



SUBDIVISION REPORT - CONCEPT

► **FILE #:** 12-SE-21-C

AGENDA ITEM #: 24

AGENDA DATE: 12/9/2021

► **SUBDIVISION:** PROSPERITY CROSSING

► **APPLICANT/DEVELOPER:** STEVE MADDOX

OWNER(S): I-40 75 Business Park, LLC

TAX IDENTIFICATION: 141 028, 02802, 02805, 02806, 033 & 03304

[View map on KGIS](#)

JURISDICTION: County Commission District 6

STREET ADDRESS: 13115 & 0 El Camino Lane, 0 Everett Road, 13206 & 0 Buttermilk Rd.

► **LOCATION:** West side of Everett Road, north side of El Camino Lane, south side of Buttermilk Road

SECTOR PLAN: Northwest County

GROWTH POLICY PLAN: Planned Growth Area

WATERSHED: Hickory Creek

► **APPROXIMATE ACREAGE:** 166 acres

► **ZONING:** CB (Business and Manufacturing) & RB (General Residential)

► **EXISTING LAND USE:** Vacant land

► **PROPOSED USE:** Commercial (undefined)

SURROUNDING LAND USE AND ZONING: North: Single family and rural residential, landscape business -- A (Agricultural), CA (General Business)
South: Interstate 40/75, Watt Road interchange -- A (Agricultural), CB (Business and Manufacturing)
East: Vacant land, truck & highway oriented commercial uses -- CB (Business and Manufacturing)
West: Vacant land, Commercial -- CB (Business and Manufacturing), A (Agricultural), Loudon County zoning (unknown)

► **NUMBER OF LOTS:** 0

SURVEYOR/ENGINEER: Robert Campbell & Associates

ACCESSIBILITY: Access is via El Camino Ln., a local street with 22ft of pavement width within the Interstate 40/75 right-of-way; and via Everett Rd., a minor arterial street with 21ft of pavement width within 50ft of right-of-way.

► **SUBDIVISION VARIANCES REQUIRED:**

VARIANCES:

- 1) Reduce the minimum vertical curve from K=25 to K=16 on Road 'A' at STA 11+00.
- 2) Reduce the minimum curb radii at an intersection from 75 ft to 25 ft for all intersections.
- 3) Reduce the minimum vertical curve from K=25 to K=19 on Road 'C' at STA 78+75. (Requested by applicant)
- 4) Reduce the minimum vertical curve from K=25 to K=20 on Road 'C' at STA 78+75. (Recommended by staff)

**ALTERNATIVE DESIGN STANDARDS APPROVED BY KNOX COUNTY
ENGINEERING AND PUBLIC WORKS:**

- 1) Increase the maximum intersection grade from 1% to 2%.**

STAFF RECOMMENDATION:

- **Approve variances 1, 2, & 4 on the recommendations of the Knox County Department of Engineering and Public Works and because the site conditions restrict compliance with the Subdivision Regulations and will not create a traffic hazard, and Deny variance #3.**

Approve the Concept Plan for the construction and platting of the roads only, subject to 8 conditions.

1. Connection to sanitary sewer and meeting any other relevant requirements of the utility provider.
2. Provision of street names that are consistent with the Uniform Street Naming and Addressing System within Knox County (Ord. 91-1-102).
3. Certifying sight distance at all intersections with review and approval by Knox County Engineering and Public Works during the design plan phase.
4. Road 'A' shall not connect to Everett Road until it is widened as part of a public improvement project or the property owner submits a transportation impact study and implements the recommended improvements.
5. If a final plat for the internal road right-of-ways is submitted before the Planning Commission has reviewed and approved a concept plan for the lots, including a transportation impact study,, the following note must be added to the plat: "No access shall be provided to the internal roads until a concept plan for the lots has been submitted and approved by the Planning Commission. A transportation impact study must be submitted with the concept plan application and all recommended improvements to the internal roads and external roads must be implemented by the property owner unless otherwise agreed upon by Knox County Engineering and Public Works and/or the Tennessee Department of Transportation."
6. Obtaining approval from Loudon County for the extension of Road 'B' and Road 'C' into their jurisdiction. If the Loudon County portions of these roads are not installed at the same time as the portions in Knox County, a temporary turnaround shall be provided as required by Knox County Engineering and Public Works and Knox County Fire Prevention Bureau.
7. Meeting all applicable requirements of the Knox County Department of Engineering and Public Works.
8. Submitting to Planning staff prior to final plat review by the Planning Commission or Planning staff, the certification of design plan approval form as required by the Knoxville-Knox County Subdivision Regulations.

