

JUN-21-2004 MON 03:16 PM BSC NORWELL

FAX NO. 6173458027

P. 02



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June 21, 2004

Mr. John Gurney, Chairman  
City of New Bedford Conservation Commission  
New Bedford City Hall  
133 William Street  
New Bedford, MA 02744

RE: Keith Middle School  
New Bedford, Massachusetts

Dear Mr. Gurney:

This letter is in regards to the proposed Keith Middle School project located at McCoy Field, Hathaway Boulevard in New Bedford, Massachusetts. BSC has reviewed the following materials submitted to the New Bedford Conservation Commission:

- Notice of Intent Application dated June 11, 2004 prepared by Moreice & Gary, including Geotechnical Engineering Assessment, Drainage Report dated June 8, 2004, prepared by Beta Engineering, and Order of Conditions issued March 22, 2004.
- Site Plans entitled "Keith Middle School, New Bedford, MA," prepared by Moreice & Gary, dated June 11, 2004.
- Plan entitled "Roof Drainage Plan, Keith Middle School, New Bedford, Massachusetts," prepared by Mount Vernon Group, dated June 11, 2004.

With regards to the above referenced information, BSC has the following comments pertaining to drainage design only:

1. The applicant had shown catch basin to catch basin connections on the site. BSC recommends that catch basin to drain manhole connections be incorporated into the design.
2. The piping design is lacking information including the proposed inverts for drain manholes, roof leaders, and flared ends discharging to the wetlands. Pipe sizing calculations were not submitted for review.
3. BSC concurs with the applicant that discharge to the wetlands generated by grassed slopes and the building rooftop does not require treatment. However, the discharge to Hathaway Boulevard is only treated by deep sump catch basins which remove 25% of Total Suspended Solids. Additional treatment is required to meet the 80% TSS removal requirement outlined in the Stormwater Management Guidelines.
4. With regards to the Operation and Maintenance Plan, BSC recommends that the catch basins and detention facilities be inspected four times a year and cleaned when necessary. One inspection should take place in the spring following the snow melt.

Engineers

Environmental  
Scientists

GIS Consultants

Landscape  
Architects

Planners

Surveyors

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5. The applicant has provided test boring logs for 9 of the 34 test borings performed on the property. The applicant should provide all soil testing information. The summary of test borings indicates a groundwater elevation. It is unclear as to whether the groundwater elevations were determined by observed groundwater or by soil mottles. The majority of the borings were conducted in August, September, and October. Therefore, if the groundwater elevations were determined by the observation of groundwater and not soil mottles, the groundwater elevations shown on the plans are not indicative of seasonal high groundwater.
6. A proposed conditions drainage plan should be submitted for review.
7. The applicant has used hydrologic soil type B for the proposed conditions calculations and hydrologic soil type D for the existing conditions calculations. The soil types should be consistent for both the existing and proposed conditions calculations.
8. Proposed conditions calculations were not submitted for the 100-year storm. These calculations are necessary to determine whether the underground detention facilities are sized appropriately to accommodate the 100-year storm.
9. The applicant has stated that there have been discussions with the City regarding increasing the stormwater flows to the Hathaway Boulevard by 3 cfs. The proposed conditions calculations show an increase in flows to the drainage system in Hathaway Boulevard by 2.6, 2.3, and 2.1 cfs for the 2, 10, and 25 year storm events. There were no proposed conditions calculations submitted for the 100 year storm. BSC recommends that the Commission coordinate with the City of New Bedford Engineering Department regarding this increase in flows. Due to the fact that there is an increase in flows to Hathaway Boulevard drainage system, there is also an increase in total peak flows offsite. Therefore, Standard #2 of the Stormwater Management Guidelines is not met for the 2 and 10 year storms.
10. The applicant shows field drains and a drain manhole in the proposed courtyard. It is unclear as to how these drains are tied into the drainage system.
11. The site plans show four discharge points to the wetlands from the proposed building. The roof drainage plan shows five discharge points to the wetlands.
12. The calculations show a 7" primary orifice and a 6" overflow orifice controlling the discharge rates from both underground systems. A detail should be included on the plans showing how this outlet structure is to be constructed.
13. BSC understands that the site is listed as a "Disposal Site" under the Massachusetts Contingency Plan (MCP). BSC did not review any information specific in the Notice of Intent relative to the site conditions with respect to hazardous waste. Due to the fact that hazardous waste issues are complex, BSC recommends that the Commission request the project's Licensed Site Professional (LSP) of record to prepare a written statement for the Commission stating that he has reviewed the plans. The letter should state that the plans are consistent with the findings of his site assessment, risk assessment, Response Action Outcome statement or other documents prepared as part of the Site Closure and that the proposed activity will not adversely impact the environment. The LSP's letter should indicate whether the work will exacerbate any environmental condition or cause any significant residual contamination to migrate off-site via moved soil, ground water moving towards the wetlands or as eroded sediment. This statement will allow the Commission to condition the project while relying on issues associated with the MCP under the direction of the LSP.

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Please call if you have any questions.

Sincerely,

The BSC Group, Inc.

A handwritten signature in black ink, appearing to read "Scott D. Turner".

Scott D. Turner, P.E., A.I.C.P.  
Associate

VAUSR\public\BSC\Proposals\2004\ednab-keith-5-20-04.doc



## MEMO

Date: June 21, 2004

To: Kevin Aguiar and Al Hanscom at BETA and Evan Warner at MVG

From: Ben Gary

Re: **Keith Middle School, New Bedford**

Subject: BSC Group Review, June 21, 2004

Received the attached three page FAX from BSC, reviewing engineers for the New Bedford Conservation Commission concerning the Notice of Intent for Phases 2 and 3 and have listed the involved firms with suggested paragraphs which they should be prepared to respond to for your consideration. Given that the Public Hearing is tomorrow evening, it seems realistic that we can provide answers to these questions, with a letter or drawing to follow, for as always, the Hearing will be continued.

<u>Firm</u>	<u>Paragraphs (* shared response)</u>
M&G	1, 2, 4, 5*, 6, 10, 11*
BETA (Aguiar)	5*, 7, 8, 9, 11*
BETA (Hanscom)	5*, 13