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March 6, 2020

Marlboro Township Planning Board

1979 Township Drive Marlboro, NJ 07746

Re: El at Marlboro 79, LLC / Marlboro Parke (PB# 1201-20)

Preliminary and Final Major Subdivision and Site Plan -

Engineering / Planning Review #1

Block 415 Lot 22

Location: NJ State Highway Route 79

Zone: GH2D (Generational Housing 2 District)

CME File No.: HMRP0415.09

Dear Planning Board Members:

Our office received the following information in support of the above-referenced application for Preliminary and Final Major Subdivision and Site Plan approval:

- Preliminary and Final Major Subdivision and Site Plan (40 sheets) prepared by Bowman Consulting dated January 7, 2020 unrevised;
- Subdivision Plan (1 sheet) prepared by Bowman Consulting dated January 17, 2020, unrevised;
- ALTA/NSPS Land Title and Topographic Survey (1 sheet) prepared by Maser Consulting, PA dated June 21, 2016, last revised April 26, 2017;
- Stormwater Management Report prepared by Bowman Consulting dated January 16, 2020, unrevised;
- Stormwater Management Facilities Maintenance Manual prepared by Bowman Consulting dated January 17, 2020, unrevised;
- Traffic Engineering Evaluation prepared by Bowman Consulting dated December 3, 2019, unrevised;
- Environmental Impact Report prepared by Bowman Consulting dated January 27, 2020;
- A development application.

In accordance with your authorization, we have reviewed this application for Preliminary and Final Major Subdivision and Site Plan approval and offer the following comments:

1. Project Description

The subject 34 acre property is within a GH2D (Generational Housing 2 District) Zone District and contains 910 feet of frontage along the east side of NJ State Highway Route 79 opposite the Butchers Lane intersection. Currently, the property contains a 2-story

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dwelling, a shed, as well as apparent building ruins, and a gravel driveway along the Route 79 site frontage. The property is partially wooded along the perimeter with a cleared apparent farm field within the interior. A portion of the Henry Hudson Trail adjoins the site along the rear property line.

The Applicant proposes to subdivide the property into 226 lots consisting of 224 lots for attached townhouse unit development (minimum 2,577 s.f.; 24 feet x 107 feet), a 2.7 acre lot for affordable housing unit development (56 units) and a 14.6 acre lot containing the development roadways, a clubhouse building with in ground swimming pool, and a stormwater management basin. Access is proposed by a full-movement boulevard style drive at the approximate midpoint of the Route 79 site frontage with all units having access along interior roadways. The 224 townhouse units are proposed within 16 - 8-unit 3-story buildings and 16 - 6-unit 3-story buildings, all apparently containing a minimum of three (3) bedrooms with each providing a 2-car garage and driveway access. An additional 133 onstreet parking spaces, including clubhouse spaces with 2 electric vehicle parking/charging spaces, are proposed. The 56 affordable housing units are proposed within two (2) 3-story buildings with 113 on-street parking spaces provided. The affordable units are indicated to provide 11 1-bedroom, 33 2-bedroom and 12 3-bedroom units. All buildings are to be serviced by municipal water and sanitary sewer system via connection to an off-site existing water main along Route 79 and off-site sanitary sewer connection to an existing manhole immediately north of the subject tract boundary, while the stormwater basin is proposed to discharge via overland flow to an existing wooded area south of the site. Lighting and landscape improvements, including two (2) monument style site identification signs (one (1) each side of the Route 79 access drive), a tot lot recreation area at the affordable housing units and refuse enclosures at the affordable housing units and clubhouse area are also proposed.

2. Surrounding Uses

Properties north, south and opposite Route 79 of the subject site are zoned C-5 containing commercial uses along Route 79 and residential parcels to the north, residential and residential/agricultural parcels opposite Route 79 and a portion of the Henry Hudson Trail to the east. Properties east of the Henry Hudson Trail are zoned R-80 containing a residential/agricultural parcel in the vicinity of the subject site.

3. Zoning Compliance

The subject property is designated within a Generational Housing 2 District per recently adopted legislation New Law Ordinance No. 2019-14, Section 220-XX.2 "Generational Housing 2 Districts". The table below summarizes the bulk measures and zone requirements of the development per Ordinance Section 220-XX.2.



