

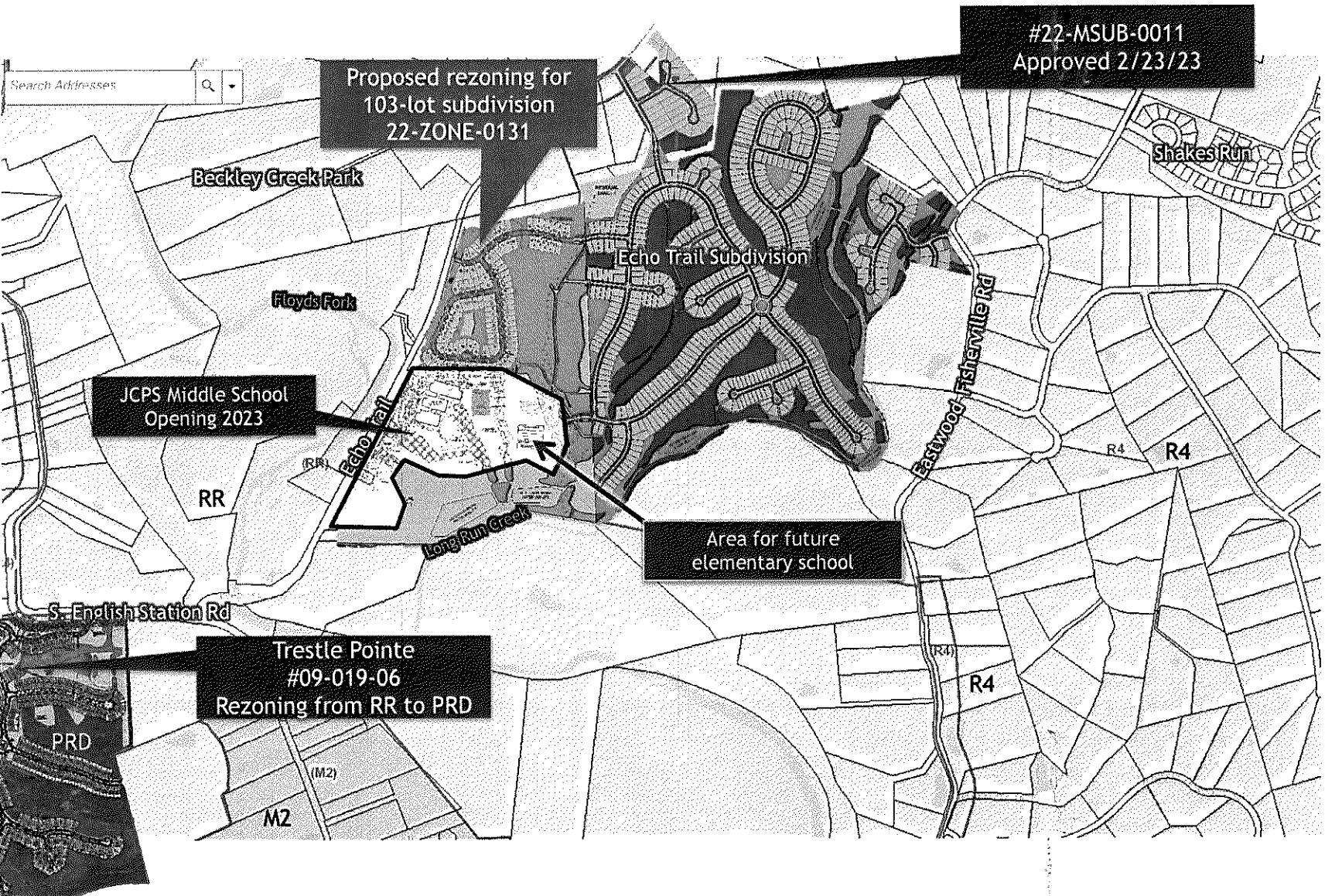
Louisville Metro Planning Commission Public Hearing - April 20, 2023
Louisville Metro Land Development and Transportation Committee - March 9, 2023
Neighborhood Meeting - August 31, 2022

Docket No. 22-ZONE-0131

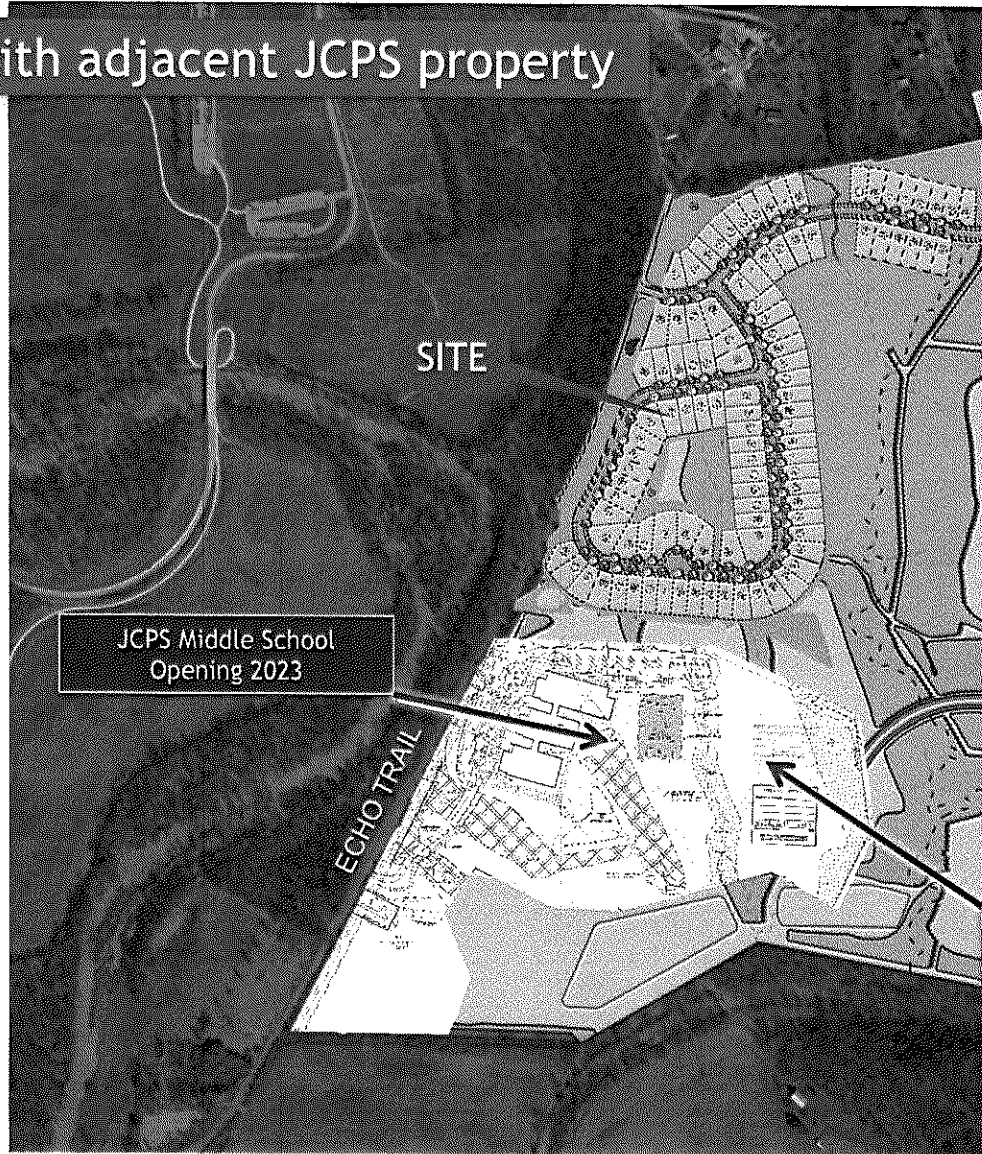
**Zone change from R-R to R-4 to allow a
103-lot subdivision with development
potential transfer and a Floyds Fork
Development Review Overlay on
property located at 2405 Echo Trail**

Long Run Creek Properties, LLC
c/o Brad Rives, Jack Smith & Rick Riney

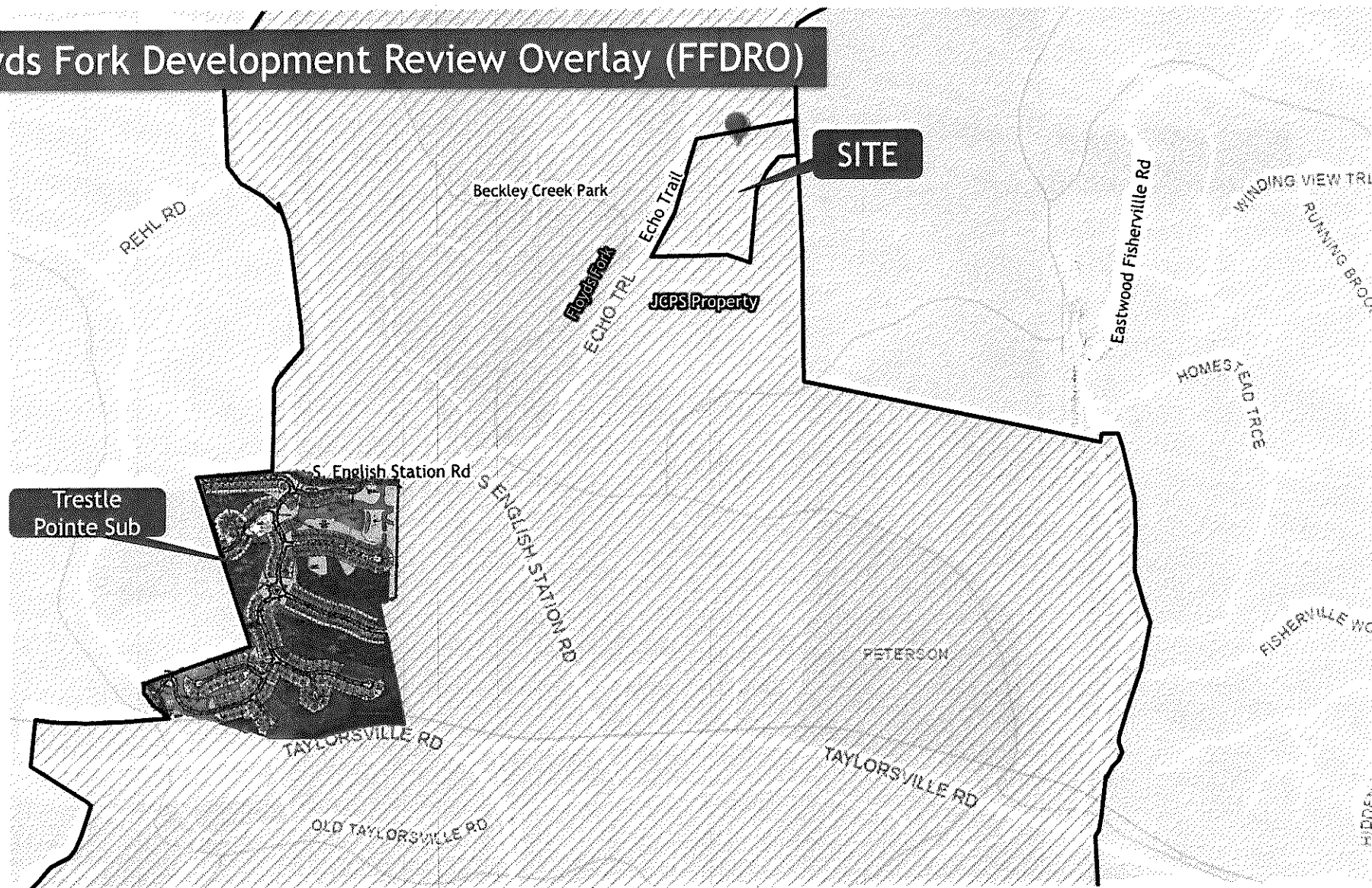
Attorneys: Bardenwerper Talbott & Roberts, PLLC
Land Planners, Landscape Architects & Engineers: Mindel Scott & Associates, Inc.
Traffic Engineer: Diane B. Zimmerman Traffic Engineering, LLC
Ecological Consultant: RES
Geotechnical Consultants: ECS Southeast, LLC



Subject property with adjacent JCPS property



Floyds Fork Development Review Overlay (FFDRO)



Center turn lane to be added at entrance



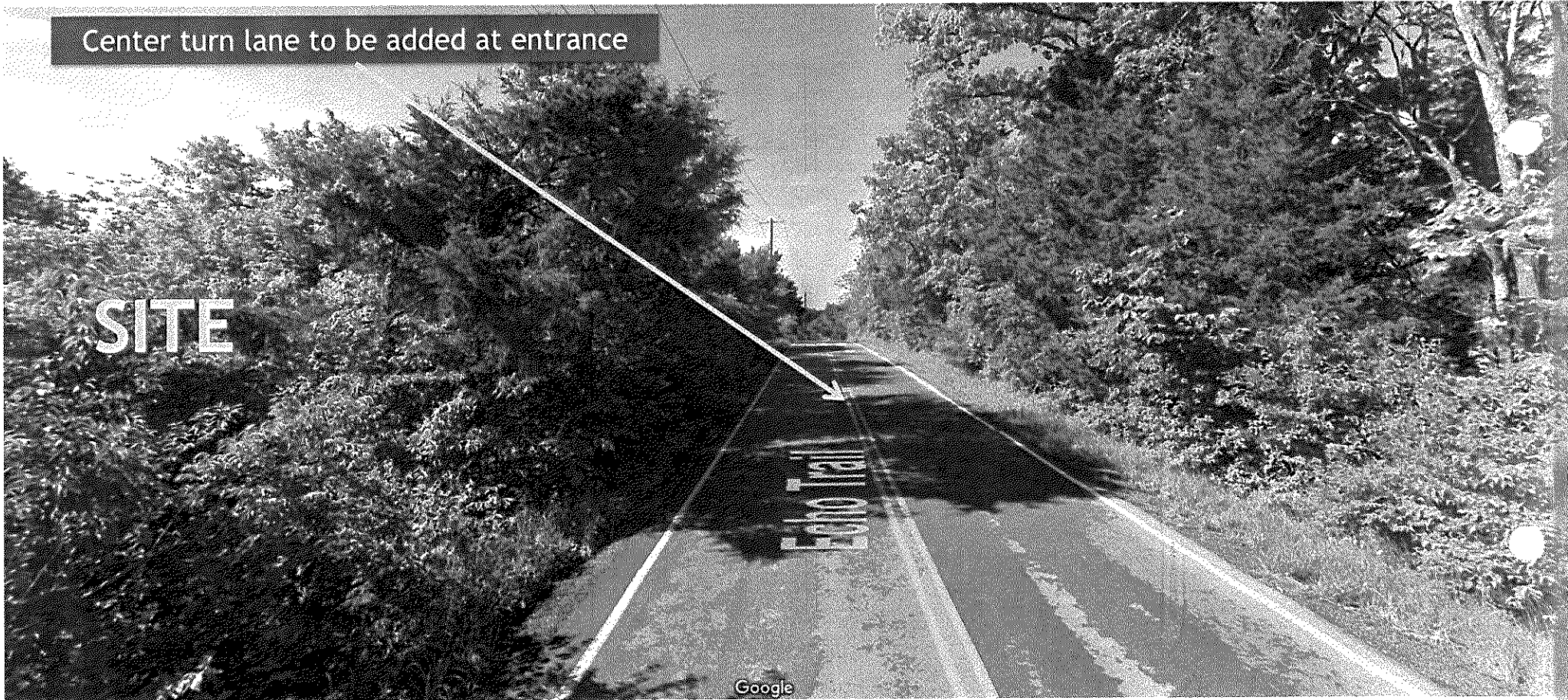
View of Echo Trail looking north. Site is to the right.

Center turn lane to be added at entrance

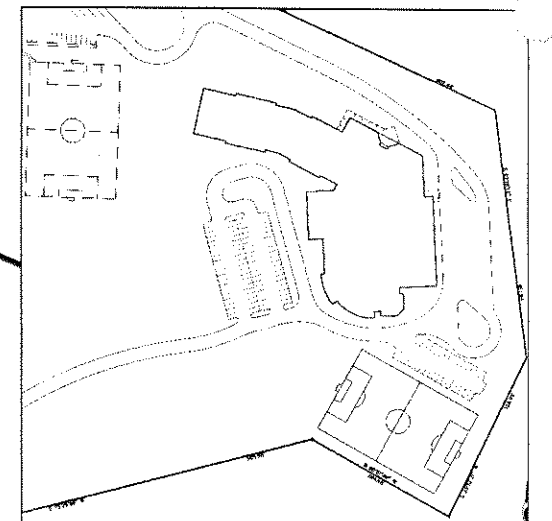
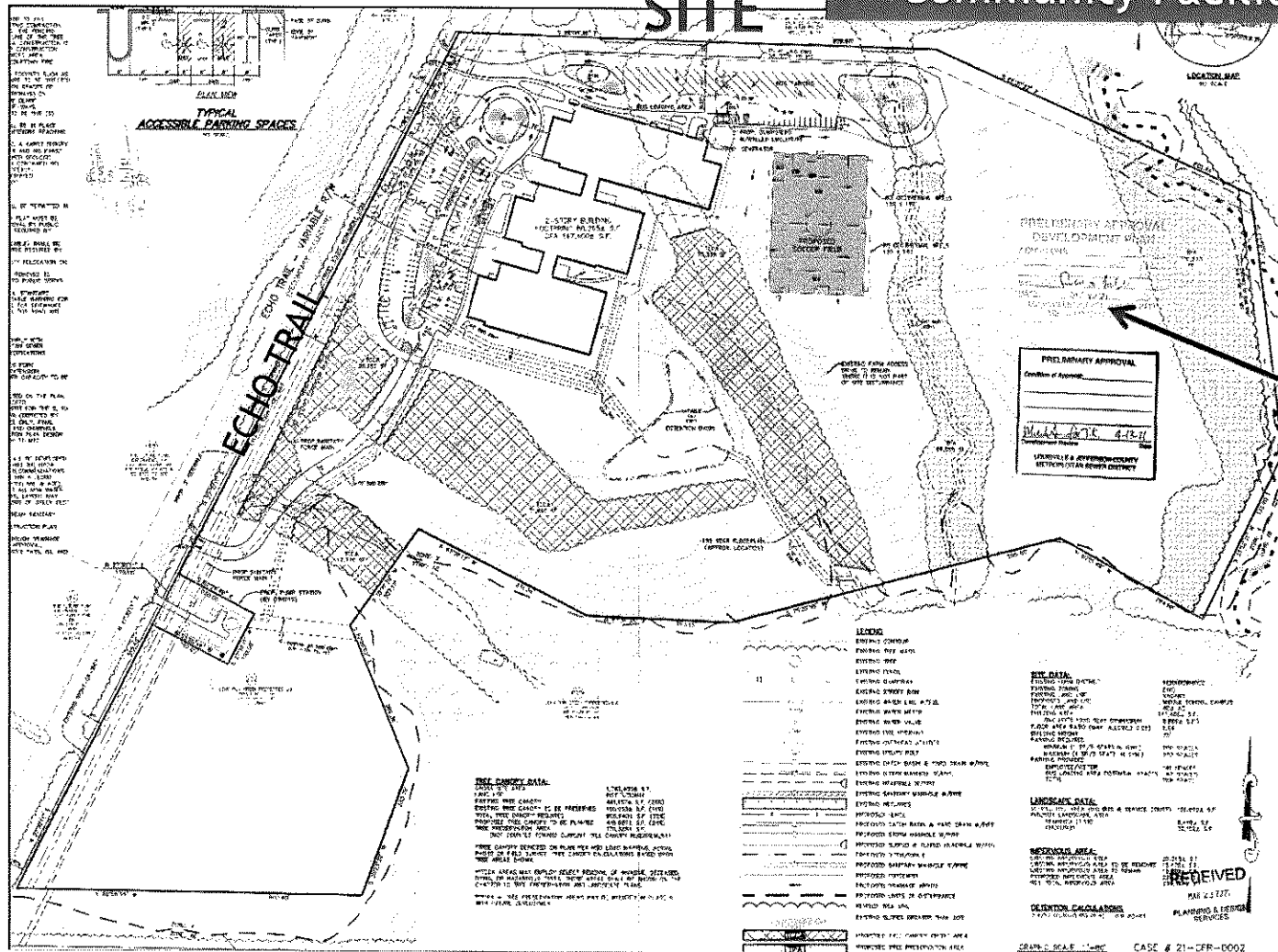
SITE

Google

View of Echo Trail looking south. Site is to the left.



