

Town of Thompson's Station  
Municipal Planning Commission  
Meeting Agenda  
1/26/16

**Meeting Called To Order**

**Pledge Of Allegiance**

**Minutes-**

**Consideration Of Minutes Of The November 17, 2015 Meeting**

Documents: [111715 PC MINUTES.PDF](#)

**Public Comments-**

**Reports-**

**Town Planner Report**

Documents: [PLANNER REPORT 012616.PDF](#), [PROPOSED BY SITE DEVELOPMENT PLAN 12-17-15.PDF](#)

**Unfinished Business:**

**1. Review Of A Modification To A Concept Plan Within A Planned Zone - Whistle Stop (SDP 2015-005)**

Documents: [ITEM 1 UPDATED WHISTLESTOP TRAFFIC STUDY.PDF](#), [ITEM 1 WHISTLESTOP PLAN PACKET.PDF](#), [ITEM 1 WHISTLESTOP STAFF REPORT.PDF.PDF](#)

**New Business:**

**2. Public Hearing - Update To The Town's General Plan To Assign Growth Sectors To Newly Annexed Land North Of State Route 840, South Of Coleman Road**

Documents: [ITEM 2 GROWTH SECTOR EXHIBIT.PDF](#), [ITEM 2 GROWTH SECTOR UPDATE STAFF REPORT.PDF](#)

**3. Letter Of Credit Reduction For Fields Of Canterbury, Section 7B (1-D-14-003)**

Documents: [ITEM 3 FC SEC 7B BOND REDUCTION STAFF REPORT.PDF](#)

**4. Letter Of Credit Reduction For Fields Of Canterbury, Section 4C (1-D-14-002)**

Documents: [ITEM 4 FC SEC 4C BOND REDUCTION STAFF REPORT.PDF](#)

**5. Letter Of Credit Reduction For Allenwood (FP 2015-005)**

Documents: [ITEM 5 ALLENWOOD BOND REDUCTION STAFF REPORT.PDF](#)

**6. Revised Preliminary Plat For Bridgemore Village, Phase 7 (PP 2015-008)**

Documents: [ITEM 6 BRIDGEMORE VILLAGE PHASE 7 MOD PRELIM PLAT.PDF](#),  
[ITEM 6 BV PHASE 7 MOD PRELIM PLAT.PDF](#)

**7. Revised Preliminary Plat For Tollgate Village, Phase 15 (PP 2015-009)**

Documents: [ITEM 7 TOLLGATE VILLAGE PHASE 15 MODIFICATION STAFF REPORT.PDF](#), [ITEM 7 TOLLGATE VILLAGE PHASE 15 PRELIM PLAT.PDF](#)

**8. Tree Replacement Plan For Bridgemore Village, Phase 5 And Phase 6 (PP 2015-004)**

Documents: [ITEM 8 BV TREE REMOVAL STAFF REPORT.PDF](#), [ITEM 8 BV TREE REMOVAL PLANS PHASE 5 AND 6.PDF](#)

**9. Land Development Ordinance Amendments**

Documents: [ITEM 9 LDO AMENDMENT STAFF REPORT.PDF](#), [ITEM 9 ADDENDUM MEMO.PDF](#)

**Adjourn**

*This meeting will be held at 7:00 p.m. at the Thompson's Station Community Center  
1555 Thompson's Station Rd West*

**Minutes of the Meeting**  
**of the Municipal Planning Commission**  
**of the Town of Thompson 's Station, Tennessee**  
**November 17, 2015**

**Call to Order:**

The meeting of the Municipal Planning Commission of the Town of Thompson's Station was called to order at 7:00 p.m. on the 17<sup>th</sup> day of November, at the Thompson's Station Community Center with the required quorum. Members and staff in attendance were: Chairman Jack Elder; Secretary Don Blair; Vice-Chair Mike Roberts; Commissioner Ben Dilks; Commissioner Sarah Benson; Commissioner Debra Bender; Town Administrator Joe Cosentini; Town Planner Wendy Deats; Town Attorney Todd Moore and Town Clerk Jennifer Jones. Commissioner Burress was unable to attend.

**Pledge of Allegiance.**

**Minutes:**

The minutes of the October 27, 2015 Meeting were previously submitted.

**Commissioner Benson moved for approval of the October 27, 2015 meeting minutes. The motion was seconded and carried unanimously.**

**Public Comment:**

Randall Shaw – Shaw Construction. Requested to be added to agenda as new business to discuss a grading permit for Bridgemore Village Phase 5.

**Chairman Elder closed public comment.**

**Unfinished Business:**

**1. Preliminary Plat – Phase 1 of Roderick (File: PP 2015-007)**

Mrs. Deats reviewed her staff report and recommended denial based on the lack of consistency with the site specific development plan and envisioning book. Mrs. Deats recommends that the applicant present the modifications to the Board of Mayor and Aldermen for approval of the changes to the concept plan.

Brian Echols with Waller Lansden Dortch & Davis LLP came forward to represent the applicant, CNL Development. Mr. Echols stated that the project was approved by Planning Commission back in October 2014 as a minor change by Staff. He went on to speak about the differences between “minor” and “major” modifications to a plan and what was considered by Staff to be minor vs. major. Mr. Echols encouraged the Planning Commission to consider the plat under the conditions of the previous staff report and the revised concept plan.

Commissioner Bender requested a TDOT update from Mrs. Deats, whereupon Mrs. Deats discussed the information received from TDOT, including discussion about signals, widening plans and roundabouts.

Chairman Elder stated that the Planning Commission has been advised by both Staff and the town attorney, Mr. Moore to return the plat back to BOMA. Mr. Moore advised that no communication had ever indicated that this was a minor change.

**After discussion, Chairman Elder moved to deny the Preliminary Plat for Phase 1 of Roderick based on its non-conformity to the last BOMA approved concept plan and advise the applicant to submit the necessary information to BOMA to revise said concept plan.**

**The motion was seconded and carried unanimously.**

**2. Site Plan – For the development of a restaurant and convenience store on a 2.77 acre site located within Roderick (File: SP 2015-008; DR 2015-007).**

Mrs. Deats reviewed her staff report and recommended approval based on the project's consistency with the approved plans with the following contingencies: 1. Prior to the issuance of any grading or building permits, the applicant shall submit a preliminary plat to establish a single lot for the purposes of development. The plat shall incorporate the roadway connection to Columbia Pike as approved by the Board of Mayor and Aldermen and TDOT. 2. Prior to issuance of grading permits, construction plans shall be submitted and approved. The location of the driveway entrance shall be located a minimum of 200 feet from any intersection. Any upgrades to the utility infrastructure necessary for the project shall be incorporated into the construction plans and shall be completed by the applicant. 3. Prior to the issuance of building permits, the site plan shall be modified to incorporate enhanced paving at the project entrance which shall match the pedestrian pathway on site. All mechanical equipment locations shall be identified and screening provided. 4. Prior to the issuance of building permits, the applicant shall post a letter of credit for the landscaping in the amount of \$24,000. 5. Prior to the installation of the landscaping, the applicant shall meet with the staff to confirm location of all landscaping. 6. Any change of use or expansion of the project site shall conform to the requirements set forth within the Land Development Ordinance and shall be approved prior to the implementation of any changes to the project. 7. The parking area shall be revised to either reduce the parking area by four spaces or incorporate the low impact design improvements to the parking lot.

**After discussion, Commissioner Benson moved to approve the Site Plan for the development of a restaurant and convenience store on a 2.77 acre site located within Roderick with the acceptance of the staff's recommendation for the 7 contingencies.**

**The motion was seconded and carried unanimously.**

**Non-Agenda Items:**

**1. Randall Shaw – Grading permit discussion for Bridgemore Village Phase 5.**

Mr. Shaw is requesting a grading permit for Bridgemore Village Phase 5. Mr. Smith representing Mr. Shaw stated that "under the old ordinance, the permit would be required to be passed back through the Planning Commission as a specific condition of approval due to the removal and replacement of trees". Mr. Shaw is requesting to be heard at this time due to the lack of a December meeting. Mr. Shaw agreed to work around the trees until removal and replacement was approved by the Planning Commission.

**After discussion, Commissioner Blair recommended to modify the prior contingency approved as part of Phase 5 Bridgemore Village in May 2015 which requires tree removal and replacement inventory be reviewed by the Planning Commission prior to the issuance of a grading permit be waived as long as tree removal and replacement is presented at the January 2016 Planning Commission meeting.**



**The motion was seconded and carried unanimously.**

**2. Don Blair – Major Thoroughfare work session.**

Commissioner Blair proposed that a work session for major thoroughfare discussion take place in December of 2015 and the Planning Commission be given an orientation by Staff.

Mr. Cosentini and Mrs. Deats recommended that the work session take place in January.

**After discussion, Commissioner Blair recommended that the Planning Commission begin work on a major thoroughfare plan in January at a work session that Staff will provide an orientation regarding transportation issues within the Town.**

**The motion was seconded and carried unanimously.**

There being no further business, Chairman Elder made a motion to adjourn. The motion was seconded and the meeting was adjourned at 8:16 p.m.

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Jack Elder, Chairman

Attest: \_\_\_\_\_  
Don Blair, Secretary

Phone: (615) 794-4333  
Fax: (615) 794-3313  
www.thompsons-station.com



1550 Thompson's Station Road W.  
P.O. Box 100  
Thompson's Station, TN 37179

**DATE:** January 26, 2016  
**TO:** The Planning Commission  
**FROM:** Wendy Deats, Town Planner  
**SUBJECT:** Planner Report

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Bridgemore Concept Plan Revision: The developer of Bridgemore Village is in the process of selling approximately 46 acres of land to Williamson County Schools reducing the overall development area to 498.3 acres. The revised plan consists of 479 single-family lots and 52% of the site designated as open space, thereby complying with density and open space requirements of the D1 zoning district. A preliminary plat for phases 5 -11 was previously approved; however the developer is requesting a modification to phase 7 resulting from the sale of the land. Phase 5 construction drawings are under review with the construction route proposed by the developer (Shaw Enterprises) along Robbins Nest to Sporting Hill Bridge Road. Staff has informed the developer that a grading permit cannot be issued until the construction route, as submitted through a built section of the neighborhood, is approved by the Planning Commission. Phase 6 has received a grading permit and has started on-site work. The remaining portion of Phase 4 and Phase 8 are not proposed to change and the revision phase 7 is currently under review as a modification to the preliminary plat.

Two Farms at Thompson's Station:

Annexation: The Board of Mayor and Aldermen adopted the resolution for the annexation of land totaling 1,961 acres north of S.R. 840 on the west side of Town for annexation in to our municipal boundary.

Zoning: The Board of Mayor and Aldermen zoned the land south of West Harpeth Road as T2 which is largely an open space or agricultural designation and the area north of West Harpeth Road as TC or Transect Community which allows development in compliance with the hamlet community type, which permits a mixed use development requiring 60% open space.

Concept Plan: The project, located south of Coleman Road, north of West Harpeth Road will be developed into a community in accordance with the Land Development Ordinance. The 1,223-acre project site will be developed into 18 hamlets with 800-900 units with an 18-hole golf course and other non-residential land uses. Non-residential land uses are not identified at this time, however, the "market" street component of the project are shown at the entry along Coleman Road with the "hilltop village" in proximity around the existing residence on site and the "golf club core" in the center of the development. Development of hamlets require 60% of the hamlet zoned T1 or T2 and this project will have approximately 743 acres within these two zones resulting in 61% of the overall site.

Access to the project site will be located on Coleman Road and West Harpeth Road. No access is proposed along Carters Creek Pike. A traffic study is required and all off-site traffic improvements will be the responsibility of the developer. The traffic study will be reviewed by Town Staff, the Town's Consulting Engineer and Consulting Traffic Engineer along with Williamson County. The applicant is proposing to build the street sections with 10 foot travel lanes, sidewalks, on street parking

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www.thompsons-station.com



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Thompson's Station, TN 37179

and swales in coordination with the Land Development Ordinance. Street sections will be reviewed by the Planning Commission and will be included into the Development Agreement.

The properties will be served by HB&TS water and the Town will be providing onsite wastewater service (constructed and dedicated by the developer).

The site contains several streams tributaries, hillsides with slopes exceeding 15% and other constraints may be identified during the planning process. Therefore, additional studies are necessary to determine the potential impacts of the project, including an archeological survey, along with biological and geotechnical assessments.

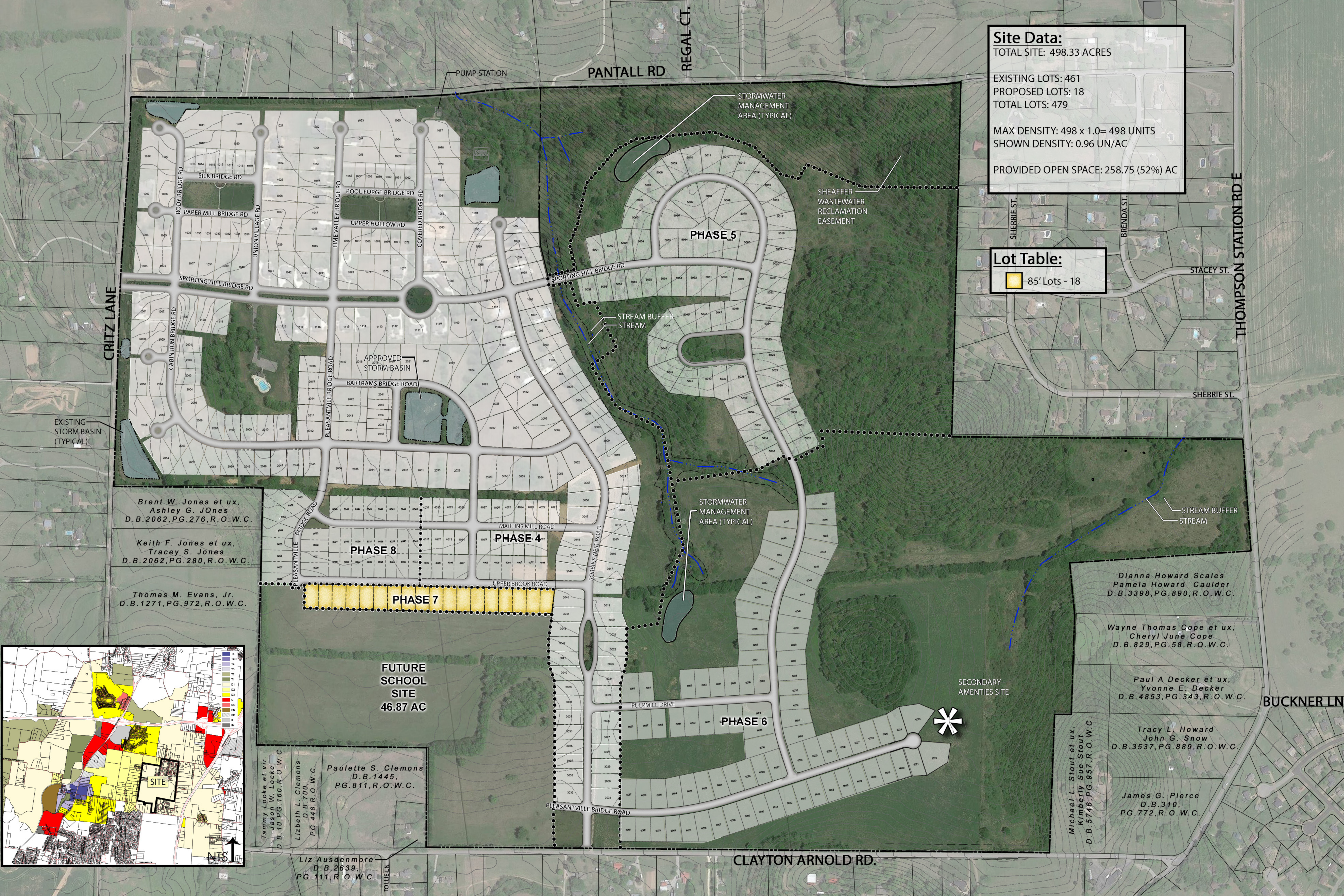
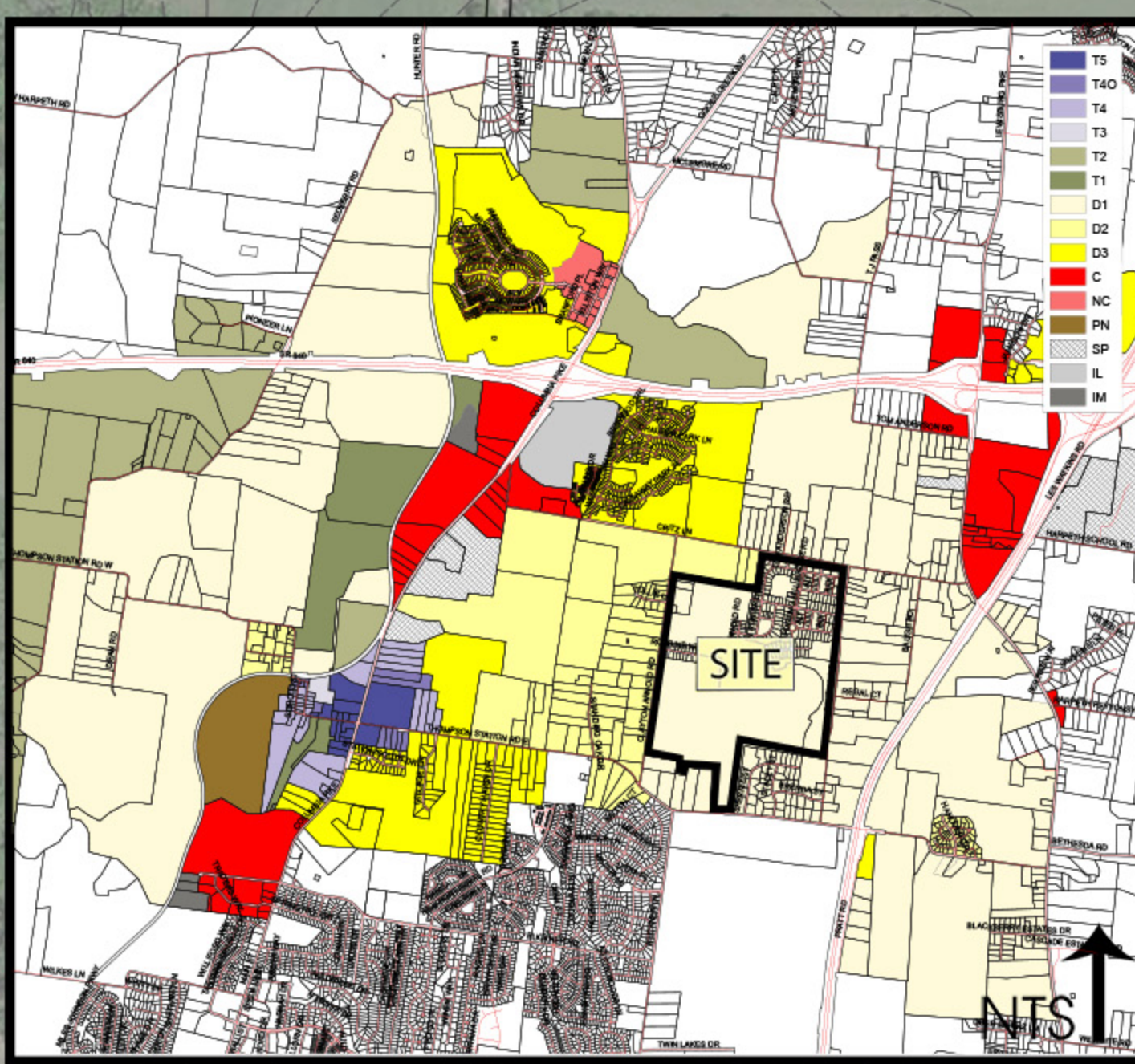
The developer was made aware of these studies and is working on submitting all necessary information in order to move forward with the project.

PlaceMaker Contract: The Board approved a contract with PlaceMakers for consulting services to assist staff with plan review on projects considered for the transect district. Review costs for specific projects would be passed on to the developers of the project.



**Site Data:**  
 TOTAL SITE: 498.33 ACRES  
 EXISTING LOTS: 461  
 PROPOSED LOTS: 18  
 TOTAL LOTS: 479  
 MAX DENSITY: 498 x 1.0= 498 UNITS  
 SHOWN DENSITY: 0.96 UN/AC  
 PROVIDED OPEN SPACE: 258.75 (52%) AC

**Lot Table:**  
 85' Lots - 18



*Brent W. Jones et ux,  
 Ashley G. Jones  
 D.B. 2062, PG. 276, R.O.W.C.*

*Keith F. Jones et ux,  
 Tracey S. Jones  
 D.B. 2062, PG. 280, R.O.W.C.*

*Thomas M. Evans, Jr.  
 D.B. 1271, PG. 972, R.O.W.C.*

*Dianna Howard Scales  
 Pamela Howard Caulder  
 D.B. 3398, PG. 890, R.O.W.C.*

*Wayne Thomas Cope et ux,  
 Cheryl June Cope  
 D.B. 829, PG. 58, R.O.W.C.*

*Paul A Decker et ux,  
 Yvonne E. Decker  
 D.B. 4853, PG. 343, R.O.W.C.*

*Tracy L. Howard  
 John G. Snow  
 D.B. 3537, PG. 889, R.O.W.C.*

*James G. Pierce  
 D.B. 310,  
 PG. 772, R.O.W.C.*

*Michael L. Stout et ux,  
 Kimberly Sue Stout  
 D.B. 5746, PG. 957, R.O.W.C.*

*Paulette S. Clemons  
 D.B. 1445,  
 PG. 811, R.O.W.C.*

*Lizbeth L. Clemons  
 D.B. 700,  
 PG. 448, R.O.W.C.*

*Liz Ausdenmore  
 D.B. 2639,  
 PG. 111, R.O.W.C.*

*Tammy Locke et vlr,  
 Jason W. Locke  
 D.B. 10, PG. 160, R.O.W.C.*



F i s c h b a c h  
**Transportation Group, LLC**  
Traffic Engineering and Planning

## **Traffic Impact Study**

**Whistle Stop  
Thompson Station Road West  
Thompson's Station, TN**

Prepared December 2015  
For Jay Franks Properties, LLC

FTG, LLC  
P.O. Box 682736  
Franklin, TN 37068  
(615) 771-8022 phone  
Gillian@FTGtraffic.com

**Traffic Impact Study**

**Whistle Stop  
Thompson's Station Road West**

**Thompson's Station, Tennessee**

**Prepared December 2015**

**PREPARED FOR:**

Jay Franks Properties, LLC  
135 Southeast Parkway Court  
Franklin, TN 37064

**PREPARED BY:**

Ms. Gillian L. Fischbach, P.E., PTOE  
Fischbach Transportation Group (FTG, LLC)  
P.O. Box 682736  
Franklin, TN 37068  
Phone: (615) 771-8022  
FTG Project Number: 10463



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## **1. INTRODUCTION**

This traffic study has been prepared in order to identify the traffic impacts of a residential development that is proposed to be constructed west of School Street in Thompson's Station, Tennessee.

For the purposes of this study, existing and background traffic volumes were established, and capacity analyses were conducted for these conditions. Also, trip generation calculations were performed, and the trips which are expected to be generated by the proposed project were distributed to the roadway system and added to the background traffic volumes. The roadways and intersections which provide access to the site were then re-evaluated to determine the traffic impacts of the proposed project. Access needs for the project were evaluated, and the necessary roadway and/or traffic control improvements were identified. This report presents the results of these analyses and the subsequent recommendations.



## 2. PROJECT DESCRIPTION

The location of the proposed project is shown in [Figure 1](#). As shown, the project site is located west of School Street in Thompson's Station, Tennessee.

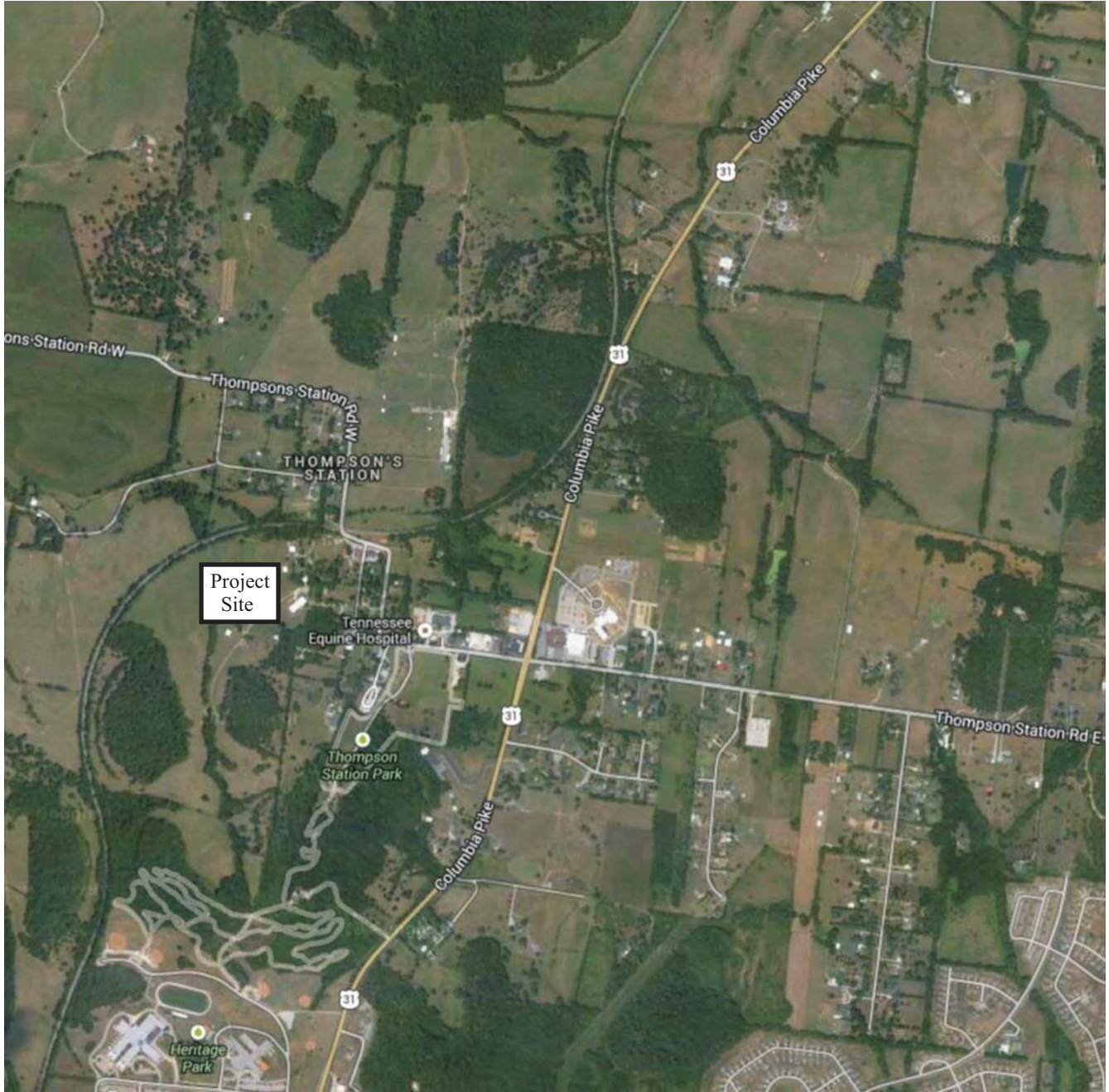
The current project site plan is shown in [Figure 2](#). Currently, the project site is undeveloped, and the developer of the proposed project plans to construct the following land uses:

1. 165 single-family homes,
2. 3,000 square feet of neighborhood retail.

Access to this development is proposed to be provided by extending the northern east-west segment of Thompson's Station Road West. This roadway will be extended west from the existing 90-degree curve in Thompson's Station Road West at the existing railroad crossing.

In large part, economic and market considerations will dictate the pace and timing with which the proposed project is actually completed. The analyses conducted within this study are based on the estimation that the entire project will be completed within three years.

F i s c h b a c h  
Transportation Group, LLC  
Traffic Engineering and Planning



**No Scale**

XX - AM Peak Hour Volumes  
(XX) - PM Peak Hour Volumes

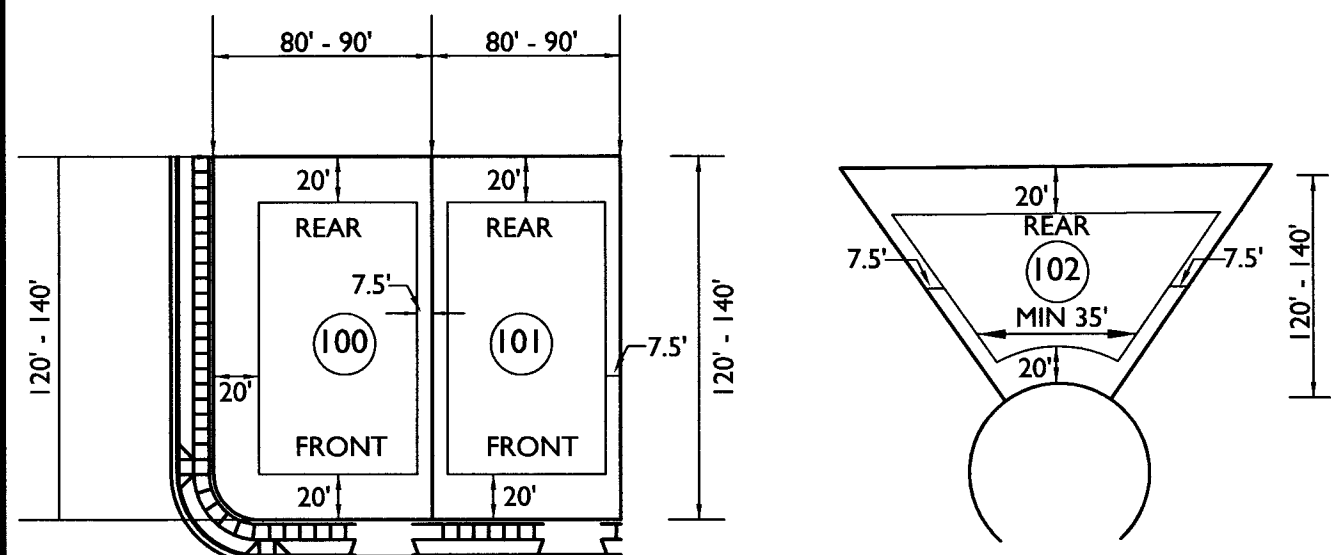
**Figure 1.**  
**Location of the Project Site**



**Whistle Stop PUD Subdivision**  
**Site Development Plan, Revision 3**

Town of Thompson's Station, Williamson County, Tennessee

**TYPICAL LOT DIAGRAMS**



**SINGLE FAMILY LOT**

**SINGLE FAMILY LOT STANDARDS:**  
FRONT SET BACK: 20' MIN.  
SIDE YARD SETBACK: 7.5' MIN.  
REAR YARD SETBACK: 20' MIN.

1. LOT COVERAGE (FOOTPRINT OF ALL STRUCTURES) SHALL NOT EXCEED 40%
2. ALL ACCESSORY STRUCTURES SHALL BE LOCATED IN THE REAR YARD. MINIMUM DISTANCE FROM HOME AND SIDE/REAR PROPERTY LINES IS 5'.
3. GARAGE STANDARDS: 2 CAR GARAGE WITH MINIMUM INTERIOR DIMENSIONS OF 22' X 22'; ALL FRONT LOADED GARAGES SHALL BE RECESSED FROM THE FRONT FACADE.

