



MEMORANDUM

DATE: December 4, 2022

TO: Jean Bubon, AICP, Town Planner

CC: file

FROM: John P. Shevlin, P.E.

**Re: Engineering Review Services
Interstate Towing- Site Plan Approval &
Notice of Intent Application-Revised Submission
698 Main Street
Sturbridge, Massachusetts
(Pare Project No.: 22193.00)**

Pare Corporation has received a response to our review memorandum dated November 8, 2022 from CMG. Pare is reviewing this application on behalf of both the Planning Board (“Board”) and the Conservation Commission (“Commission”) which are currently considering the Site Plan Approval application and Notice of Intent application for Wrecker, LLC, an affiliate of Interstate Towing Inc. Pare Corporation (Pare) has completed our review of the revised Site Plan Approval application and Notice of Intent application.

For this revised submission, Pare has been provided the following information for review:

- Letter of Transmittal, dated December 1, 2022
- Site Plan entitled “Proposed Interstate Towing Facility #698 Main Street, Sturbridge, MA prepared for Wrecker LLC-1660 Westover Road Chicopee, MA”. Plans prepared by CMG 67 Hall Road, Sturbridge, MA. Plans dated October 11, 2022, revision date November 30, 2022.
- Traffic Assessment Response to Peer Review Comments dated November 15, 2022 prepared by McMahan Associates.
- Stormwater Report Revision 1 dated November 30, 2022 prepared by CMG Environmental Services, Inc.
- Pare November 8, 2022 Peer Review Comment/CMG Response Letter, prepared by CMG dated November 30, 2022.

Pare offers the following pertaining to this submission.

PLANS

1. *Sheet C-1- Title Sheet:* On Index of Drawings, revise the Sheet Name for Sheet Nos. L1-0 and L2-0. Change “Landscape Plan” to “Planting Plan”.
Title Sheet Index has been revised.
2. *Sheet N-1.0: General Notes-*
 - a. Revise note numbers. Note 1 is duplicated.

Numbering of notes has been revised.

- b. Note 15 - A traffic control plan for work on Route 20 will be necessary for MassDOT review.

CMG has acknowledged in notes that MassDOT approval will be necessary for access permit.

- c. Note 16: Change the wording on the reference to the 'Manual on Uniform Traffic Control Devices'.

Reference has been revised.

3. *Sheet C-1.0 Site Layout Plan –*

- a. It is understood that the retaining walls are to be designed by others but a detail indicating the type of wall finish should be identified. In particular the wall in the front of the site.

CMG has provided detail for wall finish. This should be reviewed and approved by the Planning Board. Applicant should clarify if this finish will be provided for both walls.

- b. Detail of business sign is included in the application. Should detail be added to the plans?

Applicant has noted that the sign will be added to the plans upon approval by the Town.

- c. It is understood that it has been discussed and agreed that the dumpster will not be screened.

With most of the property being screened with a fence, Pare is satisfied that screening of dumpster is not being provided.

- d. Provide details on chain link fence and slide gate. Will fence include slats?

Detail has been provided. Please provide information on Fabric being provided on fence.

- e. It is understood that tow truck parking will be primarily inside the building.

Original comment was in regards to how storage on-site may be laid out for vehicles, including electric vehicles, and tow trucks. Based on conversation with application, tow trucks will be stored inside the building. Have other areas been identified?

- f. Provide more dimensions for pavement edge layout.

Some additional pavement layout dimensions have been added. The contractor will use CAD drawings to layout the entire site.

- g. Total parking spaces are identified as '13 HC Spaces'. Clarify 'HC'.

Parking designations have been clarified.

- h. Could improvements be made to the boat ramp access to better define the driveways/roadways and movements in this area?

Applicant has responded that this area is within the Route 20 right-of-way and subject to MassDOT jurisdiction. They responded that they could add "No Parking" signs along the site frontage in the vicinity of the gravel bus turnaround area. Pare's original comment was based on our site visit as a vehicle was witnessed to pull off the roadway through the gravel area instead of using the Streeter Road entrance. Comment was made to see if something can be done to better identify/control turning movements in the area especially with the new development.

