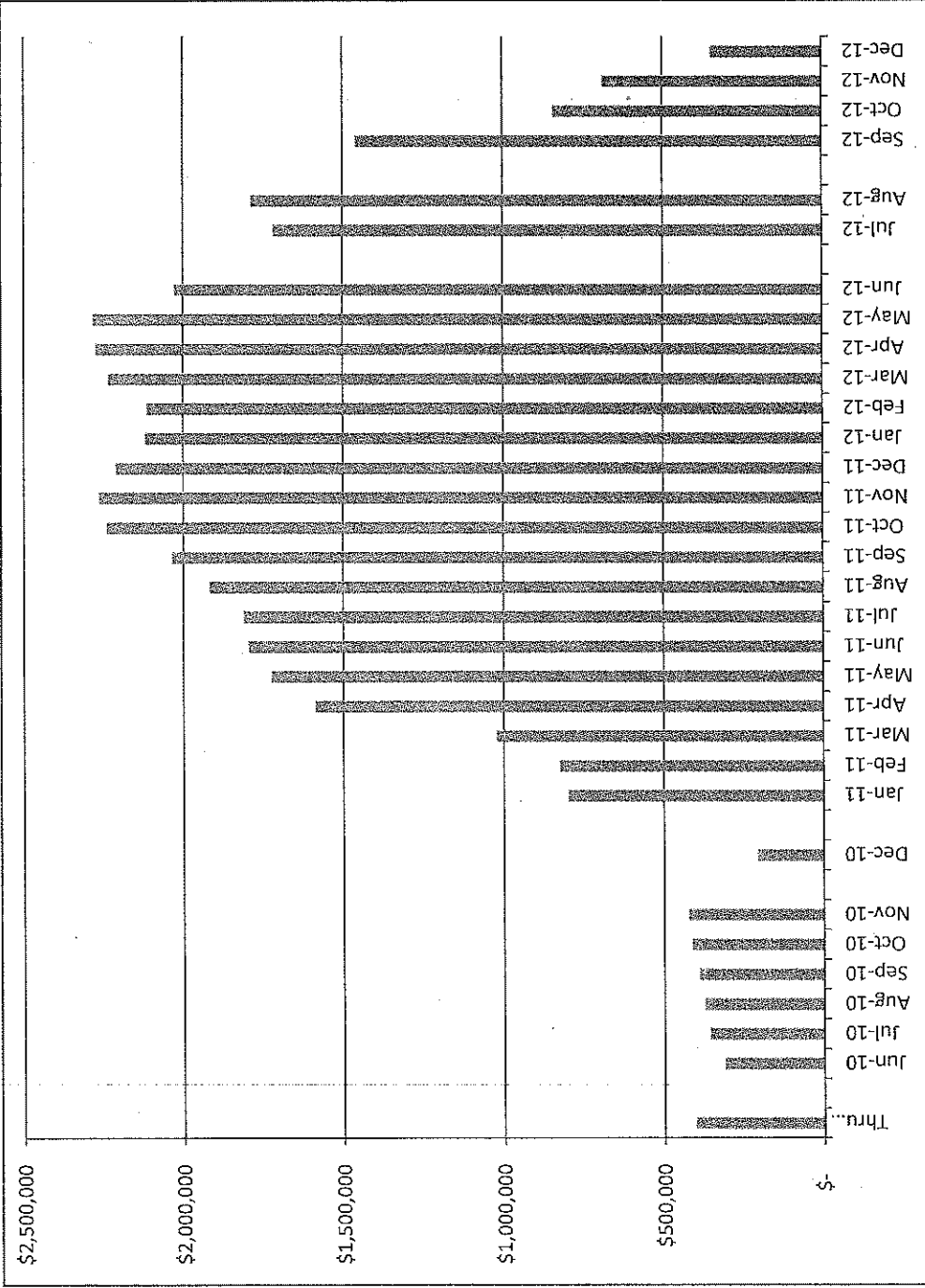


<b>Spent to Date to May 2010</b>	
Thru May-10	\$ 404,725
<b>Projected Amounts</b>	
Jun-10	\$ 313,596
Jul-10	\$ 360,216
Aug-10	\$ 375,012
Sep-10	\$ 391,237
Oct-10	\$ 413,768
Nov-10	\$ 423,879
<b>Bidding</b>	
Dec-10	\$ 206,012
<b>Construction</b>	
Jan-11	\$ 798,238
Feb-11	\$ 824,359
Mar-11	\$ 1,023,456
Apr-11	\$ 1,587,683
May-11	\$ 1,724,052
Jun-11	\$ 1,795,741
Jul-11	\$ 1,810,237
Aug-11	\$ 1,917,528
Sep-11	\$ 2,034,929
Oct-11	\$ 2,239,098
Nov-11	\$ 2,262,234
Dec-11	\$ 2,207,817
Jan-12	\$ 2,119,724
Feb-12	\$ 2,115,560
Mar-12	\$ 2,233,404
Apr-12	\$ 2,273,279
May-12	\$ 2,280,228
Jun-12	\$ 2,028,209
<b>Punch List; FFE; Technology</b>	
Jul-12	\$ 1,717,727
Aug-12	\$ 1,785,517
<b>Close-Out</b>	
Sep-12	\$ 1,458,399
Oct-12	\$ 840,529
Nov-12	\$ 684,094
Dec-12	\$ 349,511
<b>Total:</b>	<b>\$ 43,000,000</b>



**EXHIBIT E**  
**PROJECT SITE**  
**TOWN OF UXBRIDGE**

**PROJECT SCOPE & BUDGET AGREEMENT**



## **SITE DEVELOPMENT NARRATIVE**

The location of the new Uxbridge High School on Quaker Highway allows for continued use of the existing Uxbridge High School building and athletic facilities throughout construction.

The project site is a 156 acre town-owned property at 246-270 Quaker Highway. The site development area is concentrated within the central portion of the site and occupies approximately 35 acres at full build out. This development occurs within forested and previously disturbed areas and away from the steep slopes located along Quaker Highway.

The new school building is oriented along an east/west axis to take advantage of maximum natural day-lighting control and the associated savings in electrical lighting. The building is situated on a knoll between two existing gravel pits, with the main building entrance and interior 'commons' aligned with the centerline of the Blackstone River beyond to the north. People entering the building from main entrance on the south elevation will have a seasonal view through the open spine of the school to the river beyond.

Access to the school facility is via a boulevard entrance off Quaker Highway. The design of on-site driveways and parking areas easily accommodates traffic flow and queuing with separate designated parent and bus drop-off areas. Parking areas will accommodate approximately 297 vehicles, including accessible parking and is designed, along with the access drives, to provide safe and organized traffic flow through the site.

The site design takes advantage of the two previously-disturbed areas created by the gravel removal operations to the north and south of the knoll. All of the athletic fields, as well as a running track are located within former gravel pit areas. Athletic facilities include a soccer field that will be constructed on top of fill within the northern gravel pit, and a 400 meter track with synthetic surface and grass football and multi-purpose grass athletic fields within the southern gravel pit. Coincidentally, the grade difference between the southern gravel pit and the plateau upon which the first floor of the high school is to be built will allow for a lower locker room level under the gymnasium with direct access to the playing fields to be constructed in the southern gravel pit.

Low impact development (LID) techniques including minimization of paved areas, bio-retention areas, and groundwater infiltration systems will be combined with traditional stormwater collection and treatment systems to manage stormwater on site. Site lighting and amenities will be strategically placed throughout the High School site. Native trees, shrubs and ground cover will be used to vegetate disturbed areas and provide shade.

The high school will be serviced by municipal sewer and water services. Private natural gas, electric, and tele-communications utilities will be provided by the applicable utility companies.

Site Development "Packages"  
(Refer to Figure 1 Below)

A development strategy was created to work with the 'not-to-exceed' budget established by the MSBA during the Feasibility Study phase. The design team broke the scope of site work into a menu of numerous site development 'Packages' that could be included in the 'Base Bid', bid as "Alternates", or budgeted as "Future Projects" by the town, depending on market conditions when the project is bid.

The overall site development plan was separated into seven (7) individual packages labeled "A" through "G". Site package "A" generally includes the Base Bid site work, including the entrance drive, parking, utility connections, and limited playing fields. In general, the remaining site packages are being budgeted as Alternates or Future Projects, though some Base Bid work overlaps a bit into some.

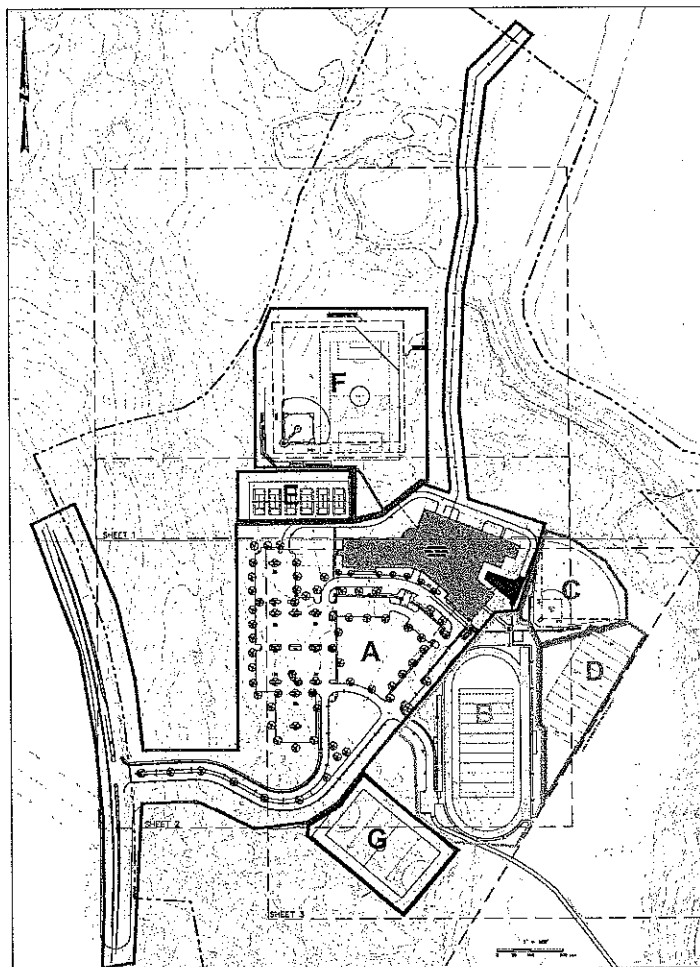


Figure 1 – Site Packages "A" through "G"



Base Bid Schematic Site Design

*(Refer to Figure 2 Below)*

The Base Bid generally includes the area delineated in red and labeled "A" on Figure 1 above and limited work within the southern and northern gravel pits labeled as "B", "C", "D" and "F" as described below:

- Site preparation, erosion control, and grading throughout the base bid areas (A, B, C, D, and F)
- Building pad and utility connections
- Off-site road improvements along Quaker Highway as described in the Traffic Impact Statement
- Boulevard access driveway off of Quaker Highway; pavement, pavement markings, site sign, street lights, guardrail, curbing, planting, and associated drainage.
- Interior access drives and parking areas; pavement, pavement markings, drive aisles, curbing, walkways, drainage, lighting, landscaping, crosswalks, accessible curb ramps, signage, and flag poles
- Service/emergency drive around the school; pavement, lighting, drainage, walkways, turn-around, guardrails, landscaping, dumpster area, and a pervious paver turn-around/patio area.
- Site utilities and stormwater management systems; natural gas, electric, tel/data, sanitary sewer, water, underground stormwater infiltration units, rain gardens, and biofiltration areas
- Athletic facilities at southern gravel pit; grading, loam, seed, water service, automatic irrigation system, walkways, paved access/emergency drive, accessible parking, 400 meter track with synthetic surface, natural turf football field and field events area inside track at Site Area A and multi-use athletic field area adjacent to track and stretching off into Site Areas C and D.
- Northern gravel pit restoration; fill, loam, seed, water service, walkway, and soccer field.
- Plantings and landscaping

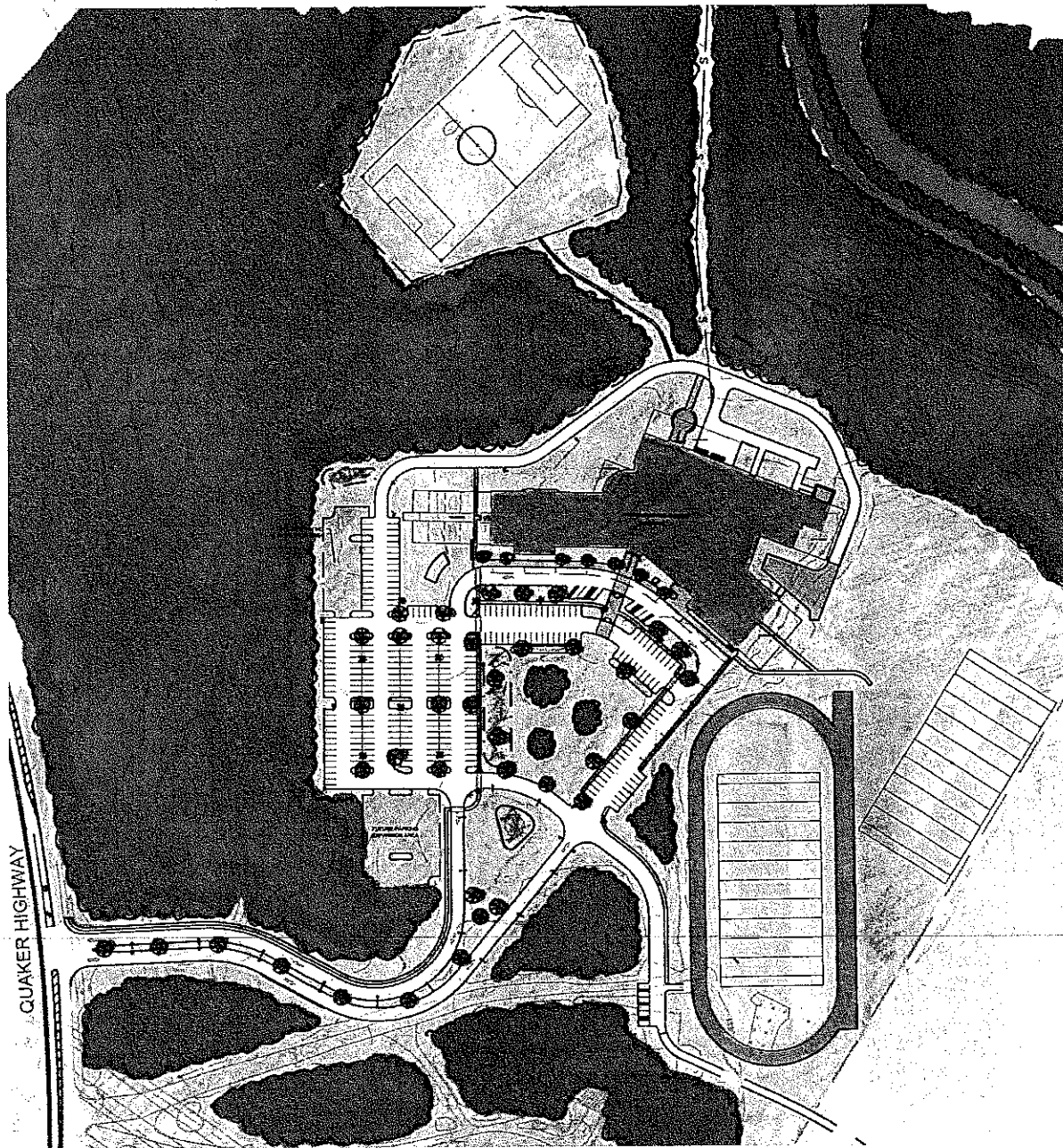


Figure 2-Schematic Design Site Plan – Base Bid

#### Base Bid Pavement and Site Circulation

Access to the school facility is via a boulevard entrance off Quaker Highway. The 20' wide one-way entrance and exit drives are separated by a minimum 10' wide planting area. The width of the entry and exit drives provides overflow parallel parking capacity for large events, thereby minimizing the amount of parking lot constructed. The design of vehicular routes near the school itself is organized around "the Grove", a one acre multi-use open space in front of the building.

The new High School will experience heightened activity during the morning and afternoon peak times for parent and bus drop-off and pick-up. Vehicular circulation routes within the site are designed to provide safe and organized traffic flow. Vehicular circulation is two-way within the interior of the school site with exception of the bus drop off area which is one-way. The design of on-site driveways and parking areas accommodate easy flow of traffic and queuing with designated, separate parent and bus drop-off areas. The bus drop off area will allow 12 buses to queue at one time without interfering with traffic flow.

Parking areas provide approximately 297 parking spaces, including accessible parking. The majority of the accessible parking is located along the bus drop off drive and is in close proximity to the main entrance. Additional accessible parking spaces are located adjacent to the track and athletic field area. An 18' wide emergency/ service access drive is located on the north side of the building with a turn-around that allows emergency vehicles/fire trucks to reverse direction in the courtyard between the gymnasium and the tech ed wing.

The future location of the Blackstone Bikeway within the Quaker Highway site will provide alternative transportation options to area residents and students, and will reinforce the goals of the "Green Schools" initiative.

Parking lots, driveways, service access and the emergency access around the High School will be constructed of bituminous concrete with pavement boxes suitable to the expected traffic loading. Parking islands and driveways will be edged with curbing and/or water quality/bio-retention swales for stormwater treatment. Traffic and direction signage will be installed to manage traffic flow throughout the site.

Sidewalks and accessible ramps will be concrete and pavers or other decorative paving may be used at the main entrance. Cross walks will be installed as needed to provide safe routes for pedestrians to traverse the site. All routes and ways will conform to MAAB/ADA requirements.

#### Base Bid Exterior Athletic Facilities

Athletic facilities include; a soccer field, a 400 meter track with synthetic surface and grass turf field located in the interior of the track, and a multi-purpose grass athletic field area is located adjacent to the track and field. The adjacent athletic field area will provide a grass surface graded appropriately

for the specified use in anticipation of future build out of the softball field described in site package "C" in the Site Add – Alternate descriptions.

Due to the proximity to a public water supply and location within a Zone II aquifer recharge area, the fields will be irrigated and maintained using Integrated Pest Management. This is also in keeping with the goals stated in the "Green Schools" initiative.

#### Base Bid Site Improvements and Landscaping

Site lighting will be installed in the parking lots, around the High School, and along significant pedestrian routes. Trash receptacles, benches, and water fountains will be strategically located around the school and field areas. Bicycle racks will be installed convenient to entrances. Again, this is in keeping with the goals stated in the "Green Schools" initiative.

Native trees, shrubs, groundcover, perennials, and hardy turf species will be installed to compliment the site athletic field area and public areas, in keeping with the goals stated in the "Green Schools" initiative.

#### Base Bid Storm Drainage

Due to the resource areas on site (Bordering Vegetated Wetlands, Riverfront, etc.), this site will fall under the jurisdiction of the Massachusetts Wetland Protection Act. Therefore, stormwater management systems will need to meet DEP's stormwater management standards. Requirements will include attenuation of peak discharge rates, treatment of stormwater runoff, and infiltration to groundwater recharge. To achieve these goals and to produce a more sustainable site, low impact development (LID) techniques including minimal paved areas, bio-retention areas, and groundwater infiltration systems will be employed wherever possible to manage stormwater on site. Stormwater management in the base bid construction areas will be divided into two separate systems – one to collect stormwater runoff south of the building and one to collect stormwater runoff north of the building.

The stormwater management system south of the building will combine LID techniques with some traditional stormwater collection and treatment systems. Stormwater runoff from the majority of the access driveway will be directed to a grass lined swale in the median, which will discharge to a bio-retention area for treatment prior to discharge. Stormwater runoff from the parking areas southwest of the building will sheet flow towards the east to a bio-retention area located in the quad in front of the high school.

All bio-retention areas shall be constructed without base liners to promote groundwater infiltration and provide peak runoff rate attenuation. In addition, each bio-retention area will include a raised area drain overflow that will connect to the overall stormwater collection system.





Runoff from the smaller parking areas to the southeast and sections of the driveways will be collected in deep-sump, hooded catch basins to promote sediment removal and will be routed through stormwater quality units for treatment prior to discharge. All stormwater collected in catch basins, overflows from bio-retention areas, and runoff from the building's roof will be directed via pipes to an underground detention and infiltration system located southeast of the building, providing both peak rate attenuation and further infiltration to the groundwater table. Overflow from this detention and infiltration system will be discharged towards the east through a level spreader to provide a low velocity, sheet flow discharge.

The stormwater management system north of the building will also combine LID and traditional stormwater management techniques. Stormwater runoff from the parking area west of the building as well as most of the perimeter driveway north of the building will be directed to three bio-retention areas for treatment prior to discharge. Each of these bio-retention areas will be constructed without base liners to promote infiltration to groundwater and will include raised area drain overflows that will connect to the stormwater collection system. A portion of the perimeter driveway northeast of the building will be collected in deep-sump, hooded catch basins to promote sediment removal and routed through stormwater quality units for treatment prior to discharge. All stormwater collected in catch basins, overflows from bio-retention areas, and runoff from the building roof will be directed via pipes to an underground detention and infiltration system located northeast of the building providing both peak rate attenuation and further groundwater infiltration. Overflow from this detention and infiltration system will be discharged towards the east through a level spreader to provide a low velocity, sheet flow discharge.

#### Base Bid Sewer, Water and Utility Connections

The high school will be serviced by municipal sewer and water. Sewer service will have to be routed from the north side of the building to an existing main in South Main Street. Installation of this service will require wetlands crossing between the building and South Main Street and will generally follow the proposed route of the Blackstone River bikeway.

Water service shall be provided by a connection to a new main from the new well the Town will be installing southeast of the building site prior to this project coming on line. A 12-inch DICL water pipe will be routed from a connection at the main in the access driveway to the domestic and fire protection services on the south side of the building, on the ground floor. A 6-inch DICL main will continue around the west and north sides of the building to provide service for fire hydrants spaced in accordance with current fire code requirements. Gate valves will be provided at each service, each hydrant, and at various locations along the water main to provide adequate shut off controls.

Private utilities will provide natural gas, electric, and tele-communications services to the school. These services will be routed into the site from existing mains in either Quaker Highway or South Main

Street per the discretion of the individual utility companies. Additional electrical connections will be required from the building to the various fields and courts for each of the optional site packages.

Site Development "Add-Alternates"  
(Refer to Figure 3 Below)

Site Add-Alternates "A" thru "G" are to be constructed as funding becomes available. Elements included in each Add Alternate -Site Package are described below and priorities have not yet been set:

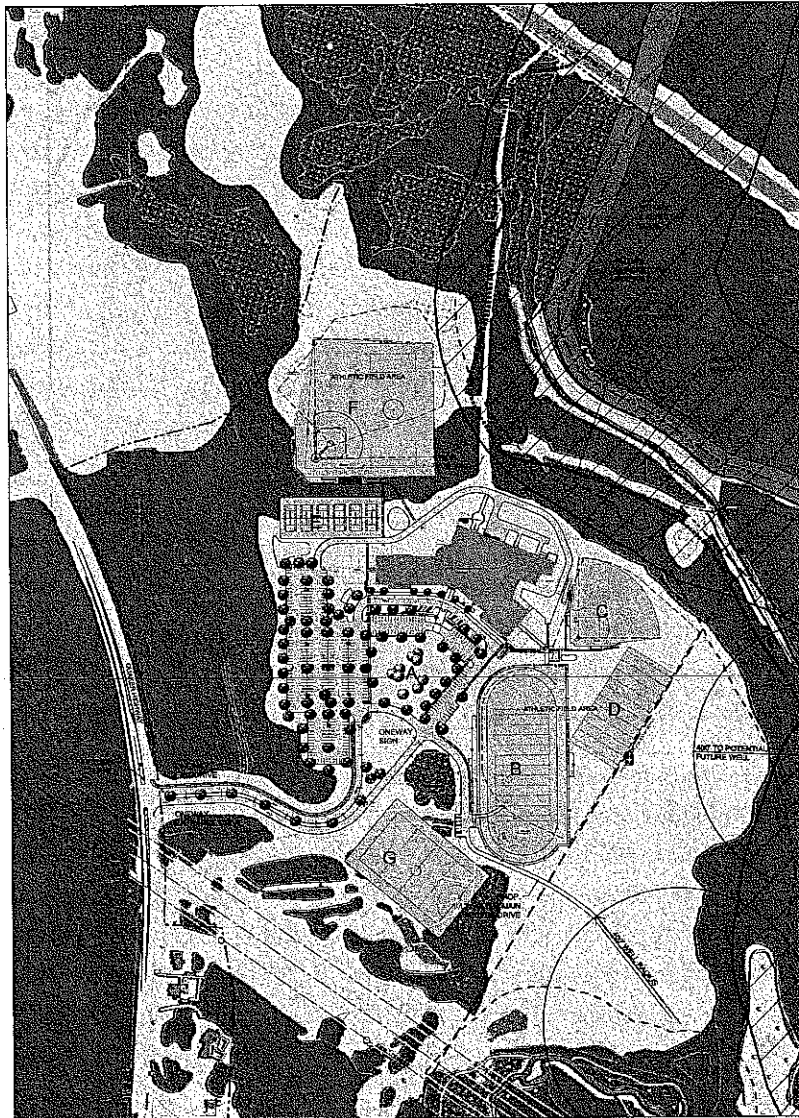


Figure 3-Schematic Design Site Development "Add Alternate" Site Packages



#### Site Package A "Add-Alternate" - Miscellaneous Site Work

- Add an additional 87 parking spaces; earthwork, grading, drainage, pavement, lighting, pavement markings, landscaping
- Add Rainwater Harvesting Cisterns for use in irrigating landscaping and athletic fields; subsurface concrete structures, pumps, circulation piping.