PARCEL ID: 146 04000  
OWNED BY: WHISTLE STOP FARMS, LLC  
WILLIAMSON CO. TAX MAP 146  
PARCEL 40  
DEED REFERENCE: BOOK 5775,  
PAGE 532  
ZONING: PLANNED NEIGHBORHOOD

PARCEL ID: 146N A00400  
OWNED BY: JOHN RODERICK HELLER, III  
WILLIAMSON CO. TAX MAP 146N  
PARCEL 40N  
DEED REFERENCE: BOOK 6323,  
PAGE 529  
ZONING: T4

1. BOUNDARY & TOPOGRAPHIC INFORMATION TAKEN FROM A SURVEY PROVIDED BY THOMAS G. KING 111 DATED 3/4/2015 TITLED WHISTLE STOP, LLC.
2. WATER SERVICE TO ALL LOTS PROVIDED BY H.B.&T.S.
3. FLOOD INFORMATION TAKEN FROM FLOOD INSURANCE RATE MAP (FIRM) MAP NUMBER 47187C0345C ZONE X DATED 09/29/2006.
4. ONE 2" CALIPER TREE PER SINGLE FAMILY LOT.
5. FENCING IN LOT NO GREATER THAN 6 FOOT IN HEIGHT.
6. CONSTRUCTION GRADING TO BE WITHIN LOT, ROW AND DRAINAGE AREAS.
7. MASS GRADING WILL BE REQUIRED WITH CONSTRUCTION DOCUMENTS.

\* ASTRIC REPRESENTS CRITICAL DUE TO SLOPE OR SOILS CONDITION. ENGINEERING SITE PLAN REQUIRED FOR BUILDING PERMIT.

**SURVEY NOTES:**

1. SURVEYOR'S LIABILITY FOR THE DOCUMENT SHALL BE LIMITED TO THE ORIGINAL PURCHASER AND DOES NOT EXTEND TO ANY UNNAMED PERSON OR ENTITIES WITHOUT AN EXPRESSED RE-CERTIFICATION BY WHOSE SIGNATURE APPEARS UPON THE SURVEY.
2. PARCEL NUMBERS SHOWN THUS (00) REFER TO WILLIAMSON COUNTY TAX MAP 146 PARCEL 40.
3. ALL DISTANCES WERE MEASURED WITH E.D.M. EQUIPMENT AND HAVE BEEN ADJUSTED FOR TEMPERATURE.
4. THE PROPERTY DOES NOT LIE WITHIN THE 100 YEAR FLOOD PLANE AND ARE DETERMINED TO BE IN ZONE X AS PER FIRM PANEL NUMBER 47187C0345C, DATED 09-29-06.
5. THIS SURVEYOR WAS NOT PROVIDED WITH A TITLE COMMITMENT. THEREFORE SUBJECT TO THE FINDINGS OF A DETAILED TITLE SEARCH.
6. PRIOR TO ANY CONSTRUCTION, EXCAVATION OR ANY DISTURBANCE OF THE EXISTING GROUND ELEVATION THE OWNER AND/OR CONTRACTOR SHOULD ASSUME RESPONSIBILITY OF CONTACTING THE LOCAL ELECTRIC CABLES AND WATER LINES ETC. TO AVOID ANY HAZARD OR CONFLICT. IN TENNESSEE, IT IS A REQUIREMENT PER "THE UNDERGROUND UTILITY DAMAGE PREVENT ACT", THAT ANYONE WHO ENGAGES IN EXCAVATION MUST NOTIFY ALL KNOWN UNDERGROUND UTILITY OWNERS, NO LESS THAN THREE (3) NO MORE THAN TEN (10) WORKING DAYS PRIOR TO THE DATE OF EXCAVATION AND ALSO TO AVOID ANY POSSIBLE HAZARD OR CONFLICT. TENNESSEE ONE CALL 1-800-351-1111.
7. PROPERTY DATA TAKEN FROM DEED OF RECORD AND DEEDS FROM ADJOINING PROPERTIES AS NOTED CURRENT DEED OF RECORD FOR PARCEL 40 BEING RECORDED IN DEED BOOK 5775 PAGE 532 REGISTER OFFICE WILLIAMSON COUNTY TENNESSEE. OWNER: WHISTLE STOP, LLC.
8. EASEMENT GRANTED TO MIDDLE TENNESSEE ELECTRIC MEMBERSHIP CORPORATION OF RECORDED IN BOOK 1971, PAGE 174 R.O.W.C.T.
9. CSX INFORMATION TAKEN FROM MAPS PROVIDED BY CSX RAILROAD COMPANY, "RIGHT OF WAY AND TRACK MAP NASHVILLE AND DECATUR R.R. CO." OPERATED BY LOUISVILLE AND NASHVILLE R.R. CO SHEETS V11799 DATED JUNE 30, 1017. FENCE OWNED BY R.R. COMPANY.
10. UTILITIES SHOWN WERE TAKEN FROM FIELD LOCATIONS THAT WERE APPARENT AND COPIED FROM APPROPRIATE GOVERNING AGENCIES MAPS ARE APPROXIMATE AT BEST, THERE MY BE UTILITIES, THE EXISTENCE OF WHICH ARE UNKNOWN TO THE SURVEYOR.
11. MASS GRADING PLAN WILL BE REQUIRED WITH THE CONSTRUCTION DRAWINGS.
12. ALL CRITICAL LOTS WILL BE REQUIRED A GEOTECHNICAL REPORT WITH BUILDING PERMIT APPLICATION.
13. THIS DEVELOPMENT WILL CONSIST OF TWO PHASES. PRELIMINARY PLAT FOLLOWED BY CONSTRUCTION DRAWING FOR EACH PHASE. FINAL PLAT WILL BE BROKEN DOWN IN 20'-0" LOT SECTIONS.

**OPEN SPACE**

SQUARE FEET	ACRES
A 247,805	5.69
B 11,753	0.27
C 4,042	0.09
D 87,726	2.01
E 5,614	0.13
F 321,728	7.39
G 193,189	4.44
H 2,043,967	46.92
I 40,132	0.92
<b>TOTAL</b>	<b>67.86</b>

SCENARIO	TOTAL BOUNDARY	REQUIRED OPEN SPACE
SCENARIO A	144.58	X50% = 72.29 AC
SCENARIO B	144.58	LESS CSX CHARTER = 13.13 131.45
		REQUIRED OPEN SPACE X50% = 65.73 AC

**SITE DATA REVISION 3:**

PROJECT NAME: WHISTLE STOP VILLAGE  
LOCATION: PARCEL 40, TAX MAP 146  
ZONING: PN (PLANNED NEIGHBORHOOD)

TOTAL SITE AREA: 41-131.45 AC  
TOTAL SITE (144.58 AC) - CSX ROW (13.13 AC)

TOTAL ALLOWED DENSITY: 3 DUA  
APPROVED WITH 2009 DEVELOPMENT PLAN

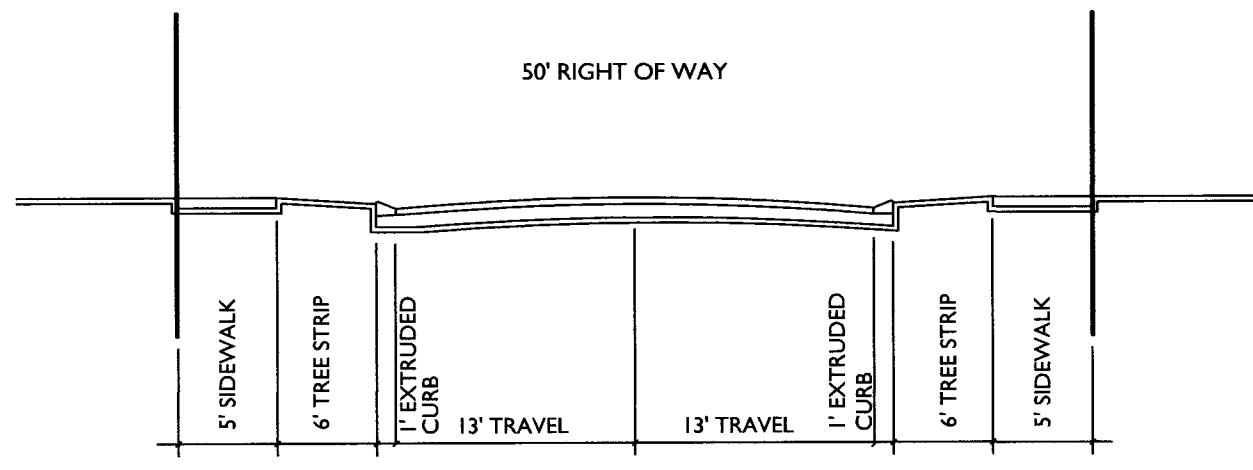
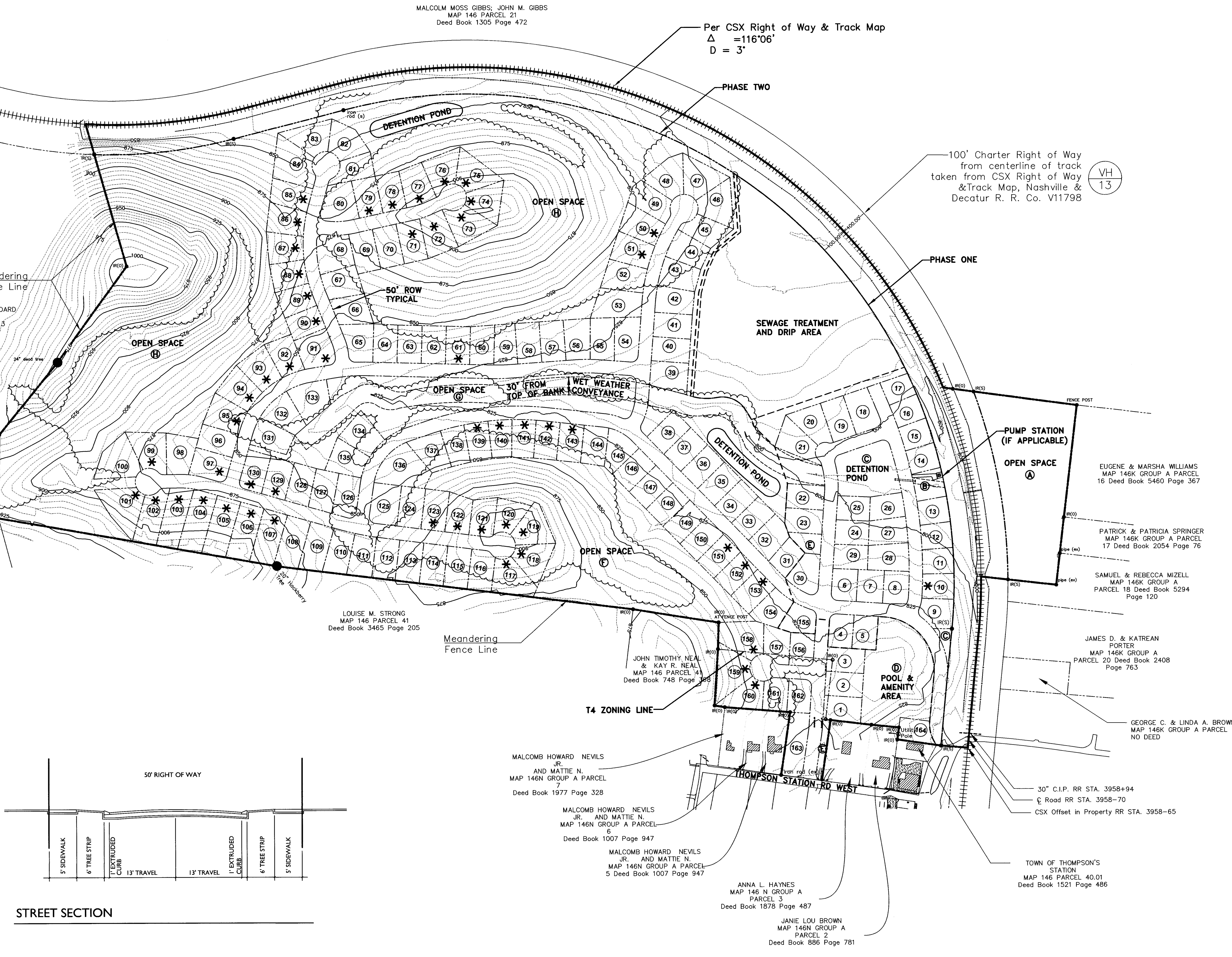
TOTAL PROPOSED HOMES: 164 (0.80 DUA)  
SINGLE FAMILY LOT TYPE A: 80' X 130' (TYPICAL)

REQUIRED OPEN SPACE: 50%,  
PROVIDED OPEN SPACE: 52%

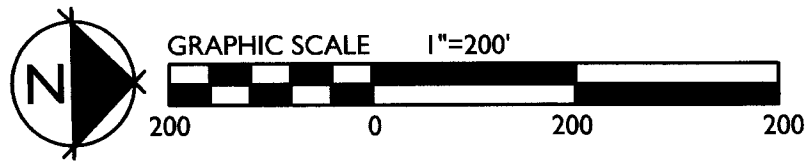
**SITE DATA REVISION 2:**

TOTAL PROPOSED HOMES: 381 (2.76 DUA)  
SINGLE FAMILY LOT TYPE A: 60' X 130' (TYPICAL) 204 UNITS  
SINGLE FAMILY LOT TYPE B: 40' X 110' (TYPICAL) 12 UNITS  
VILLA HOMES 81 UNITS  
INDEPENDENT LIVING APARTMENTS 84 UNITS

REQUIRED OPEN SPACE: 50%,  
PROVIDED OPEN SPACE: 51%



**STREET SECTION**



**SITE DEVELOPMENT PLAN**

date  
09-30-15  
10-07-15

GCG Job No. 14006  
AUGUST 19, 2015

**SHEET**  
**C2.0**

### 3. EXISTING TRAFFIC VOLUMES

In order to provide data for the traffic impact analysis, peak hour traffic volumes were counted at the following intersections:

1. Thompson's Station Road West and School Street (at the southern 90-degree curve)
2. Thompson's Station Road West and School Street (west of the northern 90-degree curve)

This data was collected from 7:00 – 9:00 AM and 4:00 – 6:00 PM on typical weekdays in November 2013 when schools were in session. The existing laneage at these intersections is shown in [Figure 3](#), and the existing peak hour traffic volumes are shown in [Figure 4](#).

Using the existing peak hour traffic volumes shown in [Figure 4](#), capacity analyses were conducted for the intersection studied. Specifically, in order to identify current peak hour levels of operation within the study area, the capacity calculations were performed according to the methods outlined in the Highway Capacity Manual 2010 (HCM2010). These analyses result in the determination of a Level of Service (LOS), which is a measure of evaluation is used to describe how well an intersection or roadway operates. LOS A represents free flow traffic operations, and LOS F suggests that the traffic demand exceeds the available capacity. In an urbanized area, LOS D is typically considered to be the minimum acceptable LOS. [Table 1](#) presents the descriptions of LOS for unsignalized intersections.

The results of the capacity analyses for the existing peak hour traffic volumes are shown in [Table 2](#), and [Appendix A](#) includes the capacity analyses worksheets. These analyses indicate that all of the critical turning movements at the unsignalized intersections within the study area currently operate at LOS A during both peak hours. Specifically, these intersections accommodate relatively low peak hour traffic volumes. However, it is important to note that the laneage, geometry, and alignment at these intersections are substandard.



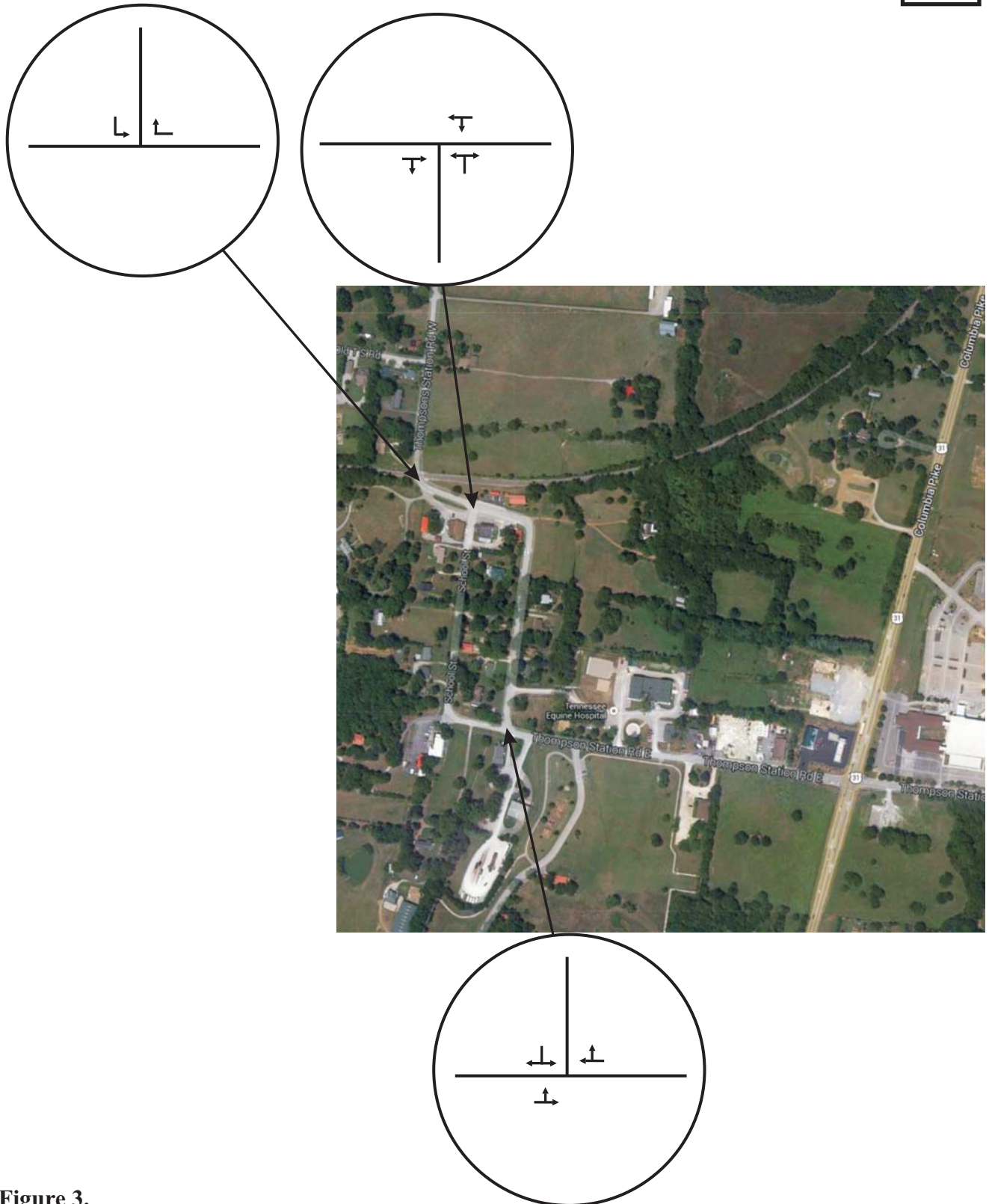


Figure 3.  
Existing Laneage within the Study Area

XX - AM Peak Hour Volumes  
 (XX) - PM Peak Hour Volumes

No Scale

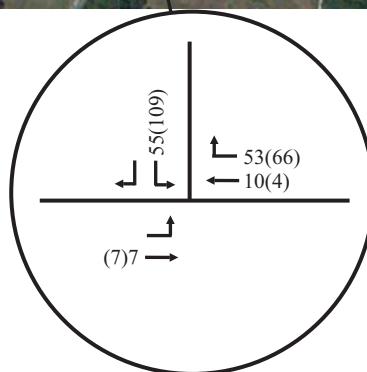
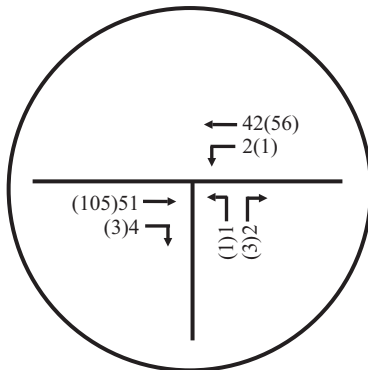
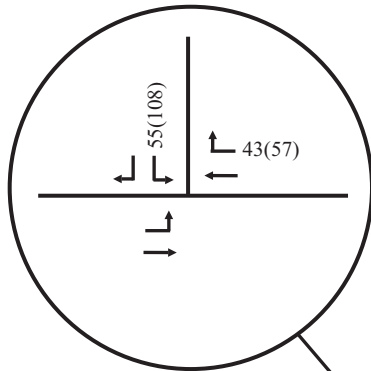


Figure 4.  
 November 2013 Peak Hour Traffic Volumes

**TABLE 1. DESCRIPTIONS OF LOS FOR UNSIGNALIZED INTERSECTIONS**

<b>Level of Service</b>	<b>Description</b>	<b>Average Control Delay (sec/veh)</b>
A	Minimal delay	$\leq 10$
B	Brief delay	$> 10$ and $\leq 15$
C	Average delay	$> 15$ and $\leq 25$
D	Significant delay	$> 25$ and $\leq 35$
E	Long delay	$> 35$ and $\leq 50$
F	Extreme delay	$> 50$

Source: Highway Capacity Manual 2010 (HCM 2010)

**TABLE 2. EXISTING PEAK HOUR LEVELS OF SERVICE**

INTERSECTION	TURNING MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
		LEVEL OF SERVICE	VEHICLE QUEUE	LEVEL OF SERVICE	VEHICLE QUEUE
<b>Thompson's Station Road West and School Street (south)</b>	Eastbound Left Turns / Thrus	LOS A	1 veh	LOS A	1 veh
<b>Thompson's Station Road West and School Street (north)</b>	Westbound Left Turns / Thrus	LOS A	1 veh	LOS A	1 veh
	Northbound Left and Right Turns	LOS A	1 veh	LOS A	1 veh



#### 4. PROJECTION OF BACKGROUND TRAFFIC VOLUMES

In order to account for the traffic growth which will occur within the study area because of typical growth, as well as other approved developments, background traffic volumes were established for the intersections within the study area. Specifically, in order to account for typical growth within the study area, consideration was given to the historical traffic volumes near the project site. The Tennessee Department of Transportation (TDOT) conducts an annual count program throughout the state. This count program includes the annual collection of average daily traffic (ADT) counts at numerous fixed locations. As shown in [Table 3](#), the daily traffic volumes within the study area have grown modestly 2005. However, the intersections studied accommodate relatively low peak hour traffic volumes. Therefore, for the purposes of this study, the existing traffic volumes were increased by 100% to reflect background conditions in Year 2018, as shown in [Figure 5](#).

**TABLE 3. HISTORICAL TRAFFIC VOLUMES IN THE STUDY AREA**

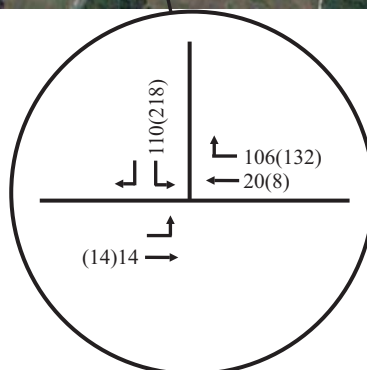
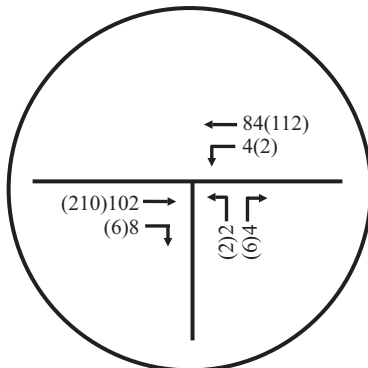
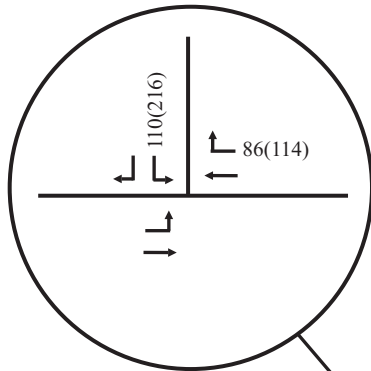
Year	Station 68 Thompson's Sta Rd ADT	Annual Growth	Overall Growth
2005	2,513		
2006	2,858	13.73%	
2007	3,449	20.68%	
2008	3,483	0.99%	
2009	2,916	-16.28%	
2010	2,412	-17.28%	
2011	2,585	7.17%	
2012	2,720	5.22%	
2013	2,723	0.11%	
2014	2,952	8.41%	<b>1.94%</b>

Using the background peak hour traffic volumes, capacity analyses were conducted for the intersections within the study area. For these analyses, it was assumed that all existing infrastructure will be maintained and no improvements will be made.

The results of the analyses are shown in [Table 4](#), and [Appendix A](#) includes the capacity analyses worksheets. These analyses indicate that all of the critical turning movements at the unsignalized intersections within the study area will operate at LOS A during both peak hours. Specifically, these intersections will continue to accommodate relatively low peak hour traffic volumes.

XX - AM Peak Hour Volumes  
 (XX) - PM Peak Hour Volumes

**No Scale**



**Figure 5.**  
**Background Peak Hour Traffic Volumes**

**TABLE 4. BACKGROUND PEAK HOUR LEVELS OF SERVICE**

INTERSECTION	TURNING MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
		LEVEL OF SERVICE	VEHICLE QUEUE	LEVEL OF SERVICE	VEHICLE QUEUE
<b>Thompson's Station Road West and School Street (south)</b>	Eastbound Left Turns / Thrus	LOS A	1 veh	LOS A	1 veh
<b>Thompson's Station Road West and School Street (north)</b>	Westbound Left Turns / Thrus	LOS A	1 veh	LOS A	1 veh
	Northbound Left and Right Turns	LOS A	1 veh	LOS A	1 veh

## 5. IMPACTS OF PROPOSED DEVELOPMENT

### 5.1 TRIP GENERATION

Trip generation calculations were conducted in order to identify how much traffic will be generated by the proposed project. Trip generation data for daily and peak hour trips were identified from Trip Generation, Ninth Edition, which was published by the Institute of Transportation Engineers (ITE) in 2012. In order to present a conservative analysis for the purposes of these analyses, it was assumed that the villa homes will generate trips as if they were detached single-family homes. [Table 5](#) presents the daily and peak hour trip generations for proposed project, and these trip generation calculations are included in [Appendix B](#).

**TABLE 5. TRIP GENERATION**

LAND USE	SIZE	DAILY TRAFFIC	GENERATED TRAFFIC			
			AM PEAK HOUR		PM PEAK HOUR	
			ENTER	EXIT	ENTER	EXIT
Single-Family (LUC 210)	165 homes	1,664	31	94	104	61
Specialty Retail (LUC 826)	3,000 sq.ft.	166	10	11	13	16
<b>TOTAL</b>		<b>1,830</b>	<b>41</b>	<b>105</b>	<b>117</b>	<b>77</b>

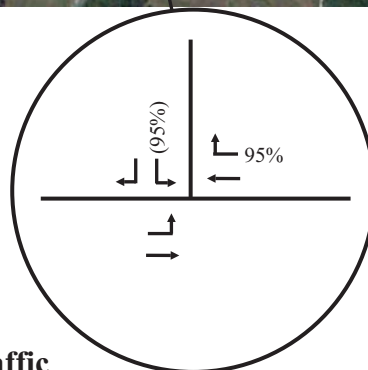
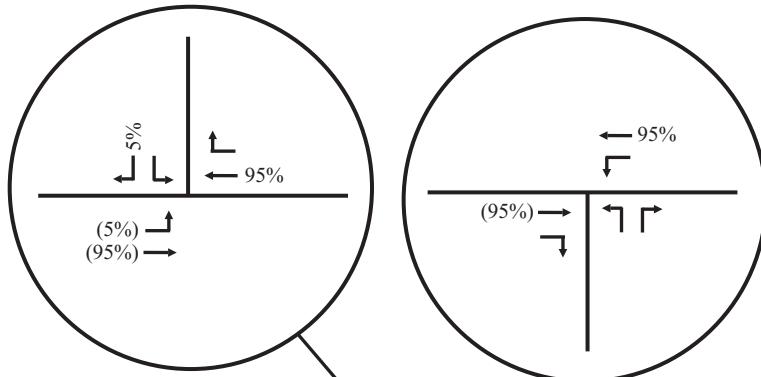
## 5.2 TRIP DISTRIBUTION AND TRAFFIC ASSIGNMENT (ONE ACCESS)

For the purposes of this study, it was estimated that the trips generated by the proposed development will access the project site according to the directional distribution shown in [Figure 6](#). The development of this distribution was based on the following factors:

- existing land use characteristics,
- the directions of approach of the existing traffic,
- the access proposed for the project, and
- the locations of population centers in the area.

It is important to note that this directional distribution is based on the provision of just one project access.

The peak hour trip generations and directional distribution were used to add the site-generated trips to the roadway system. [Figure 7](#) includes the peak hour traffic volumes that are expected to be generated by the proposed project.



**Figure 6.**  
**Directional Distribution of Peak Hour Traffic**  
**Volumes Generated by the Proposed Project**



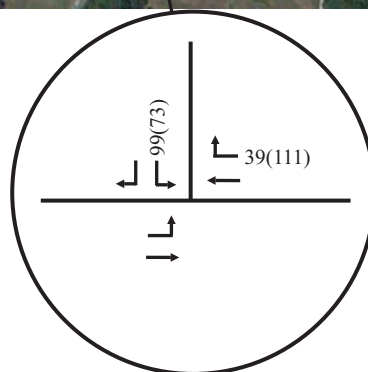
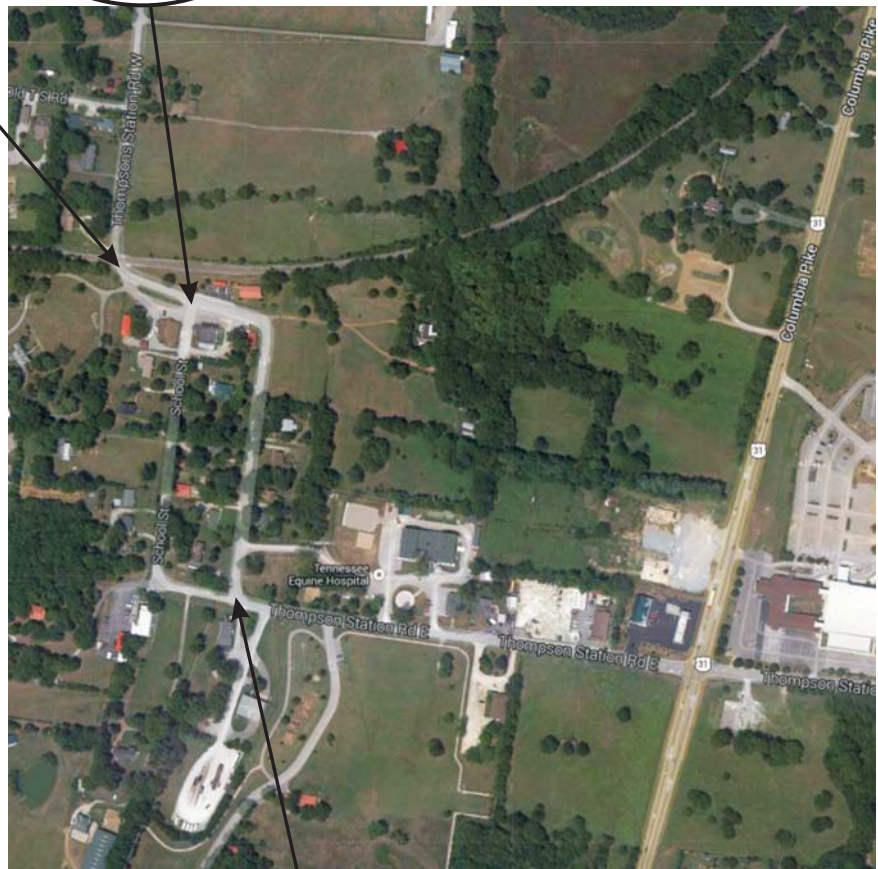
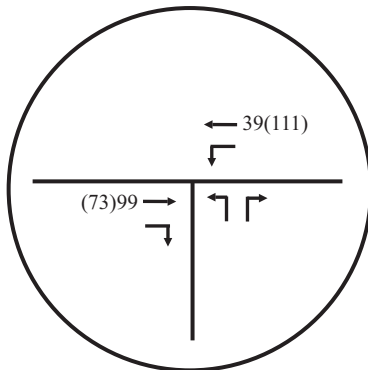
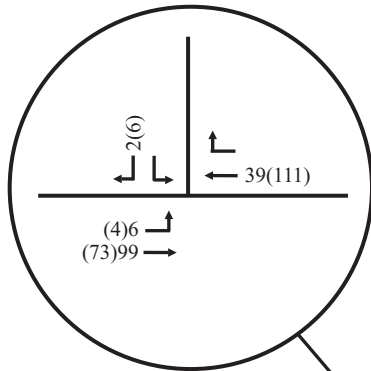


Figure 7.  
 Peak Hour Traffic Volumes  
 Generated by the Proposed Project

### **5.3 CAPACITY ANALYSES (ONE ACCESS)**

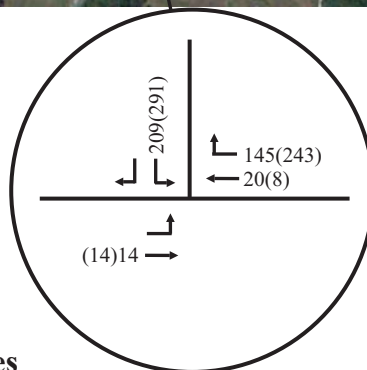
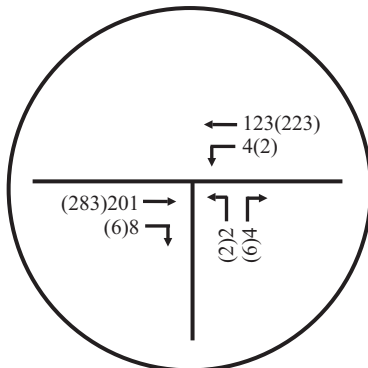
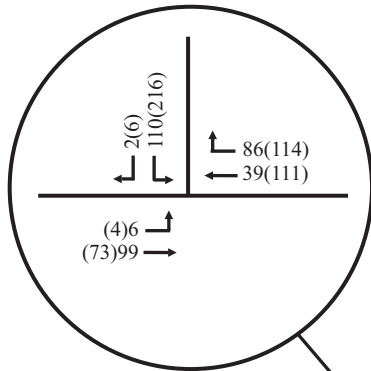
In order to identify the projected peak hour traffic volumes at the completion of the proposed project, based on the provision of just one project access, the trips generated by the proposed development were added to the background peak hour traffic volumes within the study area. The resulting peak hour volumes are shown in [Figure 8](#).