COMMENTS:

VARIANCES

1. Reduce the minimum vertical curve from K=25 to K=16 on Road 'A' at STA 11+00.
 - a) The standard minimum K value for this sag vertical curve is 25 because Road 'A' is being designed as a collector street (Section 3.04.I.4.b.2). If these were both local streets, the minimum K value is 15.
 - b) The reduced K value should not impact the ability of El Camino Lane to be expanded in the future because there is additional right-of-way width available on the opposite (south) side of the road. This was demonstrated in the concept plan approved in 2011 (12-SB-11-C).
 - c) The reduced K value will help reduce the amount of grading required within the HP (Hillside Protection) area.
2. Reduce the minimum curb radii at an intersection from 75 ft to 25 ft for all intersections.
 - a) The minimum intersection radius is 75 ft for property lines and curbs in commercial and industrial zones and the Knox County Engineering and Public Works department can reduce the radius to 50 ft as an alternative design standard. A reduction for either of these less than 50 ft requires a variance. The intersection radius for a typical local street, such as a residential subdivision, is 25 ft.
 - b) The subdivision regulations require larger radii in commercial developments as a default because it is typically required to accommodate the turning radius of larger vehicles, such as delivery trucks, so they don't have a tire go over the curb which could damage the curb and create ruts on shoulder of the road. The design of the road system, including lane widths and turn lanes, can also impact whether larger curb radii are needed.
 - c) Knox County Engineering and Public Works is in agreement with the requested 25 ft intersection radii for this proposal.
3. Reduce the minimum vertical curve from K=25 to K=19 on Road 'C' at STA 78+75. (Requested by the applicant)
 - a) Staff's recommendation to deny this variance is based on the proposed degree of reduction (K=19). Variance #4 below is for a slightly lower reduction (K=20) at the same location that staff is recommending for approval.

4. Reduce the minimum vertical curve from K=25 to K=20 on Road 'C' at STA 78+75. (Recommended by staff)
 - a) This sag vertical curve on Road 'C' is required to have a minimum K value of 25 because Road 'A' is being designed as a collector street (Section 3.04.1.4.b.2). If these were both local streets, the minimum K value is 15.
 - b) Knox County Engineering and Public Works is recommending that the vertical curve be flatted slightly so it has a K value of 20.
 - c) The reduced K value will help reduce the amount of grading required within the HP (Hillside Protection) area.

ALTERNATIVE DESIGN STANDARD REQUIRING KNOX COUNTY ENGINEERING AND PUBLIC WORKS APPROVAL

1. Increase the maximum intersection grade from 1% to 2% for all intersections except for those with a crosswalk that must meet ADA standards.
 - a) The Subdivision Regulations allow Knox County Engineering and Public Works to approve an intersection grade up to 3% when a pedestrian crossing is not proposed. It is anticipated that a sidewalk will either be on one or both sides of Road 'A', so a crosswalk could be at each intersection. An ADA accessible crosswalk can have a cross slope of up to 2% but they are usually designed closer to 1%.
 - b) All intersections with a crosswalk must be designed and constructed to meet ADA standards.

The purpose of this concept plan is to establish a public road network and begin site grading for the future subdivision of this commercial property into lots. If approved, this concept plan will only allow the applicant to seek permits for grading and construction of the road network, not subdivide the property into new lots and/or obtain building permits or establish new uses that access the new internal road network without further approvals. When the concept plan is submitted for the creation of lots, a transportation impact study must be provided and road improvements may be required to both the new internal roads and external roads, dependent on the proposed mix of uses, projected daily vehicle trips, and anticipated vehicle types.

The subdivision regulation road design standards are primarily for roads classified as local, such as typical residential streets and other streets with lower traffic volumes and limited turn movements. The main road through this commercial property, Road 'A', will be a collector with 3-lanes and a 60-ft right-of-way. The subdivision regulations defer to the road design standards of the applicable jurisdiction for collector and arterial streets. Knox County uses the applicable TDOT road design standard and Knox County Engineering and Public Works is in agreement that Road 'A' meets TDOT's standards for a 3-lane collector. Road 'B' and Road 'C' are designed as local streets and only need to meet the standards in the subdivision regulations.

PREVIOUS CONCEPT PLAN APPROVALS

Concept plans have been approved for this property in 2006, 2007, and 2011, however, they have expired. A transportation impact study (TIS) was submitted at that time and had recommendations for the design of internal roads, widening of existing roads, and a new traffic signal at the Watt Road and El Camino Lane intersection. These improvements included widening N. Watt Road to 8 lanes (including turn lanes) between the interchange and El Camino Lane, widening El Camino Lane to 4-5 lanes (including turn lanes), and widening and realigning portions of Everett Road to the Road 'A' intersection. Similar improvements may be necessary depending on the mix of uses in the development.

ZONING

The property is zoned CB (Business and Manufacturing) and RB (General Residential). The RB zoning is located on the north side of the site with frontage on Buttermilk Road and is approximately 25 acres of the 166 acre development. Most uses in the CB and RB zones do not require Planning Commission approval, so the only review by the Planning Commission may be a concept plan. The current application does not propose any uses for the site.