4. *Sheet C-2.0 Grading & Drainage Plan-*

- a. Provide a detail for the proposed Water Quality Units This is identified in Stormwater Report as the Hydroworks Water Quality Unit.

Details for the HydroDome HD4i have been added to the plan set. Detail is acceptable.

- b. Is a detail needed for a typical catch basin?

Details for proposed catch basins have been clarified. No further comments.

- c. Is there a need for the "Slab Top Deep Sump Catch Basin Detail"?

Clarification for the need of the Slab Top Deep Sump Catch Basin has been provided. No further comments.

- d. Callouts on the plan do not match callouts on the “4,500 Gal. Oil Grit Separator Detail”. (pipe type (HDPE vs. RCP); rim elevation; inverts)

Detail has been revised so details match plans.

- e. Callouts on the plan do not match callouts on the “Cross-Sectional Detail of Stormwater Bypass Structures” Detail. (pipe sizes, WQ numbering, DMH labelling, pipe slope between DMH-1 and Oil/Dirt Separator; inverts)

Verify the pipe lengths and slopes from the By-Pass Structure to WQ-2. If you go by plans (L=48”, S=0.04, and outlet from structure invert=671.70) the inlet invert in WQ-2 should be 669.78 not 669.10. The detail indicates an outlet invert of 671.7 but a pipe length of 48 feet and a slope of 0.01. With this detail the invert elevation into WQ-2 would be 670.62 not 669.10.

Also, from WQ-2, to outlet the pipe size (12” vs. 8”), pipe length(10 feet vs. 8 feet) and slope (0.10 versus 0.12) do not match. Please clarify.

- f. Provide a detail for the trench drain with concrete apron.
Detail has been provided. No further action is necessary.
- g. Trench drain is called out to tie into DMH-5. The drain manhole is labelled as DMH-2.
Plan has been revised as requested. No further action is necessary.
- h. WQ-2 indicates Invert from DMH-5. Should be DMH-2.
Plan has been revised as requested. No further action is necessary.

5. *Sheet C-3.0 Utility Plan-*

- a. Clarify in legend the pipe material for the sewer and water services.
Plan has been revised as requested. No further action is necessary.
- b. Plan calls for 2” PL water service and 6” DI fire service. Detail calls for Type K water service.
Detail has been clarified. No further action is necessary.

6. *Sheet C-4.0 – Erosion & Sediment Control Plan-*

- a. Provide proposed catch basin protection detail.
Comment clarified. Sediment control has been added to Route 20 structure. No further action is necessary.
- b. Identify on legend of the plans the locations of the 12” Erosion Control Straw Wattle with Silt Fence Backing.
Plan has been modified. No further action is necessary.

7. *Sheet C-4.1-Erosion & Sediment Control Detail*

- a. Construction Exit Detail should be revised to match Sturbridge DPW standard detail (i.e. 75 feet X 24 feet and 12” deep).
Detail has been revised. No further action is necessary.

8. *Sheet C-5.0- Construction Details*

- a. ‘Cross-Sectional Detail of Stormwater Bypass Structures’ does not match plans. (see 4.f above)
See additional comments in 4.e above.
- b. Underground Infiltration Chamber Detail-number of rows and units do not match Sheet C-4.0.
Detail has been revised.
- c. Sturbridge DPW standard details should be used for manholes and catch basins.

Applicant has provided response to the structures being used. Pare has no objection to structures being proposed. Confirmation of acceptance of structures from DPW should be obtained.