SITE

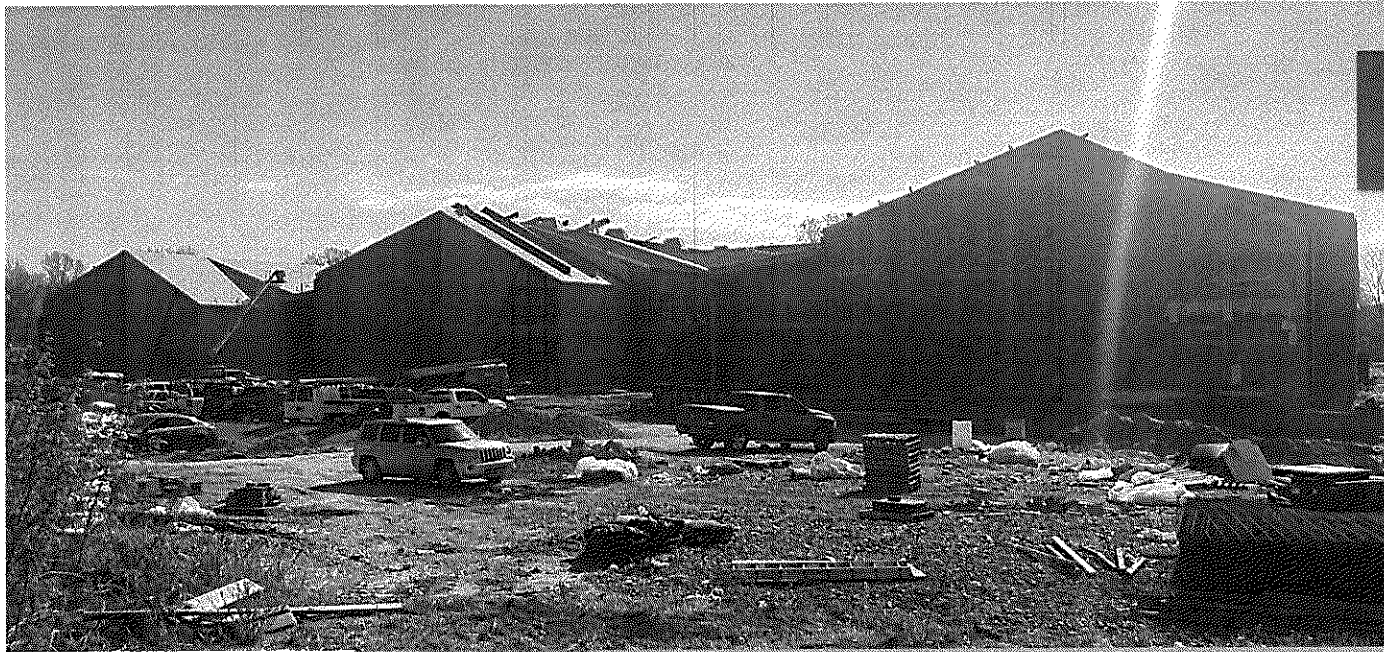


Area for future elementary school

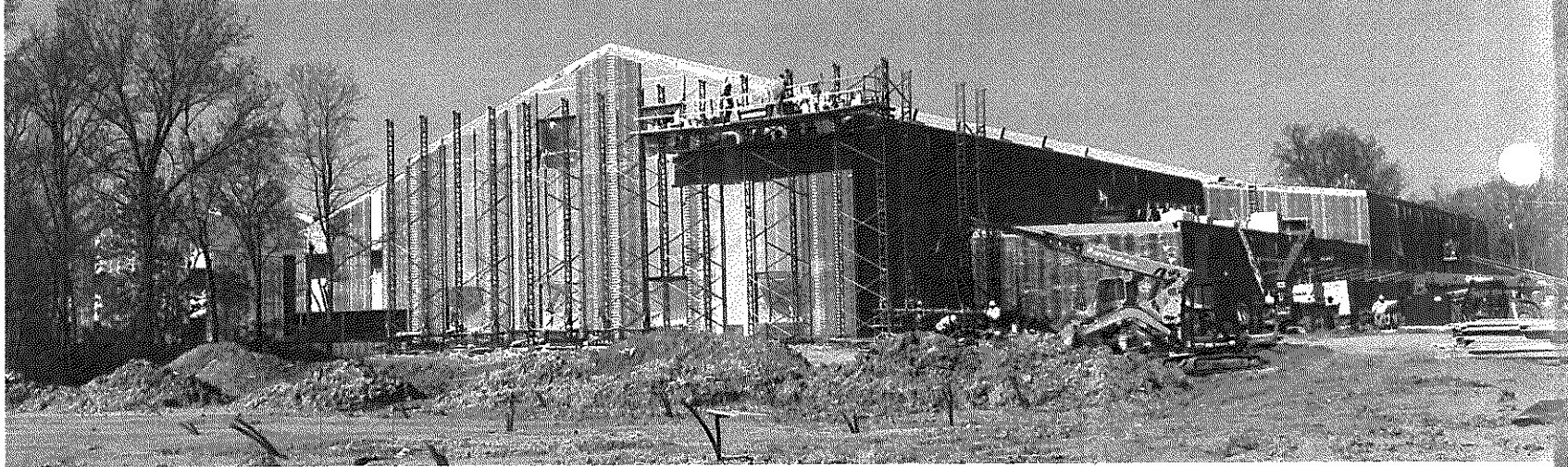
RECEIVED

PLANTING & LAND

RESULTS



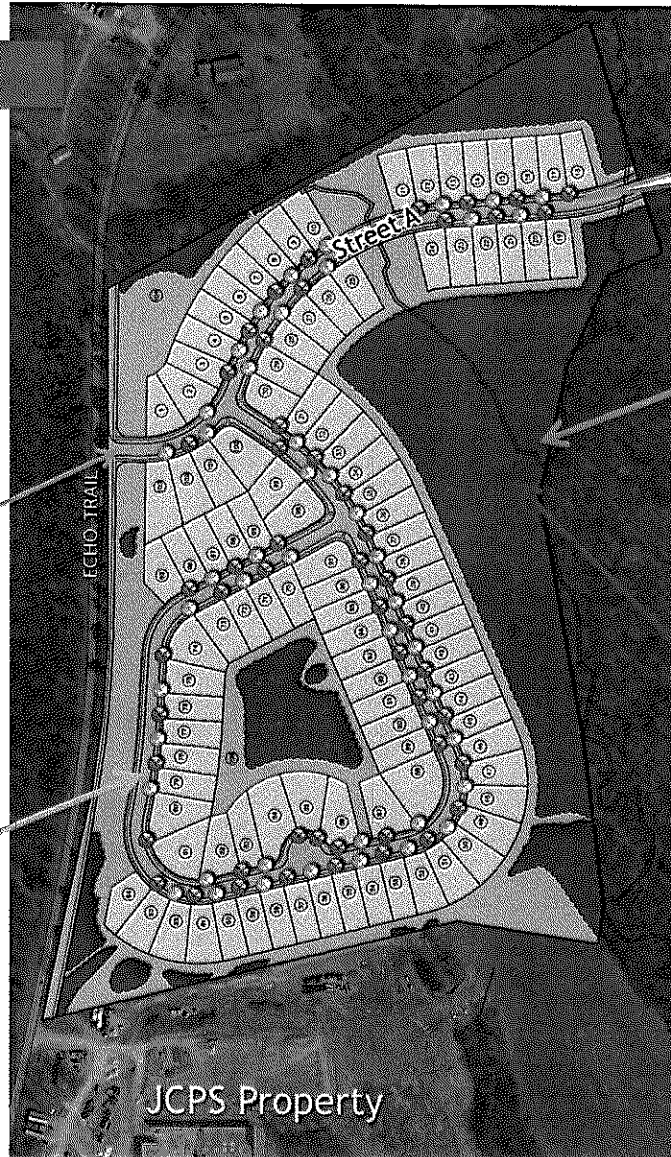
JCPs Echo Trail
Middle School



Proposed development plan

Turn Lane addition

Single loaded lots facing Echo Trail



Street A is the same street approved on plan in #18SUBDIV1023.

Required Tree Preservation =
20% of existing

Proposed Tree Preservation =
39% of existing

Open Space Proposed =
49% (638,932 sf)

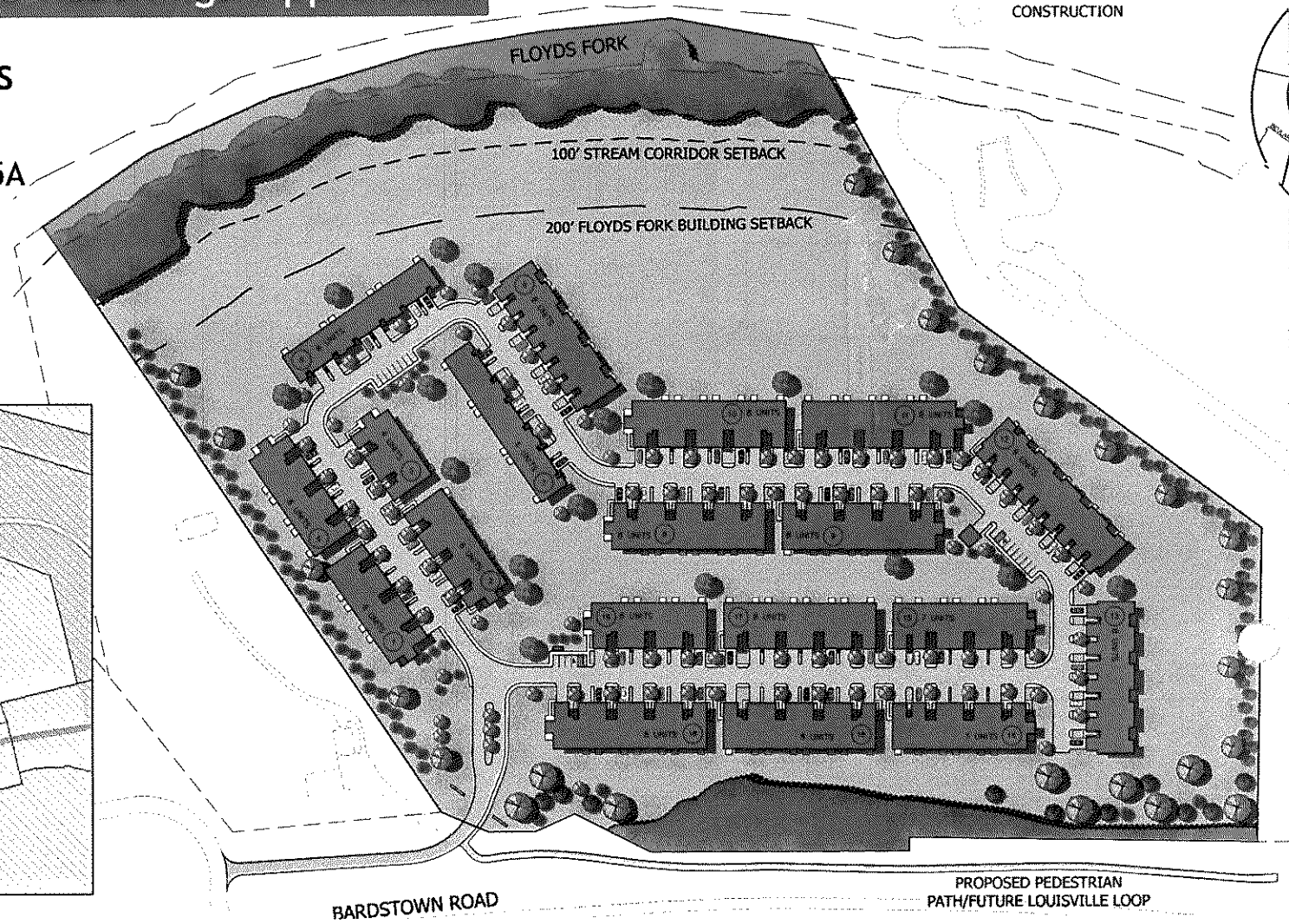
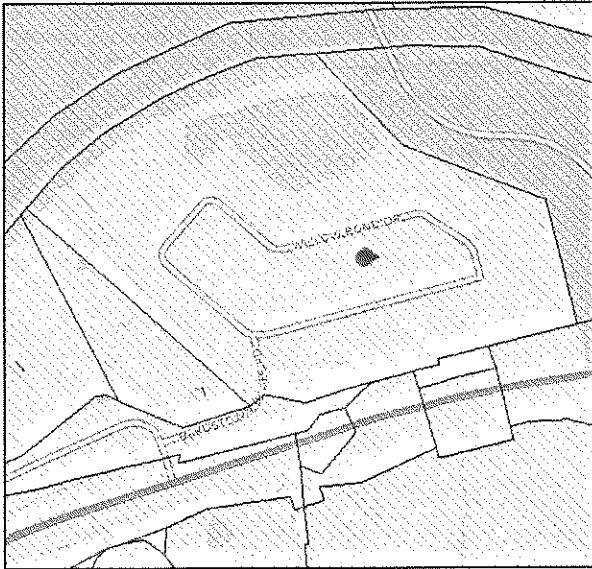
Proposed Density = 2.81 du/a gross
(less than the 4.84 du/a allowed in R-4)

Prior Floyds Fork DRO Rezoning/Approvals

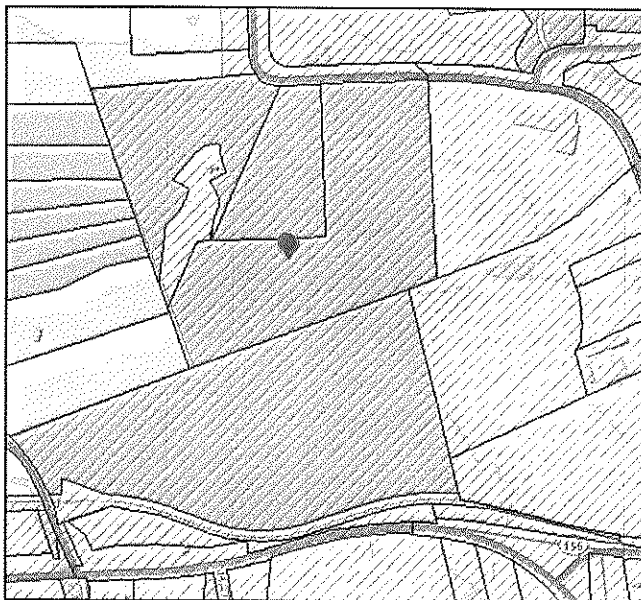
Brentwood Commons

#15ZONE1015

**Zone Change from RR to R-5A
(3.97 du/a)**



Trestle Point Subdivision
#09-019-06
 Zone Change from RR to PRD
 (211 lots - 1.8 du/a)



167	ANNA (70)
28	4428 W
pro	
48	4335 SP
52	4534 SP
56	4445 SP
61	4524 W
68	4434 SP
70	3711 SP
80	4434 SP
81	4772 SP
83	4575 SP
88	4428 W
94	4434 SP
96	3741 SP
97	4343 SP
98	4509 SP
99	4433 SP
03	4434 SP
04	4400 SP
07	4434 SP
12	3741 SP
21	4434 SP
48	4428 SP
50	4481 SP
45	4356 RE
08	4770 SP

THE AREA NOTED:

located in the plan submitted below, it being understood that the plan is subject to the approval of the Board of Directors of the City of New York, and that the plan is subject to the approval of the Board of Directors of the City of New York, and that the plan is subject to the approval of the Board of Directors of the City of New York.

[illegible]

NOTE

The edge of the body of the bar must not be used prior to any grinding. It remains in place until the component is resubmitted for grinding. It shall be protected with the barrel cap.

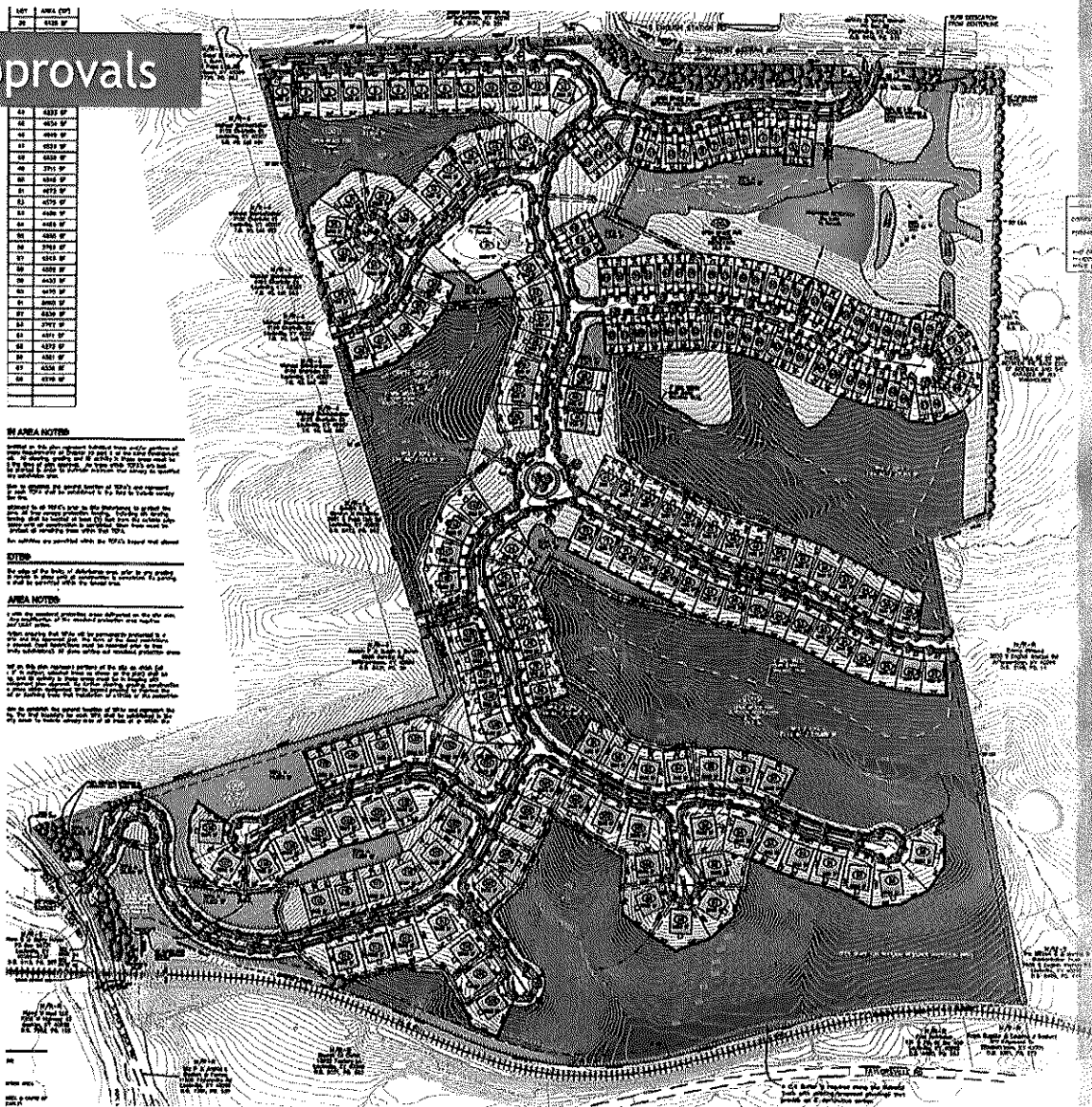
AREA NOTES:

It was the standard procedure to be followed on the day after the meeting of the standard procedure was adopted and that after.

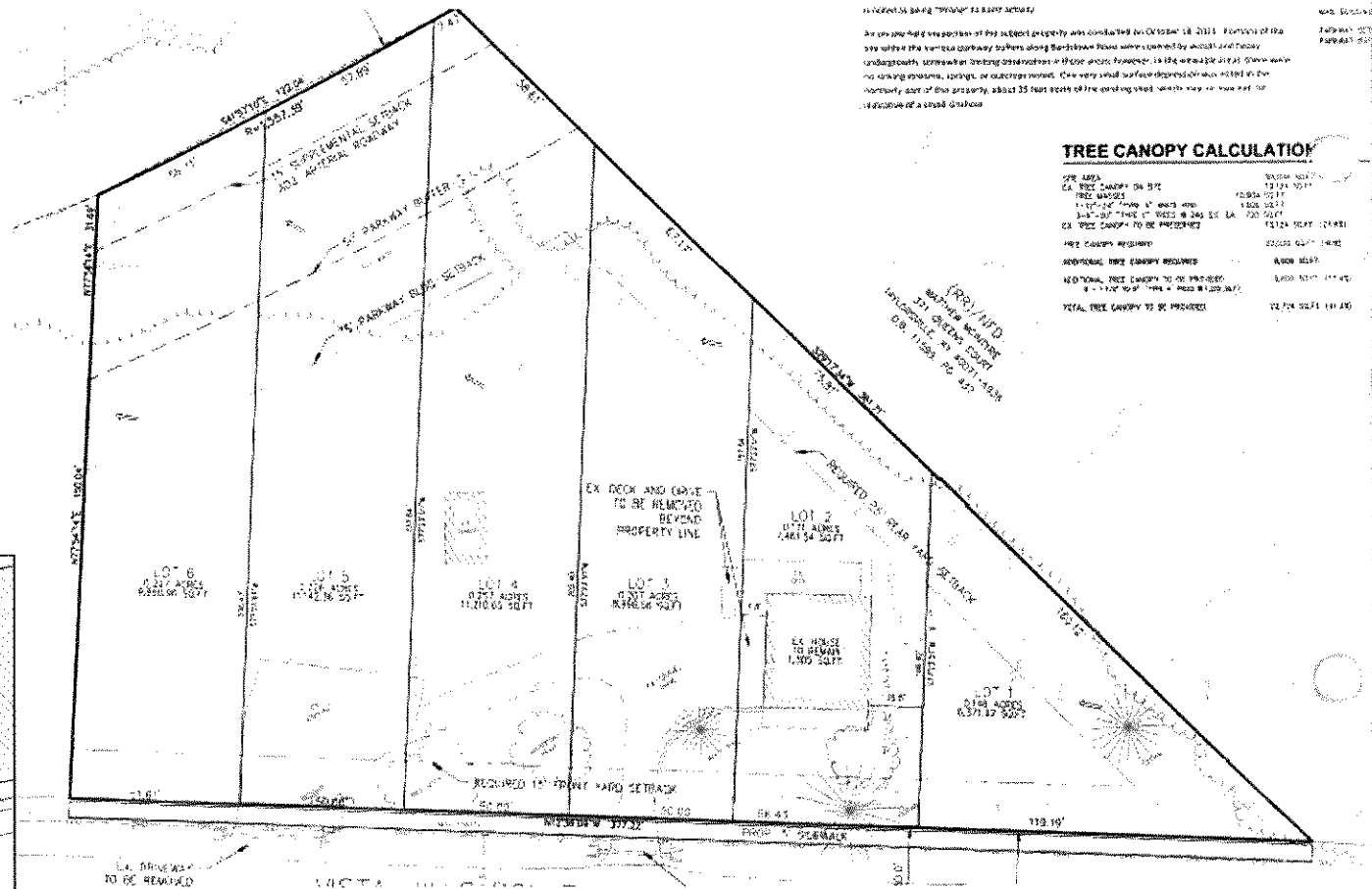
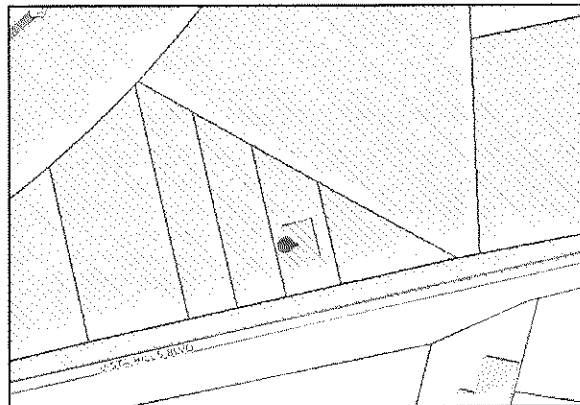
After stating that this will be permanently protected in a way and the agreement that the work of the standard procedure, it stated that the standard procedure was followed after the day after the meeting of the standard procedure was adopted and that after.

