

**KNOXVILLE/KNOX COUNTY METROPOLITAN PLANNING COMMISSION
 SUBDIVISION REPORT - CONCEPT/USE ON REVIEW**

▶ **FILE #:** 5-SA-17-C
 5-B-17-UR

AGENDA ITEM #: 15
AGENDA DATE: 5/11/2017

▶ **SUBDIVISION:** VINING MILL
 ▶ **APPLICANT/DEVELOPER:** HOMESTEAD LAND HOLDINGS, LLC
 OWNER(S): Homestead Land Holdings, LLC

TAX IDENTIFICATION: 129 12601 AND PART OF 126
 JURISDICTION: County Commission District 6
 STREET ADDRESS: 2010 Marietta Church Rd

[View map on KGIS](#)

▶ **LOCATION:** Southeast side of Hardin Valley Rd., east side of Marietta Church Rd.

SECTOR PLAN: Northwest County
 GROWTH POLICY PLAN: Rural Area
 WATERSHED: Conner Creek and Hickory Creek

▶ **APPROXIMATE ACREAGE:** 117 acres

▶ **ZONING:** PR (Planned Residential) & PR pending

▶ **EXISTING LAND USE:** Vacant land

▶ **PROPOSED USE:** Detached Residential Subdivision

SURROUNDING LAND USE AND ZONING: North: Vacant land - A (Agricultural) and PR (Planned Residential)
 South: Vacant land - A (Agricultural)
 East: Vacant land - A (Agricultural)
 West: Rural residential and vacant land / A (Agricultural)

▶ **NUMBER OF LOTS:** 192
 SURVEYOR/ENGINEER: Rackley Engineering

ACCESSIBILITY: Access is via Hardin Valley Rd., a minor arterial street with a 22' pavement width within a 40' - 60' right-of-way, and Marietta Church Rd., a minor collector street with a 19' pavement width within a 40' of right-of-way.

▶ **SUBDIVISION VARIANCES REQUIRED:**

1. Reduce sag k from 25 to 20 on English Ivy Ln at STA 1+06.
2. Reduce centerline radius from 250 to 150 on English Ivy Ln at STA 43+00.
3. Reduce centerline radius from 250 to 203 on Boston Ivy Ln at STA 3+00.
4. Increase maximum road grade from 12% to 12.58% on Boston Ivy Ln at STA 6+00.
5. Increase maximum road grade from 12% to 13.31% on Velvet Leaf Ln at STA 2+25.
6. Reduce crest k from 25 to 19 on Velvet Leaf Ln at STA 4+05.
7. Reduce centerline radius from 250 to 150 on Leatherback Rd at STA 4+00.
8. Reduce centerline radius from 250 to 223 on Leatherback Rd at STA 9+50.

9. Reduce centerline radius from 250 to 100 on Leatherback Rd at STA 12+00.
10. Reduce centerline radius from 250 to 100 on Leatherback Rd at STA 13+75.
11. Increase maximum road grade from 12% to 14.63% on Leatherback Rd at STA 2+00.
12. Increase maximum road grade from 12% to 15% on Leatherback Rd at STA 12+60.
13. Reduce sag k from 25 to 15 at intersection Leatherback Rd and Marietta Church Rd.
14. Reduce crest k from 25 to 19 on Leatherback Rd at STA 4+43.
15. Reduce sag k from 25 to 20 on Leatherback Rd at STA 10+20.
16. Reduce transition radius for the Needlegrass Ln cul-de-sac from 75' to 25' on inside of road centerline curve.

STAFF RECOMMENDATION:

- ▶ **APPROVE** variances 1-16 because the site's topography and shape restricts compliance with the Subdivision Regulations and the proposed variances will not create a traffic hazard.

APPROVE the Concept Plan subject to 13 conditions

1. Connection to sanitary sewer and meeting any other relevant requirements of the Knox County Health Department.
2. Provision of street names which are consistent with the Uniform Street Naming and Addressing System within Knox County (Ord 91-1-102).
3. Installation of sidewalks as identified on the concept plan. Sidewalks shall meet all applicable requirements of the Americans with Disabilities Act (ADA) and the Knox County Department of Engineering and Public Works. A bond shall be provided to the Knox County Department of Engineering and Public Works by the developer in an amount sufficient to guarantee the installation of the sidewalks.
4. Installation of the separate westbound left turn lane on Hardin Valley Road with a storage bay length of a minimum of 100 feet as identified in the Traffic Impact Study (TIS) prepared by Ajax Engineering and dated November 28, 2016. This turn lane should be installed prior to the 60th building permit, which is stated in the TIS.
5. The final design and details for implementation of the intersection improvements for English Ivy Ln. at Hardin Valley Rd. shall be worked out between the applicant and the Knox County Department of Engineering and Public Works during the design plan stage for the subdivision.
6. At the design plan stage of the subdivision review, increased side yard setbacks may be required by the Knox County Department of Engineering and Public Works for lots along street grades of 10% or greater.
7. During the design plan stage of the subdivision review the applicant shall work with the Knox County Department of Engineering and Public Works and Planning Commission staff to minimize the clearing and grading of the common areas identified on the concept plan. When the grading and stormwater plans are finalized, a plan shall be prepared that identifies the areas within the common area that are to remain as natural undisturbed areas. These areas shall be identified on the final plat and protective covenants for the subdivision as natural undisturbed area with a prohibition on any clearing and grading except what would be needed for a passive trail system. The boundary for the natural undisturbed areas shall be clearly marked in the field prior to any site grading in order to identify the limits of disturbance and protect those areas of mature vegetation.
8. Meeting all applicable requirements of the Knox County Department of Engineering and Public Works.
9. Obtaining any grading and slope easements that will be needed for grading the site.
10. Meeting all applicable requirements and obtaining all required permits from the Tennessee Department of Environment and Conservation for crossing the blue line stream on the property.
11. Prior to certification of the final plat for the subdivision, establishing a property owners association that will be responsible for the maintenance of the common areas, drainage system and any recreational amenities.
12. Placing a note on the final plat that the vehicular access for all lots is limited to the internal street system.
13. A final plat application based on this concept plan will not be accepted for review by the MPC until certification of design plan approval has been submitted to the MPC staff.

- ▶ **APPROVE the Development Plan for up to 192 detached dwelling units on individual lots and the reduction of the peripheral setback from 35' to 25', subject to 2 conditions.**

1. Obtaining approval from Knox County Commission of the rezoning of the 6 acres to PR (Planned Residential) at a density of up to 2 du/ac.

2. Meeting all applicable requirements of the Knox County Zoning Ordinance.

With the conditions noted, this plan meets the requirements for approval in the PR zone and the other criteria for approval of a Use on Review.

COMMENTS:

A concept plan/use-on-review approval was granted by the Planning Commission for Vining Mill Subdivision on January 12, 2017. The concept plan included 190 lots on 111 acres at a density of 1.71 du/ac. The applicant is now adding 6 additional acres located at the northeast corner of the to the site to the subdivision. The addition of this property allows for some design changes that will result in a reduction of the street grade for Boston Ivy Ln. With the addition of the 6 acres, 2 additional lots have been added. The proposed subdivision now includes 192 lots on 117 acres at a reduced density of 1.64 du/ac. The Planning Commission had recommended approval of the rezoning of the 6 acres to PR (Planned Residential) at a density of up to 2 du/ac on April 13, 2017. The Planning Commission had recommended approval of the rezoning of the original 111 acres to PR (Planned Residential) at a density of up to 2 du/ac on August 11, 2016. The Knox County Commission approved that rezoning request on September 26, 2016.

The proposed subdivision will be served by public streets with access out to both Hardin Valley Rd. and Marietta Church Rd. A Traffic Impact Study was prepared by Ajax Engineering for this development with the last revision date being March 30, 2016. The study recommends turn lane improvements on Hardin Valley Rd. at the proposed subdivision entrance.

Staff had evaluated street connections from this development into adjoining tracks of land and it was determine that the subdivision layout and steep topography did not provide any logical street connections. Staff is encouraging the applicant to work with any adjoining land owners that would be interested in connecting to the proposed street network within this subdivision.

While this site is not within the parental responsibility zone, sidewalks will be provided on one side of English Ivy Ln. from Hardin Valley Rd. to Leatherback Dr. and along Leatherback Dr. to Marietta Church Rd. This will provided pedestrian access along the two main streets with a connection to the amenity area that is being provided at the main entrance to the subdivision at Hardin Valley Rd.

The proposed subdivision layout includes a significant amount of common area which includes 31.64 acres (27% of the site). The majority of the common area includes the steeper portions of the site. The preliminary grading plan is limiting the disturbance into these common areas. The applicant has expressed a willingness to work with staff to reduce the impact on the common area. Approximately 21.8 acres of the common area will remain undisturbed. The areas of the site that can remain undisturbed must be clearly marked in the field prior to any site grading in order to identify the limits of disturbance and protect those areas of mature vegetation.

The applicant has requested a reduction of the peripheral setback from 35' to 25' along all subdivision boundaries. The Planning Commission can approve a peripheral setback reduction down to 15' when the subdivision adjoins specific residential zoning districts.

EFFECT OF THE PROPOSAL ON THE SUBJECT PROPERTY, SURROUNDING PROPERTY AND THE COMMUNITY AS A WHOLE

1. The proposed detached residential subdivision will have minimal impact on local services since utilities are available to serve this site.
2. The proposed low density residential development at a density of 1.64 du/ac is compatible with the scale and intensity of recent development that has occurred in this area.
3. The applicant has laid out the development to stay off the steeper portions of the site. The concept plan has included the steeper area within common area, and with the recommended conditions, those areas will be protected from development.

CONFORMITY OF THE PROPOSAL TO CRITERIA ESTABLISHED BY THE KNOX COUNTY ZONING ORDINANCE

1. With the recommended conditions, the proposed residential development is consistent with all relevant requirements of the PR zoning, as well as other criteria for approval of a use on review.
2. The development is consistent with the following general standards for uses permitted on review: The proposal is consistent with the adopted plans and policies of the General Plan and Sector Plan. The use in is

harmony with the general purpose and intent of the Zoning Ordinance. The use will not significantly injure the value of adjacent property. The use will not draw additional traffic through residential areas since the development has access to a minor arterial street and a minor collector street.

3. The proposed residential development at a density of 1.64 du/ac, is consistent in use and density with the PR zoning of the property that was approved at a density of up to 2 du/ac.

CONFORMITY OF THE PROPOSAL TO ADOPTED MPC PLANS

1. The Northwest County Sector Plan proposes low density residential development for this site. The proposed development at a density of 1.64 du/ac is consistent with the sector plan.
2. The majority of this site is located within the hillside protection area. The proposed concept plan includes 31.64 acres (27%) in common areas. The majority of that area includes the steeper portions of the site. Staff is recommending a condition that clearing and grading be restricted in those areas and protective measures be included within the protective covenants for these undisturbed areas.
3. This site is located within the Rural Area on the Knoxville-Knox County-Farragut Growth Policy Plan map.

ESTIMATED TRAFFIC IMPACT: A traffic impact study was prepared by the applicant. The findings of that study were used in formulating the recommendations of this staff report.

