



October 30, 2023

PCD File No.: VR2313

Traffic Memo
Hill Subdivision Filing No. 1

SITE DESCRIPTION AND BACKGROUND

This Traffic Memo concerns the proposed replat for both Lot 1, C and H Estates. The Minor Plat is proposed to subdivide the property into a total of four lots in place of the one existing single-family residential lot.

The proposed subdivision to be known as “Hill Subdivision Filing No. 1” is located within the North $\frac{1}{2}$ of the Southwest $\frac{1}{4}$ of the Northwest $\frac{1}{4}$ of Section 29, Township 11 South, Range 65 west of the 6th principal meridian in El Paso County, Colorado. The site situated on the east side of Black Forest Road, north of Shoup Road, and south of Hodgen Road. The site is currently platted as Lot 1 (14.692 \pm acres), C and H Estates having El Paso County Tax Id number: 5129-00-4018. The only assigned address is for Lot 1 which is 6910 Alpaca Heights, Colorado Springs, Colorado 80908. A 100-foot Right-Of-Way (R.O.W.) dedication for the future realignment of Black Forest Road is located on the west property line of Lot 1. Existing Black forest Road is located on the west side of Lot 1. A Vicinity Map is enclosed with this memo.

Lot 1 contains an existing single family residence, garage, horse stable, gravel drive, private drive, windmill, and a well & septic system. Within existing Lot 1, there are 20-foot public utility and drainage easements along the R.O.W realignment and east lot line. Along the north and south lot lines, there are 60-foot ingress/egress & public utility easements centered on the lot lines. The private road, Alpaca Heights is situated along the south lot line's 30-foot easement and is currently the driveway for Lot 1. The proposed Minor Plat will create a total of three rural residential lots in place of the one existing lot, resulting in the potential for two new single-family rural residential units. An exhibit showing the proposed lots is enclosed with this memo.

ACCESS TO COUNTY ROADWAYS

Access for proposed Lots 1-3, located in existing Lot 1, C and H Estates shall be by way of the existing private drive named Alpaca Heights which currently serves the existing residence from Black Forest Road. Black Forest Road is a paved two-lane public road designated a minor arterial in the 2040 Major Transportation Corridors Plan. The existing private drive will be extended to connect proposed Lots 2 and 3 to Black Forest Road. No new driveway connections to Black Forest Road are are required for proposed lots 1, 2, or 3. However, the use of the common driveway for all three lots requires approval of an Ingress/Egress Waiver being considered with the Minor Plat. Driveway Permits will be obtained for the existing and proposed driveways as required. There are no topographical or alignment challenges limiting safety of the existing or proposed driveway access to the proposed lots.

Engineers • Surveyors
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SIGHT DISTANCE

The existing roadway conditions for Black Forest Road, existing as a Rural Major Collector, located between Terra Ridge Circle/Old Stagecoach Road and Hodgen Road reflects a 45 MPH posted speed limit with moderate slopes. Black Forest Road between Hodgen Road and Swan Road is used as a school bus route. According to El Paso County Traffic Criteria Manual, the minimum entering sight distance for a single-unit truck, as required for residential use on a bus route, with posted speed limit of 45 mph intersection is 585 feet assuming a 3.5 foot eye height and 3.5 foot object height. The driver location being 10 feet from the northbound paved roadway edge. Additionally, the existing roadway north and south of the subject driveway has areas of up to 3.5% longitudinal slope, however the existing driveway sits at a slight crest with upslope toward the driveway location from both directions. The sight distance is not adjusted for grade, leaving the required entering sight distance at 585'. Sight distance requirements for both the north and south directions are satisfied with adequate sight distance with no obstructions to view. A sight distance exhibit is included in this memo.

The proposed Black Forest Road realignment is listed as a Minor Arterial Road according to the El Paso County's Major Transportation Corridors Plan (MTCP). Rural Minor Arterial roadways have a 60 mph design speed (55 mph posted speed) and a 24 foot wide travel way. According to El Paso County Traffic Criteria Manual, Rural Minor Arterial roads with a single-unit truck, as required for residential use on a bus route, has a minimum entering sight distance of 715 feet. Vertical design of the future road has not yet determined but is not anticipated to contain significant longitudinal slopes in the vicinity of the driveway, therefore the required entering sight distance is not adjusted for grade as in the existing conditions. Adequate entering sight distance for the driveway onto future Black Forest Road exists for both left and right turning movements. A sight distance exhibit is included in this memo. The resulting sight triangles are completely contained within the dedicated rights-of-way. Future homeowners for this subdivision will have no opportunity to place obstruction within the rights-of-way or sight triangles.