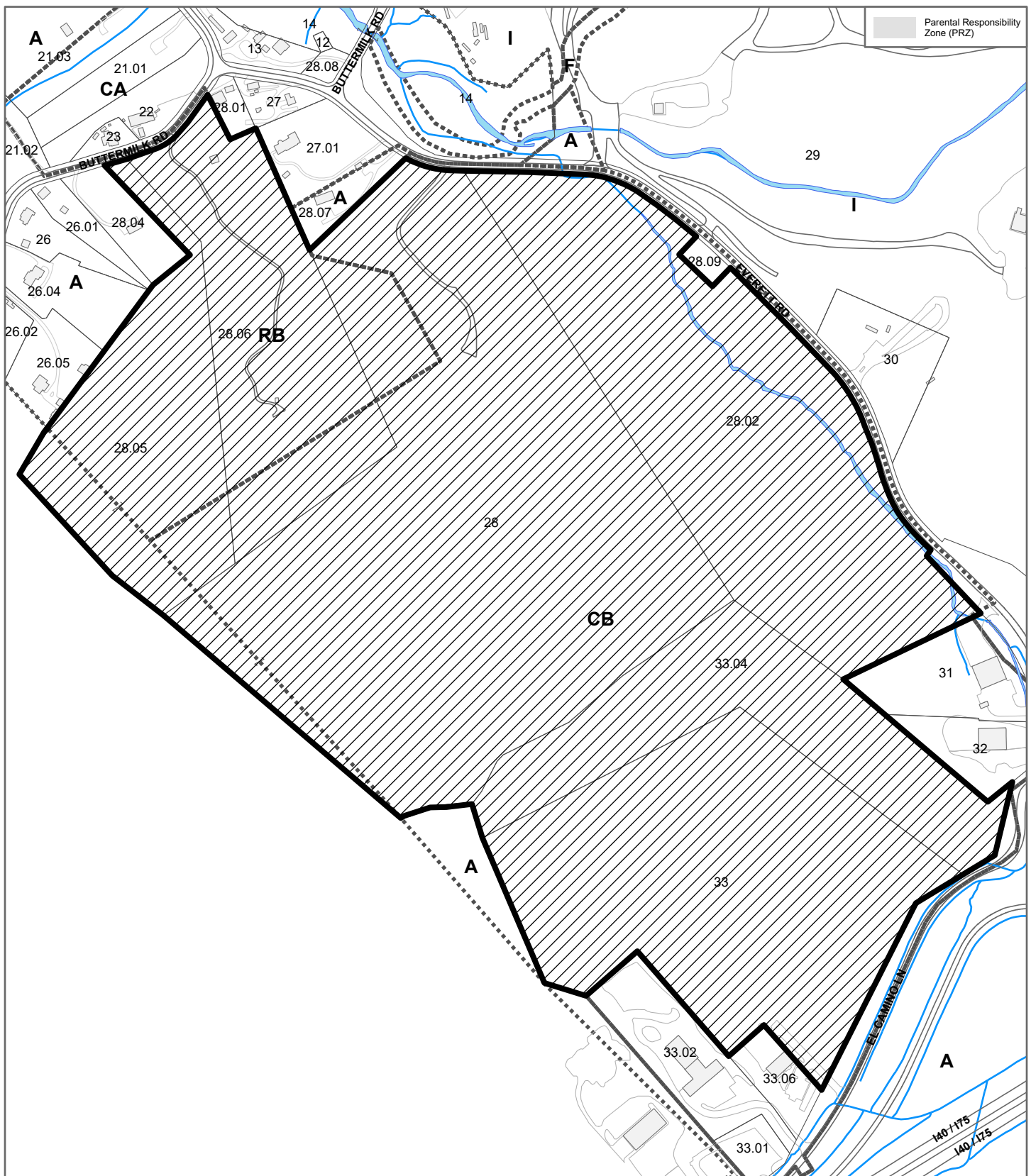
WATT ROAD INTERCHANGE

TDOT is studying the I-40/75 corridor from N. Campbell Station Road to the I-40/75 junction. This study includes developing options for improvements to the Watt Road interchange. This study is not far enough along to have a preferred option. The design of the interchange could have an impact on access to El Camino Lane and its intersection with N. Watt Road. TDOT has not allocated funding for these improvements and currently does not have a timeline for when construction will begin.

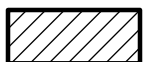
ESTIMATED TRAFFIC IMPACT: Not required.

ESTIMATED STUDENT YIELD: Not applicable.

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



12-SE-21-C CONCEPT PLAN



in CB (Business and Manufacturing) & RB (General Residential)

Original Print Date: 11/15/2021 Revised:
Knoxville - Knox County Planning Commission * City / County Building * Knoxville, TN 37902

Petitioner: Maddox, Steve

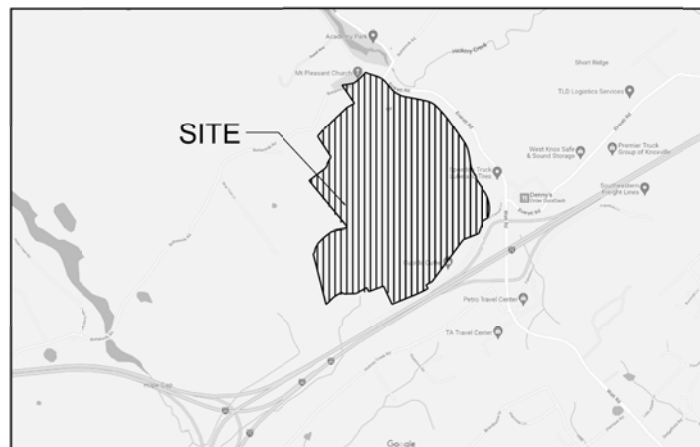
Map No: 141
Jurisdiction: County

0 500
Feet



CONCEPT PLAN
PROSPERITY CROSSING
KNOX COUNTY, TENNESSEE

12-SE-21-C
11/22/2021



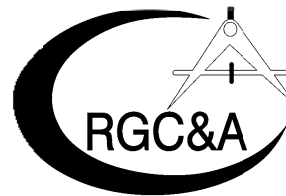
LOCATION MAP

APPLICANT:
MADDOX PROPERTY MANAGEMENT AND SALES
100 DALTON PLACE WAY
SUITE 105
KNOXVILLE, TN 37912
CONTACT: STEVE MADDOX
PHONE: (865) 971-1975