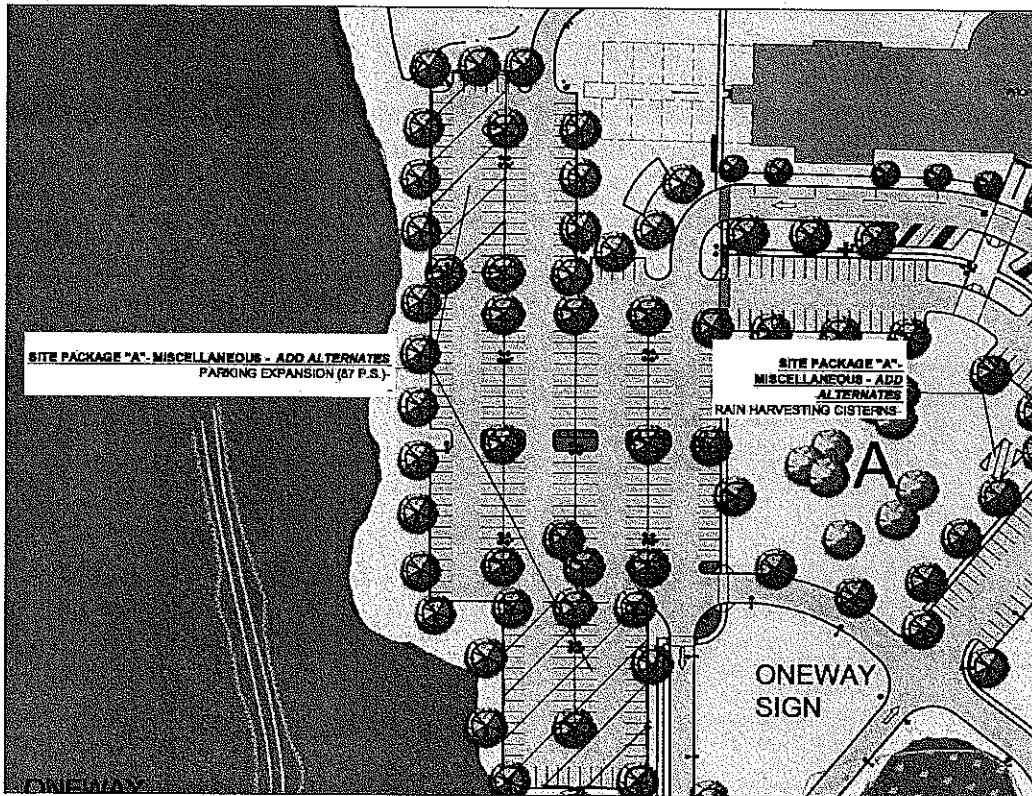


Figure 3a: Site Package "A" - Miscellaneous Site Work Add-Alternate

#### Site Package B "Add Alternate" - Football Complex

- Install electric/data/tv/telephone services, sports lighting, score board, 300 and 600 seat bleachers, press box, concession/restrooms building, equipment storage building, chain link fence and gates around the track and football field installed under the base bid.
- Install related walkways, accessible ramp to bleachers and pressbox, landscaping, and trash receptacles as required
- Additions to the stormwater management systems as part of Site Package "B" include construction of an additional bio-retention area and connection of the trench drain along the inside edge of the track to the stormwater collection system. The bio-retention area will be

constructed to promote infiltration to groundwater and will include a raised area drain overflow to the stormwater collection system. Both the discharge from the track trench drain and the overflow from the bio-retention area will be routed through the underground detention and infiltration area southeast of the building.

- Construction of Site Package "B" will require a sewer service connection to the field area rest rooms. This connection will require grinder pumps as the rest rooms will be located below the elevation of the sewer service discharging from the school building.
- A 2-inch copper water line with a corporation stop will be installed from the site water main to provide irrigation water and drinking water for the track and field areas.
- If funding allows, an additional add-alternate is to add a synthetic turf field striped for football, soccer and lacrosse

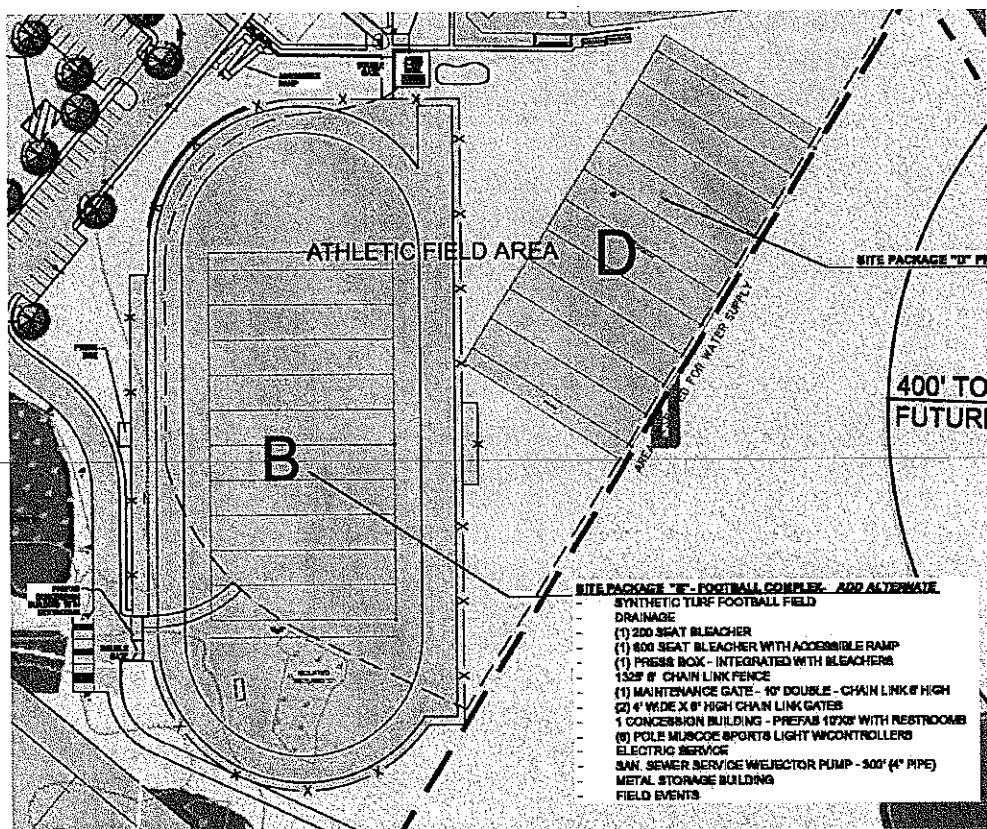


Figure 3b: Site Package "B" Football/Track Complex Add-Alternate

Site Packages C and D "Add Alternates" - Softball Field and Practice Football Field

- Upgrade of irrigation system, skinned infield, pitching rubber, bases, foul poles, fence/backstop, players benches, dugouts, scoreboard, bleachers, walkways, drainage, electric service, sports lighting (optional), trash receptacles, rip-rap slope to create a softball field in Area B of the phys ed field installed under the base bid.
- Line marking, benches and water bubbler to create a practice football field in Area D of the phys ed field installed under the base bid.

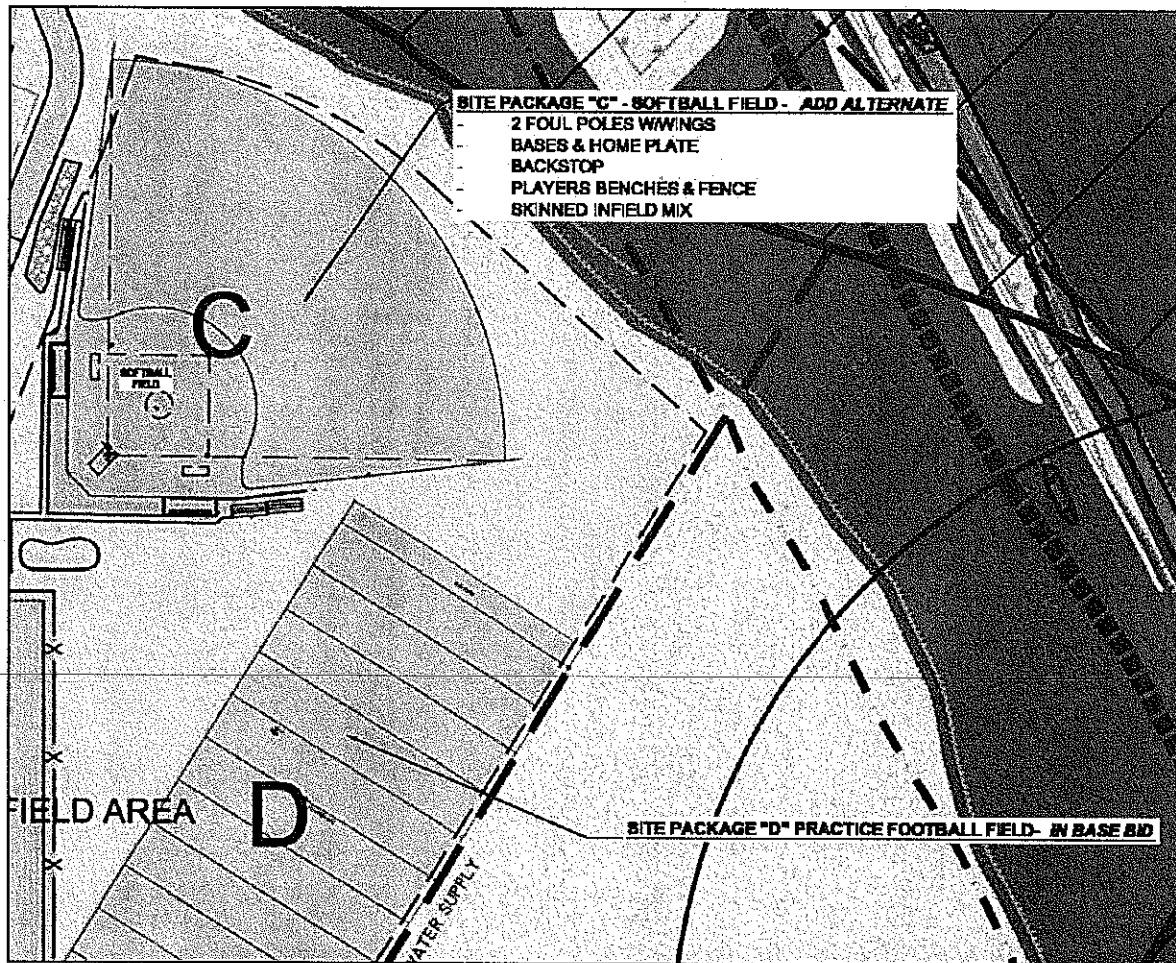


Figure 3c: Site Packages "C" Softball Field and "D" Practice Football Field Add-Alternates



Site Package E "Add Alternate" - Tennis Courts

- Provide additional site preparation, clearing, grading, erosion control, loam and seeding for the installation of six tennis courts to allow for league play
- Install Six (6) bituminous concrete courts with colored acrylic surface, court markings, posts, nets, water service, bubbler, 10' high chain link fence, gates, players benches, walkways, trash receptacles
- The construction of the tennis courts under Site Package "E" will require the construction of an additional bio-retention area to collect and treat runoff from this additional impervious surface. The bio-retention area will be constructed to promote infiltration to groundwater and will include a raised area drain overflow to the stormwater collection system north of the building.
- A 2-inch copper water line with corporation stop will be installed from the site water main north of the building to provide drinking water for the tennis courts.

Site Package F "Add Alternate" Baseball Field/Multi-Use Athletic Field:

- Provide additional site preparation, clearing, grading, erosion control, loam and seeding to extend the soccer field installed over the top of the northern gravel pit under the base bid
- Cut in and add infield mix, pitching rubber, bases, foul poles, fence/backstop, players benches, dugouts, scoreboard, bleachers, walkways, electric service, sports lighting (optional), steps/railing, bubbler, trash receptacles for the new baseball field
- Install an automatic irrigation system
- Extend the 2-inch copper water service installed with Site Package "E". It will be required for Site Package "F" to provide irrigation and drinking water for the fields.
- As part of the construction of the fields in Site Package "F", a perimeter sub-drain will be installed that will day light to an existing depression east of the fields. The sub-drain will consist of a 6-inch perforated HDPE pipe encased in washed, crushed stone wrapped in a filter fabric.



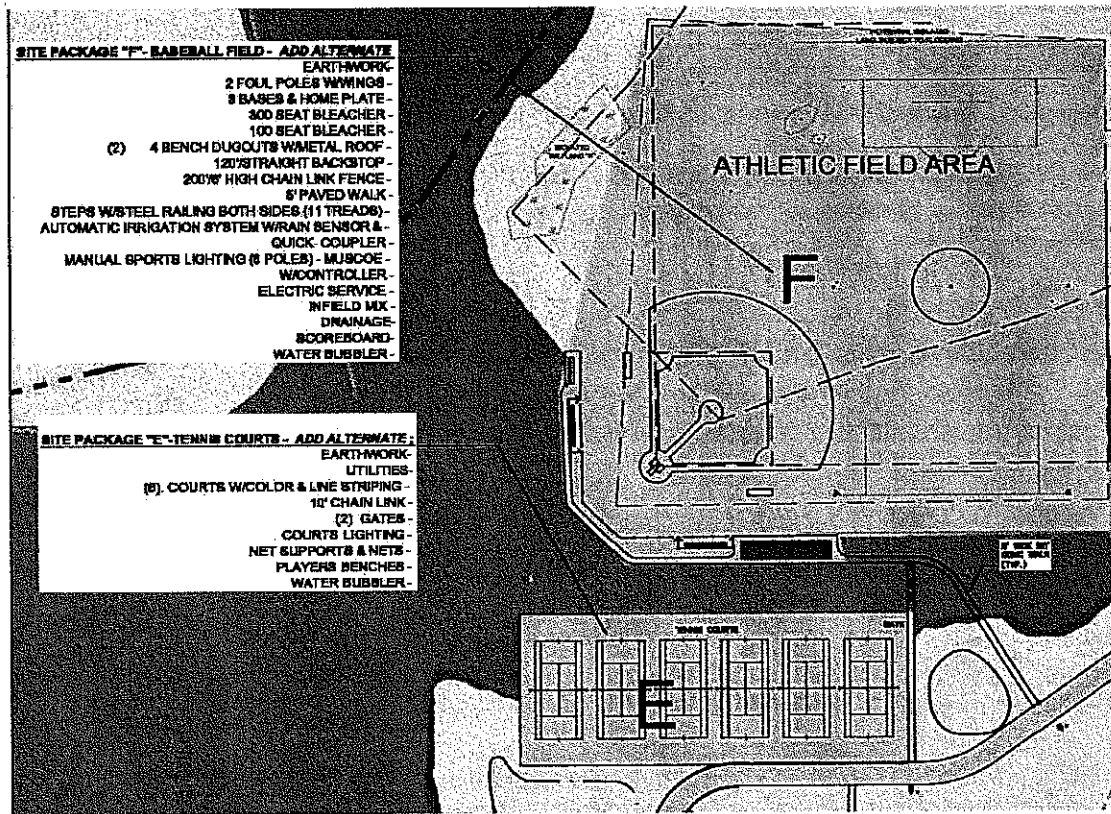


Figure 3d: Site Packages "E" & "F": Tennis Courts and Baseball Field Add-Alternates

#### Site Package G "Add Alternate" - Field Hockey

- Provide site preparation, clearing, grading, erosion control, loam and seeding to create a flat field plateau in site area H for a field hockey field
- Install goals, nets, permanent field marking pins, players benches, and trash receptacles
- Install an automatic irrigation system and an electric service
- Extend the 2-inch copper water service installed with Site Package "B" in order to provide irrigation and drinking water for the field.



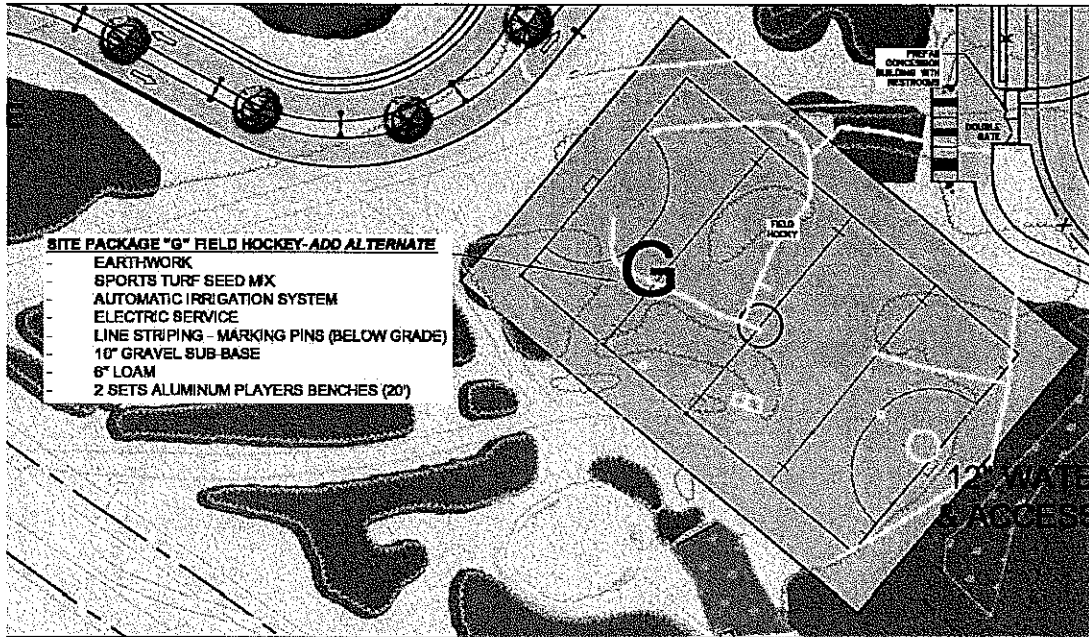


Figure 3e: Site Package "G" Field Hockey Add-Alternate



## Preferred Site Alternative: Quaker Highway Site

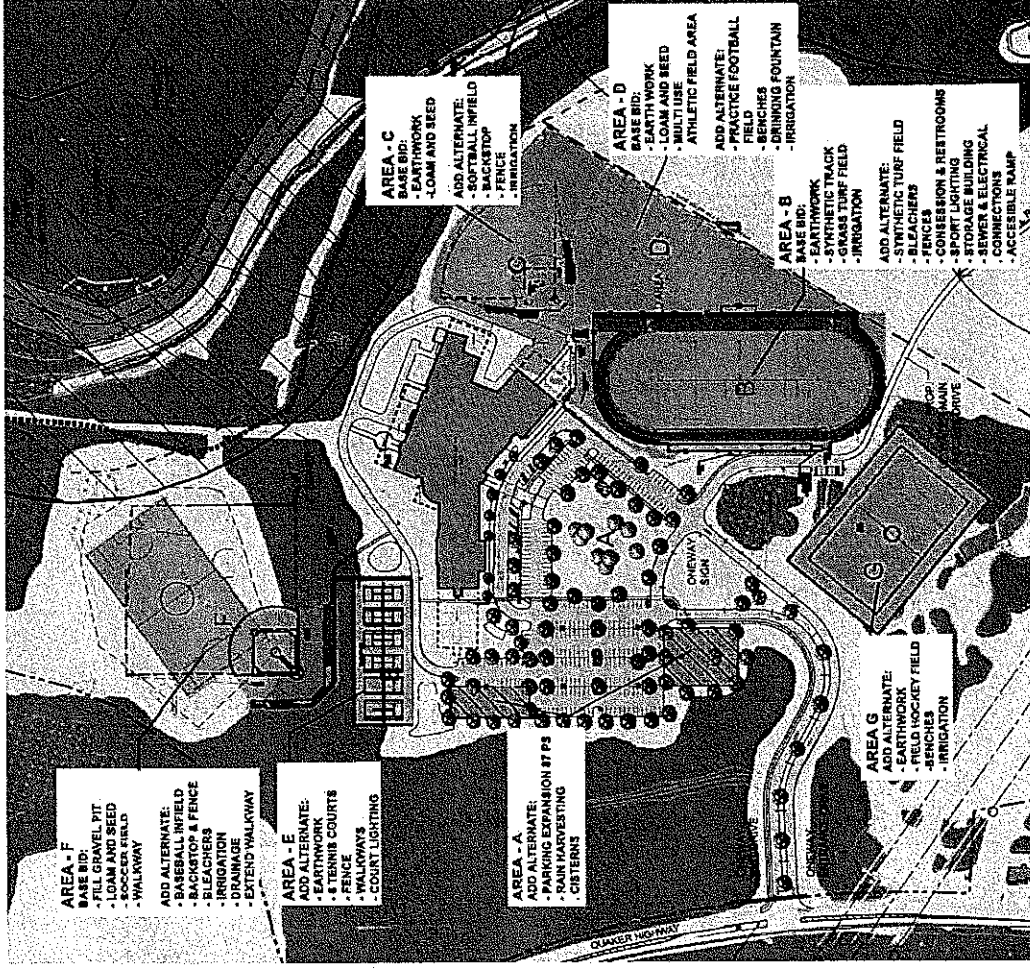
### Base Bid

- Area B: Football field & track
- Area C: Loam & seed softball area
- Area D: Multi-use athletic field
- Area F: Soccer field

### Add Alternates

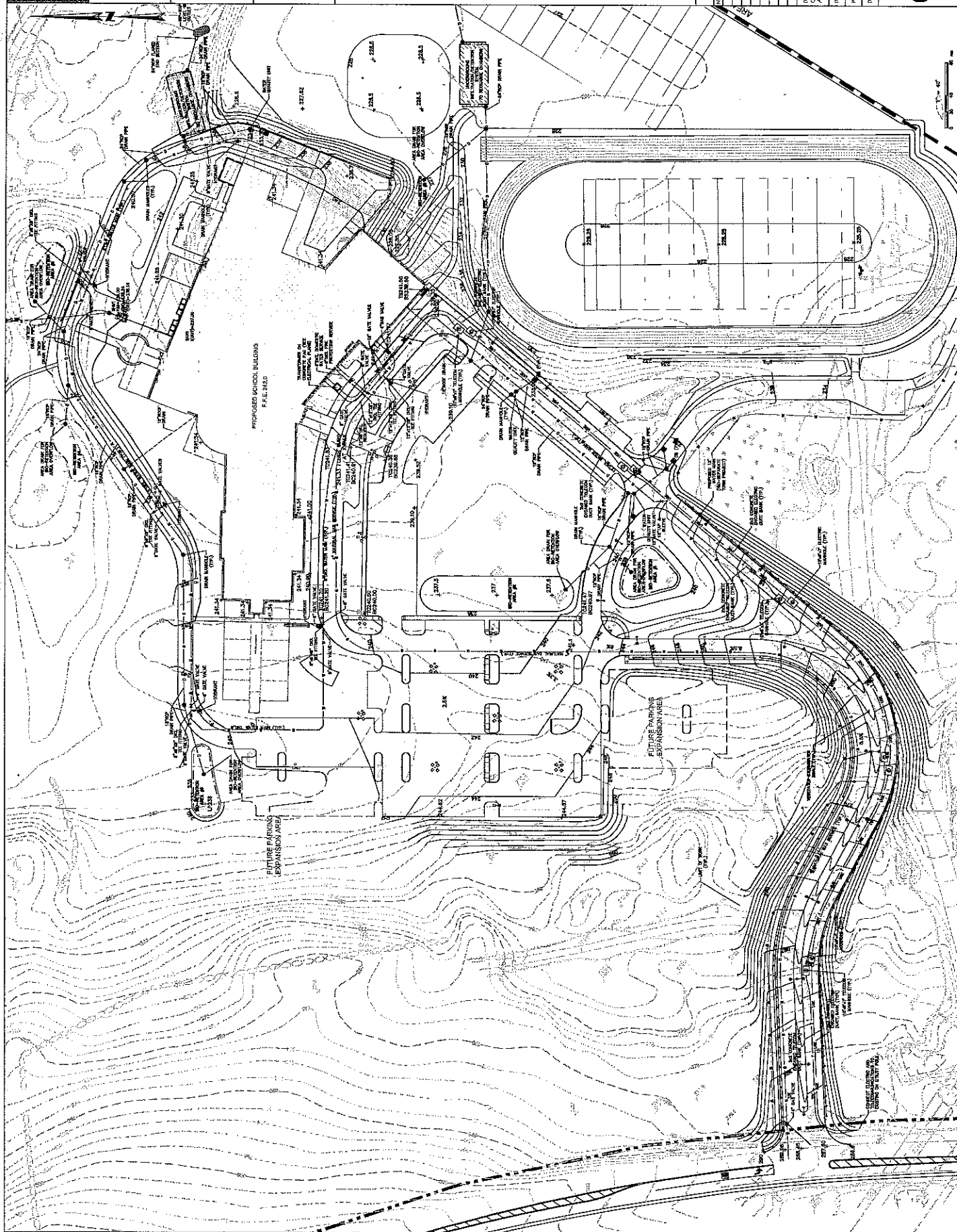
- #1 Irrigation Area C/D
- #2 Softball Field
- #3 Practice Field
- #4 Additional Parking
- #5 Football/Track
- #6 Artificial Turf Field
- #7 Field Hockey
- #8 Baseball Field w/bleachers/lights
- #9 Tennis

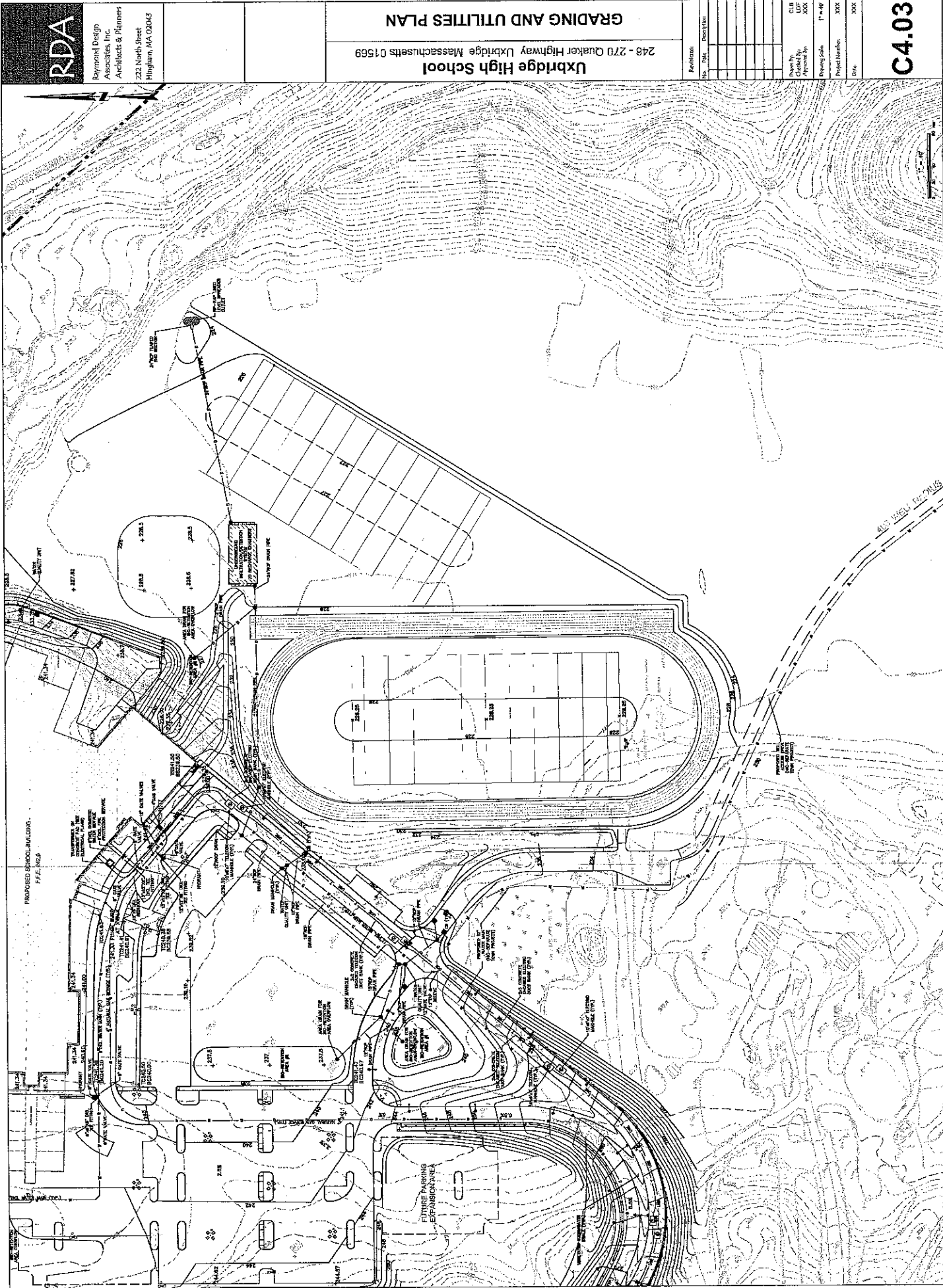
 = included in base bid  
 = add alternates