- d. 4500 Gal. Oil Grit Separation Detail does not match plans. (Finish grade is different, Inlet & Outlet Pipe Types are different, Inlet and Outlet Inverts are different)
Detail has been revised.
 - e. Detail for Proposed Stormwater Basin Detail should indicate 8” HDPE pipe.
Detail has been revised.
 - f. Riprap dimensions on the Proposed Stormwater Basin Detail and the Flared End Detail do not match.
 - g. **Plans revised accordingly. No further action is necessary.**
9. *Sheet C-5.1- Construction Details*
- a. How is MDC Trap going to be vented?
Detail has been clarified.
 - b. Verify pipe type for sewer. Detail does not match plan.
Detail has been revised.
10. *Sheet A-1: Building Floor Plan-*
- a. Utilities should be shown where entering the building.
Applicant has responded that utility locations will be finalized with the Building Permit Application.

TRAFFIC ASESMENT

McMahon has responded to Pare’s November 8, 2022 comments. As previously noted, based on the ‘limited’ number of trips anticipated from the proposed use, Pare is in agreement with the level of detail that the applicant has submitted pertaining to traffic. Overall there is anticipated that this development will not have any significant impacts to the traffic capacity to the surrounding roadway network. If approved by MassDOT, additional signage will be added to alert motorists of vehicles entering/exiting the site which will help improve the safety. The following are our responses to McMahons November 15, 2022 responses.

1. The applicant states that the “assessment is based on the Site Layout Plan prepared by CMG Engineering, Inc., dated July 18, 2022.” The latest plans are dated October 11, 2022. It does not appear that anything on the site plan has changed that would affect the assessment report but the applicant should confirm.
Applicant has clarified this comment.
2. The study area consisted of the vicinity around the proposed site, including the driveway and Route 20 (Main Street). Based on our field review of the area, the operations of the surrounding intersections and the volumes of traffic anticipated to be generated from the development, the extents reviewed are acceptable.
No response was necessary.
3. Table 1: ATR Data does not match traffic data information provided in the appendix. The actual count data numbers are slightly smaller. The difference should not have any impact on the assessment.

Applicant has clarified where numbers have come from. As previously noted the difference in volumes should have no impact on the assessment.

4. The study uses LUC 942 for an Automobile Care Center since this is probably the best match within ITE Trip Generation. Counts at a similar could have been obtained but based on the size of the facility and the number of employees, the trips shown in Table 3 seem reasonable.
No action was required.
5. The trips in Figures 6 and 7 do not match the trips identified to be generated in Table 3.
Pare's original comment was incorrect. Figures 5 and 6 did indicate the correct trips.
6. The future build operations indicate that the proposed intersection will operate at a good level of service (worse case LOC C with 18 seconds delay).
No action was required.
7. Clearing of vegetation should be maintained for good sight lines.
A note should be added to plans to ensure that sight lines are maintained by applicant and/or MassDOT.
8. With the use proposed for this site, towing, vehicles will be slower pulling in and out of the site. Also, the % of heavy vehicles on the roadway is high. With these two factors, I would agree to add signage alerting Route 20 traffic of the truck traffic entering/exiting the site.
McMahon is agreement to the truck warning signage being added. The types and locations have been added to the plans.
9. Conclusion- This site will not generate a significant amount of traffic. The biggest issue is safety as far as vehicles entering/exiting the site. The area does not have a significant history of crashes in the area. It is recommended that sight lines be maximized so approaching cars and cars leaving the site have enough vision to safely travel in the area.
No action required.

STORMWATER MANAGEMENT REPORT

1. Project Description- The applicant does a good job with the Project Description.
No action required.
2. *Hydrologic Calculation Methodology* – The information and analyses factors included in this section are correct.
No action required.
3. *Flood Plain Data, Soils & Topography, On-Site Soil Testing, and Existing Conditions*-This information appears correct.
No action required.
4. *Proposed Conditions*-
 - Subcatchment 1A - Please detail and call out on the plans the Hydroworks Water

Quality Unit.

Water Quality Unit detail has been added to the plans.

- Subcatchment 1C – States “Stormwater runoff will flow via sheet flow”. Cape Cod Berm is proposed along parking lot.
Description has been revised.
- Subcatchment 2A- Revise ‘southeast to southwest’.
Description has been revised.