ESTIMATED TRAFFIC VOLUMES

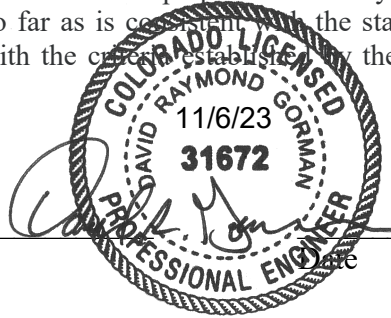
The two new single family rural residential lots, together with the existing residence will access public Black Forest Road Road with the existing private driveway as described above. The development is expected to generate a total of 28 trips per day (Average weekday trips ends) and 3 trips in the peak hour based on 9.44 trips per unit for Single Family Detached Housing (according to Trip Generation, 10th Edition, 2017 by the Institute of Transportation Engineers). This number of trips is below the County threshold of 100 trips per day or 10 trip during the peak hour. Therefore, a full Transportation Impact Study (TIS) is not required for the project. This development is subject to fees established by the El Paso County Road Impact Fee Program per El Paso County Resolution Number 19-471. The owners have elected to not be included in a Public Improvements District. Traffic Impact Fees will be paid at time of building permit. The property is also subject to cost sharing of potential future improvements to Brown Road as described below.

Based on the current conditions of Black Forest Road and the low traffic volumes to be generated by the site, no new improvements to Black Forest Road or nearby area roadways. are required to serve this development. A 100-wide right-of-way for the realignment of Black Forest Road and additional right-of-way for existing Black Forest Road has already been dedicated from the subject property with the previous plat. No new right-of-way is required to be dedicated with the proposed minor plat.

Statements and Acknowledgments

Engineer's Statement

The attached traffic report and supporting information were prepared under my responsible charge and they comport with the standard of care. So far as is consistent with the standard of care, said report was prepared in general conformance with the criteria established by the County for traffic reports.



David R. Gorman, Colorado P.E. No. 31672
For and on Behalf of MVE, Inc.