ENGINEER:
ROBERT G. CAMPBELL & ASSOCIATES
7523 TAGGART LANE
KNOXVILLE, TN 37938
CONTACT: JASON SIVERLING
PHONE: (865) 947-5996
EMAIL: JASONS@RGC-A.COM

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: *Jason P. Siverling*
Professional Certificate No. 109034

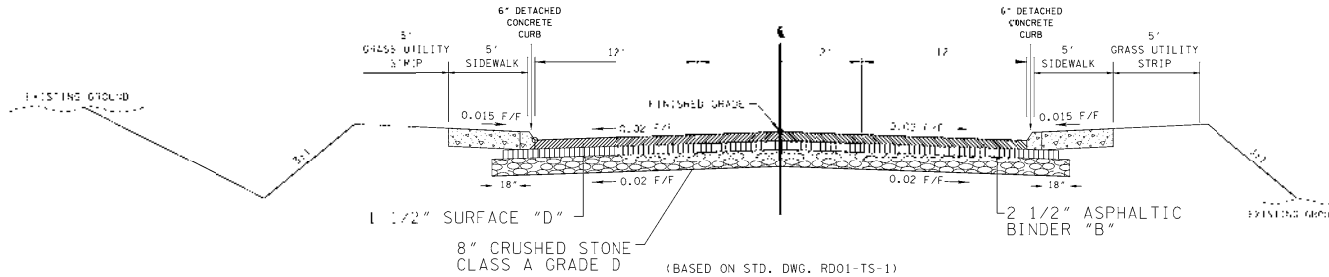


ROBERT G. CAMPBELL & ASSOCIATES, L.P.
CONSULTING ENGINEERS
KNOXVILLE, TENNESSEE



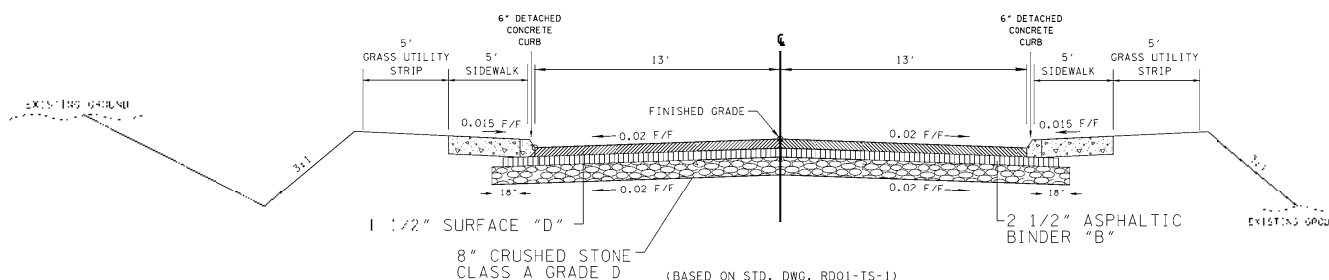
KNOXVILLE / KNOX COUNTY PLANNING
FILE NUMBER:
12-SE-21-C

12-SE-21-C
11/22/2021



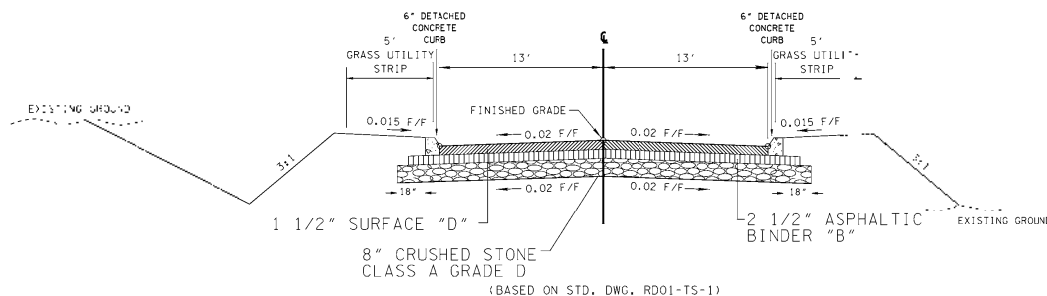
ROAD 'A' TYPICAL SECTION

STA. 10+00.00 TO 47+43.40



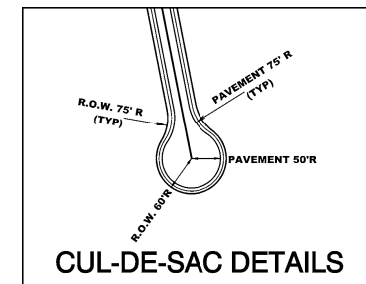
ROAD 'B' TYPICAL SECTION

STA. 50+00.00 TO 66+79.22



ROAD 'C' TYPICAL SECTION

STA. 70+00.00 TO 79+82.81



NOTES:

- 1) EXISTING AND PROPOSED CONTOUR INTERVAL: 10 FEET
- 2) THE PURPOSE OF THIS CONCEPT PLAN IS TO ESTABLISH A PUBLIC ROAD NETWORK FOR FUTURE LOT SUBDIVISION.
- 3) TEMPORARY TURNAROUNDS TO BE PROVIDED ON ROADS 'B' AND 'C' AT THE LOUDON COUNTY LINE. TURNAROUNDS TO BE REMOVED BASED ON THE LOUDON COUNTY PLANNING COMMISSION'S ACCEPTANCE OF THE PROPOSED ROADWAYS THAT LIE WITHIN LOUDON COUNTY.
- 4) FINAL DESIGN PLANS WILL MEET ALL OF THE APPLICABLE COMMENTS THAT WERE PROVIDED BY KNOX COUNTY FIRE PREVENTION.