[illegible]

...the ...

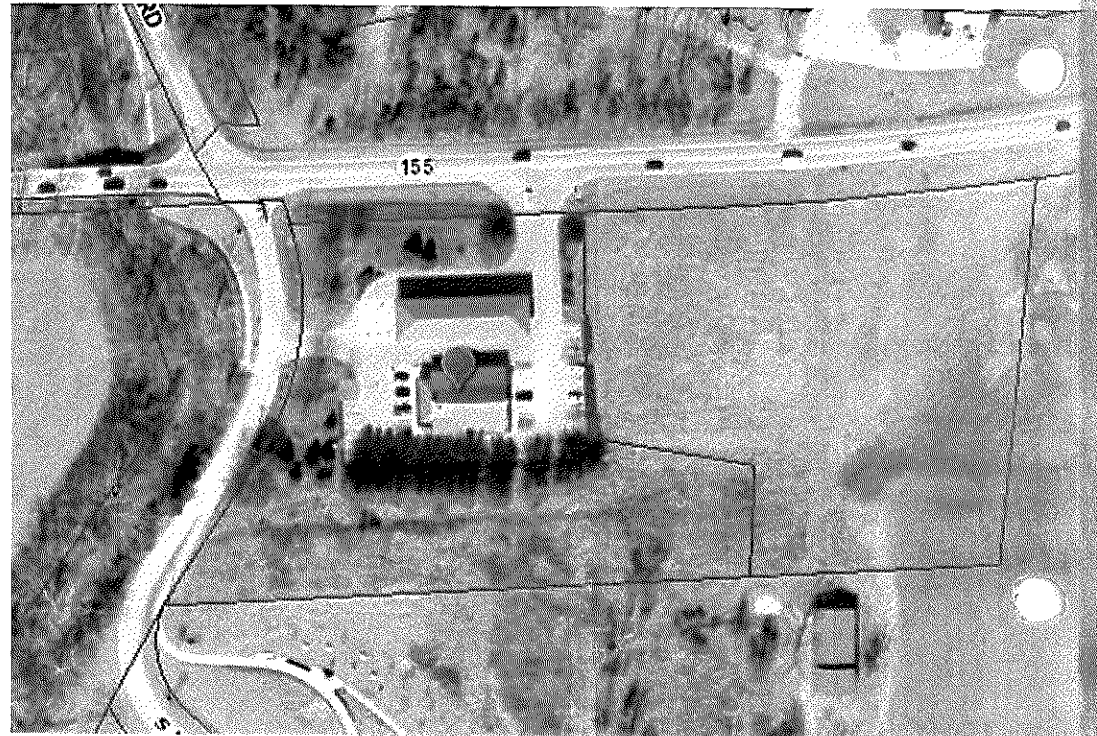
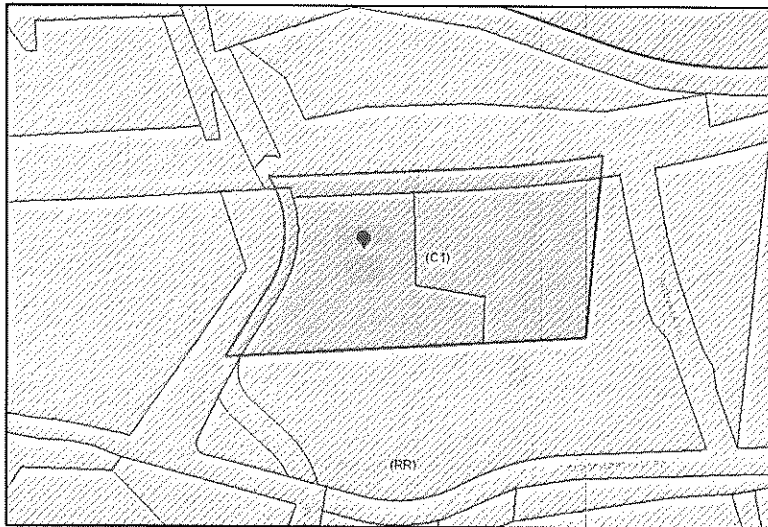


10105 Vista Hills Road
#21-ZONE-0138
Zone Change from RR to R-5
(4.76 du/a)

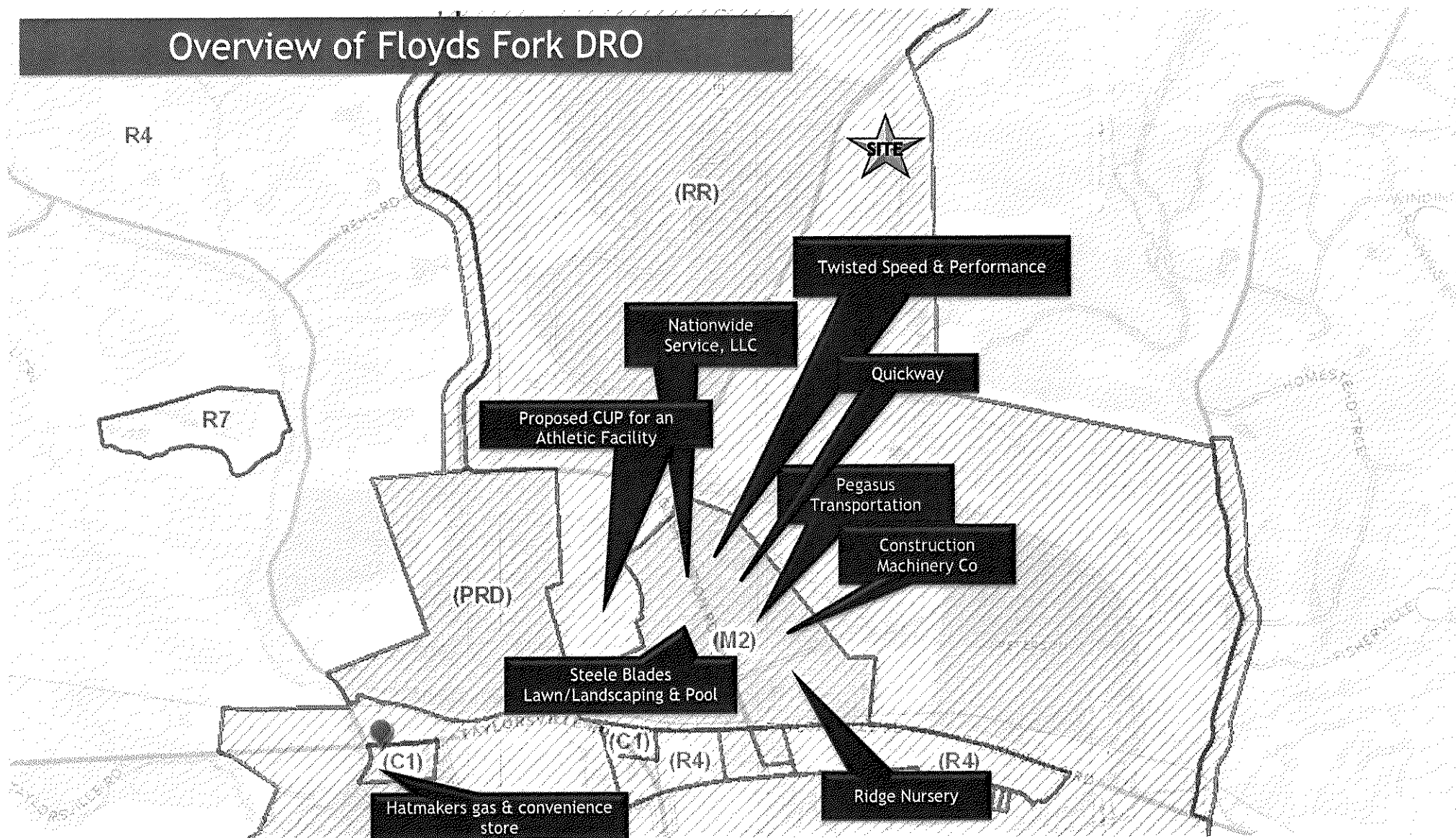


Prior Floyds Fork DRO Rezoning/Approvals

Hatmaker's Gas & Convenience Store Pre-Plan Certain C-1



Overview of Floyds Fork DRO



FFDRO Compliance Statement

BARDENWERPER, TALBOTT & ROBERTS, PLLC

ATTORNEYS AT LAW

1000 N. HORTONSMITH PARKWAY • BUILDING INDUSTRY ASSOCIATION OF GREATER LOUISVILLE BUILDING • SECOND FLOOR • LOUISVILLE, KENTUCKY 40222
(502) 426-6688 • (502) 426-0561 (fax) • WWW.BARDENLAW.NET

STATEMENT OF COMPLIANCE STATEMENT FOR FLOYDS FORK OVERLAY DISTRICT GUIDELINES

<u>Applicant/Owner:</u>	Long Run Creek Properties, LLC
<u>Project Name/Location:</u>	2405 (a/k/a 2605) Echo Trail
<u>Proposed Use:</u>	Single family residential subdivision
<u>Request:</u>	Zone change from RR to R-4
<u>Engineers, Land Planners, Landscape Architects:</u>	Mindel Scott & Associates, Inc.

The development complies with the applicable guidelines as follows:

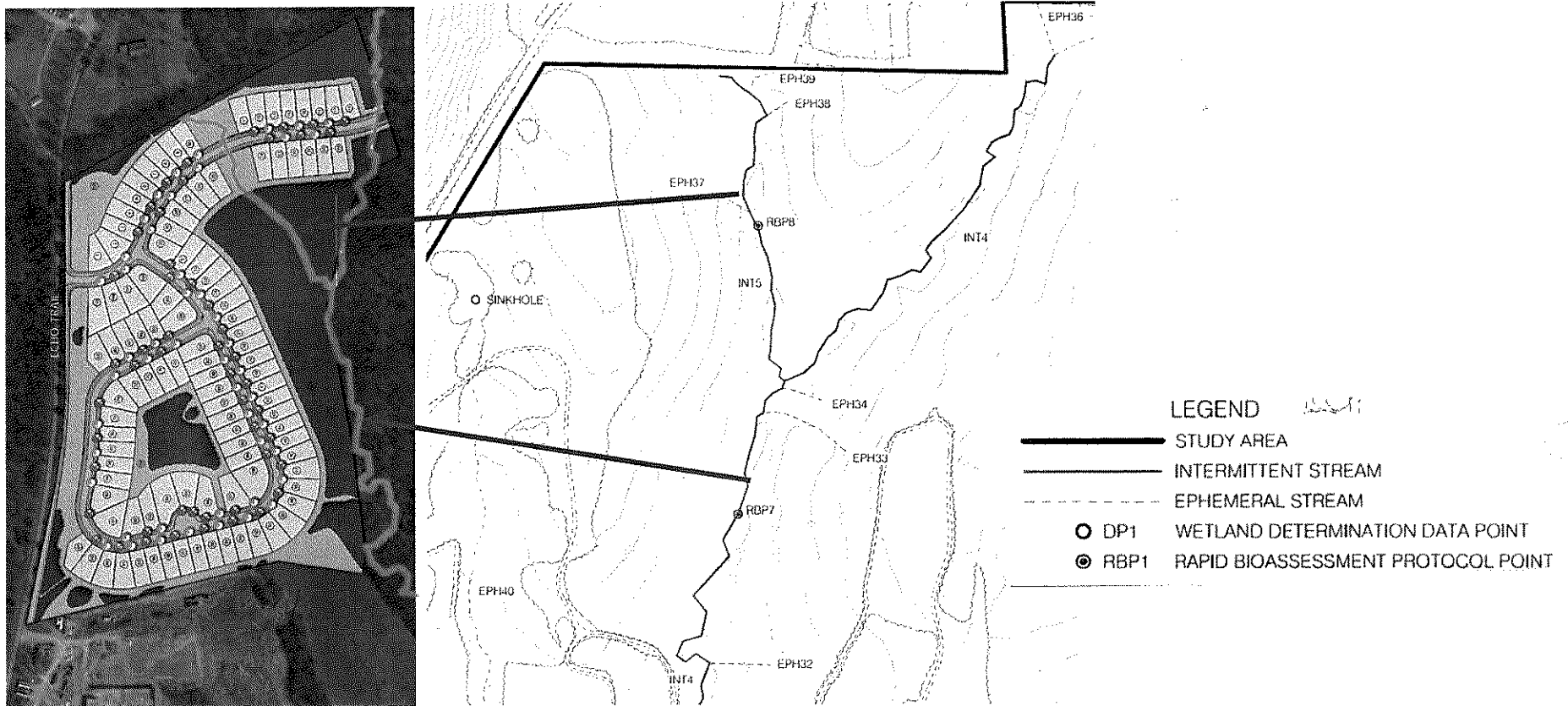
The Floyds Fork Development Review Overlay (FFDRO) is an overlay area shown on Louisville Metro's zoning district maps, which "constitutes a second level of development standards in addition to those specified by the underlying zoning district", the "purpose" of which "is to protect the quality of the natural environment . . . by promoting compatible development of land and structures" from "blighting influences" . . . , "unsafe buildings" . . . , "significant damage or destruction of prominent hillsides or valleys caused by improper development" . . . , "significant damage to the economic value of existing properties and/or new developments" . . . , "soil erosion and stream siltation" . . . , "destruction of mature and/or valuable trees and other vegetation and wildlife habitat" . . . , and "loss of high quality visual character." LCD 3.1.A.1.

The FFDRO Regulations attempt to accomplish these purposes by reviewing development applications against certain "guidelines" which contain such word choices as "desirable," "preferred," "recommended," "discouraged," "encouraged," "intended," "where possible," "may" and "would". Indeed, there are sixty-two different times the word "should" is used in the FFDRO Guidelines, with only a single use of the word "shall". This is why the FFDRO review is conducted against mere "guidelines," not detailed, objective "standards," like the rest of the LDC.

As such, in each case a FFDRO review is conducted by the Planning Commission to determine a proposed development's "impact on environmental characteristics." To aid the Planning Commission in doing so, the FFDRO Regulations state that the applicant must "provide adequate information to allow the Commission to determine impacts of the proposal and compliance with the [established] guidelines." LDC 3.1.B.3. If the Planning Commission determines there to be negative impacts, the next question for the Planning Commission is to

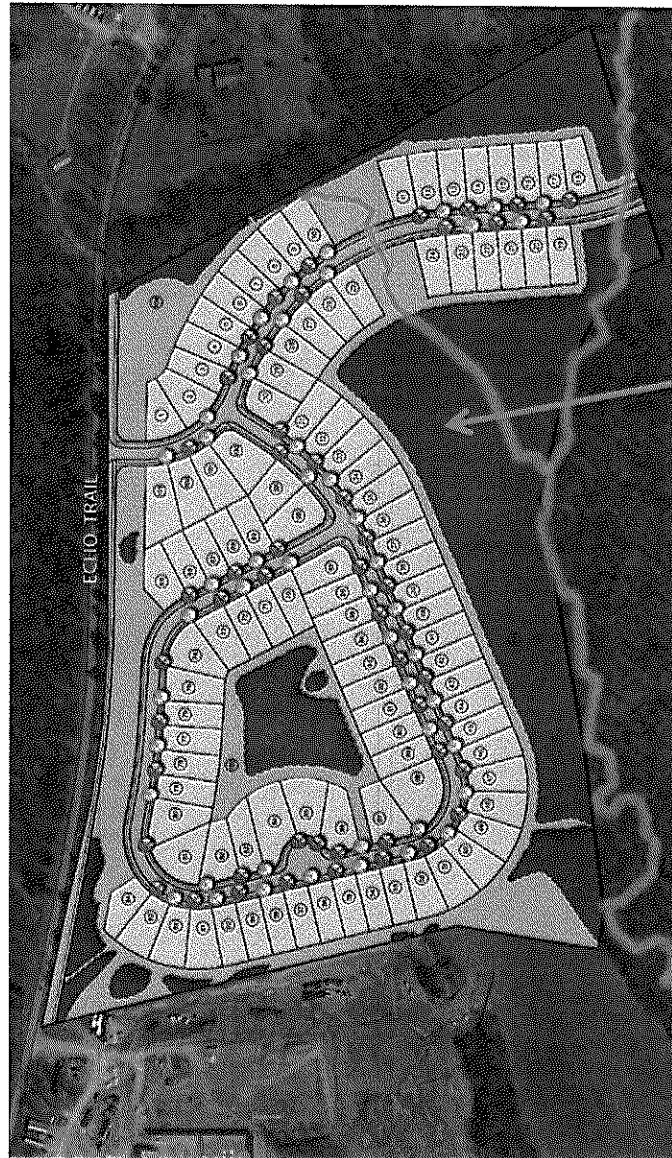
1. Stream Corridors:

- The intermittent stream is located in open space and buffered with 25-foot stream buffer.
- No floodplain on site.



2. Trees and Vegetation:

- Vegetation adjoining intermittent stream protected.
- Approx. double the required tree preservation provided.

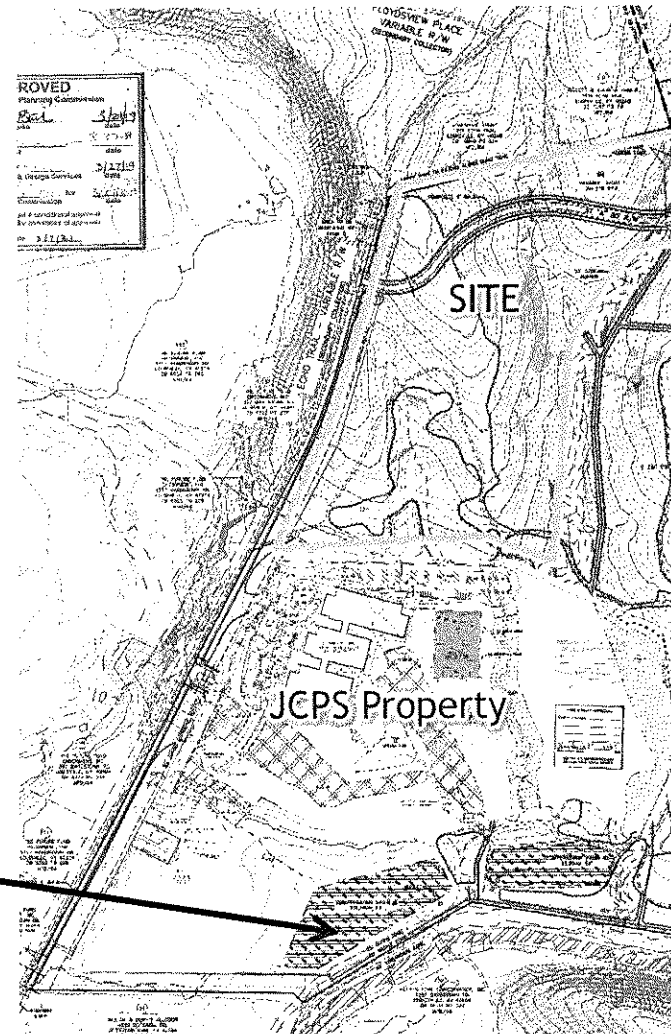
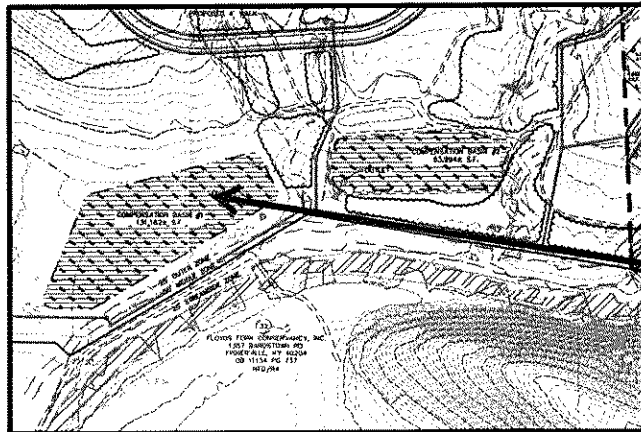


Required Tree Preservation =
20% of existing

Proposed Tree Preservation =
39% of existing

3. Drainage and Water Quality:

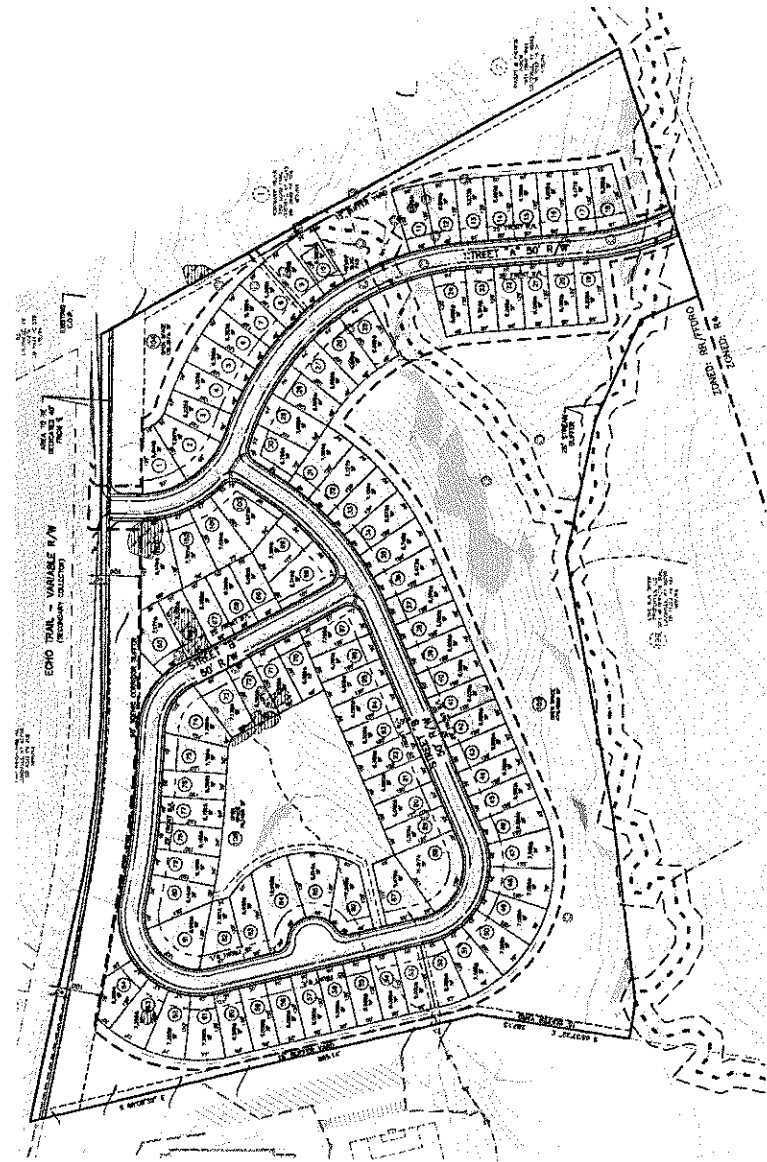
- Septic systems will NOT be utilized.
- No wetlands on site per RES report.
- Applicant to double the MS-4 water quality treatment per binding element.



