

ENGINEERING NARRATIVE – Special Exception §4.6.6(c) – Lot access requirements

PROJECT: Gourley Single Family Development

PARCEL: 96-13

COUNTY: Albemarle County, Virginia

Special Exception

Executive Summary

This request is submitted pursuant to Section §4.6.6(c) of the Albemarle County Zoning Ordinance to authorize access to a single-family dwelling where portions of the existing/shared driveway exceed 16% percent maximum grade under Section §4.6.6(b). The proposed driveway improvements have been designed to provide safe and reasonable access to the Dwelling Site while responding to existing site constraints and minimizing environmental disturbance.

Background

Existing Access Conditions

The subject parcel (Parcel ID no. 96-13) (the “Subject Parcel”) comprises approximately 69 acres in southwest Albemarle County. The majority of the Subject Parcel is characterized by critical slopes with one area of non-critical slopes suitable for residential development (the “Dwelling Site”).

Access to the Dwelling Site and non-critical slope areas of the Subject Parcel is provided via an existing shared driveway connection from Spring Valley Road (the “Existing Driveway Segment”). The Existing Driveway Segment has served as the sole access for a residence on an adjacent parcel (Parcel ID no. 96-13B) (the “Neighboring Parcel”) since 2001. The Existing Driveway Segment is situated on the boundary line between the Subject Parcel and the Neighboring Parcel.

One section of the Existing Driveway Segment, approximately 215 feet in length, includes grades that exceed the 16% grade threshold required under Section §4.6.6(b) of the Albemarle County Zoning Ordinance, including some areas that approach or exceed a 20% grade. These conditions are pre-existing and are not the result of the current proposal to develop a single-family residence on the Subject Parcel. The Existing Driveway Segment is bounded by critical slope areas and sits above a ravine feature and ephemeral stream area located on the Subject Parcel.

Background – Proposed Driveway Connection

The applicant proposes to access the Dwelling Site via a driveway connection from the Existing Driveway Segment. This private driveway (the “New Driveway Segment”) will follow the route of a pre-existing logging road and terminate at the non-critical slope area comprising the Dwelling Site. The improvement of this pre-existing logging road to create the driveway connection to the Existing Driveway Segment has been designed to comply with the 16% maximum grade requirement. Accordingly, this request arises solely with respect to the Existing Driveway Segment shared with the Neighboring Parcel. As such, the special exception is not to introduce new noncompliance, but rather to allow reasonable use of an existing access condition. Moreover, the planned connection point for the intersection of the Existing Driveway Segment and the New Driveway Segment will provide enhanced functionality and safety over present conditions on the Existing Driveway Segment.

Section §4.6.6 - Lot access requirements

Section §4.4.6(b) of the Albemarle County Zoning Ordinance provides, among other things, that “in order to provide public safety vehicles with safe and reasonable access to a new dwelling unit on a lot, each driveway that will serve a new dwelling unit: ... shall not exceed a 16 percent grade....”

Section §4.4.6(c) of the Albemarle County Zoning Ordinance permits a waiver of the Section §4.6.6(b) requirements with consideration to public safety vehicle access.

Specifically, under Section 4.6.6, vehicular access on a lot shall be provided as follows under Section §4.6.6(a)-(d):

- a. In all zoning districts, a structure requiring a permit under the Uniform Statewide Building Code may be established only on a lot having frontage on a public or private street as authorized by the subdivision ordinance, except that this requirement shall not apply to lots lacking such frontage on the effective date of this chapter.

The lot meets the frontage requirements as shown on exhibit A, the Subject Parcel has frontage on Spring Valley Road.

- b. In the rural areas zoning district, in addition to the requirements in subsection (a) and in order to provide public safety vehicles with safe and reasonable access to a new dwelling unit on a lot, each driveway that will serve a new dwelling unit: (1) shall not exceed a 16 percent grade; (2) shall have a travelway that is at least ten feet in width; (3) shall extend to within 50 feet of each dwelling unit on the lot; and (4) shall include a rectangular zone superjacent to the driveway that is clear of all obstructions, including any structures and vegetation, that is at least ten feet in width and 14 feet in height. The

landowner shall demonstrate to the satisfaction of the county engineer that the driveway will meet the requirements of this subsection before a building permit is issued.

The Existing Driveway Segment exceeds the 16% slope for approximately 215 feet. As a result, when considering the Existing Driveway Segment and the New Driveway Segment together, access does not meet Section §4.6.6(b1). The criteria in Section §4.6.6(b)(2), (3), and (4) will be met and are not the subject of this request.

c. Notwithstanding the requirements of subsection (b), the county engineer, with the recommendation of the fire marshal, may authorize a driveway having a grade that exceeds 16 percent if the landowner demonstrates to the satisfaction of the county engineer and the fire marshal that public safety vehicles would be able to access the dwelling unit even though the grade may exceed 16 percent. In considering a waiver request, the Board of Supervisors shall consider: (1) the length of the segment of the driveway that would exceed 16 percent; (2) whether the segment that would exceed 16 percent would require the public safety vehicle to travel uphill towards the dwelling unit; (3) whether fire suppression equipment such as sprinklers would be installed within the dwelling unit; and (4) whether the dwelling unit is within 50 feet of a public or private street. In authorizing such a grade, the Board of Supervisors may impose reasonable conditions to assure that the public safety vehicles may access the dwelling unit including, but not limited to, a condition limiting the maximum length any segment of the driveway may exceed 16 percent.