PROPOSED SCHOOL BUILDING  
P.F.E. 2020

RDA

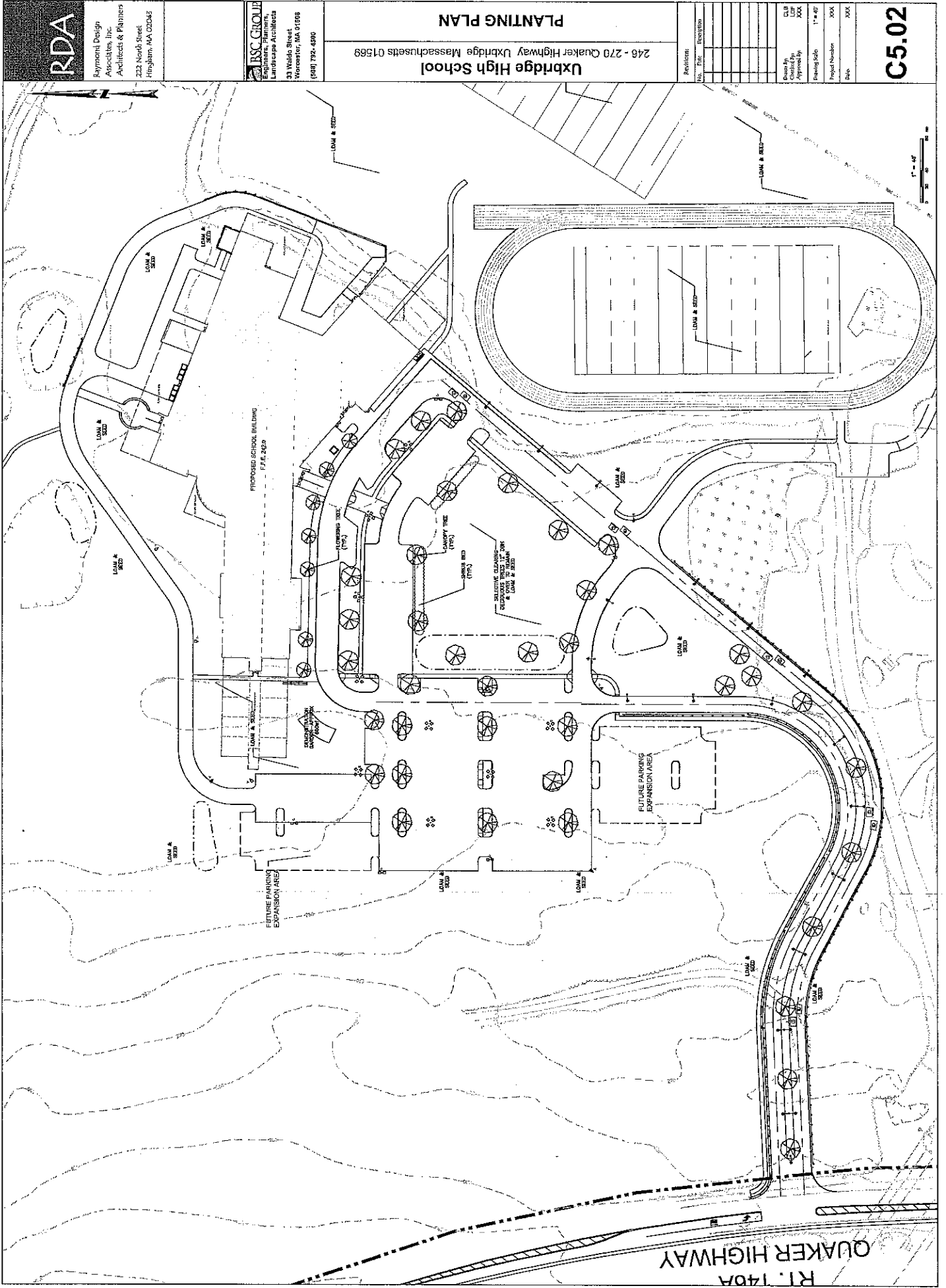
Raymond Design  
Associates Inc.  
Architects & Planners  
222 North Street  
Hingham, MA 02043

Uxbridge High School  
248 - 270 Quaker Highway Uxbridge Massachusetts 01569  
GRADING AND UTILITIES PLAN

Revisions		Drawn By	Checked By	Approved By	Project Number	Date
No.	Desc.					
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						
65						
66						
67						
68						
69						
70						
71						
72						
73						
74						
75						
76						
77						
78						
79						
80						
81						
82						
83						
84						
85						
86						
87						
88						
89						
90						
91						
92						
93						
94						
95						
96						
97						
98						
99						
100						

C4.03





**RDA**

Raymond Design  
Associates, Inc.  
Architects & Planners  
233 North Street  
Hingham, MA 02043

**RSC GROUP**  
Landscape Architects  
23 Hildes Street  
Worcester, MA 01608  
(508) 792-4800

**Uxbridge High School**  
246 - 270 Quaker Highway  
Uxbridge, Massachusetts 01569

**PLANTING PLAN**

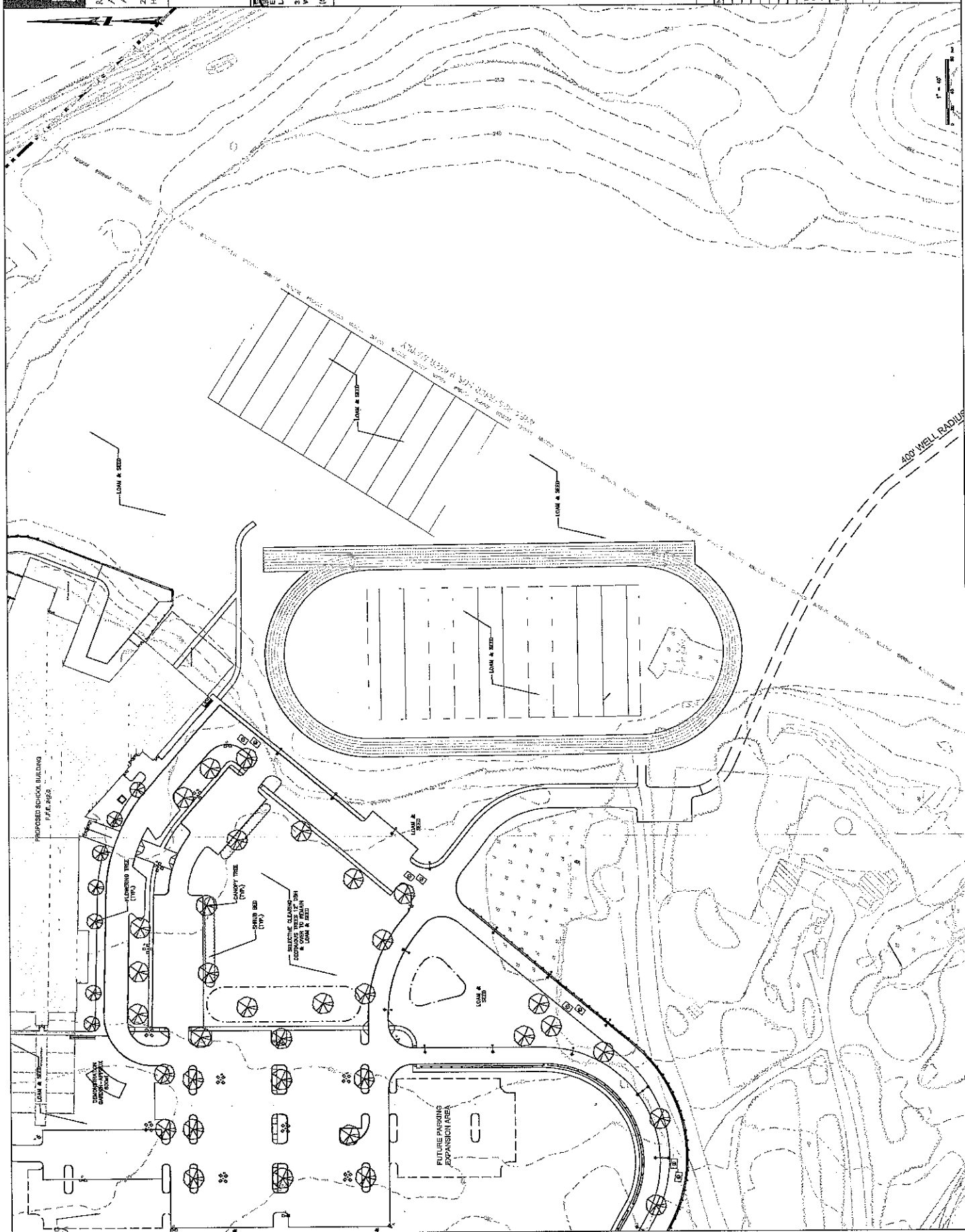
Revisions:  
No. Date Description

Drawn By: [Blank]  
Checked By: [Blank]  
Approved By: [Blank]

Project Name: Uxbridge High School  
Project Number: XXXX  
Date: XXXX

Scale: 1" = 40'

**C5.02**





# **APPENDIX D**

## **GEOTECHNICAL REPORT**

REPORT TO

**TOWN OF UXBRIDGE**

OCTOBER 8, 2009

---

**PRELIMINARY GEOTECHNICAL EVALUATION  
NEW UXBRIDGE HIGH SCHOOL SITE  
QUAKER HIGHWAY  
UXBRIDGE, MA**

PEER CONSULTANTS, P.C.  
99 SOUTH BEDFORD STREET  
BURLINGTON, MA 0180

Project Number: 4576-001

## TABLE OF CONTENTS

<b>1. INTRODUCTION.....</b>	<b>1</b>
1.1 GENERAL	1
1.2 PROPOSED SITE	1
1.3 PURPOSE AND SCOPE OF SERVICES	1
<b>2. SITE CONDITIONS.....</b>	<b>4</b>
2.1 SURFACE TOPOGRAPHY	4
2.1 SURFACE SOIL	4
2.2 HYDROLOGY	4
2.3 SITE IMPROVEMENTS	4
<b>3. SITE INVESTIGATION.....</b>	<b>5</b>
3.1 GENERAL	5
3.2 SUBSURFACE CONDITIONS	5
<b>4. DESIGN RECOMMENDATIONS .....</b>	<b>6</b>
4.1 FOUNDATION DESIGN	6
4.2 CULVERT DESIGN	6
4.3 PAVEMENT DESIGN	6
<b>5. LIMITATIONS.....</b>	<b>7</b>

## FIGURES

Figure 1 General Site Location.....	2
Figure 2 Proposed Site Design.....	3

## APPENDICES

APPENDIX A BORING LOGS
APPENDIX B CALCULATIONS
APPENDIX C REFERENCES

## **1. INTRODUCTION**

### **1.1 GENERAL**

PEER Consultants, P.C. has completed a preliminary geotechnical engineering evaluation for the proposed new Uxbridge High School to be located at about 3 miles south of the existing Uxbridge High School site. The proposed site is along MA-146A/Quaker Highway south of the center of Uxbridge, Massachusetts (Figure 1). This report includes our preliminary recommendations related to the geotechnical aspects of foundation design. Conclusions and recommendations presented in this report are based on the subsurface conditions encountered at the locations of our soil borings shown as B4, B5, B6, B7, B8, and B9 in Figure 2.

### **1.2 PROPOSED SITE**

The proposed site design (Figure 2) is identified in the Feasibility Study / Schematic Design (Raymond Design Associates (RDA), August 2009) document provided by RDA. The proposed site is about 160 acres in area and is centered at approximately N 42° 03.09' and W 71° 37.15'. The parcel is located to the southeast of the intersection of Mill Street and Quaker Highway. The proposed site is located immediately to the east of the Quaker Highway and the west of the Blackstone River. A dirt access road is present on the south side of the property at the site of a former house at 308 Quaker Highway.

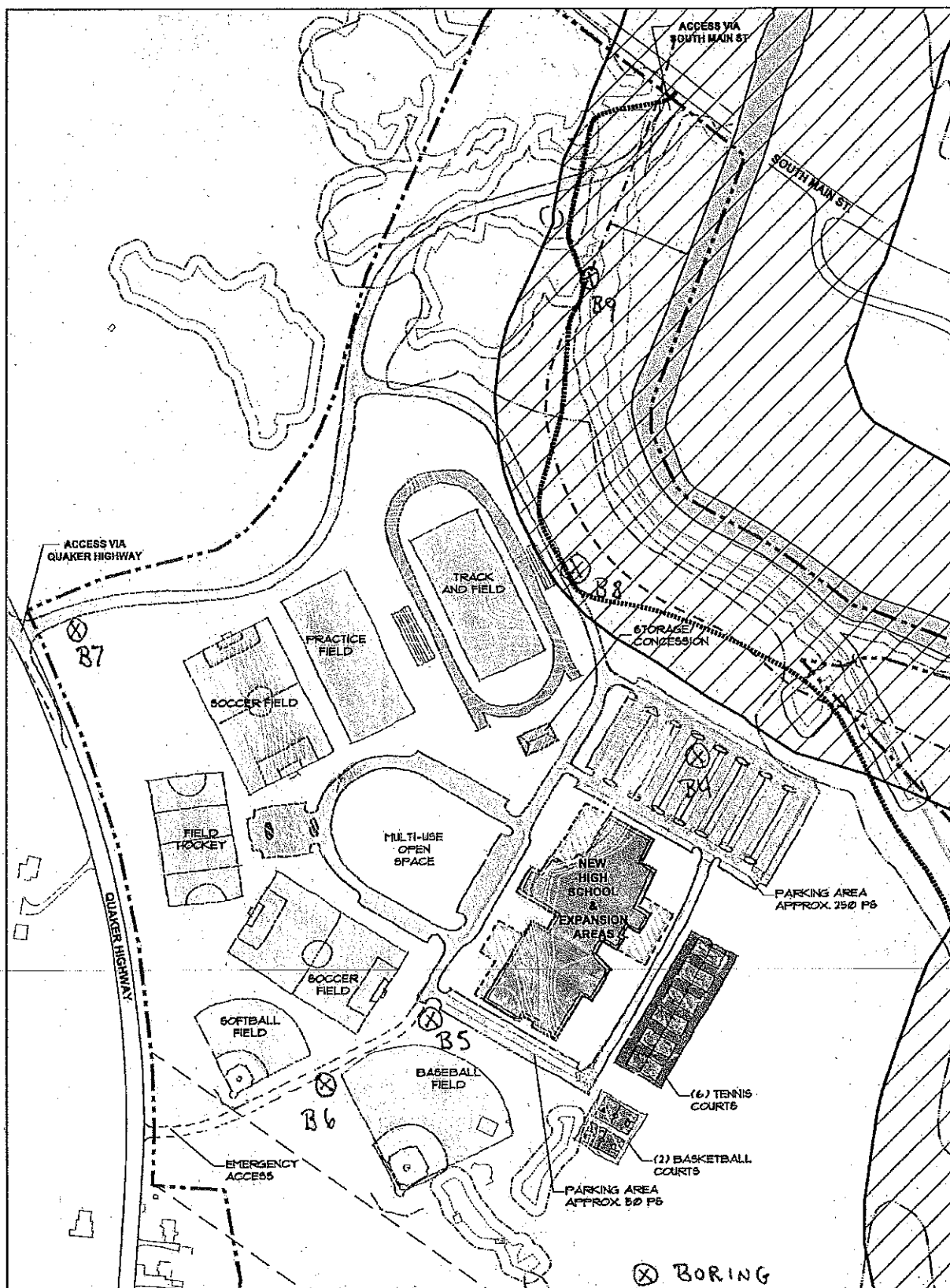
### **1.3 PURPOSE AND SCOPE OF SERVICES**

The purpose of this preliminary geotechnical evaluation was to explore and evaluate subsurface conditions at the site and develop recommendations for the preliminary foundation design. The Scope of Services performed for this geotechnical evaluation consisted of a subsurface exploration program, engineering analysis of the field data and the preparation of a written report presenting the results of our field exploration and foundation recommendation.

The scope of the exploration and engineering evaluation for this study, as well as the conclusions and recommendations in this report, were based on our understanding of the project as described above.



FIG. 1 GENERAL SITE LOCTION



**OPTION 3A**  
**NEW HIGH SCHOOL AT QUAKER HIGHWAY**  
**(SOUTH MAIN AND QUAKER HIGHWAY ACCESS)**

**UXBRIDGE HIGH SCHOOL**  
**QUAKER HIGHWAY, UXBRIDGE, MA**

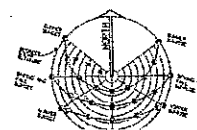
AUGUST 26, 2009

**LEGEND**

PROPERTY LINE  
 PRIORITY HABITAT  
 30' RIVERFRONT AREA  
 100 YEAR FLOODPLAIN  
 25' NO TOUCH BUFFER (TOWN BY-LAW)



BORDERING VEGETATED  
 WETLAND  
 WELL  
 PROP  
 BORING



**FIG. 2 PROPOSED SITE DESIGN**

20'

## **2. SITE CONDITIONS**

### **2.1 SURFACE TOPOGRAPHY**

The topography of the site is generally of modest downward slope between Quaker Highway and the Blackstone River. The site elevation ranges from approximately 300 feet above mean sea level (msl) in the northwest corner to 220 feet above msl on the east side adjacent to the river. A shallow depression (210 feet above msl) occupied by the former gravel pit exists in the east central portion of the site. The Blackstone River forms the boundary of the eastern side of the property.

### **2.1 SURFACE SOIL**

The surficial material in this area is generally soil consisting of fine sandy loam (Merrimac Soil). These soils are typically deep and well drained with high infiltration rates. Excessively drained sands and gravels are typically present at depths greater than 12 inches. However, some soil along Quaker Highway consists of sandy loam (Scituate Soil). These soils have slow infiltration rates but are moderately well drained. Surficial material in a wetland area in the northeast portion of the site is muck (Scarboro Soil). These soils exhibit very slow infiltration due to clayey soil with a high water table. The depth-to-bedrock at the site is uncertain. Surficial material has been stripped from sections of the property by gravel mining.

### **2.2 HYDROLOGY**

On the basis of surficial topography, the groundwater on the site probably flows towards the east and the Blackstone River. Regionally, the groundwater and surface water flows to the southeast and Narragansett Bay. The depth to groundwater is unknown but is probably close to the current grade on the basis of the proximity to the Blackstone River. Wetlands do exist on the northeast corner of the property. The former Blackstone Canal appears to traverse the eastern side of the property and just to the west of the Blackstone River.

According to the Flood Insurance Rate Map (Worcester County, Panel 2503410007B), the eastern border of the subject property lies inside the 100- and 500-year flood zone. The Blackstone River forms the eastern boundary of the property. Small flagged wetlands were visually observed in the northeast corner of the property near the river.

### **2.3 SITE IMPROVEMENTS**

The property being evaluated in this report is currently undeveloped forest, field and former gravel pit that include no improvements such as buildings or paved roads. However, a few unpaved roads traverse the site. The main unpaved road/driveway, on the southern boundary of the property near power lines, was formerly the access to the former home at 308 Quaker Highway and into the gravel pit.

### **3. SITE INVESTIGATION**

#### **3.1 GENERAL**

This site investigation work is preliminary in nature as it consists of only six borings over a large site area. The purpose of this initial investigation was to obtain a general indication of subsurface conditions at the site, with an understanding that a more comprehensive investigation will be undertaken to provide data for a final foundation design.

#### **3.2 SUBSURFACE CONDITIONS**

Subsurface field investigations were carried out on September 3-4, 2009 at selected locations within the project site. Six borings were drilled using a hollow stem auger on a truck mounted Diedrich D 120 rig to depths ranging from 20 to 42 feet below grade. Boring locations are shown in Figure 2. Standard Penetration Tests were conducted in accordance with ASTM D1586-08a. 2" split spoon samples were used to collect soil samples. Visual and tactile soil analysis was conducted. Detailed boring logs are provided in Appendix A. Soil bearing capacity was calculated on the basis of standard blow counts and assumed soil characteristics using equations noted in Appendix B. Soil characteristics are summarized below.

Most of the borings encountered up to 2 feet of fine sand mixed with silt and brown loam soil. Below this layer, fine to medium sand with some silt and gravel with color ranging from tan to grey were found. Grey silt was encountered in boring B4 at a depth of 9 feet and it extends to depth of 15 feet where grey silt with traces of sand is found. A medium dense layer extends from a depth of 9 feet to 15 feet in boring B9 consisting of wet brown medium sand. A boulder was encountered at a depth of 19 feet in boring B8 and the boring had to be moved 5 feet south.

No bedrock was encountered in any of the borings.

Groundwater was encountered during the subsurface evaluation at various elevations deeper than 8 feet. It should be noted that groundwater is known to fluctuate due to local and regional factors including, but not limited to, precipitation events and seasonal changes.



## **4. DESIGN RECOMMENDATIONS**

### **4.1 FOUNDATION DESIGN**

Based on our evaluation of the subsurface soil, it is recommended that the proposed school foundation may be supported on isolated spread-footings bearing on undisturbed native soils. Footings constructed in accordance with above recommendations should be designed for a maximum net allowable soil bearing pressure of up to 3,200 pounds per square foot (psf) (Appendix B).

Footings subject to frost are recommended to be located at least 4 feet below the lowest adjacent exterior grade. Construction schedules that include a winter season may require temporary frost protection for interior footings and other building features that are not designed to be subject to frost upon building completion.

Specific recommendations for foundation design should be provided for the project by a geotechnical engineer once specific locations, detailed structural drawings and estimates of the building loads are determined.

Further investigation and laboratory testing will be necessary to obtain a more accurate estimate of building location-specific geotechnical parameters.

### **4.2 CULVERT DESIGN**

Fairly stable soil was found in boring B9 in the wetland area (northeast of the site). Therefore, no soil related problems in the design of the culvert foundation are anticipated. Other issues such as roadway alignments and culvert size should be used to determine the culvert foundation. Specific recommendations should be made by a geotechnical engineer based on the specific location of the culvert.

### **4.3 PAVEMENT DESIGN**

It is assumed that pavement will include flexible or rigid pavements for parking and driveways. Without specific traffic loadings, it is anticipated that the pavement section would typically include a minimum of 3 inches of asphalt concrete placed on top of a minimum of 6 inches of crushed stone sub-base. Rigid concrete pavements would be placed on top of a minimum of 6 inches of crushed stone sub-base. A geotechnical engineer should approve sub-grade materials.

## **5.    LIMITATIONS**

Recommendations contained in this report are based on our field observations and limited subsurface exploration. The report is based on the assumption that a detailed program of tests and observations will be conducted before final foundation design is completed.

