∘	BOLLARD
○PK(O)	PK NAIL (OLD)	GM	GAS METER
	FIRE HYDRANT	TR	TELEPHONE RISER
	WATER VALVE	SA	SANITARY SEWER LINE
	WATER METER	FM	SEWER FORCEMAIN
	IRRIGATION CONTROL VALVE	FO	FIBER OPTIC LINE
	LIGHT STANDARD	FO	FIBER OPTIC BOX
	CATCH BASIN/CURB INLET	G	GAS LINE
	AREA DRAIN	W	WATER LINE
	SANITARY SEWER MANHOLE	X	FENCE
	SEWER CLEAN–OUT		HEADWALL
	ELECTRIC BOX	RCP	REINFORCED CONCRETE PIPE
	TRANSFORMER PAD	CMP	CORRUGATED METAL PIPE
	ADA ACCESSIBLE PARKING	PVC	POLYVINYL CHLORIDE
	SIGN	M.B.S.L.	MINIMUM BUILDING SETBACK LINE
1	LOT NUMBER	P.U.D.E.	PUBLIC UTILITY & DRAINAGE EASEMENT
R.O.W.C.T.	REGISTER'S OFFICE FOR WILLIAMSON COUNTY, TN		CONCRETE SURFACE
			ASPHALT SURFACE
			EXISTING BUILDING

GENERAL NOTES

1. BEARINGS SHOWN HEREON ARE BASED ON THE TENNESSEE COORDINATE SYSTEM OF 1983, GPS EQUIPMENT WAS USED TO DETERMINE THE POSITION OF TWO (2) CONTROL POINTS FOR THE SURVEYED PROPERTY TO ESTABLISH AS BASIS FOR BEARING FOR THE SURVEY.
2. THIS PROPERTY IS CURRENTLY ZONED C–2 – (COMMERCIAL RETAIL) AND R–2 (SUBURBAN RESIDENTIAL). MINIMUM BUILDING SETBACK LINES ARE AS FOLLOWS:

C-2	R-2
FRONT – 50'	FRONT – 75'
REAR – 20'	REAR – 30'
SIDE – 20'	SIDE – 20'
SIDE – 100' ABUTTING A RESIDENTIAL DISTRICT	

   SETBACKS SHOWN ON THIS SURVEY ARE BASED ON C–2 ZONING REQUIREMENTS AND DO NOT CORRESPOND WITH SETBACKS SHOWN ON THE CURRENT RECORDED PLAT OF SUBJECT PROPERTY.
3. BY SCALED MAP LOCATION AND GRAPHIC PLOTTING ONLY, THIS PROPERTY LIES WITHIN FLOOD ZONE "X", AS DESIGNATED ON CURRENT FEDERAL EMERGENCY MANAGEMENT AGENCY MAP NO. 47187C0091F WITH AN EFFECTIVE DATE OF SEPTEMBER 29, 2006, AND MAP NO. 47187C0093G WITH AN EFFECTIVE DATE OF DECEMBER 22, 2016, WHICH MAKES UP A PART OF THE NATIONAL FLOOD INSURANCE ADMINISTRATION REPORT; COMMUNITY NO. 470205, PANEL NO. 0091 & 0093, SUFFIX F & G, WHICH IS THE CURRENT FLOOD INSURANCE RATE MAP FOR THE COMMUNITY IN WHICH SAID PREMISES IS SITUATED, SAID MAP DEFINES ZONE "X" UNDER "OTHER AREAS" AS AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

UTILITY CONTACTS:

PUBLIC WORKS	BRENTWOOD PUBLIC WORKS (615) 371–0080
ELECTRIC	NASHVILLE ELECTRIC SERVICE
GAS	PIEDMONT NATURAL GAS (615) 456–6313
TELEPHONE	AT&T (615) 585–3878
SEWER	BRENTWOOD WATER & SEWER DEPARTMENT (615) 371–0080
WATER	BRENTWOOD WATER & SEWER DEPARTMENT (615) 371–0080

PLAT LINE TABLE

LINE	BEARING	DISTNACE
L1	N10°38'20"W	28.38'
L2	N82°03'05"W	16.19'
L3	N07°56'55"E	27.00'
L4	N82°03'04"W	24.53'

PLAT CURVE TABLE

CURVE	DELTA ANGLE	RADIUS	ARC LENGTH	CHORD BEARING	CHORD LENGTH
C1	46°40'44"	994.30'	810.06'	N74°42'37"E	787.84'

LINE TABLE

LINE	BEARING	DISTANCE
L1	N06°40'46"W	28.40'
L2	N77°56'21"W	16.17'
L3	N12°02'50"E	27.02'
L4	N78°05'22"W	24.66'

CURVE TABLE

CURVE	RADIUS	LENGTH	DELTA	TANGENT	CHORD	CHD BRG
C1	994.30'	810.06'	46°40'45"	429.03	787.84'	N78°47'23"E

EXISTING PERVIOUS AREA: ±4.17 ACRES
EXISTING IMPERVIOUS AREA: ±12.88 ACRES

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

0 50 100

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5101 MARYLAND WAY

FOR

HIGHWOODS PROPERTIES

5101 MARYLAND WAY, CITY OF BRENTWOOD, 15TH CIVIL DISTRICT OF WILLIAMSON COUNTY, TENNESSEE

Scale: 1"=50'

Date: 11.07.2022

Approved By: B. SLAYDEN

Revisions:

- – –
- – –
- – –

3 12/20/2022 PER CITY COMMENTS
2 12/05/2022 PER CITY COMMENTS
1 11/22/2022 PER CITY COMMENTS

Drawing Title:

EXISTING CONDITIONS PLAN

Drawing No.

C1.0

Project No.

22-0189

P:\22-0189\CIVIL ENGINEERING\PLAN SHEETS\MASTER LAYOUT.DWG
PLOTTED BY: Matthew Lawrence Wilson 10/5/2022 9:53 AM



LEGEND

- GREEN SPACE/PROPOSED LANDSCAPING
- BIORETENTION AREA
- PROPOSED BUILDING
- PROPOSED CONCRETE WALK
- PROPOSED CONCRETE PAVEMENT
- PROPOSED PERVIOUS PAVERS
- PROPOSED ASPHALT
- EXISTING ASPHALT
- EXISTING CONCRETE WALK

HIGHWOODS WILL ENDEAVOR TO DESIGN, BUILD, AND FINANCE THE GREENWAY CONNECTION REQUIRED ON THE CITY'S LAND. THIS CONNECTION WILL INCLUDE THE ASPHALT PATH AND GRADING REQUIRED TO ACHIEVE THE ADEQUATE SLOPE. SITE WALLS, ELEVATED PATHS, UTILITIES, TREE DEMOLITION, AND SIMILAR REQUIREMENTS ARE NOT ANTICIPATED. FINAL DESIGN WILL BE SUBMITTED WITH THE SITE PLAN AND OUR TEAM WILL WORK WITH THE CITY'S TEAM TO ARRIVE AT A MUTUALLY AGREEABLE SOLUTION.

S:\2022\HIGHWOODS PROPERTIES\22-0189 5101 MARYLAND WAY\CAD\SHEETS\MASTER LAYOUT.DWG
Layout: C2.0 MASTER LAYOUT PLAN Model: Layout1 Plotted: 12/20/2022 12:18 PM
XREF: C-TOPO C-BASE C-PROP C-BLDG C-ROAD C-UTIL C-SITE C-LAND C-PLAN C-PROF C-SECT C-DETL C-NOTE C-SHRD

SITE DATA:

PROPERTY INFORMATION:

STREET ADDRESS:	5101 MARYLAND WAY BRENTWOOD, TN 37067
TAX MAP:	011A
PARCEL:	16.00
DEED BOOK:	55
PAGE:	213
ACREAGE:	± 17.04 AC (742,480 SF)

OWNER:

HIGHWOODS PROPERTIES
TAYLOR B. WELLS, AIA
3322 WEST END AVENUE, SUITE 600
NASHVILLE, TN 37203
(615) 340-1232
TAYLOR.WELLS@HIGHWOODS.COM

CIVIL ENGINEER:

RAGAN SMITH ASSOCIATES, INC
BRAD SLAYDEN
315 WOODLAND STREET
NASHVILLE, TN 37206
(615) 244-8591
BSLAYDEN@RAGANSMITH.COM

ARCHITECT:

HASTINGS ARCHITECTURE
CHUCK GANNAWAY
225 POLK AVENUE SUITE 100
NASHVILLE, TN 37203
(615) 329-1399
CGANNAWAY@HASTINGSARCHITECTURE.COM

ZONING INFORMATION:

ZONING CLASSIFICATION:	C-2 (COMMERCIAL RETAIL) (12.78 AC) R-2 (SUBURBAN RESIDENTIAL) (4.27 AC)
C-2 BUILDING SETBACKS:	
FRONT:	50'
FRONT (IF BUILDING OVER 3 STORIES):	100'
SIDE:	20'
SIDE	100' ABUTTING A RESIDENTIAL DISTRICT
REAR:	20'
R-2 BUILDING SETBACKS:	
FRONT:	75'
SIDE:	20'
REAR:	30'

PROPOSED PROJECT INFORMATION:

PROPOSED USAGE:

USES:	GENERAL OFFICE / RETAIL / RESTAURANT
OFFICE:	
A:	102,000 SF
B:	112,000 SF
C:	110,000 SF
	324,000 SF
RETAIL:	
VILLAGE (RESTAURANT):	23,000 SF
VILLAGE (GENERAL RETAIL):	13,800 SF
WITHIN BUILDING A (GENERAL RETAIL):	6,250 SF
	43,050 SF

PARKING:

EXISTING SURFACE PARKING:	527 SPACES (12 ACCESSIBLE SPACES)
PARKING RATIO REQUIRED:	
GENERAL OFFICE:	1 SP/300SF
GENERAL RETAIL:	1 SP/250SF
RESTAURANT:	1 SP/100SF
REQUIRED PARKING:	1,382 SP
PROPOSED PARKING PROVIDED:	
PROPOSED SURFACE PARKING :	332 SP
PROPOSED STRUCTURED PARKING:	913 SP
TOTAL:	1,245 SP
PARKING EXCESS:	-137 SP (SEE SHARED PARKING ANALYSIS)
GREENWAY PARKING PROVIDED:	8 SP
ALLOWABLE BUILDING HEIGHT:	4 STORIES OR 60 FEET
PROPOSED BUILDING HEIGHT:	
OFFICE BUILDINGS A, B AND C:	4 STORIES OR 60 FEET
RETAIL VILLAGE:	NOT EXCEEDING 3 STORIES OR 46 FEET
USABLE LOT AREA ALLOWED (MAX):	30%
USABLE LOT AREA PROVIDED:	28%
EXISTING PERVIOUS AREA:	± 4.17 ACRES (181,645 SF)
EXISTING IMPERVIOUS AREA:	± 12.88 ACRES (561,053 SF)
PROPOSED PERVIOUS SITE AREA:	± 6.21 ACRES (270,805 SF)
PROPOSED IMPERVIOUS SITE AREA:	± 10.89 ACRES (474,292 SF)
TOTAL:	CONVERSION OF 2.05 AC TO PERVIOUS SURFACE

SURVEY INFORMATION:

BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM A SURVEY BY RAGAN SMITH ASSOCIATES DATED MARCH 26, 2021.

FLOOD INFORMATION:

FEMA MAP #: 47187C0093G & 47187C0091F
EFFECTIVE DATE: SEPTEMBER 29, 2006
BY SCALED MAP LOCATION AND GRAPHIC PLOTTING ONLY, THIS PROPERTY LIES WITHIN FLOOD ZONE "X", AS DESIGNATED ON CURRENT FEDERAL EMERGENCY MANAGEMENT AGENCY MAP NO. 47187C0091F WITH AN EFFECTIVE DATE OF SEPTEMBER 29, 2006, AND MAP NO. 47187C0093G WITH AN EFFECTIVE DATE OF DECEMBER 22, 2016, WHICH MAKES UP A PART OF THE NATIONAL FLOOD INSURANCE ADMINISTRATION REPORT; COMMUNITY NO. 470205, PANEL NO. 0091 & 0093, SUFFIX F & G, WHICH IS THE CURRENT FLOOD INSURANCE RATE MAP FOR THE COMMUNITY IN WHICH SAID PREMISES IS SITUATED. SAID MAP DEFINES ZONE "X" UNDER "OTHER AREAS" AS AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

GEOTECHNICAL INFORMATION:

NO GEOTECHNICAL STUDY HAS BEEN CONDUCTED ON THIS SITE. HOWEVER, THE DESIGN FOR THE SITE IMPROVEMENTS SHOWN ON THIS PLAN HAS RELIED ON EXPERIENCE WITH SIMILAR PROJECTS AND SIMILAR SOIL/SITE CONDITIONS. IF, IN THE PURSUIT OF THIS WORK BY THE CONTRACTOR, CONDITIONS OR CIRCUMSTANCES ARE ENCOUNTERED THAT ARE DIFFERENT THAN REFLECTED IN THESE PLANS OR THAT APPEAR TO IMPACT THE SCOPE OF THE WORK, THE CONTRACTOR WILL IMMEDIATELY NOTIFY THE CIVIL ENGINEER, AND THE OWNER/DEVELOPER BEFORE ANY REMEDIAL COURSE OF ACTION OR DESIGN CHANGE IS INITIATED. ALL PARTIES (OWNER, CIVIL ENGINEER, PROPER GOVERNMENTAL AGENCIES, AND CONTRACTOR) MUST BE IN AGREEMENT AND THE MAGNITUDE OF THE COST/TIME REQUIRED FOR THE MEASURES ESTABLISHED.

GENERAL NOTES:

1. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES IN THE PROXIMITY OF THE CONSTRUCTION AREA AND REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE PRIOR TO BEGINNING WORK.
2. THE CONTRACTOR SHALL CONFORM TO ALL LOCAL, STATE AND FEDERAL CODES AND OBTAIN ALL PERMITS PRIOR TO BEGINNING WORK.
3. THE CONTRACTOR SHALL CHECK ALL FINISHED GRADES AND DIMENSIONS AND REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE PRIOR TO BEGINNING WORK.
4. DIMENSIONS ARE TO THE FACE OF CURB, EDGE OF CONCRETE AND FACE OF BUILDING, UNLESS NOTED OTHERWISE.
5. PROPOSED BUILDING FOOTPRINT IS FOR GRAPHIC PURPOSES ONLY. CONTRACTOR SHALL USE THE CURRENT ARCHITECTURAL DRAWINGS FOR BUILDING STAKEOUT AND VERIFY THAT THERE ARE NO DISCREPANCIES WITH THESE PLANS.
6. ALL TRAFFIC MARKINGS SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICE (MUTCD).
7. ALL ACCESSIBLE RAMPS, PARKING SPACES AND ACCESSIBLE ROUTES SHALL COMPLY WITH THE CURRENT ADA REQUIREMENTS.
8. EXTERIOR DOOR LANDINGS SHALL BE PROVIDED PER THE LOCAL BUILDING CODE. CONTRACTOR SHALL COORDINATE DOOR LOCATIONS AND ADJACENT SIDEWALK/LANDING GRADES WITH THESE PLANS AND REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE.

DIMENSION NOTES:

- THE MINIMUM DISTANCE BETWEEN ANY BUILDING AND ANY INTERNAL STREET OR DRIVE SHALL BE 15 FEET.
- THE MINIMUM DISTANCE BETWEEN ANY BUILDING AND ANY PARKING SPACE SHALL BE 10 FEET.

CONSTRUCTION PHASING NOTE:

THE DEVELOPMENT'S CONSTRUCTION AND PHASING PLANS BEGINS WITH ASSUMED DECOMMISSIONING OF THE YMCA BY THE YMCA IN THE SUMMER OF 2023. WE ANTICIPATE BEGINNING DEMOLITION SOON AFTER THE CLOSING OF THE FACILITY WITH PLANS TO COMPLETE DEMOLITION BY THE END OF 2023. DEPENDENT ON MARKET CONDITIONS AND DEMAND, UPON COMPLETION OF DEMOLITION, OUR GOAL WOULD BE TO BEGIN VERTICAL CONSTRUCTION OF OFFICE BUILDING 'A' AND APPROXIMATELY 30,000 SF OF RETAIL AND ½ OF THE STRUCTURED PARKING DECK IN 2024. THE 2ND PHASE OF OFFICE AND RETAIL WOULD DEPEND ON RECEPTIVE OFFICE AND RETAIL MARKET DEMANDS. OUR PLAN WOULD BE TO BEGIN CONSTRUCTION OF OFFICE BUILDING 'B' AND THE REMAINING SF OF RETAIL AND PARKING DECK EXPANSION APPROXIMATELY 1 YEAR AFTER SUBSTANTIAL COMPLETION OF PHASE 1. OFFICE BUILDING C WOULD THEN BEGIN APPROXIMATELY 1 YEAR AFTER THE SUBSTANTIAL COMPLETION OF PHASE II.

RaganSmith
Nashville - Murfreesboro - Chattanooga
ragansmith.com

5101 MARYLAND WAY

FOR

HIGHWOODS PROPERTIES

5101 MARYLAND WAY,CITY OF BRENTWOOD, 15TH CIVIL DISTRICT OF WILLIAMSON COUNTY, TENNESSEE

Scale:	1"=50'
Date:	11.07.2022
Approved By:	B. SLAYDEN

Revisions:

- – –
- – –
- – –

3 12/20/2022 PER CITY COMMENTS
2 12/05/2022 PER CITY COMMENTS
1 11/22/2022 PER CITY COMMENTS

Drawing Title:

MASTER LAYOUT PLAN

Drawing No.

C2.0

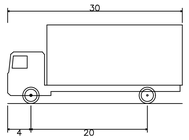
Project No.

22-0189

0 50 100

Know what's below. Call before you dig.

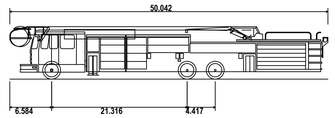
GARBAGE TRUCK



SU-30 - Single Unit Truck

Overall Length	30.000ft
Overall Width	8.000ft
Overall Body Height	13.500ft
Min Body Ground Clearance	1.367ft
Track Width	8.000ft
Lock-to-lock time	5.00s
Max Steering Angle (Virtual)	31.80°

FIRE TRUCK ACCESS



Rsa Fire Truck

Overall Length	50.042ft
Overall Width	8.333ft
Overall Body Height	8.303ft
Min Body Ground Clearance	0.627ft
Track Width	8.000ft
Lock-to-lock time	6.00s
Wall to Wall Turning Radius	42.000ft

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5101 MARYLAND WAY

FOR

HIGHWOODS PROPERTIES

5101 MARYLAND WAY,CITY OF BRENTWOOD, 15TH CIVIL DISTRICT OF WILLIAMSON COUNTY, TENNESSEE

Scale: 1"=50'

Date: 11.07.2022

Approved By: B. SLAYDEN

Revisions:

- – –
- – –
- – –

3 12/20/2022 PER CITY COMMENTS
2 12/05/2022 PER CITY COMMENTS
1 11/22/2022 PER CITY COMMENTS

Drawing Title:

TRUCK TURN MOVEMENT PLAN

Drawing No.

C2.1

Project No.

22-0189

Know what's below. Call before you dig.

0 50 100

R:\22-0189 - CIVIL ENGINEERING\C4-SHEET MASTER FILES\22-0189 - TRUCK TURN MOVEMENTS.DWG
Feb 03, 2023 - 8:46am jmcdonald R:\22-0189 - CIVIL ENGINEERING\C4-SHEET MASTER FILES\22-0189 - TRUCK TURN MOVEMENTS.dwg

STORMWATER QUANTITY NOTES:

CITY OF BRENTWOOD STORMWATER REQUIREMENTS:

1. ARTICLE 6: SECTION 10(3)G.12:
   - PREVIOUSLY DEVELOPED SITES. THE CITY OF BRENTWOOD RESERVES THE RIGHT TO REQUIRE DRAINAGE CALCULATIONS TO BE BASED ON PRE-EXISTING CONDITIONS OF DEVELOPED SITES WHERE NEW DEVELOPMENT IS PROPOSED. HISTORICAL INSTANCES OF DOWNSTREAM FLOODING WILL BE THE BASIS FOR REQUIRING THESE CALCULATIONS.
2. ARTICLE 6: SECTION 10(3)G.8.C:
   - DRAINAGE CALCULATIONS SUBMITTED IN SUPPORT OF PROPOSED DEVELOPMENTS WITHIN THE CITY OF BRENTWOOD SHALL INCLUDE AN ANALYSIS OF BOTH ONSITE AND OFFSITE WATERSHEDS AS A SYSTEM WITH AN APPROPRIATE HYDROLOGIC AND HYDRAULIC ROUTING SOFTWARE PROGRAM, TAKING INTO CONSIDERATION THE OFFSITE/BYPASS DRAINAGE AREAS AND PROPERLY ACCOUNTING FOR TIMING OF ONSITE/OFFSITE WATERSHEDS. IN ADDITION TO MEETING FLOW REDUCTION REQUIREMENTS AT DETENTION POND OUTFALLS LISTED IN TABLE SEVEN, THE POST-DEVELOPED DISCHARGES FOR ALL STORM EVENTS, INCLUDING THE 1-YEAR, 2-YEAR, 5-YEAR, 10-YEAR, 25-YEAR, 50-YEAR AND 100-YEAR-24-HOUR DESIGN STORMS, MUST BE REDUCED TO BE EQUAL TO OR LESS THAN PRE-DEVELOPED DISCHARGES AT THE OVERALL SITE OUTFALL. THE ANALYSIS POINT(S) FOR PROPOSED DEVELOPMENTS SHALL BE LOCATED AT EACH ONSITE DETENTION POND OUTFALL, AT CONFLUENCE(S) WITH ONSITE/BYPASS FLOWS, AND AT AN OVERALL COMMON OUTFALL POINT THAT CAPTURES BOTH THE ONSITE AND OFFSITE TOTAL COMBINED DISCHARGES, A SUMMARY TABLE COMPARING PRE-DEVELOPED AND POST-DEVELOPED DISCHARGES FOR ALL DESIGN STORMS AT ALL ANALYSIS POINTS SHALL BE PROVIDED.

SOUTH DRAINAGE BASIN:
- THE DRAINAGE BASIN THAT OUTFALLS TO THE SOUTH INCLUDES THE PROPOSED DETENTION POND. THIS DRAINAGE BASIN ADHERES TO ALL OF THE CITY CODE REQUIREMENTS LISTED ABOVE BY: USING THE PRE-EXISTING CONDITIONS OF THE SITE FOR THE DRAINAGE CALCULATIONS DUE TO THE KNOWN EXISTING STORMWATER ISSUES TO THE SOUTH OF THE SITE, RELEASING STORMWATER FROM THE DETENTION POND AT THE EXISTING TO PROPOSED PEAK FLOW REQUIREMENTS PER THE CITY OF BRENTWOOD'S STORMWATER CODE, AND THE POST-DEVELOPED DISCHARGE FOR ALL STORM EVENTS ARE REDUCED TO BE EQUAL TO OR LESS THAN PRE-DEVELOPED DISCHARGES.

NORTH DRAINAGE BASIN AND WEST DRAINAGE BASIN:
- THE DRAINAGE BASIN TO THE NORTH AND TO THE WEST DO NOT HAVE ANY KNOWN EXISTING STORMWATER OR DRAINAGE ISSUES. BECAUSE THERE ARE NO KNOWN EXISTING STORMWATER OR DRAINAGE ISSUES, THE CITY CODE REQUIREMENT ABOVE(1), DOES NOT APPLY TO THESE DRAINAGE BASINS AND THESE BASINS USE THE EXISTING CONDITIONS OF THE SITE FOR THE PROPOSED DRAINAGE CALCULATIONS OF EACH OUTFALL.
- THESE DRAINAGE BASINS DO NOT HAVE A PROPOSED DETENTION POND. THEREFORE, THE CITY REQUIREMENT ABOVE(2-"FLOW REDUCTION REQUIREMENTS AT DETENTION POND OUTFALLS LISTED IN TABLE SEVEN") DOES NOT APPLY TO THESE DRAINAGE BASINS AND THE POST-DEVELOPED DISCHARGE FOR ALL STORM EVENTS ARE REDUCED TO BE EQUAL TO OR LESS THAN PRE-DEVELOPED DISCHARGES AT EACH OUTFALL.

STORMWATER QUALITY NOTES:

1. ARTICLE 6: SECTION 10(3)G.9:
   - STORMWATER QUALITY. THE DESIGN OF STORMWATER QUALITY CONTROL PRACTICES SHALL INCLUDE STRUCTURAL AND NON-STRUCTURAL DEVICES AND SHALL BE DESIGNED IN ACCORDANCE WITH THE FOLLOWING CRITERIA(SEE ARTICLE 6: SECTION 10(3)G.9 FOR FURTHER CRITERIA) AND IN ACCORDANCE WITH THE METRO WATER SERVICES LOW IMPACT DEVELOPMENT MANUAL VOLUME 5, OR LATER SUBSEQUENT EDITIONS.

* THE PROPOSED SITE ADHERES TO THE VOLUME 5 LID REQUIREMENTS THROUGH THE USE OF PERVIOUS PAVERS AND BIO-RETENTIONS. THE CODE REQUIREMENT FOR A SITE BEING REDEVELOPED IS 60% RUNOFF REDUCTION VOLUME. THE PROPOSED 5101 MARYLAND WAY SITE MEETS THE 80% RUNOFF REDUCTION VOLUME REQUIREMENT FOR SITES THAT HAVE NOT PREVIOUSLY BEEN DEVELOPED. THE PURPOSE OF ADHERING TO THE 80% RUNOFF REDUCTION VOLUME REQUIREMENT IS TO FURTHER HELP THE KNOWN EXISTING STORMWATER ISSUES TO THE SOUTH OF THE SITE. THE INCREASED RUNOFF REDUCTION VOLUME WILL REDUCE THE STORMWATER BURDEN DOWNSTREAM BY INFILTRATING STORMWATER INTO THE GROUND AND REDUCING THE SPEED OF THE STORMWATER LEAVING THE PROPOSED SITE.

