



March 27, 2023

Planning Board
Town of Hingham
Attn: Michael Silveria
210 Central Street
Hingham, MA 02043

**RE: Peer Review Comments
Proposed Flexible Residential Development**

Dear Members of the Board;

This letter is being submitted in response to the peer review comments received by Patrick Brennan of Amory Engineers, P.C. and the Traffic Engineering peer review provided by Jeffrey Dirk of Vanasse & Associates regarding the Definitive Flexible Residential Development Plan for at 213-215 Cushing Street in Hingham, Massachusetts. Crocker Design Group, LLC (CDG) has reviewed the comments and offers the following responses below. In addition, the following revised and supporting documents are enclosed:

- Exhibit A - Definitive FRD Plan – Prepared by Crocker Design Group - Revised March 27, 2023
- Exhibit B - Stormwater Management Report – Prepared by Crocker Design Group – Revised March 27, 2023
- Exhibit C – Memo from Drohan, Tocchio and Morgan – dated March 27, 2023

Peer Review by Amory Engineers, P.C.

This is the second iteration of comments received by Amory Engineers, the original letter was received on December 22, 2022. Mr. Brennan’s original comments are in *italic* text and his new comments are shown in standard format. CDG’s responses are in **bold** below each comment.

Compliance with the Zoning Bylaw

1. *ZBL §IV-D.8.d considers surface retention and detention ponds to be wetlands, which should not be counted toward the minimum open space percentage. The note on Sheet C-4 states that “minimum open space calculation includes tree preservation, basins and septic areas and excludes wetlands, individual house lots and any/all green space within the R.O.W.” The note goes on to read “basins account for 5.7% of open space (less than the 9.2% allowed).” This should be explained further as we question why basins are included in the open space calculation. Addressed – basins are no longer included in the open space calculation. Green space within the proposed roadway right-of-way is also not included in the open space calculation. Proposed open space is now 52.9% of the total land area.*

Response: Addressed

2. *As was the case with the preliminary FRD plan, the 100 foot wide perimeter buffer from adjacent properties will not be provided along portions of the north east and south property lines as required by ZBL §IV-D.9.d. Also, since this application is also for Site Plan Approval, the Tree Yard should be shown on the plans along with a tree protection plan in accordance with ZBL §I-1.5.h. The plan should include an inventory of mature trees to be removed and planted to confirm compliance with ZBL §I-1.6.d(ii).* In the response CDG states that “the Open Space buffer along the perimeter of the site is substantially unchanged from that previously approved by the Special Permit A3. An inventory of mature trees on the site is provided on Sheet C-3 of the Plan Set.” We could not find the inventory of mature trees on the plans. The response goes on to state “as the proposed Definitive FRD has been revised to omit individual house lots, CDG has not included Tree Yards on the plans.” The Tree Yard should be shown for the entire parcel.

Response: All the existing mature trees on-site are shown on sheet C-3 as well as the proposed limit of work. An inventory table of the mature trees on site has been added to this sheet as well. The Tree Yard has been added and is shown on Sheet C-5.

3. *In accordance with ZBL §IV-D.10.e, the plans should contain a note stating that “no lot shall be further subdivided.”* Addressed – this note has been added to Sheet C-4.

Response: Addressed.

Compliance with the Planning Board Rules and Regulations

1. *R&R §3.C.2(a) requires two permanent benchmarks to be shown on the plan. No benchmarks are shown on the plans.* Addressed – two benchmarks are shown on Sheet C-5.

Response: Addressed. No response required.

2. *R&R §3.C.2(l) requires the proposed size, type and species of proposed trees to be shown on the plan. Proposed street trees and a ten foot wide street tree planting strip should be in accordance with R&R §5.B4.* The proposed size, type and species of proposed trees are specified on Sheet L1. The Applicant is seeking a waiver from R&R §5.B4 to allow for a twenty-foot wide planting strip rather than the ten foot wide strip required.

Response: The plans have been revised to shift the street trees closer to the roadway so that the proposed trees are located within the 10’ wide planting strip as required by R&R §5.B4. The Applicant is no longer requesting a waiver from this subsection.

3. *R&R §4.B(4)(b) requires sloped granite curbing around the inside island of a cul-de-sac turnaround. Cape Cod berm is proposed.* The Applicant is seeking a waiver to allow for the Cape Cod berm in lieu of sloped granite curbing. However, the waiver from §4.B(4)(b) listed on Sheet 1 should include reference to the Cape Cod berm and sloped granite curbing.