**APPENDIX A**  
**Soil Boring Logs**

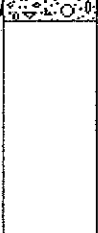
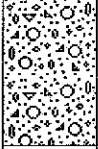
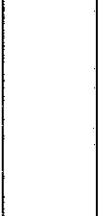
<b>Report Date:</b> 10/8/2009	<b>BORING LOG</b>	<b>Boring No.:</b> B4
<b>Company Name:</b> PEER Consultants, P.C.		<b>Surface Elevation:</b> 221 Feet
<b>Site Name:</b> New Uxbridge High School Site, Mill Street/Quaker Highway, Uxbridge		<b>Total Depth:</b> 25 Feet
<b>Location:</b> NE corner of gravel pit (42 03.04, 71 36.97)		<b>Start:</b> 09/03/2009
<b>Logged By:</b> Kenneth Menzies		<b>Finish:</b> 09/03/2009
<b>Contractor:</b> Geosearch, Inc.		<b>Equipment Type:</b> Diedrich D120 - 4 inch HSA
<b>Conditions:</b> Clear, cool		<b>Sample Hammer Torque:</b> 140 # @ 30 inches
<b>Comments:</b>		<b>Sampling Methods:</b> 2 inch SS

Graphical Log	Top Depth (Feet)	Thick. (Feet)	Bt.Elev. (Feet)	Strata Code	Material Description	Sample No.	Sampling Method	Penetration		Remarks
								Type	Rate	
	0	1	220		silt, some sand, little gravel, tan	S1	2 inch SS		4-8	
	1	1	219		silt, little fine sand, trace gravel, tan	S1	2 inch SS		9-12	0.6 ppm PID
	2	1	218		silt and gravel, trace sand, tan	S2	2 inch SS		13-16	
	3	1	217		silt, little sand, little gravel, tan	S2	2 inch SS		13-14	0.7 ppm PID
	4	2	215		silt, lt. brown	S3	2 inch SS		10-6-6-5	0.7 ppm PID
	6	2	213		silt, trace sand, trace gravel, lt. brown	S4	2 inch SS		9-18-21-19	0.7 ppm PID
	8	1	212		silt and fine sand, lt. brown		2 inch SS		4-8	
	9	1	211		silt, gray	S5	2 inch SS		8-11	1.0 ppm PID
	10	2	209		silt, gray	S6	2 inch SS		15-25-19-13	1.1 ppm PID
	12	3	206							
	15	1	205		silt, trace sand, gray	S7	2 inch SS		14-15	

LITHOLOGY DATA PRINTED ON NEXT PAGE







Boring No.: B4

10/8/2009

Graphical Log	Top Depth (Feet)	Thick. (Feet)	Bt.Elev. (Feet)	Strata Code	Material Description	Sample No.	Sampling Method	Penetration		Remarks
								Type	Rate	
	16	1	204		fine sand and gravel, lt brown	S7	2 inch SS		14-11	1.1 ppm PID
	17	3	201							GW@19'
	20	2	199		fine sand, some gravel, brown, wet	S8	2 inch SS		20-8-10-20	1.1 ppm PID
	22	3	196		stop, surge in SS					

25 Feet T.D.

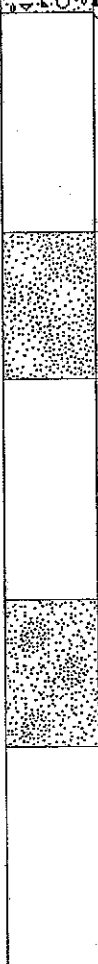
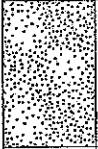



<b>Report Date:</b> 10/8/2009	<b>BORING LOG</b>	<b>Boring No.:</b> B5
<b>Company Name:</b> PEER Consultants, P.C.		<b>Surface Elevation:</b> 222 Feet
<b>Site Name:</b> New Uxbridge High School Site, Mill Street/Quaker Highway, Uxbridge		<b>Total Depth:</b> 30 Feet
<b>Location:</b> SW corner of gravel pit (42 02.95, 71 37.05)		<b>Start:</b> 09/03/2009
<b>Logged By:</b> Kenneth Menzies		<b>Finish:</b> 09/03/2009
<b>Contractor:</b> Geosearch, Inc.		<b>Equipment Type:</b> Diedrich D120 - 4 inch HSA
<b>Conditions:</b> Clear, cool		<b>Sample Hammer Torque:</b> 140 # @ 30 inches
<b>Comments:</b>		<b>Sampling Methods:</b> 2 inch SS

Graphical Log	Top Depth (Feet)	Thick. (Feet)	Bt.Elev. (Feet)	Strata Code	Material Description	Sample No.	Sampling Method	Penetration		Remarks
								Type	Rate	
	0	1	221		silt, little sand, loam, brown, moist	S1	2 inch SS		3-5	
	1	1	220		fine sand and silt, gray	S1	2 inch SS		9-11	0.8 ppm PID
	2	3	217							
	5	1	216		fine sand, little silt, gray	S2	2 inch SS		5-5	
	6	1	215		medium sand, trace silt, gray	S2	2 inch SS		6-6	1.0 ppm PID
	7	3	212							
	10	2	210		fine sand, some silt	S3	2 inch SS		4-7-7-8	0.8 ppm PID
	12	3	207							
	15	1	206		fine sand, some silt, gray, moist	S4	2 inch SS		4-11	

LITHOLOGY DATA PRINTED ON NEXT PAGE



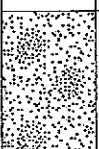
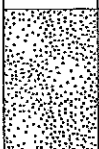

Boring No.: B5

10/8/2009

Graphical Log	Top Depth (Feet)	Thick. (Feet)	Bt.Elev. (Feet)	Strata Code	Material Description	Sample No.	Sampling Method	Penetration		Remarks
								Type	Rate	
	16	1	205		fine sand and gravel, lt brown, wet	S4	2 inch SS		14-11	0.7 ppm PID; GW@17'
	17	3	202							GW@19'
	20	2	200		silt and fine sand, gray, wet	S5	2 inch SS		2-6-6-7	1.4 ppm PID; thin layer medium sand and gravel at 17'
	22	3	197		easy augering					
	25	2	195		fine sand, some medium silt, some gravel	S6	2 inch SS		5-10-13-23	1.0 ppm PID
	27	3	192		no SS. surge back					

30 Feet T.D.


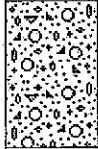

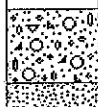

<b>Report Date:</b> 10/8/2009	<b>BORING LOG</b>	<b>Boring No.:</b> B6
<b>Company Name:</b> PEER Consultants, P.C.		<b>Surface Elevation:</b> 251 Feet
<b>Site Name:</b> New Uxbridge High School Site, Mill Street/Quaker Highway, Uxbridge		<b>Total Depth:</b> 27 Feet
<b>Location:</b> 100 feet west of old B2 (42 02.95; 71 37.14)		<b>Start:</b> 09/03/2009
<b>Logged By:</b> Kenneth Menzies		<b>Finish:</b> 09/03/2009
<b>Contractor:</b> Geosearch, Inc.		<b>Equipment Type:</b> Diedrich D120 - 4 inch HSA
<b>Conditions:</b> Clear, cool		<b>Sample Hammer Torque:</b> 140 # @ 30 inches
<b>Comments:</b>		<b>Sampling Methods:</b> 2 inch SS

Graphical Log	Top Depth (Feet)	Thick. (Feet)	Bt.Elev. (Feet)	Strata Code	Material Description	Sample No.	Sampling Method	Penetration		Remarks
								Type	Rate	
	0	1	250		loam, brown, moist	S1	2 inch SS		1-9	
	1	1	249		silt, some sand, some gravel, tan	S1	2 inch SS		12-10	0.6 ppm PID
	2	3	246							
	5	2	244		medium sand, trace silt, gray	S2	2 inch SS		6-6	1.0 ppm PID
	7	3	241							
	10	2	239		silt, little fine sand, little gravel, tan	S3	2 inch SS		5-16-14-12	1.2 ppm PID
	12	3	236							
	15	2	234		gravel and fine sand, trace silt, gray	S4	2 inch SS		18-13-31	1.0 ppm PID



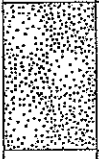
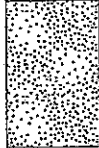



Boring No.: B6

10/8/2009

Graphical Log	Top Depth (Feet)	Thick. (Feet)	Bt.Elev. (Feet)	Strata Code	Material Description	Sample No.	Sampling Method	Penetration		Remarks
								Type	Rate	
	17	3	231							
	20	2	229		gravel and medium sand, tan	S5	2 inch SS	17-20-2	0.9 ppm PID	
	22	3	226		some gravelly augering					
	25	1	225		gravel and medium sand, moist	S6	2 inch SS	20-30		
	26	1	224		silt, trace sand, trace gravel, moist	S6	2 inch SS	19-17	0.8 ppm PID; GW@27'	
27 Feet T.D.										


<b>Report Date:</b> 10/8/2009	<b>BORING LOG</b>	<b>Boring No.:</b> B7
<b>Company Name:</b> PEER Consultants, P.C.		<b>Surface Elevation:</b> 311 Feet
<b>Site Name:</b> New Uxbridge High School Site, Mill Street/Quaker Highway, Uxbridge		<b>Total Depth:</b> 20 Feet
<b>Location:</b> Farmer's Field, NW corner of site (42 03.12, 71 37.35)		<b>Start:</b> 09/03/2009
<b>Logged By:</b> Kenneth Menzies		<b>Finish:</b> 09/03/2009
<b>Contractor:</b> Geosearch, Inc.		<b>Equipment Type:</b> Diedrich D120 - 4 inch HSA
<b>Conditions:</b> Clear, cool		<b>Sample Hammer Torque:</b> 140 # @ 30 inches
<b>Comments:</b>		<b>Sampling Methods:</b> 2 inch SS

Graphical Log	Top Depth (Feet)	Thick. (Feet)	Bl.Elev. (Feet)	Strata Code	Material Description	Sample No.	Sampling Method	Penetration		Remarks
								Type	Rate	
	0	1	310		loam, silt, trace sand, brown, moist	S1	2 inch SS		2-3	
	1	1	309		silt, trace sand, trace gravel, tan	S1	2 inch SS		4-8	1.2 ppm PID
	2	3	306							
	5	2	304		silt, trace fine sand, trace gravel, tan; boulder refusal at 6 feet, move 5 feet south	S2	2 inch SS		17-32-8 5+	0.7 ppm PID
	7	3	301		gravelly augering					
	10	2	299		silt and fine sand, little gravel, wet	S3	2 inch SS		12-12-1 4-14	0.9 ppm PID; GW@11'
	12	3	296							
	15	1	295		fine sand, some silt, some gravel, gray, wet	S4	2 inch SS		10-19	

LITHOLOGY DATA PRINTED ON NEXT PAGE



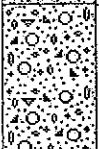
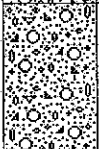
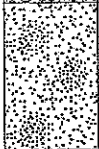
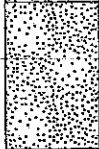
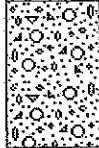

Boring No.: B7

10/8/2009

Graphical Log	Top Depth (Feet)	Thick. (Feet)	Bt.Elev. (Feet)	Strata Code	Material Description	Sample No.	Sampling Method	Penetration		Remarks
								Type	Rate	
	16	1	294		silt and some sand, little clay (varve), wet	S4	2 inch SS		30-29	0.9 ppm PID
	17	3	291		stop					


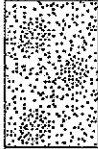





20 Feet T.D.

<b>Report Date:</b> 10/8/2009	<b>BORING LOG</b>	<b>Boring No.:</b> B8
<b>Company Name:</b> PEER Consultants, P.C.		<b>Surface Elevation:</b> 244 Feet
<b>Site Name:</b> New Uxbridge High School Site, Mill Street/Quaker Highway, Uxbridge		<b>Total Depth:</b> 42 Feet
<b>Location:</b> North woods between gravel pits (42 03.11, 71 37.08)		<b>Start:</b> 09/04/2009
<b>Logged By:</b> Kenneth Menzies		<b>Finish:</b> 09/04/2009
<b>Contractor:</b> Geosearch, Inc.		<b>Equipment Type:</b> Diedrich D120 - 4 inch HSA
<b>Conditions:</b> Clear, cool		<b>Sample Hammer Torque:</b> 140 # @ 30 inches
<b>Comments:</b>		<b>Sampling Methods:</b> 2 inch SS

Graphical Log	Top Depth (Feet)	Thick. (Feet)	Bt.Elev. (Feet)	Strata Code	Material Description	Sample No.	Sampling Method	Penetration		Remarks
								Type	Rate	
	0	1	243		silt, little fine sand, brown loam, moist	S1	2 inch SS		6-7	
	1	1	242		gravel, little sand, little silt, tan	S1	2 inch SS		12-23	0.9 ppm PID
	2	2	240		gravel, little sand, little silt, gray	S2	2 inch SS		40-60-5 0-35	0.6 ppm PID
	4	2	238		silt and gravel, trace sand, gray	S3	2 inch SS		27-39-5 5-39	0.6 ppm PID
	6	2	236		fine sand and silt, gray	S4	2 inch SS		31-23-1 9-23	0.6 ppm PID
	8	2	234		silt, trace fine sand, tan	S5	2 inch SS		6-12-11- 10	0.9 ppm PID
	10	2	232		fine sand and gravel, trace silt, tan	S6	2 inch SS		12-17-2 1-19	0.8 ppm PID
	12	3	229							
	15	2	227		gravel and fine sand, trace silt, brown	S7	2 inch SS		24-75-3 3-30	0.7 ppm PID;

Boring No.: B8

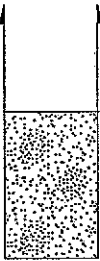
10/8/2009

Graphical Log	Top Depth (Feet)	Thick. (Feet)	Bt. Elev. (Feet)	Strata Code	Material Description	Sample No.	Sampling Method	Penetration		Remarks
								Type	Rate	
	17	3	224		auger refusal at 19', move 5 feet south					
	20	2	222		fine sand, trace silt, tan	S8	2 inch SS		5-6-9-10	0.7 ppm PID
	22	3	219							
	25	2	217		medium sand, some gravel, tan	S9	2 inch SS		5-9-10-10	1.0 ppm PID
	27	8	209		same augering					
	35	2	207		fine sand, some silt, trace gravel, tan, moist	S10	2 inch SS		7-10-14-11	0.9 ppm PID
	37	3	204							

Boring No.: B8










10/8/2009

Graphical Log	Top Depth (Feet)	Thick. (Feet)	Bt.Elev. (Feet)	Strata Code	Material Description	Sample No.	Sampling Method	Penetration		Remarks
								Type	Rate	

										
	40	2	202		fine sand and silt, gray, moist	S11	2 inch SS	7-10-9-10	0.5 ppm PID; GW@42'	

42 Feet T.D.

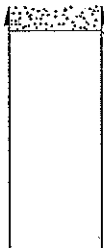
<b>Report Date:</b> 10/8/2009	<b>BORING LOG</b>	<b>Boring No.:</b> B9
<b>Company Name:</b> PEER Consultants, P.C.		<b>Surface Elevation:</b> 212 Feet
<b>Site Name:</b> New Uxbridge High School Site, Mill Street/Quaker Highway, Uxbridge		<b>Total Depth:</b> 20 Feet
<b>Location:</b> Wetland, NE Corner of site (42 03.21, 71 37.04)		<b>Start:</b> 09/04/2009
<b>Logged By:</b> Kenneth Menzies		<b>Finish:</b> 09/04/2009
<b>Contractor:</b> Geosearch, Inc.		<b>Equipment Type:</b> Diedrich D120 - 4 inch HSA
<b>Conditions:</b> Clear, cool		<b>Sample Hammer Torque:</b> 140 # @ 30 inches
<b>Comments:</b>		<b>Sampling Methods:</b> 2 inch SS

Graphical Log	Top Depth (Feet)	Thick. (Feet)	Bt.Elev. (Feet)	Strata Code	Material Description	Sample No.	Sampling Method	Penetration		Remarks
								Type	Rate	
	0	1	211		medium sand, some silt, dark gray, moist	S1	2 inch SS		7-6	
	1	1	210		fine sand and silt, brown, moist	S1	2 inch SS		18-19	1.2 ppm PID
	2	1	209		medium sand, some silt, dark gray	S2	2 inch SS		36-56	
	3	1	208		medium sand, little gravel, little silt, lt brown	S2	2 inch SS		40-30	0.4 ppm PID
	4	1	207							
	5	1	206		silt and gravel, gray	S3	2 inch SS		91-42	
	6	1	205		fine to medium sand, tan	S3	2 inch SS		20-23	0.9 ppm PID
	7	2	203		medium sand, brown, wet	S4	2 inch SS		14-14-1 0-7	1.2 ppm PID; GW@8'
	9	6	197		same soft augering					
	15	1	196		medium sand, tan, wet	S5	2 inch SS		5-7	

LITHOLOGY DATA PRINTED ON NEXT PAGE

Boring No.: B9

10/8/2009

Graphical Log	Top Depth (Feet)	Thick. (Feet)	Bt.Elev. (Feet)	Strata Code	Material Description	Sample No.	Sampling Method	Penetration		Remarks
								Type	Rate	
	16	1	195		coarse sand, tan, wet	S5			7-32	1.4 ppm PID
	17	3	192		No SS, blowback					

20 Feet T.D.



## APPENDIX B

### Soil Bearing Capacity

<u>Input Data:</u>		<u>Results:</u>	
Cohesion, $c =$	<div style="border: 1px solid black; padding: 2px 10px; display: inline-block;">0</div> psf	$N_q =$	<div style="border: 1px solid black; padding: 2px 10px; display: inline-block;">33.30</div>
Soil density, $\gamma =$	<div style="border: 1px solid black; padding: 2px 10px; display: inline-block;">115</div> pcf	$N_\gamma =$	<div style="border: 1px solid black; padding: 2px 10px; display: inline-block;">37.15</div>
Found. depth, $D =$	<div style="border: 1px solid black; padding: 2px 10px; display: inline-block;">5</div> ft	$N_c =$	<div style="border: 1px solid black; padding: 2px 10px; display: inline-block;">5.14</div>
Friction angle, $\phi =$	<div style="border: 1px solid black; padding: 2px 10px; display: inline-block;">35</div> °	Ultimate bearing cap. =	<div style="border: 1px solid black; padding: 2px 10px; display: inline-block;">9,734</div> psf
Found. width, $B =$	<div style="border: 1px solid black; padding: 2px 10px; display: inline-block;">1</div> ft	Allowable bearing cap. =	<div style="border: 1px solid black; padding: 2px 10px; display: inline-block;">3,245</div> psf
Factor of Safety =	<div style="border: 1px solid black; padding: 2px 10px; display: inline-block;">3</div>		

### Terzaghi's Ultimate Bearing Capacity Equation

For saturated, submerged soils:

$$q_u = q_c + q_q + q_\gamma = cN_c + qN_q + \frac{1}{2}\gamma'BN_\gamma \dots \text{for strip foundations}$$

$$q_u = q_c + q_q + q_\gamma = cN_c + qN_q + 0.3\gamma'BN_\gamma \dots \text{for circular or square foundations}$$

- $q_c, q_q, q_\gamma$  = load contributions from cohesion, soil weight and surcharge
- $N_c, N_q, N_\gamma$  = bearing capacity factors for cohesion, soil weight and surcharge
- $c$  = cohesion strength of soil
- $q$  = soil weight
- $\gamma'$  = effective bulk density of soil ( $\gamma' = \gamma - \gamma_w$ )
- $B$  = width of the foundation

Soil weight is calculated as  $q = \gamma'D$ , where  $D$  is the depth of penetration of the foundation

NOTE:  $\gamma'$  is used only for the portion of the soil that is submerged, otherwise the bulk density  $\gamma$  is used (neither is a dry weight!)

For shallow foundations:

- $N_q = e^{\pi \tan \phi} \tan^2(45 + \phi/2)$
- $N_\gamma = (N_q - 1) \tan(1.4\phi)$
- $N_c = (N_q - 1) \cot \phi$  if  $\phi > 0$
- $N_c = \pi + 2 = 5.14$  if  $\phi = 0$ , clay

. [http://www.sd-w.com/civil/bearing\\_capacity.html](http://www.sd-w.com/civil/bearing_capacity.html)

## **APPENDIX C**

### **REFERENCES**

1. J. David Rogers 2006, *Subsurface Exploration Using the Standard Penetration Test and the Cone Penetrometer Test*. Department of Geological Sciences & Engineering University of Missouri pp168-169.
2. Meyerhof, 1956 *Relationship among Relative Density, SPT N Value and Internal Friction Angle of Cohesionless Soils*.
3. Braja M Das, *Principles of Foundation Engineering Fifth Edition*. California State University Sacramento pp 9.
4. [http://www.sd-w.com/civil/bearing\\_capacity.html](http://www.sd-w.com/civil/bearing_capacity.html)

# TABLE OF CONTENTS

UXBRIDGE HIGH SCHOOL  
SCHEMATIC DESIGN

WETLANDS REPORT

---

1.0 EXECUTIVE SUMMARY

2.0 WETLAND RESOURCE AREA REPORT

3.0 PERMITTING ASSESSMENT

PERMITTING SCHEDULE TABLE

ATTACHMENT A NHESP CORRESPONDENCE

ATTACHMENT B NHESP SITE WALK MINUTES

UXBRIDGE HIGH SCHOOL  
SCHEMATIC DESIGN

WETLANDS REPORT  
PAGE 1 OF 8

## 1.0 ENVIRONMENTAL EXECUTIVE SUMMARY

As part of the schematic design-level environmental scope, BSC performed a site visit to review existing wetland delineation information and determine whether any additional resources subject to review under the Massachusetts Wetland Protection Act (MGL 131 S.40) (MWPA) and associated Regulations (310 CMR 10.00), were present on site in the area of the proposed development. As previously indicated, resource areas on site include Bordering Vegetated Wetlands (BVW), Inland Bank, Land Under Water Bodies and Waterways (LUWW), Bordering Land Subject to Flooding (BLSF), and Riverfront Area. In addition, we determined that a depression (located in the northern gravel pit) was observed holding water immediately following the large storms in March 2010, and met the criteria of Isolated Land Subject to Flooding (ILSF).

Several small isolated vegetated wetlands had previously been observed on site but wetland delineation for the Town Well project and more detailed site investigation led to the identification of several more. While the isolated wetland areas are not jurisdictional under the Wetlands Protection Act, as they do not meet the size and capacity requirements of ILSF, they may be jurisdictional with the US Army Corps of Engineers (USACE) and the State 401 Water Quality Certification Process.

After evaluating the proposed design, we have determined that temporary and permanent impacts will be necessary in areas jurisdictional to the MWPA. However, the majority of the permanent site development for the school and associated grounds will be located outside of BVW, the associated 100-foot buffer zone to BVW, the Town of Uxbridge Wetlands 25-foot Setback to BVW, and Riverfront Area due to careful design. A small area of permanent fill in wetland resource areas will be required to install the sewer and water lines from South Main Street to the site, but the remainder of the utility installation will result in temporary impacts. The development constraints on site have resulted in proposed permanent fill to the recently identified ILSF in the northern gravel pit in order to create playing fields. The utility work and fill in the ILSF will necessitate filing a Notice of Intent with the Uxbridge Conservation Commission and the Department of Environmental Protection.

Two of the isolated wetlands will also be permanently impacted despite attempts to avoid them in the design of the school facilities. In the permitting phase, we will need to work with the USACE to determine whether the wetlands provide important adjacent functions to bordering wetlands and waters of the United States. This is a case by case determination and will identify whether the areas are jurisdictional under the Clean Water Act. If the isolated wetlands are determined to be jurisdictional, the proposed total impact to isolated and bordering vegetated wetlands will be greater than 5,000 square feet. A Programmatic General Permit Category II screening application to the ACOE and Water Quality Certification with MassDEP will be required.

In addition to the known Massachusetts Natural Heritage and Endangered Species Program (NHESP) Priority and Estimated Habitat mapped on site for protected state-listed species, the site investigation identified a population of wood turtles (*Glyptemys insculpta*) in the southern portion of the site. Wood turtles are listed by NHESP and the Massachusetts Endangered Species Act (MESA) as a species of special concern. This is a new observation

UXBRIDGE HIGH SCHOOL  
SCHEMATIC DESIGN

WETLANDS REPORT  
PAGE 2 OF 8

of this species in an area that was not previously mapped by NHESP. The Town has already had proactive communication with NHESP and the design has been drastically condensed, in part to remain outside of potentially important habitat for this species. Although NHESP has been receptive to the changes and compromises that have been made, we anticipate that a Conservation and Management Permit application will be necessary. This application must demonstrate that there are no feasible alternatives to the project and propose measures that will ensure a long term net benefit to the species, despite the impacts to potential habitat at the project site.

## 2.0 WETLAND RESOURCE AREA REPORT

A BSC wetland scientist performed a field visit to the Quaker Highway Site on April 22, 2010. As stated in the original feasibility study analysis, areas subject to review as wetland resource areas under the jurisdiction of the Massachusetts Wetland Protection Act (MGL 131 S.40) (MWPA) and associated Regulations (310 CMR 10.00), as well the Town of Uxbridge Wetlands Setback Policy (school projects are exempt from local zoning). Resource areas include Bordering Vegetated Wetlands (BVW), Inland Bank, Land Under Water Bodies and Waterways (LUWW), Bordering Land Subject to Flooding (BLSF), and Riverfront Area. In addition, depressions that were observed to hold water immediately following the large storms in March 2010 were evaluated to determine whether they met the criteria of Isolated Land Subject to Flooding (ILSF). It was determined that there is one area of ILSF area located in the northern gravel pit on the Quaker Highway parcel.

Several small isolated vegetated wetlands had previously been observed on site but wetland delineation for the Town Well project and more detailed site investigation led to the identification of several more. While the areas are not jurisdictional under the Wetlands Protection Act as they do not meet the size and capacity requirements of ILSF, they may be jurisdictional with the Army Corps of Engineers and the State 401 Water Quality Certification Process. These areas and permitting implications are described in more detail below. Additional site and resource area description details can be found in the Feasibility Study.

### *Bordering Vegetated Wetlands*

Bordering wetland systems on the proposed project site includes mostly forested communities associated with the Blackstone River, Emerson Brook and their floodplains.

The northern wetland system includes the remnants of the Blackstone Canal and a smaller tributary stream identified as intermittent on the applicable USGS topographical quad. As described in the feasibility study, BSC evaluated the original delineation versus the slightly expanded Bikeway delineation and largely confirmed the original line. The wetland system extends to the south and borders the area that has been historically cleared and excavated for gravel (northern gravel pit). A small manmade riprap channel was located between the large system and a smaller open water area to the west. The open water area included many dead trees and snags and appeared to be good habitat for a variety of songbirds. Two small extensions of this open water area were flagged and recorded by BSC, including an area that extends slightly along the riprap channel.

UXBRIDGE HIGH SCHOOL  
SCHEMATIC DESIGN

WETLANDS REPORT  
PAGE 3 OF 8

Bordering vegetated wetlands are also present along Emerson Brook adjacent to the southern portion of the site, particularly within the National Grid overhead electric transmission right-of-way (ROW).

All bordering vegetated wetlands have an associated 100-foot buffer zone jurisdictional under the MWPA and a local 25-foot setback (school projects are exempt from local zoning).

*Isolated Wetlands*

Two previously delineated isolated wetlands were located in the southern portion of the site in an area east of the proposed access drive and south of the proposed track. The area was evaluated by BSC and a third small isolated pocket was also delineated between the two areas based on vegetation and soil characteristics.

After observing ponding in the large excavated and graveled depression in the north of the site following the March 2010 storms, BSC evaluated the basin for signs of hydrology, hydric soils and wetland vegetation. On the far western bank of the basin, BSC observed groundwater breakouts that supported a small area dominated with wetland vegetation. Soils were difficult to evaluate since the area had been stripped to base sand material but mottling was present to the surface of the substrate. This area was flagged as Isolated Wetland A and was not included as part of the larger ILSF described below.

Ponding was also previously observed to the east of the proposed grove and west of the proposed track. BSC evaluated the area for signs of hydrology, hydric soils and wetland vegetation. Groundwater was present immediately below the soil surface as evident by an old perc test pit. It appears the area is underlain by a soil layer with a certain amount of clay or silt which retains water. Due to high groundwater, soils could not be fully evaluated to determine if the area can be characterized as a wetland. This will be confirmed during the design and permitting phase. This area was currently identified as Isolated Wetland B and does not meet the volume requirements of ILSF.