LEGEND

- BIORETENTION AREA
- PROPOSED BUILDING
- PROPOSED CONCRETE WALK
- PROPOSED CONCRETE PAVEMENT
- PROPOSED PERVIOUS PAVERS
- PROPOSED ASPHALT
- EXISTING ASPHALT
- EXISTING CONCRETE WALK

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5101 MARYLAND WAY

FOR

HIGHWOODS PROPERTIES

5101 MARYLAND WAY, CITY OF BRENTWOOD, 15TH CIVIL DISTRICT OF WILLIAMSON COUNTY, TENNESSEE

Scale: 1"=50'

Date: 11.07.2022

Approved By: B. SLAYDEN

Revisions:

- - - -
- - - -
- - - -
3 12/20/2022 PER CITY COMMENTS
2 12/05/2022 PER CITY COMMENTS
1 11/22/2022 PER CITY COMMENTS

Drawing Title:

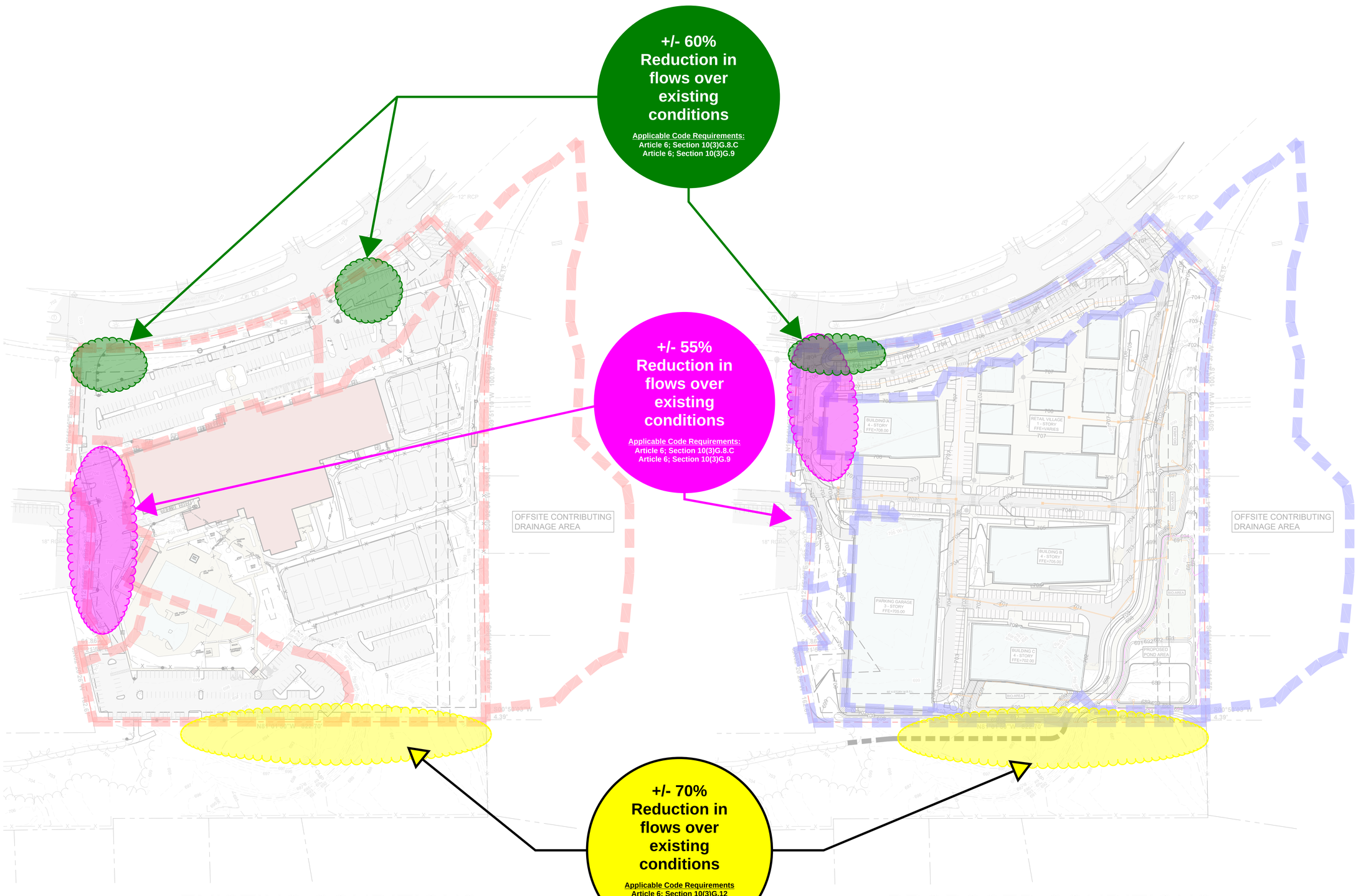
MASTER GRADING & DRAINAGE PLAN

Drawing No.

C3.0

Project No.

22-0189



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5101 MARYLAND WAY

FOR

HIGHWOODS PROPERTIES

5101 MARYLAND WAY,CITY OF BRENTWOOD, 15TH CIVIL DISTRICT OF WILLIAMSON COUNTY, TENNESSEE

Scale: 1"=80'

Date: 11.07.2022

Approved By: B. SLAYDEN

Revisions:

- - -
- - -
- - -
- - -

3 12/20/2022 PER CITY COMMENTS

2 12/05/2022 PER CITY COMMENTS

Drawing Title:

PRE VS POST DRAINAGE ANALYSIS

Drawing No.

C3.1

Project No.

22-0189

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

0 80 160


MARYLAND WAY
(110' RIGHT OF WAY)
BUILDING A
RETAIL VILLAGE
BUILDING B
BUILDING C
PARKING GARAGE
PROPOSED SANITARY SEWER PUMP
GATE KEY PAD
GATE KEY PAD
MONUMENT SIGN
ELECTRIC BOX
SANITARY MANHOLE RIM=706.80 INV=702.60(IN)SE INV=702.05(IN)NW INV=702.00(OUT)SW
PRIVATE SANITARY SEWER FORCE MAIN DEED BOOK 1555, PAGE 403 R.O.W.C.T.
VEHICULAR & PEDESTRIAN INGRESS AND EGRESS EASEMENT GRANTED TO JORDAN PROPERTIES, INC. (LOT 38) AREA SHOWN THUS: DEED BOOK 1696, PAGE 741 R.O.W.C.T.
SANITARY MANHOLE RIM=706.60' INV=700.00'(IN) INV=699.80'(OUT)
SANITARY MANHOLE RIM=702.70' INV=693.70'(NE) INV=693.80'(OUT)W INV=694.00'(OUT)S
SANITARY MANHOLE ELEV.=701.90' INV.=694.70 (OUT)
2' ACCESS EASEMENT DEED BOOK 1256, PAGE 360, DEED BOOK 1758, PAGE 692, DEED BOOK 1759, PAGE 724, R.O.W.C.T.
20' DRAINAGE EASEMENT P.B. 2001, PG. 76 R.O.W.C.T.
DRAINAGE EASEMENT
PROPOSED 6" FIRE LINE (TO BE INSTALLED BY FIRE SPRINKLER CONTRACTOR)
PROPOSED 8" DOMESTIC WATER LINE (SUBURBAN RESIDENTIAL BUFFER AREA)
S18°35'47"W 86.15'
S14°41'37"W 100.14'
S09°51'10"W 100.15'
S09°02'54"W 313.14'
S08°11'36"W 311.75'
S00°50'03"W 4.39'
N81°01'50"W 822.70'
N12°16'46"E 303.08'
N12°16'42"E 498.32'
N23°12'01"W 77.32'
61.86'
S83°21'55"E
N02°20'26"W 19.20'
30' P.U.E.
10' P.U.E.
20' P.U.E.
10' UTILITY EASEMENT
FIRE ACCESS ONLY
FIRE ACCESS ONLY
FIRE ACCESS ONLY



LEGEND

C-2 BUFFER PLANTING

- PROPOSED BUFFER VEGETATION AREA
- PROPOSED BUFFER EVERGREEN TREES (234)
- PROPOSED BUFFER EVERGREEN SHRUBS (202)

MARYLAND WAY PLANTING

- PROPOSED EVERGREEN HEDGE (536)

SITE PLANTING

- CANOPY TREE (100)
- EVERGREEN TREE (104)
- UNDERSTORY TREE (113)

0 50 100

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5101 MARYLAND WAY

FOR

HIGHWOODS PROPERTIES

5101 MARYLAND WAY, BRENTWOOD, TENNESSEE

Scale:	1"=50'
Date:	11.21.2022
Approved By:	B. SLAYDEN

Revisions:

- – –
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- – –

Drawing Title:

MASTER LANDSCAPE PLAN

Drawing No.

L1.0

Project No.

P:\PROJECTS\2019\MARYLAND FARMS\DRAWINGS\SHEETS\L1.0.DWG
Plotted: 11/21/2022 2:29 PM By: WILLEM VAN DE VEN Login Name: WILLEM VAN DE VEN

MEMORANDUM

TO:	City of Brentwood
FROM:	Meghan Sigler, KCI Technologies, Inc.
DATE:	December 2, 2022
SUBJECT:	Maryland Farms YMCA TIS – Response to TIS Review Comments KCI Job Order No. 892206641

In October 2022, KCI Technologies, Inc. prepared a traffic impact study (TIS) for the proposed Maryland Farms YMCA development located along Maryland Way in Brentwood, Tennessee. As presented in the TIS, the proposed development includes approximately 40,000 square feet of retail and 325,000 square feet of office, and access to the development is planned to be provided by three existing driveways, two on Maryland Way and one on Ward Circle.

In November 2022, Neel-Schaffer reviewed the TIS for the City of Brentwood and provided the development team and the City of Brentwood comments/recommendations on the reviewed TIS. The following are the comments/recommendations and the development teams responses to those comments/recommendations:

- The applicant shall implement all recommendations presented in the TIS as part of the project's initial opening. If the project uses a phased approach, all improvements should be in place prior to the opening of the first phase.
    - The development is planned to be constructed in phases. The development team would prefer that phasing of off-site improvements be finalized at a later time, once a phasing plan has been finalized.
- Review found that the traffic study did not provide a functional illustration outlining proposed recommendations. We recommend that the report be amended to include a diagram highlighting the proposed improvements as outlined by the TIS and the review memo. The drawing will serve as a tool for city officials during review and approval of future site plan submittals.
    - The TIS report has been updated to include a recommended improvements figure. The updated TIS report has been included with the submittal of this memo.
- We recommend that the eastern access driveway include longer vehicle storage than

indicated in the TIS. In reviewing the study's analysis of existing left-turn movement during the PM peak, we concluded that 75 feet of storage may likely not be adequate under typical conditions. We suggest that the northbound exit approach of the eastern driveway provide a turn lane length of approximately 100ft.

  - The development team agrees with this recommendation. The TIS report and site plan have been updated to reflect this change in storage length from 75 feet to 100 feet. Those updated documents have been included with the submittal of this memo.

- Review concluded that improvement to the existing westbound left-turn lanes on Maryland Way at both proposed access driveways is advisable. We characterize the condition of the existing left-turn lanes as marginally sufficient. We suggest improvement to the turn lanes based on Maryland Way's 40-mph posted speed limit, a general lack of existing transitional deceleration taper and the proposed land uses.

  - We recommend that the westbound left-turn lanes at the western access and eastern access driveways be lengthened to provide a total storage length of 100 to 125 feet each. Final storage capacities may be confirmed as part of final design as and as approved by city engineering officials. We advise that both westbound left-turn lanes include a minimum of 100ft storage length.

  - Design of the modified left-turn lanes should include appropriate deceleration taper per city design guidelines. We advise a transitional taper of 50ft to 75ft.

  - Design should also investigate driver sight lines for turning movements from the left-turn lane into the site. Site design should confirm required sight distances are not obstructed by existing vegetation.

  - The development team agrees with this recommendation. The TIS report and site plan have been updated to reflect 100ft storage length and 75ft of taper for the westbound left-turn lanes at the intersections of Maryland Way and YMCA Western Driveway and Maryland Way and YMCA Eastern Driveway. Those updated documents have been included with the submittal of this memo.

- We suggest that the site designers and city officials consider the benefit of incorporating sign guidance directing exiting drivers with destinations to the west along Maryland Way to use the southwest driveway access. The side driveway that connects to Ward Circle provides access to the existing traffic signal at the intersection of Maryland Way and Ward Circle/Maryland Commons Dr. For vehicles exiting the site that desire to travel westbound along Maryland Way, we envision scenarios where drivers would likely find left turn exit to

be safer and potentially more efficient at the signalized intersection. We believe trailblazer signage placed strategically within the site's campus would encourage drivers to use the signalized intersection to complete left-turn movements, especially during peak travel periods.

- The development team agrees with this recommendation and are planning to work out the details of this recommendation during final site plan approval.

NOVEMBER 2022

SHARED PARKING STUDY

MARYLAND FARMS YMCA
BRENTWOOD, TENNESSEE

PREPARED FOR:
HIGHWOODS PROPERTIES

KCI TECHNOLOGIES

500 11TH AVENUE NORTH, SUITE 290
NASHVILLE, TENNESSEE 37203

SHARED PARKING STUDY
MARYLAND FARMS YMCA
BRENTWOOD, TENNESSEE

PREPARED FOR:
HIGHWOODS PROPERTIES



KCI TECHNOLOGIES, INC
500 11th Avenue North, Suite 290
Nashville, TN 37203
615.370.8410 office 615.370.8455 fax
www.kci.com

1. INTRODUCTION AND PROJECT DESCRIPTION

The purpose of this study is to complete an analysis to determine the minimum number of parking spaces required to accommodate the combined land uses associated with the proposed Maryland Farms YMCA development. As shown by Figure 1, the development is located along Maryland Way west of the intersection of Maryland Way and Brentwood Boulevard in Brentwood, Tennessee.

Based on information provided by the development team, the proposed development is planned to include approximately 325,000 square feet of office space and 40,000 square feet of retail/restaurant space. Specifically, the retail/restaurant space is planning to include approximately 17,000 square feet of retail space, 10,000 square feet of full service/sit-down restaurant space, 10,000 square feet of fast/casual restaurant space, and 3,000 square feet of coffee shop space. The specific size breakdown for each land use is shown in Table 1, which corresponds to the current development plan.

TABLE 1. PROPOSED MIXED-USE DEVELOPMENT PROGRAM

LAND USE	SIZZE
Office	325,000 s.f.
Retail	17,000 s.f.
Fine Dining Restaurant	10,000 s.f.
Fast Casual Restaurant	10,000 s.f.
Coffee Shop	3,000 s.f.

The purpose of this study is to determine the projected parking demand of the combined land uses. Since the proposed development will include a mix of land uses, the peak parking demand for each land use will occur at varying times. Parking demand rate information and shared parking information from Brentwood's *Municipal Code* as well as typical parking patterns and data presented in *Shared Parking*, 3rd Edition, published by the Urban Land Institute (ULI) were utilized to determine the peak parking demand of the site.



N

Location of the Study Area
(Not to Scale)

Figure 1.

2. PARKING ANALYSIS

2.1 Zoning Ordinance Requirements

Brentwood's *Municipal Code* contains parking space requirements for specific land uses that do not account for shared parking that may occur on parcels with a mix of land uses. This ordinance was reviewed to determine the parking that would be required for the proposed land uses if no adjustments for shared parking were considered.

Table 2 show the proposed land uses and densities for the Maryland Farms YMCA development, the parking demand rates contained in Brentwood's *Municipal Code*, and the number of parking spaces required per the code with no adjustments for shared parking for each of the proposed development scenarios.

TABLE 2A. PARKING DEMAND BASED ON BRENTWOOD'S MUNICIPAL CODE WITH INDIVIDUAL LAND USES

LAND USE	SIZE	PARKING RATE PER ZONING ORDINANCE	UNADJUSTED PARKING DEMAND
Office	325,000 s.f.	1 space per 300 sq. ft.	1,083 spaces
Retail	17,000 s.f.	1 space per 250 sq. ft.	68 spaces
Fine Dining Restaurant	10,000 s.f.	1 space per 100 sq. ft.	100 spaces
Fast Casual Restaurant	10,000 s.f.	1 space per 100 sq. ft.	100 spaces
Coffee Shop	3,000 s.f.	1 space per 100 sq. ft.	30 spaces
		TOTAL	**1,381 spaces**

As shown in Table 2, based on the parking demand rates without considering shared parking, the development would require a total of 1,381 parking spaces.

Generally, the procedure outlined above is followed when determining parking needs for developments within Brentwood. However, for sites with a mixture of land uses, this procedure typically overestimates the parking demand. The overall peak parking demand for a mixed-use site can be significantly less than the sum of the peak parking demands of the individual uses since different types of uses have different peak parking demand characteristics. Therefore, the total number of parking spaces mentioned above are considered an overestimation of the actual parking demand for the combined land uses.

2.2 Shared Parking Analysis

Shared Parking, Third Edition, includes extensive research that quantifies how shared parking within mixed-use developments results in a lower parking demand than the sum of the parking needed for the individual uses. This reduction is due in part to fluctuations in the parking demand throughout the day, week, and year. The peak demand for each land use does not necessarily occur at the same time. Also, shared trips between the different land uses within a mixed-use site result in fewer parking spaces required for shared trips.

In order to determine the number of parking spaces that are needed to serve the Maryland Farms YMCA development, a shared parking analysis was conducted for the combined land uses. The parking demand rates for each month of the year were identified per land use. The month with the peak parking demand was then determined. Next, the hourly parking demand rates for a typical weekday and a weekend were identified for each of the proposed land uses. The monthly parking demand factor and the hourly parking demand factor were applied to the base parking rates for each land use in order to determine the number of parking spaces that are required for each use on an hourly basis. Finally, the hourly parking demands for the individual uses were added together to determine the total parking demand per hour for the site. This procedure was followed to determine the weekday peak parking demand and the weekend peak parking demand. The analysis is described further below.

Monthly Parking Demand Factors

Studies have shown that the parking demand for a given land use will typically vary from month to month. Therefore, the monthly parking demands for the land uses within the Maryland Farms YMCA development were evaluated to determine the peak monthly variations.

For each of the land uses, the monthly parking demand factors were taken from *Shared Parking*. These factors were then applied to the base parking rates to determine the monthly parking demand for each land use. For each month, the parking demands for the proposed uses were summed to identify the month with the highest parking demand. The peak month for the proposed development is expected to be December.

Hourly Parking Demand

Similar to the monthly parking demand factors, studies have shown that the parking demand for a given land use will typically change from hour to hour. Therefore, the hourly parking demands for each of the proposed land uses were evaluated to determine the peak hour variations. The peak hour for the proposed development is expected to be 2:00 PM on weekdays and 12:00 PM on weekends.

Non-Captive Parking Factors

Studies have shown that developments containing multiple land uses will typically have a reduction of customer parking needs due to customers parking and visiting more than one use. The term "captive market" is used to describe someone already present in the area that will visit another site. It is important to recognize the difference in simultaneous and sequential trips when estimating the effects of captive market influences on parking supply. For example, an employee parked at an office building is likely to visit an on-site retail business or on-site restaurant for lunch, which will reduce the parking demand for the restaurant. This is considered a simultaneous trip; and therefore, results in the reduction for shared parking. This reduction in parking is reflected in the non-captive parking percentage.

Non-Captive Parking Factors and Mode Adjustment Factors

The mode adjustment factor is the percentage of visitors that drive to the project site rather than use an alternative means of transportation such as riding public transportation, taking a taxi or ride-share, riding a bicycle, or walking.

Peak Parking Demand

For each of the proposed land uses, the standard parking demand rates previously described were multiplied by the peak monthly parking demand factor, the hourly parking demand factor, the non-captive parking factor, and the mode adjustment factor to determine the hourly parking demand for each land use. The peak parking demands for each of the land uses were then summed to determine the total hourly parking demands for the development.

Table 3 presents the results of the shared parking analysis for the Maryland Farms YMCA development.

TABLE 3. SHARED PARKING MODEL – PROJECTED PARKING DEMAND

PEAK PARKING DEMAND	
WEEKDAY	WEEKEND
2:00 PM December	12:00 PM December
1,162 spaces	420 spaces

As shown in Table 3, with the proposed land uses for the Maryland Farms YMCA development, there will be potential for shared parking between land uses.

Using ULI's *Shared Parking* methodology, the shared parking analysis indicates the peak parking demand is 1,162 parking spaces. This is a reduction of 16% as compared to the base parking demand rates contained in Brentwood's *Municipal Code*. ULI's shared parking worksheet is attached.

3. CONCLUSIONS & RECOMMENDATIONS

Using Brentwood's *Municipal Code,* parking rates without a shared parking analysis determined that the development would require a total of 1,381 parking spaces.

The shared parking analysis utilizing the shared parking methodology presented in ULI's *Shared Parking*, Third Edition, reduced the total number of parking spaces needed for the site by 219 spaces. This results in a reduction of 16% as compared to the base parking demand rates contained in Brentwood's *Municipal Code*.

Therefore, based on results of the analyses presented in this report, a minimum of 1,162 parking spaces should be provided by the proposed Maryland Farms YMCA development.

Shared Parking Demand Summary

Peak Month: DECEMBER -- Peak Period: 2 PM, WEEKDAY

Land Use	Project Data		Weekday					Weekend					Weekday			Weekend		
	Quantity	Unit	Base Ratio	Driving Adj	Non-Captive Ratio	Project Ratio	Unit For Ratio	Base Ratio	Driving Adj	Non-Captive Ratio	Project Ratio	Unit For Ratio	Peak Hr Adj 2 PM	Peak Mo Adj December	Estimated Parking Demand	Peak Hr Adj 12 PM	Peak Mo Adj December	Estimated Parking Demand
Retail																		
Retail (<400 ksf)	17,000	sf GLA	2.90	100%	88%	2.56	ksf GLA	3.20	100%	98%	3.13	ksf GLA	100%	100%	44	100%	100%	54
Employee			0.70	100%	100%	0.70		0.80	100%	100%	0.80		100%	100%	12	100%	100%	14
Food and Beverage																		
Fine/Casual Dining	10,000	sf GLA	13.25	100%	79%	10.47	ksf GLA	15.25	100%	98%	14.88	ksf GLA	65%	100%	68	50%	100%	75
Employee			2.25	100%	100%	2.25		2.50	100%	100%	2.50		90%	100%	21	75%	100%	19
Fast Casual/Fast Food	13,000	sf GLA	12.40	100%	32%	4.01	ksf GLA	12.70	100%	89%	11.26	ksf GLA	90%	96%	45	100%	96%	141
Employee			2.00	100%	100%	2.00		2.00	100%	100%	2.00		95%	100%	25	100%	100%	26
Office																		
Office 100 to 500 ksf	325,000	sf GFA	0.22	100%	100%	0.22	ksf GFA	0.02	100%	100%	0.02	ksf GFA	95%	100%	69	90%	100%	7
Reserved		emp	0.00	100%	100%	0.00		0.00	100%	100%	0.00		100%	100%	-	100%	100%	-
Employee			2.84	100%	100%	2.84		0.28	100%	100%	0.28		95%	100%	878	90%	100%	84
													Customer/Visitor		227	Customer		277
													Employee/Resident		935	Employee/Resident		142
													Reserved		-	Reserved		-
													Total		1,162	Total		420

Hazen *Memorandum*

December 22, 2022

To: Brentwood Water Services (Brentwood)

From: Seth Bradley P.E., Associate
Ryan Dean, Sr. Hydraulic Modeler

Re: Capacity Evaluation – 5101 Maryland Way Proposed Development

As requested by the City of Brentwood, Hazen performed an evaluation of a proposed development located at 5101 Maryland Way. The site currently is owned and operated by The YMCA of Middle Tennessee and provides a variety of facilities for exercise and fitness as shown in Figure 1. The proposed development would be a mixed-use development consisting of office, retail, and restaurant uses as shown in Figure 2 and would increase flows above existing conditions. The purpose of this evaluation is to determine if Brentwood's existing sewer system would have adequate capacity to receive increased flows from the proposed development. Brentwood's latest calibrated collection system hydraulic model was used for this evaluation.



Figure 1: Existing Site Aerial



Figure 2: Proposed Mixed Use Development Master Plan

Model Calibration Update

The model calibration in this area was last refined during the 2020 model update. During that effort, calibration was updated based on flow meter T-07, which was located on the main trunk and downstream of the trunk connection for this area. Model parameters were adjusted to match both dry and wet weather conditions based on this data.

Modeling Assumptions

- Sewer capacity was evaluated by adding proposed flows to the model under existing conditions.
- Modeled flow from the existing YMCA facilities is 31,358 gpd based on an average of recent winter water consumption from 2017, 2018 and 2022 (see Figure 3). This flow represents a conservative but realistic number post-pandemic.

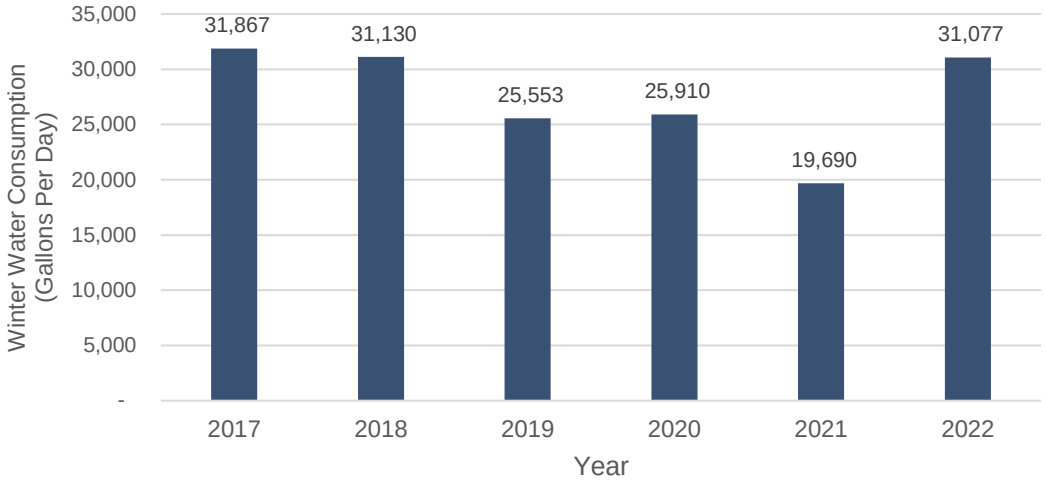


Figure 3: YCMA Winter Water Consumption (2017 – 2022)

- Proposed development flows were input as provided by Ragan Smith, totaling 72,208 gpd. The assumptions used to develop this flow are provided in Table 1.