Proposed Binding Element:
The Applicant shall treat the first 1.2 inches of stormwater run-off to meet the MS-4 Water Quality standards, in the proposed wetlands area as shown at the public hearing dated April 20, 2023

4. Hillsides:

- Density transfer subdivision proposed to allow following the natural character of the land in order to minimize grading, cutting, and filling.
- Most of slopes > 20% in open space.



5. Clustering of Residential Use:

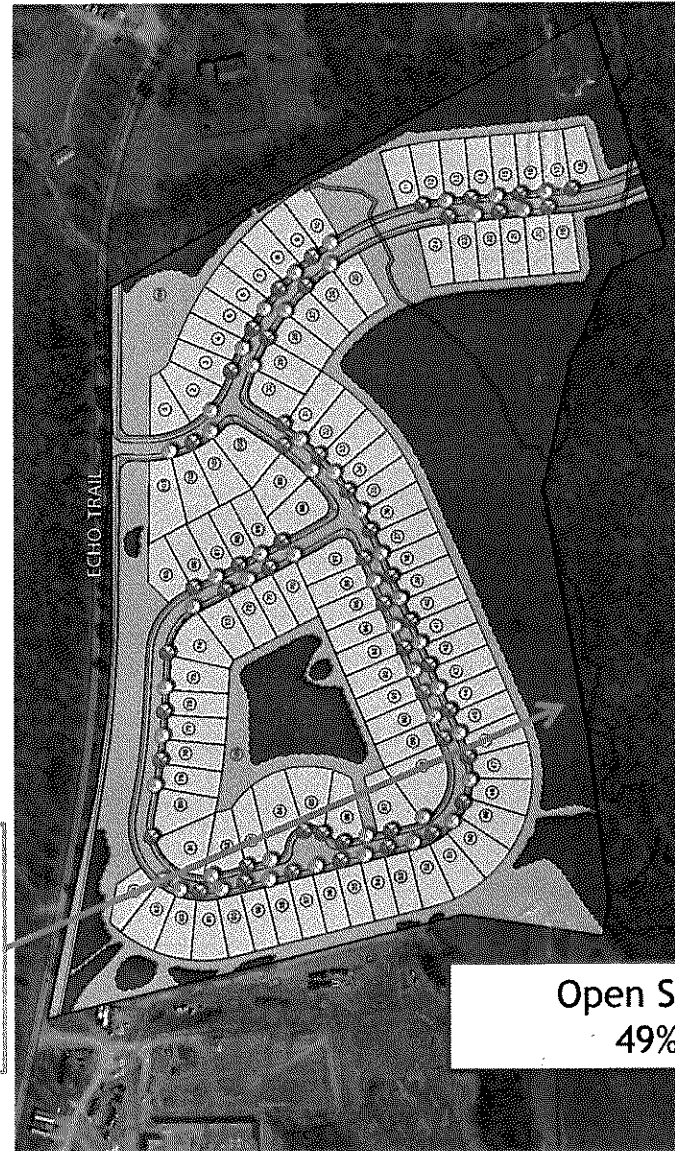
- Lots clustered to allow 49% of the site to remain as open space.
- Approx. double the required tree preservation provided.
- 90% of the lots adjacent to opens space.

6. Historic Elements:

- There are no structures, including no historic homes, walls, fences, or cemeteries, located on the site.

Required Tree Preservation =
20% of existing

Proposed Tree Preservation =
39% of existing



Open Space Proposed =
49% (638,932 sf)

- **80-foot buffer provided along Echo Trail rather than 60-foot buffer recommended.**
- **Street single loaded so all lots face Echo Trail.**
- **Enhanced landscaped plan with additional plantings provided along Echo Trail.**

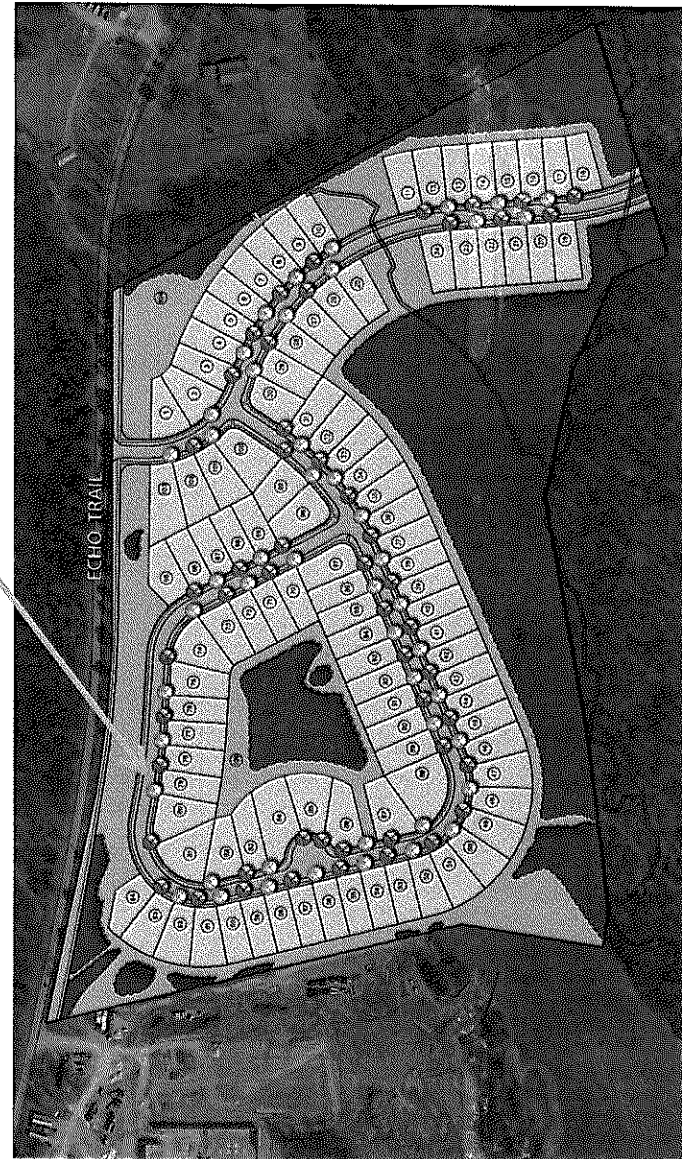
ENHANCED SCENIC CORRIDOR BUFFER
25% MORE TREES
1 SHRUB/10 ± L.F.
9 TREES & 20 SHRUBS PER 200 L.F.

S 63°33'52" E 745.87' S 26°16' E 249.83' S 63°33'52" E

100' 100' 100' 100' 100' 100'

ENHANCED SCENIC CORRIDOR BUFFER
SUTHERLAND POINT

GRAPHIC SCALE: 0' - 100'



final report

January 3, 2023
Revised March 27, 2023

Traffic Impact Study

Echo Trail Subdivision
2605 Echo Trail
Louisville, KY

Prepared for

Louisville Metro Planning Commission

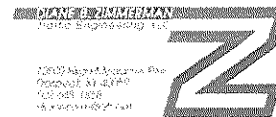


Table 1. Peak Hour Trips Generated by Site

Land Use	A.M. Peak Hour			P.M. Peak Hour		
	Trips	In	Out	Trips	In	Out
Single-Family Detached (103 lots)	77	19	58	102	64	38

Table 2. Peak Hour Level of Service

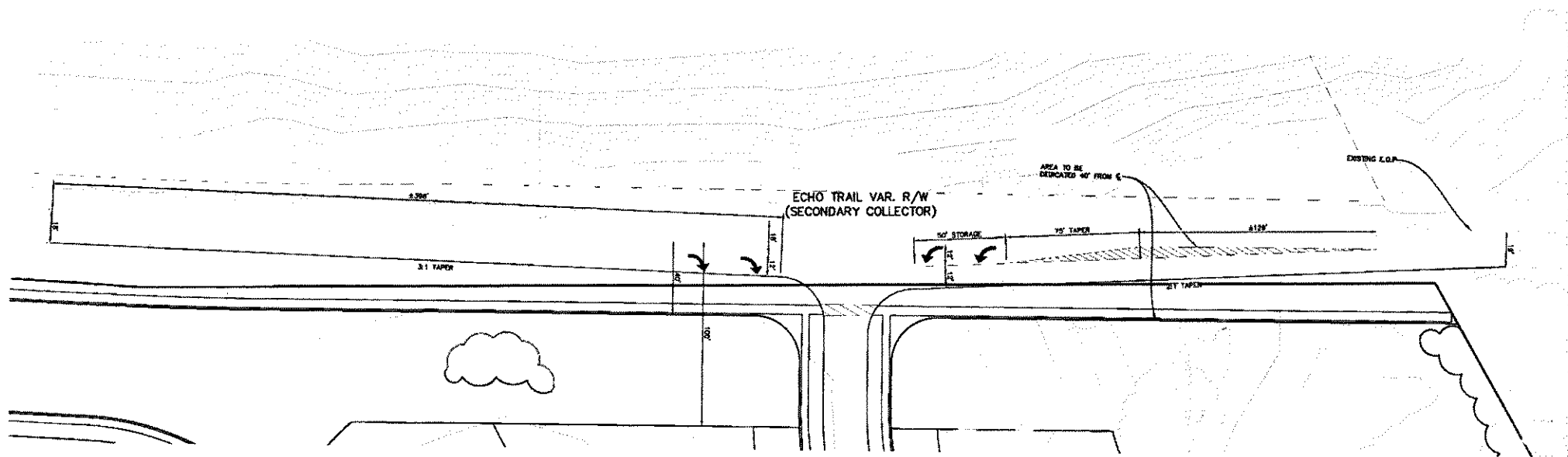
Approach	A.M.			P.M.		
	2022 Existing	2033 No Build	2033 Build	2022 Existing	2033 No Build	2033 Build
Echo Trail at Street A						
Street A Westbound		C 20.6	D 26.7		B 14.6	C 18.5
Echo Trail Southbound		A 8.0	A 8.0		A 8.2	A 8.5
Echo Trail at Street G						
Street G Westbound		B 11.1	B 11.3		A 9.9	B 10.1
Echo Trail Southbound		A 7.9	A 8.0		A 7.7	A 7.8

Key: Level of Service, Delay in seconds per vehicle

CONCLUSIONS

Based upon the volume of traffic generated by the development and the amount of traffic forecasted for the year 2033, there will be an impact to the existing highway network. No turn lanes will be required at the entrances.

Applicant to add turn lane at entrance -
approximate \$100,000 cost



Emergency Service Response Time

From: Stephen Hanson <SHanson@amfems.org>
Sent: Tuesday, March 28, 2023 1:46 PM
To: Vic Peek <vpeek@mindelscott.com>
Cc: David Mindel <dmindel@mindelscott.com>
Subject: RE: Echo trail

EXTERNAL email. DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Vic –

I have reviewed the plans you sent for the Echo Trail Concept project. Anchorage Middletown Fire Department and (prior to our merger) the Eastwood Fire Protection District have been providing coverage in this area for many years. We are not aware of any adverse response times due to road conditions or distance., Echo Trail & Eastwood Fishersville Rd are two-lane winding roads that service that area. At this time, both roads are in decent shape but will degrade faster with increased use and demand as the population expands.

We provide service out of two AMFEMS stations from the north side combined with mutual aid response from Jeffersontown Fire if required. We are in the early stages of gathering data so when can make an informed decision on replacing our station 6 on Taylorsville Rd. We may replace the station with a new building and increase staffing levels. Currently, that station is 1.5 miles from the entrance to the proposed subdivision.

As you are aware the east side of Jefferson County has developed substantially in recent years. The increasing demand for services, including fire service is a popular subject of discussion with AMFEMS. Efforts are underway to provide excellent fire and EMS protection for all our residents and stakeholders.

If you have any additional questions or concerns, please feel free to contact me.

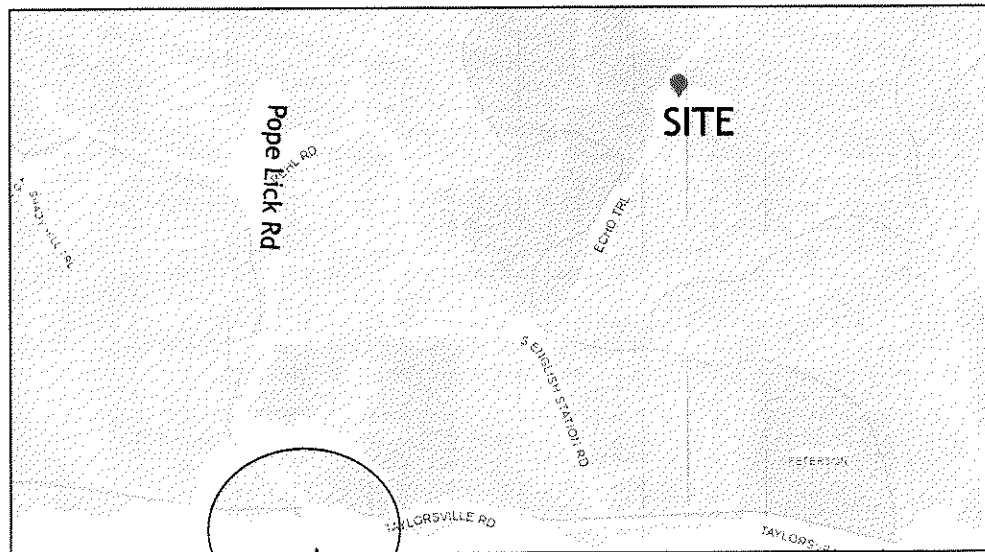
Thank you,

Steve Hanson
Major / Fire Marshal
Anchorage Middletown Fire & EMS
9514 Featherbell Blvd
Prospect, KY 40059
Phone: 502.813.4806
Cell: 502.376.4074
FAX: 502.245.8086
E-mail: shanson@amfems.org

years. We are not aware of any adverse response times due to road conditions or distance., Echo Trail & Eastwood Fishersville Rd are two-lane winding roads that service that area.

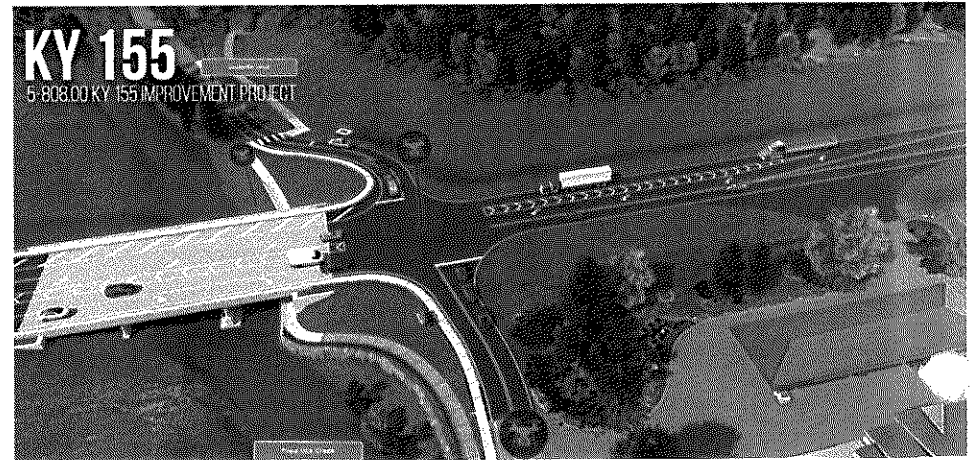
Everyone's
Fight

Pope Lick Road/Taylorsville Road Improvements



Construction underway

Jefferson County: KY 155 (Taylorsville Road) Safety Improvement Project at South Pope Lick Road - Project 05-808



Eastwood Cut-Off/US 60 Road Improvements

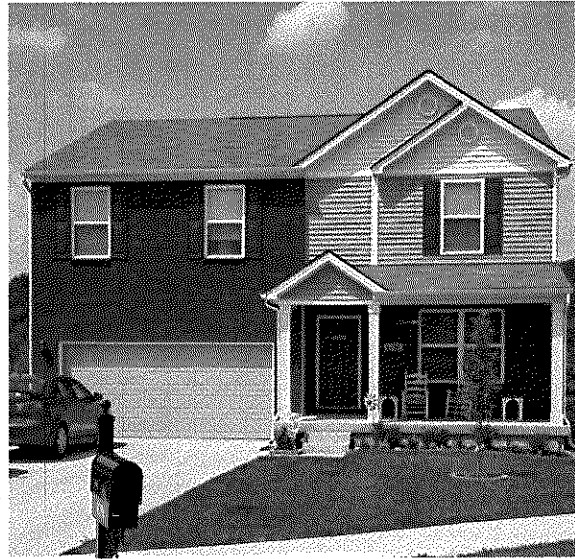
JEFFERSON COUNTY
ITEM No. 5-8952.00
US 60 @ EASTWOOD CUTOFF RD.

Project Timeline

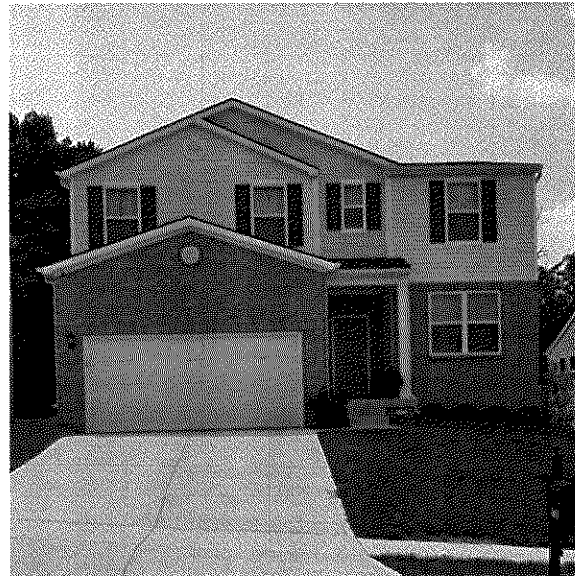
- "KYTC anticipates letting the project to construction by mid-late 2025."