BSC also evaluated the area flagged by the consultant for the Town Well project. This area is located just to the south of the existing main access as it enters the open gravel pit. The area had standing water due to groundwater breakouts and wetland vegetation. BSC confirmed portions of the delineation but reduced the overall extent of the area where they did not observe a majority of wetland species. This area was identified as Isolated Wetland C and does not meet the volume requirements of ILSF.

*Isolated Land Subject to Flooding (ILSF)*

After observing ponding in the large excavated and graveled depression in the north of the site following the March 2010 storms, BSC ran calculations on the basin to determine whether the area qualifies as ILSF. Typically, areas defined as ILSF are observed to contain the volume of ¼ acre feet of surface water and/or groundwater at least annually. Therefore, the 1-year return period storm of 2.5 inches of rain in 24 hours is used to determine whether the contributing watershed would result in the qualifying amount of run-off. Topography is

UXBRIDGE HIGH SCHOOL  
SCHEMATIC DESIGN

WETLANDS REPORT  
PAGE 4 OF 8

used to determine whether the area has the capacity to hold the appropriate amount of water.

With 0.65 acre feet of water predicted during the 1-year storm, the basin located in the northern gravel pit meets the qualifying criteria of ILSF.

*100 Year Floodplain or Bordering Land Subject to Flooding (BLSF)*

During the feasibility study, the extent of the 100-year floodplain or BLSF was established on the site plans using the best available data (i.e. the FEMA Q3 datalayer provided by MassGIS). The 100-year floodplain line provided in the MassGIS datalayer is a digitization of the FEMA Flood Insurance Rate Map (FIRM) information. The paper FIRM was consulted and the 100 year floodplain line followed the general shape and extent as provide in the MassGIS layer. The paper FIRM established the floodplain at elevation 222 feet. As a result of the gravel removal operation, small areas within the gravel pit where at, or slightly below elevation 222. Field survey conducted in May, 2010, confirmed that a continuous high point between the gravel pit and Emerson Brook is present at an elevation higher than 222 which provides the necessary disconnect between the floodplain and the gravel pit and keeps the floodplain entirely out of the gravel pit.

Field observations conducted by BSC one hour after the official cresting of the Blackstone River during the major March, 2010 storms confirmed that the large southern gravel pit remained dry without any obvious ponding or flooding. A small area adjacent to Emerson Brook was recorded as having evidence of ponding following the floods but this did not extend into the gravel pit.

**Wildlife Habitat**

*State-listed Protected Species*

The northern and eastern portions of the site are located in an area currently identified as Priority and Estimated Habitat (PH444/EH336) for protected state-listed species. Massachusetts Natural Heritage and Endangered Species Program (NHESP) records indicate that the species located in this habitat are likely the marbled salamander (*Ambystoma opacum*), the oak hairstreak butterfly (*Satyrrium favonius*), and the arrow clubtail dragonfly (*Stylurus spiniceps*).

However, during a field visit on April 22, 2010, BSC observed five separate mature male wood turtles (*Glyptemys insculpta*) immediately adjacent to Emerson Brook in the National Grid ROW. Wood turtles are listed by NHESP and the Massachusetts Endangered Species Act (MESA) as a species of special concern. This is a new observation of a state listed species in a new area of habitat that is not currently mapped on the site. This finding or constraint could not be predicted during the feasibility study. We expect that the NHESP mapping will be updated to reflect new areas of protected habitat when the next version of the NHESP habitat atlas and datalayer is released later this year.

UXBRIDGE HIGH SCHOOL  
SCHEMATIC DESIGN

WETLANDS REPORT  
PAGE 5 OF 8

### 3.0 PERMITTING ASSESSMENT

The following paragraphs include the permits and considerations that will be needed based on BSC's understanding of the proposed work activities.

#### Notice of Intent

Due to careful design, the majority of the permanent site development for the school and associated grounds will be located outside of BVW, the associated 100-foot buffer zone to BVW, the Town of Uxbridge Wetlands 25-foot Setback to BVW, and Riverfront Area. Impacts subject to the MWPA are generally restricted to the water and sewer line installation from the north of the site, and the proposed athletic fields in the ILSF located in the northern gravel pit.

The proposed installation of utilities (water and sewer) off of Route 122 will likely result in direct but temporary impact to BVW, Riverfront Area, and Land Under Waterbodies and Waterways (LUWW). It is also likely that a small area of BVW will be permanently filled in order to get appropriate cover on the sewer line in one location. The work to install utilities qualifies as a limited project under 310 CMR 10.53 3(d).

Fill will be required in the ILSF in order to grade and construct the proposed athletic fields in the northern gravel pit. The work in the ILSF and the utility installation will require submitting a Notice of Intent with the Uxbridge Conservation Commission and the Massachusetts Department of Environmental Protection (DEP).

The application will have to address the measures taken to reduce impacts to jurisdictional areas in the site design. Adequate wetland replication would have to be designed and proposed on at least a 1:1 ratio (310 CMR 10.55) for the small area of permanent wetland fill. The Commonwealth of Massachusetts has a No Net Loss Policy regarding wetland impact. Therefore, the Conservation Commission will require a justification for the need to alter wetland resource areas and will require an alternatives analysis to "avoid, minimize and mitigate" wetland loss. The loss of the ILSF will require justification to the Commission that fill in this area does not impact on or off site flooding. It is likely that documentation can prove the area holds little value for flood control, public water supply, wildlife habitat or pollution attenuation since it was created as a result of over-excavation during gravel removal operations. This particular ILSF does not hold water for a long enough period of time to support aquatic-breeding wildlife or a majority of wetland vegetation. It is considered an upland area ILSF and not an Isolated Wetland large enough to qualify as ILSF.

Some of the utility installation may occur in the 200-foot Riverfront Area to the Blackstone River. The Conservation Commission can allow alteration in up to 10% of the Riverfront Area on the lot (or 5,000 sf, whichever is greatest), provided the inner 100-feet (closest to the river) remains undisturbed. An alternatives analysis must be developed which describes why the project could not avoid the Riverfront Area on site but the temporary nature of the activities will reduce this effort.

Portions of the project site are located within the 100-year floodplain to the Blackstone River



UXBRIDGE HIGH SCHOOL  
SCHEMATIC DESIGN

WETLANDS REPORT  
PAGE 6 OF 8

and Emerson Brook as determined the FEMA. No work is proposed in these areas with the potential exception of the utility installation. Although portions of the main (southern) gravel pit have been over excavated to elevations below the established floodplain, additional survey has confirmed that a continuous berm or high point provides a disconnect between the river. Therefore, the gravel pit is not located within the 100-year floodplain or BLSF.

The Notice of Intent application would include the necessary NOI forms, data sheets, figures, a narrative describing existing conditions, a proposed project description, compliance with performance standards, best management practices and mitigation measures, alternatives analysis, and wildlife habitat information to the extent required. This application will also require the preparation of site plans. In support of the NOI, compliance with the DEP Stormwater Management Standards/Regulations is required. The Stormwater Management Form and Checklist will be submitted with the NOI and a Stormwater Design Report will be prepared by a professional engineer registered in the State of Massachusetts.

Applications are typically submitted to the Commission 2 to 3 weeks prior to their scheduled meetings (usually held twice a month). Assuming the Commission has a quorum and does not have requests for additional information, the meeting can be closed and an Order of Conditions issued within 21 days. A 10-business day appeal period follows. However, the Commission may recommend continuing the hearing to the next scheduled meeting if there are outstanding questions or additional review time necessary. In addition, their decision often needs to reflect input from the NHESP when working in Priority/Estimated Habitat.

**Section 404 USACE Programmatic General Permit/Section 401 DEP Water Quality Certification**

As previously described, several isolated wetlands have been observed and identified on site. Since they are not large enough to qualify for ILSF, they are not jurisdictional under the MWPA or the Town of Uxbridge Wetland Setback Policy. Despite attempts to avoid them in the design of the school facilities, two of the isolated wetlands will be permanently impacted. While not jurisdictional under the MWPA, the isolated wetlands may be regulated by the US Army Corps of Engineers (USACE). Recent court cases and rulings require the USACE to determine whether isolated wetlands provide important adjacent functions to bordering wetlands and waters of the United States and are therefore jurisdictional under the Clean Water Act. In the permitting phase, we will need to work with the USACE and supply the required supporting material so they can make their Jurisdictional Determination. If it is determined that the wetlands provides little additional value or adjacency, they will not be regulated by the USACE. This determination occurs on a case-by-case basis. If the areas are determined jurisdictional, it is still possible to permanently impact them provided that wetland mitigation/replication is provided and efforts to avoid and minimize the areas are clearly discussed.

If the USACE determines that the isolated wetlands are jurisdictional, the proposed cumulative impact (including permanent and temporary) to Waters of the U.S. (includes BVW, certain isolated wetlands, and LUWW) will be greater than 5,000 square feet (when adding the impacts resulting from the utility installation). A Category II screening application to the USACE under the Massachusetts Programmatic General Permit (PGP) (Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act) will be

UXBRIDGE HIGH SCHOOL  
SCHEMATIC DESIGN

WETLANDS REPORT  
PAGE 7 OF 8

required.

In addition, when a federal permit is required and over 5,000 square feet of cumulative loss is proposed, a Section 401 Water Quality Certification application with the MADEP is also required per Regulations 314 CMR 9.00.

Both applications are similar to the Notice of Intent with necessary forms, wetland information, existing conditions, project description and plans. Applications also include alternatives analysis and a mitigation plan for wetland areas lost. Following public comment periods (401 WQC), review for completion, and technical review, permit issuance may take 60 days or more for USACE and 120-150 days or more for the DEP 401 WQC.

#### **MESA Review - Conservation and Management Permit**

Prior to the new observation of wood turtles on the site, it was likely that the project activities could have occurred with several minor conditions following review by NHESP. With the exception of the water and sewer line installation, all development was kept outside of the currently mapped Priority and Estimated Habitat for protected state-listed species. The limited and temporary nature of the utility installation in the direct habitat should reduce the potential issues NHESP would have with the project. However, any impact to Priority and Estimated Habitat allows NHESP to review all activities on a project site and we anticipated filing for a Project Review with the NHESP under the Massachusetts Endangered Species Act (MESA) (321 CMR 10.00).

With the new observation of a state-listed species (wood turtles), the Town has proactively coordinated with NHESP and performed a site visit together to review the habitat. Due to the new findings, the school design has been redesigned and condensed considerably to remain outside of potentially important habitat for this species. NHESP has been receptive and appreciative of the efforts by the Town to minimize impacts to this point. NHESP has officially informed the Town that the extent of Estimated/Priority habitat in this site will be increased (letter attached). Habitat mapping is updated every two years with the next scheduled update occurring typically in the fall or winter of 2010. The new extent of habitat will likely be reflected in the 2010 version. It is likely the new area of mapped habitat will extend at least 300 feet from both the Blackstone River and Emerson Brook.

A Project Review Application under MESA will be necessary. A copy of the Notice of Intent will be submitted to NHESP along with additional habitat information for streamlined review. At this point, conversations with the NHESP indicate that a Conservation and Management Permit application will be necessary despite the efforts to minimize impacts, because of the potential significant extent of habitat on site. NHESP may be able to confirm that Conservation and Management Permit review could occur simultaneously with the Project Review to save time and filing fees. The Conservation and Management application must demonstrate that there are no feasible alternatives to the project and propose measures that will ensure a long term net benefit to the species, despite the impacts proposed at the project site.

The following measures were discussed with NHESP and include some of the ideas and potential conditions that may be part of the school or well installation design and the

UXBRIDGE HIGH SCHOOL  
SCHEMATIC DESIGN

WETLANDS REPORT  
PAGE 8 OF 8

**Conservation and Management Plan:**

- Creating nesting habitat (per the NHESP nest creation guidelines) in close proximity to the rivers (particularly Emerson Brook) with undulating, southern facing slopes. Since it is difficult to determine whether turtles are using the first portion of the gravel pit they encounter or traversing the pit to the embankments, this suggestion serves to provide slopes in closer proximity to the wetlands. Appropriate nesting habitat may already be preserved with the current design but additional creation enhances the area.
- A vegetative management plan that encourages/retains successional vegetation for foraging or open nesting habitat in undisturbed areas of the pit, or the remaining old field habitat.
- Identification of other appropriate habitat on site that will be preserved or managed with habitat needs in mind.
- Fencing with fine links at the bottom (to prevent climbing) to keep turtles out of school grounds where they may be at risk from mowing or nesting in playing fields.
- Construction timing or construction monitoring to limit the potential for any turtles in the work area. This may also include barrier silt fence depending on the time of year.

The NOI is submitted simultaneously to NHESP for review and they have 30 days to provide comments to the Conservation Commission. Review of the Conservation and Management Permit application will take another 30 days or more.

**NPDES – Construction General Permit and SWPPP**

If the project disturbs more than 1 acre of land, the preparation of a Stormwater Pollution Prevention Plan (SWPPP) will be necessary per the requirements of the NPDES Program. This effort would also include obtaining coverage with the EPA under the General Permit for Stormwater Discharges from Construction Activities.

**Attachments**

Environmental attachments include a more detailed environmental report and permitting assessment, a species information request letter to NHESP, an update letter to NHESP identifying the changes made to the site design, and a letter from NHESP documenting the new species and habitat occurrence on the project site. Rare species observation forms documenting the presence of the wood turtle have not been enclosed due to their sensitivity, but can be provided on request.

		Schematic Design: Need for Permit	Approximate Timeline From Submission**
Wetlands	Notice of Intent	X	35 to 45 Days from submission to issuance of Order of Conditions (+10 business day appeal period)  (Could be 60 days or more if quorum issues or continuation of hearing. Also may need to wait for NHESP approval)
	Stormwater Management Form and Report (with NOI)	X	Same as/part of NOI process
	US Army Corps of Engineers PGP Category II Screening	X	60 days or more
	DEP 401 Water Quality Certification	X	120 to 150 days
Wildlife	MESA Project Review/Conservation & Management Permit with NHESP	X	60 days or more
Land Development	MEPA ENF	X	30 days from date it was published in the Environmental Monitor
	NPDES Construction General Permit for Stormwater Discharges	X Assumes 1 acre or more of land disturbance	8 to 14 days

X Assumed to be necessary

— Assumed to be unnecessary.

\*\* All timelines are approximate and will be project specific.

# **ATTACHMENT A**

**UXBRIDGE HIGH SCHOOL  
SCHEMATIC DESIGN**

**WETLANDS REPORT**

**NHESP CORRESPONDENCE**

April 30, 2010

Ms. Emily Holt, Regulatory Review  
Natural Heritage and Endangered Species Program  
Massachusetts Division of Fisheries and Wildlife  
North Drive, Rt. 135  
Westborough, MA 01581

**RE: MESA Information and Consultation Request  
Proposed Uxbridge High School  
Quaker Highway (Route 146A)  
Uxbridge, MA**

Dear Ms. Holt,

On behalf of the Town of Uxbridge (the Town), BSC Group, Inc. (BSC) is submitting this MESA Information and Consultation Request for a proposed new High School building and associated utilities, athletic fields, access driveway, and grounds. The facilities are proposed on a 154-acre town parcel located just to the west of the Blackstone River and Canal, south of Route 122 and east of Quaker Highway (Rt 146A). The parcel is a mix of forested land and areas of abandoned, open gravel pit which have been heavily excavated in the past. Emerson Brook flows within the southern portion of the parcel and part of the site is encumbered by an existing electric transmission line corridor. The northern and eastern portions of the parcel are currently located in an area identified as Priority and Estimated Habitat (PH444/EH336) which is associated with the Blackstone River.

The Town and their consultants have completed a feasibility study for the proposed new facility and are now in an expedited schematic design phase in order to acquire partial state funding and assistance for the construction of the high school. The existing wetland resource areas and habitat constraints result in a buildable area of approximately 60 acres. Due to the highly excavated/graveled existing conditions, significant grading and cut and fill will be necessary for the development of the facilities. As part of the schematic design, the Town is requesting a consultation with the Massachusetts Natural Heritage and Endangered Species Program (NHESP) in order to better understand any constraints or recommendations that would protect habitat for state-listed species. From involvement with other projects in the area, BSC understands that past records indicate that the species located in this habitat are the marbled salamander (*Ambystoma opacum*), the oak hairstreak butterfly (*Satyrrium favonius*), and the arrow clubtail dragonfly (*Stylurus spiniceps*).

The current conceptual or schematic design of the site depicts the majority of the work occurring outside of the mapped Priority and Estimated Habitat PH444/EH336. Wetland resource areas have also been largely avoided. However, during a field visit on April 22, 2010, BSC observed five (5) separate mature wood turtles (*Glyptemys insculpta*) immediately adjacent to Emerson Brook where the existing transmission corridor crosses the brook. The turtles were all found within the same general area, approximately 1 acre or

NHESP Information and Consultation Request  
Town of Uxbridge High School  
April 30, 2010  
Page 2 of 2

less in size. This is a new species occurrence in a new area of habitat that is not currently mapped on the site. We would also like to discuss the implications of this finding at the consultation meeting. Rare species observation forms, details and photos will be submitted to NHESP shortly.

To assist in your review, enclosed please find the MESA Information Request Form, Site Locus, Conceptual/Schematic Design for the site, and submittal fee. If a consultation meeting could be planned as soon as your schedule allows, that would be very helpful. The Town and associated boards need to make decisions in a short span of time in order to secure the state funds available to them. If you have any questions, please contact me at 617-896-4529.

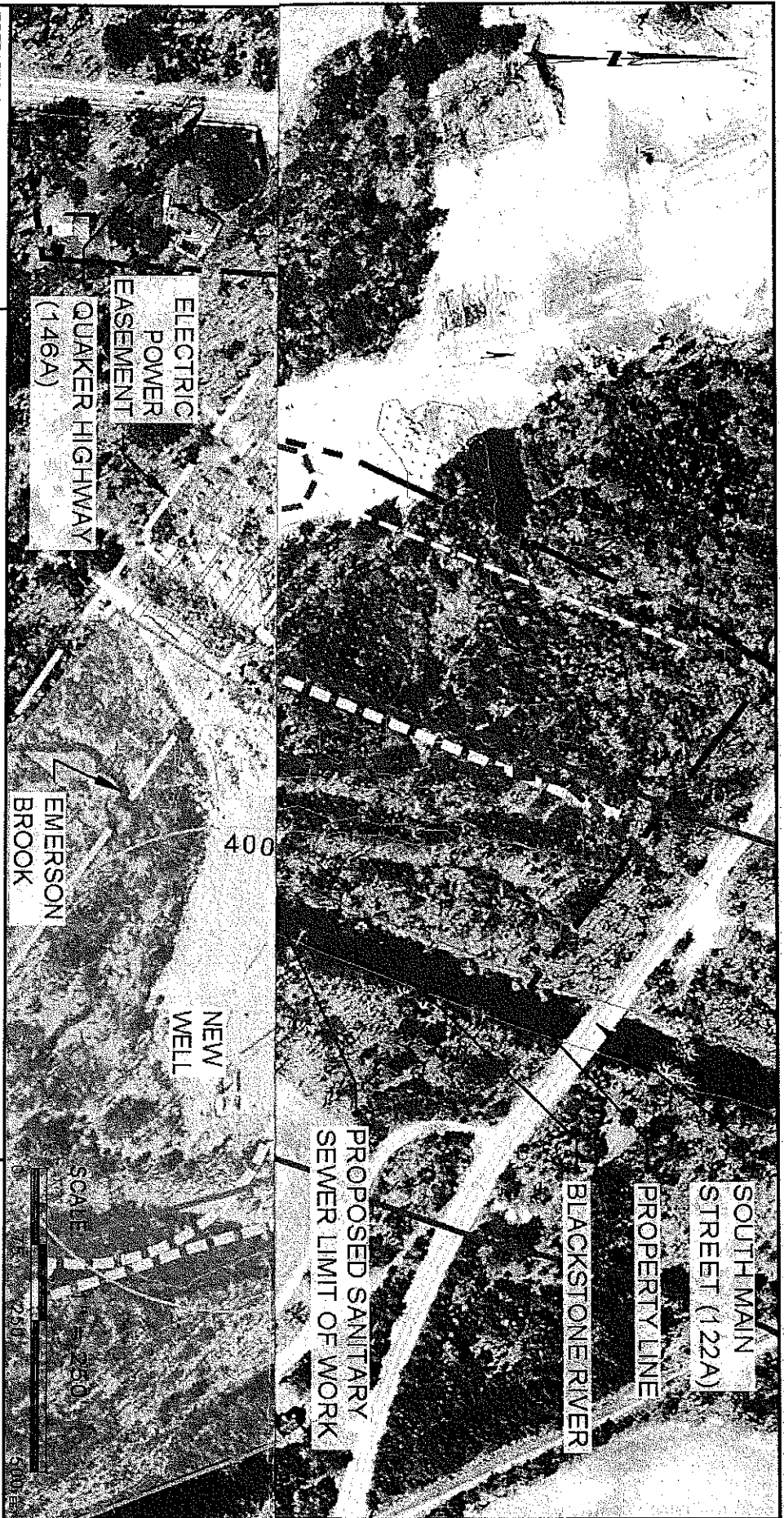
Sincerely,  
**BSC Group, Inc**



Diana Walden  
Wetland/Wildlife Scientist







PREPARED FOR:

TOWN OF UXBRIDGE  
UXBRIDGE, MA 01569

SCHEMATIC DESIGN PLAN  
OVER AERIAL PHOTO

UXBRIDGE HIGH SCHOOL  
QUAKER HIGHWAY  
UXBRIDGE, MA



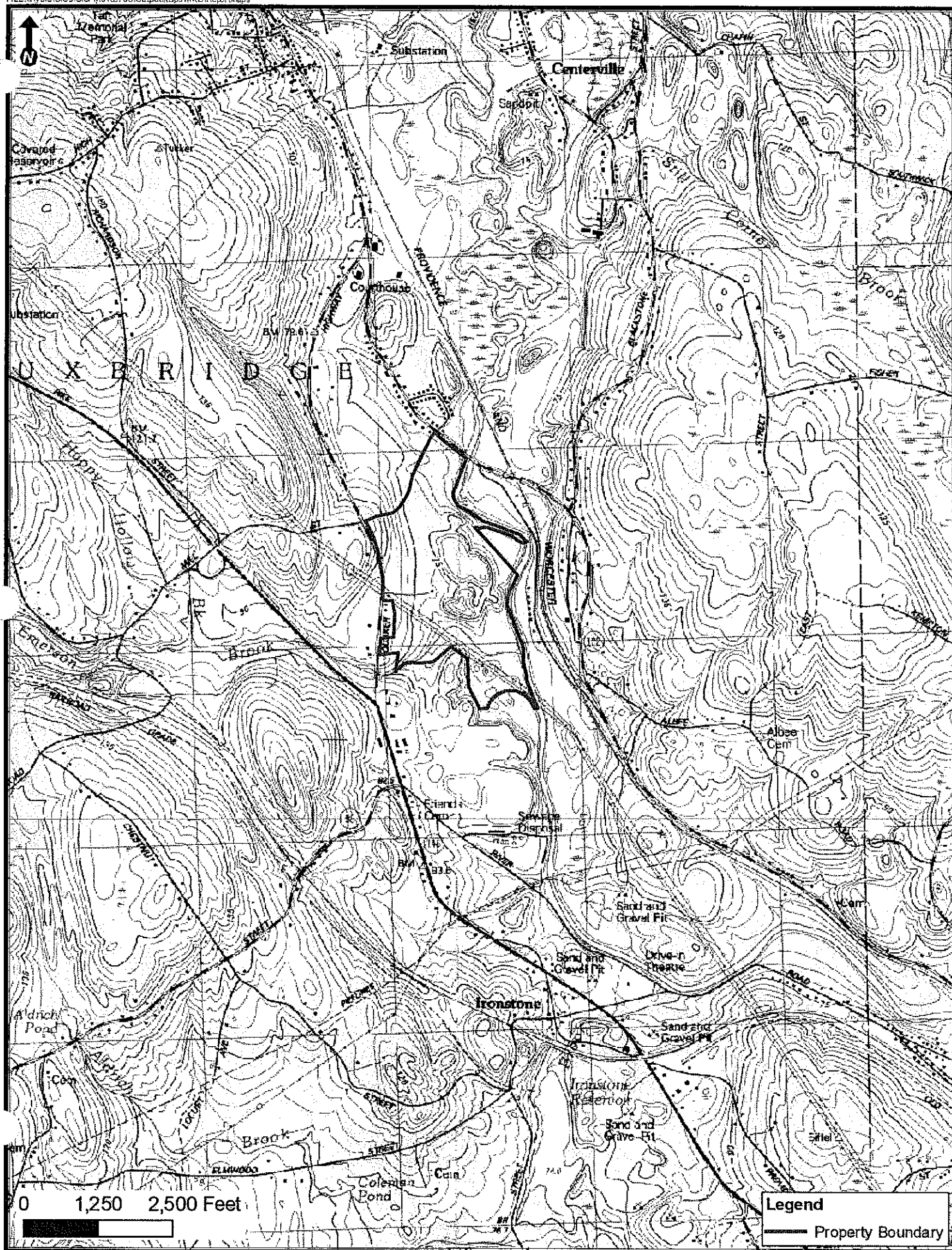
33 Waldo Street  
Worcester, Massachusetts  
01608

508.792.4500

JOB NO.: 61067.01 Date: 6/21/2010  
Scale: 1"=250' Rev'd: \_\_\_\_\_  
Dwg. No.: NHESP-EXHIBIT Figure: X

File: XXXXXXXX







June 2, 2010

Mr. Jon Regosin, Regulatory Review  
Natural Heritage and Endangered Species Program  
Massachusetts Division of Fisheries and Wildlife  
North Drive, Rt. 135  
Westborough, MA 01581

33 Waldo Street  
Worcester, MA 01608

Tel: 508-792-4500  
800-288-8123  
Fax: 508-792-4509

[www.bscgroup.com](http://www.bscgroup.com)

**RE: Updated Site Plan  
Proposed Uxbridge High School  
Quaker Highway (Route 146A)  
Uxbridge, MA**

Dear Mr. Regosin,

On behalf of the Town of Uxbridge (the Town), BSC Group, Inc. (BSC) would like to thank you for your time spent on May 13, 2010 evaluating the site for the proposed High School located off Quaker Highway (Rt 146A). Based on the recent observations of wood turtles (*Glyptemys insculpta*) both during your site walk and during BSC site evaluations, it is our understanding that new portions of the 154-acre town owned parcel will be considered to be within the jurisdiction of the Massachusetts Natural Heritage and Endangered Species Program (NHESP). These areas will be considered Priority and Estimated Habitat for the wood turtle which is a state-listed species of concern, protected under the Massachusetts Endangered Species Act (MESA). The extent of the mapped habitat will be reflected in the next edition of the NHESP atlas and GIS datalayer which is tentatively scheduled for late 2010. It is also our understanding that NHESP will be issuing a letter to the Town (owner) in the meantime to officially inform them that new habitat has been identified on their property.