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Overall Tract:

DESCRIPTION	REQUIRED	PROPOSED
		TROI OOLD
Maximum Density	280 units	280 units
Minimum Tract Area	25 acres	34 acres
Minimum Front Setback	50 feet	70 feet
Minimum Side Setback	40 feet	45 feet
Minimum Rear Setback	50 feet	52 feet
Maximum Tract Impervious Coverage	65%	23.5%
Maximum Tract Building Coverage	35%	53.8%
Minimum Distance Between Buildings	20 feet	24 feet
Minimum Building Front to Front	60 feet	77 feet
Minimum Building Front to Side	40 feet	75 feet
Minimum Building Side to Side	20 feet	24 feet
Minimum Building Rear to Rear	50 feet	50 feet
Minimum Building to Internal Road or Parking	10 feet	13 feet



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Attached Single-Family/Townhouse Dwellings:

DESCRIPTION	REQUIRED	PROPOSED
Maximum Lot Area	2,000 s.f.	2,577 s.f. minimum
Minimum Lot Width	22 feet	24 feet
Minimum Lot Depth	100 feet	107 feet
Maximum Building Height	3-story/40 feet	3-story/<40 feet
Maximum Units per Building	8 units	8 units
Minimum Front Setback	20 feet	20 feet
Minimum Side Setback (exterior)	10 feet	12 feet
Minimum Side Setback (interior)	0 feet	0 feet
Minimum Rear Setback	15 feet	25 feet
Maximum Building Coverage	65%	43.3%
Maximum Impervious Coverage	90%	88.7%

Multi-Family Dwellings:

DESCRIPTION	REQUIRED	<u>PROPOSED</u>
Maximum Building Height	3-story/45 feet	3-story/<45 feet



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Accessory Structures:

DESCRIPTION	REQUIRED	PROPOSED
Maximum Building Height	15 feet	N/A
Minimum Side Setback	3 feet	N/A
Minimum Rear Setback	5 feet	N/A
Minimum Tract Boundary Setback	25 feet	N/A

The Applicant has not requested any variances and/or design waivers with this application, however, the following variances appear necessary:

- a. Section 220-23E(14) Lot grading shall be at a minimum slope of 1.5%; less than 1.5% is proposed within swale areas. We note a minimum grade of 0.5% indicated to be provided within General Note #19 on the Plans.
- b. Section 220-35D(24)(e) The maximum grade for lawns within 5 feet of a building shall be 10% and for lawns more than 5 feet of a building 25% (4:1); greater than 10% within 5 feet of a building appears proposed at the northwest corner of Building 13, southeast corner of Building 19, southwest corner of Building 21, northwest corner of Building 28 and southeast corner of Building 27 and 33% (3:1) grade is proposed along perimeter slope areas as well as at the rear of Buildings 18 and 19 and along the rear of the tot lot recreation area.
- c. Section 220-XXG(6) No building shall have an uninterrupted horizontal width of greater than 40 feet without a change in vertical plane of the façade. A step-back or projection with a minimum depth of 18 inches shall be provided; no projections or recesses appear proposed along the affordable housing buildings.
- d. Section 220-XX.2G(1)(a) Monument signs shall be permitted to have a maximum height of 8 feet; an overall sign height of 8.5 feet is proposed.
- e. Section 220-XX.2G(1)(b) Monument signs shall be permitted to have a maximum sign area of 100 s.f.; a sign area of approximately 116 s.f. is proposed, including the base and support column areas.
- f. Section 220-XX.2H(2) A landscaped buffer with a minimum width of 25 feet shall be provided around all tract boundaries; retaining walls are proposed within approximately



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5 feet and 2 feet along the southerly tract boundary. Site grading within 25 feet along the tract boundaries is also proposed. We note landscape plantings proposed along all tract boundaries which should be discussed with the Board regarding compliance with said buffer requirement.

- 4. The Applicant has not requested any waivers from providing required ordinance and/or checklist submission items. The following required ordinance and/or checklist submission items shall be provided or waivers requested:
 - a. **Section 220-137A(2)** All Landscape Plans, except for Minor Site Plans, shall be prepared by a professional landscape architect, professional landscaper or one who commonly prepares landscaping plans.
 - b. Section 220-137D(18) In the case of major subdivisions and site plans, there shall be provided in conjunction with preliminary review a report on prevailing soil and groundwater conditions.
- 5. Based on our review of the subject application, we estimate that the following fees are required:

a. Nonrefundable Application Fees:

Preliminary Plat Application Fee	\$500.00
Preliminary Plat Review Fee - \$100 per lot x 226 Lots	\$22,600.00
Final Plat Application Fee	\$500.00
Final Plat Review Fee - \$50 per lot x 226 lots	\$11,300.00
Bulk Variance	\$250.00
Environmental Impact Statement Review	\$400.00
Fee for each new tax lot - 76 to 100 lots	\$2,200.00
Townhouse and Condominium Development 1 to 10 units = \$200.00 + excess of 10 units = \$17.50 per unit (224 Units	\$3,845.00