Response: The Applicant is no longer requesting this waiver. Sloped granite curbing is now proposed in the cul-de-sac island.

4. *R&R §4.C(1) prohibits “retention or direct subsurface discharge of storm water.”* There is a proposed subsurface infiltration system that is designed to retain and infiltrate runoff

from the easterly 280 feet of roadway. The Applicant is seeking a waiver to allow for retention and direct subsurface discharge of storm water. In the response, CDG notes that the road is proposed to remain private and “any maintenance and upkeep of the system will be the obligation of, and conducted by, the Condominium Association.”

Response: No response required.

5. *R&R §4.C(e) and §5.L1(9) require a concrete or masonry headwall at the outfall end of all drains. Flared end sections are proposed.* Addressed – a concrete headwall is now specified at the outfall.

Response: Addressed.

6. *R&R §4.E requires that all stormwater management structures for detention and/or retention be open basins constructed of natural earth material with loam and seed surface. As noted above, a subsurface infiltration system is proposed.* The Applicant is seeking a waiver to allow for the subsurface infiltration system.

Response: No response required.

7. *R&R §4.E also limits the maximum side slope of stormwater facilities to 25% or 4H:1V. The side slopes of the proposed basins are 3:1.* The Applicant is seeking a waiver to allow the 3:1 side slopes.

Response: No response required.

8. *R&R §4.L(6) requires documentation that there will be a minimum of 1,000 gallons of water per minute at the proposed fire hydrant. Documentation should be provided to verify this. We also believe that a hydrant should be located near Cushing Street since the nearest hydrants along Cushing Street are about 340 feet and 500 feet from the proposed road intersection.* CDG included a letter from Weir River Water System, dated February 28, 2022, which indicates that it has the capacity to serve the development. However, there is no indication that 1,000 gallons per minute fire flow will be provided. An additional hydrant is shown near the intersection with Cushing Street.

Response: An additional hydrant was added near Cushing Street after coordination with the Weir River Water System (WRWS) and is shown on Sheet C-8. CDG has coordinated with WRWS and is scheduling a hydrant flow test to ensure 1,000 gallons per minute fire flow can be provided at this location. When the test is complete documentation will be provided.

9. *R&R §4.L(7)a. requires a ten foot wide electric easement around all Hingham Municipal Lighting Plant (HMLP) infrastructure. The Applicant should coordinate with HMLP as necessary and the easements, if required, should be shown on the definitive plan.* Addressed – the HMLP easements are shown on the plans.

Response: CDG has coordinated with Hingham Municipal Lighting Plant (HMLP) on easement and utility pole locations and the changes are reflected on the Lotting plan, Sheet C-4.

10. *R&R §5.L1(4) requires HDPE drain pipe to have rubber gaskets. This should be specified on the plans.* Notes have been added to the catch basin and drain manhole

details to specify rubber joints. However, we believe this note should also be added to the Typical Storm Pipe Trench Detail on Sheet C-10.1.

Response: The same note that was added to the catch basin and drain manhole details on Sheet C-10.1 has been added to the Typical Storm Pipe Trench Detail stating that all joints for HDPE pipes must be equipped with rubber gaskets.

11. *R&R §5.L1(5); §5.R1(22) and §5.T3(6) require granite curb inlets at all catch basins. Curb inlets are not proposed.* The Applicant is seeking a waiver to not install the granite curb inlets.

Response: The Applicant is no longer requesting a waiver. Granite curb inlets are proposed.

12. *R&R §5.Q1(1) requires drain manholes to have bricked inverts. This should be specified on the Precast Concrete Drain Manhole detail on Sheet C-10.1.* Addressed – the detail on Sheet C-10.1 now specifies bricked inverts.

Response: Addressed.

13. *R&R §5.R1(6) requires catch basins to be five feet in diameter and 8'-6" deep. The proposed catch basins are four foot diameter with a four foot sump, which is MassDOT and industry standard.* The Applicant is seeking a waiver to allow the four foot diameter catch basins with four foot sumps.

Response: No response required.

14. *R&R §5.X1(1) requires frames on catch basins and drain manholes to be set in a full bed of mortar with a maximum of four and minimum of two courses of bricks for adjustment to finish grade. The catch basin and manhole details on Sheet C-10.1 should specify this requirement.* Addressed – the catch basins and drain manhole details specify a maximum of four and minimum of two courses of bricks.

Response: Addressed.