This request seeks as special exception under Section §4.6.6(c). Albemarle County Fire & Rescue has recommended that it can serve the driveway as submitted under this request.

d. Any lot which was lawfully a lot of record on the effective date of subsection (b) shall be exempt from the requirements of that subsection for the establishment of the first single-family detached dwelling unit on the lot if the county engineer determines that those requirements would prohibit the practicable development of the lot for that first single-family detached dwelling unit.

This request does not seek an exemption under Section §4.6.6(d).

Public Safety Vehicle Access Evaluation

Albemarle County Fire and Rescue conducted a field review of the Existing Driveway Segment in April 2026. Battalion Chief, Shawn Maddox reported that a standard engine was able to traverse the length of the Existing Driveway Segment under typical conditions and was able to reach the

planned intersection point for the New Driveway Segment. The vehicle was able to travel over the section of the Existing Driveway Segment that exceeds 16% grade.

The primary limitation identified during field review was not related to the grade of the Existing Driveway Segment, but rather to a geometric constraint at the proposed acute-angle turn into the New Driveway Segment alignment. The applicant plans to address this condition as part of the proposed New Driveway Segment work through revisions to provide an expanded turning radii and improved maneuverability.

The proposed design enhancements for the New Driveway Segment to improve public safety vehicle access will incorporate the following:

- Revised horizontal geometry to eliminate acute-angle turning conditions;
- Minimum required travel way width and vertical clearance; and
- Turnaround area at the Dwelling Site to accommodate large public safety vehicles.

The enhancements at the intersection of the New Driveway Segment and the Existing Driveway Segment will represent a substantial improvement over existing access conditions at the point of connection with the Existing Driveway Segment. Specifically, the larger turning radius will improve maneuverability generally, and will ensure that public safety vehicles can safely and reliably reach the Dwelling Site.

Impracticability of Modifying the Existing Shared Driveway

Regrading the Existing Driveway Segment to bring the steeper portions of the Existing Driveway Segment into full compliance with the 16% grade requirement is not practical due to site constraints. Specifically, the Existing Driveway Segment traverses steep terrain and is influenced by a ravine feature with an ephemeral stream and surrounding critical slopes. Modifying this segment to achieve compliant grades would require:

- Extensive regrading of the existing alignment requiring substantial disturbance of critical slope, or
- Introduction of a new alternative route that will necessitate bridging a ravine and substantial disturbance of critical slopes that are currently characterized by undisturbed native mixed hardwood forest in a manner that would exceed the disturbance footprint of the Dwelling Site itself.

As illustrated in Exhibit C, efforts to reduce grades along on the Existing Driveway Segment are constrained by the surrounding topography. Adjustments to the vertical profile would no longer allow the Existing Driveway Segment to tie into existing ground conditions without creating

excessively steep side slopes or requiring structural solutions such as retaining walls as well as requiring an expansive disturbance of critical slope and the ephemeral stream.

An alternative configuration to create a new segment and connection to the Existing Driveway Segment in order to ensure the entire route from Spring Valley Road to the Dwelling Site will remain below a 16% grade would necessitate substantial encroachment into critical slopes and disturbance of natural features, resulting in increased environmental impact and construction complexity to traverse the ravine situated between the Existing Driveway Segment and the Dwelling Site.

These approaches are not proportional to the scale of the proposed residential use and would introduce greater long-term impacts than the existing condition. Moreover, these approaches would not improve public vehicle access to the Dwelling Site due to the geographic features in this area of Albemarle County because, in order to access the Existing Driveway Segment, public safety vehicles must first travel along Spring Valley Road which is unpaved and includes sections that approach or exceed 20-25% grade, see Exhibit A.

More Disturbance with platted access easement

The Subject Parcel includes an unused logging trail ("Logging Trail") on the opposite side of the property that crosses a stream area to run parallel to Spring Valley Road. The Logging Trail appears as a platted access easement on the Subject Parcel because a neighboring parcel holds an access easement. The Logging Trail is separated from the Dwelling Site by undisturbed forest and critical slopes.

The proposed access results in substantially less land disturbance than utilizing the Logging Trail. The proposed access utilizes the Existing Driveway Segment over an established logging road, which will be improved to address the access and maneuverability concerns identified by Albemarle County Fire and Rescue. Because the Existing Driveway Segment and established logging road already exist to provide access to the Dwelling Site, new disturbance associated with the driveway is primarily limited to the proposed turnaround and placement of gravel along the existing logging road. The total disturbance associated with the proposed driveway is less than approximately 6,000 square feet.

In comparison, utilizing the unused Logging Trail that parallels Spring Valley Road would result in substantially greater disturbance. The Logging Trail itself requires more improvement than the proposed New Driveway Segment to meet the travel way requirements of Section §4.6.6(b)(2). Following the Logging Trail route first to the point it comes closest to the Dwelling Site would bring a new driveway to an undisturbed area separated from the Dwelling Site by critical slopes. In order to reach the proposed Dwelling Site, and meet the criteria of Section §4.6.6(b) a

switchback driveway through critical slopes would be required with substantial additional disturbance to the same turnaround criteria as the proposed access route. Alternatively, the Logging Trail could be followed farther into the Subject Parcel away from the Dwelling Site to approximately the same elevation as the Dwelling Site before cutting back through undisturbed forest to the Dwelling Site. This route, however, would still require, approximately 400 feet of additional new driveway through undisturbed forest over critical slope areas to reach the Dwelling Site.