Subtotal: \$41,695.00



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b. Professional Services Escrow Fees:

Preliminary Major Subdivision (101 to 500 lots)

\$10,000.00

Final Major Subdivision (101 to 500 lots)

\$5,000.00

Bulk Variance

\$1,500.00

Subtotal:

\$16,500.00

We recommend the Township collect \$41,695.00 in nonrefundable application fees and \$16,500.00 in professional services escrow fees from the Applicant prior to deeming the application complete. In addition, the Applicant will be required to pay all applicable revision fees as stipulated in the Township Ordinances.

- 6. This application is subject to the requirements of the Residential Site Improvement Standards (RSIS) adopted as NJAC 5:21-1 et. seq. The Applicant has not requested any waivers or deminimus exceptions from the RSIS requirements. An agreement to exceed said requirements should be filed with the DCA for any improvements which exceed the RSIS.
 - a. The Applicant appears to require a *deminimus* exception from the RSIS requirements for the following:
 - Section 5:21-4.16 (Table 4.4) Requirements for attached units (apartment, condominium and townhouse) include provisions for guest parking at a ratio of 0.5 spaces per dwelling unit, whereby 111 spaces would be required for the 56 affordable housing units plus 28 spaces for guest parking thereby requiring 139 total parking spaces; 113 parking spaces are proposed for the affordable housing units.
 - b. The Applicant proposes to exceed the RSIS requirements for the following:
 - Section 5:21-4.15 Each parking space shall measure 9 feet by 18 feet; 10 feet by 20 feet spaces are proposed for the affordable housing units and in the vicinity of the clubhouse building.
- 7. The Applicant should be prepared to discuss the following issues with the Board:
 - Compliance with the Generational Housing District requirements per Ordinance Section 220-XX, especially regarding the mix of low and moderate income affordable dwelling units (220-XXD(3)), income limits and bedroom distribution (220-XXD(4)) and



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building design standards (220-XXD). We note that no Architectural Plans have been submitted.

- b. Whether any phased construction of the dwelling units is proposed, including whether any threshold regarding construction of the affordable housing units and/or clubhouse improvements would be required.
- c. Timing associated with the installation and removal of the sales and construction trailers and construction of the model units must be reviewed. Parking associated with the sales trailer should also be reviewed.
- d. The need for any additional recreational amenities at the clubhouse and/or tot lot areas, as well as any walking paths, including connection to the adjoining Henry Hudson Trail.
- e. Whether the clubhouse would be available for any special events (weddings, birthdays, etc.).
- f. Operations associated with the electric vehicle parking/charging spaces at the clubhouse, including any restrictions regarding timing/duration of parking/charging.
- g. The need for any bikeway along the Route 79 site frontage in accordance with Ordinance Section 220-XX.2F(2).
- h. Whether any fencing along the sides of private rear yard areas would be permitted.
- i. The proposed stormwater management of the site and compliance with NJDEP requirements regarding quantity, quality and recharge. As the proposed stormwater basin will be if privately owned, the need for same to be protected by easement, deed restriction, ordinance, or other legal measures that prevent its neglect, adverse alteration, or removal.
- j. The need for any fencing to the rear of Building #27 or along the rear of the basin.
- k. Whether any mail kiosks would be provided at the affordable housing units.
- Circulation of large wheel-base vehicles (emergency, refuse, buses, etc.) throughout the site must be reviewed with the Board. Our office would recommend providing a Truck Turning Radius Plan.
- m. As the roadways appear to be private, the need for easements along all sanitary sewer and water main pipes as well as along the northerly tract boundary for the offsite sanitary connection.



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n. The proposed improvements along the Route 79 site frontage must be reviewed with the Board. Our office defers all comment regarding any improvements within the Route 79 right-of-way to the NJDOT, including Access Permit.

- 8. This application may be subject to the following outside agency approvals:
 - a. Monmouth County Planning Board
 - b. Freehold Soil Conservation District
 - c. NJDEP Letter of Interpretation (LOI)
 - d. NJDOT Access Permit
 - e. Marlboro Township Environmental Commission
 - f. Marlboro Township Fire Bureau
 - g. Marlboro Township Police Department
 - Marlboro Township Water Department
 - i. All other outside agency approvals as may be required. The Applicant shall address the Board regarding the status of all outside agency approvals for the project. In addition, copies of all outside agency approvals shall be forwarded to our office.