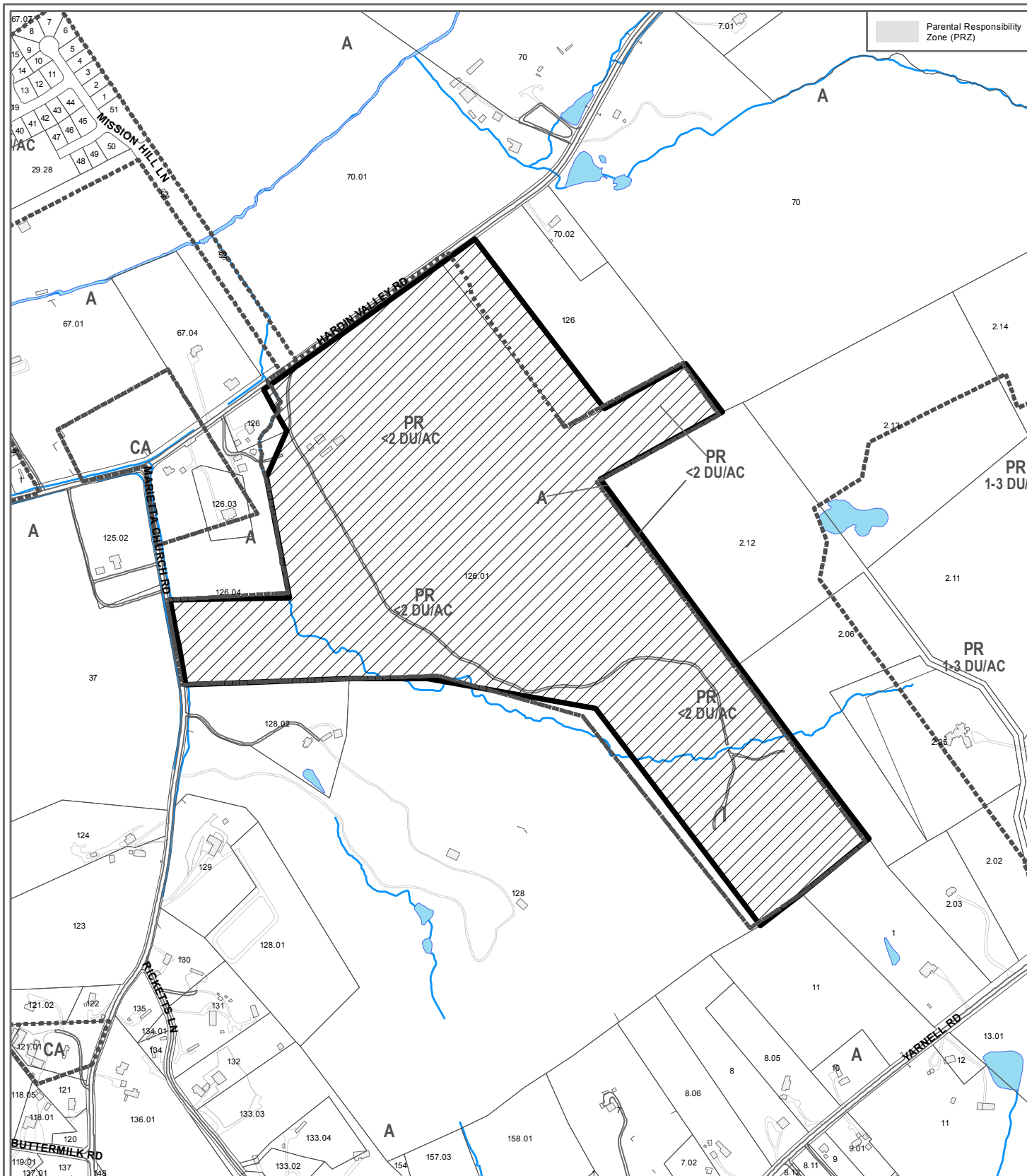
ESTIMATED STUDENT YIELD: 102 (public and private school children, ages 5-18 years)

Schools affected by this proposal: Hardin Valley Elementary, Karns Middle, and Hardin Valley Academy.

- School-age population (ages 5–18) is estimated by MPC using data from a variety of sources.
- While most children will attend public schools, the estimate includes population that may be home-schooled, attend private schools at various stages of enrollment, or drop out of the public system.
- Students are assigned to schools based on current attendance zones as determined by Knox County Schools. Zone boundaries are subject to change.
- Estimates presume full build-out of the proposed development. Build-out is subject to market forces, and timing varies widely from proposal to proposal.
- Student yields from new development do not reflect a net addition of children in schools. Additions occur incrementally over the build-out period. New students may replace current population that ages through the system or moves from the attendance zone.
- School capacities are subject to change by Knox County Schools through building additions, curriculum or scheduling changes, or amendments to attendance zone boundaries.

MPC's approval or denial of this concept plan request is final, unless the action is appealed to Knox County Chancery Court. The date of the Knox County Chancery Court hearing will depend on when the appeal application is filed.

MPC's approval or denial of this use on review request is final, unless the action is appealed to the Knox County Board of Zoning Appeals. The date of the Knox County Board of Zoning Appeals hearing will depend on when the appeal application is filed.



**5-SA-17-C / 5-B-17-UR
CONCEPT PLAN/USE ON REVIEW**

Petitioner: Homestead Land Holdings, LLC
Vining Mill

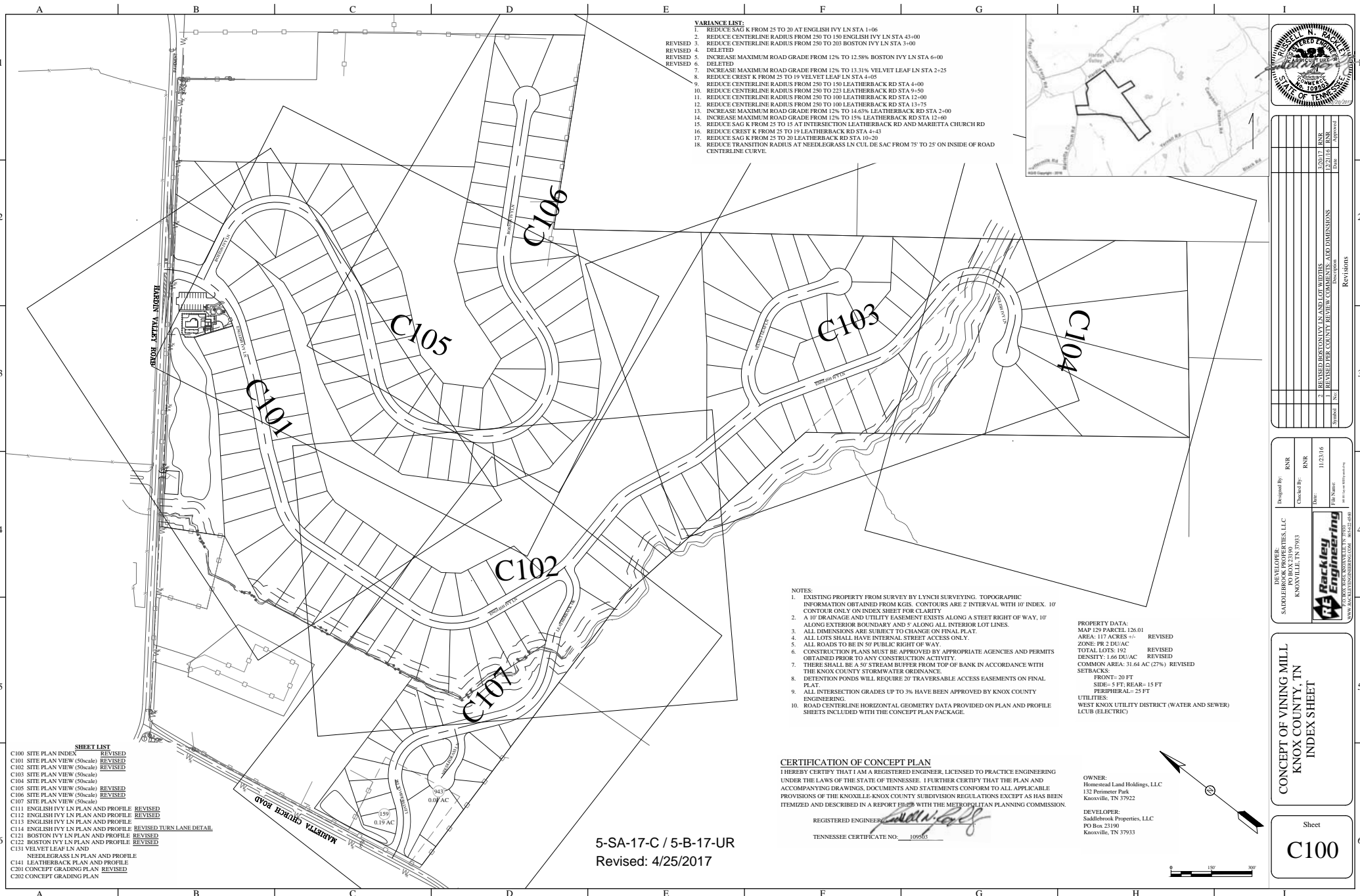


Detached Residential Subdivision in PR (Planned Residential) & PR pending

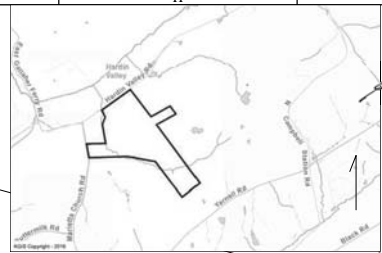
Map No: 129
Jurisdiction: County

Original Print Date: 4/17/2017 Revised:
Metropolitan Planning Commission * City / County Building * Knoxville, TN 37902





- VARIANCE LIST:**
1. REDUCE SAG K FROM 25 TO 20 AT ENGLISH IVY LN STA 1+06
 2. REDUCE CENTERLINE RADIUS FROM 250 TO 150 ENGLISH IVY LN STA 43+00
 3. REDUCE CENTERLINE RADIUS FROM 250 TO 200 BOSTON IVY LN STA 3+00
 4. DELETED
 5. INCREASE MAXIMUM ROAD GRADE FROM 12% TO 12.58% BOSTON IVY LN STA 6+00
 6. DELETED
 7. INCREASE MAXIMUM ROAD GRADE FROM 12% TO 13.31% VELVET LEAF LN STA 2+25
 8. REDUCE CREST K FROM 25 TO 19 VELVET LEAF LN STA 4+05
 9. REDUCE CENTERLINE RADIUS FROM 250 TO 150 LEATHERBACK RD STA 4+00
 10. REDUCE CENTERLINE RADIUS FROM 250 TO 100 LEATHERBACK RD STA 12+00
 11. REDUCE CENTERLINE RADIUS FROM 250 TO 100 LEATHERBACK RD STA 13+75
 12. INCREASE MAXIMUM ROAD GRADE FROM 12% TO 14.63% LEATHERBACK RD STA 2+00
 13. INCREASE MAXIMUM ROAD GRADE FROM 12% TO 15% LEATHERBACK RD STA 12+00
 14. REDUCE SAG K FROM 25 TO 15 AT INTERSECTION LEATHERBACK RD AND MARBETTA CHURCH RD
 15. REDUCE CREST K FROM 25 TO 19 LEATHERBACK RD STA 4+43
 16. REDUCE CREST K FROM 25 TO 30 LEATHERBACK RD STA 10+20
 17. REDUCE TRANSITION RADIUS AT NEEDLEGRASS LN CUL-DE-SAC FROM 75 TO 25 ON INSIDE OF ROAD CENTERLINE CURVE.