5. *Appendix A- MA-DEP Stormwater Checklist-*

- States that a Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan is in Stormwater Report. Please clarify.
Agreed that this will need to be submitted with EPA NPDES Construction General Permit (CGP) prior to commencement of construction and this should be included as a condition of approval. Pare was looking for clarification due to the fact it was noted as being included in package.
- An inspection and maintenance schedule for erosion and sedimentation controls along with a log form should be included.
Agreed that this will need to be submitted with EPA NPDES Construction General Permit (CGP) prior to commencement of construction and this should be included as a condition of approval. Pare was looking for clarification due to the fact it was noted as being included in package.
- Provide operations and maintenance budget
Agreed that this will need to be submitted with EPA NPDES Construction General Permit (CGP) prior to commencement of construction and this should be included as a condition of approval. Pare was looking for clarification due to the fact it was noted as being included in package.

STANDARDS

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

Met. The design includes most of the stormwater discharges through water quality treatment BMPs including deep sump catch basins with hoods, Hydrostorm Water Quality Units, oil-grit separators, underground infiltration chambers, and a stormwater basins. No untreated stormwater discharge will be directed to the wetlands.

No further response required.

- *Standard No. 2: Stormwater management systems shall be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates.*

Met. The proposed design indicates that there will be no increase to off-site peak flow rates will not increase.

No further response required.

- *Standard No. 3; Loss of annual recharge to groundwater shall be eliminated or minimized through the use of infiltration measures including environmentally sensitive site design, low impact development techniques, stormwater best practices, and good operation and maintenance. At a minimum, the annual recharge from the post-development conditions based on soil type. This Standard is met when the stormwater*

management system is designed to infiltrate the required recharge volume as determined in accordance with the Massachusetts Stormwater Handbook..

Met. Recharge volumes through the use of underground infiltration chambers and a stormwater infiltration basin were designed to meet the required recharge. Also, BMP's are included in the design to treat stormwater runoff associated with the LUHPPL's prior to discharging into the infiltration systems.

No further response required.

- *Standard 4: Stormwater management systems shall be designed to remove 80% of the annual post-construction load of Total Suspended Solids (TSS). The Standard is met when:*
 - a. *Suitable practices for source control and pollution prevention are identified in a long-term pollution prevention plan, and thereafter are implemented and maintained;*
 - b. *Structural stormwater best management practices are sized to capture the required water quality volume determined in accordance with the Massachusetts Stormwater Handbook; and*
 - c. *Pretreatment is provided in accordance with the Massachusetts Stormwater Handbook.*

Met: The applicant has provided data that indicates that with the proposed design achieves 96% TSS removal.

No further response required

- Also, an acceptable Stormwater Management System Long-Term Operation & Maintenance Plan has been provided. One item that needs to be included is the Hydroworks Hydrostorm Operations & Maintenance Manual. The Plan should include the following:
 - provisions for storing materials and waste products
 - vehicle washing controls
 - provisions for solid waste management
 - restrictions for road salt/sand
 - training for staff regarding implementation of Long-Term Pollution Prevention Plan

The plan has added instructions for the 5 bullets described above. No further action is necessary.

- *Standard 5: For land uses with higher pollutant loads, source control and pollution prevention shall be implemented in accordance with the Massachusetts Stormwater Handbook to eliminate or reduce the discharge of stormwater runoff from such land uses with the higher potential pollutant loads cannot be completely protected from exposure to rain, snow, snow melt, and stormwater runoff, the proponent shall use the specific structural stormwater BMP's determined by the Department to be suitable for such uses as provided in the Massachusetts Stormwater Handbook. Stormwater discharges from land uses with higher potential pollutant loads shall also comply with the requirements of the Massachusetts Clean Waters Act, M.G.L. c. 21, Sections 26-53 and the regulations promulgated thereunder at 314 CMR 3.0, 314 CMR 4.00 and 314 CMR 5.00.*

Met. The site design includes a 4500 gallon oil-grit separator to achieve TSS removal and provide oil storage in case of a spill and the design incorporates increased stormwater volumes as required in the LUHPPL areas.

