STONEFIELD

July 3, 2025

Attn.: Andrew MacNichol
Community Development Director
Attn.: Charles Tirone
Conservation Administrator

Town of Reading
16 Lowell Street
Reading, MA 01867

RE: Peer Review Response #1
MassDEP #270-0796
Proposed Child Day Care Facility
Parcel ID: 28-113
885 Main Street
Town of Reading, Middlesex County, Massachusetts

Mr. MacNichol and Mr. Tirone:

Our office is submitting documents on behalf of the Applicant to address comments received within the Stormwater Peer Review prepared by Horsley Witten Group, dated June 10, 2025 and the Traffic Engineering Peer Review letter prepared by Green International Affiliates, Inc. ("Green"), dated June 26, 2025.

Additionally, based on feedback during the March Conservation Commission Hearing we have included a summary of additional feedback and updates incorporated into the resubmission at the request of the Commissioners.

Please find the following items enclosed:

ITEM DESCRIPTION	DATED	COPIES	PREPARED BY
Site Plans	06-26-2025	1	Stonefield Engineering & Design
Stormwater Management Report	06-26-2025	1	Stonefield Engineering & Design
O&M	06-26-2025	1	Stonefield Engineering & Design
Turf Informational Packet	02-19-2019	1	XGrass
Traffic Impact Study	07-03-2025	1	Stonefield Engineering & Design
Town of Reading Fire Department Email Correspondence	04-30-2025	1	Town of Reading Fire Department

Should you have any questions regarding the submission items or responses above please do not hesitate to contact our office.

Regards,

Joshua H. Kline, PE
Stonefield Engineering and Design, LLC

Via Email & FedEx

The following is a summary of additional materials provided based on review of the draft Conservation Commission Meeting Minutes from the March 26, 2025 Meeting. At the time of the submission approved meeting minutes had not been provided but the goal was to provide a summary responding to various requests made from the Commission as well as the public at the meeting.

1. **Lighting Plan (Dark Sky Compliant) –** The proposed lighting on-site is 'Dark Sky Approved' (DSA). Since the March meeting the proposed site lights have been lowered to 15' mounting height and the overall exterior light levels have been reduced across the site. There is no off-site spillage or lighting within the existing wetland proposed as part of the project.

2. **Proposed Plantings (Native) –** The Landscape Plan has been updated to include all native plantings on-site.

3. **Turf Informational Packet –** We have included in this submission an informational packet regarding the turf for the play area. The XGrass Turf and all components are fully certified by the International Play Equipment Manufacturer's Association (IPEMA), and they have conducted testing to ensure there products are PFAS free. The fill to be utilized is envirofill which is a non-toxic, non-flammable infill. There is also a border around the turf surface to ensure all material is kept on-site. The turf material is a low maintenance solution and safe solution for the play area,
    a. Recreational Group (RG) XGrass Play Area Summary
    b. PFAS Position Statement
    c. Permeability Testing Report

4. **Operations & Maintenance Manual –** The Operations & Maintenance Manual has been updated to provide additional clarification on the long-term management of trash on-site, the turf play area, and snow management.
    a. Trash
    b. Turf Section
    c. Salt

5. **Stormwater Management Modeling –** The stormwater management design has been updated based on comments received from the Commissions third-party peer reviewer and complies with all local and state requirements. The proposed design includes three different points of interest including the adjacent properties to the north, the adjacent properties to the south, and the wetland area to the rear of the site. The proposed design provides water quality, recharge, and peak reductions which meet the stormwater standards reviewed by the condition and will ensure no adverse impact the surrounding properties and wetland.

6. **Snow Management –** The Applicant will be responsible for removing any snow from the property and will not store or stockpile snow from the parking areas within the 100-foot jurisdictional boundaries. There are small areas along the perimeter of the site outside of the jurisdictional boundary where small amounts of snow could be stored or along the property frontage (ensuring sight lines are maintained).