[https://transportation.ky.gov/DistrictFive/Pages/U.S.-60-Widening-from-Eastwood-Cutoff-\(KY-2841\)-to-Rockcrest-Way.aspx](https://transportation.ky.gov/DistrictFive/Pages/U.S.-60-Widening-from-Eastwood-Cutoff-(KY-2841)-to-Rockcrest-Way.aspx)



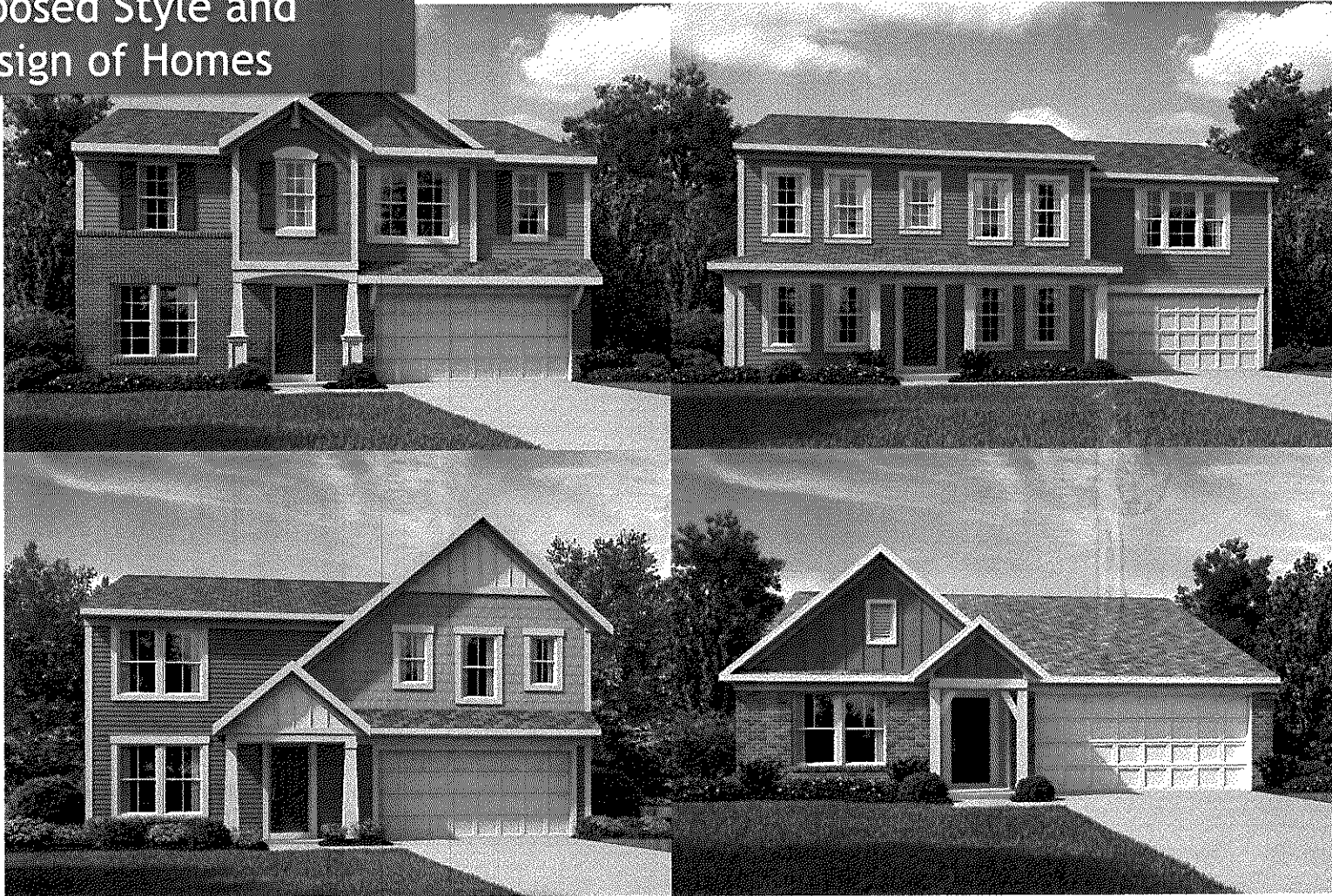
Proposed Style and Design of Homes



Proposed Style and Design of Homes



Proposed Style and Design of Homes



Proposed Style and Design of Homes



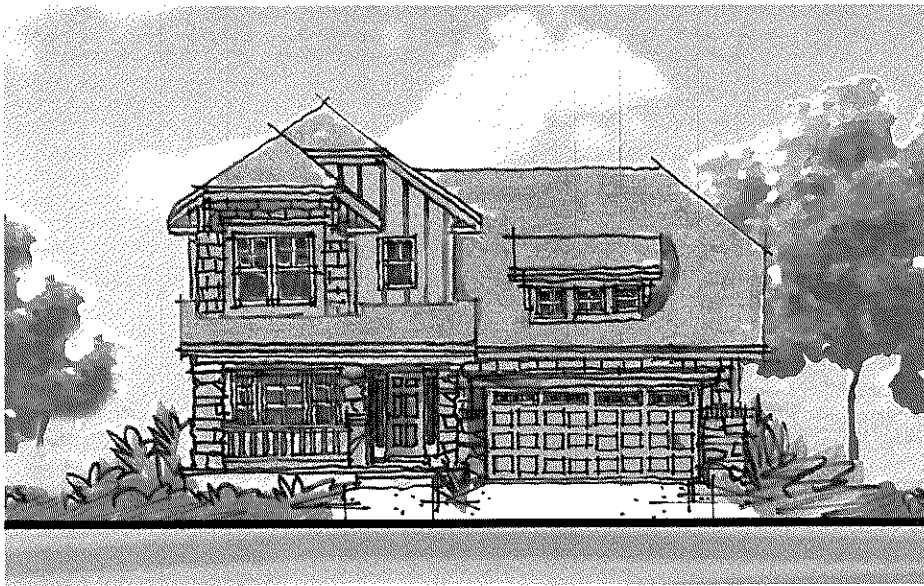
Proposed Style and Design of Homes



Proposed Style and Design of Homes



Proposed Style and Design of Homes



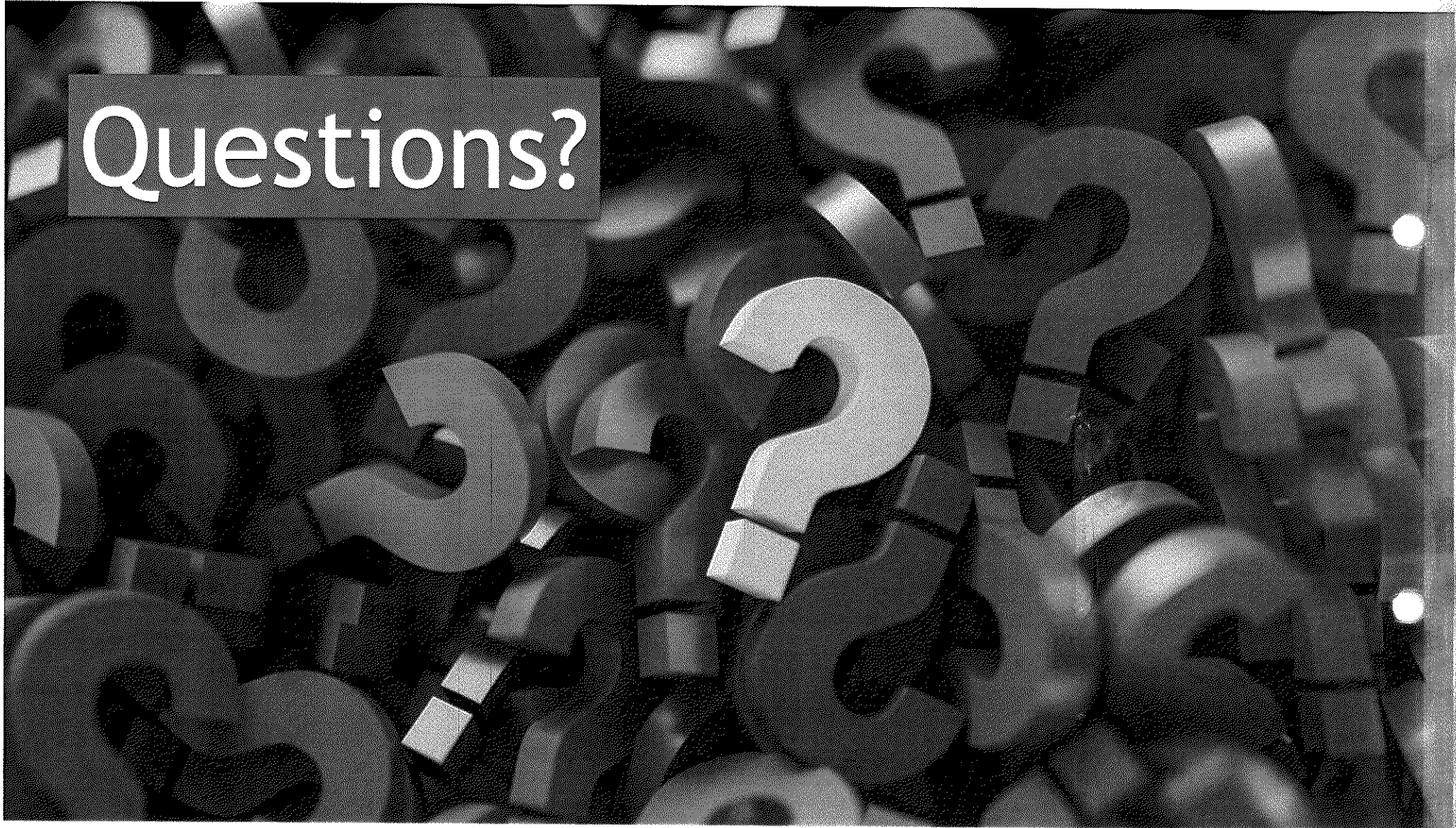
Application exceeding the Land Development Code and FFDRD requirements

	Required/Recommended	Subject Application
Density/total lots	R-4 allows 4.84 du/a - 153 lots	2.81 du/a - 103 lots
Open Space	0% required	49% provided [10% required (638,932 sf)]
Turn Lane at entrance	Not required per TIS	Provided
Tree Preservation	20% of existing	39% of existing
MS-4 water quality	.6 inch of rainfall	1.2 inch of rainfall
Scenic corridor buffer	60-foot buffer	80-foot buffer (with single loaded lots facing Echo Trail)

Proposed development plan



Questions?



Traffic Memorandum presented at the 3/7/19 PC Public Hearing in Docket No. 18SUBDIV1023



MEMORANDUM

TO: Jeff Frank
Stephen Porter
Randy Strobo

FROM: Adam Kirk
Principal
Adam Kirk Engineering
137 McClelland Springs Drive
Georgetown, KY 40324

DATE: March 6, 2019

The purpose of this memorandum is to evaluate the impact of the proposed Echo Trail Subdivision, which will develop 584 single family lots. Access to the subdivision will be from three entrances on Echo Trail, serving approximately 500 lots and a new entrance proposed for a limited sight line entrance connecting the remaining lots to Eastwood Fisherville Road. The Traffic Impact Study prepared by Diane Zimmerman dated October 22, 2018 was reviewed to assist in the evaluation, as well as the conduction of site reviews.

Based upon the review of the Traffic Impact Study, this review is in agreement that the proposed development will impact on the capacity of the roadway system and improvements are required to accommodate the traffic generated by this development. However, the Traffic Impact Study does not identify adequate improvements to address the need presented by the development.

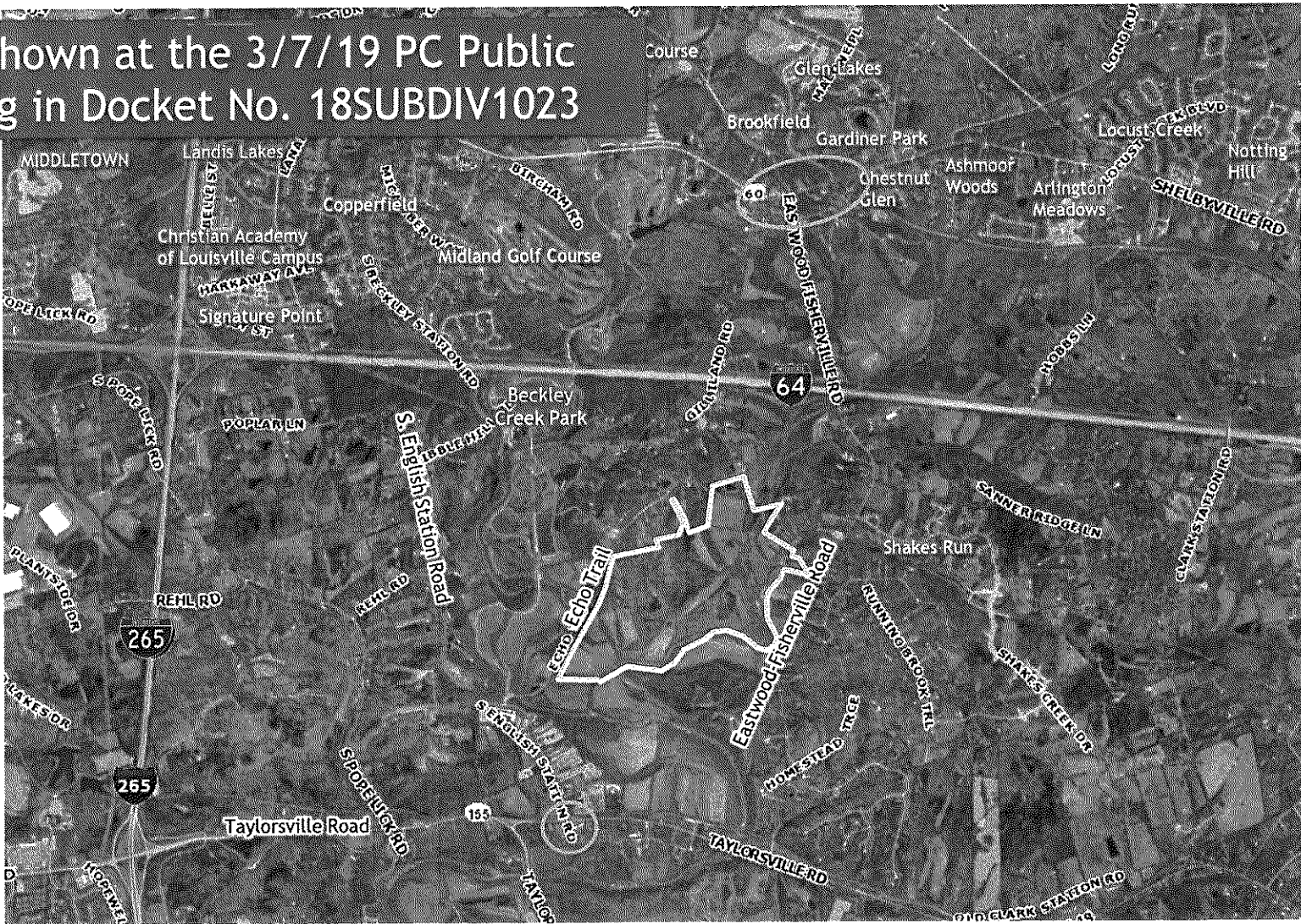
Echo Trail is a two-lane highway with nine-foot lanes with two-foot shoulders through the study area. Based on the Traffic Impact Study, current traffic volumes on Echo Trail between S. English Station Road are approximately 200 vehicles per hour, with an estimated daily traffic of 1,000 vehicles per day. The proposed development is anticipated to generate 550 trips during the PM peak hour alone, tripling the amount of traffic on the roadway during the peak hour. Daily trip generation for the development is estimated at over 5,000 vehicles per day, increasing the amount of traffic on Echo trail by over 500 percent.

While the Traffic Impact Study correctly identifies that the proposed development will have impacts to the adjacent roadways, it appears based on field observations and third party data sources that the existing conditions may be overestimated as well. This can occur when existing intersections, such as Shelbyville Road at Eastwood Cutoff and Taylorsville Lake Road at Taylorsville Road are currently operating at capacity, decreasing the amount of traffic observed during the peak hour counts; as the demand simply exceeds capacity resulting in queued vehicles not making it to the point of the count.

The following critical intersections were reviewed to determine the full extent of the delay and queues resulting from proposed development.

1. Shelbyville Road at Eastwood Cutoff
2. South English Station Road at Taylorsville Lake Road
3. Taylorsville Road at Taylorsville Lake Road.

Slide shown at the 3/7/19 PC Public Hearing in Docket No. 18SUBDIV1023



TIS areas of identified LOS impacts relative to other development

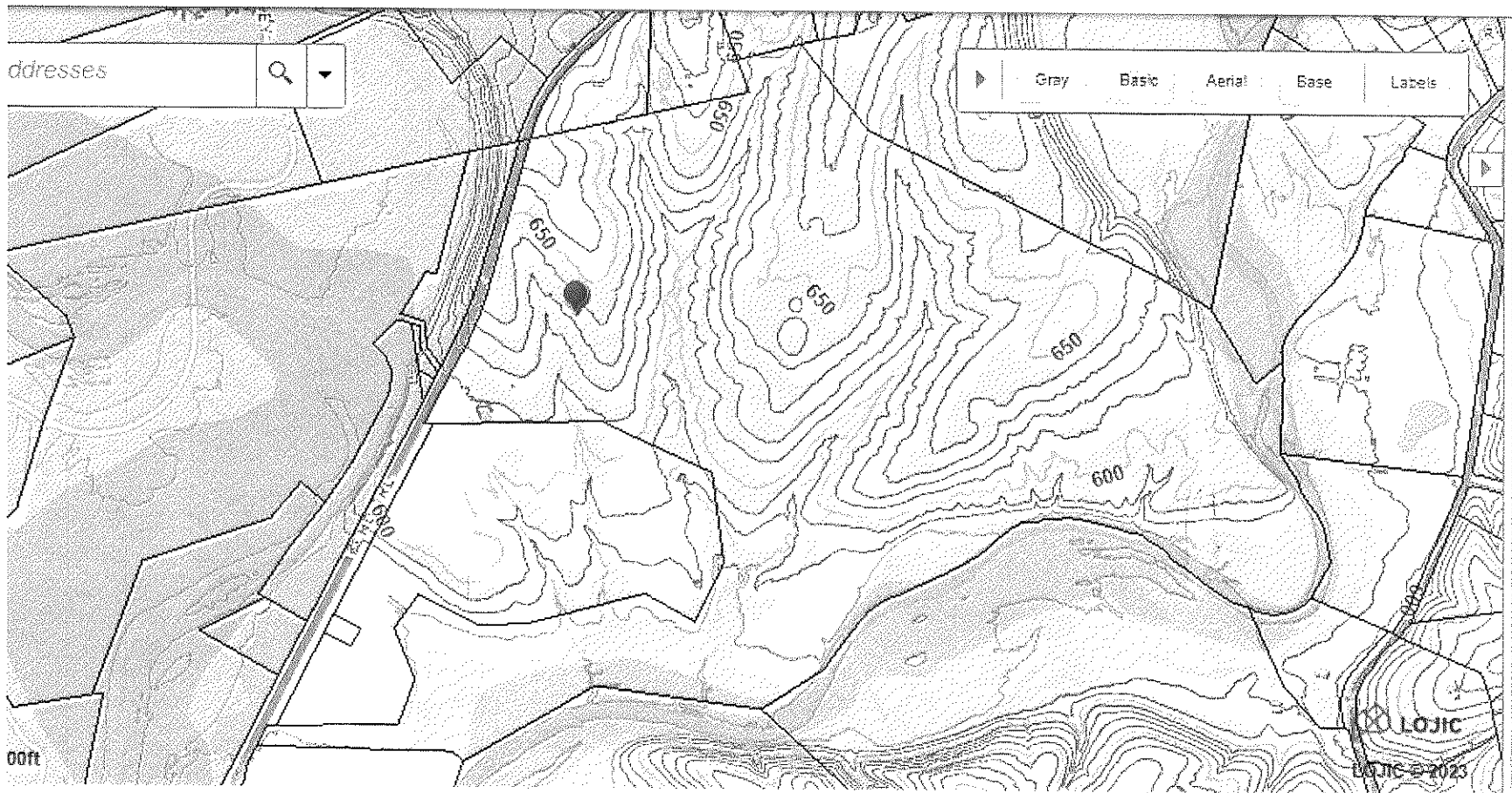
22- ZONE-131
2405 Echo Trail –
Floyds Fork DRO Rezoning

Friends of Floyds Fork and Fisherville
Area Neighborhood Association
Supplemental Comments

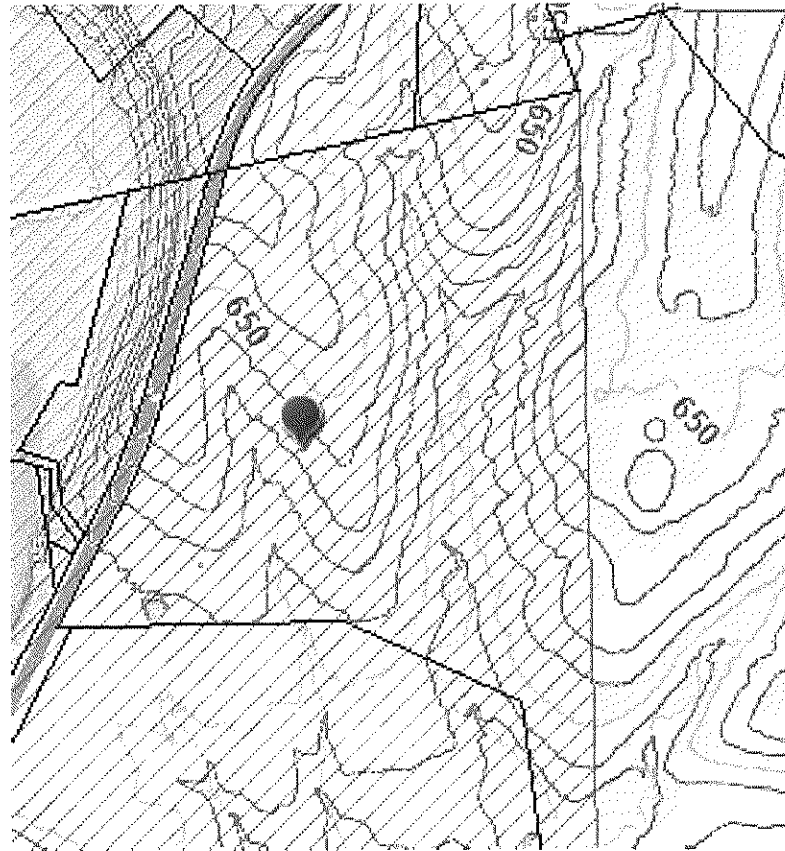
2405 Echo Trail Aerial



2405 Echo Trail Area



100% Floyds Fork DRO – 175' from Floyds Fork





Storm Water Notes

MSD NOTES:

1. CONSTRUCTION PLANS & DOCUMENTS SHALL COMPLY WITH LOUISVILLE AND JEFFERSON COUNTY METROPOLITAN SEWER DISTRICT'S DESIGN MANUAL AND STANDARD SPECIFICATIONS.
2. WASTEWATER:
SANITARY SEWER WILL CONNECT TO THE FLOYDS FORK WASTEWATER TREATMENT PLANT BY LATERAL EXTENSION AGREEMENT, SUBJECT TO FEES. SANITARY SEWER CAPACITY TO BE APPROVED BY METROPOLITAN SEWER DISTRICT.
3. DRAINAGE/STORMWATER DETENTION:
THE INCREASE IN STORM WATER VOLUME FOR THE 100-YEAR STORM WATER EVENT SHALL BE PROVIDED IN THE OFFSITE COMPENSATION BASINS SHOWN ON 18SUBDIV1023. ALL VOLUME SHALL BE PROVIDED BELOW THE FEMA FLOODPLAIN ELEVATION.
4. EROSION AND SILT CONTROL:
A SOIL AND SEDIMENTATION CONTROL PLAN SHALL BE DEVELOPED AND IMPLEMENTED IN ACCORDANCE WITH MSD AND THE USDA NATURAL RESOURCES CONSERVATION SERVICE RECOMMENDATIONS.