Symbol	No.	Description	Date	Approval
	1	REVISION PER COUNTY REVIEW COMMENTS, ADD DIMENSIONS	12/21/16	
	2	REVISION BOSTON IVY LN AND CUL-DE-SACS	12/01/17	

Designed By:	RSR	11/23/16
Checked By:	RSR	
Drawn By:	RSR	

DEVELOPER:
SADDLEBROOK PROPERTIES, LLC
KNOXVILLE, TN 37933

RErackley Engineering
REGISTERED ENGINEER
WWW.REACKLEYENGINEERING.COM

- NOTES:**
1. EXISTING PROPERTY FROM SURVEY BY LYNCH SURVEYING. TOPOGRAPHIC INFORMATION OBTAINED FROM KGIS. CONTOURS ARE 2' INTERVAL WITH 10' INDEX. 10' CONTOUR ONLY ON INDEX SHEET FOR CLARITY.
 2. A 10' DRAINAGE AND UTILITY EASEMENT EXISTS ALONG A STREET RIGHT OF WAY, 10' ALONG EXTERIOR BOUNDARY AND 5' ALONG ALL INTERIOR LOT LINES.
 3. ALL DIMENSIONS ARE SUBJECT TO CHANGE ON FINAL PLAT.
 4. ALL LOTS SHALL HAVE INTERNAL STREET ACCESS ONLY.
 5. ALL ROADS TO BE IN 50' PUBLIC RIGHT OF WAY.
 6. CONSTRUCTION PLANS MUST BE APPROVED BY APPROPRIATE AGENCIES AND PERMITS OBTAINED PRIOR TO ANY CONSTRUCTION ACTIVITY.
 7. THERE SHALL BE A 50' STREAM BUFFER FROM TOP OF BANK IN ACCORDANCE WITH THE KNOX COUNTY STORMWATER ORDINANCE.
 8. DETENTION PONDS WILL REQUIRE 20' TRAVERSABLE ACCESS EASEMENTS ON FINAL PLAT.
 9. ALL INTERSECTION GRADES UP TO 3% HAVE BEEN APPROVED BY KNOX COUNTY ENGINEERING.
 10. ROAD CENTERLINE HORIZONTAL GEOMETRY DATA PROVIDED ON PLAN AND PROFILE SHEETS INCLUDED WITH THE CONCEPT PLAN PACKAGE.

PROPERTY DATA:
MAP 129 PARCEL 126.01 REVISIONED
AREA: 117 ACRES REVISIONED
ZONE: PR 2 DU/AC REVISIONED
TOTAL LOTS: 192 REVISIONED
DENSITY: 1.66 DU/AC REVISIONED
COMMON AREA: 31.64 AC (27%) REVISIONED

SETBACKS:
FRONT= 20 FT
SIDE= 5 FT; REAR= 15 FT
PERIPHERAL= 25 FT

UTILITIES:
WEST KNOX UTILITY DISTRICT (WATER AND SEWER)
LCUR (ELECTRIC)

- SHEET LIST**
- C100 SITE PLAN INDEX REVISIONED
 - C101 SITE PLAN VIEW (50scale) REVISIONED
 - C102 SITE PLAN VIEW (50scale) REVISIONED
 - C103 SITE PLAN VIEW (50scale) REVISIONED
 - C104 SITE PLAN VIEW (50scale) REVISIONED
 - C105 SITE PLAN VIEW (50scale) REVISIONED
 - C106 SITE PLAN VIEW (50scale) REVISIONED
 - C107 SITE PLAN VIEW (50scale) REVISIONED
 - C111 ENGLISH IVY LN PLAN AND PROFILE REVISIONED
 - C112 ENGLISH IVY LN PLAN AND PROFILE REVISIONED
 - C113 ENGLISH IVY LN PLAN AND PROFILE REVISIONED
 - C114 ENGLISH IVY LN PLAN AND PROFILE REVISIONED
 - C121 BOSTON IVY LN PLAN AND PROFILE REVISIONED
 - C122 BOSTON IVY LN PLAN AND PROFILE REVISIONED
 - C131 VELVET LEAF LN AND NEEDLEGRASS LN PLAN AND PROFILE
 - C141 LEATHERBACK PLAN AND PROFILE
 - C201 CONCEPT GRADING PLAN REVISIONED
 - C202 CONCEPT GRADING PLAN

CERTIFICATION OF CONCEPT PLAN

I HEREBY CERTIFY THAT I AM A REGISTERED ENGINEER, LICENSED TO PRACTICE ENGINEERING UNDER THE LAWS OF THE STATE OF TENNESSEE. I FURTHER CERTIFY THAT THE PLAN AND ACCOMPANYING DRAWINGS, DOCUMENTS AND STATEMENTS CONFORM TO ALL APPLICABLE PROVISIONS OF THE KNOXVILLE-KNOX COUNTY SUBDIVISION REGULATIONS EXCEPT AS HAS BEEN ITEMIZED AND DESCRIBED IN A REPORT FILED WITH THE METROPOLITAN PLANNING COMMISSION.

REGISTERED ENGINEER: *[Signature]*
TENNESSEE CERTIFICATE NO. 10953

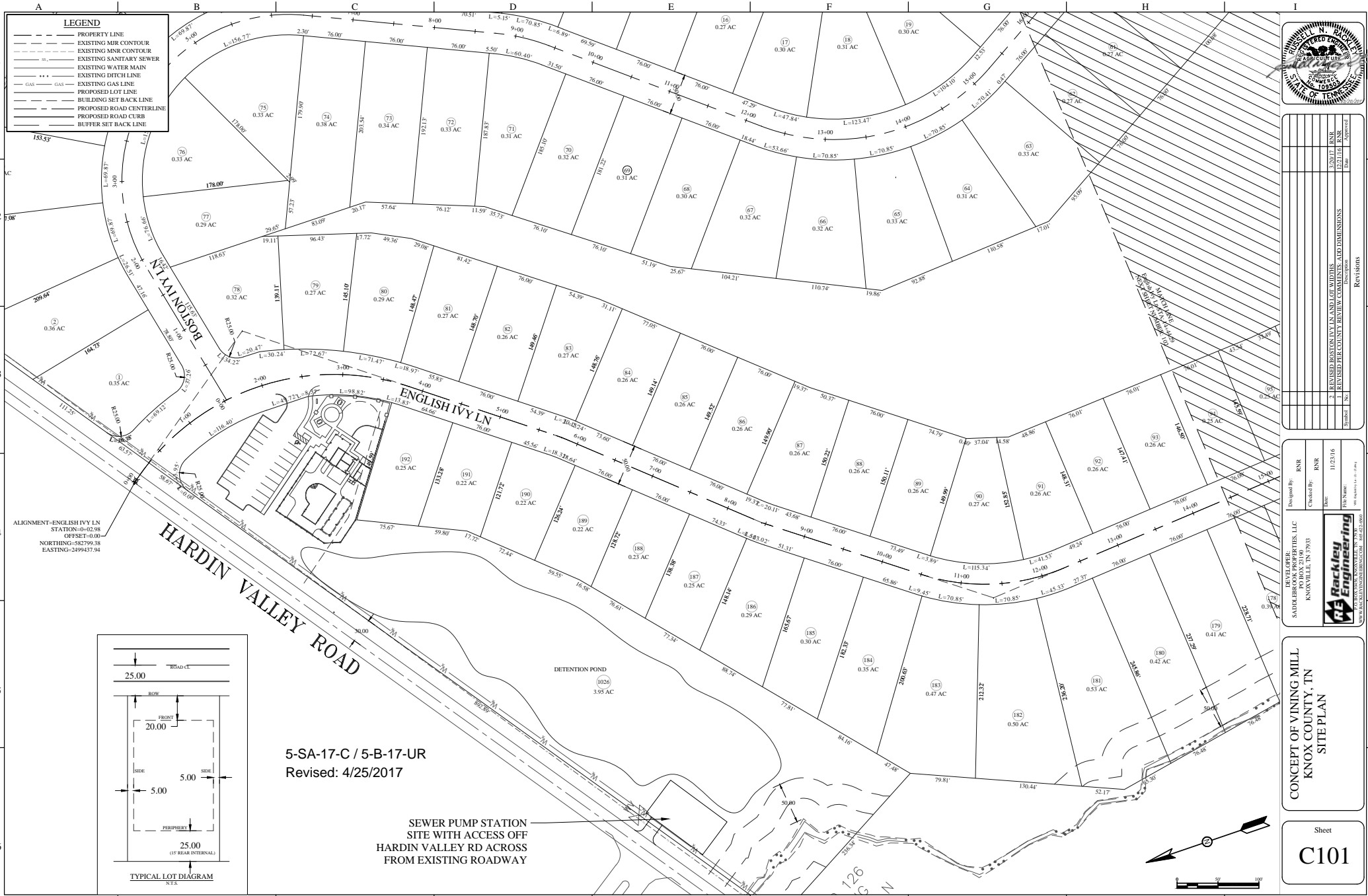
OWNER:
Homestead Land Holdings, LLC
132 Perimeter Park
Knoxville, TN 37922

DEVELOPER:
Saddlebrook Properties, LLC
PO Box 23190
Knoxville, TN 37933

5-SA-17-C / 5-B-17-UR
Revised: 4/25/2017

CONCEPT OF VINING MILL
KNOX COUNTY, TN
INDEX SHEET

Sheet
C100



NO.	DESCRIPTION	DATE	BY	APPROVED
1	PRELIMINARY			
2	REVISIONS AND LOT WIDTHS AND DIMENSIONS	12/01/16	RSK	
3	REVISIONS			

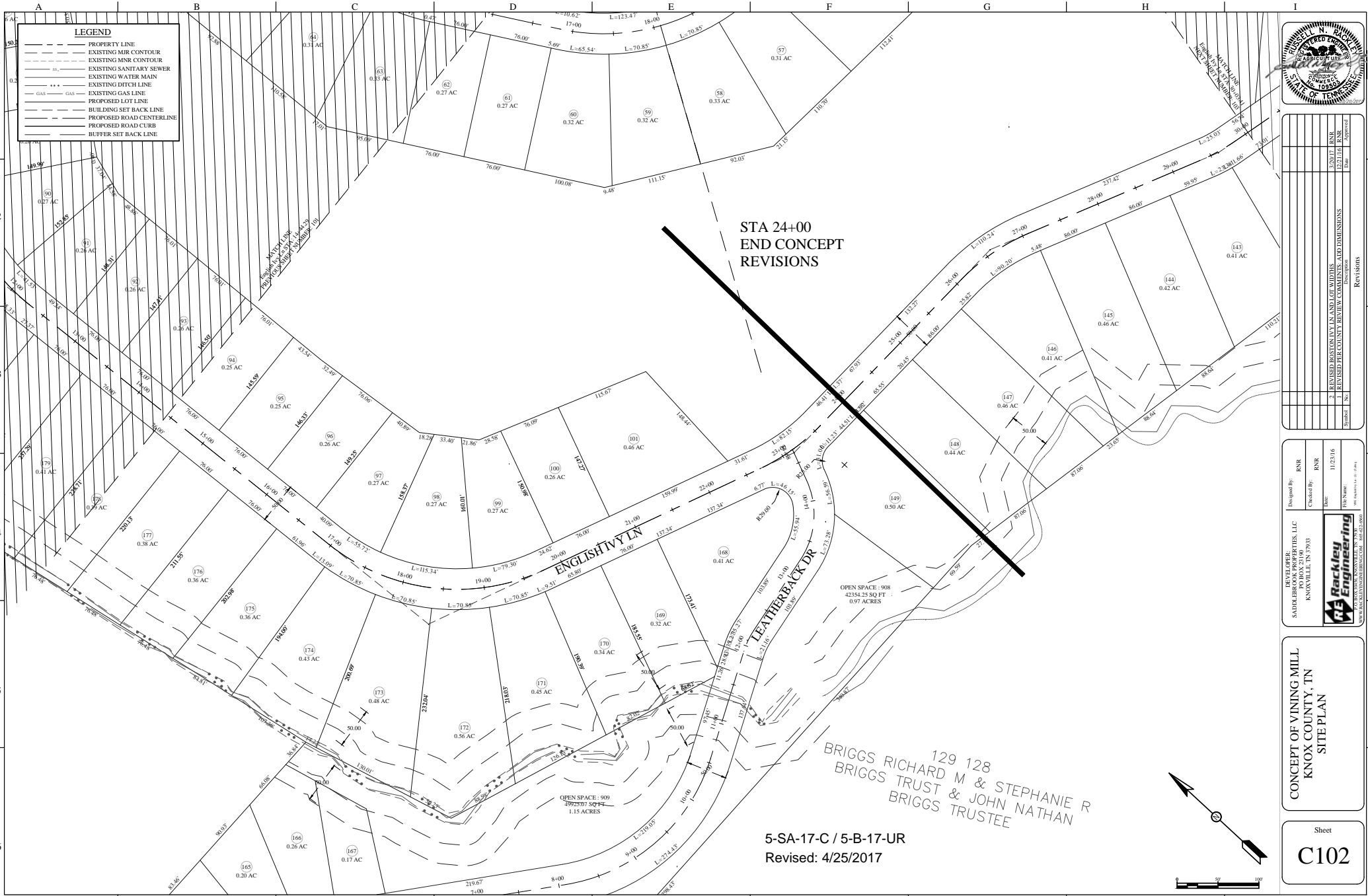
Designed By: RSK
 Checked By: RSK
 Date: 11/23/16
 Title: ENGINEER