NOTE: BORROW MATERIALS TO BE USED FOR FILL SHALL BE TESTED FOR MAXIMUM DRY DENSITY AND OPTIMUM MOISTURE CONTENT (STANDARD PROCTOR ASTM D698) PRIOR TO PLACEMENT OF FILL.

FILL SOILS SHALL BE COMPACTED IN LAYERS 8 INCHES OR LESS IN THICKNESS TO A MINIMUM OF 98 PERCENT STANDARD PROCTOR MAXIMUM DRY DENSITY AND WITHIN PLUS OR MINUS 3 PERCENT OPTIMUM MOISTURE CONTENT. NO LESS THAN SIX (6) DENSITY TESTS SHALL BE PERFORMED IN EVERY 10,000 SQUARE FEET OF AREA PER 8 INCH LIFT. (APPROX. 1 TEST PER EVERY 50 SQ. FT.)

11/22/2021

KNOXVILLE / KNOX COUNTY PLANNING
FILE NUMBER:
12-SE-21-C

12-SE-21-C

NO.	DATE	DESCRIPTION	BY	CHKD.
1		REVISIONS		



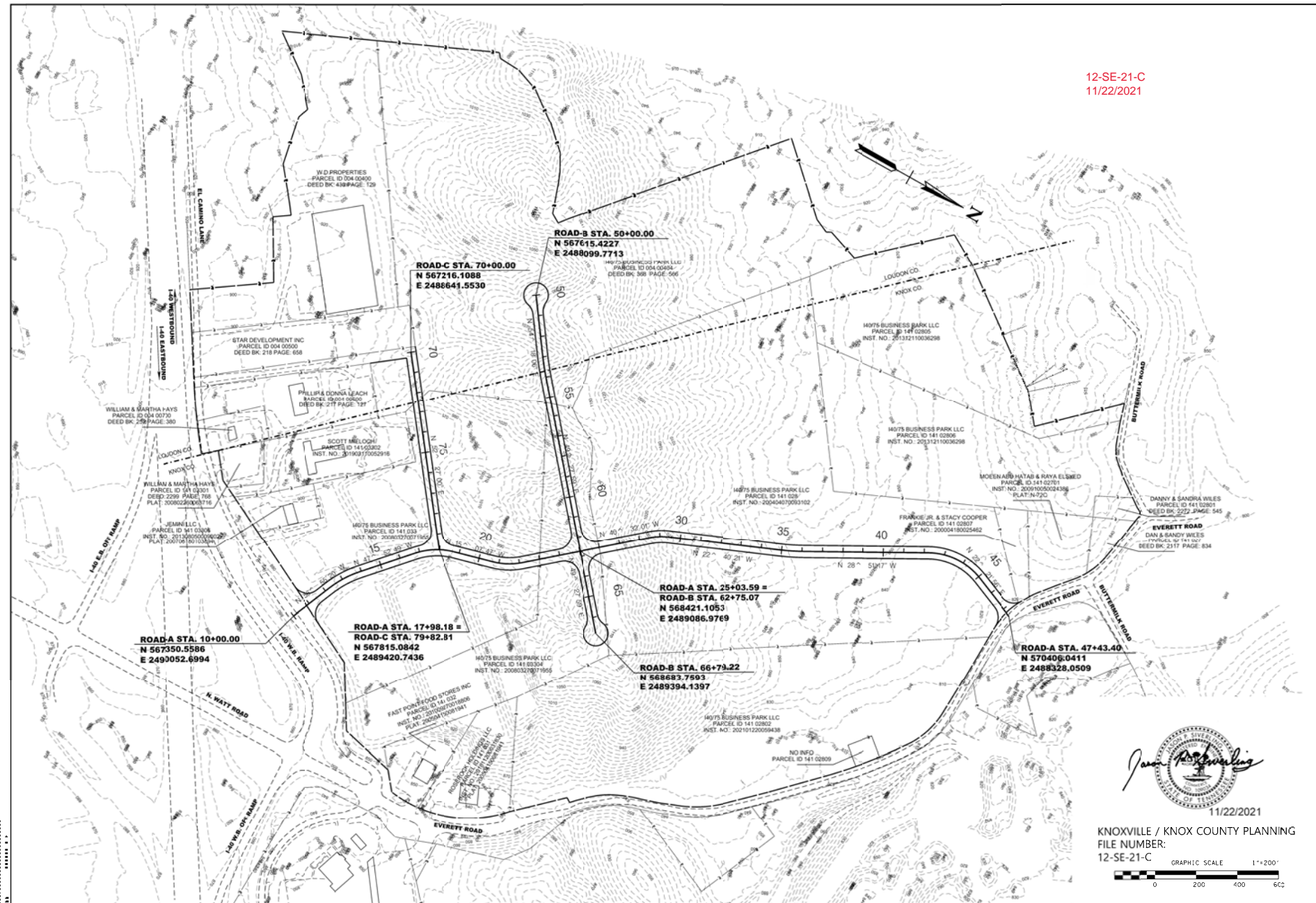
ROBERT G. CAMPBELL & ASSOC., L.P.
CONSULTING ENGINEERS
KNOXVILLE, TENNESSEE

PROSPERITY CROSSING
CONCEPT PLAN


TYPICAL SECTIONS

DESIGNED BY	CHECKED BY	SCALE	SHEET TWO
RGC	GG	N.T.S.	2
DRAWN BY	DATE	FILE NO.	
JPS	10/21/21	21242	

12-SE-21-C
11/22/2021



11/22/2021
KNOXVILLE / KNOX COUNTY PLANNING
FILE NUMBER:
12-SE-21-C
GRAPHIC SCALE 1"=200'
