

SITE PLAN REVIEW MEMORANDUM

Date: June 29, 2009

To: Madbury Planning Board

From: Jack Mettee, AICP
Mettee Planning Consultants

Project Name: Stormwater Improvement Project

Project Background:

Type of Application:	Site Plan Review
Property Owner:	New England Metals Recycling LLC Everett, Massachusetts
Applicant:	New England Metals Recycling LLC Everett, Massachusetts
Property Address:	Knox Marsh Road Madbury, New Hampshire
Tax Map & Lot Number:	Map 9/Lot 5
Lot Area:	91 Acres
Zoning District:	Commercial and Light Industry
Overlay District:	Aquifer and Wellhead Protection
Minimum Lot Area	80,000 SF
Frontage Required:	125 feet

Current Activities and Background

On June 19, 2009, I met with David White of Woodard & Curran, the engineering firm representing New England (NE) Metals Recycling and Keri Fitzpatrick, regional environmental manager for Schnitzer Northeast the parent company for NE Metals at the site. They explained that NE Metals Recycling is conducting a scrap metal receiving and shipping operation that involves a minimum of processing. Unlike the previous operation at this site under a previous owner, NE Metals does not have significant stockpiles of scrap metal and does not conduct any shredding or major processing of scrap material that is brought into the facility. It acts more like a trans-shipment facility that breaks down material for further processing which takes place at its major processing facility in Everett, Massachusetts.

Schnitzer has only fully owned the site since last October and as part of company policy, it is upgrading this site along with several others of its 13 sites around New England. NE Metals Recycling currently complies with relevant state laws and is a permitted waste handling facility. It has also been working directly with NH DES to ensure that the site fully complies with water quality standards for groundwater. Of particular note is the fact that both MTBE and PCE contaminants are monitored three

times per year and the levels are significantly below Clean Water Act standards. There have been no recent deficiencies in groundwater sampling. The site has been permitted for a shredder operation, although there is no intention to use one except as a backup if the Everett site cannot accommodate all of the material received.

During the meeting, the proposed changes to the stormwater system were fully explained (see below) and I was provided with a site tour. It was noted that similar changes to the stormwater management system were made to the site in Everett several years ago and Schnitzer is quite satisfied with the results. Ms. Fitzpatrick noted that NE Metals Recycling would like to undertake this project by August of this year.

NE Metals has also been scheduled to meet with the Conservation Commission on June 22, 2009 and the Water Board on June 30, 2009.

Proposed Project

The applicant is seeking a site plan approval and a Conditional Use Permit for activity in the Aquifer and Wellhead Protection District for the upgrade of the stormwater management system on a 91-acre site on Knox Marsh Road at the site of the existing New England Metals Recycling LLC operation. The applicant proposes to improve the stormwater management system through both operational and structural changes on the site. These include:

- Moving processing activities from pervious areas (open ground) to impervious (paved) surfaces in order to contain and treat stormwater;
- Removing non-functional process equipment that will allow reduction of impervious surfaces by approximately 0.4 acres where no activity will take place; and
- Converting approximately 3.5 acres of process area to non-process areas (storage).

More specifically the project involves the installation of a stormwater management system that will treat all of the stormwater that is discharged from the scrap metal operation. This proposed system is graphically portrayed on the Presentation Plan that is attached to the application booklet and in the Site Plan drawing set included as part of the application. The proposed system is also consistent with the NH DES *NH Stormwater Management Manual*. At present, 27% of the stormwater from impervious surfaces is being treated through an on-site oil/water separator unit. The applicant proposes to install a system that will treat all of the stormwater from impervious surfaces.

The system will initially direct much of the stormwater to a concrete lined swale that will then discharge into a sediment trap. Remaining stormwater will either enter a second concrete swale or discharge directly into the same sediment trap. During a storm event, the stormwater will be held in the trap for up to 24-hours to allow for settling of the sediment. Discharge from the sediment trap will be controlled by a

sluice gate that is operated manually. Once the stormwater has been held for the 24-hour period, it will then be discharged to one of two oil/water separators that will remove oils and greases. Stormwater will then be directed to a constructed wetland system where it will be further treated prior to discharge into an existing on-site isolated wetland. Stormwater from Non-process area #1 will be directed to the constructed wetland and since there will be no stormwater runoff in non-process area #2 no improvements are proposed. All stormwater will be retained on-site and no stormwater will directly discharge into the Bellamy River. The calculation of stormwater volume to be treated is included in Attachment A of the application.