SAADDLEBROOK PROPERTIES, LLC
 100 BOX 2100
 KNOXVILLE, TN 37933

RA Rackley Engineering
 100 BOX 2100
 KNOXVILLE, TN 37933
 (615) 596-1111
 WWW.RACKLEYENGINEERING.COM

**CONCEPT OF VINING MILL
 KNOX COUNTY, TN
 SITE PLAN**

Sheet
C101



LEGEND

- PROPERTY LINE
- - - EXISTING MNR CONTOUR
- - - EXISTING MNR CONTOUR
- EXISTING SANITARY SEWER
- EXISTING WATER MAIN
- EXISTING DITCH LINE
- EXISTING GAS LINE
- PROPOSED LOT LINE
- BUILDING SET BACK LINE
- PROPOSED ROAD CENTERLINE
- PROPOSED ROAD CURB
- BUFFER SET BACK LINE

**STA 24+00
END CONCEPT
REVISIONS**

5-SA-17-C / 5-B-17-UR
Revised: 4/25/2017

129 128
BRIGGS RICHARD M & STEPHANIE R
BRIGGS TRUST & JOHN NATHAN
BRIGGS TRUSTEE

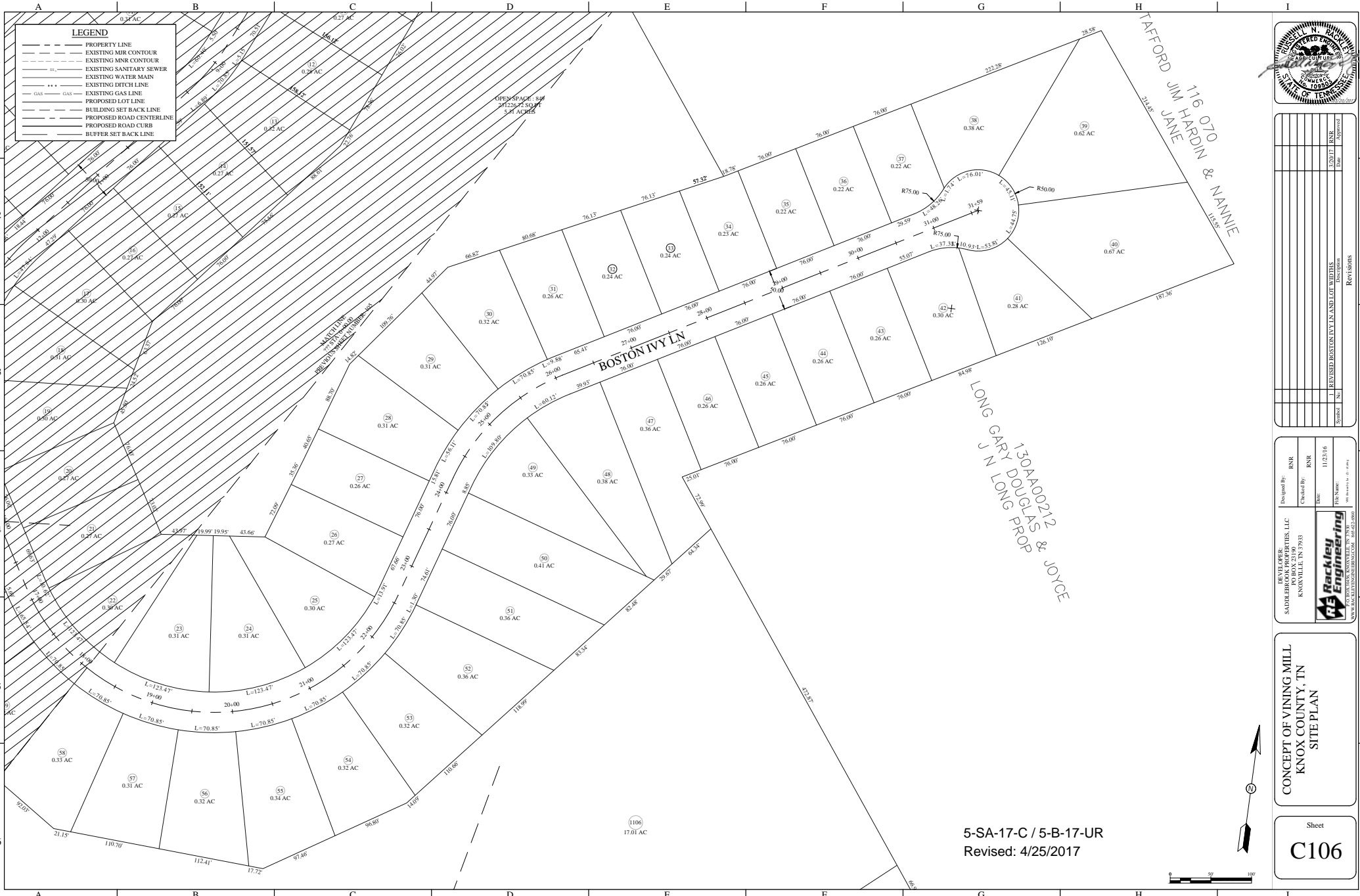


Prepared By:	NSR
Checked By:	NSR
Date:	11/23/16
Scale:	AS SHOWN
Project No.:	5-SA-17-C / 5-B-17-UR
Sheet No.:	C102
Revisions:	

DESIGNED BY: NSR
 CHECKED BY: NSR
 DATE: 11/23/16
 PROJECT NO.: 5-SA-17-C / 5-B-17-UR
 SHEET NO.: C102

CONCEPT OF VINING MILL
 KNOX COUNTY, TN
 SITE PLAN

Sheet
C102



LEGEND

- PROPERTY LINE
- - - - - EXISTING MNR CONTOUR
- - - - - EXISTING SANITARY SEWER
- - - - - EXISTING WATER MAIN
- - - - - EXISTING DITCH LINE
- - - - - EXISTING GAS LINE
- PROPOSED LOT LINE
- BUILDING SET BACK LINE
- PROPOSED ROAD CENTERLINE
- PROPOSED ROAD CURB
- BUFFER SET BACK LINE



Symbol	No.	Revised	Description	Revisors
	1	2/20/17	RNR	Approval
	2	2/20/17	RNR	Approval
	3	2/20/17	RNR	Approval
	4	2/20/17	RNR	Approval
	5	2/20/17	RNR	Approval
	6	2/20/17	RNR	Approval

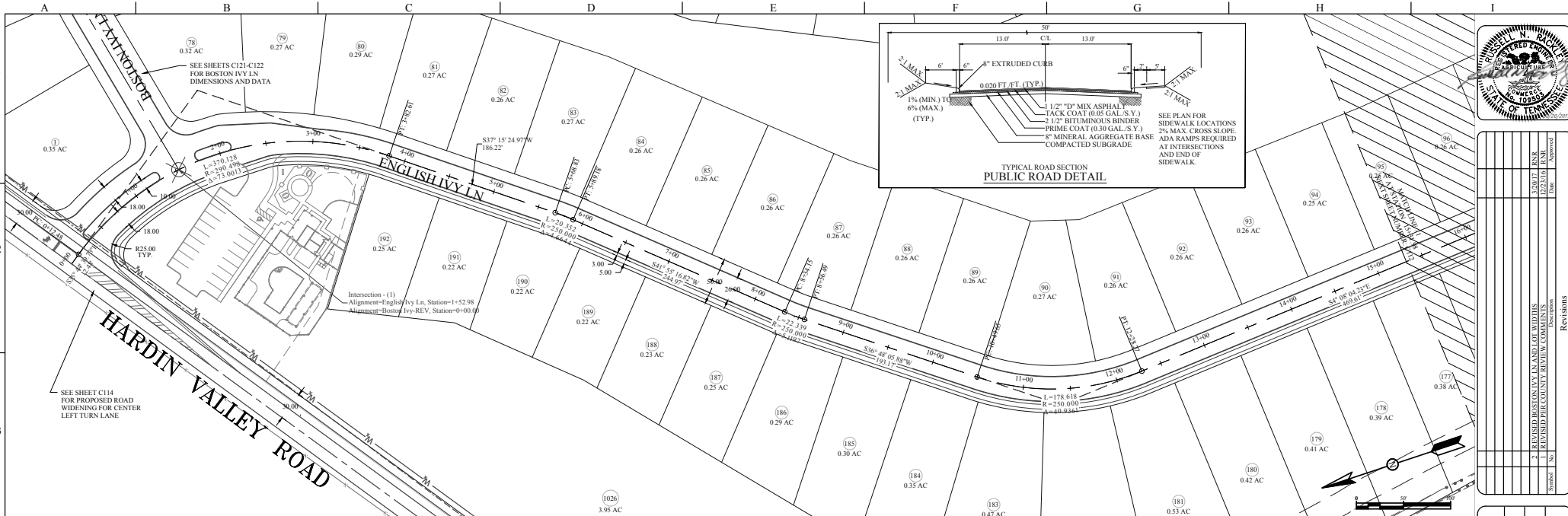
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Checked By:	RNR	RIS
Date:	11/23/16	
Project Name:	CONCEPT OF VINING MILL, KNOX COUNTY, TN	
Scale:	AS SHOWN	