0 200 400 600

REVISIONS				ROBERT G. CAMPBELL & ASSOC., L.P. CONSULTING ENGINEERS KNOXVILLE, TENNESSEE	PROSPERITY CROSSING CONCEPT PLAN	EXISTING CONDITIONS	DESIGNED BY RGC	CHECKED BY GG	SCALE 1"=200'	SHEET THREE No. 3
DATE	DESCRIPTION	BY					DRAWN BY JPS	DATE 10/21/21	FILE NO. 21242	

12-SE-21-C
11/22/2021

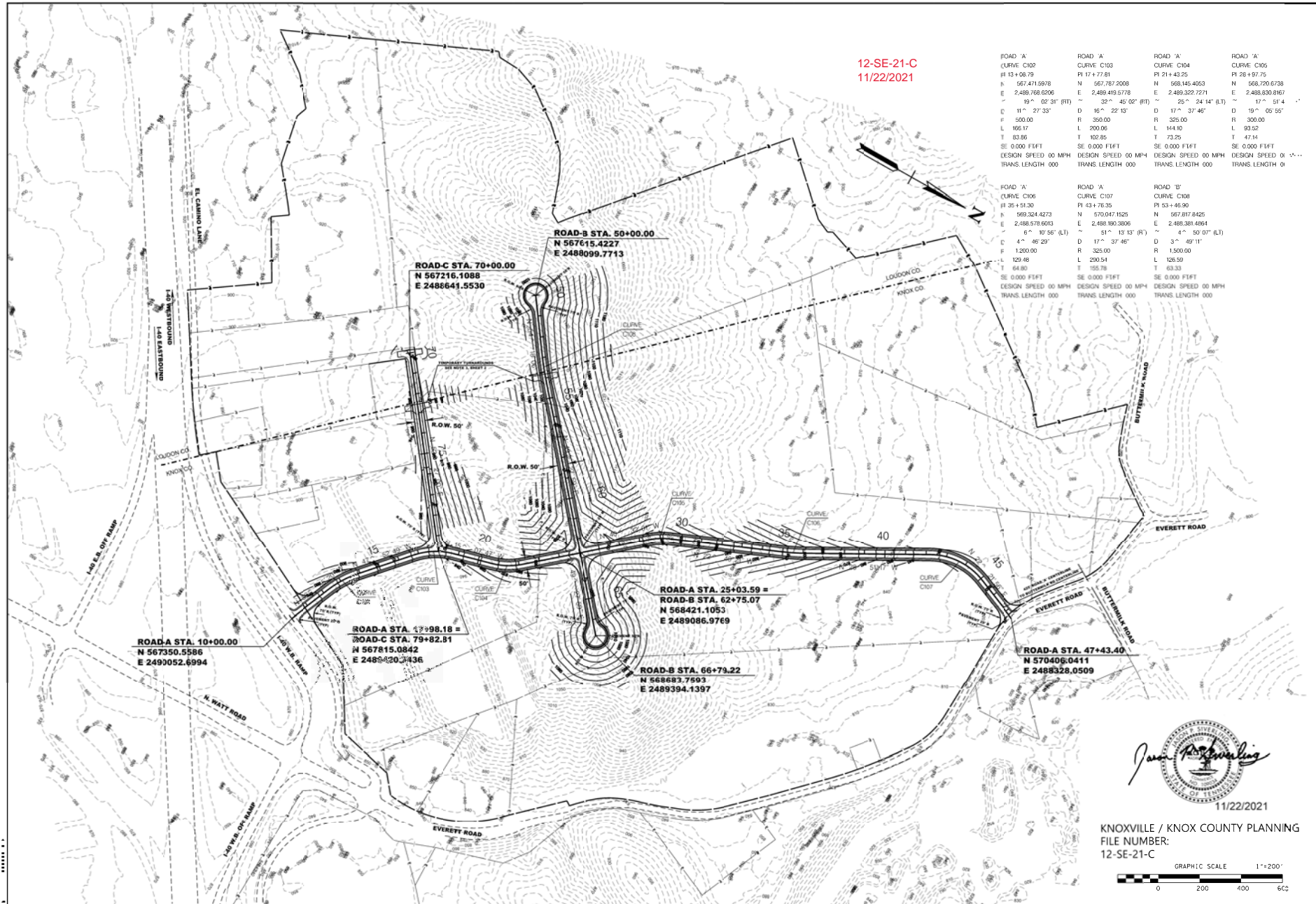
ROAD 'A'	ROAD 'A'	ROAD 'A'	ROAD 'A'
CURVE C102	CURVE C103	CURVE C104	CURVE C105
PI 13+00.79	PI 17+77.81	PI 21+43.25	PI 28+07.75
N 567.471.9078	N 567.787.0008	N 568.145.4063	N 568.720.6738
E 2,485,768.6206	E 2,489,419.5778	E 2,489,322.7271	E 2,488,630.8867
19° 02' 31" (RT)	32° 45' 02" (RT)	25° 24' 14" (LT)	17° 51' 4"
11' 27' 33"	16' 22' 13"	17' 37' 46"	19' 05' 55"
R 500.00	R 350.00	R 325.00	R 300.00
L 165.17	L 200.00	L 144.10	L 93.52
T 83.86	T 102.85	T 73.25	T 47.14
SE 0.000 FEET	SE 0.000 FEET	SE 0.000 FEET	SE 0.000 FEET
DESIGN SPEED 00 MPH	DESIGN SPEED 00 MPH	DESIGN SPEED 00 MPH	DESIGN SPEED 00 MPH
TRANS. LENGTH 000	TRANS. LENGTH 000	TRANS. LENGTH 000	TRANS. LENGTH 000