Our office has prepared the attached Technical Engineering Review #1. The items contained therein should be addressed by the Applicant's Engineer.

The right is reserved to present additional comments pending the receipt of revised plans and/or the testimony of the Applicant before the Board.



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If you have any questions with regard to the above matter, please do not hesitate to call.

Very truly yours,

CME ASSOCIATES

CIME ASSOCIATES

Laura J. Neumann, PE, PP

Planning Board Engineer and Planner

LJN/GAC/pg/BM Enclosure(s)

CC:

Marlboro Township Engineering Department

Michael W. Herbert, Esq. - Planning Board Attorney

El at Mariboro 79, LLC - Applicant

Bowman Consulting Group, LTD. - Applicant's Engineer

Maser Consulting, PA – Applicant's Surveyor Salvatore Alfieri, Esq. – Applicant's Attorney



MARLBORO TOWNSHIP PLANNING BOARD

El at Marlboro 79, LLC/Marlboro Parke (1201-20) CME File No.: HMRP0415.09

PRELIMINARY AND FINAL MAJOR SUBDIVISION AND SITE PLAN

March 6, 2020

TECHNICAL ENGINEERING REVIEW #1

A. General

- 1. Verify Zone District for the property indicated on the application.
- Verify the following items indicated as provided within the zoning table(s): building setback front to side and rear to rear as well as to internal roadway/parking; number of COAH parking spaces; parking setback to overall tract; minimum lot area for fee simple townhouses; conservation/recreation and open space area; and monument sign height, area and setback.
- 3. Verify number of stories indicated for six (6) unit townhouses on the Overall Site and Orientation Plan.
- 4. Verify parking count indicated as five (5) spaces at the affordable housing units.
- 5. Verify location of fence along retaining wall as same does not match between Plans and Wall Detail.
- 6. Provide on the Plans spacing of daylighted drainage pipes for the proposed retaining walls to avoid confusion during construction.
- 7. Revise the Wall Detail to show geogrid fabric as required by the design report, ultimately to be provided to this office.

B. Grading

- 1. Provide curb grade at east corner of seven (7) vehicle parking area north of Building 7.
- 2. Verify tie into existing topography for proposed 206 and 207 elevation contours north of Building 3.
- 3. Verify grate elevations for Inlets 109 and 110 along Road B opposite Sta. 0+50.
- 4. Provide 4:1 maximum slope north of Buildings 11 and 13 and 30 and 31.



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Technical Engineering Review #1

- 5. Clarify high point ("HP") spot grade between Buildings 11 and 13.
- 6. Verify tie into existing topography for proposed 113 contour north of Building 5.
- 7. Provide curb grades at corners of six (6) vehicle parking area opposite Building 5.
- 8. Verify corner grades and/or grading along front and north side of Building 15 as well as building floor grades.
- 9. Verify building grade at northeast corner of Building 18.
- 10. Provide curb grades at corners of six (6) vehicle parking area west of Building 24.
- 11. Verify/clarify grading of 106 elevation contour along curb of six (6) vehicle parking area at terminus of Road 5.
- 12. Provide HP spot grade west of clubhouse pool.
- 13. Verify curb grade at south corner of parking area along front of clubhouse.
- 14. Provide 203 elevation contour along front of Building 32 and grading of 200 elevation contour south of same would appear to require tree clearing/removal along the property line.
- 15. Indicate HP spot grade between Buildings 10 and 12.
- 16. Indicate HP spot grades behind curb between Buildings 32 and 33 and 33.
- 17. Verify grades along rear of Building 34.
- 18. Provide curb grades at north corners of parking areas at beginning of Road 3 and verify grate elevation for Inlet 102.
- 19. Verify westerly wall grade TW 193.50 along property line.
- 20. Provide HP spot grades between Buildings 14 and 16 and south of Building 14 as well as north and south of Building 16.
- 21. Provide HP spot grades between Buildings 18 and 20 and Buildings 18 and 19.
- 22. Provide HP spot grades for swales along both sides of Building 20 and provide corner curb grades at parking area opposite same.



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- 23. Verify TW 198.50 and BW 186.00 at east end of the stormwater basin.
- 24. Provide curb grades at all corners of parking areas for the affordable housing buildings and indicate/verify HP spot grades within same, including curb I sland between Buildings 25 and 26.