While properly managing stormwater for both quantity and quality is the primary aim of these changes, NE Metals has selected this particular design approach so that it can efficiently clean and manage the various components of the system.

Information Provided

As part of the review of this proposed project, the following information was provided:

- Site Plan Application
- Attachment A, Stormwater Standards, June 12, 2009
- Attachment B, Environmental Protection Program, June 12, 2009
- Attachment B-1, Spill Prevention, Control and Countermeasure Plan, November, 2004
- Attachment B-2, List of Wastes Generated
- Attachment B-3, Stormwater Pollution Prevention Plan, June, 2002
- Site Plan Drawing Set consisting of a title sheet and eight (8) plan sheets, June 2008

Note: The site is currently operating under a Spill Prevention, Control and Countermeasure Plan, November, 2004 that is required of all sites handling petroleum products. It is my understanding that some of the current Above-Ground Storage Tanks have been or will be eliminated, making the current plan outdated. It is also my understanding that NE Metals will be preparing an updated plan in the near future. The Planning Board should clarify this.

Type of Review

This site plan review includes a review of consistency of the subject application with the provisions of Article VII, Commercial and Light Industrial Zone; Article IX Wet Area Conservation Overlay District; Article IX-A, Aquifer and Wellhead Protection Overlay District; Article X, Shoreland Overlay Protection District; Article XXI, Flood Hazard Area Overlay District and Madbury's Site Plan Review Regulations. The review will also offer comments, as appropriate, with respect to the general clarity and accuracy of the information provided. It is not an engineering review of the technical aspects of the proposed project.

Consistency with the Town of Madbury Zoning Ordinance

Consistency with Provisions of Article VII, Commercial and Light Industrial Zone

This project involves the upgrade of the stormwater management system of an existing metal recycling facility. The existing facility is located within the Commercial and Light Industrial Zone as defined in the Madbury Zoning Ordinance (ZO).

The existing and proposed activities appear to conform to the provisions of this zone with respect to both permitted uses and dimensional standards. However, the property is also located within three other overlay districts: the Wet Area Conservation Overlay District, the Aquifer and Wellhead Protection Overlay District and Shoreland Overlay Protection District. Where the provisions of these overlay districts conflict with the underlying zone, the more restrictive requirement will apply.

Consistency with Provisions of Article IX, Wet Area Conservation Overlay District

A priority objective of this zoning article is to: “protect and manage...wetlands...for the benefit of present and future generations”.

There are four (4) delineated wetlands on the subject parcel. Of these, only one will be affected by the proposed activity—the so-called Wetland A as shown on the Site Plan drawings. No activity is proposed in the wetland resource area. The Wet Area Overlay District also regulates a 25-foot no-disturbance buffer and a building/land alteration setback buffer of 75-feet (unless from poorly drained soils--then 50 feet). A portion of the proposed stormwater treatment system—the constructed wetland—is proposed to be constructed within the 75-foot building/land alteration setback with some construction disturbance to the 25-foot buffer.

The applicant has requested a waiver to allow work within the 75-foot building/land alteration and 25-foot vegetated buffer.

This activity is not a permitted use nor is it a strictly prohibited use as defined in Section 4 of Article IX. It may be considered as a Prohibited Use #3—“Alteration of the surface configuration of the land...” Should this be the case, the proposed activity could be subject to a Conditional Use Permit (CUP), requiring written evidence from a wetland scientist indicating that there will be no adverse impact to the wet area as well as comments from the Madbury Conservation Commission and Water Resources Board. If the Planning Board (PB) decides that a CUP is not appropriate, I would suggest as a condition of approval both the statement from a wetland scientist and written comment from the Water Board and Conservation Commission with respect to wetland impact.

Whether or not the PB chooses to grant a waiver or issue CUP, I believe the proposed project will improve the quality of the stormwater and potentially improve the quality of Wetland A since the pollutant load from the stormwater will be mitigated.