Based on our site visit, we are also submitting an updated site plan with the most recent schematic design of the high school, fields and other associated facilities for your files. We have also included as reference, the previous concept designs. The preferred Schematic design plan is several iterations beyond the one submitted with our April 30, 2010 MESA information request and the plan BSC brought to the site visit. As we discussed in the field, site constraints resulting from the proposed public well, reserve well, identified habitat, and funding have resulted in a condensed design, with the proposed access drive and playing fields being generally shifted north and west. The enclosed graphics also include a depiction of a 300 foot and a 600 foot "buffer zone" from both the Blackstone River and Emerson Brook for your review. The general extent of the proposed design and limit of work have also been placed over an orthophoto background as you requested, so the relation to existing site features can be better understood.

Engineers

Environmental  
Scientists

GIS Consultants

Landscape  
Architects

Planners

Surveyors

#### *General Protection of Habitat*

The preferred Schematic design plan indicates that the majority of the proposed work remains 300 feet or greater from the Blackstone River and at least 600 feet from Emerson Brook. A portion of some of the school playing fields and grounds are located between the 300 to 600 foot buffer of Emerson Brook, but much of this area will be avoided. Most work will be 600 feet or greater from the area where the majority of the wood turtles were located at Emerson Brook. Work will also be 600 feet or greater from the confluence of the Blackstone River and Canal where another wood turtle was observed. The area between the 300 and 600 foot outer buffer to the Blackstone River is more difficult to avoid as the river parallels the eastern side of the site. The buffer here encompasses much of the buildable portion of the parcel.

The Town is developing a new public water supply adjacent to the school project. The concurrent well development and school projects have coordinated their design efforts to protect existing and proposed water supply by relocating all school related activities outside the area delineated on the schematic design plan as "Area Reserved for Water Supply". This agreement moves the school fields further away from the steep embankments of the excavated gravel pit on the eastern side of the site. A large area of the existing, open gravel pit adjacent to Emerson Brook will also remain undisturbed. The excavated gravel pit to the north will be partially developed with courts and fields but the work was reconfigured and the majority of disturbance stays over 300 feet from the Blackstone River. It is our understanding that NHESP's opinion was that the area of the northern gravel pit that comes closest to the Blackstone River may provide additional nesting habitat because of the more gradual slope and overall proximity.

Portions of the successional meadows or clearing where a home site had previously been will be retained and turtles from Emerson Brook will have unobstructed access to the successional shrub and grassland habitat on the existing NGRID right-of-way. The extensive wetland systems at the confluence of Emerson Brook and the Blackstone River will not be disturbed.

#### *Potential Mitigation Measures*

Despite the extensive efforts to redesign the project, it is our understanding that the project will likely require a Conservation and Management Permit from NHESP following official review of the school project and well development project. The Conservation and Management Plan developed must provide a net benefit to the species. The following measures were some of the ideas and potential conditions discussed in the field with NHESP:

- Creating nesting habitat (per the NHESP nest creation guidelines) in close proximity to the rivers (particularly Emerson Brook) with undulating, southern facing slopes. Since it is difficult to determine whether turtles are using the first portion of the gravel pit they encounter or traversing the pit to the

embankments, this suggestion serves to provide slopes in closer proximity to the wetlands. Appropriate nesting habitat may already be preserved with the current design but additional creation enhances the area.

- A vegetative management plan that encourages/retains successional vegetation for foraging or open nesting habitat in undisturbed areas of the pit, or the remaining old field habitat.
- Identification of other appropriate habitat on site that will be preserved or managed with habitat needs in mind.
- Fencing with fine links at the bottom (to prevent climbing) to keep turtles out of school grounds where they may be at risk from mowing or nesting in playing fields.
- Construction timing or construction monitoring to limit the potential for any turtles in the work area. This may also include barrier silt fence depending on the time of year.

We look forward to working with NHESP further during the project review and into the permitting phase. If possible, the Town would greatly appreciate acknowledgement of their proactive efforts to contact NHESP and compromise when you submit the required correspondence regarding the new species observation. If you have any questions or require additional graphics or information at this time, please contact me at 617-896-4529.

Sincerely,  
**BSC Group, Inc**

Diana Walden  
Wetland/Wildlife Scientist

Enclosures

Cc; Leslie Fanger, Gene Raymond



**MassWildlife**

Commonwealth of Massachusetts

# Division of Fisheries & Wildlife

Wayne F. MacCallum, *Director*

June 2, 2010

Town of Uxbridge  
Board of Selectmen  
Town Hall  
21 South Main Street  
Uxbridge, MA 01569

RE: New state-listed rare species information  
Town of Uxbridge, 154-acre town parcel located West of the Blackstone River and Canal,  
South of Route 122 and East of Quaker Highway (Route 146A)  
NHESP Tracking No. 07-21324

To Whom It May Concern:

In compliance with the MA Endangered Species Act Regulations (321 CMR 10.13) (MESA), I am writing to inform you that the Natural Heritage & Endangered Species Program (NHESP) of the MA Division of Fisheries and Wildlife has received new information on a state-listed rare species occurrence relating to the above-listed parcel. The Wood Turtle (*Glyptemys insculpta*) has been documented to occur on and in the immediate vicinity of the parcel. This species is listed as a species of "Special Concern" pursuant to the MESA. A portion of the project site is also mapped as Priority Habitat for the Arrow Clubtail (*Stylurus spiniceps*), state-listed as "Threatened".

The Division has determined that this new state-listed species occurrence meets the criteria for delineation of a Priority Habitat under 321 CMR 10.12. Please note that projects and activities located within Priority Habitat must be reviewed by the NHESP for compliance with the state-listed rare species protection provisions of MESA (321 CMR 10.18).

BSC Group, Inc. (BSC), acting on the behalf of the Town of Uxbridge (Town) has been in consultation with our office regarding the new state-listed species occurrence. On May 13, 2010 we conducted a site visit with BSC and the Town to address this concern. During the site visit we discussed the school site design and identified potential mitigation options. On June 2, 2010 we received an updated site plan ("Schematic Design Plan" dated 6/2/2010) and narrative from BSC. The updated site plan does a good job of avoiding key habitat areas and provides an excellent starting point for obtaining a required MESA permit. Pending additional discussion of permitting details; we would anticipate that the project could be permitted through a Conservation and Management Permit (321 CMR 10.23). We look forward to working with BSC and the Town, should the Town decide to move forward with the school and/or well projects.

For additional information about the MESA review process, please see our website ([www.nhesp.org](http://www.nhesp.org)) Regulatory Review tab. If you have any questions regarding this review please contact David J. Paulson, Consulting Biologist, at (508) 389-6366.

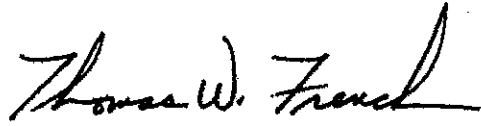
[www.masswildlife.org](http://www.masswildlife.org)

Division of Fisheries and Wildlife

Field Headquarters, North Drive, Westborough, MA 01581 (508) 389-6300 Fax (508) 389-7891

*An Agency of the Department of Fish and Game*

Sincerely,

A handwritten signature in black ink that reads "Thomas W. French". The signature is fluid and cursive, with the first letters of each name being capitalized and prominent.

Thomas W. French, Ph.D.  
Assistant Director

cc: Diana Walden, BSC Group, Inc.



# **ATTACHMENT B**

UXBRIDGE HIGH SCHOOL  
SCHEMATIC DESIGN

WETLANDS REPORT

NHESP SITE WALK MINUTES

**To:** Leslie Fanger
**Date:** May 14, 2010
**From:** Diana Walden
**Proj. No.**

08

**Re:** NHESP site walk Uxbridge High School
**Date of Meeting:** May 13, 2010
**Time:** 11:30am

1500

**Place of Meeting:** Proposed Uxbridge High School Site Quaker Highway

3123

**Purpose:** Review potential rare species habitat and implications

1509

**List of Attendees:** Jon Regosin, NHESP; Dave Paulson, NHESP; Leslie Fanger, BSC; Diana Walden, BSC; Dan..., Town; Bill..., Town; Jenna Rzasa, Tata&Howard

1

Item	Discussion	Action
1.	<p>Leslie showed NHESP the updated schematic with the shorter, more northerly access, and the "condensed" playing fields area.</p> <p>In the meantime, new information about the Zone 1 restrictions for the back-up well forced a new schematic/configuration during the site walk, placing the ball field back in the northern gravel pit but providing additional buffer between the Blackstone River on the southern portion of site.</p>	<p>Send the latest schematic to NHESP for review – particularly with an orthophoto back drop.</p>
2.	<p>NHESP wanted to evaluate potential habitat along the Blackstone River and Canal north of the confluence with Emerson Brook. A female, juvenile wood turtle (likely 5-6 yrs old) was found on mud flats where the Canal enters the River.</p> <p>This typically means the site supports a sustaining population due to the various ages and sizes of the turtles found.</p> <p>This also increases NHESP concern that nesting may be occurring further north within the site than previously thought when the individuals had been found near Emerson Brook. The northern gravel pit is now in question.</p>	<p>NHESP requested that a distinct 300 foot buffer and a distinct 600 foot buffer from each river (Emerson Brook, Blackstone River) also be placed on the submitted schematic.</p>
3.	<p>NHESP discussed whether a nesting survey would be useful to identifying restrictions on site. (This typically involves field teams observing the site during the evenings for an approximately two week period at the appropriate time of year. Turtles can also be radio tagged and tracked to understand movement on site.)</p> <p>Since these studies are costly, and may result in the same situation as we are currently in, NHESP is assuming that both gravel pits are habitat and the project will require a Conservation Management Permit.</p> <p>It is difficult for NHESP to establish a specified distance as a buffer from the rivers since turtles can move a significant distance over land to nest. However, there is some information that indicates the sooner they</p>	<p>If a nesting survey was performed, it could provide evidence that the turtles are staying relatively close to the rivers or not using the northern gravel pit. NHESP may not have as many restrictions or conditions in that case.</p> <p>However, the survey could identify that</p>

**ACCURACY NOTICE**

We have sought to record accurately the minutes of this meeting. If any of the above items do not agree with your understanding, please contact us within seven (7) days from the date of this document.

Item	Discussion	Action
	<p>encounter appropriate habitat after leaving the river, the sooner they will nest.</p> <p>NHESP indicated that while we have already done a good job of making compromises on the design, further compromise could continue to be worked out to ensure the turtles have appropriate habitat. They did not want to have another contentious school project.</p>	<p>turtles are using a larger area and the Conservation Management Permit would still be necessary even after spending the funds on the survey.</p>
4.	<p>NHESP agreed that the Town well should be a compatible use with the turtle habitat. They will want to review exact location of the access road and also discuss a long-term vegetative management plan to ensure the habitat stays appropriate for nesting.</p>	<p>Jenna or the town will continue to coordinate with NHESP with the road alignment. NHESP may contact the well representatives through their coordination on the school project.</p>
5.	<p>A Conservation and Management Permit allows the "take" of habitat but a plan must be developed that ensures the population is sustained or in better condition in the long run.</p> <p>Some of the recommendations that NHESP may require include:</p> <ul style="list-style-type: none"> <li>- Further condensing the area encumbered by the playing fields, even if this means filling in some of the lower quality isolated wetlands that were previously avoided.</li> <li>- Creating nesting habitat in close proximity to the rivers with undulating, southern facing slopes. NHESP nest creating guidelines are available on line. This will attempt to replace any of the steep slopes further to the north that may be preferred by turtles. (Again it is difficult to say if turtles are using the first portion of the gravel pit they come to or traversing the area).</li> <li>- A vegetative management plan that encourages successional vegetation for foraging or open nesting habitat.</li> <li>- Fencing with fine links at the bottom (to prevent climbing) to keep turtles out of school grounds where they may be at risk from mowing or nesting in playing fields.</li> <li>- Identification of other appropriate habitat on site that will be preserved or managed with habitat needs in mind.</li> </ul>	<p>Leslie discussed sending a cover letter to NHESP with the new schematic identifying some of the commitments that the town may take.</p> <p>Additional habitat mapping could be performed to provide NHESP with information towards a final determination. The bulk of this work is more appropriate during the permitting phase and technically out of scope until then.</p>
6.	<p>NHESP is required to send a letter to the town within 30 days of understanding there has been a new species observation on the site. This letter will identify the site will be mapped during the next installment of the NHESP atlas.</p>	<p>NA</p>

**EXHIBIT F**  
**FURNISHINGS AND EQUIPMENT**  
**TOWN OF UXBRIDGE**

**PROJECT SCOPE & BUDGET AGREEMENT**

Room Type	# of Rms	Qty	Description	Unit Price	Extended	Type Total
<b>CORE ACADEMIC SPACES</b>						
General Classrooms	10	1	Task chair, armless	\$ 375.00	\$ 375.00	
Typ.A - separate chairs		1	Desk, double pedestal	\$ 1,050.00	\$ 1,050.00	
24-28 students each		1	Storage cab, lam, partial wardrobe	\$ 1,020.00	\$ 1,020.00	
		1	Lateral file, 42/2-high	\$ 440.00	\$ 440.00	
		1	Activity table, 60"x30"	\$ 300.00	\$ 300.00	
		26	Student chair	\$ 50.00	\$ 1,300.00	
		26	Student desk, 26"x19"	\$ 75.00	\$ 1,950.00	
		1	Flag and holder	\$ 15.00	\$ 15.00	
		1	Electric pencil sharpener	\$ 30.00	\$ 30.00	
		1	Trash receptacle, fire resistant	\$ 30.00	\$ 30.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 6,510.00	\$ 65,100.00
General Classrooms	6	1	Task chair, armless	\$ 375.00	\$ 375.00	
Typ.B - combination desk/chairs		1	Desk, double pedestal	\$ 1,050.00	\$ 1,050.00	
28 students each		1	Storage cab, lam, partial wardrobe	\$ 1,020.00	\$ 1,020.00	
		1	Lateral file, 42/2-high	\$ 440.00	\$ 440.00	
		1	Activity table, 60"x30"	\$ 300.00	\$ 300.00	
		4	Student chair	\$ 50.00	\$ 200.00	
		28	Student tablet desk with chair	\$ 95.00	\$ 2,660.00	
		1	Flag and holder	\$ 15.00	\$ 15.00	
		1	Electric pencil sharpener	\$ 30.00	\$ 30.00	
		1	Trash receptacle, fire resistant	\$ 30.00	\$ 30.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 6,120.00	\$ 36,720.00
General Classrooms	4	1	Task chair, armless	\$ 375.00	\$ 375.00	
Typ.C - combination desk/chairs		1	Desk, double pedestal	\$ 1,050.00	\$ 1,050.00	
18 students each		1	Storage cab, lam, partial wardrobe	\$ 1,020.00	\$ 1,020.00	
		1	Lateral file, 42/2-high	\$ 440.00	\$ 440.00	
		1	Activity table, 60"x30"	\$ 300.00	\$ 300.00	
		4	Student chair	\$ 50.00	\$ 200.00	
		18	Student tablet desk with chair	\$ 95.00	\$ 1,710.00	
		1	Flag and holder	\$ 15.00	\$ 15.00	
		1	Electric pencil sharpener	\$ 30.00	\$ 30.00	
		1	Trash receptacle, fire resistant	\$ 30.00	\$ 30.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 5,170.00	\$ 20,680.00
General Biology Lecture/Lab	1	1	Task stool, armless	\$ 400.00	\$ 400.00	
28 students		1	Lateral file, 30/2-high	\$ 370.00	\$ 370.00	
		28	Student chair	\$ 50.00	\$ 1,400.00	
		14	Science table, 60"x24"x29"	\$ 500.00	\$ 7,000.00	
		1	Flag and holder	\$ 15.00	\$ 15.00	
		1	Electric pencil sharpener	\$ 30.00	\$ 30.00	
		1	Trash receptacle, fire resistant	\$ 30.00	\$ 30.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 9,245.00	\$ 9,245.00
Chem/Anatomy/AP Bio Lab	3	1	Task stool, armless	\$ 400.00	\$ 400.00	
		1	Lateral file, 30/2-high	\$ 370.00	\$ 370.00	
		26	Student stool	\$ 75.00	\$ 1,950.00	
		1	Flag and holder	\$ 15.00	\$ 15.00	
		1	Electric pencil sharpener	\$ 30.00	\$ 30.00	
		1	Trash receptacle, fire resistant	\$ 30.00	\$ 30.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 2,795.00	\$ 8,385.00

Room Type	# of Rms	Qty	Description	Unit Price	Extended	Type Total
Science Prep Room, Double	2	2	Student stool	\$ 75.00	\$ 150.00	
		1	Trash receptacle, fire resistant	\$ 30.00	\$ 30.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 180.00	\$ 360.00
Foreign Language Lab 25-30 students	1	1	Task chair, armless	\$ 375.00	\$ 375.00	
		1	Language lab desk, teacher	\$ 1,000.00	\$ 1,000.00	
		1	Lateral file, 42/3-high	\$ 585.00	\$ 585.00	
		2	Storage cabinet, 36/6-high	\$ 605.00	\$ 1,210.00	
		26	Language lab desk, student	\$ 750.00	\$ 19,500.00	
		26	Student chair	\$ 50.00	\$ 1,300.00	
		1	Flag and holder	\$ 15.00	\$ 15.00	
		1	Electric pencil sharpener	\$ 30.00	\$ 30.00	
		1	Trash receptacle, fire resistant	\$ 30.00	\$ 30.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 24,045.00	\$ 24,045.00
Break-out Space	2	1	Trash receptacle, fire resistant	\$ 30.00	\$ 30.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 30.00	\$ 60.00
Small Group	1	1	Lectern, teacher, locked storage	\$ 665.00	\$ 665.00	
		1	Bookcase, 36/2-high	\$ 190.00	\$ 190.00	
		10	Student desk, 26"x19"	\$ 75.00	\$ 750.00	
		10	Student chair	\$ 50.00	\$ 500.00	
		1	Flag and holder	\$ 15.00	\$ 15.00	
		1	Electric pencil sharpener	\$ 30.00	\$ 30.00	
		1	Trash receptacle, fire resistant	\$ 30.00	\$ 30.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 2,180.00	\$ 2,180.00
SPECIAL EDUCATION						
SPED Chair Office	1	1	Desk, return	\$ 1,550.00	\$ 1,550.00	
		1	Task chair, arms	\$ 425.00	\$ 425.00	
		4	Side chair, arms, upholstered	\$ 250.00	\$ 1,000.00	
		1	Bookcase, 36/2-high	\$ 190.00	\$ 190.00	
		2	Lateral file, 31/4-high, fireproof	\$ 2,105.00	\$ 4,210.00	
		1	Meeting table, 60"x36"	\$ 350.00	\$ 350.00	
		1	Trash receptacle, fire resistant	\$ 30.00	\$ 30.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
			\$ 7,755.00	\$ 7,755.00		
Specialist/Testing Office	2	8	Student chair	\$ 50.00	\$ 400.00	
		2	Activity table, 60"x30"	\$ 300.00	\$ 600.00	
		1	Trash receptacle, fire resistant	\$ 30.00	\$ 30.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 1,030.00	\$ 2,060.00
Academic Support Center Up to 15 students, 2 teachers	1	2	Task chair, armless	\$ 375.00	\$ 750.00	
		2	Desk, double pedestal	\$ 1,050.00	\$ 2,100.00	
		2	Storage cab, lam, partial wardrobe	\$ 1,020.00	\$ 2,040.00	
		2	Lateral file, 30/2-high	\$ 370.00	\$ 740.00	
		4	Bookcase, 36/3-high	\$ 230.00	\$ 920.00	
		8	Student tablet desk with chair	\$ 95.00	\$ 760.00	
		6	Student chair	\$ 50.00	\$ 300.00	
		1	Activity table, 60"x36"	\$ 350.00	\$ 350.00	
		1	Computer table, 60"x24"	\$ 350.00	\$ 350.00	
		1	Flag and holder	\$ 15.00	\$ 15.00	

Room Type	# of Rms	Qty	Description	Unit Price	Extended	Type Total
		1	Electric pencil sharpener	\$ 30.00	\$ 30.00	
		1	Trash receptacle, fire resistant	\$ 30.00	\$ 30.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 8,385.00	\$ 8,385.00
Alternative Education Mosaic Mill, up to 15	1	1	Storage cab, lam, partial wardrobe	\$ 1,020.00	\$ 1,020.00	
		1	Bookcase, 36/2-high	\$ 190.00	\$ 190.00	
		6	Student tablet desk with chair	\$ 95.00	\$ 570.00	
		6	Student chair	\$ 50.00	\$ 300.00	
		1	Activity table, 60"x36"	\$ 350.00	\$ 350.00	
		1	Computer table, 60"x24"	\$ 350.00	\$ 350.00	
		1	Flag and holder	\$ 15.00	\$ 15.00	
		1	Electric pencil sharpener	\$ 30.00	\$ 30.00	
		1	Trash receptacle, fire resistant	\$ 30.00	\$ 30.00	
		1	Trash receptacle, health	\$ 80.00	\$ 80.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 2,935.00	\$ 2,935.00
Alternative Education Office	1	1	Desk, double pedestal	\$ 1,050.00	\$ 1,050.00	
		1	Task chair, arms	\$ 425.00	\$ 425.00	
		4	Student chair	\$ 50.00	\$ 200.00	
		1	Bookcase, 36/2-high	\$ 190.00	\$ 190.00	
		1	Lateral file, 30/2-high	\$ 370.00	\$ 370.00	
		1	Meeting table, 36" diameter	\$ 400.00	\$ 400.00	
		1	Trash receptacle, fire resistant	\$ 30.00	\$ 30.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 2,665.00	\$ 2,665.00
Life Skills and Spartan Café Up to 10 students, 2-3 teachers	1	2	Task chair, armless	\$ 375.00	\$ 750.00	
		2	Desk, double pedestal	\$ 1,050.00	\$ 2,100.00	
		2	Storage cab, lam, partial wardrobe	\$ 1,020.00	\$ 2,040.00	
		1	Lateral file, 42/3-high	\$ 585.00	\$ 585.00	
		2	Bookcase, 36/3-high	\$ 250.00	\$ 500.00	
		2	Activity table, 72"x36"	\$ 365.00	\$ 730.00	
		12	Side chair, arms, higher back	\$ 300.00	\$ 3,600.00	
		4	Computer table, 60"x24"	\$ 350.00	\$ 1,400.00	
		3	Meeting table, 42" diameter	\$ 500.00	\$ 1,500.00	
		12	Stacking chair, plastic	\$ 85.00	\$ 1,020.00	
		1	Flag and holder	\$ 15.00	\$ 15.00	
		1	Electric pencil sharpener	\$ 30.00	\$ 30.00	
		1	Trash receptacle, health	\$ 80.00	\$ 80.00	
		1	Trash receptacle, fire resistant	\$ 30.00	\$ 30.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 14,380.00	\$ 14,380.00
ART & MUSIC						
Art Studio 18-20 students	1	1	Task chair, armless	\$ 375.00	\$ 375.00	
		1	Desk, double pedestal	\$ 1,050.00	\$ 1,050.00	
		1	Lateral file, 30/2-high	\$ 370.00	\$ 370.00	
		20	Student stool	\$ 75.00	\$ 1,500.00	
		6	Activity table, 60"x42"x34" adj ht	\$ 315.00	\$ 1,890.00	
		1	Drying rack	\$ 1,150.00	\$ 1,150.00	
		1	Flag and holder	\$ 15.00	\$ 15.00	
		1	Electric pencil sharpener	\$ 30.00	\$ 30.00	
		1	Trash receptacle, large	\$ 80.00	\$ 80.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 6,460.00	\$ 6,460.00
Ceramics Studio Up to 18 students	1	8	Student stool	\$ 75.00	\$ 600.00	
		2	Activity table, 60"x42"x34" adj ht	\$ 315.00	\$ 630.00	

Room Type	# of Rms	Qty	Description	Unit Price	Extended	Type Total
		1	Slab roller table	\$ 800.00	\$ 800.00	
		1	Wedging table	\$ 700.00	\$ 700.00	
		2	Ceramics ware rack, mobile	\$ 515.00	\$ 1,030.00	
		1	Flag and holder	\$ 15.00	\$ 15.00	
		1	Electric pencil sharpener	\$ 30.00	\$ 30.00	
		1	Trash receptacle, large	\$ 80.00	\$ 80.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 3,885.00	\$ 3,885.00
Kiln room <i>existing kiln to be relocated</i>	1	1	Trash receptacle, large	\$ 80.00	\$ 80.00	
					\$ 80.00	\$ 80.00
Band/Choral	1	1	Task chair, armless	\$ 375.00	\$ 375.00	
		1	Desk, double pedestal	\$ 1,050.00	\$ 1,050.00	
		1	Storage cab, lam, partial wardrobe	\$ 1,020.00	\$ 1,020.00	
		1	Lateral file, 42/3-high	\$ 500.00	\$ 500.00	
		1	Conductor's podium	\$ 1,015.00	\$ 1,015.00	
		1	Conductor's stool	\$ 570.00	\$ 570.00	
		40	Music chair, stacking	\$ 90.00	\$ 3,600.00	
		40	Music stand	\$ 50.00	\$ 2,000.00	
		3	Choral riser with four steps	\$ 1,085.00	\$ 3,255.00	
		6	Midi station	\$ 250.00	\$ 1,500.00	
		6	Student task chair	\$ 155.00	\$ 930.00	
		1	Folio cabinet, 100 slot	\$ 1,250.00	\$ 1,250.00	
		1	Stereo cabinet	\$ 1,000.00	\$ 1,000.00	
		1	Flag and holder	\$ 15.00	\$ 15.00	
		1	Electric pencil sharpener	\$ 30.00	\$ 30.00	
		1	Trash receptacle, fire resistant	\$ 30.00	\$ 30.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 18,140.00	\$ 18,140.00
Ensemble	1	6	Music chair, stacking	\$ 90.00	\$ 540.00	
		6	Music stand	\$ 50.00	\$ 300.00	
					\$ 840.00	\$ 840.00
Practice Room	2	2	Music chair, stacking	\$ 90.00	\$ 180.00	
		2	Music stand	\$ 50.00	\$ 100.00	
					\$ 280.00	\$ 560.00
Music Storage	1	1	Music chair cart	\$ 165.00	\$ 165.00	
		1	Music stand cart	\$ 200.00	\$ 200.00	
		2	Lateral file, 42/4-high	\$ 745.00	\$ 1,490.00	
		1	Music instrument storage	\$ 10,000.00	\$ 10,000.00	
		4	Costume/uniform rack, 72" mobile	\$ 810.00	\$ 3,240.00	
					\$ 15,095.00	\$ 15,095.00
VOCATIONS & TECHNOLOGY						
Physics/Tech Classroom <i>25-30 students</i>	1	1	Task chair, armless	\$ 375.00	\$ 375.00	
		1	Desk, double pedestal	\$ 1,050.00	\$ 1,050.00	
		1	Storage cab, lam, partial wardrobe	\$ 1,020.00	\$ 1,020.00	
		1	Lateral file, 30/2-high	\$ 370.00	\$ 370.00	
		28	Student tablet desk with chair	\$ 95.00	\$ 2,660.00	
		1	Flag and holder	\$ 15.00	\$ 15.00	
		1	Electric pencil sharpener	\$ 30.00	\$ 30.00	
		1	Trash receptacle, large	\$ 80.00	\$ 80.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 5,600.00	\$ 5,600.00