CONCEPT OF VINING MILL,
KNOX COUNTY, TN
SITE PLAN

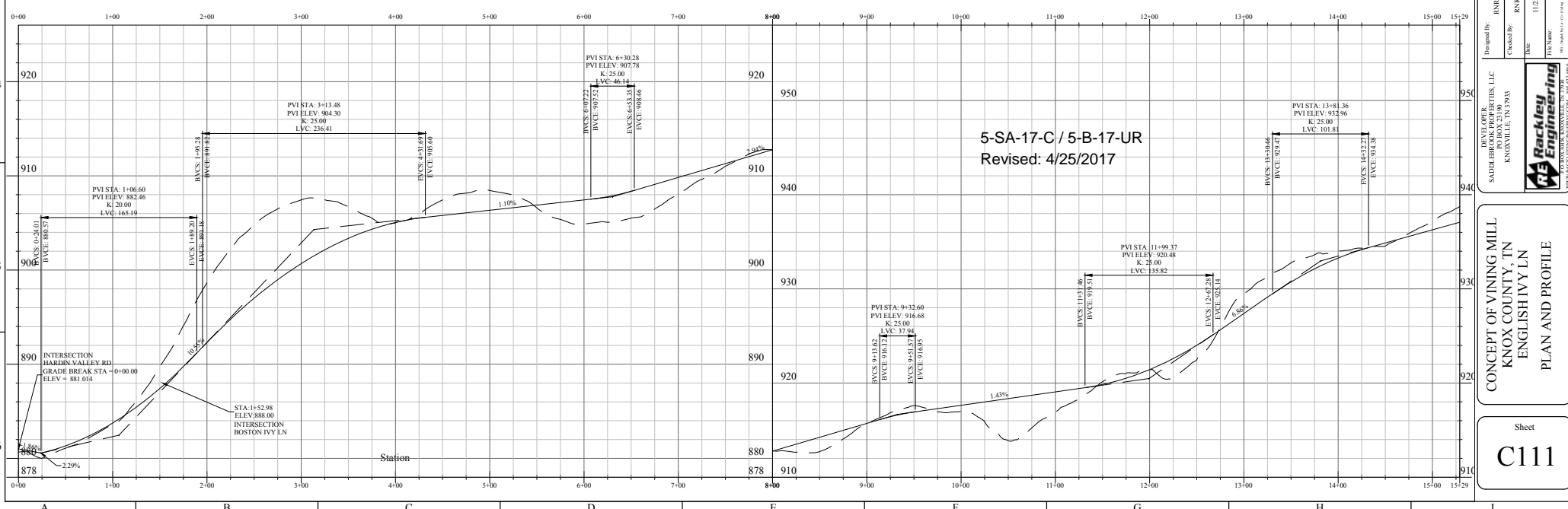
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5-SA-17-C / 5-B-17-UR
Revised: 4/25/2017





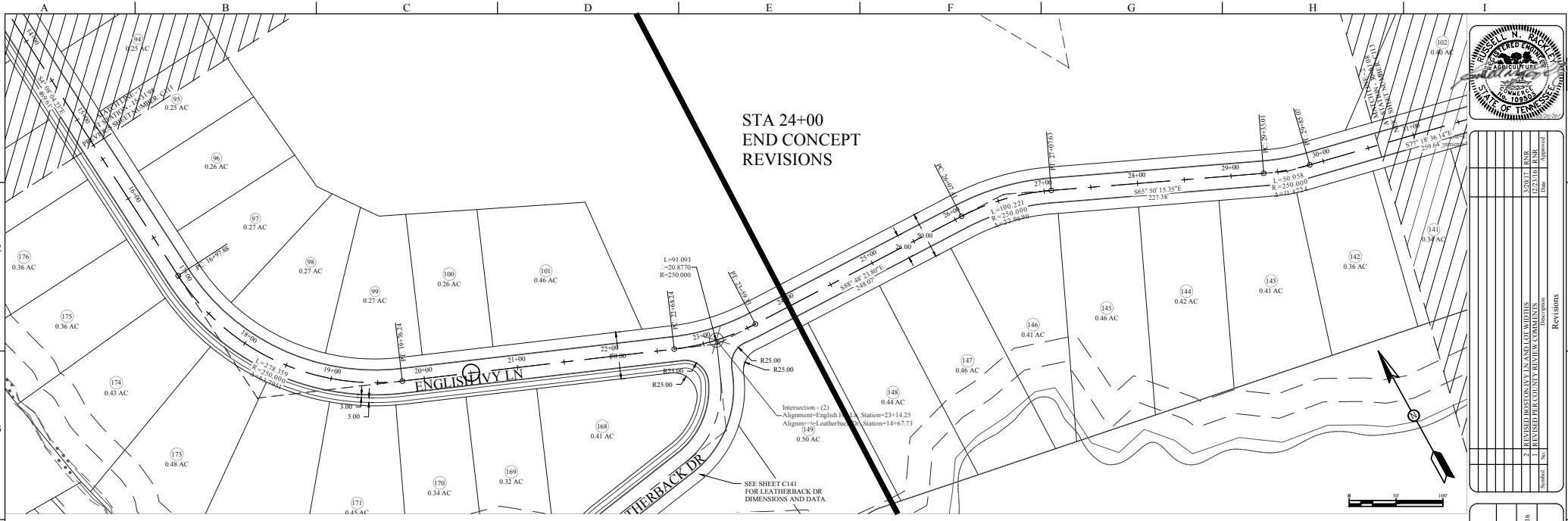
DESIGNED BY	RSR
CHECKED BY	RSR
DATE	11/23/16
PROJECT NO.	16-001
PROJECT NAME	CONCEPT OF VINEYING MILL, KNOX COUNTY, TN, ENGLISH IVY LN
SCALE	AS SHOWN
REVISIONS	



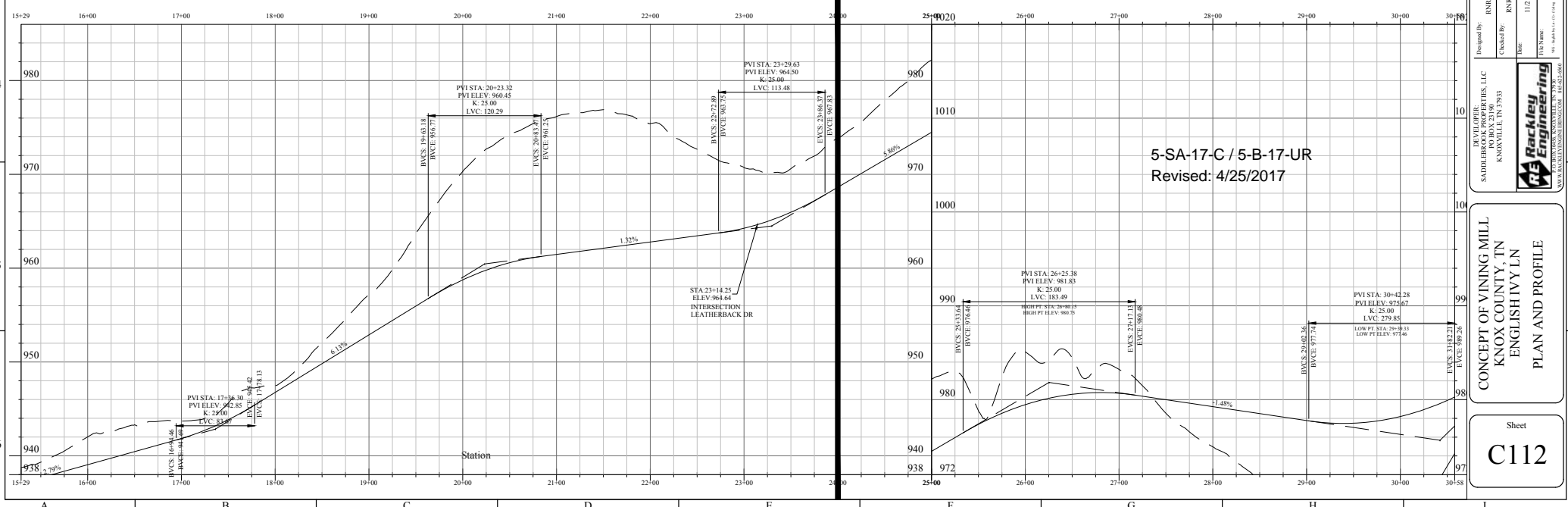
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CHECKED BY	RSR
DATE	11/23/16
PROJECT NO.	16-001
PROJECT NAME	CONCEPT OF VINEYING MILL, KNOX COUNTY, TN, ENGLISH IVY LN
SCALE	AS SHOWN
REVISIONS	

CONCEPT OF VINEYING MILL
KNOX COUNTY, TN
ENGLISH IVY LN
PLAN AND PROFILE

Sheet
C111



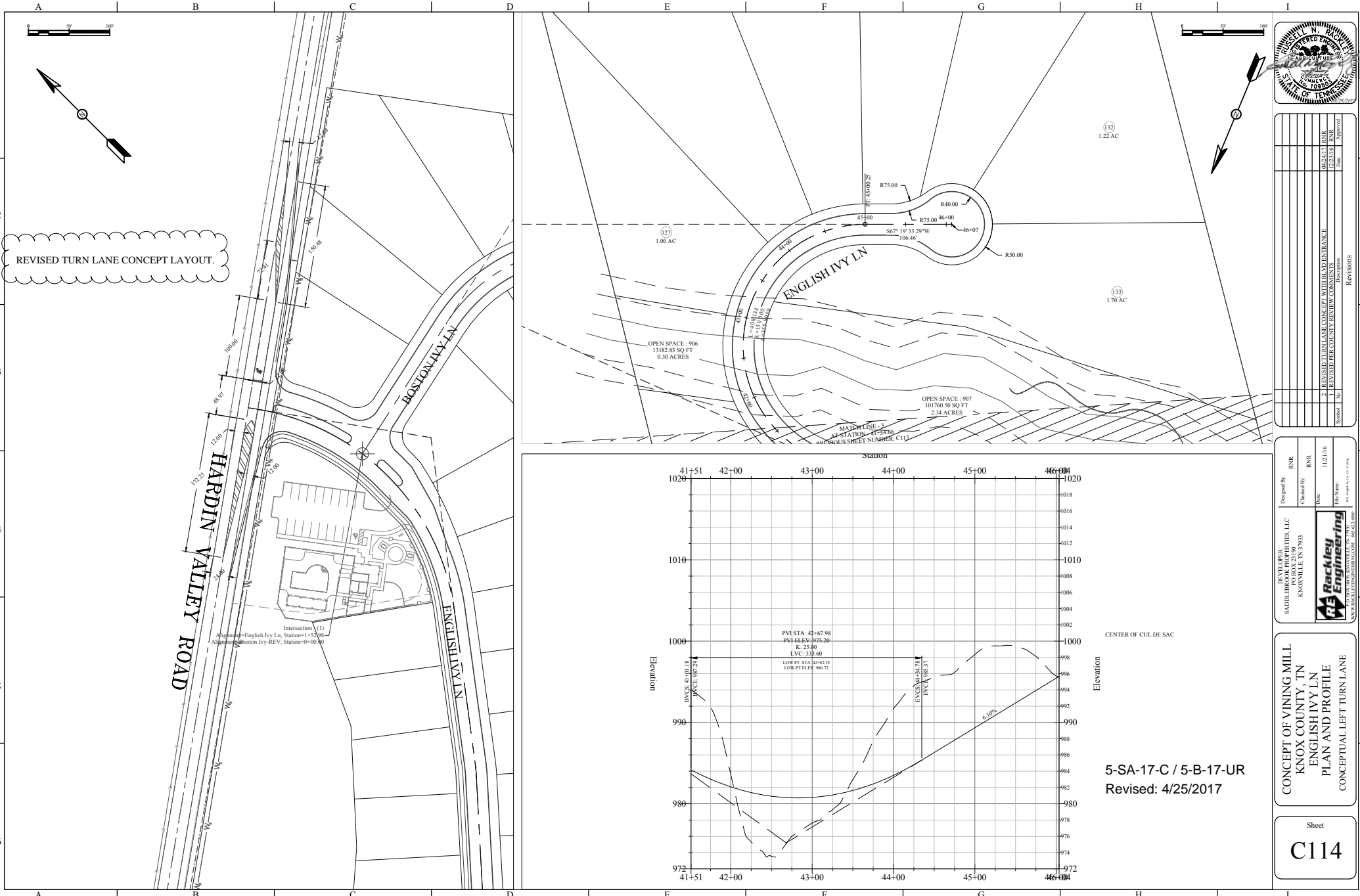
NO.	DATE	BY	DESCRIPTION
1	12/01/16	RSR	DESIGN
2	02/01/17	RSR	REVISIONS (VAR. IN AND OUT OF WIDTHS)
3	04/25/17	RSR	REVISIONS (EASING LEFT HAND CURVE)



Designed By: RSR
 Checked By: RSR
 Date: 11/21/16
 Title: 5-SA-17-C / 5-B-17-UR
 Scale: AS SHOWN
 Project: SADDLEBROOK PROPERTIES, LLC
 101 BOX 21100
 KNOXVILLE, TN 37933

CONCEPT OF VINING MILL
 KNOX COUNTY, TN
 ENGLISH IVY LN
 PLAN AND PROFILE

Sheet
C112



REVISED TURN LANE CONCEPT LAYOUT.