15. *R&R §5.L2(8) requires twelve inches of gravel base for sidewalks. The sidewalk detail on Sheet C10.1 should specify this. We note that the detail shows a concrete sidewalk and the plans and application materials indicate a "paved" sidewalk, which could be either concrete or bituminous concrete. Clarification is needed.* The detail on Sheet C-10.1 is now titled "Bituminous Concrete Sidewalk" and it specifies twelve inches of gravel. However, the welded wire mesh should be removed from the detail as this is only required in concrete walks.

Response: CDG concurs. The welded wire mesh is not necessary for a bituminous concrete and has been removed from the detail.

16. *Proposed street lights are shown on the Utilities Plan (Sheet C-8). Specifications of the street lights should be provided to verify compliance with R&R §5.X3.* Specifications for the proposed street lights are included on Sheet L1. The Applicant is seeking a waiver to allow for a fourteen foot mounting height rather than the twenty-five foot height specified in R&R §5.X3(6).

Response: Addressed.

17. *There should be a loam and seed detail that specifies a minimum of six inches of loam in accordance with R&R §5.A4(3).* Addressed – a Loam and Seed Detail has been added to Sheet C-10.1.

Response: Addressed.

18. *R&R §5.C4(1) requires granite Hingham Highway bounds to be set at all street intersections and at all points of change in direction or curvature of streets. R&R §5.C4(3) also requires at least one sideline of each lot be marked with a bound. A bound/monument detail should be shown on the plans.* Addressed – bounds are shown where required and Bound Details have been added to Sheet C-10.2. However, the lettering on the bounds should be “HHB” rather than “MHB.”

Response: The lettering on the bound details on Sheet C-10.2 have been revised from “MHB” to “HHB”.

General, Utilities, Stormwater & Erosion Control

1. *The proposed roadway and sidewalk pavement is located within a foot of the proposed right-of-way line along the south side of the road and about half of the north side. This will make maintenance of the road and sidewalk difficult without disturbing adjacent private property.* The Applicant is seeking a waiver to allow for a reduced width of right-of-way from 46 feet to 37 feet. Also, since the road will be private and the road and adjacent land will be owned by the Condominium Association, future maintenance will not disturb ‘private’ property. As we noted in the February 13, 2023 public hearing, we question why a right-of-way is being created. With the project now being a condominium, there is no need for a right-of-way.

Response: The Applicant is now requesting a waiver for the right-of-way width to be reduced from 46 feet to 40 feet. While the project is now proposed as a condominium the right-of-way is necessary due to 211 Cushing Street relying on the old paper street subdivision for its frontage. See Memo from Drohan, Tocchio and Morgan attached as Exhibit C.

2. *Proposed grading off the northeast corner of the unit on Lot 3 indicates that the retaining wall will be about five feet high. This will require a building permit and engineered design.* Proposed grading has been adjusted so that retaining walls will not be greater than four feet. However, at four feet high the walls will still require a building permit and engineered design.

Response: The proposed grading has been adjusted so the retaining wall around the vernal pool buffer is less than 4’ tall. Spot shots have been added to Sheet C-6 to better depict the elevations.

3. *We recommend that the proposed guardrail shown on the retaining wall adjacent to the driveway on Lot 3 be extended to the northeast, around the turnaround to about Sta. 5+10.* Addressed – the retaining wall has been revised as recommended.

Response: Addressed.

4. *The Cape Cod Berm Detail on Sheet C-10.1 should show the berm to be placed monolithically with both the binder and surface courses of pavement so that runoff may be controlled during the time between the placement of pavement courses.* The detail specified that the berm is to be placed with monolithically with both pavement courses, but the detail does not depict that graphically.

Response: The detail has been revised accordingly to graphically depict the berm to be placed monolithically with both pavement courses. This change can be seen on Sheet C-10.1 of the revised Definitive FRD Plan set.

5. *Access routes to the drainage basins for maintenance equipment should be shown on the plans. Same should be shown for access to the septic system leaching facility.* An easement is shown around the drainage basin and the pipe leading to the basin. Since this is a Condominium and the basin will be owner by the Condominium Association, we don't believe that easements are required.

Response: We recognize Mr. Brennan's comment. The proposed subdivision road to remain private and under the control of the Condominium Association, therefore the plans show easements for all related infrastructure that serves the roadway.

6. *The storm event elevations for Drywell System DW-1 are incorrect on Sheet C-6.* Addressed – the storm event elevations have been revised accordingly.

Response: Addressed. No response required.