ROAD 'A'	ROAD 'A'	ROAD 'B'
CURVE C106	CURVE C107	CURVE C108
PI 35+53.30	PI 43+76.35	PI 53+46.50
N 569,324.4273	N 570,047.1525	N 567,817.8425
E 2,488,578.6013	E 2,488,180.3806	E 2,488,381.4864
6° 10' 56" (LT)	51° 13' 13" (RT)	4° 50' 07" (LT)
4' 46' 29"	D 17' 37' 46"	D 3' 49' 11"
R 1,200.00	R 325.00	R 1,500.00
L 129.48	L 126.54	L 126.50
T 64.80	T 155.78	T 63.33
SE 0.000 FEET	SE 0.000 FEET	SE 0.000 FEET
DESIGN SPEED 00 MPH	DESIGN SPEED 00 MPH	DESIGN SPEED 00 MPH
TRANS. LENGTH 000	TRANS. LENGTH 000	TRANS. LENGTH 000

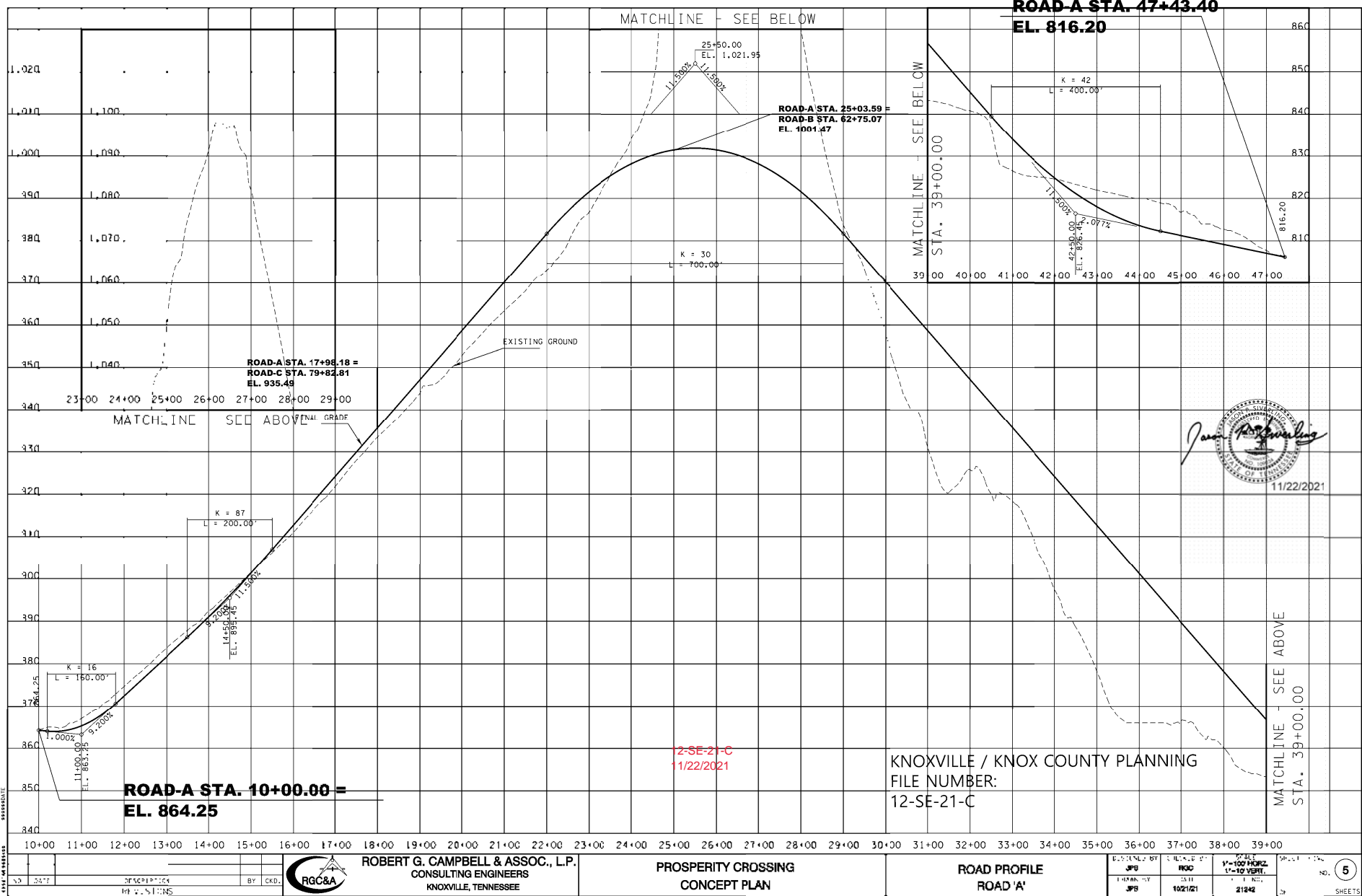


11/22/2021

KNOXVILLE / KNOX COUNTY PLANNING
FILE NUMBER:
12-SE-21-C



<div> </div>		ROBERT G. CAMPBELL & ASSOC., L.P. CONSULTING ENGINEERS KNOXVILLE, TENNESSEE		PROSPERITY CROSSING CONCEPT PLAN		PROPOSED LAYOUT		DESIGNED BY: RGC CHECKED BY: GG SCALE: 1" = 200' DATE: 10/21/21 FILE NO.: 21242		SHEET FOUR NO. 4	
REVISIONS NO. DATE DESCRIPTION BY CKD.											



11/22/2021 10:00 AM

NO.	DATE	DESCRIPTION	BY	CHKD.
1	11/22/2021	PROSPERITY CROSSING CONCEPT PLAN	JFB	RGC



ROBERT G. CAMPBELL & ASSOC., L.P.
 CONSULTING ENGINEERS
 KNOXVILLE, TENNESSEE

PROSPERITY CROSSING
 CONCEPT PLAN

ROAD PROFILE
 ROAD 'A'

DESIGNED BY	CHECKED BY	DATE	SCALE	SHEET NO.
JFB	RGC	11/22/21	1"=10' HORIZ. 1"=10' VERT.	5
JFB			21244	



Development Request

DEVELOPMENT

- ☐ Development Plan
☐ Planned Development
☐ Use on Review / Special Use
☐ Hillside Protection COA

SUBDIVISION

- ☒ Concept Plan
☐ Final Plat

ZONING

- ☐ Plan Amendment
☐ SP ☐ OYP
☐ Rezoning

Steve Maddox

Applicant Name

10/25/2021

Date Filed

12/9/2021

Meeting Date (if applicable)

Principal

Affiliation

File Number(s)

12-SE-21-C

CORRESPONDENCE

All correspondence related to this application should be directed to the approved contact listed below.

- ☐ Applicant ☐ Owner ☐ Option Holder ☐ Project Surveyor ☒ Engineer ☐ Architect/Landscape Architect

Jason Siverling

Robert G. Campbell, and Associates

Name

Company

7523 Taggart Lane

Knoxville

TN

37938

Address

City

State

ZIP

865-947-5996

JasonS@RGC-A.COM

Phone

Email

CURRENT PROPERTY INFO