Consistency with the Provisions of the Aquifer Protection Overlay District Requirements for a Conditional Use Permit

A priority objective of this zoning article is to: "Protect water resources in Madbury from contamination, depletion and disfigurement using watershed management principles."

Section 4. Permitted and Prohibited Uses

The project is a modification of an existing permitted use that pre-dates the adoption of this Article of the Zoning Ordinance (ZO). Today such a use would not be allowed. The Planning Board will want to consider how to apply the provisions of this article. The proposed project might be considered as a Permitted Use under Section 4: A, 3 as maintenance and repair. The applicant has determined that the activity falls under provision C of Section 3, Applicability, and is subject to a Conditional Use Permit. I am not sure that interpretation applies. I also am not sure that the Conditional Use Permit requirements of Subsection C. 2—Limited and Regulated Use, Conditional Use Permit apply.

Section 8. Conditional Use Permit Criteria and Procedures

The applicant has addressed the Conditional Use Permit Criteria in Section 8 by providing in the application submission an Environmental Protection Plan (Section 8 B.2) as Attachment B. I also believe that the proposed project will improve the quality of stormwater discharged from the operation resulting in a higher quality of water infiltrating into the aquifer, a result which is consistent with the purpose of this Article.

Consistency with the Provisions of the Shoreland Protection Overlay District and the Flood Hazard Area Overlay District

While the project property is subject to the provisions of these two (2) articles of the ZO, the proposed activity does not fall within either district and therefore is not subject to the their provisions and standards.

Consistency with Site Plan Requirements/Standards

The following discussion identifies only those articles and standards that are relevant to this project.

Article V: Submission Requirements

The applicant has submitted a Site Plan application, a Site Plan set of drawings and accompanying documents that are noted above. The submission would appear to be generally consistent with the Submission Requirements enumerated as items A through U of Article V of the Site Plan Review Regulations given that this is not a proposed development, but rather an upgrade to an already approved facility. There are several requirements that are not specifically provided by the applicant which the Board may choose to require or waive. With reference to the lettered items in Article V, these include:

- I. Existing contours are one-foot intervals not two feet. Since the site is very flat the one-foot interval is appropriate, providing good topographic coverage that is more detailed than 2-foot contours.
- J. There does not appear to be a labeled benchmark from USGS datum.
- K. There are no easements or rights-of-way noted on the plan, indicating that this parcel does not have such encumbrances. This should be clarified.
- L. Existing features and conditions appear to be included; however, it might be more convenient for purposes of reading the plans to carry the appropriate legend information on all the drawings rather than having just a general legend applying to all drawings on the first plan sheet.
- M. The plan does show the buildings, but not their size (dimensions) or elevations. Setbacks are not shown, but this is not particularly relevant since all structures are well beyond the required dimensional setbacks. A note to this effect might be helpful.
- N. On-site roadways do not show widths.
- P. Water supply and sewage disposal facilities not shown. Assume these are not found on this part of site. This should be clarified.
- Q. No solid waste facilities shown. Clarify how solid waste is managed on site.
- S. Water and monitoring wells noted, but no other utilities shown on the Site Layout Plan, C203. I understand from the applicant that no utilities will be changed and that they will remain as shown on the Existing Conditions Plan, C 201. This should also be clarified.
- T. No lighting is shown. This should be clarified.
- U. The information requested in this item is not provided on this plan and can only be obtained from a boundary survey which has not been provided. I assume one does not exist for this site. E.g., there is a note on the Overall Existing Condition Plan sheet—"Approximate Property Line". While it would be helpful to have this information, I am not sure how critical it is for the purposes of this project. I would think that property owner would have had a property survey completed previously.

Article VI: Standards

Since this a previously approved use and the project involves an upgrade to the stormwater system, not all of the standards for site review are relevant. Below I have itemized each with a response.