Using the total projected peak hour traffic volumes, capacity analyses were conducted in order to determine the impact of the proposed project on the roadway system. Specifically, these capacity analyses were used to evaluate the need for roadway and traffic control improvements within the study area. For the purposes of these analyses, the following assumptions were made:

1. The existing laneage and traffic control will be maintained, and no improvements will be made.
2. The new project access will be constructed as a two-lane extension of Thompson's Station Road West from the existing 90-degree curve at the existing railroad crossing.

The results of the capacity analyses for the total projected peak hour traffic volumes are shown in [Table 6](#), and [Appendix A](#) includes the capacity analyses worksheets. These analyses indicate that all of the critical turning movements at the unsignalized intersections within the study area will operate at LOS A during both peak hours. Specifically, these intersections will continue to accommodate relatively low peak hour traffic volumes.





**Figure 8.**  
 Total Projected Peak Hour Traffic Volumes  
 at the Completion of the Proposed Project

**TABLE 6. TOTAL PROJECTED LEVELS OF SERVICE  
WITH COMPLETION OF THE PROPOSED PROJECT**

**(WITH ONE PROJECT ACCESS)**

INTERSECTION	TURNING MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
		LEVEL OF SERVICE	VEHICLE QUEUE	LEVEL OF SERVICE	VEHICLE QUEUE
<b>Thompson's Station Road West and School Street (south)</b>	Eastbound Left Turns / Thrus	LOS A	1 veh	LOS A	1 veh
<b>Thompson's Station Road West and School Street (north)</b>	Westbound Left Turns / Thrus	LOS A	1 veh	LOS A	1 veh
	Northbound Left and Right Turns	LOS A	1 veh	LOS A	1 veh
<b>Thompson's Station Road West and Project Access</b>	Westbound Left Turns / Thrus	LOS A	1 veh	LOS A	1 veh
	Northbound Left and Right Turns	LOS A	1 veh	LOS A	1 veh

#### **5.4 TRIP DISTRIBUTION AND TRAFFIC ASSIGNMENT (TWO ACCESSES)**

For the purposes of this study, it was estimated that the trips generated by the proposed development will access the project site according to the directional distribution shown in [Figure 9](#). The development of this distribution was based on the following factors:

- existing land use characteristics,
- the directions of approach of the existing traffic,
- the access proposed for the project, and
- the locations of population centers in the area.

It is important to note that this directional distribution is based on the provision of a second project access on School Street.

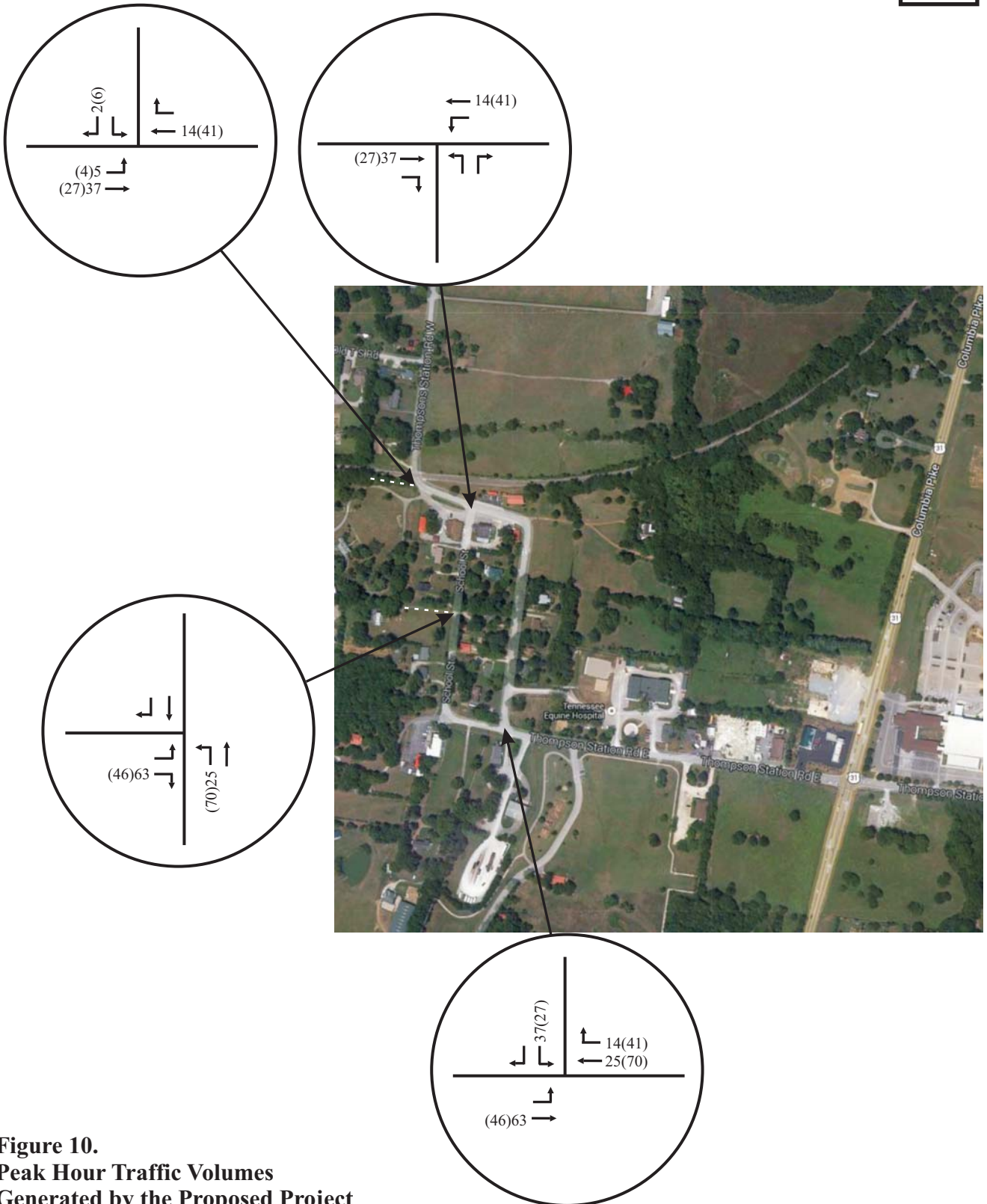
The peak hour trip generations and directional distribution were used to add the site-generated trips to the roadway system. [Figure 10](#) includes the peak hour traffic volumes that are expected to be generated by the proposed project.





XX - Entering Volumes  
 (XX) - Exiting Volumes

No Scale



**Figure 10.**  
 Peak Hour Traffic Volumes  
 Generated by the Proposed Project  
 (with two accesses)

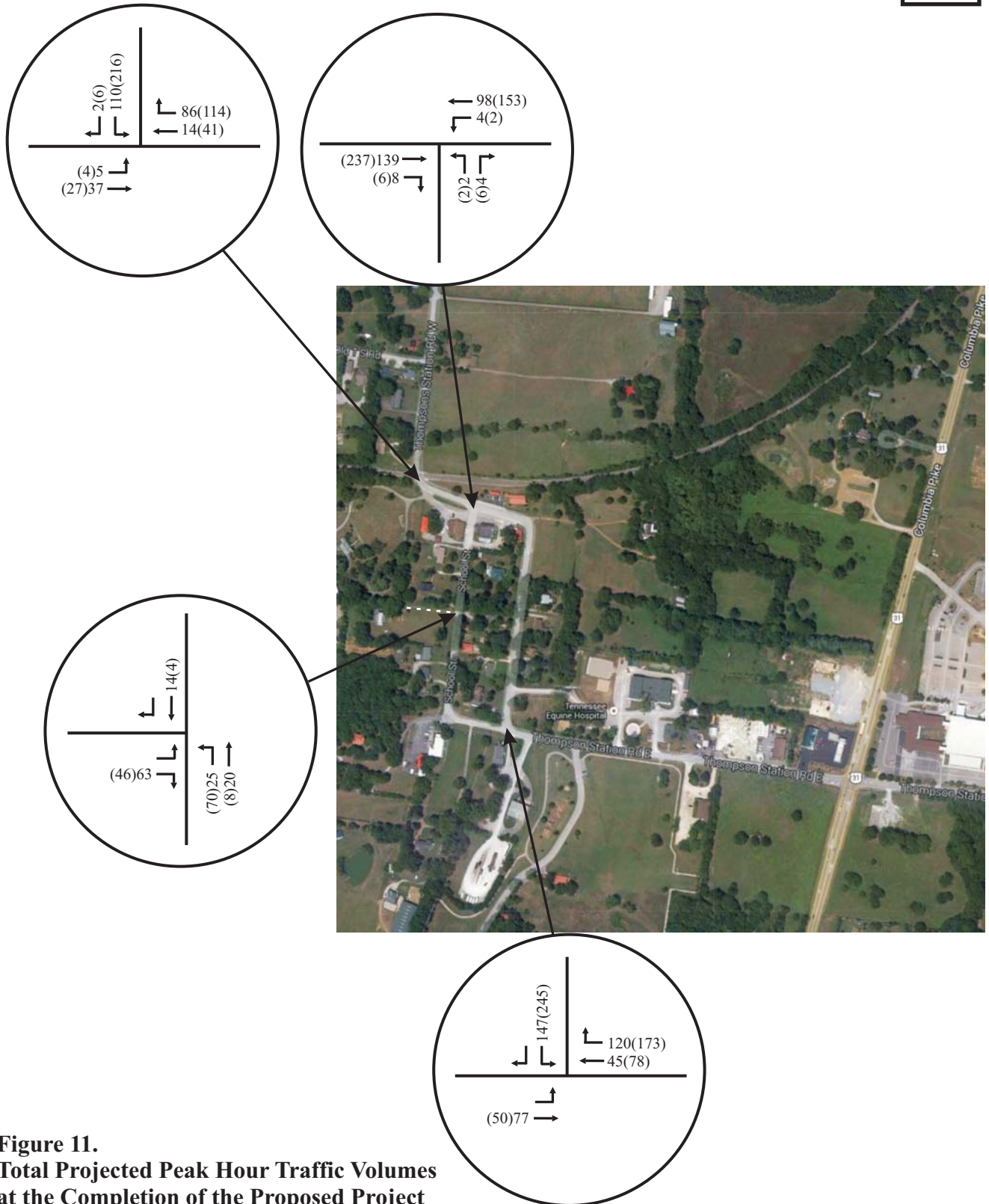
## 5.5 CAPACITY ANALYSES (TWO ACCESS)

In order to identify the projected peak hour traffic volumes at the completion of the proposed project, based on the provision of two project accesses, the trips generated by the proposed development were added to the background peak hour traffic volumes within the study area. The resulting peak hour volumes are shown in [Figure 11](#).

Using the total projected peak hour traffic volumes, capacity analyses were conducted in order to determine the impact of the proposed project on the roadway system. Specifically, these capacity analyses were used to evaluate the need for roadway and traffic control improvements within the study area. For the purposes of these analyses, the following assumptions were made:

1. The existing laneage and traffic control will be maintained, and no improvements will be made.
2. The northern project access will be constructed as a two-lane extension of Thompson's Station Road West from the existing 90-degree curve at the existing railroad crossing.
3. The project access on School Street will be constructed to include one entering lane and one exiting lane.

The results of the capacity analyses for the total projected peak hour traffic volumes are shown in [Table 7](#), and [Appendix A](#) includes the capacity analyses worksheets. These analyses indicate that all of the critical turning movements at the unsignalized intersections within the study area will operate at LOS B or better during both peak hours. Specifically, these intersections will continue to accommodate relatively low peak hour traffic volumes.



**Figure 11.**  
**Total Projected Peak Hour Traffic Volumes**  
**at the Completion of the Proposed Project**  
**(with two accesses)**

**TABLE 7. TOTAL PROJECTED LEVELS OF SERVICE  
WITH COMPLETION OF THE PROPOSED PROJECT  
(WITH TWO PROJECT ACCESSES)**

INTERSECTION	TURNING MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
		LEVEL OF SERVICE	VEHICLE QUEUE	LEVEL OF SERVICE	VEHICLE QUEUE
<b>Thompson's Station Road West and School Street (south)</b>	Eastbound Left Turns / Thrus	LOS A	1 veh	LOS B	1 veh
<b>Thompson's Station Road West and School Street (north)</b>	Westbound Left Turns / Thrus	LOS A	1 veh	LOS A	1 veh
	Northbound Left and Right Turns	LOS A	1 veh	LOS B	1 veh
<b>Thompson's Station Road West and Project Access</b>	Westbound Left Turns / Thrus	LOS A	1 veh	LOS A	1 veh
	Northbound Left and Right Turns	LOS A	1 veh	LOS A	1 veh
<b>School Street and Project Access</b>	Northbound Left Turns / Thrus	LOS A	1 veh	LOS A	1 veh
	Eastbound Left and Right Turns	LOS A	1 veh	LOS A	1 veh



## 6. CONCLUSIONS AND RECOMMENDATIONS

The analyses presented in this study indicate that the following infrastructure improvements should be provided in conjunction with the proposed project:

1. The new project access on Thompson's Station Road West should be constructed as an extension of the east-west portion of Thompson's Station West, immediately south of the existing railroad tracks. With this new leg, the new T-intersection should be built as far south as possible to maximize the separation from the railroad tracks.
2. If a second project access is provided on School Street, this access should be constructed to include one entering lane and one exiting lane. It is important to note that this access is not needed to provide adequate capacity but will enhance vehicle circulation related to the proposed project. Because this access is not needed to provide adequate capacity within the study area, it can be open to residents during the later phases of construction. Specifically, it could be provided at 75% completion of the project without compromising the efficiency of turning movements within the study area. If this access is used as a construction access during the earlier phases of construction, adequate turning radii should be provided at the intersection of School Street and the project access to accommodate delivery vehicles and construction traffic. It is likely that fewer than 15 construction vehicles will enter and exit the project site each day, and so these vehicles will not likely have a significant impact on the peak hour turning movements .
3. If a second project access is provided, School Street should be widened to include two 10-foot travel lanes from the project access south to the east-west portion of School Street and the southern alignment of Thompson's Station Road West. This improvement could be provided with the reconstruction of Thompson's Station Road West, as described above.

In conclusion, the implementation of the above recommendations should be provided in order to provide safe and efficient traffic operations on the roadways and intersections within the study area.

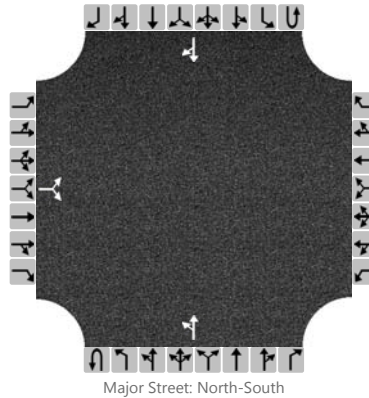
**APPENDIX A  
CAPACITY ANALYSES**

**EXISTING CONDITIONS**

# HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst	FTG	Intersection	Thompson's Sta and School
Agency/Co.	FTG	Jurisdiction	Thompson's Station, TN
Date Performed	Dec 2015	East/West Street	Thompson's Sta Rd, E / School
Analysis Year	2015	North/South Street	Thompson's Station Road, E.
Time Analyzed	AM Peak Hour	Peak Hour Factor	0.90
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	10463 (Existing)		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Movement																	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		0	0	0		0	0	0	0	0	1	0	0	0	1	0	
Configuration			LR							LT						TR	
Volume (veh/h)		1		7						10	53					55	1
Percent Heavy Vehicles		0		0						0							
Proportion Time Blocked																	
Right Turn Channelized	No				No				No				No				
Median Type	Undivided																
Median Storage																	

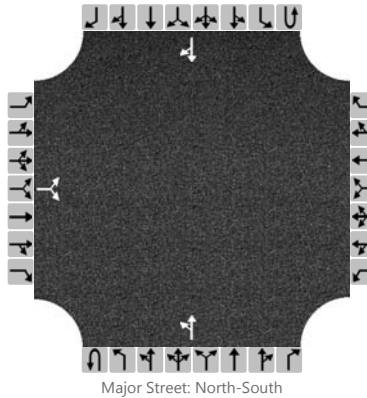
## Delay, Queue Length, and Level of Service

Flow Rate (veh/h)			9							70							
Capacity			988							1554							
v/c Ratio			0.01							0.05							
95% Queue Length			0.0							0.0							
Control Delay (s/veh)			8.7							7.3							
Level of Service (LOS)			A							A							
Approach Delay (s/veh)	8.7								1.2								
Approach LOS	A								A								

# HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst	FTG	Intersection	Thompson's Sta and School
Agency/Co.	FTG	Jurisdiction	Thompson's Station, TN
Date Performed	Dec 2015	East/West Street	Thompson's Sta Rd, E / School
Analysis Year	2015	North/South Street	Thompson's Station Road, E.
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.90
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	10463 (Existing)		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Movement																	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		0	0	0		0	0	0	0	0	1	0	0	0	1	0	
Configuration			LR							LT						TR	
Volume (veh/h)		1		7						4	66					109	1
Percent Heavy Vehicles		0		0						0							
Proportion Time Blocked																	
Right Turn Channelized	No				No				No				No				
Median Type	Undivided																
Median Storage																	

## Delay, Queue Length, and Level of Service

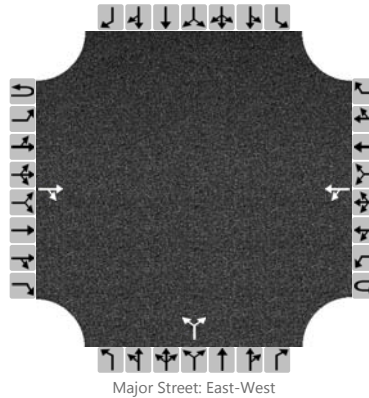
Flow Rate (veh/h)			9							77							
Capacity			916							1478							
v/c Ratio			0.01							0.05							
95% Queue Length			0.0							0.0							
Control Delay (s/veh)			9.0							7.4							
Level of Service (LOS)			A							A							
Approach Delay (s/veh)	9.0								0.4								
Approach LOS	A								A								



# HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst	FTG	Intersection	Thompson's Sta, E / School
Agency/Co.	FTG	Jurisdiction	Thompson's Station Road, E.
Date Performed	Dec 2015	East/West Street	Thompson's Station Road, E.
Analysis Year	2015	North/South Street	School Street
Time Analyzed	AM Peak Hour	Peak Hour Factor	0.90
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	10463 (Existing)		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			51	4		2	42			1		2				
Percent Heavy Vehicles						0				0		0				
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

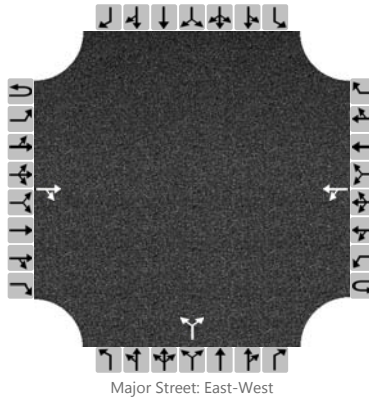
## Delay, Queue Length, and Level of Service

Flow Rate (veh/h)						49						3				
Capacity						1555						968				
v/c Ratio						0.03						0.00				
95% Queue Length						0.0						0.0				
Control Delay (s/veh)						7.3						8.7				
Level of Service (LOS)						A						A				
Approach Delay (s/veh)					0.3				8.7							
Approach LOS					A				A							

# HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst	FTG	Intersection	Thompson's Sta, E / School
Agency/Co.	FTG	Jurisdiction	Thompson's Station Road, E.
Date Performed	Dec 2015	East/West Street	Thompson's Station Road, E.
Analysis Year	2015	North/South Street	School Street
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.90
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	10463 (Existing)		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			105	3		1	56			1		3				
Percent Heavy Vehicles						0				0		0				
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

## Delay, Queue Length, and Level of Service

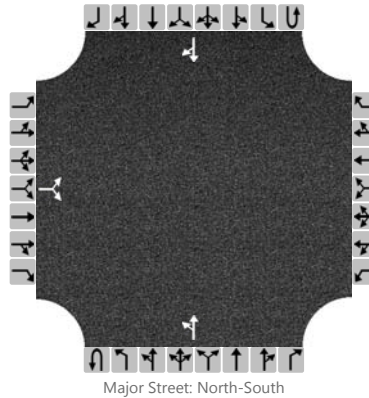
Flow Rate (veh/h)						63						4				
Capacity						1480						904				
v/c Ratio						0.04						0.00				
95% Queue Length						0.0						0.0				
Control Delay (s/veh)						7.4						9.0				
Level of Service (LOS)						A						A				
Approach Delay (s/veh)					0.1				9.0							
Approach LOS					A				A							

## **BACKGROUND CONDITIONS**

# HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst	FTG	Intersection	Thompson's Sta and School
Agency/Co.	FTG	Jurisdiction	Thompson's Station, TN
Date Performed	Dec 2015	East/West Street	Thompson's Sta Rd, E / School
Analysis Year	2015	North/South Street	Thompson's Station Road, E.
Time Analyzed	AM Peak Hour	Peak Hour Factor	0.90
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	10463 (Background)		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Movement																	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		0	0	0		0	0	0	0	0	1	0	0	0	1	0	
Configuration			LR							LT						TR	
Volume (veh/h)		1		14						20	106					110	1
Percent Heavy Vehicles		0		0						0							
Proportion Time Blocked																	
Right Turn Channelized	No				No				No				No				
Median Type	Undivided																
Median Storage																	

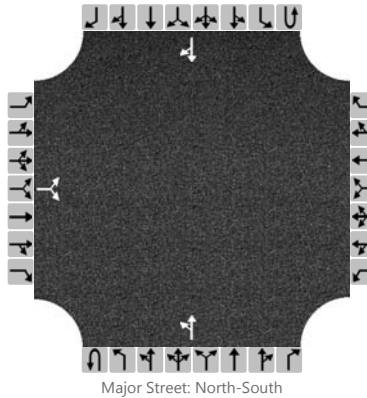
## Delay, Queue Length, and Level of Service

Flow Rate (veh/h)			17							140							
Capacity			917							1477							
v/c Ratio			0.02							0.09							
95% Queue Length			0.1							0.0							
Control Delay (s/veh)			9.0							7.5							
Level of Service (LOS)			A							A							
Approach Delay (s/veh)	9.0								1.3								
Approach LOS	A								A								

# HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst	FTG	Intersection	Thompson's Sta and School
Agency/Co.	FTG	Jurisdiction	Thompson's Station, TN
Date Performed	Dec 2015	East/West Street	Thompson's Sta Rd, E / School
Analysis Year	2015	North/South Street	Thompson's Station Road, E.
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.90
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	10463 (Background)		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Movement																	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		0	0	0		0	0	0	0	0	1	0	0	0	1	0	
Configuration			LR							LT						TR	
Volume (veh/h)		1		14						8	132					218	1
Percent Heavy Vehicles		0		0						0							
Proportion Time Blocked																	
Right Turn Channelized	No				No				No				No				
Median Type	Undivided																
Median Storage																	

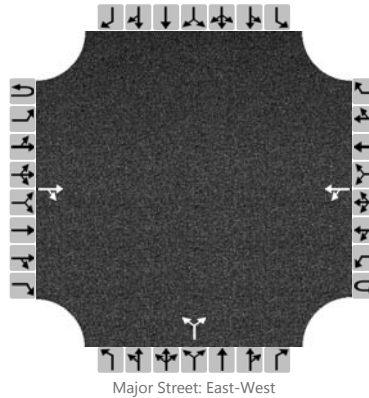
## Delay, Queue Length, and Level of Service

Flow Rate (veh/h)			17							156							
Capacity			786							1335							
v/c Ratio			0.02							0.12							
95% Queue Length			0.1							0.0							
Control Delay (s/veh)			9.7							7.7							
Level of Service (LOS)			A							A							
Approach Delay (s/veh)	9.7								0.5								
Approach LOS	A								A								

# HCS 2010 Two-Way Stop Control Summary Report

General Information				Site Information			
Analyst	FTG			Intersection	Thompson's Sta, E / School		
Agency/Co.	FTG			Jurisdiction	Thompson's Station Road, E.		
Date Performed	Dec 2015			East/West Street	Thompson's Station Road, E.		
Analysis Year	2015			North/South Street	School Street		
Time Analyzed	AM Peak Hour			Peak Hour Factor	0.90		
Intersection Orientation	East-West			Analysis Time Period (hrs)	1.00		
Project Description	10463 (Background)						

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			102	8		4	84			2		4				
Percent Heavy Vehicles						0				0		0				
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

## Delay, Queue Length, and Level of Service

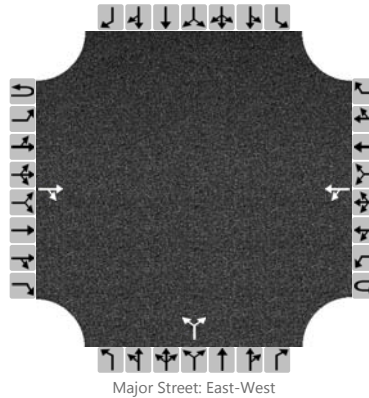
Flow Rate (veh/h)						97						6				
Capacity						1478						876				
v/c Ratio						0.07						0.01				
95% Queue Length						0.0						0.0				
Control Delay (s/veh)						7.4						9.1				
Level of Service (LOS)						A						A				
Approach Delay (s/veh)					0.3				9.1							
Approach LOS					A				A							



# HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst	FTG	Intersection	Thompson's Sta, E / School
Agency/Co.	FTG	Jurisdiction	Thompson's Station Road, E.
Date Performed	Dec 2015	East/West Street	Thompson's Station Road, E.
Analysis Year	2015	North/South Street	School Street
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.90
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	10463 (Background)		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			210	6		2	112			2		6				
Percent Heavy Vehicles						0				0		0				
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

## Delay, Queue Length, and Level of Service

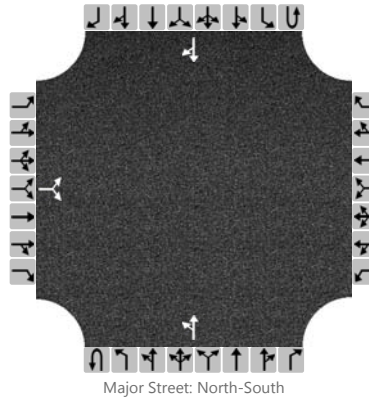
Flow Rate (veh/h)					126					9						
Capacity					1339					763						
v/c Ratio					0.09					0.01						
95% Queue Length					0.0					0.0						
Control Delay (s/veh)					7.7					9.8						
Level of Service (LOS)					A					A						
Approach Delay (s/veh)					0.1				9.8							
Approach LOS					A				A							

**TOTAL PROJECTED CONDITIONS  
(WITH ONE PROJECT ACCESS)**

# HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst	FTG	Intersection	Thompson's Sta and School
Agency/Co.	FTG	Jurisdiction	Thompson's Station, TN
Date Performed	Dec 2015	East/West Street	Thompson's Sta Rd, E / School
Analysis Year	2015	North/South Street	Thompson's Station Road, E.
Time Analyzed	AM Peak Hour	Peak Hour Factor	0.90
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	10463 (Total with one access)		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Movement																	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		0	0	0		0	0	0	0	0	1	0	0	0	1	0	
Configuration			LR							LT						TR	
Volume (veh/h)		1		14						20	145					209	1
Percent Heavy Vehicles		0		0						0							
Proportion Time Blocked																	
Right Turn Channelized	No				No				No				No				
Median Type	Undivided																
Median Storage																	

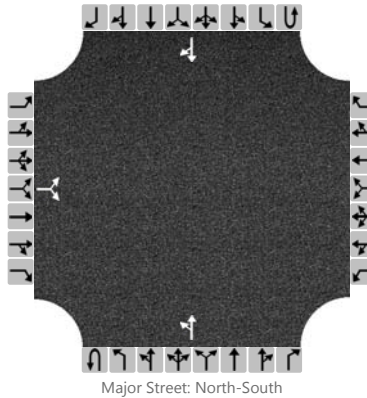
## Delay, Queue Length, and Level of Service

Flow Rate (veh/h)			17							183							
Capacity			792							1347							
v/c Ratio			0.02							0.14							
95% Queue Length			0.1							0.0							
Control Delay (s/veh)			9.6							7.7							
Level of Service (LOS)			A							A							
Approach Delay (s/veh)	9.6								1.1								
Approach LOS	A								A								

# HCS 2010 Two-Way Stop Control Summary Report

General Information				Site Information			
Analyst	FTG			Intersection	Thompson's Sta and School		
Agency/Co.	FTG			Jurisdiction	Thompson's Station, TN		
Date Performed	Dec 2015			East/West Street	Thompson's Sta Rd, E / School		
Analysis Year	2015			North/South Street	Thompson's Station Road, E.		
Time Analyzed	PM Peak Hour			Peak Hour Factor	0.90		
Intersection Orientation	North-South			Analysis Time Period (hrs)	1.00		
Project Description	10463 (Total with one access)						