C. Stormwater Management

- Verify pipe slope Inlet 108 to 107 and pipe length Inlet 104B to 104A between Plan and calculations.
- 2. Verify grate elevations for Inlets 211 and 210 between Plan and calculations.
- 3. Verify pipe lengths for Inlet 208 to 207, 205C to 205B and 205B to 205A between Plan and calculations.
- 4. Verify pipe slopes for Inlet 310A to 310, 306B to 306A and 306A to 306 between Plan and calculations.
- Verify inverts for Inlets 306B to 306A between Plan and calculations.
- 6. Verify pipe length Inlets 306B to 306A, 306A to 306, 302B to 302A and 302A to 302 between Plan and calculations.
- 7. Verify pipe length and slope Inlet 403 to 402 between the Plan and Calculations.
- 8. Verify pipe size at HW 300 on the Scour Hole calculations and Detail.
- 9. Verify Outlet Control Structure information between the Plan and Detail.
- 10. Revise callout for Outlet Control Structure on Plans to include inverts for 1.25' weir crest and 2.5" orifice.
- 11. Verify grate elevations for Inlets 104B and 104A on Profile for same.
- Add Inlet 306 to Profile Inlet 306B to 306.
- 13. Add Inlet 210 and verify grate elevation for Inlet 211 on Profile Inlet 211 to 203.
- 14. Verify grate elevations for Inlets 209A and 209 on Profile Inlet 209C to 209.
- 15. Verify grate elevations for Inlet 207D, 207C and 207B on profile for same.



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- 16. Verify grate elevations for Inlet 205C to 205A on Profile 205C to 205.
- 17. Verify grate elevations Inlet 203E and 203D and add Inlets 203F and 202A to Profile Inlet 203E to HW 200.
- 18. Add Inlets 201F and 201H and verify grate elevation Inlet 201A on Profile Inlet 201G to 201A.
- 19. Provide a profile for Inlet 201D to 201.
- 20. Verify grate elevations for all on Profile Inlet 404 to HW400.
- 21. Add Inlets 310A and 308A on Profile Inlet 312 to HW300 and provide a profile for Inlet 309B to 309.
- 22. Verify grate elevations Inlets 110 and 109, add Inlet 107A, add pipe information for Inlet 105 to 104 and verify grate elevation Inlet 102 on Profile Inlet 111 to HW 100.
- 23. Verify grate elevations Inlets 302C, 302B and 302 A on Profile Inlet 302C to 302; also verify proposed grade line Inlet 103 to 102.
- 24. Verify grate elevations Inlets 106B and 106A and add Inlet 106 with pipe information on profile for same.
- 25. Verify proposed grade line on all storm profiles as many structures appear below grade.
- 26. Label and dimension the basin emergency spillway and provide a detail for same.
- 27. Verify fence height along basin between Plan and Basin Section Detail.
- 28. The height of the dam (15.25 feet), which is measured from the invert of the outlet pipe to the spillway elevation (pursuant to N.J.A.C. 7:20-1.2) exceeds the maximum height of 15 feet for a Class IV Dam classification. It appears dam classification is required for the proposed pond in accordance with the requirements of the Dam Safety Standards (N.J.A.C. 7:20). Our office notes that emergency spillway calculations for Class IV Dams must safely pass the 24-hour 100-year frequency Type III storm plus 50 percent.
- 29. In accordance with the BMP Manual, soil tests are required at the exact location of the proposed basin in order to confirm its ability to function as designed. A minimum of two soil profile pits are required within the infiltration area of the proposed infiltration basin.



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- Permeability tests are required and must be consistent with Appendix E: Soil Testing Criteria in the NJ Stormwater BMP Manual, including the required information to be included in the soil logs, which can be found in section 3.b Soil Logs.
- 31. Revise the groundwater recharge spreadsheet accordingly as it appears the default Post-D Impervious Area (Aimp) is used whereas Aimp should reflect the impervious area tributary to the basin.
- 32. Provide drain time calculations for the basin to demonstrate the basin drains within 72 hours.
- 33. Revise the infiltration basin detail accordingly as filter fabric is required only along the sides of the infiltration basin to prevent the migration of fine particles from the surrounding soil.
- 34. Include a note on the plan to indicate excavation and construction of the basin must be performed using equipment placed outside the limits of the basin.
- 35. Revise the Operation & Maintenance Manual to include cost estimates of maintenance tasks, including sediment, trash and debris removal, etc.
- 36. Indicate the basin design drain time in the Operation & Maintenance Manual.
- 37. Revise the Tc as shown on the Existing Drainage Areas Map to minutes, not HRS.
- 38. Revise the "Typical Section Stormwater Basin" to read "Extended Detention-Infiltration Basin Detail".
- 39. Revise the basin detail to note elevations for basin bottom, maximum stormwater quality design storm water surface, and bottom of sand layer.
- 40. Revise callout for flared end section "proposed storm115" located after basin outlet control structure.
- 41. Revise the Stormwater Report to include Groundwater Mounding Analysis as required by N.J.A.C. 7:8-5.4(a)2.iv for the proposed extended detention-infiltration basin. For information on conducting a groundwater mounding analysis, please see Chapters 6 and 9.5 of the BMP Manual.
- 42. Revise the Test Pit Location Plan included within Stormwater Report as same does not appear to match proposed overall site plan layout.