7. **Vernal Pool Evaluation –** At the request of the Commission Goddard Consulting performed and submitted an Evaluation for Vernal Pool Characteristics confirming the bordering vegetated wetland is not a vernal pool.

8. **Impervious Coverage Summary –** The impervious coverage is included within the Stormwater Management Report both the report itself and drainage area maps. The site consists of 11,547 SF of existing impervious surfaces and 31,028 SF of proposed impervious surfaces are proposed.

The following is an itemized response to the comments contained within the Horsley Witten Group Review Letter dated June 10, 2025. For the sake of brevity, any comments that are statements of fact or have been previously addressed are not included in the response below:

1. *Standard 1: No new stormwater conveyances (e.g., outfalls) may discharge untreated stormwater directly or cause erosion in wetlands or waters of the Commonwealth.*

    a. *The Applicant has analyzed the pre-development stormwater runoff for the site. Under existing conditions, the Applicant has indicated that the entire site, EX-1, flows towards the north using the BVW as the study point. However, the Applicant has not included the topography on the north and south sides of the parcel, specifically at 811 and 891 Main Street and 58 Francis Drive. There appears to be two low points on either side of the driveway below elevation 106. It is not clear how these low points are connected to the BVW. HW recommends that the Applicant provides additional topography on the adjacent lots to support the watershed divide illustrated. Furthermore, HW recommends that the Applicant add a study point to the three adjacent properties to confirm that under proposed conditions the peak runoff will be reduced.*

    Additional topography has been included around the site to better illustrate the watershed divides. The analysis has been updated to include three unique points of interest; runoff tributary the adjacent properties to the north and south, and the wetland.

    b. *The Applicant has also analyzed the post-development stormwater runoff for the site. Under proposed conditions, the Applicant has evaluated two catchment areas, P-1A and P-1B. The proposed rooftop and driveway increase the area of impervious cover. Runoff from most of the proposed impervious area within catchment area P-1B is directed to the subsurface infiltration system, Pond B-1. As noted above, HW recommends that the Applicant add a study point to the three adjacent properties to confirm that under proposed conditions the peak runoff will be reduced.*

    As noted above study points have been added to the two properties adjacent to the proposed driveway, the analysis shows that at each study point proposed conditions reduces peak runoffs.

    c. *As illustrated on the Stormwater Management Plan, Sheet C-6, two stone lined scour holes are proposed at the 35-foot No Build Zone. HW recommends that the Applicant provides the sizing calculations for the scour holes to demonstrate that no erosion will occur at the outfalls.*

    Sizing calculations for the two (2) proposed stone lined scour holes have been added to appendix C of the revised stormwater management report. Additional details have also been added to Sheet C-15 of the Site Plans.

    d. *On the Existing Conditions Plan, Sheet C-2, information regarding the wetlands is indicated under "General Note #7." However, HW was not able to locate this note in the plan set. HW recommends that the Applicant clarify the reference to General Note #7.*

    The callout on Sheet C-2 has been updated accordingly.

    e. *HW notes that on the MassDEP website a technical comment was provided recommending that "All resource areas and/or their buffer areas should be shown on the plan. Wetland resource area with certified Vernal pool appears to be located adjacent to the property." HW recommends that the Applicant address DEP's comment.*

    The 100-foot vernal pool buffer zone has been added to all sheets of the site plans. No proposed disturbance is within the buffer zone and the proposed improvements are not tributary to the vernal pool.