USACOE Floyds Fork Assessment

- “The Floyds Fork watershed also represents the last undeveloped area of Jefferson County. Over the past 15 years growth in the county has rapidly expanded eastward from the urban core of Louisville, which has further disrupted habitat and stream function. Nationally, high-quality streams within or adjacent to large population centers are scarce. Multiple groups in Jefferson County including the Future Fund, Louisville Metropolitan Sewer District and Louisville Metro government have targeted Floyds Fork for conservation and restoration actions to counter the negative effects of increasing development pressure on Floyds Fork.”

As of this Morning from MSD

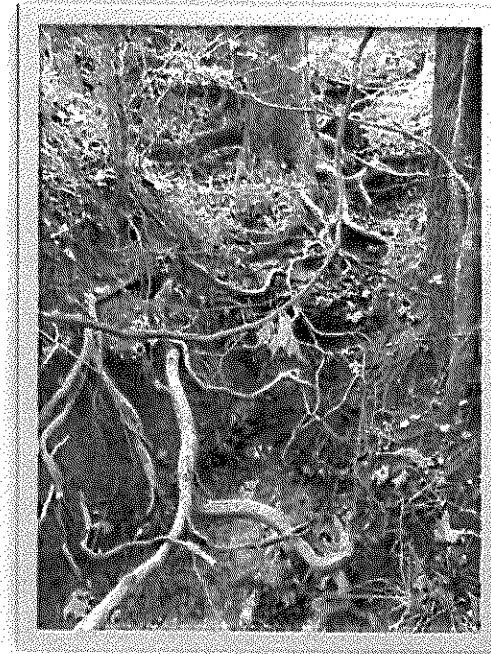
- From MSD's Chief Engineer this morning - "Yes it is very fair to use the highlighted statement below."
- "MSD, Future Fund and the Friends have been working together over the last 6 months to frame a co-operative agreement to enable the proposed USACOE Sec.206 Floyds Fork restoration effort to proceed. The parties hope to be able to finalize their discussions and enable this project by mid to late May, 2023"

USACOE Project Impacts

PROBLEMS

The study area suffers from many different ecosystem impairments resulting from degraded hydrologic and hydraulic conditions, channelization and land use. These include, but are not limited to:

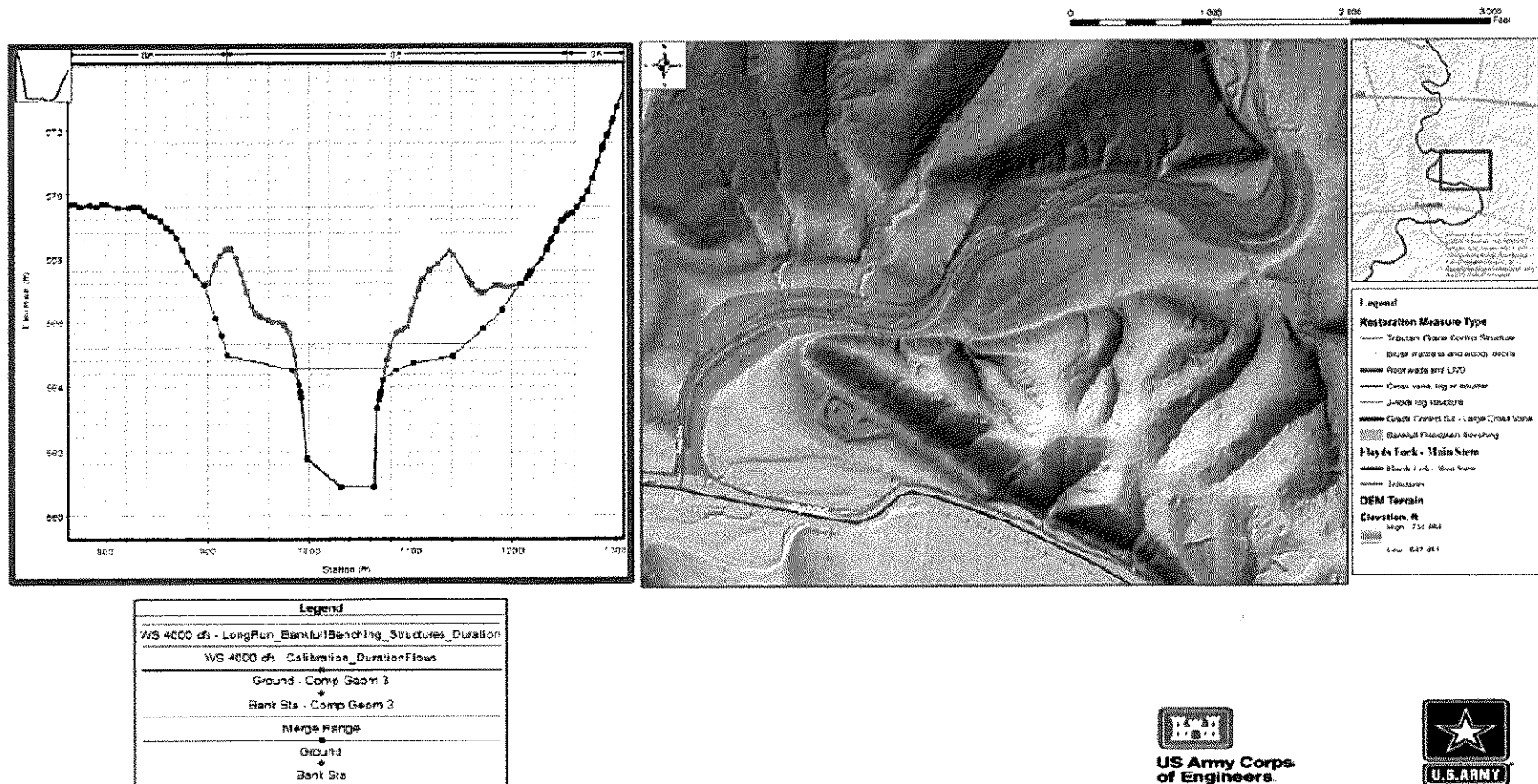
- Loss of fluvial geomorphic processes
- Degradation of hydrologic regime
- Loss of riparian zone
- Loss of species richness



Proposed USACOE Long Run Project Area

LONG RUN PROPOSED IN-STREAM MEASURES

17



Proposed USACOE Long Run Project Area

TSP areas #1 and #2

Long Run



Walker



Tree Canopy Impacts

TREE CANOPY DATA:

GROSS SITE AREA	36.67± AC (1,597,331 SF)
LAND USE	SINGLE-FAMILY RESIDENTIAL
EX. TREE CANOPY	1,039,580± SF (65%)
EX. TREE CANOPY TO BE PRESERVED	406,668± SF (39% OF EX. CNPY) (25% OVERALL)
TOTAL TREE CANOPY REQUIRED	638,932± SF (40%)

*TREE CANOPY DEPICTED ON PLAN PER MSD LOGIC MAPPING, AERIAL PHOTO OR FIELD SURVEY. TREE CANOPY CALCULATIONS BASED UPON TREE AREAS SHOWN.

Tree Canopy Impacts

- 1,039,580 ft² of tree canopy today – 65%
- Propose to remove 61% of that to leave 406,668 ft² or 9.3 acres out of a 36.67 ace site
- Going to remove 632,912 ft² or 14.5 acres
- Average lot size proposed is 6,000 ft²
- Going to clear essentially all of the acreage required for the proposed 103 homes

Traffic Issues

- ***Prior to the addition of the adjacent middle school opening this fall*** the applicants study identified major issues at numerous intersections. Specifically I referenced at LD&T one of many issues - the Eastwood Cutoff at Shelbyville road, from page 3 of the attached:
- "Under the proposed conditions, queues on Eastwood Cutoff Road are anticipated to increase from 110 feet to 592 feet. These queues would extend onto Echo Trail Road and Eastwood Cutoff Road, effectively blocking the intersection. In the AM peak, delay is anticipated to increase from 83 seconds of delay to 1,480 seconds (over 25 minutes). "
- A 25 minute am emergency response time, multiple "F" grade intersections, and yet we continue to recommend and approve these projects.

2411 Echo Trail – One Farms Story



2411 Echo Trail – One Farms Story



2411 Echo Trail – One Farms Story



2411 Echo Trail – One Farms Story



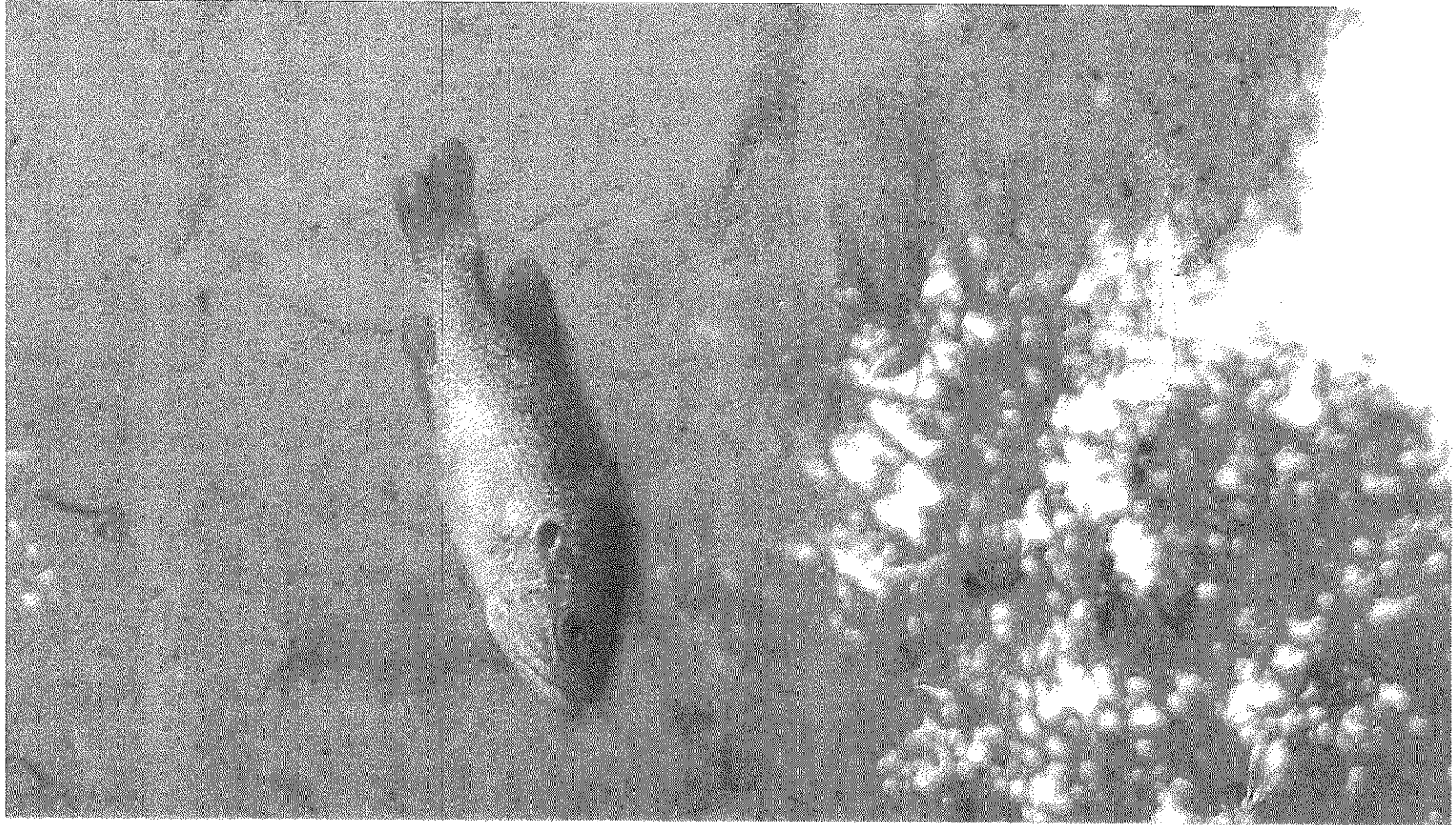
2411 Echo Trail – One Farms Story



Floyds Fork at Pope Lick Creek Parklands Entrance



We're Seeing way too much of this...



And This...



22-ZONE-0131

2405 Echo Trl

Louisville Metro Planning Commission

Jay Lockett, AICP, Planner II

April 20, 2023



REQUESTS

- Change-in-Zoning from R-R, Rural Residential to R-4 Single-family residential
- Major Preliminary Subdivision with steep slope development potential transfer and review of land disturbing activities on slopes greater than 20%.
- Floyds Fork Development Review Overlay
- District Development Plan with Binding Elements



CASE SUMMARY

- 104 buildable lots on 36.67 acres
- Steep Slope development potential transfer option
- Floyds Fork Development Review Overlay
- “Street A” is the same as shown on 18SUBDIV1023.



TECHNICAL REVIEW

- The application of development potential transfer on this project allows for the following:
- Lot sizes to be reduced in accordance with the alternative development incentives of the Neighborhood form district.
- Setbacks to be applied as required for standard subdivision development in the R-4 zoning district.
- The transferrable potential is based on the theoretical maximum allowable density of the zoning district containing the preserved slopes; therefore, the development potential of preserved areas is incorporated through reductions in lot sizes across the total area of the subdivision.
- Areas of steep slopes may be present within single-family lots subject to the requirements of Chapter 4, Part 7.5 – Land Disturbing Activity on Slopes Greater than 20%. Areas within lots may not be used for development potential transfer.
- All areas being considered for development transfer potential must be preserved as open space or by other acceptable means.



TECHNICAL REVIEW

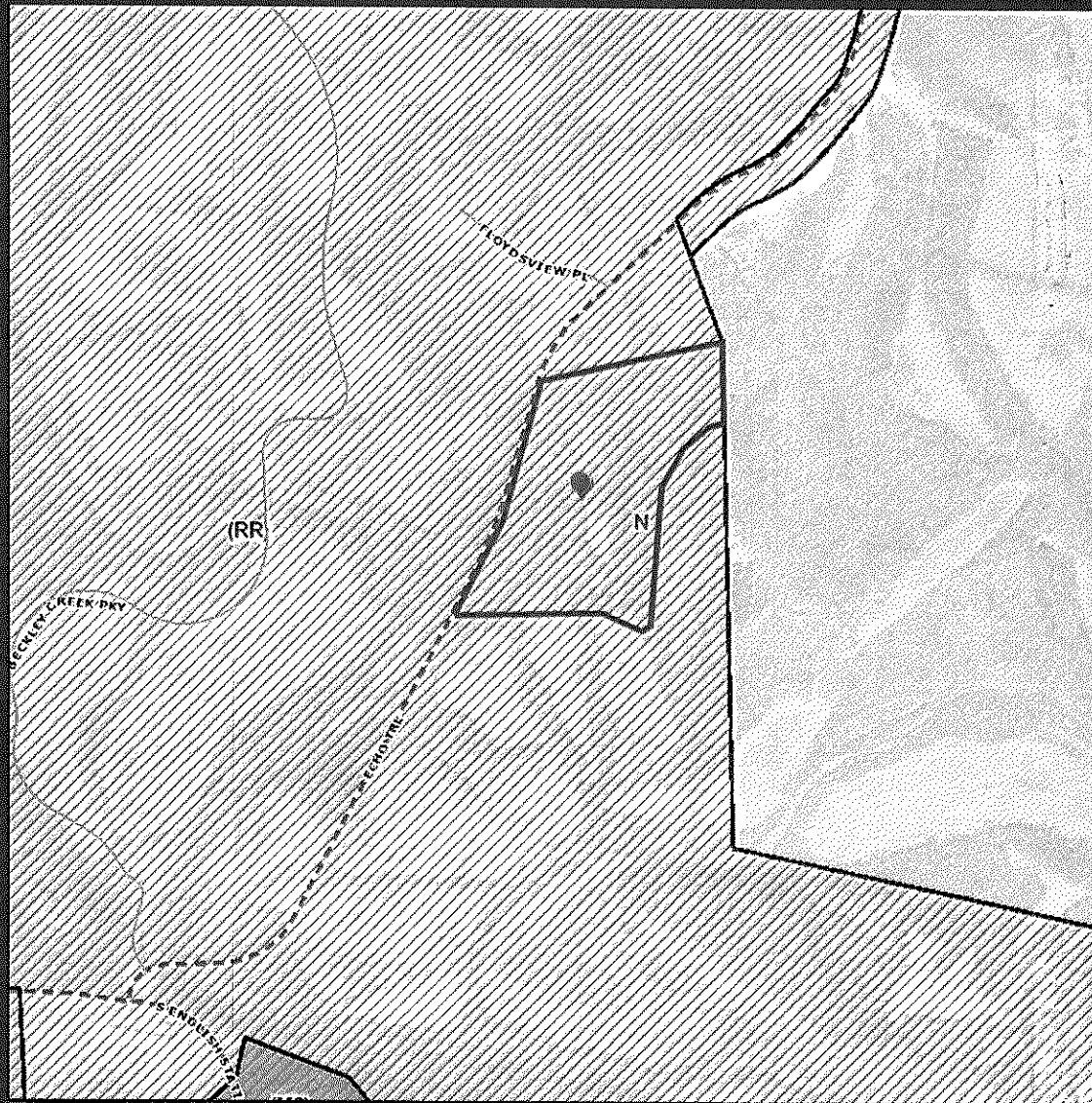
- The proposed subdivision includes disturbance of slopes in excess of 20%. Land Development Code, section 4.7.5 provides that Land disturbing activities on slopes greater than 20% is permitted on lots created by major subdivision after the effective date of this regulation only if the activity is in keeping with the Comprehensive Plan and the proposed activity complies with the provided standards of this part.



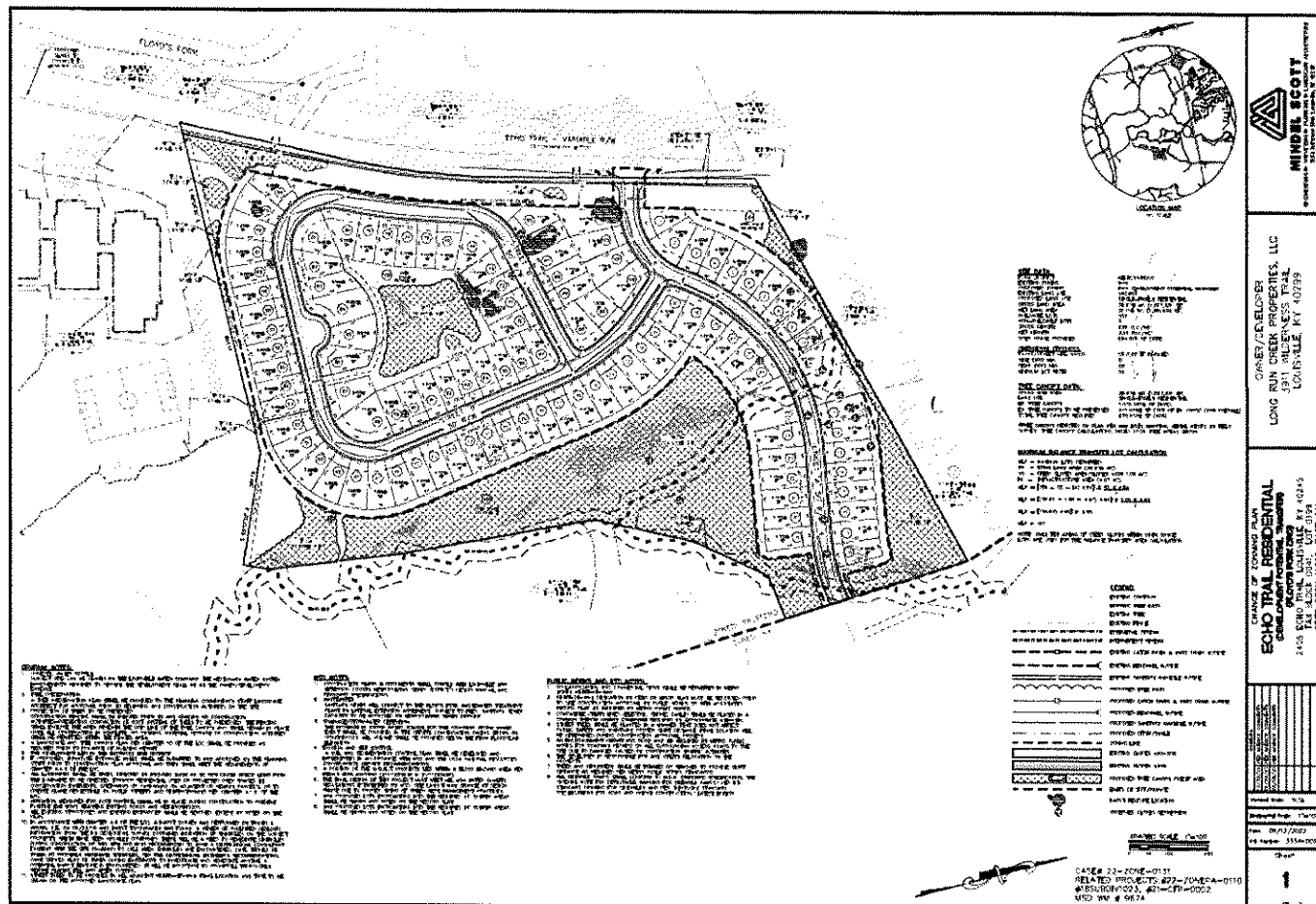
TECHNICAL REVIEW

- Transportation Planning and MSD have approved the preliminary development plan.