These alternative routes have not been fully engineered because they are not proposed for construction. They have not been proposed because either alternative would necessarily require substantially more grading and disturbance of critical slopes than the proposed access. This additional disturbance would create a longer access route and fail to yield any public safety benefit as emergency vehicles would still need to transit grades on Spring Valley Road to access the driveway.

The proposed route therefore represents the least-disturbing and most practical means of accessing the Dwelling Site by utilizing the Existing Driveway Segment and improving the existing logging road for the New Driveway Segment to accommodate Fire & Rescue access.

Consistency with Ordinance Intent

The intent of Section §4.6.6 of the Albemarle County Zoning Ordinance is to ensure that public safety vehicles have safe and reasonable access to dwelling units. The ordinance recognizes that strict compliance may not be feasible in all cases and provides flexibility where site conditions warrant.

In this case:

- The Existing Driveway Segment has been in use since 2001 as the access for a single-family residence on the Neighboring Parcel and currently provides access for short-term rental tenants and service vehicles for the Neighboring Parcel. The applicant is not creating the noncompliant condition, but rather working within an existing constraint;
- The planned single-family dwelling's use of the Existing Driveway Segment will not materially increase public safety vehicle needs in this area;
- Albemarle County Fire and Rescue has demonstrated the ability of a standard engine to travel the full length of the Existing Driveway Segment under typical conditions;
- The applicant's proposed plan for the New Driveway Segment directly addresses the geometric limitations identified by Albemarle County Fire and Rescue with respect to

turning area during the field review and will improve public safety vehicle maneuverability generally at the point at which the New Driveway Segment will intersect with the Existing Driveway Segment;