Steve Maddox and others
140-75 Business Park, LLC

100 Dalton Place Way

865-522-9910

Owner Name (if different)

Owner Address

Owner Phone

13115 & 0 Everett Rd; 0 Everett Rd; 13206 & 0 Buttermilk Rd
El Camino Ln.

141-028, 02802, 02805, 02806, 033, 03304

Property Address

Parcel ID

West Knox

West Knox

No

Sewer Provider

Water Provider

Septic (Y/N)

STAFF USE ONLY

West side of Everett Rd, north side of El Camino Ln, sout side of Buttermilk Rd Approx. 166 acres

General Location

Tract Size

☐ City ☒ County
District

6th

CB & RB

Vacant land

Zoning District

Existing Land Use

Northwest County

GC, MDR, & HP

Planned Growth

Planning Sector

Sector Plan Land Use Classification

Growth Policy Plan Designation

DEVELOPMENT REQUEST

- ☐ Development Plan ☐ Use on Review / Special Use ☐ Hillside Protection COA
☐ Residential ☐ Non-Residential

Home Occupation (specify) _____

Other (specify) _____

Related City Permit Number(s)

SUBDIVISION REQUEST**Prosperity Crossing**

Related Rezoning File Number

Proposed Subdivision Name

Unit / Phase Number ☐ Combine Parcels ☐ Divide Parcel

0

Total Number of Lots Created

☒ Other (specify) **New road only**☐ Attachments / Additional Requirements**ZONING REQUEST**☐ Zoning Change

Proposed Zoning

Pending Plat File Number

☐ Plan Amendment Change

Proposed Plan Designation(s)

Proposed Density (units/acre)

Previous Rezoning Requests

☐ Other (specify) _____**STAFF USE ONLY****PLAT TYPE**

- ☐ Staff Review ☐ Planning Commission

ATTACHMENTS

- ☐ Property Owners / Option Holders ☐ Variance Request

ADDITIONAL REQUIREMENTS

- ☐ Design Plan Certification (*Final Plat*)
☐ Use on Review / Special Use (*Concept Plan*)
☐ Traffic Impact Study
☐ COA Checklist (*Hillside Protection*)

Fee 1

0107

Fee 2

Fee 3

Total

\$500

AUTHORIZATION

By signing below, I certify I am the property owner, applicant or the owners authorized representative.

Applicant Signature

Steve Maddox

Please Print

Date

10-28-21

Phone Number

865-522-9910

Email

smaddox@maddoxcompany.com

Staff Signature

Michael Reynolds

Please Print

10/28/2021 swm

Date