2. *Standard 2: Stormwater management systems shall be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates.*

    a. *In accordance with Section 4.1.3.1 of the Reading Stormwater Regulations, the Applicant shall use the precipitation data provided in the National Oceanic and Atmospheric Administration's (NOAA) Atlas 14 volume 10. However, the Applicant has used the precipitation data from the NRCC D rainfall data which differs from the NOAA Atlas 14 rainfall data. HW recommends that the Applicant adjust the rainfall depths per the table below.*

Storm Event	NOAA Atlas 14	NRCC D
2-year 24-hour	3.31 inches	3.09 inches
10-year 24-hour	5.22 inches	4.65 inches
25-year 24-hour	6.41 inches	5.87 inches
100-year 24-hour	8.24 inches	8.36 inches

    The precipitation data has been updated in HydroCAD to reflect the above NOAA Atlas 14 volume 10 data.

    b. *The Applicant has provided a Proposed Drainage Area Map. The drainage area and proposed low points are not clear. HW recommends that the Applicant include the proposed contours and proposed stormwater structures on the Proposed Drainage Area Map.*

    The proposed contours and proposed stormwater structures have been added to Sheet 2 of the drainage area maps to clarify the proposed drainage areas and low points.

    c. *HW recommends that the Applicant clarify the proposed areas modeled as Turf.*

    A hatch has been added to the turf area on Sheet 2 of the drainage area maps.

    d. *The Applicant has provided a Geotechnical Report prepared by Whitestone Associates, Inc. Four test pits were conducted around the site; infiltration testing was conducted in three of the test pits with the most restrictive rate measured at 6.3 inches per hour (iph). In accordance with the MSH the exfiltration rate used should be 50% of the onsite testing. The Applicant has used an infiltration rate of 3.15 iph for the proposed subsurface infiltration system, which appears reasonable. The Geotechnical Report also notes that groundwater was encountered 10 feet below the surface at approximately elevation 99.0. The bottom of the chamber system is set at elevation 105.0, therefore the Applicant is providing the required 4 feet of separation.*

    Noted.

    e. *The Geotechnical Report also notes that existing fill was found in two of the test pits. HW recommends that the Applicant call out to remove any fill, topsoil, and subsoil encountered during construction beneath the chamber system. If necessary, clean fill with an infiltration rate of at least 3.15 iph shall be installed beneath the system.*

    A note has been added to Sheet 6 of the site plans instructing the contractor to remove any fill, topsoil, and subsoil encountered up to 4 feet below the proposed underground

BMP and replace with clean fill that has a minimum infiltration rare of 3.15 inches per hour.

3. *Standard 3 requires that the annual recharge from post-development shall approximate annual recharge from pre-development conditions.*

    a. *HW concurs that the Applicant has provided adequate recharge within the proposed subsurface infiltration system in accordance with Volume 3, Chapter 1, page 15 of the MSH.*

    Noted.

    b. *HW notes that the infiltration rate for the site is considered rapid infiltration. Per the MSH Volume 1, Chapter 1, page 8 at least 44% of the total suspended solids (TSS) must be removed prior to discharging to an infiltration structure within an area of rapid infiltration. HW recommends that the Applicant confirm it is providing 44% TSS removal prior to discharging into the subsurface chamber system.*

    The proposed ADS Isolater Row Plus in conjunction with proposed deep sump hooded catch basins provide the minimum 44% TSS removal prior to discharging to the proposed subsurface chamber system.

4. *Standard 4 requires that the stormwater system be designed to remove 80% Total Suspended Solids (TSS) and to treat 1-inch of volume from the impervious area for water quality. The Town of Reading requires stormwater management systems to remove TSS at a rate of 90% and total Phosphorus at a rate of 60% for new projects and 80% and 50%, respectively for redevelopment projects.*

    a. *Per the Town Stormwater Regulations Section 4.1.3.4, stormwater systems should be designed to remove 90% of total suspended solids and 60% of total phosphorus. The Applicant has not provided sufficient TSS or TP removal calculations for this project. 9% street cleaning is not an acceptable rate per Volume 2, Chapter 1, page 9 of the MSH.*

    Compliance with the Towns stormwater runoff quality requirements (90% TSS Removal and 60% TP Removal) is met through the method outlined in section 4.1.4.4.2 of the Town of Readings Stormwater Regulations: "Retaining the volume of runoff equivalent to, or greater than, one (1.0) inch multiplied by the total post-construction impervious surface area on the new development site". The Towns pollutant removal requirements have also been met through the method outlined in section 4.1.4.4.1 of the Town of Readings Stormwater Regulations: "Installing BMPs that meet the pollutant removal percentages based on calculations developed consistent with EPA Region 1's BMP Accounting and Tracking Tool (2016)". A copy of the filled out BMP Accounting and Tracking Tool can be found in Appendix C of the revised Stormwater Report.

    b. *HW recommends that the Applicant submit third party documentation to verify the TSS removal provided by the isolator row.*

    The NJCAT Technology Verification for the ADS Isolator Row PLUS has been included in the appendices of the revised stormwater report.