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Movement																	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		0	0	0		0	0	0	0	0	1	0	0	0	1	0	
Configuration			LR							LT						TR	
Volume (veh/h)		1		14						8	243					291	1
Percent Heavy Vehicles		0		0						0							
Proportion Time Blocked																	
Right Turn Channelized	No				No				No				No				
Median Type	Undivided																
Median Storage																	

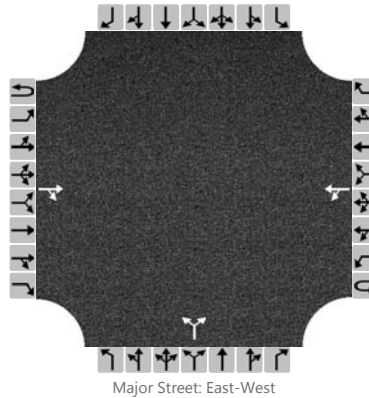
## Delay, Queue Length, and Level of Service

Flow Rate (veh/h)			17							279							
Capacity			698							1247							
v/c Ratio			0.02							0.22							
95% Queue Length			0.1							0.0							
Control Delay (s/veh)			10.3							7.9							
Level of Service (LOS)			B							A							
Approach Delay (s/veh)	10.3								0.3								
Approach LOS	B								A								

# HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst	FTG	Intersection	Thompson's Sta, E / School
Agency/Co.	FTG	Jurisdiction	Thompson's Station Road, E.
Date Performed	Dec 2015	East/West Street	Thompson's Station Road, E.
Analysis Year	2015	North/South Street	School Street
Time Analyzed	AM Peak Hour	Peak Hour Factor	0.90
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	10463 (Total with one access)		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			201	8		4	123			2		4				
Percent Heavy Vehicles						0				0		0				
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

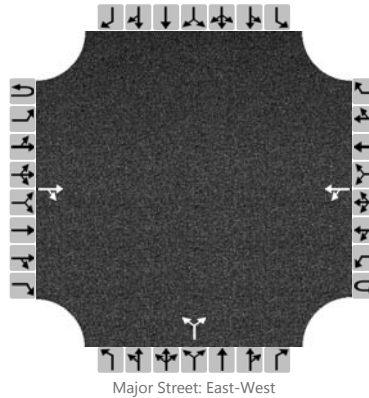
## Delay, Queue Length, and Level of Service

Flow Rate (veh/h)						141						6				
Capacity						1348						744				
v/c Ratio						0.10						0.01				
95% Queue Length						0.0						0.0				
Control Delay (s/veh)						7.7						9.9				
Level of Service (LOS)						A						A				
Approach Delay (s/veh)					0.2				9.9							
Approach LOS					A				A							

# HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst	FTG	Intersection	Thompson's Sta, E / School
Agency/Co.	FTG	Jurisdiction	Thompson's Station Road, E.
Date Performed	Dec 2015	East/West Street	Thompson's Station Road, E.
Analysis Year	2015	North/South Street	School Street
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.90
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	10463 (Total with one access)		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			283	6		2	223			2		6				
Percent Heavy Vehicles						0				0		0				
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

## Delay, Queue Length, and Level of Service

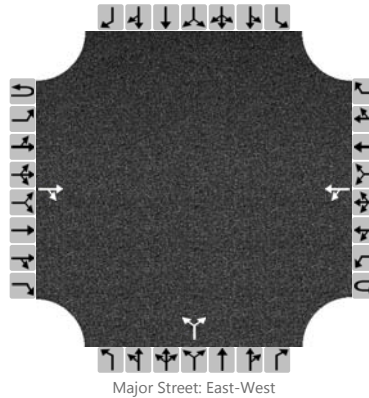
Flow Rate (veh/h)					250						9					
Capacity					1250						655					
v/c Ratio					0.20						0.01					
95% Queue Length					0.0						0.0					
Control Delay (s/veh)					7.9						10.6					
Level of Service (LOS)					A						B					
Approach Delay (s/veh)					0.1				10.6							
Approach LOS					A				B							



# HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst	FTG	Intersection	Thompson's Sta Rd and Project
Agency/Co.	FTG	Jurisdiction	Thompson's Station, TN
Date Performed	Dec 2015	East/West Street	Thompson's Station, E.
Analysis Year	Total (with one access)	North/South Street	Project Access
Time Analyzed	AM Peak Hour	Peak Hour Factor	0.90
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	10463		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			110	2		39	86			6		99				
Percent Heavy Vehicles						0				0		0				
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

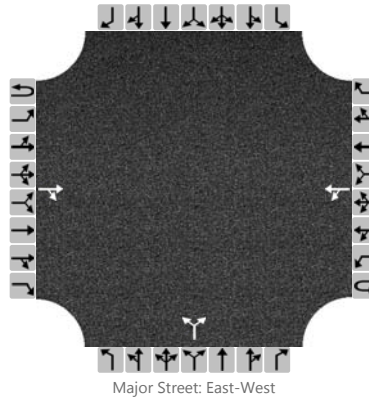
## Delay, Queue Length, and Level of Service

Flow Rate (veh/h)						139						117				
Capacity						1476						912				
v/c Ratio						0.09						0.13				
95% Queue Length						0.1						0.4				
Control Delay (s/veh)						7.5						9.5				
Level of Service (LOS)						A						A				
Approach Delay (s/veh)					2.5				9.5							
Approach LOS					A				A							

# HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst	FTG	Intersection	Thompson's Sta Rd and Project
Agency/Co.	FTG	Jurisdiction	Thompson's Station, TN
Date Performed	Dec 2015	East/West Street	Thompson's Station, E.
Analysis Year	Total (with one access)	North/South Street	Project Access
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.90
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	10463		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			216	6		111	114			4		73				
Percent Heavy Vehicles						0				0		0				
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

## Delay, Queue Length, and Level of Service

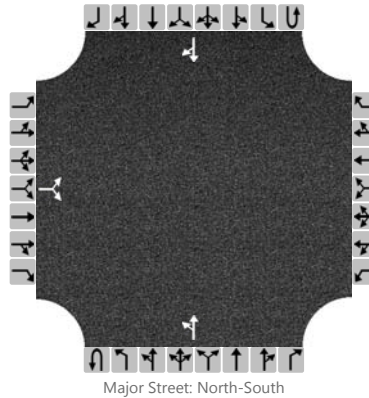
Flow Rate (veh/h)					250						85					
Capacity					1331						766					
v/c Ratio					0.19						0.11					
95% Queue Length					0.3						0.4					
Control Delay (s/veh)					8.0						10.3					
Level of Service (LOS)					A						B					
Approach Delay (s/veh)					4.3				10.3							
Approach LOS					A				B							

**TOTAL PROJECTED CONDITIONS  
(WITH TWO PROJECT ACCESSES)**

# HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst	FTG	Intersection	Thompson's Sta and School
Agency/Co.	FTG	Jurisdiction	Thompson's Station, TN
Date Performed	Dec 2015	East/West Street	Thompson's Sta Rd, E / School
Analysis Year	2015	North/South Street	Thompson's Station Road, E.
Time Analyzed	AM Peak Hour	Peak Hour Factor	0.90
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	10463 (Total with two accesses)		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Movement																	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		0	0	0		0	0	0	0	0	1	0	0	0	1	0	
Configuration			LR							LT						TR	
Volume (veh/h)		1		77						45	120					147	1
Percent Heavy Vehicles		0		0						0							
Proportion Time Blocked																	
Right Turn Channelized	No				No				No				No				
Median Type	Undivided																
Median Storage																	

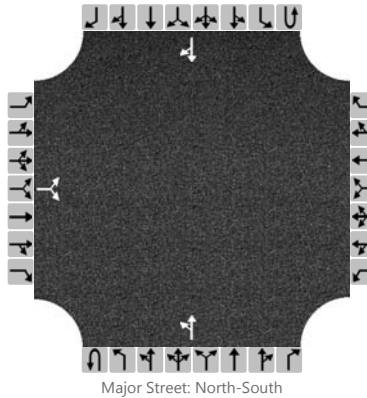
## Delay, Queue Length, and Level of Service

Flow Rate (veh/h)			87							183							
Capacity			881							1427							
v/c Ratio			0.10							0.13							
95% Queue Length			0.3							0.1							
Control Delay (s/veh)			9.5							7.6							
Level of Service (LOS)			A							A							
Approach Delay (s/veh)	9.5								2.3								
Approach LOS	A								A								

# HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst	FTG	Intersection	Thompson's Sta and School
Agency/Co.	FTG	Jurisdiction	Thompson's Station, TN
Date Performed	Dec 2015	East/West Street	Thompson's Sta Rd, E / School
Analysis Year	2015	North/South Street	Thompson's Station Road, E.
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.90
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	10463 (Total with two accesses)		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Movement																	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		0	0	0		0	0	0	0	0	1	0	0	0	1	0	
Configuration			LR							LT						TR	
Volume (veh/h)		1		50						78	173					245	1
Percent Heavy Vehicles		0		0						0							
Proportion Time Blocked																	
Right Turn Channelized	No				No				No				No				
Median Type	Undivided																
Median Storage																	

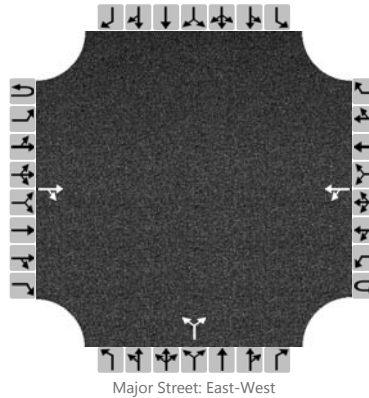
## Delay, Queue Length, and Level of Service

Flow Rate (veh/h)			57							279							
Capacity			760							1302							
v/c Ratio			0.07							0.21							
95% Queue Length			0.2							0.2							
Control Delay (s/veh)			10.1							8.0							
Level of Service (LOS)			B							A							
Approach Delay (s/veh)	10.1								2.9								
Approach LOS	B								A								

# HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst	FTG	Intersection	Thompson's Sta, E / School
Agency/Co.	FTG	Jurisdiction	Thompson's Station Road, E.
Date Performed	Dec 2015	East/West Street	Thompson's Station Road, E.
Analysis Year	2015	North/South Street	School Street
Time Analyzed	AM Peak Hour	Peak Hour Factor	0.90
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	10463 (Total with two accesses)		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			139	8		4	98			2		4				
Percent Heavy Vehicles						0				0		0				
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

## Delay, Queue Length, and Level of Service

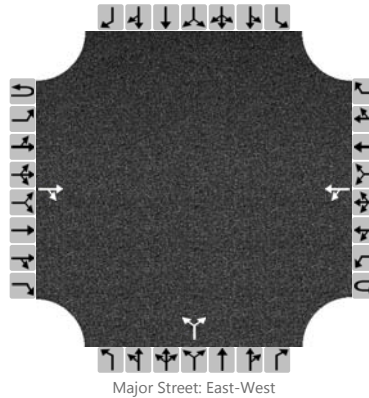
Flow Rate (veh/h)						113						6				
Capacity						1428						825				
v/c Ratio						0.08						0.01				
95% Queue Length						0.0						0.0				
Control Delay (s/veh)						7.5						9.4				
Level of Service (LOS)						A						A				
Approach Delay (s/veh)					0.3				9.4							
Approach LOS					A				A							



# HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst	FTG	Intersection	Thompson's Sta, E / School
Agency/Co.	FTG	Jurisdiction	Thompson's Station Road, E.
Date Performed	Dec 2015	East/West Street	Thompson's Station Road, E.
Analysis Year	2015	North/South Street	School Street
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.90
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	10463 (Total with two accesses)		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			237	6		2	153			2		6				
Percent Heavy Vehicles						0				0		0				
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

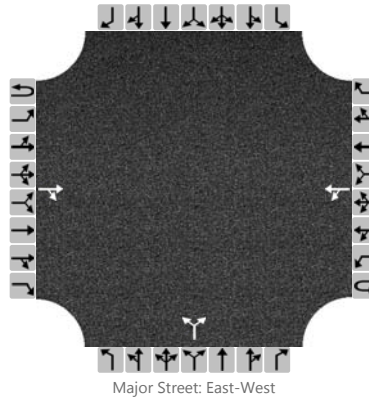
## Delay, Queue Length, and Level of Service

Flow Rate (veh/h)						172						9				
Capacity						1305						722				
v/c Ratio						0.13						0.01				
95% Queue Length						0.0						0.0				
Control Delay (s/veh)						7.8						10.0				
Level of Service (LOS)						A						B				
Approach Delay (s/veh)					0.1				10.0							
Approach LOS					A				B							

# HCS 2010 Two-Way Stop Control Summary Report

General Information				Site Information			
Analyst	FTG			Intersection	Thompson's Sta Rd and Project		
Agency/Co.	FTG			Jurisdiction	Thompson's Station, TN		
Date Performed	Dec 2015			East/West Street	Thompson's Station, E.		
Analysis Year	2015			North/South Street	Project Access		
Time Analyzed	AM Peak Hour			Peak Hour Factor	0.90		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	10463 (Total with two accesses)						

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			110	2		14	86			5		37				
Percent Heavy Vehicles						0				0		0				
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

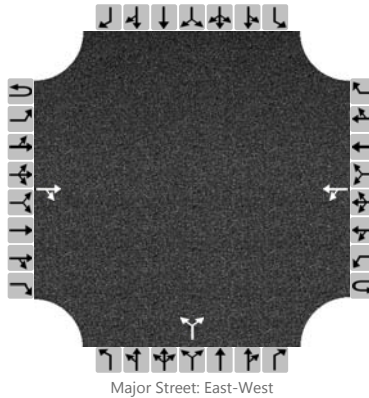
## Delay, Queue Length, and Level of Service

Flow Rate (veh/h)						112						47				
Capacity						1476						902				
v/c Ratio						0.08						0.05				
95% Queue Length						0.0						0.2				
Control Delay (s/veh)						7.5						9.2				
Level of Service (LOS)						A						A				
Approach Delay (s/veh)					1.1				9.2							
Approach LOS					A				A							

# HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst	FTG	Intersection	Thompson's Sta Rd and Project
Agency/Co.	FTG	Jurisdiction	Thompson's Station, TN
Date Performed	Dec 2015	East/West Street	Thompson's Station, E.
Analysis Year	2015	North/South Street	Project Access
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.90
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	10463 (Total with two accesses)		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			216	6		41	114			4		27				
Percent Heavy Vehicles						0				0		0				
Proportion Time Blocked																
Right Turn Channelized	No				No				No				No			
Median Type	Undivided															
Median Storage																

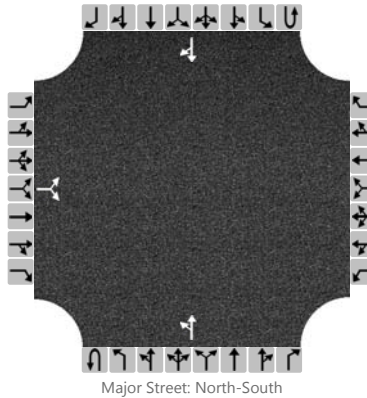
## Delay, Queue Length, and Level of Service

Flow Rate (veh/h)						173						34				
Capacity						1331						758				
v/c Ratio						0.13						0.04				
95% Queue Length						0.1						0.1				
Control Delay (s/veh)						7.8						10.0				
Level of Service (LOS)						A						A				
Approach Delay (s/veh)					2.3				10.0							
Approach LOS					A				A							

# HCS 2010 Two-Way Stop Control Summary Report

General Information				Site Information			
Analyst	FTG			Intersection	School St and Project Access		
Agency/Co.	FTG			Jurisdiction	Thompson's Station, TN		
Date Performed	Dec 2015			East/West Street	Project Access		
Analysis Year	2015			North/South Street	School Street		
Time Analyzed	AM Peak Hour			Peak Hour Factor	0.90		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	10463 (Total with two accesses)						

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Movement																	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		0	0	0		0	0	0	0	0	1	0	0	0	1	0	
Configuration			LR							LT						TR	
Volume (veh/h)		1		63						25	20					14	1
Percent Heavy Vehicles		0		0						0							
Proportion Time Blocked																	
Right Turn Channelized	No				No				No				No				
Median Type	Undivided																
Median Storage																	

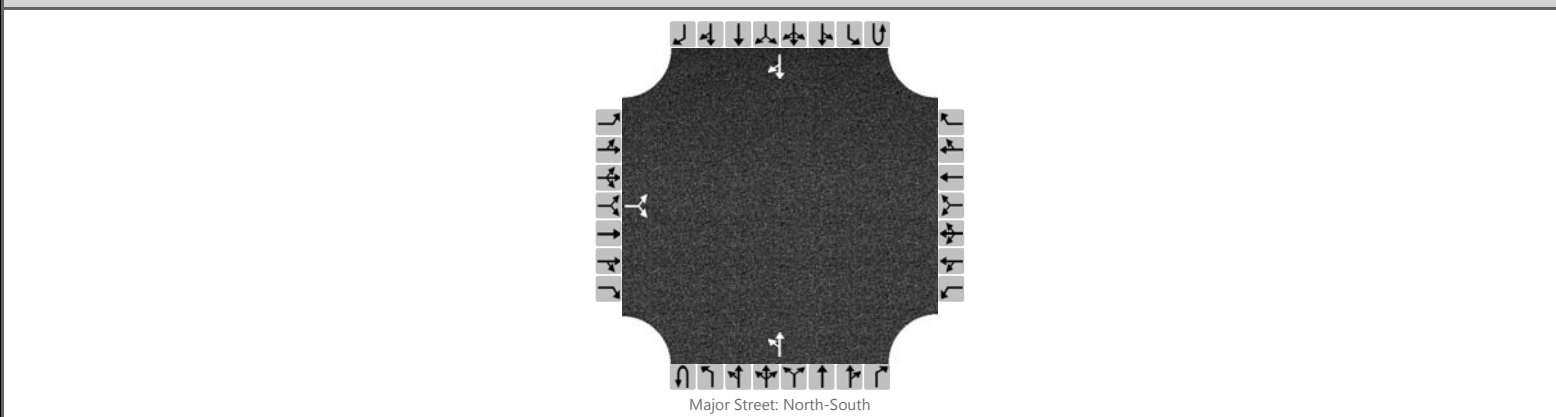
## Delay, Queue Length, and Level of Service

Flow Rate (veh/h)			71							50							
Capacity			1066							1614							
v/c Ratio			0.07							0.03							
95% Queue Length			0.2							0.1							
Control Delay (s/veh)			8.6							7.3							
Level of Service (LOS)			A							A							
Approach Delay (s/veh)	8.6								4.1								
Approach LOS	A								A								

# HCS 2010 Two-Way Stop Control Summary Report

General Information		Site Information	
Analyst	FTG	Intersection	School St and Project Access
Agency/Co.	FTG	Jurisdiction	Thompson's Station, TN
Date Performed	Dec 2015	East/West Street	Project Access
Analysis Year	2015	North/South Street	School Street
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.90
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	10463 (Total with two accesses)		

## Lanes



## Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Movement																	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		0	0	0		0	0	0	0	0	1	0	0	0	1	0	
Configuration			LR							LT						TR	
Volume (veh/h)		1		46						70	8					4	1
Percent Heavy Vehicles		0		0						0							
Proportion Time Blocked																	
Right Turn Channelized	No				No				No				No				
Median Type	Undivided																
Median Storage																	

## Delay, Queue Length, and Level of Service

Flow Rate (veh/h)			52										87				
Capacity			1078										1630				
v/c Ratio			0.05										0.05				
95% Queue Length			0.2										0.2				
Control Delay (s/veh)			8.5										7.3				
Level of Service (LOS)			A										A				
Approach Delay (s/veh)	8.5								6.6								
Approach LOS	A								A								

**APPENDIX B  
TRIP GENERATION**

**TRIP GENERATION CALCULATIONS - Single-family Homes**

The following calculations are based on the data compiled for ITE Land Use Code 210.

**Average Daily Traffic**

$$\ln(T) = 0.92 \ln(X) + 2.72$$

$$\ln(T) = 0.92 \ln(165) + 2.72$$

$$T = 1,664 \text{ vehicles}$$

$$\text{Enter} = 0.50 (1,664) = 832 \text{ vehicles}$$

$$\text{Exit} = 0.50 (1,664) = 832 \text{ vehicles}$$

**AM traffic during peak hour of adjacent street**

$$T = 0.70 (X) + 9.74$$

$$T = 0.70 (165) + 9.74$$

$$T = 125 \text{ vehicles}$$

$$\text{Enter} = 0.25 (125) = 31 \text{ vehicles}$$

$$\text{Exit} = 0.75 (125) = 94 \text{ vehicles}$$

**PM traffic during peak hour of adjacent street**

$$\ln(T) = 0.90 \ln(X) + 0.51$$

$$\ln(T) = 0.90 \ln(165) + 0.51$$

$$T = 165 \text{ vehicles}$$

$$\text{Enter} = 0.63 (165) = 104 \text{ vehicles}$$

$$\text{Exit} = 0.37 (165) = 61 \text{ vehicles}$$



**TRIP GENERATION CALCULATIONS – Specialty Retail**

The following calculations are based on the data compiled for ITE Land Use Code 826.

**Average Daily Traffic**

$$T = 42.78 (X) + 37.66$$

$$T = 42.78 (3.000) + 37.66$$

$$T = 166 \text{ vehicle-trips}$$

$$\text{Enter} = 0.50 (166) = 83 \text{ vehicles}$$

$$\text{Exit} = 0.50 (166) = 83 \text{ vehicles}$$

**A.M. traffic during peak hour of adjacent street**

$$T = 6.84 (X)$$

$$T = 6.84 (3.000)$$

$$T = 21 \text{ vehicle-trips}$$

$$\text{Enter} = 0.48 (21) = 10 \text{ vehicles}$$

$$\text{Exit} = 0.52 (21) = 11 \text{ vehicles}$$

**P.M. traffic during peak hour of adjacent street**

$$T = 2.40 (X) + 21.48$$

$$T = 2.40 (3.000) + 21.48$$

$$T = 29 \text{ vehicle-trips}$$

$$\text{Enter} = 0.44 (29) = 13 \text{ vehicles}$$

$$\text{Exit} = 0.56 (29) = 16 \text{ vehicles}$$

# Whistle Stop Subdivision

## Site Development Plan, Revision 3

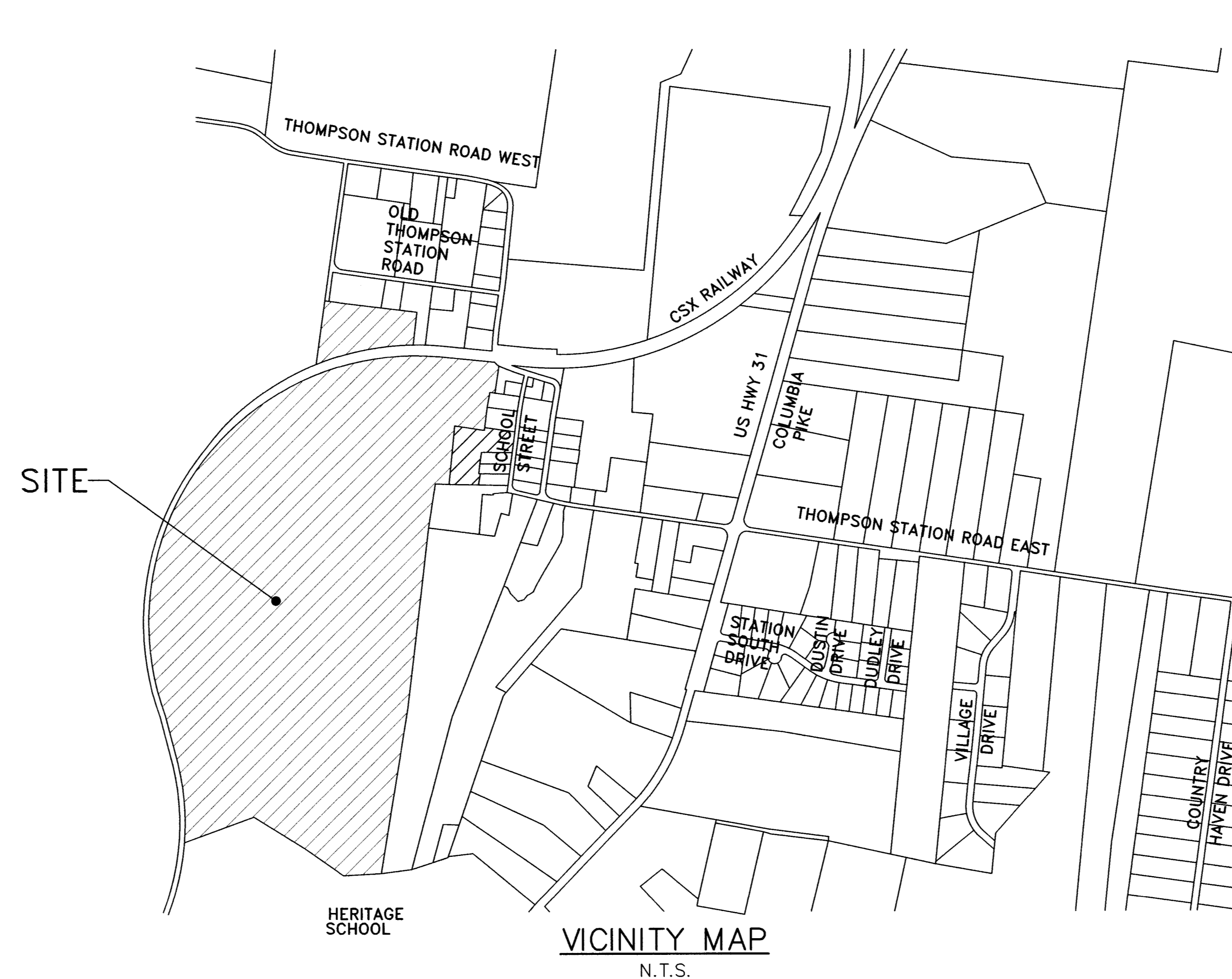
Parcel 40 on Tax Map 146  
Town of Thompson's Station, Williamson County, TN

**OWNER / DEVELOPER**

WHISTLE STOP FARMS, LLC  
144 SOUTHEAST PARKWAY, STE. 230  
FRANKLIN, TN, 37064  
JOHN FRANKS  
615.790.2447  
JOHNFRANKS@LIVE.COM

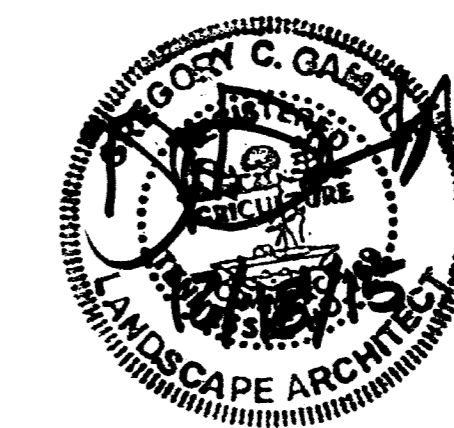
**LANDSCAPE ARCHITECT / PLANNER**

GAMBLE DESIGN COLLABORATIVE, LLC  
144 SOUTHEAST PARKWAY, SUITE 200  
FRANKLIN TN 37064  
CONTACT: GREG GAMBLE, RLA  
EMAIL: greggamble209@gmail.com  
PHONE: (615) 975-5765



### INDEX OF SHEETS

<u>SHEET</u>	<u>DESCRIPTION</u>
	<b>COVER SHEET</b>
<b>C 1.0</b>	<b>EXISTING FEATURES</b>
<b>C 2.0</b>	<b>SITE CONCEPT PLAN</b>
<b>C 3.0</b>	<b>SLOPE ANALYSIS</b>
<b>C 4.0</b>	<b>SOILS ANALYSIS</b>
<b>L 1.0</b>	<b>TREE PROTECTION PLAN</b>
<b>L 2.0</b>	<b>TREE REPLACEMENT PLAN</b>
<b>L 2.1</b>	<b>TREE REPLACEMENT PLAN</b>

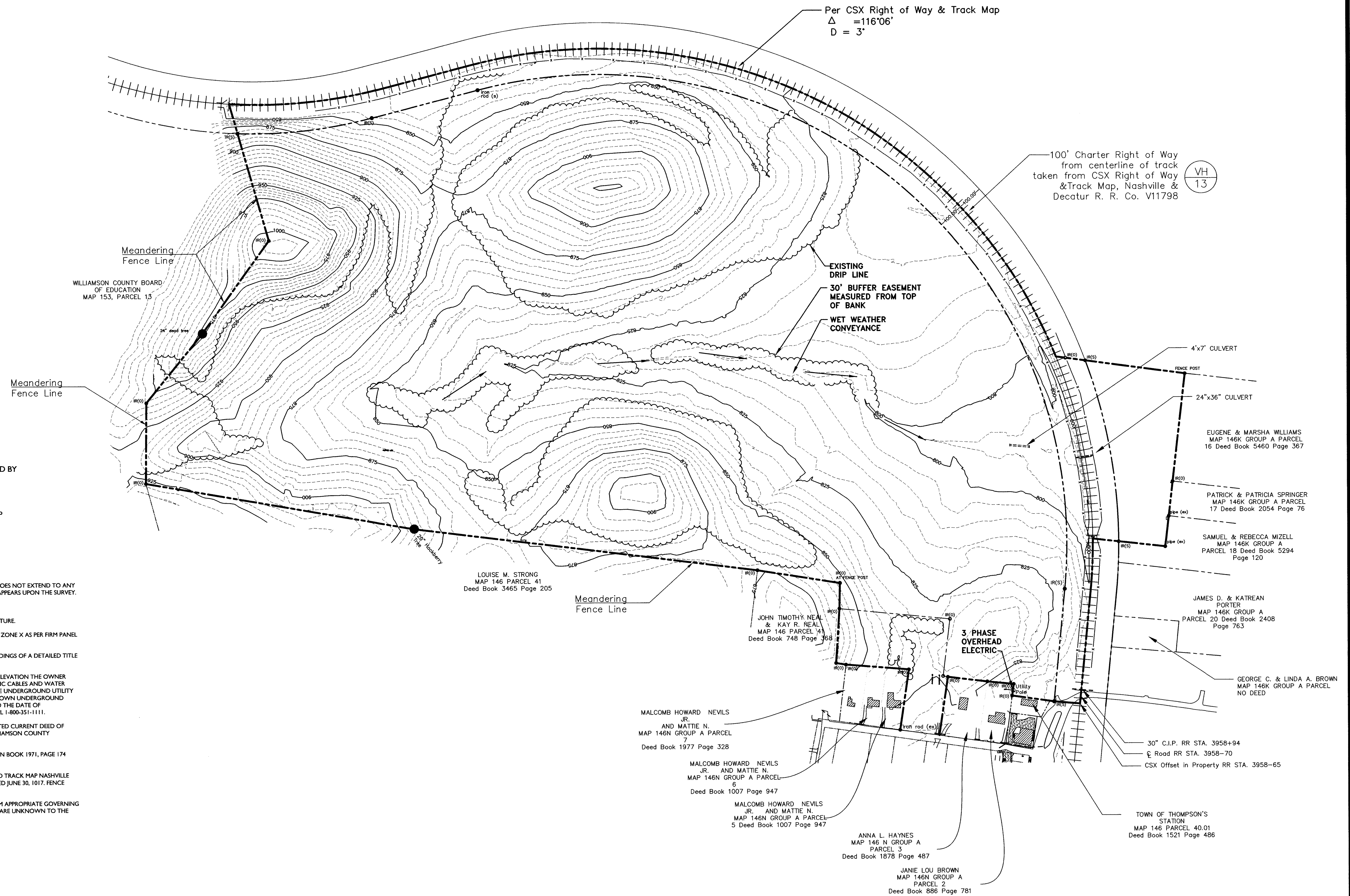


AUGUST 26, 2015  
REVISED OCTOBER 07, 2015  
REVISED DECEMBER 18, 2015

Whistle Stop PUD Subdivision  
Site Concept Plan, Revision 3

Town of Thompson's Station, Williamson County, Tennessee

MALCOLM MOSS GIBBS; JOHN M. GIBBS  
MAP 146 PARCEL 21  
Deed Book 1305 Page 472



- 1. BOUNDARY & TOPOGRAPHIC INFORMATION TAKEN FROM A SURVEY PROVIDED BY THOMAS G. KING 111 DATED 3/4/2015 TITLED WHISTLE STOP, LLC.
- 2. WATER SERVICE TO ALL LOTS PROVIDED BY H.B.&T.S.
- 3. FLOOD INFORMATION TAKEN FROM FLOOD INSURANCE RATE MAP (FIRM) MAP NUMBER 47187C0345C ZONE X DATED 09/29/2006.