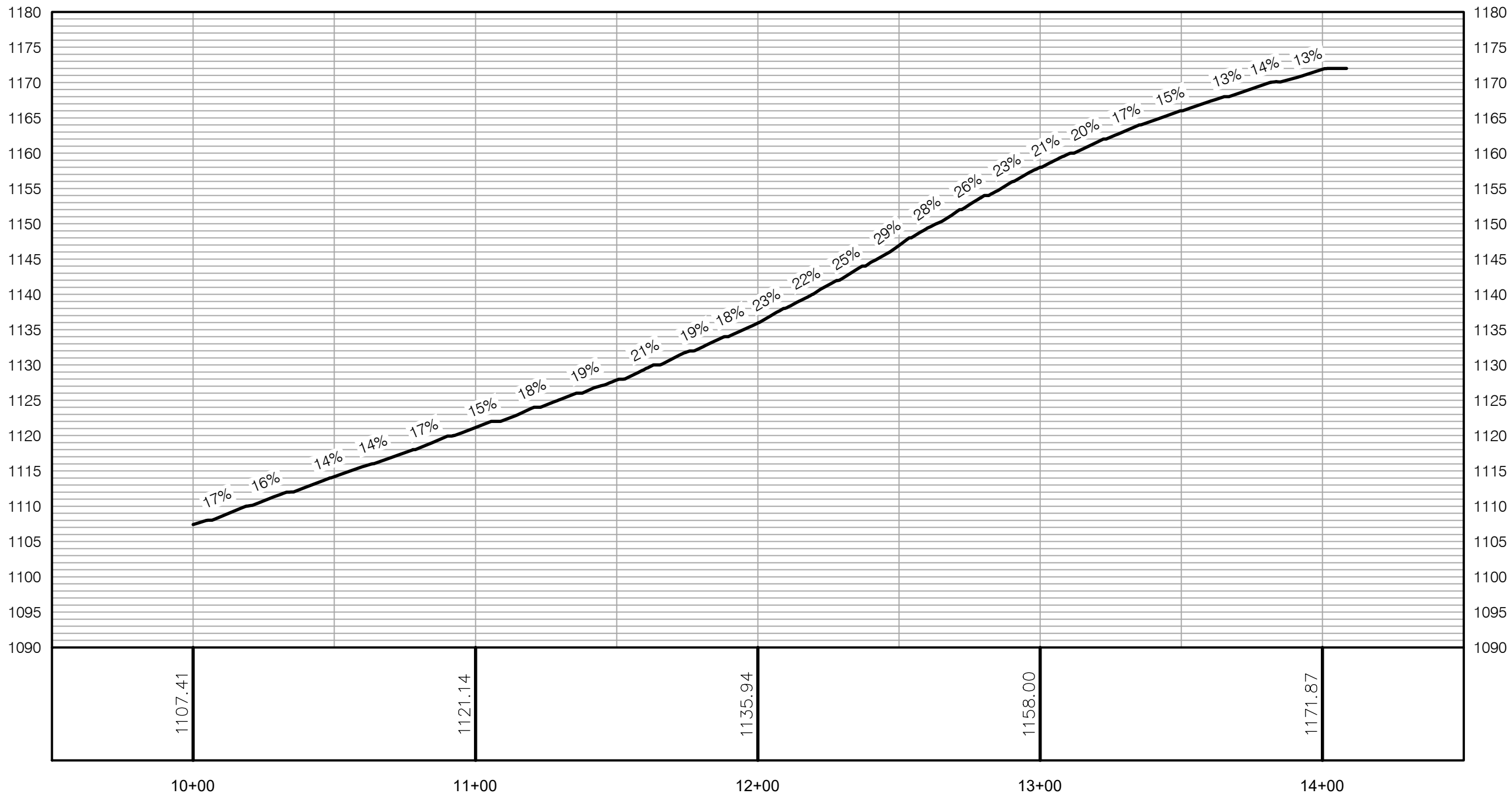
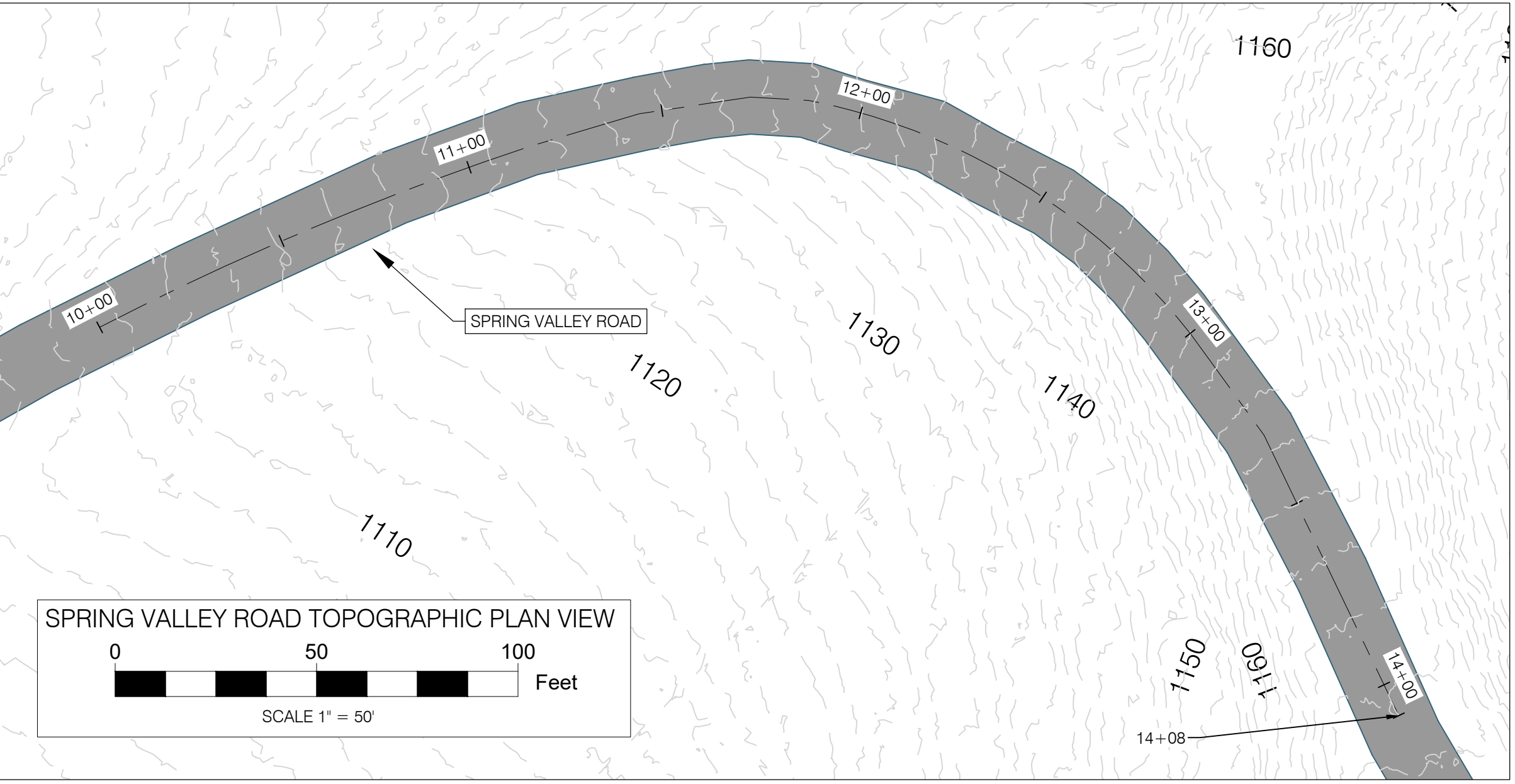
- Strict enforcement of the 16% grade requirement on the Existing Driveway Segment would not materially improve public safety vehicle access because vehicles must travel Spring Valley Road, but would require substantial environmental disturbance and structural intervention beyond the practical scope of a single-family dwelling; and
- Alternative access to the Dwelling Site that avoids the Existing Driveway Segment is not practical because this would require substantial new disturbance of critical slopes.