Use	Design Usage (SF)	Rate (GPD/Unit)	Flow (GPD)
Office	324,000	0.1 GPD/SF	32,400
Retail	20,050	0.15 GPD/SF	3,008
Restaurant	23,000 (920 Seats)	40 GPD/Seat	36,800
		Total Proposed	**72,208**

Table 1: Mixed-Use Proposed Development Flow Assumptions

- In addition to the proposed mixed-use development flows at 5101 Maryland Way, the proposed flows from the East Park Development were also included as summarized in the Capacity Evaluation – East Park Proposed Development technical memorandum dated 04/27/22. This development is located at 1 Maryland Farms and 3 Maryland Farms, further upstream from the proposed 5101 Maryland Way development. Proposed flows total 33,800 gpd.

- The 4.0-million-gallon Brentwood EQ located just north of the Brentwood PS was assumed to be online for this analysis as the tank is currently under construction and will be completed before proposed development flows are realized. This analysis updated the model representation of the EQ pump setpoints and piping configuration based on the latest conformed drawings.
- Wet-weather capacity was evaluated by using the established 2-year, 24-hour design storm for Brentwood.

Hydraulic Analysis

The hydraulic analysis performed included evaluating the impacts of the proposed development during both dry and wet weather conditions. The analysis focused on whether or not the existing sewer system has capacity in both conditions to receive the higher proposed flow.

For both existing and proposed conditions, no changes were made to the model-generated infiltration and inflow (I/I) that was previously calibrated in the 2020 model update. Infiltration and inflow should not have changed substantially since then and would likely either remain the same or decrease with the proposed development.

Figures 6 and 7 compare hydraulic profiles for existing and proposed conditions for dry weather. Evaluation of the peak hydraulic grade from the point of connection down to the trunk sewer revealed no capacity limitations for proposed development in terms of depth of flow within pipe. No segment was shown to be surcharged.

Figures 8 and 9 compare hydraulic profiles for existing and proposed conditions for wet weather (2-year, 24-hour design storm). A review of the same hydraulic profile indicates the additional flow from the proposed development did not result in a significant difference in HGL within the branch sewer down to the connection with the trunk sewer (MH_12_143). No segments in branch sewer were shown to surcharge prior to this connection. The peak HGL at MH_12_143 increases by approximately 4 inches with the inclusion of the proposed development.

Brentwood EQ Impact

Inclusion of the Brentwood EQ impacts the HGL along the main trunk back to MH_12_143. Figure 10 shows an extended profile from the proposed development connection to the Brentwood EQ diversion with and without the Brentwood EQ. Without inclusion of the Brentwood EQ, the HGL at MH_12_143 would be approximately 4.75 feet higher in the 2-year storm.

Once online the Brentwood EQ will not only reduce HGL along the main trunk sewer, but two chronic SSO locations shown in Figure 4 will be eliminated. Without EQ, these SSOs would have increased in volume by 85,600 gallons with the addition of the proposed development flow. With EQ, the total systemwide SSO volume in the 2-year storm is 122,100 gallons for both pre and post development conditions. No additional SSO volume occurs as a result of the proposed development along the branch or trunk sewers, *upstream or downstream* of the development connection. As Figure 5 shows, the additional flow from the proposed development does increase EQ tank volume used.

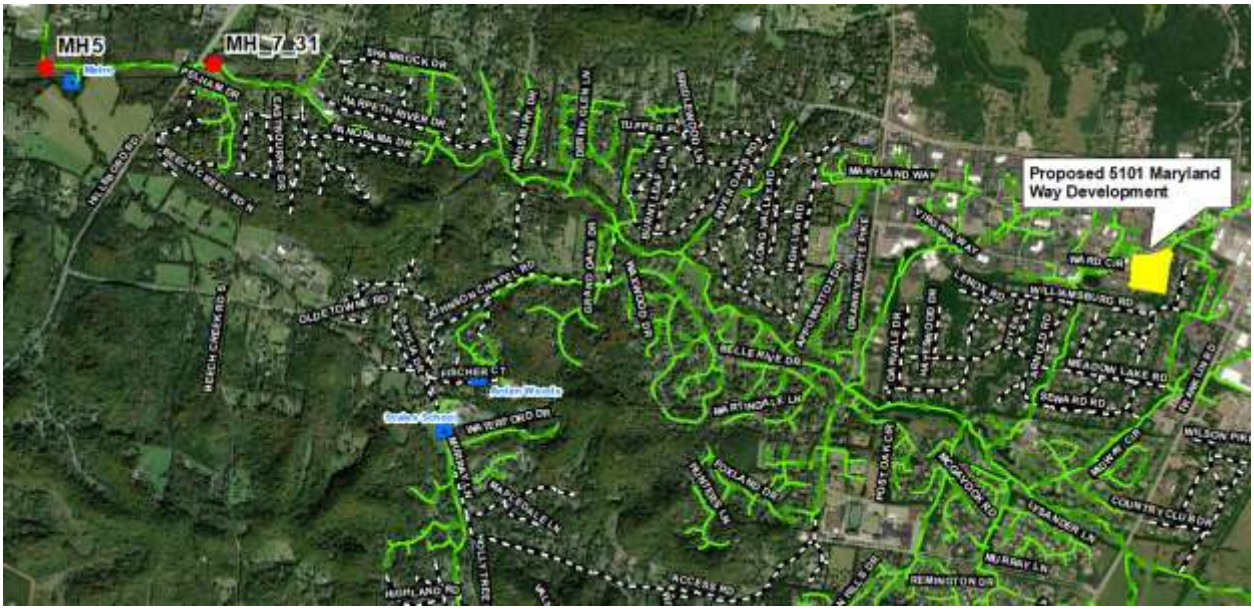


Figure 4: SSO Locations eliminated by Brentwood EQ Project

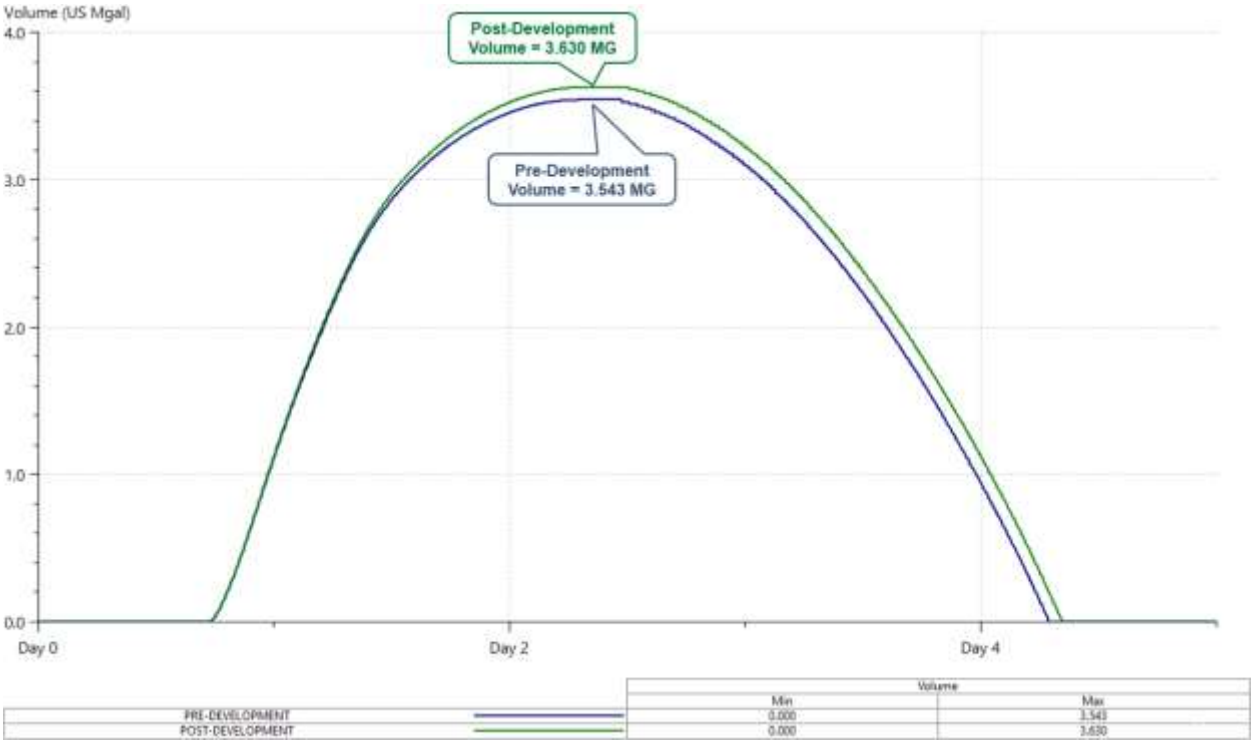


Figure 5: Brentwood EQ volume – Pre vs. Post Development Conditions

Conclusions

Based on the results of the model runs conducted, the branch sewer from the development connection to the trunk sewer does not surcharge during the 2-year storm with the additional development flow. The Brentwood EQ project successfully eliminates two existing SSO locations and reduces HGL along the main trunk sewer. Importantly, no SSOs are created or impacted as a result of this proposed development and SSO volume remains the same for both pre and post development. The proposed development will increase Brentwood EQ volume utilized in the 2-year storm, but the maximum volume remains below the tank's full capacity.

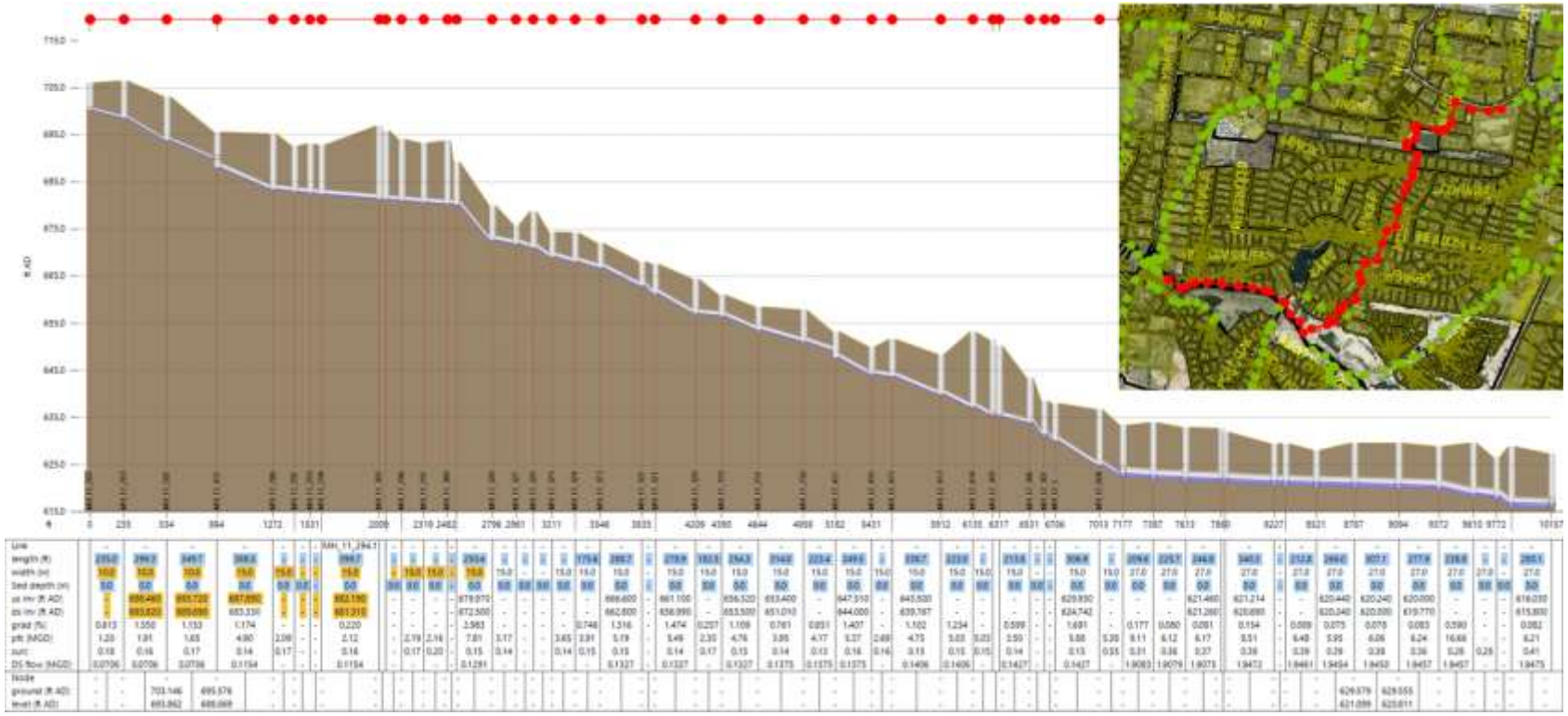


Figure 6: Existing Dry Weather Hydraulic Capacity

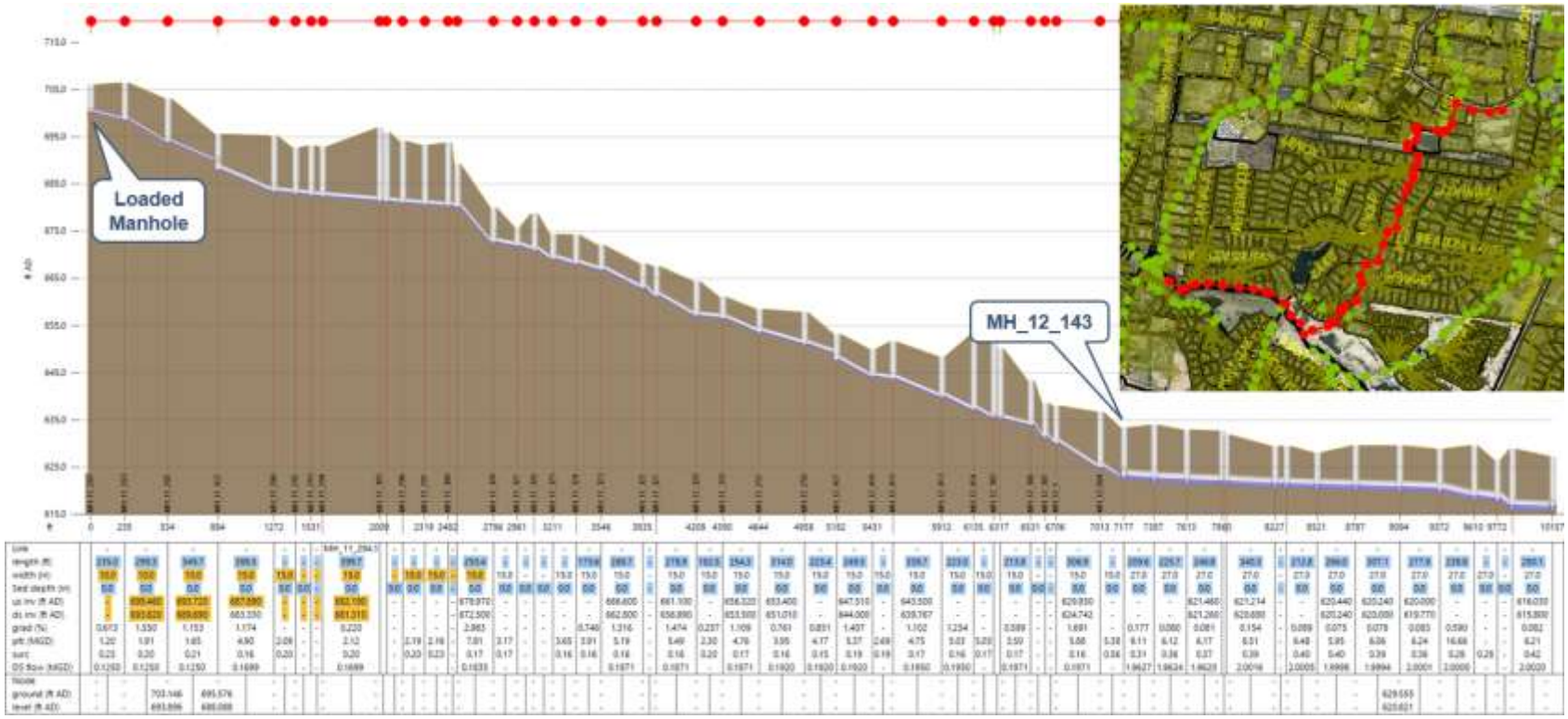


Figure 7: Proposed Dry Weather Hydraulic Capacity

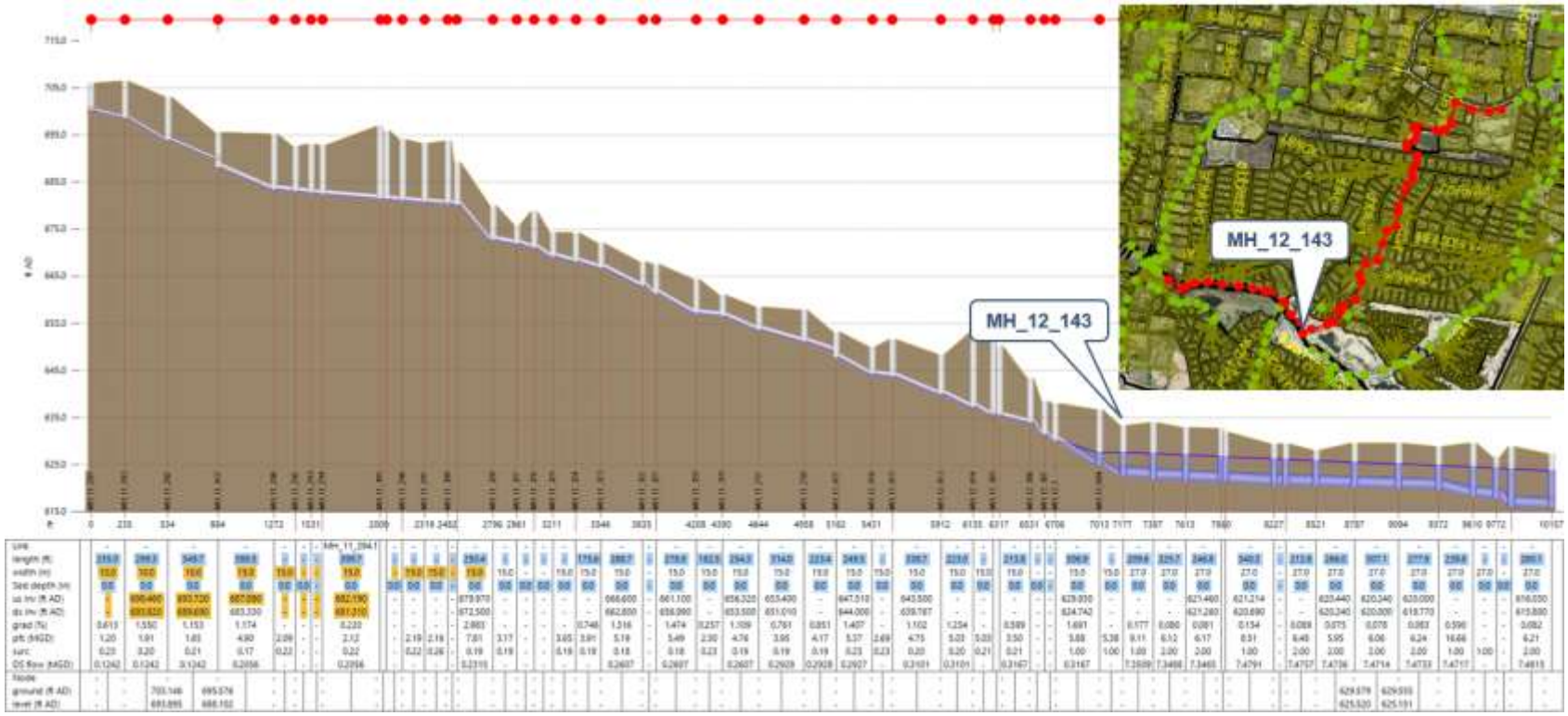


Figure 8: Existing Wet Weather Hydraulic Capacity

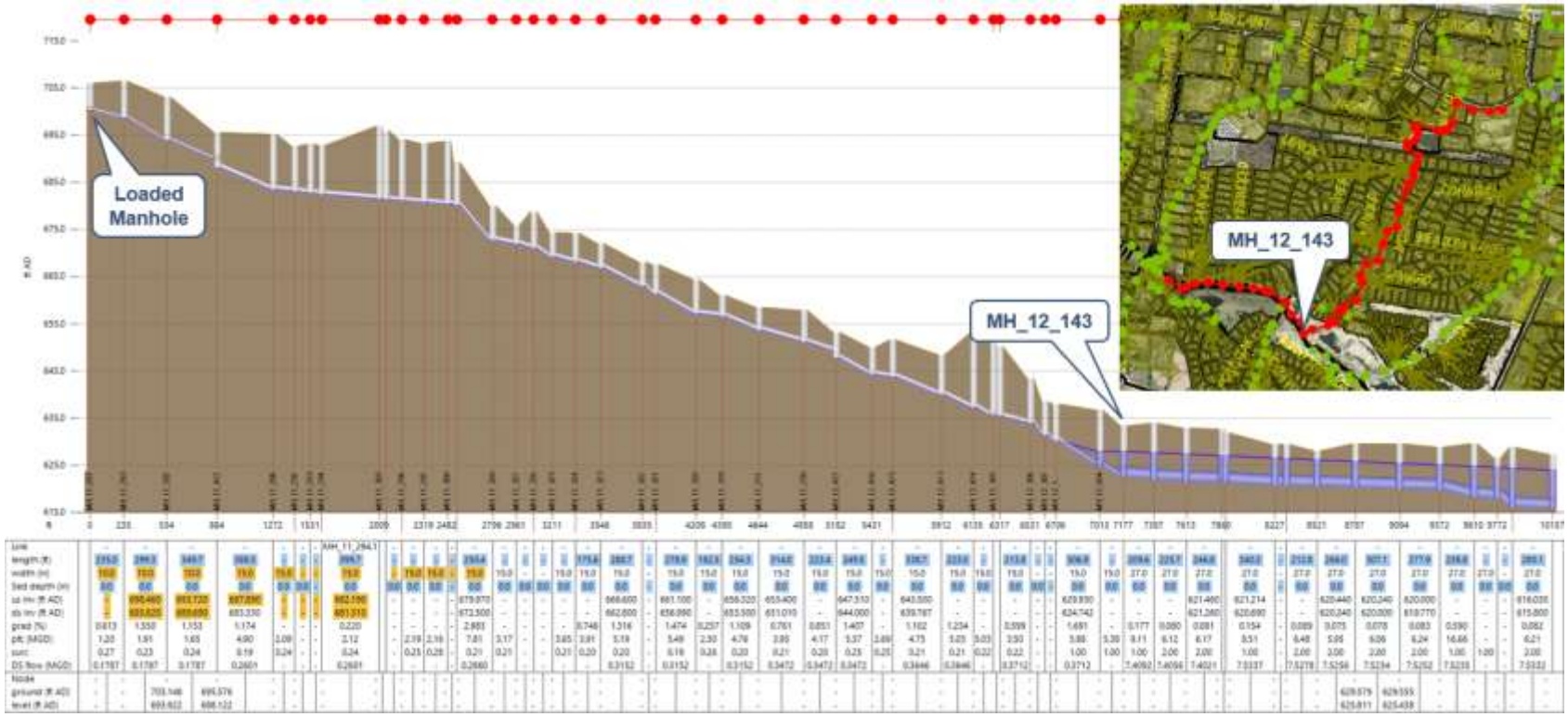


Figure 9: Proposed Wet Weather Hydraulic Capacity

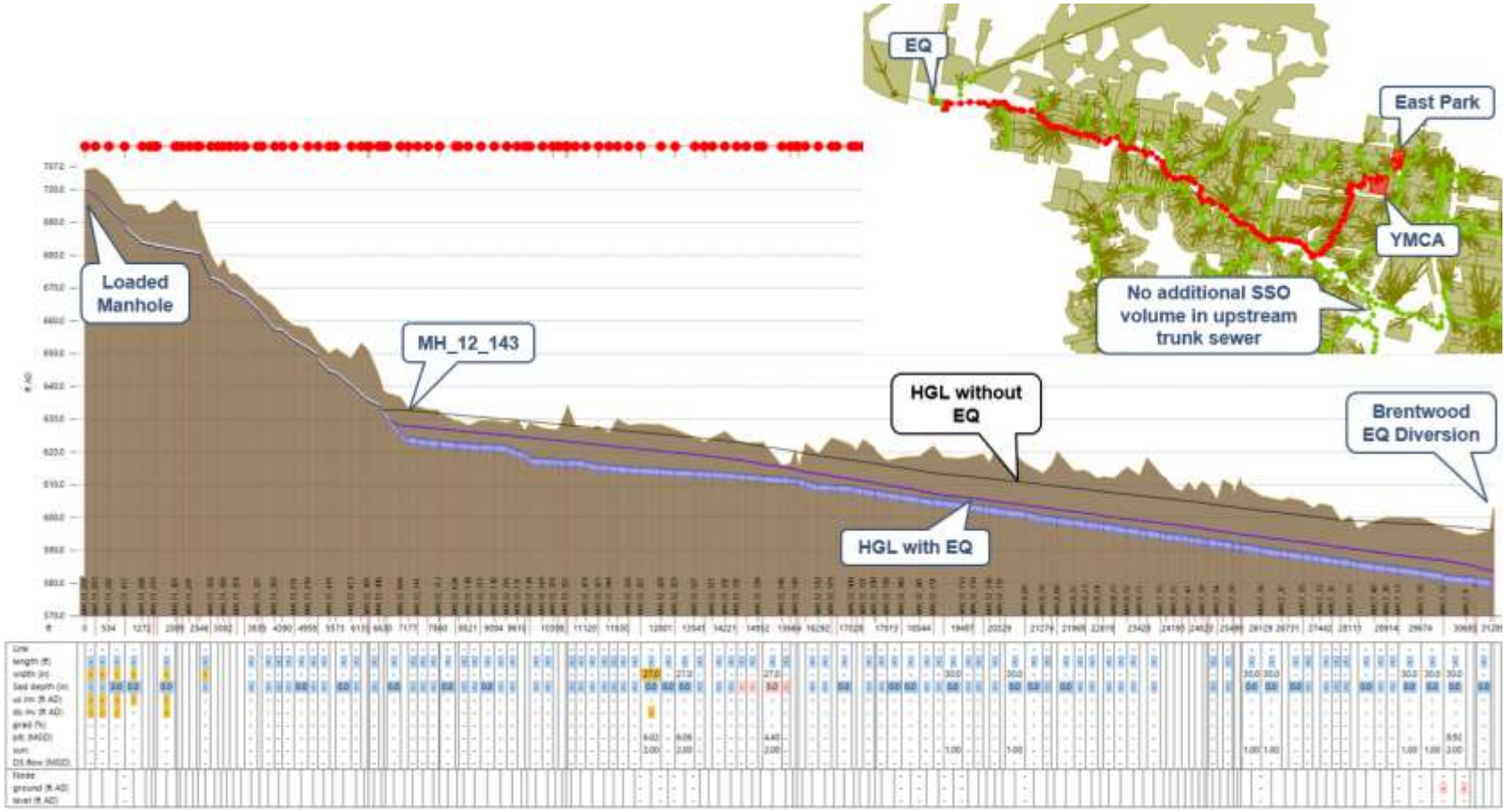


Figure 10: Proposed Wet Weather Hydraulic Capacity – Extended Profile to Brentwood EQ Diversion

Regular Agenda 4.

