

MEMORANDUM

TO: North Castle Planning Board

CC: Adam Kaufman, AICP
Jeri Barrett, RLA
Allan Gordon

FROM: Joseph M. Cermele, P.E., CFM
Kellard Sessions Consulting
Consulting Town Engineers



DATE: May 20, 2021

RE: Allan Gordon
257 East Middle Patent Road
Section 88.04, Block 1, Lot 13

As requested, Kellard Sessions Consulting has reviewed the site plans and application for the field change request submitted in conjunction with the above-referenced project. The applicant is proposing modifications to two (2) of the existing curb cuts serving the property. The existing curb cut to the south, referred to as Subject Area 1, is proposed to be reconstructed in the same general location. The existing curb cut to the north, referred to as Subject Area 2, is proposed to be removed and relocated further south along East Middle Patent Road. Reconstruction of both curb cuts will include removal and restoration of a portion of the existing stone walls, tree removal and installation of automated gates. The relocated driveway to the north will also provide stormwater mitigation for the increased impervious surface area resulting from the project.

Our comments are outlined below.

GENERAL COMMENTS:

1. The plan proposes the removal of thirty-three (33) town regulated trees, five of which are reported to be dead. The plan proposes plantings in the area of the existing drive to be removed at Subject Area 2. The Planning Board should discuss whether the proposed tree removal and plantings are appropriate for the development.

2. The plan illustrates the limits of the future road widening easement previously granted to the Town. The proposed pillars and gates appear to have been positioned beyond the limits of the easement. The plan should illustrate and dimension a minimum of 20 feet between the future road widening right-of-way line and the nearest point of the gate and pillar required to provide adequate access for vehicles pulling off the road.
3. We would recommend that the plan be referred to the Bedford-Banksville Fire Department for review for emergency access. We note that the applicant has illustrated turning movements for an emergency vehicle at the southern entrance which appears to provide adequate maneuverability. A similar analysis may be required at the northern drive. We also note that the turning movements provided on the plan are for fire apparatus from the Town of Harrison Fire Department. The applicant should confirm that the specifications used are sufficient for the Bedford-Banksville Fire Department.
4. The property is located partially within a FEMA Floodplain. While there is no development proposed within the floodplain area and floodplain mitigation will not be necessary, the applicant will be required to obtain a Floodplain Development Permit from the Town of North Castle.
5. The applicant has provided a driveway profile for the northern drive at Subject Area 2. A similar profile should be provided for the southern drive at Subject Area 1 demonstrating compliance with Section 355-59, Driveways of the Town Code, specifically as it relates to permitted grades within the platform area at the street. We note that, as shown, the platform grade for the northern drive is slightly steeper than permitted and should be revised for compliance.
6. The applicant has provided sight line profiles for both driveway entrances demonstrating available sight distances in either direction for a vehicle exiting the drive. This office has visited the site and inspected the proposed locations of both driveway curb cuts. Existing sight distances are limited and will be improved by this plan. We offer the following comment:
 - a. In general, the sight line profiles and plan view should be revised to illustrate that the sight line is measured from a vehicle 14 feet back from the edge of the traveled way, at a height of 3.5 feet, to an object in the road at a height of two (2) feet, for a distance of at least 200 feet.
 - b. The widening of the driveway apron and reconfiguration of the stonewalls at the southern drive (Subject Area 1) will certainly improve available sight lines as compared to existing conditions. We note, however, that once the profile is revised to comply with the above

specifications, that sight distance to the south may be hindered. Because this is an improvement to an existing curb cut and sight distance is improved over existing conditions, even though the minimum 200 foot may not be provided, the Building Inspector should make a determination as to whether this would be considered a “new” driveway and if a variance from Section 355-59 D would be required.

- c. The relocation of the northern curb cut at Subject Area 2 appears to provide a significant improvement with regard to sight distance, even after making the minor modifications noted above.
7. The plans should dimension the maximum curb cut width of 18 feet, as permitted by the Town Highway Department.
8. The applicant proposes stormwater mitigation for the increased stormwater runoff generated by the additional impervious surface at the northern drive (Subject area 2). The applicant shall prepare a Stormwater Pollution Prevention Plan (SWPPP) and design calculations demonstrating mitigation of the net increase in the peak discharge rate for the 25-year storm event.
9. The applicant will be required to perform deep and percolation soil testing in the vicinity of the proposed stormwater practice, to be witnessed by the Town Engineer. Please contact this office to schedule testing.
10. The plan proposes tiered, four (4) foot high stone retaining walls along the west side of the northern drive. We note that any walls over four (4) feet in height will require design by a NYS Licensed Professional Engineer and that the construction of these walls will require certification by the Design Professional. Plans to this effect shall be added to the Site Plan.
11. The construction of the northern drive will require limited rock removal. The applicant will be required to demonstrate compliance with Chapter 122, Blasting, Explosives and Chipping. The construction of both driveways will require a net of approximately 868 cubic yards of fill. The plan shall illustrate that adequate material staging and stockpile areas are available to ensure that vehicle queuing in East Middle Patent Road will not be required.
12. The plan proposes stone rumble strips at the driveway entries. The first five (5) feet from the edge of the traveled way must be paved with asphalt, as required by the Town Highway Department.

13. The plan shall illustrate the required electric service to power the proposed automated gates and pillar lighting.
14. The Erosion Control Plan shall quantify the area of disturbance for each driveway, indicate all trees to be removed or protected and include a sequence of construction.
15. The plans should include details for all site improvements including but not limited to pavement, paver installation, stone pillars and gates, roadway restoration details for the existing driveway removals, stormwater management components and tree protection.

As additional information becomes available, we will continue our review. It is noted that an itemized response to all comments will facilitate completeness and efficiency of review.

PLANS REVIEWED, PREPARED BY J.D. BARRETT & ASSOCIATES, LLC, DATED MAY 7, 2021:

- Site Information Plan (1 of 4)
- Subject Area 1 – South Entry (2 of 4)
- Subject Area 2 – North Entry (3 of 4)
- Erosion Control Plan (4 of 4)
- Tree Removal Plan – Subject Area 1
- Tree Removal Plan – Subject Area 2

JMC/dc