No further response required.

- *Standard 6: Stormwater discharges within the Zone II or Interim Wellhead Protection Area of a public water supply, and stormwater discharges near or to any other critical area, require the use of the specific source control and pollution prevention measures and the specific structural stormwater best management practices determined by the Department to be suitable for managing discharges to such areas, as provided in the Massachusetts Stormwater Handbook.*

The site does not appear to discharge within a Zone II or Interim Wellhead Protection Area.

No further response required.

- *Standard 7: A redevelopment project is required to meet the following Stormwater Management Standards only to the maximum extent practicable: Standards 2 & 3 and the pretreatment and structural best management practice requirements of Standard 4, 5 and 6. A redevelopment project shall also comply with all other requirements of the Stormwater Management Standards and improve existing conditions.*

NA. Agreed that this is should be considered as a new development and will meet all applicable Stormwater Management Standards.

No further response required.

- *Standard 8: A plan to control construction-related impacts including erosion, sedimentation and other pollutant sources during construction and land disturbance activities (construction period erosion, sedimentation, and pollution prevention plan) shall be developed and implemented.*

Met: Erosion and Sedimentation Control Plans and Details have been provided in the plan set. Also, as noted by the applicant an EPA-NPDES Stormwater General Permit will be necessary due to the amount of disturbance prior to construction. This permit will require a Stormwater Pollution Prevention Plan.

No further response required.

- *Standard 9: A long-term Operation and Maintenance Plan shall be developed and implemented to ensure stormwater management systems function as designed.*
 - See 9. Below. The Plan should include the following:
 - provisions for storing materials and waste products
 - vehicle washing controls
 - provisions for solid waste management
 - restrictions for road salt/sand
 - training for staff regarding implementation of Long-Term Pollution Prevention Plan

As stated above, items have been added to the O&M Plan.

- *Standard 10: All illicit discharges to the stormwater management are prohibited.*

Met: The applicant has included an Illicit Discharge Compliance Statement for the Site Stormwater Management System in the Long-Term Operation and Maintenance Plan.

No further response required.

6. *Appendix E- Post Development Drainage Calculations*

- Some of the items in the routing diagram do not replicate the design on plans. CMG should revise as necessary.

The site plans have been updated to reflect the HydroCAD model. Based on review the model is acceptable. No further action is necessary at this time.

7. *Appendix F- Additional Stormwater Calculations*

- Additional stormwater calculations appear accurate.

No further response required.

8. *Appendix G- Hydrostorm Manufacturers Design Report*

- No information provided.

The applicant has added the Hydrostorm Manufacturers Design Report as requested.

9. *Appendix H – Stormwater Management System Long-Term Operation & Maintenance (O&M) Plan –*

- The Plan should include the following:
 - provisions for storing materials and waste products
 - vehicle washing controls
 - provisions for solid waste management
 - restrictions for road salt/sand
 - training for staff regarding implementation of Long-Term Pollution Prevention Plan

As previously noted, items requested above have been added.

CMG's resubmittal also included Responses to Town staff comments. Pare offers the following responses related to Stormwater and/or traffic.:

DPW (10/18/22)

1. Sewer and DPW are in process of reviewing the site plans.

Pare has not received comments from Sewer and DPW.

Police (10/20/22)

1. If possible, I would like to see caution signs "truck entering" on Route 20.

CMG?

McMahon has agreed to add the W8-6 or W11-10 signs. A mark-up of these signs was provided to the town. Pare has not received a copy to date.

Sign types and locations have been included on Sheet C-1.0 of CMG's updated (11.30.22 plans)

We are available to discuss this document at the December 13 Planning Board meeting. In the meantime, if you have any questions please feel free to contact me.