Conclusion

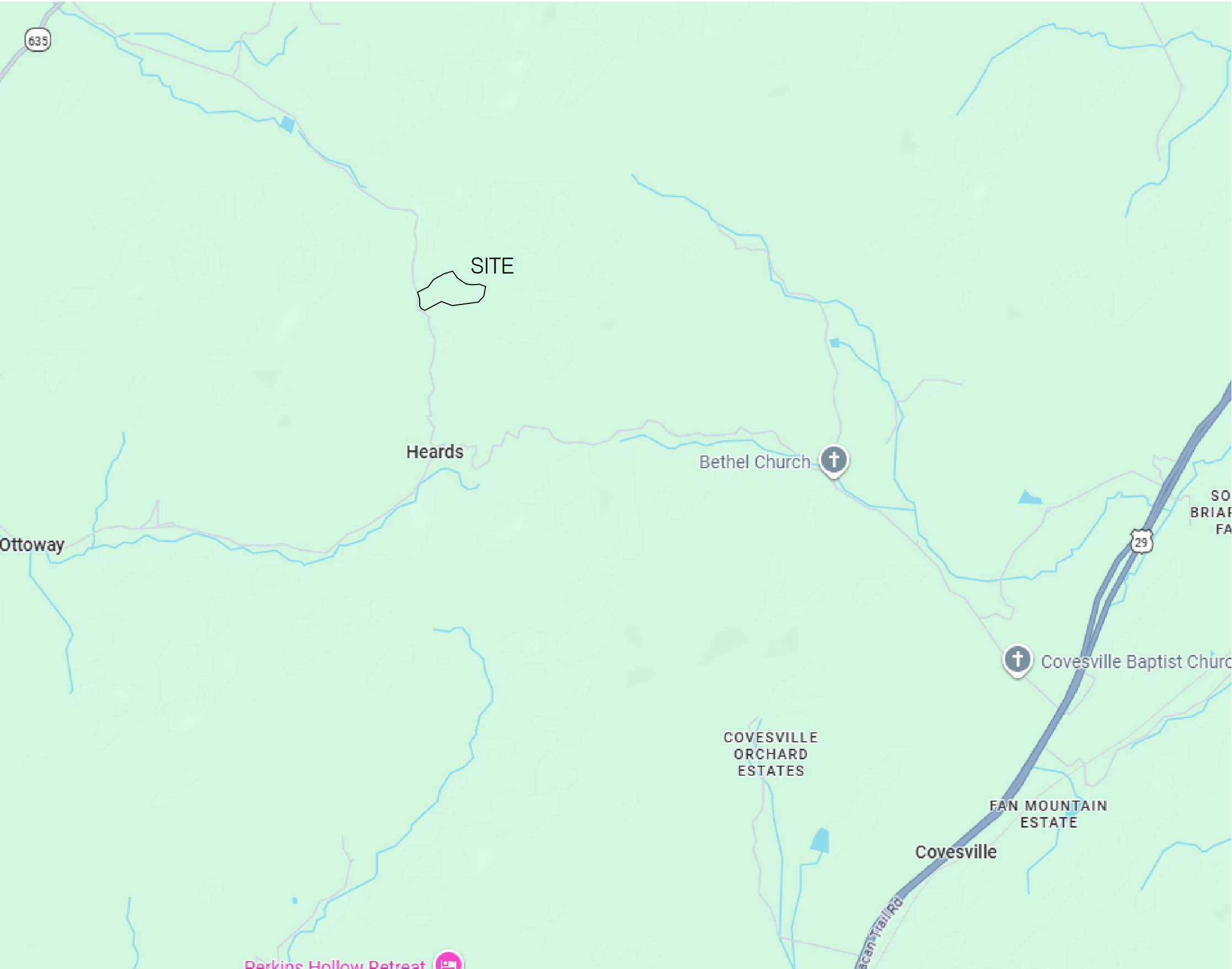
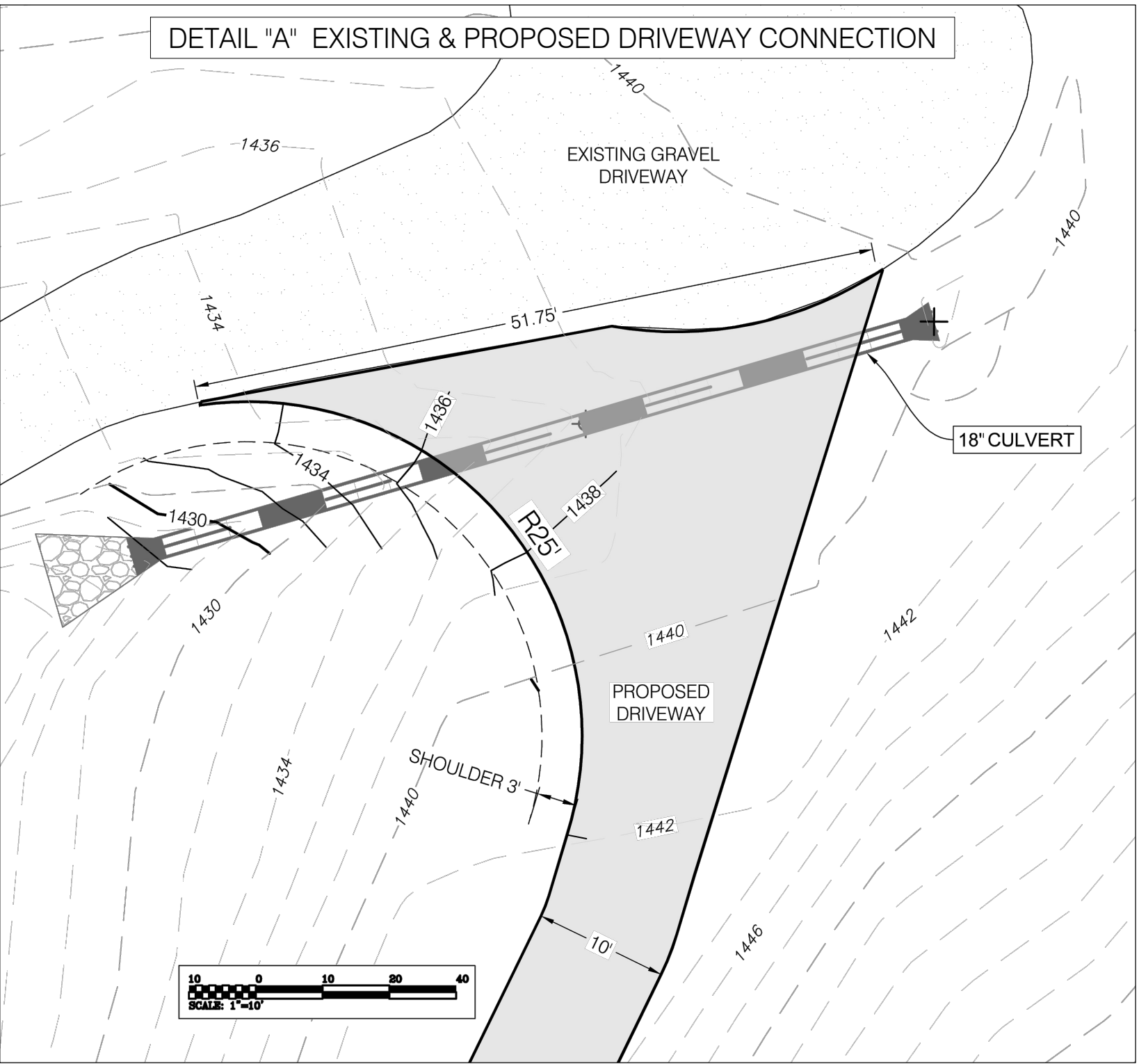
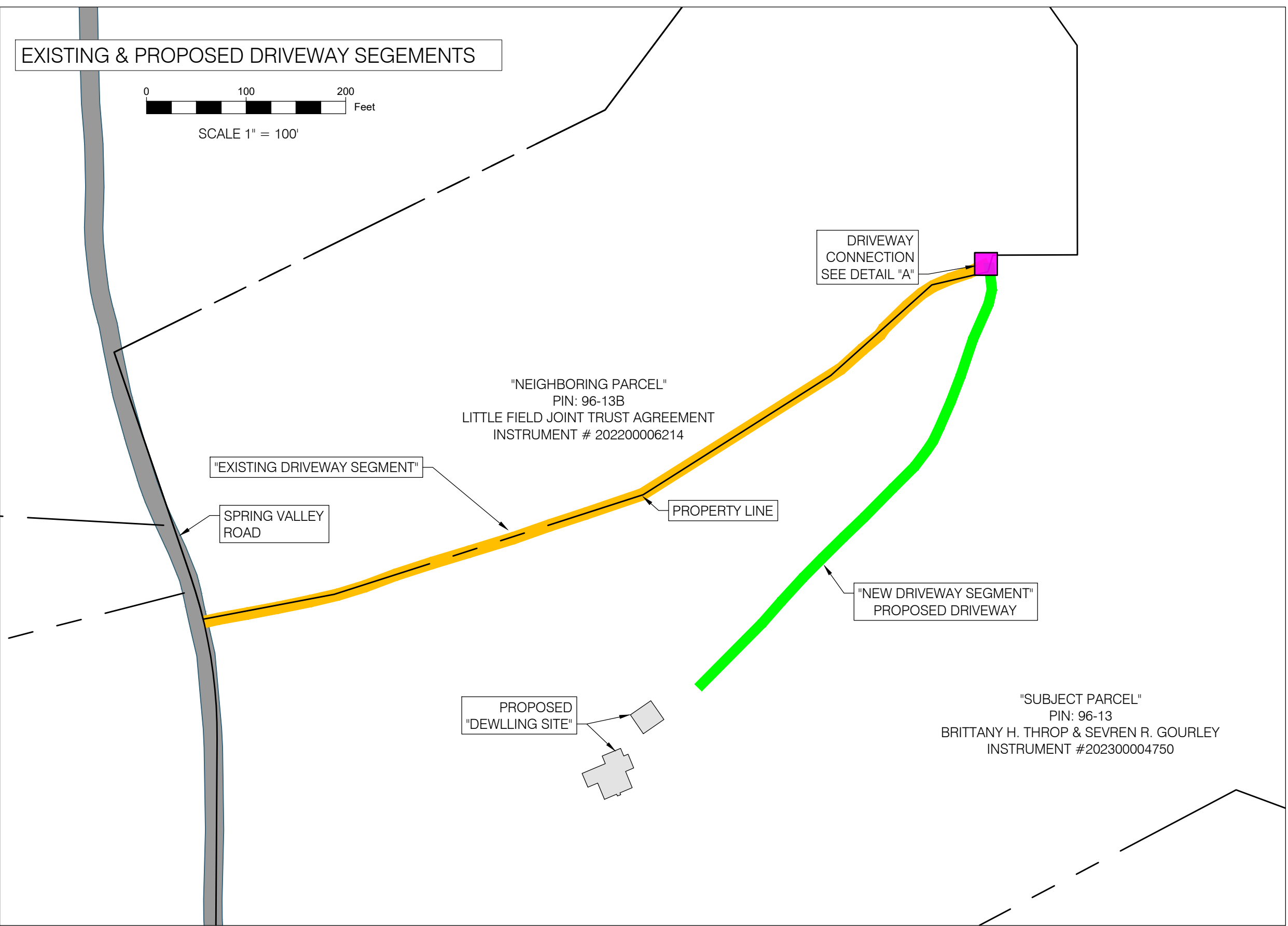
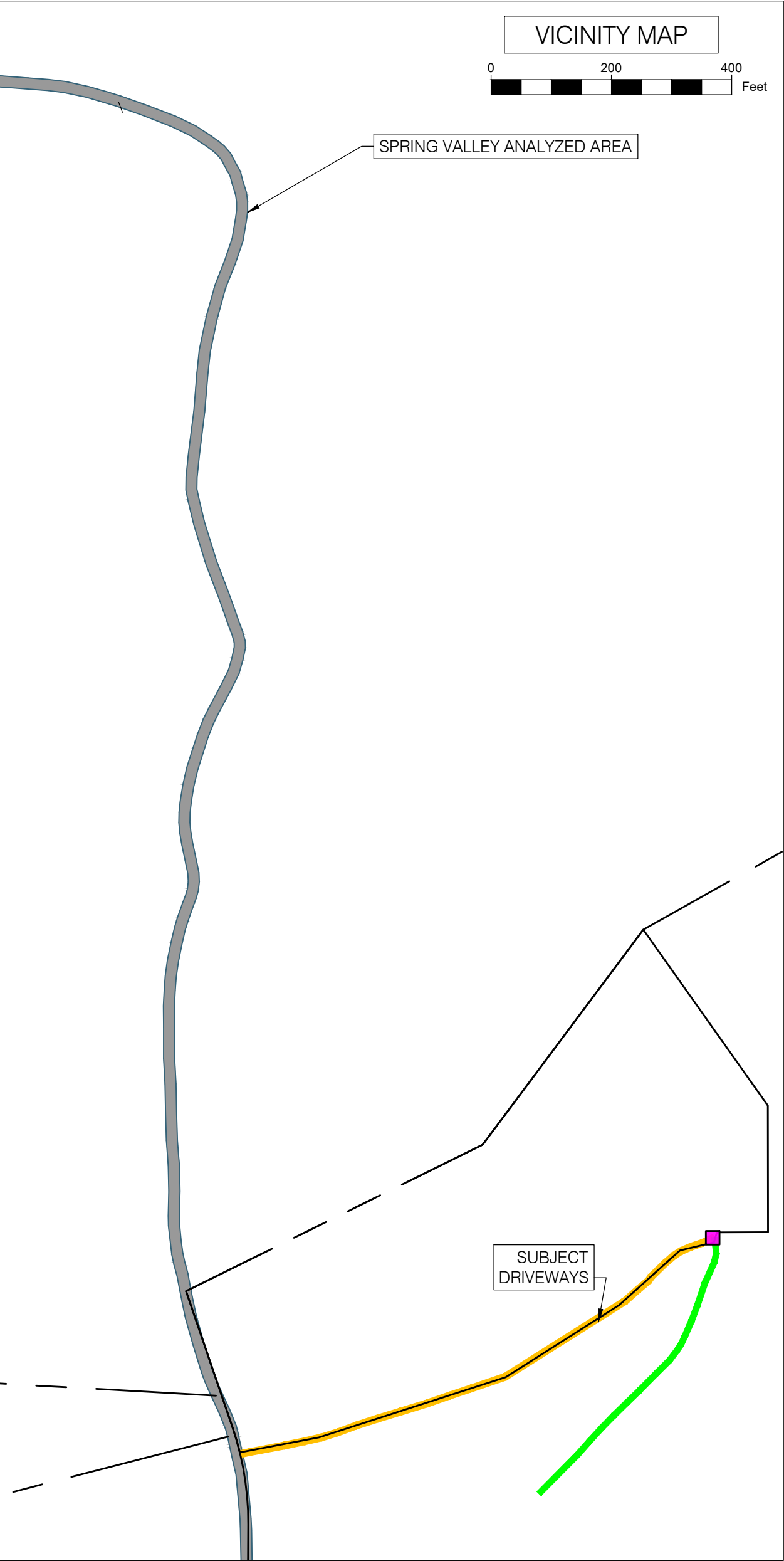
The proposed driveway design represents the most practical and balanced solution that improves access within the natural constraints of the Subject Parcel. The limited noncompliance with the 16% grade requirement is confined to a portion of the Existing Driveway Segment that is currently in use and cannot be modified without significant, disproportionate impacts on critical slope areas. Regrading the Existing Driveway Segment would provide no material enhancement to public safety vehicle access to the Subject Parcel due to the existing conditions on Spring Valley Road.