SURVEY NOTES:

- 1. SURVEYOR'S LIABILITY FOR THE DOCUMENT SHALL BE LIMITED TO THE ORIGINAL PURCHASER AND DOES NOT EXTEND TO ANY UNNAMED PERSON OR ENTITIES WITHOUT AN EXPRESSED RE-CERTIFICATION BY WHOSE SIGNATURE APPEARS UPON THE SURVEY.
- 2. PARCEL NUMBERS SHOWN THUS (00) REFER TO WILLIAMSON COUNTY TAX MAP 146 PARCEL 40.
- 3. ALL DISTANCES WERE MEASURED WITH E.D.M. EQUIPMENT AND HAVE BEEN ADJUSTED FOR TEMPERATURE.
- 4. THE PROPERTY DOES NOT LIE WITHIN THE 100 YEAR FLOOD PLANE AND ARE DETERMINED TO BE IN ZONE X AS PER FIRM PANEL NUMBER 47187C0345F, DATED 09-29-06.
- 5. THIS SURVEYOR WAS NOT PROVIDED WITH A TITLE COMMITMENT, THEREFORE SUBJECT TO THE FINDINGS OF A DETAILED TITLE SEARCH.
- 6. PRIOR TO ANY CONSTRUCTION, EXCAVATION OR ANY DISTURBANCE OF THE EXISTING GROUND ELEVATION THE OWNER AND/OR CONTRACTOR SHOULD ASSUME RESPONSIBILITY OF CONTACTING THE LOCAL ELECTRIC CABLES AND WATER LINES ETC. TO AVOID ANY HAZARD OR CONFLICT. IN TENNESSEE IT IS A REQUIREMENT PER THE UNDERGROUND UTILITY DAMAGE PREVENT ACT, THAT ANYONE WHO ENGAGES IN EXCAVATION MUST NOTIFY ALL KNOWN UNDERGROUND UTILITY OWNERS, NO LESS THAN THREE (3) NO MORE THAN TEN (10) WORKING DAYS PRIOR TO THE DATE OF EXCAVATION AND ALSO TO AVOID ANY POSSIBLE HAZARD OR CONFLICT. TENNESSEE ONE CALL 1-800-351-1111.
- 7. PROPERTY DATA TAKEN FROM DEED OF RECORD AND DEEDS FROM ADJOINING PROPERTIES AS NOTED CURRENT DEED OF RECORD FOR PARCEL 40 BEING RECORDED IN DEED BOOK 5775 PAGE 532 REGISTER OFFICE WILLIAMSON COUNTY TENNESSEE. OWNER: WHISTLE STOP, LLC.
- 8. EASEMENT GRANTED TO MIDDLE TENNESSEE ELECTRIC MEMBERSHIP CORPORATION OF RECORDED IN BOOK 1971, PAGE 174 R.O.W.C.T.
- 9. CSX INFORMATION TAKEN FOR MAPS PROVIDED BY CSX RAILROAD COMPANY, "RIGHT OF WAY AND TRACK MAP NASHVILLE AND DECATUR R.R. CO." OPERATED BY LOUISVILLE AND NASHVILLE R.R. CO SHEETS V11799 DATED JUNE 30, 1017. FENCE OWNED BY R.R. COMPANY.
- 10. UTILITIES SHOWN WERE TAKEN FROM FIELD LOCATIONS THAT WERE APPARENT AND COPIED FROM APPROPRIATE GOVERNING AGENCIES MAPS ARE APPROXIMATE AT BEST, THERE MAY BE UTILITIES, THE EXISTENCE OF WHICH ARE UNKNOWN TO THE SURVEYOR.

date

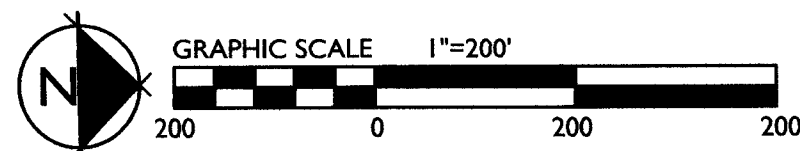
10/07/15

GCG Job No. 14006  
AUGUST 19, 2015

SHEET

C1.0

EXISTING FEATURES









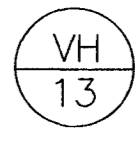
**Whistle Stop PUD Subdivision  
 Site Concept Plan, Revision 3**

Town of Thompson's Station, Williamson County, Tennessee

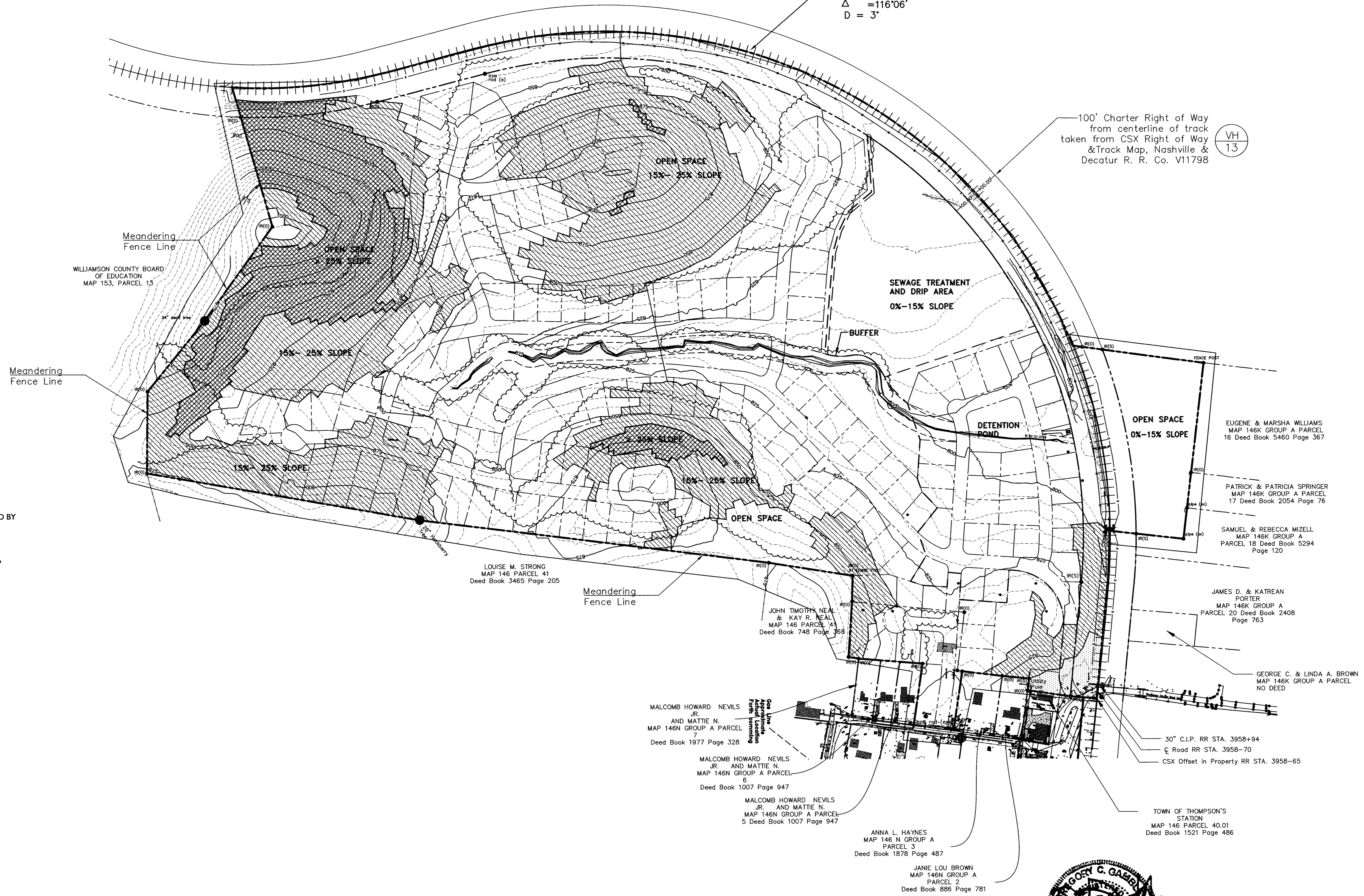
MALCOLM MOSS GIBBS, JOHN M. GIBBS  
 MAP 146 PARCEL 21  
 Deed Book 1305 Page 472

Per CSX Right of Way & Track Map  
 $\Delta = 116'06"$   
 $D = 3'$

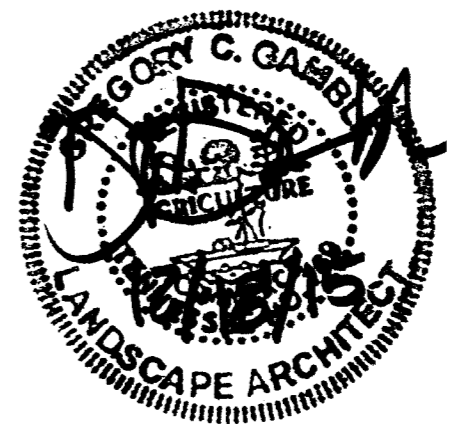
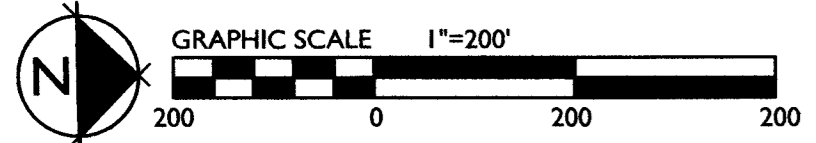
100' Charter Right of Way  
 from centerline of track  
 taken from CSX Right of Way  
 & Track Map, Nashville &  
 Decatur R. R. Co. V11798



	0 - 15% SLOPE	SQ. FT. 4,269,341	AC 98
	15 - 25% SLOPE	1,535,531	35.2
	>25% SLOPE	492,906	11.3
	<b>TOTAL</b>	<b>6,297,778</b>	<b>144.5</b>



- BOUNDARY & TOPOGRAPHIC INFORMATION TAKEN FROM A SURVEY PROVIDED BY THOMAS G. KING 111 DATED 3/4/2015 TITLED WHISTLE STOP, LLC.
- WATER SERVICE TO ALL LOTS PROVIDED BY H.B.&S.
- FLOOD INFORMATION TAKEN FROM FLOOD INSURANCE RATE MAP (FIRM) MAP NUMBER 47187C0345C ZONE X DATED 09/29/2006.



**SLOPE ANALYSIS**

date  
 10/07/15

GCG Job No. 14006  
 AUGUST 19, 2015

SHEET  
 C3.0



**Whistle Stop PUD Subdivision**  
**Site Concept Plan, Revision 3**  
 Town of Thompson's Station, Williamson County, Tennessee

date  
10/07/15  
 GCG Job No. 14006  
 AUGUST 19, 2015

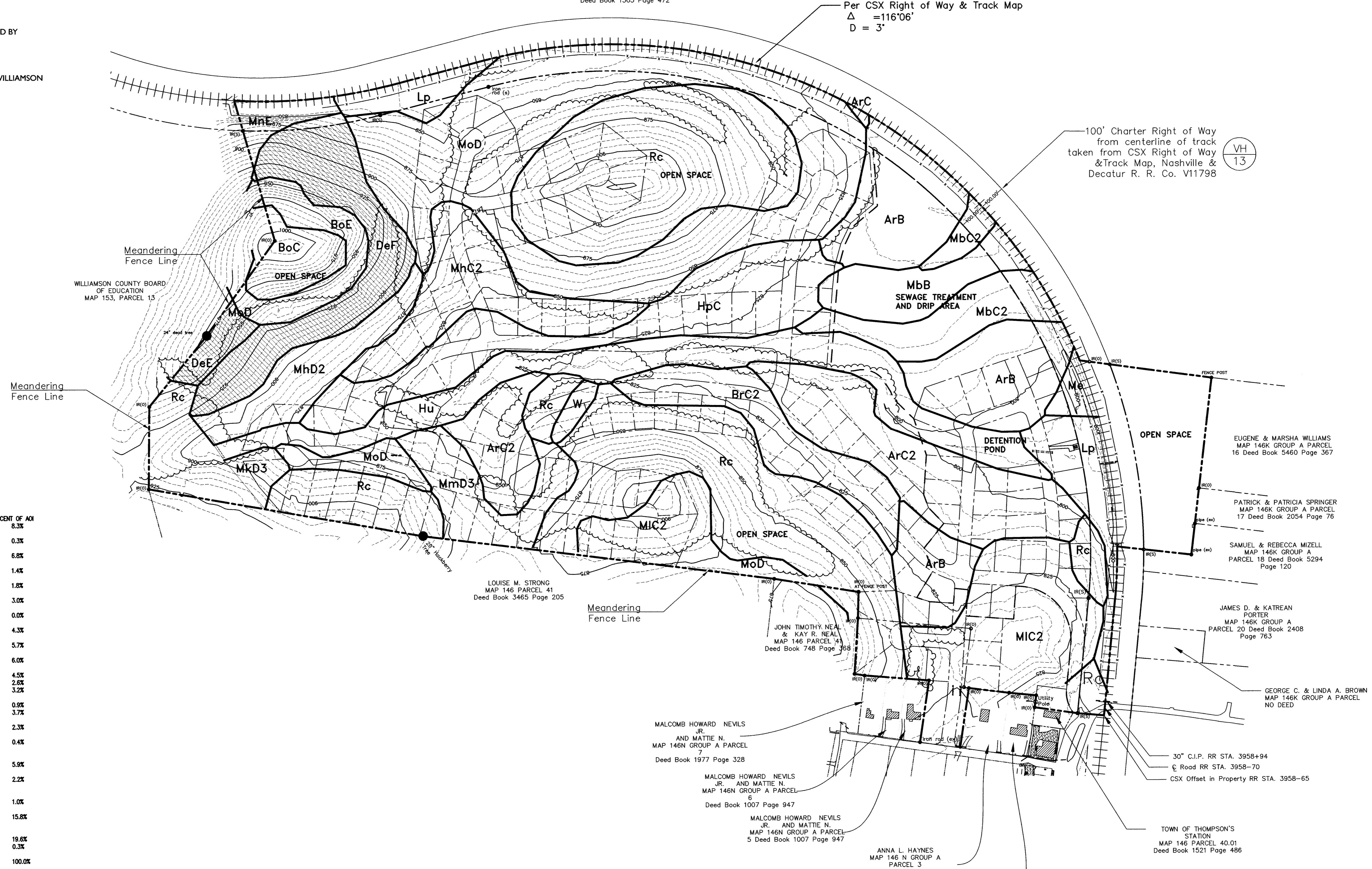
SHEET  
**C4.0**

- BOUNDARY & TOPOGRAPHIC INFORMATION TAKEN FROM A SURVEY PROVIDED BY THOMAS G. KING I II DATED 3/4/2015 TITLED WHISTLE STOP, LLC.
- WATER SERVICE TO ALL LOTS PROVIDED BY H.B.&T.S.
- SOILS INFORMATION TAKEN FROM NRCS CUSTOM SOILS RESOURCE REPORT WILLIAMSON COUNTY, TENNESSEE DATED AUGUST 24, 2015.


MALCOLM MOSS GIBBS, JOHN M. GIBBS  
 MAP 146 PARCEL 21  
 Deed Book 1305 Page 472

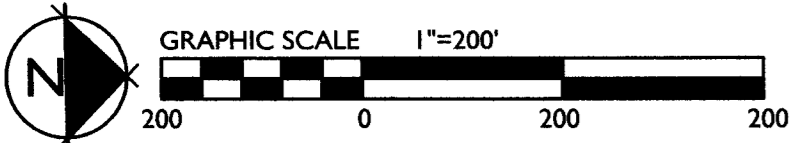
Per CSX Right of Way & Track Map  
 $\Delta = 116'06"$   
 $D = 3'$

100' Charter Right of Way  
 from centerline of track  
 taken from CSX Right of Way  
 & Track Map, Nashville &  
 Decatur R. R. Co. V11798



WILLIAMSON COUNTY, TENNESSEE (TN187)			
MAP UNIT SYMBOL	MAP UNIT NAME	ACRES IN AOI	PERCENT OF AOI
ArB	Armour silt loam, 2 to 5 percent slopes	11.3	8.3%
ArC	Armour silt loam, 5 to 12 percent slopes	0.3	0.3%
ArC2	Armour silt loam, 5 to 12 percent slopes, eroded	9.3	6.8%
BoC	Bodine cherty silt loam, 5 to 12 percent slopes	1.9	1.4%
BoE	Bodine cherty silt loam, 20 to 45 percent slopes	2.4	1.8%
BcC2	Broxton cherty silt loam, 5 to 12 percent slopes	4.2	3.0%
DeE	Deltrose gravelly silt loam, 20 to 30 percent slopes, eroded	0.0	0.0%
DeF	Deltrose gravelly silt loam, 20 to 45 percent slopes, eroded	5.9	4.3%
HpC	Humphreys gravelly silt loam, 5 to 12 percent slopes	7.8	5.7%
Hu	Huntington silt loam, phosphatic	8.2	6.0%
Lp	Lindell silt loam, 0 to 2 percent slopes, occasionally flooded	6.2	4.5%
MbB	Maury silt loam, 2 to 5 percent slopes	3.6	2.6%
MbC2	Maury silt loam, 5 to 12 percent slopes, eroded	4.4	3.2%
Me	Mehin silt loam, phosphatic	1.2	0.9%
MhC2	Mimosa cherty silt loam, 5 to 12 percent slopes, eroded	5.1	3.7%
MhD2	Mimosa cherty silt loam, 12 to 20 percent slopes, eroded	3.1	2.3%
MhD3	Mimosa cherty silty clay, 10 to 20 percent slopes, severely eroded	0.6	0.4%
MIC2	Mimosa silt loam, 5 to 12 percent slopes, eroded	8.1	5.9%
MmD3	Mimosa silty clay, 10 to 20 percent slopes, severely eroded	3.1	2.2%
MnE	Mimosa-Rock outcrop complex, eroded	1.4	1.0%
MoD	Mimosa and Ashwood very rocky soils, 5 to 20 percent slopes	21.6	15.8%
Rc	Rockland	26.8	19.6%
W	Water	0.4	0.3%
Totals for Area of Interest		136.9	100.0%

 SLIPPAGE SOILS SHALL BE THOSE WHERE THE PARENT MATERIAL IS COLLUVIUM.



**SOIL ANALYSIS**



**Whistle Stop PUD Subdivision  
 Site Concept Plan, Revision 3**

Town of Thompson's Station, Williamson County, Tennessee



**TREE INVENTORY - 24" DBH & GREATER**


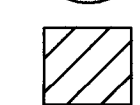
NUMBER	TYPE	SIZE-DBH	HEALTH	STATUS
203	HICKORY	31	FAIR	REMOVED
204	BODOCK	28	FAIR	REMOVED
205	BODOCK	29	FAIR	REMOVED
209	CEDAR	29	FAIR	REMOVED
212	BODOCK	34	FAIR	REMOVED
213	BODOCK	29	FAIR	REMOVED
214	BODOCK	28	FAIR	REMOVED
216	HICKORY	28	FAIR	REMOVED
218	BODOCK	25	FAIR	REMOVED
244	HICKORY	24	FAIR	REMOVED
245	HICKORY	24	FAIR	REMOVED
259	HICKORY	40	FAIR	REMOVED
280	POPLAR	27	FAIR	REMOVED
291	HICKORY	26	FAIR	REMOVED
296	OAK	26	FAIR	REMOVED
307	BODOCK	24	FAIR	REMOVED
309	OAK	36	FAIR	REMOVED
310	MAPLE	24	FAIR	REMOVED
311	HICKORY	30	FAIR	REMOVED
312	BODOCK	24, TWIN	FAIR	REMOVED
314	PECAN	24	FAIR	REMOVED
318	OAK	36	FAIR	REMOVED
328	PINE	24	FAIR	REMOVED
330	HACKBERRY	39	FAIR	REMOVED
333	HACKBERRY	35	FAIR	REMOVED
337	HACKBERRY	36	FAIR	RETAINED
342	HACKBERRY	29	FAIR	REMOVED
343	MAPLE	26	FAIR	REMOVED
353	HACKBERRY	33	FAIR	REMOVED
354	HACKBERRY	38	FAIR	REMOVED

TOTAL INCHES REMOVED: 851  
 REPLACEMENT REQUIRED: 1,277 INCHES  
 REPLACEMENT RATIO 1.5:1  
 PER LAND DEVELOPMENT ORDINANCE ADOPTED 9/29/2015

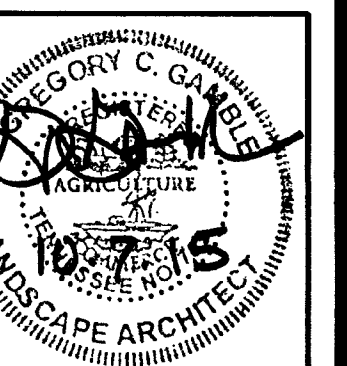
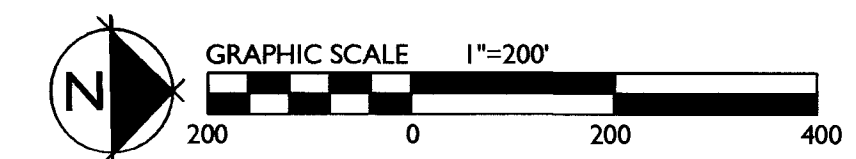
**NOTES**

1. ALL TREES THAT WILL REMAIN ON SITE SHALL HAVE PROTECTIVE FENCING INSTALLED BE INSTALLED AROUND THE DRIPLINE OF THE TREE TO PROTECT THE ROOT SYSTEM FOR THE TREE.
2. IF EARTHWORK IS NECESSARY WITHIN THE DRIPLINE OF THE PROTECTED TREE, HAND DIGGING SHALL BE REQUIRED.
3. NO EQUIPMENT, SUPPLIES OR ANY OTHER MATERIAL SHALL BE STORED WITHIN THE DRIPLINE OF ANY PROTECTED TREE.
4. NO DIRT OR OTHER FILL MATERIAL SHALL BE STOCKPILED WITHIN THE DRIPLINE.
5. NO SIGNAGE SHALL BE PERMITTED ON ANY PROTECTED TREE.

**KEY:**

-  TREE 24" DBH OR GREATER
-  TREE REMOVAL AREA

TREE SURVEY PROVIDED BY:  
 THOMAS G. KING III,  
 RLS #1720



date  
 10.7.2015

GCG Job No. 14006  
 SEPTEMBER 30, 2015

SHEET

L1.0




**TREE PROTECTION PLAN**

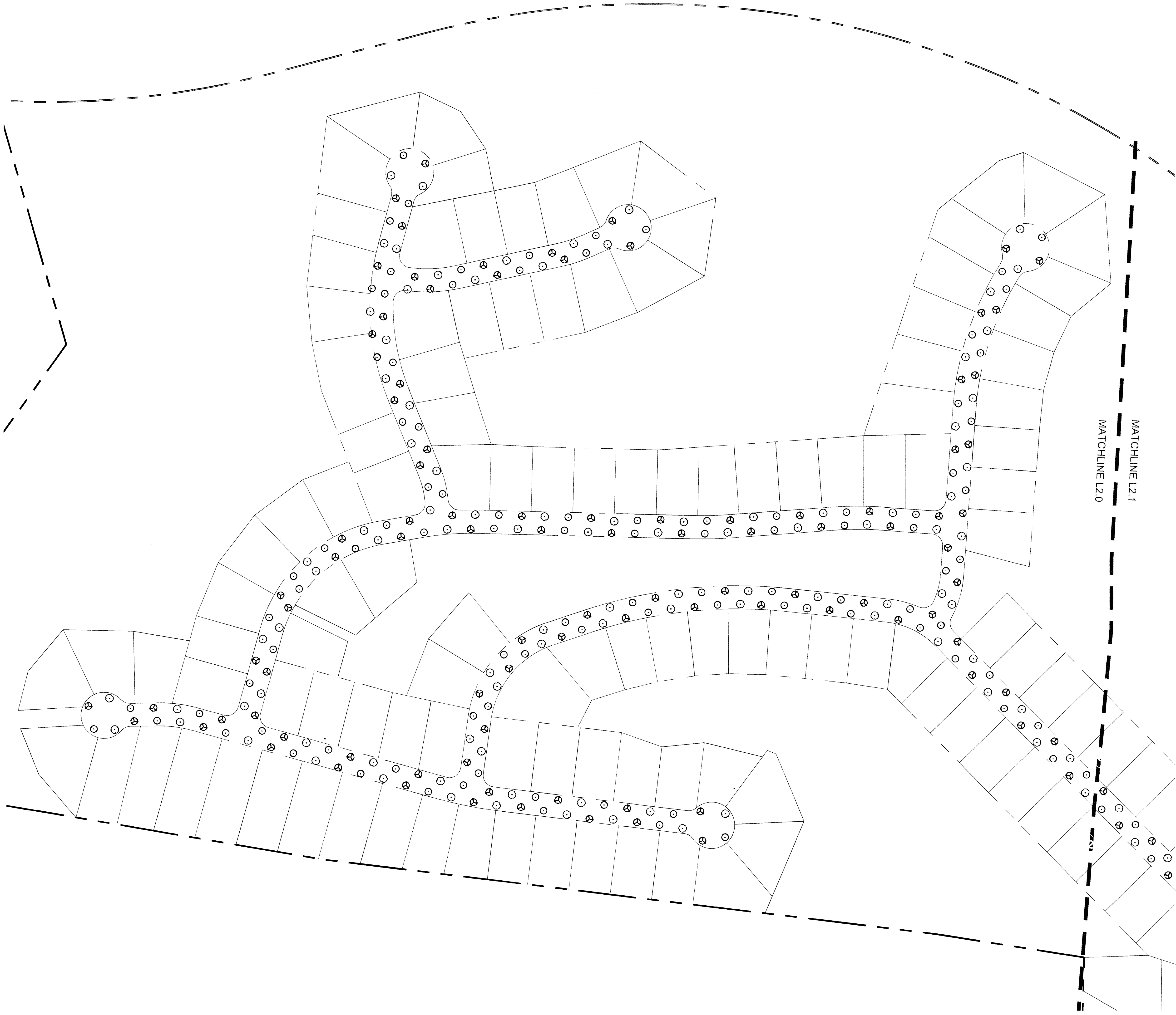
TREE REPLACEMENT	
TOTAL CALIPER INCHES OF TREES REMOVED:	851
TOTAL INCHES OF TREE REPLACEMENT REQUIRED:	1,277
STREET TREES PROVIDED IN INCHES:	1,332

**STREET TREE NOTES**

TOTAL TREES PROVIDED: 444 TOTAL INCHES PROVIDED: 1,332

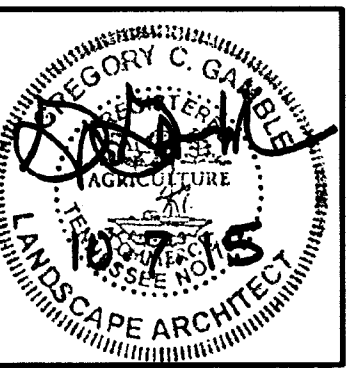
1. STREET TREES INSTALLED AT 3" CALIPER.
2. STREET TREES TO HAVE A STRONG CENTRAL LEADER.
3. STREET TREES SHALL BE CENTERED IN THE 6' TREE STRIP PROVIDED BETWEEN SIDEWALK AND CURB AND GLITTER.
4. TREES SHALL BE PLANTED A MINIMUM OF 2' FROM EDGE OF SIDEWALK AND BACK OF CURB.
5. STREET TREES SHALL BE PLANTED 5' FROM STREET LIGHTS AND UTILITIES.
6. SPECIES SHALL BE ROTATED SO THAT NO TWO ALIKE TREES ARE PLANTED SIDE BY SIDE.

-  NUTTALL OAK  
LONDON PLANETREE
-  RED MAPLE  
TULIP POPLAR
-  LACEBARK ELM  
JAPANESE ZELKOVA



**TREE REPLACEMENT PLAN**

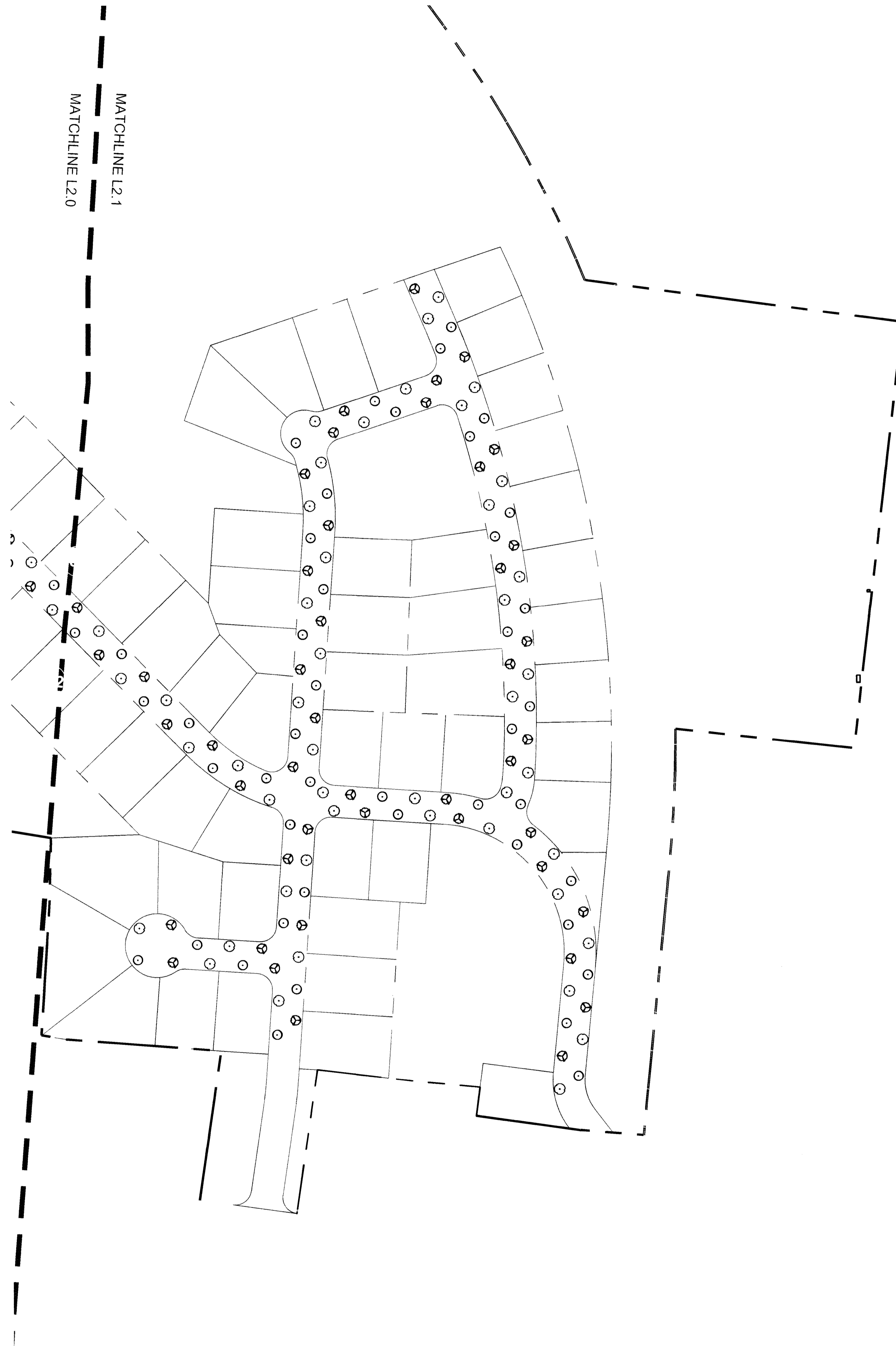
**Whistle Stop PUD Subdivision**  
**Site Concept Plan, Revision 3**  
 Town of Thompson's Station, Williamson County, Tennessee



date  
 10.7.2015

GCG Job No. 14006  
 SEPTEMBER 30, 2015

SHEET  
**L2.0**






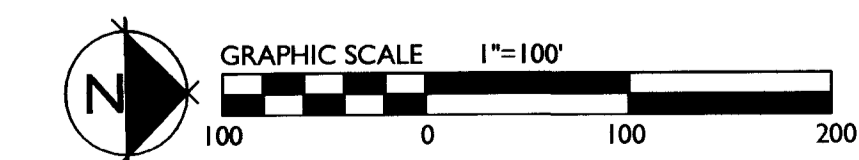
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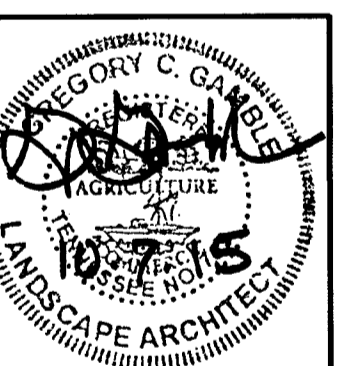
-  NUTTALL OAK  
LONDON PLANETREE
-  RED MAPLE  
TULIP POPLAR
-  LACEBARK ELM  
JAPANESE ZELKOVA



**GDC**  
**GAMBLE**  
 DESIGN COLLABORATIVE  
 DEVELOPMENT PLANNING AND  
 LANDSCAPE ARCHITECTURE  
 144 SOUTHEAST PARKWAY  
 SUITE 200  
 FRANKLIN, TENNESSEE 37064  
 GREG GAMBLE  
 greggamble209@gmail.com  
 615.975.5765

**Whistle Stop PUD Subdivision**  
**Site Concept Plan, Revision 3**

Town of Thompson's Station, Williamson County, Tennessee



date

10.7.2015

GCG Job No. 14006  
 SEPTEMBER 30, 2015

S H E E T

L2.1

**TREE REPLACEMENT PLAN**



**Thompson's Station Planning Commission**  
**Staff Report – Item 1 (SDP 2015-005)**  
**January 26, 2016**

**Revision to a planned zone district to develop 163 single family lots and one commercial lot within the Whistle Stop community.**

**PROJECT DESCRIPTION**

A request to revise the site development plan (concept plan) within a planned zone for Whistle Stop to develop a total of 163 residential lots and one commercial lot (Lot 164) within the Whistle Stop community.