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- 43. Revise the Test Pit Location Plan to show the location of all 22 test pits as noted by Stormwater Report.
- 44. Revise each of the Log of Test Pit sheets to note actual ground surface elevation using real datum, as Google Earth is not acceptable. Once datum and test pit elevations are actually determined and revised, the updated test pit locations shall be plotted on the Grading & Utility Plans.

D. Landscaping

- 1. Provide an overall landscape schedule.
- Revise the landscaping plans to provide match lines and remove call outs for plant materials not referenced in the schedule. The Applicant has provided separate landscape schedules on individual sheets; however, it is difficult to determine which landscape materials are referenced in each schedule to confirm quantities.
- The Applicant might consider providing scattered shade trees along the south and southwest areas of the proposed pool, to provide future shade for some areas of the pool decking. The Applicant might consider Honeylocust, due to the fruitless varieties and small leaves.
- 4. The Applicant has proposed PTGC (Japanese Spurge) as a ground cover in front of the proposed Club House. Our office recommends providing a hardier groundcover, as PTGC can be difficult to establish and also prefers shade locations. The Applicant might consider Liriope, Gro-low Fragrant Sumac, Deutzia, or another similar species.
- Revise the four (4) plans provided for foundation landscape plans based on solar orientation to include plant materials that are specific to each direction and are not duplicated on other foundation landscape plans in order to increase site diversity.
- 6. Revise the plans so that a location is indicated for the proposed playground, as a detail for same is provided.
- 7. Provide the specifications for the safety surfacing within the proposed play area for further review.
- 8. Revise the landscape perimeter buffer to ensure a continuous evergreen buffer planting along its entirety. Our office recommends providing a mixture of species as the Applicant currently has proposed; however, large gaps should not be created when providing deciduous trees.



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- Revise the plans to provide greater diversity within the landscape buffer. Dawn Redwood, Tulip tree, London Plane, Sweetgum, Green Giant Arborvitae, Serbian Spruce, Red Cedar, etc. should all be considered.
- Verify the proposed landscaping is not atop underground utilities, to avoid potential conflicts.
- 11. Revise the plans so that proposed street trees are provided eight (8) to ten (10) feet back from the proposed sidewalk, where feasible, to reduce root/hardscape conflicts.
- 12. Revise the plans so that proposed street trees are provided closer to 50 (fifty) feet on average, to reduce overcrowding.
- 13. Provide a different species in place of the proposed ASAC (Sugar Maple) near sidewalks and parking areas, as this species is sensitive to road salt and should be used only in open space and buffer areas.
- 14. Provide a different species in place of the proposed PCCC (Chanticleer Select Pear) as this species is not an acceptable tree selection due to being a highly invasive species and prone to branch failure.
- 15. Revise the plans to reduce the quantity of trees in the Red Oak family, as Bacterial Leaf Scorch (BLS), a viral disease without a known cure, is present in the area. The Red Oak family is more susceptible to BLS than the White Oak family. Provide a greater quantity of trees within the White Oak family instead.
- 16. Revise the plans to avoid proposing PSTR (White Pine) in large groupings due to the species' mature habit of losing its lower branches, which does not provide adequate visual screening. The Applicant might utilize PSTR as a single tree within buffer areas in small quantities.
- 17. Revise the plans to reduce the quantity of proposed TCCH (Hemlock) as this species performs best in partial sun-partial shade and is susceptible to Hemlock Wooly Adelgid (HWA). Provide a greater quantity of trees within another acceptable family instead.
- 18. Revise the plans to provide an alternative for proposed TCGS (Greenspire Littleleaf Linden), due to the species' susceptibility to insect infestation. Our office recommends Silver Linden, due to the species' greater resistance to Japanese beetle.
- 19. Revise the 'Plant Schedule South East', sheet 8D, to indicate specific container sizes for proposed Ornamental Grasses, to prevent confusion during construction. Also,



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indicate a minimum size of eighteen (18) inches for proposed SJNF (Neon Flash Spirea).