5. *Standard 5 is related to projects with a Land Use of Higher Potential Pollutant Loads (LUHPPL).*

    a. *HW notes that a day care facility is not considered a land use of higher potential pollutant load. Therefore, Standard 5 is not applicable. No further action is requested.*

    Noted.

6. *Standard 6 is related to projects with stormwater discharging into a critical area, a Zone II, or an Interim Wellhead Protection Area of a public water supply.*

    a. *The proposed development is not discharging near or into a critical area, Zone II, or an IWPA area; therefore Standard 6 is not applicable. No further action is requested.*

    Noted.

7. *Standard 7 is related to projects considered Redevelopment.*

    a. *The project at 885 Main St. is considered a new development, and therefore, Standard 7 is not applicable. No further action is requested.*

    Noted.

8. *Standard 8 requires a plan to control construction related impacts including erosion, sedimentation, or other pollutant sources.*

    a. *The proposed project will be disturbing greater than one acre of land. A SWPPP is required by EPA for land disturbance of greater than 1 acre. The SWPPP should include source control and pollution prevention measures, stormwater practices to address erosion and sedimentation, stabilization measures, and procedures for operating and maintaining the proposed stormwater practices. The plan should also identify the parties responsible for implementing the plan. The Conservation Commission may consider requiring receipt of a final signed SWPPP a minimum of 14 days prior to land disturbance as a Special Condition.*

    The applicant will accept requiring receipt of a final signed SWPPP a minimum of 14 days prior to land disturbance as a special condition.

    b. *The Applicant has provided a Soil Erosion and Sediment Control Plan (SESC), Drawing C-9, that includes an erosion control barrier. In the Stormwater Management Plan, the Applicant notes that compost socks would be used for erosion control, however the compost socks are not clearly marked on the plans. HW recommends that the Applicant indicate compost sock with the silt fence along the limit of work closest to the 25-foot "no disturb zone" on the SESC.*

    The Soil Erosion and Sediment Control Plan (Sheet C-9) has been updated to include compost socks with the silt fence along the limit of work closest to the 25-foot "no disturb zone".

    c. *In the SESC, the Applicant indicates a proposed soil stockpile about 25-feet from the limit of work. HW recommends that the Applicant move the soil stockpile outside the 100-foot buffer zone.*

    The Soil Erosion and Sediment Control Plan (Sheet C-9) has been updated to show the proposed soil stockpile relocated outside of the 100-foot wetland buffer zone.

9. *Standard 9 requires a Long-Term Operation and Maintenance (O & M) Plan to be provided.*

    a. *The Applicant has provided a stand-alone Long Term Stormwater Operation and Maintenance (O & M) Plan. The O&M plan includes parties responsible and their roles, descriptions of various stormwater practices, guidance for how to go about maintenance, and the frequency of maintenance. The plan provides expected annual costs and guidance for inspection & logs of preventative and corrective measures. The Applicant also provided a sketch to illustrate where the practices are located on the site, so the property owner understands what to expect. A landscape plan along with a landscape maintenance schedule was provided as well. The*

Conservation Commission may choose to require receipt of the O&M Plan signed by the property owner prior to land disturbance.

The applicant will accept the Conservation Commission requiring receipt of the O&M Plan signed by the property owner prior to land disturbance as a special condition.