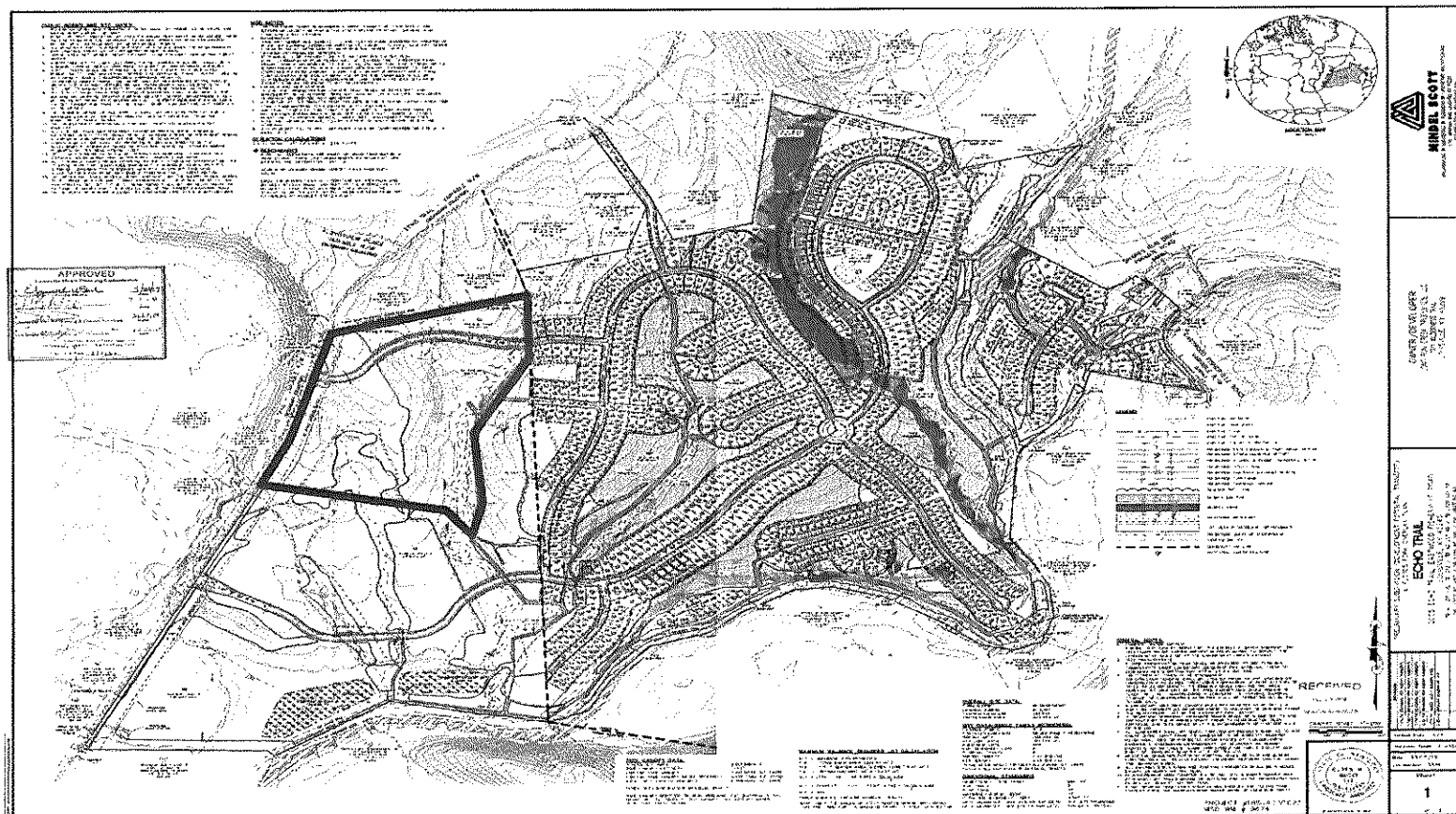








18SUBDIV1023



SITE PHOTOS – SUBJECT PROPERTY



SITE PHOTOS – SUBJECT PROPERTY



ADDITIONAL BINDING ELEMENT

- The Applicant shall treat the first 1.2 inches of stormwater run-off to meet the MS-4 Water Quality standards, in the proposed wetlands area as shown at the public hearing dated April 20, 2023.**



STAFF FINDING

- The change in zoning is adequately justified and is generally in keeping with the provisions of the Comprehensive Plan. The proposed zoning district would allow for the applicant to utilize the balance transfer subdivision option to cluster smaller lots outside of environmentally sensitive areas.
- The clustering of smaller lots facilitates the permanent preservation of areas of the site containing environmentally sensitive areas. The applicant also proposes tree preservation in excess of the minimum requirements of the Land Development Code, in keeping with the purpose of the Floyds Fork Development Review Overlay district to preserve natural areas including steep slopes.
- The Major Preliminary Subdivision and District Development plan is compliant with the Land Development Code.



REQUIRED ACTIONS

- **RECOMMEND that Louisville Metro Council APPROVE or DENY the Change-in-Zoning from R-R, Rural Residential to R-4 Single-family residential**
- **APPROVE or DENY the Major Preliminary Subdivision with steep slope development potential transfer and review of land disturbing activities on slopes greater than 20%.**
- **APPROVE or DENY the Floyds Fork Development Review Overlay**
- **APPROVE or DENY the District Development Plan with Binding Elements**



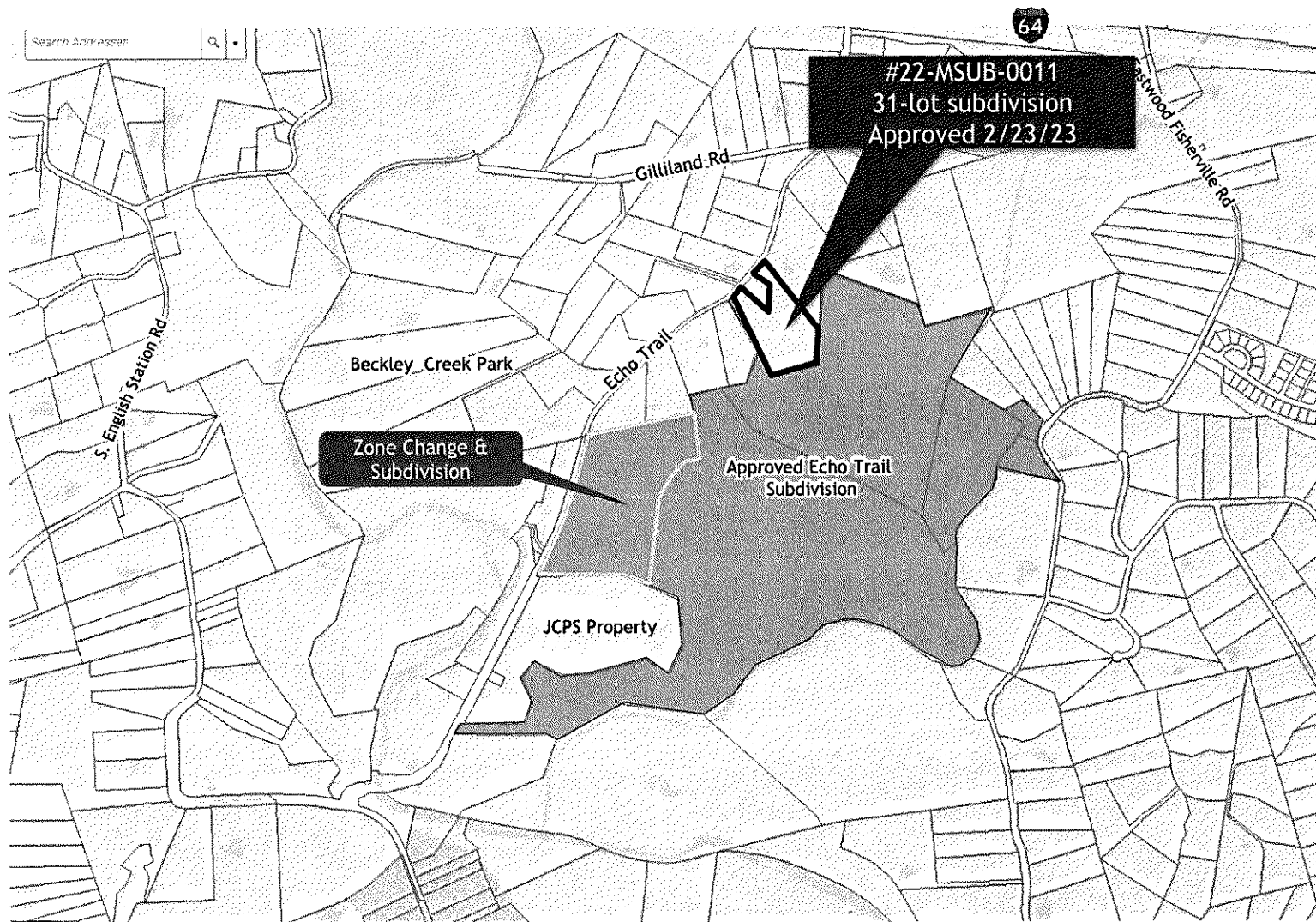


Docket No. 22-ZONE-0131

Zone change from R-R to R-4 to allow a
103-lot subdivision with development
potential transfer and a Floyds Fork
Development Review Overlay on
property located at 2405 Echo Trail

Long Run Creek Properties, LLC
c/o Brad Rives, Jack Smith & Rick Riney

Attorneys: Bardenwerper Talbott & Roberts, PLLC
Land Planners, Landscape Architects & Engineers: Mindel Scott & Associates, Inc.
Traffic Engineer: Diane B. Zimmerman Traffic Engineering, LLC



Search Addresses



Proposed rezoning for
103-lot subdivision
22-ZONE-0131

#22-MSUB-0011
31-lot subdivision
Approved 2/23/23

Beckley Creek Park

Floyds Fork

Echo Trail Subdivision

Shakes Run

Echo Trail

Eastwood Fisherville Rd

RR

R4

R4

Long Run Creek

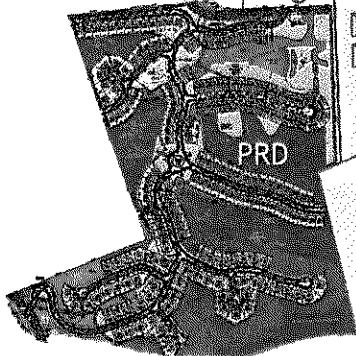
S. English Station Rd

Home Emporium
Rezoning denied
(#21-ZONE-0095)

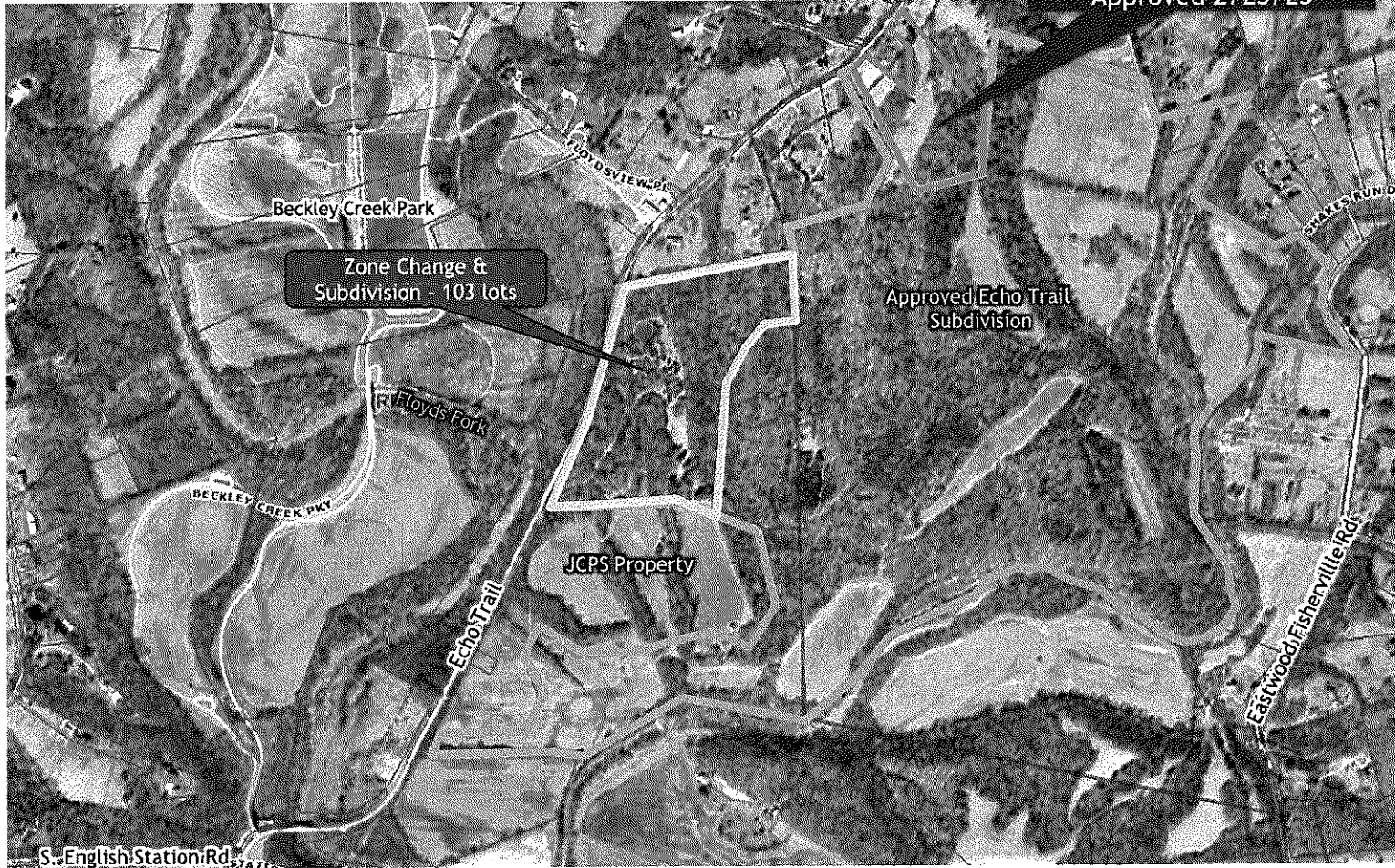
PRD

M2

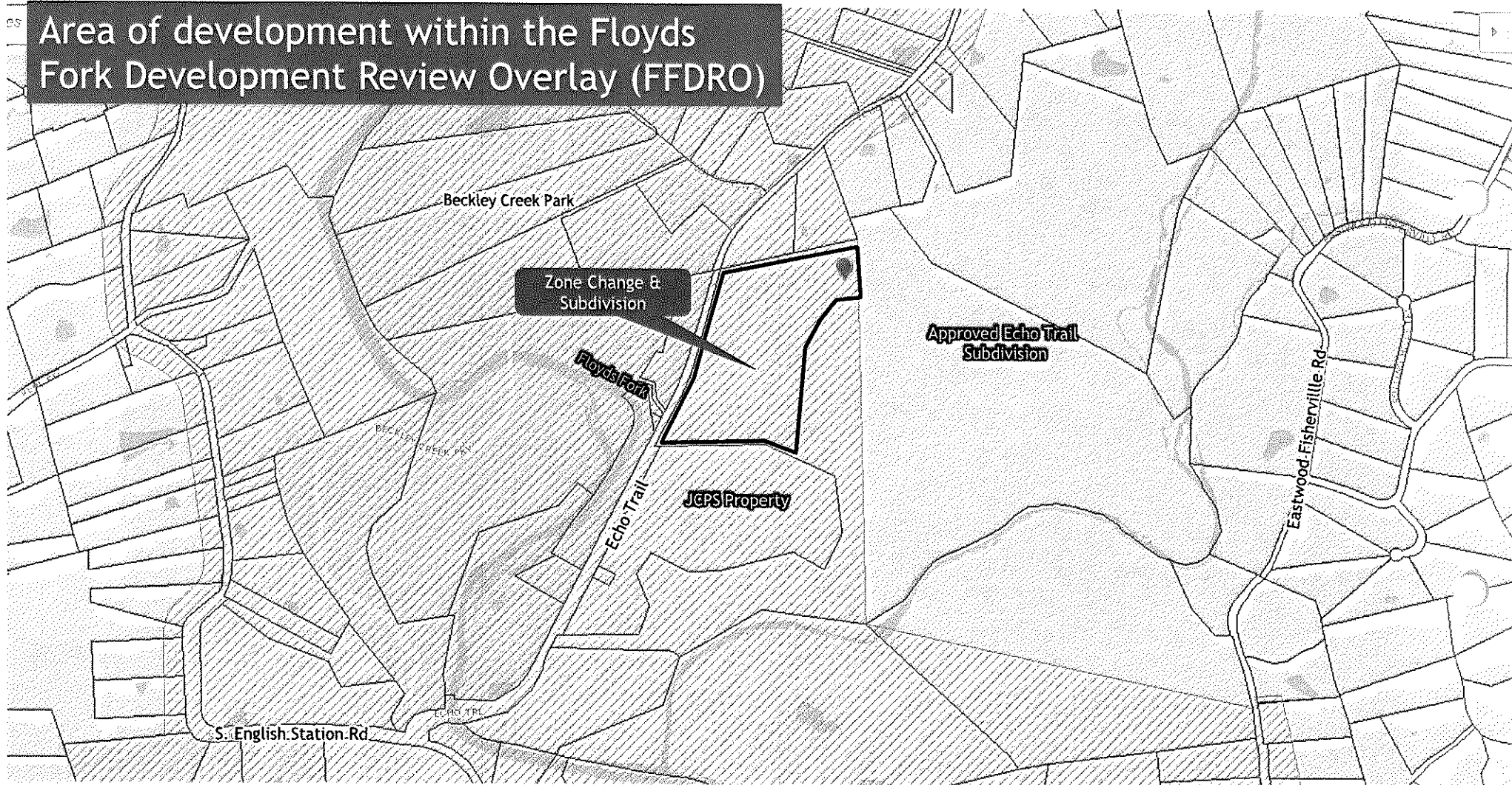
R4



#22-MSUB-0011
31-lot subdivision
Approved 2/23/23



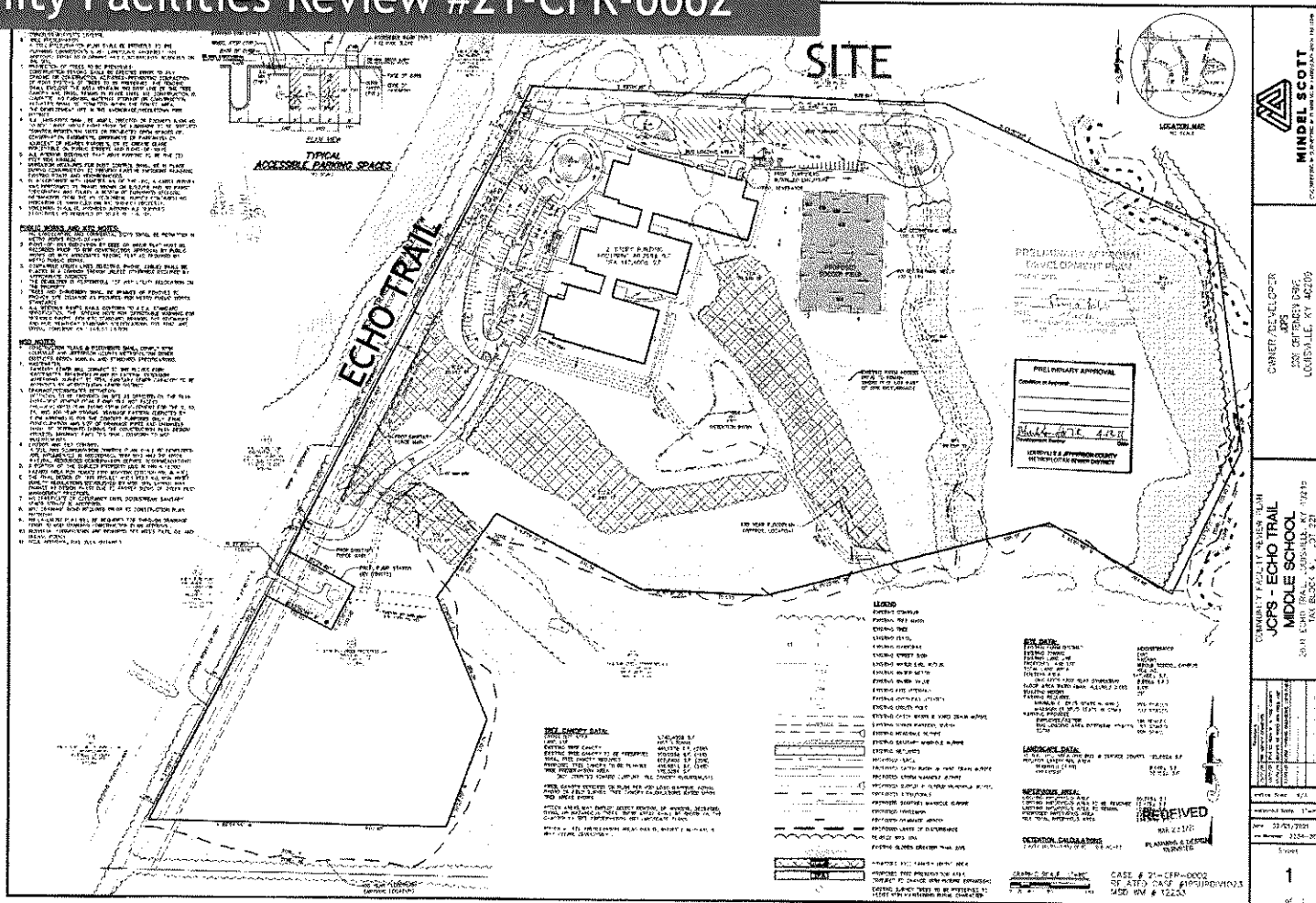
Area of development within the Floyds Fork Development Review Overlay (FFDRO)



Previously Approved Echo Trail Subdivision
with JCPS property and proposed rezoning
in 22-ZONE-0131



JCPS Middle School Development Plan
Community Facilities Review #21-CFR-0002



Calculations for determining the number of smaller lots by transferring development density out of steep slope areas