BRENTWOOD PLANNING COMMISSION

Meeting Date: 01/03/2023

Current Zoning: C-4 - TOWN CENTER

Information

Subject

BPC2212-007 Revised Site Plan - Brentwood Towne Center, 122 Franklin Road & 128 Pewitt Drive, Zoning C-4, - *Applicant: Mr. Gary Emerson, Development Management Group, LLC, 4209 Gallatin Pike, Nashville, TN 37216*

General Information

Development Management Group requests approval of a revised site plan for the properties located at 122 Franklin Road & 128 Pewitt Drive. The proposal includes the addition of three parking spaces at 128 Pewitt Drive formerly occupied by the Juice Bar. The additional parking is needed to accommodate an upper level conversion from residential to medical office for the building located at 122 Franklin Road. Both lots are under the same ownership and a revised final plat will be required to secure adequate long-term shared parking for each building. The former Juice Bar Building will reserve four parking spaces on its lot so that the existing building can be used for future retail or office use. The building at 122 Franklin Road will use the lower level as a bank and the upper level for a medical office use. The required parking for this building will be thirty-three spaces. Twelve parking spaces will be on-site and twenty-one parking spaces will be reserved / provided next door at 128 Pewitt Drive.

This proposal also includes new wall signage for the 122 Franklin Road building.

Conditions of Approval

Staff recommends that the following **3** conditions be attached to the approval of the request.

1. When converting residential spaces upstairs to commercial, all sprinkler piping shall conform to NFPA 13. Please confirm 2nd story piping is steel piping per NFPA 13.

2. Additional Public Works Project Fees will be required for the upper level residential conversion. These will be calculated as part of the permit application.

3. A revised final plat that designates parking for 122 Franklin Road and 128 Pewitt Drive must be submitted for staff review and approval. This plat must be recorded before either building can be occupied.

Standard Requirements

Staff recommends that the following **12** conditions be attached to the approval of the request.

1. A site plan shall be vested for a period of three years from the date of the original approval.

2. Add the following note to the site plan:

   This site plan is subject to a three-year vesting period, during which the development standards in effect on the date of approval will remain the standards applicable to this plan. If construction is not completed during the first three years, the original site plan is considered a preliminary site plan and the applicant must obtain approval of a final site plan. Development of the property shown on this plan may be subject to standards other than those that were applicable during the vesting period. The Initial vesting period for this plan expires on **January 3, 2026**, unless extended by the City of Brentwood. Persons relying on this plan after said date should contact the City of Brentwood to determine if development may continue as depicted on the plan.

3. When the construction authorized pursuant to a site plan is not completed within three years from the date of initial approval, but the applicant desires to complete the project proposed for the site, the plan as initially approved for the project or as amended shall be considered a preliminary site plan. If the applicant secures all necessary permits, commences site preparation and obtains approval of a final site plan within the three-year vesting period following approval of the preliminary site plan, then the vesting period shall be extended an additional two years beyond the expiration of the initial three-year vesting period. During the two-year extension, the applicant must commence construction and maintain any necessary permits to remain vested.

4. All signs must comply with the Brentwood Sign Ordinance. A comprehensive sign package including all signs (temporary or permanent, wall or ground) with dimensions shall be submitted to the Planning Department for a compliance review. Please submit a comprehensive sign package to Allison Roberts at allison.roberts@brentwoodtn.gov.

5. If necessary permits are maintained and construction, as defined by Section 78-43, has commenced by the end of the two-year extension, then the vesting period shall remain in effect until the Planning and Codes Department has certified final completion of the project, provided the total vesting period shall not exceed ten years from the date of approval of the preliminary site plan.

6. If the construction authorized pursuant to a site plan is completed within three years from the date of approval, the site plan shall then be considered the final site plan for the project.

7. The property owner is responsible for all development fees including water and sewer service and tap fees, building permit fees and Public Works Project Fees. The required fees shall be used for future infrastructure related improvements required by the proposed development.

8. Add the following note to the plans that are to be submitted for building permit review: "This document certifies that the building materials specified in the Planning Commission approval of this project (BPC2212-007) are likewise provided for in the plans submitted. Any deviation from the approved building materials will negate any staff approval of said

plans. Proposed changes to project specifications will be submitted to the Planning Commission for further consideration.

9. Complete building plans shall be submitted to the Planning and Codes Department for review, approval and issuance of the required permits before any work is begun. Additionally, all required electrical permits, issued by the State of Tennessee must be received before any work is begun.

10. Development of this project shall comply with all applicable codes and ordinances of the City of Brentwood.

11. Deviations from the approved plan in the development of a project or the failure to satisfy any standard requirements or special conditions of approval imposed by the planning commission will be considered a violation of the provisions of the Zoning Ordinance, which shall be subject to punishment as provided in Section 1-9 of the Brentwood Municipal Code. The city may also require the applicant to appear before the Planning Commission to address any deficiencies or unapproved modifications. The project may also be subject to delays in issuance of permits, certificates of occupancy, recordation of plats or other project approvals.

12. Approval of the proposed plan shall be limited to the illustrations and plans presented to the Planning Commission for review and approval on **January 3, 2023**. Any changes to Planning Commission approved plans and specifications will require staff review and re-approval by the Planning Commission.

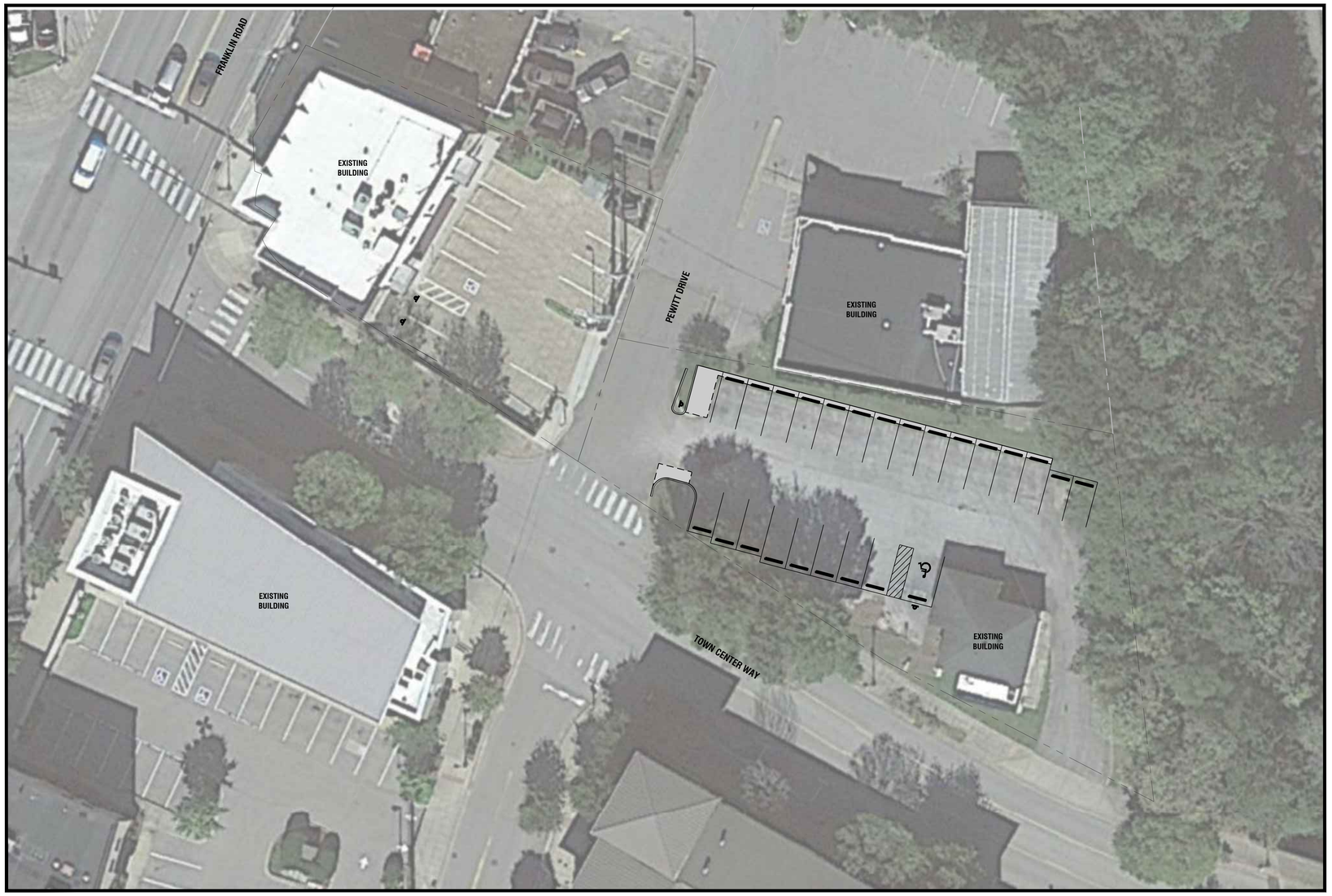
Staff Recommendation

Staff requests that the Planning Commission vote to approve the revised site plan subject to the requirements of the staff report.

Attachments

Revised Site Plan

SITE PLAN REVIEW
FOR
COMMERCIAL BANK
122 FRANKLIN ROAD & 128 PEWITT DRIVE
BRENTWOOD, WILLIAMSON COUNTY, TENNESSEE



CIVIL/APPLICANT
DEVELOPMENT MANAGEMENT GROUP, LLC
4209 GALLATIN PIKE
NASHVILLE, TN 37216
615.227.5863
dabbey@dmgnashville.com

OWNER
COMMERCIAL BANK
US HWY 25 E
HARROGATE, TN 37752

SURVEYOR
CESO, INC
216 CENTERVIEW DRIVE, STE 150
BRENTWOOD, TN 37027
615.970.3354
huffman@cesoinc.com

LANDSCAPE ARCHITECT
KITA DESIGNS
2101 MASTERS DRIVE
SPRINGFIELD, TN 37172
615.469.1222
kreff@kitadesign.biz

ISSUED FOR: ☐ CHECKSET ■ AGENCY REVIEW ☐ BID PURPOSES ☐ CONSTRUCTION

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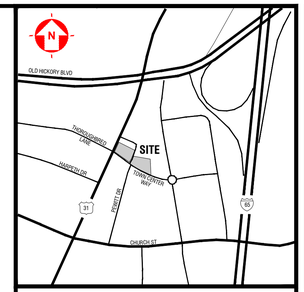


VICINITY MAP

FLOOD NOTE:
BY GRAPHIC PLOTTING ONLY, THE DESCRIBED PROPERTY IS LOCATED IN A FLOOD HAZARD ZONE 'X' AS SHOWN ON THE FLOOD INSURANCE RATE MAP COMMUNITY PANEL NO. 47187C0091F WHICH BEARS AN EFFECTIVE DATE OF SEPTEMBER 29, 2006.

DISTURBED AREA:
TOTAL DISTURBED AREA = 0.02 ACRES±

SURVEY NOTE:
BASE INFORMATION WAS TAKEN FROM A GENERAL PURPOSE SURVEY AND FINAL PLAT PREPARED BY CESO, INC. DATED 11/30/22. DMG SHALL NOT BE HELD RESPONSIBLE FOR THE ACCURACY AND/OR COMPLETENESS OF THAT INFORMATION SHOWN HEREON OR ANY ERRORS OR OMISSIONS RESULTING FROM SUCH.

INDEX OF DRAWINGS

C0.0	COVER SHEET
C1.0	EXISTING CONDITIONS
C1.1	EXISTING SITE MAP
C2.0	SITE LAYOUT PLAN 122 FRANKLIN ROAD
C2.1	SITE LAYOUT PLAN 128 PEWITT DRIVE
C3.0	AERIAL VIEWS
C3.1	STREET VIEWS 122 FRANKLIN ROAD
C3.2	STREET VIEWS 128 PEWITT DRIVE
L-1.1	LANDSCAPE PLAN

NOTE:
THIS SITE PLAN IS SUBJECT TO A THREE YEAR VESTING PERIOD, DURING WHICH THE DEVELOPMENT STANDARDS IN EFFECT ON THE DATE OF APPROVAL WILL REMAIN THE STANDARDS APPLICABLE TO THIS PLAN. IF CONSTRUCTION IS NOT COMPLETED DURING THE FIRST THREE YEARS, THE ORIGINAL SITE PLAN IS CONSIDERED A PRELIMINARY SITE PLAN AND THE APPLICANT MUST OBTAIN APPROVLA OF A FINAL SITE PLAN. DEVELOPMENT OF THE PROPERTY SHOWN ON THIS PLAN MAY BE SUBJECT TO STANDARDS OTHER THAN THOSE THAT WERE APPLICABLE DURING THE VESTED PERIOD. THE INITIAL VESTING PERIOD FOR THIS PLAN EXPIRES ON **JANUARY 3, 2026**, UNLESS EXTENDED BY THE CITY OF BRENTWOOD. PERSONS RELYING ON THIS PLAN AFTER SAID DATE SHOULD CONTACT THE CITY OF BRENTWOOD TO DETERMINE IF DEVELOPMENT MAY CONTINUE AS DEPICTED ON THE PLAN.

PARCEL ID: 11B B 01300 (122 FRANKLIN RD. 11B B 01100 (128 PEWITT DRIVE)
ZONE: C-4 COMMERCIAL TOWN CENTER

PLANS PREPARED FOR:
COMMERCIAL BANK
6710 CUMBERLAND GAP PARKWAY
HARROGATE, TN 37752
423-869-5151

PLANS PREPARED BY:
4209 GALLATIN PIKE
NASHVILLE, TN 37216
TELE:(615) 227-5863
www.dmgnashville.com
DEVELOPMENT MANAGEMENT GROUP, LLC

MULTI-TENANT BUILDING
122 FRANKLIN ROAD & 128 PEWITT DRIVE
BRENTWOOD, TENNESSEE

DAVID S. ABBEY — REGISTERED LANDSCAPE ARCHITECT — STATE OF TENNESSEE — 12/22

REVISIONS

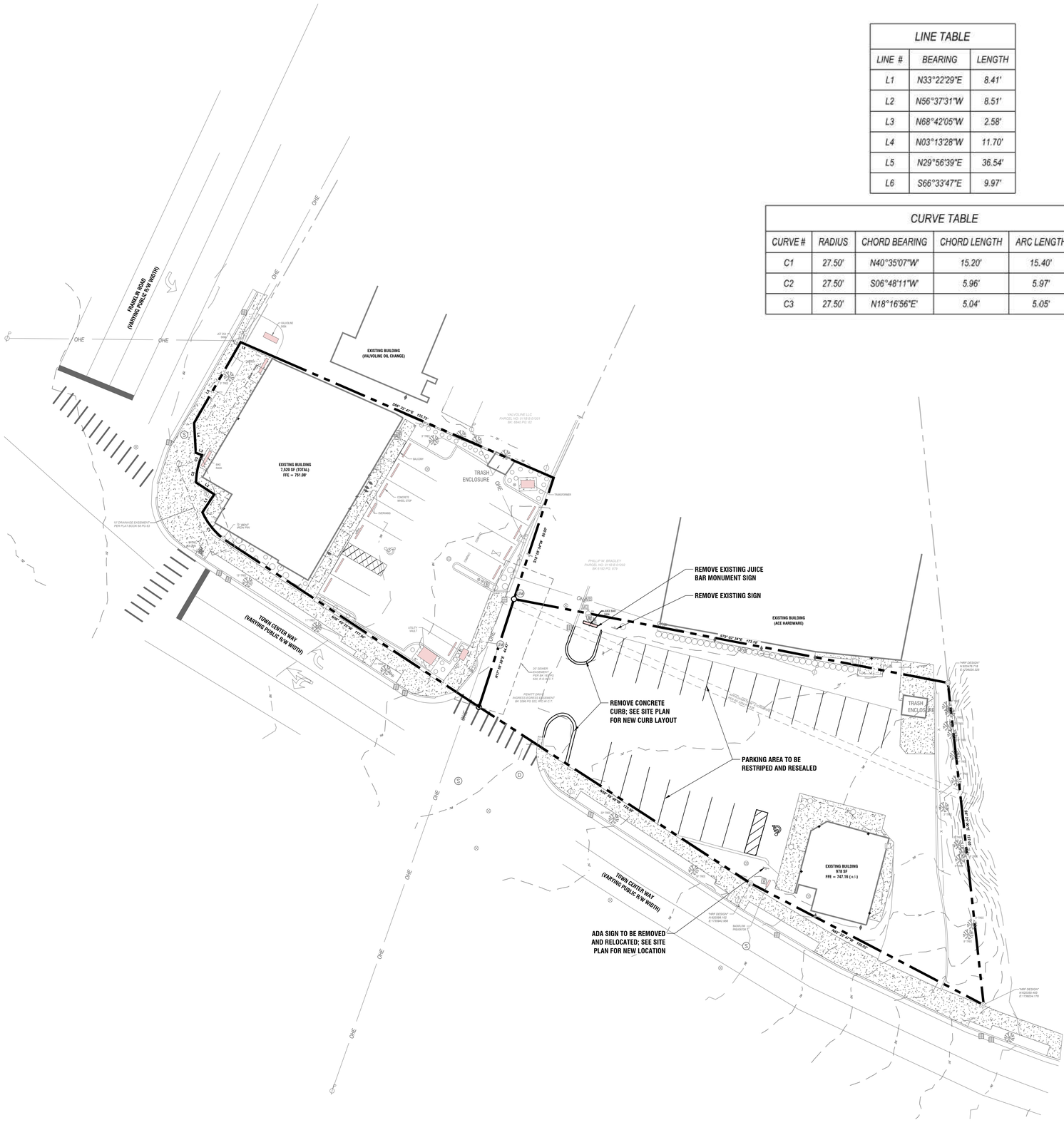
NO.	DATE	DESCRIPTION

DATE:	12/05/22
DMG Project No:	22250

COVER SHEET

C0.0

Z:\PROJECT DATABASE\2022\22250 - Commercial Bank - 122 Franklin Road, Brentwood, TN\Plans\Engineer\22250 Commercial Bank_C0-C0_Cov.dwg-Layout1 Dec 20, 2022 - 8:49am GaryEmerson



LINE TABLE		
LINE #	BEARING	LENGTH
L1	N33°22'29"E	8.41'
L2	N56°37'31"W	8.51'
L3	N68°42'05"W	2.58'
L4	N03°13'28"W	11.70'
L5	N29°56'39"E	36.54'
L6	S66°33'47"E	9.97'

CURVE TABLE					
CURVE #	RADIUS	CHORD BEARING	CHORD LENGTH	ARC LENGTH	TANGENT
C1	27.50'	N40°35'07"W	15.20'	15.40'	7.91'
C2	27.50'	S06°48'11"W	5.96'	5.97'	3.00'
C3	27.50'	N18°16'56"E	5.04'	5.05'	2.53'

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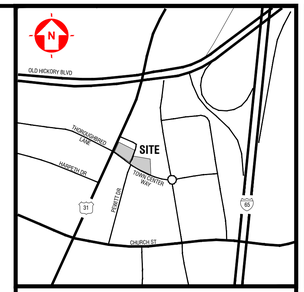

VICINITY MAP

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SITE DEMOLITION NOTES

1. THE CONTRACTOR SHALL CONFORM TO LOCAL CODES, OBTAIN ALL PERMITS AND GIVE ALL NOTICES REQUIRED FOR EXECUTION OF THE WORK.

2. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL CHARTED AND UNCHARTED UTILITIES. TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN, REPAIR ANY DAMAGE ACCORDING TO LOCAL STANDARDS AND AT THE CONTRACTOR'S EXPENSE. COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY.

3. PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL VERIFY THE LIMITS OF DEMOLITION WITH THE OWNER'S REPRESENTATIVE.

4. SAW CUT TO PROVIDE A CLEAN EDGE IN AREAS WHERE EXISTING PAVEMENT, WALKS, OR CURBS ARE TO BE REMOVED. THE EXTENT OF PAVEMENT DEMOLITION SHALL BE COORDINATED WITH THE LIMIT OF NEW IMPROVEMENTS ON THE PROPOSED SITE IMPROVEMENT PLANS.

5. THE CONTRACTOR SHALL COORDINATE PHASING OF THE DEMOLITION WITH THE OWNER'S REPRESENTATIVE AND LOCAL GOVERNING AGENCY PRIOR TO BEGINNING WORK. DISRUPTION OF EXISTING UTILITY SERVICES AND TRAFFIC PATTERNS SHALL BE MINIMIZED TO THE EXTENT POSSIBLE AND INITIATED ONLY AFTER APPROVAL BY THE LOCAL GOVERNING AGENCY AND THE UTILITY COMPANIES.

6. CAVITIES LEFT BY STRUCTURE REMOVAL SHALL BE SUITABLY BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEERING RECOMMENDATIONS AND SPECIFICATIONS.

7. THE CONTRACTOR SHALL USE WATER SPRINKLING AND/OR OTHER SUITABLE METHODS AS NEEDED TO CONTROL DUST CAUSED BY THE DEMOLITION WORK.

8. THE CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION AND REMOVAL NECESSARY TO ACCOMPLISH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.

9. THE CONTRACTOR SHALL PRESERVE AND PROTECT SURVEY CONTROL POINTS AND SHALL BE RESPONSIBLE FOR REPLACEMENT OF ANY DISTURBED CONTROL POINTS AT NO COST TO THE OWNER.

10. SITE LIGHTING DEMOLITION AND LAYOUT SHALL BE COORDINATED WITH THE ELECTRICAL DRAWINGS.

11. RELOCATION OF EXISTING PLANT MATERIALS SHALL BE COORDINATED WITH THE OWNER AND RELOCATED TO A DESIGNATED AREA ON SITE.

12. EXISTING SHRUBS TO BE PRESERVED ARE TO BE BARRICADED BEFORE BEGINNING CONSTRUCTION.

13. NO UTILITY OR STORM SEWER LINES SHALL BE DEMOLISHED UNTIL THE NEW LINES HAVE BEEN INSTALLED, INSPECTED, AND ARE PLACED INTO OPERATION.

14. THE CONTRACTOR SHALL INCORPORATE INTO HIS WORK ANY ISOLATION VALVES OR TEMPORARY PLUGS REQUIRED TO CONSTRUCT NEW UTILITY LINES WHILE DEMOLISHING EXISTING UTILITY LINES.