7. *The Catch Basin Leaching Pit (DW-1) Detail on Sheet C-10.3 shows an 8-inch PVC pipe between the catch basin and drywell. This should be 12-inch HDPE and it should be noted that there is a water quality unit between the catch basin and drywell.* Addressed – the water quality unit has been added to the detail and the pipe is shown as 12-inch. However, we suggest that the dimensions of the system be added to the detail (total length, depth and width). This information should also be provided on the details for the other two systems.

Response: Dimensional information such as length, depth, and width have been added to all the drywell details. These changes can be seen reflected on Sheet C-10.3 of the Definitive FRD Plan set. The labels on Sheet C-8 have also been updated to show the dimensions of stone around each drywell. Additionally, drywell systems DW-2 & 3 have been revised for more accurate dimensions and the corresponding storm event elevations have been updated accordingly on Sheet C-6.

8. *The HydroCAD model for Drywell System DW-1 should be revised to model the actual outlet from the system (CB-8 grate) and account for storage in the depression above the system.* Addressed – the HydroCAD model has been revised accordingly.

Response: Addressed.

9. *The proposed ten foot long sleeves shown at sewer/water crossings should be twenty feet*

long (ten feet either side of the utilities). Addressed – the notes specify the sleeves to be ten feet each side of the sewer/water crossings.

Response: Addressed.

10. *The surface of the proposed walking trail is specified to be bark mulch. This surface would not be ADA compliant.* In the response, CDG states that “based upon comment from the Conservation Commission, we have eliminated the bark mulch and are now just proposing a meandering walking path through the open space area.”

Response: No response required.

11. *Notes related to electrical service on Sheet C-1 should reference HMLP, not National Grid.* Addressed – notes on Sheets C-4 and C-8 reference HMLP.

Response: Addressed.

Peer Review by Vanasse & Associates Inc.

This is the second iteration of comments received by Vanasse & Associates Inc., the original letter was received on December 19, 2022. Mr. Dirk’s original comments are in *italic* text and his new comments are shown in standard format. CDG’s responses are in **bold** below each comment.

1. *The relocation of the retaining wall adjacent to and north of the proposed roadway should be shown on the Definitive FRD Plan along with the associated regrading and tree removal (see attached plan).* An affidavit should be provided by the Professional Engineer from McMahon Associates stating the sight lines at the Project site roadway intersection with Cushing Street will meet or exceed 280 feet with the removal of the tree stumps, and that the relocation of the retaining wall and regrading of the slope where the trees were removed is not required. The affidavit should be signed and stamped by the Professional Engineer.

Response: The Applicant has committed to grinding the stumps down to grade that were removed along Cushing Street and proposes to landscape the slope beyond the existing retaining wall where the trees were removed. In addition the applicant is proposing to pull a portion of the existing wall back to the property line as originally agreed upon. This change can be seen on Sheet C-6.

2. *The sight distances are shown on Drawing No. C-4; however the corresponding sight triangle areas should be added along with a note to indicate: “Signs, landscaping and other features located within sight triangle areas shall be designed, installed and maintained so as not to exceed 2.5-feet in height. Snow windrows located within sight triangle areas that exceed 3.5-feet in height or that would otherwise inhibit sight lines shall be promptly removed.”* The sight line looking to the north of the proposed roadway should be a minimum of 280 feet based on an approach speed of 38 mph along Cushing Street.

Response: Updated sight distance triangles have been added to the plans and are shown on Sheet C-5.

3. *A note should be added stating: "All Signs and pavement markings to be installed within the Project site shall conform to the applicable specifications of the Manual on Uniform Traffic Control Devices (MUTCD)."* The requested note has been added to the Definitive FRD Plan (see Drawing C-5). Comment closed.

Response: Addressed.

4. *Pedestrian crossing warning signs should be added at the crosswalk (W11-2 and W16-7P) and on Cushing Street 125 feet in advance of the crossing (W11-2) in both directions.* The requested signs have been added to the Definitive FRD Plan (see Drawing C-5). Comment closed.

Response: Addressed.

Should you have any questions or require any further information, please do not hesitate to contact us, taylorcorsano@crockerdesigngroup.com or 781-919-0808.

Sincerely,
Crocker Design Group LLC



Taylor Corsano
Project Manager

Exhibit A – Definitive FRD Plan Set
(Under Separate Cover)

Exhibit B – Stormwater Management Report
(Under Separate Cover)

Exhibit C – DTM Memo