	R-4 Existing	R-4 w/ density transfer
Density/lot total calculations	4.84 du/a on 31.71 net acres (36.67 gross acres less 4.97 acres of infrastructure)	<p>Two-part maximum lot calculation:</p> <p>1. Total area (36.67 acres) - infrastructure area (4.97 acres) - steep slope area (1.06 acres) = net acreage for calculation (30.64 acres) x allowed density of 4.84 du/a = <u>148 lots</u></p> <p>plus</p> <p>2. Steep slope area (1.06 acres) x allowed density of 4.84 du/a = 5 lots / 2 = <u>2 lots</u></p>
Maximum # of lots	153	150
# of lots proposed	n/a	103 = 2.81 du/a gross and 3.25 du/a net (i.e., 46 lots less than density transfer maximum # and 50 lots less than standard R-4 maximum #)
Open Space	0% required	49% provided

final report

January 3, 2022

Traffic Impact Study

Echo Trail Subdivision
2605 Echo Trail
Louisville, KY

Prepared for

Louisville Metro Planning Commission

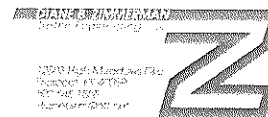


Table 1. Peak Hour Trips Generated by Site

Land Use	A.M. Peak Hour			P.M. Peak Hour		
	Trips	In	Out	Trips	In	Out
Single-Family Detached (103 lots)	77	19	58	102	64	38

Table 2. Peak Hour Level of Service

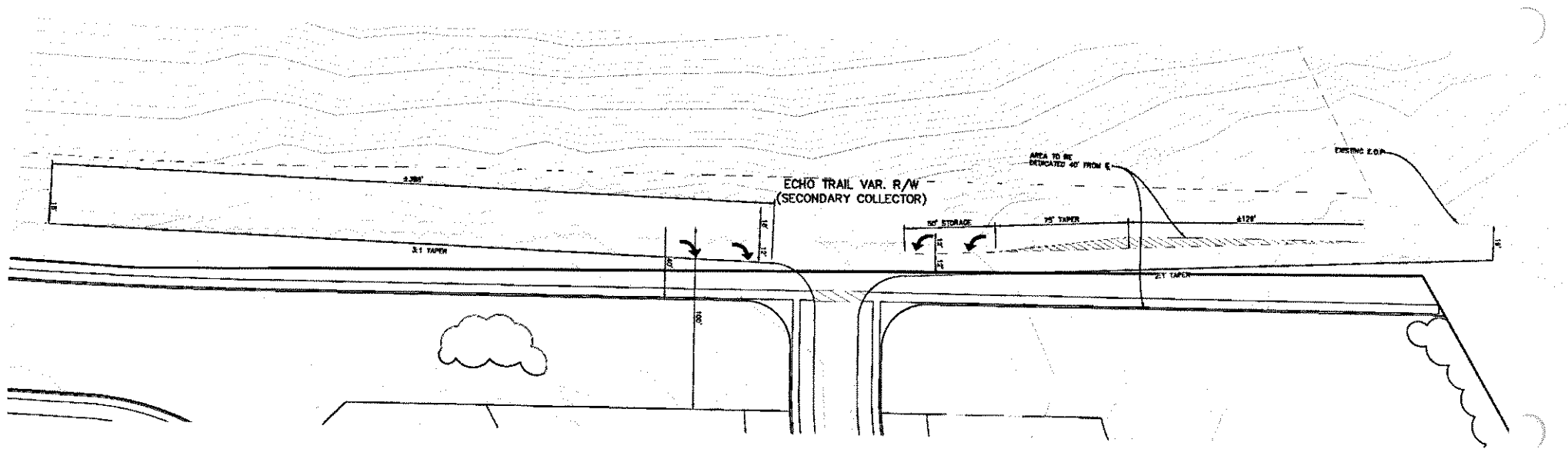
Approach	A.M.			P.M.		
	2022 Existing	2033 No Build	2033 Build	2022 Existing	2033 No Build	2033 Build
Echo Trail at Street A						
Street A Westbound		C 17.0	C 20.7		B 11.7	B 13.6
Echo Trail Southbound		A 7.8	A 7.9		A 7.9	A 8.1
Echo Trail at Street G						
Street G Westbound		B 10.6	B 10.8		A 9.2	A 9.4
Echo Trail Southbound		A 7.8	A 7.9		A 7.5	A 7.6

Key: Level of Service, Delay in seconds per vehicle

CONCLUSIONS

Based upon the volume of traffic generated by the development and the amount of traffic forecasted for the year 2033, there will be an impact to the existing highway network. No turn lanes will be required at the entrances.

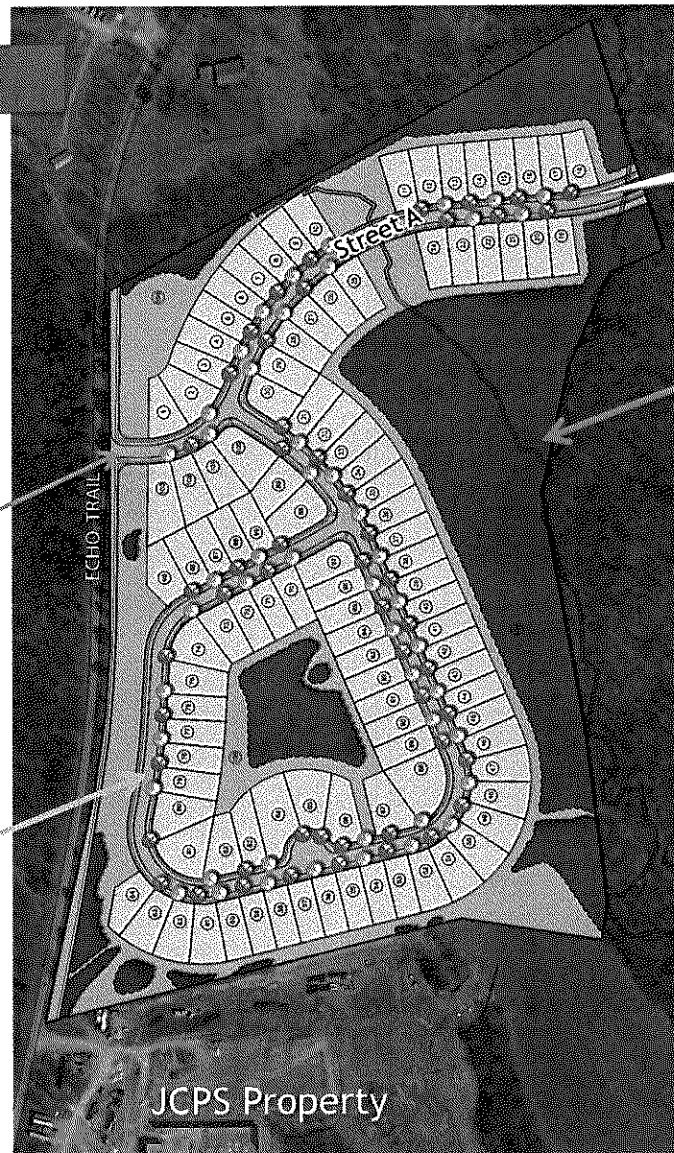
Turn Lane Addition



Proposed development plan

Turn Lane addition

Single loaded lots facing Echo Trail



Street A is the same street approved on plan in #18SUBDIV1023.

Required Tree Preservation =
20% of existing

Proposed Tree Preservation =
39% of existing

Slope Evaluation and Karst Study



ECS SOUTHEAST, LLP

Geotechnical • Construction Materials • Environmental • Facilities

"One Firm. One Mission."

February 14, 2023

Mr. S. Bradford Rives
Long Run Creek Properties, LLC
3911 Wilderness Trail
Louisville, Kentucky 40299

c/o Mr. David Mindel
Mindel Scott
5151 Jefferson Boulevard
Louisville, Kentucky 40219

Reference: Slope Evaluation and Karst Survey – 2405 Echo Trail – Revision I
2405 Echo Trail
Louisville, Jefferson County, Kentucky 40245
ECS Project No. 61-2863RI

Dear Mr. Rives:

ECS Southeast, LLP (ECS) conducted a combined evaluation, consisting of a limited subsurface exploration and site reconnaissance, for the referenced site in accordance with ECS Proposal No. 61-P2890, dated October 10, 2022. This evaluation included the following elements: a review of provided drawings; a review of soil survey information; a review of geologic maps; a review of topographic maps; a review of current and historical aerial photographs; a visual reconnaissance of site conditions for the karst geologic features defined in the Metro Louisville Land Development Code (LDC); a visual reconnaissance of indicated steeper slope areas that would be disturbed by new construction; a limited subsurface evaluation to explore the materials along slopes greater than 30% that will be disturbed during construction; and evaluate the reviewed information and prepare a report of our findings and recommendation.

Purpose

The purpose of the subsurface evaluation was to explore the materials along slopes greater than 30% that will be disturbed during construction, the depth to bedrock and the shear strength of the soils in these areas are required to be analyzed by a geotechnical engineer per the county development code (Section 4.7.4 of the LDC). A visual reconnaissance of the site was completed concurrently with the subsurface evaluation to identify potential karst geologic features and document the condition of steeper slope areas not evaluated during the subsurface evaluation, per the LDC (Section 4.9.3).

The drawing "22-ZONEPA-0110 – 22-09-12 (FILED)" provided by Allison Hicks of Mindel Scott via email, dated September 12, 2022, was used as a reference during the subsurface evaluation and site reconnaissance and for creation of the attached maps and diagrams. A reduced copy of this drawing is attached to this report. Slopes identified as greater than 30%, and slopes between 20% and 30%, were reported on this drawing, as well as the location of planned construction.

Project Information

The proposed development on-site includes 103 single-family residential lots and associated roadways. The site undulates across the proposed development footprint with approximately 75 feet of fall across the entire site, with up to approximately 20 feet of fall across a single proposed residential development lot. The site includes approximately 36.67 acres of rolling hills which are mostly wooded, with isolated open areas. Two existing streams are located in the northeastern portion of the site. A third stream was observed in the southern portion of the site in the proposed open space located in Lot 106, which extended towards the southern property boundary of the site.

Slope Evaluation and Karst Study – Findings and Recommendations

Slope Evaluation and Karst Survey – 2405 Echo Trail
ECS Project No.: 61-2863B

February 14, 2023
Page 13

Laboratory Test Summary

STRATUM	MOISTURE CONTENT	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	UNCONFINED COMPRESSIVE STRENGTH (kN)	UNDRAINED SHEAR STRENGTH (kN)	UNIFIED SOIL CLASSIFICATION
II	14.6	46	20	26	3.0 – 9.0	1,500 – 4,500	CL
III	23.1	76	77	49	2.0 – 9.0	1,000 – 4,000	CH

Notes:

- (1) A more detailed summary of the laboratory test results is included on the Boring Records and Laboratory Reports in the Appendix. Detailed descriptions of the laboratory test methods are listed in the Laboratory Procedures section of the Appendix.
- (2) Atterberg Limit test results were not complete at the time the report was revised. Once completed, an updated report will be issued.

Findings

Based on our review of the above referenced observations and information, and on our past experience with site development for similar conditions in Jefferson County, our opinion is that most of the on-site slopes (excluding small, localized erosion features along swales) in the observed areas were generally stable at the time of our site reconnaissance. Evidence of minor instability was observed in isolated areas in the northeast and east portions of the site (identified as SF-01 and SF-02 in this report).

The current, on-site localized slope instability observed likely is related to the following factors:

- Relatively thin depths of soil in slope areas
- Cohesive (clayey) soil matrix
- Rocky soil texture
- Limestone, dolomite, and/or shale bedrock
- Numerous trees and other vegetation
- Groundwater seepage from shallow bedrock

Based on the conditions observed, our opinion is that additional geotechnical exploration/analyses including soil/rock test borings/coring, shear strength tests of soils, etc. are not required for most of the evaluated on-site slopes, provided that the planned subdivision is designed and constructed utilizing the guidelines included in this report.

The northeast and east portions of the site, particularly in areas identified as "existing slopes > 20-30%" and "existing slopes >30%" as shown on the provided drawing, and including the shaded "Minor Failure Areas", where minor instability was observed should be further evaluated during the construction phase of the project once the location and planned elevation of the proposed structures and related improvements are known.

The following guidelines should be used to help maintain the stability of the existing and planned slopes during the design and construction of the new subdivision, and over the life of the new homes. These guidelines include:

- All foundations should bear entirely on competent rock (sound and continuous).
- Groundwater seepage should be anticipated. Plan to install foundation and sub-floor drainage systems for structures bearing entirely on rock or near the soil/rock interface.
- Plan grading to minimize changes to existing topography along slopes.
- Minimize disturbance to slopes and vegetation outside new construction areas.
- Avoid significant transverse cuts along face or at the toe of existing slopes.
- Avoid significant embankments on the face, or along or at the crest of existing slopes.
- Avoid placing new construction at or within 10 feet of the crest of existing slopes.
- Maintain the following limits for new embankments without additional geotechnical exploration and analysis:
 - 3:1 (horizontal: vertical) or flatter slopes.
 - Properly strip all vegetation, topsoil, etc. where fill will be placed.

Slope Evaluation and Karst Survey – 2405 Echo Trail
ECS Project No.: 61-2863B

February 14, 2023
Page 14

- Construct embankments with controlled fill compacted to at least 98 percent of the Standard Proctor maximum dry density and within 2 percent of the optimum moisture content.
- Maximum fill embankment height of 5 feet.
- Horizontally bench new fill into existing slopes in maximum one foot vertical steps.
- Maintain the following limits for new cuts in soil without additional geotechnical exploration and analysis:
 - 3:1 (horizontal: vertical) or flatter slopes
 - Maximum cut height of 5 feet.
- Provide adequate erosion and surface water drainage control during construction and over the life of the subdivision.
- Establish permanent vegetative cover as soon as practical.

Closing

We appreciate the opportunity to serve as your geotechnical consultants for this project. We look forward to future association with you on this and other projects.

Respectfully submitted,
ECS Southeast, LLP


Bryn Kahbas, E.I.T.
Project Engineer
bkahbas@ecslimited.com




Dr. Randolph Newcomb, P.E.
Principal Engineer
rnewcomb@ecslimited.com

APPENDICES

Appendix A – Drawings

- Site Location Diagram
- Geology Location Map
- Karst Potential Map
- Provided Drawing: 22 ZONEPA 0110 – 22-09-12 (FILED)

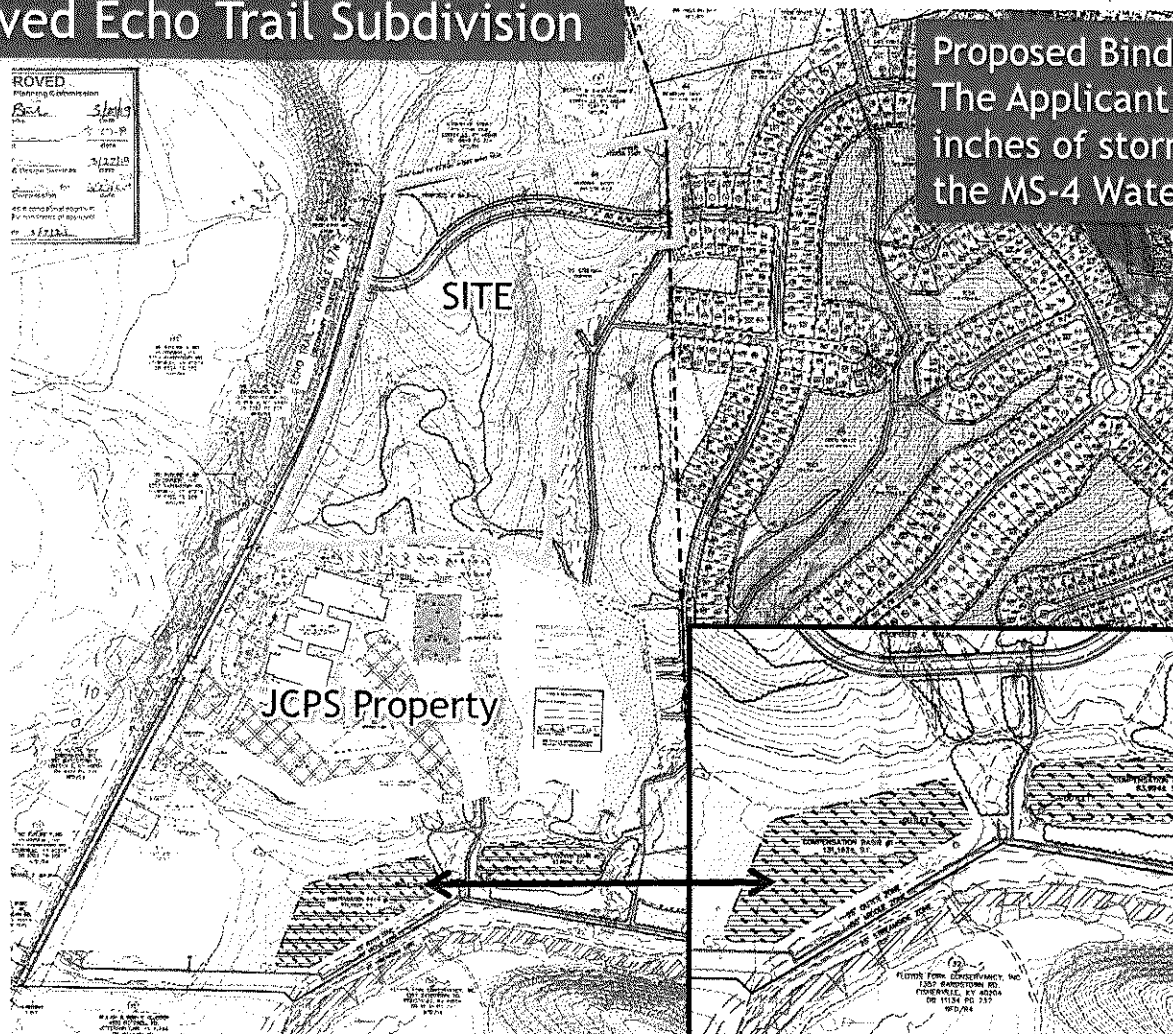
Appendix B – Site Reconnaissance

- Site Reconnaissance Plans – 3 pages
- Site Photos – 18 pages
- Typical Sinkhole Remediation Diagram

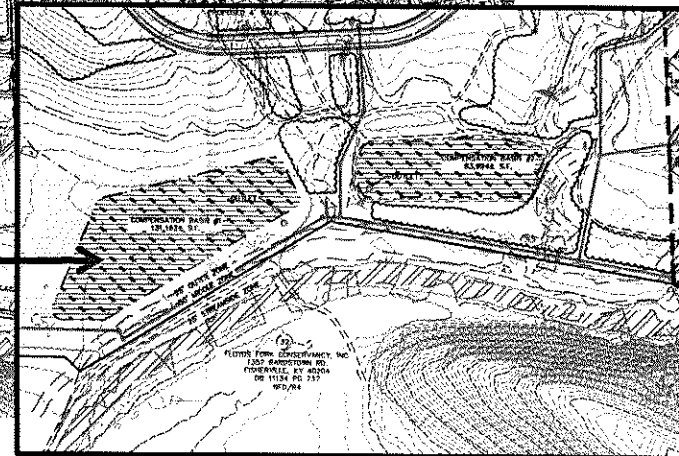
Appendix C – Slope Exploration

- Boring Location Diagram
- Soil & Rock Classification
- Boring Legend
- Boring Records
- Boring Composite
- Field and Laboratory Procedures

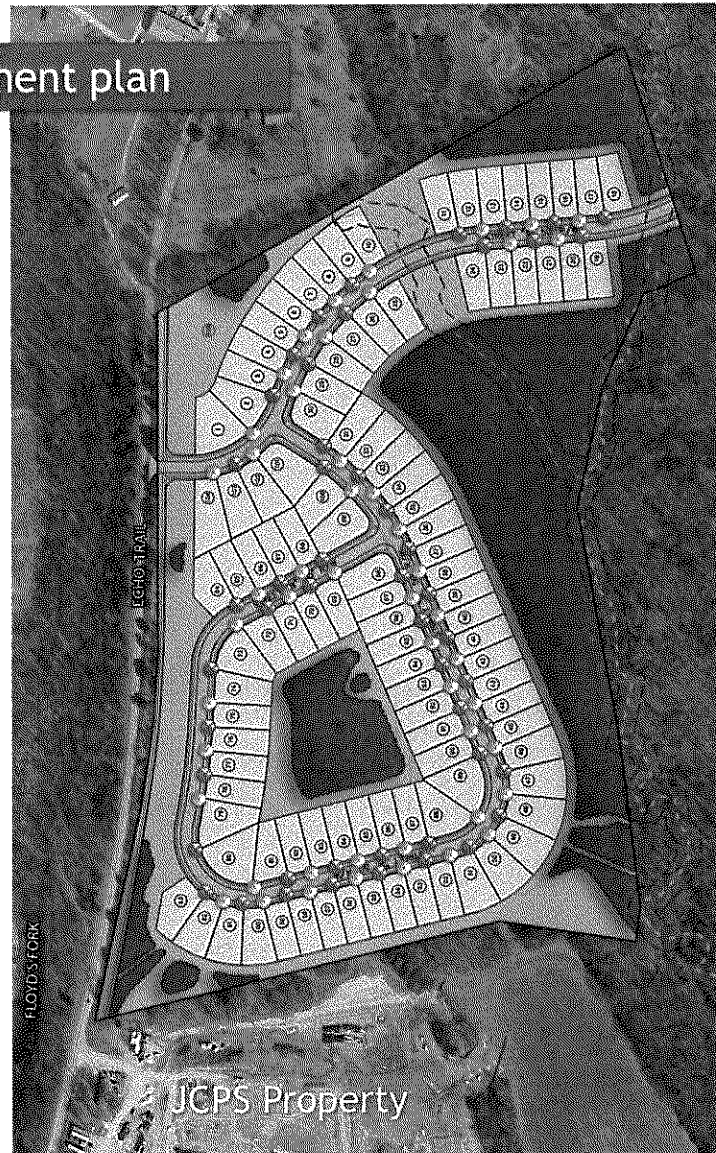
Previously Approved Echo Trail Subdivision



Proposed Binding Element:
The Applicant shall treat the first 1.2 inches of stormwater run-off to meet the MS-4 Water Quality standards.



Proposed development plan



Questions?