**BACKGROUND**

In 2009, the Whistle Stop project site was rezoned to Planned Neighborhood and was approved for the development of master planned community consisting of 392 assisted care, memory care, skilled nursing and independent living units with commercial uses such as a bed and breakfast, medical clinic and farmers market.

In June 2013, the Planning Commission approved a revision of the plan for the development of 343 units consisting of 193 single family lots, 85 villa lots (duplex units) along with 85 independent living units and one commercial lot. In addition, a preliminary plat was approved for Phase 1 consisting of 46 residential lots. However, sewer approval was never obtained for the phase and the plat expired.

On October 13, 2015, the Board of Mayor and Aldermen authorized a request for the developer to pursue approval of an SBR system to manage wastewater.

On October 27, 2015, the Planning Commission reviewed the project and provided comments to the developer regarding the project however no formal motion was made for approval to the Board of Mayor and Aldermen. Modifications to planned zones are subject to approval from the Board of Mayor and Aldermen. Therefore, the project is an amendment to the planned zone and before the Commission for a recommendation to the Board.

***Zoning***

The original project site was zoned Planned Neighborhood which permitted developments with a density of two (2) units per acre, up to 20% commercial uses and 50% as permanent open space.

Therefore, single-family development and a commercial site were allowable land uses within the zoning district. Approximately 128.5 acres of the project site is located within the planned zone permitting a maximum density of 257 units. However, given the need to manage wastewater onsite, the overall layout and density of the site is changed.

Access to the site is Thompson's Station Road; however, in order to provide another access, additional acreage was purchased on School Street increasing the overall site area to approximately 131.5 acres. The additional acreage along School Street is zoned T4. The overall site density (including the T4 zone) is 1.2 units per acre.

*Planned Neighborhood standards*

Within the Planned Neighborhood zone, setbacks are minimum of 10 feet for the front yard, 7.5 feet for the side yards and 30 feet for the rear yards, which are requested as part of the project for the lots within the planned zone.

*General residential standards (applicable to the Planned Neighborhood zone)*

In addition, the project is subject to the developments standards as identified in Section 4.10 of the Land Development Code. Maximum lot coverage of 40% is permitted. The garages must meet minimum interior dimensions of 22 by 22 feet and must be recessed from the front façade. Two amenities are required for the project due to the number of residential units, which include an amenity center within Open Space Lot F and a nature trail through the site. Staff recommends that the trail be connected to the sidewalks throughout the neighborhood and have a connection to the town center.

*T4 standards*

The portion of the site located within the T4 zone is subject to the bulk standards within Table 4.5. The concept plan has identified this area and noted compliance with the requirements as submitted.

**RECOMMENDATION**

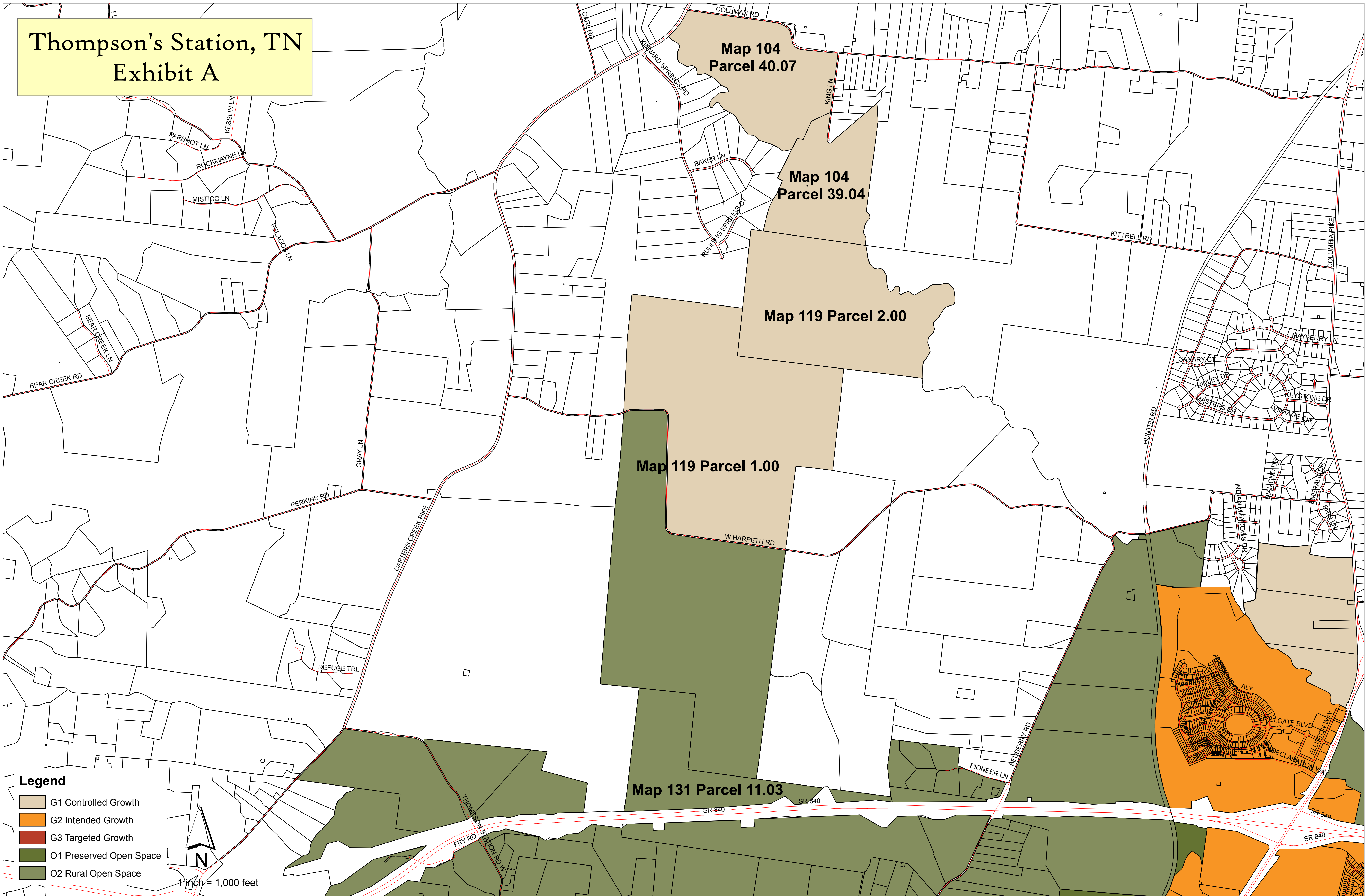
Staff recommends that the Planning Commission recommend to the Board of Mayor and Aldermen approval of the modified plan.

**ATTACHMENTS**

Revised Site Development Plan (concept plan)



# Thompson's Station, TN Exhibit A



**Legend**

- G1 Controlled Growth
- G2 Intended Growth
- G3 Targeted Growth
- O1 Preserved Open Space
- O2 Rural Open Space

1 inch = 1,000 feet



**Thompson's Station Planning Commission**  
**Staff Report – Item 2**  
**January 26, 2016**  
**Update to the Growth Sector Map within the General Plan**

**PROJECT DESCRIPTION**

An update to include recently annexed land within sector map of the General Plan.

**BACKGROUND**

On October 27, 2015, the Planning Commission recommended to the Board of Mayor and Aldermen annexation of 1,961 acres of land, north of State Route 840, east of Carters Creek Pike, south of Coleman Road and west of the CSX railroad into the Town boundaries. As part of the annexation request the Planning Commission also recommended the Transect Community zoning for the land north of West Harpeth Road and T2 zoning for the land south of West Harpeth Road. This land also needs to be included and designated in the Town's growth sector map.

On November 10, 2015, the Board of Mayor and Aldermen passed a resolution to annex an additional 1,961 acres of land, north of State Route 840, east of Carters Creek Pike, south of Coleman Road and west of the CSX railroad into the Town boundaries.

On January 13, 2016, an ordinance zoning the properties as proposed was adopted.

**ANALYSIS**

The land located north of West Harpeth to Coleman Road has frontage along a state route, Carters Creek Pike and has the potential for additional growth in keeping with the characteristics of the hamlet community type, therefore, it would be appropriate to designate this area as the G1 Controlled Growth sector. The land south of West Harpeth Road is adjacent to existing O2 and it would be appropriate to designate this land as the O2 sector.

**RECOMMENDATION**

Staff recommends that the Planning Commission adopt the updated growth sector map of the General Plan as proposed.

**ATTACHMENTS**

Exhibit A –Proposed Growth Sector

**Thompson's Station Planning Commission  
Staff Report – Item 3  
January 26, 2016**

**LETTER OF CREDIT REQUEST FOR REDUCTION**

**Fields of Canterbury, Section 7B (File: 1-D-14-003)– \$188,000 for Roads, Drainage and Erosion Control and \$44,000 for Sewer.**

A request for a bond reduction was submitted on December 3, 2015 for Section 7B within The Fields of Canterbury. Section 7B was renewed in February 2015 in the amount of \$188,000 for roads, drainage and erosion control and \$44,000 for sewer. The Town Engineer has completed a site visit and observed that the road is complete to binder course and has eight out of the 21 lots under construction. This section includes Tapestry Court and a portion of English Garden in the rear of the development. Therefore, pass through construction traffic is not anticipated. Attention to dirt of roadways and erosion control is necessary to be addressed by the developer. Staff recommends the roads, drainage and erosion control bond be reduced to \$54,000.

Sewer is installed and operational, however, given that damage may occur from construction traffic, service line hook ups, or pavement remediation, Staff recommends the sewer bond be maintained in its current amount of \$44,000.

**Recommendation:**

Based on the progress within Section 7B, Staff recommends that the Planning Commission reduce the letter of credit from \$188,000 to \$54,000 for roads, drainage and erosion control and maintain the letter of credit in its current amount of \$44,000 for sewer for a year with the option for automatic renewal.

**Thompson's Station Planning Commission  
Staff Report - Item 4  
January 27, 2016**

**LETTER OF CREDIT REQUEST FOR REDUCTION**

**Fields of Canterbury, Section 4C (File: 1-D-14-002)– \$170,000 for Roads, Drainage and Erosion Control and \$44,000 for Sewer.**

A request for bond reduction was submitted on December 3, 2015. The Fields of Canterbury Section 4C was renewed February 2015. The Town Engineer has completed a site visit and observed that this section is built out and the road is complete to binder course with no damage. Therefore, Staff recommends the roads, drainage and erosion Control bond be reduced to \$58,000.

Sewer is installed and functioning therefore, Staff recommends the Sewer bond be reduced to \$22,000. Please note, this bond cannot be reduced below this amount for the performance/maintenance period.

**Recommendation:**

Staff recommends that the Planning Commission reduce the letter of credit to \$58,000 for roads, drainage and erosion control and \$22,000 for sewer for a year with the option for automatic renewal.



**Thompson's Station Planning Commission  
Staff Report – Item 5  
January 27, 2016**

**LETTER OF CREDIT REQUEST FOR REDUCTION**

**Allenwood, Off-site Improvements – \$32,000 AND Allenwood (File: FP2015-005) – \$170,000 for Roads, Drainage and Erosion Control and \$186,000 for Sewer.**

On April 28, 2015, a bond was established in the amount of \$32,000 for off-site infrastructure improvements necessary for the connection of sewer for Allenwood to the Town's system.

A request for a reduction was submitted on December 14, 2015. The Town Engineer has reviewed the off-site work and determined that the work is complete, and therefore, recommends the off-site bond be reduced to \$12,000.

On June 23, 2015, a bond for the final plat for Allenwood was established in the amount of \$170,000 for roads, drainage and erosion control and \$186,000 for sewer. A request for a reduction was submitted on December 14, 2015. The Town Engineer has completed a site visit and observed the development is underway with five out of the 13 lots under construction. The road is complete to binder course and the detention and drainage systems are in place. All erosion control is in place and functioning with the exception of the curb inlets which shall be addressed. Given the progress of the site, staff recommends that the bond be reduced to \$98,000.

Sewer is installed and is operational and the pump station is installed. Therefore, given the progress staff recommends the sewer bond be reduced to \$140,000.

**Recommendation:**

Staff recommends that the Planning Commission reduce the off-site letter of credit from \$32,000 to \$12,000 for a year with the option for automatic renewal.

Staff recommends that the Planning Commission reduce the letter of credit from \$170,000 to \$98,000 for roads, drainage and erosion control and reduce the letter of credit from \$186,000 to \$140,000 for sewer for a year with the option for automatic renewal.

**GENERAL NOTES**

- THE PURPOSE OF THIS PLAT IS TO CREATE 18 SINGLE-FAMILY LOTS AND TO DEDICATE EASEMENTS.
- BEARINGS SHOWN HEREON ARE BASED ON THE TENNESSEE COORDINATE SYSTEM OF 1983. GPS EQUIPMENT WAS USED TO DETERMINE THE POSITION OF CONTROL POINTS ON THE SURVEYED PROPERTY TO ESTABLISH THE BEARING BASE FOR THE SURVEY. TYPE OF EQUIPMENT USED: LEICA, MODEL GX1230, DUAL FREQUENCY RECEIVER. THE TYPE OF GPS SURVEY: NETWORK ADJUSTED REAL TIME KINEMATIC.
- THE PROPERTY IS ZONED D1 (LOW INTENSITY RESIDENTIAL).  
MINIMUM BUILDING SETBACKS PER TOWN OF THOMPSON'S STATION LAND DEVELOPMENT ORDINANCE DATED SEPTEMBER 29, 2015:  
FRONT - 25'  
\*SIDE - 5'/15' OR 10' (20' AGGREGATE)  
REAR - 30'
- WITHIN ALL NEW DEVELOPMENTS AND FOR OFF-SITE LINES CONSTRUCTED AS A RESULT OF, OR TO PROVIDE SERVICE TO THE NEW DEVELOPMENT, ALL UTILITIES, SUCH AS CABLE TELEVISION, ELECTRICAL, GAS, SEWER, TELEPHONE, AND WATERLINES SHALL BE PLACED UNDERGROUND.
- BY SCALED MAP LOCATION AND GRAPHIC PLOTTING ONLY, THE PROPERTY LIES WITHIN FLOOD ZONE "X", AS DESIGNATED ON CURRENT FEDERAL EMERGENCY MANAGEMENT AGENCY MAP NO. 47187C0345F AND 47187C0365F, WITH AN EFFECTIVE DATE OF SEPTEMBER 29, 2006, WHICH MAKES UP A PART OF THE NATIONAL FLOOD INSURANCE ADMINISTRATION REPORT; COMMUNITY NO. 470424, PANEL NOS. 0345 AND 0365, 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."
- 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.
- ALL PUBLIC STREETS AND DRAINAGE STRUCTURES WITHIN THE RIGHTS-OF-WAY WILL BE MAINTAINED BY THE TOWN OF THOMPSON'S STATION.
- OPEN SPACE AREAS, PUBLIC UTILITY AND DRAINAGE EASEMENTS (INCLUDING DRAINAGE AND DETENTION STRUCTURES), ALLEYS AND ALL LANDSCAPING WITHIN ROADWAY MEDIANS WILL BE MAINTAINED BY THE HOMEOWNERS' ASSOCIATION.
- ELEVATIONS SHOWN HEREON ARE BASED ON NAVD 88. CONTOURS ARE AT ONE FOOT INTERVALS AND ARE BASED ON A FIELD RUN SURVEY USING RANDOM SPOT ELEVATIONS. CONTOURS WERE DERIVED USING SURFACE MODELING TECHNIQUES.
- DOMESTIC WATER SUPPLY INFORMATION SHOWN HEREON IS PRELIMINARY AND TO BE DESIGNED BY OTHERS. FINAL DESIGN WILL BE INCLUDED ON THE FINAL PLAT.

**DEED REFERENCE**

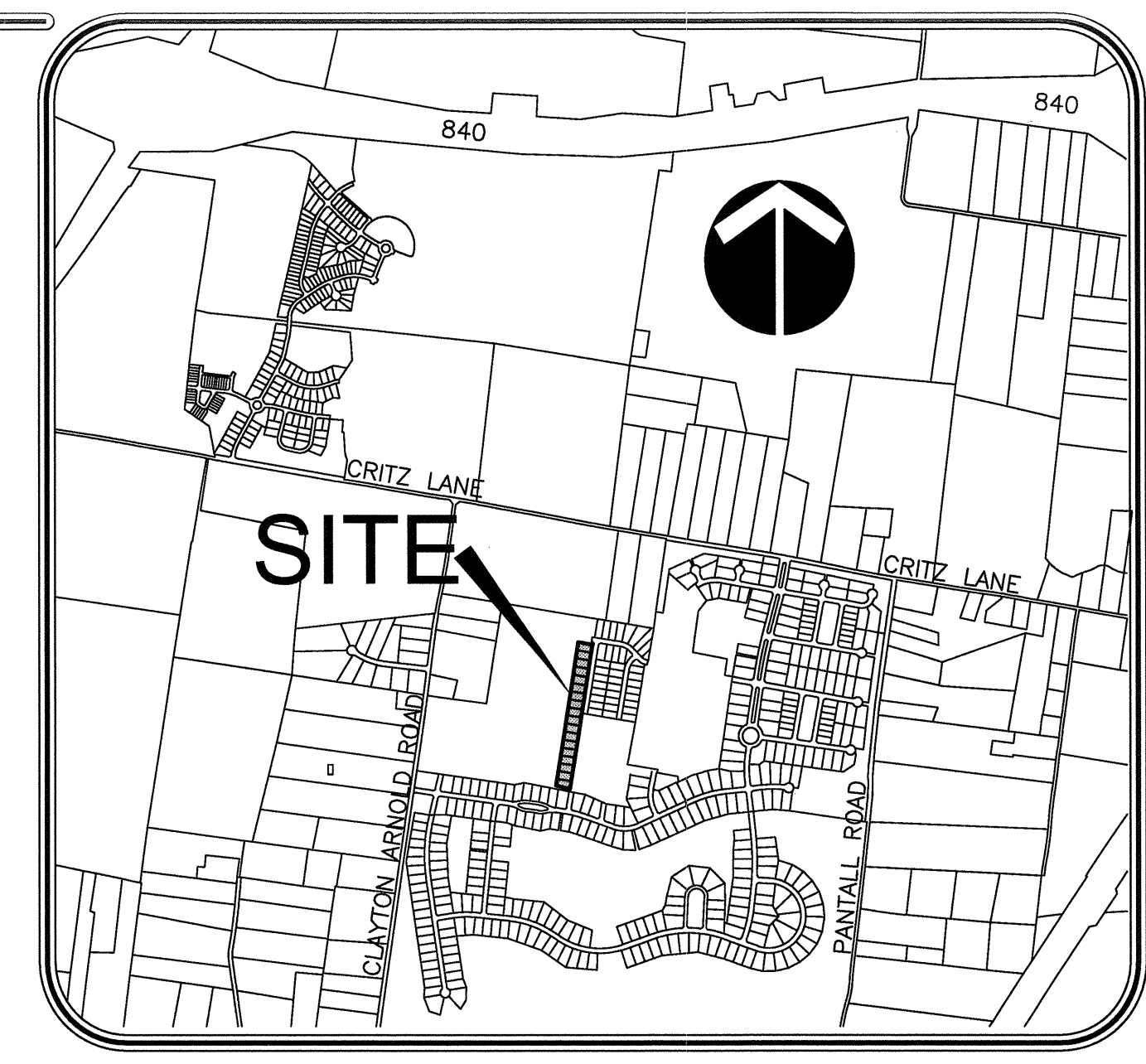
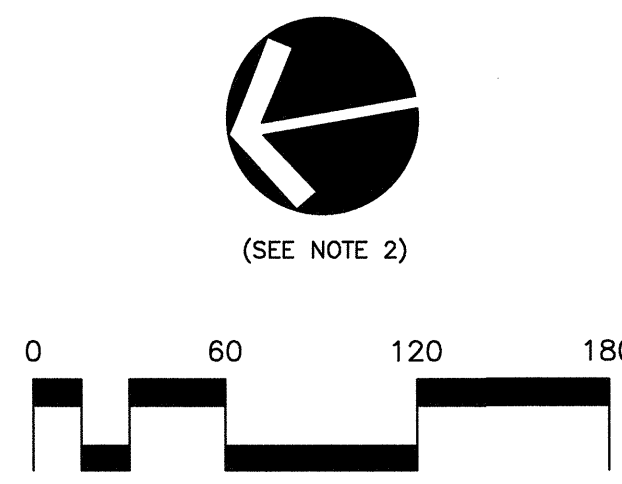
BEING A PORTION OF THE SAME PROPERTY CONVEYED TO MBSC BRIDGEMORE, LLC BY WARRANTY DEED OF RECORD IN BOOK 6038, PAGE 898, REGISTER'S OFFICE FOR WILLIAMSON COUNTY, TENNESSEE.

**PROPERTY MAP REFERENCE**

BEING A PORTION OF PARCEL NUMBER 14.01 AS SHOWN ON WILLIAMSON COUNTY PROPERTY MAP NUMBER 145.

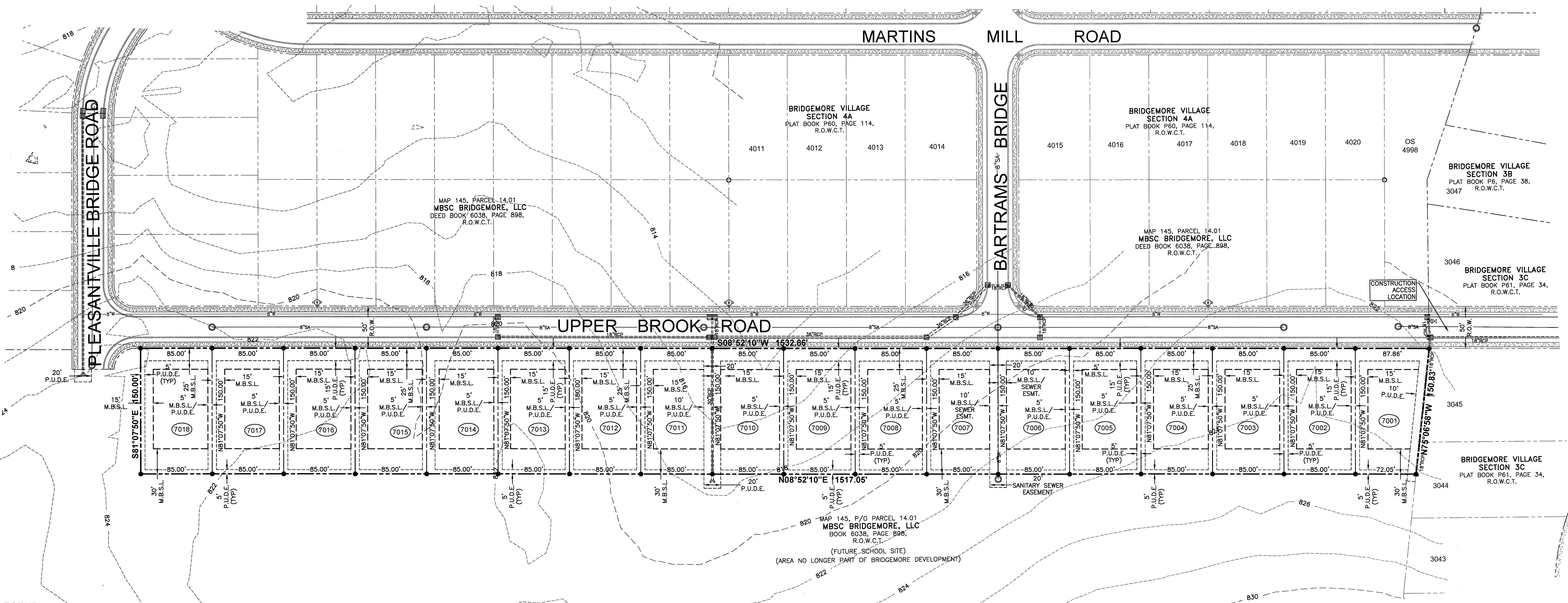
LOT	SQ. FT.±	ACRES±
7001	11,993	0.28
7002	12,750	0.29
7003	12,750	0.29
7004	12,750	0.29
7005	12,750	0.29
7006	12,750	0.29
7007	12,750	0.29
7008	12,750	0.29
7009	12,750	0.29
7010	12,750	0.29
7011	12,750	0.29
7012	12,750	0.29
7013	12,750	0.29
7014	12,750	0.29
7015	12,750	0.29
7016	12,750	0.29
7017	12,750	0.29
7018	12,750	0.29

**SITE DATA**  
 LOTS - 5.25 ACRES  
 OPEN SPACE - 0.00 ACRES  
 RIGHT-OF-WAY - 0.00 ACRES  
 TOTAL - 5.25 ACRES



**RAGAN SMITH**  
 LANDSCAPE ARCHITECTS • SURVEYORS  
 CIVIL ENGINEERS  
 1500 WOODLAND STREET  
 NASHVILLE, TENNESSEE 37206  
 P.O. BOX 1071, LEVIN, TN 37089  
 (615) 244-8591  
 www.ragan-smith.com  
 (62)718-9898

**CHRISTOPHER J. MABERY**  
 REGISTERED SURVEYOR  
 LICENSE NO. 34883  
 TENNESSEE



**BRIDGEMORE VILLAGE**  
**REVISION TO PHASE SEVEN**  
 TOWN OF THOMPSON'S STATION, WILLIAMSON COUNTY, TENNESSEE

- LEGEND**
- IRON ROD (NEW) (5/8" x 18" W/CAP STAMPED "RAGAN SMITH & ASSOCIATES")
  - LOT NUMBER
  - P.U.D.E. PUBLIC UTILITY DRAINAGE & EASEMENT
  - M.B.S.L. MINIMUM BUILDING SET BACK LINE
  - R.O.W. RIGHT-OF-WAY
  - R.O.W.C.T. REGISTER'S OFFICE WILLIAMSON COUNTY, TENNESSEE
  - FIRE HYDRANT
  - WATER VALVE
  - REINFORCED CONCRETE PIPE
  - CATCH BASIN
  - SANITARY SEWER MANHOLE
  - SANITARY SEWER LINE
  - WATER LINE
  - CONCRETE SURFACE

**SURVEYOR**  
 RAGAN-SMITH ASSOCIATES, INC.  
 C/O CHRISTOPHER J. MABERY, RLS  
 315 WOODLAND STREET  
 NASHVILLE, TENNESSEE 37206  
 (615) 244-8591

**OWNER**  
 MBSC BRIDGEMORE, LLC  
 C/O BRIAN ROWE  
 130 SEABOARD LANE, SUITE A-9  
 FRANKLIN, TENNESSEE 37067

**DEVELOPER**  
 MBSC TN HOMEBUILDERS, LLC  
 C/O BRIAN ROWE  
 402 S. GAY STREET, SUITE 202  
 CHATTANOOGA, TENNESSEE 37902  
 (865) 309-4461

JOB NO. 11-062  
 WK ORDER 9396  
 APPROVED: C/JM  
 DRAWN: AMR/DBB  
 SCALE: 1" = 60'  
 DATE: DECEMBER 23, 2015

PRELIMINARY PLAT

**1 OF 1**

**Thompson's Station Planning Commission**  
**Staff Report – Item 6 (PP 2015-008)**  
**January 26, 2016**

**Revision to Preliminary Plat for Phases 7 within Bridgemore Village to create 18 single-family lots.**

**PROJECT DESCRIPTION**

A request to modify a portion of the preliminary plat approved for phases 5 – 11; specifically phase 7 within the Bridgemore Village community. The Bridgemore Village is a subdivision located along the south side of Critz Lane, east of Clayton Arnold, west of Pantall Road with access from Critz Lane and Clayton Arnold Road.

**BACKGROUND**

On May 28, 2013, a revision to increase the number of lots from 490 to 545 was reviewed; however, based on several concerns including the reduced lot sizes, narrow lot widths, no additional amenities for the increased density and no traffic calming for the access from Clayton Arnold the project was revised with increased lot sizes, open space in front of the alley loaded units, an amenities area and traffic calming along Robbins Nest Road.

On September 24, 2013, another revision modifying lot widths that included the elimination of the 60 foot lots and the 80 foot lots for the inclusion of 70 foot lots was approved by the Planning Commission.

On May 26, 2015, a preliminary plat for phases 5 -11 was approved by the Planning Commission with contingencies.