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BRENTWOOD, TENNESSEE

DAVID S. ABEL
REGISTERED ENGINEER
AGRICULTURE
NUMBER
STATE OF TENNESSEE
12/5/22

REVISIONS

NO.	DATE	DESCRIPTION

DATE:	12/05/22
DMG Project No:	22250

EXISTING CONDITIONS & DEMOLITION PLAN

C1.0

ISSUED FOR: ☐ CHECKSET ☐ AGENCY REVIEW ☐ BID PURPOSES ☐ CONSTRUCTION

0 20' 40' 60'

SCALE: 1"=20'

Z:\PROJECT DATABASE\2022\22250 – Commercial Bank – 122 Franklin Road, Brentwood, TN\Plans\Engineer\22250_Commercial Bank Ex Cond_C1.0.dwg–C2.0 Dec 20, 2022 – 8:17am GaryEmerson



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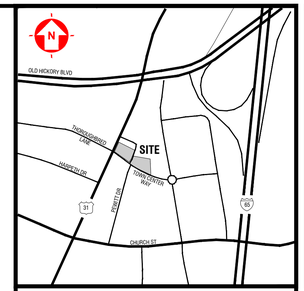

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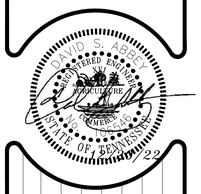


REVISIONS

NO.	DATE	DESCRIPTION

DATE:	12/05/22
DMG Project No:	22250

EXISTING SITE MAP

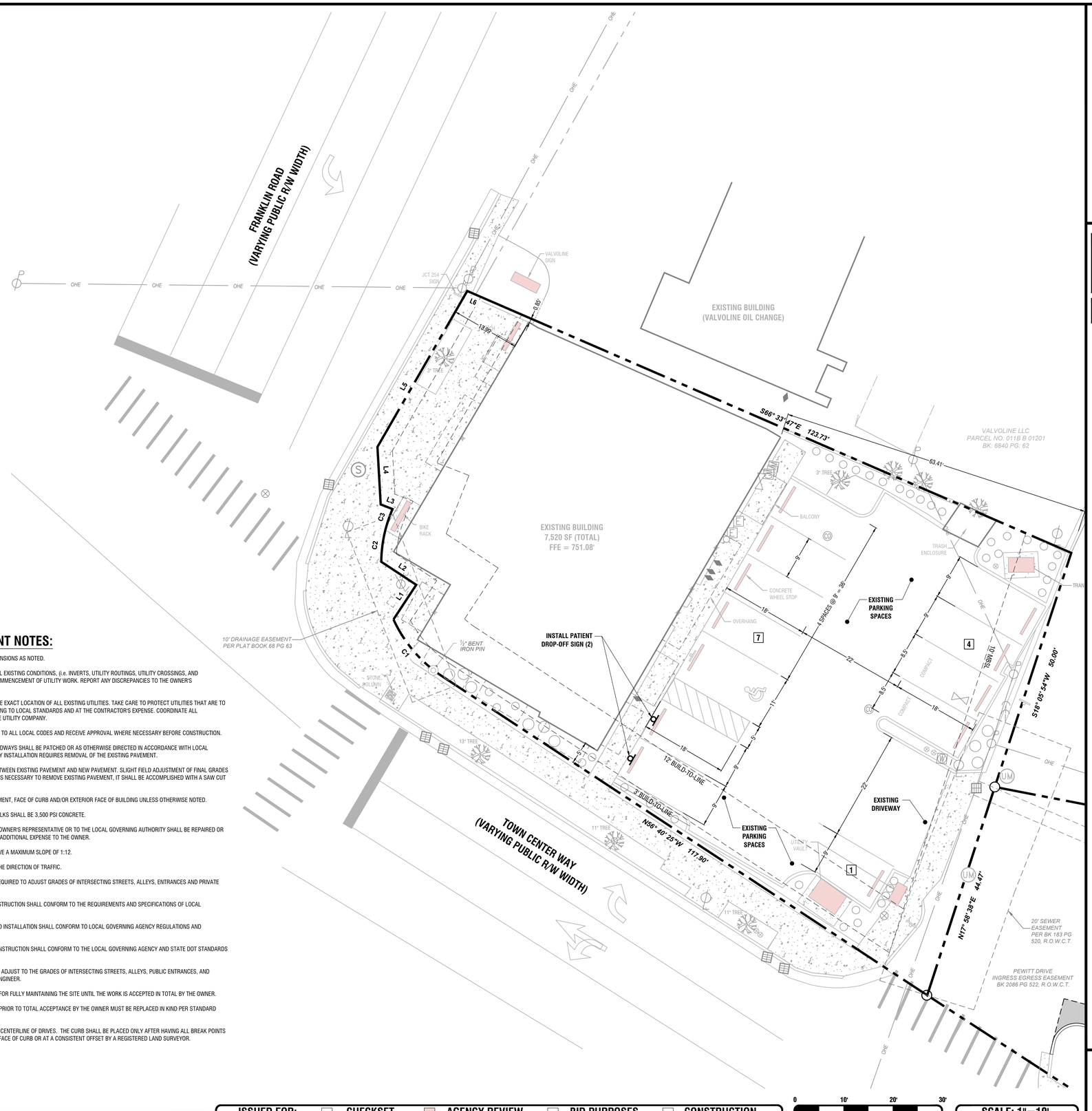
C1.1

PARCEL ID: 11B B 01300 (122 FRANKLIN RD. 11B B 01100 (128 PEWITT DRIVE)
ZONE: C-4 COMMERCIAL TOWN CENTER

ISSUED FOR: ☐ CHECKSET ☐ AGENCY REVIEW ☐ BID PURPOSES ☐ CONSTRUCTION

SCALE: AS NOTED

Z:\PROJECT DATABASE\2022\22250 - Commercial Bank - 122 Franklin Road, Brentwood, TN\Plans\Engineer\22250_Commercial Bank Site Radius_C1.1.dwg-C3.0 Dec 20, 2022 - 7:58am GaryEmerson



SITE IMPROVEMENT NOTES:

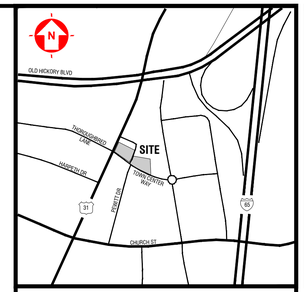
1. THE SITE LAYOUT IS BASED ON DIMENSIONS AS NOTED.
2. THE CONTRACTOR SHALL CHECK ALL EXISTING CONDITIONS, (i.e. INVERTS, UTILITY ROUTINGS, UTILITY CROSSINGS, AND DIMENSIONS) IN THE FIELD PRIOR TO COMMENCEMENT OF UTILITY WORK. REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE.
3. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES. TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN. REPAIR ANY DAMAGE ACCORDING TO LOCAL STANDARDS AND AT THE CONTRACTOR'S EXPENSE. COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY.
4. THE CONTRACTOR SHALL CONFORM TO ALL LOCAL CODES AND RECEIVE APPROVAL WHERE NECESSARY BEFORE CONSTRUCTION.
5. EXISTING PAVEMENT OF PUBLIC ROADWAYS SHALL BE PATCHED OR AS OTHERWISE DIRECTED IN ACCORDANCE WITH LOCAL AGENCY STANDARDS WHEREVER UTILITY INSTALLATION REQUIRES REMOVAL OF THE EXISTING PAVEMENT.
6. PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING PAVEMENT AND NEW PAVEMENT. SLIGHT FIELD ADJUSTMENT OF FINAL GRADES MAY BE NECESSARY. WHERE IT BECOMES NECESSARY TO REMOVE EXISTING PAVEMENT, IT SHALL BE ACCOMPLISHED WITH A SAW CUT TO ACHIEVE A SMOOTH TRANSITION.
7. DIMENSIONS ARE TO EDGE OF PAVEMENT, FACE OF CURB AND/OR EXTERIOR FACE OF BUILDING UNLESS OTHERWISE NOTED.
8. CONCRETE FOR CURBS AND SIDEWALKS SHALL BE 3,500 PSI CONCRETE.
9. ANY WORK UNACCEPTABLE TO THE OWNER'S REPRESENTATIVE OR TO THE LOCAL GOVERNING AUTHORITY SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
10. ADA ACCESSIBLE RAMPS SHALL HAVE A MAXIMUM SLOPE OF 1:12.
11. THE CONTRACTOR SHALL PAVE IN THE DIRECTION OF TRAFFIC.
12. THE CONTRACTOR SHALL NOT BE REQUIRED TO ADJUST GRADES OF INTERSECTING STREETS, ALLEYS, ENTRANCES AND PRIVATE DRIVES AS DIRECTED BY THE ENGINEER.
13. ALL ROADWAY AND SIDEWALK CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS AND SPECIFICATIONS OF LOCAL GOVERNING AGENCY.
14. ALL CONSTRUCTION MATERIALS AND INSTALLATION SHALL CONFORM TO LOCAL GOVERNING AGENCY REGULATIONS AND SPECIFICATIONS.
15. ALL PAVEMENT MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE LOCAL GOVERNING AGENCY AND STATE DOT STANDARDS AND SPECIFICATIONS.
16. ALL CURBING WILL BE REQUIRED TO ADJUST TO THE GRADES OF INTERSECTING STREETS, ALLEYS, PUBLIC ENTRANCES, AND PRIVATE DRIVES AS DIRECTED BY THE ENGINEER.
17. THE CONTRACTOR IS RESPONSIBLE FOR FULLY MAINTAINING THE SITE UNTIL THE WORK IS ACCEPTED IN TOTAL BY THE OWNER.
18. ANY DEFICIENCIES WITHIN THE SITE PRIOR TO TOTAL ACCEPTANCE BY THE OWNER MUST BE REPLACED IN KIND PER STANDARD DRAWINGS.
19. CURBS SHALL BE PARALLEL TO THE CENTERLINE OF DRIVES. THE CURB SHALL BE PLACED ONLY AFTER HAVING ALL BREAK POINTS (PC & PT OF CURVES) LOCATED AT THE FACE OF CURB OR AT A CONSISTENT OFFSET BY A REGISTERED LAND SURVEYOR.

ISSUED FOR: ☐ CHECKSET ☐ AGENCY REVIEW ☐ BID PURPOSES ☐ CONSTRUCTION

0 10' 20' 30'

SCALE: 1"=10'

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



VICINITY MAP

FLOOD NOTE:
BY GRAPHIC PLOTTING ONLY, THE DESCRIBED PROPERTY IS LOCATED IN A FLOOD HAZARD ZONE 'X' AS SHOWN ON THE FLOOD INSURANCE RATE MAP COMMUNITY PANEL NO. 47187C0091F WHICH BEARS AN EFFECTIVE DATE OF SEPTEMBER 29, 2006.

DISTURBED AREA:
TOTAL DISTURBED AREA = 0.02 ACRES±

SURVEY NOTE:
BASE INFORMATION WAS TAKEN FROM A GENERAL PURPOSE SURVEY AND FINAL PLAT PREPARED BY CESO, INC. DATED 11/30/22. DMG SHALL NOT BE HELD RESPONSIBLE FOR THE ACCURACY AND/OR COMPLETENESS OF THAT INFORMATION SHOWN HEREON OR ANY ERRORS OR OMISSIONS RESULTING FROM SUCH.

PURPOSE NOTE:
THE PURPOSE OF THIS PLAN/SUBMITTAL IS TO MODIFY THE PREVIOUS APPROVED SECOND FLOOR USE OF RESIDENTIAL TO MEDICAL OFFICE USE: NO SITE MODIFICATIONS MADE TO THE SITE OTHER THAN TO PROVIDE TWO (2) PATIENT DROP-OFF SPACES WITH ASSOCIATED SIGNAGE. ADDITIONAL PARKING TO MEET ZONING REQUIREMENTS WILL BE PROVIDED ON 128 PEWITT DRIVE AND ON-STREET PARKING ON TOWN CENTER WAY.

SITE DATA TABLE

CITY:	BRENTWOOD	
COUNTY:	WILLIAMSON	
STATE:	TENNESSEE	
CIVIL DISTRICT:	15TH CIVIL DISTRICT	
TAX MAP / GROUP / PARCEL:	11B / B / 13.00	
TOTAL ACREAGE OF SITE:	0.254 ACRES	
TOTAL SQUARE FOOTAGE OF SITE:	11,077 SQUARE FEET	
ZONING CLASSIFICATION:	C-4 (COMMERCIAL TOWN CENTER DISTRICT)	
EXISTING BUILDING SQUARE FOOTAGE:	7,520 SF TOTAL (2 STORY BUILDING) BANK - FIRST FLOOR 3,760 SF; MEDICAL OFFICE - SECOND FLOOR 3,760 SF	
BUILDING SETBACKS / YARDS: (BUILDING SITE)	REQUIRED	PROVIDED:
FRONT: (FRANKLIN ROAD)	3' TO 12' BUILD TO LINE	EXISTING
FRONT: (TOWN CENTER WAY)	3' TO 12' BUILD TO LINE	EXISTING
SIDE:	0'-0"	EXISTING
REAR:	10'-0"	EXISTING
PARKING REQUIREMENTS:	REQUIRED:	PROVIDED:
BANK: 1 SPACE / 250 SF MEDICAL OFFICE: 1 SPACE / 250 SF + 2 DROP-OFF SPACES	7,520 SF / 250 SF = 30.1 SPACES (31 SPACES) + 2 DROP-OFF SPACES EQUALS 33 SPACES REQUIRED	10 SPACES (INCLUDES 1 ADA SPACE) 2 COMPACT SPACES ON SITE AND 18 STANDARD SPACES + 3 COMPACT SPACES ON 128 PEWITT DRIVE OFF-SITE

PARKING TABULATION 122 FRANKLIN ROAD & 128 PEWITT DRIVE

122 FRANKLIN ROAD		
PARKING REQUIREMENTS:	REQUIRED:	PROVIDED:
BANK: 1 SPACE / 250 SF MEDICAL OFFICE: 1 SPACE / 250 SF + 2 DROP-OFF SPACES	7,520 SF / 250 SF = 30.1 SPACES (31 SPACES) + 2 DROP-OFF SPACES EQUALS 33 SPACES REQUIRED	10 SPACES (INCLUDES 1 ADA SPACE) 2 COMPACT SPACES ON SITE
128 PEWITT DRIVE		
GENERAL RETAIL: 1 SPACE / 250 SF GENERAL OFFICE: 1 SPACE / 300 SF	978 SF / 250 SF = 3.9 SPACES 978 SF / 300 SF = 3.3 SPACES 4 SPACES REQUIRED FOR EITHER USE	22 SPACES (INCLUDES 1 ADA SPACE) 3 COMPACT SPACES
TOTAL REQUIRED BOTH PARCELS	33 SPACES + 4 SPACES = 37 REQUIRED	32 SPACES (INCLUDES 2 ADA SPACES) 5 COMPACT SPACES (13.5% TOTAL) TOTAL PARKING SPACES PROVIDED 37
SEE SITE PLAN SHEET C2.1 (128 PEWITT DRIVE) FOR PARKING SPACE DELEGATION		

NOTE:
THIS SITE PLAN IS SUBJECT TO A THREE YEAR VESTING PERIOD, DURING WHICH THE DEVELOPMENT STANDARDS IN EFFECT ON THE DATE OF APPROVAL WILL REMAIN THE STANDARDS APPLICABLE TO THIS PLAN. IF CONSTRUCTION IS NOT COMPLETED DURING THE FIRST THREE YEARS, THE ORIGINAL SITE PLAN IS CONSIDERED A PRELIMINARY SITE PLAN AND THE APPLICANT MUST OBTAIN APPROVLA OF A FINAL SITE PLAN. DEVELOPMENT OF THE PROPERTY SHOWN ON THIS PLAN MAY BE SUBJECT TO STANDARDS OTHER THAN THOSE THAT WERE APPLICABLE DURING THE VESTED PERIOD. THE INITIAL VESTING PERIOD FOR THIS PLAN EXPIRES ON **JANUARY 3, 2026**, UNLESS EXTENDED BY THE CITY OF BRENTWOOD. PERSONS RELYING ON THIS PLAN AFTER SAID DATE SHOULD CONTACT THE CITY OF BRENTWOOD TO DETERMINE IF DEVELOPMENT MAY CONTINUE AS DEPICTED ON THE PLAN.

PARCEL ID: 11B B 01300 (122 FRANKLIN RD. 11B B 01100 (128 PEWITT DRIVE)
ZONE: C-4 COMMERCIAL TOWN CENTER

PLANS PREPARED FOR:
COMMERCIAL BANK
6710 CUMBERLAND GAP PARKWAY
HARROGATE, TN 37752
423-869-5151

PLANS PREPARED BY:

4209 GALLATIN PIKE
NASHVILLE, TN 37216
TELE:(615) 227-5863
www.dmgnashville.com
DEVELOPMENT MANAGEMENT GROUP, LLC

MULTI-TENANT BUILDING
122 FRANKLIN ROAD & 128 PEWITT DRIVE
BRENTWOOD, TENNESSEE

DAVID S. ABBEY
REGISTERED ARCHITECT
ARCHITECTURE
OWNER
STATE OF TENNESSEE
22

REVISIONS

NO.	DESCRIPTION	DATE

DATE:	12/05/22
DMG Project No:	22250

SITE LAYOUT PLAN
122 FRANKLIN ROAD

C2.0

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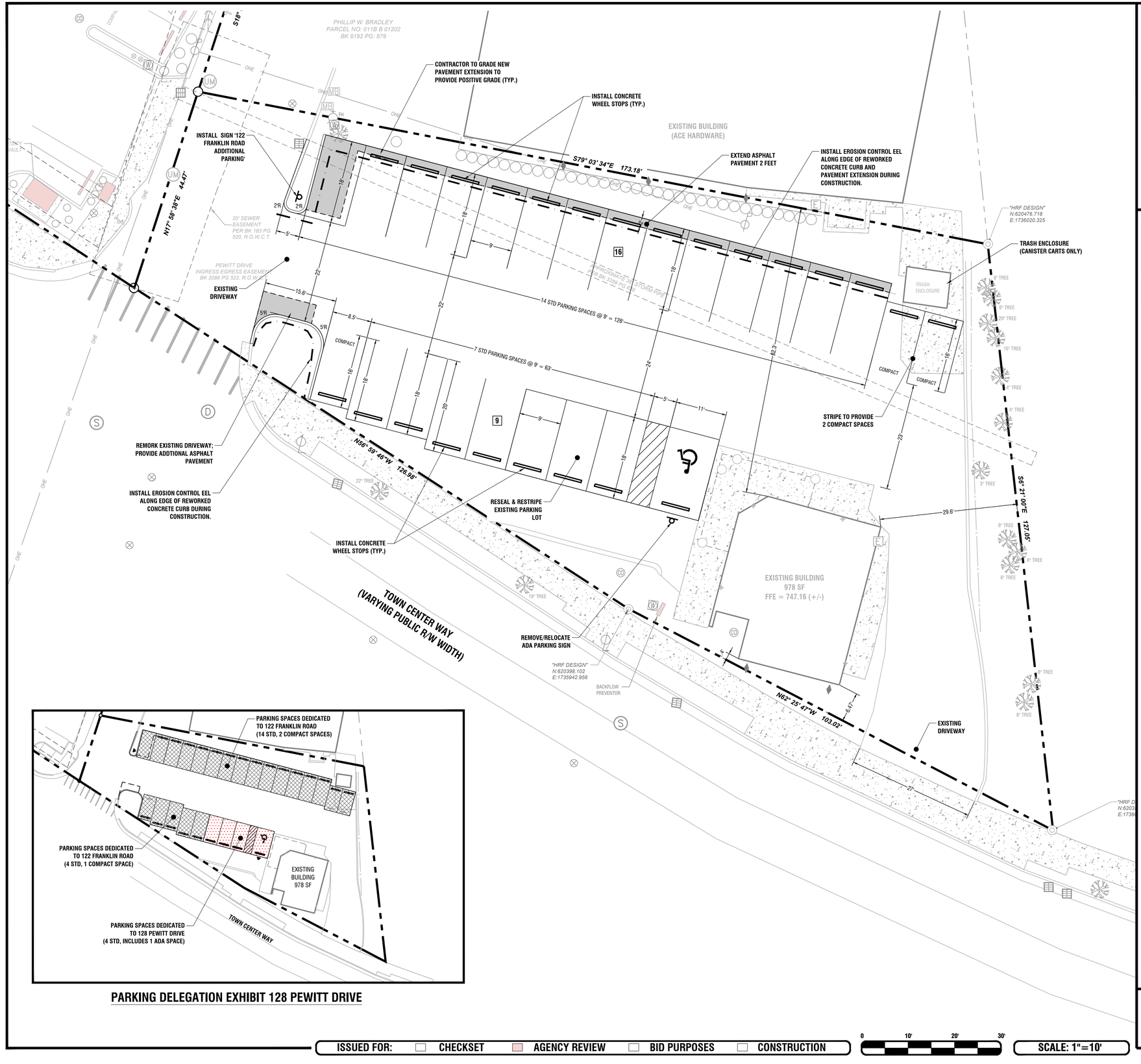
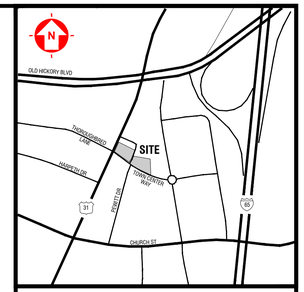


PARKING DELEGATION EXHIBIT 128 PEWITT DRIVE

Know what's **below.** **Call** before you dig.



VICINITY MAP

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SITE DATA TABLE

CITY:	BRENTWOOD	
COUNTY:	WILLIAMSON	
STATE:	TENNESSEE	
CIVIL DISTRICT:	15TH CIVIL DISTRICT	
TAX MAP / GROUP / PARCEL:	11B / B / 11.00	
TOTAL ACREAGE OF SITE:	0.370 ACRES	
TOTAL SQUARE FOOTAGE OF SITE:	16,110 SQUARE FEET	
ZONING CLASSIFICATION:	C-4 (COMMERCIAL TOWN CENTER DISTRICT)	
EXISTING BUILDING SQUARE FOOTAGE:	978 SF (1 STORY BUILDING)	
BUILDING SETBACKS / YARDS: (BUILDING SITE)	REQUIRED	PROVIDED:
FRONT: (TOWN CENTER WAY)	3' TO 12' BUILD TO LINE	EXISTING
SIDE:	0'-0"	EXISTING
REAR:	10'-0"	EXISTING
PARKING REQUIREMENTS:	REQUIRED:	PROVIDED:
GENERAL RETAIL: 1 SPACE / 250 SF GENERAL OFFICE: 1 SPACE / 300 SF	978 SF / 250 SF = 3.9 SPACES 978 SF / 300 SF = 3.3 SPACES 4 SPACES REQUIRED FOR EITHER USE	25 SPACES (INCLUDES 1 ADA SPACE) 3 COMPACT SPACES

PARKING TABULATION 122 FRANKLIN ROAD & 128 PEWITT DRIVE

122 FRANKLIN ROAD		
PARKING REQUIREMENTS:	REQUIRED:	PROVIDED:
BANK: 1 SPACE / 250 SF MEDICAL OFFICE: 1 SPACE / 250 SF + 2 DROP-OFF SPACES	7,520 SF / 250 SF = 30.1 SPACES (31 SPACES) + 2 DROP-OFF SPACES EQUALS 33 SPACES REQUIRED	10 SPACES (INCLUDES 1 ADA SPACE) 2 COMPACT SPACES ON SITE
128 PEWITT DRIVE		
GENERAL RETAIL: 1 SPACE / 250 SF GENERAL OFFICE: 1 SPACE / 300 SF	978 SF / 250 SF = 3.9 SPACES 978 SF / 300 SF = 3.3 SPACES 4 SPACES REQUIRED FOR EITHER USE	22 SPACES (INCLUDES 1 ADA SPACE) 3 COMPACT SPACES
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SEE SITE PLAN SHEET C2.1 (128 PEWITT DRIVE) FOR PARKING SPACE DELEGATION		

NOTE:
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NOTE:
ANY DISTURBED AREAS TO BE SODDED UPON COMPLETION.

NOTE:
REFER TO SHEET C2.0 FOR SITE IMPROVEMENT NOTES

PARCEL ID: 11B B 01300 (122 FRANKLIN RD. 11B B 01100 (128 PEWITT DRIVE)
ZONE: C-4 COMMERCIAL TOWN CENTER

PLANS PREPARED FOR:
COMMERCIAL BANK
6710 CUMBERLAND GAP PARKWAY
HARROGATE, TN 37752
423-869-5151

PLANS PREPARED BY:
4209 GALLATIN PIKE
NASHVILLE, TN 37216
TELE:(615) 227-5863
www.dmgnashville.com
DEVELOPMENT MANAGEMENT GROUP, LLC

MULTI-TENANT BUILDING
122 FRANKLIN ROAD & 128 PEWITT DRIVE
BRENTWOOD, TENNESSEE

DAVID S. ABERY — REGISTERED ENGINEER — STATE OF TENNESSEE — 12/5/22

REVISIONS

NO.	DESCRIPTION	DATE

DATE:	12/05/22
DMG Project No:	22250

SITE LAYOUT PLAN
128 PEWITT DRIVE

C2.1

ISSUED FOR: ☐ CHECKSET ☐ AGENCY REVIEW ☐ BID PURPOSES ☐ CONSTRUCTION

0 10' 20' 30'

SCALE: 1"=10'

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OVERHEAD VIEW



OVERHEAD VIEW TOWN CENTER WAY LOOKING BACK TOWARD FRANKLIN ROAD



OVERHEAD VIEW FROM PEWITT DRIVE



OVERHEAD VIEW INTERSECTION FRANKLIN ROAD AND TOWN CENTER WAY

ISSUED FOR: ☐ CHECKSET ☐ AGENCY REVIEW ☐ BID PURPOSES ☐ CONSTRUCTION

SCALE: AS NOTED

PLANS PREPARED FOR:

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MULTI-TENANT BUILDING

122 FRANKLIN ROAD & 128 PEWITT DRIVE
BRENTWOOD, TENNESSEE

REVISIONS

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DATE:	12/05/22
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AERIAL VIEWS

C3.0

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LEFT SIDE ELEVATION VIEW



FRONT ELEVATION VIEW



RIGHT SIDE ELEVATION VIEW



BACK ELEVATION VIEW



VIEW OF PARKING AREA



VIEW ALONG LEFT SIDE OF FACILITY



VIEW ALONG RIGHT SIDE OF THE FACILITY



VIEW AT INTERSECTION



VIEW OF TRASH ENCLSORE AND TRANSFORMER



VIEW ALONG BACK OF FACILITY



VIEW OF WALL AND PARKING AREA



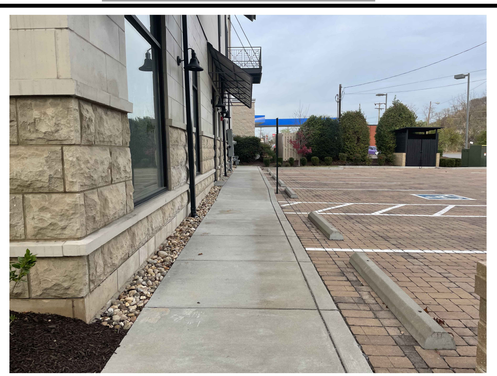
VIEW LOOKING AT WALL ALONG TOWN CENTER



VIEW OF PARKING AREA



VIEW OF PARKING AREA



VIEW ALONG BACK OF FACILITY



VIEW ALONG FRONT OF FACILITY

ISSUED FOR: ☐ CHECKSET ☐ AGENCY REVIEW ☐ BID PURPOSES ☐ CONSTRUCTION

SCALE: AS NOTED

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BRENTWOOD, TENNESSEE

REVISIONS

NO.	DATE	DESCRIPTION

DATE:	12/05/22
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STREET VIEWS
122 FRANKLIN ROAD

C3.1

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VIEW OF TREES ALONG DRIVEWAY



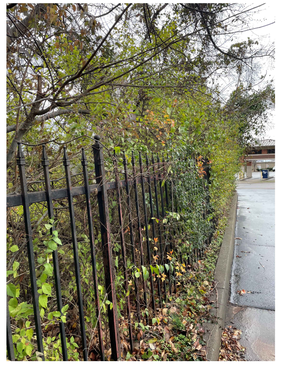
VIEW OF FACILITY ALONG TOWN CENTER WAY



VIEW OF FACILITY



VIEW OF PARKING AREA



VIEW OF TREES ALONG DRIVEWAY



VIEW OF ON-STREET PARKING ALONG TOWN CENTER WAY



VIEW OF TRASH ENCLOSURE



VIEW ALONG TOWN CENTER WAY



VIEW ON-STREET PARKING ALONG TOWN CENTER WAY



VIEW OF FACILITY ALONG TOWN CENTER WAY



VIEW ALONG BACK OF FACILITY



VIEW AT ENTRANCE OFF PEWITT DRIVE



VIEW OF PARKING ALONG TOWN CENTER WAY



VIEW OF PARKING AREA



VIEW ALONG SIDE OF FACILITY



VIEW OR PARKING AREA

ISSUED FOR: ☐ CHECKSET ☐ AGENCY REVIEW ☐ BID PURPOSES ☐ CONSTRUCTION

SCALE: AS NOTED

PLANS PREPARED FOR:

COMMERCIAL BANK
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MULTI-TENANT BUILDING
122 FRANKLIN ROAD & 128 PEWITT DRIVE
BRENTWOOD, TENNESSEE

REVISIONS

NO.	DATE	DESCRIPTION

DATE:	12/05/22
DMG Project No:	22250

STREET VIEWS
128 PEWITT DRIVE

C3.2

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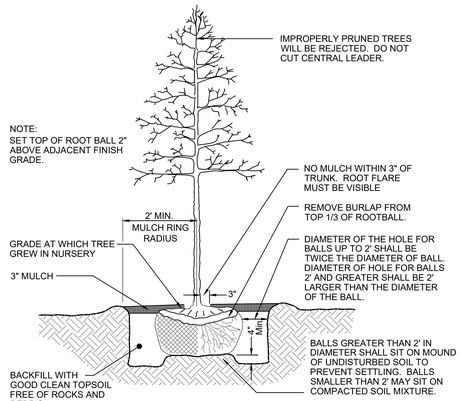
EX. TREE TABLE - 122 FRANKLIN				
NO.	TYPE	SIZE	CREDIT	COMMENTS
15	TREE	3"		
16	TREE			OFFSITE
17	TREE			OFFSITE
18	TREE			OFFSITE
19	TREE	13"	13"	
20	TREE	11"	11"	
21	TREE	11"	11"	
22	TREE	3"		
TOTAL ACI			35"	

LANDSCAPE CALCULATIONS - 122 FRANKLIN		
TOTAL SITE ACREAGE:	11,077	(0.25 AC)
ZONING: COMMERCIAL TOWN CENTER		C-4
	REQUIRED	PROVIDED
MIN. ACI DENSITY (50" * 1.0)	12.7 ACI	
EX. TREES TO REMAIN: (ACI)	-	35"
PROPOSED TREES		
REPLACEMENT TREES:	0	-
TOTAL SITE ACI:	12.7"	35.0"
15 TREES/AC.	4	26
TOTAL GREENSPACE:	10%	9.6%
GREENSPACE AREA:	1,108 SF	1,060 SF
PARKING SPACES:		12
150 SF GREENSPACE/PARKING (if over 20)		



DECIDUOUS TREE PLANTING

NOT TO SCALE

EX. TREE TABLE - 128 PEWITT				
NO.	TYPE	SIZE	CREDIT	COMMENTS
1	TREE	8"	8"	
2	TREE	6"	6"	
3	TREE	20"	20"	
4	TREE	16"	16"	
5	TREE	4"	4"	
6	TREE	4"	4"	
7	TREE	3"	3"	
8	TREE	8"	8"	
9	TREE	8"	8"	
10	TREE	6"	6"	
11	TREE	8"	8"	
12	TREE	8"	8"	
13	TREE	19"		OFF-SITE
14	TREE	22"		OFF-SITE
TOTAL ACI			99"	

LANDSCAPE CALCULATIONS - 128 PEWITT		
TOTAL SITE ACREAGE:	16,110	(0.37 AC)
ZONING: COMMERCIAL TOWN CENTER		C-4
	REQUIRED	PROVIDED
MIN. ACI DENSITY (50" * 1.0)	18.5 ACI	
EX. TREES TO REMAIN: (ACI)	-	99"
PROPOSED TREES		9"
REPLACEMENT TREES:	0	-
TOTAL SITE ACI:	18.5"	108.0"
15 TREES/AC.	6	26
TOTAL GREENSPACE:	10%	23.6%
GREENSPACE AREA:	1,611 SF	3,800 SF
PARKING SPACES:		25
150 SF GREENSPACE/PARKING	3,750 SF	3,800 SF

PLANT SCHEDULE					
QTY.	COMMON NAME	BOTANICAL NAME	HEIGHT	TRUNK	COMMENTS
CANOPY TREES					
3	'Green Vase' Japanese Zelkova	Zelkova serrata 'Green Vase'	12' - 14'	3" Cal.	B&B
3	TOTAL - CANOPY TREES				
UNDERSTORY/COLUMNAR TREES					
0	TOTAL - UNDERSTORY TREES				
3	TOTAL - ALL TREES				
SHRUBS					
0	TOTAL - SHRUBS				
GRASSES, PERENNIALS AND GROUND COVER					
TURF					
-	Hybrid Fescue Seed/Sod	Drought tolerant fescue blend			

KITA designs
Beauty | Economy | Sustainability

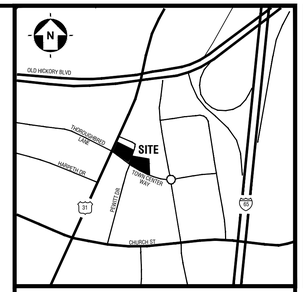
Kevin Reff, RLA
KITA Sustainable Designs, LLC
2101 Masters Drive
Springfield, TN 37172
(615) 469 - 1222 Ofc.
(615) 594 - 7333 Cell.
kreff@kitadesign.biz

ISSUED FOR: ☐ CHECKSET ■ AGENCY REVIEW ☐ BID PURPOSES ☐ CONSTRUCTION

0 20' 40' 60'

SCALE: 1"=20'

Know what's below. Call before you dig.



VICINITY MAP

LANDSCAPE NOTES:

1. WHEN APPLICABLE, IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROTECT EXISTING TREES TO REMAIN. NO HEAVY EQUIPMENT SHOULD BE PERMITTED TO OPERATE OR BE STORED, NOR ANY MATERIALS TO BE HANDLED OR STORED, WITHIN THE DRIPLINES OF TREES OUTSIDE THE LIMIT OF GRADING.
2. THE QUANTITIES INDICATED ON THE PLANT LIST AND PLAN ARE PROVIDED FOR THE BENEFIT OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HIS OWN QUANTITY CALCULATIONS AND THE LIABILITY WHICH PERTAINS TO THOSE QUANTITIES AND TO ANY RELATED CONTRACT DOCUMENTS AND/OR PRICE QUOTATIONS. QUESTIONS SHOULD BE DIRECTED TO THE LANDSCAPE ARCHITECT.
3. ALL PLANT MATERIALS SHALL BE NURSERY GROWN, GRADE "A" QUALITY, UNLESS OTHERWISE NOTED AND SHALL COMPLY WITH THE AMERICAN STANDARD FOR NURSERY STOCK: ANSI Z-60.1; LATEST EDITION, FOR SIZE AND QUALITY.
4. NO SUBSTITUTIONS AS TO TYPE, SIZE, OR SPACING OF PLANT MATERIALS SPECIFIED ON THIS PLAN MAY BE MADE WITHOUT THE APPROVAL OF THE LANDSCAPE ARCHITECT. KITA LANDSCAPE DESIGN (615) 469-1222.
5. THE CONTRACTOR IS TO VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES AND TO PROTECT UTILITIES THAT ARE TO REMAIN. THE CONTRACTOR SHALL REPAIR ANY DAMAGE ACCORDING TO LOCAL STANDARDS AT THE CONTRACTOR'S EXPENSE. COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY.
6. SOD 5' BEHIND CURBS AND ISLANDS ADJACENT TO BUILDING. USE EROSION CONTROL ON SLOPES 3:1 AND GREATER. SEED AND STRAW ALL OTHER DISTURBED AREAS.
7. SOIL USED FOR PLANTING SHALL CONSIST OF (5) PARTS TOPSOIL, (1) PART SAND AND (2) PARTS ORGANIC MATTER, MIXED WITH I POUND OF FERTILIZER PER CUBIC YARD.
   A. SAND SHALL BE CLEAN MASONRY SAND.
   B. ORGANIC MATTER SHALL BE PEAT MOSS, OR WELL COMPOSTED PINE BARK, OR APPROVED EQUAL AND SHALL BE FINELY GROUND AND FREE OF WEEDS.
   C. ALL FERTILIZER SHALL BE 10-10-10 WITH MINOR ELEMENTS. FERTILIZER SHALL HAVE 40-50% OF ITS TOTAL NITROGEN IN A WATER INSOLUBLE FORM.
8. PRE-EMERGENT HERBICIDE SHALL BE APPLIED TO ALL PLANT BEDS AND SOD AREAS PRIOR TO INSTALLATION. TREFLAN OR AN APPROVED EQUAL SHALL BE USED.
9. ALL PLANT BEDS SHALL HAVE A MINIMUM OF 3" DEEP MULCH. MULCH SHALL BE SHREDDED HARDWOOD.
10. IT IS THE LANDSCAPE CONTRACTOR'S RESPONSIBILITY TO CONFIRM MATERIAL QUANTITIES. IN THE EVENT OF A DISCREPANCY, THE QUANTITIES SHOWN ON THE PLAN SHALL TAKE PRECEDENCE OVER QUANTITIES SHOWN ON THE PLANT LIST.
11. PRIOR TO FINAL PAYMENT, THE LANDSCAPE CONTRACTOR SHALL PROVIDE THE OWNER WITH COMPLETE WRITTEN INSTRUCTIONS ON PROPER CARE OF ALL SPECIFIED PLANT MATERIALS.
12. THE LANDSCAPE INSTALLATION SHALL BE COORDINATED WITH THE IRRIGATION INSTALLATION WHEN APPLICABLE.
13. THE LANDSCAPE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM STRUCTURES AND TAKE SPECIAL CARE TO INSURE THAT BED PREPARATION DOES NOT INHIBIT DRAINAGE.
14. ALL LAWN AREAS SHALL BE CULTIVATED TO A DEPTH OF 4" PRIOR TO SODDING AND SEEDING. PREPARED TURF BEDS SHALL BE FREE FROM STONES OVER 2" DIAMETER, WEEDS AND OTHER DELETERIOUS MATERIAL.
15. THE LANDSCAPE CONTRACTOR SHALL RAKE SMOOTH ALL SEED OR SOD AREAS PRIOR TO INSTALLATION.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR BACKFILLING BEHIND THE CURB SO GRADE IS LEVEL WITH TOP OF CURB.
17. SODDED AREAS SHALL HAVE NO BARE AREAS. SEEDED AREAS SHALL BE CONSIDERED ACCEPTABLE WHEN FULL COVERAGE OF THE PERMANENT TURF GRASS SPECIES IS ESTABLISHED.
18. CUT AWAY ROPES OR WIRES FROM B&B PLANTS. PULL BACK BURLAP FROM TOP OF ROOT BALL. DO NOT ALLOW BURLAP TO BE EXPOSED AT SURFACE. TOTALLY REMOVE BURLAP IF IT IS SYNTHETIC.
19. IF CONTAINER GROWN PLANTS SHOW SIGNS OF BEING ROOT BOUND, SCORE ROOTS VERTICALLY.
20. ALL PLANT MATERIAL SHALL BE GUARANTEED FOR ONE YEAR FROM DATE OF FINAL ACCEPTANCE.
21. ALL REPLACEMENTS SHALL BE OF THE SAME TYPE, SIZE, AND QUALITY AS SPECIFIED ON THE PLANT LIST, UNLESS APPROVED OTHERWISE IN WRITING BY THE LANDSCAPE ARCHITECT.
22. ANY MATERIAL THAT IS DEEMED TO BE 25% DEAD OR MORE SHALL BE CONSIDERED DEAD, AND MUST BE REPLACED AT NO CHARGE. A TREE IS CONSIDERED DEAD WHEN THE MAIN LEADER HAS DIED BACK, OR MORE THAN 25% OF THE CROWN IS DEAD.
23. REPLACEMENTS SHALL BE MADE DURING THE NEXT PLANTING SEASON UNLESS THE LANDSCAPE CONTRACTOR AGREES TO AN EARLIER DATE.
    PLANTING DATES
    SPRING: MARCH 15 - APRIL 15
    FALL: OCTOBER 1 - NOVEMBER 30
24. THE LANDSCAPE CONTRACTOR WILL NOT BE RESPONSIBLE FOR PLANT MATERIAL THAT HAS BEEN DAMAGED BY VANDALISM, FIRE, RELOCATION, WILDLIFE, THEFT, OR OTHER ACTIVITIES BEYOND THE LANDSCAPE CONTRACTOR'S CONTROL.
25. CONTRACTOR TO IRRIGATE ALL NEW LANDSCAPE PLANTINGS AND LAWN AREAS WITH AN AUTOMATED UNDERGROUND IRRIGATION SYSTEM, ENSURING HEAD-TO-HEAD COVERAGE. IRRIGATION SYSTEM TO BE DESIGN-BUILD.
26. GENERAL CONTRACTOR TO COORDINATE AND BE RESPONSIBLE FOR WATERING ALL PLANTS AND SEEDED AREAS AFTER PLANTING UNTIL IRRIGATION SYSTEM IS OPERABLE.

PARCEL ID: 11B B 01300 (122 FRANKLIN RD. 11B B 01100 (128 PEWITT DRIVE)
ZONE: C-4 COMMERCIAL TOWN CENTER

PLANS PREPARED FOR:
COMMERCIAL BANK
6710 CUMBERLAND GAP PARKWAY
HARROGATE, TN 37752
423-869-5151

PLANS PREPARED BY:
DMG DEVELOPMENT MANAGEMENT GROUP, LLC
4209 GALLATIN PIKE
NASHVILLE, TN 37216
TELE:(615) 227-5863
www.dmgnashville.com

MULTI-TENANT BUILDING
122 FRANKLIN ROAD & 128 PEWITT DRIVE
BRENTWOOD, TENNESSEE

REVISIONS

NO.	DESCRIPTION	DATE

DATE:	12/05/22
DMG Project No:	22250

LANDSCAPE PLAN

L-1.1

Z:\DMG\2022\122 Franklin Road\122 FRANKLIN RD - LDSC.dwg-L-1.1 Dec 19, 2022 - 4:10pm KIDS

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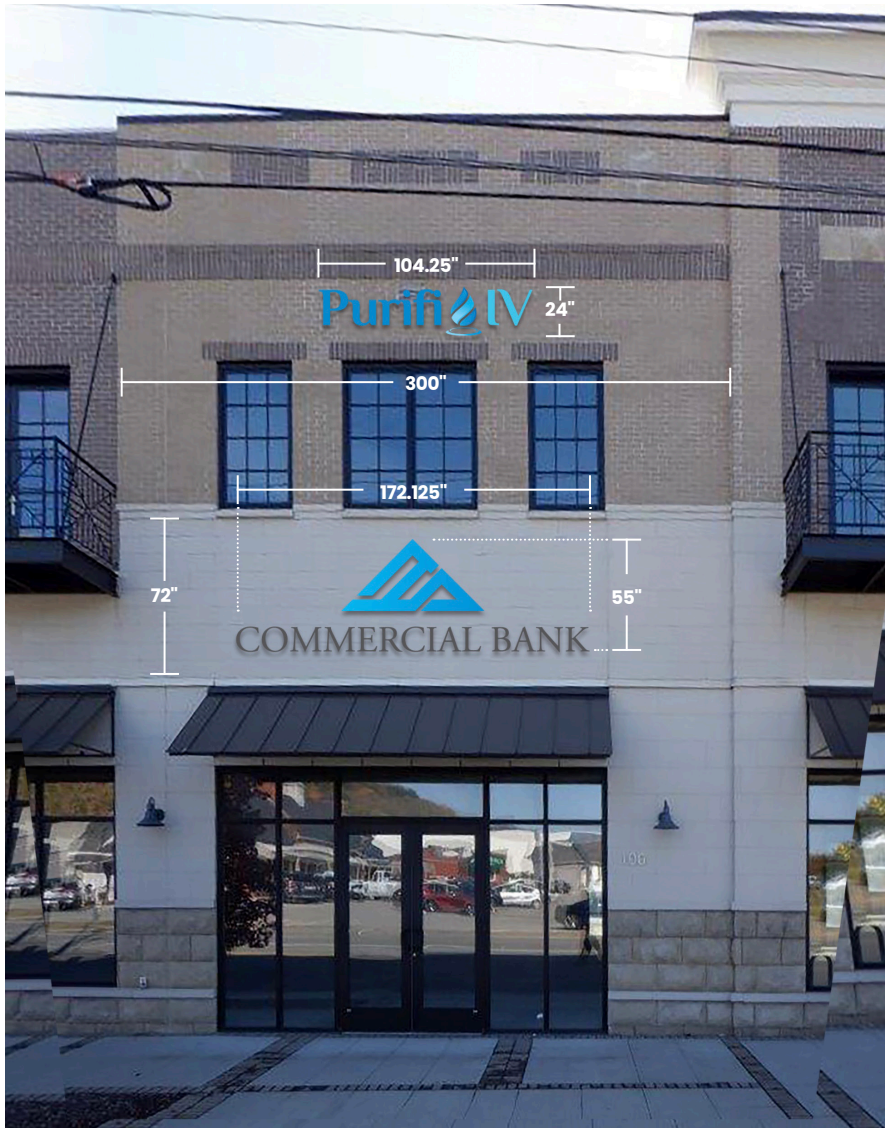
PROOF



34ft Building Height
72ft Building Lenght

Commercial Bank - 122 Franklin Rd. Brentwood, TN

BRENTWOOD PLANNING COMMISSION **1.**

Meeting Date: 01/03/2023

Information

PROJECT NUMBER

Monthly Security Report

PROJECT DESCRIPTION

ZONING OF PROPERTY

APPLICANT NAME/ADDRESS

Attachments

Securities -- December 2022

Bob Leeman
PLANNING AND CODES DIRECTOR

Michael Rinehart
BUILDING CODES OFFICIAL

Todd Petrowski
SENIOR CITY PLANNER

Allison Roberts
PLANNER I

BRENTWOOD
PLANNING AND CODES

PLANNING DEPARTMENT MEMORANDUM

TO: Planning Commission Members

FROM: Bob Leeman, AICP, Planning & Codes Department

SUBJECT: Security Summary – December 2022

DATE: December 28, 2022

The following securities were received or administered by Planning and Codes Department staff during the month of December 2022.

Witherspoon, Sec. 7: December 2, 2022 – A one year extension letter was issued with new expiration date of **January 8, 2024**. Based upon these staff reviews, and considering the quantity of work completed, staff has recommended that the amount of letter of credit number **90610443**, issued by the Pinnacle Bank, remain at **$381,736.00.**

Cromwell, Section 1: December 7, 2022 – The amount of letter of credit number **69408855-711**, being held to secure all improvements within Section One of the project was reduced a total of $125,415.50, or from the current total of $168,415.00 to a new total of **$42,999.50**. The new expiration date for the letter of credit shall be shown on the amendment as being **April 28, 2024**. Security for required landscaping is still being held.

Cromwell, Section 2: December 7, 2022 – The amount of letter of credit number **69408855-712**, being held to secure all improvements within Section Two of the project was reduced a total of $117,456.50, or from the current total of $127,457.00 to a new total of **$10,000.50**. The new expiration date for the letter of credit shall be shown on the amendment as being **April 30, 2024**. Security for required landscaping is still being held.

Delfino Subdivision: December 13, 2022 - The amount of letter of credit number **2690071471**, issued by FirstBank, will remain at **$294,726.00.** This is a Perpetual Letter of Credit and automatically renews. Staff will conduct another review of this security on or before **January 28, 2024.**

Taramore Subdivision, Phase 14: December 14, 2022: The amount of letter of credit number 70002305 issued by Suntrust Bank (Truist) will remain at **$53,267.00**. Staff will conduct another review of this security on or before **January 30, 2024**.

Should you have any questions or require additional information, please feel free to contact me at Bob.Leeman@Brentwoodtn.gov

SECURITY REPORT

CITY OF BRENTWOOD

BY EXPIRATION DATE

October 2022

PROJECT NAME	SECURITY NUMBER	AMOUNT OF SECURITY	DESIGNATED IMPROVEMENT	P/M	ISSUING BANK	SECURITY TYPE	EXP. NOTICE DATE	ACTUAL EXPIRY DATE	LAST STAFF ACTION	AUTO RENEW	KROLL RATING Q1 2022	ORIGINAL DATE OF ISSUANCE
Witherspoon Subdivision, Sec. Four	90020122	$292,883.00	RDL, W/S & LAND	P	Pinnacle National Bank	LOC	12/20/2022	1/24/2023	8/12/2022	YES	B+	1/26/2018
935 Edmondson Pike	2720059121	$96,100.00	RDU	P	FirstBank	LOC	2/1/2023	3/1/2023	12/20/2020	YES	B	4/1/2021
Tuscany Hills Sec. Seven	1250031570	$177,575.00	RDL,W/S	P	FirstBank	LOC	2/15/2023	3/15/2023	3/31/2022	YES	B	3/15/2019
Small Cell Node Removal -- Verizon -- Crown	68145854	$15,000.00	SMALL CELL REMOVAL	P	Bank of America	LOC	2/22/2023	3/22/2023	3/31/2022	YES	B	5/3/2019
Reserve at Raintree Forest, Sec. Four	90412148	$331,419.00	RDU, W/S	P	Pinnacle National Bank	LOC	3/15/2023	4/15/2023	11/10/2022	YES	B+	4/17/2019
Beech Creek Hill -- ***PERPETUAL***	403822500	$152,333.00	RDU & S	P	Franklin Synergy Bank -- FirstBank	LOC	3/18/2023	4/18/2023	9/30/2022	YES	B	10/18/2019
Morgan Farms Secs 1, 2, 3, 5, & 7	IS000188884U	$483,345.00	RDL, W/S	P	Wells Fargo Bank	LOC	3/28/2023	4/28/2023	12/19/2020	YES	B	5/19/2021
Academy at Holy Tree	1001	$139,748.00	RDU & LAND	P	FirstBank	LOC	4/5/2023	5/5/2023	12/21/2020	YES	B	5/5/2021
Taramore, Subdivision, Ph. 15	70002531	$87,007.00	RDL, W/S	P	SunTrust Bank -- Truist	LOC	4/18/2023	5/18/2023	5/31/2022	YES	B	5/18/2017
Allen's Green Subdivision	1250062776	$739,593.00	RDU, W/S, LAND, ENT FEAT.	P	FirstBank	LOC	5/16/2023	6/16/2023	12/22/2020	YES	B	6/16/2021
Taramore, Subdivision, Ph 13	IS0432338U	$60,709.00	RDL,W/S	P	Wells Fargo Bank	LOC	5/16/2023	6/16/2023	7/1/2022	YES	B	6/16/2016
Valley View Subdivsion	36536	$174,429.00	RDL,W/S	P	Servis 1st Bank	LOC	5/22/2023	6/22/2023	7/1/2022	YES	B	6/25/2016
The Heights	SLCMMSP09551	$203,034.70	RDU & BUFER LAND	P	U.S. Bank	LOC	6/30/2023	7/31/2023	7/21/2022	YES	Aa3*	7/31/2019
Rosebrooke Sub., Sec 1 -- (8-Lots)	90721867	$182,211.00	RDU	P	Pinnacle National Bank	LOC	7/18/2023	8/18/2023	12/23/2020	YES	B+	8/10/2021
Terrabrooke Subdivision	5098	$188,230.00	RDL,W/S & LAND	P	Franklin Synergy Bank -- FirstBank	LOC	7/20/2023	8/20/2023	7/21/2022	YES	B	2/2/2016
Taramore, Subdivision Ph.10	IS0333349U	$81,429.00	RDL, W/S	M	Wells Fargo Bank	LOC	8/3/2023	9/3/2023	12/6/2020	YES	B	9/3/2015
Oman Subdivision	1250038637	$414,611.50	RDL,W/S & LAND	P	FirstBank	LOC	8/7/2023	9/7/2023	8/26/2022	YES	B	9/6/2019
Taramore, Subdivision, Ph. 12	70004240	$461,679.00	RDU, W/S	P	SunTrust Bank -- Truist	LOC	8/20/2023	9/20/2023	12/9/2020	YES	B	9/19/2019
American Tower	3029729	$20,000.00	TOWER REM.	P	Bank of America	LOC	8/26/2023	9/26/2023	8/11/2022	YES	B	9/26/2000
Witherspoon Sub. Sec. 8	90727896	$314,560.00	RDU, W/S & LAND	P	Pinnacle National Bank	LOC	8/27/2023	9/27/2023	9/30/2021	YES	B+	9/28/2021
Taramore, Subdivision Ph. 11	IS0342670U	$165,064.00	RDL,W/S	P	Wells Fargo Bank	LOC	9/13/2023	10/13/2023	9/30/2022	YES	B	10/13/2015
Broad Oaks Sub	SLCMMSP10192	$811,428.00	RDU, W/S & LAND	P	U.S. Bank	LOC	9/22/2023	10/22/2023	9/30/2022	YES	Aa3*	7/31/2019
Marshall Place ***PERPETUAL***	40037500	$162,493.00	RDL, W/S & LAND	P	Lineage Bank	LOC	11/5/2023	12/22/2023	11/3/2022	YES	B	12/22/2021
Witherspoon Sec. Seven	90610443	$381,736.00	RDU, W/S, LAND	P	Pinnacle National Bank	LOC	12/8/2023	1/8/2024	12/2/2022	YES	B+	1/8/2021
Delfino Subdivision ***PERPETUAL***	2690071471	$294,726.00	RDU, W/S, LAND, SIGN	P	FirstBank	LOC	12/28/2023	1/28/2024	12/13/2022	YES	B	1/5/2022
Taramore Subdivision, Ph. 14	70002305	$53,267.00	RDL, W/S	P	SunTrust Bank -- Truist	LOC	12/30/2023	1/30/2024	1/31/2022	YES	B	1/30/2017
Witherspoon, Sub. Sec. Five	90359703	$373,525.00	RDL, W/S & LAND	P	Pinnacle National Bank	LOC	1/22/2024	2/22/2024	9/30/2022	YES	B+	2/22/2019
Harlan Sub.	90744937	$1,714,735.00	RDU, AMENITY & LAND	P	Pinnacle National Bank	LOC	3/20/2024	4/20/2024	4/21/2022	YES	B+	4/20/2022
Cromwell, Sec. One	69408855-711	$42,999.50	RDL, W/S & LAND	M	Synovus Bank	LOC	3/28/2024	4/28/2024	12/14/2022	YES	B	5/7/2013
Cromwell, Sec. Two	69408855-712	$127,457.00	RDL, W/S	M	Synovus Bank	LOC	3/30/2024	4/30/2024	12/14/2022	YES	B	1/9/2017
Harpeth on the Green,, Building Two	S223221	$128,157.70	LAND	P	First Horizon Bank	LOC	4/16/2024	5/16/2024	5/17/2022	YES	B	5/16/2022
Harpeth on the Green,, Building Three	S223222	$128,157.70	LAND	P	First Horizon Bank	LOC	4/16/2024	5/16/2024	5/17/2022	YES	B	5/16/2022
Harpeth on the Green,, Building Four	S223223	$93,142.50	LAND	P	First Horizon Bank	LOC	4/16/2024	5/16/2024	5/17/2022	YES	B	5/16/2022
Harpeth on the Green,, Building Five	S223224	$88,887.70	LAND	P	First Horizon Bank	LOC	4/16/2024	5/16/2024	5/17/2022	YES	B	5/16/2022
100 Winners Circle	S223225	$163,606.30	LAND	P	First Horizon Bank	LOC	4/16/2024	5/16/2024	5/17/2022	YES	B	5/16/2022
Brentwood Family YMCA	75000574	$121,000.00	LAND	P	Truist Bank	LOC	4/21/2024	5/21/2024	6/2/2022	YES	B	6/1/2022
Rosebrooke Sub., Sec. 2A	90755320	$2,507,799.85	RD, Amenity, Landscape St Trees, Entrance	P	Pinnacle Bank	LOC	7/30/2024	8/30/2024	8/19/2022	YES	B+	8/19/2022
Reserve at Raintree Forest, Sec. Ten	0000002690083195	$126,669.50	RDU, WS	P	FirstBank	LOC	8/6/2024	9/6/2024	9/7/2022	YES	B	9/7/2022
Grand Oaks	90760579	$151,793.04	RDU, WS	P	Pinnacle Bank	LOC	9/19/2024	10/19/2024	10/20/2022	YES	B+	10/19/2024
Rosebrooke, Sec. 2B	90761260	$369,500.54	RDU, Street Trees	P	Pinnacle Bank	LOC	9/25/2024	10/25/2024	11/10/2022	YES	B+	11/8/2022
TOTAL	**$12,622,041.53**											
***Moody's Rating -- Aa3, Fitch Rating -- AA**												