10. *Standard 10 requires an Illicit Discharge Compliance Statement be provided.*

    a. *The Applicant has not provided a signed Illicit Discharge Compliance Statement. HW recommends that the Applicant provides an Illicit Discharge Compliance Statement signed by the property owner.*

    The applicant will accept requiring the submission of a signed Illicit Discharge Compliance Statement prior to the discharge of stormwater runoff to the post-construction stormwater best management practices as a special condition.

The following is an itemized response to the comments contained within the Green Traffic Engineering Peer Review Letter dated June 26, 2025.

1. *Green concurs with the study area and intersections for the analysis.*

   Acknowledged.

2. *Traffic counts were collected in March 2025. Per MassDOT Standards and published seasonal factors, a greater-than-average volume is anticipated in March so no seasonal factor was applied to the existing traffic counts. Green concurs with this methodology. However, there does not appear to be daily roadway traffic data collected nor a source cited. Please provide source of daily traffic volume, stated to be 11,354 vehicles on Page 2 of the report.*

   The daily traffic volume cited in the Traffic Impact Study was obtained from the MassDOT Traffic Count (TCDS) Interactive Map. Specifically, the report references the Annual Average Daily Traffic (AADT) reported at Station 4848 located along Main Street north of Minot Street. Please note that as of the date of this letter, the MassDOT Interactive Map now shows the AADT to be 11,635 vehicles at this station. The revised Traffic Impact Study reflects this updated AADT, and the most recent available station data is included within the Technical Appendix of the Traffic Impact Study.

3. *Crash data at the study intersections were reviewed for the most recent five-year period available using MassDOT's online portal. Crash rates were calculated and compared to MassDOT statewide and District average crash rates for unsignalized intersections. The study locations were found to have crash rates below the state and district averages besides the intersection of Main Street at Salem Street. This intersection experienced 41 crashes over the five-year review period. Green concurs with the methodology used but requests that times-of-day and detailed crash data be included in the report or Appendix for review to determine if additional active site hours may impact or be affected by observed crash patterns.*

   The Technical Appendix within the revised Traffic Impact Study contains detailed summary tables of the reported crashes within the study network. It is important to note that the majority of the reported collisions (approximately 47%) occurred between 10:00 a.m. and 4:00 p.m., generally outside of the typical peak pick-up and drop-off periods anticipated for the proposed day care center.

4. *Crash rate calculations were provided in the report and appendices. Crash rate calculations include the "K" factor which is a proportion of daily traffic going through the analyzed intersection or segment; however daily existing traffic volumes were not collected. Please explain the choice of "K"- factor used in the crash rate worksheets.*

   The "K" factor utilized for the crash rate analyses was obtained from the MassDOT TCDS Interactive Map based on data recorded at Station 4848. Please note that as of the date of this letter, the "K" factor is now reported to be 9% rather than 8% as was originally utilized. The analyses were revised accordingly to incorporate the published 9% "K" factor. Please note the findings in the revised Traffic Impact Study remain generally consistent with the findings previously presented regarding motor vehicle collision rates at the study intersections and segment of Main Street.

5. *A future analysis year of 2032 was selected based on MassDOT standards. A background growth rate of one percent (0.5%), compounded annually, was utilized to capture traffic growth associated with general changes in population and other developments that may not be known at this time. This growth rate was stated to have been forecasted by the Metropolitan Area Planning Council (MAPC). Additionally, trips estimated to be generated by a nearby planned development were included in future traffic volumes. Green concurs with this methodology and no further information is required.*

   Acknowledged.

6. *ITE Land Use Code (LUC) 565, Day Care Center was used to estimate trips expected to be generated by the proposed day care facility. The average rates are what are available for estimating the daily trips and trips generated during adjacent roadway morning and evening peak hours, using the more conservative/higher result of calculating either by gross floor area or by number of students. Green concurs that this LUC and methodology is appropriate.*

   Acknowledged.