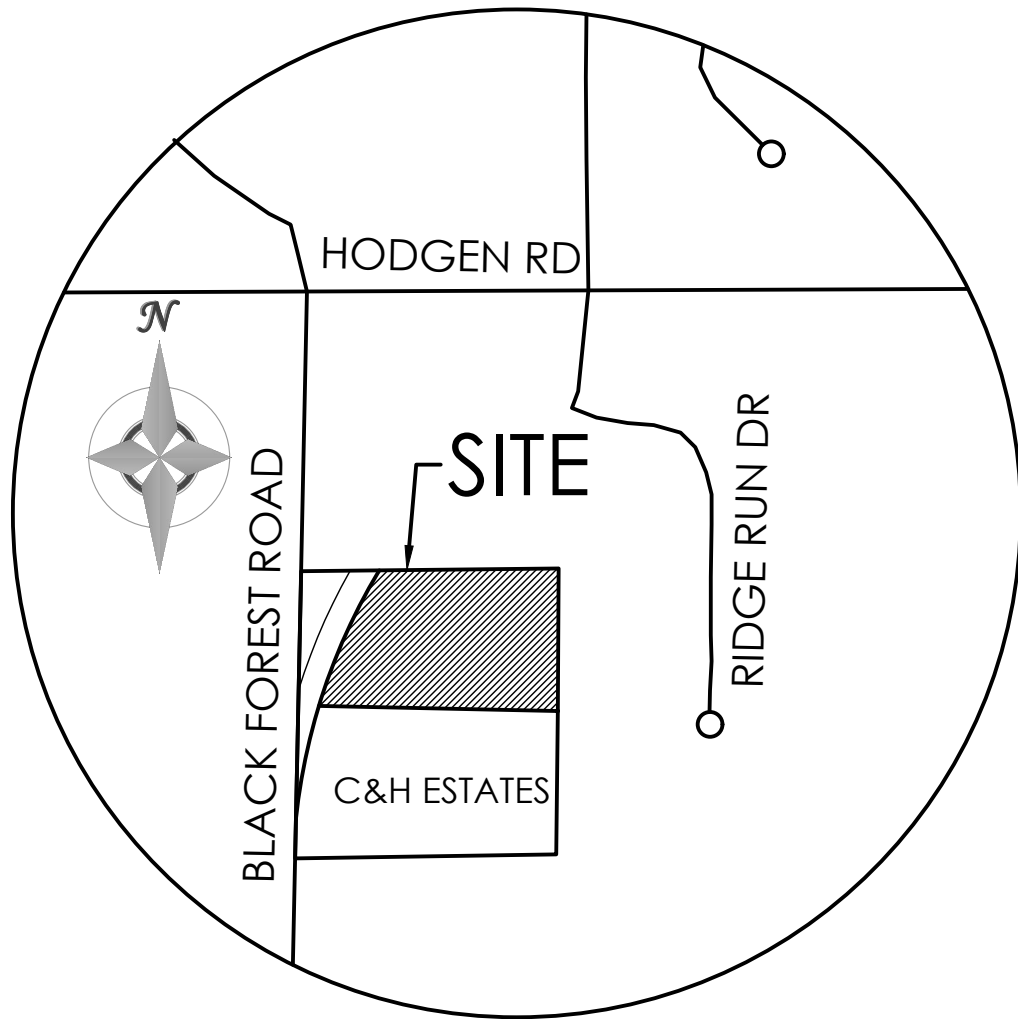
Developer's Statement

"I, the Developer, have read and will comply with all commitments made on my behalf within this report."