With the applicant's proposed design enhancements for the intersection of the New Driveway Segment with the Existing Driveway Segment, the driveway system will provide safe and reasonable access to the Dwelling Site for public safety vehicles proportional to the proposed use and consistent with the intent of Section §4.6.6(c). The request reflects a good-faith effort to improve existing conditions while minimizing environmental disturbance in a manner that will allow practicable development of a single-family residence on the Subject Parcel within existing site constraints.

For these reasons, applicant respectfully requests that the Board approve this special exception.

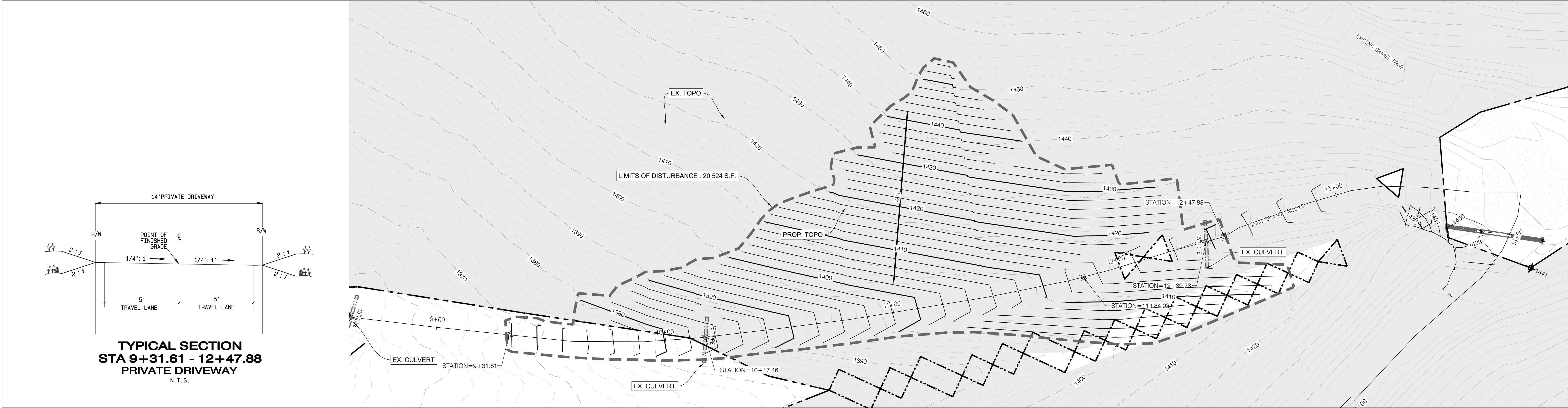
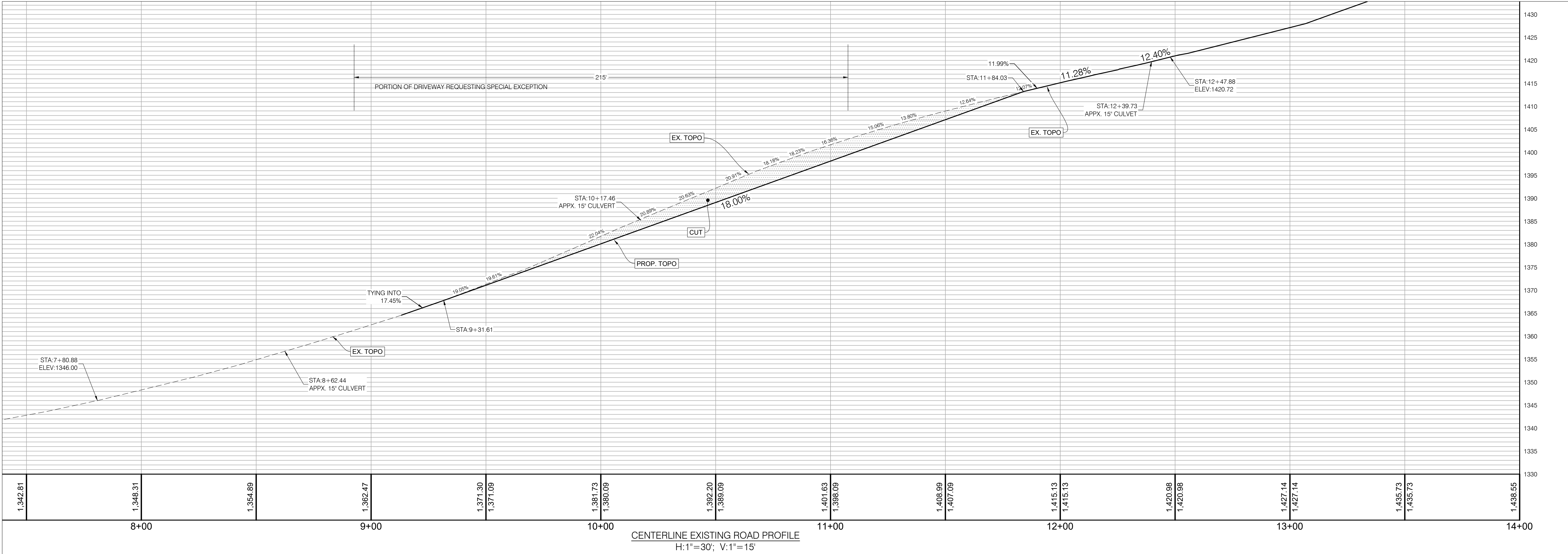


SPRING VALLEY ROAD PLAN AND PROFILE



SPRING VALLEY ROAD PLAN AND PROFILE

GOURLEY TMP 96-13 | DATE 19 AUGUST 2026 | EXHIBIT B

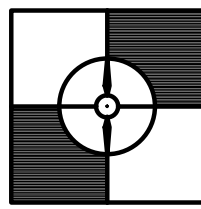
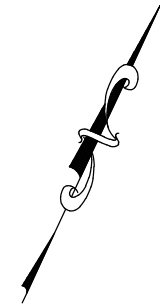
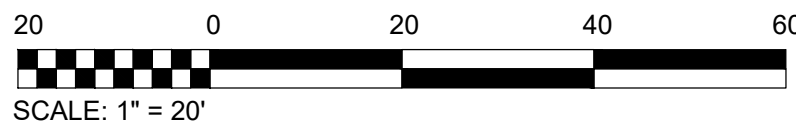


IMPRACTICAL DRIVEWAY DESIGN

GOURLEY TMP 96-13 | 19 AUGUST 2026 | EXHIBIT C



ALBEMARLE COUNTY
GIS STEEP SLOPES



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