7. *Volumes for the peak midday hour were estimated by applying a factor from ITE's Trip Generation Manual to the daily traffic volume estimate, although the report appears to be slightly conservative with this volume. Green concurs that this methodology is appropriate; however, the middle column of Table 3 should state "Midday Peak Hour" instead of "Evening Peak Hour".*

   The revised Traffic Impact Study corrects the errant language presented in Table 3 as noted.

8. *The trip distribution was stated to be based on existing volume patterns. However, reviewing the existing volumes presented in Figure 2 it appears that volumes from north of the site on Main Street are higher in the AM peak hour and roughly even northbound/southbound splits occur during the other peak periods. This is in contrast to what is shown in Figure 4 where the assigned new trip distribution assumes a higher proportion of vehicles to/from south of the site rather than north. Confirm if another factor was used to assume greater volumes from/to the south than from/to the north.*

   Trip distributions were prepared based on the existing traffic volume patterns, the access management plan for the development, and engineering judgement of local neighborhood characteristics. Stonefield concurs that traffic volumes are generally greater in the southbound direction of travel along the frontage and accordingly routed a large portion of "new" trips (approximately 35%) to arrive/depart to/from the north of the site. However, given that there are dense residential neighborhoods generally located south, southwest, and southeast of the proposed development within the Town of Reading, it is assumed that the site would also generate new trips from residences in these locations; as such, the trip distributions account for a similar portion of new trips arriving from the south via Main Street (approximately 35%), as well as a smaller portion of trips arriving from the west via Lowell Street (approximately 20%) or from the east via Salem Street (approximately 10%).

   It should also be noted that the applied trip distributions generally provide for a more conservative analysis as they result in a larger portion of vehicles required to complete a left-turn to exit the site driveway and continue to the south of the site, whereas new trips routed to the north would exit the driveway via right-turn. However, it is anticipated that the overall findings of the Traffic Impact Study, which indicate that the proposed development is not anticipated to have a significant adverse impact on the adjacent roadway operations, would remain generally consistent should the trip distribution be modified to increase the percentage of new vehicle trips routed to/from the north.

9. *Parking supply was determined per the Off-Street Parking and Loading and Unloading Requirements in §9.1.1.7 of the Town of Reading, Massachusetts Zoning Bylaw, per the proposed maximum number of students and employees. We concur with this approach.*

   Acknowledged.

10. *Please confirm if child drop-off and pick-up times are proposed to be defined or if drop-off/pick-up times are anticipated to be staggered throughout a given hour. The trip generation and available internal site spacing suggest that if a single drop-off or pick-up time is implemented and all staff parking is occupied, there is potential for spillback onto Main Street from the site driveway. Operations at the study intersections will also have higher delays relative to the capacity analysis shown in the report with a single drop-off/pick-up time (i.e. volumes not spread throughout a given peak hour). Staggered or extended drop-off and pick-up times are recommended.*

    Primrose does not operate on a bell schedule. Pick-up and drop-off are generally staggered by nature of the operations since these times are dependent on each individual parent/guardian's schedule. Based on observations of similar existing facilities it is anticipated that the majority of drop-offs will occur between 7:30 a.m. and 9:30 a.m. and the majority of pick-ups will occur between 3:30 p.m. and 5:30 p.m., with occasional pick-up throughout the day for children enrolled part-time. Please note that as discussed during the virtual meeting with Stonefield, Green, and Town of Reading Planning Staff on Tuesday, July 1, 2025, the applicant is amenable to designating the ten (10) proposed parking spaces along the building frontage exclusively for drop-off/pick-up parking during critical periods. The applicant is also amenable to preparing a Parking Management Plan for parents/guardians enrolling children at the Primrose facility to ensure there are no instances of drop-off and pick-up occurring outside of parking spaces and potentially impeding on-site circulation.