P/M = PERFORMANCE/MAINTENANCE, RDL = ROADS, DRAINAGE AND LIGHTING, W/S = WATER AND SEWER, LAND = LANDSCAPING, DRAIN = DRAINAGE, EROSION = EROSION CONTROL

SECURITY REPORT

CITY OF BRENTWOOD

AMOUNTS HELD IN ESCROW

September 2022

PROJECT NAME	*AMOUNT OF ESCROW*	*DESIGNATED IMPROVEMENT*	*P/M*	*ORIGINAL CASHIERS CHECK NUMBER*	*DATE RECEIVED*
Local Taco Restaurant	$1,000.00	LAND	M	34725	6/2010
Clearwire Co-Location -- Chenoweth	$7,750.00	LAND	M	695110938	6/1/2010
Brookfield, Section 19 -- Fence	$1,300.00	FENCE	P	5192	7/1/2010
Inglehame Farms, Section 7	$123,006.50	RDL & W/S	P	7030834893	12/30/2010
Princeton Hills, Sections 3, 4, & 5	$50,000.00	DRAINAGE	M	7031641428	3/2011
Parklane Building Renovations -- Land	$13,447.50	LAND	M	7038763389	3/2011
Peartree Village Revised Site Plan	$5,410.90	LAND	P	1603114238	6/6/2011
HG Hills S/C -- Dumpster Area Land.	$2,130.00	LAND	P	N/A	5/4/2012
PWSF -- 8217 Alamo Drive	$5,747.50	LAND	P	5501777477	4/24/2014
Tomlinson Subdivision	$15,000.00	LAND	P	8732105553	4/10/2015
Traditions Section 1	$240,295.00	RDU & W/S	P	001060	3/31/2017
Elmbrooke, Sec. 1	$5,000.00	RDU & LAND	M	201755368	6/8/2017
Traditions Section 2	$298,234.00	RDU & W/S	P	003273	8/16/2018
Hidden Creek Sections 1 & 2	$25,000.00	LAND	M	001402	8/8/2018
Small Cell Node Removal -- Murray & Fisher	$49,500.00	TOWER REMOVAL	M	165804	12/7/2018
Small Cell Node Removal -- 7101B Crossroads	$5,000.00	TOWER REMOVAL	M	1019362782	10/25/2018
Traditions, Section 3	$703,066.80	RDU & W/S	P	004736	10/4/2019
Traditions, Section 5	$398,475.00	RDU & W/S	P	005159	2/11/2020
Traditions, Section 4	$346,044.00	RDU & W/S	P	005392	4/20/2020
Preserve at Arden Woods	$108,139.00	RDU & W/S	P	5301576623	3/30/2020
Springhill Suites	$6,000.00	STREET FURN	P	1343110	12/14/2020
Fish Split Log Road Subdivision	$62,486.70	RDU & W/S	P	9671300959	7/16/2022
	$2,472,032.90				

TOTAL ESCROW ACCOUNT HOLDINGS	**$2,472,032.90**
TOTAL AMOUT OF ALL SECURITIES HELD BY THE CITY	**$15,094,074.43**

BRENTWOOD PLANNING COMMISSION **1.**

Meeting Date: 01/03/2023

Information

PROJECT NUMBER

Planning & Codes Monthly Report

PROJECT DESCRIPTION

ZONING OF PROPERTY

APPLICANT NAME/ADDRESS

Attachments

Planning and Codes Department Monthly Report -- November 2022

Bob Leeman
PLANNING AND CODES DIRECTOR

Michael Rinehart
BUILDING CODES OFFICIAL

Todd Petrowski
SENIOR CITY PLANNER

Allison Roberts
PLANNER I

BRENTWOOD
PLANNING AND CODES

PLANNING DEPARTMENT MEMORANDUM
2022-22

TO: HONORABLE MAYOR AND MEMBERS OF THE BOARD OF COMMISSIONERS

THROUGH: KIRK BEDNAR, CITY MANAGER

FROM: Todd Petrowski, Senior City Planner MTP

SUBJECT: November 2022 MONTHLY REPORT

DATE: December 15, 2022

PLANNING COMMISSION

The Planning Commission conducted their regular monthly meeting on ***November 7, 2022***. The following presents a summary of the Planning Commission case file review, completed by staff to date in FY 2023.

REVIEW TYPE	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	YTD	TOTAL
ADOPTION OF PROPOSED REVISIONS TO SUBDIVISION REGULATIONS													***0***	
FINAL PLAT	1	2	2	1	2								***8***	
FOOD TRUCK RALLY													***0***	
HILLSIDE PROTECTION SITE PLAN	1												***1***	
LIMITED DURATION EVENT	2	1	1	2	1								***7***	
MASTER GRADING PLAN													***0***	
PRELIMINARY PLAN	1	1	1										***3***	
PUBLIC HEARING -- TBCH			1										***1***	
REVISED BUILDING ELEVATIONS													***0***	
REVISED FINAL PLAT	1		1		1								***3***	
REVISED HILLSIDE PROTECTION SITE PLAN					2								***2***	
ORD. 2022-06 SAM DONALD RD ZONING		1											***1***	
ORD. 2022-12 - ASSIGN C-3 TO SUMMIT VIEW PLACE			1										***1***	
RES. 2022-84 - POS EXPANSION OF UGB SAM DONALD RD			1										***1***	
ORD. 2022-14 Old Smyrna Road Prop. to AR-IP					1									
REVISED MASTER PLAN													***0***	
REVISED PRELIMINARY PLAN		3	3	2	2								***10***	
REVISED SITE PLAN	3	4	4	1	3								***15***	
SITE PLAN	1												***1***	
SMALL CELL WIRELESS FACILITIES													***0***	
REVISED PWSF SITE PLAN													***0***	
TEMPORARY MODEL HOME/SALES OFFICE													***0***	
													0	
MONTHLY TOTAL	**10**	**12**	**15**	**6**	**12**	**0**	**0**	**0**	**0**	**0**	0	0	***55***	

BOARD OF ZONING APPEALS

The Board of Zoning Appeals had three cases on their November agenda.

BOARD OF ZONING APPEALS -- CASE FILE REVIEW SUMMARY-- FY 2023 (FROM FINAL AGENDA)													
REVIEW TYPE	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	YTD TOTAL
ACCESSORY STRUCTURE	1	3	3	1	2								10
HOME OCCUPATION													0
SPECIAL EXCEPTION													0
VARIANCE				1	1								2
APPEAL OF STAFF DECISION													0
TOTALS	1	3	3	2	3	0	0	0	0	0	0	0	12

AMENDMENTS TO THE ZONING ORDINANCE/ANNEXATIONS/REZONINGS/CODE REVISIONS

Planning staff, in coordination with staff from other departments continue to work on various zoning ordinance amendments.

ORDINANCE 2022-13 - AN ORDINANCE ASSIGNING THE R-2 ZOINING CLASSIFICATION TO PORTIONS OF PROPERTIES SOUTH OF SAM DONALD ROAD

The attached ordinance requests the assignment of the R-2 (Suburban Residential) zoning district to 21.20 +/- acres lying within the City's Urban Growth Boundary (UGB) and located on the south side of Sam Donald Road, adjacent to the City Limits. The properties proposed for rezoning are also proposed for annexation pursuant to Resolution 2022-84 and Resolution 2022-91. This area is adjacent to an area previously annexed and zoned R-2 to the west (Resolution 2022-06 and Resolution 2022-43 were approved by the Board of Commissioners on July 25, 2022).

More specifically, the properties for which annexation and rezoning is requested are detailed in the table below. The total combined area of the subject properties is ≈ 21.20 +/- acres.

PROPERTY DESCRIPTION -- SCALES and HUNNICUTT PROPERTIES			
OWNER	ADDRESS	PARCEL #	AREA (AC)
Gordon R. Hunnicutt	Clovercroft Rd.	059 00202	6.90
Larry Scales & Phyllis Sanford	Sam Donald Rd.	059 00204	14.30
TOTAL			**21.20 +/-**

The portions of properties proposed for rezoning are currently vacant. These properties abut the Nolensville Town limits.

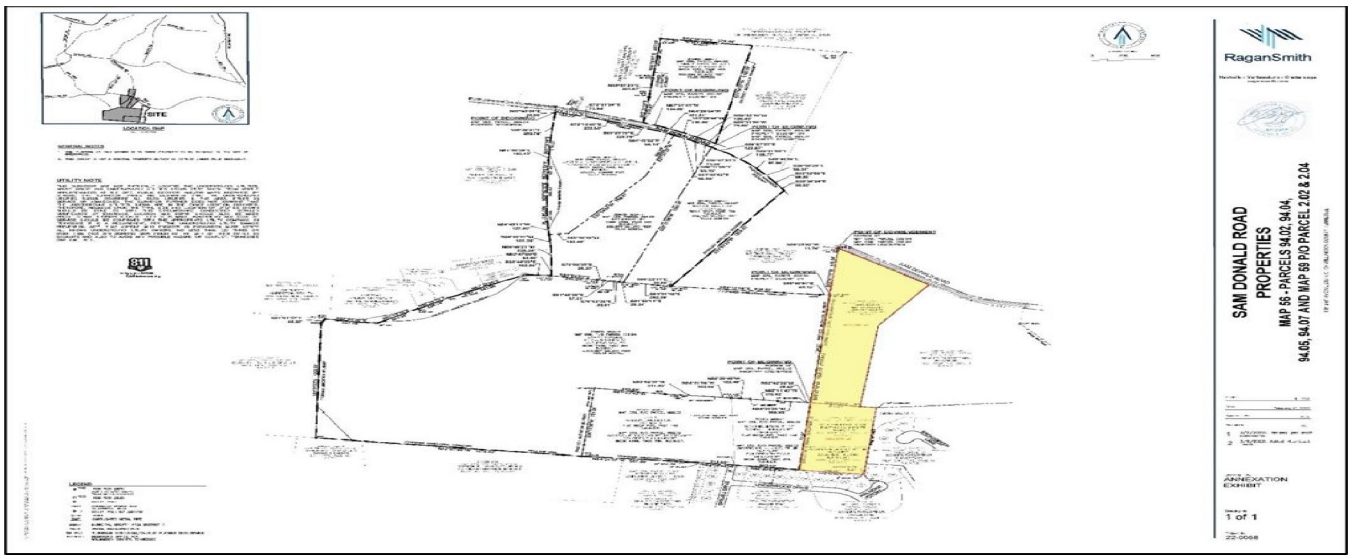
The Urban Growth Boundary (UGB) was expanded pursuant to Resolution 2022-81 on August 22, 2022, by the Board of Commissioners. That expansion was for the same area included in this assignment of

zoning, plus the adjacent Sam Donald Road right-of-way.

These remnant tracts are currently zoned in the County as Rural Development - 5 (RD-5), which requires a five-acre lot density. A non-binding plan for this area shows approximately 76 lots (mostly on the adjacent properties to the west of this rezoning). The area within this rezoning is shown on the non-binding plan to include an access road to Sam Donald Road. The access for this area would come through the area proposed for annexation and rezoning, which would allow for better connectivity and would be better for emergency access.

Staff requests that the 21.20-acre area currently proposed for annexation be assigned the R-2 (Suburban Residential) zoning district. Currently, the tracts can be developed under the existing zoning classification in the County. The proposed district standards require a minimum lot area of one acre, however, the applicant has agreed that this area would not exceed the current density allowance in the County.

REMAINING HEARING SCHEDULE --	
10/10/22	Board of Commissioners -- Public Hearing on the Plan of Services for Annexation
10/10/22	Board of Commissioners -- First Reading of the Ordinance Assigning R-2 Zoning
10/27/22	Required Community Meeting -- Annex Room-- 6:00pm
11/7/22	Planning Commission -- Review and Recommendation of the Ordinance Assigning R-2 zoning to the properties
11/14/22	Board of Commissioners -- Public Hearing on Ordinance 2022-13 Assigning R-2 to the Properties
11/28/22	Board of Commissioners -- Second and Final Reading of the Ordinance Assigning R-2 zoning to the Properties (Ordinance 2022-13)
11/28/22	Board of Commissioners-- Review of Resolution Annexing the Properties into the City of Brentwood (Resolution 2022-91).


SITE
LOCATION MAP
RaganSmith
SAM DONALD ROAD
PROPERTIES
MAP 95 - PARCELS 94.02, 94.04,
94.05, 94.07 AND MAP 99 P/O PARCEL 2.02 & 2.04
ANNEXATION
EXHIBIT
1 of 1
22-0068

ORDINANCE 2022-14 AN ORDINANCE REZONING CERTAIN PROPERTY LOCATED ALONG THE SOUTH SIDE OF OLD SMYRNA ROAD, APPROXIMATELY 3,200 FEET EAST OF JONES PARKWAY FROM THE AR (AGRICULTURAL / RESIDENTIAL ESTATE) TO AR-IP (INNOVATIVE PROJECT)

The attached ordinance requests to change from AR (Agricultural/Residential Estate) to AR-IP (Agricultural/Residential, Innovative Project) zoning district for two contiguous parcels lying on the south side of Old Smyrna Road, approximately 3,200 feet east of Jones Parkway. The two parcels total 40.37+/- acres, and the submitted plan shows a total of ten lots ranging in area from 2.01 acres to 8.2 acres. There are six lots that are just over two acres, two lots that are just over three acres, one lot that is 6.3 acres, and one lot that is 8.21 acres. The plan also proposes a total of 2.53 acres of open space. Access to the subdivision will be through a gated, private roadway.

The subject properties are located at 9227 and 9229 Old Smyrna Road (Parcel Numbers 011 07100 & 029 05600), which are situated on the south side of the road, slightly east of the existing access to the Harlan Subdivision and approximately 3,200 feet east of Jones Parkway. The southern portion of the property is encumbered by the Hillside Protection Overlay district. The property is owned by OSR Land LLC (0112 07100) and Doyle and Ranelle Gaw (029 05600). There is an existing home located atop the hill along with several accessory structures on the property. The submitted plan proposes the demolition of all existing structures.

More specifically, the parcels for which rezoning is requested are detailed in the table below. The site sits within the Brentwood city limits and the total combined area of the subject properties is 40.37+/- acres.

PROPERTY DESCRIPTION -- 9227 AND 9229 OLD SMYRNA ROAD			
OWNER	***ADDRESS***	***PARCEL #***	***AREA (AC)***
Doyle and Ranelle Gaw Living Trust	9227 Old Smyrna Road	056 15029	15.00
OSR Land LLC	9227 Old Smyrna Road	7100 15011	25.37
TOTAL			**40.37 +/-**

The proposed AR-IP plan consists of 10 lots with a minimum lot size of two acres. A detention pond is proposed at the front of the site. All stormwater conveyance plans and utilities proposed were coordinated with the Engineering Department and have been sized or designed as requested.

The lots average 3.5 acres (10 lots on 35.47 acres), which is consistent with the AR-IP and Hillside Overlay standards (one unit per three acres maximum). A geotechnical report will be required with the preliminary plan submittal. The initial development plan does not include fully engineered plans and, therefore, may not show all final construction details. Subsequent engineered development plans must meet all requirements of the City's Zoning Ordinance and Subdivision Regulations. The absence of specific details on the AR-IP plan does not constitute a variance of any city technical standards.

A 50-foot right-of-way dedication is proposed along Old Smyrna Road and the required 50-foot

landscape buffer has also been provided along Old Smyrna Road. The proposed detention area is 100 feet from the existing right of way.

All lots meet the technical requirements of the AR-IP district, including 100-foot front yard setbacks, 30-foot side setbacks (not abutting a street), 50-foot rear setbacks, and a 200-foot-wide minimum lot width at the building line. While all lots do have street frontage, several lots at the end of the proposed cul-de-sac will also be served by a shared driveway due to steep topography. This will allow less grading and disturbance, overall, to the site.

The development plan indicates there will be an observation deck within a shared use easement on Lot 7 to allow residents of this development the ability to view the Nashville skyline. Details of the deck would need to be provided with future detailed development plans submitted through the normal Planning Commission process.

A Traffic Access Review was prepared by Ragan Smith Associates for this development. The City's traffic consultant, Greg Judy with Neel-Schaffer, performed a review of this and provided the following:

- *In review of the total projected number of new vehicle trips expected from the development, we concur with the report's conclusion that the site's vehicle trip generation falls below the minimum threshold of requiring a full Traffic Impact Study (TIS).*
- *The report presented guidance for providing minimum intersection sight distance at the intersection of the access road and Old Smyrna Rd. We take no exception with the report's documentation of recommended minimum line of sight distances. While we are unable to verify the study's documentation of provided sight distance under improved conditions, review determined that minimum intersection sight distance provisions would be met if construction conditions follow the guidance provided in the report. We advise that site designers should follow recommendations as shown in the report. Specifically, we note, based on our general review of existing field conditions, that existing vegetation and adjacent mature trees will likely require removal to provide necessary intersection sight distance. Project designers shall coordinate with engineering department officials to confirm these measures are addressed as part of the design submittal process.*
- *Generally speaking, we concur with the conclusions presented in the Traffic Access Report. In addition, we provide the following remarks for consideration by City planning and engineering staff in its review of the proposal:*
    - *The design and alignment of the access road at its intersection with Old Smyrna Rd should consider the position of the future access road to the Harlan subdivision. Harlan, at 21-lot subdivision previously considered by the City of Brentwood, will be located on the north side of Old Smyrna Rd in proximity to the proposed Old Smyrna Estates. While the relative positions and separation distance between the two access roads are not clear, we recommend that designers for Old Smyrna Estates review the proposed spacing between the driveways to ensure compliance with city zoning ordinance regulations. Design of the site access for Old Smyrna Estates should meet or exceed minimum driveway spacing requirements for arterial classified roadways (250ft, per Section 78-486, item 3). This requirement includes any other existing driveways on Old Smyrna Rd serving adjacent home sites.*
    - *As mentioned in the Traffic Access Review, Old Smyrna Rd includes the presence of speed humps as a traffic calming enhancement. We advise, pending determination of the final position of the site's access road, that no speed hump should be located within 100ft of the site's proposed access intersection. We suggest that project designers consider this*

feature in their review and design of improvements to Old Smyrna Rd, relocating or otherwise adjusting the presence of any existing speed hump to the satisfaction of the City engineering department.

- *As a point of information for City officials, review observed within the project's draft site plans provided to us that 1.5ft of the proposed 5-foot sidewalk (on both sides of the access road) appear to be located outside the proposed 50ft right-of-way dedication as shown in the "Roadway Cross Section 50' ROW" exhibit (sheet C1). We mention this only to confirm that this follows typical city expectations.*

Staff notes that the Harlan Subdivision entrance is not directly aligned with this property. Therefore, the applicant was not required to adjust their access location, and the sidewalk encroachments will be required to be placed in a Public Utility, Drainage, and Access Easement (PUDAE).

The site will be served by City water and sewer. The owner/developer is responsible for all infrastructure improvements required to meet minimum pressure and flows for domestic and fire water service. The applicant is continuing to work with the Water Services Department to determine the best way to serve the project.

HEARING SCHEDULE -- Old Smyrna Estates	
10/10/2022	Board of Commissioners -- First Reading of Ordinance 2022-14, Rezoning Properties from AR to AR-IP
11/3/2022	Required Community Meeting -- Annex Room -- 6:00 pm TENTATIVE
11/7/2022	Planning Commission -- Review & Recommendation of Ordinance 2022-14
11/14/2022	Board of Commissioners -- Public Hearing on Ordinance 2022-14
11/28/2022	Board of Commissioners – Second and Final Reading of Ordinance 2022-14.





PERMIT SUMMARY

Staff issued a total of **2** single-family residential permits for the month of November 2022. The total valuation of the single-family permits issued was **$2,925,000.00.** A total of **6** single-family permits were issued for the same period last year.

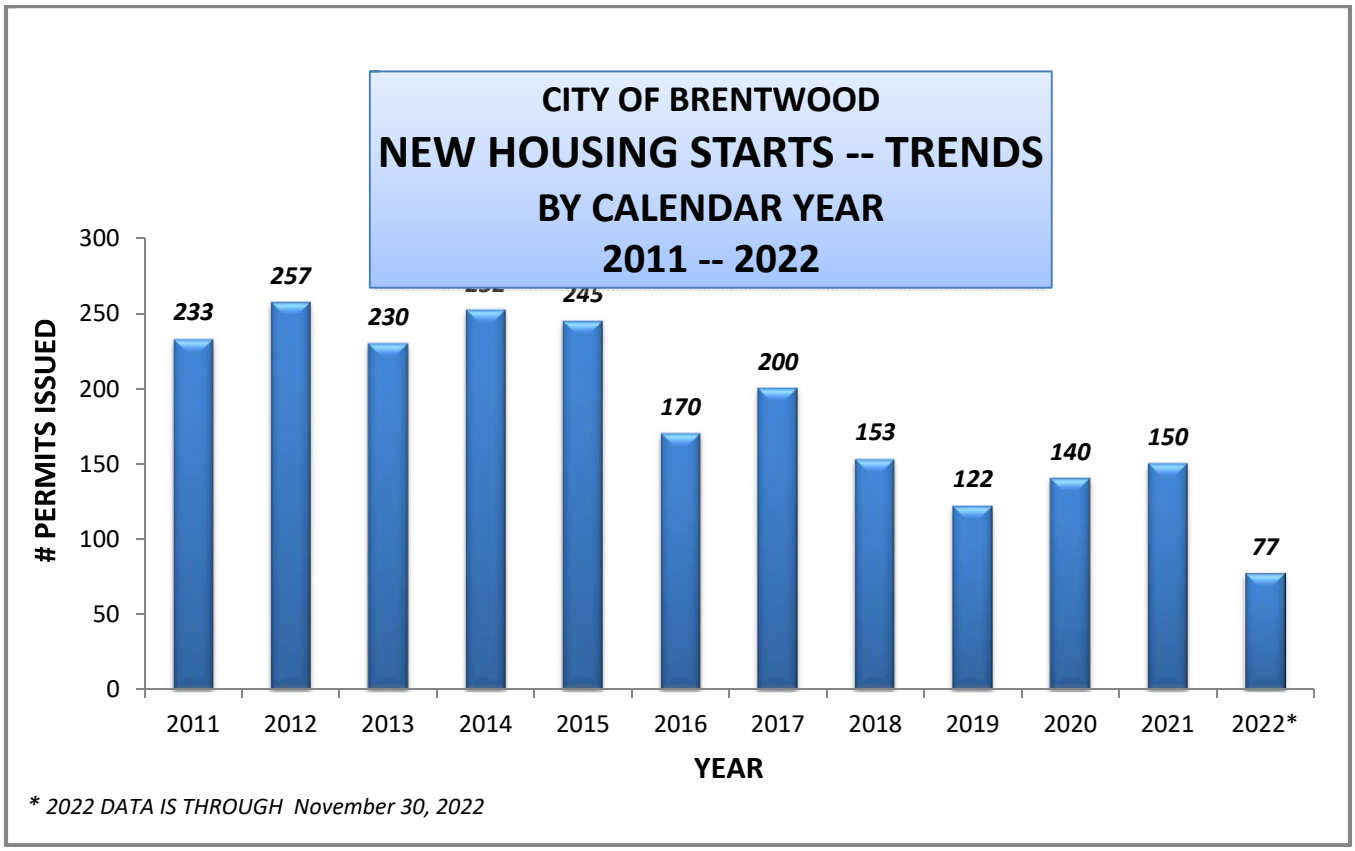
The total number of single-family permits issued this **calendar year**, through October is **77.** The total number of single-family permits issued last calendar year for the same period was **138**. A total of 23 single-family building permits have been issued to date in FY 2023.

The tables below provide additional details on the total permits issued in November.