**ANALYSIS**

**Preliminary Plat**

The preliminary plat is required to “form the basis of the design process for greenway lands, house locations, street alignments and lot lines” (LDO 5.4.3a). The site is zoned D1 (Low Intensity Residential District) which is “intended for low density residential development” (LDO 1.2.7b). A previous plat was approved for phases 5 -11; however a revision to the plat is necessary due to the sale of 46 acres of land, which results in a substantial change to the overall layout of the site and a loss of amenities/open space within this phase. The overall project site, as revised, is 498 acres with 479 single-family lots. Currently, Bridgemore Village has 258 platted single-family lots within phases 1, 2, 3 and a portion of 4. The remaining portion of phase 4 along with phases 5, 6 and 8 are approved and consist of 203 lots. Phase 7 consists of the remaining 18 single-family lots.

*Lot Standards*

The single family lots are approximately .25 acre lots with 25 front yard setbacks, a five and 15 foot side yard setback (aggregate of 20 feet) and a 30 foot rear yard setback with lot widths of 85 feet. These setbacks and lot widths meet the minimum requirements for the D1 zone.

*Open Space*

No open space is proposed within this phase. The amenities area is relocated to phase 6. The development currently has approximately 80 acres of the open space recorded which is approximately 32% of the requirement. The remaining open space was identified on the preliminary plat, which will be recorded upon final plat approvals.



### *Geotechnical Information*

The Subdivision Regulations state that “as a general policy, sinkholes shall be classified as land unsuitable for development and shall not be included in streets and lots.” No geotechnical report is submitted at this time for this phase of the development. A geotechnical report should be completed identifying any issues that could impact the development of the site. As a result of the report, all sinkholes should be noted on the plan, placed in open space with appropriate buffers. Therefore, Staff recommends a geotechnical analysis be completed prior to the approval of construction drawings.

### Construction Plans

Approval of the preliminary plat provides entitlement to develop the phase and construction plans will be submitted as the project moves forward. The construction documents provide all the necessary engineering for the development. Since the construction drawings have not been submitted at this time, engineering issues have not been identified or addressed, including but not limited to grading, drainage, utilities, etc. Therefore, should any issues arise during the construction plan review that requires changes to the preliminary plat, it shall be incumbent on the applicant to revise the preliminary plat accordingly to meet all zoning and engineering related standards.

### **RECOMMENDATION**

Based on the project’s consistency with the Land Development Ordinance, Staff recommends that the Planning Commission approve the preliminary plat with the following contingencies:

1. Prior to the submittal of the final plat, the applicant shall enter into a development agreement.
2. Prior to the approval of construction plans, a geotechnical report shall be submitted for review.
3. Prior to the approval of construction plans, all applicable codes and regulations shall be addressed to the satisfaction of the Town Engineer.

### **ATTACHMENTS**

Revised preliminary plat Phase 7

**Thompson's Station Planning Commission  
Staff Report –Item 7 (PP 2015-009)  
January 26, 2016**

**Revision to a preliminary plat for Phase 15 within Tollgate Village.**

**PROJECT DESCRIPTION**

A request to approve a revision to a portion of the preliminary plat for Phase 15 of Tollgate Village to create 21 single family lots.

**BACKGROUND**

On July 28, 2015, a preliminary plat was approved by the Planning Commission for phase 15 within Tollgate Village. The phase created 83 single-family lots and one open space lot on 33.76 acres. This plat included an extension of Ashmore Drive and Del Mar Drive. This phase also requires the construction of new roads which include Vinemont Drive, Lewiston Street, Willmore Drive and Milford Drive. The developer has submitted a revision to modify a portion of the overall phase eliminating the alley between Milford and Vinemont, establishing a new road “D” and adding .88 acre for a total of 34.64 acres within the phase.

**ANALYSIS**

**Preliminary Plat**

The revision to the preliminary plat includes 21 single family residential lots, which eliminates the alley to create front loaded lots along Vinemont Drive and creates a new road to provide access to Willmore Drive. The revision also adds .88 acre along Vinemont Drive.

*Roadways*

No changes to the roadway sections are proposed with the modified plat.

*Critical Lots*

Lots 1543-1546, 1558-1560 are designated as critical lots on the plat. At this time, Staff does not have a detailed slope analysis for these lots to determine the actual slope; however, the applicant has stated that “no natural slope exceeds 25%.” All critical lots will require engineered site plans to address all site specific issues. To confirm the slopes, Staff recommends that a detailed slope analysis for each lot be prepared to identify the slope and determine if it is natural or a result of man-made alterations. Any lot that exceeds 25% natural slope should be placed within the open space.

*Lot Standards*

The single family lots will vary in size from .19 acres to .28 acres with lot widths a minimum of 50 feet with proposed setbacks of 15 feet for the front yard setback, 7.5 feet for the side yard setbacks and 20 feet for the rear yard setback. Therefore, the preliminary plat conforms to required Land Development Ordinance.

**Traffic Study**

The traffic study prepared in 2003 evaluated the project based on two phases with an anticipated 10 year completion of the entire development. Phase I consisted of approximately 700 dwelling units with an estimated trip generation of 6,069 (daily traffic). To date, 650 lots are platted, and while other residential phases are proposed for the development, approval of phase 15 completes Phase I based on the number of dwelling units analyzed in the traffic study.

The 2003 traffic study recommended traffic mitigation for Phase I was:

1. *“The eastbound approach of the south project driveway should be constructed to include separate lanes for left and right turning movements.”*

This improvement is complete. Tollgate Boulevard eastbound has a separate left and right turn lane onto Columbia Pike.

2. *“As part of the State Route 840 construction project, TDOT plans to widen Highway 31 north of State Route 840 to a five lane cross section. The five lane section will extend for approximately 250 feet north of the high school access. Also, the planned widening will result in enough roadway width to provide a northbound left turn lane to serve the south project driveway to Tollgate Farms.”*

This improvement is complete. Columbia Pike has a five lane cross section from State Route 840 to Tollgate Boulevard along with a northbound left turn lane onto Tollgate Boulevard.

3. *“The proposed site plan shows a driveway connection between Tollgate Farms and the high school. The connection will be beneficial since it will allow traffic to travel between the high school and the residential development without being required to travel on Highway 31.”*

This improvement is not complete. Declaration Way is not a public and no connection to Tollgate Village exists from this roadway.

Phase II consisted of the office and retail development with a trip generation of 14,832 (daily traffic). To date, approximately 30,000 square feet of general office and 46,800 square feet of medical office have been constructed. Phase II recommended traffic mitigation was:

1. *“It is recommended that the five lane cross-section be extended north to a point approximately 200 feet north of the north project driveway.”*
2. *“A traffic signal should be installed at the intersection of Highway 31 and the south project driveway. This signal should be installed at the onset of Phase II development.”*
3. *“The eastbound approach of the intersection of Highway 31 and the south project driveway should be improved to provide a dual left turn lane for traffic exiting the project site.”*
4. *“The eastbound approach of the intersection of Highway 31 and the north project driveway should be constructed to include a right turn lane and a left turn lane.”*
5. *“A northbound left turn lane on Highway 31 should be provided at the intersection with the north project driveway. This left turn lane should include approximately 200 feet of storage.”*
6. *“The intersection of Highway 31 and Goose Creek Bypass should be realigned to form a T intersection. It is also recommended that a traffic signal be installed at this intersection.”*



7. *“A southbound left turn lane should be provided on Highway 31 at the realigned intersection with Goose Creek Bypass. This left turn lane should include approximately 150 feet of storage.”*
8. *“A westbound right turn lane on Goose Creek Bypass should be provided at the intersection of Highway 31 and Goose Creek Bypass. This right turn lane should include approximately 150 feet of storage.”*

With the exception of a northbound turn lane at the proposed location of the secondary access, none of the other improvements related to Phase II have been completed, however Phase I is still underway and Phase II is predominantly undeveloped except with the Shelter Insurance office building and the Williamson Medical office building.

An updated traffic study was completed in February 2015 and submitted with a proposed revision to the site development plan. The traffic study was updated due to a proposed change to the overall development with an anticipated completion year of 2020. Based on the proposed land uses, the traffic generation is substantially lower than the original project. The traffic study identifies study references that TDOT has reviewed the project area and that based on “preliminary indications that a new traffic signal will be installed as part of TDOT improvements, the analysis of the intersection under traffic signal control indicates that the acceptable intersection operations can be provided” with the following mitigation measure:

1. *“A southbound right turn lane should be constructed on Columbia Pike at Tollgate Boulevard. The storage length of this turn lane should be 250 feet with 100 feet of taper.”*

In addition, the updated traffic study addresses the secondary access to the north of Tollgate Boulevard. The original plans proposed a secondary access 640 feet north of Tollgate Boulevard, however, due to feasibility issues, the study suggests moving the access 240 feet to the south to avoid conflict with the bridge. Regardless of the placement of this access, the applicant will be responsible to obtain approval from TDOT prior to the construction of any roadway connection.

### Construction Plans

The construction documents provide all the necessary engineering for the development. Modification to this section of the preliminary plat will require revision to the construction plans. All engineering issues will be identified and addressed, including but not limited to grading, drainage, etc. prior to the issuance of any grading permits. Therefore, should any issues arise during the construction plan review that requires changes to the preliminary plat; it shall be incumbent on the applicant to revise the preliminary plat accordingly to meet all engineering related standards.

### **RECOMMENDATION**

Based on the project’s consistency with the Land Development Ordinance, Staff recommends that the Planning Commission approve the revision to the phase 15 plat contingent on the following:

1. Prior to the submittal of the final plat, the applicant shall enter into a development agreement for Tollgate Village Phase 15.
2. Prior to the approval of construction plans, all applicable codes and regulations shall be addressed to the satisfaction of the Town Engineer.

3. Prior to the approval of construction plans, a drainage study shall be submitted to verify that drainage is managed adequately on site.
4. Prior to the approval of construction plans, a geotechnical report shall be submitted identifying the location of any sinkholes.
5. Prior to the submittal of the final plat for Phase 15, an updated traffic study (reviewed by the Town's Consulting Traffic Engineer) with a schedule of improvements for traffic mitigation including the secondary access and traffic signal shall be submitted for review and approval.
6. Prior to the submittal of a final plat for Phase 15, a detailed slope analysis shall be prepared showing slopes 15% - 25% and slopes exceeding 25%. Any lots located within areas exceeding 25% slopes shall be located within an open space lot.

**ATTACHMENT**

Revised Preliminary Plat

Tollage Village Development Plan

**GENERAL NOTES:**

1. THE PURPOSE OF THIS PLAT IS TO CREATE 21 RESIDENTIAL SINGLE-FAMILY LOTS.
2. BEARINGS SHOWN HEREON ARE BASED ON TENNESSEE COORDINATE SYSTEM OF 1983.
3. BY SCALED MAP LOCATION AND GRAPHIC PLOTTING ONLY, THIS PROPERTY LIES WITHIN FLOOD ZONE "X" (OTHER AREAS), AS DESIGNATED ON CURRENT FEDERAL EMERGENCY MANAGEMENT AGENCY MAP NO. 47187C0335F, WITH AN EFFECTIVE DATE OF SEPTEMBER 29, 2006, WHICH MAKES UP A PART OF THE NATIONAL FLOOD INSURANCE ADMINISTRATION REPORT: COMMUNITY NO. 470424, PANEL NO. 0335, SUFFIX F, WHICH IS THE CURRENT FLOOD INSURANCE RATE MAP FOR THE COMMUNITY IN WHICH SAID PREMISES IS SITUATED, SAID MAP DEFINES ZONE "X" (OTHER AREAS) UNDER "OTHER AREAS" AS AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.
4. 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.
5. THIS PROPERTY IS CURRENTLY ZONED D3 (HIGH DENSITY RESIDENTIAL), MAXIMUM LOT COVERAGE - 55%.
6. MINIMUM BUILDING SETBACKS PER TOWN OF THOMPSON'S STATION LAND DEVELOPMENT ORDINANCE DATED SEPTEMBER 29, 2015:  
FRONT: 10'  
REAR: 20'  
SIDE: 7.5'
7. ALL STREETS AND ALLEYS ARE DESIGNATED PUBLIC AND AS SUCH ARE PUBLIC UTILITY, ACCESS AND DRAINAGE EASEMENTS.
8. ALL PUBLIC STREETS AND DRAINAGE STRUCTURES WITHIN THE RIGHTS-OF-WAY WILL BE MAINTAINED BY THE TOWN OF THOMPSON'S STATION.
9. OPEN SPACE AREAS, PUBLIC UTILITY AND DRAINAGE EASEMENTS (INCLUDING DRAINAGE AND DETENTION STRUCTURES), ALLEYS AND ALL LANDSCAPING WITHIN ROADWAY MEDIANS WILL BE MAINTAINED BY THE HOMEOWNERS' ASSOCIATION.
10. ELEVATIONS SHOWN HEREON ARE BASED ON NAVD 88. CONTOURS ARE AT TWO FOOT INTERVALS AND ARE BASED ON A FIELD RUN SURVEY BY RAGAN-SMITH ASSOCIATES ON JANUARY 26, 2015 USING RANDOM SPOT ELEVATIONS. CONTOURS WERE DERIVED USING SURFACE MODELING TECHNIQUES.
11. SANITARY SEWER LINES AND STORM LINES SHOWN HEREON WERE TAKEN FROM A PRELIMINARY DESIGN FOR THIS SECTION. FINAL PLACEMENT OF UTILITIES WILL BE DEPICTED ON THE FINAL PLAT.
12. DOMESTIC WATER SUPPLY INFORMATION TO BE DESIGNED BY OTHERS AND INCLUDED ON THE FINAL PLAT. WATER TO BE PROVIDED BY H.B.&T.S.
13. LOTS SHOWN THUS (\*) ARE DESIGNATED AS CRITICAL LOTS AND HAVE MANMADE SLOPES IN EXCESS OF 15%. PER SECTION 3-102.104 OF THE SUBDIVISION REGULATIONS, PRIOR TO THE ISSUANCE OF A BUILDING PERMIT, A SITE GRADING PLAN FOR DEVELOPMENT OF THE LOT SHALL BE SUBMITTED ADDRESSING SITE SPECIFIC NATURAL RESOURCE ISSUES TO THE TOWN OF THOMPSON'S STATION FOR REVIEW AND APPROVAL. NO BUILDING PERMIT WILL BE ISSUED ON SAID LOTS UNTIL AND UNLESS THE TOWN ENGINEER HAS RECEIVED AND APPROVED THE SITE PLAN.
14. OPEN SPACE 1599 IS ALSO A PUBLIC UTILITY, DRAINAGE AND ACCESS EASEMENT.

**DEED REFERENCE:**

BEING A PORTION OF THE SAME PROPERTY CONVEYED TO MBSC TN HOMEBUILDER, LLC, FROM TGF 2010, LLC OF RECORD IN BOOK 5264, PAGE 242, REGISTER'S OFFICE FOR WILLIAMSON COUNTY, TENNESSEE.

**PROPERTY MAP REFERENCE:**

BEING A PORTION OF PARCEL 1 AS SHOWN ON WILLIAMSON COUNTY PROPERTY MAP 132.

**SURVEYOR**

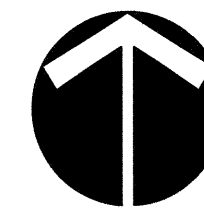
RAGAN-SMITH ASSOCIATES, INC.  
315 WOODLAND STREET  
NASHVILLE, TENNESSEE 37206  
(615) 244-8591

**OWNER / DEVELOPER**

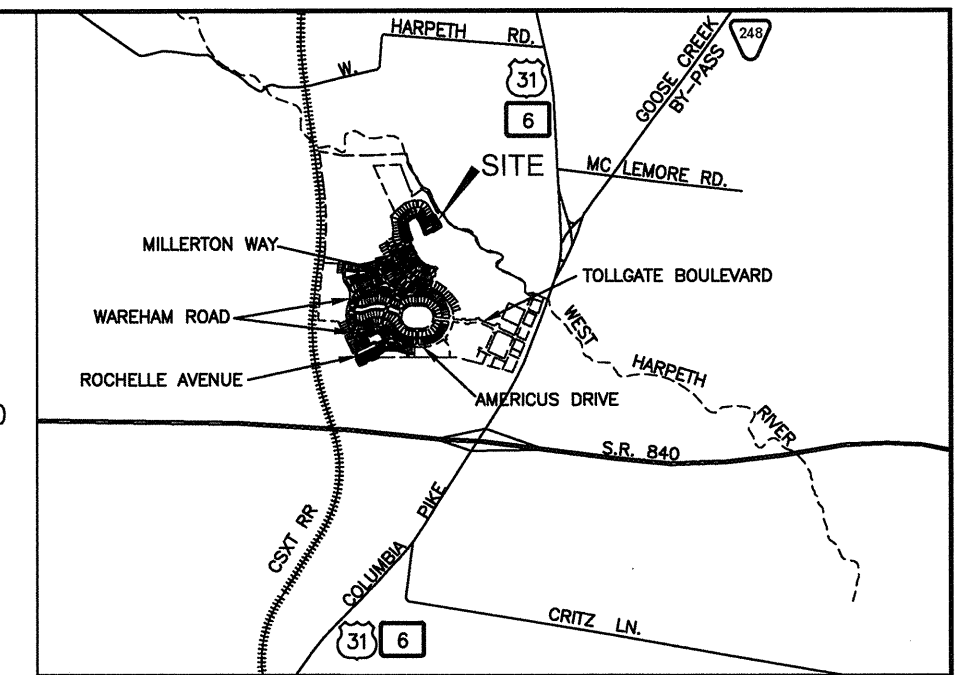
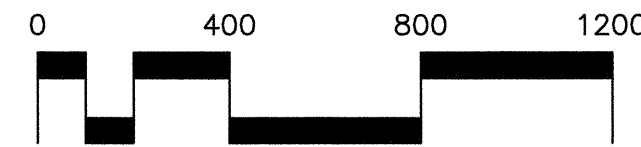
MBSC TN HOMEBUILDER, LLC  
C/O BRIAN ROWE  
312 S. GAY STREET, SUITE 200  
KNOXVILLE, TENNESSEE 37902  
(865) 408-8322

**LEGEND**

R.O.W.C.T. REGISTER'S OFFICE FOR WILLIAMSON COUNTY, TENNESSEE



(SEE NOTE 2)



VICINITY MAP  
(NOT TO SCALE)

**SECTIONS 15A - 15B**

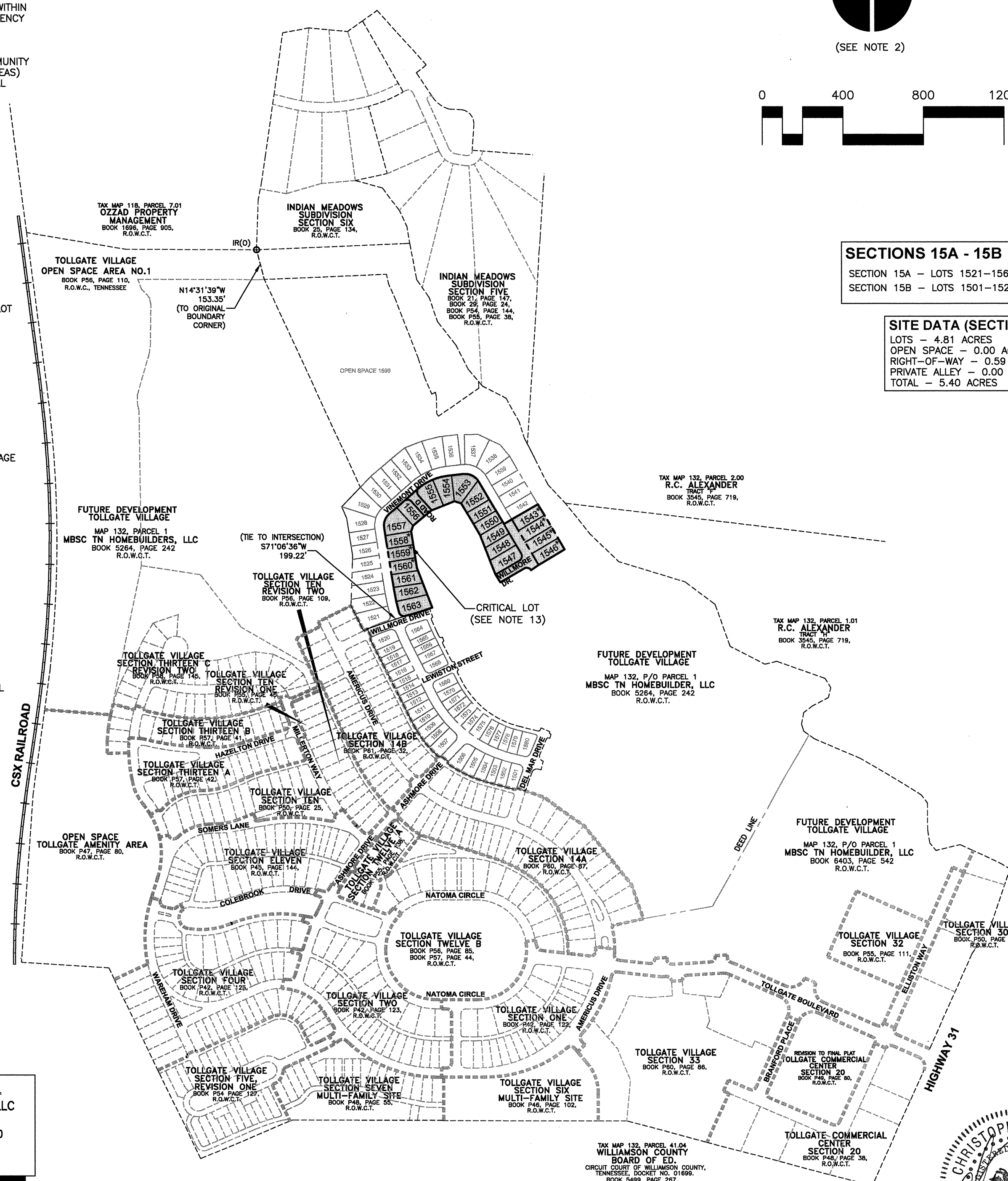
SECTION 15A - LOTS 1521-1563  
SECTION 15B - LOTS 1501-1520, 1567-1580

**SITE DATA (SECTION 15)**

LOTS - 4.81 ACRES  
OPEN SPACE - 0.00 ACRES  
RIGHT-OF-WAY - 0.59 ACRES  
PRIVATE ALLEY - 0.00 ACRES  
TOTAL - 5.40 ACRES

**LOT AREA TABLE**

LOT	SQ. FT.±	ACRES±
1543	9,750	0.22
1544	9,750	0.22
1545	9,750	0.22
1546	9,750	0.22
1547	11,675	0.27
1548	9,489	0.22
1549	8,796	0.20
1550	8,450	0.19
1551	8,450	0.19
1552	10,693	0.25
1553	12,345	0.28
1554	10,466	0.24
1555	11,104	0.25
1556	9,106	0.21
1557	12,784	0.29
1558	8,450	0.19
1559	8,450	0.19
1560	8,467	0.19
1561	9,065	0.21
1562	10,224	0.23
1563	12,356	0.28



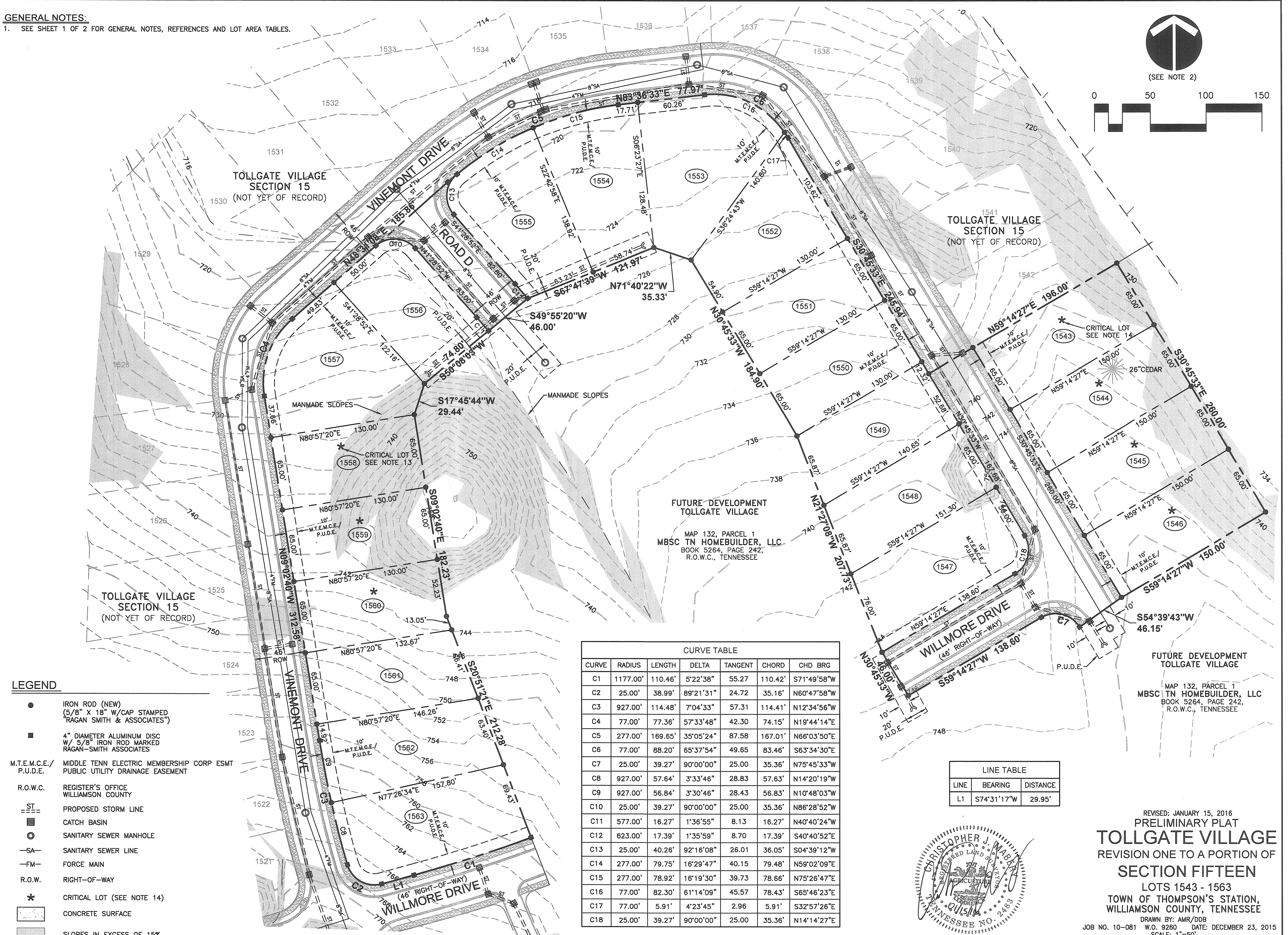
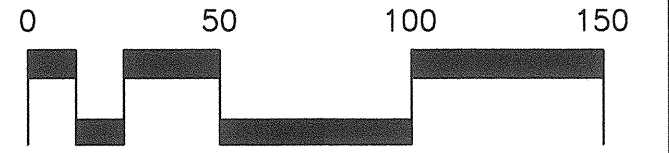
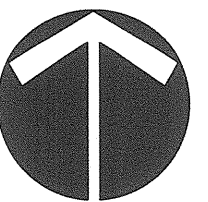
REVISED: JANUARY 15, 2016  
**PRELIMINARY PLAT**  
**TOLLGATE VILLAGE**  
REVISION ONE TO A PORTION OF  
**SECTION FIFTEEN**  
LOTS 1543-1563  
TOWN OF THOMPSON'S STATION,  
WILLIAMSON COUNTY, TENNESSEE  
DRAWN BY: AMR / DDB  
JOB NO. 10-081 W.O. 9260 DATE: DECEMBER 23, 2015  
SCALE: 1"=400'

**TOTAL SITE AREA = 235,223 SQUARE FEET OR 5.40 ACRES±**



**GENERAL NOTES:**

1. SEE SHEET 1 OF 2 FOR GENERAL NOTES, REFERENCES AND LOT AREA TABLES.



**LEGEND**

- IRON ROD (NEW)  
(5/8" X 18" W/CAP STAMPED  
"RAGAN SMITH & ASSOCIATES")
- 4" DIAMETER ALUMINUM DISC  
W/ 5/8" IRON ROD MARKED  
RAGAN-SMITH ASSOCIATES
- M.T.E.M.C.E./  
P.U.D.E. MIDDLE TENN ELECTRIC MEMBERSHIP CORP ESMT  
PUBLIC UTILITY DRAINAGE EASEMENT
- R.O.W.C. REGISTER'S OFFICE  
WILLIAMSON COUNTY
- ST— PROPOSED STORM LINE
- ▣ CATCH BASIN
- SANITARY SEWER MANHOLE
- SA— SANITARY SEWER LINE
- FM— FORCE MAIN
- R.O.W. RIGHT-OF-WAY
- \* CRITICAL LOT (SEE NOTE 14)
- ▨ CONCRETE SURFACE
- ▨ SLOPES IN EXCESS OF 15%

CURVE TABLE						
CURVE	RADIUS	LENGTH	DELTA	TANGENT	CHORD	CHD BRG
C1	1177.00'	110.46'	5°22'38"	55.27	110.42'	S71°49'58"W
C2	25.00'	38.99'	89°21'31"	24.72	35.16'	N60°47'58"W
C3	927.00'	114.48'	7°04'33"	57.31	114.41'	N12°34'56"W
C4	77.00'	77.36'	57°33'48"	42.30	74.15'	N19°44'14"E
C5	277.00'	169.65'	35°05'24"	87.58	167.01'	N66°03'50"E
C6	77.00'	88.20'	65°37'54"	49.65	83.46'	S63°34'30"E
C7	25.00'	39.27'	90°00'00"	25.00	35.36'	N75°45'33"W
C8	927.00'	57.64'	3°33'46"	28.83	57.63'	N14°20'19"W
C9	927.00'	56.84'	3°30'46"	28.43	56.83'	N10°48'03"W
C10	25.00'	39.27'	90°00'00"	25.00	35.36'	N86°28'52"W
C11	577.00'	16.27'	1°36'55"	8.13	16.27'	N40°40'24"W
C12	623.00'	17.39'	1°35'59"	8.70	17.39'	S40°40'52"E
C13	25.00'	40.26'	92°16'08"	26.01	36.05'	S04°39'12"W
C14	277.00'	79.75'	16°29'47"	40.15	79.48'	N59°02'09"E
C15	277.00'	78.92'	16°19'30"	39.73	78.66'	N75°26'47"E
C16	77.00'	82.30'	61°14'09"	45.57	78.43'	S65°46'23"E
C17	77.00'	5.91'	4°23'45"	2.96	5.91'	S32°57'26"E
C18	25.00'	39.27'	90°00'00"	25.00	35.36'	N14°14'27"E

LINE TABLE		
LINE	BEARING	DISTANCE
L1	S74°31'17"W	29.95'



REVISED: JANUARY 15, 2016  
**PRELIMINARY PLAT**  
**TOLLGATE VILLAGE**  
 REVISION ONE TO A PORTION OF  
**SECTION FIFTEEN**  
 LOTS 1543 - 1563  
 TOWN OF THOMPSON'S STATION,  
 WILLIAMSON COUNTY, TENNESSEE  
 DRAWN BY: AMR/DOB  
 JOB NO. 10-081 W.O. 9260 DATE: DECEMBER 23, 2015  
 SCALE: 1"=50'

**Thompson's Station Planning Commission**  
**Staff Report – Item 8 (PP 2015 – 004)**  
**January 26, 2016**

**Tree Removal and Replacement for Phases 5 and 6 within Bridgemore Village.**

**PROJECT DESCRIPTION**

A request for tree removal for Phases 5 and 6 within the Bridgemore Village community.

**BACKGROUND**

On May 26, 2015, a preliminary plat was approved for Phases 5 – 11 of Bridgemore Village. The preliminary plat did not identify tree removals and therefore, a contingency was placed on the project requiring a tree plan be presented to the Planning Commission prior to the approval of construction plans.