Room Type	# of Rms	Qty	Description	Unit Price	Extended	Type Total
Physics/Tech Lab 25-30 students storage furniture to be relocated from existing high school	1	1	Task chair, armless	\$ 375.00	\$ 375.00	
		1	Lectern, teacher, locked storage	\$ 665.00	\$ 665.00	
		8	Computer table, 60"x24"	\$ 350.00	\$ 2,800.00	
		16	Student task chair	\$ 155.00	\$ 2,480.00	
		28	Student stool	\$ 75.00	\$ 2,100.00	
		7	Workbench, 64"x54"x34", shelf	\$ 1,500.00	\$ 10,500.00	
		1	Tool cabinet, 48"x22"x84"	\$ 1,275.00	\$ 1,275.00	
		1	Flag and holder	\$ 15.00	\$ 15.00	
		1	Electric pencil sharpener	\$ 30.00	\$ 30.00	
		1	Trash receptacle, large	\$ 80.00	\$ 80.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 20,320.00	\$ 20,320.00
CADD/Robotics Lab	1	1	Task chair, armless	\$ 375.00	\$ 375.00	
		1	Desk, double pedestal	\$ 1,050.00	\$ 1,050.00	
		1	Storage cab, lam, partial wardrobe	\$ 1,020.00	\$ 1,020.00	
		1	Lateral file, 30/2-high	\$ 370.00	\$ 370.00	
		4	Student chair	\$ 50.00	\$ 200.00	
		24	Student task chair	\$ 155.00	\$ 3,720.00	
		12	Computer table, 72"x24"	\$ 350.00	\$ 4,200.00	
		1	Computer table, 36"x24"	\$ 300.00	\$ 300.00	
		1	Activity table, 60"x36"	\$ 350.00	\$ 350.00	
		1	Flag and holder	\$ 15.00	\$ 15.00	
		1	Electric pencil sharpener	\$ 30.00	\$ 30.00	
		1	Trash receptacle, large	\$ 80.00	\$ 80.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 11,710.00	\$ 11,710.00
TV Studio	1		(Not included in Contract)			
TV Editing Computer Lab	1	1	Task chair, armless	\$ 375.00	\$ 375.00	
		1	Desk, double pedestal	\$ 1,050.00	\$ 1,050.00	
		1	Storage cab, lam, partial wardrobe	\$ 1,020.00	\$ 1,020.00	
		1	Lateral file, 30/2-high	\$ 370.00	\$ 370.00	
		1	Computer table, 36"x24"	\$ 300.00	\$ 300.00	
		10	Computer table, 72"x24"	\$ 350.00	\$ 3,500.00	
		20	Student task chair	\$ 155.00	\$ 3,100.00	
		1	Flag and holder	\$ 15.00	\$ 15.00	
		1	Electric pencil sharpener	\$ 30.00	\$ 30.00	
		1	Trash receptacle, large	\$ 80.00	\$ 80.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 9,840.00	\$ 9,840.00
Fabrication Lab furniture to be relocated from existing high school	1	1	Task stool, armless	\$ 400.00	\$ 400.00	
		1	Desk, double pedestal	\$ 1,050.00	\$ 1,050.00	
		1	Storage cab, lam, partial wardrobe	\$ 1,020.00	\$ 1,020.00	
		1	Tool cabinet, 48"x22"x84"	\$ 1,275.00	\$ 1,275.00	
		1	Flag and holder	\$ 15.00	\$ 15.00	
		1	Electric pencil sharpener	\$ 30.00	\$ 30.00	
		1	Trash receptacle, large	\$ 80.00	\$ 80.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 3,870.00	\$ 3,870.00
Consumer Science Classroom 20-24 students	1	1	Task chair, armless	\$ 375.00	\$ 375.00	
		1	Desk, double pedestal	\$ 1,050.00	\$ 1,050.00	
		1	Storage cab, lam, partial wardrobe	\$ 1,020.00	\$ 1,020.00	
		1	Lateral file, 30/2-high	\$ 370.00	\$ 370.00	
		6	Activity table, 60"x30"	\$ 300.00	\$ 1,800.00	
		24	Student chair	\$ 50.00	\$ 1,200.00	

Room Type	# of Rms	Qty	Description	Unit Price	Extended	Type Total
		1	Computer table, 60"x24"	\$ 350.00	\$ 350.00	
		2	Student task chair	\$ 155.00	\$ 310.00	
		1	Flag and holder	\$ 15.00	\$ 15.00	
		1	Electric pencil sharpener	\$ 30.00	\$ 30.00	
		1	Trash receptacle, large	\$ 80.00	\$ 80.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 6,600.00	\$ 6,600.00
Consumer Science Lab	1	5	Activity table, 60"x30", casters	\$ 350.00	\$ 1,750.00	
		20	Stacking chair, plastic	\$ 85.00	\$ 1,700.00	
		1	Flag and holder	\$ 15.00	\$ 15.00	
		1	Electric pencil sharpener	\$ 30.00	\$ 30.00	
		4	Trash receptacle, large	\$ 80.00	\$ 320.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 3,815.00	\$ 3,815.00
Con. Sci. Pantry & Storage	1	6	Industrial shelving, 48"x18"	\$ 385.00	\$ 2,310.00	
					\$ 2,310.00	\$ 2,310.00
<b>HEALTH &amp; PHYSICAL EDUCATION</b>						
Gymnasium	1		(Not Included in Contract)			
Concessions	1		(Not Included in Contract)			
Gym Storage	1	15	Industrial shelving, 48"x24"	\$ 435.00	\$ 6,525.00	
					\$ 6,525.00	\$ 6,525.00
PE Storage	2	6	Stacking chair, plastic	\$ 85.00	\$ 510.00	
		5	Industrial shelving, 48"x24"	\$ 435.00	\$ 2,175.00	
					\$ 2,685.00	\$ 5,370.00
Athletic Director's Office	1	1	Desk, return	\$ 1,550.00	\$ 1,550.00	
		1	Task chair, arms	\$ 425.00	\$ 425.00	
		2	Side chair, arms, upholstered	\$ 250.00	\$ 500.00	
		1	Lateral file, 42/3-high	\$ 585.00	\$ 585.00	
		1	Bookcase, 36/2-high	\$ 290.00	\$ 290.00	
		3	Uniform rack, 72" mobile	\$ 810.00	\$ 2,430.00	
		1	Trash receptacle, fire resistant	\$ 30.00	\$ 30.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 5,810.00	\$ 5,810.00
Trainer	1	1	Desk, double pedestal	\$ 1,050.00	\$ 1,050.00	
		1	Task chair, arms	\$ 425.00	\$ 425.00	
		1	Bookcase, 36/2-high	\$ 190.00	\$ 190.00	
		2	Storage cabinet, 36/6-high	\$ 605.00	\$ 1,210.00	
		2	Stacking chair, plastic	\$ 85.00	\$ 170.00	
		1	Treatment table, 72"x27"x31"	\$ 405.00	\$ 405.00	
		1	Taping table cabinets, 72"x36"x36"	\$ 1,300.00	\$ 1,300.00	
		1	Exam stool	\$ 300.00	\$ 300.00	
		1	Trash receptacle, health	\$ 80.00	\$ 80.00	
		1	Trash receptacle, fire resistant	\$ 30.00	\$ 30.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 5,160.00	\$ 5,160.00
Coach/PE Office with shower, toilet	2	2	Desk, double pedestal	\$ 1,050.00	\$ 2,100.00	
		2	Task chair, arms	\$ 425.00	\$ 850.00	
		2	Stacking chair, plastic	\$ 85.00	\$ 170.00	
		2	Storage cabinet, 36/6-high	\$ 605.00	\$ 1,210.00	
		1	Trash receptacle, health	\$ 80.00	\$ 80.00	

Room Type	# of Rms	Qty	Description	Unit Price	Extended	Type Total
		2	Trash receptacle, fire resistant	\$ 30.00	\$ 60.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 4,470.00	\$ 8,940.00
<b>MEDIA CENTER</b>						
Media Center	1	1	Library shelving, 3 & 4-shelf, metal	\$ 16,000.00	\$ 16,000.00	
Learning Commons		1	Library end panels&signage, metal	\$ 3,200.00	\$ 3,200.00	
multi-function space;		1	Library canopy tops, laminate	\$ 4,800.00	\$ 4,800.00	
8,000 volume library		1	Atlas/dictionary stand	\$ 2,150.00	\$ 2,150.00	
		2	Book truck	\$ 525.00	\$ 1,050.00	
		1	Descending platform book truck	\$ 800.00	\$ 800.00	
		4	Study table, 60"x36" wood edge	\$ 1,150.00	\$ 4,600.00	
		3	Study table, 42" diam wood edge	\$ 1,150.00	\$ 3,450.00	
		32	Study chair, metal frame, uph seat	\$ 250.00	\$ 8,000.00	
		28	Study task chair	\$ 350.00	\$ 9,800.00	
		5	Computer carrel, open style, 6-pk	\$ 2,800.00	\$ 14,000.00	
		1	Lectern, teacher, locked storage	\$ 665.00	\$ 665.00	
		2	Occasional table	\$ 475.00	\$ 950.00	
		1	Circulation desk with storage	\$ 8,000.00	\$ 8,000.00	
		2	Task chair, arms	\$ 425.00	\$ 850.00	
		1	Flag and holder	\$ 15.00	\$ 15.00	
		1	Electric pencil sharpener	\$ 30.00	\$ 30.00	
		3	Trash receptacle, fire resistant	\$ 30.00	\$ 90.00	
		2	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 78,450.00	\$ 78,450.00
<b>AUDITORIUM / DRAMA</b>						
Stage	1	1	Lectern, wood with mic & light	\$ 2,725.00	\$ 2,725.00	
		2	Flag with gilded stand	\$ 135.00	\$ 270.00	
					\$ 2,995.00	\$ 2,995.00
Controls / Lighting / Projection	2	2	Task chair, armless	\$ 375.00	\$ 750.00	
		1	Trash receptacle, fire resistant	\$ 30.00	\$ 30.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 780.00	\$ 1,560.00
Auditorium Storage	1	3	Industrial shelving, 48"x18"	\$ 385.00	\$ 1,155.00	
					\$ 1,155.00	\$ 1,155.00
<b>DINING &amp; FOOD SERVICE</b>						
Commons	1	17	Cafeteria table, oval, 12 stools	\$ 1,475.00	\$ 25,075.00	
204 seats, three lunches		6	Trash receptacle, large	\$ 80.00	\$ 480.00	
		6	Recycle receptacle, large	\$ 50.00	\$ 300.00	
					\$ 25,855.00	\$ 25,855.00
Commons Storage	1	1	Storage cabinet, 36/6-high	\$ 605.00	\$ 605.00	
		8	Industrial shelving, 48"x18"	\$ 385.00	\$ 3,080.00	
					\$ 3,685.00	\$ 3,685.00
Kitchen & Serving	1	4	Trash receptacle, large	\$ 80.00	\$ 320.00	
		4	Recycle receptacle, large	\$ 50.00	\$ 200.00	
					\$ 520.00	\$ 520.00
Kitchen Office	1	1	Desk, double pedestal	\$ 1,050.00	\$ 1,050.00	
		1	Task chair, arms	\$ 425.00	\$ 425.00	
		1	Side chair, arms, upholstered	\$ 250.00	\$ 250.00	
		1	Bookcase, 36/2-high	\$ 290.00	\$ 290.00	
		1	Lateral file, 42/3-high	\$ 585.00	\$ 585.00	

Room Type	# of Rms	Qty	Description	Unit Price	Extended	Type Total
		1	Trash receptacle, fire resistant	\$ 30.00	\$ 30.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 2,630.00	\$ 2,630.00
Staff Dining	1	3	Meeting table, 42" diameter	\$ 500.00	\$ 1,500.00	
		12	Side chair, arms, upholstered	\$ 250.00	\$ 3,000.00	
		2	Trash receptacle, large	\$ 80.00	\$ 160.00	
		2	Recycle receptacle, large	\$ 50.00	\$ 100.00	
					\$ 4,760.00	\$ 4,760.00
MEDICAL						
Waiting Area	1	2	Stacking chair, plastic	\$ 85.00	\$ 170.00	
		1	Occasional table	\$ 475.00	\$ 475.00	
		1	Scale	\$ 250.00	\$ 250.00	
		2	Defibrillator, wall mounted	\$ 1,400.00	\$ 2,800.00	
		1	Wheelchair	\$ 250.00	\$ 250.00	
		1	Trash receptacle, health	\$ 80.00	\$ 80.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 4,025.00	\$ 4,025.00
Medical Suite Toilet	1	1	Trash receptacle, health	\$ 80.00	\$ 80.00	
					\$ 80.00	\$ 80.00
Nurses' Office	1	1	Desk, return	\$ 1,550.00	\$ 1,550.00	
		1	Task chair, arms	\$ 425.00	\$ 425.00	
		2	Stacking chair, plastic	\$ 85.00	\$ 170.00	
		4	Lateral file, 42/4-high	\$ 745.00	\$ 2,980.00	
		1	Trash receptacle, health	\$ 80.00	\$ 80.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 5,205.00	\$ 5,205.00
Examination Room / Resting	2	1	Cot, resting	\$ 375.00	\$ 375.00	
		1	Occasional table	\$ 475.00	\$ 475.00	
		1	Exam stool	\$ 300.00	\$ 300.00	
		1	Trash receptacle, health	\$ 80.00	\$ 80.00	
					\$ 1,230.00	\$ 2,460.00
ADMINISTRATION & GUIDANCE						
Administration	1	2	Task chair, arms	\$ 425.00	\$ 850.00	
		2	Systems workstations with storage	\$ 4,500.00	\$ 9,000.00	
		6	Side chair, arms, upholstered	\$ 250.00	\$ 1,500.00	
		2	Occasional table	\$ 475.00	\$ 950.00	
		1	Bookcase, 36/3-high	\$ 230.00	\$ 230.00	
		2	Lateral file, 42/3-high, lam top	\$ 710.00	\$ 1,420.00	
		2	Trash receptacle, fire resistant	\$ 30.00	\$ 60.00	
		2	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 14,010.00	\$ 14,010.00
Principal's Office	1	1	Desk, return, credenza	\$ 2,550.00	\$ 2,550.00	
		1	Task chair, arms	\$ 425.00	\$ 425.00	
		6	Side chair, arms, upholstered	\$ 250.00	\$ 1,500.00	
		1	Meeting table, 72"x36", lam top	\$ 500.00	\$ 500.00	
		1	Lateral file, 42/3-high, lam top	\$ 710.00	\$ 710.00	
		1	Bookcase, 36/3-high, lam top	\$ 335.00	\$ 335.00	
		1	Trash receptacle, fire resistant	\$ 30.00	\$ 30.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 6,050.00	\$ 6,050.00
Assistant Principal's Office	1	1	Desk, return	\$ 1,550.00	\$ 1,550.00	
		1	Task chair, arms	\$ 425.00	\$ 425.00	

Room Type	# of Rms	Qty	Description	Unit Price	Extended	Type Total
		2	Side chair, arms, upholstered	\$ 250.00	\$ 500.00	
		1	Bookcase, 36/3-high, lam top	\$ 335.00	\$ 335.00	
		1	Lateral file, 42/3-high, lam top	\$ 710.00	\$ 710.00	
		1	Trash receptacle, fire resistant	\$ 30.00	\$ 30.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 3,550.00	\$ 3,550.00
Resource Officer	1	1	Desk, double pedestal	\$ 1,050.00	\$ 1,050.00	
		1	Task chair, arms	\$ 425.00	\$ 425.00	
		2	Side chair, arms, upholstered	\$ 250.00	\$ 500.00	
		1	Storage cabinet, 30/2-high	\$ 285.00	\$ 285.00	
		1	Lateral file, 30/2-high	\$ 370.00	\$ 370.00	
		1	Trash receptacle, fire resistant	\$ 30.00	\$ 30.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 2,660.00	\$ 2,660.00
Conference Room	1	1	Conference table, 120"x48" wood	\$ 3,300.00	\$ 3,300.00	
		10	Side chair, arms, upholstered	\$ 250.00	\$ 2,500.00	
		1	Storage cabinet, 36/3-high, wd top	\$ 645.00	\$ 645.00	
		1	Trash receptacle, fire resistant	\$ 30.00	\$ 30.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 6,475.00	\$ 6,475.00
Copy/Kitchen	1	1	Trash receptacle, fire resistant	\$ 30.00	\$ 30.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 30.00	\$ 30.00
Storage	1	2	Industrial shelving, 36"x18"	\$ 385.00	\$ 770.00	
		1	Safe, small	\$ 700.00	\$ 700.00	
		2	Storage cabinet, 36/6-high	\$ 605.00	\$ 1,210.00	
		2	Lateral file, 42/4-high	\$ 745.00	\$ 1,490.00	
					\$ 4,170.00	\$ 4,170.00
Guidance Waiting & Career Ctr.	1	1	Task chair, arms	\$ 425.00	\$ 425.00	
		1	Systems workstation with storage	\$ 4,500.00	\$ 4,500.00	
		2	Storage cabinet, 36/6-high	\$ 605.00	\$ 1,210.00	
		2	Lateral file, 42/3-high, lam top	\$ 710.00	\$ 1,420.00	
		4	Side chair, arms, upholstered	\$ 250.00	\$ 1,000.00	
		3	Bookcase, 36/3-high	\$ 230.00	\$ 690.00	
		4	Student chair	\$ 50.00	\$ 200.00	
		1	Meeting table, 60"x36"	\$ 350.00	\$ 350.00	
		1	Computer table, 60"x24"	\$ 350.00	\$ 350.00	
		2	Student task chair	\$ 155.00	\$ 310.00	
		1	Flag and holder	\$ 15.00	\$ 15.00	
		2	Trash receptacle, fire resistant	\$ 30.00	\$ 60.00	
					\$ 10,530.00	\$ 10,530.00
Guidance Office	5	1	Desk, double pedestal	\$ 1,050.00	\$ 1,050.00	
		1	Task chair, arms	\$ 425.00	\$ 425.00	
		2	Side chair, arms, upholstered	\$ 250.00	\$ 500.00	
		1	Storage cabinet, 30/2-high	\$ 285.00	\$ 285.00	
		1	Lateral file, 30/2-high	\$ 370.00	\$ 370.00	
		1	Trash receptacle, fire resistant	\$ 30.00	\$ 30.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
					\$ 2,660.00	\$ 13,300.00

Room Type	# of Rms	Qty	Description	Unit Price	Extended	Type Total
Guidance Conference Room	1	1	Conference table, 120"x48"	\$ 1,450.00	\$ 1,450.00	
		10	Side chair, arms, upholstered	\$ 250.00	\$ 2,500.00	
		1	Storage cabinet, 36/3-high, lam top	\$ 500.00	\$ 500.00	
		1	Trash receptacle, fire resistant	\$ 30.00	\$ 30.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
				\$ 4,480.00	\$ 4,480.00	
Records Room	1	1	Industrial shelving, 36"x18"	\$ 385.00	\$ 385.00	
		10	Lateral file, 42/4-high	\$ 745.00	\$ 7,450.00	
				\$ 7,835.00	\$ 7,835.00	
Teachers' Work Room	2	12	Side chair, arms, upholstered	\$ 250.00	\$ 3,000.00	
		2	Meeting table, 72"x36"	\$ 365.00	\$ 730.00	
		2	Storage cabinet, 36/6-high	\$ 605.00	\$ 1,210.00	
		1	Laptop storage cart (COW)	\$ 1,670.00	\$ 1,670.00	
		1	Trash receptacle, fire resistant	\$ 30.00	\$ 30.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
				\$ 6,640.00	\$ 13,280.00	
Telephone Room	6	1	Side chair, arms, upholstered	\$ 250.00	\$ 250.00	
		1	Meeting table, 60"x30"	\$ 300.00	\$ 300.00	
		1	Trash receptacle, fire resistant	\$ 30.00	\$ 30.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
				\$ 580.00	\$ 3,480.00	
Teacher & School Storage	3	14	Industrial shelving, 36"x18"	\$ 385.00	\$ 5,390.00	
					\$ 5,390.00	\$ 16,170.00
CUSTODIAL & MAINTENANCE						
Receiving/Custodial	1	1	Workbench	\$ 1,380.00	\$ 1,380.00	
		16	Industrial shelving, 48"x18"	\$ 385.00	\$ 6,160.00	
		2	Storage cabinet, 36/6-high	\$ 605.00	\$ 1,210.00	
		2	Storage cabinet, hazardous materials	\$ 735.00	\$ 1,470.00	
		2	Utility cart, 3-shelf	\$ 235.00	\$ 470.00	
		6	Recycle receptacle, large	\$ 50.00	\$ 300.00	
		6	Trash receptacle, large	\$ 80.00	\$ 480.00	
				\$ 11,470.00	\$ 11,470.00	
Custodial Office	1	1	Desk, double pedestal	\$ 1,050.00	\$ 1,050.00	
		1	Task chair, arms	\$ 425.00	\$ 425.00	
		2	Side chair, arms, upholstered	\$ 250.00	\$ 500.00	
		1	Lateral file, 42/2-high	\$ 440.00	\$ 440.00	
		1	Bookcase, 36/3-high	\$ 230.00	\$ 230.00	
		1	Trash receptacle, fire resistant	\$ 30.00	\$ 30.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
				\$ 2,675.00	\$ 2,675.00	
OTHER						
School Store	1	2	Student stool	\$ 75.00	\$ 150.00	
		1	Trash receptacle, fire resistant	\$ 30.00	\$ 30.00	
		1	Recycle bin, provided by the town	\$ -	\$ -	
				\$ 180.00	\$ 180.00	
Head End Room	1	(Not included in Contract)				

Room Type	# of Rms	Qty	Description	Unit Price	Extended	Type Total
<b>ADDITIONAL ITEMS &amp; EQUIPMENT</b>						
			PE & weight room equipment allowance		\$ 27,390.00	
			Consumer Science small wares allowance		\$ 3,000.00	
			Fabrication Lab equipment allowance		\$ 5,000.00	
			Piano & instruments allowance		\$ 10,000.00	
			Science equipment allowance		\$ 45,000.00	
			Kitchen small wares allowance		\$ 10,000.00	
			Media Center new book allowance (250 vols)		\$ 5,000.00	
			Custodial/grounds equip't allowance		\$ 15,000.00	
					\$ 120,390.00	\$ 120,390.00
			Subtotal			\$720,000.00
			Contingency - Inflation (0%)		\$ -	
			Grand Total			\$720,000.00

**NOTES**

1. Copy, plotter, printer and fax equipment is not included in this budget.
2. Computers, headsets, and language lab AV equipment are not included in this budget.
3. Library book security system is not included in this budget.

**EXHIBIT G**  
**STANDARD CONSTRUCTION CONTRACT INSURANCE**  
**PROVISIONS FOR AN OWNER-CONTRACTOR CONTRACT**  
**TOWN OF UXBRIDGE**

**PROJECT SCOPE & BUDGET AGREEMENT**



## **EXHIBIT "G"**

### **MASSACHUSETTS SCHOOL BUILDING AUTHORITY STANDARD CONSTRUCTION CONTRACT INSURANCE PROVISIONS FOR AN OWNER-CONTRACTOR CONTRACT**

**(Alternate Form for Construction Manager at Risk on Page 6 of this Exhibit G)**

**The District shall include, at a minimum, the following language regarding insurance requirements in the Owner-Contractor contract. The District may impose additional insurance requirements provided that any such additional requirements shall not be inconsistent with the requirements imposed by the standard language set forth herein and further provided that, prior to issuing an invitation for bids for construction of the Project, the District shall give the Authority adequate written notice clearly describing any such additional requirements so that the Authority may, at its discretion, review and comment upon such additional requirements. Any such additional requirements may be set forth in Section 8 of the Insurance Requirements below. It shall be the sole responsibility of the District to determine whether additional insurance requirements are desirable or necessary for the Project and should be included in the Owner-Contractor contract.**

#### **INSURANCE REQUIREMENTS (Design-Bid-Build)**

##### **1. Insurance Generally.**

**A. The Contractor shall purchase and maintain insurance of the type and limits listed in this Article with respect to the operations as well as the completed operations of this Contract. This insurance shall be provided at the Contractor's expense and shall be in full force and effect for the full term of the Contract or for such longer period as this Article requires.**

**B. All policies shall be written on an occurrence basis and be issued by companies lawfully authorized to write that type of insurance under the laws of the Commonwealth with a financial strength rating of A- or better as assigned by AM Best Company, or an equivalent rating assigned by a similar rating agency acceptable to the Owner, or as otherwise acceptable to the Owner.**

**C. The Contractor shall submit three originals of each certificate of insurance, acceptable to the Owner, simultaneously with the execution of this Contract. Certificates shall show each type of insurance, insurance company, policy number, amount of insurance, deductibles and/or self-insured retentions, and policy effective and expiration dates. Certificates shall show the Massachusetts School Building Authority (hereinafter "Authority"), the Owner and anyone else the Owner may request as additional insureds as to all policies of liability insurance. Certificates shall specifically note the following:**

- **that the automobile liability, umbrella liability and pollution liability policies include the Authority and the Owner as additional insureds;**
- **that all policies include the coverage and endorsements in accordance with the terms and conditions as required by this Contract;**
- **that none of the coverages shall be cancelled, terminated, or materially modified unless and until thirty (30) days prior notice is given in writing to the Owner and the Authority;**
- **the Contractor shall submit updated certificates of insurance prior to the expiration of any of the policies referenced in the certificates so that the Owner shall at all times possess certificates indicating current coverage.**

**D.** The Contractor shall file one certified, complete copy of all policies and endorsements with the Owner within sixty (60) days after Contract award. If the Owner is damaged by the Contractor's failure to maintain such insurance and to comply with the terms of this Article, then the Contractor shall be responsible for all costs and damages to the Owner and the Authority attributable thereto.