1. Off Site Impacts—The proposed activity will not increase any of the off-site impacts of the current operation. Surface water is not discharged off-site with all stormwater being infiltrated on site.
2. Landscaping—Because of the location of this operation on the property and with respect to adjacent properties, additional landscaping would not yield any benefit. Much of the site activity is buffered by existing natural vegetation and long distance to streets (e.g., Knox Marsh Road) or adjacent properties.
3. Parking—Adequate space for minimal parking appears to be provided on-site.
4. Loading—Loading not an issue.
5. Erosion—The site is flat and all stormwater is retained on-site with little chance for erosion. The areas requiring processing and vehicle travel are paved with little chance for dust to move off-site. The Board may want to clarify with the applicant the potential for dust from the non-process areas.
6. Stormwater Runoff—Meets this standard.
7. Nuisances—I would clarify this with the applicant. Based on my conversations with the applicants' representatives at the site visit, such potential nuisances do not rise to the level of a discernable impact to surrounding property owners. No complaints from abutters in recent years.
8. Highway Access—I do not know if the access from Knox Marsh Road meets the Subdivision Standards. Since the level of vehicular traffic should not be affected by this project and the use/activity was previously approved, it would seem that the current entrance is adequate. The Board may want to ask for a qualitative assessment from the applicant's engineer.
9. Water and Sewage—This development will not increase the demand for these services and it is assumed that the current services meet both state and local requirements. The Board may want to clarify what the current services are.
10. Utilities—Utilities are not indicated on the plan. See Article 5, S above. Clarify this with the applicant.
11. Emergency Services—Since the proposed use does not increase the level of activity and is only an upgrade to the stormwater system, this requirement is probably not necessary—unless there is some current problem with respect to this issue.
12. Hazardous Materials—I assume this requirement has already been complied with since this operation is a long-standing business which should have been required to supply any such data to the Fire Chief previously. The application contains a list of three (3) industrial wastes generated on the site and how they are managed. See Attachment B-2 of the submission.

Article VII: Compliance with Other Laws

The Board should inquire as to any other state or federal laws that may be applicable including the provisions of the NH DES Stormwater Regulations and recommended stormwater Best Management Practices. I would also recommend a letter of review from both the Madbury Conservation Commission and the Madbury Water Board prior to site plan approval.

Article VIII: Traffic Impact Analysis

Since the proposed activity does not change the use or level of activity, a Traffic Impact Analysis is not recommended.

Article IX. Special Studies

I believe the applicant has provided a stormwater management plan that is a significant improvement over the existing system. I also believe the applicant has complied with the regulations of the NH DES for addressing stormwater impacts. Prior to issuing an approval of the site plan, the Board may wish to have third party civil engineering review for the technical aspects of the proposed plan. I can supply names of three local firms that could undertake such a study in an efficient and timely manner. I do not believe any other Special Studies would be warranted.

Section 2. Waivers

The applicant at present does not strictly comply with the Madbury Site Plan Review Regulations. However, I believe the plan as proposed with any minor amendments the Board may want to impose would be acceptable for approval with waivers for some or all of the provisions I have noted above.

PB Note on Article VI; Section 6. Stormwater Runoff. This standard requires that "In no case shall post-development run-off "velocity" be permitted to exceed the predevelopment rate." (Instead of velocity this term should be "peak storm runoff rate or peak storm discharge"). This item was corrected in the Subdivision Regulations, but not Site Plan.

Comments on the Site Plan Package

Overall these plans are suitable for illustrating the nature of the proposed site plan activity. Below are several comments with respect to the overall plan set:

- There is only one overall legend—so-called Line Types on Sheet G001. It would be preferable to have legends on each of the plan sheets that relate solely to the information on that particular sheet.
- On Sheet G001 under Line Types there is a line type for Bordering Vegetated Wetlands. This is incorrect—this is a type of wetland under the Massachusetts Wetlands Protection Act. It should say Wet Area or Wetland consistent with Madbury's definition. Also there is no line type for either the 25 –foot buffer or the 75-foot setback.
- On Sheets C200 and C201 the plan uses fade back instead of full weight (like the labels) to the plan lines making them somewhat difficult to read.
- On Sheet C200 there are 2 scales/scale bars.
- On Sheet C205 there is a bar scale which is not correct.

Summary

- The proposed project will upgrade and improve the stormwater system at the NE Metals Recycling site.
- The owner appears to be in compliance with state laws and regulations.
- The Planning Board may want to request a third-party engineering review to ensure to its satisfaction that the plan is technically sound.
- The proposed site plan generally conforms to the Town of Madbury's Zoning Laws and Site Plan Review Regulations.

This concludes the review of the proposed Stormwater Improvement Project. Please let me know if you have any questions or require additional information.