Douglas E. Hill, Owner

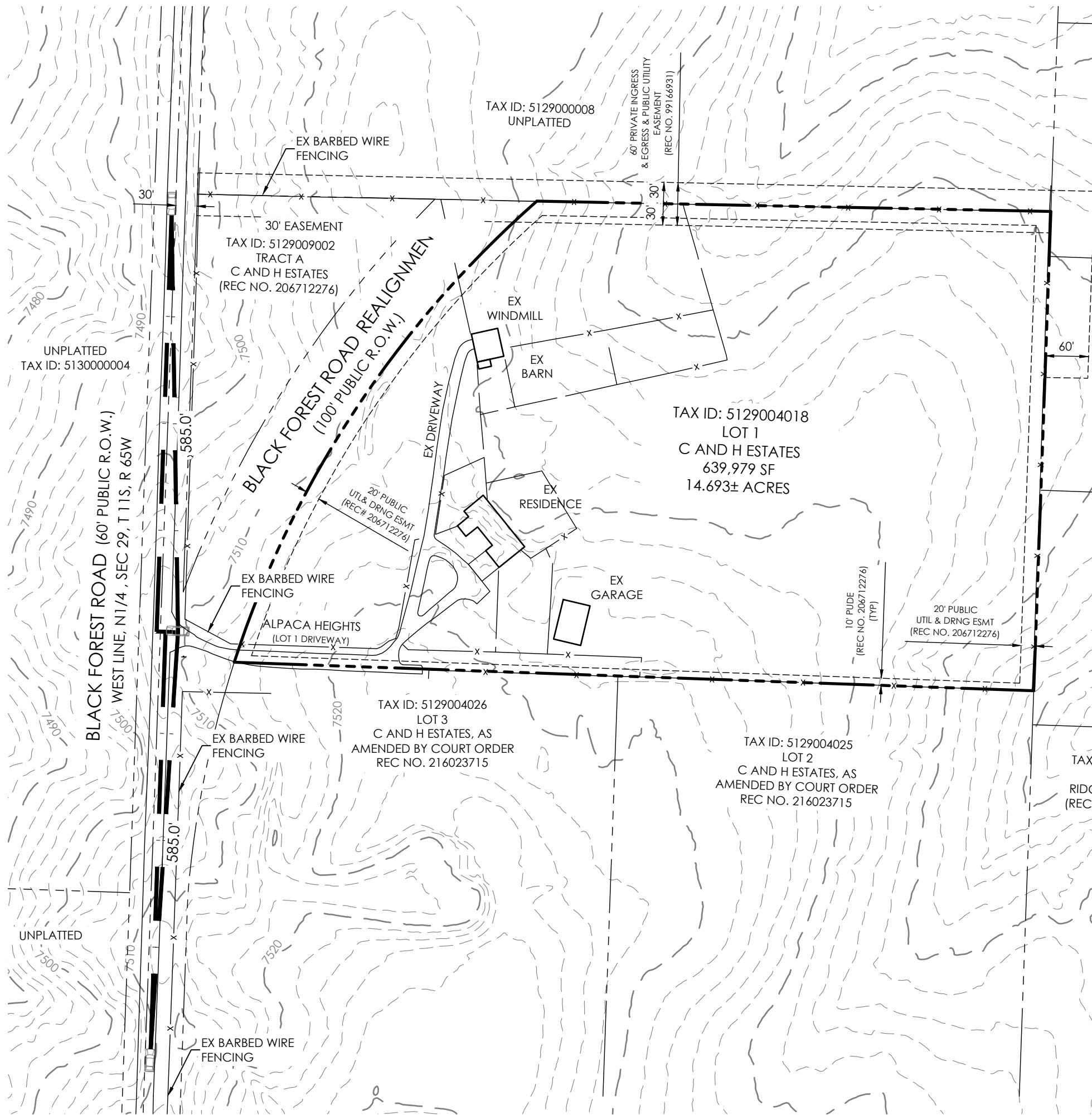
Date

| Attachments



VICINITY MAP

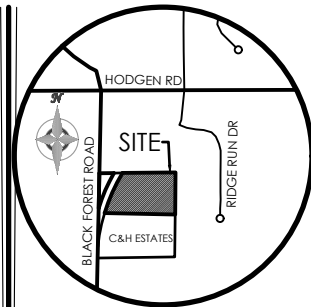
NOT TO SCALE



LEGEND

SIGHT TRIANGLE

- NOTES:
1. VEHICLE SIZES ARE EXAGGERATED, ENTERING VEHICLE EYE IS 10 FEET AWAY FROM EDGE OF THE INTERSECTION.
 2. BOTH ENTERING DRIVER EYE HEIGHT AND OBJECT HEIGHT ARE 3.5 FEET ABOVE GROUND ELEVATION.
 3. THE LAND USE SERVED BY ACCESS IS: RESIDENTIAL, SCHOOL BUS ROUTE. ENTERING SIGHT DISTANCE FOR A SINGLE-UNIT TRUCK FOR A 45 MPH ROADWAY IS 585 FEET.