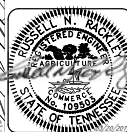
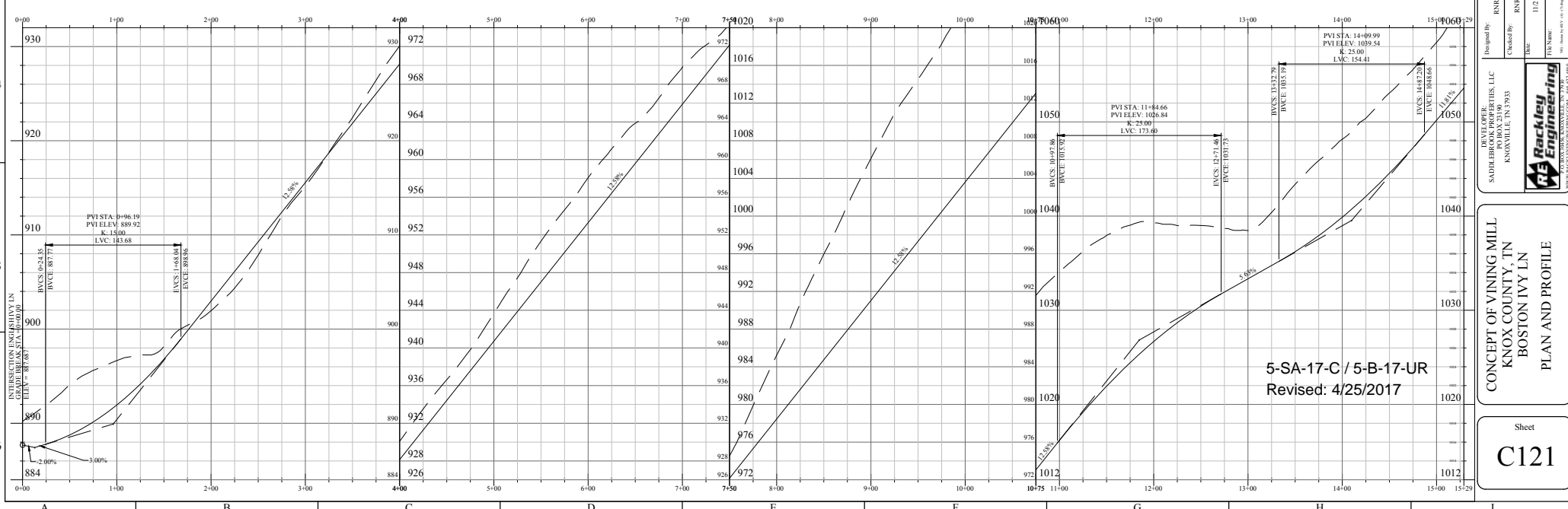


Station	Date	Description	Revisors
1	07/23/14	RSK	
2	07/23/14	RSK	
3	07/23/14	RSK	

Prepared by: RSK
 Checked by: RSK
 Date: 11/21/16
 Title: 5-SA-17-C / 5-B-17-UR
 Scale: AS SHOWN
 SADDLEBROOK PROPERTIES, LLC
 PO BOX 21100
 KNOXVILLE, TN 37933
RA Rackley Engineering
 1000 W. BRYANT PARKWAY, SUITE 202
 KNOXVILLE, TN 37938

CONCEPT OF VINING MILL
 KNOX COUNTY, TN
 ENGLISH IVY LN
 PLAN AND PROFILE
 CONCEPTUAL LEFT TURN LANE

Sheet
C114

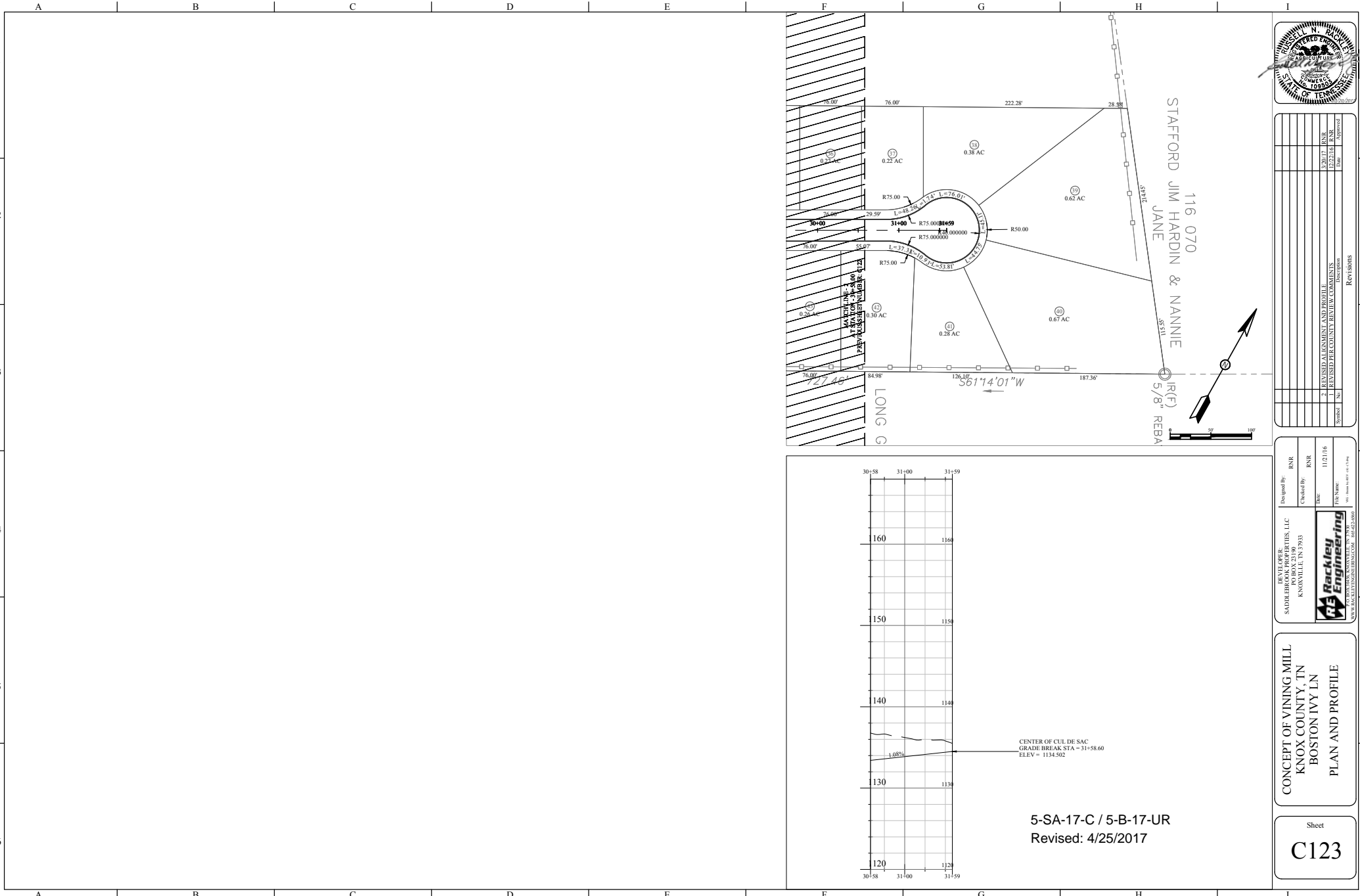


NO.	DATE	DESCRIPTION	BY	APP.
1	11/21/16	REVISION	RSR	
2	4/25/17	REVISION	RSR	
3		REVISION	RSR	
4		REVISION	RSR	
5		REVISION	RSR	
6		REVISION	RSR	
7		REVISION	RSR	
8		REVISION	RSR	
9		REVISION	RSR	
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Prepared by: RSR
 Checked by: RSR
 Date: 11/21/16
 Title: 5-SA-17-C / 5-B-17-UR
 Scale: AS SHOWN
 Project: SADDLEBROOK PROPERTIES, LLC
 20100A, 21000
 KNOX HILL, TN 37933
RA Rackley Engineering
 20100A, 21000
 KNOX HILL, TN 37933

CONCEPT OF VINING MILL,
 KNOX COUNTY, TN
 BOSTON IVY LN
 PLAN AND PROFILE
 5-SA-17-C / 5-B-17-UR
 Revised: 4/25/2017

Sheet
C121



NO.	DATE	DESCRIPTION	REVISIONS
1	11/21/16	DESIGN	DESIGN
2	03/07/17	REVISION	REVISION
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PREPARED BY: RSR
 SADDLEBROOK PROPERTIES, LLC
 PO BOX 21100
 KNOXVILLE, TN 37933