- 20. Revise the plans to include specifications on the proposed basin seed mix and the general site seed mix to prevent confusion during construction.
- 21. Revise scale/size of proposed shrub graphics, to indicate a semi-mature size. Typically, shrubs are indicated with a graphic size of three (3) to four (4) feet, while currently some of the proposed shrubs are depicted at ten (10) feet wide.
- 22. Revise the plans to provide mulch bed limits on the plans, to prevent confusion during construction, specifically for those proposed within the buffer.
- 23. Remove the detail for 'Vine Planting', sheet 14 of the details as it does not appear any vines are proposed.
- 24. Revise the tree planting details, sheet 14 of the details, to indicate that all wire baskets shall be removed prior to backfilling the planting pit.
- 25. Revise the tree planting details to indicate that only two (2) stakes are necessary, not three (3).
- 26. Revise the 'Deciduous Tree Planting' detail, sheet 14 of the details, to remove the note referencing biodegradable tape, as current industry standards does not endorse the use of such. However, indicate rigid, plastic, open mesh trunk guards to prevent the irreparable damage from buck rub.
- 27. Provide a detail of rigid, plastic, open mesh trunk guards to prevent the irreparable damage from buck rub.
- 28. Revise the 'General Planting Notes', sheet 14 of the details, to indicate the required deer trunk protection as mentioned above.
- 29. Revise the 'General Planting Notes', sheet 14 of the details, to indicate the Township Engineer in Notes #6 through #8 inclusive.

E. Lighting

 Revise the plans to provide a Luminaire Schedule on each sheet as well as an overall schedule, to include quantities, color and finish, mounting height and ordering information for both fixtures and poles for further review.



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- 2. Revise the plans to provide a data summary chart, to separately indicate average, minimum and maximum light footcandles throughout the parking areas and the proposed roadways, for further review.
- 3. Revise the plans to indicate the proposed timers and hours or operation.
- 4. Revise the plans to provide full manufacturer's catalog cuts for all proposed fixtures and light poles.
- 5. Revise the plans to provide details for any proposed building mounted light fixtures.

F. ADA

- 1. We defer compliance with ADA requirements to the Construction Code Official. At a minimum, our office has the following comments:
 - a. Revise the 'Handicapped Parking Space', sheet 12A, to indicate a five (5) foot wide accessible aisle with standard stalls eight (8) feet wide and van accessible stalls eleven (11) feet wide, in accordance with the current preferred standards. The plans should depict same.
 - Revise the 'Concrete Sidewalk' detail, sheet 15 of the details, to indicate a broom finish, to ensure a slip resistant wearing surface, in accordance with ADA requirements.

G. Signs

 Revise the sign details, sheet 12B, to provide the following note: Sign supports and support foundations shall be designed to sustain minimum design loadings for dead, live, wind and seismic conditions, in accordance with the Building Code having jurisdiction.



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H. Woodland Management

- 1. Revise the plans to graphically depict tree protection fencing at the limit of disturbance.
- 2. Revise the plans to provide a note that a tree removal permit shall be secured prior to any site disturbance.
- In accordance with Section 220-177A, shade trees shall be planted an average of fifty (50) feet apart along roadways. Due to this requirement, proposed street trees are to be exempted from replacement tree calculations. Revise the calculations to reflect same.

H. Environmental

- 1. The Applicant needs to submit a preliminary site investigation report in accordance Ordinance §220-159.1, that indicates historical information on the previous uses of the site and identifies any areas of concern that may warrant soil testing. The submitted Environmental Impact Report indicates that a "Report of Phase 1 Environmental Site Assessment" was generated by Geo-Technology dated October 2016 was prepared for the Site. We note that the EIR indicates historical agricultural use of at least portions of the Site, a condition that will require a Site Investigation, in accordance with the NJDEP document entitled "Historically Applied Pesticide Technical Guidance", dated December 2018.
- Revise the EIR to include the missing Page 2 section that addresses water quality, and a confirmatory statement regarding the lack of need for any NJDEP land use permitting.
- 3. Revise the Grading & Utility Plan to include a note that states any imported fill must need the definition of Clean Fill, pursuant to the Technical Requirements for Site Remediation per N.J.A.C. 7:26E-1.8.