11. *Green concurs with the results of the capacity analysis indicating that minimal impacts to traffic operations at the study intersections are expected as a result of the project trips. However, the Peak Hour Factor (PHF) for the future year analysis should use a factor of 0.92 per MassDOT standards.*

    The future 2032 No-Build Condition and 2032 Build Condition Level of Service/Capacity analyses were revised to apply a PHF of 0.92 at the study signalized intersections during the peak hours in accordance with MassDOT standards. Please note that the proposed site driveway intersection was previously and continues to be analyzed utilizing a PHF of 0.92. The analysis findings are presented in the revised Traffic Impact Study and remain generally consistent with the original findings indicating that the proposed development would not have a significant adverse impact on the operations of the adjacent roadway network.

12. *Green conducted a field visit to confirm existing conditions and sight distance at the existing driveway. During the field visit several ongoing home renovations were observed along Main Street between Birch Meadow Drive and Charles Street, including work vans that were parked along the shoulder near (#877) the proposed site drive and thus reducing sight distances from what was stated in the report. Thus, the presence of home repair or lawn crews, trash barrels, or winter snowbanks can reduce the sight distances functionally available, especially in the northbound direction of Main Street where a vertical crest is encountered before the site driveway. We recommend that the Applicant review means of improving visibility of the site driveway.*

    It is important to note that on-street parking along Main Street is prohibited within the study limits in accordance with Municipal and State regulations, and therefore on-street parking observed in the site's proximity is outside of the applicant's control. As was discussed in the aforementioned meeting held with Stonefield, Green, and the Town of Reading Staff, "No Parking" signage is not presently posted along Main Street near the property, and so the applicant is amenable to installing such signage. Note Main Street is under MassDOT jurisdiction and therefore any proposed signage in the State Highway Layout would be subject to review and

approval by the outside agency; however, as this application will require a State Highway Access Permit from MassDOT (for which an application was submitted and is under the preliminary 25% Design Review Stage), it is anticipated that this additional signage can be explored concurrently.

Regarding trash barrels and winter snowbanks, these features would typically be expected to measure below 3.5 feet which is generally recognized in the industry as the height of a driver's eye; therefore, it is not anticipated that they would obstruct a driver's view of the site driveway when approaching the site or of a driver's view of the roadway when exiting the site.

13. *A shorter minimum desirable Intersection Sight Distance (ISD) is listed for the northbound (i.e. right- turning) than is for southbound (i.e. left-turning) direction. However, the latest (7th edition) of the AASHTO guideline A Policy on Geometric Design of Highways and Streets states that the same distance shall be met for looking in both directions when left turns are being made, and thus the minimum desirable ISD is higher than the measured value. This being stated, the stated minimum value for ISD (which equals that of minimum SSD) is still satisfied for looking towards the northbound direction. However, please see the previous comment regarding functional northbound visibility.*

    Stonefield concurs that the available sight lines are sufficient to safely and effectively support the site driveway based on industry standards. As noted in Comment Response #12, the applicant is amenable to coordinating with MassDOT to install "No Parking" signage near the site. This would ensure that existing on-street parking restrictions are enforced and minimize the risk of vehicles illegally parking along Main Street and obstructing the sight lines at the site driveway.

14. *Turning movements evaluated with a fire apparatus similar to the Town of Reading's Seagrave ladder truck suggest that the fire apparatus will be able to turn around within the site without encroaching on parking spaces or curb, but only if the ladder trucks are able to back up into the internal stop line / "Do Not Enter". AASHTO-standard 30-foot single-unit box trucks (SU-30) are able to make a similar maneuver without encroachment but not SU-40 vehicles. We request if the Town finds this internal emergency circulation acceptable, and request the Applicant to confirm the largest vehicle size anticipated to use the site.*

    Please note that the Town of Reading Fire Department reviewed the Site Plan and Truck Turning Exhibits and confirmed via email correspondence dated Wednesday, April 30, 2025, that the department is satisfied with the plan and that the site layout allows for a safe turnaround within the lot, thereby minimizing the need to back an emergency vehicle. This correspondence is also enclosed for reference.

    The applicant confirms that the standard SU-30 single-unit box truck is the largest vehicle anticipated to access the site.