MVE, INC.
ENGINEERS & SURVEYORS

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SCALE



1" = 150' 1:1800

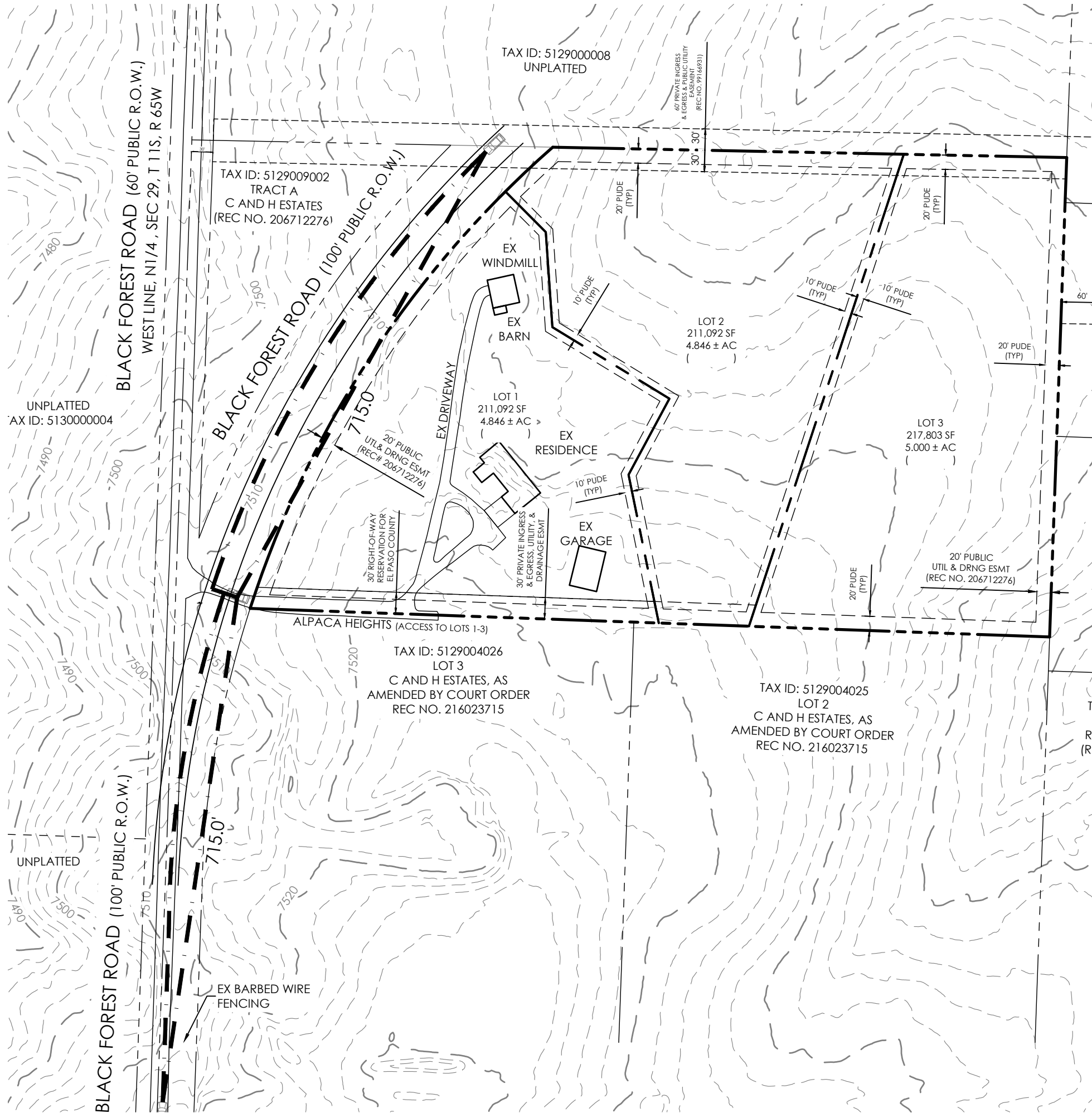
DESIGNED BY _____
DRAWN BY _____
CHECKED BY _____
AS-BUILTS BY _____
CHECKED BY _____

HILL SUBDIVISION
MINOR PLAT

ENTERING SIGHT
DISTANCE CALCS
EXISTING CONDITIONS

MVE PROJECT **61174**
MVE DRAWING **EX-TRAFF**

OCTOBER 31, 2023
SHEET 1 OF 1



LEGEND

SIGHT TRIANGLE

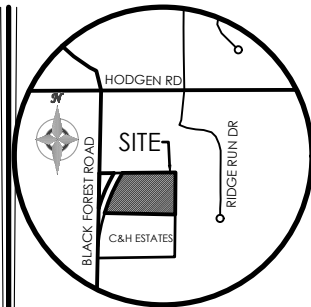
NOTES:

1. VEHICLE SIZES ARE EXAGGERATED, ENTERING VEHICLE EYE IS 10 FEET AWAY FROM EDGE OF THE INTERSECTION.
2. BOTH ENTERING DRIVER EYE HEIGHT AND OBJECT HEIGHT ARE 3.5 FEET ABOVE GROUND ELEVATION.
3. BLACK FOREST ROADWAY IS TO BECOME A RURAL MINOR ARTERIAL ROADWAY WITH A POSTED SPEED LIMIT OF 55MPH.
4. THE LAND USE SERVED BY ACCESS IS: RESIDENTIAL, SCHOOL BUS ROUTE. ENTERING SIGHT DISTANCE FOR A SINGLE-UNIT TRUCK FOR A 55 MPH ROADWAY IS 715 FEET.

SCALE



1" = 150' 1:1800



VICINITY MAP
NOT TO SCALE



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REVISIONS

DESIGNED BY _____
DRAWN BY _____
CHECKED BY _____
AS-BUILTS BY _____
CHECKED BY _____

HILL SUBDIVISION
MINOR PLAT

ENTERING SIGHT
DISTANCE CALCS
PROPOSED CONDITIONS

MVE PROJECT **61174**
MVE DRAWING **PP-TRAFF**

OCTOBER 31, 2023
SHEET 1 OF 1