**ANALYSIS**

Development of phase 5 requires the removal of 13 trees for a total of 385 inches. The Land Development Ordinance requires the replacement of tree exceeding 24 inches at a ratio of one and a half inches for every inch removed. Therefore, 577.5 inches of trees is required to be replaced on the site. The replacement plan includes one tree per lot and the planting of trees around the perimeter of the open space area for total of 579.5 inches.

Development of phase 6 requires the removal of eight trees for a total of 249 inches thereby requiring the installation of 373.5 inches of trees. The developer proposes to install 374 inches of trees throughout the site. The replacement plans includes one tree per lot and the planting of trees within the open space area along Clayton Arnold Road for a total of 374 inches.

**RECOMMENDATION**

Based on the project's consistency with the Land Development Ordinance, Staff recommends that the Planning Commission approve the removal and replacement plan as submitted.

**ATTACHMENTS**

Tree Removal Plan



# CONSTRUCTION PLANS FOR BRIDGEMORE VILLAGE PHASE 5 & 6

**CONTACTS**

OWNER/DEVELOPER

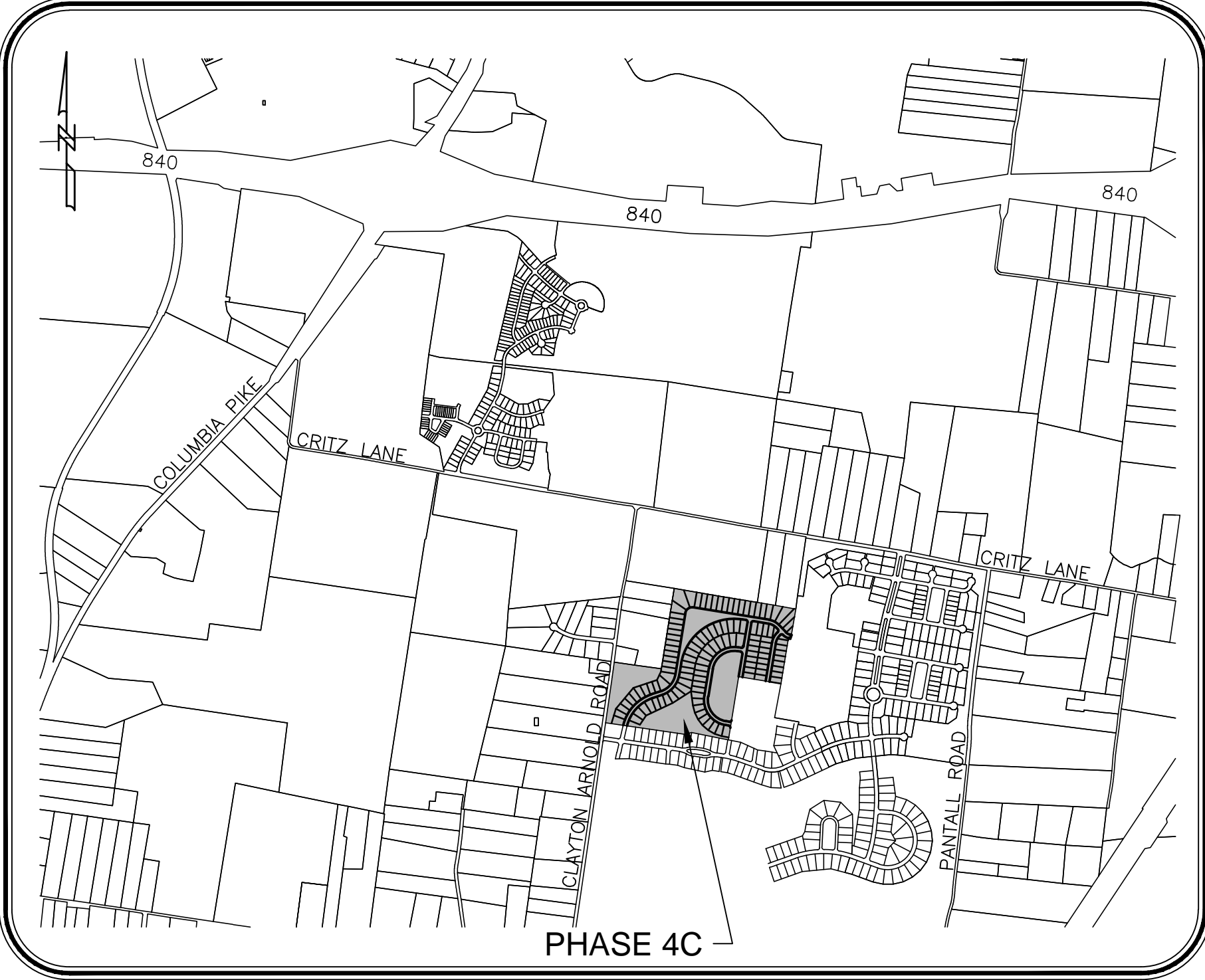
MBSC TN HOMEBUILDER, LLC  
4443 COLUMBIA PIKE  
THOMPSON'S STATION, TN 37179  
CONTACT PHONE NUMBER  
CONTACT EMAIL ADDRESS

CIVIL

JACOB F. VINCENT, P.E.  
315 WOODLAND STREET  
NASHVILLE, TN 37206  
(615) 244-8591  
JVINCENT@RAGANSMITH.COM

LANDSCAPE ARCHITECTURE

BRETT SMITH, R.L.A.  
315 WOODLAND STREET  
NASHVILLE, TN 37206  
(615) 244-8591  
BSMITH@RAGANSMITH.COM



LOCATION MAP  
N.T.S.

## TOWN OF THOMPSON'S STATION WILLIAMSON COUNTY, TENNESSEE

**Sheet List Table**

Sheet Number	Sheet Title
C0.0	COVER
C0.1	GENERAL NOTES
C1.0	OVERALL LAYOUT
C1.1	LAYOUT AND SIGNAGE
C1.2	LAYOUT AND SIGNAGE
C1.3	LAYOUT AND SIGNAGE
C1.4	LAYOUT AND SIGNAGE
C2.0	INITIAL EROSION CONTROL
C3.0	OVERALL GRADING
C3.1	ENLARGED GRADING
C3.2	ENLARGED GRADING
C3.3	ENLARGED GRADING
C3.4	ENLARGED GRADING
C4.0	FINAL EROSION CONTROL
C4.1	DRAINAGE SCHEDULE AND DETAILS
C4.2	DETAILS
C5.0	OVERALL UTILITY
ROADWAY SHEETS	
R1.0	PLEASANTVILLE BRIDGE ROAD PLAN & PROFILE
R1.1	PLEASANTVILLE BRIDGE ROAD PLAN & PROFILE
R1.2	PLEASANTVILLE BRIDGE ROAD PLAN & PROFILE
R2.0	MARTINS MILL ROAD PLAN & PROFILE
R3.0	UPPER BROOK ROAD PLAN & PROFILE
R4.0	ROAD A PLAN & PROFILE
R5.0	ROAD B PLAN & PROFILE
R6.0	ROADWAY DETAILS
SANITARY SEWER SHEETS	
S1.0	LINE A PLAN & PROFILE
S1.1	LINE A PLAN & PROFILE
S1.2	LINE A PLAN & PROFILE
S2.0	LINE B PLAN & PROFILE
S3.0	LINE C PLAN & PROFILE
S4.0	LINE D PLAN & PROFILE
S5.0	LINES E & F PLAN & PROFILES
S6.0	LINE G PLAN & PROFILE
S7.0	SANITARY SEWER DETAILS
TREE REMOVAL PLAN	
ET1.1	EXISTING TREE PLAN
ET1.2	EXISTING TREE PLAN
ET1.3	EXISTING TREE PLAN
ET1.4	EXISTING TREE PLAN



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SUITE 200  
CHATTANOOGA, TN 37405  
(423) 894-9400

www.ragan-smith.com

BRIDGEMORE VILLAGE

FOR

PHASE 5 & 6

TOWN OF THOMPSON'S STATION WILLIAMSON COUNTY, TENNESSEE

JOB NO. 11052	WK. ORDER 0324	DESIGNED: JFV	DRAWN: NLF	SCALE: N.T.S.	REVISIONS
DATE: OCTOBER 19, 2015					
COVER					
C0.0					

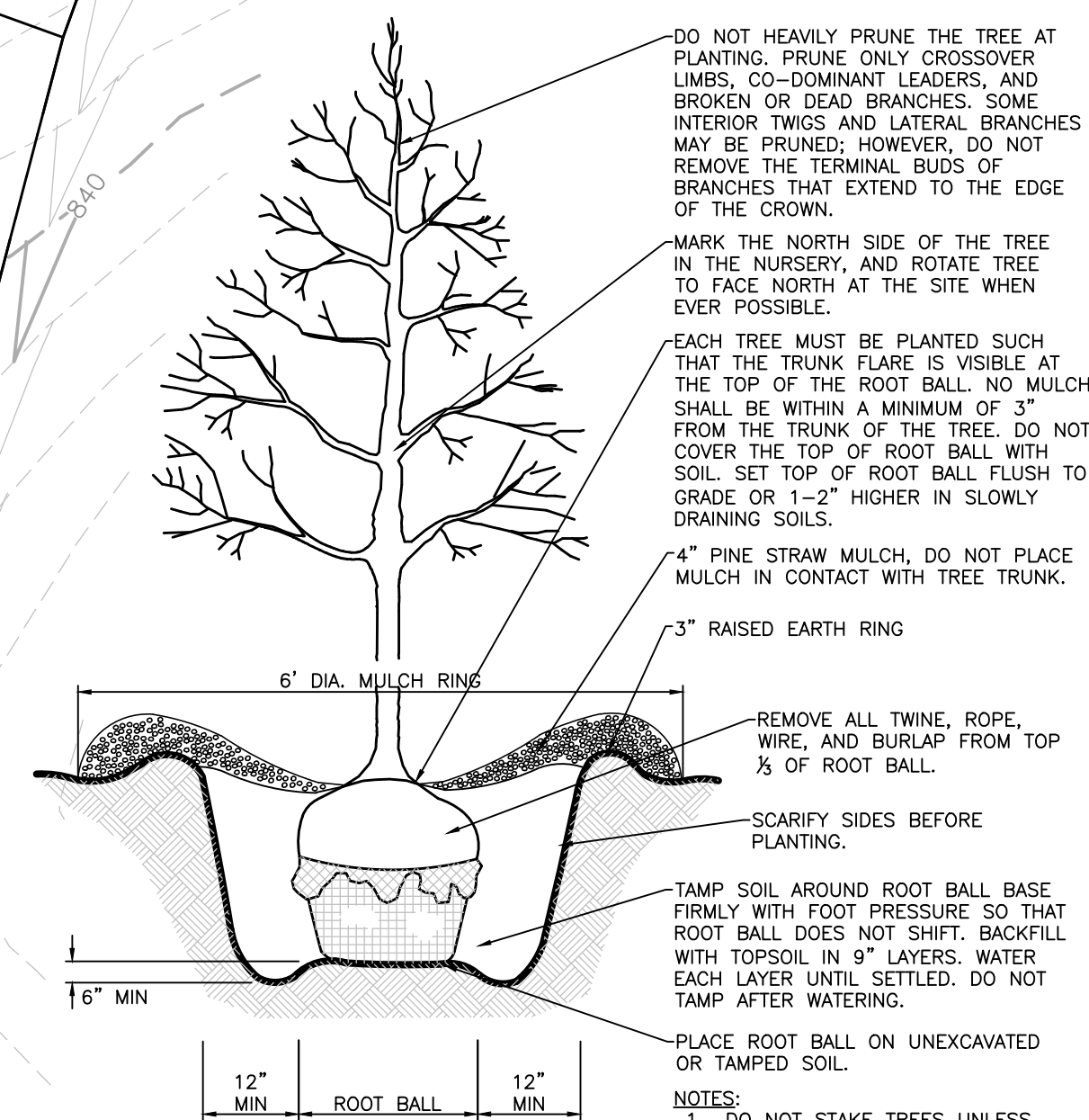
© 11/15/2015 11:52 AM C:\PROJECTS\BRIDGEMORE VILLAGE\PHASE 5 & 6\DWG\C0.0.DWG  
PLOTTER: JACOBO BARRONZA ON 10/19/2015 11:52 AM LAST UPDATED BY JFV ON 10/19/2015 7:50 AM







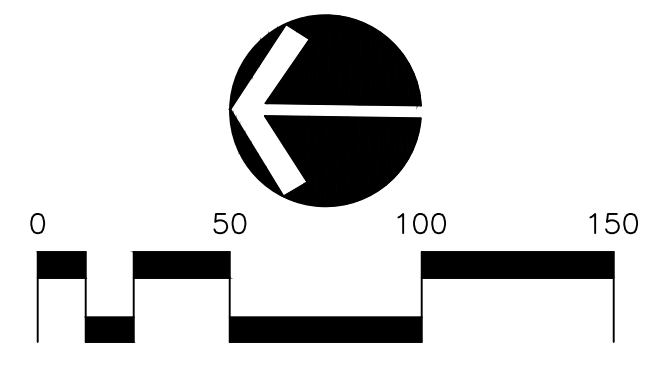
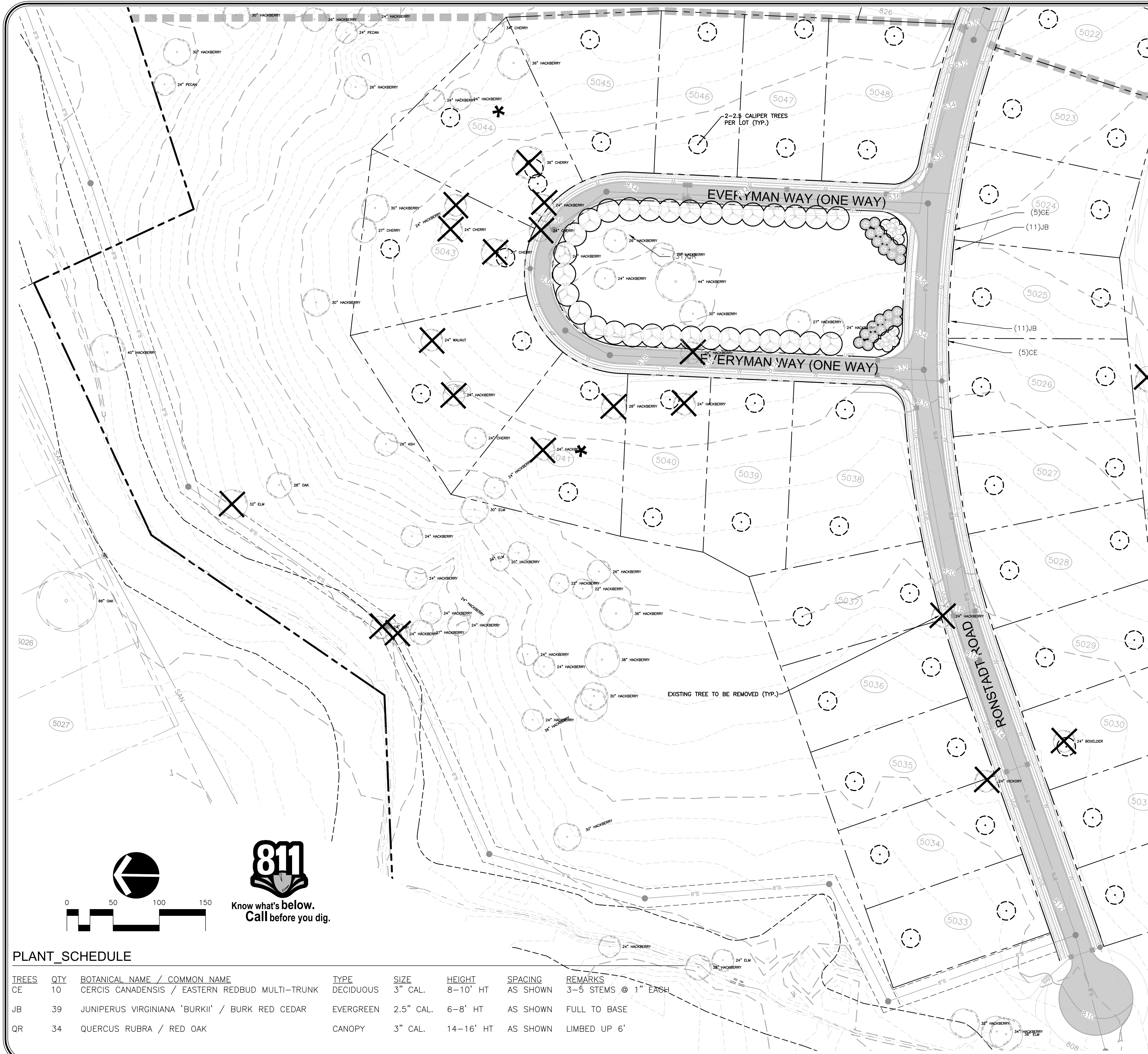
**BRIDGEMORE VILLAGE**  
 FOR  
**PHASE 5**  
 TOWN OF THOMPSON STATION, WILLIAMSON COUNTY, TENNESSEE



**TREE PLANTING**  
 NOT TO SCALE

**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 (TRIFLORAL 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 WARRANT ALL MATERIAL FOR ONE YEAR AFTER DATE OF FINAL ACCEPTANCE.



**811**  
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**PLANT SCHEDULE**

TREES	QTY	BOTANICAL NAME / COMMON NAME	TYPE	SIZE	HEIGHT	SPACING	REMARKS
CE	10	CERCIS CANADENSIS / EASTERN REDBUD MULTI-TRUNK	DECIDUOUS	3" CAL.	8-10' HT	AS SHOWN	3-5 STEMS @ 1" EACH
JB	39	JUNIPERUS VIRGINIANA 'BURKII' / BURK RED CEDAR	EVERGREEN	2.5" CAL.	6-8' HT	AS SHOWN	FULL TO BASE
QR	34	QUERCUS RUBRA / RED OAK	CANOPY	3" CAL.	14-16' HT	AS SHOWN	LIMBED UP 6'

WK. ORDER	0274	DESIGNED:	JFV	DATE:	JULY 24, 2015
JOB NO.	11092	DRAWN:	NLF	REVISIONS	
INSPECTED:		SCALE:	1"=50'	SUB. RESS.	
DATE:	12/08/2015	DATE:	8/27/2015	DATE:	

**TREE PLAN**  
**ET1.2**

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**PLANT\_SCHEDULE**

TREES	QTY	BOTANICAL NAME / COMMON NAME	TYPE	SIZE	HEIGHT	SPACING	REMARKS
JV	13	JUNIPERUS VIRGINIANA 'BURKII' / BURK RED CEDAR	EVERGREEN	2.5" CAL.	6-8' HT	AS SHOWN	FULL TO BASE

NOTE:  
LOT TREES TO BE SPECIES FROM THE THOMPSON'S STATION L.D.O., APPENDIX "A"

**Tree Protection / Replacement Data Table**

Tree Units Provided from Existing Trees		
Removed Tree inches	Quantity	Units Per Tree
26	2	52
27	1	27
30	1	30
34	2	68
36	2	72
<b>Total Trees to be removed</b>	<b>8</b>	<b>249</b>
<b>Total Units From Trees to be removed</b>		
<b>Total Replacement Units</b>	<b>249x1.5</b>	<b>373.5</b>
<b>2-2" Cal. Tree Per Lot</b>	<b>87 Lots</b>	<b>348"</b>
<b>2" Cal. Cedar Tree</b>	<b>13</b>	<b>26"</b>
<b>Total Units Provided</b>		<b>374"</b>

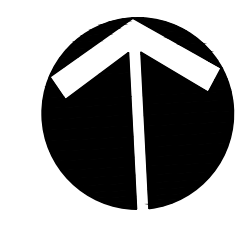
**RAGAN SMITH**  
 LAND PLANNERS • CIVIL ENGINEERS  
 LANDSCAPE ARCHITECTS • SURVEYORS  
 CHATTANOOGA  
 1000 GUNNERSVILLE STREET  
 P.O. BOX 00100  
 CHATTANOOGA, TENN 37402  
 (423) 344-8800  
 www.ragan-smith.com

**BRIDGEMORE VILLAGE - PHASE 6**  
 FOR  
**BLUEPRINT PROPERTIES, LLC**  
 TOWN OF THOMPSON'S STATION WILLIAMSON COUNTY, TENNESSEE

WK. ORDER	0329
DESIGNED:	JFV
DRAWN:	NLF
SCALE:	1"=50'
DATE:	December 09, 2015
REVISIONS	12-18-15 (O.P.S.) Rev. PER TOWN COMMENTS

TREE PLAN

**ET1.0**



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 PRINTED BY RAGAN SMITH ON 12/18/2015 AT 10:54 AM. LAST UPDATED BY GMS ON 12/23/2015 3:50 PM

MATCH LINE SEE SHEET ET1.1





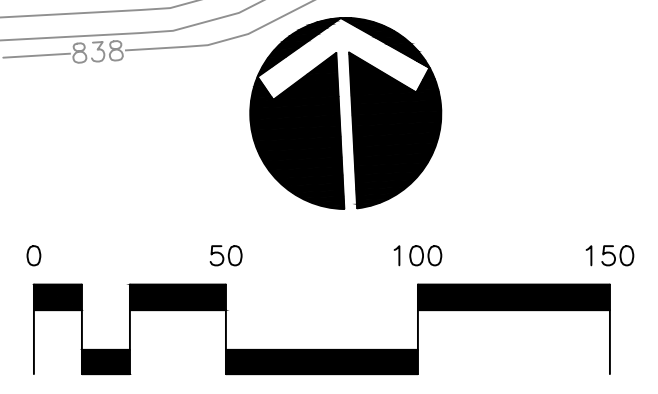
MATCH LINE SEE SHEET ET1.1

2-2" CALIPER TREES PER LOT (TYP.)

EXISTING TREES TO BE REMOVED (TYP.)



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 CHATTANOOGA, TN 37402  
 (423) 244-8561  
 www.ragan-smith.com

**BRIDGEMORE VILLAGE - PHASE 6**  
 FOR  
**BLUEPRINT PROPERTIES, LLC**  
 TOWN OF THOMPSON'S STATION WILLIAMSON COUNTY, TENNESSEE

WK. ORDER	0329
JOB NO.	11052
DESIGNED:	JFV
DRAWN:	NLF
SCALE:	1"=50'
DATE:	December 09, 2015
REVISIONS	12-18-15 (O.B.S.) REV. PER TOWN COMMENTS

TREE PLAN  
**ET1.1**



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**Tree Protection / Replacement Data Table**

Tree Units Provided from Existing Trees		
Removed Tree inches	Quantity	Units Per Tree
26	2	52
27	1	27
30	1	30
34	2	68
36	2	72
<b>Total Trees to be removed</b>	<b>8</b>	
<b>Total Units From Trees to be removed</b>		<b>249</b>

<b>Total Replacement Units</b>	249x1.5	<b>373.5</b>
<b>2-2" Cal. Tree Per Lot</b>	<b>87 Lots</b>	<b>348"</b>
<b>2" Cal. Cedar Tree</b>	<b>13</b>	<b>26"</b>
<b>Total Units Provided</b>		<b>374"</b>

**811**  
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CHATTANOOGA, TN 37405  
PH: 423.244.8561  
WWW.RAGANSMITH.COM

**BRIDGEMOOR VILLAGE - PHASE 6**  
FOR  
**BLUEPRINT PROPERTIES, LLC**  
TOWN OF THOMPSON'S STATION WILLIAMSON COUNTY, TENNESSEE

WK. ORDER	0329
JOB NO.	11052
DESIGNED:	JFV
DRAWN:	NLF
SCALE:	1"=50'
DATE:	December 09, 2015

REVISIONS

12-18-15 (D.B.S.) Rev. PER TOWN COMMENTS

**TREE PLAN**

**ET1.2**

**Thompson's Station Planning Commission  
Staff Report – Item 9 (File: Zone Amend 2016-001)  
January 26, 2016  
Land Development Ordinance Amendments**

**PROJECT DESCRIPTION**

These are staff initiated amendments of the Land Development Ordinance.

**PROPOSED REVISIONS**

**Section 1.2.7 Use Districts (page 03).** The intent of section 1.2.7 is to provide a brief descriptions of each use district. The density identified in the D2 Medium Intensity zoning description is incorrect. However, density is not listed in any of the other zoning descriptions and is listed in the corresponding zoning tables. Staff is recommending that the density reference be removed from the D2 Medium Intensity zoning description.

**Section 1.3 Definitions (page 7).** Remove reclamation bond in the definition section. The LDO does not have a provision for reclamation bonds and the term does not appear anywhere else in the document.

**Table 2.1 Community Types Permitted in Sectors (page 23).** In order to comply with state code requirements, the “key” on this table must be amended. It should read as follows “Key: ‘P’ is permitted by zoning.” All current letters within the table should be changed to P. This change would require all potential changes to the zoning map to accommodate transect communities would have to go through the normal zoning process.

**Section 3.3.14 Tree Protection (page 33).** Current language within the tree protection section requires identification of trees 24 inches and greater; however tree replacement requirements are for “trees exceeding 24 inches.” We recommend to modify the language for tree replacement requirements to read trees 24 inches or greater to correct the inconsistency by requiring the same size for identification and removal and replacement requirements.

**Section 3.3.14 Tree Protection (page 33).** Tree removal is currently regulated by the Planning Commission during concept plan review. Staff is recommending that this be moved to the preliminary plat phase since concept plans are not approved by the Planning Commission.

**Table 4.1 Land Use and Building Type (page 73).** Single family residential should be an allowable use in the T2 district.

**Section 4.5 Lot Use Restrictions (page 73); Table 4.2 Building Intensity (page 75); and Section 4.10.4 (page 95).** We have identified inconsistencies on accessory dwelling unit regulation. Section 4.5.2 permits accessory dwelling units within the T3 up to 900 square feet. However, the Building Intensity table permits accessory dwelling units within T3 permits habitable area up to 500 square feet. We are recommending modifying the square footage in the Building Intensity table to 900 square feet for consistency with the text with Section 4.5. These corrections would create consistency between the different code sections and permit a maximum of 900 square feet for an accessory dwelling unit.

**Table 4.1 Land Use and Building Type (page 73).** Include accessory dwelling unit within the T2 zoning district. This accessory dwelling unit allowance will be subject to the requirements set forth



within Table 4.2 Building Intensity which limits accessory dwellings in size, which would be 900 square feet.

**Table 4.1 Land Use and Building Type (page 74).** Include office building as a permitted land use within Industrial Light (IL) and Industrial Medium (IM) zones.

**Table 4.3 T2 Lot Standards (page 78).** Side and rear lot line building setbacks for the main building and accessory building are reversed in the T2 table. We would recommend changing the main building setbacks for side lot line to 20 feet and rear lot line to 50 feet and change accessory building side lot line to 10 feet and rear lot line to 12 feet. In addition, the primary frontage parking setback of 100 feet appears to be inappropriate for the required building setbacks. Staff recommends a change to require a 50 parking setback in accordance with the primary building setback.

**Table 4.4 T3 Lot Standards (page 79).** Side yard setbacks are an aggregate of 20 feet; however, the code didn't identify a minimum set setback. The minimum setback should be five feet.

**Section 4.12.4 Maximum Provided Automobile Parking (page 104).** This section has two inconsistent requirements. Developers are allowed to supply parking in excess of standard parking requirements in exchange for using low impact design standards. Staff is recommending that the first sentence be deleted which states the parking "shall not be permitted to exceed the allowable parking spaces . . . in excess of 10%" to eliminate the conflicting language within this code section. The requirement for any increases over 10% is 50% of the park area as low impact design (LID).

Strike second sentence regarding parking area exceeding allowances subject to review and approval by the Planning Commission. Parking lot layouts are prepared as part of site plans which are already reviewed by the Planning Commission. Any permanent parking that exceeds code requirements are subject to LID standards and are reviewed as part of the site plan packet.

**Table 4.16 Use District Parking Requirements (page 106).** Correct parking requirement for auto mechanical repair to reflect waiting areas instead of "seating for restaurants."

**Section 4.17.6 Future Development Signs (page 122).** The code states that "signs may not be installed until an approved concept plan is recorded." However, concept plans are not approved or recorded and therefore, the requirement should reflect preliminary plat approval.

**Section 5.2.6 Construction Plans (page 129).** The code states that "multi-phase developments shall be required to submit phasing and construction traffic plan for the entire development before any final plats are approved." Staff recommends the timing be changed to prior to the approval of preliminary plat.

**Section 5.2.8 Development Agreement Required Prior to Construction (page 131).** Modify the language to require the development agreement prior to preliminary plat. The section would read "Following the review of the concept plan, a Development Agreement shall be prepared prior to the approval of preliminary plats. . ." All remaining language will remain the same.

### **RECOMMENDATION**

Staff is requesting the Planning Commission recommend to the Board of Mayor and Aldermen these Staff initiated amendments to the Land Development Ordinance.

## **ADDITIONAL AMENDMENTS**

A request was submitted by Aldermen Shepard requesting the elimination of apartments as an allowable land use in the T4 and T5 zoning districts along with the inclusion of apartments within Commercial and Industrial zones. Aldermen Shepard has requested a modification to the transect definitions for T4 and T5 zoning to include condominiums and prohibit apartments within these transect zones along with a modification to apartment definition and the inclusion of a definition for multi family dwelling.

The Land Development Ordinance was prepared with the intent of designating a mix of land uses throughout communities, including a mix of housing options to create neighborhoods with a “range of housing types” that “accommodate diverse ages and incomes” (Section 1.2.3e of the LDO). Eliminating apartments from these mixes of housing options will have a significant impact on the overall development these types of projects and the town center which was an area considered for higher density residential development. The development of apartments or any housing types within these districts are regulated by the bulk standards to ensure that the form of the project meets criteria to build a sense of place rather than control by use. Furthermore, goal 1 of the Housing Element states to “provide opportunities for a range of housing units that meet a wide variety of income levels” and policy 1.1 states to “encourage mixed use development within the Town Center,” which is T4 and T5 zoning, “that provides a variety of housing types.”

In addition, if the staff recommendation on changes to Table 2.1 are accepted then all transect community designations will have to come before the Planning Commission for recommendation to the Board of Mayor and Aldermen. Any apartment concern can be handled during these evaluations rather than deleting the use outright from the T4 and T5 districts.

Permitting apartments within the commercial zones will lend to an option for a mixed use development, however would not be subject to the bulk standards that require frontages, glazing, maximum lot widths and other standards to ensure a pedestrian scale. Permitting apartments within the industrial zones is not recommended because uses that may occur within these zones tend to be not compatible with residential land uses.

## **RECOMMENDATION**

Based on the goals and policies of the General Plan and the intent of the Land Development Ordinance, Staff recommends that the Planning Commission:

1. Does not recommend the exclusion of apartments within the T4 and T5 zones or the modification to the transect definitions.
2. Does not recommend the inclusion of apartments in the Industrial zone.
3. Recommends the inclusion of apartments in the Commercial zone.
4. Recommends the modification to the apartment definition.
5. Recommends the inclusion of the multi family dwelling definition.

## **ATTACHMENTS**

Email request for LDO amendments

Proposed Amendments (as submitted to the PC)

Phone: (615) 794-4333  
Fax: (615) 794-3313  
www.thompsons-station.com



1550 Thompson's Station Road W.  
P.O. Box 100  
Thompson's Station, TN 37179

To: Planning Commission  
From: Wendy Deats, AICP  
Town Planner  
Date: January 26, 2016  
Re: Addendum to Item 9 – Land Development Amendments

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Additional Revision

**Table 3.4 Maximum Block Face Length (page 52).** The block lengths for the transect districts were copied over to the use districts. However, the previous subdivision regulations had a range of block lengths from 800 to 1,200 feet. Therefore, Staff recommends correcting this table to consist of a block length of 1,200 feet for the D1 zone, 1,000 feet for the D2 zone, and 800 feet for the D3 zone.

Recommendation

Staff recommends this modification be included into the amendments for the Land Development Ordinance.