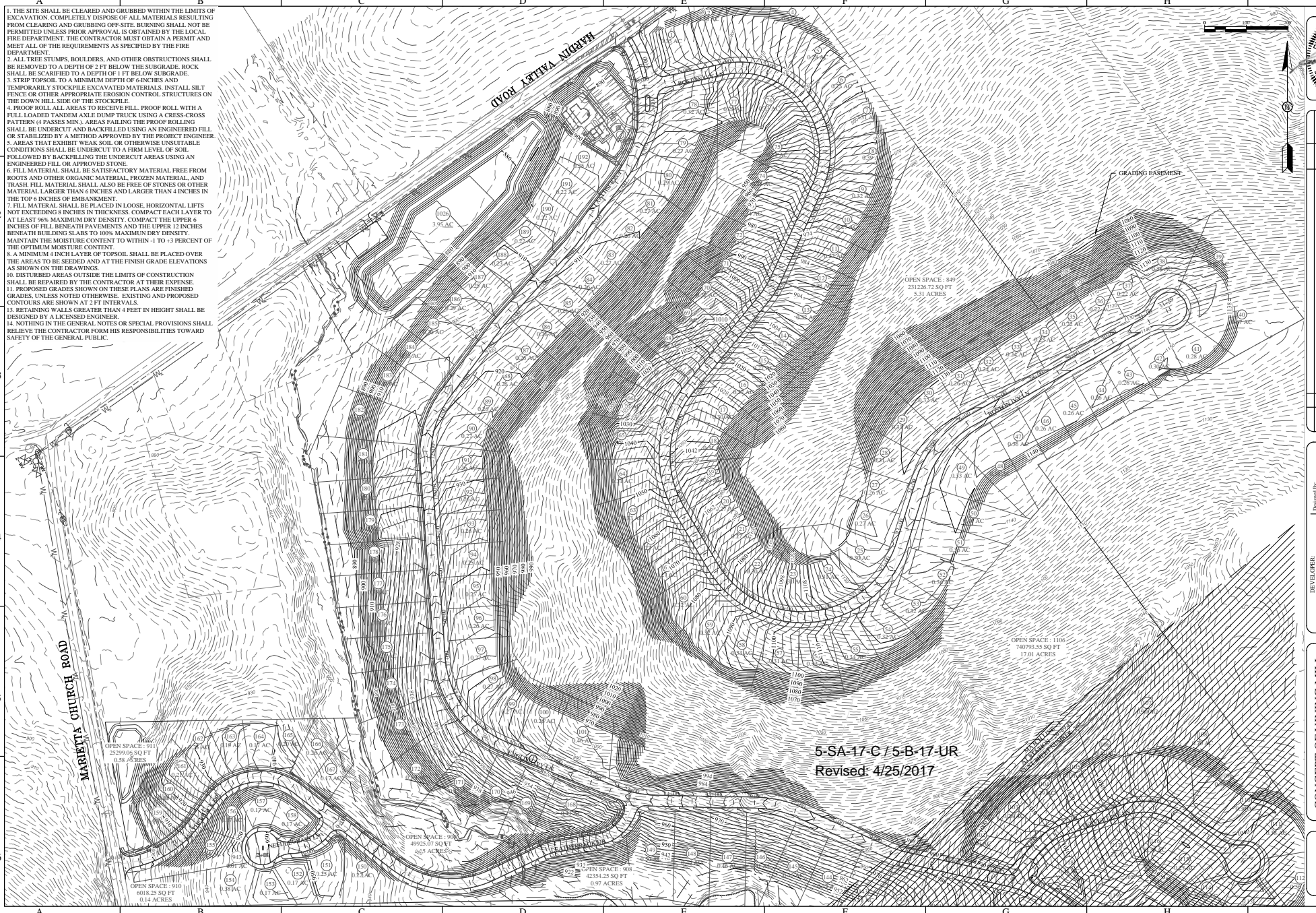
DESIGNED BY: RSR
 CHECKED BY: RSR
 DATE: 11/21/16
 TALK NUMBER: 865-597-9174

RSR Rackley Engineering
 1717 BRYAN BLVD, SUITE 200
 KNOXVILLE, TN 37933

CONCEPT OF VINING MILL,
 KNOX COUNTY, TN
 BOSTON IVY LN
 PLAN AND PROFILE

Sheet
C123

1. THE SITE SHALL BE CLEARED AND GRUBBED WITHIN THE LIMITS OF EXCAVATION. COMPLETELY DISPOSE OF ALL MATERIALS RESULTING FROM CLEARING AND GRUBBING OFF-SITE. BURNING SHALL NOT BE PERMITTED UNLESS PRIOR APPROVAL IS OBTAINED BY THE LOCAL FIRE DEPARTMENT. THE CONTRACTOR MUST OBTAIN A PERMIT AND MEET ALL OF THE REQUIREMENTS AS SPECIFIED BY THE FIRE DEPARTMENT.
2. ALL TREE STUMPS, BOULDERS, AND OTHER OBSTRUCTIONS SHALL BE REMOVED TO A DEPTH OF 2 FT BELOW THE SUBGRADE. ROCK SHALL BE SCRAPED TO A DEPTH OF 1 FT BELOW SUBGRADE.
3. STRIP TOPSOIL TO A MINIMUM DEPTH OF 6 INCHES AND TEMPORARILY STOCKPILE EXCAVATED MATERIALS. INSTALL SILT FENCE OR OTHER APPROPRIATE EROSION CONTROL STRUCTURES ON THE DOWN HILL SIDE OF THE STOCKPILE.
4. PROOF ROLL ALL AREAS TO RECEIVE FILL. PROOF ROLL WITH A FULL LOADED TANDUM AXLE DUMP TRUCK USING A CRSS-CROSS PATTERN (4 PASSES MIN.). AREAS FAILING THE PROOF ROLLING SHALL BE UNDERCUT AND BACKFILLED USING AN ENGINEERED FILL OR STABILIZED BY A METHOD APPROVED BY THE PROJECT ENGINEER.
5. AREAS THAT EXHIBIT WEAK SOIL, OR OTHERWISE UNSUITABLE CONDITIONS SHALL BE UNDERCUT TO A FIRM LEVEL OF SOIL FOLLOWED BY BACKFILLING THE UNDERCUT AREAS USING AN ENGINEERED FILL OR APPROVED STONE.
6. FILL MATERIAL SHALL BE SATISFACTORY MATERIAL FREE FROM ROOTS AND OTHER ORGANIC MATERIAL, FROZEN MATERIAL, AND TRASH. FILL MATERIAL SHALL ALSO BE FREE OF STONES OR OTHER MATERIAL LARGER THAN 6 INCHES AND LARGER THAN 4 INCHES IN THE TOP 6 INCHES OF EMBANKMENT.
7. FILL MATERIAL SHALL BE PLACED IN LOOSE, HORIZONTAL LIFTS NOT EXCEEDING 8 INCHES IN THE THICKNESS. COMPACT EACH LAYER TO AT LEAST 90% MAXIMUM DRY DENSITY. COMPACT THE UPPER 6 INCHES OF FILL BENEATH PAVEMENTS AND THE UPPER 12 INCHES BENEATH BUILDING SLABS TO 100% MAXIMUM DRY DENSITY. MAINTAIN THE MOISTURE CONTENT TO WITHIN -1 TO +3 PERCENT OF THE OPTIMUM MOISTURE CONTENT.
8. A MINIMUM 4 INCH LAYER OF TOPSOIL SHALL BE PLACED OVER THE AREAS TO BE SEED AND AT THE FINISH GRADE ELEVATIONS AS SHOWN ON THE DRAWINGS.
10. DISTURBED AREAS OUTSIDE THE LIMITS OF CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR AT THEIR EXPENSE.
11. PROPOSED GRADES SHOWN ON THESE PLANS ARE FINISHED GRADES, UNLESS NOTED OTHERWISE. EXISTING AND PROPOSED CONTOURS ARE SHOWN AT 2 FT INTERVALS.
13. RETAINING WALLS GREATER THAN 4 FEET IN HEIGHT SHALL BE DESIGNED BY A LICENSED ENGINEER.
14. NOTHING IN THE GENERAL NOTES OR SPECIAL PROVISIONS SHALL RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITIES TOWARD SAFETY OF THE GENERAL PUBLIC.



No.	Date	Revisions
1		
2		
3		
4		
5		
6		

DESIGNED BY: RSK
 CHECKED BY: RSK
 DATE: 12/17/16
 TITLE: SALES
 PROJECT: SALES

PREPARED BY:
 RSK
 DATE: 12/17/16
 TITLE: SALES
 PROJECT: SALES

SAADLERBROOK PROPERTIES, LLC
 601 BOX 2100
 KNOXVILLE, TN 37935

RSK Rackley Engineering
 1001 E. BIRCHWOOD KNOXVILLE, TN 37935
 615-596-1000

CONCEPT OF VINING MILL,
 KNOX COUNTY, TN
 CONCEPT MASS GRADING

Sheet
C201

SUBDIVISION - CONCEPT

Name of Applicant: HOMESTEAD LAND HOLDINGS, LLC

Date Filed: 3/22/2017 Meeting Date: 5/11/2017

Application Accepted by: Marc Payne

Fee Amount: 2,690.00 File Number: Subdivision - Concept 5-5A-17-C
(5-B-17-UR)

Fee Amount: Related File Number: Development Plan



PROPERTY INFORMATION

Subdivision Name: VINING MILL

Unit/Phase Number:

General Location: 3/3 Hardin Valley Rd
due east Marietta Church Rd

Tract Size: 117 AC No. of Lots: 192

Zoning District: PR2 & PR2 (PENDING)

Existing Land Use: AG VACANT

Planning Sector: LDR & LDR (PENDING)

Growth Policy Plan Designation: RURAL

Census Tract: 59.05

Traffic Zone: 222

Parcel ID Number(s): 129 12601 & PORTION
OF 129 12600

Jurisdiction: City Council _____ District
 County Commission C District

PROPERTY OWNER/OPTION HOLDER

PLEASE PRINT

Name:

Company: HOMESTEAD LAND HOLDINGS, LLC

Address: 132 PERIMETER PARK

City: KNOXVILLE State: TN Zip: 37933

Telephone:

Fax:

E-mail:

PROJECT SURVEYOR/ENGINEER

PLEASE PRINT

Name: RUSSELL N. RACKLEY

Company: RACKLEY ENGINEERING

Address: PO Box 30456

City: KNOXVILLE State: TN Zip: 37930

Telephone: 865-850-1535

Fax:

E-mail: RNRACKLEY@RACKLEYENGINEERING.COM

AVAILABILITY OF UTILITIES

List utility districts proposed to serve this subdivision:

Sewer WKUB

Water WKUB

Electricity LCUB

Gas KUB

Telephone AT&T

TRAFFIC IMPACT STUDY REQUIRED

No Yes

USE ON REVIEW No Yes

Approval Requested:

Development Plans in Planned District or Zone

Other (be specific):

VARIANCE(S) REQUESTED

No Yes (If Yes, see reverse side of this form)

APPLICATION CORRESPONDENCE

All correspondence relating to this application (including plat corrections) should be directed to:

PLEASE PRINT

Name: ENGINEER

Company:

Address:

City: State: Zip:

Telephone:

Fax:

E-mail:

VARIANCES REQUESTED

1. _____
Justify variance by indicating hardship: SEE ATTACHED

2. _____
Justify variance by indicating hardship: _____

3. _____
Justify variance by indicating hardship: _____

4. _____
Justify variance by indicating hardship: _____

5. _____
Justify variance by indicating hardship: _____

6. _____
Justify variance by indicating hardship: _____

7. _____
Justify variance by indicating hardship: _____

APPLICATION AUTHORIZATION

I hereby certify that I am the authorized applicant, representing ALL property owners involved in this request or holders of option on same, as listed on this form. I further certify that any and all variances needed to meet regulations are requested above, or are attached. I understand and agree that no additional variances can be acted upon by the legislative body upon appeal and none will be requested. I hereby waive the requirement for approval or disapproval of the plat within sixty (60) days after its submission, in accordance with the provisions of Tennessee Code Annotated 13-3-404.