SUMMARY -- PERMIT VALUATION/FEES COLLECTED -- FY 2023			
PERMIT COUNT VALUES FEES			
MONTH	***PERMITS ISSUED***	***VALUATION***	***FEES COLLECTED***
JULY	222	$47,972,152.00	$442,025.13
AUGUST	272	$93,074,993.00	$324,053.98
SEPTEMBER	179	$40,573,245.00	$138,031.65
OCTOBER	179	$17,510,544.00	$61,578.77
NOVEMBER	151	$12,324,294.00	$48,091.40
DECEMBER			
JANUARY			
FEBRUARY			
MARCH			
APRIL			
MAY			
JUNE			
TOTAL FY 2023	**1003**	**$211,455,228.00**	**$1,013,780.93**

PERMITS ISSUED ***NOVEMBER 2022***							
PERMIT TYPE	***# ISSUED***	***VALUATION***	***FEES***	***PERMIT TYPE***	***# ISSUED***	***VALUATION***	***FEES***
AMENITY IMPROVEMENTS	0	$0.00	$0.00	RESIDENTIAL DECK	5	$284,700.00	$1,343.75
COMMERCIAL ADDITION	0	$0.00	$0.00	RESIDENTIAL DETATCHED GARAGE	0	$0.00	$0.00
COMMERCIAL EXTERIOR RENOVATION	0	$0.00	$0.00	RESIDENTIAL FENCE	2	$17,014.00	$0.00
COMMERCIAL NEW CONSTRUCTION	0	$0.00	$0.00	RESIDENTIAL FREE-STANDING FIREPLACE	0	$0.00	$0.00
COMMERCIAL ROOF	0	$0.00	$0.00	RESIDENTIAL GEZEBO	1	$40,000.00	$225.25
COMMERCIAL SWIMMING POOL	0	$0.00	$0.00	RESIDENTIAL HOT TUB/SPA	1	$30,000.00	$187.75
COMMERCIAL TENANT FINISH	6	$1,478,016.00	$7,510.15	RESIDENTIAL NEW BUILDING	2	$2,925,000.00	$5,718.50
COMMUNICATIONS STRUCTURE	0	$0.00	$0.00	RESIDENTIAL PERGOLA	0	$0.00	$0.00
DEMOLITION	3	$102,800.00	$750.00	RESIDENTIAL POOL HOUSE	1	$101,000.00	$453.00
FIRE SUPRESSION ALARM	0	$0.00	$0.00	RESIDENTIAL REMODEL BASEMENT OR ATTIC	3	$135,000.00	$732.00
FIRE SUPPRESSION/SPRINKLER SYSTEM	0	$0.00	$0.00	RESIDENTIAL RENOVATION/REPAIR	8	$1,435,794.00	$5,157.00
FLOOD RENOVATION	0	$0.00	$0.00	RESIDENTIAL SHED	1	$9,686.00	$104.00
GRADING	1	$0.00	$250.00	RESIDENTIAL SIDING	0	$0.00	$0.00
HISTORICAL UNKNOWN	0	$0.00	$0.00	RESIDENTIAL SWIMMING POOL	11	$1,228,410.00	$6,825.50
IRRIGATION/FIRE SPRINKLER SYS/DOMESTIC FIRE LINE	8	$59,450.00	$391.00	RESIDENTIAL WINDOWS & DOORS	6	$28,611.00	$386.50
LIFE SAFETY INSPECTION	0	$0.00	$0.00	RETAINING WALL	0	$0.00	$0.00
MECHANICAL	46	$875,199.00	$3,166.00	SPECIAL EVENT	0	$0.00	$0.00
MISCELLANEOUS	2	$0.00	$0.00	STORMWATER MANAGEMENT	0	$0.00	$0.00
MONUMENT SIGN	0	$0.00	$0.00	STRUCTURE RELOCATION	0	$0.00	$0.00
PLUMBING	22	$242,359.00	$1,099.00	TEMPORARY STRUTURE	0	$0.00	$0.00
RESIDENTIAL ADDITION	11	$2,792,164.00	$11,050.00	WALL SIGN	0	$0.00	$0.00
RESIDENTIAL ATTACHED GARAGE	0	$0.00	$0.00	WELL / SEPTIC	1	$0.00	$25.00
RESIDENTIAL CARPORT	0	$0.00	$0.00	TENT	0	$0.00	0
RESIDENTIAL COVERED PORCH	10	$539,091.00	$2,717.00				
				TOTALS	***151***	***$12,324,294.00***	***$48,091.40***

PERMITTING CUSTOM -- PERMIT COUNT VALUE FEES



** 2022 DATA IS THROUGH November 30, 2022*

INSPECTION SUMMARY

The number of inspections conducted by staff in November decreased from the previous month. The number of inspections completed in November was 792. These are combined inspection totals for Planning & Codes, Engineering, and Fire. The total number of inspections completed to date in FY 2023 is 4,580.

MONTHLY COMPARISON OF INSPECTIONS COMPLETED -- 2011 - 2022												
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
January	1,201	1,332	1,485	1,099	1,273	1,098	1,032	879	829	721	828	552
February	1,156	1,423	1,334	1,233	1,165	1,175	966	896	774	766	641	652
March	1,530	1,384	1,472	1,332	1,473	1,255	1,147	1,138	983	824	1,103	900
April	1,504	1,598	1,678	1,400	1,620	1,158	1,039	944	779	944	967	890
May	1,709	2,025	1,792	1,350	1,451	1,355	1,315	912	775	924	946	848
June	1,840	1,693	1,648	1,423	1,622	1,323	1,165	1,057	764	962	1,076	1,025
July	1,599	1,768	1,830	1,602	1,495	1,109	1,119	1,117	881	743	1,058	797
August	1,765	2,014	1,757	1,466	1,446	1,538	1,198	1,087	896	862	925	993
September	1,712	1,801	1,562	1,575	1,595	1,270	1,153	1,124	736	897	845	1,042
October	1,337	1,918	1,717	1,522	1,365	1,270	1,111	986	869	934	970	956
November	1,331	1,440	1,397	1,281	1,120	1,305	1,051	743	635	912	794	792
December	1,402	1,384	1,516	1,455	1,188	1,071	994	729	737	865	737	
TOTAL	**18,086**	**19,780**	**19,188**	**16,738**	**16,813**	**14,927**	**13,290**	**11,612**	**9,658**	**10,354**	**10,890**	**9,447**

PUBLIC WORKS PROJECT FEES

A summary of the Public Works Project fees collected in November 2022 are detailed in the table below.

SUMMARY PUBLIC WORKS PROJECT FEES COLLECTED FY 2023 (VERIFIED)		
MONTH	***PERMITS ISSUED***	***FEES COLLECTED***
JULY	2	$156,250.00
AUGUST	4	$22,945.00
SEPTEMBER	3	$17,580.00
OCTOBER	1	$5,860.00
NOVEMBER	0	$0.00
DECEMBER		
JANUARY		
FEBRUARY		
MARCH		
APRIL		
MAY		
JUNE		
TOTAL FY 2023	**10**	**$202,635.00**
PERMITTING CUSTOM -- FINANCE -- PUBLIC WORKS FEES		

WATER AND SEWER TAP FEES RECEIVED

WATER & SEWER TAP FEE SUMMARY - FY 2023							
MONTH	**SEWER**			**WATER**			**TOTAL FEES RECEIVED**
	TAP FEES	**PERMITS ISSUED**	**ACCOUNT SET UP FEES**	**TAP FEES**	**PERMITS ISSUED**	**ACCOUNT SET UP FEES**	
JULY	$138,750.00	4	$60.00	$5,000.00	3	$75.00	$143,885.00
AUGUST	$84,500.00	5	$60.00	$35,000.00	7	$100.00	$119,660.00
SEPTEMBER	$18,000.00	4	$45.00	$22,500.00	4	$100.00	$40,645.00
OCTOBER	$5,000.00	1	$15.00	$0.00	1	$25.00	$5,040.00
NOVEMBER	$0.00	0	$0.00	$0.00	0	$0.00	$0.00
DECEMBER							$0.00
JANUARY							$0.00
FEBRUARY							$0.00
MARCH							$0.00
APRIL							$0.00
MAY							$0.00
JUNE							$0.00
TOTAL	**$246,250.00**	**14**	**$180.00**	**$62,500.00**	**15**	**$300.00**	**$309,230.00**

CODES ENFORCEMENT

The Municipal Codes Officer opened a total of 6 codes violation cases during the month of November.

The bulk of the Municipal Codes Officer's time this month has been spent doing sign enforcement. Approximately 50 illegally placed signs were pulled from the right-of-way during the month of November.

CODE ENFORCEMENT CASE SUMMARY NOVEMBER 2022		
CASE TYPE	*TOTAL CASES*	*CLOSED CASES*
Building Safety	0	0
Drainage	0	0
Nuisance	0	0
Sanitary	0	0
Sign Obstruction	0	0
Vehicle	0	0
Zoning	5	1
TOTAL	**5**	**1**

ROUTINE TASKS AND RESPONSIBILITIES

- Customer support in the use of the permitting software.
- Daily inspections conducted by the Inspection staff on open permits.
- Short Term Rentals -- Planning staff continues to monitor listings in Brentwood from several web sites that promote short term property rentals.
- Maintenance/update of the city-wide Commercial and Residential land use inventory.
- Site inspections for residential and commercial projects for issuance of final Certificates of Occupancy.
- Field inspections on former and current Planning Commission cases.
- Interpretation and enforcement of Ordinances and Codes for the public.
- Processed/reviewed applications plans for items to be included on the City Commission, Planning Commission, and the Board of Zoning Appeals agendas.
- Monitored parade and special events in the city.
- Determined if properties are located within floodplain areas for contractors and homeowners.
- Updated & maintained the department's portion of the city's website as needed.

CITY OF BRENTWOOD

SUMMARY OF VACANT RESIDENTIAL LOTS

NOVEMBER 2022

SUBDIVISON NAME	GENERAL LOCATION	# OF APPROVED LOTS	# LOTS PLATTED TO DATE	# PERMITS ISSUED	# LOTS UNDER DEVELOPMENT, NOT PLATTED	# VACANT PLATTED LOTS REMAINING	UNDEVELOPED LOTS REMAINING PER PLAN	AREA (AC)	PLANNING AREA	COMMENTS
ANNANDALE	OLD SMYRNA RD.	168	168	168	0	0	0	208.00	4	All Sections Recorded
ARLINGTON HEIGHTS	PINKERTON RD.	43	43	43	0	0	0	56.04	5	All Sections Recorded
AVERY SUBDIVISION	MURRAY LN.	23	23	23	0	0	0	32.14	1	Recorded
BEECH CREEK HILL	BEECH CREEK RD.	6	6	6	0	0	0	10.68	1	Final Plat approved by PC -- 6/4/2018
BELLE TERRA	CONCORD RD.	5	5	5	0	0	0	8.67	6	Recorded
BERKLEY WALK	EDMONDSON PK.	25	25	25	0	0	0	25.05	5	All Sections Recorded
BERRYMAN PROPERTY	MURRAY LN.	2	2	2	0	0	0	40.45	1	Final Plat Recorded -- PB P68, PG 146
BORGATA	WILSON PK.	27	27	27	0	0	0	40.67	4	All Sections Recorded
BRASS LANTERN FARMS	MURRAY LN.	9	9	9	0	0	TRUE	15.06	1	All Sections Recorded
BRENTWOOD CLOSE	WILSON PK.	29	29	29	0	0	0	34.02	4	All Sections Recorded
BRENTWOOD GLEN	WILSON PK.	47	47	47	0	0	0	52.40	6	All Sections Recorded
BRIDGETON PARK	CONCORD RD.	146	146	146	0	0	0	77.53	5	All Sections Recorded
BROOKFIELD	SUNSET RD.	472	472	472	0	0	0	273.00	5	All Sections Recorded
CHEVOIT HILLS	HUNTERBORO DR.	16	16	16	0	0	0	17.98	4	All Sections Recorded
CROMWELL SUBDIVISION (LOMBARDY EST.)	SPLIT LOG RD.	62	62	62	0	0	0	70.67	5	All Sections Recorded
CONCORD RIDGE	CONCORD PASS	11	11	11	0	0	0	10.02	5	All Sections Recorded
COURTSIDE AT SOUTHERN WOODS WEST	SUNSET RD.	255	255	255	0	0	0	159.00	5	All Sections Recorded
CROSS POINTE	SPLIT LOG RD.	14	14	14	0	0	0	21.49	6	Includes the Historic Fly House
EDENBROOK	LIBERTY CHURCH RD.	13	13	13	0	0	0	19.63	5	Recorded
ELMBROOKE	CONCORD RD.	47	47	47	0	0	0	55.26	6	All Sections Recorded
ESTATES AT MAGNOLIA VALE	SUNSET RD.	8	8	8	0	0	0	9.10	5	All Sections Recorded
FOXCREST SUBDIVISION	CONCORD RD.	6	6	6	0	0	0	8.28	3	Plan Approved -- 8-3-2015. Plat Recorded 4/11/2018
FOXVIEW ESTATES	OLD SMYRNA RD.	2	2	2	0	0	0	3.00	4	Approved March 2013
GENE SACKS PROPERTY	RAGSDALE RD.	3	3	3	0	0	0	24.65	5	Recorded South Tract Became Echo
GLEN ABBEY	SPLIT LOG RD.	75	75	75	0	0	0	100.41	5	All Sections Recorded
GLENELLEN ESTATES	RAGSDALE RD.	66	66	66	0	0	0	81.75	5	All Sections Recorded
GLENSHADOWS SUBDIVISION	EDMONDSON PK.	5	5	5	0	0	0	7.25	4	Plat Recorded -- 4-12-2015 -- Includes Existing Home
HALCYON ESTATES	HAROGATE DR.	8	8	8	0	0	0	9.96	4	Recorded
HIDDEN CREEK	PINKERTON RD.	25	25	25	0	0	0	28.92	5	All Sections Recorded
INGLEHAME FARMS	SPLIT LOG RD.	170	170	170	0	0	0	205.62	6	All Sections Recorded
JOHNSON COVE	JOHNSON CHAPEL RD.	4	4	4	0	0	0	7.16	1	Recorded
KINGS CROSSING	WIKLE RD. WEST	39	39	39	0	0	0	43.00	1	All Sections Recorded
MCGAVOCK FARMS	MURRAY LN.	192	192	192	0	0	0	211.00	1	All Sections Recorded
OLD TOWNE	MURRAY LN.	21	21	21	0	0	0	26.78	1	All Sections Recorded
OLSEN PROPERTY	PANARAMA DR.	4	4	4	0	0	0	19.82	1	Recorded
OWL CREEK, ALL PHASES	CONCORD RD.	85	85	85	0	0	0	87.60	5	All Sections Recorded
PENA ESTATES	CONCORD PASS	2	2	2	0	0	0	5.19	5	Recorded
PRESERVE AT CONCORD	CONCORD RD.	22	22	22	0	0	0	25.10	4	All Sections Recorded
RAINTREE FOREST	CROCKETT RD.	222	222	222	0	0	0	240.00	6	All Sections Recorded
RAINTREE FOREST SOUTH (HIGHLAND PARK)	RAINTREE PARKWAY	235	235	235	0	0	0	272.48	6	All Sections Recorded
RESERVE AT MAGNOLIA VALE	SUNSET RD.	5	5	5	0	0	0	7.04	5	All Sections Recorded
RESERVE AT SONOMA	SPLIT LOG RD.	9	9	9	0	0	0	19.57	5	All Sections Recorded
ROY D. MAYNARD SUBDIVISION	WALLER RD.	2	2	2	0	0	0	5.87	5	Existing home on Lot 1
SHADOW CREEK AT SOUTHERN WOODS WEST	SUNSET RD.	145	145	145	0	0	0	79.30	5	All Sections Recorded
SHERIDAN PARK	SADDLEWOOD LN.	22	22	22	0	0	0	24.50	4	Recorded -- Private Streets
SONOMA	SPLIT LOG RD.	66	66	66	0	0	0	84.50	5	All Sections Recorded
STONECREST	BLUFF RD.	29	29	29	0	0	0	36.00	5	Recorded
TUSCANY HILLS	SPLIT LOG RD.	125	125	125	0	0	0	97.70	5	Sections 1 - 7 -- Recorded
VALLE VERDE	MOORES LN.	40	40	40	0	0	0	75.05	2	Recorded -- Private Streets
WETHERBROOK	LIBERTY CHURCH RD.	55	55	55	0	0	0	62.21	5	All Sections Recorded
WHETSTONE	EDMONDSON PK.	141	141	141	0	0	0	167.00	4	All Sections Recorded
WILLIAMS GROVE	OLD SMYRNA RD.	63	63	63	0	0	0	78.09	4	All Sections Recorded
WILLOWMET	CONCORD RD.	129	129	129	0	0	0	132.00	6	All Sections Recorded
WOODLANDS AT COPPERSTONE	SUNSET RD.	119	119	119	0	0	0	75.87	5	All Sections Recorded

THE SUBDIVISIONS ABOVE, INDICATED IN RED TEXT HAVE BEEN BUILT OUT

#NAME?	GENERAL LOCATION	# OF APPROVED LOTS	# LOTS PLATTED TO DATE	# PERMITS ISSUED	# LOTS UNDER DEVELOPMENT, NOT PLATTED	# VACANT PLATTED LOTS REMAINING	UNDEVELOPED LOTS REMAINING PER PLAN	AREA (AC)	PLANNING AREA	COMMENTS
1165 WALLER ROAD	WALLER RD.	2	0	2	0	0	0	5.01	5	Property owner decided not to subdivide. On 12/21/2021 the BZA approved a request to construct a 1,900 sf detatched structure on the lot w/ sleeping quarters in addition to the principal structure.
919 EDMONDSON PIKE	EDMONDSON PIKE	2	2	2	0	0	0	7.42	4	Plat Aproved by PC -- 9/8/2020
935 EDMONDSON PIKE	EDMONDSON PIKE	3	3	3	0	0	0	7.55	4	Plat Recorded -- 4/5/2021 -- Inc. 931, 933 & 935 Edmondson Pk
9829 CONCORD ROAD	CONCORD ROAD	2	2	0	0	1	0	3	6	aka COX PROPERTY - recorded 7/27/2022
9784 CONCORD ROAD	CONCORD ROAD	2	0	0	0	0	0	4.87	6	Preliminary Plan approved 8/1/2022
ALLENS GREEN, FKA -- ALLEN PROPERTY	SPLIT LOG RD.	18	18	14	0	4	0	28.00	6	Preliminary plan approved 8/3 -- Plat App. By PC 5/3/2021 -- Plat Recorded
ARDEN WOODS	JOHNSON CHAPEL RD.	30	30	27	0	3	0	41.38	1	All Sections Recorded
BELLA COLLINA	CONCORD RD.	8	0	0	8	0	8	17.71	6	Prelim Plan Appr -- 10/1/2018 & 3/2/2020
BOYD SUBDIVISION	CONCORD RD.	2	0	0	0	0	1	4.53	6	Preliminary Plan only
BREITHORN	SUNNYBROOK DR.	8	8	6	0	2	0	11.00	5	All Sections Recorded
BRENTHAVEN PLACE	LIPSCOMB DR.	20	20	19	0	1	0	28.62	3	All Sections Recorded
BRENTWOOD FARMS	SOUTHERN WOODS	13	0	0	0	0	13	16.52	5	Prelim Plan App -- 5-1-2017
BRENTWOOD LIGHTS	WILDWOOD DR.	13	13	11	0	2	0	41.24	1	All Sections Recorded
BROAD OAKS (LAWSON)	WILSON PIKE	8	8	3	8	5	0	23.96	6	Rev. Prelim. Plan Approved by PC -- 5-2020 -- Final Plat App - 7-2020
CANNON SUBDIVISION	MURRAY LN.	2	2	1	0	1	0	9.24	1	Recorded -- PB P72, PG 30
CROCKETT FORGE ESTATES	CROCKETT RD.	2	2	2	0	0	0	3.92	6	All Sections Recorded
DELFINO SUBDIVISION -- FKA DOLPHIN CLUB	WILSON PIKE	5	5	5	0	0	0	10.27	4	Ord 2020-08 approved -- 8/24/2020
DUKE ROSE JR. SUBDIVISION	BELLE RIVE DR.	2	1	0	0	1	1	2.60	1	Revised Final Plat Approved by PC -- 7/6/2021
ECHO SUBDIVISION	RAGSDALE ROAD	13	0	0	0	0	13	20.40	5	Prelim Plan App. -- 8/2/2021
FISH SPLIT LOG ROAD SUBDIVISION	SPLIT LOG ROAD	3	3	3	3	0	0	12.78	5	Final Plat recorded. -- 8/5/2022
FOUNTAINBROOKE	PINKERTON RD.	188	188	186	0	2	0	151.00	5	All Sections Recorded
GOVERNORS CLUB	CONCORD RD.	424	424	416	0	8	0	610.00	5	All Sections Recorded -- Private Streets
GRAND OAKS SUBDIVISION -- RANDOLPH SUB.	GRAND OAKS DRIVE	3	3	0	0	3	0	4.16	1	Prelim Plan Approved 4/6/2021
HAMPTON RESERVE	CONCORD RD.	91	91	90	0	1	0	105.47	6	All Sections Recorded -- Private Streets
HARLAN SUBDIVISION	OLD SMYRNA RD.	21	21	0	0	21	0	71.01	4	Ord 2021-06 -- App 3/22/2021 -- Prelim Plan App 5/3/2021 -- Final Plat App -- 4/5/2022
HIGH POINT	CONCORD RD.	5	5	1	0	4	0	7.43	5	All Sections Recorded
LAURELS WEST	CHARITY DR.	19	19	18	0	1	0	25.44	6	All Sections Recorded
LENOX PARK	HILLSBORO RD.	40	40	37	0	3	0	65.77	1	All Sections Recorded
LIBERTY FARM	CONCORD RD.	6	6	4	0	2	0	32.36	5	All Sections Recorded
MAGNOLIA VALE	STANFIELD RD.	60	60	55	0	5	0	68.64	5	All Sections Recorded
MARSHALL PLACE	WILSON PK.	10	10	7	0	3	0	13.72	4	Private Streets -- Plat Recorded -- 2/2018
MCADAMS PROPERTY	NEW BRISTOL LN	5	0	0	0	0	0	26.80	5	Rezonge -- Ord 2021-09
MORGAN FARMS, (AZALEA PARK)	SPLIT LOG RD.	173	173	171	0	2	0	209.00	5	All Sections Recorded
MOTHERALL SUBDIVISION	LIBERTY CHURCH RD.	2	2	0	0	2	0	6.32	1	Lot 1 includes an existing home
NICHOLSON SUBDIVISION	BEECH CREEK RD.	2	0	0	0	0	1	4.92	1	Preliminary Plan Approval Only
OMAN SUBDIVISION	FRANKLIN RD.	21	21	15	0	6	0	33.66	1	Recorded -- 9-2019
PARKSIDE AT BRENTHAVEN PH. II, SEC. I	DEVENS DR.	69	69	47	0	22	0	210.00	3	Phase II Not Recorded
PARKSIDE DOWNS	WILSON PK.	8	8	6	0	2	0	40.00	3	Recorded
PRESERVE AT ARDEN WOODS	FISCHER CT.	4	4	3	0	1	0	10.17	1	Prelim Plan App -- 6-6-2017 -- Final Plat Recorded 3/30/2020
PRINCETON HILLS	MURRAY LN.	162	162	161	0	1	0	224.00	1	All Sections Recorded
PRIMM FARM	MOORES LANE	24	0	0	0	0	24	29.00	3	Prelim Plan Approve by PC -- 12-3-2018
RAGSDALE SUBDIVISION	RAGSDALE RD.	66	0	0	0	0	66	115.29	5	Rev. Plan Approved -- 9-7-2021 -- OSRD-IP
RANDOLPH SUBDIVISION	JOHNSON CHAPEL RD. W.	2	2	1	0	1	1	7.52		Rear 4.2 acres will become the Grand Oaks Sub.
RESERVE AT RAINTREE FOREST, SEC 1-3	EASTWOOD DR.	100	100	98	0	2	0	272.00	6	All Sections Recorded
RESERVE AT RAINTREE FOREST, SEC 4-10	EASTWOOD DR.	113	36	23	0	13	77	282.00	6	Final Plat for Sec. 4 Recorded 6/7/2019, Sec. 10 recorded 9/23/22
ROSEBROOK SUBDIVISION (GAW)	SUNSET / SPLIT LOG RD.	124	21	6	0	15	103	154.34	5	OSRD Dev. Plan approved -- 2-22-2021 -- Sec 1 plat approved 5/3/2021 Recorded 10/11/2021, Sec. 2A recorded.
SNEED MANOR	OLD SMYRNA RD.	6	6	4	0	2	0	31.42	4	Private Streets -- Plan Approved -- 11-2-2015 -- Plat Recorded -- 7-18-2017
TERRABROOKE	SPLIT LOG RD.	8	8	8	0	0	0	13.12	5	Recorded -- Several homes under construction
THE HEIGHTS	CONCORD RD.	7	7	6	0	1	0	7.36	5	Preliminary Plan Last APP by PC 4/3/2018 -- Recorded -- 9-2019
TARAMORE	SPLIT LOG RD.	275	275	266	0	9	0	312.00	5	All Phases Recorded
TAUBE PROPERTRY	SPLIT LOG RD.	24	0	0	0	0	24	58.24		Preliminary Plan Approval only -- 11/12/2021 -- Vacant
THOMAS PROPERTY	MAUPIN RD.	2	2	1	0	1	0	5.01	5	Revised Final Plat App. by PC -- 1/3/2017
TRADITIONS	WILSON PK.	127	127	116	0	11	0	146.74	5	Sections 1, 2, 3, 4 & 5 -- Recorded
VALENTINE PROPERTY	MURRAY LN.	2	0	0	0	0	0	6.74	6	Final Plat approved by PC -- 6/2021 -- Lot Split
VALLEY VIEW SUBDIVISION	OLD SMYRNA RD.	11	11	9	0	2	0	14.00	4	Recorded
WITHERSPOON SUBDIVISION	CROCKETT RD.	154	154	146	0	8	0	260.72	6	Sec. 1, thru 8 & R-2 Lot Recorded.
WINDSTONE	MURRAY LN.	108	108	106	0	2	0	197.00	6	All Sections Recorded -- Private Streets
WILSON PROPERTY	MURRAY LN.	2	0	0	2	0	2	5.60	6	Final Plat not yet Recorded -- Lot 1 Inc. Existing Home
TOTALS		***6,190***	***5,844***	***5,669***	***21***	***176***	***334***	***7,728***		
						Available *	***W/Plans *****			
TOTAL VACANT LOTS IN CITY						***197***	***531***			