I. Traffic

- 1. Provide roadway centerline by centerline intersection stations and grades on all road profiles and indicate proposed centerline spot grades at 50 foot interval.
- 2. Clarify PVI data at Sta 9+16 on Road A Profile.
- 3. Provide ground break data at Sta 0+12, 2+54 and 2+75 on the Road 1 Profile as well as stationing datum.
- 4. Clarify PVI data at Sta 2+95, 5+39 ad 9+00 on Road B profile.



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- 5. Provide ground break data at Sta 0+12 and 2+66 on Road 2 Profile and indicate centerline spot grades at 50 foot interval as well as stationing datum
- 6. Clarify PVI data on Road 5 Profile.
- 7. Provide Profile for Road C.
- 8. Provide stationing along Road A on the Plans.
- 9. Provide dimensions on the Typical Roadway Section Route 79 Detail.
- 10. The Desired Typical Section Line along Route 79 should be indicated on the Plans and additional building setbacks should be provided to same.
- 11. The Applicant states that the site trip distribution was done based on observed traffic patterns. The Applicant should discuss how the 30% trip distribution to NJ State Route 18 was observed.
- 12. The Traffic Engineering Evaluation Table 1 should be revised. The 2019 Existing Conditions for the intersection of S. Main Street/School Road do not depict the same delays as the HCS reports in the appendix.
- 13. The no-build condition includes movements that have a LOS F with up to 438 seconds of delay. While the delay is not due to the extra trips from the proposed site, the Applicant should consider testifying about the feasibility to mitigate some of the delay with signal optimization to lower the overall delay of the signal to create less traffic in the area of the development.
- 14. With a cartway of 24 feet, the Applicant should include signage along the roadways for No Parking.
- 15. The Site Plan should label all proposed signage.
- 16. Spot grades should be shown for accessible ramps and parking spaces to ensure slopes and design intent, particularly along Road A for the atypical ramps.
- Ramps for the sidewalk within the parking lot island and near the accessible parking in the southeast parking lot should be depicted.
- 18. The Site Plan should include sight triangles at each intersection. Vertical sight distance at the site entrance should be included as well.



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- 19. The Applicant should consider including a speed limit sign at the entrance to the development.
- 20. Additional detail should be included to depict how the Belgian Block Curb will be transitioned from Full Height Curb to Depressed Curb as well as 4" Mountable Curb to Depressed Curb.
- 21. The Site Plan depicts 246 parking spaces located throughout the development which requires seven (7) accessible parking spaces which is provided. The Applicant's Engineer should consider additional accessible parking spaces on Road A to provide better access throughout the development.

J. Major Subdivision Plat

- Indicate offset distances, per the Survey Plans, for the concrete monument found and With regards to the Major Subdivision Plat, verify the need for drainage easement along the common line of Lots 22.36/22.37, along the rear of Lot 22.151 and portions of the common line between Lots 22.93 and 22.94 with Lots 22.107 and 22.108 where no drainage pipes appear proposed.
- the iron pipe found at the northerly end of the Route 79 right-of-way line.
- 3. Revise the Plat and Construction Plans to indicate the landscape buffer easements and a WMUA sanitary sewer easement on adjoining properties along the northerly tract boundary as per Tax Map information.
- 4. Provide lot distance along rear of Lot 22,86.
- 5. Verify curve lengths for C2 to C6 as they conflict with indicated overall curve length.
- Verify lot dimension along front of Lots 154 to 158 as they conflict with overall dimension.
- 7. Provide lot dimension along westerly property line of Lot 22.175 and provide lot dimension along southerly property line of Lot 22.226 west of Lot 22.175.
- 8. Revise Title Block to indicate Major Subdivision Plan.
- Revise all curve data to include the central angle.
- 10. Label all non-radial lines.



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- 11. Revise the north arrow meridian to indicate coordinate base utilized and a minimum of 3 tract corners should indicate calculated coordinate values.
- 12. Indicate and note all easements on the Layout/Dimension Plan and the Grading/Utility Plans.
- 13. Indicate on the Plat the outbound closure calculation.
- 14. Revise the Surveyor's signature approval certification to indicate the preparation dates of the Survey Plan utilized.
- 15. Revise the Planning Board signature approval certification to indicate the time frame permitted for filing of the Plat with the County Clerk's Office.
- 16. Remove the Municipal Clerk's signature certification as it does not appear to be required since the proposed roadways would appear to be private roads and that no dedication areas are to be provided as well as that no monuments appear to be set.
- 17. Provide the NJDOT Desired Typical Section Line along Route 79 on the Plat.