PLEASE PRINT

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

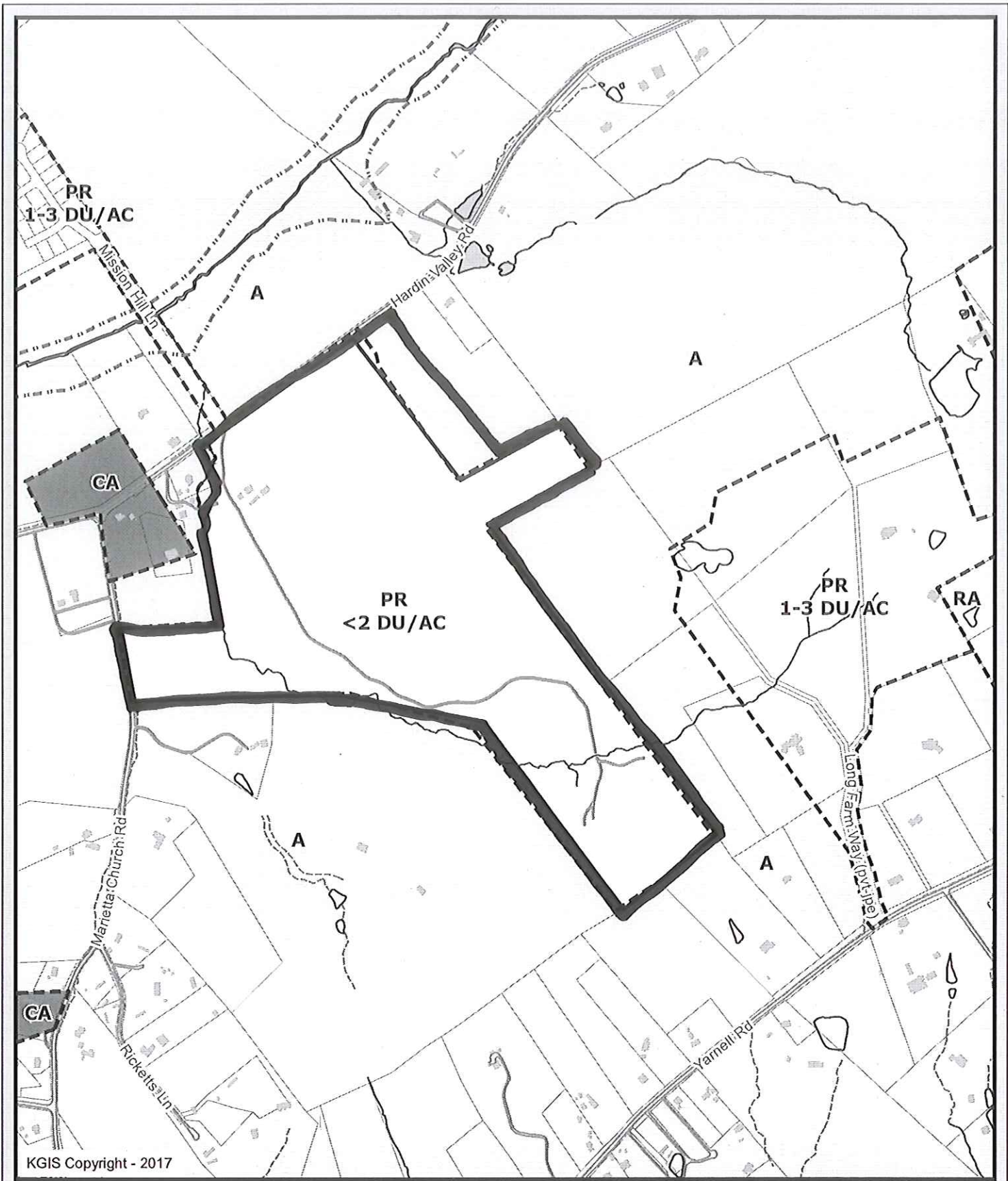
Telephone: _____

Signature: [Handwritten Signature]

Fax: _____

Date: 3/22/17

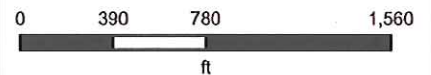
E-mail: _____



Letter Portrait

Printed: 3/22/2017 at 1:36:50 PM

Knoxville - Knox County - KUB Geographic Information System



KGIS makes no representation or warranty as to the accuracy of his map and its information nor to its fitness for use. Any user of this map product accepts the same AS IS ,WITH ALL FAULTS, and assumes all responsibility for the use thereof, and futher covenants and agrees to hold KGIS harmless from any and all damage, loss, or liability arising from any use of this map product.

VARIANCE LIST: VINING MILL S/D **REVISED 3/22/17**

All variances requested due to site topography constraints.

1. REDUCE SAG K FROM 25 TO 20 AT ENGLISH IVY LN STA 1+06
2. REDUCE CENTERLINE RADIUS FROM 250 TO 150 ENGLISH IVY LN STA 43+00
3. REDUCE CENTERLINE RADIUS FROM 250 TO 200 203 BOSTON IVY LN STA 3+00 **REVISED**
4. ~~REDUCE MINIMUM TANGENT BETWEEN BROKEN BACK CURVES FROM 150 TO 100 BOSTON IVY LN STA 5+25. **DELETED**~~
5. INCREASE MAXIMUM ROAD GRADE FROM 12% TO 44.89% 12.58% BOSTON IVY LN STA 6+00. **REVISED**
6. ~~INCREASE MAXIMUM ROAD GRADE FROM 12% TO 13.17% BOSTON IVY LN STA 14+00 **DELETED**~~
7. INCREASE MAXIMUM ROAD GRADE FROM 12% TO 13.31% VELVET LEAF LN STA 2+25
8. REDUCE CREST K FROM 25 TO 19 VELVET LEAF LN STA 4+05
9. REDUCE CENTERLINE RADIUS FROM 250 TO 150 LEATHERBACK RD STA 4+00
10. REDUCE CENTERLINE RADIUS FROM 250 TO 223 LEATHERBACK RD STA 9+50
11. REDUCE CENTERLINE RADIUS FROM 250 TO 100 LEATHERBACK RD STA 12+00
12. REDUCE CENTERLINE RADIUS FROM 250 TO 100 LEATHERBACK RD STA 13+75
13. INCREASE MAXIMUM ROAD GRADE FROM 12% TO 14.63% LEATHERBACK RD STA 2+00
14. INCREASE MAXIMUM ROAD GRADE FROM 12% TO 15% LEATHERBACK RD STA 12+60
15. REDUCE SAG K FROM 25 TO 15 AT INTERSECTION LEATHERBACK RD AND MARIETTA CHURCH RD
16. REDUCE CREST K FROM 25 TO 19 LEATHERBACK RD STA 4+43
17. REDUCE SAG K FROM 25 TO 20 LEATHERBACK RD STA 10+20
18. REDUCE TRANSITION RADIUS AT NEEDLEGRASS LN CUL DE SAC FROM 75' TO 25' ON INSIDE OF ROAD CENTERLINE CURVE



11312 Black Road
Knoxville, Tennessee 37932
Phone (865) 556-0042
ajaxengineering@gmail.com

TO: Russell Rackley, PE
Rackley Engineering

FROM: Robert Jacks, PE
Ajax Engineering, LLC

DATE: 3/20/17

SUBJECT: Vining Hill Traffic Impact Study
Update for Additional 2 Lots

Russell,

It is my understanding that your project has been revised to include an additional 5.25 acres that was purchased adjacent to your Vining Hill residential development. I understand that this additional property will allow you to revise the alignment of the proposed Boston Ivy Lane. Along with the road alignment change, this property will allow you to include an additional 2 lots for a total of 192 lots in the development.

The original Traffic Impact Study that was previously approved was based on a total of 190 lots in the development. In my professional opinion, adding an additional 2 lots to this development will not change the recommendations offered in the original Traffic Impact Study for 190 lots that is stamped and dated 1/5/17.

If you need any further information, please do not hesitate to contact me.

Regards,

A handwritten signature in black ink, appearing to read "Robert Jacks", written in a cursive style.

Robert Jacks, PE
TN #105730

Vining Mill Concept proposed changes:

Add 5.25 acres to site: From 111.8 to 117.05

Add 1.76 acres to open space: From 29.88 to 31.64

Add 2 lots: From 190 to 192 (widen all lots on English and Boston to 76' min. width)

Decrease density from 1.78 du/ac to 1.66 du/ac

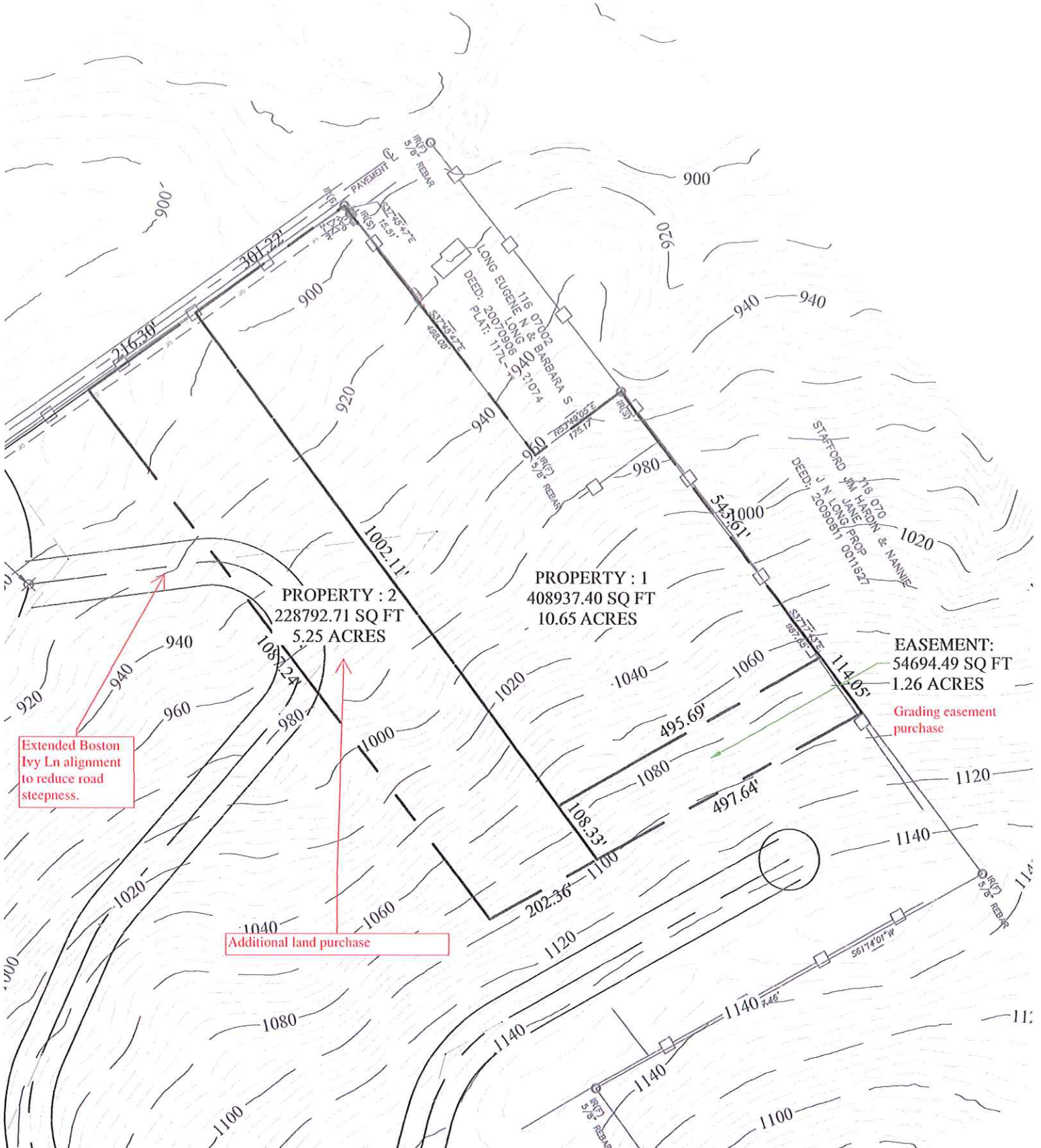
Lengthen Boston Ivey Ln 273 LF

Increase center line radius Boston Ivey from 200 to 203 (Approved Variance 3)

Eliminate Variance 4: increase tangent to 235 ft.

Reduce grade from 14.89% to 12.6% (Approved Variance 5)

Eliminate Variance 6: reduce grade from 13.17% to 11.81%



Extended Boston Ivy Ln alignment to reduce road steepness.

Additional land purchase

EASEMENT:
54694.49 SQ FT
1.26 ACRES
Grading easement purchase

PROPERTY : 2
228792.71 SQ FT
5.25 ACRES

PROPERTY : 1
408937.40 SQ FT
10.65 ACRES

ANSI A (8.50 x 11.00 Inches), 1:210.632