**E.** Termination, cancellation, or material modification of any insurance required by this Contract, whether by the insurer or the insured, shall not be valid unless written notice thereof is given to the Owner, and the Authority to the extent that the Authority is an additional insured, at least thirty (30) days prior to the effective date thereof, which shall be expressed in said notice.

**F.** The Contractor is responsible for the payment of any and all deductibles under all of the insurance required herein. Neither the Owner nor the Authority shall in any instance be responsible for the payment of deductibles, self-insured retentions, or any portion thereof.

## **2. Contractor's Commercial General Liability.**

**A.** The Contractor shall purchase and maintain general liability coverage on the ISO form CG 00 01 or equivalent, including products and completed operations, on an occurrence basis. The form must be amended to state that the aggregate limit applies on a per location/project basis. The policy shall provide the following minimum coverage to protect the Contractor from claims with respect to the operations performed by Contractor and any employee, subcontractor, or supplier, or by anyone for whose acts they may be liable unless a higher coverage is specified in Section 8 below in which case the Contractor shall provide the additional coverage:

Bodily Injury &	\$1,000,000 each occurrence
Property Damage	\$2,000,000 general aggregate per project
Products & Completed Operations	\$1,000,000 annual aggregate
Personal & Advertising Injury	\$1,000,000 each occurrence
Medical Expenses	\$5,000

**B.** This policy shall include coverage relating to explosion, collapse, and underground property damage.

**C.** This policy shall include contractual liability coverage.

**D.** The completed operations coverage shall be maintained for a period of three (3) years after Substantial Completion and acceptance by the Owner. The Contractor shall provide renewal certificates of insurance to the Owner as evidence that this coverage is being maintained.

**E.** If the Work includes work to be performed within fifty (50) feet of a railroad, any exclusion for liability assumed under contract for work within fifty (50) feet of a railroad shall be deleted.

**F.** This policy shall include the Authority, the Owner and anyone else requested by the Owner as additional insureds via endorsements CG 20 10 for ongoing operations and CG 20 37 for completed operations. This policy shall be primary and non-contributory with respect to any other insurance available to additional insureds.

**G.** The policy shall include endorsement CG 24 04, a Waiver of Subrogation in favor of the Authority and the Owner.

## **3. Automobile Liability.**

**A.** The Contractor shall purchase and maintain the following minimum coverage with respect to the operations of any owned, non-owned, and hired vehicles including trailers used in the performance of the work, unless a higher coverage is specified in Section 8 below in which case the Contractor shall provide the additional coverage:

Bodily Injury & Property Damage      \$1,000,000 combined single limit

B. The policy shall include a CA 99 48 Broadened Pollution Endorsement. If specified in Section 8 below, the Contractor, if hauling contaminants and/or pollutants, must adhere to Sections 29 and 30 of the Motor Carrier Act of 1980, which shall include coverage Form MCS-90.

C. The policy shall name the Authority and the Owner as additional insureds.

D. The policy shall contain a Waiver of Subrogation in favor of the Owner and the Authority.

#### **4. Contractor's Pollution Liability.**

The Contractor shall purchase and maintain coverage for bodily injury and property damage resulting from liability arising out of pollution related exposures such as asbestos abatement, lead paint abatement, tank removal, removal of contaminated soil, etc. The insurance policy shall cover the liability of the Contractor during the process of removal, storage, transport and disposal of hazardous waste and contaminated soil and/or asbestos abatement. The policy shall include coverage for on-Site and off-Site bodily injury and loss of, damage to, or loss of use of property, directly or indirectly arising out of the discharge, dispersal, release or escape of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids or gas, waste materials or other irritants, contaminants or pollutants into or upon the land, the atmosphere or any water course or body of water, whether it be gradual or sudden and accidental. The policy shall also include defense and clean-up costs. The Authority and the Owner shall be named as additional insureds and coverage must be on an occurrence basis. The amount of coverage shall be as follows unless a higher amount is specified in Section 8 below to this Contract, in which case the Contractor shall provide the additional coverage:

Limit of liability	\$1,000,000 per occurrence
	\$3,000,000 aggregate

#### **5. Worker's Compensation.**

A. The Contractor shall provide the following coverage in accordance with M.G.L. c.149 §34A and c.152, as amended, unless a higher coverage is specified in Section 8 below, in which case the Contractor shall provide the higher coverage:

Worker's Compensation	Statutory limits
Employer's Liability	\$ 500,000 each accident
	\$ 500,000 disease per employee
	\$ 500,000 disease policy aggregate

B. If specified in Section 8 below, the policy must be endorsed to cover United States Longshoremen & Harborworkers Act (USLHW), or Maritime Liability.

C. The policy shall contain a Waiver of Subrogation in favor of the Authority and the Owner.

#### **6. Builder's Risk/ Installation Floater/Stored Materials.**

**Owner may purchase and maintain coverage against loss or damage to the Work included in this Contract. If purchased by Owner, such coverage shall be on an "all risks" or equivalent form and will include a waiver of subrogation in favor of Contractor for loss or damage that occurs during the term of the Project. Owner will be responsible for the payment of any deductible under such coverage.**

**If specified in Section 8 below , Owner may require the Contractor to purchase and maintain coverage against loss or damage to the Work in accordance with the following requirements:**

A. The Contractor shall purchase and maintain coverage against loss or damage on all Work included in this Contract in an amount equal to the Contract Price. Such coverage shall be written on an all risks basis or equivalent form and shall include, without limitation, insurance against perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, terrorism ("certified" and "non-certified"), collapse, earthquake, flood (if the project is not in an "A" or a "V" flood Zone), windstorm, falsework, testing and startup, temporary buildings and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for Architect's and Contractor's services and expenses required as a result of such insured loss. Unless otherwise specified in this Contract, the limits for earthquake and flood shall be the lesser of the Contract Price or \$10,000,000. This policy and/or installation floater shall include transportation and Stored Materials coverage in an amount equal to the value of the stored materials as required in C. below.

B. When Work will be completed on existing buildings owned by the Owner, the Contractor shall provide an installation floater, in the full amount of the Contract Price. Such coverage shall be written on an all risks basis or equivalent form and shall include, without limitation, insurance against perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, collapse, earthquake, flood (if the project is not in an "A" or a "V" flood Zone), windstorm, falsework, testing and startup, temporary buildings and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for Architect's and Contractor's services and expenses required as a result of such insured loss. Unless otherwise specified in this Contract, the limits for earthquake and flood shall be the lesser of the Contract Price or \$10,000,000. This policy and/or installation floater shall include transportation and Stored Materials coverage in an amount equal to the value of the stored materials as required in C. below.

C. The Contractor shall maintain insurance on delivered and/or stored material designated to be incorporated in the Work against fire, theft or other hazards. Any loss or damage of whatever nature to such material while stored at an off Site location shall be forthwith replaced by the Contractor at no expense to the Owner or the Authority..

D. The policy or policies shall specifically state that they are for the benefit of and payable to the Authority, the Owner, the Contractor, and all persons furnishing labor or labor and materials for the Contract Work, as their interests may appear. The policy or policies shall list the Authority, the Owner, the Contractor, and Subcontractors of any tier as named insureds.

E. Coverage shall include any costs for work performed by the Designer or any consultant as the result of a loss experienced during the term of this Contract.

F. Coverage shall include permission for temporary occupancy and a Waiver of Subrogation in favor of the Owner and the Authority.

G. Coverage shall be maintained until final acceptance by the Owner of the Work and final payment has been made.

H. A loss under the property insurance shall be adjusted by the Contractor as fiduciary and made payable to the Contractor as fiduciary for the insureds. The Contractor shall pay the subcontractors their just shares of insurance proceeds received by the Contractor and shall require subcontractors to make payments to their sub-subcontractors in similar manner.

**7. Umbrella Coverage.**

The Contractor shall provide Umbrella Coverage in a form at least as broad as primary coverages required by Sections 2, 3 and 5 of this Article in the following amount unless a higher amount is specified in Section 8 below in which case the Contractor shall provide the higher amount:

<u>Contract Price:</u>	<u>Limit of Liability:</u>
Under \$1,000,000	\$2,000,000 per occurrence
\$1,000,001 -- \$5,000,000	\$5,000,000 per occurrence
\$5,000,001-- \$10,000,000	\$10,000,000 per occurrence
\$10,000,001 and over	\$25,000,000 per occurrence

#### **8. Additional Insurance Requirements**

The Contractor shall provide such other and/or additional types and/or amounts of insurance as may be set forth below:

**MASSACHUSETTS SCHOOL BUILDING AUTHORITY**  
**STANDARD CONSTRUCTION CONTRACT INSURANCE PROVISIONS FOR A**  
**CONSTRUCTION MANAGER AT RISK CONTRACT**

The District shall include, at a minimum, the following language regarding insurance requirements in the Owner-Construction Manager at Risk ("CM") contract. The District may impose additional insurance requirements provided that any such additional requirements shall not be inconsistent with the requirements imposed by the standard language set forth herein and further provided that, prior to issuing an RFQ for construction management at risk services for the Project, the District shall give the Authority adequate written notice clearly describing any such additional requirements so that the Authority may, at its discretion, review and comment upon such additional requirements. Any such additional requirements may be set forth in Section 8 of the Insurance Requirements below. It shall be the sole responsibility of the District to determine whether additional insurance requirements are desirable or necessary for the Project and should be included in the Owner-CM contract.

**INSURANCE REQUIREMENTS (CM at Risk)**

**1. Insurance Generally.**

A. The CM shall purchase and maintain the insurance of the type and limits listed in this Article with respect to the operations as well as the completed operations of this Contract. This insurance shall be provided at the CM's expense and shall be in full force and effect for the full term of the Contract or for such longer period as this Article requires.

B. All policies shall be written on an occurrence basis and be issued by companies lawfully authorized to write that type of insurance under the laws of the Commonwealth with a financial strength rating of A- or better assigned by AM Best Company, or equivalent rating assigned by a similar rating agency acceptable to the Owner or as otherwise acceptable to the Owner.

C. CM shall submit three originals of each certificate of insurance, acceptable to the Owner, simultaneously with the execution of this Contract. Certificates shall show each type of insurance, insurance company, policy number, amount of insurance, deductibles and/or self insured retentions, and policy effective and expiration dates. Certificates shall show the Massachusetts School Building Authority (hereinafter "Authority"), the Owner and anyone else that the Owner may request as additional insureds as to all policies of liability insurance. Certificates shall specifically note the following:

- that the automobile liability, umbrella liability and pollution liability policies include the Owner and the Authority as additional insureds;
- that all policies include the coverage and endorsements in accordance with the terms and conditions as required by this construction contract;
- that none of the coverages shall be cancelled, terminated, or materially modified unless and until thirty (30) days prior notice is given in writing to the Owner and the Authority;
- CM shall submit updated certificates prior to the expiration of any of the policies referenced in the certificates so that the Owner shall at all times possess certificates indicating current coverage.

D. The CM shall file one certified complete copy of all policies and endorsements with the Owner within sixty (60) days after Contract award. If the Owner or the Authority is damaged by the CM's failure to maintain such insurance and to comply with the terms of this Article, then the CM shall be responsible for all costs and damages to the Owner and the Authority attributable thereto.

E. Termination, cancellation, or material modification of any insurance required by this Contract, whether by the insurer or the insured, shall not be valid unless written notice thereof is given to Owner, and the Authority to the extent that the Authority is an additional insured, at least thirty (30) days prior to the effective date thereof, which shall be expressed in said notice.

F. The CM is responsible for the payment of any and all deductibles under all of the insurance required below unless the Owner and the Authority specifically provide a written waiver to the CM.

## **2. CM's Commercial General Liability.**

A. The CM shall purchase and maintain general liability coverage on the ISO form CG 00 01 or equivalent, including products and completed operations, on an occurrence basis. The form must be amended to state that the aggregate limit applies on a per location/per project basis. The policy shall provide the following minimum coverage to protect the CM from claims with respect to the operations performed by CM and any employee, subcontractor, or supplier, unless a higher coverage is specified in Section 8 below, in which case the CM shall provide the additional coverage:

Bodily Injury &	\$1,000,000	each occurrence
Property Damage	\$2,000,000	general aggregate, per project
Products & Completed Operations	\$1,000,000	annual aggregate
Personal & Advertising Injury	\$1,000,000	each occurrence
Medical Expenses	\$5,000	

B. This policy shall include coverage relating to explosion, collapse, and underground property damage.

C. This policy shall include contractual liability coverage.

D. The completed operations coverage shall be maintained for a period of three (3) years after Substantial Completion and acceptance by the Owner. The CM shall provide renewal certificates of insurance to the Owner as evidence that this coverage is being maintained.

E. If the Work includes work to be performed within fifty (50) feet of a railroad, any exclusion for liability assumed under contract for work within fifty (50) feet of a railroad shall be deleted.

F. This policy shall include the Authority, the Owner and anyone else requested by the Owner as additional insureds via endorsements CG 20 10 for ongoing operations and CG 20 37 for completed operations. This policy shall be primary and non-contributory with respect to any other insurance available to additional insureds.

G. The policy shall include endorsement CG 24 04, a Waiver of Subrogation in favor of the Owner and the Authority.

## **3. Automobile Liability.**

A. The CM shall purchase and maintain the following minimum coverage with respect to the operations of any owned, non-owned, and hired vehicles including trailers used in the performance of the work, unless a higher coverage is specified in Section 8 below, in which case the CM shall provide the additional coverage:

Bodily Injury & Property Damage \$1,000,000 combined single limit

B. The policy shall include a CA 99 48 Broadened Pollution Endorsement. If specified in Section 8 below, the CM, if hauling contaminants and/or pollutants, must adhere to Sections 29 and 30 of the Motor Carrier Act of 1980, which shall contain coverage Form MCS-90.

C. The policy shall name the Owner and the Authority as additional insureds.

D. The policy shall contain a Waiver of Subrogation in favor of the Owner and the Authority.

#### **4. Contractor's Pollution Liability.**

The CM shall purchase and maintain coverage for bodily injury and property damage resulting from liability arising out of pollution related exposures such as asbestos abatement, lead paint abatement, tank removal, removal of contaminated soil, etc. The insurance policy shall cover the liability of the CM during the process of removal, storage, transport and disposal of hazardous waste and contaminated soil and/or asbestos abatement. The policy shall include coverage for on-Site and off-Site bodily injury and loss of, damage to, or loss of use of property, directly or indirectly arising out of the discharge, dispersal, release or escape of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids or gas, waste materials or other irritants, contaminants or pollutants into or upon the land, the atmosphere or any water course or body of water, whether it be gradual or sudden and accidental. The policy shall also include defense and clean-up costs. The Owner and the Authority shall be named as additional insureds and coverage must be on an occurrence basis. The amount of coverage shall be as follows unless a higher amount is specified in Section 8 below, in which case the CM shall provide the additional coverage:

Limit of liability	\$1,000,000 per occurrence
	\$3,000,000 aggregate

#### **5. Worker's Compensation.**

A. The CM shall provide the following coverage in accordance with M.G.L. c.149 §34A and c.152 as amended, unless a higher coverage is specified in Section 8 below, in which case the CM shall provide the higher coverage:

Workers' Compensation	Statutory limits
Employer's Liability	\$ 500,000 each accident
	\$ 500,000 disease per employee
	\$ 500,000 disease policy aggregate

B. If specified in Section 8 below the policy must be endorsed to cover United States Longshoremen & Harborworkers Act (USLHW), or Maritime Liability for \$1,000,000/\$1,000,000.

C. The policy shall contain a Waiver of Subrogation in favor of the Owner and the Authority.

#### **6. Builder's Risk/ Installation Floater/Stored Materials.**

**Owner may purchase and maintain coverage against loss or damage to the Work included in this Contract. If purchased by Owner, such coverage shall be on an "all risks" or equivalent form and will include a waiver of subrogation in favor of CM for loss or damage that occurs during the term of the Project. Owner will be responsible for the payment of any deductible under such coverage.**

**If specified in Section 8 below, Owner may require the CM to purchase and maintain coverage against loss or damage to the Work in accordance with the following requirements:**



A. The CM shall purchase and maintain coverage against loss or damage on all Work included in this Contract in an amount equal to the GMP. Such coverage shall be written on an all risks basis or equivalent form and shall include, without limitation, insurance against perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, terrorism ("certified" and "non-certified"), collapse, earthquake, flood (if the project is not in an "A" or a "V" flood Zone), windstorm, falsework, testing and startup, temporary buildings and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for Architect's, Program Manager's and CM's services and expenses required as a result of such insured loss. Unless otherwise specified in this Contract, the limits for earthquake and flood shall be the lesser of the Contract Price or \$10,000,000. This policy and/or installation floater shall include transportation and Stored Materials coverage in an amount equal to the value of the stored materials as required in C. below.

B. When Work will be completed on existing buildings owned by the Owner, the CM shall provide an installation floater, in the full amount of the Contract Price. Such coverage shall be written on an all risks basis or equivalent form and shall include, without limitation, insurance against perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, collapse, earthquake, flood (if the project is not in an "A" or a "V" flood Zone), windstorm, falsework, testing and startup, temporary buildings and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for Architect's, Program Manager's and CM's services and expenses required as a result of such insured loss. Unless otherwise specified in this Contract, the limits for earthquake and flood shall be the lesser of the Contract Price or \$10,000,000. This policy and/or installation floater shall include transportation and Stored Materials coverage in an amount equal to the value of the stored materials as required in C. below.

C. The CM shall maintain insurance on delivered and/or stored material designated to be incorporated in the Work against fire, theft or other hazards. Any loss or damage of whatever nature to such material while stored at some approved off Site location shall be forthwith replaced by the CM at no expense to the Owner or the Authority.

D. The policy or policies shall specifically state they are for the benefit of and payable to the Authority, the Owner, the CM, subcontractors and all persons furnishing labor or labor and materials for the Contract Work, as their interests may appear. The policy or policies shall list the Authority, the Owner, the CM, and Subcontractors of any tier as named insureds.

E. Coverage shall include any costs for work performed by the Designer or any consultant as the result of a loss experienced during the term of this Contract.

F. Coverage shall include permission for temporary occupancy and a Waiver of Subrogation in favor of the Owner and the Authority.

G. Coverage shall be maintained until final acceptance by Owner of the Work and final payment has been made.

H. A loss under the property insurance shall be adjusted by CM as fiduciary and made payable to the Contractor as fiduciary for the insureds. CM shall pay the subcontractors their just shares of insurance proceeds received by the CM and shall require subcontractors to make payments to their sub-subcontractors in similar manner.

## **7. Umbrella Coverage.**

The CM shall provide Umbrella Coverage in form at least as broad as primary coverages required by Sections 2, 3 and 5 of this Article in the following amount unless a higher amount is specified in Section 8 below in which case the CM shall provide the higher amount:

Contract Price:

Under \$1,000,000

\$1,000,000 -- \$5,000,000

\$5,000,001-- \$10,000,000

\$10,000,001 and over

Limit of Liability:

\$2,000,000 per occurrence

\$5,000,000 per occurrence

\$10,000,000 per occurrence

\$25,000,000 per occurrence

**8. Additional Insurance Requirements**

The CM shall provide such other and/or additional types and/or amounts of insurance as may be set forth below:

**EXHIBIT H**  
**RATE REIMBURSEMENT CERTIFICATION**  
**TOWN OF UXBRIDGE**

**PROJECT SCOPE & BUDGET AGREEMENT**

## MSBA Project Scope and Budget Reimbursement Rate Certification

<b>Uxbridge High School</b>	
<u>MSBA Reimbursement Rate Calculation</u>	
Base Points	31.00
Income Factor	6.32
Property Wealth Factor	16.21
Poverty Factor	-
Racial Desegregation Plan Approved prior to 6/30/2000	-
<i>Subtotal: Reimbursement Rate Before Incentives</i>	53.53
<u>Incentive Points</u>	
Maintenance (0-2)	1.00
CM @ Risk (0-1) *	-
Newly Formed Regional District (0-6)	-
Major Reconstruction or Reno/Reuse (0-5)	-
Overlay Zoning 40R & 40S (0-1)	-
Overlay Zoning 100 units or 50% of units for 1, 2 or 3 family structures (0-0.5)	-
Energy Efficiency - "Green Schools" (0-2)	2.00
Model Schools (5)	-
<b>Total Incentive Points</b>	3.00
<b>MSBA Reimbursement Rate</b>	<b>56.53</b>

\* The District's receipt of 1 additional incentive point in this category will be effective upon approval to proceed with CM@Risk methodology from the Office of the Inspector General.

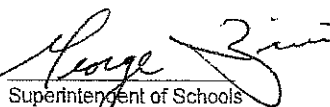
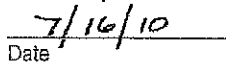
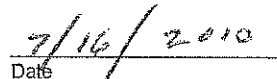
In addition to the reimbursement rate identified in this certification, the District may be eligible for School Facility Maintenance Trust matching funds up to 1%, as defined in 963 CMR 2.18.

### Certification

By signing this Project Scope and Budget Reimbursement Rate sheet, I hereby certify that I have read, understand, and accept the reimbursement rate and the incentive points set forth above, and I hereby acknowledge and agree on behalf of the Eligible Applicant that the above-stated reimbursement rate is the rate that will be used to calculate the maximum Total Facilities Grant for the proposed project, pursuant to Section 3 of the Project Scope and Budget Agreement.



Local Chief Executive Officer

  
Date  
Superintendent of Schools  
Date  
School Committee Chair  
Date

**EXHIBIT J  
DAVIS BACON  
TOWN OF UXBRIDGE**

**PROJECT SCOPE AND BUDGET AGREEMENT**

rate of costs to the contractor or subcontractor which may be reasonably anticipated in providing bona fide fringe benefits to laborers and mechanics pursuant to an enforceable commitment to carry out a financially responsible plan of program, which was communicated in writing to the laborers and mechanics affected. The fringe benefits enumerated in the Davis-Bacon Act include medical or hospital care, pensions on retirement or death, compensation for injuries or illness resulting from occupational activity, or insurance to provide any of the foregoing; unemployment benefits; life insurance, disability insurance, sickness insurance, or accident insurance; vacation or holiday pay; defraying costs of apprenticeship or other similar programs; or other bona fide fringe benefits. Fringe benefits do not include benefits required by other Federal, State, or local law.

(q) The term *wage determination* includes the original decision and any subsequent decisions modifying, superseding, correcting, or otherwise changing the provisions of the original decision. The application of the wage determination shall be in accordance with the provisions of §1.6 of this title.

[48 FR 19541, Apr. 29, 1983, as amended at 48 FR 50313, Nov. 1, 1983; 55 FR 50149, Dec. 4, 1990; 57 FR 19206, May 4, 1992; 65 FR 69693, Nov. 20, 2000; 65 FR 80278, Dec. 20, 2000]

#### §5.3—5.4 [Reserved]

#### §5.5 Contract provisions and related matters.

(a) The Agency head shall cause or require the contracting officer to insert in full in any contract in excess of \$2,000 which is entered into for the actual construction, alteration and/or repair, including painting and decorating, of a public building or public work, or building or work financed in whole or in part from Federal funds or in accordance with guarantees of a Federal agency or financed from funds obtained by pledge of any contract of a Federal agency to make a loan, grant or annual contribution (except where a different meaning is expressly indicated), and which is subject to the labor standards provisions of any of the acts listed in §5.1, the following clauses

(or any modifications thereof to meet the particular needs of the agency, *Provided*, That such modifications are first approved by the Department of Labor):

(1) *Minimum wages.* (1) All laborers and mechanics employed or working upon the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in §5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided*, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional

classification and wage rates conformed under paragraph (a)(1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(ii)(A) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits,

where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii) (B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. *Provided*, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(2) *Withholding.* The (write in name of Federal Agency or the loan or grant recipient) shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be

considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the contract, the (Agency) may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(3) *Payrolls and basic records.* (i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such

benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the (write in name of appropriate Federal agency) if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant, sponsor, or owner, as the case may be, for transmission to the (write in name of agency). The payrolls submitted shall set out accurately and completely all of the information required to be maintained under §5.5(a)(3)(i) of Regulations, 29 CFR part 5. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal Stock Number 029-005-00014-1), U.S. Government Printing Office, Washington, DC 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be maintained under §5.5(a)(3)(i) of Regulations, 29 CFR part 5 and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;



(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the (write the name of the agency) or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(4) *Apprentices and trainees*—(i) *Apprentices*. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in

the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate

Office of the Secretary of Labor

§5.5

for the work performed until an acceptable program is approved.

(ii) *Trainees.* Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) *Equal employment opportunity.* The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

(5) *Compliance with Copeland Act requirements.* The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

(6) *Subcontracts.* The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the (write in the name of the Federal agency) may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

(7) *Contract termination: debarment.* A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

(8) *Compliance with Davis-Bacon and Related Act requirements.* All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

(9) *Disputes concerning labor standards.* Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

(10) *Certification of eligibility.* (i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded

## §5.5

## 29 CFR Subtitle A (7-1-01 Edition)

Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

(b) *Contract Work Hours and Safety Standards Act.* The Agency Head shall cause or require the contracting officer to insert the following clauses set forth in paragraphs (b)(1), (2), (3), and (4) of this section in full in any contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by §5.5(a) or 4.6 of part 4 of this title. As used in this paragraph, the terms *laborers* and *mechanics* include watchmen and guards.

(1) *Overtime requirements.* No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) *Violation; liability for unpaid wages; liquidated damages.* In the event of any violation of the clause set forth in paragraph (b)(1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (b)(1) of

this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.

(3) *Withholding for unpaid wages and liquidated damages.* The (write in the name of the Federal agency or the loan or grant recipient) shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b)(2) of this section.

(4) *Subcontracts.* The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (b)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (b)(1) through (4) of this section.

(c) In addition to the clauses contained in paragraph (b), in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in §5.1, the Agency Head shall cause or require the contracting officer to insert a clause requiring that the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of

